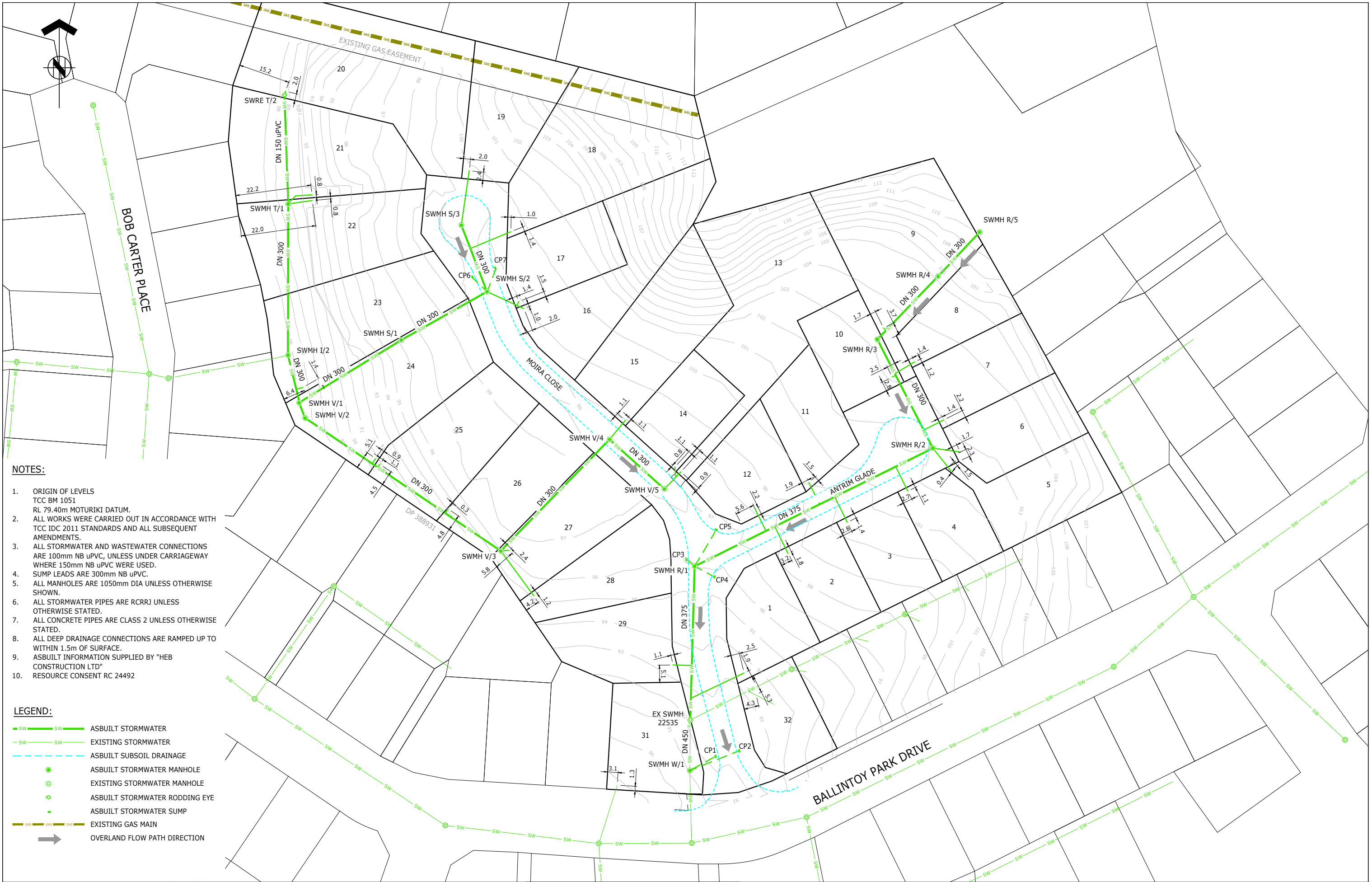


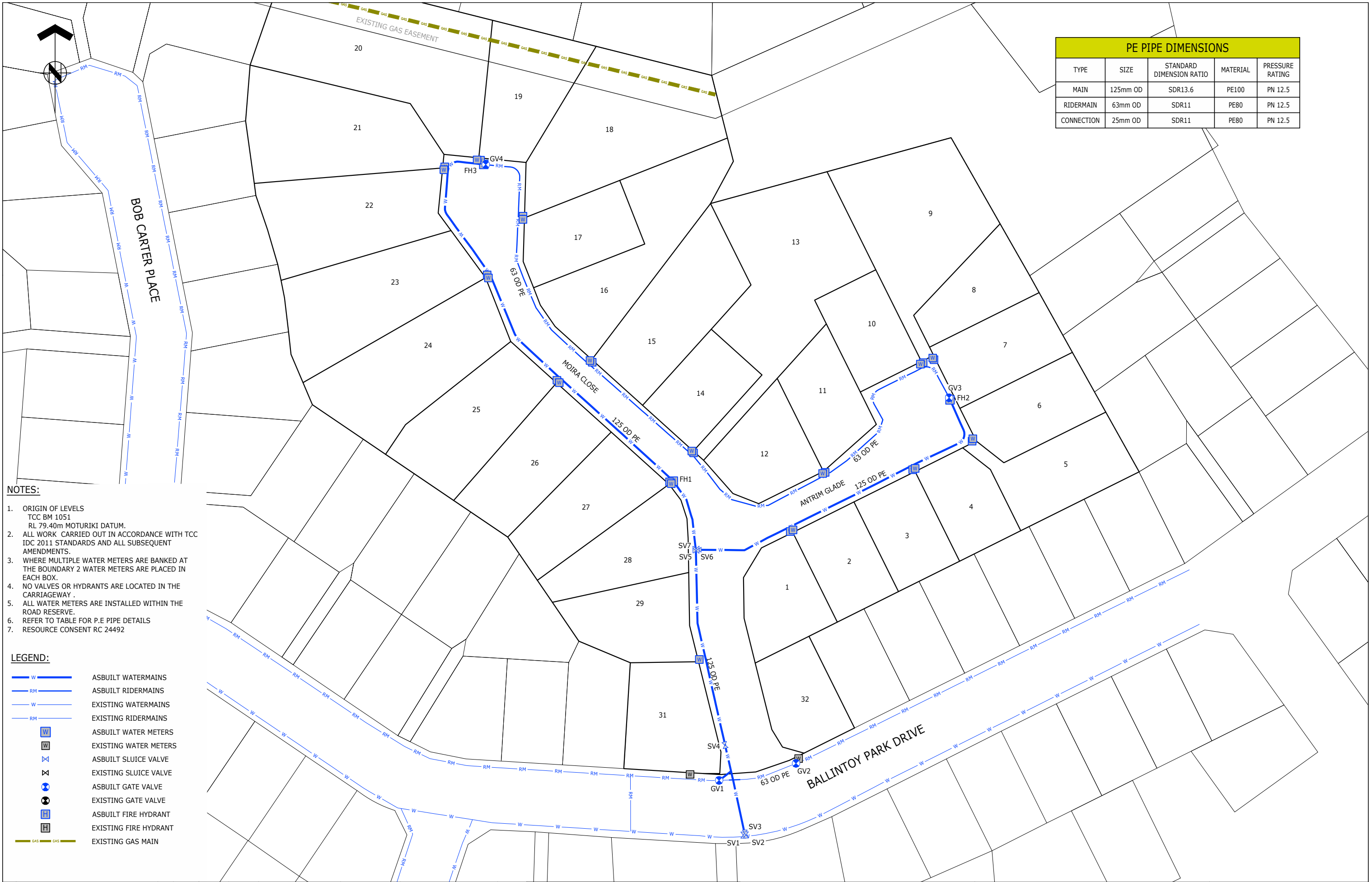


- NOTES:**
- ORIGIN OF LEVELS
TCC BM 1051
RL 79.40m MOTURIKI DATUM.
 - ALL WORKS WERE CARRIED OUT IN ACCORDANCE WITH
TCC IDC 2011 STANDARDS AND ALL SUBSEQUENT
AMENDMENTS.
 - ALL STORMWATER AND WASTEWATER CONNECTIONS
ARE 100mm NB uPVC, UNLESS UNDER CARRIAGEWAY
WHERE 150mm NB uPVC WERE USED.
SUMP LEADS ARE 300mm NB uPVC.
 - ALL MANHOLES ARE 1050mm DIA UNLESS OTHERWISE
SHOWN.
 - ALL STORMWATER PIPES ARE RCRRJ UNLESS
OTHERWISE STATED.
 - ALL CONCRETE PIPES ARE CLASS 2 UNLESS OTHERWISE
STATED.
 - ALL DEEP DRAINAGE CONNECTIONS ARE RAMPED UP TO
WITHIN 1.5m OF SURFACE.
 - ASBUILT INFORMATION SUPPLIED BY "HEB
CONSTRUCTION LTD"
 - RESOURCE CONSENT RC 24492

- LEGEND:**
- ASBUILT STORMWATER
 - EXISTING STORMWATER
 - ASBUILT SUBSOIL DRAINAGE
 - ASBUILT STORMWATER MANHOLE
 - EXISTING STORMWATER MANHOLE
 - ASBUILT STORMWATER RODDING EYE
 - ASBUILT STORMWATER SUMP
 - EXISTING GAS MAIN
 - OVERLAND FLOW PATH DIRECTION

				ORIGINATOR: SJF		DATE: 06.10.15		SIGNED:		PLOT BY: SJF				ASSOCIATION OF CONSULTING ENGINEERS NEW ZEALAND		ISO 9001 QUALITY ASSURED				TAURANGA OFFICE LEVEL 1, 60 SPRING STREET TAURANGA 3110 T +64 7 578 0023 W www.harrisongrison.com		PROJECT: HUGH GREEN GROUP LIMITED BALLINTOY PARK DRIVE WELCOME BAY, TAURANGA STAGE 5		TITLE: STORMWATER ASBUILT PLAN SHEET 1 OF 2 TCC IP 24492		ISSUE STATUS: AS BUILT		
				DRAWN: SJF		DATE: 15.08.16		SIGNED:		PLOT DATE: 08.07.16		PROJECT No: 1530-136448-01		SCALES: 1:500 - A1 1:1000 - A3		A1												
				CHECKED: GPR		DATE: 26.08.16		SIGNED:		SURVEY BY: SJF		DRAWING No: 136448-01-AB101				REV												
B ASBUILT FINAL		SJF 25.08.25		GPR		DATE: 26.08.16				SURVEY DATE:																		
A AS BUILT		SJF 15.08.16		APPROVED: JSC		DATE: 26.08.16		SIGNED:																				
REF REVISIONS		BY DATE																										

REFER TO APPROVED MASTER DRAWINGS FOR ORIGINAL SIGNATURES File: DATA\LOCAL\AUTODESK\AUTOCAD LT 2016\R22\ENU\TEMPLATE N:\1530\136448_A\CAD\AUTOCAD TENDER SET\ASBUILT\136448-01-AB100.DWG



PE PIPE DIMENSIONS				
TYPE	SIZE	STANDARD DIMENSION RATIO	MATERIAL	PRESSURE RATING
MAIN	125mm OD	SDR13.6	PE100	PN 12.5
RIDERMAIN	63mm OD	SDR11	PE80	PN 12.5
CONNECTION	25mm OD	SDR11	PE80	PN 12.5

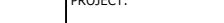
- NOTES:
- ORIGIN OF LEVELS
TCC BM 1051
RL 79.40m MOTURIKI DATUM.
 - ALL WORK CARRIED OUT IN ACCORDANCE WITH TCC IDC 2011 STANDARDS AND ALL SUBSEQUENT AMENDMENTS.
 - WHERE MULTIPLE WATER METERS ARE BANKED AT THE BOUNDARY 2 WATER METERS ARE PLACED IN EACH BOX.
 - NO VALVES OR HYDRANTS ARE LOCATED IN THE CARRIAGEWAY .
 - ALL WATER METERS ARE INSTALLED WITHIN THE ROAD RESERVE.
 - REFER TO TABLE FOR P.E PIPE DETAILS
 - RESOURCE CONSENT RC 24492

- LEGEND:
- W ASBUILT WATERMAINS
 - RM ASBUILT RIDERMAINS
 - W EXISTING WATERMAINS
 - RM EXISTING RIDERMAINS
 - W ASBUILT WATER METERS
 - W EXISTING WATER METERS
 - SV ASBUILT SLUICE VALVE
 - SV EXISTING SLUICE VALVE
 - GV ASBUILT GATE VALVE
 - GV EXISTING GATE VALVE
 - FH ASBUILT FIRE HYDRANT
 - FH EXISTING FIRE HYDRANT
 - GAS EXISTING GAS MAIN

				ORIGINATOR: SJF	DATE: 18.07.16	SIGNED:	PLOT BY: SJF		ASSOCIATION OF CONSULTING ENGINEERS NEW ZEALAND	ISO 9001 QUALITY ASSURED		TAURANGA OFFICE LEVEL 1, 60 SPRING STREET TAURANGA 3110 T +64 7 578 0023 W www.harrisingrierson.com	PROJECT: HUGH GREEN GROUP LIMITED BALLINTOY PARK DRIVE WELCOME BAY, TAURANGA STAGE 5	TITLE: WATER RETICULATION ASBUILT PLAN SHEET 1 OF 2 TCC IP 24492	ISSUE STATUS: AS BUILT											
				DRAWN: SJF	DATE: 18.07.16	SIGNED:	PLOT DATE: 18.07.16								PROJECT No: 1530-136448-01	SCALES: 1:500 - A1 1:1000 - A3	A1									
				CHECKED: SJF	DATE: 25.08.16	SIGNED:	SURVEY BY:								DRAWING No: 136448-01	REV	B									
B	ASBUILT FINAL			APPROVED: SJF	DATE: 15.08.16	SIGNED:	SURVEY DATE:																			
A	AS BUILT																									
REF	REVISIONS	BY	DATE	JSC	DATE: 26.08.16																					

WATER METER SCHEDULE							
LOT	SERIAL NO.	mE	mN	RL	Front	Side	Initial Reading
1	16M1556115	376667.47	802061.76	97.72	0.60	0.50	0.251
2	16M1556114	376668.28	802062.21	97.75	0.60	0.40	0.246
3	16M1556113	376703.34	802079.82	101.48	0.80	0.40	0.103
4	16M1556112	376704.05	802080.18	101.51	0.80	0.40	0.108
5	16M1556111	376720.73	802088.18	102.26	0.50	1.00	0.102
6	16M1556110	376720.95	802088.90	102.26	0.60	1.00	0.095
7	16M1556109	376709.55	802112.04	102.63	0.50	1.10	0.089
8	16M1556108	376709.20	802112.51	102.63	0.60	0.60	0.099
9	16M1556107	376706.38	802111.17	102.47	0.50	0.60	0.115
10	16M1556106	376705.59	802110.71	102.45	0.60	0.60	0.112
11	16M1556105	376677.69	802079.06	99.34	0.50	0.20	0.105
12	16M1556104	376676.95	802078.72	99.28	0.50	0.50	0.107
13	16M1556103	376639.16	802084.73	97.18	0.40	0.40	0.107
14	16M1556102	376638.64	802085.29	97.27	0.30	0.30	0.104
15	16M1556101	376609.49	802111.27	98.19	0.50	0.60	0.107
16	16M1556100	376608.82	802111.78	98.19	0.60	0.20	0.126
17	16M1556099	376589.19	802153.08	99.04	0.50	0.50	0.108
18	16M1556098	376589.22	802154.00	99.07	0.50	0.50	0.090
19	16M1556097	376576.74	802170.40	99.22	0.70	0.50	0.102
20	16M1556096	376575.75	802170.48	99.20	0.70	0.50	0.105
21	16M1556095	376566.30	802168.48	98.95	0.60	0.40	0.140
22	16M1556094	376566.08	802167.65	98.97	0.40	0.40	0.129
23	16M1556119	376578.71	802136.83	98.81	0.90	0.40	0.243
24	16M1556118	376579.07	802135.95	98.80	0.70	0.30	0.253
25	16M1556117	376599.15	802105.99	98.27	0.60	0.40	0.249
26	16M1556116	376599.84	802105.29	98.27	0.60	0.60	0.246
27	16M1556121	376632.12	802076.24	96.86	0.80	0.40	0.234
28	16M1556120	376632.62	802075.65	96.86	0.80	0.40	0.234
29	16M1556122	376640.86	802024.28	93.49	0.40	0.50	0.235
31	07M1520727	376638.12	801990.64	89.74	0.50	4.00	219.493
32	07M1520728	376638.12	801990.64	89.74	0.90	1.00	0.092

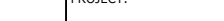
VALVES AND HYDRANTS			
ID	mE	mN	RL
FH1	376633.23	802076.48	96.89
FH2	376714.26	802100.25	84.45
FH3	376577.72	802169.09	99.23
GV1	376646.62	801988.87	90.59
GV2	376669.14	801993.88	93.17
GV3	376713.97	802100.94	102.02
GV4	376578.41	802169.06	99.26
SV1	376653.72	801972.87	91.30
SV2	376654.50	801972.92	91.38
SV3	376654.08	801973.58	91.31
SV4	376648.31	801999.24	91.89
SV5	376639.87	802056.09	95.62
SV6	376640.48	802056.51	95.63
SV7	376639.87	802056.71	95.67

					ORIGINATOR: SJF	DATE: 18.07.16	SIGNED:		PLOT BY: SJF		ASSOCIATION OF CONSULTING ENGINEERS NEW ZEALAND	ISO 9001 QUALITY ASSURED		TAURANGA OFFICE LEVEL 1, 60 SPRING STREET TAURANGA 3110 T +64 7 578 0023 W www.harrisongrierson.com	PROJECT: HUGH GREEN GROUP LIMITED BALLINTOY PARK DRIVE WELCOME BAY, TAURANGA STAGE 5	TITLE: WATER RETICULATION ASBUILT PLAN SHEET 2 OF 2 TCC IP 24492	ISSUE STATUS: AS BUILT		
					DRAWN: SJF	DATE: 18.07.16	SIGNED:		PLOT DATE: 18.07.16								PROJECT No: 1530-136448-01	SCALES:	A1
					CHECKED: GPR	DATE: 26.08.16	SIGNED:		SURVEY BY:								DRAWING No: 136448-01-AB302		
B	AS BUILT FINAL		SJF	25.08.16	GPR	DATE: 26.08.16	SIGNED:		SURVEY DATE:	REV B									
A	AS BUILT		SJF	15.08.16	APPROVED: JSC	DATE: 26.08.16	SIGNED:												
REF	REVISIONS		BY	DATE															



- NOTES:**
- 1. ORIGIN OF LEVELS
TCC BM 1051
RL = 79.40m MOTURIKI DATUM
 - 2. ALL WORKS HAVE BEEN CARRIED OUT TO TCC IDC 2011 STANDARDS.
 - 3. STANDARD ROAD RESERVE FOOTPATHS ARE 1.5m WIDE.
 - 4. ALL KERB IS STANDARD KERB AND CHANNEL
 - 5. RESOURCE CONSENT RC 24492

- LEGEND:**
- EXISTING GAS MAIN
 - ASBUILT STREETLIGHT
 - ASBUILT STREETSIGN
 - ASBUILT CONCRETE
 - TCC BENCHMARK
 - ASBUILT TREES (REFER SHEET AB402 FOR SPECIES)

				ORIGINATOR: SJF	DATE: 18.07.16	SIGNED:	PLOT BY: SJF		ASSOCIATION OF CONSULTING ENGINEERS NEW ZEALAND	ISO 9001 QUALITY ASSURED		TAURANGA OFFICE LEVEL 1 HARRISON GRIERSON HOUSE 141 CAMERON ROAD TAURANGA 3110 T +64 7 578 0023 W www.harrisongrierson.com	PROJECT: HUGH GREEN GROUP LIMITED BALLINTOY PARK DRIVE WELCOME BAY, TAURANGA STAGE 5	TITLE: STREETSCAPE AND TRANSPORTATION ASBUILT PLAN SHEET 1 OF 2 TCC IP 24492	ISSUE STATUS: AS BUILT				
				DRAWN: SJF	DATE: 18.07.16	SIGNED:	PLOT DATE: 18.07.16								PROJECT No: 1530-136448-01	SCALES: 1:500 - A1 1:1000 - A3	A1		
				CHECKED: GPR	DATE: 26.08.16	SIGNED:	SURVEY BY:	THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED OR ALTERED, WITHOUT THE WRITTEN PERMISSION OF HARRISON GRIERSON CONSULTANTS LIMITED. NO LIABILITY SHALL BE ACCEPTED FOR UNAUTHORISED USE OF THIS DRAWING.											
B	AS BUILT FINAL			SJF	25.08.16														
A	AS BUILT			SJF	15.08.16														
REF	REVISIONS			BY	DATE	JSC	26.08.16												

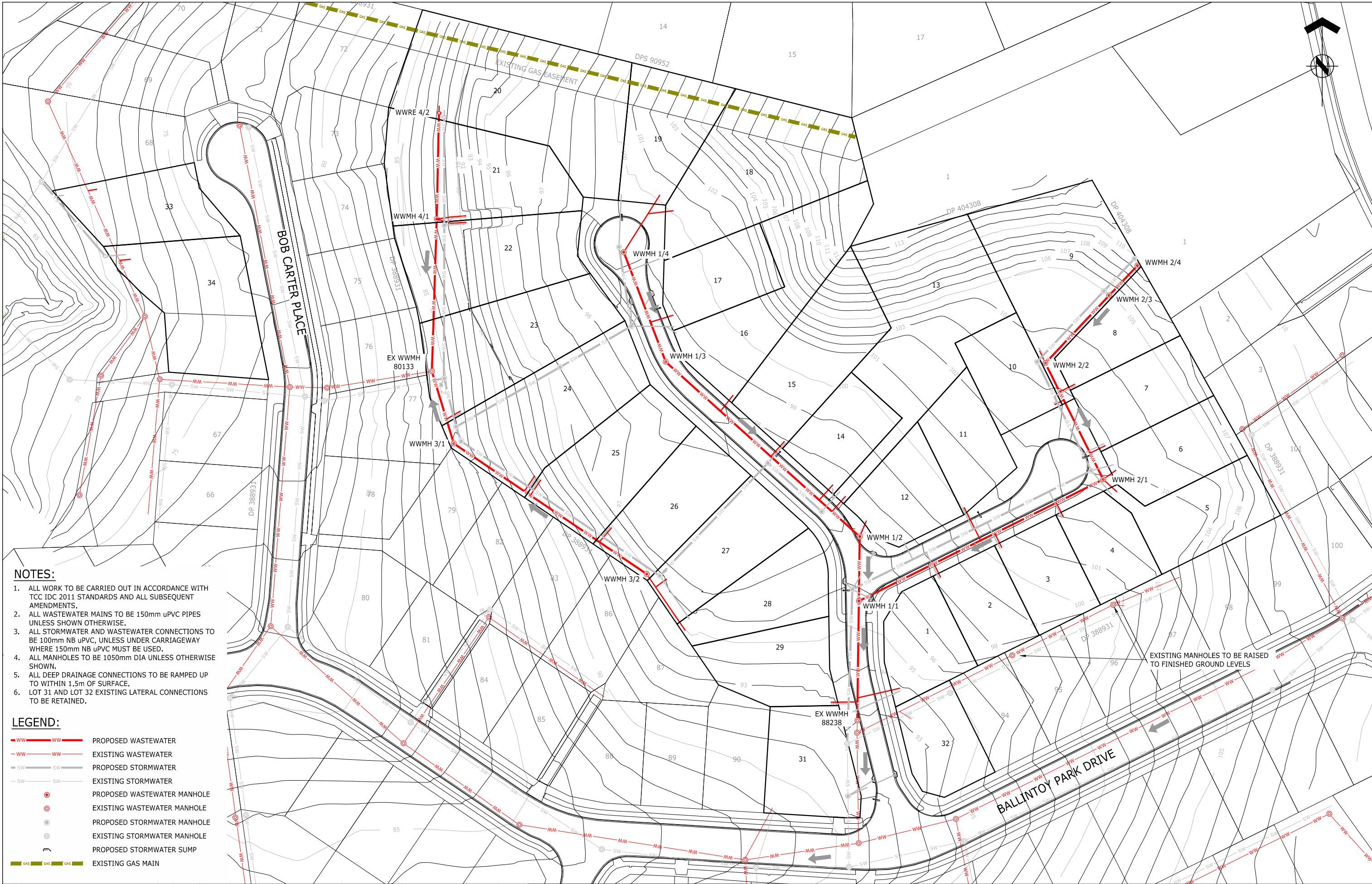
PLANT SCHEDULE					
ID	BOTANICAL NAME	COMMON NAME	mE	mN	RL
T01	Mangnolia grandiflora	Little Gem	376648.77	802007.58	92.15
T02	Mangnolia grandiflora	Little Gem	376656.32	802009.74	92.15
T03	Mangnolia grandiflora	Little Gem	376644.94	802022.79	92.86
T04	Mangnolia grandiflora	Little Gem	376651.33	802028.97	93.23
T05	Mangnolia grandiflora	Little Gem	376642.02	802041.60	94.31
T06	Mangnolia grandiflora	Little Gem	376649.66	802041.75	94.31
T07	Mangnolia grandiflora	Little Gem	376689.28	802085.16	100.52
T08	Mangnolia grandiflora	Little Gem	376696.16	802100.86	100.59
T09	Mangnolia grandiflora	Little Gem	376700.07	802103.17	101.82
T10	Mangnolia grandiflora	Little Gem	376586.77	802151.60	98.68
T11	Mangnolia grandiflora	Little Gem	376583.36	802166.99	99.05

STREETLIGHTS				
ID	mE	mN	RL	TYPE
SL 01	376650.46	801996.43	91.59	KENDERLIER 8125/LUMA LITE 1 R5 28 NW6850
SL 02	376642.09	802057.20	95.63	KENDERLIER 8125/LUMA LITE 1 R5 28 NW6850
SL 03	376681.19	802080.19	99.29	KENDERLIER 8125/LUMA LITE 1 R5 28 NW6850
SL 04	376713.74	802096.66	101.94	KENDERLIER 8125/LUMA LITE 1 R5 28 NW6850
SL 05	376623.57	802097.88	97.30	KENDERLIER 8125/LUMA LITE 1 R5 28 NW6850
SL 06	376588.45	802139.73	98.38	KENDERLIER 8125/LUMA LITE 1 R5 28 NW6850
SL 07	376577.40	802167.27	98.75	KENDERLIER 8125/LUMA LITE 1 R5 28 NW6850

STREET SIGNS				
ID	mE	mN	RL	TYPE
SN 01	376661.12	801976.04	92.02	STREET SIGN
SN 02	376659.30	801999.98	92.12	RG-6
SN 03	376642.09	802057.20	95.63	STREET SIGN

BENCHMARK SCHEDULE			
POINT	mE	mN	LEVEL
BM 1101	376655.94	802059.96	96.54

				ORIGINATOR: SJF	DATE: 18.07.16	SIGNED:	PLOT BY: SJF		ASSOCIATION OF CONSULTING ENGINEERS NEW ZEALAND	ISO 9001 QUALITY ASSURED		TAURANGA OFFICE LEVEL 1 HARRISON GRIERSON HOUSE 141 CAMERON ROAD TAURANGA 3110 T +64 7 578 0023 W www.harrisongrierson.com	PROJECT: HUGH GREEN GROUP LIMITED BALLINTOY PARK DRIVE WELCOME BAY, TAURANGA STAGE 5	TITLE: STREETSCAPE AND TRANSPORTATION ASBUILT PLAN SHEET 2 OF 2 TCC IP 24492	ISSUE STATUS: AS BUILT		
				DRAWN: SJF	DATE: 18.07.16	SIGNED:	PLOT DATE: 18.07.16								PROJECT No: 1530-136448-01	SCALES:	A1
				CHECKED: GPR	DATE: 26.08.16	SIGNED:	SURVEY BY:								THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED OR ALTERED, WITHOUT THE WRITTEN PERMISSION OF HARRISON GRIERSON CONSULTANTS LIMITED. NO LIABILITY SHALL BE ACCEPTED FOR UNAUTHORISED USE OF THIS DRAWING.		
B	AS BUILT FINAL		SJF	25.08.16	DATE: 26.08.16	SIGNED:	SURVEY DATE:										
A	AS BUILT		SJF	15.08.16	DATE: 26.08.16	SIGNED:											
REF	REVISIONS		BY	DATE	JSC												



- NOTES:**
1. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH TCC IDC 2011 STANDARDS AND ALL SUBSEQUENT AMENDMENTS.
 2. ALL WASTEWATER MAINS TO BE 150mm uPVC PIPES UNLESS SHOWN OTHERWISE.
 3. ALL STORMWATER AND WASTEWATER CONNECTIONS TO BE 100mm NB uPVC, UNLESS UNDER CARRIAGEWAY WHERE 150mm NB uPVC MUST BE USED.
 4. ALL MANHOLES TO BE 1050mm DIA UNLESS OTHERWISE SHOWN.
 5. ALL DEEP DRAINAGE CONNECTIONS TO BE RAMPED UP TO WITHIN 1.5m OF SURFACE.
 6. LOT 31 AND LOT 32 EXISTING LATERAL CONNECTIONS TO BE RETAINED.

- LEGEND:**
- WW — PROPOSED WASTEWATER
 - - - WW - - - EXISTING WASTEWATER
 - SW — PROPOSED STORMWATER
 - - - SW - - - EXISTING STORMWATER
 - PROPOSED WASTEWATER MANHOLE
 - EXISTING WASTEWATER MANHOLE
 - PROPOSED STORMWATER MANHOLE
 - EXISTING STORMWATER MANHOLE
 - PROPOSED STORMWATER SUMP
 - GAS — EXISTING GAS MAIN

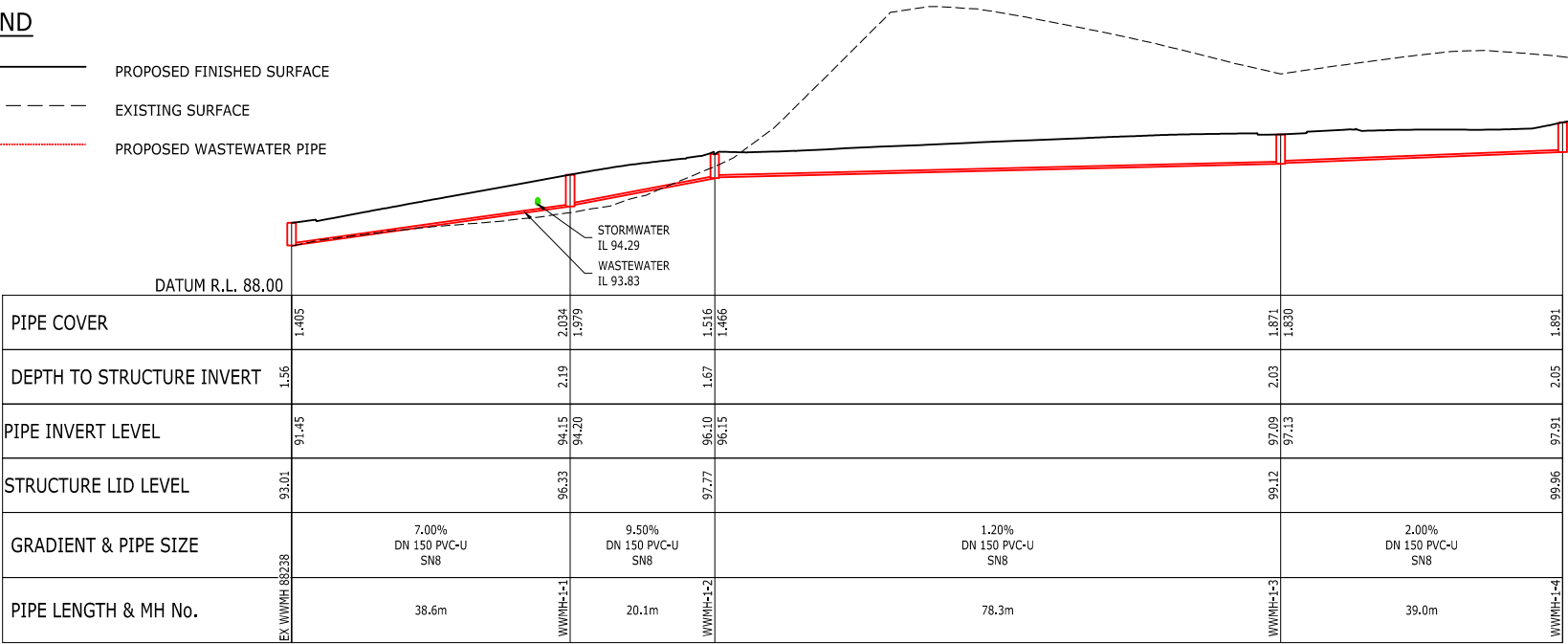
				ORIGINATOR: RJM	DATE: 06.10.15	SIGNED:	PLOT BY: HEH		ASSOCIATION OF CONSULTING ENGINEERS NEW ZEALAND	ISO 9001 QUALITY ASSURED		TAURANGA OFFICE LEVEL 1 HARRISON GRIERSON HOUSE 141 CAMERON ROAD TAURANGA 3110 T +64 7 578 0023 W www.harrissongrierson.com	PROJECT: BALLINTOY PARK DRIVE WELCOME BAY, TAURANGA STAGE 5	TITLE: WASTEWATER LAYOUT PLAN	ISSUE STATUS: DEVELOPMENT WORKS APPROVAL		
				DRAWN: HEH	DATE: 09.10.15	SIGNED:	PLOT DATE: 30.11.15									PROJECT No: 1530-136448-01	SCALES: 1:500 - A1 1:1000 - A3
3	REVISED 12m WIDE ROAD LAYOUT	JSC	04.11.15	CHECKED: RJM	DATE: 04.11.15	SIGNED:	SURVEY BY:	THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED OR ALTERED, WITHOUT THE WRITTEN PERMISSION OF HARRISON GRIERSON CONSULTANTS LIMITED. NO LIABILITY SHALL BE ACCEPTED FOR UNAUTHORISED USE OF THIS DRAWING.									
2	ISSUED FOR DEVELOPMENT WORKS APPROVAL	JSC	12.10.15	CHECKED: RJM	DATE: 04.11.15	SIGNED:											
1	ISSUED FOR TENDER	JSC	02.10.15	APPROVED: JSC	DATE: 04.11.15	SIGNED:	SURVEY DATE:										
REF	REVISIONS	BY	DATE														
DRAWING No: 136448-01-410																REV 3	

NOTES

1. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE TO TCC IDC 2011 STANDARDS.

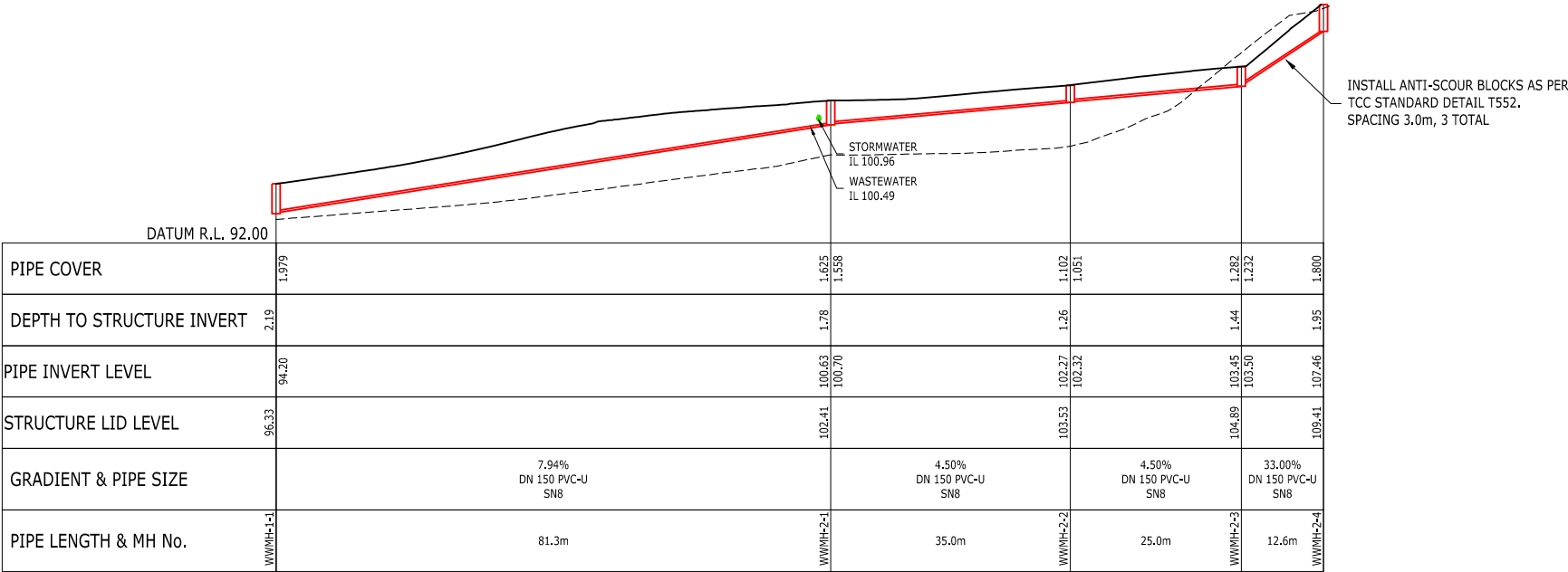
LEGEND

- PROPOSED FINISHED SURFACE
- EXISTING SURFACE
- PROPOSED WASTEWATER PIPE



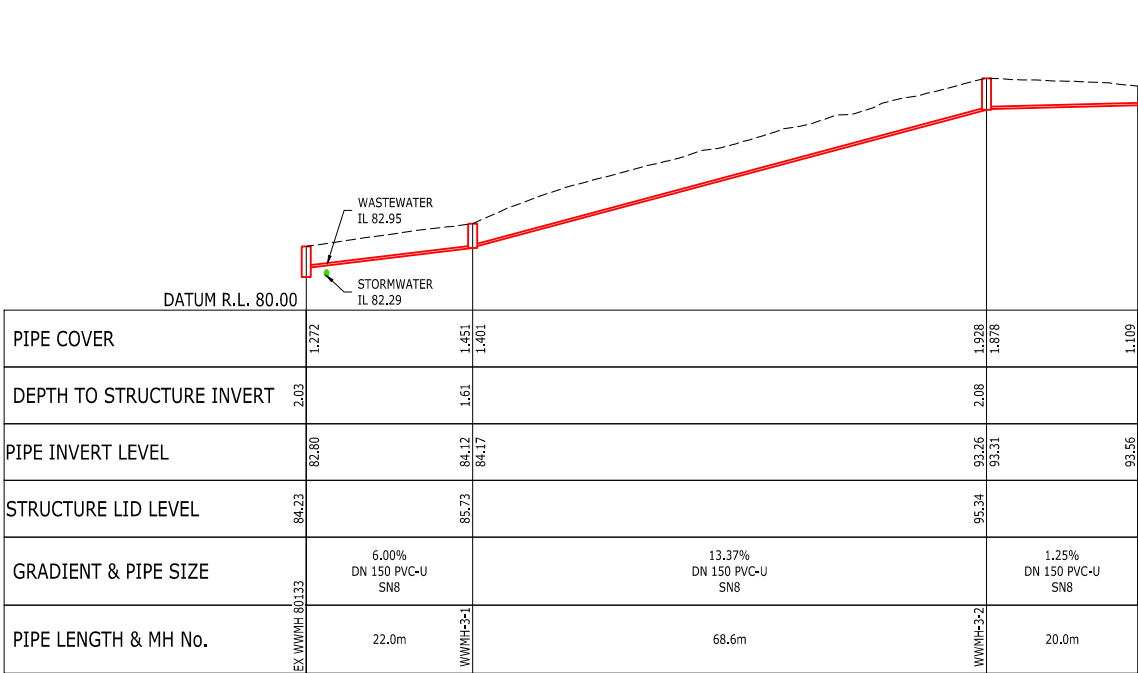
WASTEWATER LINE 1 LONGITUDINAL SECTION

SCALE HOR 1:500 -A1 1:1000 -A3
VER 1:250 -A1 1:500 -A3



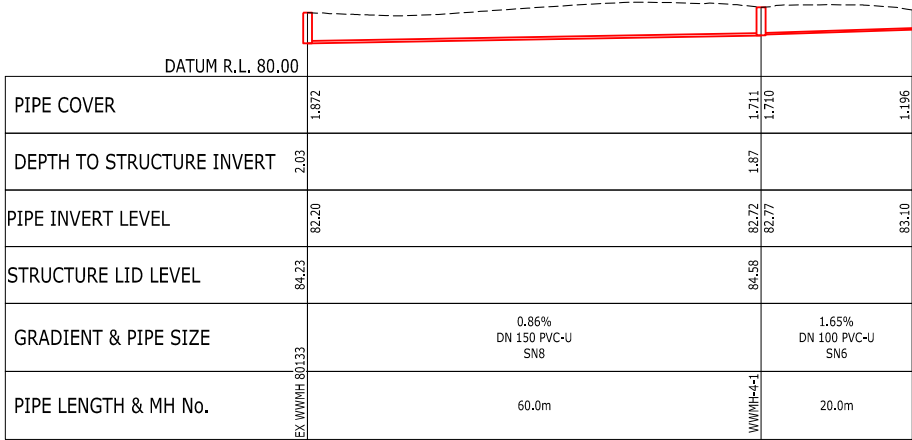
WASTEWATER LINE 2 LONGITUDINAL SECTION

SCALE HOR 1:500 -A1 1:1000 -A3
VER 1:250 -A1 1:500 -A3



WASTEWATER LINE 3 LONGITUDINAL SECTION

SCALE HOR 1:500 -A1 1:1000 -A3
VER 1:250 -A1 1:500 -A3



WASTEWATER LINE 4 LONGITUDINAL SECTION

SCALE HOR 1:500 -A1 1:1000 -A3
VER 1:250 -A1 1:500 -A3

DRAFT ONLY

				ORIGINATOR: TEB	DATE: 25.09.15	SIGNED:	PLOT BY: TSC	 ASSOCIATION OF CONSULTING ENGINEERS NEW ZEALAND	ISO 9001 QUALITY ASSURED	 TAURANGA OFFICE LEVEL 1 HARRISON GRIERSON HOUSE 141 CAMERON ROAD TAURANGA 3110 T +64 7 578 0023 W www.harrisongrierson.com	PROJECT: BALLINTOY PARK DRIVE, WELCOME BAY, TAURANGA STAGE 5	TITLE: WASTEWATER LONGITUDINAL SECTIONS	ISSUE STATUS:			TENDER								
			DRAWN: TSC	DATE: 01.10.15	SIGNED:	PLOT DATE: 01.10.15									PROJECT No: 1530-136448-01	SCALES: AS SHOWN	A1							
			CHECKED: RJM	DATE: 01.10.15	SIGNED:	SURVEY BY:									DRAWING No:		REV							
1	TENDER	JSC	01.10.15	APPROVED: JSC	DATE: 01.10.15	SIGNED:									SURVEY DATE:	THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED OR ALTERED, WITHOUT THE WRITTEN PERMISSION OF HARRISON GRIERSON CONSULTANTS LIMITED. NO LIABILITY SHALL BE ACCEPTED FOR UNAUTHORISED USE OF THIS DRAWING.								
REF	REVISIONS																							



NOTES:

1. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH TCC IDC 2011 STANDARDS AND ALL SUBSEQUENT AMENDMENTS.
2. ALL LOT CONNECTIONS TO BE 25mm OD PE80 SDR11 PN12.5.
3. WHERE MULTIPLE WATER METERS ARE BANKED AT THE BOUNDARY 2 WATER METERS ARE TO BE PLACED IN EACH BOX.
4. CONTRACTOR TO CONFIRM DUCTING REQUIREMENTS WITH SERVICE PROVIDER PLANS.
5. NO VALVES OR HYDRANTS TO BE LOCATED IN THE CARRIAGEWAY .
6. ALL WATER METERS TO BE INSTALLED WITHIN THE ROAD RESERVE.
7. ALL ROAD CROSSINGS TO HAVE MINIMUM 1.0m COVER.
8. PIPE LOCATION IS INDICATIVE. REFER TO ROAD CROSS SECTIONS FOR SERVICES TRENCH DETAILS.
9. ALL FITTINGS TO HAVE THRUST BLOCKS IN ACCORDANCE WITH TCC IDC 2011.
10. CONTRACTOR TO VERIFY LOCATION OF EXISTING WATER RETICULATION PRIOR TO CONSTRUCTION.
11. LOT 31 AND LOT 32 EXISTING LATERAL CONNECTIONS TO BE RETAINED.
12. PIPE BENDS TO BE CONFIRMED ON SITE BY ENGINEER.

LEGEND:

- W PROPOSED WATERMAINS
- RM PROPOSED RIDERMAINS
- PROPOSED WATER CONNECTIONS
- W EXISTING WATERMAINS
- RM EXISTING RIDERMAINS
- PROPOSED SLUICE VALVE
- EXISTING SLUICE VALVE
- PROPOSED GATE VALVE
- EXISTING GATE VALVE
- PROPOSED FIRE HYDRANT
- EXISTING FIRE HYDRANT
- PROPOSED STORMWATER SUMP
- EXISTING GAS MAIN

PE PIPE DIMENSIONS				
TYPE	SIZE	STANDARD DIMENSION RATIO	MATERIAL	PRESSURE RATING
MAIN	125mm OD	SDR11	PE80	PN 12.5
RIDERMAIN	63mm OD	SDR11	PE80	PN 12.5
CONNECTION	25mm OD	SDR11	PE80	PN 12.5

ORIGINATOR: TEB
DATE: 25.09.15
SIGNED: [Signature]
PLOT BY: HEH
PLOT DATE: 30.11.15

ASSOCIATION OF CONSULTING ENGINEERS
NEW ZEALAND

ISO 9001
QUALITY ASSURED

3 REVISED 12m WIDE ROAD LAYOUT
2 ISSUED FOR DEVELOPMENT WORKS APPROVAL
1 ISSUED FOR TENDER

JSC
04.11.15
02.10.15
04.11.15

CHECKED: RJM
DATE: 04.11.15
APPROVED: JSC
DATE: 04.11.15

SURVEY BY:
SIGNED:
SIGNED:
SIGNED:

SURVEY DATE:
SIGNED:
SIGNED:
SIGNED:

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PROJECT:
**BALLINTOY PARK DRIVE
WELCOME BAY, TAURANGA
STAGE 5**

TITLE:
WATER RETICULATION LAYOUT PLAN

ISSUE STATUS:
DEVELOPMENT WORKS APPROVAL

PROJECT No: 1530-136448-01
DRAWING No: 136448-01-500
REV 3

SCALES: 1:500 - A1
1:1000 - A3

A1

REFER TO APPROVED MASTER DRAWINGS FOR ORIGINAL SIGNATURES File: TAURANGA N:\1530\136448_A\CAD\AUTOCAD TENDER SET\136448-01-500.DWG



- NOTES:**
- 1. ALL POWER DUCTS TO BE SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR.
 - 2. CONTRACTOR TO INSTALL FIBRE DUCTS THAT WILL BE SUPPLIED BY OTHERS.

- LEGEND:**
- FIBRE (DUCTS)
 - POWER (DUCTS)

DRAFT ONLY

				ORIGINATOR: TEB	DATE: 25.09.15	SIGNED:	PLOT BY: TSC	 ASSOCIATION OF CONSULTING ENGINEERS NEW ZEALAND	ISO 9001 QUALITY ASSURED		TAURANGA OFFICE LEVEL 1 HARRISON GRIERSON HOUSE 141 CAMERON ROAD TAURANGA 3110 T +64 7 578 0023 W www.harrisongrierson.com	PROJECT: BALLINTOY PARK DRIVE WELCOME BAY, TAURANGA STAGE 5	TITLE: UTILITY DUCTING LAYOUT PLAN	ISSUE STATUS: TENDER	
		DRAWN: TSC		DATE: 01.10.15	SIGNED:	PLOT DATE: 01.10.15	PROJECT No: 1530-136448-01							SCALES: 1:500 - A1 1:1000 - A3	A1
		CHECKED: RJM		DATE: 01.10.15	SIGNED:	SURVEY BY:	DRAWING No: 136448-01-610								REV
1	ISSUED FOR TENDER	JSC	01.10.15	APPROVED: JSC	DATE: 01.10.15	SIGNED:	SURVEY DATE:							1	
REF	REVISIONS	BY	DATE	THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF, AND MAY NOT BE REPRODUCED OR ALTERED, WITHOUT THE WRITTEN PERMISSION OF HARRISON GRIERSON CONSULTANTS LIMITED. NO LIABILITY SHALL BE ACCEPTED FOR UNAUTHORISED USE OF THIS DRAWING.											