

CLIENT:



COUNCIL:



MILLWATER - ARRAN HILL

STAGE 5

ASBUILTS DRAWINGS

December 2019

*DISCLAIMER:
THE INFORMATION PORTRAYED ON THIS
PLAN IS INTENDED TO BE SOLELY USED
AS THE BASE DATA FOR THE PURPOSES
OF 224C APPLICATION TO COUNCIL.
WFH PROPERTIES LTD AND WOOD AND
PARTNERS CONSULTANTS ACCEPT NO
RESPONSIBILITY FOR ANY BUILDING
DESIGN OR CONSTRUCTION WORK
BASED ON THIS DRAWING FILE.*

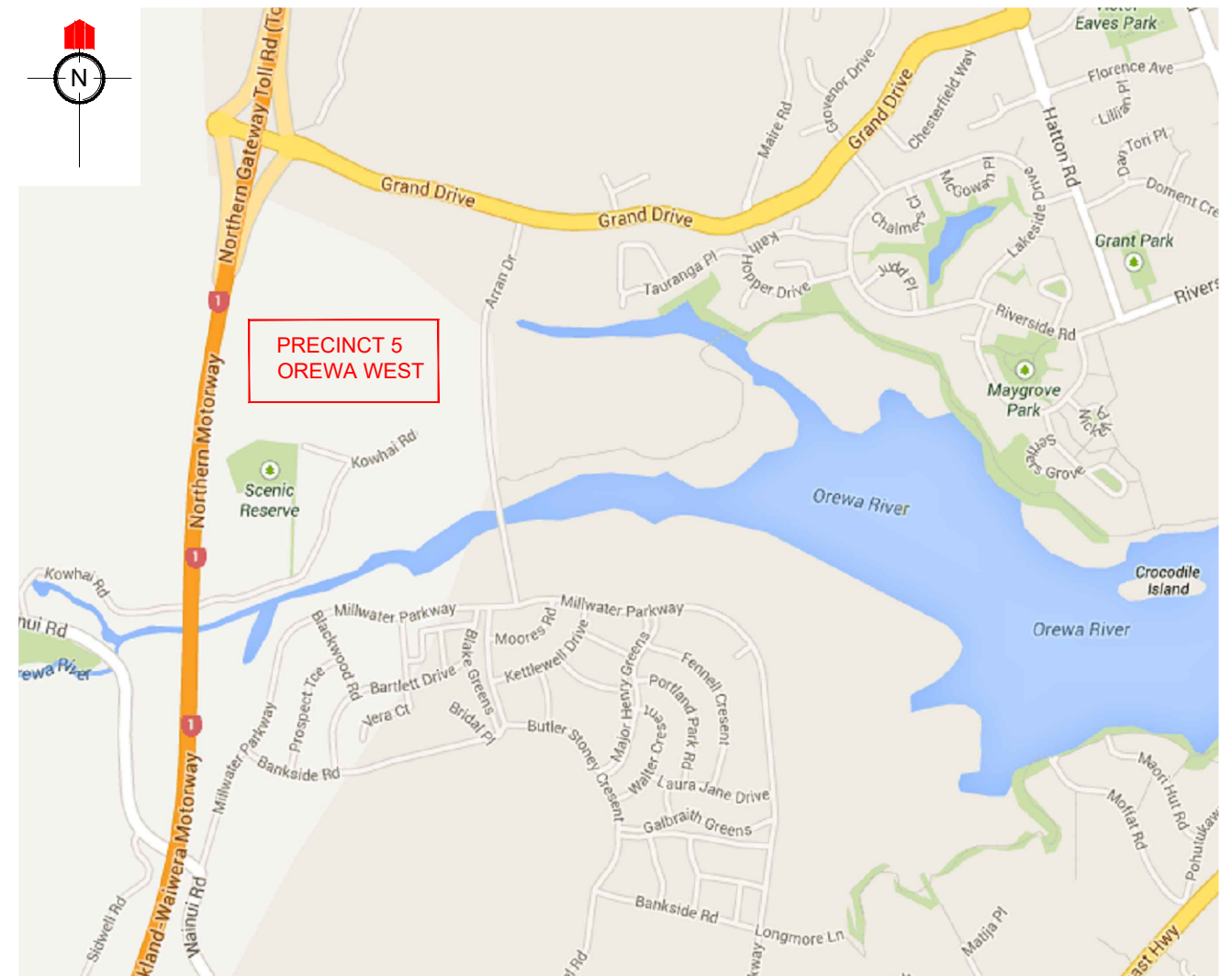


WOODS
Engineers. Surveyors. Planners.
Urban Designers. Architects.

MILLWATER - ARRAN HILL STAGE 5

CONTENT INDEX AND LOCALITY PLAN

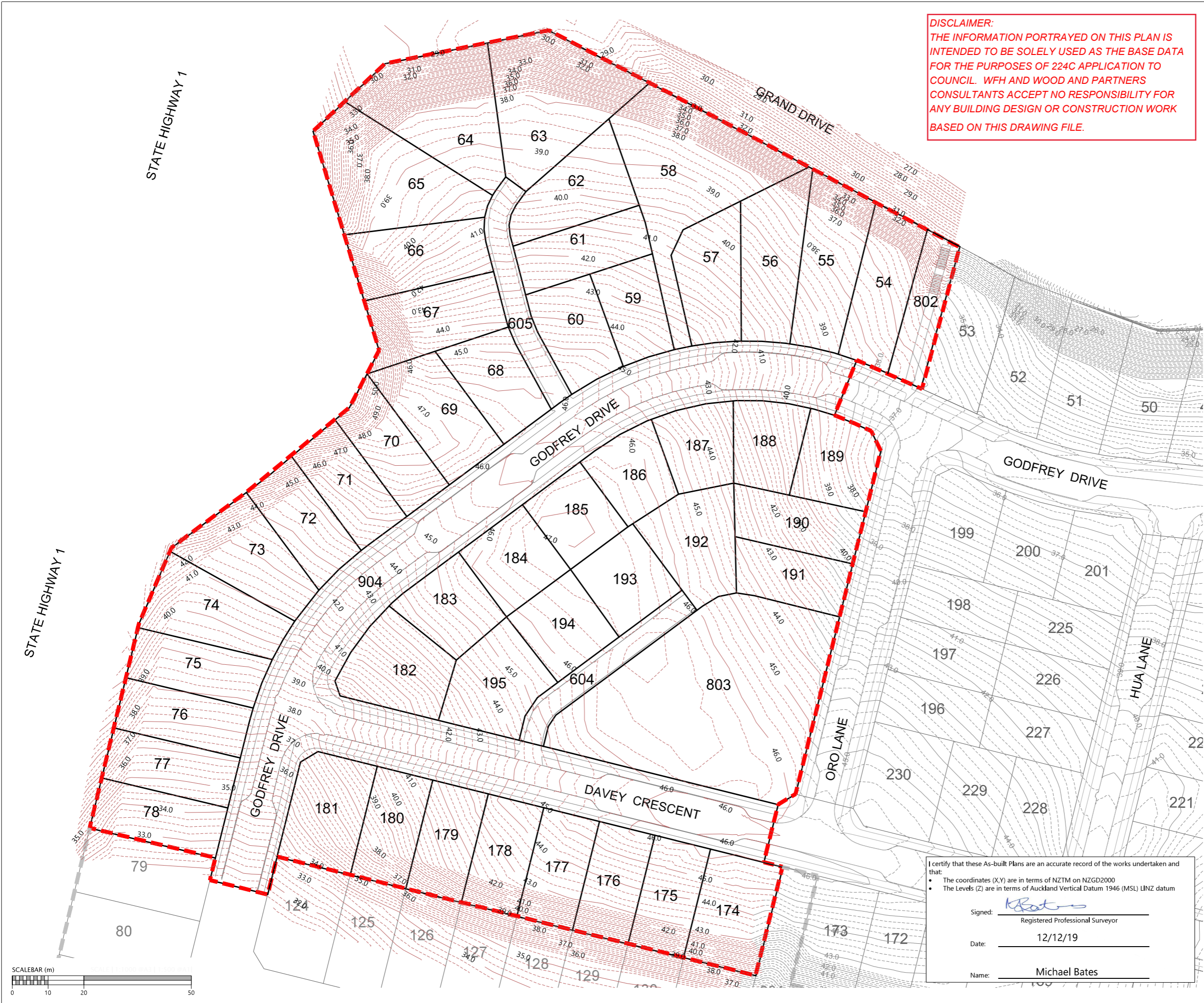
SHEET NO.		SHEET TITLE
37505-05-	000	Plans Index and Location Plan
37505-05-	100	Final Contour Asbuilt Plan
37505-05-	110-112	Cut & Fill Asbuilt Original to Final Surface
37505-05-	120	Shear Key, Undercuts & Subsoil Drains Asbuilt Plan
37505-05-	123-124	Deadman
37505-05-	140	Slope Stabilisation Plan
37505-05-	200-203	Roading Asbuilt Plans
37505-05-	300-306	Stormwater Asbuilt Plans
37505-05-	400-406	Sanitary Sewer Asbuilt Plans
37505-05-	600-602	Watermain Asbuilt Plans



LOCATION PLAN

NOT TO SCALE

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NOTES
 1. NEW CONTOURS ARE AT 0.25m INTERVALS

LEGEND

	CONTOURS MAJOR
	CONTOURS MINOR
	EXISTING CONTOURS MAJOR
	EXISTING CONTOURS MINOR
	STAGE BOUNDARIES
	LOT BOUNDARIES

REVISION DETAILS		BY	DATE
1	ISSUED FOR INFORMATION	KR	12/12/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING B, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229 WOODS.CO.NZ
DESIGNED	MB	
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	

N

**ARRAN HILL PRECINCT 5
 STAGE 5**

**FINAL CONTOUR
 ASBUILT PLAN
 SHEET 1 OF 1**

STATUS	AS-BUILT	REV
SCALE	1:1000 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-100-AB	

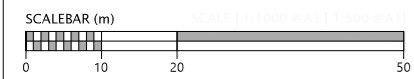
I certify that these As-built Plans are an accurate record of the works undertaken and that:

- The coordinates (X,Y) are in terms of NZTM on NZGD2000
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

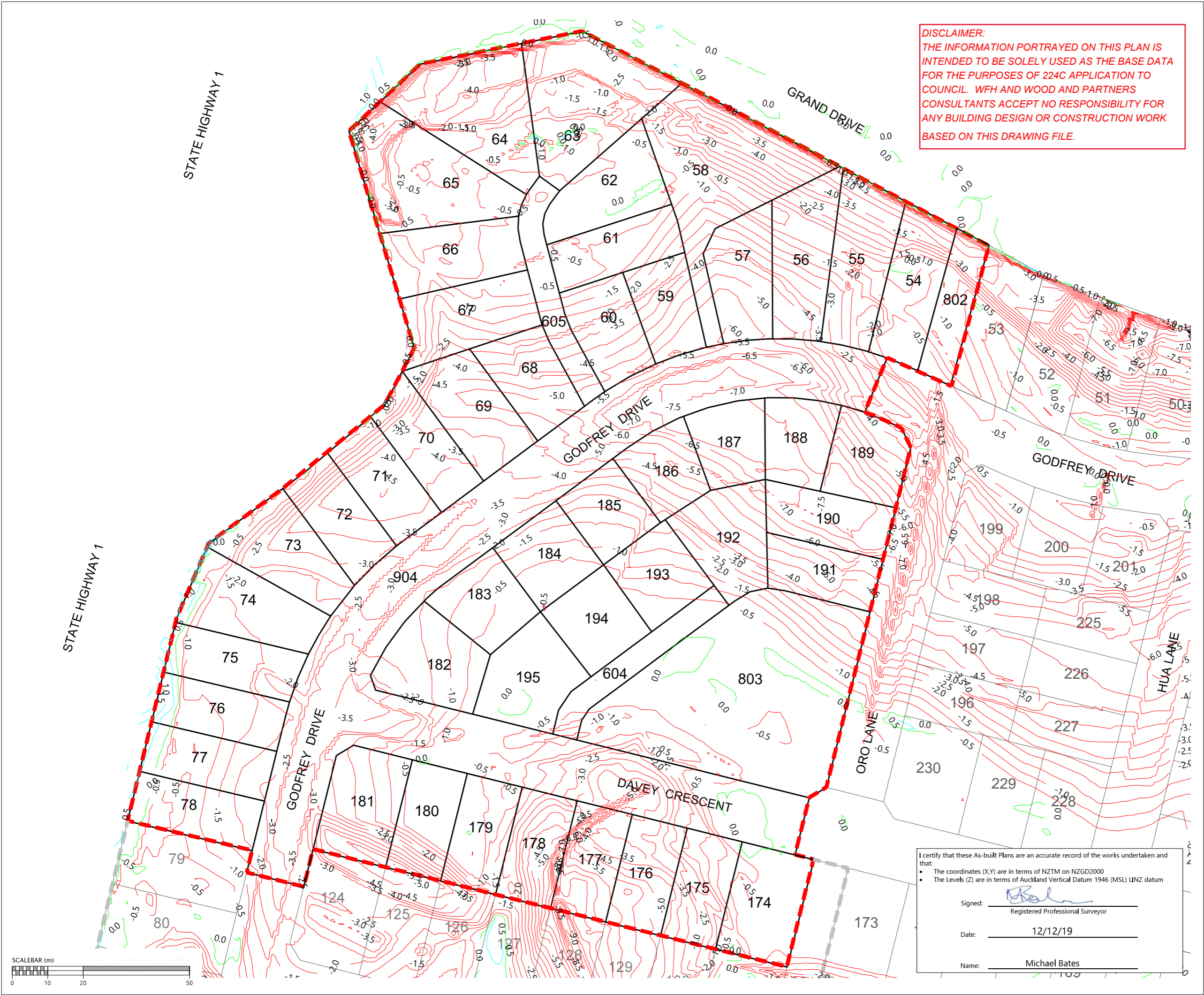
Signed:
 Registered Professional Surveyor

Date: 12/12/19

Name: Michael Bates



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NOTES
 1. CONTOURS ARE AT 0.5 METRE INTERVALS

LEGEND

	ZERO CONTOUR
	CUT CONTOUR
	FILL CONTOUR
	STAGE BOUNDARIES
	LOT BOUNDARIES

REVISION DETAILS		BY	DATE
1	ISSUED FOR INFORMATION	KR	12/12/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING B, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229 WOODS.CO.NZ
DESIGNED	T&T	
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	

N

**ARRAN HILL PRECINCT 5
 STAGE 5**

**CUT & FILL AS-BUILT
 ORIGINAL TO LOWEST SURFACE**

STATUS	AS-BUILT	REV
SCALE	1:1000 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-110-AB	

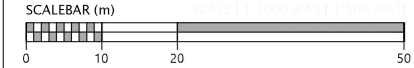
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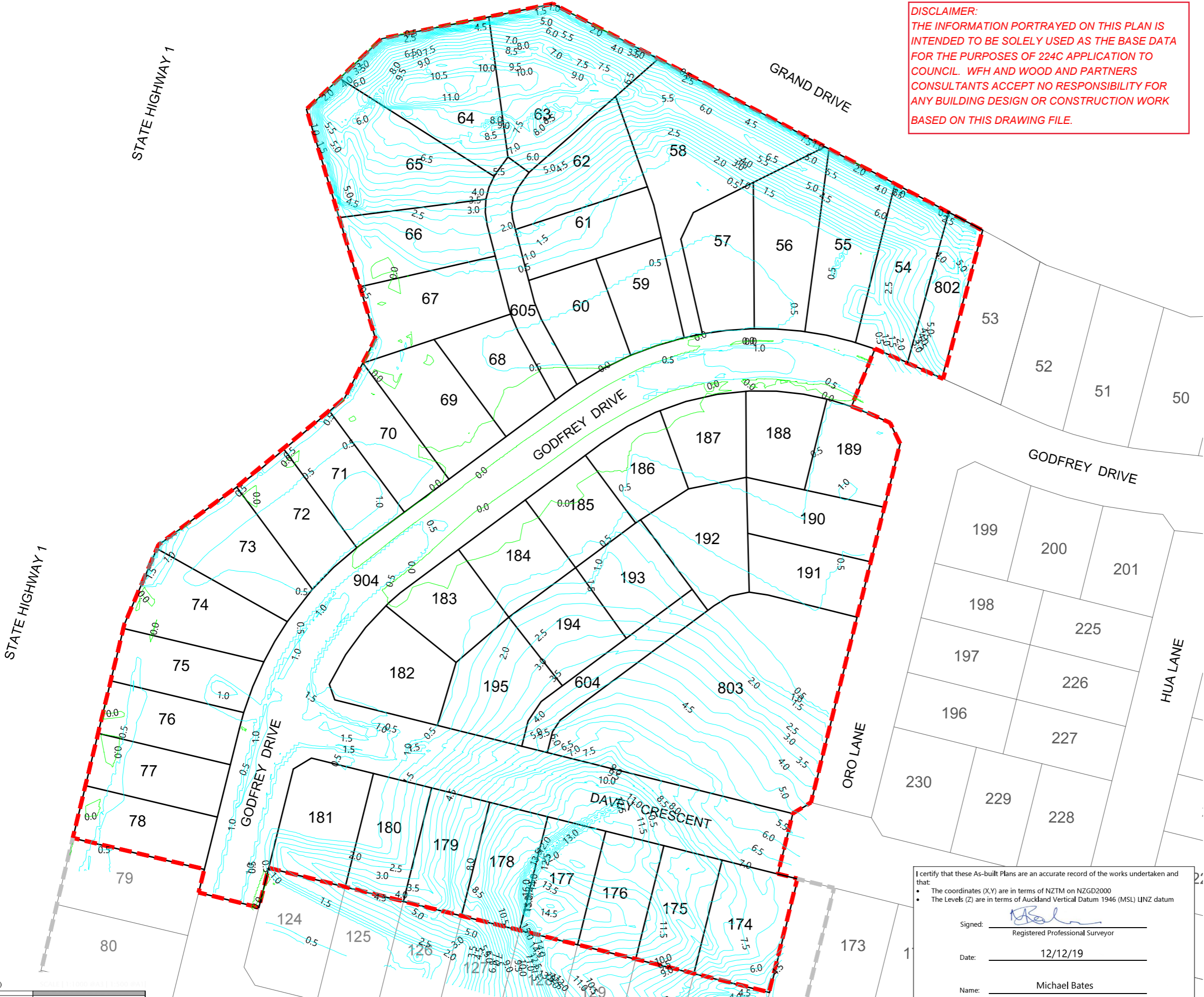
Signed:
 Registered Professional Surveyor

Date: 12/12/19

Name: Michael Bates



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NOTES
 1. CONTOURS ARE AT 0.5 METRE INTERVALS

LEGEND

	ZERO CONTOUR
	CUT CONTOUR
	FILL CONTOUR
	STAGE BOUNDARIES
	LOT BOUNDARIES

REVISION DETAILS		BY	DATE
1	ISSUED FOR INFORMATION	KR	12/12/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING B, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229 WOODS.CO.NZ
DESIGNED	T&T	
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	

N

**ARRAN HILL PRECINCT 5
 STAGE 5**

**CUT & FILL AS-BUILT
 LOWEST TO FINAL SURFACE**

STATUS	AS-BUILT	REV
SCALE	1:1000 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-111-AB	

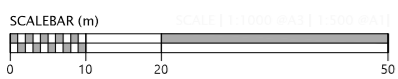
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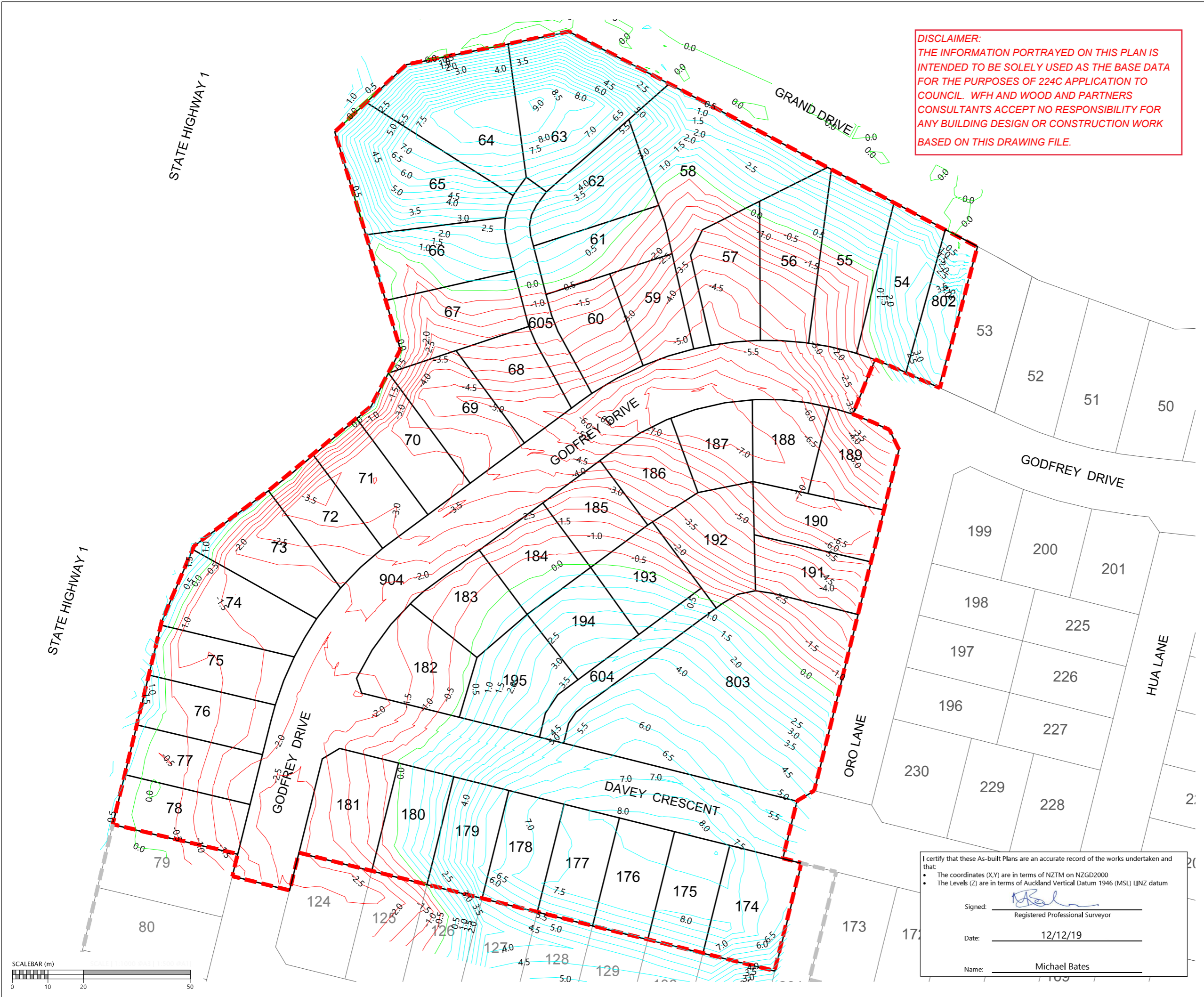
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 Registered Professional Surveyor

Date: 12/12/19

Name: Michael Bates



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NOTES
 1. CONTOURS ARE AT 0.5 METRE INTERVALS

LEGEND

	ZERO CONTOUR
	CUT CONTOUR
	FILL CONTOUR
	STAGE BOUNDARIES
	LOT BOUNDARIES

REVISION DETAILS	BY	DATE
1 ISSUED FOR INFORMATION	KR	12/12/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING B, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229 WOODS.CO.NZ
DESIGNED	T&T	
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	

N

**ARRAN HILL PRECINCT 5
 STAGE 5**

**CUT & FILL AS-BUILT
 ORIGINAL TO FINAL SURFACE**

STATUS	AS-BUILT	REV
SCALE	1:1000 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-112-AB	

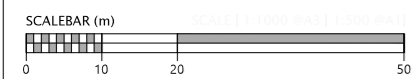
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 Registered Professional Surveyor

Date: 12/12/19

Name: Michael Bates



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STATE HIGHWAY 1

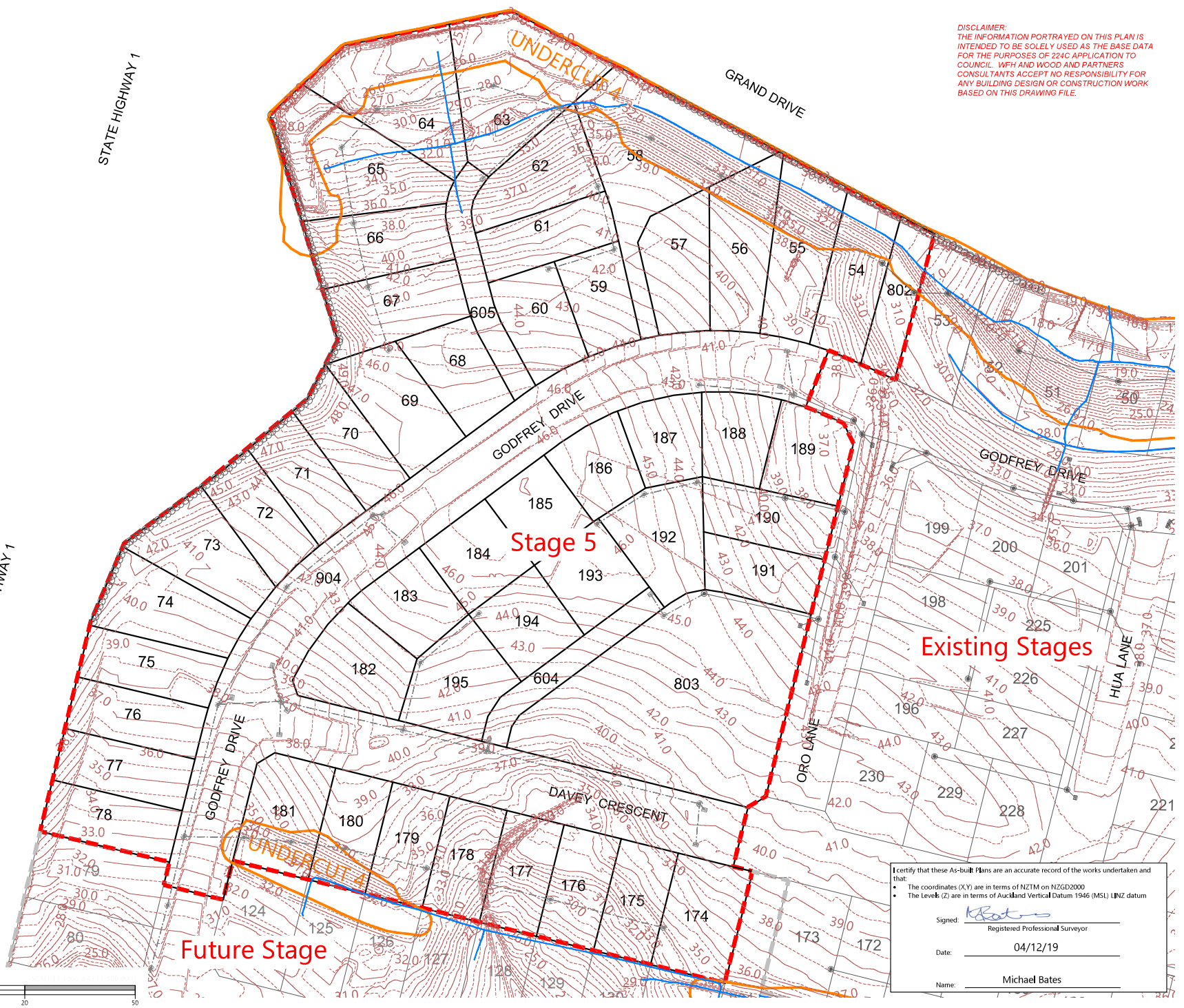
GRAND DRIVE

STATE HIGHWAY 1

NOTES
1. CONTOURS ARE AT 0.5 METRE INTERVALS
2. SUBSOIL DATA SUPPLIED BY CONTRACTOR

LEGEND

- NOVACOIL 1500 SUBSOIL DRAINS
- UPVC 1500 SUBSOIL DRAINS
- EXISTING STORMWATER DRAINAGE
- NEW STORMWATER DRAINAGE
- STAGE BOUNDARIES
- LOT BOUNDARIES
- CONTOURS
- SHEAR KEY & UNDERCUT AREAS
- PALISADE WALL PILE AT BOTTOM OF SHEARKEY



Stage 5

Existing Stages

Future Stage

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• The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed:
Registered Professional Surveyor
Date: 04/12/19
Name: Michael Bates

REVISION DETAILS	BY	DATE
1 ISSUED FOR INFORMATION	KR	04/12/19

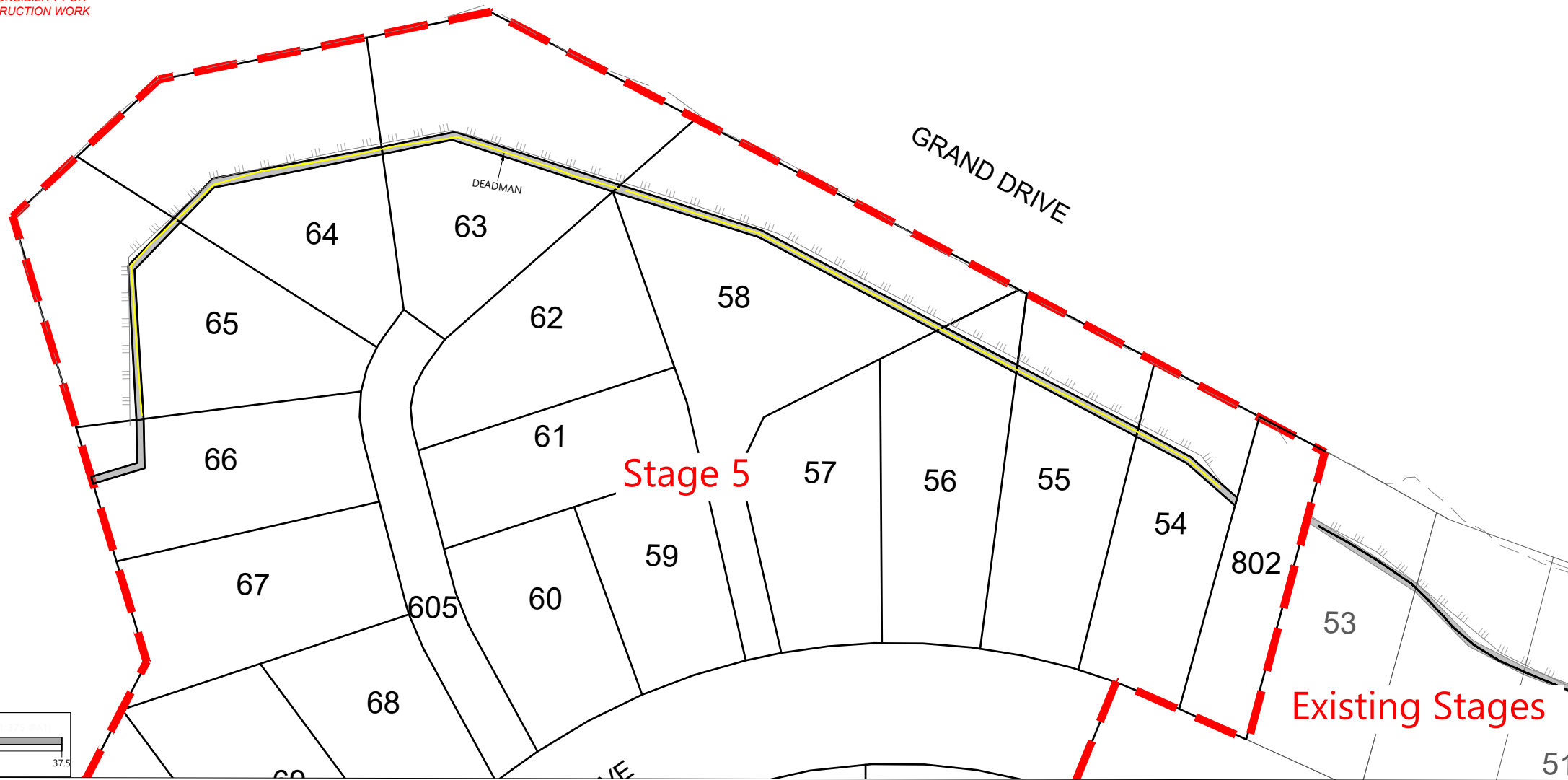
SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING B, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229 WOODS.CO.NZ
DESIGNED	T&T	
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	

**ARRAN HILL PRECINCT 5
STAGE 5**

SHEAR KEY, UNDERCUT
AND SUBSOIL DRAIN ASBUILT
SHEET 1 OF 1

STATUS	AS-BUILT	REV
SCALE	1:1000 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-120-AB	

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LEGEND:

- BOUNDARY
- █ DEADMAN COVENANT AREA
- ▬▬▬▬▬ TOP OF BANK
- ||—||— FENCE
- - - - - STAGE EXTENTS
- DEADMAN

- NOTES:**
1. DEADMAN LOCATION PROVIDED BY CONTRACTOR. LOT OWNER TO LOCATE AND PROTECT DEADMAN POSITION PRIOR TO ANY WORKS.
 2. THE DIMENSIONS PROVIDED ARE A BEST FIT APPROXIMATION BASED ON LOCATIONS PROVIDED BY THE CONTRACTOR.
 3. TITLE DIMENSIONS ARE SOURCED FROM DP 534851 - SEE CRF FOR CONFIRMATION OF DIMENSIONS.

DISCLAIMER:
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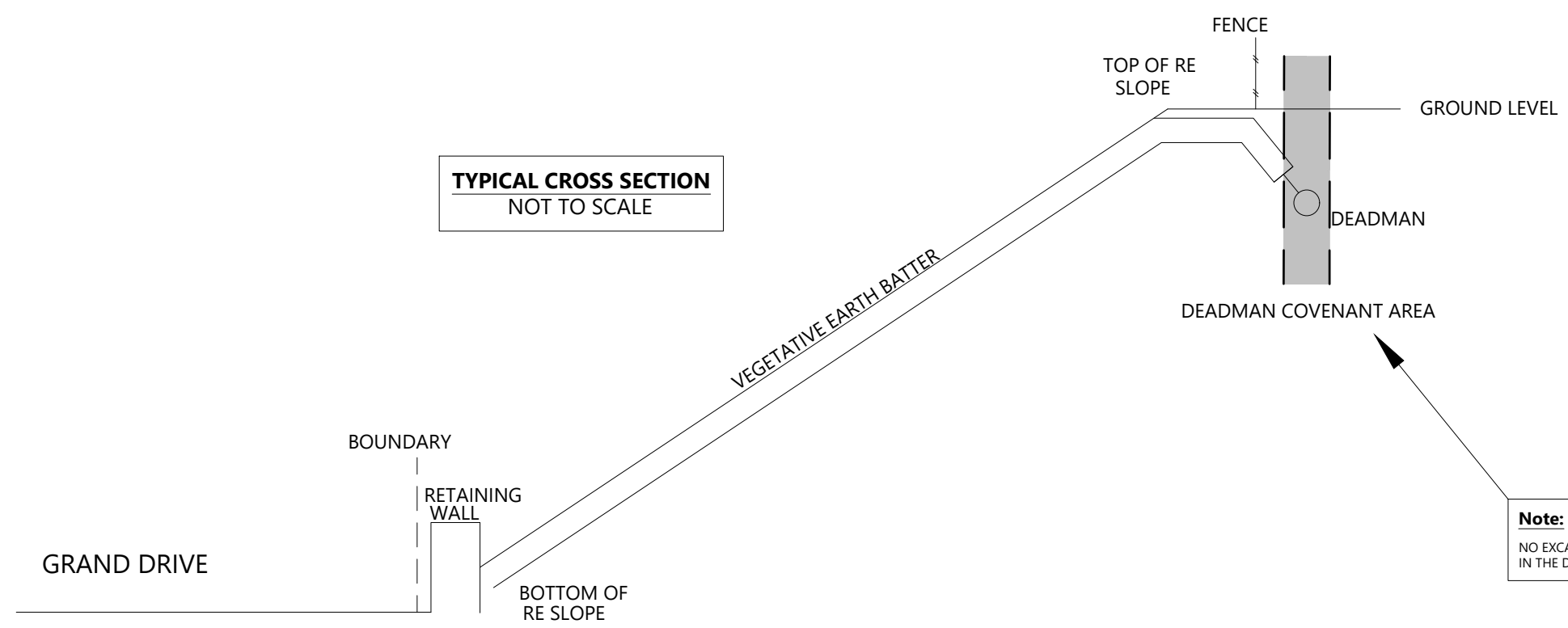
REVISION DETAILS		BY	DATE
1	ISSUED FOR INFORMATION	KR	05/12/19

SURVEYED CONTRACTOR		WOODS Ltd LEVEL 1 BUILDING B, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229
DESIGNED	T&T	
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	WOODS.CO.NZ

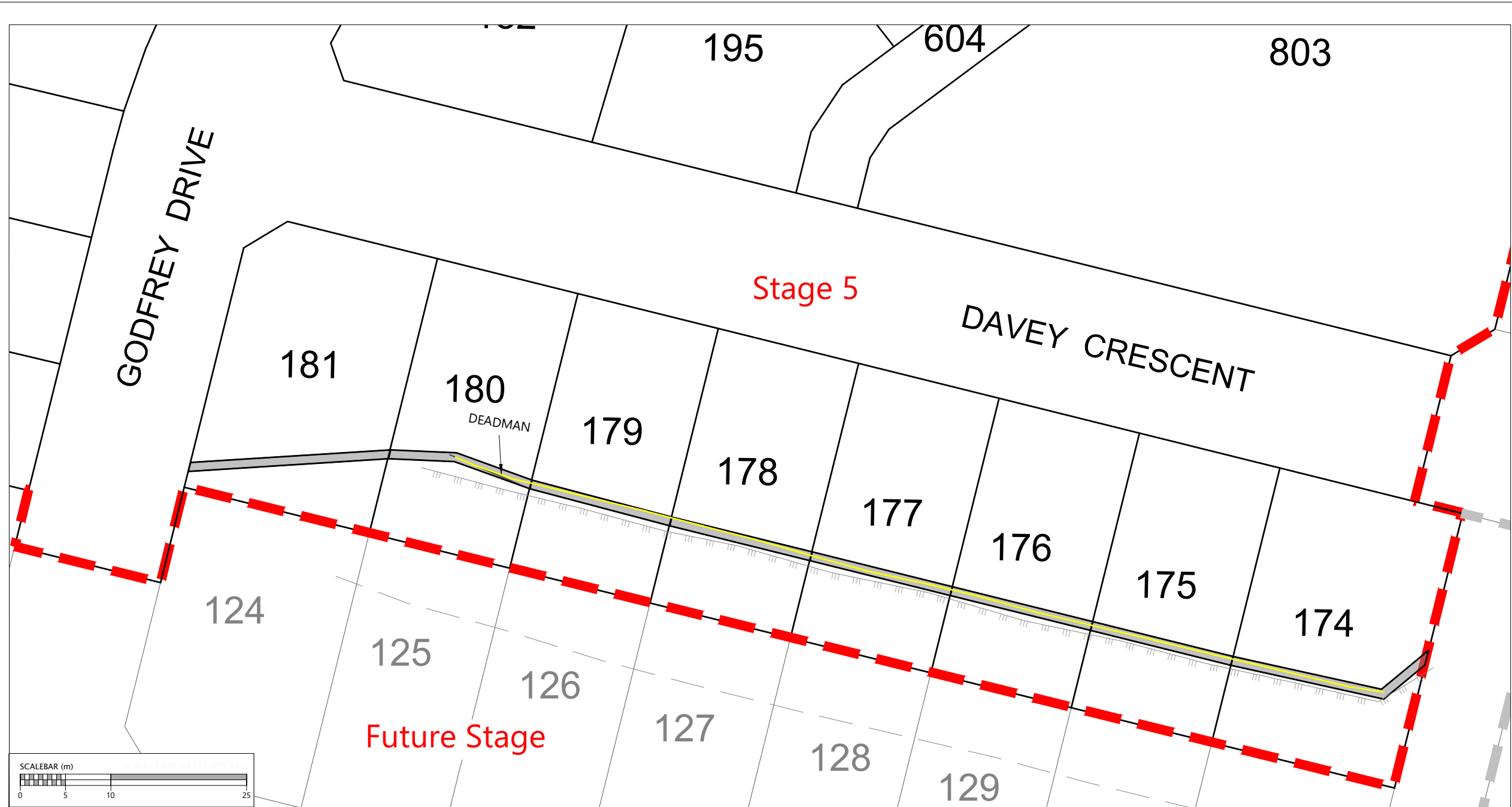
**ARRAN HILL PRECINCT 5
 STAGE 5**

**DEADMAN COVENANT DIAGRAM
 SHEET 1 OF 2**

STATUS	AS-BUILT	REV
SCALE	1:750 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-123-AB	



Note:
 NO EXCAVATION CAN BE UNDERTAKEN IN THE DEADMAN COVENANT AREA



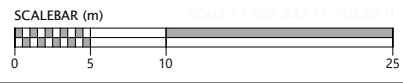
LEGEND:

- BOUNDARY
- DEADMAN COVENANT AREA
- TOP OF BANK
- FENCE
- STAGE EXTENTS
- DEADMAN

NOTES:

- DEADMAN LOCATION PROVIDED BY CONTRACTOR. LOT OWNER TO LOCATE AND PROTECT DEADMAN POSITION PRIOR TO ANY WORKS.
- THE DIMENSIONS PROVIDED ARE A BEST FIT APPROXIMATION BASED ON LOCATIONS PROVIDED BY THE CONTRACTOR.
- TITLE DIMENSIONS ARE SOURCED FROM DP 534851 - SEE CRF FOR CONFIRMATION OF DIMENSIONS.

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REVISION DETAILS		BY	DATE
1	ISSUED FOR INFORMATION	KR	05/12/19

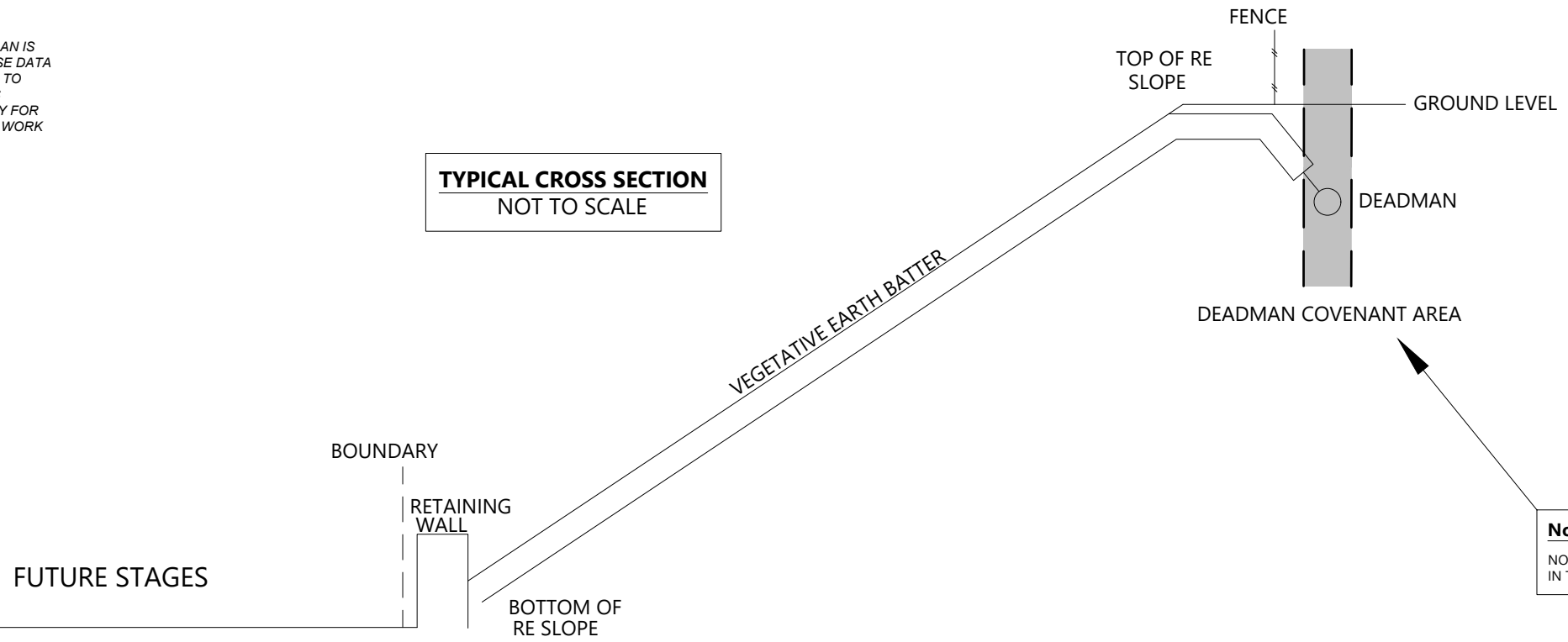
SURVEYED CONTRACTOR		WOODS Ltd LEVEL 1 BUILDING B, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229 WOODS.CO.NZ
DESIGNED	T&T	
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	

**ARRAN HILL PRECINCT 5
STAGE 5**

**DEADMAN COVENANT DIAGRAM
SHEET 2 OF 2**

STATUS	AS-BUILT	REV
SCALE	1:500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-124-AB	

**TYPICAL CROSS SECTION
NOT TO SCALE**



Note:
NO EXCAVATION CAN BE UNDERTAKEN IN THE DEADMAN COVENANT AREA

LEGEND:

- BOUNDARY
- SLOPE STABILISATION DEVICE
- TOP OF BANK
- BOTTOM OF BANK
- FENCE
- TOP OF WALL
- BOTTOM OF WALL

- NOTES:**
- DEADMAN LOCATION PROVIDED BY CONTRACTOR. LOT OWNER TO LOCATE AND PROTECT DEADMAN POSITION PRIOR TO ANY WORKS.
 - THE DIMENSIONS PROVIDED ARE A BEST FIT APPROXIMATION BASED ON LOCATIONS PROVIDED BY THE CONTRACTOR.

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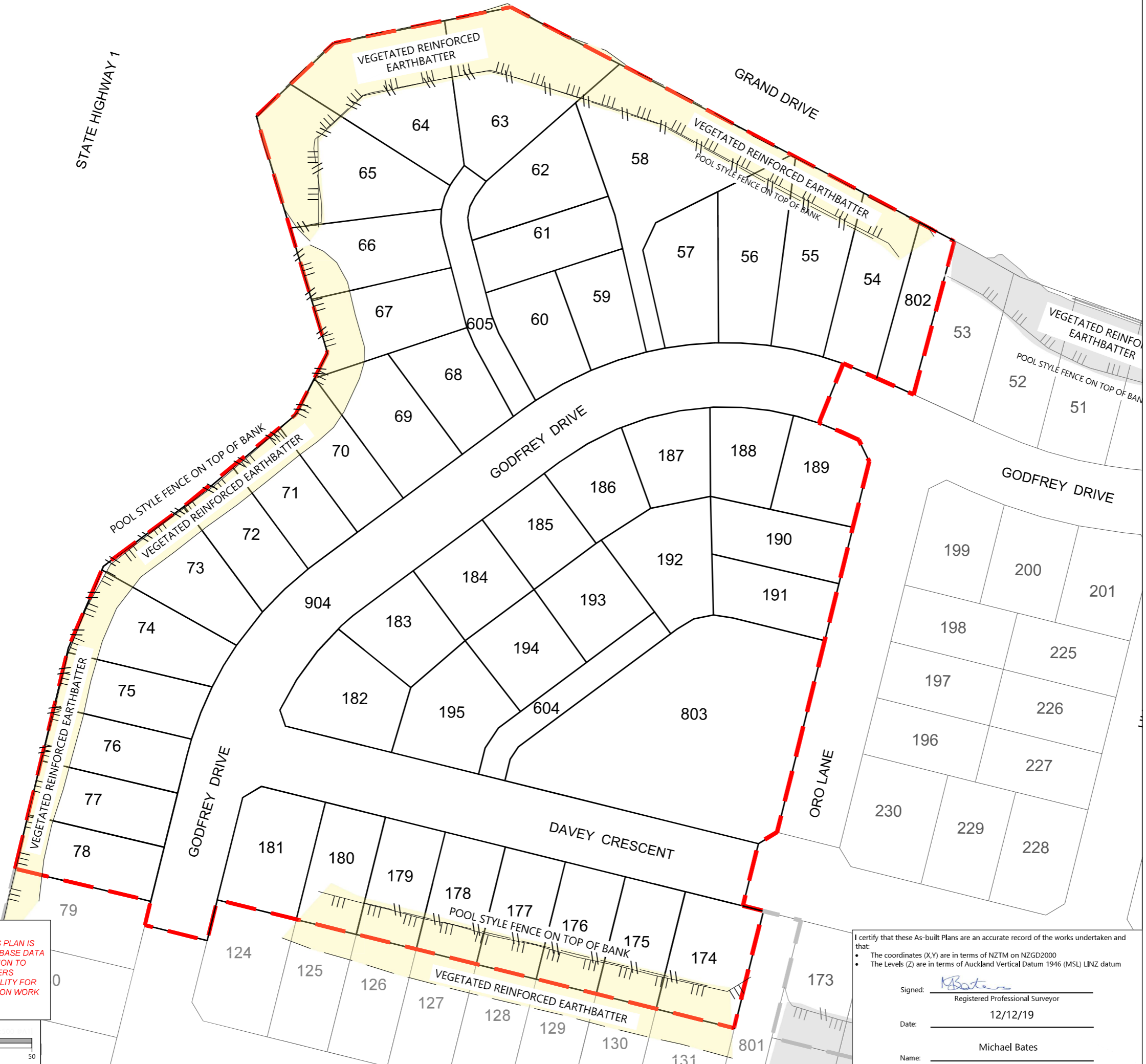
REVISION DETAILS		BY	DATE
1	ISSUED FOR INFORMATION	KR	05/12/19
2	FENCES ADDED	SK	12/12/19

SURVEYED	CONTRACTOR	WOODS Ltd
DESIGNED	T&T	LEVEL 1 BUILDING B, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	WOODS.CO.NZ

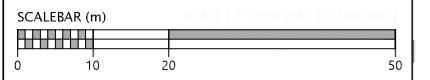
**ARRAN HILL PRECINCT 5
STAGE 5**

**REINFORCED EARTH BATTER,
SLOPE STABILISATION &
RETAINING WALL PLAN**

STATUS	ASBUILT	REV
SCALE	1:1000 @ A3	2
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-140-AB	



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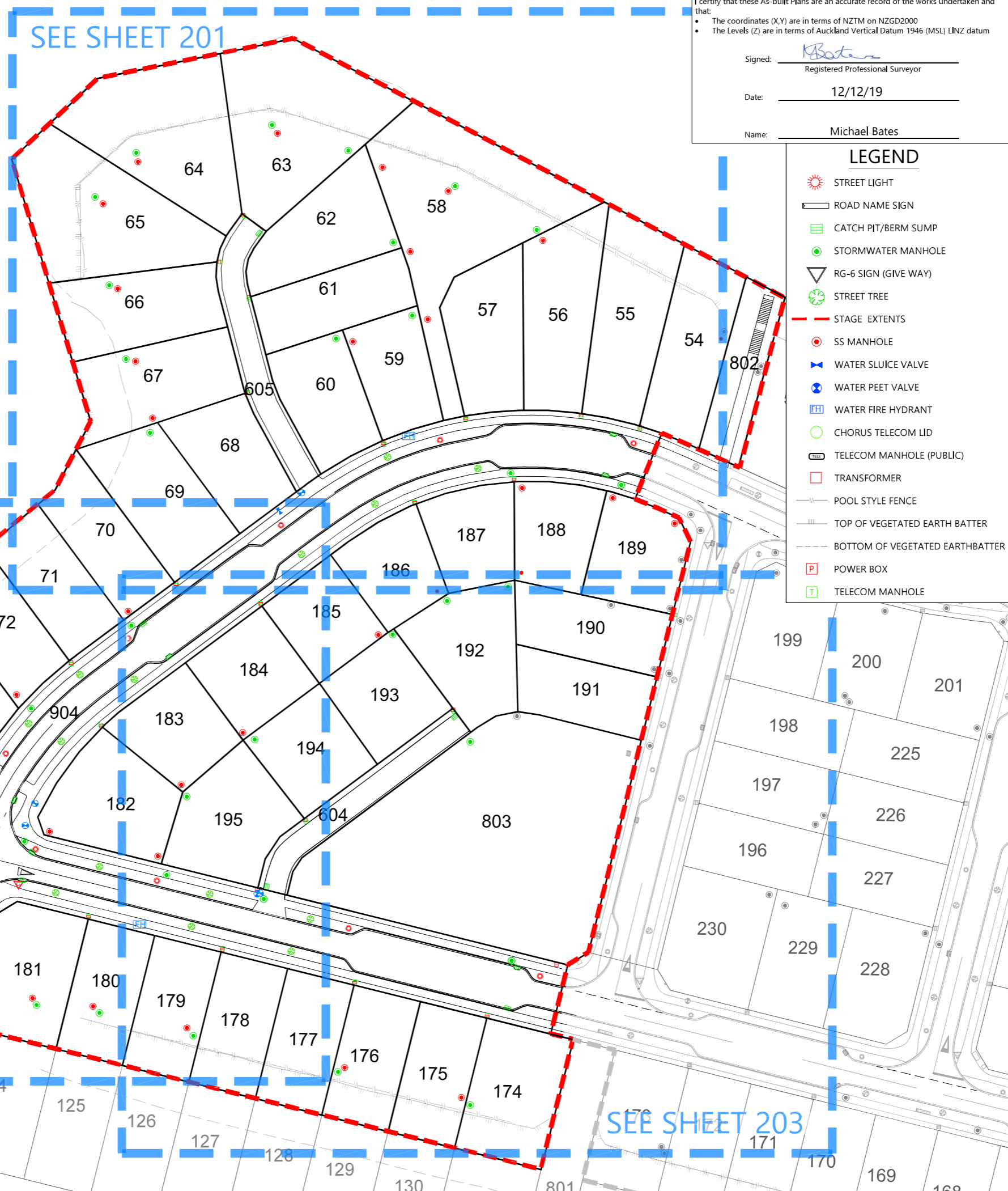
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- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: Registered Professional Surveyor
Date: 12/12/19
Name: Michael Bates

SCHEDULE OF COORDINATES				SCHEDULE OF COORDINATES			
NAME	EASTING	NORTHING	TYPE	NAME	EASTING	NORTHING	TYPE
ST01	1749042.91	5949435.39		SL 01	1749100.38	5949438.58	
ST02	1749064.02	5949432.75		SL 02	1749055.15	5949439.36	
ST03	1749039.97	5949424.45		SL 03	1749018.03	5949419.49	
ST04	1749022.82	5949412.70		SL 04	1748982.33	5949393.07	
ST05	1748983.79	5949383.52		SL 05	1748953.78	5949366.20	
ST06	1748971.09	5949384.62		SL 06	1748942.41	5949342.69	
ST07	1748959.11	5949373.19		SL 07	1748936.92	5949320.84	
ST08	1748966.74	5949369.03		SL 08	1748960.73	5949343.87	
ST09	1748947.15	5949355.13		SL 09	1748989.07	5949336.51	
ST10	1748939.22	5949330.76		SL 10	1749033.80	5949325.42	
ST11	1748945.78	5949322.20		SL 11	1749078.49	5949314.25	
ST12	1748975.66	5949339.84					
ST13	1748965.45	5949333.73					
ST14	1749001.38	5949333.41					
ST15	1748997.15	5949325.83					
ST16	1749024.91	5949327.58					
ST17	1749020.42	5949320.08					

Cree XSP IP66 T3ME 27W 4000K Version D on 8m Vico pole
 Enlarged Base Square Series and no arm (100mm Setback)



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Signed: Michael Bates
 Registered Professional Surveyor

Date: 12/12/19

Name: Michael Bates

LEGEND	
	STREET LIGHT
	ROAD NAME SIGN
	CATCH PIT/BERM SUMP
	STORMWATER MANHOLE
	RG-6 SIGN (GIVE WAY)
	STREET TREE
	SS MANHOLE
	WATER SLUICE VALVE
	WATER PEET VALVE
	WATER FIRE HYDRANT
	CHORUS TELECOM LID
	TELECOM MANHOLE (PUBLIC)
	TRANSFORMER
	POOL STYLE FENCE
	TOP OF VEGETATED EARTH BATTER
	BOTTOM OF VEGETATED EARTH BATTER
	POWER BOX
	TELECOM MANHOLE

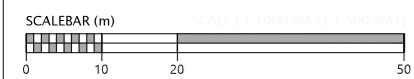
- NOTES**
- ALL WORKS AND MATERIALS COMPLY WITH AC STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION ISSUE NOV 2005.
 - ALL ROADS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH APPROVED ENGINEERING PLANS.
 - ALL FINISHED ROAD SURFACES ARE ASPHALT CONCRETE 30mm THICK.
 - ALL FOOTPATHS ARE 100mm THICK BRUSHED CONCRETE OR EXPOSED AGGREGATE AS NOTED.
 - ALL PIPE CROSSINGS UNDER ROADS HAVE BEEN HARDFILL BACKFILLED.
 - ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY DATA AND CONTRACTOR RECEIVED DATA.

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SEE SHEET 202

SEE SHEET 201

SEE SHEET 203



REVISION DETAILS		BY	DATE
1	ISSUED FOR INFORMATION	KR	12/12/19

SURVEYED	WOODS	WOODS Ltd
DESIGNED	MB	LEVEL 1 BUILDING B, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	WOODS.CO.NZ



**ARRAN HILL PRECINCT 5
 STAGE 5
 ROADING AS-BUILT
 OVERALL LAYOUT
 SHEET 1 OF 4**

STATUS	AS-BUILT	REV
SCALE	1:1000 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-200-AB	

Document No. K137505 - ARRAN HILL PRECINCT 5 STAGE 5 PROJECT DATA DRAWINGS SURV37505_P5_05_ROADING PLANS.DWG



SCHEDULE OF COORDINATES			
NAME	EASTING	NORTHING	TYPE
SL 01	1749100.38	5949438.58	
SL 02	1749055.15	5949439.36	
SL 03	1749018.03	5949419.49	
SL 04	1748982.33	5949393.07	
SL 05	1748953.78	5949366.20	
SL 06	1748942.41	5949342.69	
SL 07	1748936.92	5949320.84	
SL 08	1748960.73	5949343.87	
SL 09	1748989.07	5949336.51	
SL 10	1749033.80	5949325.42	
SL 11	1749078.49	5949314.25	

Cree XSP i66 T3ME 27W 4000K Version D on 8m Vicipole Enlarged Base Square Series and no arm (100mm setback)

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- The coordinates (X,Y) are in terms of NZTM on NZGD2000
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: Michael Bates
Registered Professional Surveyor

Date: 12/12/19

Name: Michael Bates

SCHEDULE OF COORDINATES			
NAME	EASTING	NORTHING	TYPE
ST01	1749042.91	5949435.39	
ST02	1749064.02	5949432.75	
ST03	1749039.97	5949424.45	
ST04	1749022.82	5949412.70	
ST05	1748983.79	5949383.52	
ST06	1748971.09	5949384.62	
ST07	1748959.11	5949373.19	
ST08	1748966.74	5949369.03	
ST09	1748947.15	5949355.13	
ST10	1748939.22	5949330.76	
ST11	1748945.78	5949322.20	
ST12	1748975.66	5949339.84	
ST13	1748965.45	5949333.73	
ST14	1749001.38	5949333.41	
ST15	1748997.15	5949325.83	
ST16	1749024.91	5949327.58	
ST17	1749020.42	5949320.08	

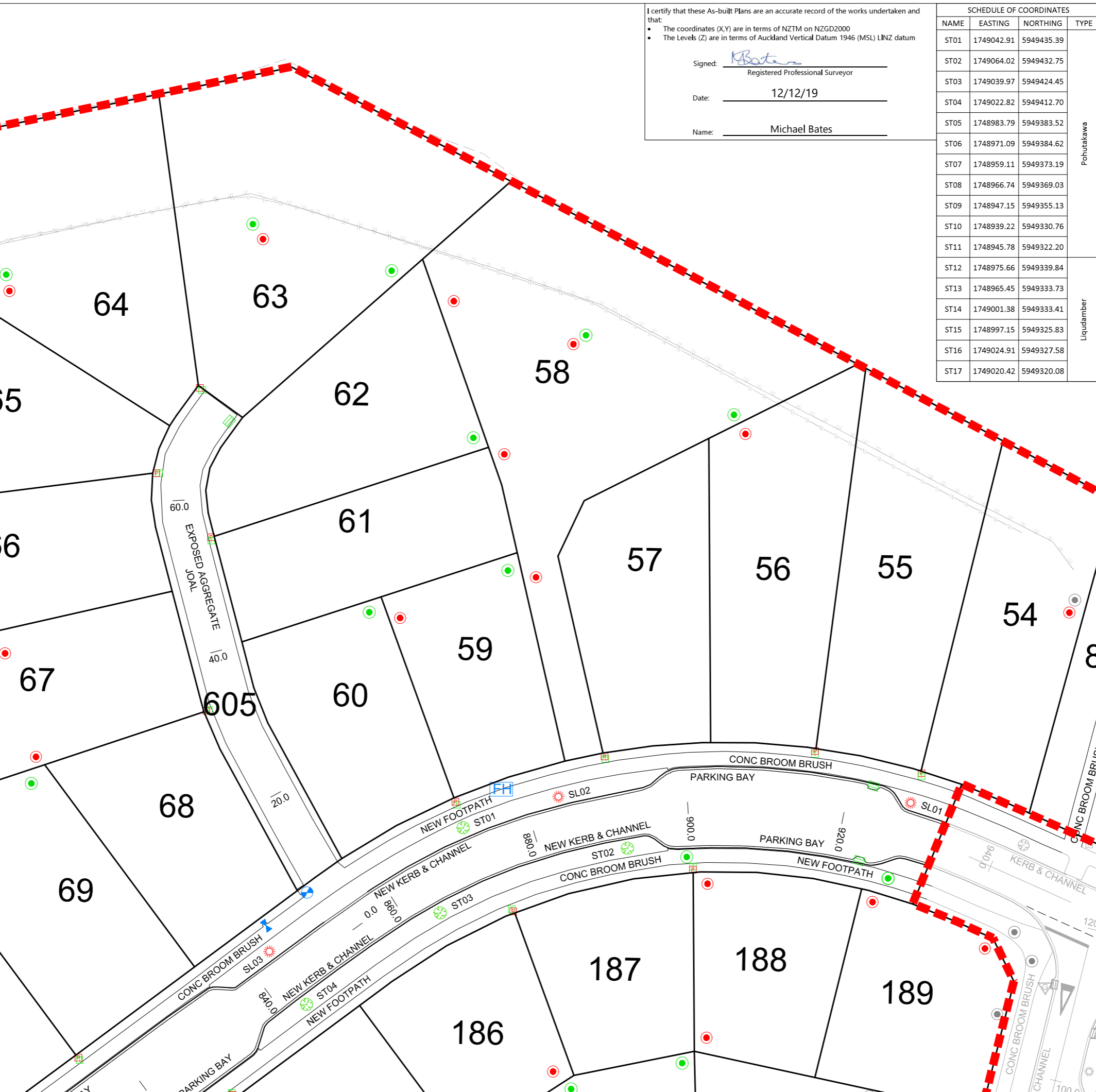
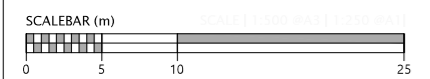
NOTES

- ALL WORKS AND MATERIALS COMPLY WITH AC STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION ISSUE NOV 2005.
- ALL ROADS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH APPROVED ENGINEERING PLANS.
- ALL FINISHED ROAD SURFACES ARE ASPHALT CONCRETE 30mm THICK.
- ALL FOOTPATHS ARE 100mm THICK BRUSHED CONCRETE OR EXPOSED AGGREGATE AS NOTED.
- ALL PIPE CROSSINGS UNDER ROADS HAVE BEEN HARDFILL BACKFILLED.
- ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY DATA AND CONTRACTOR RECEIVED DATA.

DISCLAIMER:
THE INFORMATION PORTRAYED ON THIS PLAN IS INTENDED TO BE SOLELY USED AS THE BASE DATA FOR THE PURPOSES OF 224C APPLICATION TO COUNCIL. WFH AND WOOD AND PARTNERS CONSULTANTS ACCEPT NO RESPONSIBILITY FOR ANY BUILDING DESIGN OR CONSTRUCTION WORK BASED ON THIS DRAWING FILE.

LEGEND

- STREET LIGHT
- ROAD NAME SIGN
- CATCH PIT/BERM SUMP
- STORMWATER MANHOLE
- RG-6 SIGN (GIVE WAY)
- STREET TREE
- STAGE EXTENTS
- SS MANHOLE
- WATER SLUICE VALVE
- WATER PEET VALVE
- WATER FIRE HYDRANT
- CHORUS TELECOM LID
- TELECOM MANHOLE (PUBLIC)
- TRANSFORMER
- POOL STYLE FENCE
- TOP OF VEGETATED EARTH BATTER
- BOTTOM OF VEGETATED EARTH BATTER
- POWER BOX
- TELECOM MANHOLE



REVISION DETAILS		BY	DATE
1	ISSUED FOR INFORMATION	KR	12/12/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING B, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229 WOODS.CO.NZ
DESIGNED	MB	
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	

N

**ARRAN HILL PRECINCT 5
STAGE 5**

**ROADING AS-BUILT
SHEET 2 OF 4**

STATUS	AS-BUILT	REV
SCALE	1:500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-201-AB	



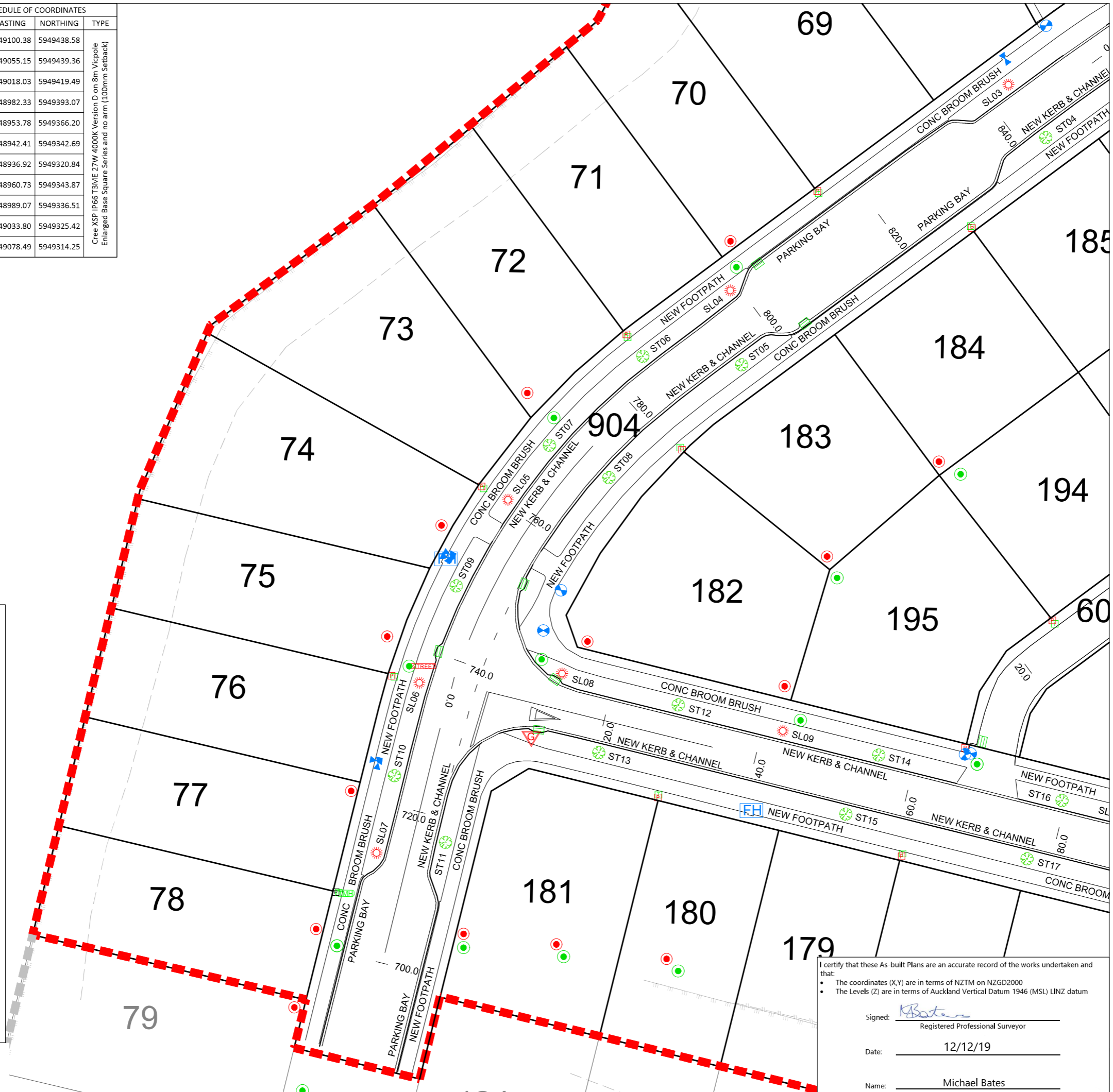
Document No. K137505 - ARRAN HILL PRECINCT 5 STAGE 5 PROJECT DATA DRAWINGS SURV37505_P5_05_ROADING PLANS.DWG

SCHEDULE OF COORDINATES				SCHEDULE OF COORDINATES				
NAME	EASTING	NORTHING	TYPE	NAME	EASTING	NORTHING	TYPE	
ST01	1749042.91	5949435.39	Pohutukawa	SL 01	1749100.38	5949438.58	Cree XSP IP66 T3ME 27W 4000K Version D on 8m Vicoile Enlarged Base Square Series and no arm (100mm Setback)	
ST02	1749064.02	5949432.75		SL 02	1749055.15	5949439.36		
ST03	1749039.97	5949424.45		SL 03	1749018.03	5949419.49		
ST04	1749022.82	5949412.70		SL 04	1748982.33	5949393.07		
ST05	1748983.79	5949383.52		SL 05	1748953.78	5949366.20		
ST06	1748971.09	5949384.62		SL 06	1748942.41	5949342.69		
ST07	1748959.11	5949373.19		SL 07	1748936.92	5949320.84		
ST08	1748966.74	5949369.03		SL 08	1748960.73	5949343.87		
ST09	1748947.15	5949355.13		SL 09	1748989.07	5949336.51		
ST10	1748939.22	5949330.76		SL 10	1749033.80	5949325.42		
ST11	1748945.78	5949322.20		SL 11	1749078.49	5949314.25		
ST12	1748975.66	5949339.84	Liquidamber					
ST13	1748965.45	5949333.73						
ST14	1749001.38	5949333.41						
ST15	1748997.15	5949325.83						
ST16	1749024.91	5949327.58						
ST17	1749020.42	5949320.08						

LEGEND

- STREET LIGHT
- ROAD NAME SIGN
- CATCH PIT/BERM SUMP
- STORMWATER MANHOLE
- RG-6 SIGN (GIVE WAY)
- STREET TREE
- STAGE EXTENTS
- SS MANHOLE
- WATER SLUICE VALVE
- WATER PEET VALVE
- WATER FIRE HYDRANT
- CHORUS TELECOM LID
- TELECOM MANHOLE (PUBLIC)
- TRANSFORMER
- POOL STYLE FENCE
- TOP OF VEGETATED EARTH BATTER
- BOTTOM OF VEGETATED EARTH BATTER
- POWER BOX
- TELECOM MANHOLE

SCALEBAR (m)



- ### NOTES
- ALL WORKS AND MATERIALS COMPLY WITH AC STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION ISSUE NOV 2005.
 - ALL ROADS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH APPROVED ENGINEERING PLANS.
 - ALL FINISHED ROAD SURFACES ARE ASPHALT CONCRETE 30mm THICK.
 - ALL FOOTPATHS ARE 100mm THICK BRUSHED CONCRETE OR EXPOSED AGGREGATE AS NOTED.
 - ALL PIPE CROSSINGS UNDER ROADS HAVE BEEN HARDFILL BACKFILLED.
 - ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY DATA AND CONTRACTOR RECEIVED DATA.

DISCLAIMER:
 THE INFORMATION PORTRAYED ON THIS PLAN IS INTENDED TO BE SOLELY USED AS THE BASE DATA FOR THE PURPOSES OF 224C APPLICATION TO COUNCIL. WFH AND WOOD AND PARTNERS CONSULTANTS ACCEPT NO RESPONSIBILITY FOR ANY BUILDING DESIGN OR CONSTRUCTION WORK BASED ON THIS DRAWING FILE.

REVISION DETAILS	BY	DATE
1 ISSUED FOR INFORMATION	KR	12/12/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING B, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229 WOODS.CO.NZ
DESIGNED	MB	
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	

ARRAN HILL PRECINCT 5 STAGE 5

ROADING AS-BUILT SHEET 3 OF 4

I certify that these As-built Plans are an accurate record of the works undertaken and that:

- The coordinates (X,Y) are in terms of NZTM on NZGD2000
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: Registered Professional Surveyor

Date: 12/12/19

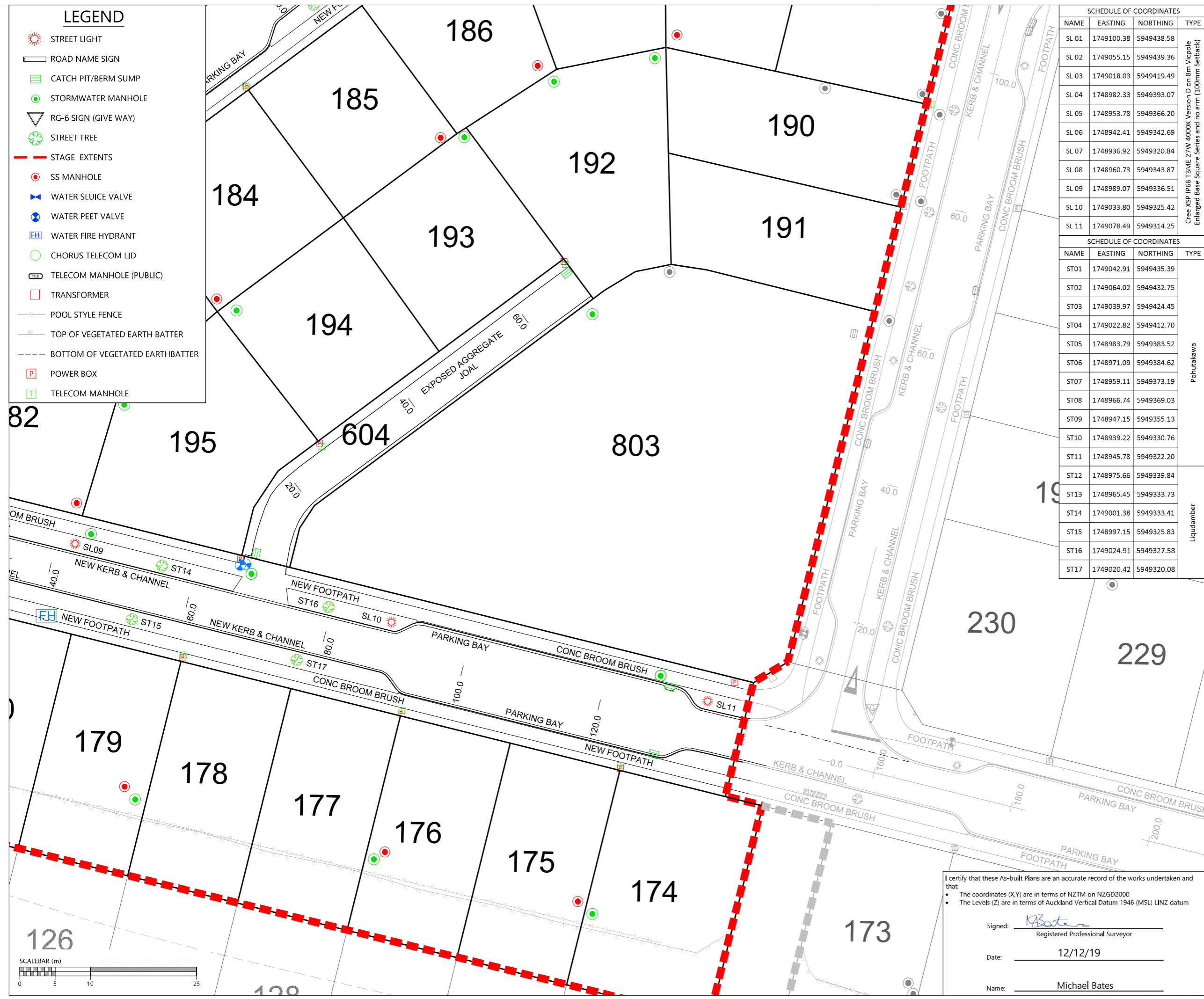
Name: Michael Bates

STATUS	AS-BUILT	REV
SCALE	1:500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-202-AB	



LEGEND

- STREET LIGHT
- ROAD NAME SIGN
- CATCH PIT/BERM SUMP
- STORMWATER MANHOLE
- RG-6 SIGN (GIVE WAY)
- STREET TREE
- STAGE EXTENTS
- SS MANHOLE
- WATER SLUICE VALVE
- WATER PEET VALVE
- WATER FIRE HYDRANT
- CHORUS TELECOM LID
- TELECOM MANHOLE (PUBLIC)
- TRANSFORMER
- POOL STYLE FENCE
- TOP OF VEGETATED EARTH BATTER
- BOTTOM OF VEGETATED EARTH BATTER
- POWER BOX
- TELECOM MANHOLE



SCHEDULE OF COORDINATES			
NAME	EASTING	NORTHING	TYPE
SL 01	1749100.38	5949438.58	
SL 02	1749055.15	5949439.36	
SL 03	1749018.03	5949419.49	
SL 04	1748982.33	5949393.07	
SL 05	1748953.78	5949366.20	
SL 06	1748942.41	5949342.69	
SL 07	1748936.92	5949320.84	
SL 08	1748960.73	5949343.87	
SL 09	1748989.07	5949336.51	
SL 10	1749033.80	5949325.42	
SL 11	1749078.49	5949314.25	

SCHEDULE OF COORDINATES			
NAME	EASTING	NORTHING	TYPE
ST01	1749042.91	5949435.39	
ST02	1749064.02	5949432.75	
ST03	1749039.97	5949424.45	
ST04	1749022.82	5949412.70	
ST05	1748983.79	5949383.52	
ST06	1748971.09	5949384.62	
ST07	1748959.11	5949373.19	
ST08	1748966.74	5949369.03	
ST09	1748947.15	5949355.13	
ST10	1748939.22	5949330.76	
ST11	1748945.78	5949322.20	
ST12	1748975.66	5949339.84	
ST13	1748965.45	5949333.73	
ST14	1749001.38	5949333.41	
ST15	1748997.15	5949325.83	
ST16	1749024.91	5949327.58	
ST17	1749020.42	5949320.08	

- ### NOTES
- ALL WORKS AND MATERIALS COMPLY WITH AC STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION ISSUE NOV 2005.
 - ALL ROADS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH APPROVED ENGINEERING PLANS.
 - ALL FINISHED ROAD SURFACES ARE ASPHALT CONCRETE 30mm THICK.
 - ALL FOOTPATHS ARE 100mm THICK BRUSHED CONCRETE OR EXPOSED AGGREGATE AS NOTED.
 - ALL PIPE CROSSINGS UNDER ROADS HAVE BEEN HARDFILL BACKFILLED.
 - ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY DATA AND CONTRACTOR RECEIVED DATA.

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REVISION DETAILS	BY	DATE
1 ISSUED FOR INFORMATION	KR	12/12/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING B, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229 WOODS.CO.NZ
DESIGNED	MB	
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	



ARRAN HILL PRECINCT 5 STAGE 5

ROADING AS-BUILT SHEET 4 OF 4

STATUS	AS-BUILT	REV
SCALE	1:500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-203-AB	

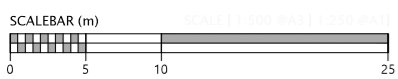
I certify that these As-built Plans are an accurate record of the works undertaken and that:

- The coordinates (X,Y) are in terms of NZTM on NZGD2000
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: Michael Bates
Registered Professional Surveyor

Date: 12/12/19

Name: Michael Bates



Document No. K137505 - ARRAN HILL PRECINCT 5 STAGE 5 PROJECT DATA/DRAWINGS/SURV37505_P5_05_ROADING PLANS.DWG

SCHEDULE OF COORDINATES			THE FOLLOWING CONNECTIONS WERE INSTALLED DURING THE PREVIOUS STAGES CONSTRUCTION		
NAME	EASTING	NORTHING	Lot	Lot	Lot
Lot 54	1749120.17	5949463.93	Lot 189	1749108.54	5949419.91
Lot 55	1749107.22	5949471.17	Lot 190	1749107.73	5949397.52
Lot 56	1749090.83	5949480.29	Lot 191	1749105.20	5949384.78
Lot 57	1749073.01	5949483.91	THE FOLLOWING CONNECTIONS ARE TO SERVE LOTS IN FUTURE STAGES		
Lot 58	1749075.21	5949488.02	Lot 80	1748917.76	5949268.57
Lot 59	1749049.18	5949466.12	Lot 81	1748912.80	5949250.09
Lot 60	1749029.45	5949461.98	Lot 82	1748910.37	5949235.17
Lot 61	1749044.43	5949481.53	Lot 83	1748904.76	5949217.02
Lot 62	1749034.95	5949502.96	Lot 84	1748907.07	5949198.64
Lot 63	1749016.18	5949511.32	Lot 87	1749220.16	5949119.48
Lot 64	1748985.28	5949505.35	Lot 88	1749203.88	5949122.97
Lot 65	1748976.04	5949495.48	Lot 89	1749188.72	5949126.52
Lot 66	1748979.19	5949475.55	Lot 90	1749172.85	5949129.96
Lot 67	1748983.24	5949458.59	Lot 91	1749155.35	5949134.48
Lot 68	1748991.64	5949441.54	Lot 92	1749140.30	5949138.15
Lot 69	1748988.17	5949439.59	Lot 93	1749124.25	5949142.09
Lot 70	1748981.16	5949399.35	Lot 94	1749108.92	5949145.75
Lot 71	1748970.09	5949391.48	Lot 95	1749092.56	5949149.74
Lot 72	1748957.35	5949379.93	Lot 96	1749077.20	5949153.75
Lot 73	1748950.38	5949371.79	Lot 97	1749050.55	5949160.60
Lot 74	1748943.30	5949360.29	Lot 98	1749030.60	5949165.38
Lot 75	1748936.71	5949347.02	Lot 99	1749015.21	5949169.19
Lot 76	1748934.09	5949333.26	Lot 100	1749000.18	5949173.09
Lot 77	1748930.34	5949318.44	Lot 101	1748984.72	5949177.27
Lot 78	1748926.59	5949305.37	Lot 102	1748969.19	5949180.75
Lot 174	1749062.68	5949286.15	Lot 103	1748954.24	5949184.22
Lot 175	1749047.18	5949289.31	Lot 104	1748937.25	5949188.69
Lot 176	1749032.35	5949293.72			
Lot 177	1749015.95	5949297.02			
Lot 178	1749000.09	5949300.82			
Lot 179	1748984.48	5949304.80			
Lot 180	1748969.75	5949307.99			
Lot 181	1748949.43	5949310.53			
Lot 182	1748963.54	5949349.43			
Lot 183	1748993.11	5949359.48			
Lot 184	1749010.03	5949374.02			
Lot 185	1749040.78	5949395.33			
Lot 186	1749054.55	5949405.56			
Lot 187	1749071.36	5949428.17			
Lot 188	1749091.66	5949426.16			
Lot 192	1749070.70	5949402.98			
Lot 193	1749043.91	5949391.86			
Lot 194	1749013.54	5949368.33			
Lot 195	1748993.28	5949341.77			

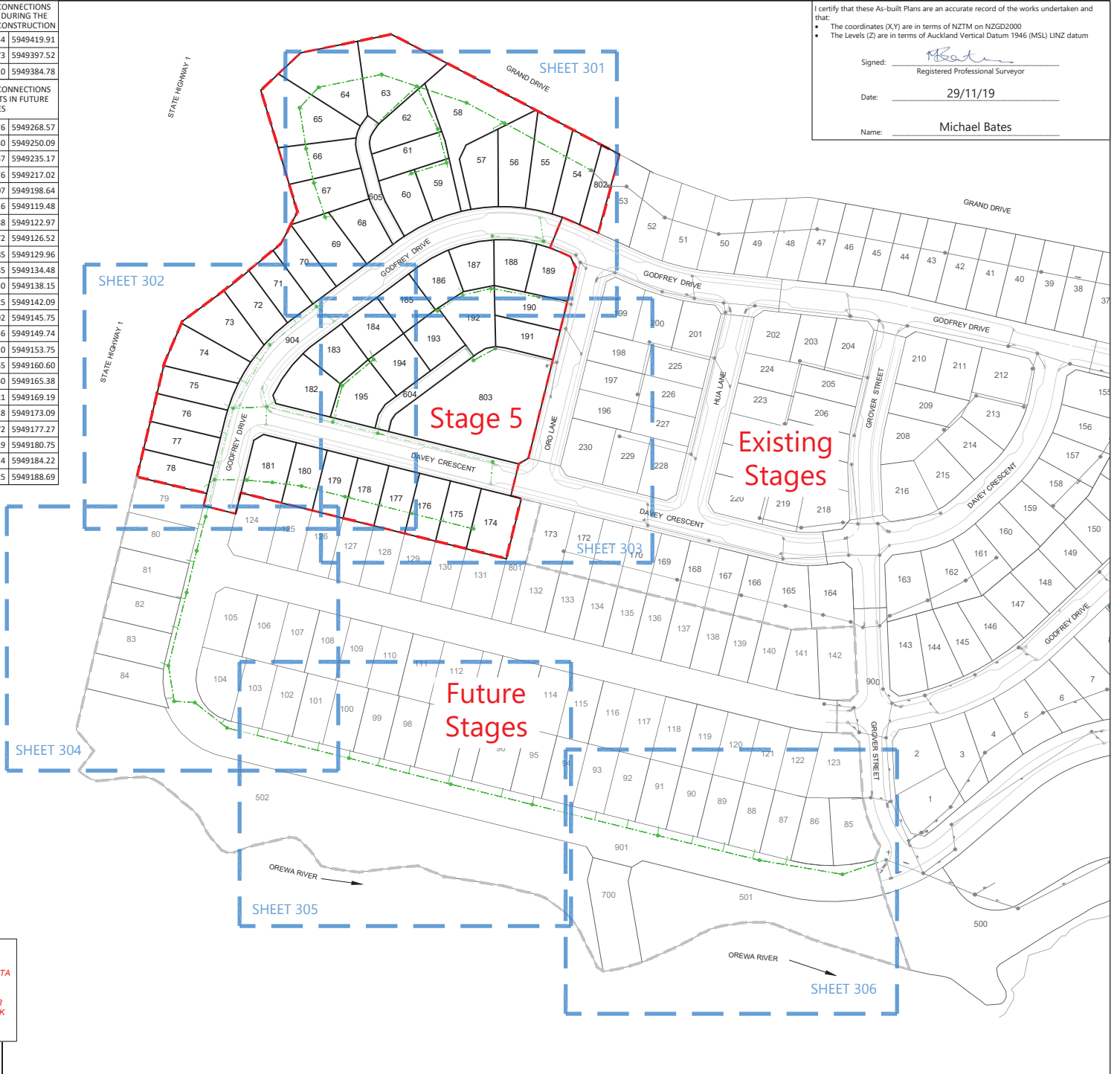
I certify that these As-built Plans are an accurate record of the works undertaken and that:

- The coordinates (X,Y) are in terms of NZTM on NZGD2000
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: Registered Professional Surveyor

Date: 29/11/19

Name: Michael Bates



LEGEND

- STORMWATER MANHOLE
- STORMWATER CESSPIP
- STORMWATER DOUBLE CESSPIP
- NEW STORMWATER
- EXISTING STORMWATER
- STAGE BOUNDARY

- NOTES**
- ALL WORKS AND MATERIALS COMPLY WITH AC STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION.
 - ALL PIPE BEDDING COMPLIES WITH AC STANDARDS
 - ALL CESSPIP LEADS AND PIPES UNDER THE ROAD AND CARRIAGEWAYS ARE REINFORCED COACRETE PIPES CLASS 4 (Z) RRJ. ALL OTHER PIPELINES ARE REINFORCED COACRETE CLASS 2 (X) RRJ UNLESS OTHERWISE NOTED.
 - ALL PIPE CROSSINGS UNDER ROADS AND ACCESSWAYS HAVE BEEN HARDFILL BACKFILLED.
 - ALL SW 100mm DIA. RAMPED RISERS HAVE BEEN EXTENDED AND CAPPED OFF 1.0m BELOW THE FINISHED GROUND SURFACE.
 - ALL PRIVATE DRAINAGE CONNECTIONS ARE 100mmØ.
 - LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.
 - ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY MEASURED DATA AND CONTRACTOR RECEIVED DATA.
 - SOME INVERT LEVELS ARE MARK THE LEVELS AT THE ENTRY POINT OF DROP-PIPES INTO THE MH CHAMBER. THESE LEVELS HAVE BEEN CALCULATED FROM OBSERVATIONS TO THE TOP OF THE PIPE.

REVISION DETAILS		BY	DATE
1	ISSUED FOR INFORMATION	KR	29/11/19

SURVEYED	WOODS	WOODS Ltd
DESIGNED	MB	LEVEL 1 BUILDING B,
DRAWN	SK	8 NUGENT STREET, GRAFTON
CHECKED	AC	AUCKLAND 1023
APPROVED	MB	09 308 9229
		WOODS.CO.NZ

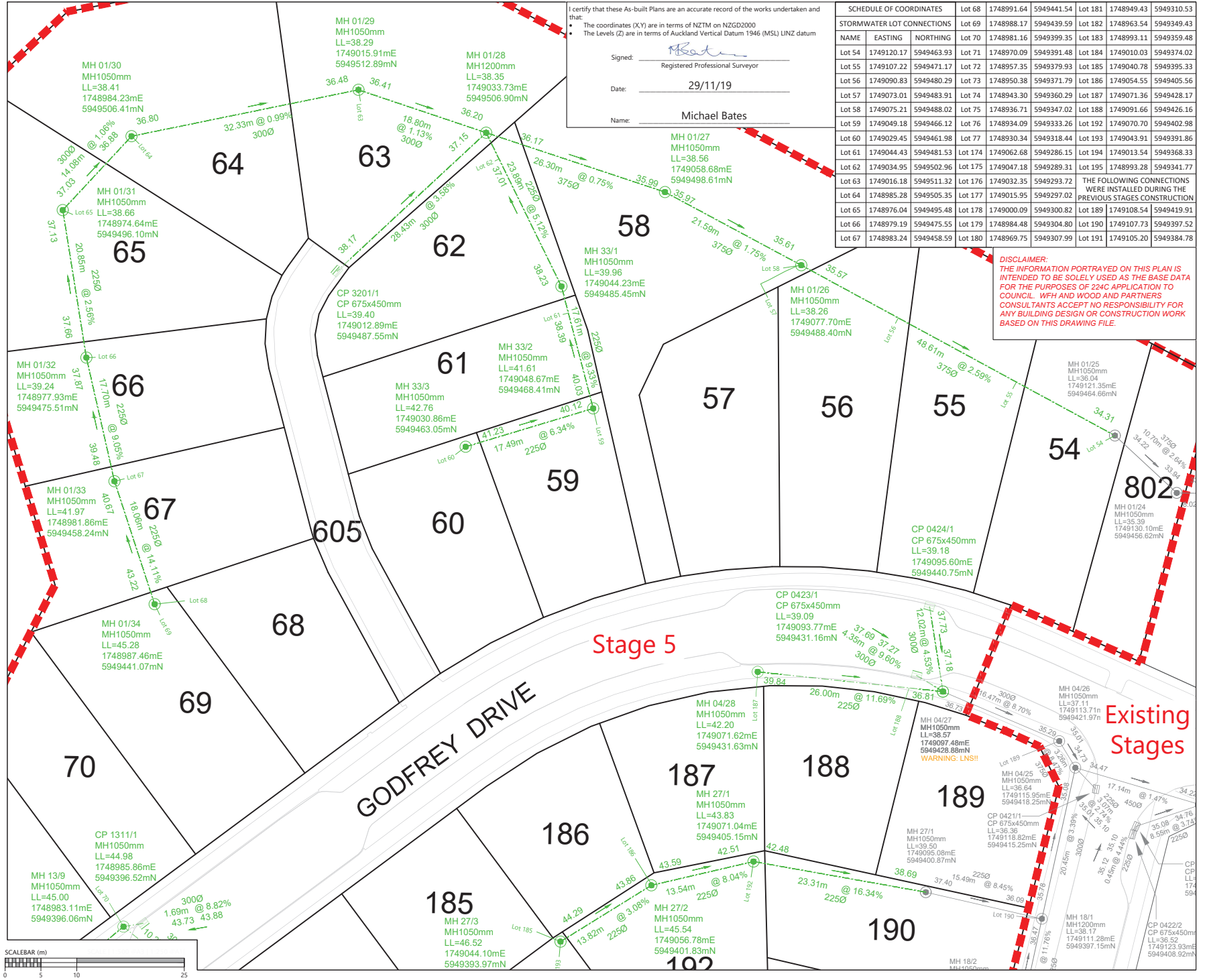
**ARRAN HILL PRECINCT 5
STAGE 5**

**STORMWATER AS-BUILT
OVERALL LAYOUT
SHEET 1 OF 7**

STATUS	AS-BUILT	REV
SCALE	1:2000 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-300-AB	

DISCLAIMER:
THE INFORMATION PORTRAYED ON THIS PLAN IS INTENDED TO BE SOLELY USED AS THE BASE DATA FOR THE PURPOSES OF 224C APPLICATION TO COUNCIL. WFH AND WOOD AND PARTNERS CONSULTANTS ACCEPT NO RESPONSIBILITY FOR ANY BUILDING DESIGN OR CONSTRUCTION WORK BASED ON THIS DRAWING FILE.





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- The coordinates (X,Y) are in terms of NZTM on NZGD2000
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: *[Signature]*
Registered Professional Surveyor

Date: 29/11/19

Name: Michael Bates

SCHEDULE OF COORDINATES		Lot 68	1748991.64	5949441.54	Lot 181	1748949.43	5949310.53
STORMWATER LOT CONNECTIONS	Lot 69	1748988.17	5949439.59	Lot 182	1748963.54	5949349.43	
NAME	EASTING	NORTHING	Lot 70	1748981.16	5949399.35	Lot 183	1748993.11
Lot 54	1749120.17	5949463.93	Lot 71	1748970.09	5949391.48	Lot 184	1749010.03
Lot 55	1749107.22	5949471.17	Lot 72	1748957.35	5949379.93	Lot 185	1749040.78
Lot 56	1749090.83	5949480.29	Lot 73	1748950.38	5949371.79	Lot 186	1749054.55
Lot 57	1749073.01	5949483.91	Lot 74	1748943.30	5949360.29	Lot 187	1749071.36
Lot 58	1749075.21	5949488.02	Lot 75	1748936.71	5949347.02	Lot 188	1749091.66
Lot 59	1749049.18	5949466.12	Lot 76	1748934.09	5949333.26	Lot 192	1749070.70
Lot 60	1749029.45	5949461.98	Lot 77	1748930.34	5949318.44	Lot 193	1749043.91
Lot 61	1749044.43	5949481.53	Lot 174	1749062.68	5949286.15	Lot 194	1749013.54
Lot 62	1749034.95	5949502.96	Lot 175	1749047.18	5949289.31	Lot 195	1748993.28
Lot 63	1749016.18	5949511.32	Lot 176	1749032.35	5949293.72	THE FOLLOWING CONNECTIONS WERE INSTALLED DURING THE PREVIOUS STAGES CONSTRUCTION	
Lot 64	1748985.28	5949505.35	Lot 177	1749015.95	5949297.02	Lot 189	1749108.54
Lot 65	1748976.04	5949495.48	Lot 178	1749000.09	5949300.82	Lot 190	1749107.73
Lot 66	1748979.19	5949475.55	Lot 179	1748984.48	5949304.80	Lot 191	1749105.20
Lot 67	1748983.24	5949458.59	Lot 180	1748969.75	5949307.99	Lot 192	1749105.20

DISCLAIMER:
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LEGEND	
STORMWATER MANHOLE	
STORMWATER CESSPIT	
STORMWATER DOUBLE CESSPIT	
NEW STORMWATER	
EXISTING STORMWATER	
STAGE BOUNDARY	

- NOTES**
- ALL WORKS AND MATERIALS COMPLY WITH AC STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION.
 - ALL PIPE BEDDING COMPLIES WITH AC STANDARDS
 - ALL CESSPIT LEADS AND PIPES UNDER THE ROAD AND CARRIDGWAYS ARE REINFORCED COCRETE PIPES CLASS 4 (2) RRJ. ALL OTHER PIPELINES ARE REINFORCED COCRETE CLASS 2 (X) RRJ UNLESS OTHERWISE NOTED.
 - ALL PIPE CROSSINGS UNDER ROADS AND ACCESSWAYS HAVE BEEN HARDFILL BACKFILLED.
 - ALL SW 100mm DIA. RAMPED RISERS HAVE BEEN EXTENDED AND CAPPED OFF 1.0m BELOW THE FINISHED GROUND SURFACE.
 - ALL PRIVATE DRAINAGE CONNECTIONS ARE 100mmØ.
 - LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.
 - ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY MEASURED DATA AND CONTRACTOR RECEIVED DATA.
 - SOME INVERT LEVELS ARE MARK THE LEVELS AT THE ENTRY POINT OF DROP-PIPES INTO THE MH CHAMBER. THESE LEVELS HAVE BEEN CALCULATED FROM OBSERVATIONS TO THE TOP OF THE PIPE.

REVISION DETAILS		BY	DATE
1	ISSUED FOR INFORMATION	KR	29/11/19

SURVEYED	WOODS	WOODS Ltd
DESIGNED	MB	LEVEL 1 BUILDING 8, 8 NUGENT STREET, GRAFTON
DRAWN	SK	AUCKLAND 1023 09 308 9229
CHECKED	AC	
APPROVED	MB	WOODS.CO.NZ



**ARRAN HILL PRECINCT 5
STAGE 5**

**STORMWATER AS-BUILT
SHEET 2 OF 7**

STATUS	AS-BUILT	REV
SCALE	1:500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-301-AB	



SCHEDULE OF COORDINATES		
NAME	EASTING	NORTHING
Lot 54	1749120.17	5949463.93
Lot 55	1749107.22	5949471.17
Lot 56	1749090.83	5949480.29
Lot 57	1749073.01	5949483.91
Lot 58	1749075.21	5949488.02
Lot 59	1749049.18	5949466.12
Lot 60	1749029.45	5949461.98
Lot 61	1749044.43	5949481.53
Lot 62	1749034.95	5949502.96
Lot 63	1749016.18	5949511.32
Lot 64	1748985.28	5949505.35
Lot 65	1748976.04	5949495.48
Lot 66	1748979.19	5949475.55
Lot 67	1748983.24	5949458.59
Lot 68	1748991.64	5949441.54
Lot 69	1748988.17	5949439.59
Lot 70	1748981.16	5949399.35
Lot 71	1748970.09	5949391.48
Lot 72	1748957.35	5949379.93
Lot 73	1748950.38	5949371.79
Lot 74	1748943.30	5949360.29
Lot 75	1748936.71	5949347.02
Lot 76	1748934.09	5949333.26
Lot 77	1748930.34	5949318.44
Lot 78	1748926.59	5949305.37
Lot 174	1749062.68	5949286.15
Lot 175	1749047.18	5949289.31
Lot 176	1749032.35	5949293.72
Lot 177	1749015.95	5949297.02
Lot 178	1749000.09	5949300.82
Lot 179	1748984.48	5949304.80
Lot 180	1748969.75	5949307.99
Lot 181	1748949.43	5949310.53
Lot 182	1748963.54	5949349.43
Lot 183	1748993.11	5949359.48
Lot 184	1749010.03	5949374.02
Lot 185	1749040.78	5949395.33
Lot 186	1749054.55	5949405.56
Lot 187	1749071.36	5949428.17
Lot 188	1749091.66	5949426.16
Lot 192	1749070.70	5949402.98
Lot 193	1749043.91	5949391.86
Lot 194	1749013.54	5949368.33
Lot 195	1748993.28	5949341.77
Lot 189	1749108.54	5949419.91
Lot 190	1749107.73	5949397.52
Lot 191	1749105.20	5949384.78

I certify that these As-built Plans are an accurate record of the works undertaken and that:

- The coordinates (X,Y) are in terms of NZTM on NZGD2000
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: Registered Professional Surveyor

Date: 29/11/19

Name: Michael Bates

State Highway 1

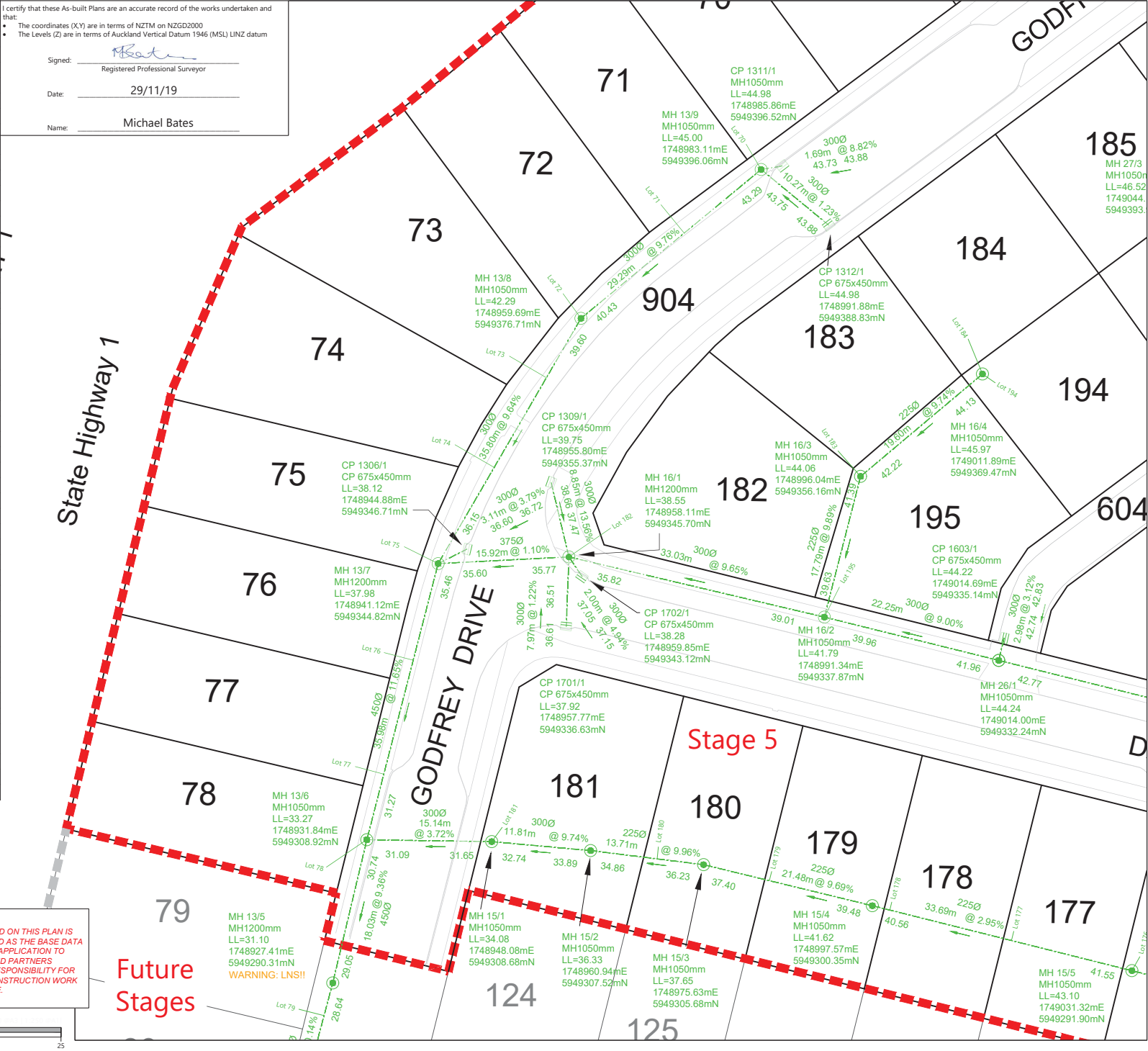
GODFREY DRIVE

Stage 5

Future Stages



DISCLAIMER:
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LEGEND

STORMWATER MANHOLE	
STORMWATER CESSPIT	
STORMWATER DOUBLE CESSPIT	
NEW STORMWATER	
EXISTING STORMWATER	
STAGE BOUNDARY	

- NOTES**
- ALL WORKS AND MATERIALS COMPLY WITH AC STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION.
 - ALL PIPE BEDDING COMPLIES WITH AC STANDARDS
 - ALL CESSPIT LEADS AND PIPES UNDER THE ROAD AND CARRIDGWAYS ARE REINFORCED COACRETE PIPES CLASS 4 (Z) RRJ. ALL OTHER PIPELINES ARE REINFORCED COACRETE CLASS 2 (X) RRJ UNLESS OTHERWISE NOTED.
 - ALL PIPE CROSSINGS UNDER ROADS AND ACCESSWAYS HAVE BEEN HARDFILL BACKFILLED.
 - ALL SW 100mm DIA. RAMPED RISERS HAVE BEEN EXTENDED AND CAPPED OFF 1.0m BELOW THE FINISHED GROUND SURFACE.
 - ALL PRIVATE DRAINAGE CONNECTIONS ARE 100mmØ.
 - LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.
 - ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY MEASURED DATA AND CONTRACTOR RECEIVED DATA.
 - SOME INVERT LEVELS ARE MARK THE LEVELS AT THE ENTRY POINT OF DROP-PIPES INTO THE MH CHAMBER. THESE LEVELS HAVE BEEN CALCULATED FROM OBSERVATIONS TO THE TOP OF THE PIPE.

REVISION DETAILS	BY	DATE
1 ISSUED FOR INFORMATION	KR	29/11/19

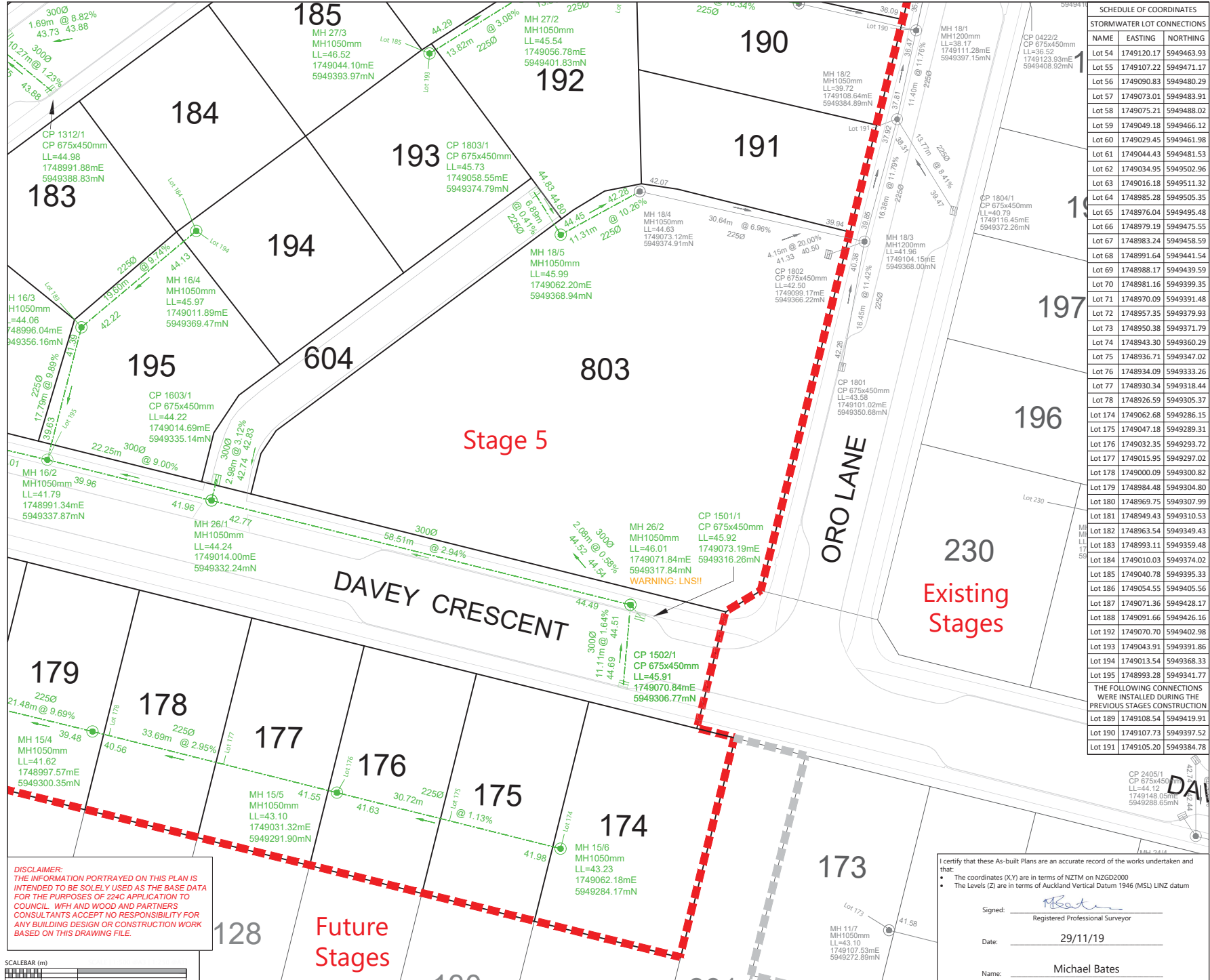
SURVEYED	WOODS	WOODS Ltd
DESIGNED	MB	LEVEL 1 BUILDING 8, 8 NUGENT STREET, GRAFTON
DRAWN	SK	AUCKLAND 1023
CHECKED	AC	09 308 9229
APPROVED	MB	WOODS.CO.NZ



ARRAN HILL PRECINCT 5 STAGE 5

STORMWATER AS-BUILT SHEET 3 OF 7

STATUS	AS-BUILT	REV
SCALE	1:500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-302-AB	



SCHEDULE OF COORDINATES		
STORMWATER LOT CONNECTIONS		
NAME	EASTING	NORTHING
Lot 54	1749120.17	5949463.93
Lot 55	1749107.22	5949471.17
Lot 56	1749090.83	5949480.29
Lot 57	1749073.01	5949483.91
Lot 58	1749075.21	5949488.02
Lot 59	1749049.18	5949466.12
Lot 60	1749029.45	5949461.98
Lot 61	1749044.43	5949481.53
Lot 62	1749034.95	5949502.96
Lot 63	1749016.18	5949511.32
Lot 64	1748985.28	5949505.35
Lot 65	1748976.04	5949495.48
Lot 66	1748979.19	5949475.55
Lot 67	1748983.24	5949458.59
Lot 68	1748991.64	5949441.54
Lot 69	1748988.17	5949439.59
Lot 70	1748981.16	5949399.35
Lot 71	1748970.09	5949391.48
Lot 72	1748957.35	5949379.93
Lot 73	1748950.38	5949371.79
Lot 74	1748943.30	5949360.29
Lot 75	1748936.71	5949347.02
Lot 76	1748934.09	5949333.26
Lot 77	1748930.34	5949318.44
Lot 78	1748926.59	5949305.37
Lot 174	1749062.68	5949286.15
Lot 175	1749047.18	5949289.31
Lot 176	1749032.35	5949293.72
Lot 177	1749015.95	5949297.02
Lot 178	1749000.09	5949300.82
Lot 179	1748984.48	5949304.80
Lot 180	1748969.75	5949307.99
Lot 181	1748949.43	5949310.53
Lot 182	1748963.54	5949349.43
Lot 183	1748993.11	5949359.48
Lot 184	1749010.03	5949374.02
Lot 185	1749040.08	5949395.33
Lot 186	1749054.55	5949405.56
Lot 187	1749071.36	5949428.17
Lot 188	1749091.66	5949426.16
Lot 192	1749070.70	5949402.98
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Lot 195	1748993.28	5949341.77
Lot 189	1749108.54	5949419.91
Lot 190	1749107.73	5949397.52
Lot 191	1749105.20	5949384.78

LEGEND	
STORMWATER MANHOLE	
STORMWATER CESSPIT	
STORMWATER DOUBLE CESSPIT	
NEW STORMWATER	
EXISTING STORMWATER	
STAGE BOUNDARY	

- NOTES**
- ALL WORKS AND MATERIALS COMPLY WITH AC STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION.
 - ALL PIPE BEDDING COMPLIES WITH AC STANDARDS
 - ALL CESSPIT LEADS AND PIPES UNDER THE ROAD AND CARRIAGEWAYS ARE REINFORCED COACRETE PIPES CLASS 4 (2) RRI. ALL OTHER PIPELINES ARE REINFORCED COACRETE CLASS 2 (N) RRI UNLESS OTHERWISE NOTED.
 - ALL PIPE CROSSINGS UNDER ROADS AND ACCESSWAYS HAVE BEEN HARDFILL BACKFILLED.
 - ALL SW 100mm DIA. RAMPED RISERS HAVE BEEN EXTENDED AND CAPPED OFF 1.0m BELOW THE FINISHED GROUND SURFACE.
 - ALL PRIVATE DRAINAGE CONNECTIONS ARE 100mmØ.
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REVISION DETAILS		BY	DATE
1	ISSUED FOR INFORMATION	KR	29/11/19

SURVEYED	WOODS	WOODS Ltd
DESIGNED	MB	LEVEL 1 BUILDING 8, 8 NUGENT STREET, GRAFTON
DRAWN	SK	AUCKLAND 1023 09 308 9229
CHECKED	AC	
APPROVED	MB	WOODS.CO.NZ

**ARRAN HILL PRECINCT 5
STAGE 5**

**STORMWATER AS-BUILT
SHEET 4 OF 7**

STATUS	AS-BUILT	REV
SCALE	1:500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-303-AB	

DISCLAIMER:
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- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed:
Registered Professional Surveyor

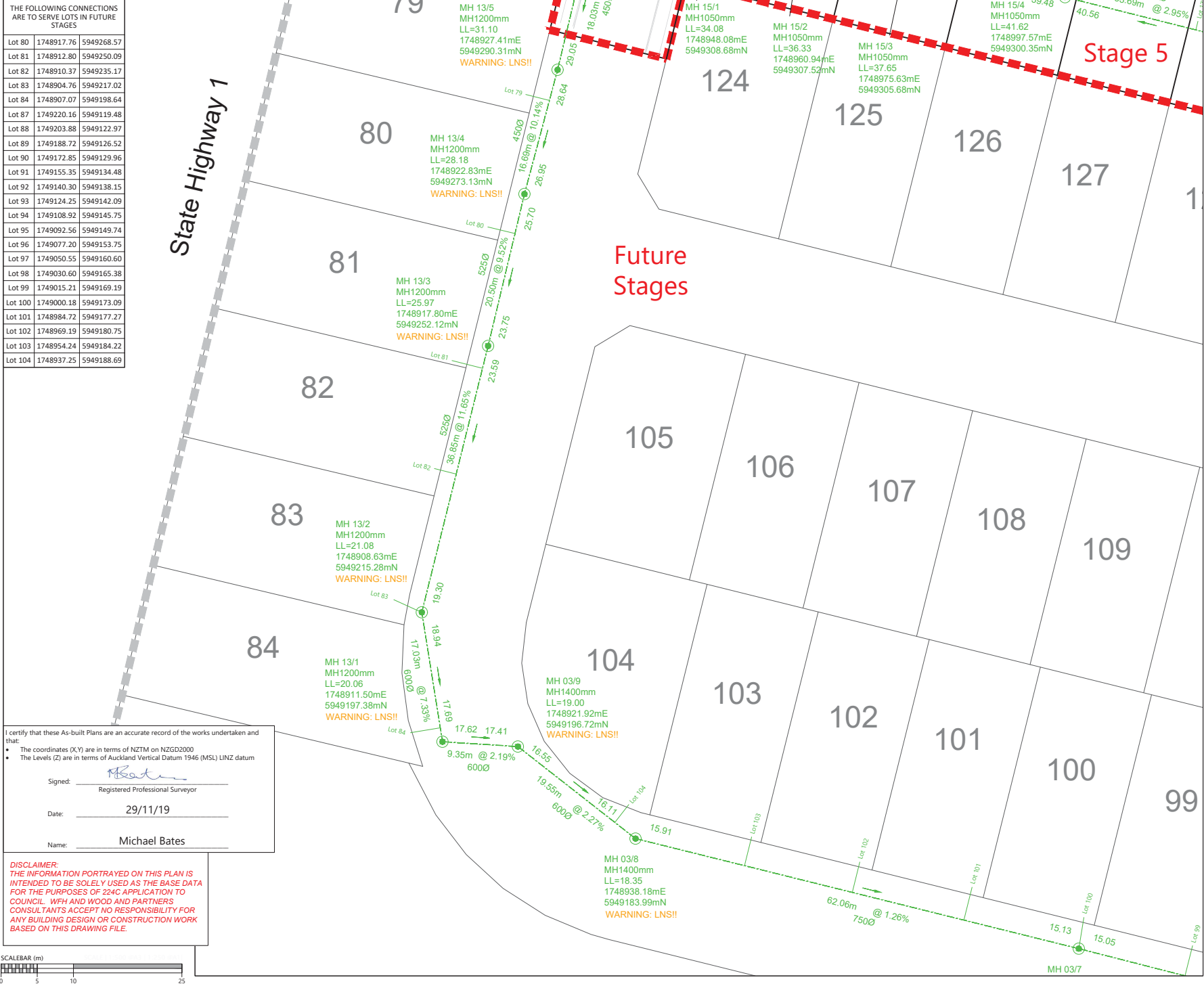
Date: 29/11/19

Name: Michael Bates

THE FOLLOWING CONNECTIONS ARE TO SERVE LOTS IN FUTURE STAGES

Lot 80	1748917.76	5949268.57
Lot 81	1748912.80	5949250.09
Lot 82	1748910.37	5949235.17
Lot 83	1748904.76	5949217.02
Lot 84	1748907.07	5949198.64
Lot 87	1749220.16	5949119.48
Lot 88	1749203.88	5949122.97
Lot 89	1749188.72	5949126.52
Lot 90	1749172.85	5949129.96
Lot 91	1749155.35	5949134.48
Lot 92	1749140.30	5949138.15
Lot 93	1749124.25	5949142.09
Lot 94	1749108.92	5949145.75
Lot 95	1749092.56	5949149.74
Lot 96	1749077.20	5949153.75
Lot 97	1749050.55	5949160.60
Lot 98	1749030.60	5949165.38
Lot 99	1749015.21	5949169.19
Lot 100	1749000.18	5949173.09
Lot 101	1748984.72	5949177.27
Lot 102	1748969.19	5949180.75
Lot 103	1748954.24	5949184.22
Lot 104	1748937.25	5949188.69

State Highway 1



LEGEND

STORMWATER MANHOLE	
STORMWATER CESSPIT	
STORMWATER DOUBLE CESSPIT	
NEW STORMWATER	
EXISTING STORMWATER	
STAGE BOUNDARY	

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REVISION DETAILS

NO	REVISION INFORMATION	BY	DATE
1	ISSUED FOR INFORMATION	KR	29/11/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING 8, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229
DESIGNED	MB	
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	

WFH PROPERTIES

**ARRAN HILL PRECINCT 5
STAGE 5**

STORMWATER AS-BUILT
SHEET 5 OF 7

STATUS	AS-BUILT	REV
SCALE	1:500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-303-AB	

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Signed:
Registered Professional Surveyor

Date: 29/11/19

Name: Michael Bates

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LEGEND

STORMWATER MANHOLE	
STORMWATER CESSPIT	
STORMWATER DOUBLE CESSPIT	
NEW STORMWATER	
EXISTING STORMWATER	
STAGE BOUNDARY	

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THE FOLLOWING CONNECTIONS ARE TO SERVE LOTS IN FUTURE STAGES

Lot 80	1748917.76	5949268.57
Lot 81	1748912.80	5949250.09
Lot 82	1748910.37	5949235.17
Lot 83	1748904.76	5949217.02
Lot 84	1748907.07	5949198.64
Lot 87	1749220.16	5949119.48
Lot 88	1749203.88	5949122.97
Lot 89	1749188.72	5949126.52
Lot 90	1749172.85	5949129.96
Lot 91	1749155.35	5949134.48
Lot 92	1749140.30	5949138.15
Lot 93	1749124.25	5949142.09
Lot 94	1749108.92	5949145.75
Lot 95	1749092.56	5949149.74
Lot 96	1749077.20	5949153.75
Lot 97	1749050.55	5949160.60
Lot 98	1749030.60	5949165.38
Lot 99	1749015.21	5949169.19
Lot 100	1749000.18	5949173.09
Lot 101	1748984.72	5949177.27
Lot 102	1748969.19	5949180.75
Lot 103	1748954.24	5949184.22
Lot 104	1748937.25	5949188.69

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Signed:
Registered Professional Surveyor

Date: 29/11/19

Name: Michael Bates

REVISION DETAILS

NO	ISSUED FOR INFORMATION	BY	DATE
1		KR	29/11/19

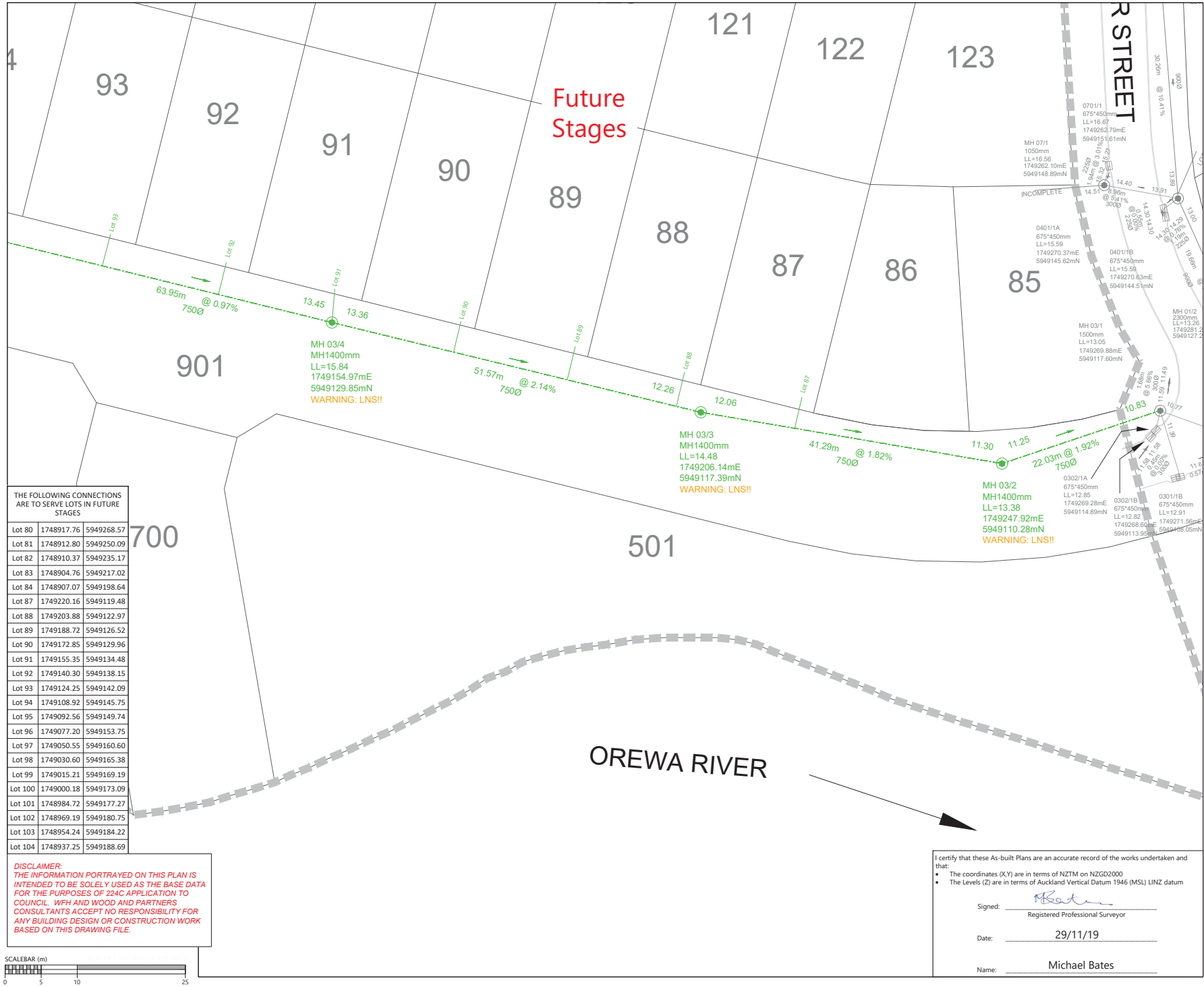
SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING 8, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229
DESIGNED	MB	
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	



**ARRAN HILL PRECINCT 5
STAGE 5**

**STORMWATER AS-BUILT
SHEET 6 OF 7**

STATUS	AS-BUILT	REV
SCALE	1:500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-303-AB	

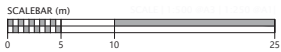


Future Stages

THE FOLLOWING CONNECTIONS ARE TO SERVE LOTS IN FUTURE STAGES

Lot 80	1748917.76	5949268.57
Lot 81	1748912.80	5949250.09
Lot 82	1748910.37	5949235.17
Lot 83	1748904.76	5949217.02
Lot 84	1748907.07	5949198.64
Lot 87	1749220.16	5949119.48
Lot 88	1749203.88	5949122.97
Lot 89	1749188.72	5949126.52
Lot 90	1749172.85	5949129.96
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Lot 93	1749124.25	5949142.09
Lot 94	1749108.92	5949145.75
Lot 95	1749092.56	5949149.74
Lot 96	1749077.20	5949153.75
Lot 97	1749050.55	5949160.60
Lot 98	1749030.60	5949165.38
Lot 99	1749015.21	5949169.19
Lot 100	1749000.18	5949173.09
Lot 101	1748984.72	5949177.27
Lot 102	1748969.19	5949180.75
Lot 103	1748954.24	5949184.22
Lot 104	1748937.25	5949188.69

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LEGEND

STORMWATER MANHOLE	
STORMWATER CESSPIT	
STORMWATER DOUBLE CESSPIT	
NEW STORMWATER	
EXISTING STORMWATER	
STAGE BOUNDARY	

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REVISION DETAILS

NO	REVISION	BY	DATE
1	ISSUED FOR INFORMATION	KR	29/11/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING 8, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229
DESIGNED	MB	
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	

WFH
PROPERTIES

**ARRAN HILL PRECINCT 5
STAGE 5**

**STORMWATER AS-BUILT
SHEET 7 OF 7**

STATUS	AS-BUILT	REV
SCALE	1:500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-303-AB	

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- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed:
Registered Professional Surveyor

Date: 29/11/19

Name: Michael Bates

SCHEDULE OF COORDINATES			THE FOLLOWING CONNECTIONS WERE INSTALLED DURING THE PREVIOUS STAGE'S CONSTRUCTION		
NAME	EASTING	NORTHING			
WASTEWATER LOT CONNECTIONS	Lot 189	1749109.96	5949409.1		
Lot 54	1749119.07	5949463.11	Lot 190	1749106.9	5949395.44
Lot 55	1749105.62	5949469.95	Lot 191	1749101.46	5949382.78
Lot 56	1749089.66	5949478.68	THE FOLLOWING CONNECTIONS ARE TO SERVE LOTS IN FUTURE STAGES		
Lot 57	1749073.58	5949483.26	Lot 79	1748922.38	5949287.02
Lot 58	1749074.68	5949486.45	Lot 80	1748917.30	5949269.85
Lot 59	1749049.35	5949466.21	Lot 81	1748913.67	5949253.06
Lot 60	1749030.72	5949460.92	Lot 82	1748909.57	5949234.85
Lot 61	1749044.67	5949482.03	Lot 83	1748904.92	5949217.32
Lot 62	1749035.64	5949504.3	Lot 84	1748905.91	5949197.32
Lot 63	1749015.98	5949509.94	Lot 104	1748938.12	5949189.95
Lot 64	1748986.48	5949504.11	Lot 103	1748953.57	5949185.72
Lot 65	1748978.01	5949495.49	Lot 102	1748968.32	5949182.00
Lot 66	1748980.17	5949476.63	Lot 101	1748985.90	5949177.57
Lot 67	1748984.37	5949459.24	Lot 100	1748999.73	5949174.25
Lot 68	1748991.87	5949441.87	Lot 99	1749016.64	5949169.98
Lot 69	1748989.09	5949439.11	Lot 98	1749030.36	5949166.48
Lot 70	1748980.9	5949401.48	Lot 97	1749049.90	5949161.61
Lot 71	1748969.61	5949390.96	Lot 96	1749078.10	5949154.38
Lot 72	1748957.24	5949381.28	Lot 95	1749094.10	5949150.42
Lot 73	1748949.77	5949371.21	Lot 94	1749109.75	5949146.66
Lot 74	1748942.82	5949359.69	Lot 93	1749125.41	5949143.02
Lot 75	1748936.15	5949346.31	Lot 92	1749140.97	5949139.00
Lot 76	1748933.55	5949332.38	Lot 91	1749159.17	5949135.02
Lot 77	1748930.13	5949317.94	Lot 90	1749172.51	5949131.76
Lot 78	1748925.83	5949304.75	Lot 89	1749187.90	5949128.16
Lot 174	1749063.22	5949285.84	Lot 88	1749204.51	5949124.18
Lot 175	1749048.15	5949290.24	Lot 87	1749220.08	5949120.47
Lot 176	1749031.49	5949294.53	Lot 86	1749228.23	5949119.11
Lot 177	1749017.3	5949298.23	Lot 85	1749262.03	5949121.84
Lot 178	1749000.87	5949302.2			
Lot 179	1748985.46	5949306.36			
Lot 180	1748969.72	5949309.76			
Lot 181	1748950.16	5949311.88			
Lot 182	1748965.57	5949348.63			
Lot 183	1748995.51	5949360.33			
Lot 184	1749008.21	5949372.95			
Lot 185	1749039.03	5949395.72			
Lot 186	1749053.27	5949403.74			
Lot 187	1749071.74	5949427.08			
Lot 188	1749090.41	5949444.33			
Lot 189	1749108.59	5949419.81			
Lot 192	1749069.46	5949405.09			
Lot 193	1749042.37	5949390.98			
Lot 194	1749012.14	5949367.93			
Lot 195	1748992.99	5949342.85			

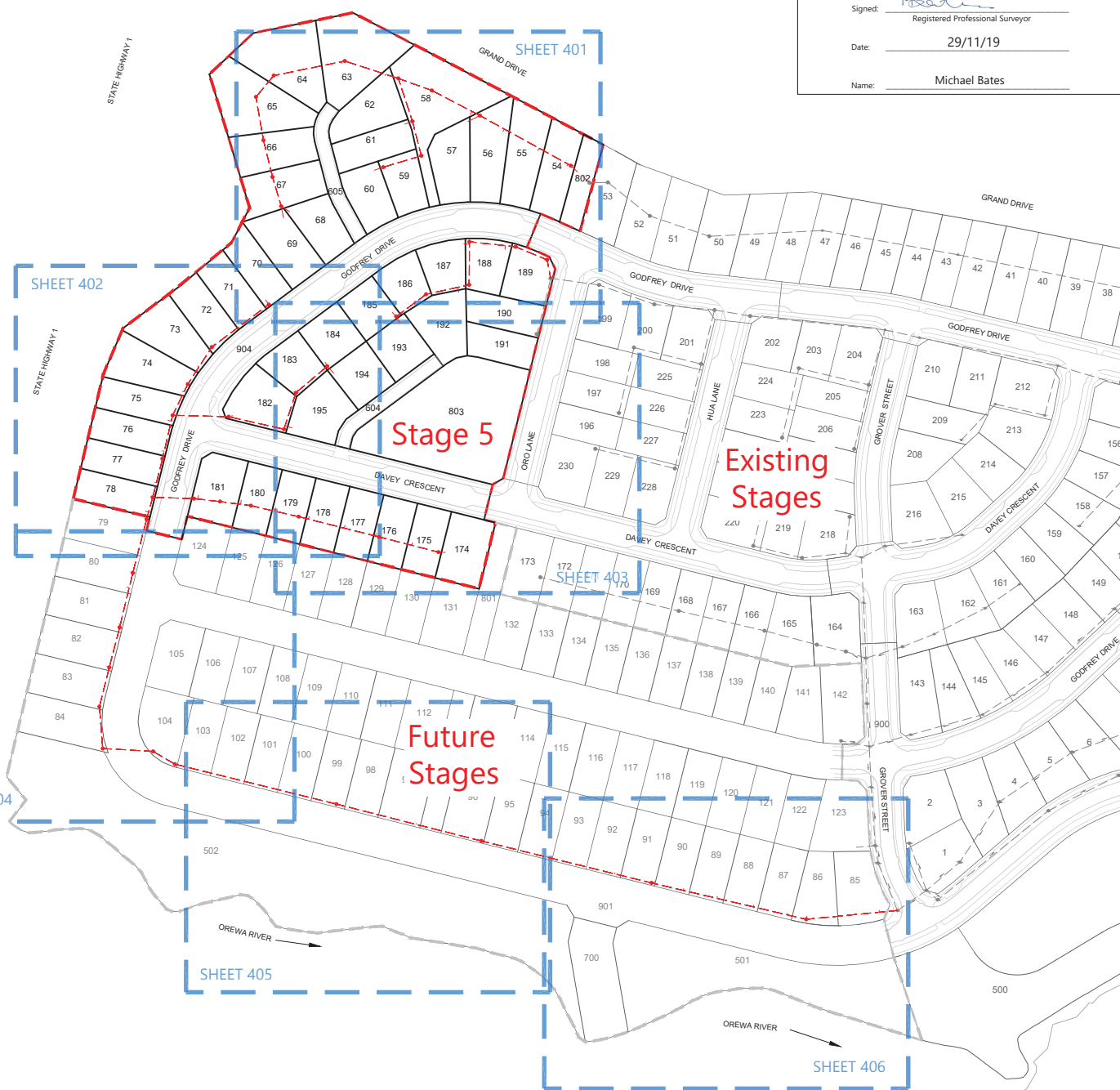
I certify that these As-built Plans are an accurate record of the works undertaken and that:

- The coordinates (X,Y) are in terms of NZTM on NZGD2000
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: *Michael Bates*
Registered Professional Surveyor

Date: 29/11/19

Name: Michael Bates



LEGEND

- NEW SANITARY SEWER MANHOLE:
- NEW SANITARY SEWER:
- EXISTING SANITARY SEWER:
- STAGE BOUNDARY:

- NOTES**
- ALL WORKS AND MATERIALS COMPLY WITH AUCKLAND COUNCIL & WATERCARE SERVICES LTD STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION.
 - ALL SANITARY SEWER LINES ARE 150mmØ uPVC CLASS SN16 UNLESS STATED OTHERWISE.
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 - ALL PIPE CROSSINGS UNDER ROADS AND ACCESSWAYS HAVE BEEN HARDFILL BACKFILLED.
 - ALL PRIVATE LOT CONNECTIONS ARE 100mmØ
 - LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.
 - ALL PIPE AND MH DIAMETERS ARE INTERNAL AND SHOWN IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
 - ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY MEASURED DATA AND CONTRACTOR RECEIVED DATA.
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REVISION DETAILS

NO	DESCRIPTION	BY	DATE
1	ISSUED FOR INFORMATION	KR	29/11/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING 8, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229
DESIGNED	MB	
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	

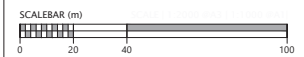


**ARRAN HILL PRECINCT 5
STAGE 5**

**WASTEWATER AS-BUILT
OVERALL LAYOUT
SHEET 1 OF 7**

STATUS	AS BUILT	REV
SCALE	1:2000 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-400-AB	

DISCLAIMER:
THE INFORMATION PORTRAYED ON THIS PLAN IS INTENDED TO BE SOLELY USED AS THE BASE DATA FOR THE PURPOSES OF 224C APPLICATION TO COUNCIL. WFH AND WOOD AND PARTNERS CONSULTANTS ACCEPT NO RESPONSIBILITY FOR ANY BUILDING DESIGN OR CONSTRUCTION WORK BASED ON THIS DRAWING FILE.





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Signed: *Michael Bates*
Registered Professional Surveyor

Date: 29/11/19

Name: Michael Bates

Lot 174	1749063.22	5949285.84	SCHEDULE OF COORDINATES	
Lot 175	1749048.15	5949290.24	NAME	EASTING
Lot 176	1749031.49	5949294.53	WASTEWATER LOT CONNECTIONS	
Lot 177	1749017.30	5949298.23	Lot 54	1749119.07 5949463.11
Lot 178	1749000.87	5949302.20	Lot 55	1749105.62 5949469.95
Lot 179	1748985.46	5949306.36	Lot 56	1749089.66 5949478.68
Lot 180	1748969.72	5949309.76	Lot 57	1749073.58 5949483.26
Lot 181	1748950.16	5949311.88	Lot 58	1749074.68 5949486.45
Lot 182	1748965.57	5949348.63	Lot 59	1749049.35 5949466.21
Lot 183	1748995.51	5949360.33	Lot 60	1749030.72 5949460.92
Lot 184	1749008.21	5949372.95	Lot 61	1749044.67 5949482.03
Lot 185	1749039.03	5949395.72	Lot 62	1749035.64 5949504.30
Lot 186	1749053.27	5949403.74	Lot 63	1749015.98 5949509.94
Lot 187	1749071.74	5949427.08	Lot 64	1748986.48 5949504.11
Lot 188	1749090.41	5949424.33	Lot 65	1748978.01 5949495.49
Lot 189	1749108.59	5949419.81	Lot 66	1748980.17 5949476.63
Lot 192	1749069.46	5949405.09	Lot 67	1748984.37 5949459.24
Lot 193	1749042.37	5949390.98	Lot 68	1748991.87 5949441.87
Lot 194	1749012.14	5949367.93	Lot 69	1748989.09 5949439.11
Lot 195	1748992.99	5949342.85	Lot 70	1748980.90 5949401.48
Lot 189	1749109.96	5949409.10	Lot 71	1748969.61 5949390.96
Lot 190	1749106.90	5949395.44	Lot 72	1748957.24 5949381.28
Lot 191	1749101.46	5949382.78	Lot 73	1748949.77 5949371.21
			Lot 74	1748942.82 5949359.69
			Lot 75	1748936.15 5949346.31
			Lot 76	1748933.55 5949332.38
			Lot 77	1748930.13 5949317.94

LEGEND

- NEW SANITARY SEWER MANHOLE
- NEW SANITARY SEWER
- EXISTING SANITARY SEWER
- STAGE BOUNDARY

- NOTES**
- ALL WORKS AND MATERIALS COMPLY WITH AUCKLAND COUNCIL & WATERCARE SERVICES LTD STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION.
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REVISION DETAILS

NO	DESCRIPTION	BY	DATE
1	ISSUED FOR INFORMATION	KR	29/11/19

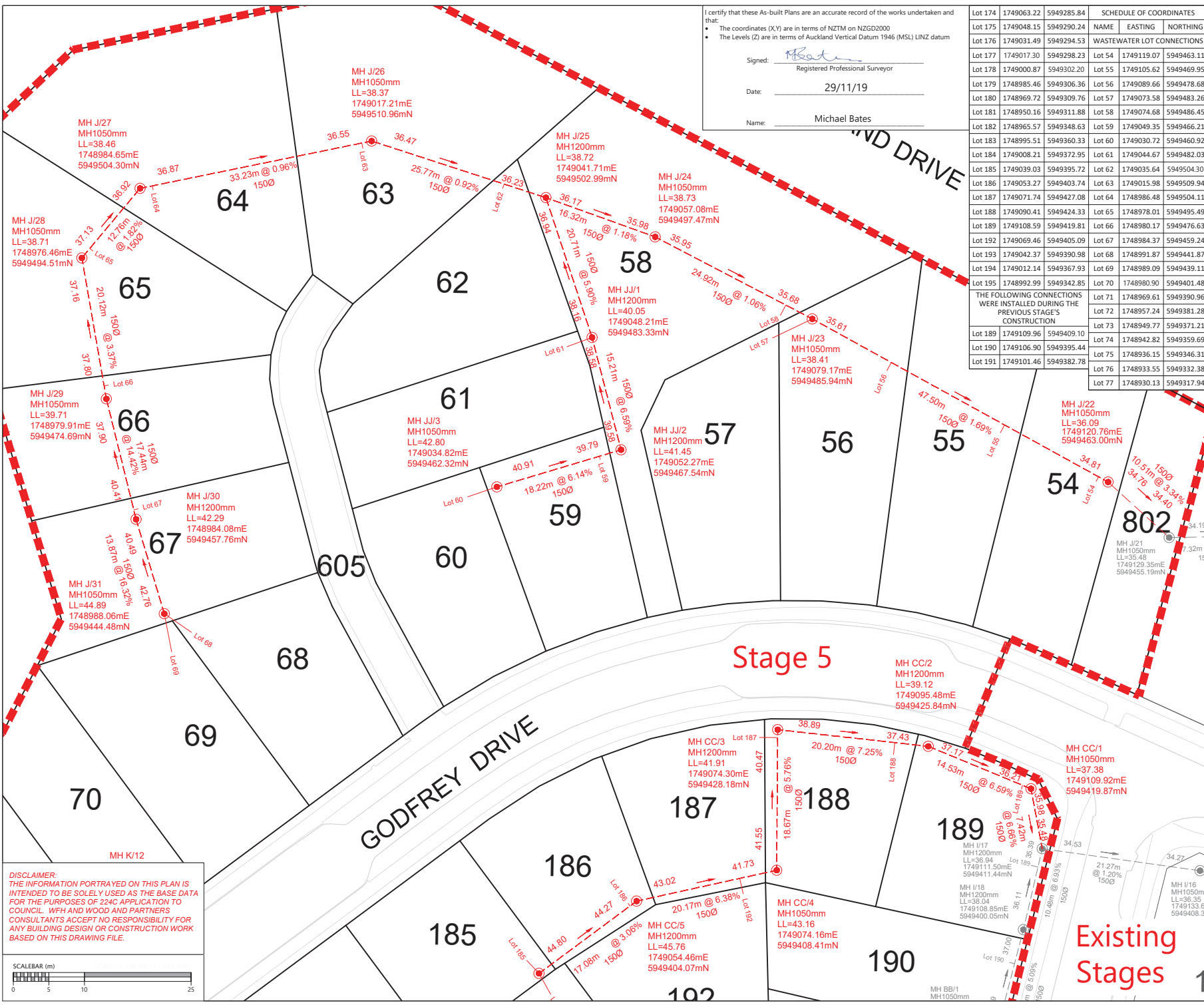
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DESIGNED	MB	
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	



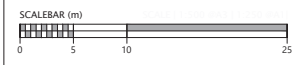
**ARRAN HILL PRECINCT 5
STAGE 5**

**WASTEWATER AS-BUILT
SHEET 2 OF 7**

STATUS	AS BUILT	REV
SCALE	1:500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-401-AB	



DISCLAIMER:
THE INFORMATION PORTRAYED ON THIS PLAN IS INTENDED TO BE SOLELY USED AS THE BASE DATA FOR THE PURPOSES OF 22AC APPLICATION TO COUNCIL. WFH AND WOOD AND PARTNERS CONSULTANTS ACCEPT NO RESPONSIBILITY FOR ANY BUILDING DESIGN OR CONSTRUCTION WORK BASED ON THIS DRAWING FILE.



Document No. K37505 - ARRAN HILL PRECINCT 5 STAGE 5 PROJECT DATA DRAWINGS SURV37505_P5_05_SEWER.DWG

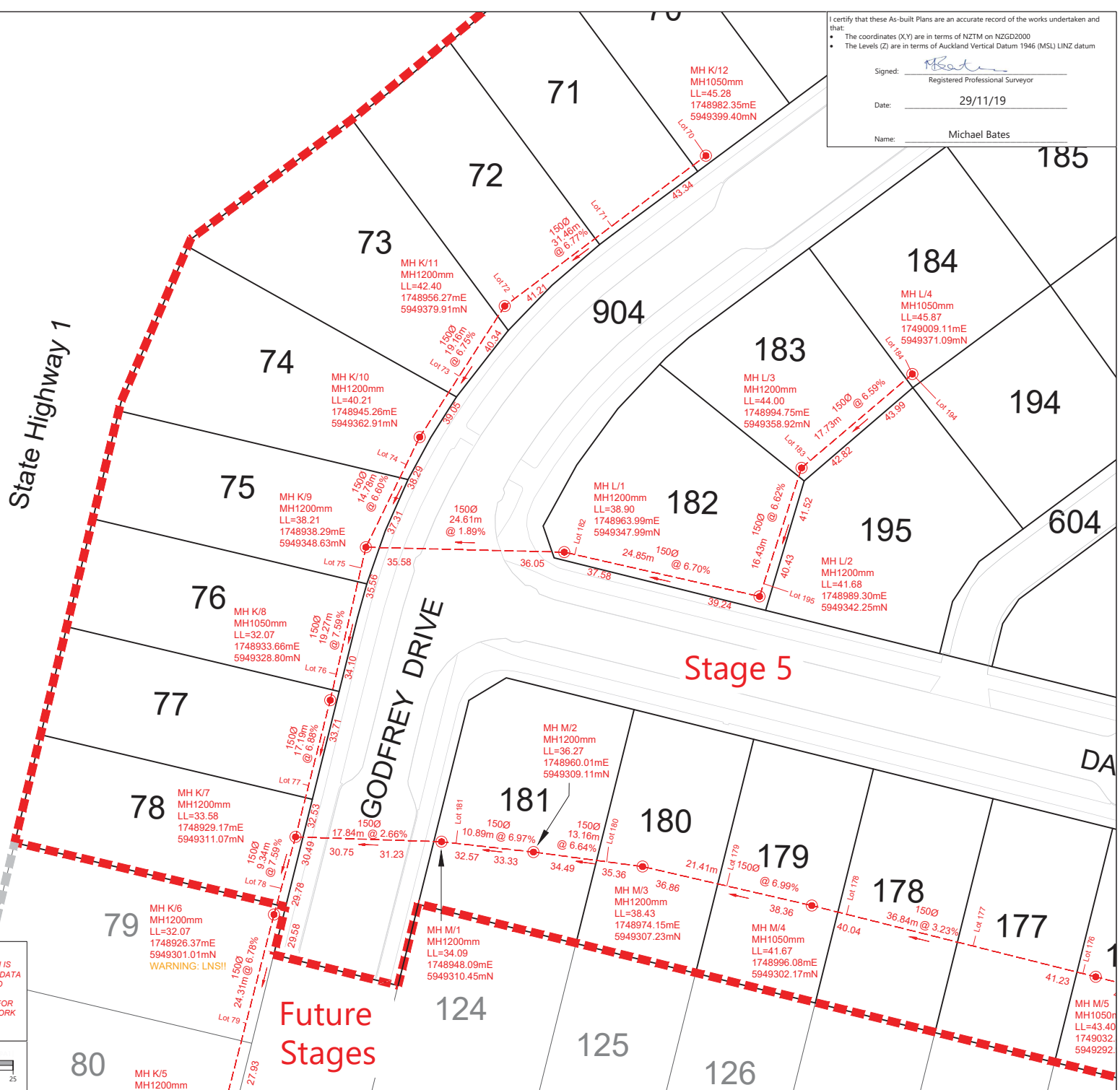
SCHEDULE OF COORDINATES		
NAME	EASTING	NORTHING
WASTEWATER LOT CONNECTIONS		
Lot 54	1749119.07	5949463.11
Lot 55	1749105.62	5949469.95
Lot 56	1749089.66	5949478.68
Lot 57	1749073.58	5949483.26
Lot 58	1749074.68	5949486.45
Lot 59	1749049.35	5949466.21
Lot 60	1749030.72	5949460.92
Lot 61	1749044.67	5949482.03
Lot 62	1749035.64	5949504.3
Lot 63	1749015.98	5949509.94
Lot 64	1748986.48	5949504.11
Lot 65	1748978.01	5949495.49
Lot 66	1748980.17	5949476.63
Lot 67	1748984.37	5949459.24
Lot 68	1748991.87	5949441.87
Lot 69	1748989.09	5949439.11
Lot 70	1748980.9	5949401.48
Lot 71	1748969.61	5949390.96
Lot 72	1748957.24	5949381.28
Lot 73	1748949.77	5949371.21
Lot 74	1748942.82	5949359.69
Lot 75	1748936.15	5949346.31
Lot 76	1748933.55	5949332.38
Lot 77	1748930.13	5949317.94
Lot 78	1748925.83	5949304.75
Lot 174	1749063.22	5949285.84
Lot 175	1749048.15	5949290.24
Lot 176	1749031.49	5949294.53
Lot 177	1749017.3	5949298.23
Lot 178	1749000.87	5949302.2
Lot 179	1748985.46	5949306.36
Lot 180	1748969.72	5949309.76
Lot 181	1748950.16	5949311.88
Lot 182	1748965.57	5949348.63
Lot 183	1748995.51	5949360.33
Lot 184	1749008.21	5949372.95
Lot 185	1749039.03	5949395.72
Lot 186	1749053.27	5949403.74
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Lot 189	1749108.59	5949419.81
Lot 192	1749069.46	5949405.09
Lot 193	1749042.37	5949390.98
Lot 194	1749012.14	5949367.93
Lot 195	1748992.99	5949342.85
THE FOLLOWING CONNECTIONS WERE INSTALLED DURING THE PREVIOUS STAGE'S CONSTRUCTION		
Lot 189	1749109.96	5949409.1
Lot 190	1749106.9	5949395.44
Lot 191	1749101.46	5949382.78

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State Highway 1

GODFREY DRIVE



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Signed:
Registered Professional Surveyor

Date: 29/11/19

Name: Michael Bates

LEGEND

NEW SANITARY SEWER MANHOLE	
NEW SANITARY SEWER	
EXISTING SANITARY SEWER	
STAGE BOUNDARY	

- NOTES**
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REVISION DETAILS

NO	DESCRIPTION	BY	DATE
1	ISSUED FOR INFORMATION	KR	29/11/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING 8, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229
DESIGNED	MB	
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	



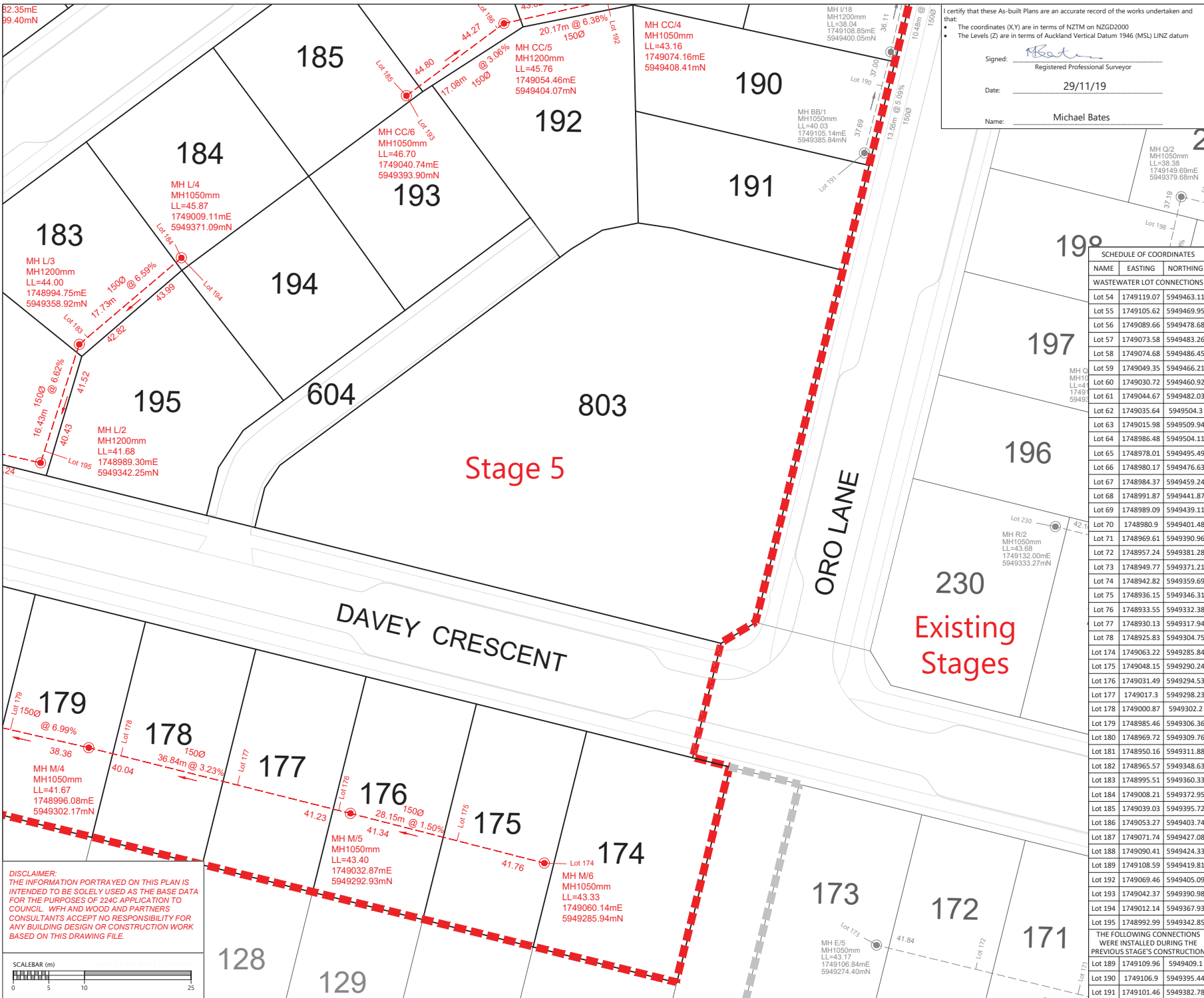
**ARRAN HILL PRECINCT 5
STAGE 5**

**WASTEWATER AS-BUILT
SHEET 3 OF 7**

STATUS	AS BUILT	REV
SCALE	1:500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-402-AB	



Document No. K137505 - ARRAN HILL PRECINCT 5 STAGE 5 PROJECT DATA DRAWINGS SURV37505_P5_05_SEWER.DWG



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Signed: *Michael Bates*
Registered Professional Surveyor

Date: 29/11/19

Name: Michael Bates

LEGEND

NEW SANITARY SEWER MANHOLE

NEW SANITARY SEWER

EXISTING SANITARY SEWER

STAGE BOUNDARY

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SCHEDULE OF COORDINATES

NAME	EASTING	NORTHING
WASTEWATER LOT CONNECTIONS		
Lot 54	1749119.07	5949463.11
Lot 55	1749105.62	5949469.95
Lot 56	1749089.66	5949478.68
Lot 57	1749073.58	5949483.26
Lot 58	1749074.68	5949486.45
Lot 59	1749049.35	5949466.21
Lot 60	1749030.72	5949460.92
Lot 61	1749044.67	5949482.03
Lot 62	1749035.64	5949504.3
Lot 63	1749015.98	5949509.94
Lot 64	1748986.48	5949504.11
Lot 65	1748978.01	5949495.49
Lot 66	1748980.17	5949476.63
Lot 67	1748984.37	5949459.24
Lot 68	1748991.87	5949441.87
Lot 69	1748989.09	5949439.11
Lot 70	1748980.9	5949401.48
Lot 71	1748969.61	5949390.96
Lot 72	1748957.24	5949381.28
Lot 73	1748949.77	5949371.21
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Lot 75	1748936.15	5949346.31
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Lot 77	1748930.13	5949317.94
Lot 78	1748925.83	5949304.75
Lot 174	1749063.22	5949285.84
Lot 175	1749048.15	5949290.24
Lot 176	1749031.49	5949294.53
Lot 177	1749017.3	5949298.23
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Lot 194	1749012.14	5949367.93
Lot 195	1748992.99	5949342.85
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Lot 189	1749109.96	5949409.1
Lot 190	1749106.9	5949395.44
Lot 191	1749101.46	5949382.78

REVISION DETAILS

NO	DESCRIPTION	BY	DATE
1	ISSUED FOR INFORMATION	KR	29/11/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING B, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229
DESIGNED	MB	
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	



**ARRAN HILL PRECINCT 5
STAGE 5**

**WASTEWATER AS-BUILT
SHEET 4 OF 7**

STATUS	AS BUILT	REV
SCALE	1:500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-403-AB	

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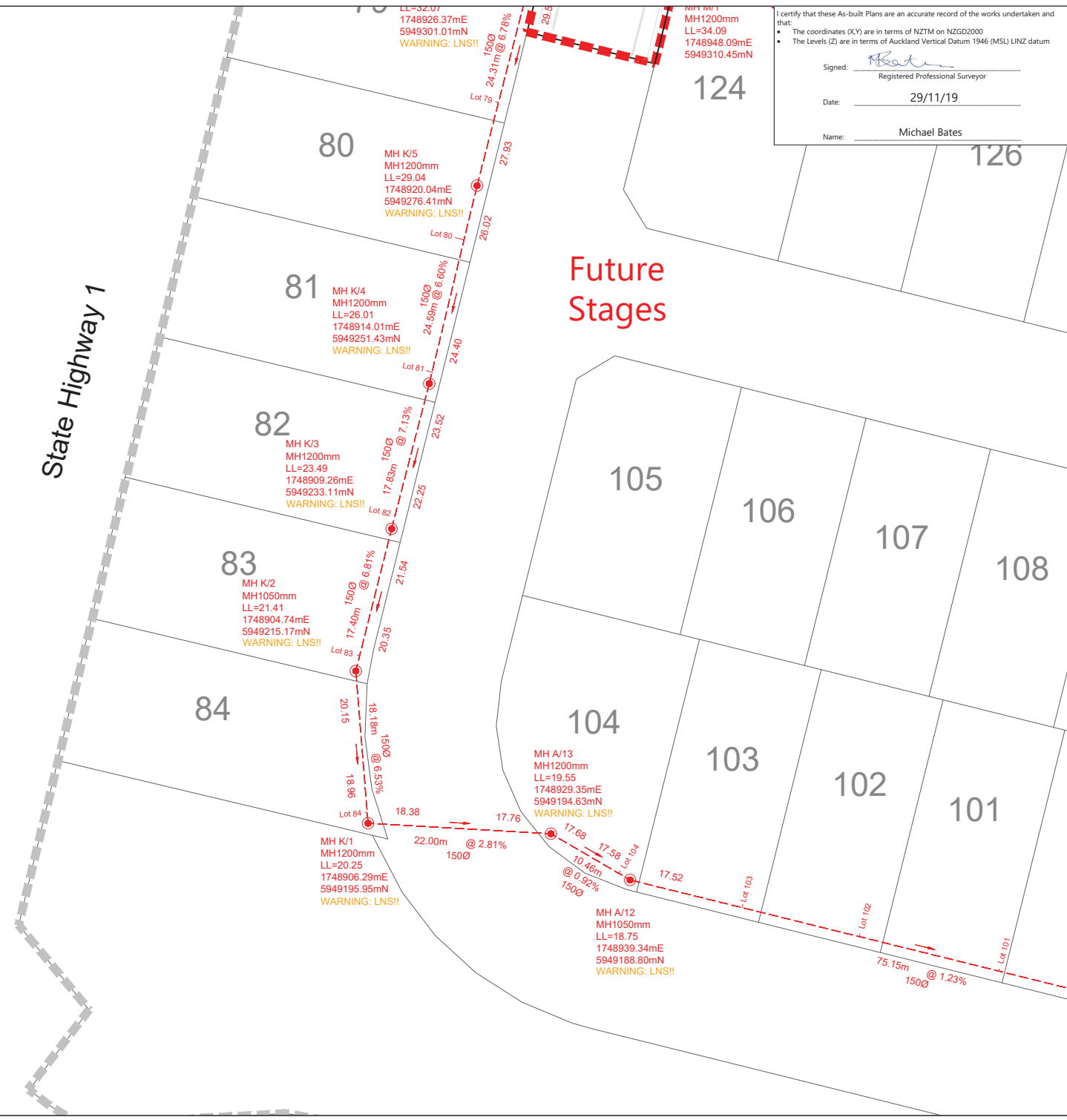
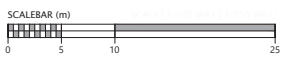
SCALEBAR (m)

THE FOLLOWING CONNECTIONS ARE TO SERVE LOTS IN FUTURE STAGES

Lot 79	1748922.38	5949287.02
Lot 80	1748917.30	5949269.85
Lot 81	1748913.67	5949253.06
Lot 82	1748909.57	5949234.85
Lot 83	1748904.92	5949217.16
Lot 84	1748905.91	5949197.32
Lot 104	1748938.12	5949189.95
Lot 103	1748953.57	5949185.72
Lot 102	1748968.32	5949182.00
Lot 101	1748985.90	5949177.57
Lot 100	1748999.73	5949174.25
Lot 99	1749016.64	5949169.98
Lot 98	1749030.36	5949166.48
Lot 97	1749049.90	5949161.61
Lot 96	1749078.10	5949154.38
Lot 95	1749094.10	5949150.42
Lot 94	1749109.75	5949146.66
Lot 93	1749125.41	5949143.02
Lot 92	1749140.97	5949139.00
Lot 91	1749159.17	5949135.02
Lot 90	1749172.51	5949131.76
Lot 89	1749187.90	5949128.16
Lot 88	1749204.51	5949124.18
Lot 87	1749220.08	5949120.47
Lot 86	1749228.93	5949119.11
Lot 85	1749262.03	5949121.84

State Highway 1

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 • The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: Michael Bates
 Registered Professional Surveyor

Date: 29/11/19

Name: Michael Bates



LEGEND

NEW SANITARY SEWER MANHOLE	●
NEW SANITARY SEWER	---
EXISTING SANITARY SEWER	—
STAGE BOUNDARY	---

- NOTES
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REVISION DETAILS

NO	DESCRIPTION	BY	DATE
1	ISSUED FOR INFORMATION	KR	29/11/19

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING 8, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229
DESIGNED	MB	
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	



ARRAN HILL PRECINCT 5
 STAGE 5
 WASTEWATER AS-BUILT
 SHEET 5 OF 7

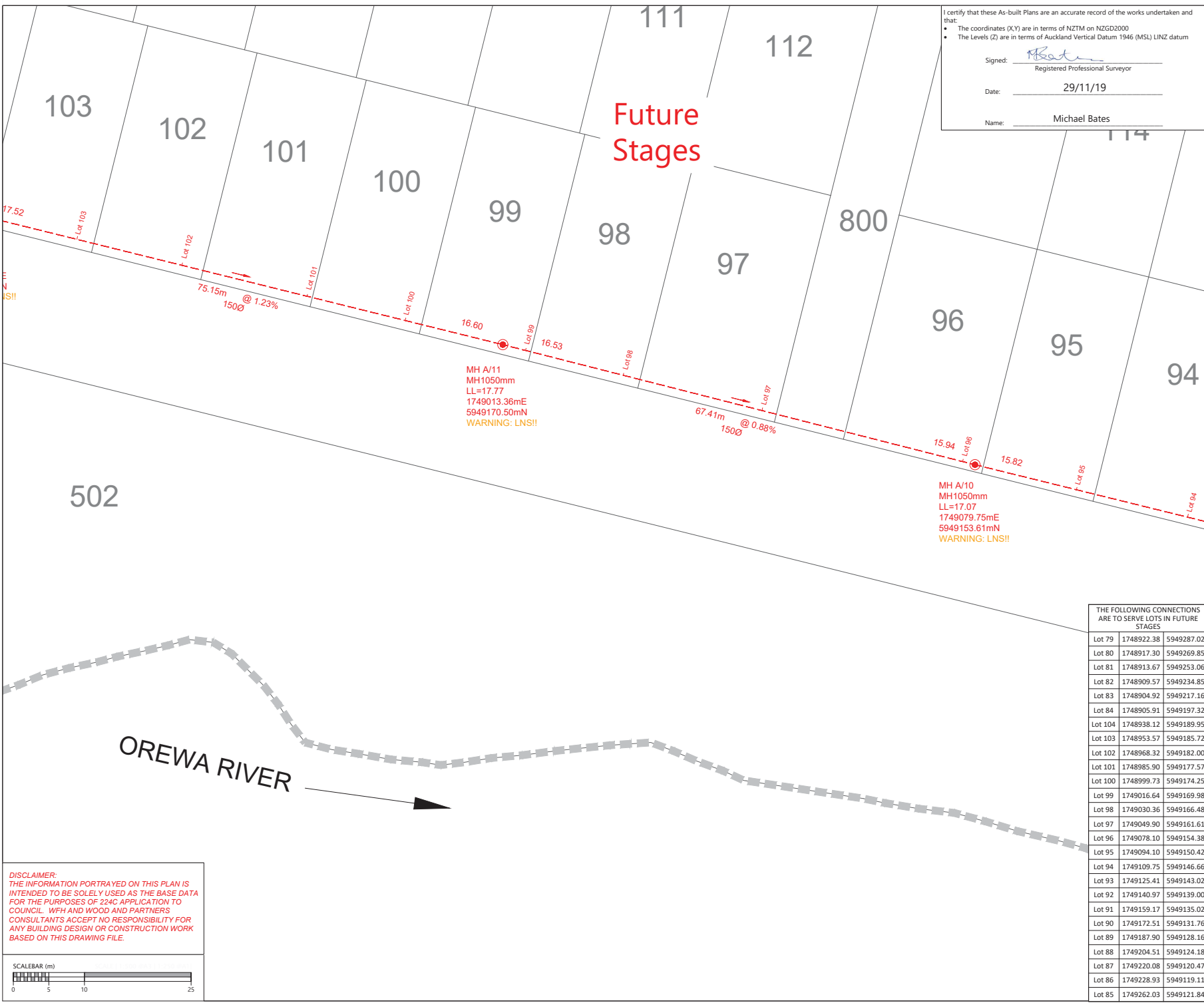
STATUS	AS BUILT	REV
SCALE	1:500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-404-AB	

Document No. K137505 - ARRAN HILL PRECINCT 5 STAGE 5 PROJECT DATA DRAWINGS SURV37505_05_05_SEWER.DWG

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Signed: Registered Professional Surveyor
 Date: 29/11/19
 Name: Michael Bates



LEGEND

- NEW SANITARY SEWER MANHOLE
- NEW SANITARY SEWER
- EXISTING SANITARY SEWER
- STAGE BOUNDARY

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 - ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY MEASURED DATA AND CONTRACTOR RECEIVED DATA.
 - SOME INVERT LEVELS ARE MARK THE LEVELS AT THE ENTRY POINT OF DROP-PIPES INTO THE MH CHAMBER. THESE LEVELS HAVE BEEN CALCULATED FROM OBSERVATIONS TO THE TOP OF THE PIPE.

REVISION DETAILS	BY	DATE
1 ISSUED FOR INFORMATION	KR	29/11/19

THE FOLLOWING CONNECTIONS ARE TO SERVE LOTS IN FUTURE STAGES

Lot 79	1748922.38	5949287.02
Lot 80	1748917.30	5949269.85
Lot 81	1748913.67	5949253.06
Lot 82	1748909.57	5949234.85
Lot 83	1748904.92	5949217.16
Lot 84	1748905.91	5949197.32
Lot 104	1748938.12	5949189.95
Lot 103	1748953.57	5949185.72
Lot 102	1748968.32	5949182.00
Lot 101	1748985.90	5949177.57
Lot 100	1748999.73	5949174.25
Lot 99	1749016.64	5949169.98
Lot 98	1749030.36	5949166.48
Lot 97	1749049.90	5949161.61
Lot 96	1749078.10	5949154.38
Lot 95	1749094.10	5949150.42
Lot 94	1749109.75	5949146.66
Lot 93	1749125.41	5949143.02
Lot 92	1749140.97	5949139.00
Lot 91	1749159.17	5949135.02
Lot 90	1749172.51	5949131.76
Lot 89	1749187.90	5949128.16
Lot 88	1749204.51	5949124.18
Lot 87	1749220.08	5949120.47
Lot 86	1749228.93	5949119.11
Lot 85	1749262.03	5949121.84

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING 8, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229
DESIGNED	MB	
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	WOODS.CO.NZ

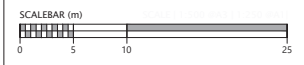


**ARRAN HILL PRECINCT 5
 STAGE 5**

**WASTEWATER AS-BUILT
 SHEET 6 OF 7**

STATUS	AS BUILT	REV
SCALE	1:500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-405-AB	

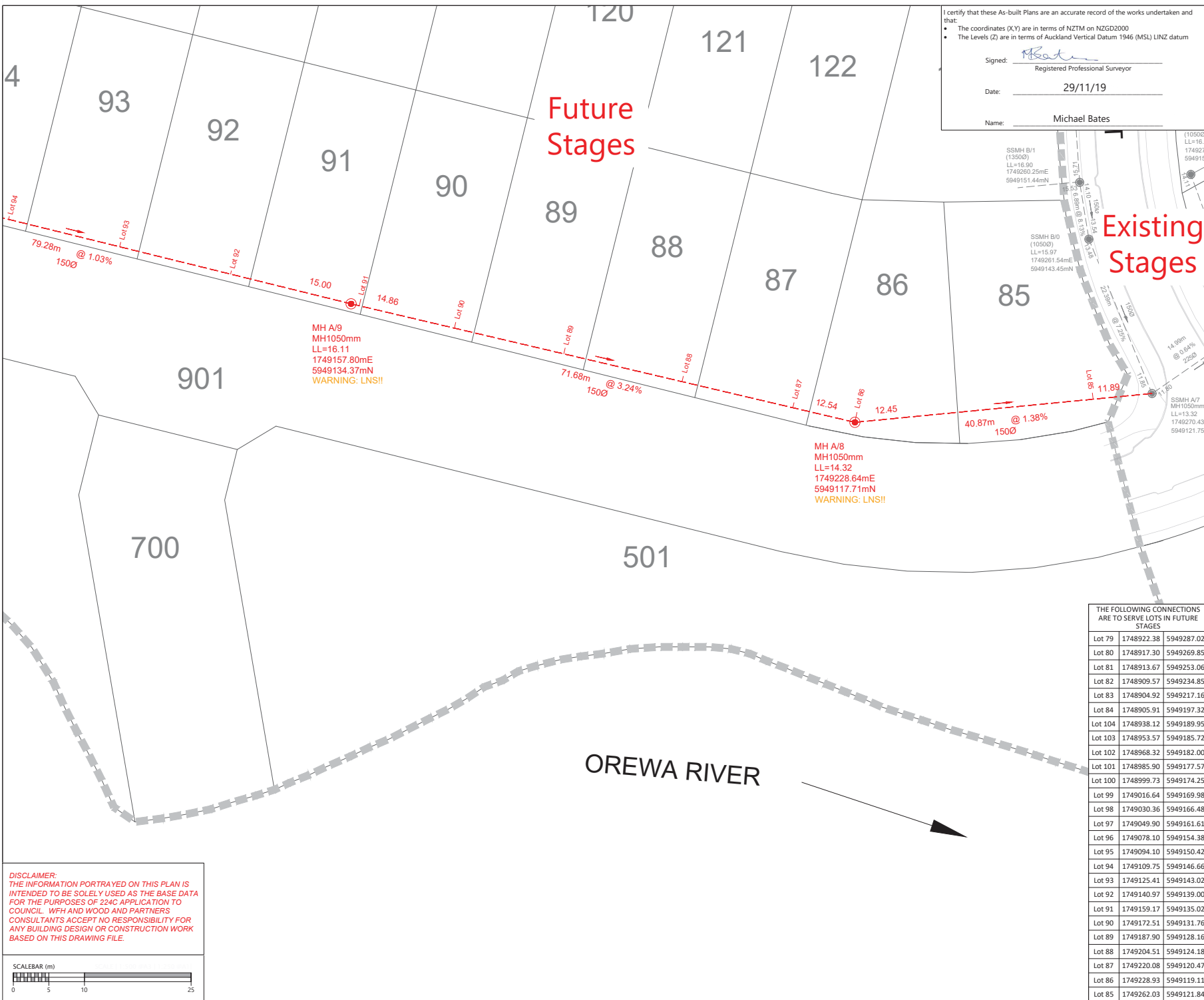
DISCLAIMER:
 THE INFORMATION PORTRAYED ON THIS PLAN IS INTENDED TO BE SOLELY USED AS THE BASE DATA FOR THE PURPOSES OF 224C APPLICATION TO COUNCIL. WFH AND WOOD AND PARTNERS CONSULTANTS ACCEPT NO RESPONSIBILITY FOR ANY BUILDING DESIGN OR CONSTRUCTION WORK BASED ON THIS DRAWING FILE.



I certify that these As-built Plans are an accurate record of the works undertaken and that:

- The coordinates (X,Y) are in terms of NZTM on NZGD2000
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: Registered Professional Surveyor
 Date: 29/11/19
 Name: Michael Bates



LEGEND

- NEW SANITARY SEWER MANHOLE:
- NEW SANITARY SEWER:
- EXISTING SANITARY SEWER:
- STAGE BOUNDARY:

- NOTES**
- ALL WORKS AND MATERIALS COMPLY WITH AUCKLAND COUNCIL & WATERCARE SERVICES LTD STANDARDS FOR ENGINEERING DESIGN AND CONSTRUCTION.
 - ALL SANITARY SEWER LINES ARE 150mmØ uPVC CLASS SN16 UNLESS STATED OTHERWISE.
 - ALL PIPE BEDDING COMPLIES WITH WATERCARE STANDARDS.
 - ALL PIPE CROSSINGS UNDER ROADS AND ACCESSWAYS HAVE BEEN HARDFILL BACKFILLED.
 - ALL PRIVATE LOT CONNECTIONS ARE 100mmØ
 - LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.
 - ALL PIPE AND MH DIAMETERS ARE INTERNAL AND SHOWN IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
 - ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY MEASURED DATA AND CONTRACTOR RECEIVED DATA.
 - SOME INVERT LEVELS ARE MARK THE LEVELS AT THE ENTRY POINT OF DROP-PIPES INTO THE MH CHAMBER. THESE LEVELS HAVE BEEN CALCULATED FROM OBSERVATIONS TO THE TOP OF THE PIPE.

REVISION DETAILS

NO	DESCRIPTION	BY	DATE
1	ISSUED FOR INFORMATION	KR	29/11/19

THE FOLLOWING CONNECTIONS ARE TO SERVE LOTS IN FUTURE STAGES

Lot 79	1748922.38	5949287.02
Lot 80	1748917.30	5949269.85
Lot 81	1748913.67	5949253.06
Lot 82	1748909.57	5949234.85
Lot 83	1748904.92	5949217.16
Lot 84	1748905.91	5949197.32
Lot 104	1748938.12	5949189.95
Lot 103	1748953.57	5949185.72
Lot 102	1748968.32	5949182.00
Lot 101	1748985.90	5949177.57
Lot 100	1748999.73	5949174.25
Lot 99	1749016.64	5949169.98
Lot 98	1749030.36	5949166.48
Lot 97	1749049.90	5949161.61
Lot 96	1749078.10	5949154.38
Lot 95	1749094.10	5949150.42
Lot 94	1749109.75	5949146.66
Lot 93	1749125.41	5949143.02
Lot 92	1749140.97	5949139.00
Lot 91	1749159.17	5949135.02
Lot 90	1749172.51	5949131.76
Lot 89	1749187.90	5949128.16
Lot 88	1749204.51	5949124.18
Lot 87	1749220.08	5949120.47
Lot 86	1749228.93	5949119.11
Lot 85	1749262.03	5949121.84

SURVEYED	WOODS	WOODS Ltd LEVEL 1 BUILDING 8, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229
DESIGNED	MB	
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	WOODS.CO.NZ

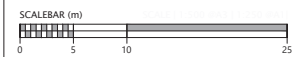


**ARRAN HILL PRECINCT 5
STAGE 5**

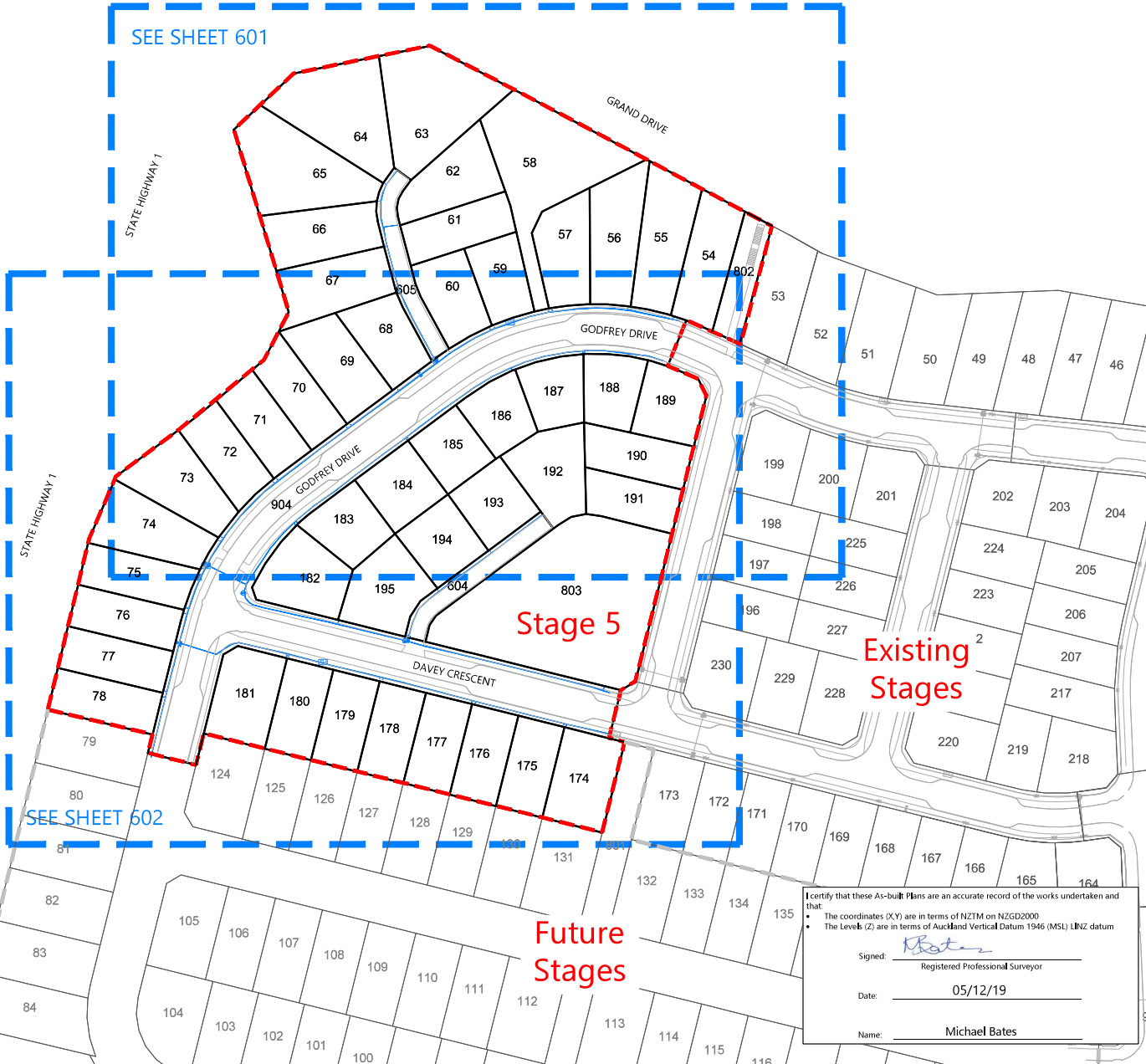
**WASTEWATER AS-BUILT
SHEET 7 OF 7**

STATUS	AS BUILT	REV
SCALE	1:500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-406-AB	

DISCLAIMER:
 THE INFORMATION PORTRAYED ON THIS PLAN IS INTENDED TO BE SOLELY USED AS THE BASE DATA FOR THE PURPOSES OF 224C APPLICATION TO COUNCIL. WFH AND WOOD AND PARTNERS CONSULTANTS ACCEPT NO RESPONSIBILITY FOR ANY BUILDING DESIGN OR CONSTRUCTION WORK BASED ON THIS DRAWING FILE.



SCHEDULE OF COORDINATES			SCHEDULE OF COORDINATES		
NAME	EASTING	NORTHING	NAME	EASTING	NORTHING
WATERMAIN LOT CONNECTIONS			FIRE HYDRANTS		
WM54	1749102.60	5949442.27	FH01	1749047.79	5949440.09
WM55	1749088.57	5949444.87	FH02	1748945.81	5949358.37
WM56	1749087.34	5949445.16	FH03	1748985.02	5949326.07
WM57	1749061.85	5949444.53	SLUICE VALVES		
WM58	1749060.73	5949444.38	SV01	1749017.61	5949422.81
WM59	1749042.57	5949438.69	SV02	1748946.27	5949359.24
WM60	1749041.00	5949438.16	SV03	1748945.95	5949358.76
WM61	1749010.19	5949472.94	SV04	1748946.37	5949358.82
WM62	1749010.18	5949472.94	SV05	1748936.87	5949332.71
WM63	1749010.25	5949491.48	SV06	1748937.11	5949332.36
WM64	1749005.24	5949487.25	PEET VALVES		
WM65	1749002.93	5949481.00	PV01	1749022.87	5949427.06
WM66	1749005.52	5949465.80	PV02	1748960.59	5949354.57
WM67	1749009.53	5949450.38	PV03	1748958.34	5949349.41
WM68	1749010.11	5949417.84	PV04	1749012.46	5949333.50
WM69	1748994.25	5949406.00	PV05	1749013.18	5949333.62
WM70	1748992.91	5949405.16	MANIFOLD BOXES		
WM71	1748969.55	5949387.76	MB01	1749022.42	5949427.89
WM72	1748968.33	5949386.76	MB02	1749013.55	5949334.04
WM73	1748950.95	5949368.26			
WM74	1748950.15	5949367.01			
WM75	1748939.27	5949344.49			
WM76	1748938.52	5949342.60			
WM77	1748932.00	5949316.46			
WM78	1748931.40	5949314.64			
WM174	1749066.62	5949304.89			
WM175	1749065.87	5949305.17			
WM176	1749036.12	5949312.46			
WM177	1749034.88	5949312.86			
WM178	1749005.02	5949320.50			
WM179	1749003.98	5949320.71			
WM180	1748973.49	5949328.20			
WM181	1748972.83	5949328.21			
WM182	1748975.68	5949372.36			
WM183	1748976.49	5949373.17			
WM184	1749013.05	5949400.95			
WM185	1749013.55	5949401.41			
WM186	1749048.49	5949424.34			
WM187	1749072.25	5949430.02			
WM188	1749072.77	5949429.98			
WM192	1749058.58	5949375.83			
WM193	1749040.78	5949364.06			
WM194	1749023.57	5949351.33			
WM195	1748990.28	5949339.95			
WM803	1749079.30	5949317.76			
THE FOLLOWING CONNECTIONS WERE INSTALLED DURING THE CONSTRUCTION OF A PREVIOUS STAGE					
WM189	1749109.75	5949399.02			
WM190	1749109.54	5949398.37			
WM191	1749105.99	5949383.67			



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I certify that these As-built Plans are an accurate record of the works undertaken and that:

- The coordinates (X,Y) are in terms of NZTM on NZGD2000
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: *[Signature]*
 Registered Professional Surveyor

Date: 05/12/19

Name: Michael Bates

- NOTES**
- ALL WORK AND MATERIALS COMPLIES WITH AC STANDARD FOR ENGINEERING DESIGN AND CONSTRUCTION.
 - PIPE BEDDING COMPLIES WITH AC STD DETAIL DRAWING 18000 SHEET 4.4 UNLESS OTHERWISE NOTED.
 - WATERMAINS ARE AN AVERAGE 0.6m BELOW GROUND IN BERMS AND 0.9m BELOW GROUND UNDER ROADS. HARDFILL BACKFILLED BENEATH ROAD CROSSINGS.
 - ALL PIPES ARE LAID APPROXIMATELY 1.4m OFF THE ROAD RESERVE BOUNDARY IN THE COMMON SERVICE TRENCH.
 - PIPE SIZES SHOWN ARE EXTERNAL DIAMETER.
 - LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.
 - ASBLT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY MEASURED DATA AND CONTRACTOR RECEIVED DATA.

LEGEND

EXISTING WATERMAIN	—
HIGH PESSURE WATERMAIN	—
SLUICE VALVE	
PEET VALVE	
FIRE HYDRANT	
TAPPING BAND	
BLANK CAP	
MANIFOLD BOX	
LOT CONNECTION	
STAGE BOUNDARY	

REVISION DETAILS		BY	DATE
1	ISSUED FOR INFORMATION	KR	05/12/19

SURVEYED	WOODS	WOODS Ltd
DESIGNED	MB	LEVEL 1 BUILDING B, 8 NUGENT STREET, GRAFTON AUCKLAND 1023
DRAWN	SK	09 308 9229
CHECKED	AC	
APPROVED	MB	WOODS.CO.NZ



**MILLWATER PRECINCT 5
 OREWA WEST
 STAGE 5
 WATERMAIN AS-BUILT
 SHEET 1 OF 3**

STATUS	AS-BUILT	REV
SCALE	1:1500 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-600-AB	

SCHEDULE OF COORDINATES			SCHEDULE OF COORDINATES		
NAME	EASTING	NORTHING	NAME	EASTING	NORTHING
WATERMAIN LOT CONNECTIONS			FIRE HYDRANTS		
WM54	1749102.60	5949442.27	FH01	1749047.79	5949440.09
WM55	1749088.57	5949444.87	FH02	1748945.81	5949358.37
WM56	1749087.34	5949445.16	FH03	1748985.02	5949326.07
WM57	1749061.85	5949444.53	SLUICE VALVES		
WM58	1749060.73	5949444.38	SV01	1749017.61	5949422.81
WM59	1749042.57	5949438.69	SV02	1748946.27	5949359.24
WM60	1749041.00	5949438.16	SV03	1748945.95	5949358.76
WM61	1749010.19	5949472.94	SV04	1748946.37	5949358.82
WM62	1749010.18	5949472.94	SV05	1748936.87	5949332.71
WM63	1749010.25	5949491.48	SV06	1748937.11	5949332.36
WM64	1749005.24	5949487.25	PEET VALVES		
WM65	1749002.93	5949481.00	PV01	1749022.87	5949427.06
WM66	1749005.52	5949465.80	PV02	1748960.59	5949354.57
WM67	1749009.53	5949450.38	PV03	1748958.34	5949349.41
WM68	1749010.11	5949417.84	PV04	1749012.46	5949333.50
WM69	1748994.25	5949406.00	PV05	1749013.18	5949333.62
WM70	1748992.91	5949405.16	MANIFOLD BOXES		
WM71	1748969.55	5949387.76	MB01	1749022.42	5949427.89
WM72	1748968.33	5949386.76	MB02	1749013.55	5949334.04
WM73	1748950.95	5949368.26			
WM74	1748950.15	5949367.01			
WM75	1748939.27	5949344.49			
WM76	1748938.52	5949342.60			
WM77	1748932.00	5949316.46			
WM78	1748931.40	5949314.64			
WM174	1749066.62	5949304.89			
WM175	1749065.87	5949305.17			
WM176	1749036.12	5949312.46			
WM177	1749034.88	5949312.86			
WM178	1749005.02	5949320.50			
WM179	1749003.98	5949320.71			
WM180	1748973.49	5949328.20			
WM181	1748972.83	5949328.21			
WM182	1748975.68	5949372.36			
WM183	1748976.49	5949373.17			
WM184	1749013.05	5949400.95			
WM185	1749013.55	5949401.41			
WM186	1749048.49	5949424.34			
WM187	1749072.25	5949430.02			
WM188	1749072.77	5949429.98			
WM192	1749058.58	5949375.83			
WM193	1749040.78	5949364.06			
WM194	1749023.57	5949351.33			
WM195	1748990.28	5949339.95			
WM803	1749079.30	5949317.76			
THE FOLLOWING CONNECTIONS WERE INSTALLED DURING THE CONSTRUCTION OF A PREVIOUS STAGE					
WM189	1749109.75	5949399.02			
WM190	1749109.54	5949398.37			
WM191	1749105.99	5949383.67			

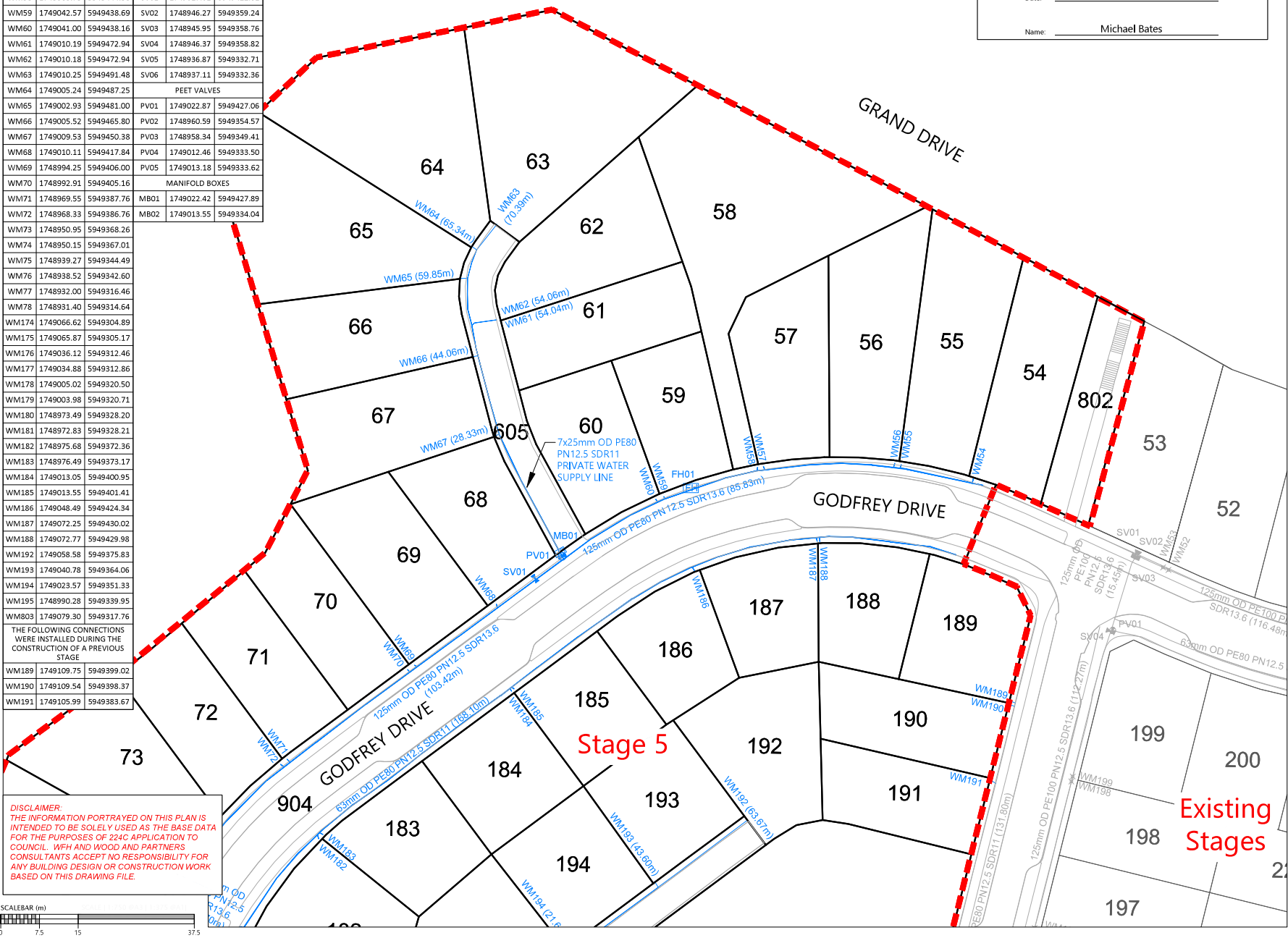
I certify that these As-built Plans are an accurate record of the works undertaken and that:

- The coordinates (X,Y) are in terms of NZTM on NZGD2000
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: Registered Professional Surveyor

Date: 05/12/19

Name: Michael Bates



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- NOTES**
- ALL WORK AND MATERIALS COMPLIES WITH AC STANDARD FOR ENGINEERING DESIGN AND CONSTRUCTION.
 - PIPE BEDDING COMPLIES WITH AC STD DETAIL DRAWING 18000 SHEET 4.4 UNLESS OTHERWISE NOTED.
 - WATERMANS ARE AN AVERAGE 0.6m BELOW GROUND IN BERMS AND 0.9m BELOW GROUND UNDER ROADS, HARDFILL BACKFILLED BENEATH ROAD CROSSINGS.
 - ALL PIPES ARE LAID APPROXIMATELY 1.4m OFF THE ROAD RESERVE BOUNDARY IN THE COMMON SERVICE TRENCH.
 - PIPE SIZES SHOWN ARE EXTERNAL DIAMETER.
 - LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.
 - ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY MEASURED DATA AND CONTRACTOR RECEIVED DATA.

LEGEND

EXISTING WATERMAIN	
HIGH PRESSURE WATERMAIN	
SLUICE VALVE	
PEET VALVE	
FIRE HYDRANT	
TAPPING BAND	
BLANK CAP	
MANIFOLD BOX	
LOT CONNECTION	
STAGE BOUNDARY	

REVISION DETAILS	BY	DATE
1 ISSUED FOR INFORMATION	KR	05/12/19

SURVEYED	WOODS	WOODS Ltd
DESIGNED	MB	LEVEL 1 BUILDING B, 8 NUGENT STREET, GRAFTON AUCKLAND 1023 09 308 9229
DRAWN	SK	
CHECKED	AC	
APPROVED	MB	WOODS.CO.NZ

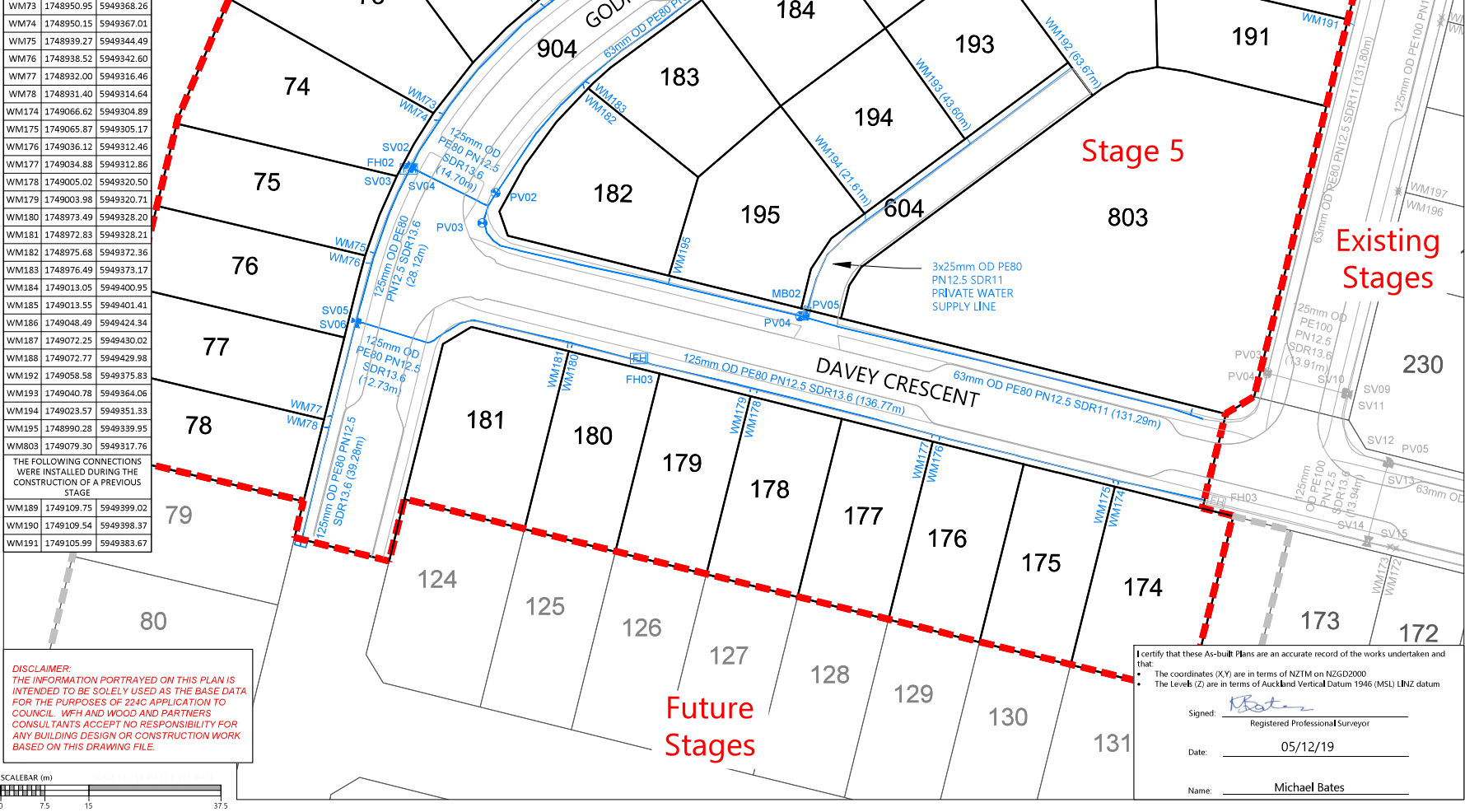


**MILLWATER PRECINCT 5
OREWA WEST
STAGE 5**

WATERMAIN AS-BUILT
SHEET 2 OF 3

STATUS	AS-BUILT	REV
SCALE	1:750 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-601-AB	

SCHEDULE OF COORDINATES			SCHEDULE OF COORDINATES		
NAME	EASTING	NORTHING	NAME	EASTING	NORTHING
WATERMAIN LOT CONNECTIONS			FIRE HYDRANTS		
WM54	1749102.60	5949442.27	FH01	1749047.79	5949440.09
WM55	1749088.57	5949444.87	FH02	1748945.81	5949358.37
WM56	1749087.34	5949445.16	FH03	1748985.02	5949326.07
WM57	1749061.85	5949444.53	SLUICE VALVES		
WM58	1749060.73	5949444.38	SV01	1749017.61	5949422.81
WM59	1749042.57	5949438.69	SV02	1748946.27	5949359.24
WM60	1749041.00	5949438.16	SV03	1748945.95	5949358.76
WM61	1749010.19	5949472.94	SV04	1748946.37	5949358.82
WM62	1749010.18	5949472.94	SV05	1748936.87	5949332.71
WM63	1749010.25	5949491.48	SV06	1748937.11	5949332.36
WM64	1749005.24	5949487.25	PEET VALVES		
WM65	1749002.93	5949481.00	PV01	1749022.87	5949427.06
WM66	1749005.52	5949465.80	PV02	1748960.59	5949354.57
WM67	1749009.53	5949450.38	PV03	1748958.34	5949349.41
WM68	1749010.11	5949417.84	PV04	1749012.46	5949333.50
WM69	1748994.25	5949406.00	PV05	1749013.18	5949333.62
WM70	1748992.91	5949405.16	MANIFOLD BOXES		
WM71	1748969.55	5949387.76	MB01	1749022.42	5949427.89
WM72	1748968.33	5949386.76	MB02	1749013.55	5949334.04
WM73	1748950.95	5949368.26			
WM74	1748950.15	5949367.01			
WM75	1748939.27	5949344.49			
WM76	1748938.52	5949342.60			
WM77	1748932.00	5949316.46			
WM78	1748931.40	5949314.64			
WM174	1749066.62	5949304.89			
WM175	1749065.87	5949305.17			
WM176	1749036.12	5949312.46			
WM177	1749034.88	5949312.86			
WM178	1749005.02	5949320.50			
WM179	1749003.98	5949320.71			
WM180	1748973.49	5949328.20			
WM181	1748972.83	5949328.21			
WM182	1748975.68	5949372.36			
WM183	1748976.49	5949373.17			
WM184	1749013.05	5949400.95			
WM185	1749013.55	5949401.41			
WM186	1749048.49	5949424.34			
WM187	1749072.25	5949430.02			
WM188	1749072.77	5949429.98			
WM192	1749058.58	5949375.83			
WM193	1749040.78	5949364.06			
WM194	1749023.57	5949351.33			
WM195	1748990.28	5949339.95			
WM803	1749079.30	5949317.76			
THE FOLLOWING CONNECTIONS WERE INSTALLED DURING THE CONSTRUCTION OF A PREVIOUS STAGE					
WM189	1749109.75	5949399.02			
WM190	1749109.54	5949398.37			
WM191	1749105.99	5949383.67			



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- The coordinates (X,Y) are in terms of NZTM on NZGD2000
- The Levels (Z) are in terms of Auckland Vertical Datum 1946 (MSL) LINZ datum

Signed: *Michael Bates*
 Registered Professional Surveyor

Date: 05/12/19

Name: Michael Bates

- NOTES**
- ALL WORK AND MATERIALS COMPLIES WITH AC STANDARD FOR ENGINEERING DESIGN AND CONSTRUCTION.
 - PIPE BEDDING COMPLIES WITH AC STD DETAIL DRAWING 18000 SHEET 4.4 UNLESS OTHERWISE NOTED.
 - WATERMANS ARE AN AVERAGE 0.8m BELOW GROUND IN BERMS AND 0.9m BELOW GROUND UNDER ROADS, HARDFILL BACKFILLED BENEATH ROAD CROSSINGS.
 - ALL PIPES ARE LAID APPROXIMATELY 1.4m OFF THE ROAD RESERVE BOUNDARY IN THE COMMON SERVICE TRENCH.
 - PIPE SIZES SHOWN ARE EXTERNAL DIAMETER.
 - LOT BOUNDARIES ARE SUBJECT TO FINAL SURVEY.
 - ASBUILT DATA HAS BEEN SOURCED FROM A COMBINATION OF WOODS SURVEY MEASURED DATA AND CONTRACTOR RECEIVED DATA.

LEGEND

- EXISTING WATERMAIN
- HIGH PESSURE WATERMAIN
- SLUICE VALVE
- PEET VALVE
- FIRE HYDRANT
- TAPPING BAND
- BLANK CAP
- MANIFOLD BOX
- LOT CONNECTION
- STAGE BOUNDARY

REVISION DETAILS	BY	DATE
1 ISSUED FOR INFORMATION	KR	05/12/19

SURVEYED	WOODS	WOODS Ltd
DESIGNED	MB	LEVEL 1 BUILDING B, 8 NUGENT STREET, GRAFTON AUCKLAND 1023
DRAWN	SK	09 308 9229
CHECKED	AC	
APPROVED	MB	WOODS.CO.NZ



**MILLWATER PRECINCT 5
 OREWA WEST
 STAGE 5
 WATERMAIN AS-BUILT
 SHEET 3 OF 3**

STATUS	AS-BUILT	REV
SCALE	1:750 @ A3	1
COUNCIL	AUCKLAND COUNCIL	
DWG NO	37505-05-602-AB	