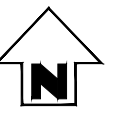


LEGEND

LEGAL BOUNDARY	
LOWER PLATFORM LEVEL	
UPPER PLATFORM LEVEL	
EXISTING BUILDINGS	
EXISTING GROUND CONTOUR	

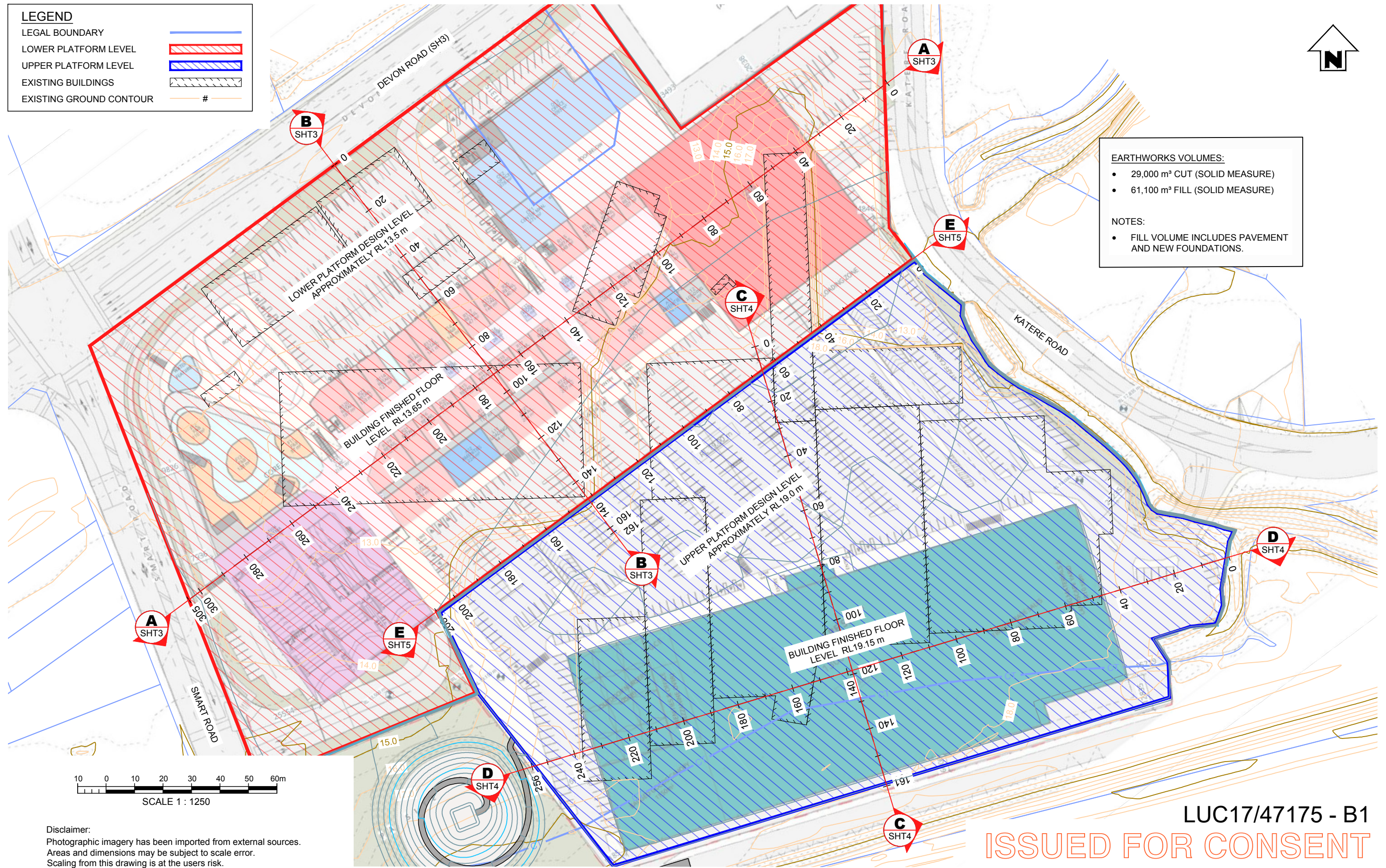


EARTHWORKS VOLUMES:

- 29,000 m³ CUT (SOLID MEASURE)
- 61,100 m³ FILL (SOLID MEASURE)

NOTES:

- FILL VOLUME INCLUDES PAVEMENT AND NEW FOUNDATIONS.



LUC17/47175 - B1
ISSUED FOR CONSENT

Disclaimer:
 Photographic imagery has been imported from external sources.
 Areas and dimensions may be subject to scale error.
 Scaling from this drawing is at the users risk.

File Name: J:\16216\Drawings\16216-05 EARTHWORKS PLAN.dwg - SHT 1 Plot Date: 29/06/2018 Plot Time: 14:52



NO	DATE	BY	CHKD	APPR	OPER	DESCRIPTION	NUMBER	TITLE
7	29/06/18	LB	IS			ISSUED FOR COMMENT		
6	18/10/17	LB	IS			ISSUED FOR COMMENT		
5	26/09/17	LB	IS			ISSUED FOR COMMENT		
4	26/08/17	LB	IS			ISSUED FOR COMMENT		
3	24/08/17	LB	IS			ISSUED FOR COMMENT		
2	29/07/17	LB	IS			ISSUED FOR COMMENT		
1	29/07/17	LB	IS			ISSUED FOR COMMENT		

GENERAL NOTES

- Coordinates in terms of: Geodetic Datum (Taranaki 2000)
- Elevations in terms of: Mean Sea Level (Taranaki Datum 1970)
- Contour interval is: 1.0 m

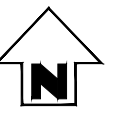
BLUEHAVEN
COMMERCIAL

LOCATION	622 DEVON ROAD
PROJECT No.	16216
A3 SCALE	AS SHOWN
SURVEYED	
DRAWN	I. BUNN 08/07/17
CHECKED	I. STEELE 08/07/17

TITLE		PROJECT ROBYN	
		BULK EARTHWORKS PLAN	
		SITE OVERVIEW - LEVEL 1	
ORIGINAL SIZE	DRAWING No.	SHEET	REVISION
A3	16216-05	1	7

LEGEND

LEGAL BOUNDARY	
LOWER PLATFORM LEVEL	
UPPER PLATFORM LEVEL	
EXISTING BUILDINGS	
EXISTING GROUND CONTOUR	

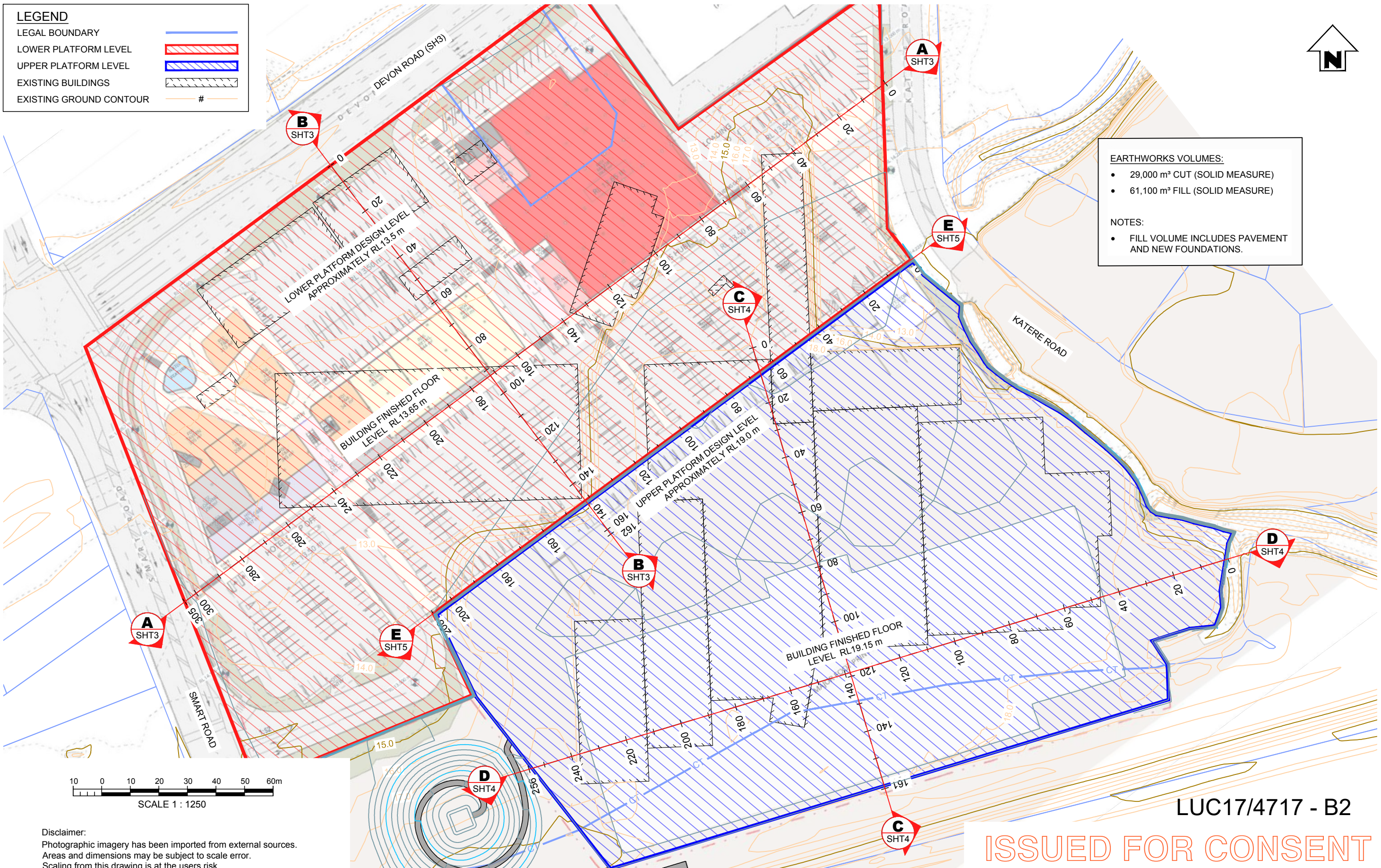


EARTHWORKS VOLUMES:

- 29,000 m³ CUT (SOLID MEASURE)
- 61,100 m³ FILL (SOLID MEASURE)

NOTES:

- FILL VOLUME INCLUDES PAVEMENT AND NEW FOUNDATIONS.



Disclaimer:
 Photographic imagery has been imported from external sources.
 Areas and dimensions may be subject to scale error.
 Scaling from this drawing is at the users risk.

LUC17/4717 - B2

ISSUED FOR CONSENT



NO	DATE	BY	CHKD	APPR	OPER	DESCRIPTION	NUMBER	TITLE
7	29/06/18	LB	IS			ISSUED FOR COMMENT		
6	18/10/17	LB	IS			ISSUED FOR COMMENT		
5	26/09/17	LB	IS			ISSUED FOR COMMENT		
4	25/08/17	LB	IS			ISSUED FOR COMMENT		
3	24/08/17	LB	IS			ISSUED FOR COMMENT		
2	25/07/17	LB	IS			ISSUED FOR COMMENT		
1	16/07/17	LB	IS			ISSUED FOR COMMENT		

GENERAL NOTES

- Coordinates in terms of : Geodetic Datum (Taranaki 2000)
- Elevations in terms of : Mean Sea Level (Taranaki Datum 1970)
- Contour interval is : 1.0 m

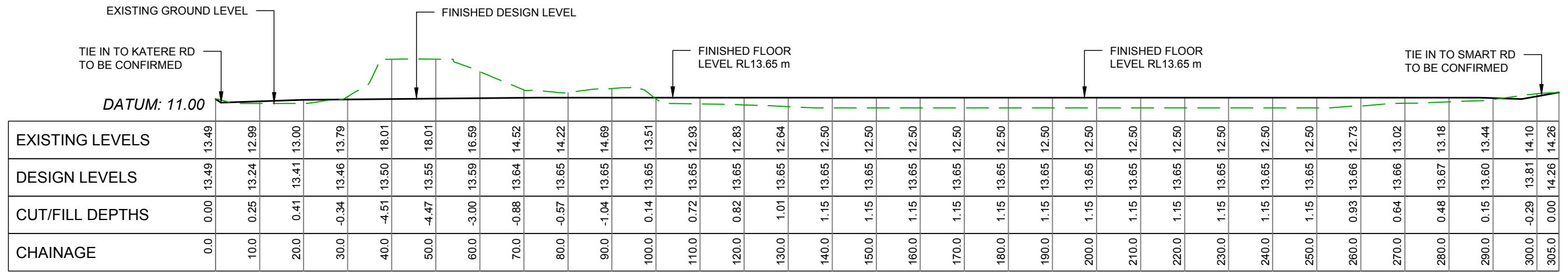
BLUEHAVEN COMMERCIAL

LOCATION	622 DEVON ROAD
PROJECT No.	16216
A3 SCALE	AS SHOWN
SURVEYED	
DRAWN	I. BUNN 08/07/17
CHECKED	I. STEELE 08/07/17

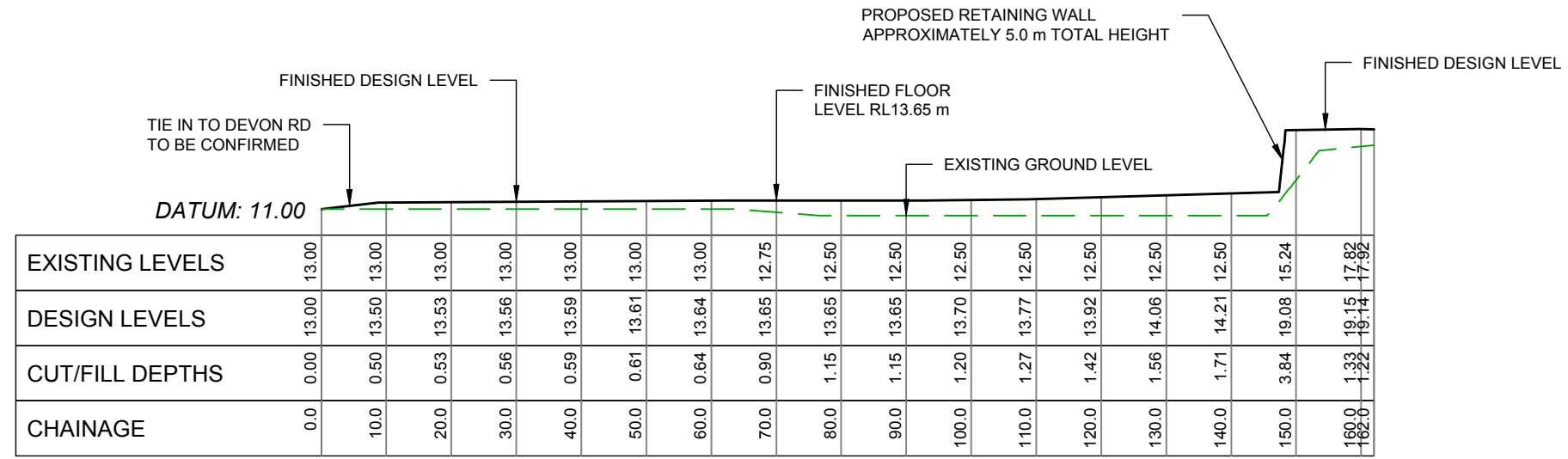
TITLE		PROJECT ROBYN	
BULK EARTHWORKS PLAN		SITE OVERVIEW - GROUND LEVEL	
ORIGINAL SIZE	DRAWING No.	SHEET	REVISION
A3	16216-05	2	7

File Name: J:\16216\Drawings\16216-05 EARTHWORKS PLAN.dwg - SHT 2 Plot Date: 29/06/2018 Plot Time: 14:52

File Name: J:\16216\Drawings\16216-05 EARTHWORKS PLAN.dwg - SHT 3 Plot Date: 29/06/2018 Plot Time: 14:52



CROSS SECTION AA
SCALE 1:1000H, 1:500V



CROSS SECTION BB
SCALE 1:1000H, 1:500V

LUC17/47175 - B3

Disclaimer:
Areas and dimensions may be subject to scale error.
Scaling from this drawing is at the users risk.



ISSUED FOR CONSENT



7	29/06/18	LB	IS		ISSUED FOR CONSENT
6	18/10/17	LB	IS		ISSUED FOR CONSENT
5	26/09/17	LB	IS		ISSUED FOR COMMENT
4	25/08/17	LB	IS		ISSUED FOR COMMENT
3	24/08/17	LB	IS		ISSUED FOR COMMENT
2	23/07/17	LB	IS		ISSUED FOR COMMENT
1	22/07/17	LB	IS		ISSUED FOR COMMENT
NO	DATE	BY	CHKD	APPR	OPER

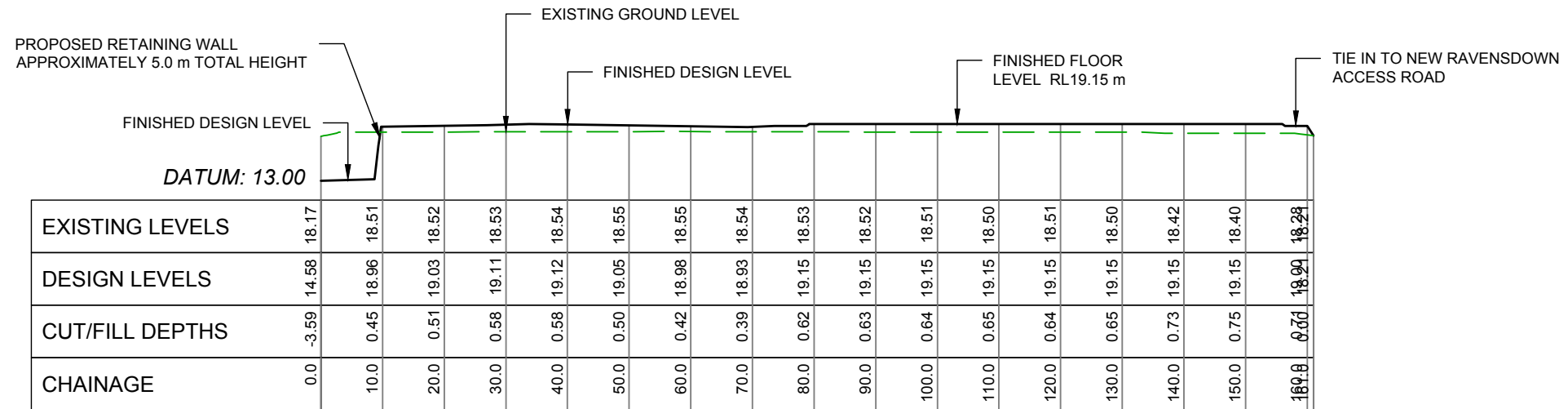
GENERAL NOTES
1. Coordinates in terms of : Geodetic Datum (Taranaki 2000)
2. Elevations in terms of : Mean Sea Level (Taranaki Datum 1970)
3. Contour interval is : -

BLUEHAVEN
COMMERCIAL

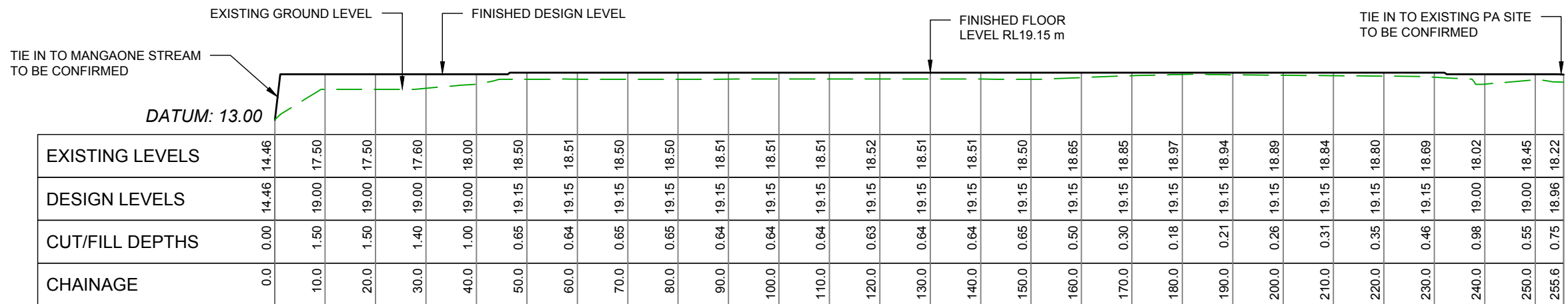
LOCATION	622 DEVON ROAD
PROJECT No.	16216
A3 SCALE	AS SHOWN
SURVEYED	
DRAWN	I. BUNN 08/07/17
CHECKED	I. STEELE 08/07/17

TITLE		PROJECT ROBYN	
		BULK EARTHWORKS PLAN	
		CROSS SECTIONS AA & BB	
ORIGINAL SIZE	DRAWING No.	SHEET	REVISION
A3	16216-05	3	7

File Name: J:\16216\16216-05 EARTHWORKS PLAN.dwg - SHT 4 Plot Date: 28/06/2018 Plot Time: 14:52



CROSS SECTION CC
SCALE 1:1000H, 1:500V



CROSS SECTION DD
SCALE 1:1000H, 1:500V

Disclaimer:
Areas and dimensions may be subject to scale error.
Scaling from this drawing is at the users risk.



LUC17/47175 - B4

ISSUED FOR CONSENT



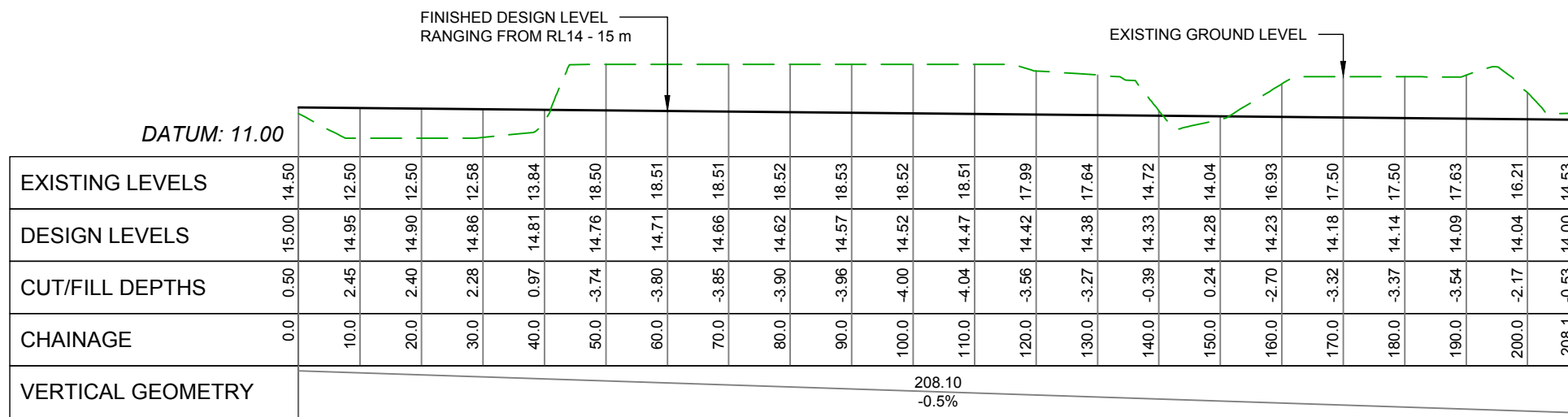
7	29/06/18	LB	IS		ISSUED FOR CONSENT		
6	18/10/17	LB	IS		ISSUED FOR CONSENT		
5	29/09/17	LB	IS		ISSUED FOR COMMENT		
4	25/08/17	LB	IS		ISSUED FOR COMMENT		
3	24/08/17	LB	IS		ISSUED FOR COMMENT		
2	25/07/17	LB	IS		ISSUED FOR COMMENT		
1	25/07/17	LB	IS		ISSUED FOR COMMENT		
NO	DATE	BY	CHKD	APPR	OPER	DESCRIPTION	REFERENCE DRAWINGS

GENERAL NOTES
1. Coordinates in terms of : Geodetic Datum (Taranaki 2000)
2. Elevations in terms of : Mean Sea Level (Taranaki Datum 1970)
3. Contour interval is : -

BLUEHAVEN
COMMERCIAL

LOCATION	622 DEVON ROAD
PROJECT No.	16216
A3 SCALE	AS SHOWN
SURVEYED	
DRAWN	I. BUNN 08/07/17
CHECKED	I. STEELE 08/07/17

TITLE		PROJECT ROBYN
BULK EARTHWORKS PLAN		
CROSS SECTIONS CC & DD		
ORIGINAL SIZE	DRAWING No.	SHEET
A3	16216-05	4
		REVISION
		7

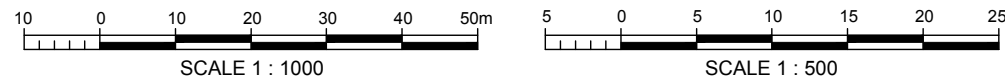


CROSS SECTION EE
SCALE 1:1000H, 1:500V

LUC17/47175 - B5

ISSUED FOR CONSENT

Disclaimer:
Areas and dimensions may be subject to scale error.
Scaling from this drawing is at the users risk.



BTWCOMPANY
SURVEYING | ENGINEERING | PLANNING & ENVIRONMENT

NO	DATE	BY	CHKD	APPR	OPER	DESCRIPTION	NUMBER	TITLE
3	29/06/18	LB	IS			ISSUED FOR CONSENT		
2	18/10/17	LB	IS			ISSUED FOR CONSENT		
1	26/09/17	LB	IS			ISSUED FOR COMMENT		

GENERAL NOTES
1. Coordinates in terms of : Geodetic Datum (Taranaki 2000)
2. Elevations in terms of : Mean Sea Level (Taranaki Datum 1970)
3. Contour interval is : -

BLUEHAVEN
COMMERCIAL

LOCATION	622 DEVON ROAD
PROJECT No.	16216
A3 SCALE	AS SHOWN
SURVEYED	
DRAWN	I. BUNN 28/09/17
CHECKED	I. STEELE 28/09/17

TITLE	PROJECT ROBYN BULK EARTHWORKS PLAN CROSS SECTION EE		
ORIGINAL SIZE	DRAWING No.	SHEET	REVISION
A3	16216-05	5	3

LEGEND

LEGAL BOUNDARY	
LOWER PLATFORM LEVEL	
UPPER PLATFORM LEVEL	
EXISTING BUILDINGS	
DESIGN GROUND CONTOUR	

LOWER PLATFORM DESIGN LEVEL APPROXIMATELY RL13.5 m

PROPOSED RETAINING WALL 0.5 HIGH AT SMART RD - 4.4 m TOTAL HEIGHT (TIE IN TO UPPER LEVEL)

2.0 m WIDE PEDESTRIAN FOOTPATH FROM UPPER LEVEL CAR PARK (RL 19.0 m) TO TOP OF PA SITE (RL 28.95 m), LONGITUDINAL GRADE NO GREATER THAN 10% (AS PER NZBC)

UPPER PLATFORM DESIGN LEVEL APPROXIMATELY RL19.0 m

ENTRANCE TO PA TRENCH (RL 27.95 m)

SMART ROAD

EXISTING RAVENSDOWN ACCESS ROAD

EARTHWORKS VOLUMES:

- 2,000 m³ CUT (SOLID MEASURE)
- 14,000 m³ FILL (SOLID MEASURE)

NOTES:

- FILL VOLUME INCLUDES PAVEMENT (STILL TO BE QUANTIFIED)
- BOUNDARY BETWEEN PA SITE AND RAVENSDOWN ACCESS ROAD NOT CONFIRMED AT TIME OF DRAWING

LUC17/47175 - B6

ISSUED FOR CONSENT

Disclaimer:
Photographic imagery has been imported from external sources.
Areas and dimensions may be subject to scale error.
Scaling from this drawing is at the users risk.



File Name: J:\16216\16216-05 EARTHWORKS PLAN.dwg - SHT 6 Plot Date: 29/06/2018 Plot Time: 14:52

BTWCOMPANY
SURVEYING | ENGINEERING | PLANNING & ENVIRONMENT

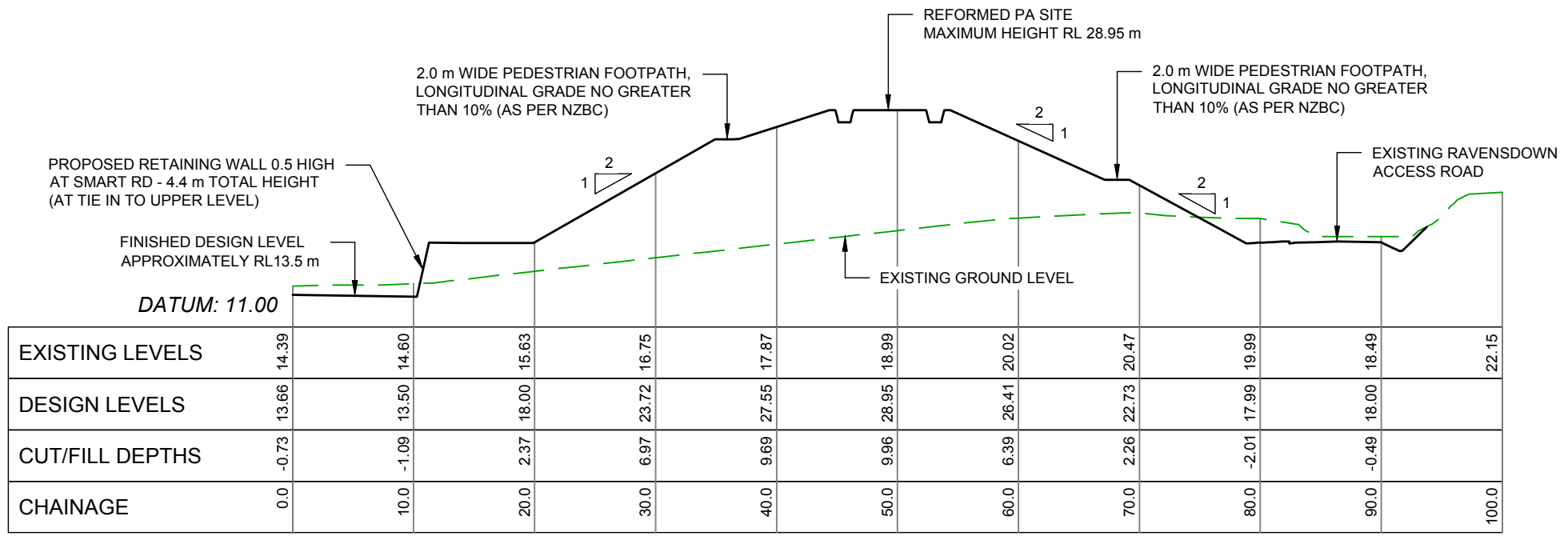
NO	DATE	BY	CHKD	APPR	OPER	DESCRIPTION	NUMBER	TITLE
4	28/06/18	LB	IS			ISSUED FOR CONSENT		
3	27/10/17	LB	IS			ISSUED FOR CONSENT		
2	15/10/17	LB	IS			ISSUED FOR CONSENT		
1	25/09/17	LB	IS			ISSUED FOR COMMENT		

GENERAL NOTES
1. Coordinates in terms of : Geodetic Datum (Taranaki 2000)
2. Elevations in terms of : Mean Sea Level (Taranaki Datum 1970)
3. Contour interval is : 1.0 m

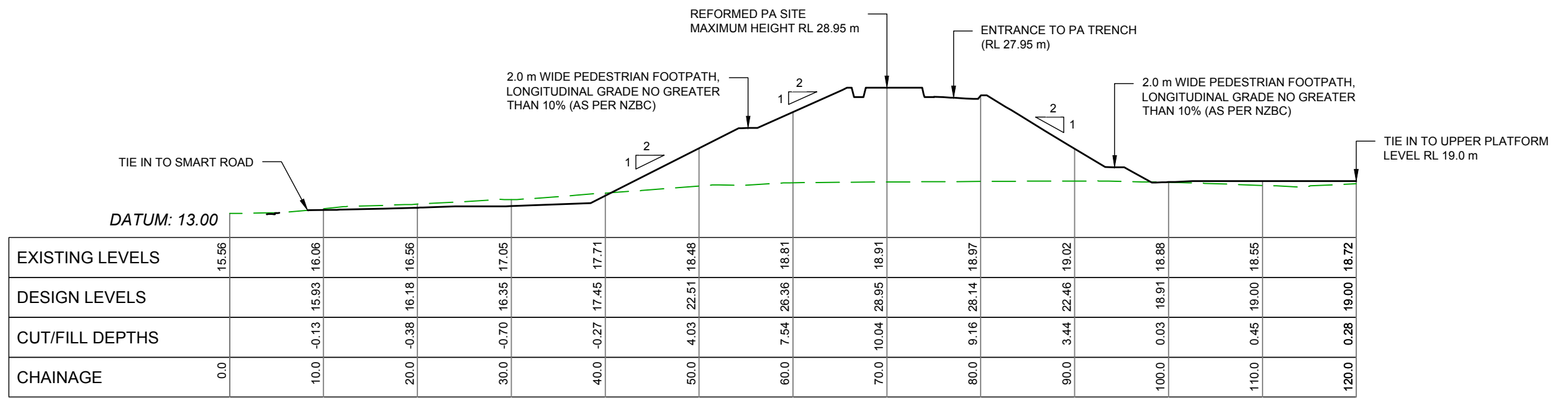
**BLUEHAVEN
COMMERCIAL**

LOCATION	622 DEVON ROAD
PROJECT No.	16216
A3 SCALE	AS SHOWN
SURVEYED	
DRAWN	I. BUNN 28/09/17
CHECKED	I. STEELE 28/09/17

TITLE		PROJECT ROBYN	
BULK EARTHWORKS PLAN		PA SITE OVERVIEW	
ORIGINAL SIZE	DRAWING No.	SHEET	REVISION
A3	16216-05	6	4



CROSS SECTION FF
SCALE 1:500



CROSS SECTION GG
SCALE 1:500

LUC17/47175 - B7

Disclaimer:
Areas and dimensions may be subject to scale error.
Scaling from this drawing is at the users risk.



ISSUED FOR CONSENT



NO	DATE	BY	CHKD	APPR	OPER	DESCRIPTION	NUMBER	TITLE
4	28/06/18	LB	IS			ISSUED FOR CONSENT		
3	27/10/17	LB	IS			ISSUED FOR CONSENT		
2	18/10/17	LB	IS			ISSUED FOR CONSENT		
1	25/09/17	LB	IS			ISSUED FOR COMMENT		

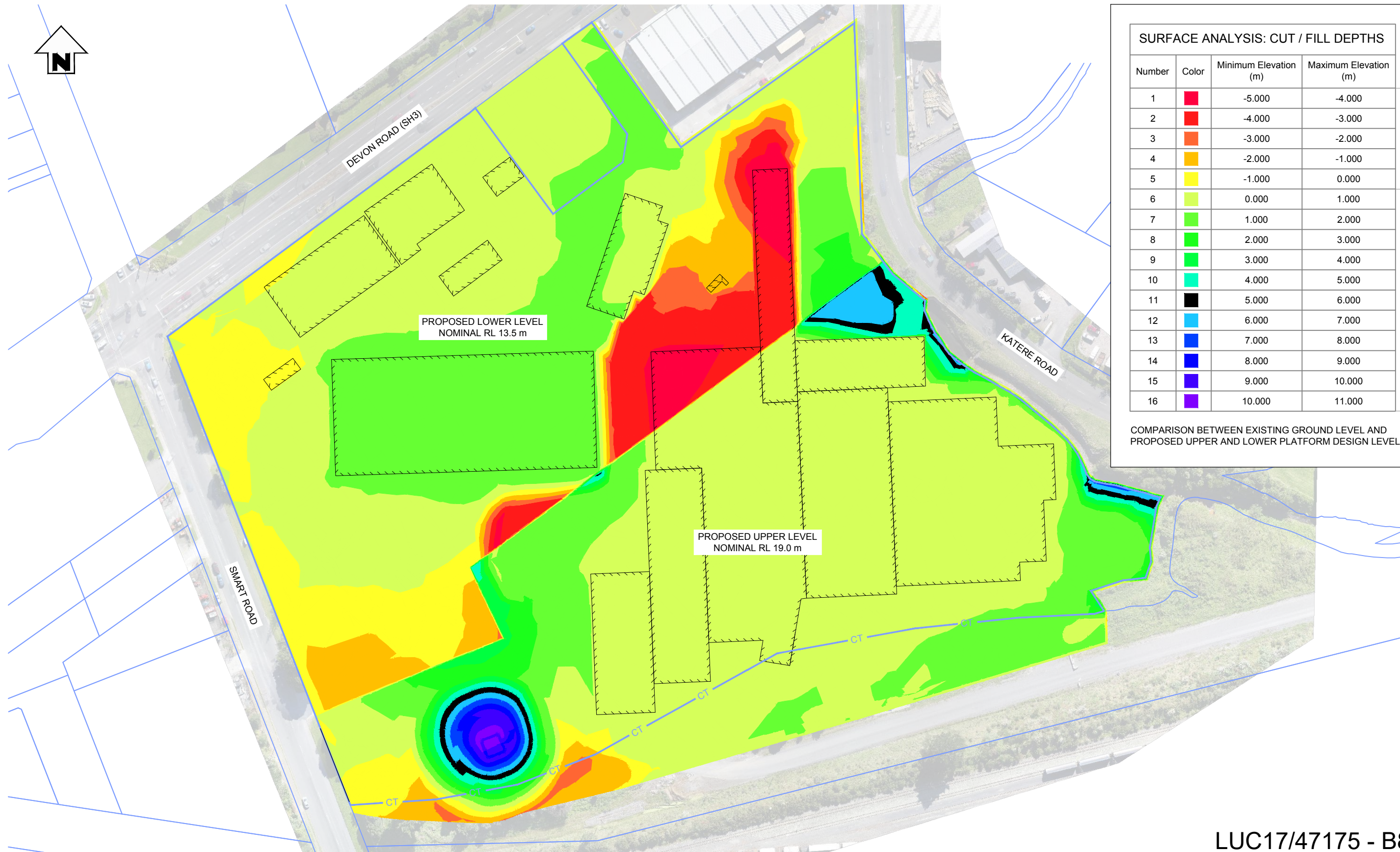
GENERAL NOTES
 1. Coordinates in terms of : Geodetic Datum (Taranaki 2000)
 2. Elevations in terms of : Mean Sea Level (Taranaki Datum 1970)
 3. Contour interval is : -

BLUEHAVEN
COMMERCIAL

LOCATION	622 DEVON ROAD
PROJECT No.	16216
A3 SCALE	AS SHOWN
SURVEYED	
DRAWN	I BUNN 28/09/17
CHECKED	I STEELE 28/09/17

TITLE		PROJECT ROBYN	
BULK EARTHWORKS PLAN		CROSS SECTIONS FF & GG	
ORIGINAL SIZE	DRAWING No.	SHEET	REVISION
A3	16216-05	7	4

File Name: J:\16216\16216-05 EARTHWORKS PLAN.dwg - SHT 7 Plot Date: 28/06/2018 Plot Time: 14:52



SURFACE ANALYSIS: CUT / FILL DEPTHS				
Number	Color	Minimum Elevation (m)	Maximum Elevation (m)	
1	Red	-5.000	-4.000	Cut
2	Red	-4.000	-3.000	
3	Orange	-3.000	-2.000	
4	Yellow	-2.000	-1.000	
5	Yellow	-1.000	0.000	Fill
6	Light Green	0.000	1.000	
7	Green	1.000	2.000	
8	Green	2.000	3.000	
9	Green	3.000	4.000	
10	Cyan	4.000	5.000	
11	Black	5.000	6.000	
12	Blue	6.000	7.000	
13	Blue	7.000	8.000	
14	Blue	8.000	9.000	
15	Blue	9.000	10.000	
16	Purple	10.000	11.000	

COMPARISON BETWEEN EXISTING GROUND LEVEL AND PROPOSED UPPER AND LOWER PLATFORM DESIGN LEVELS

File Name: J:\16216\Drawings\16216-05 EARTHWORKS PLAN.dwg - SHT 9 Plot Date: 29/06/2018 Plot Time: 14:52

Disclaimer:
Photographic imagery has been imported from external sources.
Areas and dimensions may be subject to scale error.
Scaling from this drawing is at the users risk.



LUC17/47175 - B8

ISSUED FOR CONSENT

BTWCOMPANY
SURVEYING | ENGINEERING | PLANNING & ENVIRONMENT

NO	DATE	BY	CHKD	APPR	OPER	DESCRIPTION	NUMBER	TITLE
3	29/06/18	LB	IS			ISSUED FOR CONSENT		
2	15/10/17	LB	IS			ISSUED FOR CONSENT		
1	27/09/17	LB	IS			ISSUED FOR COMMENT		

GENERAL NOTES
1. Coordinates in terms of : Geodetic Datum (Taranaki 2000)
2. Elevations in terms of : Mean Sea Level (Taranaki Datum 1970)
3. Contour interval is : -

BLUEHAVEN
COMMERCIAL

LOCATION	622 DEVON ROAD
PROJECT No.	16216
A3 SCALE	AS SHOWN
SURVEYED	
DRAWN	I BUNN 27/09/17
CHECKED	I STEELE 27/09/17

TITLE	PROJECT ROBYN BULK EARTHWORKS PLAN CUT FILL DEPTH ANALYSIS		
ORIGINAL SIZE	DRAWING No.	SHEET	REVISION
A3	16216-05	9	3