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henry&hymas

4 December 2020

Our Ref: 20224/td – searsrev1

ETHOS URBAN
173 Sussex Street
Sydney NSW 2000

Attention: Chris Forrester

Re: CIVIL AND STORMWATER STATEMENT TO SUPPORT SEARS SUBMISSION, PART 14

SUBJECT PREMISES: EASTERN CREEK RETAIL CENTRE, LOT 3. ROOTY HILL ROAD SOUTH, EASTERN CREEK

This stormwater statement has been prepared to support the application to the Department of Planning, Industry and Environment (DPIE) for the Lot 3 site. Specifically, part 14 of the Secretary's Environmental Assessment Requirements (SEARS) relates to stormwater requirements as described below. The Civil and Stormwater concept drawings prepared by Henry and Hymas should be read in conjunction with this statement letter. It should be noted that these plans are only conceptual in nature and that full detailed design of the stormwater measures required to address the items described below will be provided as part of the subsequent State Significant Development application for the detailed design.

Changes from previous approval plans

The previously submitted and approved plans for the overall lot 3 site consisted of graded earthworks pads. The lot 3 site was previously shown as being divided into two separate pad sites. The earthworks levels directed runoff from the west at RL44.30 (approx.) to the east to RL43.00 where a temporary sedimentation basin was located. Because the Lot 3 site was originally divided into 2 pads, a separate sedimentation basin was detailed for the eastern section of what is now the overall Lot 3 site. On this section of the lot (previously known as Pad 4), the earthworks levels graded from RL42.70 (approx.) in the north to RL41.30 (approx.) in the southern corner of the pad to a sediment basin. The intention of the earthworks pad design was to show how the site could be graded to levels that would allow it to remain in a benched state until such time that development for the lot was confirmed. The proposed earthworks levels were also used to ensure that the site would facilitate an eventual flat BEW pad level of RL43.00. The proposed earthworks levels for the approved submission are shown on our plans 17D83_S96_BE01, C101, C104 and C104. These plans are provided as an attachment to this statement letter.

The concept plans detail how the site stormwater system will convey flows through the site and to the previously approved and constructed communal water quality and quantity subdivision basins. Our drawing list for our concept plans is provided below.

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SEARS PART 14 RESPONSES

14.1

The existing site falls in an easterly direction and eventually discharges under the M7 through the northern outlet culvert. Once developed, the site will lie between the existing Beggs Road Cul-De-Sac and Church Street to the south and north respectively. The discharge point for the developed site will be into the previously designed, approved and built overland flow channel that runs towards the communal northern water quality and detention basin. The location of the site's discharge point is shown on the drawing 20224_DA_C105. In addition to the site generated stormwater, there is runoff from the upstream catchment of Beggs Road and a portion of Rooty Hill Road South. The previously approved subdivision catchment plan drawing 17771_CC_C250 details that there is 1.307ha of catchment that would flow down Beggs Road and then to the communal northern water quality and detention basin. Because the proposed Lot 3 development will block a substantial amount of area of the current overland flow path, we have designed a proposed 1.7m wide and 0.7m (min) deep concrete channel to convey the 1.307ha upstream catchment and also up to 2.244ha of the Lot 3 catchment. The flows that were previously calculated as part of the subdivision design are in the order of 1.79m^3/s. The concrete channel has a minimum base slope of 1.5% and will have the capacity to convey these flows. Downstream of this proposed concrete channel, a 1500 wide and 600 deep box culvert is proposed to convey the flows under the extension of the subdivision internal access road. This culvert has been previously designed and approved under the subdivision stormwater design. Once the flows discharge from the culvert, they are directed to the existing northern Water Quality and Detention Basin. Both the culvert and channel are shown on drawings 20224_DA_C104 and C105. It should be noted that the sizing of the channel between Lot 2 & 3 and the 1500x600 culvert has been sized based on 3.555ha of catchment. Because the Lot 3 internal drainage will now discharge at a location further downstream, the flow of 1.79m^3/s is conservative. The final catchment that is being directed to the proposed concrete channel and culvert will only be 1.307ha.

14.2

Because the entirety of the Lot 3 drainage system is directed to the existing open channel (as shown on drawing 20224_DA_C105), the flows will be directed to the subdivision water quality and detention basin. This is in accordance with the approved subdivision stormwater design. As such, all flows off the Lot 3 site will be controlled to rates which are in accordance with Blacktown City Council's On Site Detention Policy – Blacktown City Council Development Control Plan (2005) – Appendix B. Prior to the detention basin, the site flows will be directed to the subdivision water quality bio filtration basin. This basin will be effective in treating and removing pollutants to levels as stipulated in Council's Development Control Plan (2015) – Part J. By meeting these water quantity and quality targets, there will be no adverse impacts to the hydrology or water quality of the existing downstream and receiving systems.

14.4

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As described in item 14.2 above, the Lot 3 site stormwater system will be compliant with Blacktown City Council's On Site Detention Policy – Blacktown City Council Development Control Plan (2005) – Appendix B and also Part J – Water Sensitive Urban Design and Integrated Water Management. Part of the Lot design will include the design and documentation of an appropriately sized Gross Pollutant Trap (GPT). This will be needed in order to meet the previously approved subdivision water quality system. The Church Street intersection and road upgrades have not been documented at this stage, however the future DA for the detailed design will show the drainage system and any required easements.

DRAWING LIST

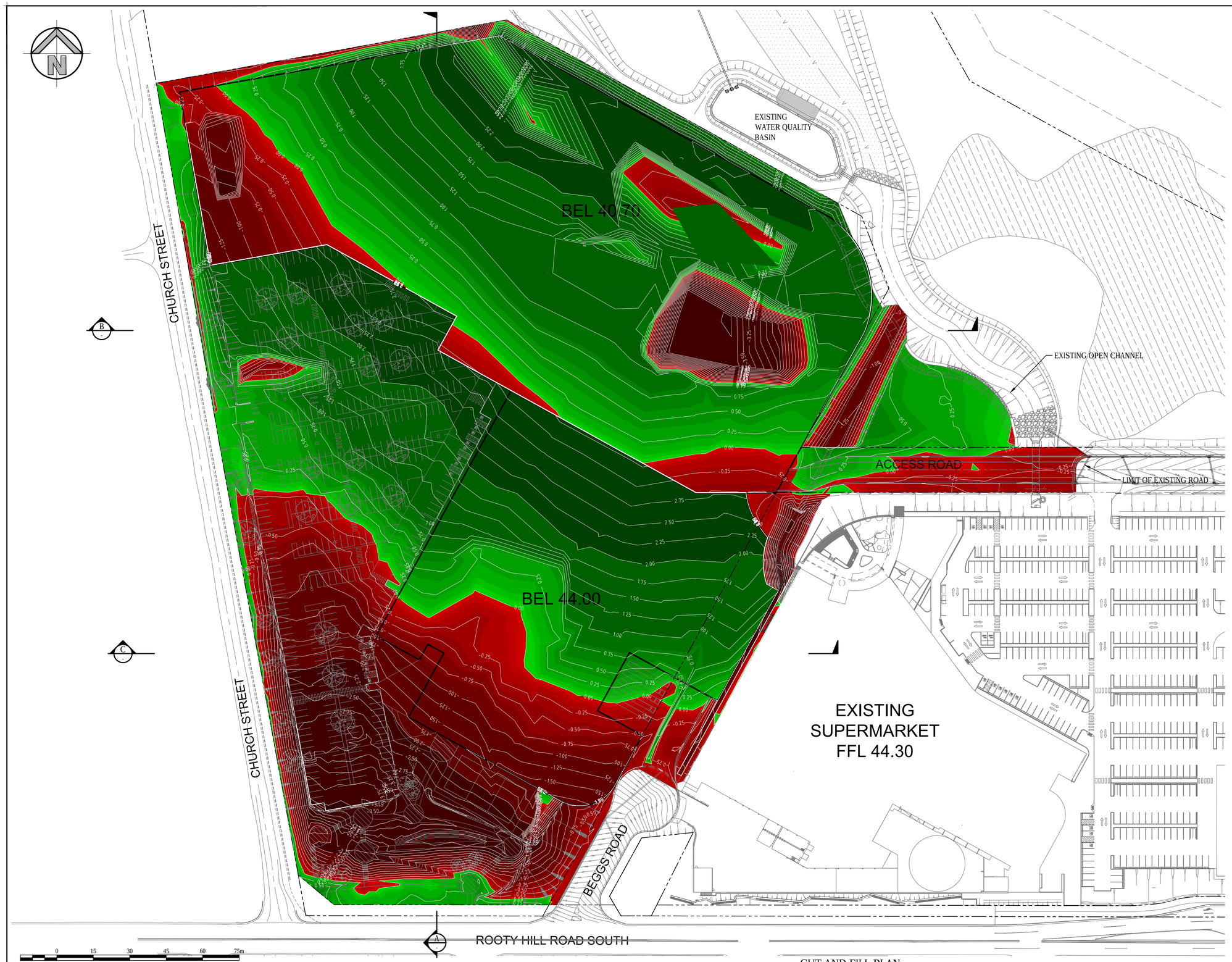
DRAWING SCHEDULE	
20224_DA_C000	COVER SHEET, DRAWING SCHEDULE, NOTES AND LOCALITY SKETCH
20224_DA_BE01	CUT AND FILL PLAN
20224_DA_BE02	BULK EARTHWORKS SECTIONS
20224_DA_C100	GENERAL ARRANGEMENT PLAN - GROUND LEVEL
20224_DA_C100a	GENERAL ARRANGEMENT PLAN - BASEMENT LEVEL
20224_DA_C101	DETAIL CIVIL PLAN, SHEET 1 OF 6
20224_DA_C102	DETAIL CIVIL PLAN, SHEET 2 OF 6
20224_DA_C103	DETAIL CIVIL PLAN, SHEET 3 OF 6
20224_DA_C104	DETAIL CIVIL PLAN, SHEET 4 OF 6
20224_DA_C105	DETAIL CIVIL PLAN, SHEET 5 OF 6
20224_DA_C106	DETAIL CIVIL PLAN, SHEET 6 OF 6
20224_DA_C107	DETAIL CIVIL PLAN - BASEMENT, SHEET 1 OF 3
20224_DA_C108	DETAIL CIVIL PLAN - BASEMENT, SHEET 2 OF 3
20224_DA_C109	DETAIL CIVIL PLAN - BASEMENT, SHEET 3 OF 3
20224_DA_C110	TYPICAL SITE SECTIONS, SHEET 1 OF 3
20224_DA_C111	TYPICAL SITE SECTIONS, SHEET 2 OF 3
20224_DA_C112	TYPICAL SITE SECTIONS, SHEET 3 OF 3
20224_DA_C130	ACCESS ROAD CL LONG SECTION AND CHAINAGES PLAN

Please contact the undersigned if you have any queries or concerns.

henry&hymas

Yours faithfully,

TOM DEMPSEY
For, and on behalf of,
H & H Consulting Engineers Pty Ltd



LEGEND

- EXISTING BOUNDARY
- 0.50 — DEPTH CONTOUR FOR FILL
- -0.50 — DEPTH CONTOUR FOR CUT

DEPTH RANGE Lower_value		Upper_value	Colour
-6	to	-4	Meters
-4	to	-2	Meters
-2	to	-1	Meters
-1	to	-.8	Meters
-.8	to	-.6	Meters
-.6	to	-.4	Meters
-.4	to	-.2	Meters
-.2	to	-.1	Meters
-.1	to	-.05	Meters
-.05	to	.0	Meters
.0	to	.05	Meters
.05	to	.1	Meters
.1	to	.2	Meters
.2	to	.4	Meters
.4	to	.6	Meters
.6	to	.8	Meters
.8	to	1	Meters
1	to	2	Meters
2	to	4	Meters
4	to	6	Meters

EARTHWORKS QUANTITIES

(APPROXIMATE ONLY)

- NOT TO BE USED FOR CONTRACTUAL PURPOSES. TENDERERS TO DETERMINE VOLUMES USING THEIR OWN METHOD OF CALCULATION.
- ASSUMED SLAB AND PAVEMENT THICKNESS OF 300mm USED FOR CALCULATIONS.

- EARTHWORKS QUANTITIES -	
TOTAL AREA (8.1 ha)	
CUT	33910 m³
FILL	62250 m³
EXCESS OF FILL	28340 m³
TOPSOIL STRIPPING "100mm" OF 8100m³ NOT INCLUDED IN CALCULATION	
EXCAVATION FOR SERVICE TRENCHES NOT INCLUDED IN CALCULATION	
FUTURE EXCAVATION FOR SERVICES 580m³/Ha "5.1Ha = 2980m³" NOT INCLUDED IN CALCULATION	

CUT AND FILL PLAN

SCALE 1:750

CONCEPT

SURVEY INFORMATION

SURVEYED BY .....

DATUM: .....

ORIGIN OF LEVELS: .....

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR INFORMATION	LC	TD	21.12.2020
01	ISSUED FOR INFORMATION	LC	TD	20.11.2020

Client: FRASER PROPERTY AUSTRALIA

Architect: i2C ARCHITECTS

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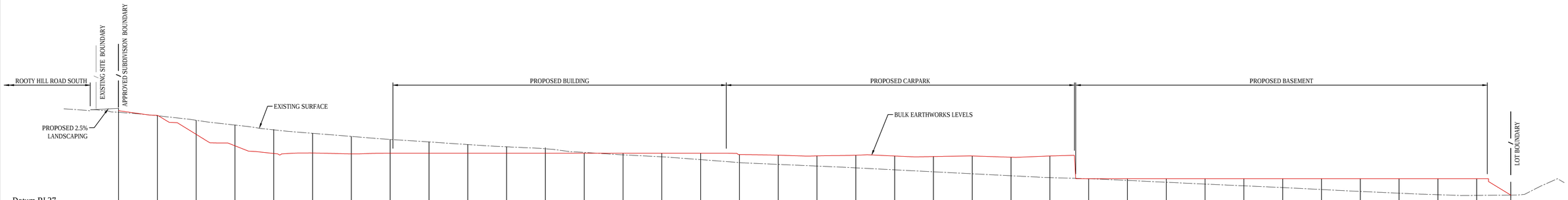
Project: PROPOSED STAGE 3 ECQ PRECINCT
ROOTY HILL ROAD SOUTH, EASTERN CREEK NSW

Title: CUT AND FILL PLAN

Drawn	Designed	Date
L.Caha	L.Caha	MAY 2018
Checked	Approved	Scale
T.Dempsey	A.Francis	1:750 @ A1

Drawing number: 20224_DA_BE01

Revision: 02

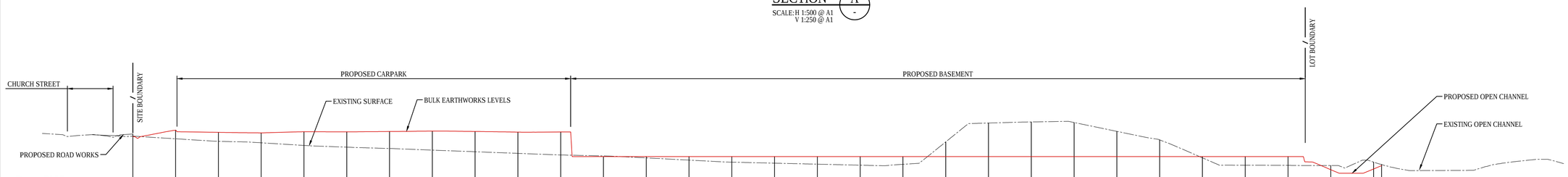


Datum RL37

BE DESIGN LEVELS	49.481	48.874	46.432	44.952	43.959	44.020	43.911	43.995	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	43.819	43.737	43.650	43.735	43.634	43.563	43.635	43.478	43.635	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	38.589
EXISTING LEVELS	49.271	48.830	48.243	47.627	47.010	46.563	46.161	45.773	45.454	45.112	44.822	44.567	44.099	43.786	43.531	43.167	42.784	42.552	42.335	42.104	41.850	41.596	41.341	41.086	40.850	40.684	40.483	40.246	40.009	39.787	39.562	39.309	39.062	38.836	38.639	38.552	38.589
CHAINAGE	0.000	10.000	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000	190.000	200.000	210.000	220.000	230.000	240.000	250.000	260.000	270.000	280.000	290.000	300.000	310.000	320.000	330.000	340.000	350.000	358.794

SECTION A

SCALE: H 1:500 @ A1
V 1:250 @ A1

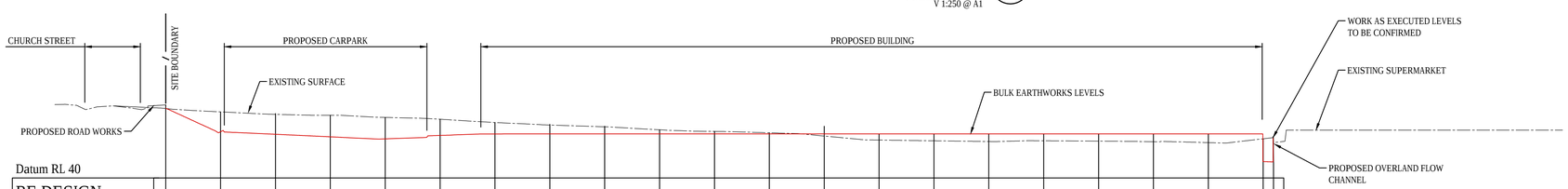


Datum RL37

BE DESIGN LEVELS	43.030	43.750	43.526	43.467	43.595	43.587	43.624	43.673	43.630	43.355	43.571	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	39.173	39.251	39.449
EXISTING LEVELS	43.080	42.776	42.479	42.308	42.000	41.798	41.640	41.454	41.264	41.074	40.888	40.775	40.546	40.287	40.048	39.930	39.813	39.695	39.797	42.412	44.612	44.740	44.674	43.642	42.650	40.552	39.690	39.677	39.677	40.105	39.713
CHAINAGE	0.000	10.000	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000	190.000	200.000	210.000	220.000	230.000	240.000	250.000	260.000	270.000	280.000	290.000	290.955

SECTION B

SCALE: H 1:500 @ A1
V 1:250 @ A1



Datum RL 40

BE DESIGN LEVELS	46.335	44.200	43.968	43.738	43.549	43.864	43.997	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	41.487	41.705
EXISTING LEVELS	46.308	46.003	45.780	45.699	45.499	45.335	45.039	44.809	44.647	44.375	44.229	44.101	43.808	43.443	43.376	43.310	43.379	43.344	43.295	43.211	43.559	
CHAINAGE	0.000	10.000	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000	190.000	200.000	201.819

SECTION C

SCALE: H 1:500 @ A1
V 1:250 @ A1

0 5 10 15 20 25m
5 4 3 2 1
SCALE 1:250

0 10 20 30 40 50m
10 8 6 4 2
SCALE 1:500

CONCEPT

SURVEY INFORMATION
SURVEYED BY .....
DATUM: .....
ORIGIN OF LEVELS: .....

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
01	ISSUED FOR INFORMTION	LC	TD	19.11.2020					

Client
FRASER PROPERTY AUSTRALIA

Architect
i2C ARCHITECTS

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henry&hymas

Project
PROPOSED STAGE 3 ECQ PRECINCT
ROOTY HILL ROAD SOUTH, EASTERN CREEK NSW

Title
BULK EARTHWORKS SECTIONS

Drawn	Designed	Date
L.Caha	L.Caha	MAY 2018
Checked	Approved	Scale
T.Dempsey	A.Francis	AS SHOWN @ A1

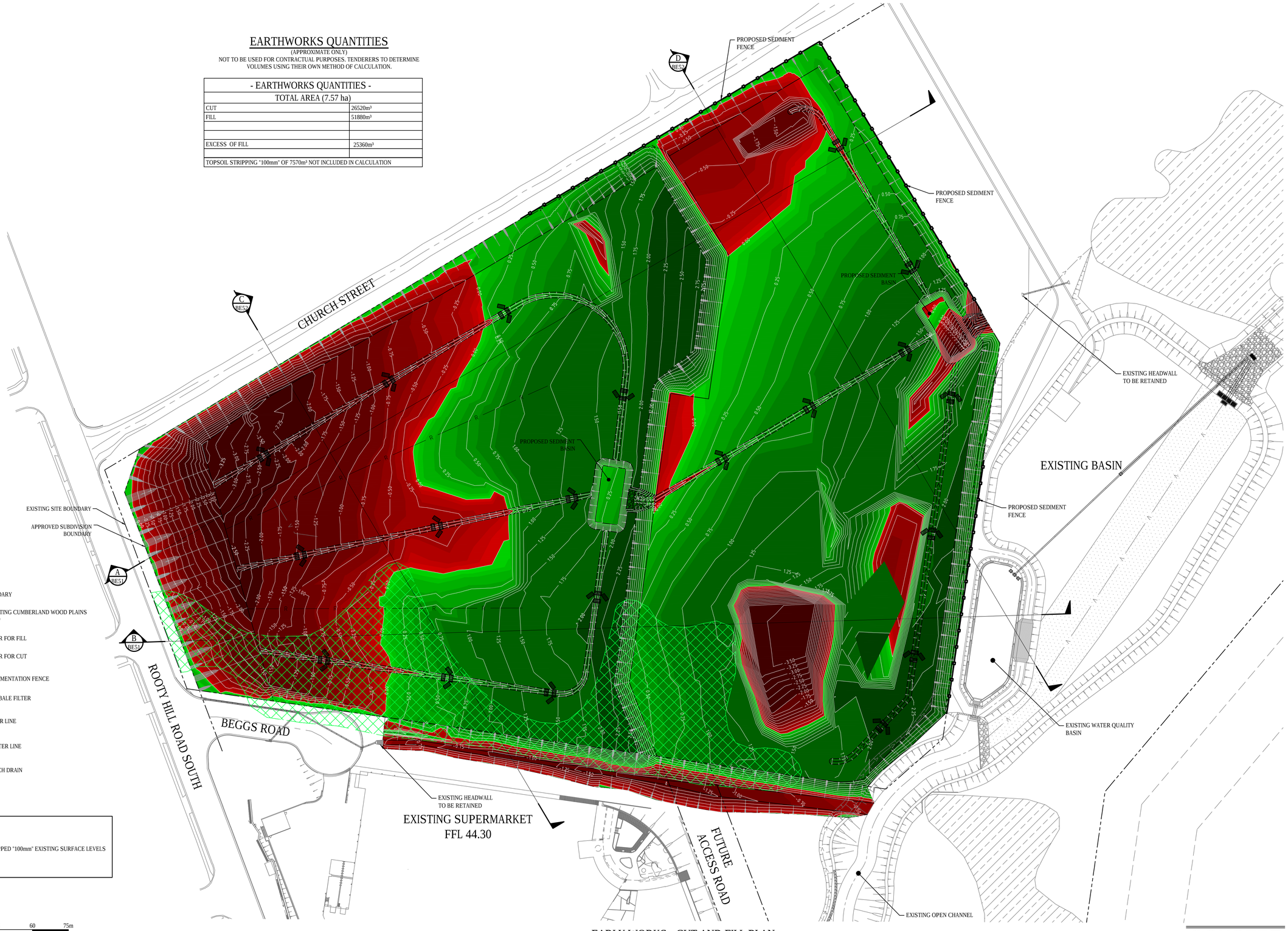
Drawing number: 20224_DA_BE02
Revision: 01

EARTHWORKS QUANTITIES

(APPROXIMATE ONLY)
NOT TO BE USED FOR CONTRACTUAL PURPOSES. TENDERERS TO DETERMINE VOLUMES USING THEIR OWN METHOD OF CALCULATION.

- EARTHWORKS QUANTITIES -	
TOTAL AREA (7.57 ha)	
CUT	26520m³
FILL	51880m³
EXCESS OF FILL	25360m³
TOPSOIL STRIPPING "100mm" OF 7570m³ NOT INCLUDED IN CALCULATION	

DEPTH RANGE Lower_value		Upper_value	Colour
-6	to	-4	Meters
-4	to	-2	Meters
-2	to	-1	Meters
-1	to	-.8	Meters
-.8	to	-.6	Meters
-.6	to	-.4	Meters
-.4	to	-.2	Meters
-.2	to	-.1	Meters
-.1	to	-.05	Meters
-.05	to	.0	Meters
.0	to	.05	Meters
.05	to	.1	Meters
.1	to	.2	Meters
.2	to	.4	Meters
.4	to	.6	Meters
.6	to	.8	Meters
.8	to	1	Meters
1	to	2	Meters
2	to	4	Meters
4	to	6	Meters



LEGEND

- EXISTING BOUNDARY
- EXTENT OF EXISTING CUMBERLAND WOOD PLAINS TO BE REMOVED
- 0.50 DEPTH CONTOUR FOR FILL
- -0.50 DEPTH CONTOUR FOR CUT
- PROPOSED SEDIMENTATION FENCE
- PROPOSED HAYBALE FILTER
- EXISTING BATTER LINE
- PROPOSED BATTER LINE
- DIVERSION CATCH DRAIN

NOTES:

CONTOURS SHOW LEVEL DIFFERENCE BETWEEN STRIPPED "100mm" EXISTING SURFACE LEVELS AND BULK EARTHWORKS LEVELS

0 15 30 45 60 75m
15 10 5
SCALE 1:750

EARLY WORKS - CUT AND FILL PLAN

SCALE 1:750

CONCEPT

SURVEY INFORMATION
SURVEYED BY .....
DATUM: .....
ORIGIN OF LEVELS: .....

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
01	ISSUED FOR INFORMTION	LC	TD	21.12.2020					

Client
FRASER PROPERTY AUSTRALIA

Architect

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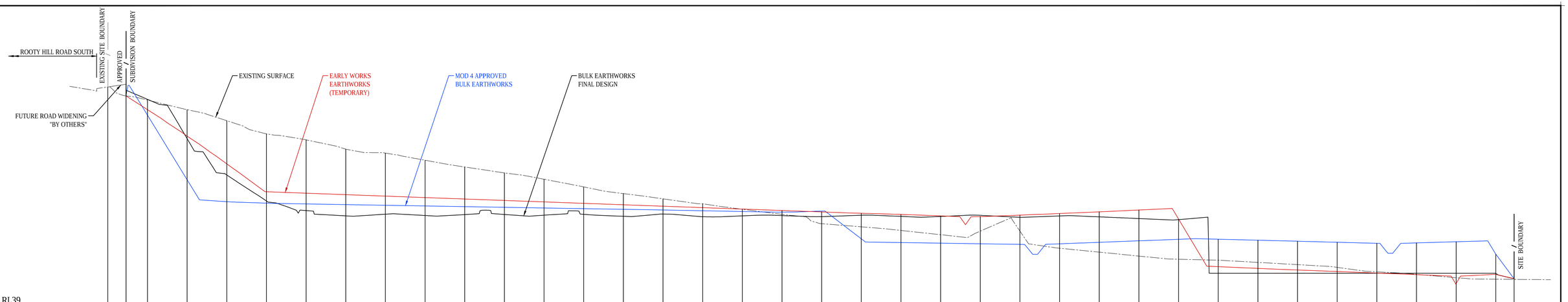
Project
PROPOSED STAGE 3 ECQ PRECINCT
ROOTY HILL ROAD SOUTH, EASTERN CREEK NSW

Title
BULK EARHWORS - EARLY WORKS
CUT AND FILL PLAN

Drawn	Designed	Date
L.Caha	L.Caha	DEC 2020
Checked	Approved	Scale
T.Dempsey	A.Francis	1:750 @ A1

Drawing number 20224_DA_BE50
Revision 01

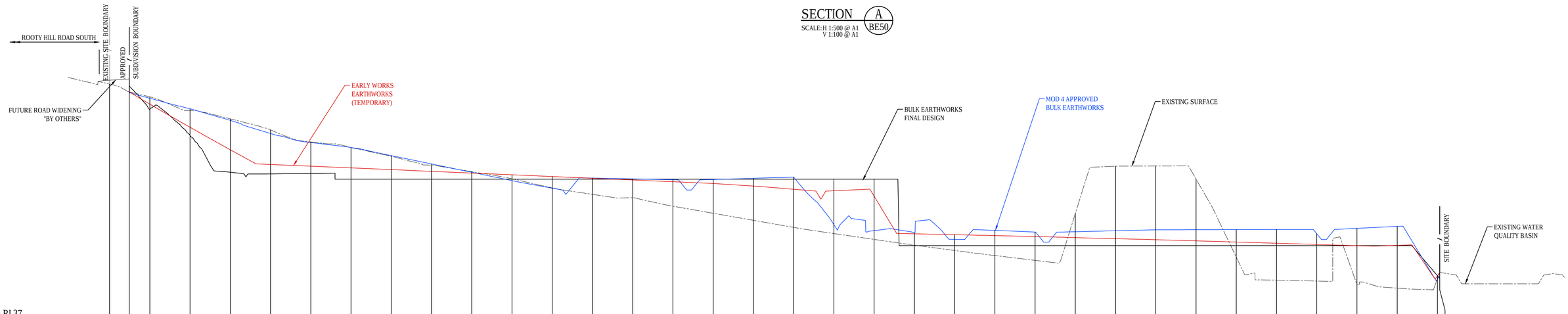


Datum RL39

EARLY BULK EARTHWORKS (TEMPORARY)		49.630	48.935	47.606	46.209	44.804	44.730	44.656	44.583	44.510	44.437	44.364	44.292	44.219	44.147	44.075	44.003	43.931	43.859	43.787	43.719	43.660	43.586	43.552	43.626	43.707	43.791	43.882	43.425	41.029	40.942	40.862	40.785	40.708	40.628	40.184	40.641	40.422
MOD 4 APPROVED BULK EARTHWORKS		49.681	48.661	45.406	44.303	44.229	44.189	44.155	44.121	44.087	44.053	44.019	43.985	43.951	43.918	43.884	43.846	43.808	43.778	43.830	42.432	42.244	42.213	42.183	42.152	42.181	42.256	42.331	42.407	42.411	42.362	42.311	42.259	42.205	42.226	42.284	41.651	40.422
BULK EARTHWORKS FINAL DESIGN		49.914	49.458	47.476	45.647	44.337	43.855	43.589	43.672	43.606	43.652	43.659	43.622	43.666	43.567	43.679	43.545	43.589	43.602	43.549	43.619	43.563	43.558	43.614	43.517	43.584	43.539	43.454	43.398	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.689	40.422
EXISTING LEVELS	49.630	49.630	49.423	48.936	48.381	47.717	47.417	46.946	46.751	46.390	46.050	45.752	45.432	45.048	44.711	44.446	44.199	43.921	43.664	43.195	43.036	42.854	42.639	42.820	42.822	41.958	41.760	41.562	41.403	41.356	41.245	41.132	40.993	40.766	40.644	40.471	40.397	40.422
CHAINAGE	0.000	4.614	10.000	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000	190.000	200.000	210.000	220.000	230.000	240.000	250.000	260.000	270.000	280.000	290.000	300.000	310.000	320.000	330.000	340.000	350.000	354.614

SECTION A BE50

SCALE:H 1:500 @ A1
V 1:100 @ A1



Datum RL37

EARLY BULK EARTHWORKS (TEMPORARY)	48.748	48.338	47.727	46.579	45.462	44.732	44.647	44.561	44.475	44.390	44.304	44.218	44.132	44.046	43.960	43.874	43.786	43.660	43.499	43.424	43.152	41.285	41.243	41.198	41.150	41.097	41.043	40.992	40.936	40.877	40.817	40.756	40.693	40.712	39.201	39.370
MOD 4 APPROVED BULK EARTHWORKS		48.298	48.023	47.497	46.923	46.269	45.821	45.574	45.171	44.757	44.342	43.928	43.552	44.054	44.015	43.970	43.984	44.043	44.100	41.736	41.444	41.335	41.009	41.455	41.373	41.389	41.437	41.483	41.489	41.493	41.497	41.292	41.556	41.653	39.040	39.370
BULK EARTHWORKS FINAL DESIGN		48.637	47.487	46.167	44.345	44.262	44.277	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	39.205	39.370
EXISTING LEVELS		48.338	48.091	47.402	46.998	46.449	45.852	45.568	45.141	44.699	44.374	44.021	43.568	43.246	43.082	42.657	42.307	41.956	41.605	41.299	41.008	40.721	40.457	40.206	39.966	42.295	44.643	44.656	44.007	40.129	38.984	38.936	38.786	38.586	38.495	39.370
CHAINAGE	0.000	4.876	10.000	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000	190.000	200.000	210.000	220.000	230.000	240.000	250.000	260.000	270.000	280.000	290.000	300.000	310.000	320.000	330.000	330.575

SECTION B BE50

SCALE:H 1:500 @ A1
V 1:100 @ A1

0 10 20 30 40 50m
10 8 6 4 2
SCALE 1:500

0 2 4 6 8 10m
2 1
SCALE 1:100

CONCEPT

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
01	ISSUED FOR INFORMATION	LC	TD	21.12.2020					

Client
FRASER PROPERTY AUSTRALIA

Architect

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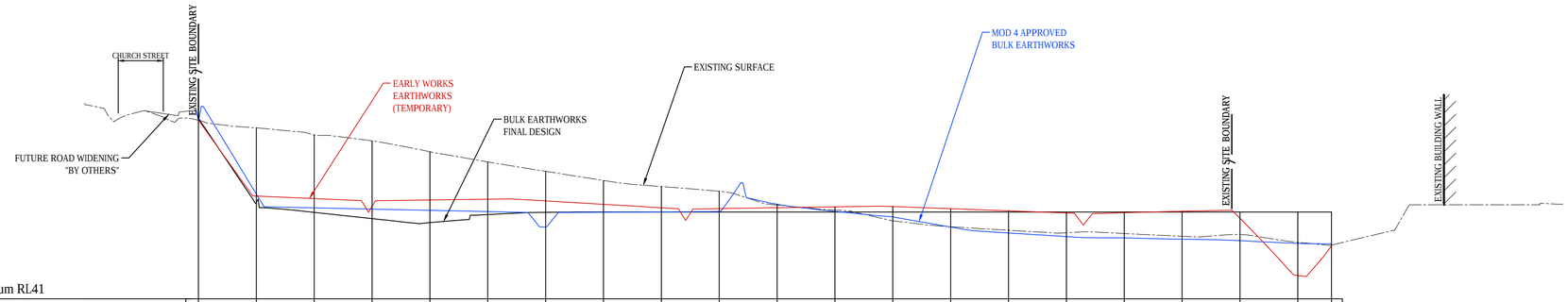
Project
PROPOSED STAGE 3 ECQ PRECINCT
ROOTY HILL ROAD SOUTH, EASTERN CREEK NSW

Title
BULK EARHWORS - EARLY WORKS
SITE SECTIONS, SHEET 1 OF 2

Drawn	Designed	Date
L.Caha	L.Caha	DEC 2020
Checked	Approved	Scale
T.Dempsey	A.Francis	AS SHOWN @ A1

Drawing number
20224_DA_BE51

Revision
01

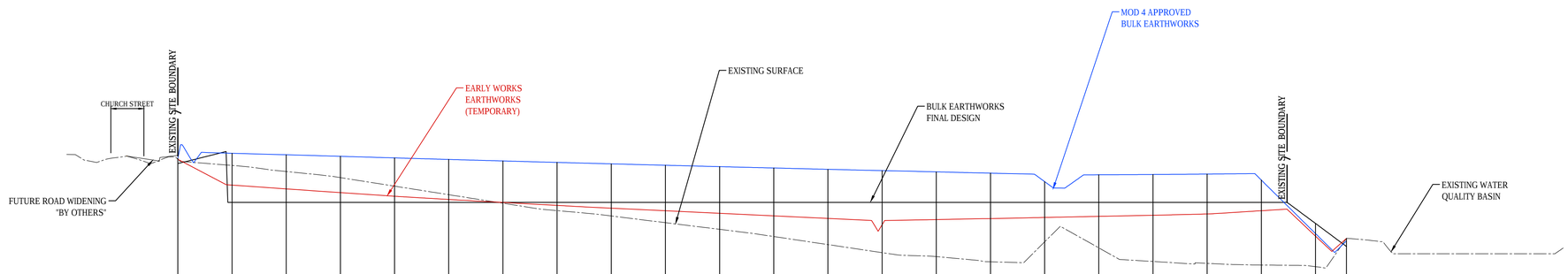


Datum RL41

EARLY BULK EARTHWORKS (TEMPORARY)	47.174	44.550	44.464	44.201	44.416	44.442	44.384	44.266	44.147	44.118	44.149	44.179	44.189	44.115	44.041	43.967	43.975	44.026	43.782	41.802	42.857	
MOD 4 APPROVED BULK EARTHWORKS	47.158	44.620	44.144	44.101	44.057	44.014	43.484	43.991	44.003	44.017	44.272	44.022	43.829	43.479	43.274	43.150	43.103	43.059	43.009	42.916	42.897	
BULK EARTHWORKS FINAL DESIGN	47.237	44.338	43.987	43.772	43.634	43.912	43.988	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	44.000	
EXISTING LEVELS	47.174	46.910	46.669	46.459	46.084	45.731	45.407	45.091	44.881	44.715	44.240	44.067	43.694	43.490	43.368	43.283	43.255	43.161	43.219	42.953	42.857	
CHAINAGE	0.000	10.000	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000	190.000	195.815	

SECTION C / BE50

SCALE:H 1:500 @ A1
V 1:100 @ A1



Datum RL37

EARLY BULK EARTHWORKS (TEMPORARY)	42.290	41.337	41.196	41.059	40.925	40.807	40.695	40.587	40.485	40.391	40.296	40.202	40.107	39.873	40.063	40.101	40.141	40.182	40.224	40.271	40.391	39.453	39.370
MOD 4 APPROVED BULK EARTHWORKS	42.329	42.512	42.457	42.399	42.341	42.284	42.228	42.174	42.121	42.069	42.018	41.968	41.919	41.872	41.826	41.777	41.465	41.716	41.729	41.744	41.522	39.547	39.275
BULK EARTHWORKS FINAL DESIGN	42.133	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	40.700	39.921	39.070
EXISTING LEVELS	42.290	42.063	41.838	41.613	41.297	40.982	40.667	40.394	40.197	39.949	39.703	39.436	39.139	38.842	38.696	38.505	39.241	39.018	38.516	38.447	38.384	38.323	39.370
CHAINAGE	0.000	10.000	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000	190.000	200.000	210.000	215.723

SECTION D / BE50

SCALE:H 1:500 @ A1
V 1:100 @ A1

0 10 20 30 40 50m
10 8 6 4 2
SCALE 1:500

0 2 4 6 8 10m
2 1
SCALE 1:100

CONCEPT

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
01	ISSUED FOR INFORMATION	LC	TD	21.12.2020					

Client
FRASER PROPERTY AUSTRALIA

Architect

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Project
PROPOSED STAGE 3 ECQ PRECINCT
ROOTY HILL ROAD SOUTH, EASTERN CREEK NSW

Title
BULK EARHWORS - EARLY WORKS
SITE SECTIONS, SHEET 2 OF 2

Drawn	Designed	Date
L.Caha	L.Caha	DEC 2020
Checked	Approved	Scale
T.Dempsey	A.Francis	AS SHOWN @ A1

Drawing number: 20224_DA_BE52
Revision: 01

LEGEND

EXISTING BOUNDARY

EXTENT OF EXISTING CUMBERLAND WOOD PLAINS AREA TO BE REMOVED

NOTE:

FOR THE INTERNAL SUBDIVISION ACCESS ROAD AND BASINS, THE CONSTRUCTION LEVEL DRAWINGS HAVE BEEN USED ON THESE PLANS. WORKS AS EXECUTED PLANS WERE NOT AVAILABLE AT THE TIME OF PREPARING THESE CONCEPT PLANS.

0 20 40 60 80 100m

20 15 10 5

SCALE 1:1000

OVERALL PLAN

SCALE 1:1000

CONCEPT

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR INFORMATION	MS	TD	22.12.2020					
01	ISSUED FOR INFORMATION	LC	TD	20.11.2020					

Client
FRASER PROPERTY AUSTRALIA

Architect
i2C ARCHITECTS

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henry&hymas

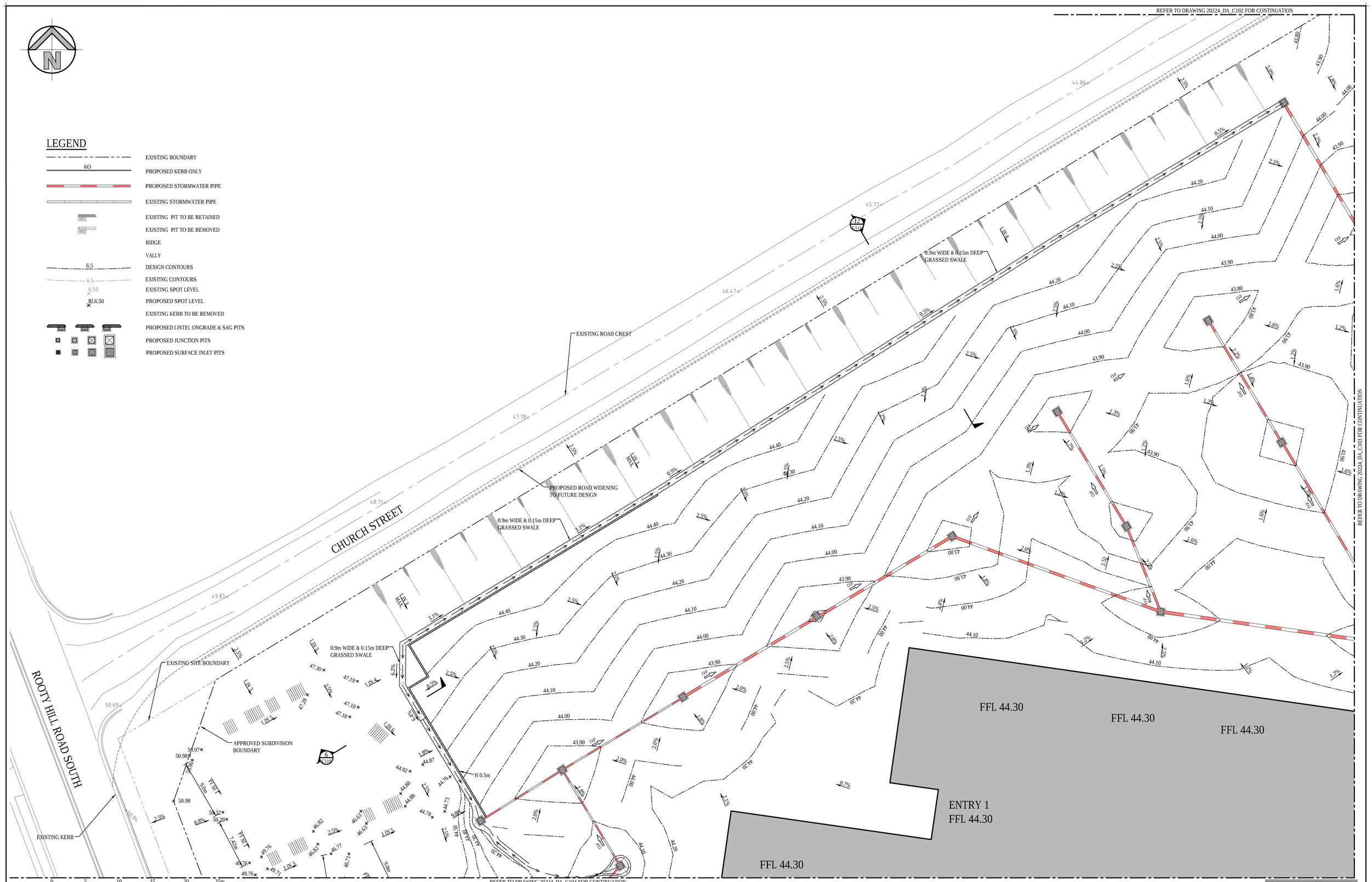
Project
PROPOSED STAGE 3 ECQ PRECINCT
ROOTY HILL ROAD SOUTH, EASTERN CREEK NSW

Title
GENERAL ARRANGEMENT PLAN
ON GROUND LEVEL

Drawn	Designed	Date
L.Caha	L.Caha	MAY 2018
Checked	Approved	Scale
T.Dempsey	A.Francis	1:100 @ A1

Drawing number
20224_DA_C100

Revision
02



DETAIL PLAN

SCALE 1:250

CONCEPT

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR INFORMATION	MS	TD	22.12.2020					
01	ISSUED FOR INFORMATION	LC	TD	20.11.2020					

Client
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Architect
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Project
PROPOSED STAGE 3 ECQ PRECINCT
ROOTY HILL ROAD SOUTH, EASTERN CREEK NSW

Title
DETAIL CIVIL PLAN
SHEET 1 OF 6

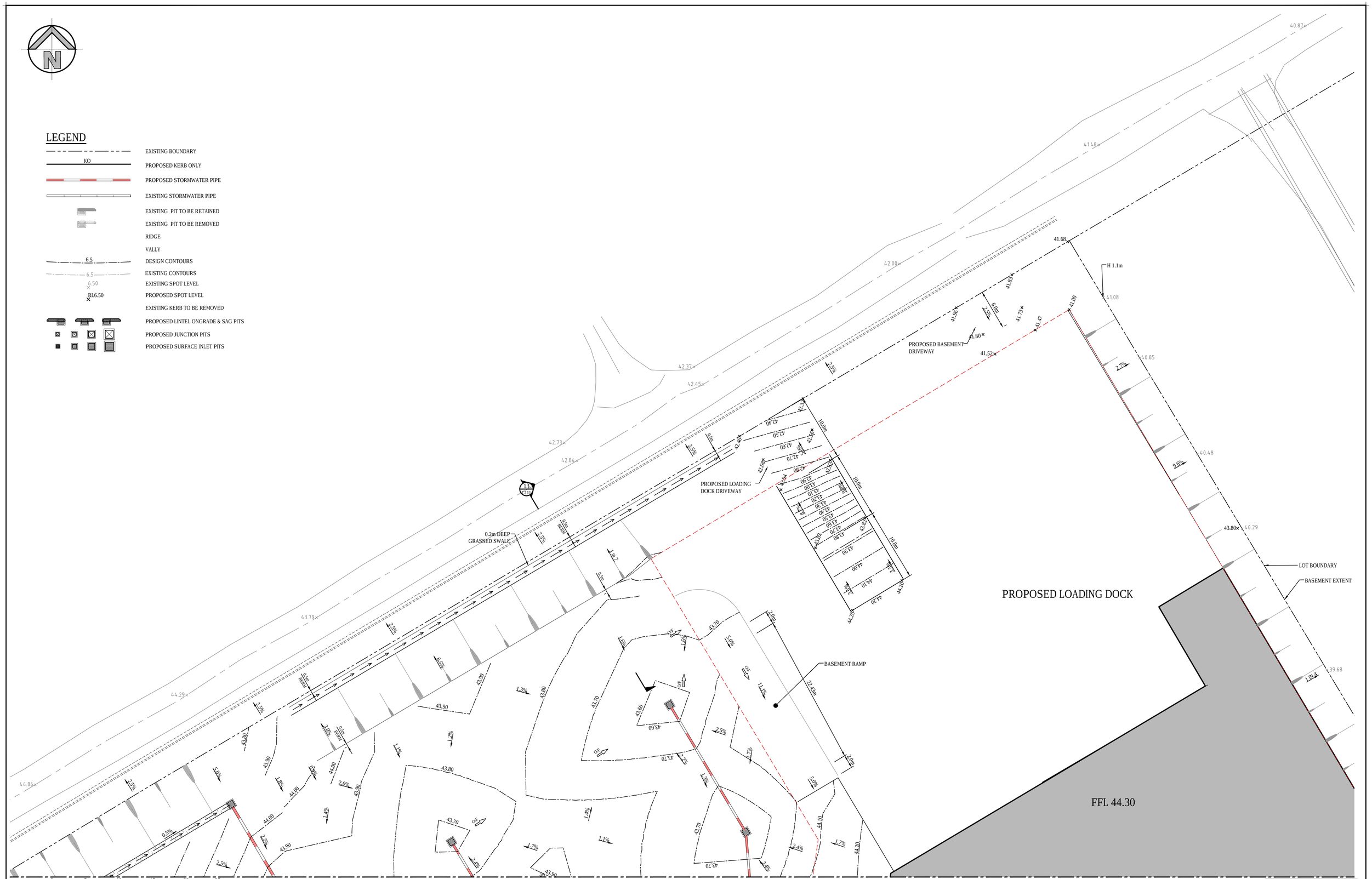
Drawn	Designed	Date
L.Caha	L.Caha	MAY 2018
Checked	Approved	Scale
T.Dempsey	A.Francis	1:250 @ A1

Drawing number
20224_DA_C101

Revision
02

LEGEND

- EXISTING BOUNDARY
- KO — PROPOSED KERB ONLY
- PROPOSED STORMWATER PIPE
- EXISTING STORMWATER PIPE
- EXISTING PIT TO BE RETAINED
- EXISTING PIT TO BE REMOVED
- RIDGE
- VALLY
- 6.5 — DESIGN CONTOURS
- 6.5 — EXISTING CONTOURS
- 6.50 — EXISTING SPOT LEVEL
- RL6.50 — PROPOSED SPOT LEVEL
- EXISTING KERB TO BE REMOVED
- PROPOSED LINTEL ONGRADE & SAG PITS
- PROPOSED JUNCTION PITS
- PROPOSED SURFACE INLET PITS



SCALE 1:250

DETAIL PLAN

SCALE 1:250

CONCEPT

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR INFORMATION	MS	TD	22.12.2020
01	ISSUED FOR INFORMATION	LC	TD	20.11.2020

Client
FRASER PROPERTY AUSTRALIA

Architect
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Project
PROPOSED STAGE 3 ECQ PRECINCT
ROOTY HILL ROAD SOUTH, EASTERN CREEK NSW

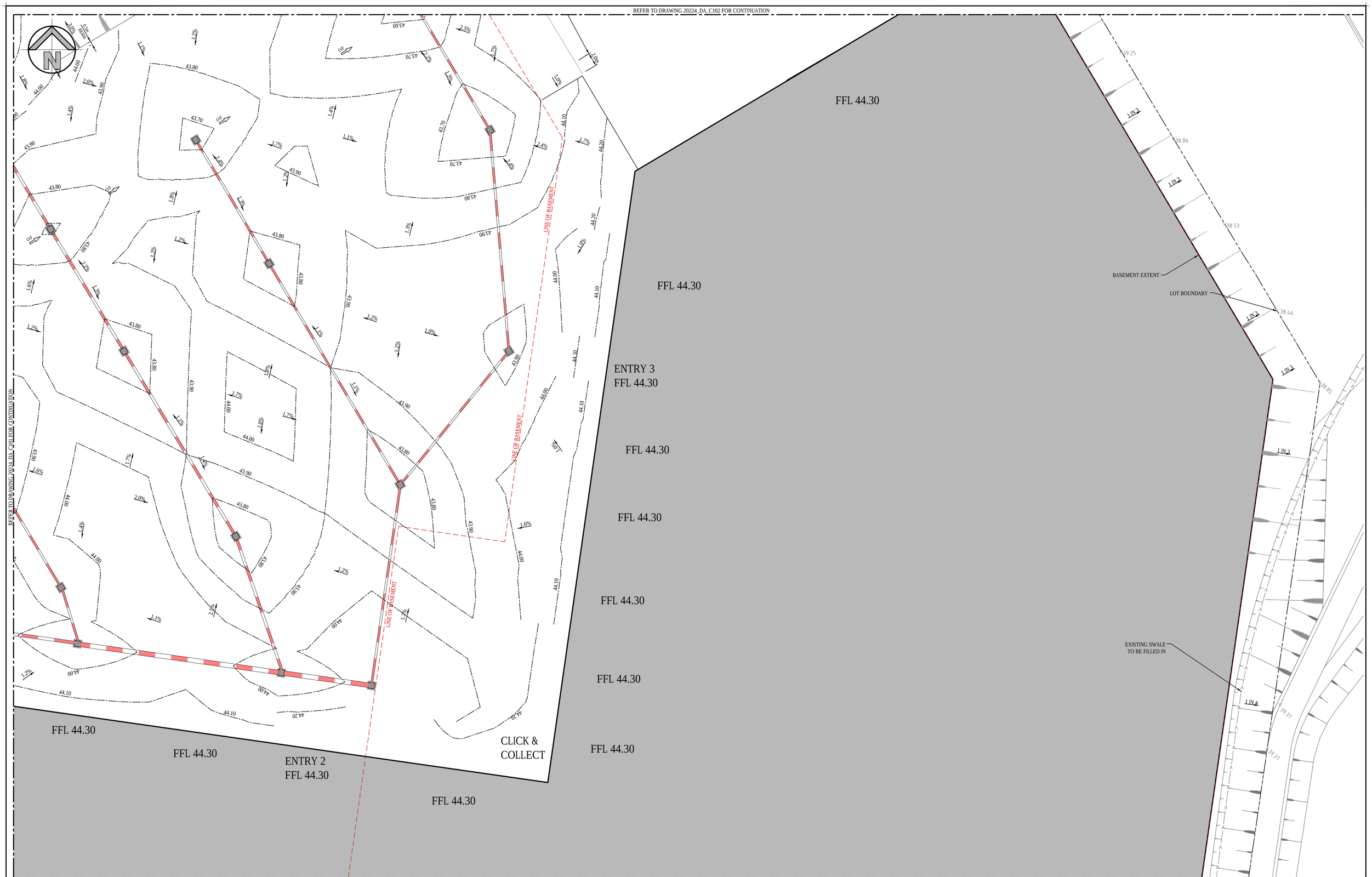
Title
DETAIL CIVIL PLAN
SHEET 2 OF 6

Drawn	Designed	Date
L.Caha	L.Caha	MAY 2018
Checked	Approved	Scale
T.Dempsey	A.Francis	1:250 @ A1

Drawing number: 20224_DA_C102

Revision: 02

REFER TO DRAWING 20224_DA_C102 FOR CONTINUATION



0 5 10 15 20 25m

5 4 3 2 1

SCALE 1:250

REFER TO DRAWING 20224_DA_C105 FOR CONTINUATION

DETAIL PLAN

SCALE 1:250

CONCEPT

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR INFORMATION	MS	TD	22.12.2020					
01	ISSUED FOR INFORMATION	LC	TD	20.11.2020					

Client
FRASER PROPERTY AUSTRALIA

Architect
i2C ARCHITECTS

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Project
PROPOSED STAGE 3 ECQ PRECINCT
ROOTY HILL ROAD SOUTH, EASTERN CREEK NSW

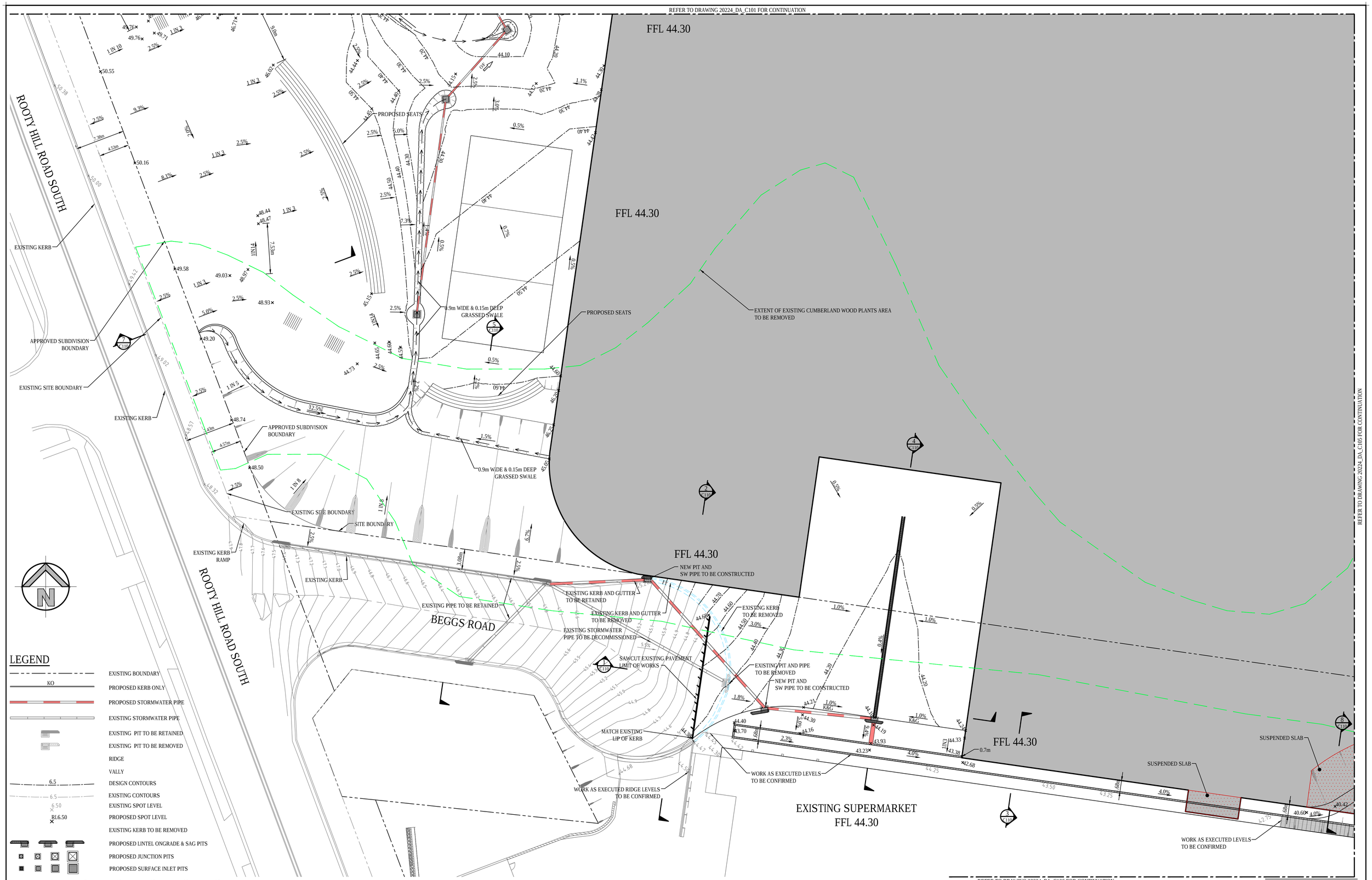
Title
DETAIL CIVIL PLAN
SHEET 3 OF 6

Drawn	Designed	Date
L.Caha	L.Caha	MAY 2018
Checked	Approved	Scale
T.Dempsey	A.Francis	1:250 @ A1

Drawing number: 20224_DA_C103

Revision: 02

REFER TO DRAWING 20224_DA_C101 FOR CONTINUATION



DETAIL PLAN

SCALE 1:250

REFER TO DRAWING 20224_DA_C106 FOR CONTINUATION

REFER TO DRAWING 20224_DA_C105 FOR CONTINUATION

CONCEPT

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR INFORMATION	MS	TD	22.12.2020
01	ISSUED FOR INFORMATION	LC	TD	20.11.2020

Client
FRASER PROPERTY AUSTRALIA

Architect
i2C ARCHITECTS

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Project
PROPOSED STAGE 3 ECQ PRECINCT
ROOTY HILL ROAD SOUTH, EASTERN CREEK NSW

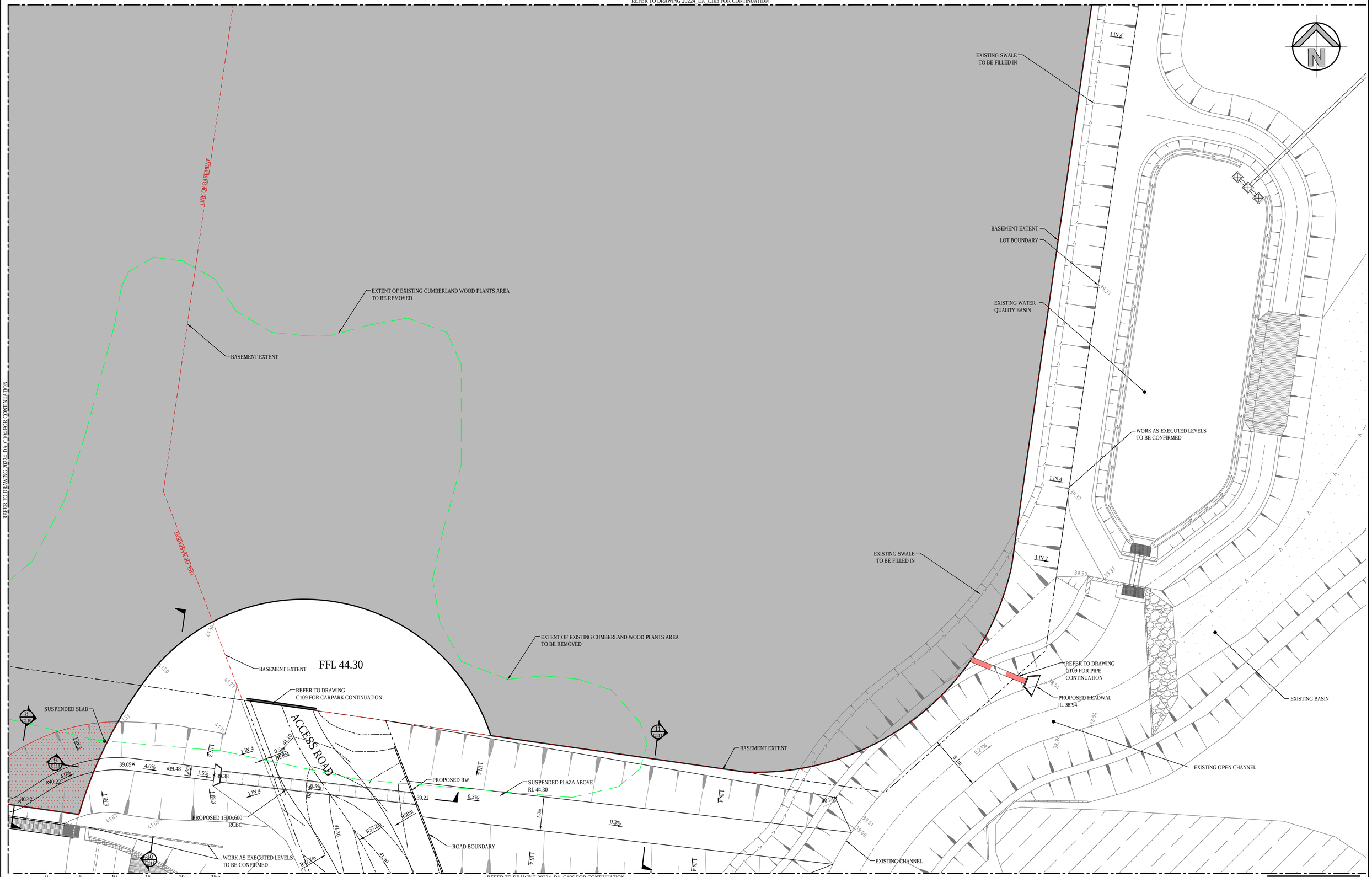
Title
DETAIL CIVIL PLAN
SHEET 4 OF 6

Drawn	Designed	Date
L.Caha	L.Caha	MAY 2018
Checked	Approved	Scale
T.Dempsey	A.Francis	1:250 @ A1

Drawing number
20224_DA_C104

Revision
02

REFER TO DRAWING 20224_DA_C103 FOR CONTINUATION



DETAIL PLAN

SCALE 1:250

CONCEPT

REFER TO DRAWING 20224_DA_C104 FOR CONTINUATION

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR INFORMATION	MS	TD	22.12.2020					
01	ISSUED FOR INFORMATION	LC	TD	20.11.2020					

Client
FRASER PROPERTY AUSTRALIA

Architect
i2C ARCHITECTS

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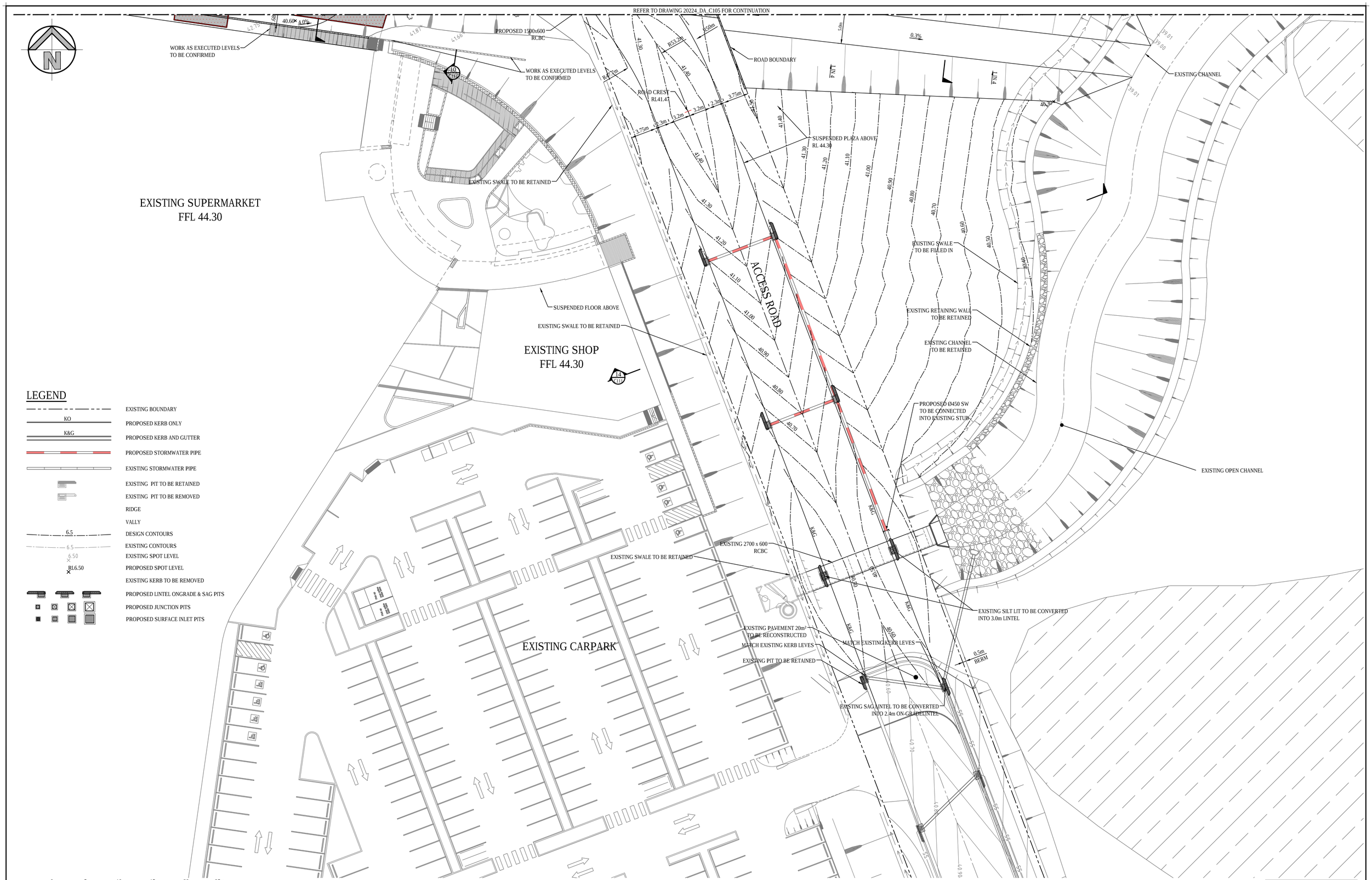
Project
PROPOSED STAGE 3 ECQ PRECINCT
ROOTY HILL ROAD SOUTH, EASTERN CREEK NSW

Title
DETAIL CIVIL PLAN
SHEET 5 OF 6

Drawn	Designed	Date
L.Caha	L.Caha	MAY 2018
Checked	Approved	Scale
T.Dempsey	A.Francis	1:250 @ A1

Drawing number: 20224_DA_C105

Revision: 02



DETAIL PLAN

SCALE 1:250

CONCEPT

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR INFORMATION	MS	TD	22.12.2020					
01	ISSUED FOR INFORMATION	LC	TD	20.11.2020					

Client
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Project
PROPOSED STAGE 3 ECQ PRECINCT
ROOTY HILL ROAD SOUTH, EASTERN CREEK NSW

Title
DETAIL CIVIL PLAN
SHEET 6 OF 6

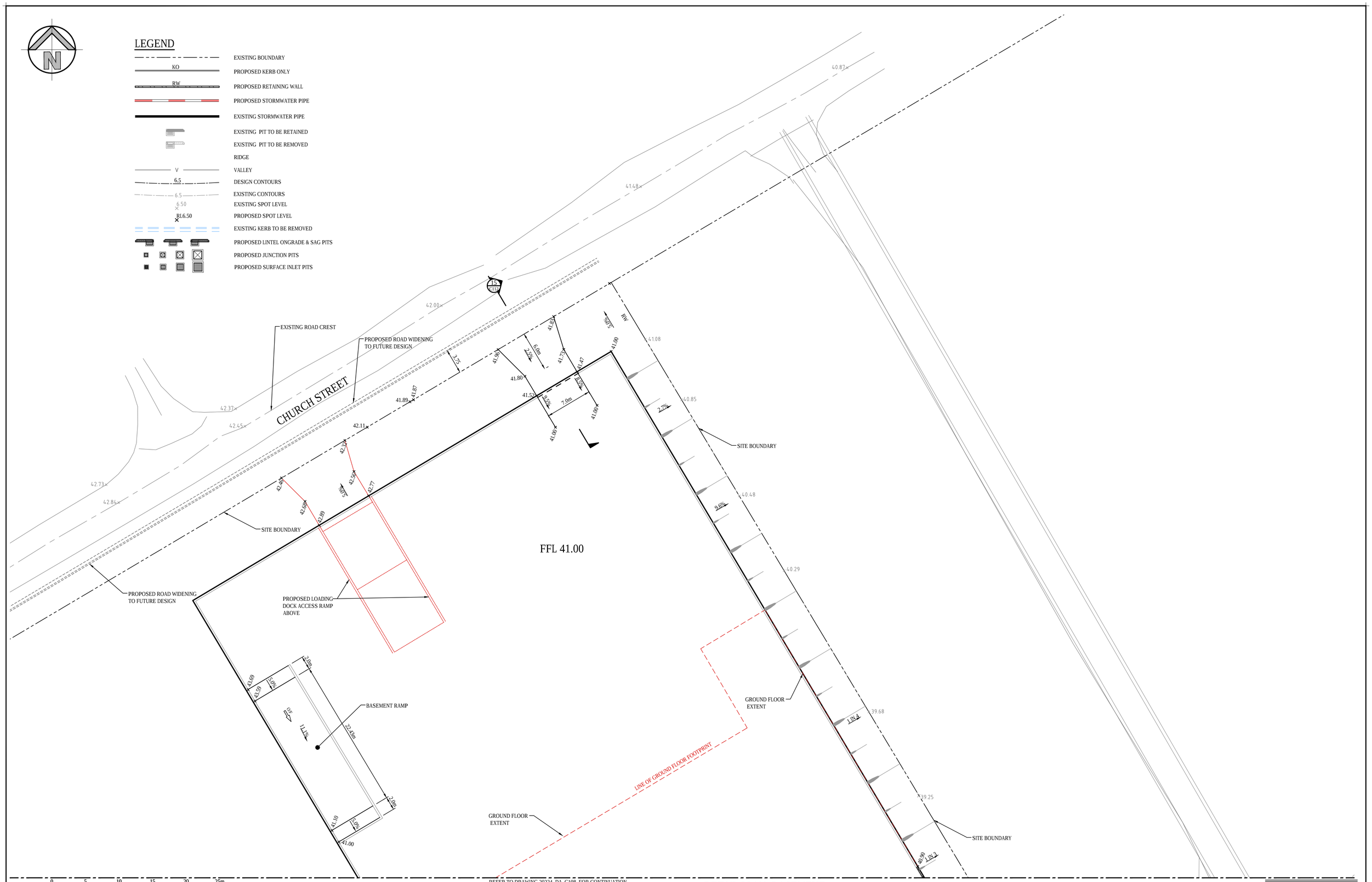
Drawn	Designed	Date
L.Caha	L.Caha	MAY 2018
Checked	Approved	Scale
T.Dempsey	A.Francis	1:250 @ A1

Drawing number 20224_DA_C106

Revision 02

LEGEND

- EXISTING BOUNDARY
- KO — PROPOSED KERB ONLY
- RW — PROPOSED RETAINING WALL
- PROPOSED STORMWATER PIPE
- EXISTING STORMWATER PIPE
- EXISTING PIT TO BE RETAINED
- EXISTING PIT TO BE REMOVED
- RIDGE
- V — VALLEY
- 6.5 — DESIGN CONTOURS
- 6.5 — EXISTING CONTOURS
- 6.50 — EXISTING SPOT LEVEL
- RL6.50 — PROPOSED SPOT LEVEL
- EXISTING KERB TO BE REMOVED
- PROPOSED LINTEL ONGRADE & SAG PITS
- PROPOSED JUNCTION PITS
- PROPOSED SURFACE INLET PITS



0 5 10 15 20 25m

5 4 3 2 1

SCALE 1:250

REFER TO DRAWING 20224_DA_C108 FOR CONTINUATION

DETAIL PLAN- BASEMENT

SCALE 1:250

CONCEPT

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR INFORMATION	MS	TD	22.12.2020					
01	ISSUED FOR INFORMATION	LC	TD	20.11.2020					

Client
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henry&hymas

Project
PROPOSED STAGE 3 ECQ PRECINCT
ROOTY HILL ROAD SOUTH, EASTERN CREEK NSW

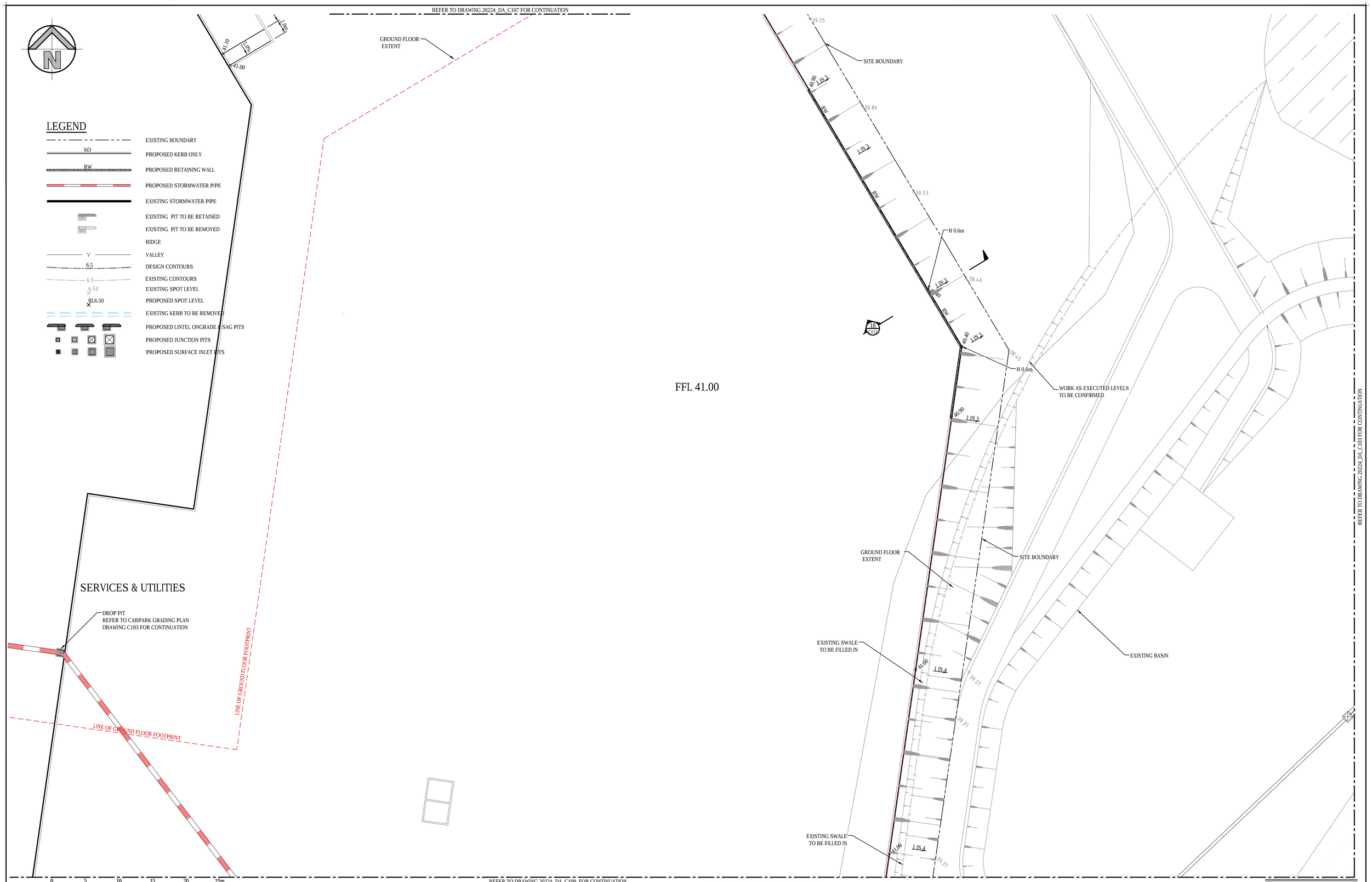
Title
DETAIL CIVIL PLAN - BASEMENT
SHEET 1 OF 3

Drawn	Designed	Date
L.Caha	L.Caha	MAY 2018
Checked	Approved	Scale
T.Dempsey	A.Francis	1:250 @ A1

Drawing number: 20224_DA_C107

Revision: 02

REFER TO DRAWING 20224_DA_C107 FOR CONTINUATION



REFER TO DRAWING 20224_DA_C109 FOR CONTINUATION

REFER TO DRAWING 20224_DA_C103 FOR CONTINUATION

DETAIL PLAN- BASEMENT

SCALE 1:250

CONCEPT

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR INFORMATION	MS	TD	22.12.2020
01	ISSUED FOR INFORMATION	LC	TD	20.11.2020

Client
FRASER PROPERTY AUSTRALIA

Architect
i2C ARCHITECTS

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Project
PROPOSED STAGE 3 ECQ PRECINCT
ROOTY HILL ROAD SOUTH, EASTERN CREEK NSW

Title
DETAIL CIVIL PLAN - BASEMENT
SHEET 2 OF 3

Drawn	Designed	Date
L.Caha	L.Caha	MAY 2018
Checked	Approved	Scale
T.Dempsey	A.Francis	1:250 @ A1

Drawing number: 20224_DA_C108
Revision: 02

DETAIL PLAN- BASEMENT

SCALE 1:250

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR INFORMATION	MS	TD	22.12.2020					
01	ISSUED FOR INFORMATION	LC	TD	20.11.2020					

Client
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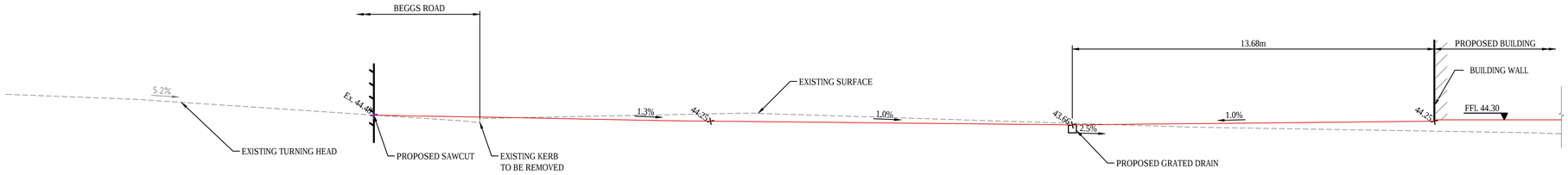
Project
PROPOSED STAGE 3 ECQ PRECINCT
ROOTY HILL ROAD SOUTH, EASTERN CREEK NSW

Title
DETAIL CIVIL PLAN - BASEMENT
SHEET 3 OF 3

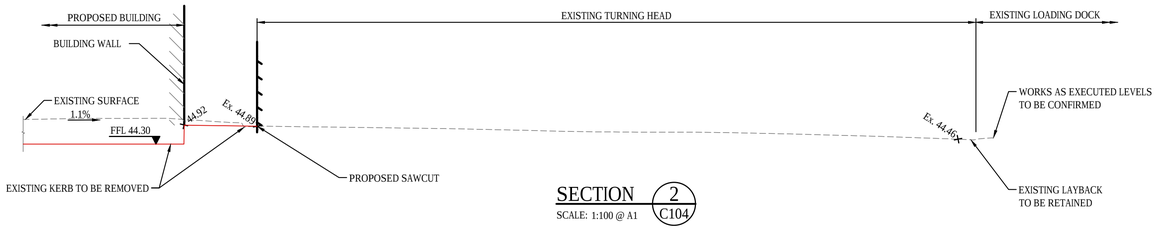
Drawn	Designed	Date
L.Caha	L.Caha	MAY 2018
Checked	Approved	Scale
T.Dempsey	A.Francis	1:250 @ A1

Drawing number
20224_DA_C109

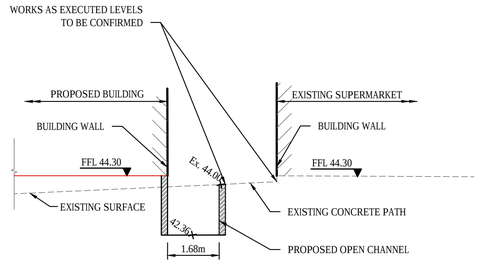
Revision
02



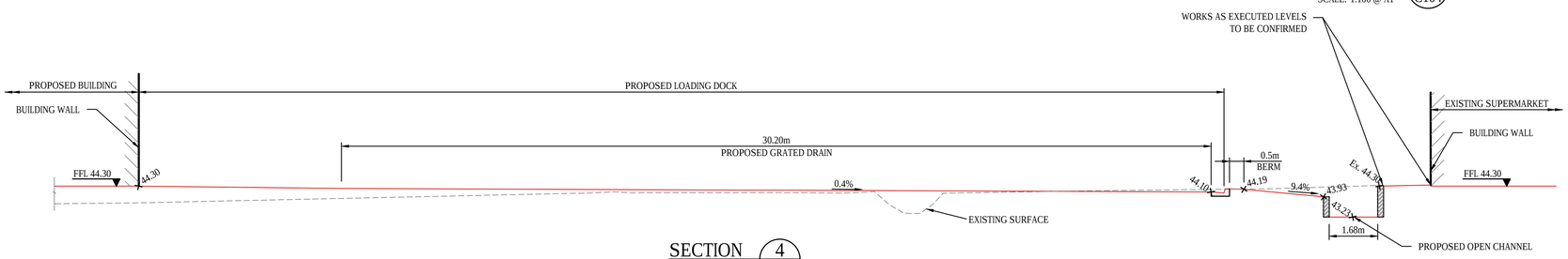
SECTION 1 / C104
SCALE: 1:100 @ A1



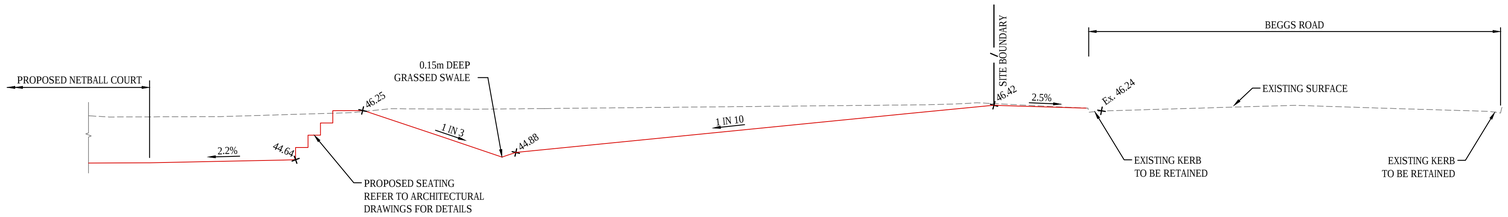
SECTION 2 / C104
SCALE: 1:100 @ A1



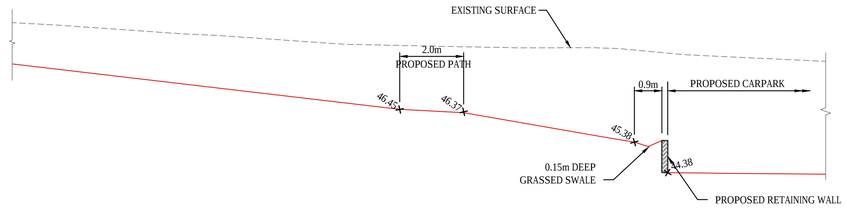
SECTION 3 / C104
SCALE: 1:100 @ A1



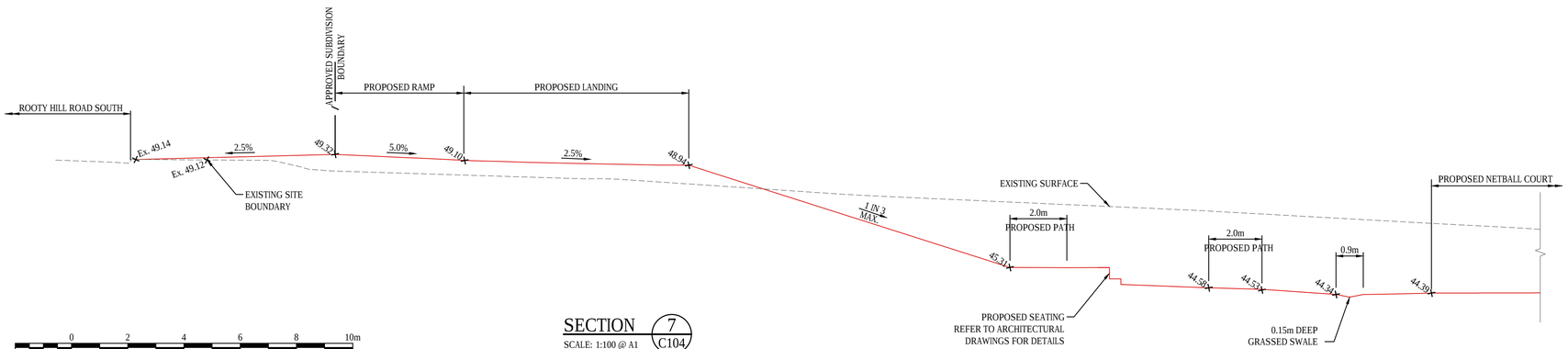
SECTION 4 / C104
SCALE: 1:100 @ A1



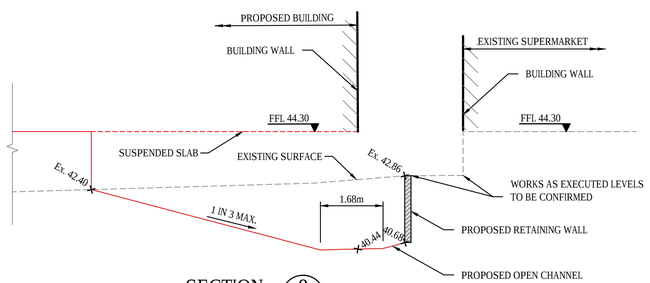
SECTION 5 / C104
SCALE: 1:100 @ A1



SECTION 6 / C101
SCALE: 1:100 @ A1



SECTION 7 / C104
SCALE: 1:100 @ A1



SECTION 8 / C104
SCALE: 1:100 @ A1

0 2 4 6 8 10m
2 1
SCALE 1:100

CONCEPT

SURVEY INFORMATION
SURVEYED BY .....
DATUM: .....
ORIGIN OF LEVELS: .....

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
01	ISSUED FOR INFORMTION	LC	TD	20.11.2020					

Client
FRASER PROPERTY AUSTRALIA

Architect
i2C ARCHITECTS

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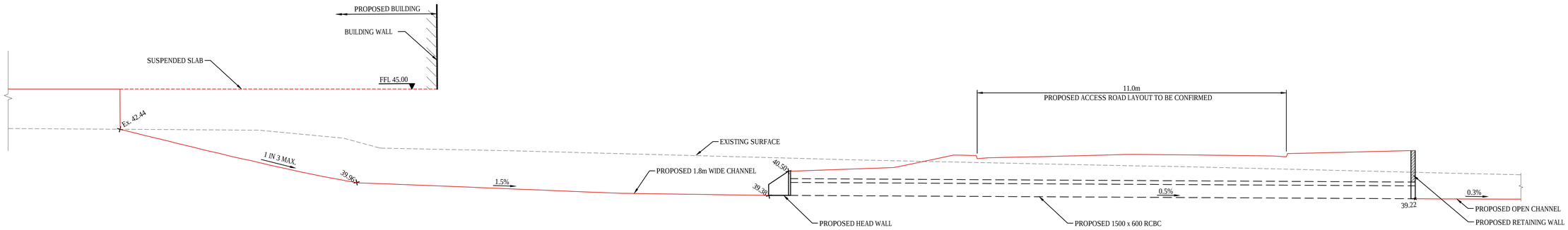
Project
PROPOSED STAGE 3 ECQ PRECINCT
ROOTY HILL ROAD SOUTH, EASTERN CREEK NSW

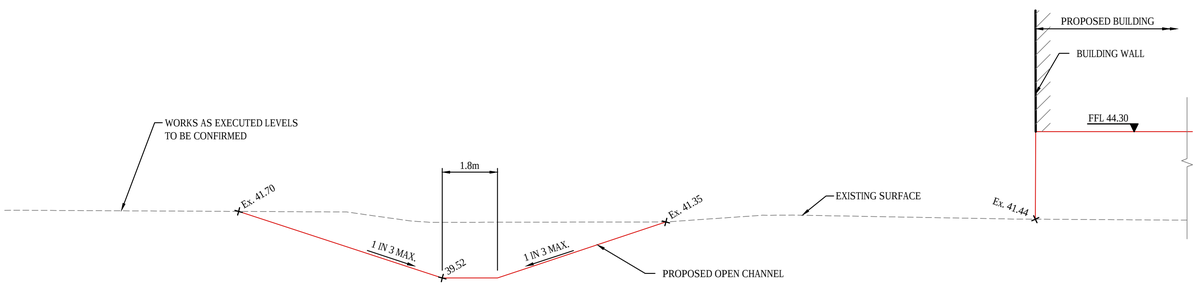
Title
SITE SECTIONS
SHEET 1 OF 3

Drawn	Designed	Date
L.Caha	L.Caha	MAY 2018
Checked	Approved	Scale
T.Dempsey	A.Francis	1:100 @ A1

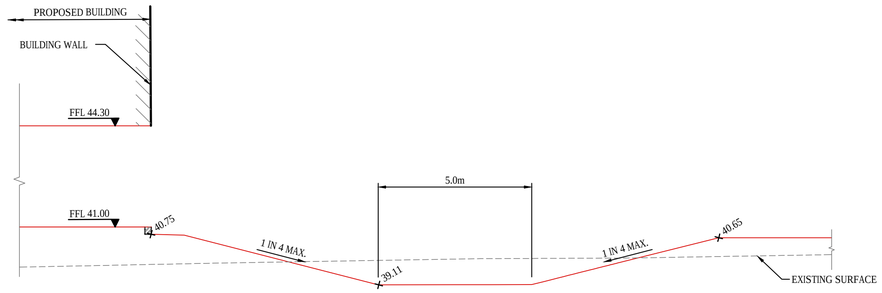
Drawing number: 20224_DA_C110
Revision: 01



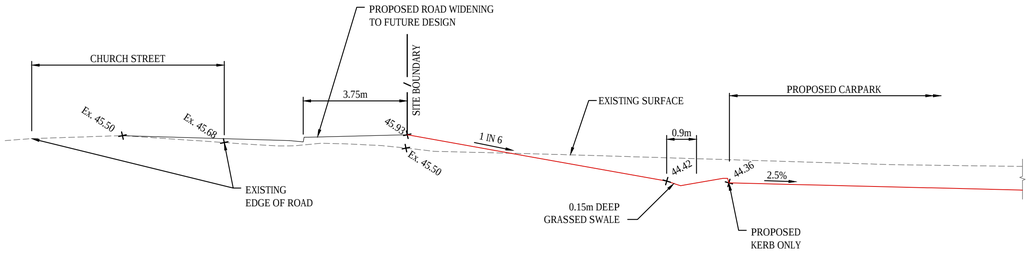
SECTION 9 C105
SCALE: 1:100 @ A1



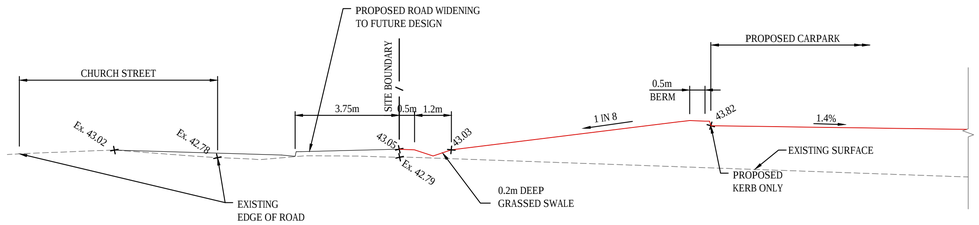
SECTION 10 C105
SCALE: 1:100 @ A1



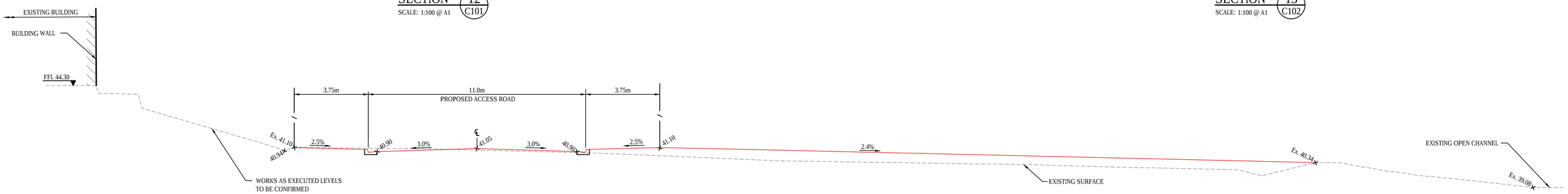
SECTION 11 C105
SCALE: 1:100 @ A1



SECTION 12 C101
SCALE: 1:100 @ A1



SECTION 13 C102
SCALE: 1:100 @ A1



SECTION 14 C106
SCALE: 1:100 @ A1

0 2 4 6 8 10m
2 1
SCALE 1:100

CONCEPT

SURVEY INFORMATION
SURVEYED BY .....
DATUM: .....
ORIGIN OF LEVELS: .....

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
01	ISSUED FOR INFORMTION	LC	TD	20.11.2020					

Client
FRASER PROPERTY AUSTRALIA

Architect
i2C ARCHITECTS

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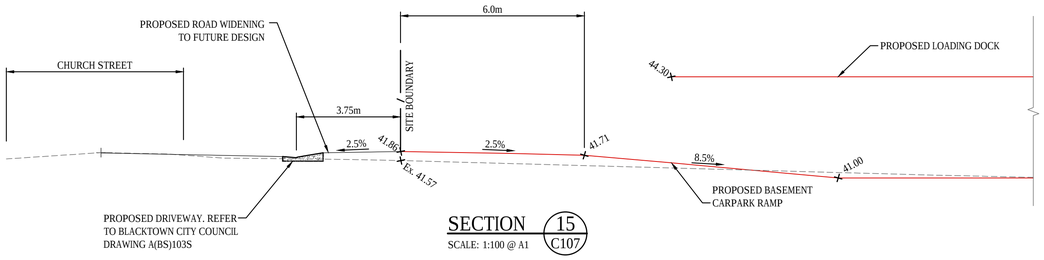
Project
PROPOSED STAGE 3 ECQ PRECINCT
ROOTY HILL ROAD SOUTH, EASTERN CREEK NSW

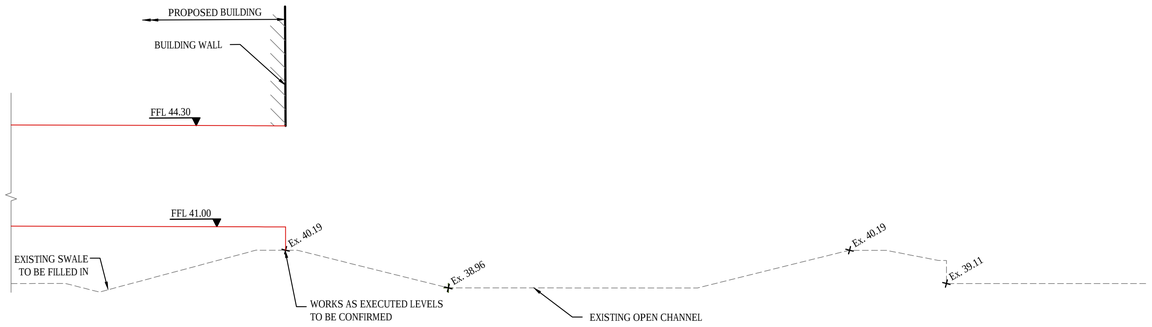
Title
SITE SECTIONS
SHEET 2 OF 3

Drawn	Designed	Date
L.Caha	L.Caha	MAY 2018
Checked	Approved	Scale
T.Dempsey	A.Francis	1:100 @ A1

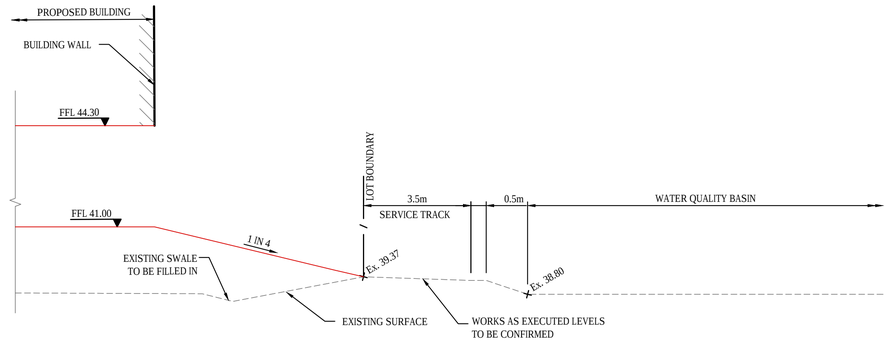
Drawing number 20224_DA_C111
Revision 01



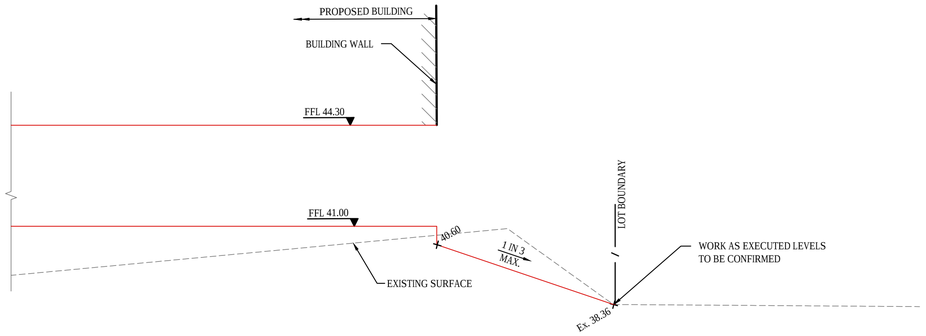
SECTION 15 / C107
SCALE: 1:100 @ A1



SECTION 16 / C109
SCALE: 1:100 @ A1



SECTION 17 / C109
SCALE: 1:100 @ A1



SECTION 18 / C108
SCALE: 1:100 @ A1

0 2 4 6 8 10m
2 1
SCALE 1:100

CONCEPT

SURVEY INFORMATION
SURVEYED BY .....
DATUM: .....
ORIGIN OF LEVELS: .....

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
01	ISSUED FOR INFORMTION	LC	TD	20.11.2020					

Client
FRASER PROPERTY AUSTRALIA

Architect
i2C ARCHITECTS

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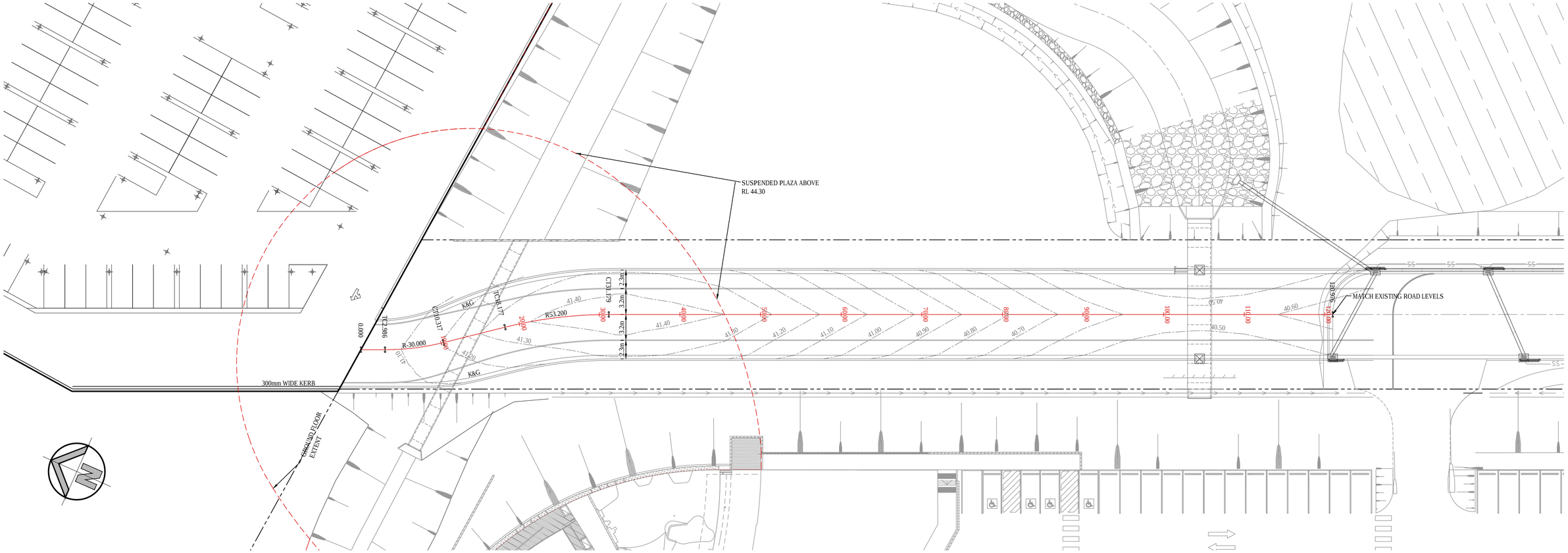
Project
PROPOSED STAGE 3 ECQ PRECINCT
ROOTY HILL ROAD SOUTH, EASTERN CREEK NSW

Title
SITE SECTIONS
SHEET 3 OF 3

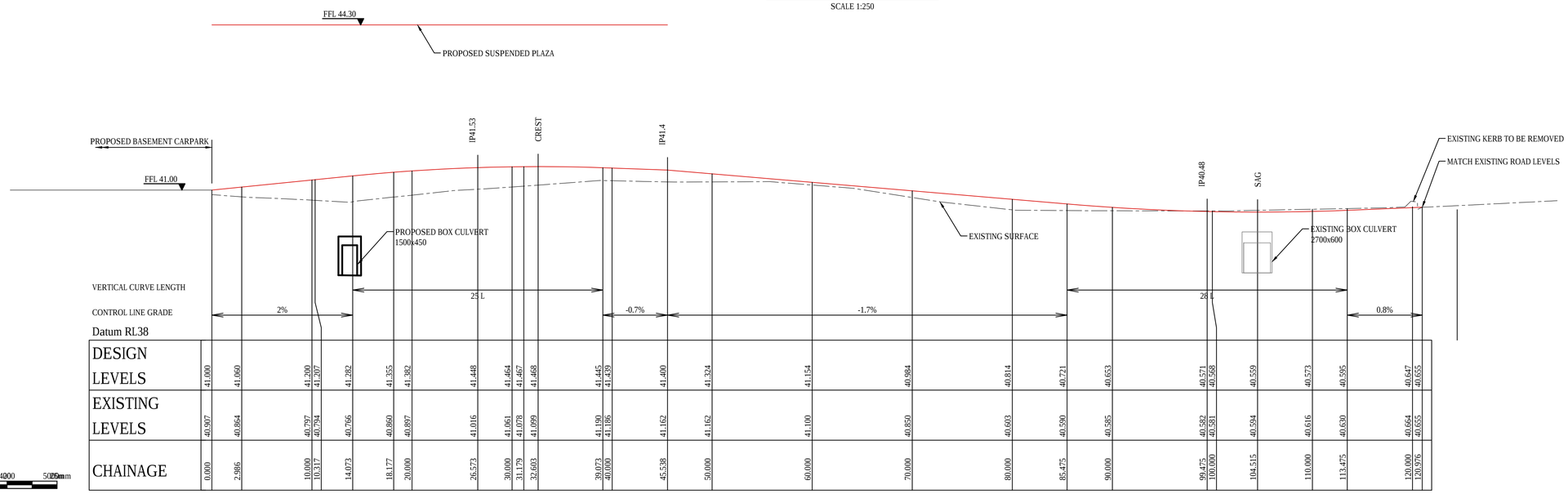
Drawn	Designed	Date
L.Caha	L.Caha	MAY 2018
Checked	Approved	Scale
T.Dempsey	A.Francis	1:100 @ A1

Drawing number 20224_DA_C112
Revision 01



ROAD CHAINAGES PLAN

SCALE 1:250



ACCESS ROAD CL LONGITUDINAL SECTION

HORIZONTAL SCALE 1:250 @ A1
VERTICAL SCALE 1:50 @ A1

0 1000 2000 3000 4000 5000mm
100 400 600 200
SCALE 1:250

0 5 10 15 20 25m
5 4 3 2 1
SCALE 1:250

CONCEPT

SURVEY INFORMATION
SURVEYED BY .....
DATUM: .....
ORIGIN OF LEVELS: .....

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
01	ISSUED FOR INFORMTION	LC	TD	20.11.2020					

Client
FRASER PROPERTY AUSTRALIA

Architect
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Project
PROPOSED STAGE 3 ECQ PRECINCT
ROOTY HILL ROAD SOUTH, EASTERN CREEK NSW

Title
ACCESS ROAD CL LONG SECTION
AND CHAINAGES PLAN

Drawn	Designed	Date
L.Caha	L.Caha	MAY 2018
Checked	Approved	Scale
T.Dempsey	A.Francis	AS SHOWN @ A1

Drawing number 20224_DA_C130
Revision 01