



ATTACHMENT F

AMENDED BULK EARTHWORKS DRAWINGS



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DOCUMENT TRANSMITTAL SCHEDULE

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Attention: Development Assessment

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PROJECT: OPERATIONAL WORKS APPLICATION FOR CHANGE TO GROUND LEVEL
VANTAGE YATALA - STAGE 2

Job No: 5941

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D - Disk				P Print				CP -CAD&PDF			
ED - DWG/DXF				EP - PDF							

Drg/Doc No.	Title	Revision Issued										
5941 ENG BE2 001	DRAWING INDEX AND LOCALITY PLAN	A	B	C	C	C	D	D	E	E	F	
5941 ENG BE2 002	GENERAL NOTES SHEET 1 OF 2	A	A	A	A	A	A	A	B	B	-	
5941 ENG BE2 003	GENERAL NOTES SHEET 2 OF 2	A	A	A	A	A	A	A	B	B	-	
5941 ENG BE2 004	LEGEND	A	A	A	A	A	A	A	B	B	-	
5941 ENG BE2 005	KEY PLAN LAYOUT	A	A	B	B	B	C	C	D	D	E	
5941 ENG BE2 010	EXISTING SURFACE AND FEATURES PLAN SHEET 1 OF 7	A	A	A	A	A	B	B	C	C	D	
5941 ENG BE2 011	EXISTING SURFACE AND FEATURES PLAN SHEET 2 OF 7	A	A	A	A	A	B	B	C	C	-	
5941 ENG BE2 012	EXISTING SURFACE AND FEATURES PLAN SHEET 3 OF 7	A	A	A	A	A	B	B	B	B	C	
5941 ENG BE2 013	EXISTING SURFACE AND FEATURES PLAN SHEET 4 OF 7	A	A	A	A	A	B	B	B	B	C	
5941 ENG BE2 014	EXISTING SURFACE AND FEATURES PLAN SHEET 5 OF 7	A	A	A	A	A	B	B	B	B	C	
5941 ENG BE2 015	EXISTING SURFACE AND FEATURES PLAN SHEET 6 OF 7	A	A	B	B	B	C	C	C	C	D	
5941 ENG BE2 016	EXISTING SURFACE AND FEATURES PLAN SHEET 7 OF 7	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 020	SEDIMENT AND EROSION CONTROL PLAN SHEET 1 OF 7	A	B	B	B	B	C	C	D	D	E	
5941 ENG BE2 021	SEDIMENT AND EROSION CONTROL PLAN SHEET 2 OF 7	A	B	B	B	B	C	C	D	D	-	
5941 ENG BE2 022	SEDIMENT AND EROSION CONTROL PLAN SHEET 3 OF 7	A	B	B	B	B	C	C	D	D	E	
5941 ENG BE2 023	SEDIMENT AND EROSION CONTROL PLAN SHEET 4 OF 7	A	A	B	B	B	C	C	C	C	D	
5941 ENG BE2 024	SEDIMENT AND EROSION CONTROL PLAN SHEET 5 OF 7	A	A	A	A	A	B	B	B	B	C	
5941 ENG BE2 025	SEDIMENT AND EROSION CONTROL PLAN SHEET 6 OF 7	A	A	B	B	B	C	C	C	C	D	
5941 ENG BE2 026	SEDIMENT AND EROSION CONTROL PLAN SHEET 7 OF 7	A	B	C	C	C	D	D	D	D	-	
5941 ENG BE2 029	CONSTRUCTION PHASE SEDIMENT BASIN 1 LAYOUT SHEET 1 OF 4	A	B	C	C	C	D	D	D	D	-	
5941 ENG BE2 030	CONSTRUCTION PHASE SEDIMENT BASIN 1 LAYOUT SHEET 2 OF 4	A	B	C	C	C	D	D	D	D	E	
5941 ENG BE2 031	CONSTRUCTION PHASE SEDIMENT BASIN 1 LAYOUT SHEET 3 OF 4	A	B	C	C	C	D	D	D	D	-	
5941 ENG BE2 032	CONSTRUCTION PHASE SEDIMENT BASIN 2 LAYOUT SHEET 4 OF 4	A	B	B	B	B	C	C	C	C	-	
5941 ENG BE2 033	CONSTRUCTION PHASE SEDIMENT BASIN SECTIONS	A	A	B	B	B	C	C	C	C	-	
5941 ENG BE2 034	CONSTRUCTION PHASE SEDIMENT BASIN TYPICAL SECTIONS	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 035	SEDIMENT AND EROSION TYPICAL DETAILS	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 050	BULK EARTHWORKS LAYOUT PLAN SHEET 1 OF 7	A	B	C	C	C	D	D	E	E	F	
5941 ENG BE2 051	BULK EARTHWORKS LAYOUT PLAN SHEET 2 OF 7	A	B	C	C	C	D	D	E	F	-	
5941 ENG BE2 052	BULK EARTHWORKS LAYOUT PLAN SHEET 3 OF 7	A	B	C	C	C	D	D	E	E	F	
5941 ENG BE2 053	BULK EARTHWORKS LAYOUT PLAN SHEET 4 OF 7	A	B	C	C	C	D	D	E	E	F	
5941 ENG BE2 054	BULK EARTHWORKS LAYOUT PLAN SHEET 5 OF 7	A	B	C	C	C	D	F	F	F	G	
5941 ENG BE2 055	BULK EARTHWORKS LAYOUT PLAN SHEET 6 OF 7	A	A	B	B	B	C	C	D	D	E	
5941 ENG BE2 056	BULK EARTHWORKS LAYOUT PLAN SHEET 7 OF 7	A	B	C	C	C	D	D	E	E	-	
5941 ENG BE2 100	FINISHED BULK EARTHWORKS SURFACE LEVEL PLAN SHEET 1 OF 7	A	B	B	B	B	C	C	D	D	E	
5941 ENG BE2 101	FINISHED BULK EARTHWORKS SURFACE LEVEL PLAN SHEET 2 OF 7	A	B	B	B	B	C	C	D	D	-	
5941 ENG BE2 102	FINISHED BULK EARTHWORKS SURFACE LEVEL PLAN SHEET 3 OF 7	A	B	B	B	B	C	C	C	D	E	
5941 ENG BE2 103	FINISHED BULK EARTHWORKS SURFACE LEVEL PLAN SHEET 4 OF 7	A	A	B	B	B	C	C	C	C	D	
5941 ENG BE2 104	FINISHED BULK EARTHWORKS SURFACE LEVEL PLAN SHEET 5 OF 7	A	A	A	A	A	B	B	C	C	D	
5941 ENG BE2 105	FINISHED BULK EARTHWORKS SURFACE LEVEL PLAN SHEET 6 OF 7	A	A	B	B	B	C	C	C	C	D	
5941 ENG BE2 106	FINISHED BULK EARTHWORKS SURFACE LEVEL PLAN SHEET 7 OF 7	A	B	C	C	C	D	D	D	D	-	
5941 ENG BE2 150	FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 1 OF 11	A	A	A	A	A	B	B	C	C	-	
5941 ENG BE2 151	FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 2 OF 11	A	B	B	B	B	C	C	D	D	-	
5941 ENG BE2 152	FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 3 OF 11	A	B	C	C	C	D	D	F	F	-	
5941 ENG BE2 153	FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 4 OF 11	A	A	B	B	B	C	C	D	D	-	
5941 ENG BE2 154	FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 5 OF 11	A	A	B	B	B	C	C	C	C	-	
5941 ENG BE2 155	FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 6 OF 11	A	A	B	B	B	C	C	C	C	-	

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Drg/Doc No.	Title	Revision Issued										
5941 ENG BE2 156	FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 7 OF 11	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 158	FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 8 OF 11	A	A	B	B	B	C	C	C	C	-	
5941 ENG BE2 159	FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 9 OF 11	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 160	FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 10 OF 11	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 161	FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 10 OF 11	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 163	BULK EARTHWORKS ROAD TYPICAL SECTIONS	A	B	B	B	B	C	C	C	C	-	
5941 ENG BE2 400	CONTROL LINE LAYOUT PLAN	A	B	B	B	B	C	C	D	D	E	
5941 ENG BE2 401	CONTROL LINE SETOUT TABLES SHEET 1 OF 2	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 402	CONTROL LINE SETOUT TABLES SHEET 2 OF 2	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 410	ROAD 01 LONGITUDINAL SECTION SHEET 1 OF 2	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 411	ROAD 01 LONGITUDINAL SECTION SHEET 2 OF 2	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 412	FAIRWAY STREET LONGITUDINAL SECTION	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 414	AMGROW DAM OVERFLOW DRAIN LONGITUDINAL SECTION	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 430	ROAD 01 CROSS SECTIONS SHEET 1 OF 8	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 431	ROAD 01 CROSS SECTIONS SHEET 2 OF 8	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 432	ROAD 01 CROSS SECTIONS SHEET 3 OF 8	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 433	ROAD 01 CROSS SECTIONS SHEET 4 OF 8	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 434	ROAD 01 CROSS SECTIONS SHEET 5 OF 8	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 435	ROAD 01 CROSS SECTIONS SHEET 6 OF 8	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 436	ROAD 01 CROSS SECTIONS SHEET 7 OF 8	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 437	ROAD 01 CROSS SECTIONS SHEET 8 OF 8	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 438	FAIRWAY STREET CROSS SECTIONS SHEET 1 OF 4	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 439	FAIRWAY STREET CROSS SECTIONS SHEET 2 OF 4	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 440	FAIRWAY STREET CROSS SECTIONS SHEET 3 OF 4	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 441	FAIRWAY STREET CROSS SECTIONS SHEET 4 OF 4	A	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 442	ROAD USER SAFETY CROSS SECTIONS SHEET 1 OF 5	-	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 443	ROAD USER SAFETY CROSS SECTIONS SHEET 2 OF 5	-	A	A	A	A	B	B	C	C	-	
5941 ENG BE2 444	ROAD USER SAFETY CROSS SECTIONS SHEET 3 OF 5	-	A	A	A	A	B	B	C	C	-	
5941 ENG BE2 445	ROAD USER SAFETY CROSS SECTIONS SHEET 4 OF 5	-	A	A	A	A	B	B	C	C	-	
5941 ENG BE2 446	ROAD USER SAFETY CROSS SECTIONS SHEET 5 OF 5	-	A	A	A	A	B	B	B	B	-	
5941 ENG BE2 460	SWALE CONTROL LINE LAYOUT PLAN	-	-	-	-	-	-	-	-	-	A	
5941 ENG BE2 461	SWALE LONGITUDINAL SECTION AND SETOUT TABLE	-	-	-	-	-	-	-	-	-	A	
5941 ENG BE2 570	OPERATIONAL PHASE BIORETENTION BASIN SHEET 1 OF 4	A	B	C	C	C	D	D	D	D	-	
5941 ENG BE2 571	OPERATIONAL PHASE BIORETENTION BASIN SHEET 2 OF 4	A	B	C	C	C	D	D	D	D	E	
5941 ENG BE2 572	OPERATIONAL PHASE BIORETENTION BASIN SHEET 3 OF 4	A	B	C	C	C	D	D	D	D	-	
5941 ENG BE2 573	OPERATIONAL PHASE BIORETENTION BASIN SHEET 4 OF 4	A	A	B	B	B	C	C	C	C	-	
5941 ENG BE2 850	LOT 205 BOULDER RETAINING WALL CONTROL LINE AND SETOUT TABLE	-	-	-	-	-	-	A	A	A	B	
5941 ENG BE2 851	LOT 205 BOULDER RETAINING WALL LONGITUDINAL SECTION RW1	-	-	-	-	-	-	A	A	A	B	
5941 ENG BE2 852	LOT 205 BOULDER RETAINING WALL LONGITUDINAL SECTION RW2	-	-	-	-	-	-	A	A	A	B	
5941 ENG BE2 853	LOT 205 BOULDER RETAINING WALL LONGITUDINAL SECTION RW3	-	-	-	-	-	-	A	A	A	B	
5941 ENG BE2 854	BOULDER RETAINING WALL TYPICAL DETAILS	-	-	-	-	-	-	A	A	A	B	
5941 ENG BE2 860	LOT 201 BOULDER RETAINING WALL LAYOUT PLAN AND DETAILS	-	-	-	-	-	-	-	-	-	A	

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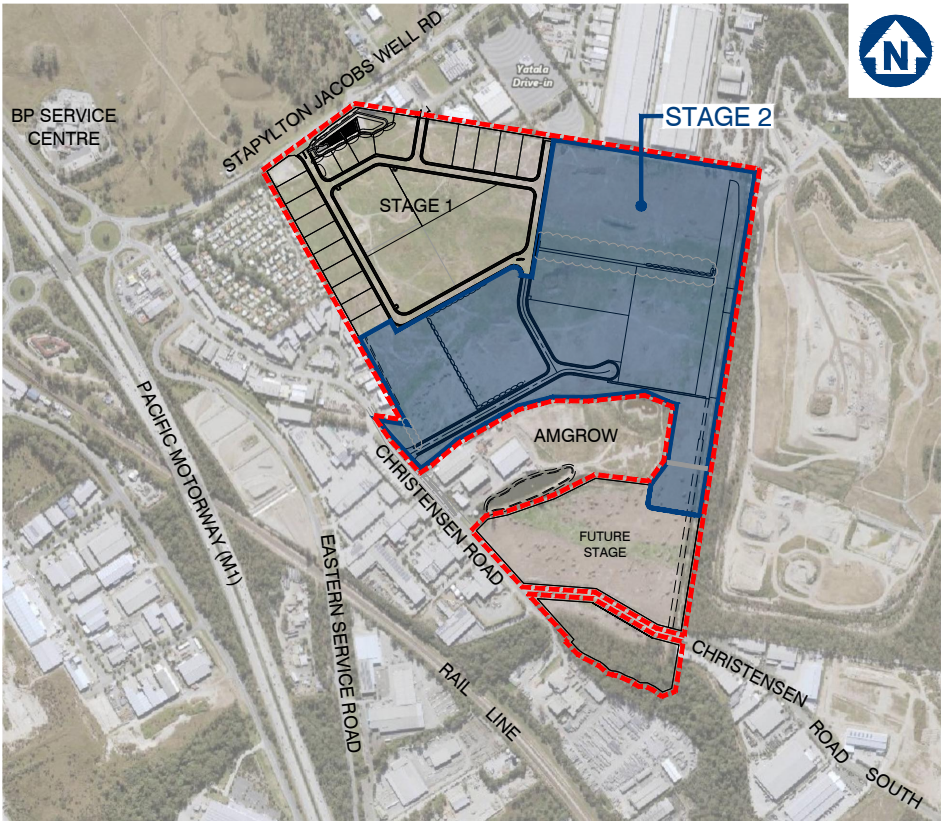
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594I ENG BE2 002	B	GENERAL NOTES SHEET 1 OF 2
594I ENG BE2 003	B	GENERAL NOTES SHEET 2 OF 2
594I ENG BE2 004	B	LEGEND
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594I ENG BE2 013	C	EXISTING SURFACE AND FEATURES PLAN SHEET 4 OF 7
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594I ENG BE2 030	E	CONSTRUCTION PHASE SEDIMENT BASIN 1 LAYOUT SHEET 2 OF 4
594I ENG BE2 031	D	CONSTRUCTION PHASE SEDIMENT BASIN 1 LAYOUT SHEET 3 OF 4
594I ENG BE2 032	C	CONSTRUCTION PHASE SEDIMENT BASIN 2 LAYOUT SHEET 4 OF 4
594I ENG BE2 033	C	CONSTRUCTION PHASE SEDIMENT BASIN SECTIONS
594I ENG BE2 034	B	CONSTRUCTION PHASE SEDIMENT BASIN TYPICAL SECTIONS
594I ENG BE2 035	B	SEDIMENT AND EROSION TYPICAL DETAILS
594I ENG BE2 050	F	BULK EARTHWORKS LAYOUT PLAN SHEET 1 OF 7
594I ENG BE2 051	F	BULK EARTHWORKS LAYOUT PLAN SHEET 2 OF 7
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594I ENG BE2 056	E	BULK EARTHWORKS LAYOUT PLAN SHEET 7 OF 7
594I ENG BE2 100	E	FINISHED BULK EARTHWORKS SURFACE LEVEL PLAN SHEET 1 OF 7
594I ENG BE2 101	D	FINISHED BULK EARTHWORKS SURFACE LEVEL PLAN SHEET 2 OF 7
594I ENG BE2 102	E	FINISHED BULK EARTHWORKS SURFACE LEVEL PLAN SHEET 3 OF 7
594I ENG BE2 103	D	FINISHED BULK EARTHWORKS SURFACE LEVEL PLAN SHEET 4 OF 7
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594I ENG BE2 105	D	FINISHED BULK EARTHWORKS SURFACE LEVEL PLAN SHEET 6 OF 7
594I ENG BE2 106	D	FINISHED BULK EARTHWORKS SURFACE LEVEL PLAN SHEET 7 OF 7
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594I ENG BE2 153	D	FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 4 OF 11
594I ENG BE2 154	C	FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 5 OF 11
594I ENG BE2 155	C	FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 6 OF 11
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594I ENG BE2 158	C	FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 8 OF 11
594I ENG BE2 159	B	FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 9 OF 11
594I ENG BE2 160	B	FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 10 OF 11
594I ENG BE2 161	B	FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 11 OF 11
594I ENG BE2 163	B	BULK EARTHWORKS ROAD TYPICAL SECTIONS
594I ENG BE2 400	E	CONTROL LINE LAYOUT PLAN
594I ENG BE2 401	B	CONTROL LINE SETOUT TABLES SHEET 1 OF 2
594I ENG BE2 402	B	CONTROL LINE SETOUT TABLES SHEET 2 OF 2
594I ENG BE2 410	B	ROAD 01 LONGITUDINAL SECTION SHEET 1 OF 2
594I ENG BE2 411	B	ROAD 01 LONGITUDINAL SECTION SHEET 2 OF 2
594I ENG BE2 412	B	FAIRWAY STREET LONGITUDINAL SECTION
594I ENG BE2 414	B	AMGROW DAM OVERFLOW DRAIN LONGITUDINAL SECTION

594I ENG BE2 430	B	ROAD 01 CROSS SECTIONS SHEET 1 OF 8
594I ENG BE2 431	B	ROAD 01 CROSS SECTIONS SHEET 2 OF 8
594I ENG BE2 432	B	ROAD 01 CROSS SECTIONS SHEET 3 OF 8
594I ENG BE2 433	B	ROAD 01 CROSS SECTIONS SHEET 4 OF 8
594I ENG BE2 434	B	ROAD 01 CROSS SECTIONS SHEET 5 OF 8
594I ENG BE2 435	B	ROAD 01 CROSS SECTIONS SHEET 6 OF 8
594I ENG BE2 436	B	ROAD 01 CROSS SECTIONS SHEET 7 OF 8
594I ENG BE2 437	B	ROAD 01 CROSS SECTIONS SHEET 8 OF 8
594I ENG BE2 438	B	FAIRWAY STREET CROSS SECTIONS SHEET 1 OF 4
594I ENG BE2 439	B	FAIRWAY STREET CROSS SECTIONS SHEET 2 OF 4
594I ENG BE2 440	B	FAIRWAY STREET CROSS SECTIONS SHEET 3 OF 4
594I ENG BE2 441	B	FAIRWAY STREET CROSS SECTIONS SHEET 4 OF 4
594I ENG BE2 442	B	ROAD USER SAFETY CROSS SECTIONS – SHEET 1 OF 5
594I ENG BE2 443	C	ROAD USER SAFETY CROSS SECTIONS – SHEET 2 OF 5
594I ENG BE2 444	C	ROAD USER SAFETY CROSS SECTIONS – SHEET 3 OF 5
594I ENG BE2 445	C	ROAD USER SAFETY CROSS SECTIONS – SHEET 4 OF 5
594I ENG BE2 446	B	ROAD USER SAFETY CROSS SECTIONS – SHEET 5 OF 5
594I ENG BE2 460	A	SWALE CONTROL LINE LAYOUT PLAN
594I ENG BE2 461	A	SWALE LONGITUDINAL SECTION AND SETOUT TABLE
594I ENG BE2 570	D	OPERATIONAL PHASE BIORETENTION BASIN SHEET 1 OF 4
594I ENG BE2 571	E	OPERATIONAL PHASE BIORETENTION BASIN SHEET 2 OF 4
594I ENG BE2 572	D	OPERATIONAL PHASE BIORETENTION BASIN SHEET 3 OF 4
594I ENG BE2 573	C	OPERATIONAL PHASE BIORETENTION BASIN SHEET 4 OF 4
594I ENG BE2 850	A	LOT 205 BOULDER RETAINING WALL CONTROL LINE AND SETOUT TABLE
594I ENG BE2 851	A	LOT 205 BOULDER RETAINING WALL LONGITUDINAL SECTION RW1
594I ENG BE2 852	A	LOT 205 BOULDER RETAINING WALL LONGITUDINAL SECTION RW2
594I ENG BE2 853	A	LOT 205 BOULDER RETAINING WALL LONGITUDINAL SECTION RW3
594I ENG BE2 854	A	BOULDER RETAINING WALL TYPICAL DETAILS
594I ENG BE2 860	A	LOT 201 BOULDER RETAINING WALL LAYOUT PLAN AND DETAILS



LOCALITY PLAN

SCALE 1: 8000 (A1)

CLIENT



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

VantageYatala

SITE ADDRESS

LOT 501 on SP295994
60 STAPYLTON JACOBS WELL ROAD
STAPYLTON QLD 4207

DWG No. 594I ENG BE2 001 – REV F

MAY 2022

GENERAL NOTES

1. **CONTRACT DOCUMENTATION**
ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE CONTRACT SPECIFICATION AND CoGC STANDARD DRAWINGS AND SPECIFICATIONS.
2. **DATUM**
LEVELS SHOWN ON THE PLANS ARE A.H.D.
3. **SURVEY SETOUT**
THE SURVEY SET OUT INFORMATION TO ALLOW THE CONTRACTOR TO ACCURATELY SET OUT THE WORKS HAS BEEN ESTABLISHED ON SITE BY THE PRINCIPAL’S SURVEYOR. THE CONTRACTOR IS NOT TO SCALE FROM THESE PLANS AS A MEANS OF OBTAINING SETOUT INFORMATION.
4. **EXISTING SURVEY CONTROL STATIONS**
IT IS THE CONTRACTOR’S RESPONSIBILITY TO ENSURE THAT EXISTING SURVEY CONTROL STATIONS ARE NOT DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES. SHOULD THE CONTRACTOR IDENTIFY ANY CONFLICT BETWEEN EXISTING SURVEY CONTROL AND THE REQUIRED CONSTRUCTION ACTIVITIES THE SUPERINTENDENT IS TO BE NOTIFIED IMMEDIATELY.
5. **EXISTING SERVICES**
THE LOCATION OF EXISTING SERVICES WHERE SHOWN ON THE PLANS ARE INDICATIVE ONLY. IT IS THE CONTRACTOR’S RESPONSIBILITY TO CONTACT THE RELEVANT SERVICE AUTHORITIES TO ASCERTAIN THE EXACT LOCATION OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORKS AND TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO THE EXISTING SERVICES.
6. **SITE ACCESS**
THE CONTRACTOR SHALL ONLY GAIN ACCESS TO THE SITE VIA ACCESS LOCATIONS APPROVED BY THE SUPERINTENDENT. FREEDOM OF ACCESS TO OTHER WORK AREAS ON THE SITE SHALL BE MAINTAINED AT ALL TIMES.
7. **PROVISION FOR TRAFFIC**
PROVISION FOR TRAFFIC ON LOCAL ROADS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND CoGC COUNCIL REQUIREMENTS.
8. **WORK EXTENT**
THE CONTRACTOR IS TO RESTRICT ACTIVITIES TO THOSE AREAS DESIGNATED AS WORKS AREAS UNDER THE CONTRACT. AT NO TIME IS THE CONTRACTOR TO ENTER ADJOINING PROPERTIES OR CONTRACT AREAS WITHOUT THE WRITTEN AUTHORISATION OF THE SUPERINTENDENT.
9. **TESTING**
ALL TESTING IS TO BE CARRIED OUT BY AN APPROVED N.A.T.A TESTING AUTHORITY IN ACCORDANCE WITH THE PROJECT SPECIFICATION AND REQUIREMENTS OF CoGC COUNCIL.
10. **"AS CONSTRUCTED" SURVEY**
"AS CONSTRUCTED" SURVEY SHALL BE CARRIED OUT BY THE PRINCIPAL’S SURVEYOR AS WORK PROCEEDS. THE CONTRACTOR IS TO PROVIDE ADEQUATE NOTICE TO THE PRINCIPAL’S SURVEYOR ON WHEN THIS IS REQUIRED TO ENSURE COMPLIANCE WITH THE REQUIREMENTS OF CoGC COUNCIL.
11. **MAINTENANCE OF SITE CONDITION**
AT THE COMPLETION OF WORKS THE SITE IS TO BE LEFT IN A CLEAN AND TIDY CONDITION TO THE SATISFACTION OF THE SUPERINTENDENT AND CoGC.

EARTHWORKS

1. **PRECEDENCE**
EARTHWORKS SPECIFICATION PREPARED BY PROJECT GEOTECHNICAL ENGINEER TO TAKE PRECEDENCE OVER STANDARD COUNCIL EARTHWORKS NOTES.
2. **TOPSOIL STRIPPING**
TOPSOIL SHALL BE STRIPPED ACROSS THE ENTIRE LIMIT OF THE EARTHWORKS CUT AND FILL AREAS AND SHALL BE STOCKPILED IN A LOCATION APPROVED BY THE SUPERINTENDENT. THE EXISTING STRATA IS TO BE TREATED IN ACCORDANCE WITH THE SPECIFICATION PRIOR TO PLACING ANY FILL.
3. **EARTHWORKS LEVELS**
EARTHWORKS LEVELS SHOWN ON THE DRAWING ARE TO FINISHED SURFACE LEVELS AND INCLUDE 100mm OF TOPSOIL. THE CONTRACTOR SHALL VERIFY BENCH MARK LEVELS AND ADVISE THE SUPERINTENDENT OF ANY DISCREPANCY BEFORE COMMENCEMENT OF CONSTRUCTION.
4. **UNDESIRABLE MATERIAL**
THE ENTIRE SITE/WORK AREAS SHALL BE CLEARED OF ALL UNDESIRABLE MATTER. THIS SHALL INCLUDE DEAD TIMBER, GRASS, OLD FOUNDATIONS, CONCRETE, MASONRY REMAINS, GARBAGE, DEBRIS AND ALL OTHER OBSTRUCTIONS TO THE WORKS UNLESS NOTED OTHERWISE. HOLES LEFT BY THE REMOVAL OF ANY OF THE ABOVE SHALL BE FILLED WITH APPROVED COMPACTED MATERIAL WITH PROPERTIES AT LEAST SIMILAR TO INSITU SOILS.
5. **COMPACTION STANDARD**
FILL MATERIAL SHALL BE COMPACTED TO THE FOLLOWING STANDARD, WHERE DRY DENSITY RATIO IS DETERMINED IN ACCORDANCE WITH AS 1289 USING STANDARD COMPACTION METHODS.

a. 100% DRY DENSITY RATIO IN COHESIVE MATERIAL OR 80% IN COHESIONLESS MATERIAL FOR ROAD SUBGRADE.

b. 98% DRY DENSITY RATIO IN COHESIVE MATERIAL OR 65% IN COHESIONLESS MATERIAL FOR ALL AREAS OTHER THAN THE ROADWAY AND BUILDING PADS.

c. 98% DRY DENSITY RATIO IN COHESIVE MATERIAL OR 70% IN COHESIONLESS MATERIAL FOR BUILDING PADS.
5. **PAVEMENT DEPTHS**
EARTHWORKS VOLUMES DO NOT INCLUDE DESIGN PAVEMENT DEPTHS AS INDICATED ON THE TYPICAL BULK EARTHWORKS ROAD SECTION.
6. **TESTING**
ALL EARTHWORKS TO BE CARRIED OUT UNDER LEVEL 1 SUPERVISION IN ACCORDANCE WITH AUSTRALIAN STANDARDS AS 3798 UNLESS DIRECTED OTHERWISE BY THE SUPERINTENDENT. ALL COMPACTION TESTING SHALL BE CARRIED OUT BY AN APPROVED N.A.T.A TESTING AUTHORITY.
7. **ROCK**
THE CONTRACTOR IS TO INCLUDE ROCK EXCAVATION AS PART OF THEIR EARTHWORKS RATES UNLESS SCHEDULED OTHERWISE WITHIN THE CONTRACT DOCUMENT.

8. **DAMS AND PONDS**
WHERE POSSIBLE, WATER FROM DAMS AND PONDS SHALL BE MAINTAINED AND UTILISED FOR CONSTRUCTION PURPOSES AND DUST SUPPRESSION. DAMS AND PONDS NOT TO BE RETAINED SHALL BE DEWATERED, CLEARED OF ANY FOREIGN MATTER AND ORGANIC MATERIAL WITH THIS MATERIAL TO BE REMOVED OFF SITE.
9. **RETAINING STRUCTURES**
THE DESIGN AND STRUCTURAL CERTIFICATION OF RETAINING STRUCTURES SHALL BE UNDERTAKEN BY THE CONTRACTOR’S STRUCTURAL ENGINEER (RPEQ) IN CONSULTATION WITH THE PROJECT’S CIVIL ENGINEER AND LANDSCAPE CONSULTANT. THE CONTRACTOR IS RESPONSIBLE FOR THE SUBMISSION AND APPROVAL COORDINATION OF THE ASSOCIATED DRAWINGS AND CERTIFICATION TO CoGC. A COPY OF THIS SUBMISSION IS TO BE PROVIDED TO THE SUPERINTENDENT.
10. **TOPSOIL REPLACEMENT**
ALL BATTERS AND ALLOTMENT CUT & FILL AREAS SHALL BE TOP SOILED FROM ONSITE STOCKPILES. IF DIRECTED BY THE SUPERINTENDENT THE TOPSOIL SHALL BE SCREENED PRIOR TO PLACING. THE CONTRACTOR SHALL ALLOW IN THEIR RATE FOR SCREENING AND THE DISPOSAL OF REJECT MATERIAL TO TIP OFFSITE INCLUDING ALL FEES. THE CONTRACTOR MUST ENSURE THAT THE STRIPPING SHALL BE UNDERTAKEN IN SUCH A MANNER AS TO AVOID CONTAMINATION BY OVER CUTTING. IF TOPSOIL IS CONTAMINATED BY OVER CUTTING AND DETERMINED NOT SUITABLE FOR REUSE BY THE SUPERINTENDENT, THE CONTRACTOR SHALL BEAR THE COST OF REMOVAL FROM SITE OF ALL CONTAMINATED TOPSOIL AND THE COST TO SUPPLY AND IMPORT SUITABLE TOPSOIL FOR RE–SPREADING.
11. **GRASSING / SEEDING**
ALL CUT & FILL AREAS AND DISTURBED AREAS SHALL BE GRASSED OR SEEDDED TO THE SATISFACTION OF THE SUPERINTENDENT.
12. **STOCKPILES**
ALL MATERIAL/SPOIL ARISING FROM WORKS ON SITE SHALL BE COMPACTED TO AN APPROPRIATE STANDARD WITHIN THE FILL AREAS OF FUTURE STAGES AS NOMINATED BY THE SUPERINTENDENT. THE CONTRACTOR IS NOT TO CREATE STOCKPILES OF SURPLUS MATERIALS UNLESS WRITTEN AUTHORIZATION IS RECEIVED FROM THE SUPERINTENDENT.

SEDIMENT AND EROSION

1. THE OBJECTIVES OF THE EROSION AND SEDIMENT CONTROL PROGRAM ARE:

a. ALLOW STORMWATER TO PASS THROUGH THE SITE IN A CONTROLLED MANNER AT NON–EROSIVE FLOW VELOCITIES.

b. MINIMISE SOIL EROSION FROM WATER AND WIND

c. MINIMISE ADVERSE EFFECTS OF SEDIMENT RUNOFF.

d. MINIMISE OR PREVENT ENVIRONMENTAL HARM ASSOCIATED WITH DISCHARGE FROM THE CONSTRUCTED SITE.

e. ENSURE THAT THE VALUE AND USE OF RESIDENTIAL AND INDUSTRIAL PROPERTIES ADJACENT TO THE DEVELOPMENT ARE NOT DIMINISHED AS A RESULT OF THE MIGRATION OF SEDIMENT FROM THE DEVELOPMENT.
2. THE EROSION AND SEDIMENT CONTROL PROGRAM SHALL COMPLY WITH THE ENVIRONMENTAL BEST ENGINEERING GUIDELINES FOR QUEENSLAND CONSTRUCTION SITES. THE CURRENT INSTITUTION OF ENGINEERS AUSTRALIA AND LOCAL AUTHORITY GUIDELINES. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO CONTROL EROSION AND DOWNSTREAM SEDIMENTATION DURING ALL STAGES OF CONSTRUCTIONS INCLUDING THE MAINTENANCE PERIOD. NOTWITHSTANDING THE FINISHED EARTHWORK DESIGN SHOWN ON THE DRAWINGS THE CONTRACTOR IS RESPONSIBLE TO IMPLEMENT ADDITIONAL SEDIMENT CONTROL MEASURES AND DEVICES USING BEST PRACTICES AS NECESSARY TO MINIMISE THE QUANTITY LEAVING THE SITE DURING CONSTRUCTION AND UPON COMPLETION OF EARTHWORKS.
3. THE CONTRACTOR IS TO FOLLOW CONSTRUCTION PHASE AS OUTLINED IN THE CONSTRUCTION SEQUENCE/SILT MANAGEMENT PROGRAM. ALL SEDIMENT CONTROL DEVICES SHALL BE MONITORED, CLEANED AND/OR REPLACED WHENEVER THE ACCUMULATED SEDIMENT REDUCES THE CAPACITY BY 50%. ALL PERIMETER BANK/SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET. AT ALL TIMES THE CONTRACTOR SHALL MONITOR THE PREVAILING WEATHER CONDITIONS AND PROTECT ANY DOWNSTREAM CONSTRUCTION AND GULLY INLETS. INLETS TO HAVE SILT PROTECTION IN ACCORDANCE WITH KERB INLET PROTECTION DETAIL AT LOCATIONS SHOWN OR AS INDICATED BY THE ENGINEER.
4. PRIOR TO THE COMMENCEMENT OF EARTHWORKS, THE CONTRACTOR IS TO CARRY OUT SOIL TESTING (IF REQUIRED BY SUPERINTENDENT) TO DETERMINE THE DISPERSIVE CHARACTERISTICS OF THE SOIL AND RESULTS TO BE GIVEN TO THE ENGINEERS SO THE FINALIZATION OF THE EROSION AND SEDIMENT CONTROL PLAN CAN BE COMPLETE.
5. TOPSOIL SHALL BE STRIPPED AND STOCKPILED IN LOCATIONS AGREED WITH THE SUPERINTENDENT. CLEARING OF SITE AND STOCKPILE AREAS TO BE AS DIRECTED BY THE SUPERVISING ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING DUST AT ALL TIMES INCLUDING WEEKENDS AND PUBLIC HOLIDAYS.
6. SUITABLE ACCESS SHALL BE PROVIDED TO ALLOW MAINTENANCE OF ALL SEDIMENT CONTROL DEVICES (IT IS TO BE NOTED THAT CLEARING SHALL ONLY OCCUR IN AREAS WHERE THERE IS NO OTHER ALTERNATIVE TO GAIN ACCESS TO THE LOCATION OF THE SEDIMENT CONTROL DEVICES). APPROVAL FOR REMOVAL OF PROTECTED SIZE VEGETATION MUST BE OBTAINED PRIOR TO CLEARING.
7. ROCK BUNDS TO BE PLACED AROUND ALL HEADWALLS DURING CONSTRUCTION.
8. 0.8m TURF IS TO BE PLACED BEHIND ON ALL BATTERS WITHIN PRIVATE OPEN SPACE STEEPER THAN 1:4 UNLESS OTHERWISE NOTED. THE EXTENT OF GRASSING SHALL BE DETERMINED BY THE ENGINEER AND SHALL BE SEEDDED, AS SPECIFIED, WITHIN 7 DAYS OF FINAL TRIMMING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT GRASS STRIKE RATES ARE ACHIEVED AT ON AND OFF MAINTENANCE INSPECTION IN ACCORDANCE WITH COUNCIL REQUIREMENTS.
9. TURF IS TO BE PLACED FROM BACK OF KERB TO ROAD RESERVE BOUNDARY ON ALL ROADS AFTER EARTHWORKS ARE COMPLETE.
10. GEO–FABRIC LINING OF CHANNELS AND CHECK DAMS MAY BE REQUIRED SUBJECT TO THE SITE CONDITIONS.
11. FILLING AND OR MAINTENANCE OF EXISTING AND OR SEDIMENT BASINS MAY REQUIRE FLOCCULATION.
12. BATTERS WITHIN PUBLIC OPEN SPACE TO BE VEGETATED IN ACCORDANCE WITH THE APPROVED OPEN SPACE MANAGEMENT PLAN (OSMP).
13. IT IS THE CONTRACTOR’S RESPONSIBILITY TO CLEAN OUT GPT’S, SEDIMENT FOREBAYS AND ALL OTHER SEDIMENT CONTROL DEVICES DURING CONSTRUCTION AND PRIOR BOTH ON AND OFF MAINTENANCE INSPECTIONS WITH CoGC. THE CONTRACTOR SHALL ALLOW FOR THE COST OF THESE WORKS WITHIN THEIR SUBMITTED TENDER PRICE.

CONSTRUCTION SEQUENCE/SILT MANAGEMENT PROGRAM

1. **PRE START**

a. ERECT SITE SIGNAGE, CONSTRUCT ENTRY AND EXIT POINT AS INDICATED CONSTRUCT VEHICLE WASH–DOWN AREA AND ASSOCIATED SILT MANAGEMENT DEVICES.

b. CONSTRUCT SITE OFFICE AND STORAGE COMPOUND AREA

c. ERECT SILT FENCE AT LOW POINTS OF THE SITE AS DEMONSTRATED

d. ERECT TEMPORARY TREE PROTECTION FENCING FOR VEGETATION TO BE RETAINED IN ACCORDANCE WITH AN OPW (TREE CLEARING) APPROVAL OR IN ACCORDANCE WITH AS4970 PROTECTION OF TREES ON DEVELOPMENT SITE.

e. CONSTRUCT ROCK CHECK DAMS AND SILT FENCE DOWN STREAM OF BASIN.

f. CONSTRUCT BASIN TO FULL DEPTH.

g. CONSTRUCT BALANCE OF BASIN IN CONJUNCTION WITH CLEARING AND BULK EARTHWORKS OPERATIONS.

h. BASIN TO BE UTILISED AS A TEMPORARY SEDIMENT BASIN. DO NOT FILL IN FILTRATION MATERIAL UNTIL CONSTRUCTION OF DEVELOPMENT IS COMPLETE.
2. **CLEARING AND BULK EARTHWORKS**
THERE SHALL BE NO CLEARING OF PROTECTED SITE VEGETATION WITHOUT AN APPROVED TREE CLEARING PLAN WHICH SHALL BE IN ACCORDANCE WITH AS4970. SILT FENCE, SAND BAGS AND EARTH RILLS WITHIN ROADS TO BE ERECTED AS INDICATED OR REQUIRED DURING CLEARING & EARTHWORKS. SUPERINTENDENT TO CONFIRM THE EXTENT OF CLEARING PRIOR TO COMMENCEMENT OF WORKS.
3. **CONSTRUCTION OF SEWER/ROOFWATER / STORMWATER /SERVICES**
EXCAVATED MATERIAL TO BE PLACED ON HIGH SIDE OF TRENCH AND TO PROTECT PIPE WORK AND DIRECT SURFACE MATERIAL AWAY FROM EXCAVATIONS. TOPSOIL AND GRASS SEED AREAS IN ALLOTMENTS IMMEDIATELY AFTER COMPLETING THE SEWER AND ROOFWATER DRAINAGE CONSTRUCTION. DEPRESS GROUND AROUND TEMPORARY FIELD INLETS TO CREATE SILT POND.
4. **CONSTRUCTION – SEDIMENT BASINS**
SEDIMENT BASIN TO BE CONSTRUCTED TO THE EARTHWORK PROFILES SHOWN. STORMWATER OUTLET PIPES TO BE TEMPORARY BLOCKED OFF UNTIL DECOMMISSIONING OF SEDIMENT BASIN (SUBSEQUENT TO CONSTRUCTION OF ALL STAGES). PLACE SPOIL FROM SEDIMENT BASIN INTO ALLOCATED AREAS AS ENGINEERED FILL IN ACCORDANCE WITH THE STAGING ORDER. SEDIMENT BASIN SHALL ONLY BE REMOVED AFTER APPROVAL BY SUPERINTENDENT AND COUNCIL.
5. **CONSTRUCTION – STOCKPILING**
TEMPORARY SILT FENCE TO BE ERECTED 5m FROM TOE OF BATTER ON LOW SIDE OF STOCKPILING. STOCKPILE SITE TO BE CLEARED OF ADJACENT PROPERTY BOUNDARIES SO AS NOT TO CAUSE NUISANCE TO ADJOINING PROPERTIES. NO STOCKPILES ARE TO BE LOCATED WITHIN THE DRIP ZONE OR STRUCTURAL ROOT ZONE OF ANY RETAINED VEGETATION.
6. **CONSTRUCTION – ROADWORKS**
SILT FENCES TO ALLOTMENTS TO BE ERECTED. KERB INLET PROTECTION TO BE PROVIDED TO ALL GULLIES.
7. **CONSTRUCTION – ALLOTMENTS**
TOPSOIL AND SEED ALLOTMENTS. SILT FENCES TO ALLOTMENTS TO BE RE–ERECTED. COVERS TO GULLY GRATES TO BE REMOVED IF THE SUPERINTENDENT INDICATE THE GRASS STRIKE IS SUFFICIENT (80% WITHIN 30 CALENDAR DAYS OF FINAL ALLOTMENT RIMMING).
8. **POST CONSTRUCTION – ALLOTMENTS**
TOPSOIL AND GRASS SEED ALL ALLOTMENTS. COVERS TO GULLY GRATES TO BE REMOVED IF THE SUPERINTENDENT INDICATES THE GRASS STRIKE IS SUFFICIENT (80% WITHIN 30 CALENDAR DAYS OF FINAL ALLOTMENT TRIMMING).
9. **POST CONSTRUCTION – BASIN**
BASIN TO CONTINUE ACTING AS SEDIMENT BASIN UNTIL COMPLETION OF ALL STAGES.
10. **POST CONSTRUCTION – ROAD RESERVES**
TOPSOIL AND TURFING IS TO BE PROVIDED BEHIND KERB.
11. **MAINTENANCE (PRE TO POST CONSTRUCTION)**
THE SILT FENCES ARE TO BE INSPECTED WEEKLY. ANY REPAIRS REQUIRED ARE TO BE EFFECTED IMMEDIATELY. SILT AFTER RAIN IS TO BE CLEANED FROM STREETS AND ALLOTMENTS IMMEDIATELY AND CORRECTIVE ACTION TAKEN TO AVOID A RE–OCCURRENCE OF THE FAILURE.
12. **BASIN CONSTRUCTION**
PRIOR TO COMMENCING CONSTRUCTION OF THE DETENTION BASIN THE DIVERSION OF SURFACE WATER FROM THE PROPOSED WORK AREAS, USING MEASURES SUCH AS OPEN DRAINS/SUMPS, ARE REQUIRED TO AID IN SITE DE–WATERING. BASIN TO CONTINUE ACTING AS SEDIMENT BASIN UNTIL 85% OF CATCHMENT CONSTRUCTION IS COMPLETE. THE CLAY FILLING FOR THE BASIN WALLS SHALL BE PLACED IN HORIZONTAL LAYERS OF 200mm THICKNESS AND COMPACTED TO DENSITY RATIO WITHIN THE RANGE 98%–102% STANDARD COMPACTION (AS 1289.5.1.1). PLACEMENT MOISTURE CONTENT SHOULD BE WITHIN THE RANGE OMC –1% TO OMC –2% (WHERE OMC = OPTIMUM MOISTURE CONTENT FOR STANDARD COMPACTION). CONTRACTOR TO PROVIDE SAFETY FENCING TO BASIN DURING CONSTRUCTION AND APPROPRIATE SIGNAGE (PERMANENT OR TEMPORARY).



HES BASIN GENERAL NOTES

AUTO DOSER

1. PROVIDED AS EITHER 'FLOC BOX' OR 'FOD-RAIN' DOSING UNIT OR APPROVED EQUIVALENT TO MANUFACTURERS SPECIFICATION.
2. DOSER AND SUPPLY OF FLOCCULANT TO BE PROVIDED ON LEVEL PAD 4mX4m WITHIN 10m OF DOSING POINT.
3. ALL-WEATHER ACCESS TRACK TO BE PROVIDED TO DOSER.
4. FLOCCULANT PROVIDED AS TURBICLEAR (ACH) OR APPROVED EQUIVALENT. IF ALTERNATIVE FLOCCULANT USED THEN THE BASIN SIZE IS TO BE INCREASED ACCORDING TO JAR SETTLEMENT TEST (REFER TO TABLE BELOW).

JAR SETTLEMENT AFTER 15 MINS	MULTIPLICATION FACTOR TO SETTLING ZONE
(mm)	VOLUME
50	x3.0
75	x2.0
100	x1.5
150	x1.0

BASIN CONSTRUCTION

MATERIALS

5. EARTH FILL: CLEAN SOIL WITH EMERSION CLASS 2(1), 3, 4 OR 5 AND FREE OF ROOTS, WOODY VEGETATION, ROCKS AND OTHER UNSUITABLE MATERIAL. SOIL WITH EMERSION CLASS 4 AND 5 MAY NOT BE SUITABLE DEPENDING ON PARTICLE SIZE DISTRIBUTION AND DEGREE OF DISPERSION. CLASS 2 (1) SHOULD ONLY BE USED UPON RECOMMENDATION FROM GEOTECHNICAL SPECIALIST.
6. SPILLWOCK ROCK: HARD, ANGULAR, DURABLE, WEATHER RESISTANT AND EVENLY GRADED ROCK WITH 50% BY WEIGHT LARGER THAN THE SPECIFIED NOMINAL (D50) ROCK SIZE. LARGE ROCK SHOULD DOMINATE, WITH SUFFICIENT SMALL ROCK TO FILL THE VOIDS BETWEEN LARGER ROCK. THE DIAMETER OF THE LARGEST ROCK SHOULD BE NO LARGER THAN 1.5 TIMES THE NOMINAL ROCK SIZE. THE SPECIFIC GRAVITY SHOULD BE AT LEAST 2.5.
7. GEOTEXTILE FABRIC: HEAVY DUTY, NEEDLE-PUNCHED, NON-WOVEN FLOCK, MINIMUM 'BIDIM' A24 OR EQUIVALENT.

CONSTRUCTION

8. NOTWITHSTANDING ANY DESCRIPTION CONTAINED WITH APPROVED PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR SATISFYING THEMSELVES AS TO THE NATURE AND EXTENT OF THE SPECIFIED WORKS AND THE PHYSICAL AND LEGAL CONDITIONS UNDER WHICH THE WORKS WILL BE CARRIED OUT. THIS SHALL INCLUDE MEANS OF ACCESS, EXTENT OF CLEARING, NATURE OF THE MATERIALS TO BE EXCAVATED, TYPE AND SIZE OF MECHANICAL PLANT REQUIRED, LOCATION AND SUITABILITY OF WATER SUPPLY FOR CONSTRUCTION AND TESTING PURPOSES, AND ANY OTHER LIKELY MATTERS AFFECTING THE CONSTRUCTION OF THE WORKS.
9. REFER TO APPROVED PLANS FOR LOCATION, DIMENSIONS, AND CONSTRUCTION DETAILS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, DIMENSIONS, OR METHOD OF INSTALLATION, CONTACT THE ENGINEER OR RESPONSIBLE ON-SITE OFFICER FOR ASSISTANCE.
10. BEFORE STARTING ANY CLEARING OR CONSTRUCTION, ENSURE ALL THE NECESSARY MATERIALS AND COMPONENTS ARE ON THE SITE TO AVOID DELAYS IN COMPLETING THE SEDIMENT BASIN ONCE WORKS BEGIN.
11. INSTALL REQUIRED SHORT TERM SEDIMENT CONTROL MEASURES DOWNSTREAM OF THE PROPOSED EARTHWORKS TO CONTROL SEDIMENT RUNOFF DURING CONSTRUCTION OF THE BASIN.
12. THE AREA TO BE COVERED BY THE EMBANKMENT, BORROW PITS AND INCIDENTAL WORKS, TOGETHER WITH AN AREA EXTENDING BEYOND THE LIMITS OF EACH FOR A DISTANCE NOT EXCEEDING FIVE (5) METRES ALL AROUND MUST BE CLEARED OF ALL TREES, SCRUB, STUMPS, ROOTS, DEAD TIMBER AND RUBBISH AND DISPOSED OF IN A SUITABLE MANNER. DELAY CLEARING THE MAIN BASIN AREA UNTIL THE EMBANKMENT IS COMPLETE.
13. ENSURE ALL HOLES MADE BY GRUBBING WITHIN THE EMBANKMENT FOOTPRINT ARE FILLED WITH SOUND MATERIAL, ADEQUATELY COMPACTED, AND FINISHED FLUSH WITH THE NATURAL SURFACE.

CUT-OFF TRENCH

14. BEFORE CONSTRUCTION OF THE CUT-OFF TRENCH OR ANY ANCILLARY WORKS WITHIN THE EMBANKMENT FOOTPRINT, ALL GRASS GROWTH AND TOPSOIL MUST BE REMOVED FROM THE AREA TO BE OCCUPIED BY THE EMBANKMENT AND MUST BE DEPOSITED CLEAR OF THIS AREA AND RESERVED FOR TOPDRESSING THE COMPLETED EMBANKMENT.

15. EXCAVATE A CUT-OFF TRENCH ALONG THE CENTRE LINE OF THE EARTH FILL EMBANKMENT. CUT THE TRENCH TO STABLE SOIL MATERIAL, BUT IN NO CASE MAKE IT LESS THAN 600mm DEEP. THE CUT-OFF TRENCH MUST EXTEND INTO BOTH ABUTMENTS TO AT LEAST THE ELEVATION OF THE OUTLET SPILLWAY CREST. MAKE THE MINIMUM BOTTOM WIDTH WIDE ENOUGH TO PERMIT OPERATION OF THE EXCAVATION AND COMPACTION EQUIPMENT, BUT IN NO CASE LESS THAN 600mm. MAKE THE SIDE SLOPES OF THE TRENCH NO STEEPER THAN 1:2 (H: V).
16. ENSURE ALL WATER, LOOSE SOIL, AND ROCK ARE REMOVED FROM THE TRENCH BEFORE BACKFILLING COMMENCES. THE CUT-OFF TRENCH MUST BE BACKFILLED WITH SELECT EARTH—FILL OF THE TYPE SPECIFIED FOR THE EMBANKMENT, AND THIS SOIL MUST HAVE A MOISTURE CONTENT AND DEGREE OF COMPACTION THE SAME AS SPECIFIED FOR THE CORE ZONE.
17. MATERIAL EXCAVATED FROM THE CUT-OFF TRENCH MAY BE USED IN THE CONSTRUCTION OF THE EMBANKMENT PROVIDED IT IS SUITABLE AND IT IS PLACED IN THE CORRECT ZONE ACCORDING TO ITS CLASSIFICATION.

EMBANKMENT

18. SCARIFY AREAS ON WHICH FILL IS TO BE PLACED BEFORE PLACING THE FILL.
19. ENSURE ALL FILL MATERIAL USED TO FORM THE EMBANKMENT MEETS THE SPECIFICATIONS CERTIFIED BY A SOIL SCIENTIST OF GEOTECHNICAL SPECIALIST.
20. THE FILL MATERIAL MUST CONTAIN SUFFICIENT MOISTURE SO IT CAN BE FORMED BY HAND INTO A BALL WITHOUT CRUMBLING. IF WATER CAN BE SQUEEZED OUT OF THE BALL, IT IS TOO WET FOR PROPER COMPACTION. PLACE FILL MATERIAL IN 150 to 200mm CONTINUOUS LAYERS OVER THE ENTIRE LENGTH OF THE FILL AREA AND THEN COMPACT BEFORE PLACEMENT OF FURTHER FILL.
21. UNLESS SPECIFIED ON THE APPROVED PLANS, COMPACT THE SOIL AT ABOUT 1% TO 2% WET OPTIMUM AND TO 95% MODIFIED OR 100% STANDARD COMPACTION.
22. WHERE BOTH DISPERSIVE AND NON-DISPERSIVE CLASSIFIED EARTH-FILL MATERIALS ARE AVAILABLE, NON-DISPERSIVE EARTH-FILL MUST BE USED IN THE CORE ZONE. THE REMAINING CLASSIFIED EARTH-FILL MATERIALS MUST ONLY BE USED AS DIRECTED BY THE SITE SUPERINTENDENT.
23. WHERE SPECIFIED, CONSTRUCT THE EMBANKMENT TO AN ELEVATION 10% HIGHER THAN THE DESIGN HEIGHT TO ALLOW FOR SETTLING; OTHERWISE FINISHED DIMENSIONS OF THE EMBANKMENT AFTER SPREADING OF TOPSOIL MUST CONFORM TO THE DRAWING WITH A TOLERANCE OF 75mm FROM SPECIFIED DIMENSIONS.
24. ENSURE DEBRIS AND OTHER UNSUITABLE BUILDING WASTE IS NOT PLACED WITHIN THE EARTH EMBANKMENT.
25. AFTER COMPLETION OF THE EMBANKMENT ALL LOOSE UNCOMPACTED EARTH-FILL MATERIAL ON THE UPSTREAM AND DOWNSTREAM BATTER MUST BE REMOVED PRIOR TO SPREADING TOPSOIL.
26. TOPSOIL AND RE-VEGETATE/STABILISE ALL EXPOSED EARTH AS DIRECTED WITHIN THE APPROVED PLANS.

ESTABLISHING THE SETTLING POND

27. THE AREA TO BE COVERED BY THE STORED WATER OUTSIDE OF THE LIMITS OF THE BORROW PITS MUST BE CLEARED OF RUBBISH. TREES MUST BE CUT DOWN STUMP HIGH AND REMOVED FROM THE IMMEDIATE VICINITY OF THE WORK.
28. ESTABLISH ALL REQUIRED INFLOW CHUTES AND INLET BAFFLES IF SPECIFIED TO ENABLE WATER TO DISCHARGE INTO THE BASIN IN A MANNER THAT WILL NOT CAUSE SOIL EROSION OR THE RE-SUSPENSION OF SETTLED SEDIMENT.
29. INSTALL A SEDIMENT STORAGE LEVEL MARKER POST WITH A CROSS MEMBER SET JUST BELOW THE TOP OF THE SEDIMENT STORAGE ZONE (AS SPECIFIED ON THE APPROVED PLANS). USE AT LEAST A 75mm WIDE POST FIRMLY SET INTO THE BASIN FLOOR.
30. IF SPECIFIED, INSTALL INTERNAL SETTLING POND BAFFLES. ENSURE THE CREST OF THESE BAFFLES IS SET LEVEL WITH, OR JUST BELOW, THE ELEVATION OF THE EMERGENCY SPILLWAY.
31. INSTALL ALL APPROPRIATE MEASURES TO MINIMISE SAFETY RISK TO ON-SITE PERSONNEL AND THE PUBLIC CAUSED BY THE PRESENCE OF THE SETTLING POND. AVOID STEEP, SMOOTH INTERNAL SLOPES. APPROPRIATELY FENCE THE SETTLING POND AND POST WARNING SIGNS IF UNSUPERVISED PUBLIC ACCESS IS LIKELY OR THERE IS CONSIDERED TO BE AN UNACCEPTABLE RISK TO THE PUBLIC.

SPILLWAY CONSTRUCTION

32. THE SPILLWAY MUST BE EXCAVATED AS SHOWN ON THE PLANS, AND THE EXCAVATED MATERIAL IF CLASSIFIED AS SUITABLE, MUST BE USED IN THE EMBANKMENT, AND IF NOT SUITABLE IT MUST BE DISPOSED OF INTO SPOIL HEAPS.
33. ENSURE EXCAVATED DIMENSIONS ALLOW ADEQUATE BOXING--OUT SUCH THAT THE SPECIFIED ELEVATIONS, GRADES, CHUTE WIDTH, AND ENTRANCE AND EXIT SLOPES FOR THE EMERGENCY SPILLWAY WILL BE ACHIEVED AFTER PLACEMENT OF THE ROCK OR OTHER SCOUR PROTECTION MEASURES AS SPECIFIED IN THE PLANS.
34. PLACE SPECIFIED SCOUR PROTECTION MEASURES ON THE EMERGENCY SPILLWAY. ENSURE THE FINISHED GRADE BLENDS WITH THE SURROUNDING AREA TO ALLOW A SMOOTH FLOW TRANSITION FROM SPILLWAY TO DOWNSTREAM CHANNEL.
35. IF A SYNTHETIC FILTER FABRIC UNDERLAY IS SPECIFIED, PLACE THE FABRIC DIRECTLY ON THE PREPARED FOUNDATION. IF MORE THAN A SHEET OF FILTER FABRIC IS REQUIRED, OVERLAP THE EDGES BY AT LEAST 300mm AND PLACE ANCHOR PINS AT MINIMUM 1m SPACING ALONG THE OVERLAP. BURY THE UPSTREAM END OF THE FILTER FABRIC A MINIMUM 300mm BELOW GROUND AND WHERE NECESSARY, BURY THE LOWER END OF THE FABRIC OR OVERLAP A MINIMUM 300mm OVER THE NEXT DOWNSTREAM SECTION AS REQUIRED. ENSURE THE FILTER FABRIC EXTENDS AT LEAST 1000mm UPSTREAM OF THE SPILLWAY CREST.
36. TAKE CARE NOT TO DAMAGE THE FABRIC DURING OR AFTER PLACEMENT. IF DAMAGE OCCURS, REMOVE THE ROCK AND REPAIR THE SHEET BY ADDING ANOTHER LAYER OF FABRIC WITH A MINIMUM OVERLAP OF 300mm AROUND THE DAMAGED AREA. IF EXTENSIVE DAMAGE IS SUSPECTED, REMOVE AND REPLACE THE ENTIRE SHEET.
37. WHERE LARGE ROCK IS USED, OR MACHINE PLACEMENT IS DIFFICULT, A MINIMUM 100mm LAYER OF FINE GRAVEL, AGGREGATE, OR SAND MAY BE NEEDED TO PROTECT THE FABRIC.
38. PLACEMENT OF ROCK SHOULD FOLLOW IMMEDIATELY AFTER PLACEMENT OF THE FILTER FABRIC. PLACE ROCK SO THAT IT FORMS A DENSE, WELL GRADED MASS OF ROCK WITH A MINIMUM OF VOIDS. THE DESIRED DISTRIBUTION OF ROCK THROUGHOUT THE MASS MAY BE OBTAINED BY SELECTIVE LOADING AT THE QUARRY AND CONTROLLED DUMPING DURING FINAL PLACEMENT.
39. THE FINISHED SLOPE SHOULD BE FREE OF POCKETS OF SMALL ROCK OR CLUSTERS OF LARGE ROCKS. HAND PLACING MAY BE NECESSARY TO ACHIEVE THE PROPER DISTRIBUTION OF ROCK SIZES TO PRODUCE A RELATIVELY SMOOTH, UNIFORM SURFACE. THE FINISHED GRADE OF THE ROCK SHOULD BLEND WITH THE SURROUNDING AREA. NO OVER FALL OR PROTRUSION OF ROCK SHOULD BE APPARENT.
40. ENSURE THAT THE FINAL ARRANGEMENT OF THE SPILLWAY CREST WILL NOT PROMOTE EXCESSIVE FLOW THROUGH THE ROCK SUCH THAT THE WATER CAN BE RETAINED WITHIN THE SETTLING BASIN AT THE ELEVATION NO LESS THAN 50mm ABOVE OF BELOW THE NOMINATED SPILLWAY CREST ELEVATION.

	OVERLAND FLOW PATH/SWALE
	CATCH DRAIN (NOT LINED)
	DIVERSION CHANNEL
	TABLE DRAIN
	STREAM INVERT
	CATCH DRAIN (CONCRETE LINED)
	SUBSOIL DRAINAGE
	SAWCUT
	SEDIMENT FENCE
	CHAINWIRE FENCE
	WOODEN FENCE
	BRIVEN WIRE SAFETY BARRIER
	GUARDRAIL (STANDARD)
	RETAINING WALL (PILED)
	RETAINING WALL (WITH FOOTINGS)
	RETAINING WALL
	ROCKBLOCK RETAINING WALL
	TOP OF BATTER / BERM
	NOISE WALL
	EDGE OF VEGETATION
	PROPERTY LINE
	PROPERTY LINE WITH FENCE
	PROPOSED KERB, FOOTPATH
	CONTROL LINE / CENTER OF ROAD
	RAILWAY (MAJOR)
	RAILWAY (MINOR)
	EXISTING PROPERTY LINE
	EXISTING PROPERTY LINE WITH FENCE
	EXISTING KERB, FOOTPATH
	EXISTING EDGE OF BITUMEN
	EXISTING RAILWAY (MAJOR)
	EXISTING RAILWAY (MINOR)
	LIMIT OF WORKS
	LIMIT OF SITE
	CATCHMENT BOUNDARY
	EXISTING CONTOURS
	DESIGN CONTOURS

RM	RM	RM	PROPOSED RISING MAIN
S	S	S	PROPOSED SEWER
SW	SW	SW	PROPOSED STORMWATER
SW	SW	SW	PROPOSED ROOFWATER
SS	SS	SS	PROPOSED ROOFWATER
SS	SS	SS	PROPOSED SUBSOIL
W	W	W	PROPOSED WATER
RW	RW	RW	PROPOSED RECYCLED WATER
OIL	OIL	OIL	PROPOSED OIL
F	F	F	PROPOSED FUEL
G	G	G	PROPOSED GAS
P	P	P	PROPOSED PIPELINE
HV	HV	HV	PROPOSED HIGH VOLTAGE ELECTRICITY
E	E	E	PROPOSED UNDERGROUND ELECTRICITY
E	E	E	PROPOSED OVERHEAD ELECTRICITY
L	L	L	PROPOSED LIGHTING
T	T	T	PROPOSED TELSTRA
C	C	C	PROPOSED COMMUNICATIONS
GE	GE	GE	PROPOSED GAS, ELECT
GT	GT	GT	PROPOSED GAS, TELSTRA
ET	ET	ET	PROPOSED ELECT, TELSTRA
GET	GET	GET	PROPOSED GAS, ELECTRICITY, TELSTRA
RM	RM	RM	EXISTING RISING MAIN
S	S	S	EXISTING SEWER
SW	SW	SW	EXISTING STORMWATER
SW	SW	SW	EXISTING ROOFWATER
SS	SS	SS	EXISTING SUBSOIL
W	W	W	EXISTING WATER
RW	RW	RW	EXISTING RECYCLED WATER
OIL	OIL	OIL	EXISTING OIL
F	F	F	EXISTING FUEL
G	G	G	EXISTING GAS
P	P	P	EXISTING PIPELINE
HV	HV	HV	EXISTING HIGH VOLTAGE ELECTRICITY
E	E	E	EXISTING UNDERGROUND ELECTRICITY
E	E	E	EXISTING OVERHEAD ELECTRICITY
L	L	L	EXISTING LIGHTING
T	T	T	EXISTING TELSTRA
C	C	C	EXISTING COMMUNICATIONS
GE	GE	GE	EXISTING GAS, ELECT
GT	GT	GT	EXISTING GAS, TELSTRA
ET	ET	ET	EXISTING ELECT, TELSTRA
GET	GET	GET	EXISTING GAS, ELECTRICITY, TELSTRA

— RM — X — RM — X — RM — X — RM — X —	DEMOLISH RISING MAIN
— S — X — S — X — S — X — S — X —	DEMOLISH SEWER
— SW — X — SW — X — SW — X — SW — X —	DEMOLISH STORMWATER
— SS — X — SS — X — SS — X — SS — X —	DEMOLISH SUBSOIL
— W — X — W — X — W — X — W — X —	DEMOLISH WATER
— OIL — X — OIL — X — OIL — X — OIL — X —	DEMOLISH OIL
— F — X — F — X — F — X — F — X — F — X —	DEMOLISH FUEL
— HV — X — HV — X — HV — X — HV — X —	DEMOLISH HIGH VOLTAGE ELECTRICITY
— E — X — E — X — E — X — E — X — E — X —	DEMOLISH UNDERGROUND ELECTRICITY
— E — X — E — X — E — X — E — X — E — X —	DEMOLISH OVERHEAD ELECTRICITY
— L — X — L — X — L — X — L — X — L — X —	DEMOLISH LIGHTING
— G — X — G — X — G — X — G — X — G — X —	DEMOLISH GAS
— P — X — P — X — P — X — P — X — P — X —	DEMOLISH PIPELINE
— T — X — T — X — T — X — T — X — T — X —	DEMOLISH TELSTRA
— C — X — C — X — C — X — C — X — C — X —	DEMOLISH COMMUNICATIONS

BK(A)	BARRIER KERB (A)
BK(B)	BARRIER KERB (B)
BK(G)	BARRIER KERB (G)
MK(D)	MOUNTABLE KERB (D)
SMK(C)	SEMI MOUNTABLE KERB (C)
ER(E)	EDGE RESTRAINT (E)
KER(F)	KERB EDGE RESTRAINT (F)
RK&C(H)	ROLL TOP KERB & CHANNEL (H)
BK&C(J)	BARRIER KERB & CHANNEL (J)
ERH	KERB EDGE RESTRAINT (HIGH)
ERL	KERB EDGE RESTRAINT (LOW)
CS(K/L)	CHANNEL SECTION (K/L)
PMB	PRECAST MOTOR BED
DD	DISH DRAIN
K&G	KERB AND GUTTER
K&T	KERB AND TOE
KO	KERB ONLY
MK	MOUNTABLE KERB
RK	ROLL KERB
	EXISTING SIGN
	PROPOSED SIGN
	PROPOSED ROAD EDGE GUIDE POST
	EXISTING BIN
	POST BOX
	TELEPHONE BOX
	TELSTRA PIT
	TELSTRA MARKER POST
	WATER METER
	WATER VALVE
	FIRE HYDRANT
	WATER TAP
	WATER HYDRANT
	WATER TEE
	WATER REDUCER
	WATER ENDCAP
	WATER CONNECTION
	WATER CROSSING
	WATER DIEL
	SEWER MANHOLE
	SEWER RODDING END
	SEWER BEND
	SEWER MAINTENANCE SHAFT
	SEWER 'T' END
	SEWER SLUICE VALVE
	SEWER PIT
	SEWER PUMP STATION
	TEMPORARY SEWER PUMP STATION
	SEWER / STORMWATER PIT NO/LINE
	SETOUT POINT
	OFFSET PIT WITH GRATE
	IN LINE PIT WITH GRATE
	JUNCTION PIT
	LETTERBOX PIT
	GRATED INLET PIT
	MANHOLE
	GULLY PIT (LIP INLINE) BARRIER KERB
	GULLY PIT (LIP INLINE) BARRIER KERB
	GULLY PIT (LIP INLINE) ROLL TOP KERB
	GULLY PIT (LIP INLINE) ROLL TOP KERB
	GULLY PIT (KERB INLINE) – GRADE
	GULLY PIT (KERB INLINE) – SAG
	INFILTRATION TRENCH
	HEADWALL
	GROSS POLLUTANT TRAP
	STORMWATER CHAMBER

	POWER POLE
	POWER POLE WITH LIGHT
	LIGHT POLE
	STAY POLE
	LIGHT POLE WITH EXTENSION
	ELECTRICAL INSPECTION BOX
	ELECTRICAL POLE
	ELECTRICAL TURRET
	TRAFFIC SIGNAL
	MAIN ROADS PIT
	TANGENT POINT
	KERB RETURN NO.
	PRAM RAMP
	GRAVEL ROCK CHECK DAM
	MESH & GRAVEL INLET FILTER
	STORMWATER INLET FILTER
	DIRECTION OF OVERLAND FLOW
	VEHICLE SHAKEDOWN
	GATE
	NOT IN SCOPE OF WORKS
	DEMOLITION
	PROPOSED CONCRETE FOOTPATH
	SCOUR PROTECTION
	TREES
	TADPOLE

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VantageYatala
STAGE 2

THIS DRAWING IS INTENDED TO
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Lot:	502
Plan:	SP316137
Local Authority:	CITY OF GOLD COAST COUNCIL
Level Datum:	AHD
Meridian:	-
Contour Interval:	-
PSM:	-
RL:	-

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LEGEND

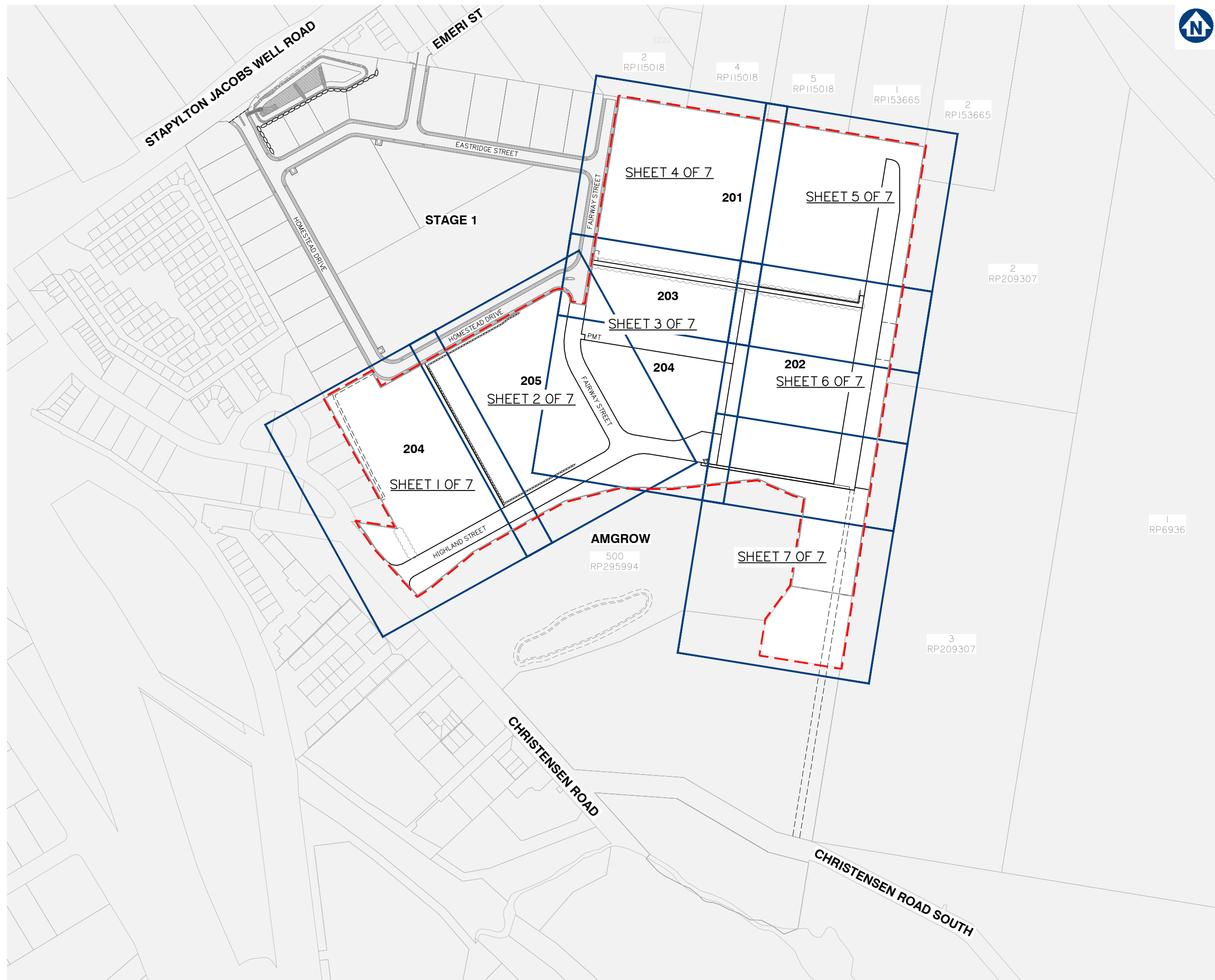
B	10/01/22	INFORMATION REQUEST RESPONSE	DV	MC
A	2011/20	ORIGINAL ISSUE	BA	MC
Issue	Date	Description	DRN	CH

Scale at A1:	NTS
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Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	24-09-2021

Rev. No:
B

LEGEND



Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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RPD:

Lot:	501
Plan:	SP295994
Local Authority:	CITY OF GOLD COAST COUNCIL
Level Datum:	AHD
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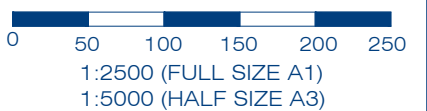
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DRAWING TITLE

KEY PLAN LAYOUT

E	18/05/22	BOUNDARY ALIGNMENT LOT 201			LAB MG
D	1/01/22	BOUNDARY FOR LOT 205/206 CHANGED			DV MG
C	24/09/21	EXTENT OF STAGE 2 EARTHWORKS REDUCED			IG MG
B	31/01/21	INFORMATION REQUEST RESPONSE			IG MG
A	2011/20	ORIGINAL ISSUE			BA MG
Issue	Date	Description		DRN	CHK

SCALE IN METRES

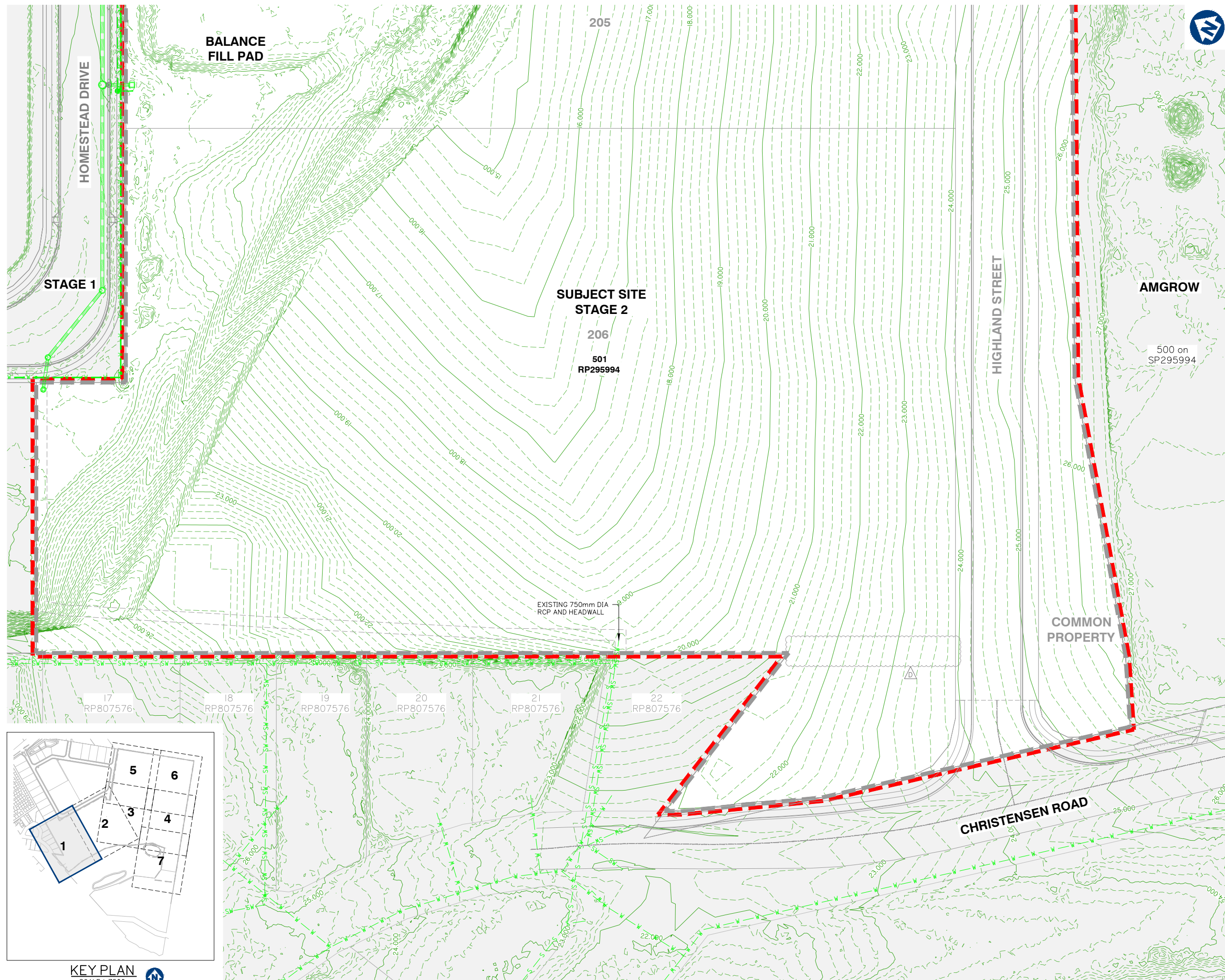


Scale at A1: 1:2500

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	18-05-2022

Drawing No:
5941 ENG BE2 005

Rev. No:
E

KEY PLAN
SCALE 1: 7500

EXISTING SURFACE AND FEATURES PLAN SHEET 1 OF 7

Client:

FRASERS PROPERTY
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Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207THIS DRAWING IS INTENDED TO
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Plan:	SP316137
Local Authority:	CITY OF GOLD COAST COUNCIL
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DRAWING TITLE
EXISTING SURFACE
AND FEATURES PLAN
SHEET 1 OF 7

D	23/05/22	LOT 201 BOUNDARY ALIGNMENT	LAB	MG	
C	10/02/22	LOT BOUNDARY FOR 205/206 MOVED	DV	MG	
B	24/09/21	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG	
A	20/11/20	ORIGINAL ISSUE	BA	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES

1:500 (FULL SIZE A1)
1:1000 (HALF SIZE A3)

Scale at A1: 1:500

Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	23-05-2022

Drawing No:
5941 ENG BE2 010Rev. No:
D



Project: **VantageYatala**
STAGE 2

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Level Datum:	AHD
Meridian:	-
Contour Interval:	-
PSM:	-
RI :	-

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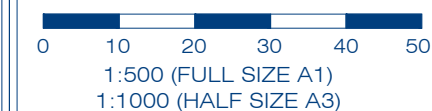
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DRAWING TITLE
EXISTING SURFACE
AND FEATURES PLAN
SHEET 2 OF 7

G	10/02/22	LOT BOUNDARY FOR 205/206 MOVED			DV MG
B	24/09/21	EXTENT OF STAGE 2 EARTHWORKS REDUCED			JG MG
A	20/11/20	ORIGINAL ISSUE			BA MG
Issue	Date	Description			DRN CHN

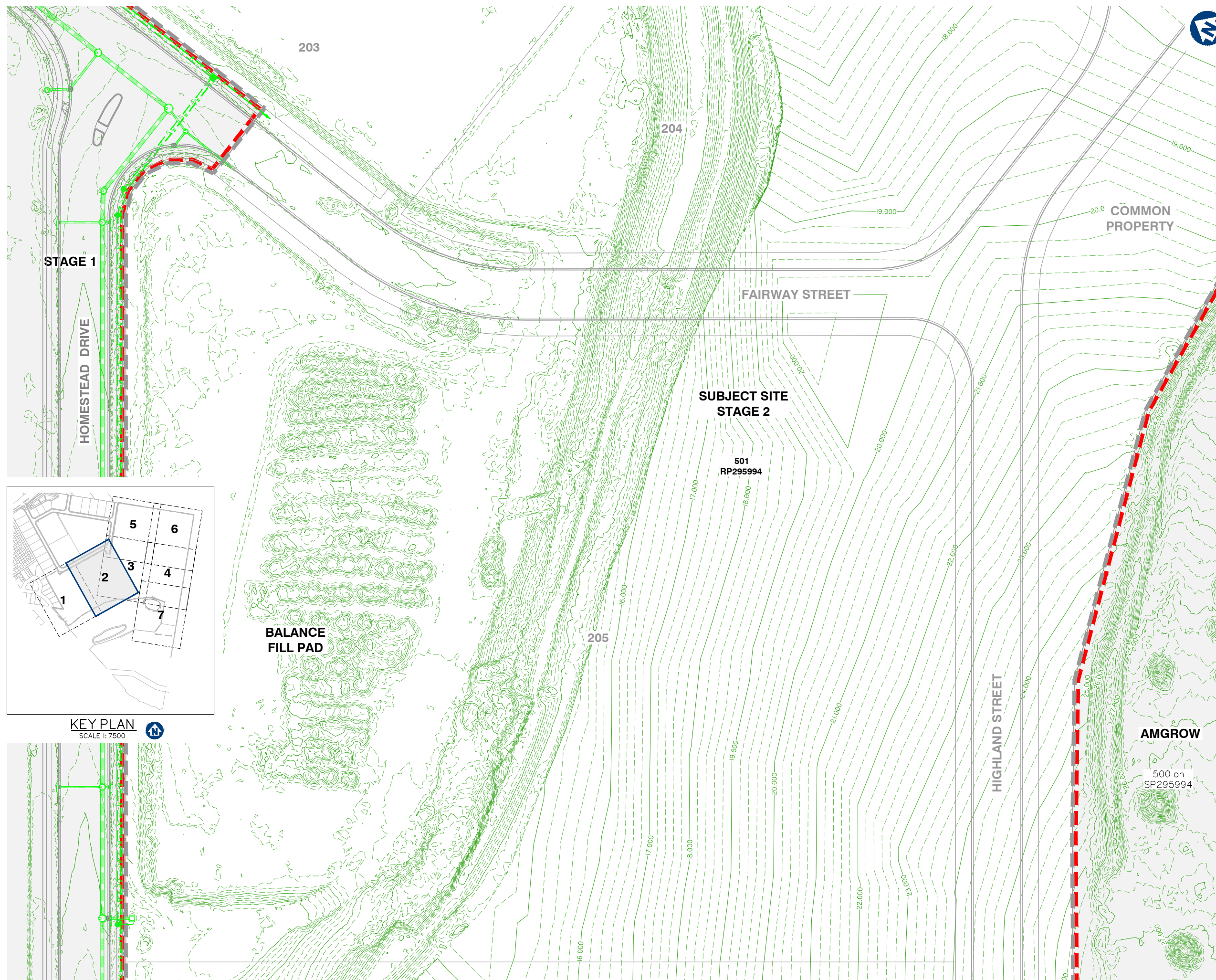
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Approved:	MG
RPEQ:	16939
Signed:	
Date:	10-02-2022

Drawing No:	Rev. No:
5941 ENG BE2 011	C





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VantageYatala
STAGE 2

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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Lot: 502
Plan: SP316137
Local Authority: CITY OF GOLD COAST
COUNCIL
Level Datum: AHD
Meridian: -
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DRAWING TITLE
EXISTING SURFACE
AND FEATURES PLAN
SHEET 3 OF 7

C	23/05/22	LOT 201/207 BOUNDARY ALIGNMENT	LAB	MO	
B	24/06/21	EXTENT OF STAGE 2 EARTHWORKS REDUCED	JG	MG	
A	2011/20	ORIGINAL ISSUE	BA	MG	
ISSUE	Date	Description	DRN	CHN	

SCALE IN METRES



1:500 (FULL SIZE A1)
1:1000 (HALF SIZE A3)

Scale at A1: 1:500

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Drafted:	IG / BA / LAB

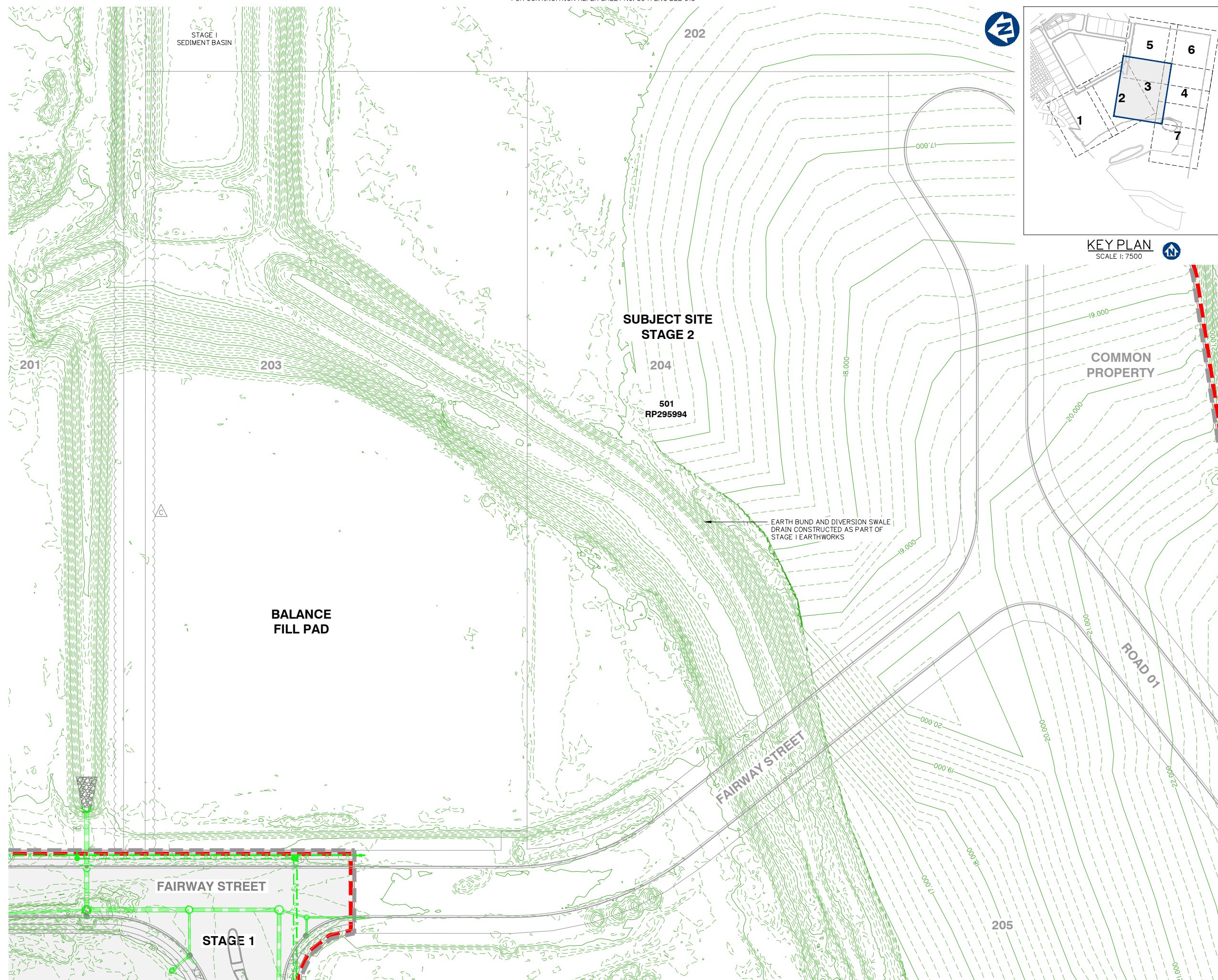
Approved:	MG
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RPEQ:	16939
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Signed:	
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Date:	23/05/2022
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Project: **VantageYatala**
STAGE 2

Site Address:
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ROAD, STAPYLTON QLD 4207

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RPD:

Lot:	502
Plan:	SP316137
Local Authority:	CITY OF GOLD COAST COUNCIL
Level Datum:	AHD
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RL:	-

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DRAWING TITLE
EXISTING SURFACE
AND FEATURES PLAN
SHEET 4 OF 7

C	23/05/22	LOT 201/207 BOUNDARY ALIGNMENT	LAB	MG
B	24/06/21	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG
A	2011/60	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES



Scale at A1:	1:500
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Drawing No:	Rev. No:
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Project: **VantageYatala**
STAGE 2

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Plan:	SP316137
Local Authority:	CITY OF GOLD COAST COUNCIL
Level Datum:	AHD
Meridian:	-
Contour Interval:	-
PSM:	-
RI :	-

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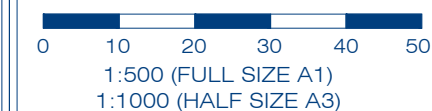
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EXISTING SURFACE
AND FEATURES PLAN
SHEET 5 OF 7

G	23/05/22	LOT 201 BOUNDARY ALIGNMENT		LAB	MO
B	24/09/21	EXTENT OF STAGE 2 EARTHWORKS REDUCED		JG	MG
A	2011/20	ORIGINAL ISSUE		BA	MG
ISSUE	Date	Description		DRN	CHN

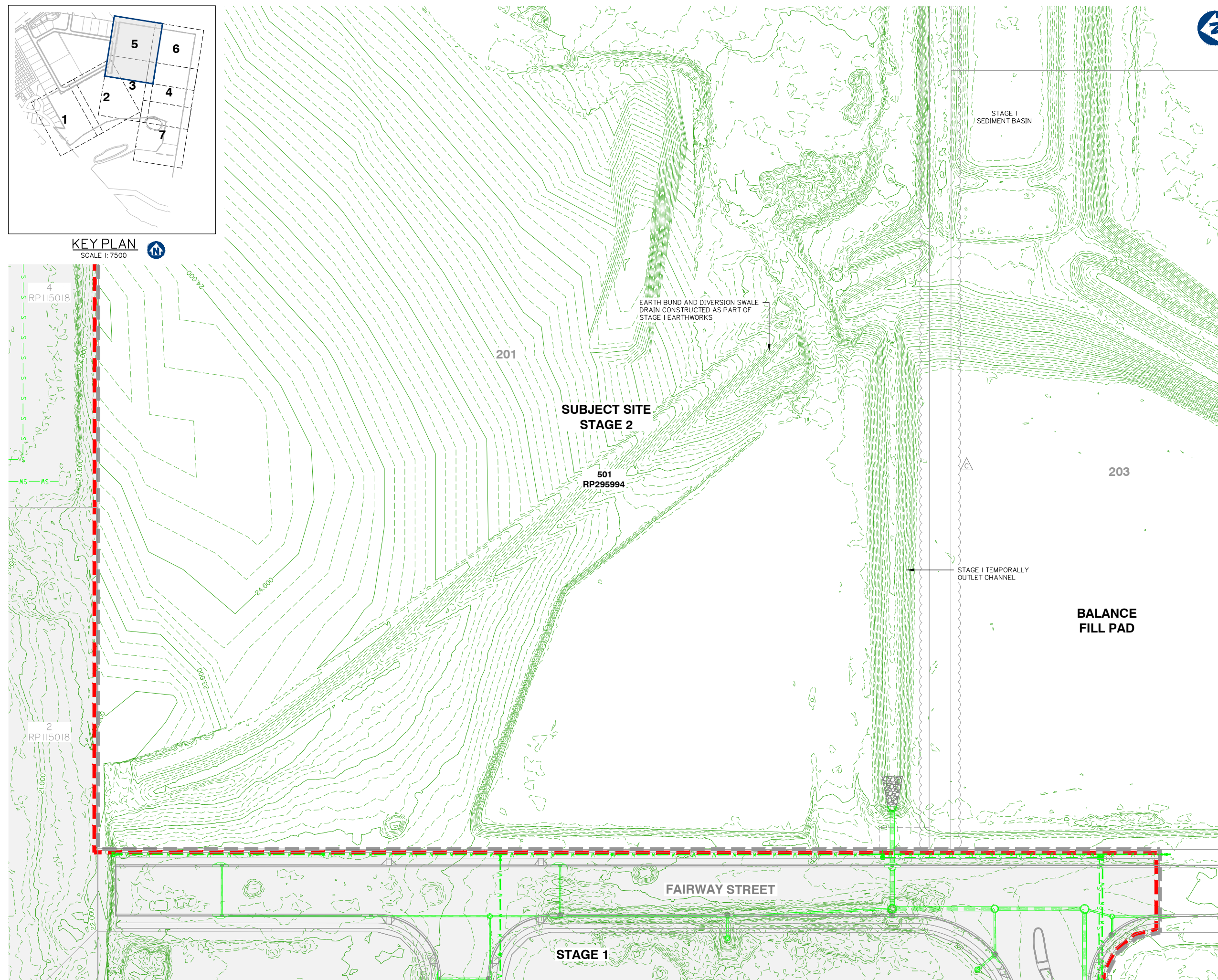
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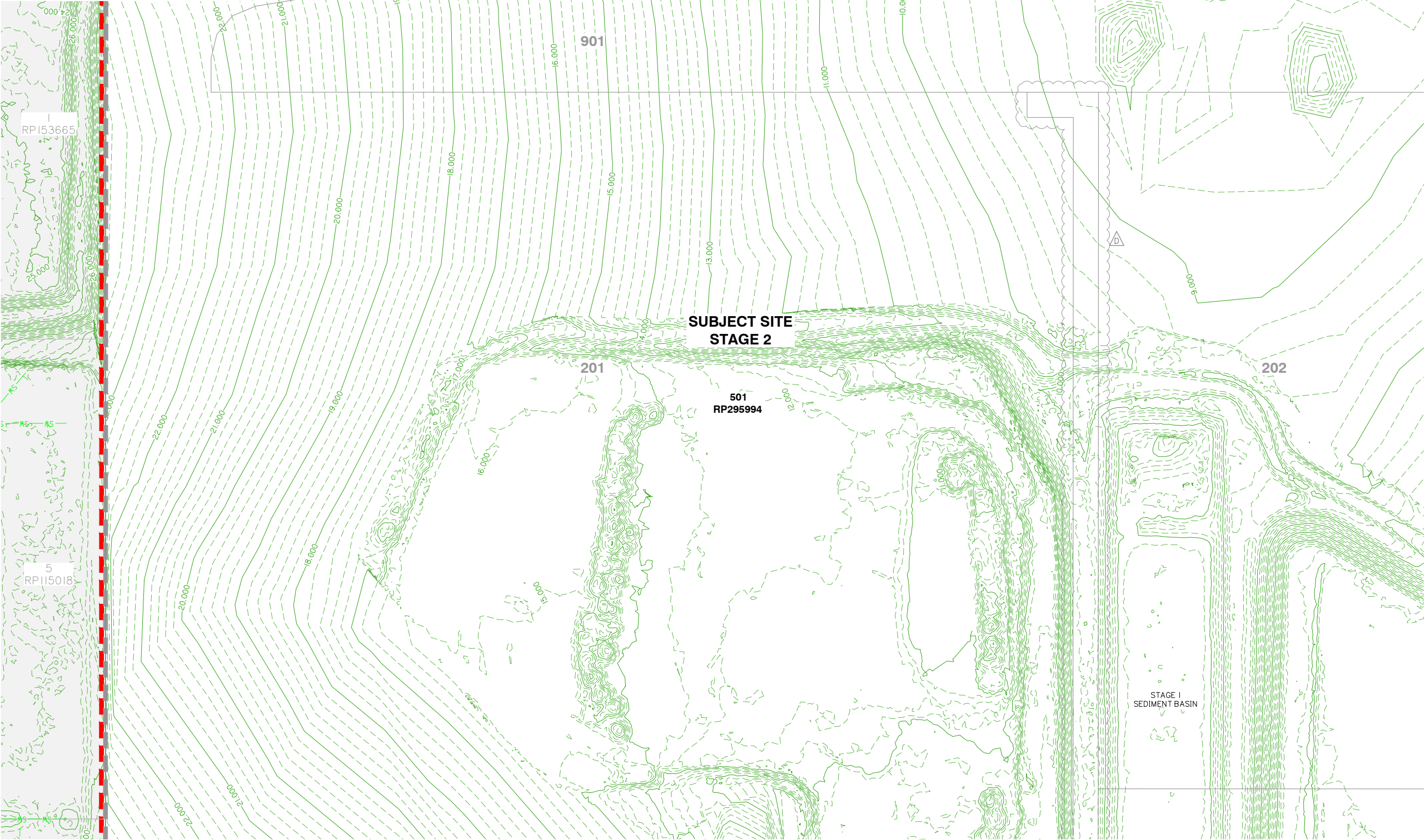
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Approved:	MG
RPEQ:	16939
Signed:	
Date:	23/05/2022

Drawing No:	Rev. No:
5941 ENG BE2 014	C





KEY PLAN
SCALE 1: 7500



FOR CONTINUATION REFER SHEET No. 5941 ENG BE2 014



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Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

RPD:

Lot: 502
Plan: SP316137
Local Authority: CITY OF GOLD COAST
COUNCIL
Level Datum: AHD
Meridian: -
Contour Interval: -
PSM: -
RL: -

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DRAWING TITLE
EXISTING SURFACE
AND FEATURES PLAN
SHEET 6 OF 7

D	23/05/22	LOT 201/207 BOUNDARY MOVED	LAB	MG	
C	24/09/21	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG	
B	31/03/21	INFORMATION REQUEST RESPONSE	IG	MG	
A	20/11/20	ORIGINAL ISSUE	BA	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES



1:500 (FULL SIZE A1)
1:1000 (HALF SIZE A3)

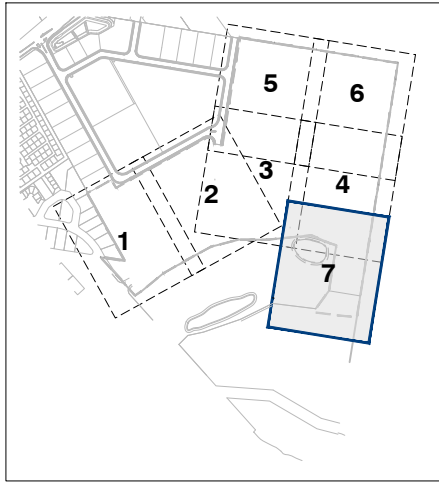
Scale at A1: 1:500

Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	23-05-2022

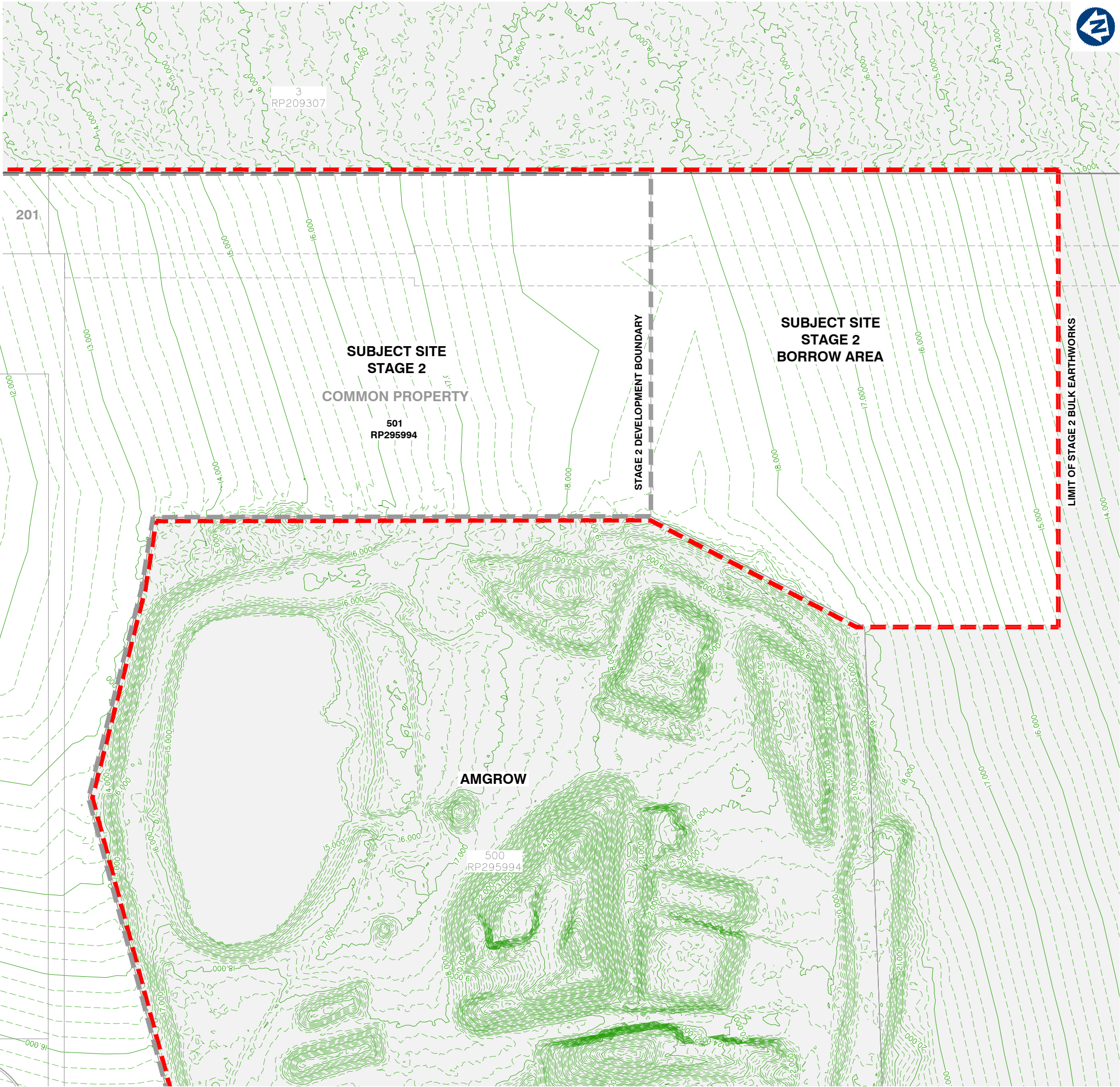
Drawing No:
5941 ENG BE2 015

Rev. No:
D

EXISTING SURFACE AND FEATURES PLAN SHEET 6 OF 7



KEY PLAN
SCALE 1:7500



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STAGE 2

Site Address:

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ROAD, STAPYLTON QLD 4207

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RPD:

Lot: 502
Plan: SP316137
Local Authority: CITY OF GOLD COAST
COUNCIL
Level Datum: AHD
Meridian: -
Contour Interval: -
PSM: -
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DRAWING TITLE
EXISTING SURFACE
AND FEATURES PLAN
SHEET 7 OF 7

B	24/09/21	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG	
A	20/11/20	ORIGINAL ISSUE	BA	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES



1:500 (FULL SIZE A1)
1:1000 (HALF SIZE A3)

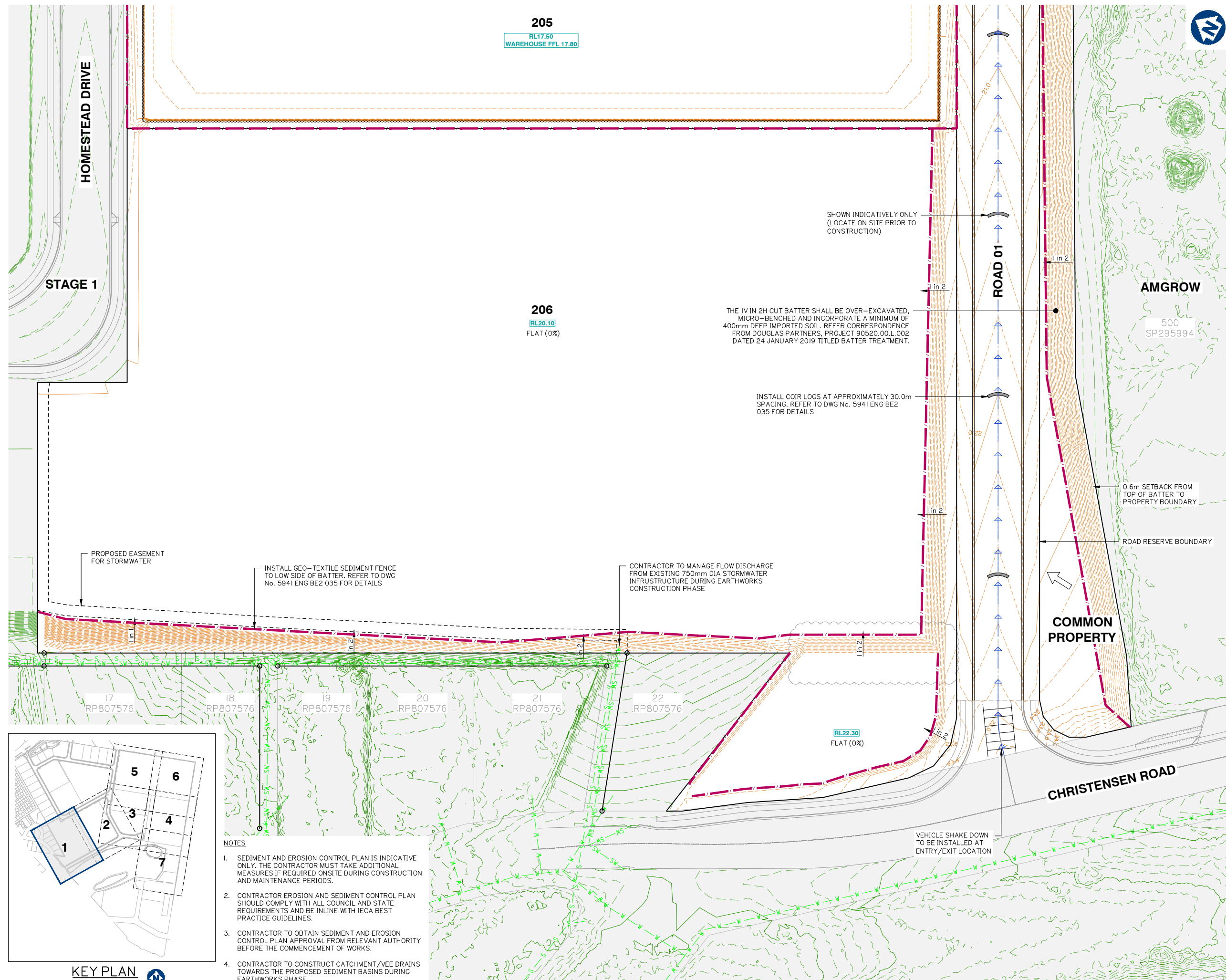
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Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	24-09-2021

Drawing No:
5941 ENG BE2 016

Rev. No:
B

EXISTING SURFACE AND FEATURES PLAN SHEET 7 OF 7



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STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207THIS DRAWING IS INTENDED TO
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RPD:

Lot: 502
Plan: SP316137
Local Authority: CITY OF GOLD COAST
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DRAWING TITLE
**SEDIMENT AND
EROSION CONTROL
PLAN SHEET 1 OF 7**

Issue	Date	Description	BA	MG	DRN	CHK
E	23-05-2022	LOT 201/207 BOUNDARY ALIGNMENT	LAB	MG		
D	10-02-2022	LOT 205 BOUNDARY AND EARTHWORKS	DV	MG		
C	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG		
B	15-02-2021	INFORMATION REQUEST RESPONSE	IG	MG		
A	20-11-2020	ORIGINAL ISSUE	BA	MG		

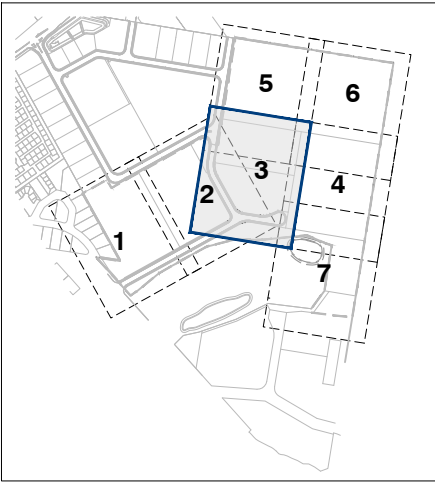
SCALE IN METRES



Scale at A1: 1:500

Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	23-05-2022

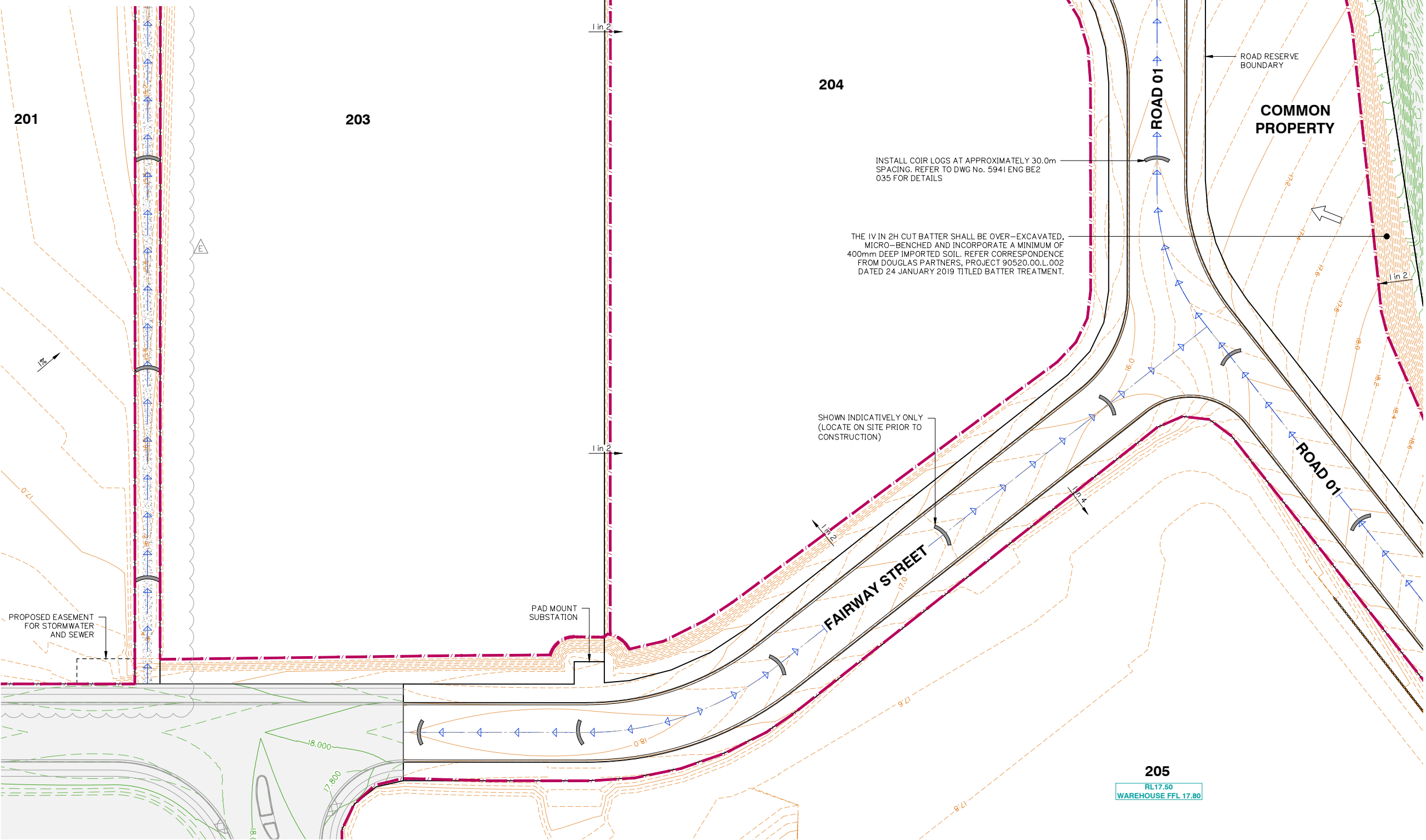
Drawing No:
5941 ENG BE2 020Rev. No:
E



KEY PLAN
SCALE 1: 7500

NOTES

1. SEDIMENT AND EROSION CONTROL PLAN IS INDICATIVE ONLY. THE CONTRACTOR MUST TAKE ADDITIONAL MEASURES IF REQUIRED ONSITE DURING CONSTRUCTION AND MAINTENANCE PERIODS.
2. CONTRACTOR EROSION AND SEDIMENT CONTROL PLAN SHOULD COMPLY WITH ALL COUNCIL AND STATE REQUIREMENTS AND BE IN LINE WITH IECA BEST PRACTICE GUIDELINES.
3. CONTRACTOR TO OBTAIN SEDIMENT AND EROSION CONTROL PLAN APPROVAL FROM RELEVANT AUTHORITY BEFORE THE COMMENCEMENT OF WORKS.
4. CONTRACTOR TO CONSTRUCT CATCHMENT / VEE DRAINS TOWARDS THE PROPOSED SEDIMENT BASINS DURING EARTHWORKS PHASE.



Client:



Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
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Lot: 502
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Meridian: -
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PSM: -
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DRAWING TITLE
SEDIMENT AND
EROSION CONTROL
PLAN SHEET 3 OF 7

Issue	Date	Description	BA	MG	DRN	CHK
E	23-05-2022	LOT 201 BOUNDARY ALIGNMENT	LAB	MG		
D	09-11-2021	LOT 205 BOUNDARY AND EARTHWORKS	DV	MG		
C	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG		
B	15-02-2021	INFORMATION REQUEST RESPONSE	IG	MG		
A	20-11-2020	ORIGINAL ISSUE	BA	MG		

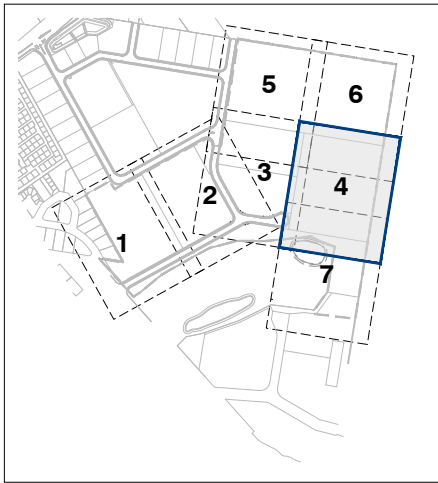
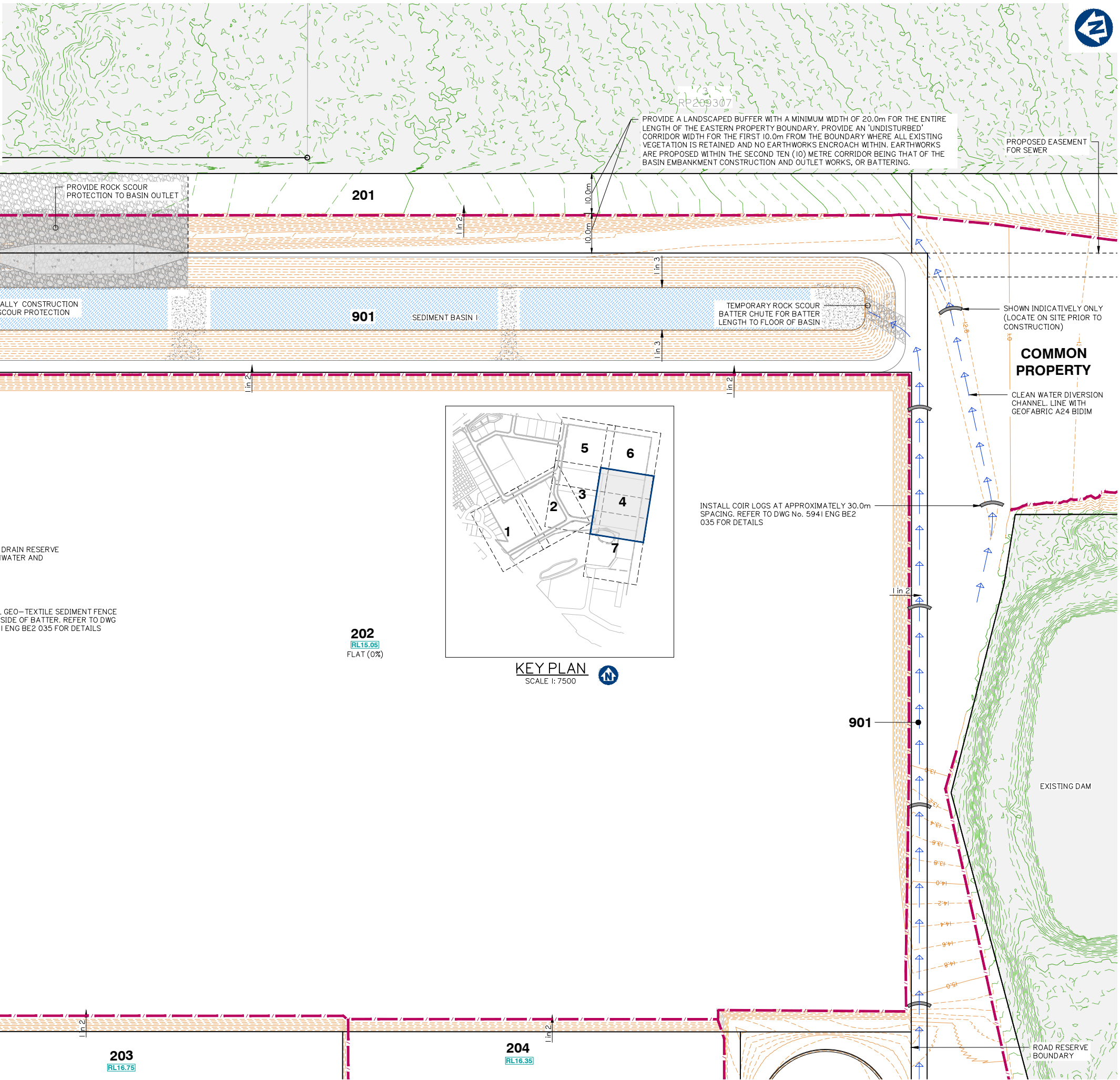
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1:500 (FULL SIZE A1)
1:1000 (HALF SIZE A3)

Scale at A1:	1:500
Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	23-05-2022

Drawing No: 5941 ENG BE2 022
Rev. No: E

NOTES

1. SEDIMENT AND EROSION CONTROL PLAN IS INDICATIVE ONLY. THE CONTRACTOR MUST TAKE ADDITIONAL MEASURES IF REQUIRED ONSITE DURING CONSTRUCTION AND MAINTENANCE PERIODS.
2. CONTRACTOR EROSION AND SEDIMENT CONTROL PLAN SHOULD COMPLY WITH ALL COUNCIL AND STATE REQUIREMENTS AND BE IN LINE WITH IECA BEST PRACTICE GUIDELINES.
3. CONTRACTOR TO OBTAIN SEDIMENT AND EROSION CONTROL PLAN APPROVAL FROM RELEVANT AUTHORITY BEFORE THE COMMENCEMENT OF WORKS.
4. CONTRACTOR TO CONSTRUCT CATCHMENT/VEE DRAINS TOWARDS THE PROPOSED SEDIMENT BASINS DURING EARTHWORKS PHASE.



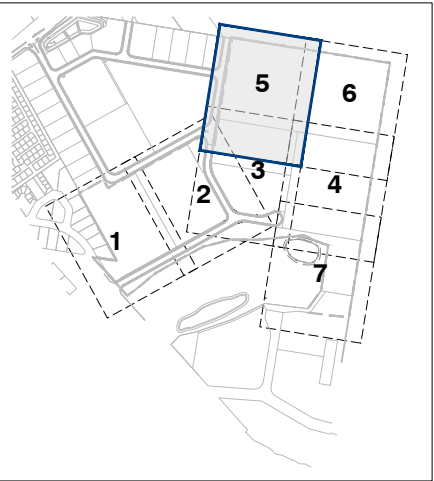
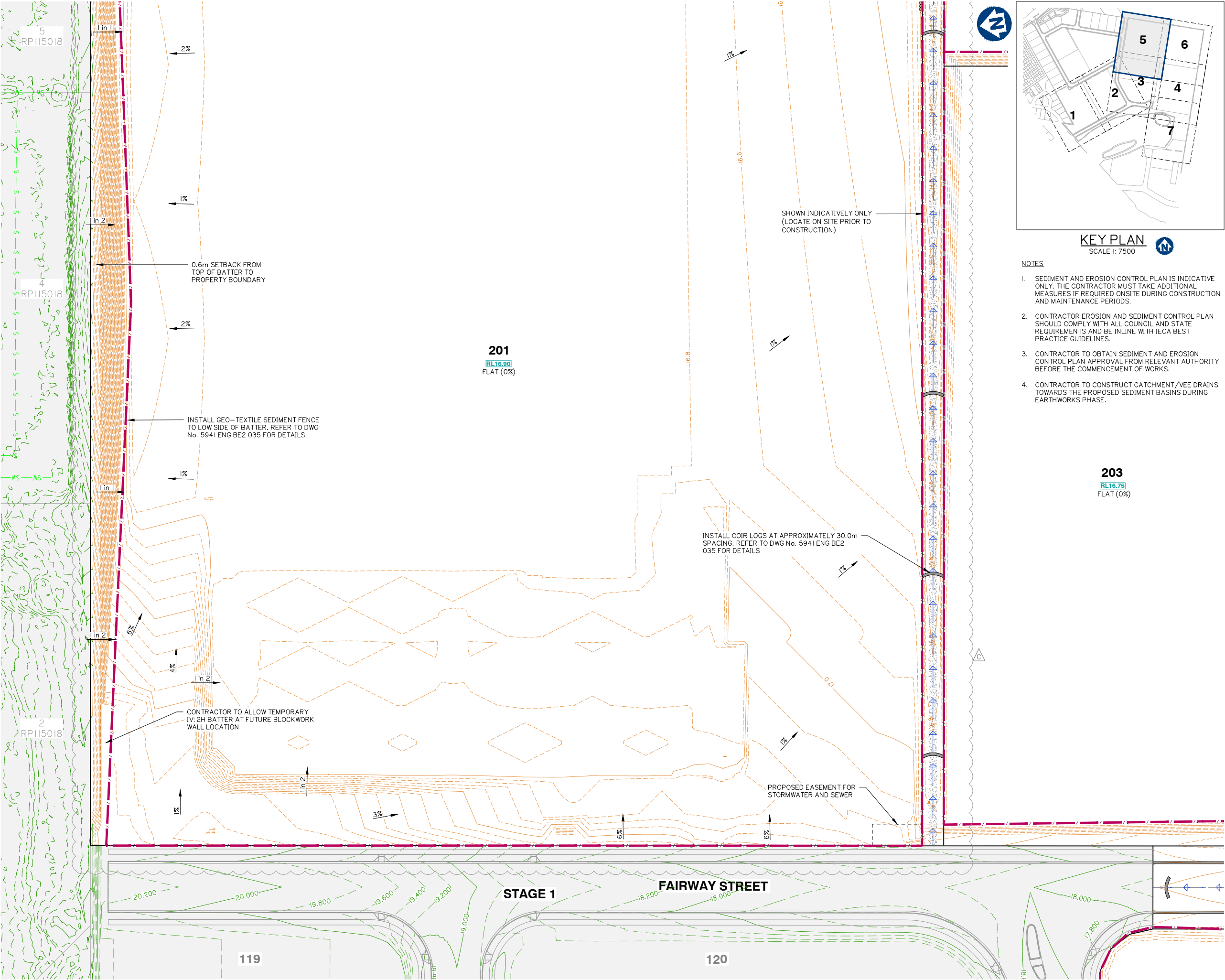
KEY PLAN
SCALE 1:7500

DRAWING TITLE
SEDIMENT AND
EROSION CONTROL
PLAN SHEET 4 OF 7

D	23-05-2022	LOT 201 BOUNDARY ALIGNMENT	LAB	MG
C	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG
B	31/03/21	INFORMATION REQUEST RESPONSE	IG	MG
A	20-11-2020	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES
0 10 20 30 40 50
1:500 (FULL SIZE A1)
1:1000 (HALF SIZE A3)

Scale at A1:	1:500
Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	23-05-2022



KEY PLAN
SCALE 1: 7500

- NOTES
1. SEDIMENT AND EROSION CONTROL PLAN IS INDICATIVE ONLY. THE CONTRACTOR MUST TAKE ADDITIONAL MEASURES IF REQUIRED ONSITE DURING CONSTRUCTION AND MAINTENANCE PERIODS.
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 4. CONTRACTOR TO CONSTRUCT CATCHMENT /VEE DRAINS TOWARDS THE PROPOSED SEDIMENT BASINS DURING EARTHWORKS PHASE.

FOR CONTINUATION REFER SHEET No. 5941 ENG BE2 023

RPD:	
Lot:	502
Plan:	SP316137
Local Authority:	CITY OF GOLD COAST
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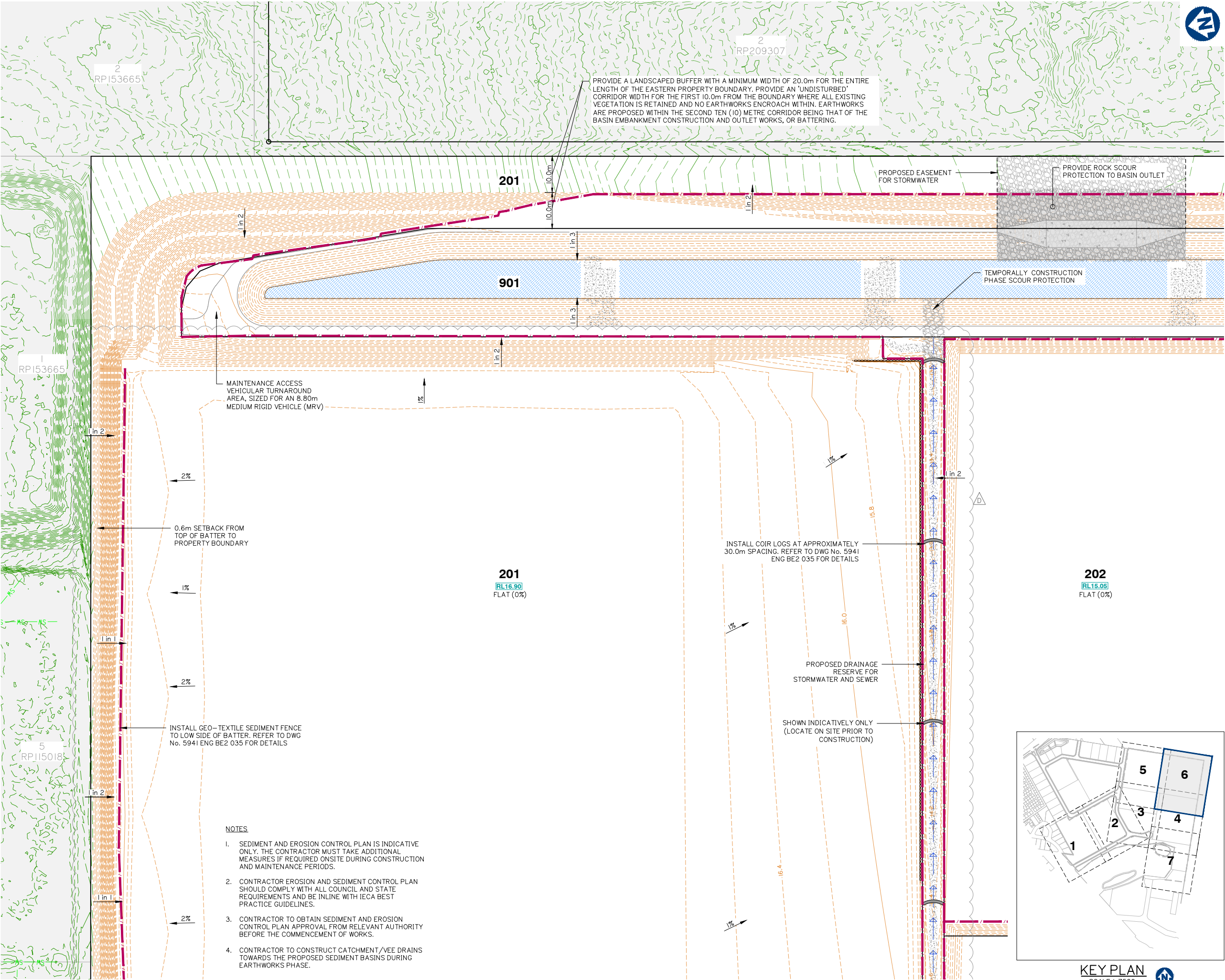
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DRAWING TITLE
SEDIMENT AND
EROSION CONTROL
PLAN SHEET 5 OF 7

C	23-05-2022	LOT 201 BOUNDARY RECONFIGURATION	LAB	MG
B	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG
A	20-11-2020	ORIGINAL ISSUE	BA	MG
Issue:	Date	Description	DRN	CHK

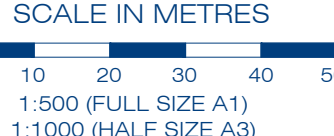
SCALE IN METRES
0 10 20 30 40 50
1:500 (FULL SIZE A1)
1:1000 (HALF SIZE A3)

Scale at A1:	1:500
Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	23/05/2022

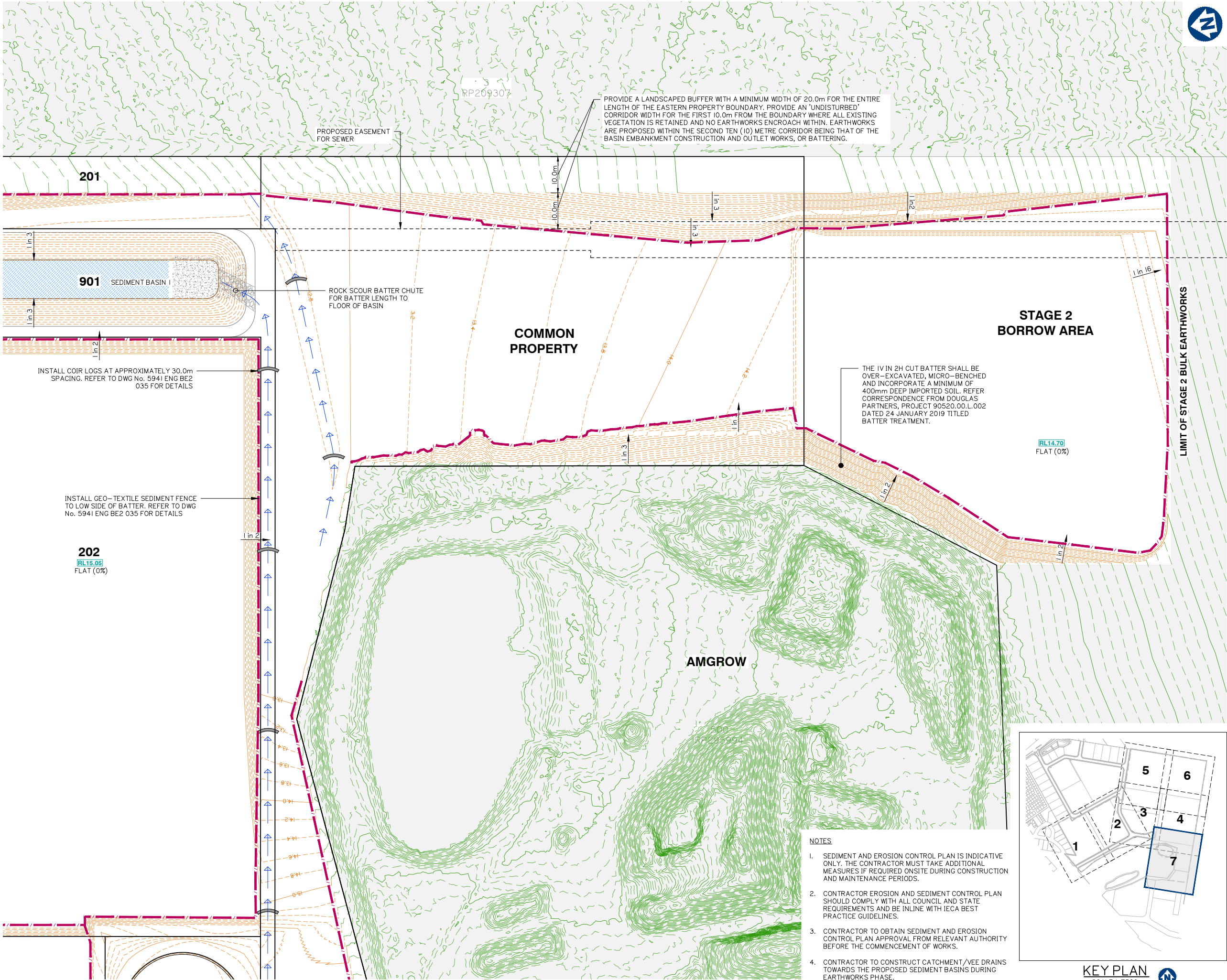


DRAWING TITLE
SEDIMENT AND
EROSION CONTROL
PLAN SHEET 6 OF 7

Rev	Date	Description	LAB	MG
D	23-05-2022	LOT 201 BOUNDARY ALIGNMENT	LAB	MG
C	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG
B	31/03/21	INFORMATION REQUEST RESPONSE	IG	MG
A	20-11-2020	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	DRN	CHK



Scale at A1:	1:500
Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	23-05-2022



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Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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RPD:

Lot: 502
Plan: SP316137
Local Authority: CITY OF GOLD COAST
COUNCIL
Level Datum: AHD
Meridian: -
Contour interval: -
PSM: -
RL: -

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DRAWING TITLE
SEDIMENT AND
EROSION CONTROL
PLAN SHEET 7 OF 7

Issue	Date	Description	BA	MG	DRN	CHK
D	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG		
C	31-03-2021	INFORMATION REQUEST RESPONSE	IG	MG		
B	15-02-2021	INFORMATION REQUEST RESPONSE	IG	MG		
A	20-11-2021	ORIGINAL ISSUE	BA	MG		

SCALE IN METRES



1:500 (FULL SIZE A1)
1:1000 (HALF SIZE A3)

Scale at A1: 1:500

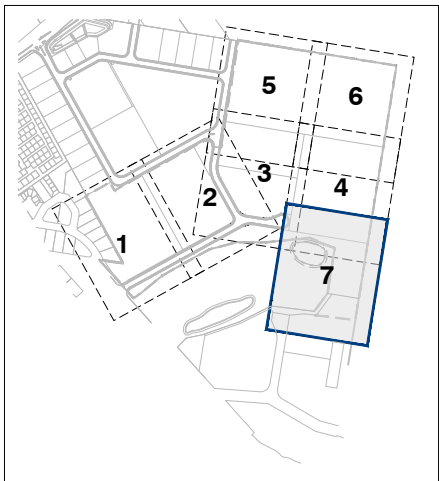
Designed: IG
Drafted: IG / BA / LAB
Approved: MG
RPEQ: 16939
Signed:
Date: 24-09-2021

Drawing No:
5941 ENG BE2 026

Rev. No:
D

NOTES

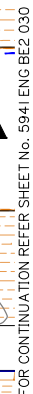
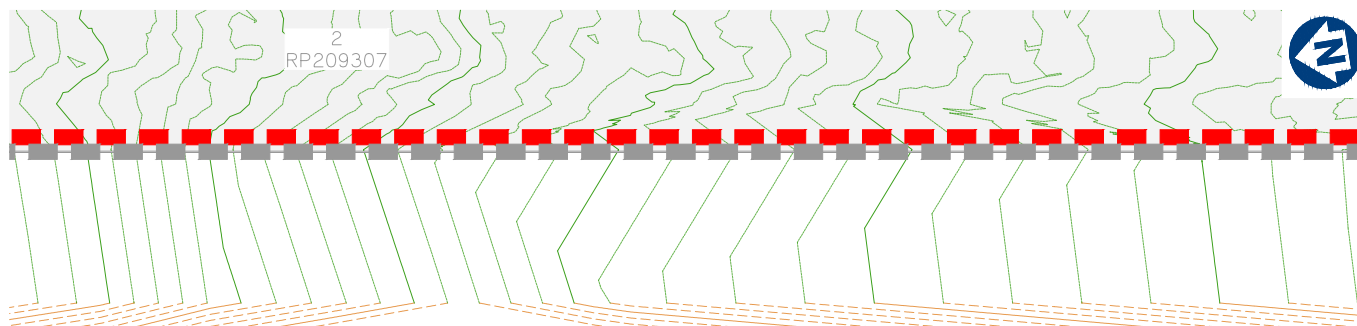
- SEDIMENT AND EROSION CONTROL PLAN IS INDICATIVE ONLY. THE CONTRACTOR MUST TAKE ADDITIONAL MEASURES IF REQUIRED ON SITE DURING CONSTRUCTION AND MAINTENANCE PERIODS.
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- CONTRACTOR TO CONSTRUCT CATCHMENT/VEE DRAINS TOWARDS THE PROPOSED SEDIMENT BASINS DURING EARTHWORKS PHASE.



KEY PLAN
SCALE 1:7500



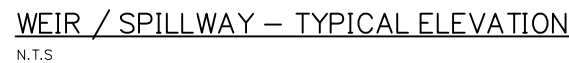
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BASIN ID	CATCHMENT AREA	DESIGN EVENT	$I_{x \text{ yr}, 24 \text{ hr}}$	WATER TEMPERATURE	K_s	SETTLING ZONE DEPTH (D_s)	W: L	OPTIMUM LOW-FLOW DECAN'T RATE	SELECTED LOW-FLOW DECAN'T RATE (Q_A)	MIN SETTling ZONE VOLUME (Min V_s)	MIN SETTling ZONE SURFACE AREA (Min A_s)	LIMITING CRITERIA
	(Ha)	(1: X YEARS)	(mm/hr)	(°C)	(s/m)	(m)	(1: X)	(L/s/Ha)	(L/s/Ha)	(m³)	(m²)	
LPoD-IA	23.067	I	4.53	20	III50	1.9	5.1	9	9	5669	2315	VOLUME

BASIN ID	SPILLWAY										
	BASIN DESIGN LIFE	DESIGN ARI	C ₁₀	C	tc	I	Q	HEAD OVER SPILLWAY	SPILLWAY CREST LENGTH	SPILLWAY CREST RL	MIN EMBANKMENT RL
		yr				(mm/hr)	(m ³ /s)	(m)	(m)	(m)	(m)
LPoD – IA	> 12 MONTHS	1: 50	0.80	0.92	25.00	143.00	8.43	0.20	25.00	11.57	12.22

BASIN ID	SETTLING ZONE (incl. sediment storage)				FOREBAY				HYDRAULIC CONTROLS						
	VOLUME (m³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	VOLUME (m³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	SPILLWAY CREST LENGTH (m)	SPILLWAY CREST (RL)	EMBANKMENT (RL)	CREST (RL)	FLUME BASE WIDTH (m)	FLUME BATTERS (X: 1)	FLUME DEPTH (m)
LPoD—IA	7369.3	152.4	29.9	3.00	1366.63	15.2	29.9	3.00	25.0	11.57	12.22	11.77	6.0	2.0	0.6

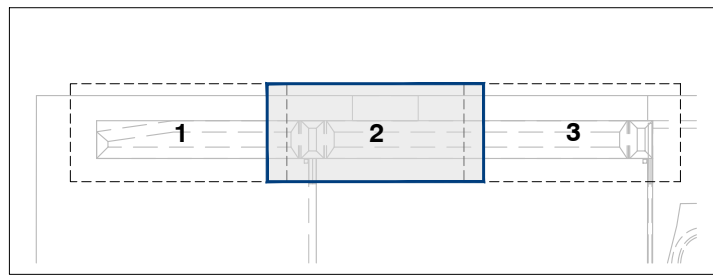
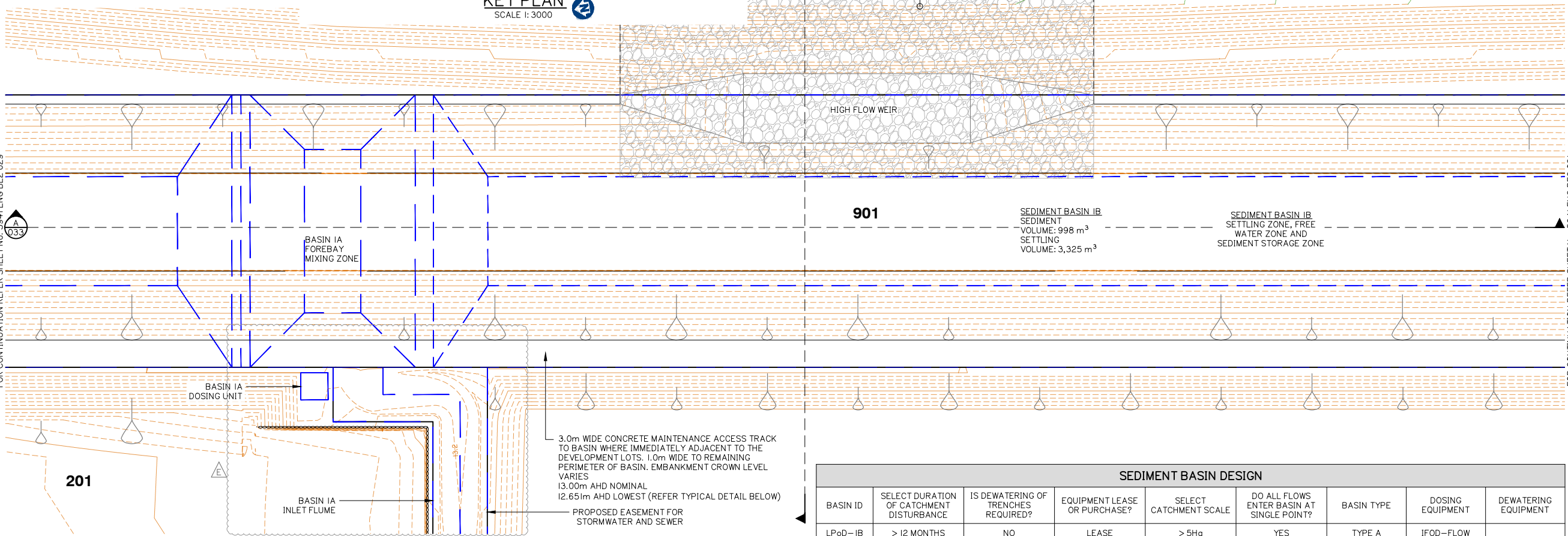


D	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MO
C	31-03-2021	INFORMATION REQUEST RESPONSE	IG	MO
B	15-02-2021	INFORMATION REQUEST RESPONSE	IG	MO
A	20-11-2020	ORIGINAL ISSUE	BA	MO
Issue	Date	Description	DRN	CHN

Drawing No:	Rev. No:
5941 ENG BE2 029	D

NOTES:

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KEY PLAN
SCALE 1:3000

FOR CONTINUATION REFER SHEET No. 5941 ENG BE2 029

FOR CONTINUATION REFER SHEET No. 5941 ENG BE2 031

SEDIMENT BASIN DESIGN								
BASIN ID	SELECT DURATION OF CATCHMENT DISTURBANCE	IS DEWATERING OF TRENCHES REQUIRED?	EQUIPMENT LEASE OR PURCHASE?	SELECT CATCHMENT SCALE	DO ALL FLOWS ENTER BASIN AT SINGLE POINT?	BASIN TYPE	DOSING EQUIPMENT	DEWATERING EQUIPMENT
LPoD-IB	> 12 MONTHS	NO	LEASE	> 5Ha	YES	TYPE A	IFOD-FLOW	

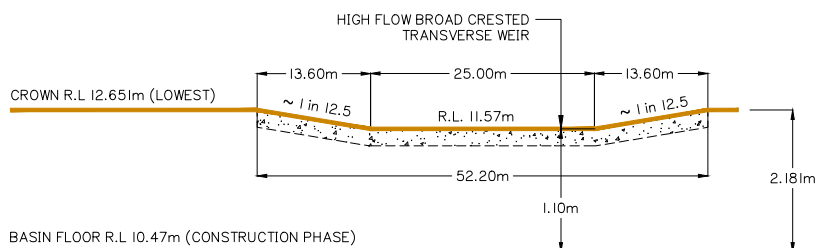
BASIN ID	CATCHMENT AREA	DESIGN EVENT	I_x yr, 24 hr	WATER TEMPERATURE	K_s	SETTLING ZONE DEPTH (D_s)	W: L	OPTIMUM LOW-FLOW DECAN RATE	SELECTED LOW-FLOW DECAN RATE (Q_d)	MIN SETTLING ZONE VOLUME (Min V_s)	MIN SETTLING ZONE SURFACE AREA (Min A_s)	LIMITING CRITERIA
	(Ha)	(1: X YEARS)	(mm/hr)	(°C)	(s/m)	(m)	(1: X)	(L/s/Ha)	(L/s/Ha)	(m³)	(m²)	
LPoD-IB	13.352	I	4.53	20	11150	1.82	3.1	9	9	3325	1358	VOLUME

BASIN ID	SETTLING ZONE			FREE WATER ZONE		SEDIMENT STORAGE ZONE		OVERALL DIMENSIONS RELATIVE TO SPILLWAY CREST (EXCL. FOREBAY)			
	ACTUAL SETTLING ZONE VOLUME (V_s)	ACTUAL SETTLING ZONE AREA (A_s)	SCOUR VELOCITY	DEPTH OF FREE WATER ZONE	VOLUME OF FREE WATER ZONE	SEDIMENT STORAGE VOLUME	SEDIMENT STORAGE DEPTH (APPROX.)	BATTER	WIDTH	LENGTH	DEPTH
	(m³)	(m²)	(m/s)	(m)	(m³)	(m³)	(m)	(1: X)	(m)	(m)	(m)
LPoD-IB	3325	1827	0.008	0.35	333	998	0.83	3	29.74	92.19	3.00

BASIN ID	SPILLWAY										
	BASIN DESIGN LIFE	DESIGN ARI	C_0	C	t_c	I	Q	HEAD OVER SPILLWAY	SPILLWAY CREST LENGTH	SPILLWAY CREST RL	MIN EMBANKMENT RL
		yr				(mm/hr)	(m³/s)				
LPoD-IB	> 12 MONTHS	1: 50	0.80	0.92	25.00	143.00	4.95	0.20	25.00	11.57	12.22

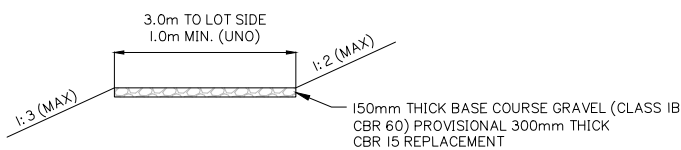
BASIN ID	FLOW RATE		FLUME DESIGN PARAMETERS				VELOCITY CHECK			OUTPUT PARAMETERS		
	BASIN DESIGN FLOW (m³/s)	FLUME DESIGN FLOW (m³/s)	BASE WIDTH (m)	SLIDE SLOPE (1: x)	LONGITUDINAL SLOPE (m/m)	FLUME LINING	MAX ALLOWABLE VELOCITY (m/s)	MANNINGS ROUGHNESS	VELOCITY (m/s)	FLOW DEPTH (m)	FLUME DEPTH (m)	CALCULATED FLOW (m³/s)
			b	x	s					d	y	
LPoD-IB	4.95	7.43	4.00	2.00	0.01	CONCRETE	5.00	0.013	3.817	0.42	0.57	7.76

BASIN ID	SETTLING ZONE (incl. sediment storage)				FOREBAY				HYDRAULIC CONTROLS						
	VOLUME (m³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	VOLUME (m³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	SPILLWAY CREST LENGTH (m)	SPILLWAY CREST (RL)	EMBANKMENT (RL)	CREST (RL)	FLUME BASE WIDTH (m)	FLUME BATTERS (X: 1)	FLUME DEPTH (m)
	4323.1	92.2	29.7	3.00	822.44	9.2	29.7	3.00	25.0	11.57	12.22	11.77	4.0	2.0	0.6
LPoD-IB															



WEIR / SPILLWAY – TYPICAL ELEVATION

N.T.S



MAINTENANCE ACCESS TRACK – TYPICAL SECTION

N.T.S

UNO DENOTES 'UNLESS NOTED OTHERWISE'

Client:

FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

RPD:

Lot: 502
Plan: SP316137
Local Authority: CITY OF GOLD COAST
COUNCIL
Level Datum: AHD
Meridian: -
Contour interval: -
PSM: -
RL: -

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DRAWING TITLE
CONSTRUCTION PHASE
SEDIMENT BASIN 1
LAYOUT SHEET 2 OF 4

Issue	Date	Description	BA	MG	DRN	CHK
E	23-05-2022	LOT 201 BOUNDARY ALIGNMENT	LAB	MG		
D	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG		
C	31-03-2021	INFORMATION REQUEST RESPONSE	IG	MG		
B	15-02-2021	INFORMATION REQUEST RESPONSE	IG	MG		
A	20-11-2020	ORIGINAL ISSUE	BA	MG		

SCALE IN METRES

1:250 (FULL SIZE A1)
1:500 (HALF SIZE A3)

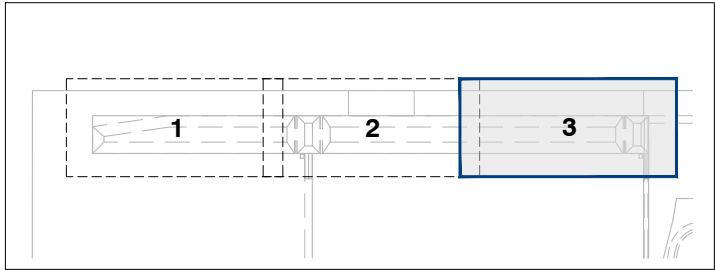
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Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	23-05-2022

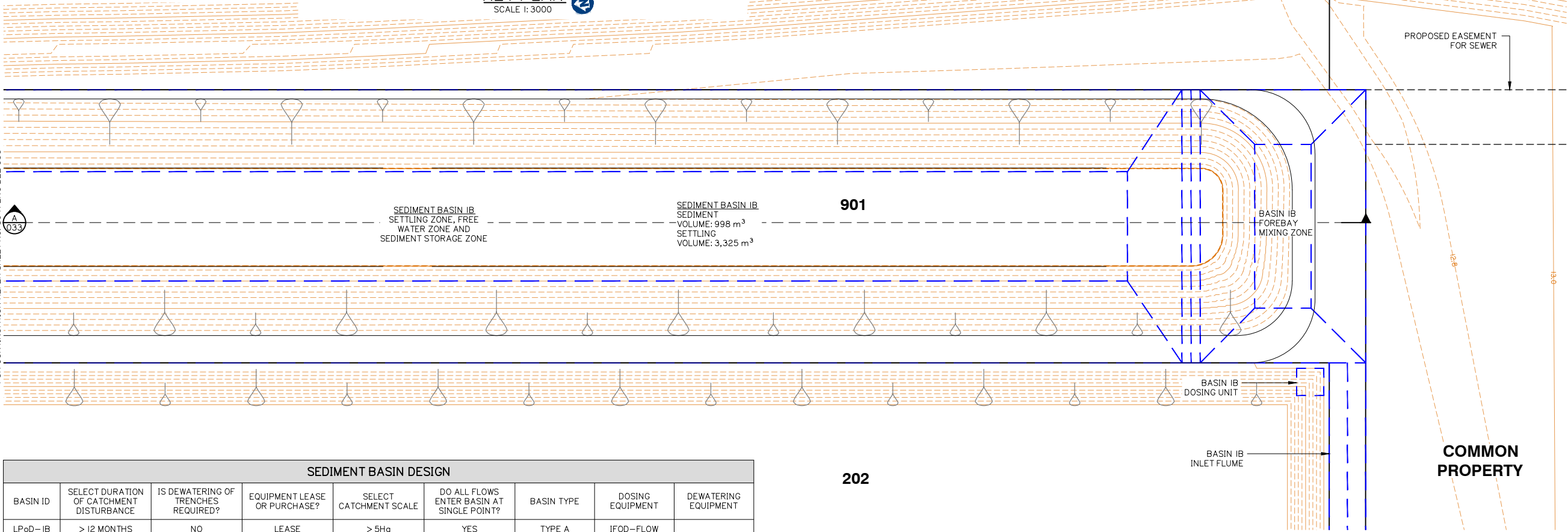
Drawing No:
5941 ENG BE2 030Rev. No:
E

NOTES:

- SEDIMENT AND EROSION CONTROL PLAN IS INDICATIVE ONLY. THE CONTRACTOR MUST TAKE ADDITIONAL MEASURES IF REQUIRED ON SITE DURING CONSTRUCTION AND MAINTENANCE PERIODS.
- CONTRACTOR EROSION AND SEDIMENT CONTROL PLAN SHOULD COMPLY WITH ALL CITY OF GOLD COAST COUNCIL AND STATE REQUIREMENTS AND TO BE IN ACCORDANCE WITH INDUSTRY BEST PRACTICE GUIDELINES.
- CONTRACTOR TO OBTAIN SEDIMENT AND EROSION CONTROL PLAN APPROVAL FROM RELEVANT AUTHORITY BEFORE THE COMMENCEMENT OF WORKS.



KEY PLAN
SCALE 1:3000



SEDIMENT BASIN DESIGN								
BASIN ID	SELECT DURATION OF CATCHMENT DISTURBANCE	IS DEWATERING OF TRENCHES REQUIRED?	EQUIPMENT LEASE OR PURCHASE?	SELECT CATCHMENT SCALE	DO ALL FLOWS ENTER BASIN AT SINGLE POINT?	BASIN TYPE	DOSING EQUIPMENT	DEWATERING EQUIPMENT
LPoD-IB	> 12 MONTHS	NO	LEASE	> 5Ha	YES	TYPE A	IFOD-FLOW	

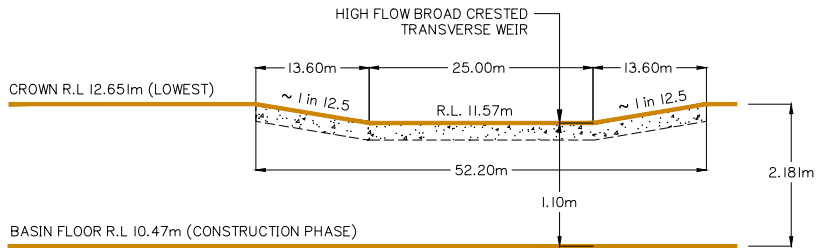
BASIN ID	CATCHMENT AREA	DESIGN EVENT	1 _x yr, 24 hr	WATER TEMPERATURE	K _s	SETTLING ZONE DEPTH (D _s)	W: L	OPTIMUM LOW-FLOW DECANT RATE	SELECTED LOW-FLOW DECANT RATE (Q _d)	MIN SETTling ZONE VOLUME (Min V _s)	MIN SETTling ZONE SURFACE AREA (Min A _s)	LIMITING CRITERIA
	(Ha)	(1: X YEARS)	(mm/hr)	(°C)	(s/m)	(m)	(1: X)	(L/s/Ha)	(L/s/Ha)	(m³)	(m²)	
LPoD-IB	13.352	1	4.53	20	11150	1.82	3.1	9	9	3325	1358	VOLUME

BASIN ID	SETTLING ZONE		SCOUR VELOCITY	FREE WATER ZONE		SEDIMENT STORAGE ZONE		OVERALL DIMENSIONS RELATIVE TO SPILLWAY CREST (EXCL. FOREBAY)			
	ACTUAL SETTling ZONE VOLUME (V _s)	ACTUAL SETTling ZONE AREA (A _s)		DEPTH OF FREE WATER ZONE	VOLUME OF FREE WATER ZONE	SEDIMENT STORAGE VOLUME	SEDIMENT STORAGE DEPTH (APPROX.)	BATTER	WIDTH	LENGTH	DEPTH
	(m³)	(m²)	(m/s)	(m)	(m³)	(m³)	(m)	(1: X)	(m)	(m)	(m)
LPoD-IB	3325	1827	0.008	0.35	333	998	0.83	3	29.74	92.19	3.00

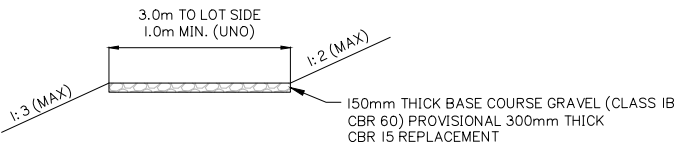
SPILLWAY											
BASIN ID	BASIN DESIGN LIFE	DESIGN ARI	C ₁₀	C	t _c	I	Q	HEAD OVER SPILLWAY	SPILLWAY CREST LENGTH	SPILLWAY CREST RL	MIN EMBANKMENT RL
		yr				(mm/hr)	(m³/s)	(m)	(m)	(m)	(m)
LPoD-IB	> 12 MONTHS	1: 50	0.80	0.92	25.00	143.00	4.95	0.20	25.00	11.57	12.22

BASIN ID	FLOW RATE		FLUME DESIGN PARAMETERS				VELOCITY CHECK			OUTPUT PARAMETERS		
	BASIN DESIGN FLOW (m³/s)	FLUME DESIGN FLOW (m³/s)	BASE WIDTH (m)	SLIDE SLOPE (1: x)	LONGITUDINAL SLOPE (m/m)	FLUME LINING	MAX ALLOWABLE VELOCITY (m/s)	MANNINGS ROUGHNESS	VELOCITY (m/s)	FLOW DEPTH (m)	FLUME DEPTH (m)	CALCULATED FLOW (m³/s)
			b	x	s					d	y	
LPoD-IB	4.95	7.43	4.00	2.00	0.01	CONCRETE	5.00	0.013	3.817	0.42	0.57	7.76

BASIN ID	SETTLING ZONE (incl. sediment storage)				FOREBAY				HYDRAULIC CONTROLS						
	VOLUME (m³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	VOLUME (m³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	SPILLWAY CREST LENGTH (m)	SPILLWAY CREST (RL)	EMBANKMENT (RL)	CREST (RL)	FLUME BASE WIDTH (m)	FLUME BATTERS (X: 1)	FLUME DEPTH (m)
LPoD-IB	4323.1	92.2	29.7	3.00	822.44	9.2	29.7	3.00	25.0	11.57	12.22	11.77	4.0	2.0	0.6



WEIR / SPILLWAY - TYPICAL ELEVATION
N.T.S.



MAINTENANCE ACCESS TRACK - TYPICAL SECTION
N.T.S. UNO DENOTES 'UNLESS NOTED OTHERWISE'

Client:



Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

RPD:

Lot: 502
Plan: SP316137
Local Authority: CITY OF GOLD COAST COUNCIL
Level Datum: AHD
Meridian: -
Contour interval: -
PSM: -
RL: -

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DRAWING TITLE
CONSTRUCTION PHASE
SEDIMENT BASIN 1
LAYOUT SHEET 3 OF 4

D	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG
C	31-03-2021	INFORMATION REQUEST RESPONSE	IG	MG
B	15-02-2021	INFORMATION REQUEST RESPONSE	IG	MG
A	20-11-2020	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES



1:250 (FULL SIZE A1)
1:500 (HALF SIZE A3)

Scale at A1:

1:250

Designed:

IG

Drafted:

IG / BA / LAB

Approved:

MG

RPEQ:

16939

Signed:

Michael

Date:

24-09-2021

Drawing No:

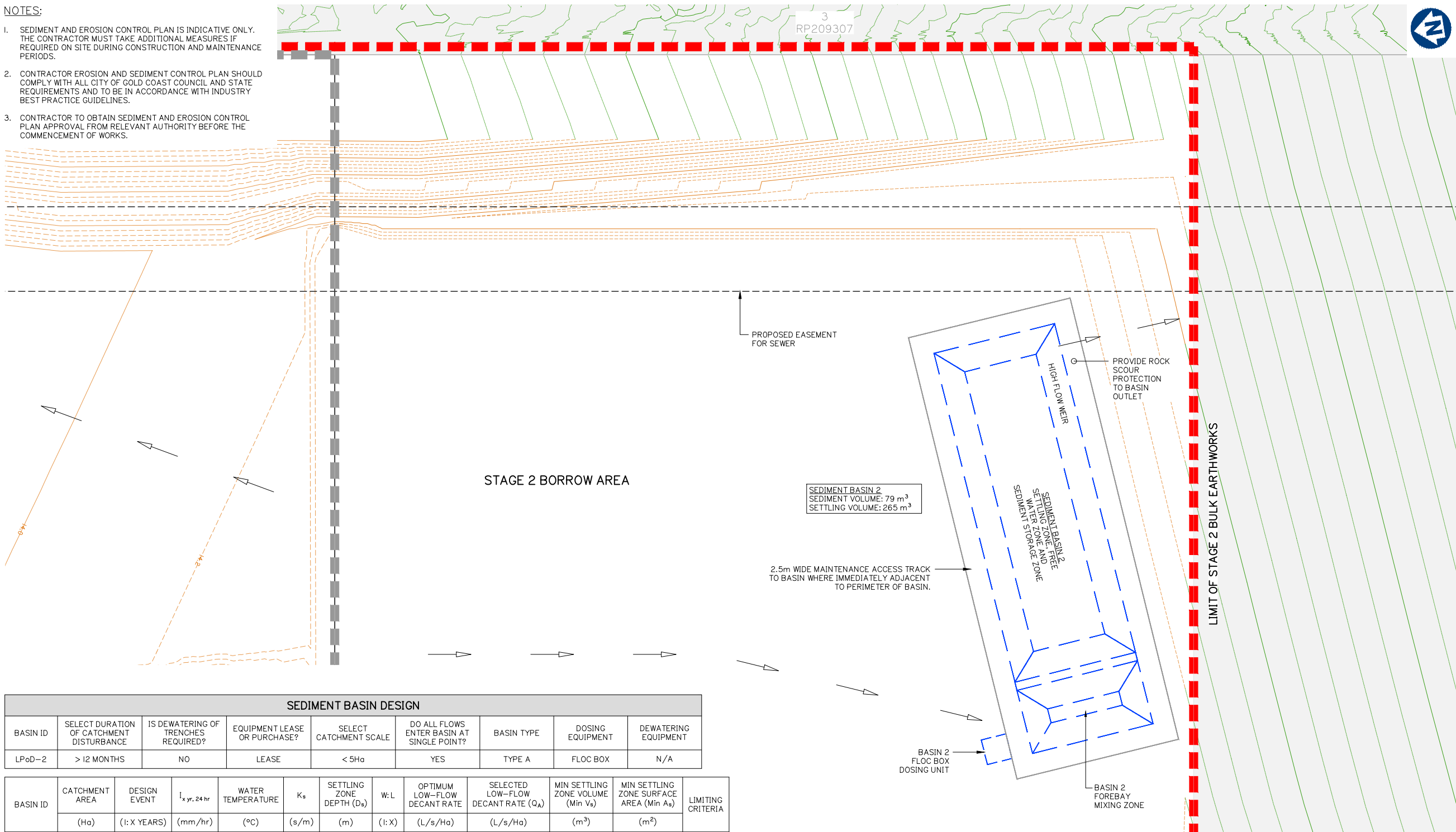
5941 ENG BE2 031

Rev. No:

D

NOTES:

1. SEDIMENT AND EROSION CONTROL PLAN IS INDICATIVE ONLY. THE CONTRACTOR MUST TAKE ADDITIONAL MEASURES IF REQUIRED ON SITE DURING CONSTRUCTION AND MAINTENANCE PERIODS.
2. CONTRACTOR EROSION AND SEDIMENT CONTROL PLAN SHOULD COMPLY WITH ALL CITY OF GOLD COAST COUNCIL AND STATE REQUIREMENTS AND TO BE IN ACCORDANCE WITH INDUSTRY BEST PRACTICE GUIDELINES.
3. CONTRACTOR TO OBTAIN SEDIMENT AND EROSION CONTROL PLAN APPROVAL FROM RELEVANT AUTHORITY BEFORE THE COMMENCEMENT OF WORKS.



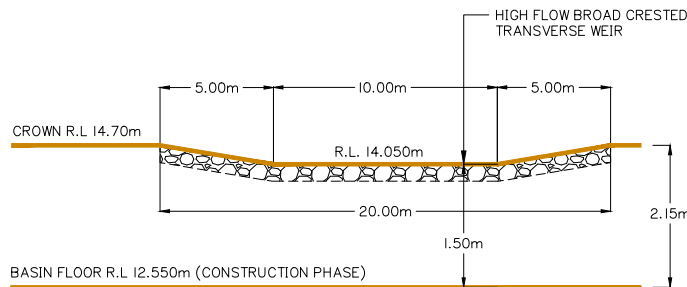
SEDIMENT BASIN DESIGN											
BASIN ID	SELECT DURATION OF CATCHMENT DISTURBANCE	IS DEWATERING OF TRENCHES REQUIRED?	EQUIPMENT LEASE OR PURCHASE?	SELECT CATCHMENT SCALE	DO ALL FLOWS ENTER BASIN AT SINGLE POINT?	BASIN TYPE	DOSING EQUIPMENT	DEWATERING EQUIPMENT			
LPoD-2	> 12 MONTHS	NO	LEASE	< 5Ha	YES	TYPE A	FLOC BOX	N/A			

BASIN ID	CATCHMENT AREA	DESIGN EVENT	I _x yr, 24 hr	WATER TEMPERATURE	K _s	SETTLING ZONE DEPTH (D _s)	W: L	OPTIMUM LOW-FLOW DECANT RATE	SELECTED LOW-FLOW DECANT RATE (Q _A)	MIN SETTLING ZONE VOLUME (Min V _s)	MIN SETTLING ZONE SURFACE AREA (Min A _s)	LIMITING CRITERIA
	(Ha)	(1: X YEARS)	(mm/hr)	(°C)	(s/m)	(m)	(1: X)	(L/s/Ha)	(L/s/Ha)	(m³)	(m²)	
LPoD-2	1.077	1	4.53	20	11150	0.86	3	9	9	265	108	VOLUME

BASIN ID	SETTLING ZONE			FREE WATER ZONE		SEDIMENT STORAGE ZONE		OVERALL DIMENSIONS RELATIVE TO SPILLWAY CREST (EXCL. FOREBAY)			
	ACTUAL SETTLING ZONE VOLUME (V _s)	ACTUAL SETTLING ZONE AREA (A _s)	SCOUR VELOCITY	DEPTH OF FREE WATER ZONE	VOLUME OF FREE WATER ZONE	SEDIMENT STORAGE VOLUME	SEDIMENT STORAGE DEPTH (APPROX.)	BATTER	WIDTH	LENGTH	DEPTH
	(m³)	(m²)	(m/s)	(m)	(m³)	(m³)	(m)	(1: X)	(m)	(m)	(m)
LPoD-2	265	308	0.002	0.20	62	79	0.44	3	12.71	38.13	1.50

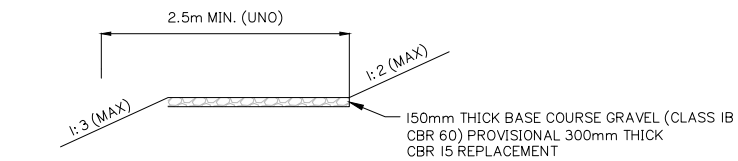
BASIN ID	SPILLWAY										
	BASIN DESIGN LIFE	DESIGN ARI	C ₁₀	C	t _c	I	Q	HEAD OVER SPILLWAY	SPILLWAY CREST LENGTH	SPILLWAY CREST RL	MIN EMBANKMENT RL
	yr					(mm/hr)	(m³/s)	(m)	(m)	(m)	(m)
LPoD-2	> 12 MONTHS	1: 50	0.80	0.92	15	183	0.50	0.20	10.0	14.050	14.700

BASIN ID	SETTLING ZONE (incl. sediment storage)				FOREBAY				HYDRAULIC CONTROLS			
	VOLUME (m³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	VOLUME (m³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	SPILLWAY CREST LENGTH (m)	SPILLWAY CREST (RL)	EMBANKMENT (RL)	LEVEL SPREADER CREST (RL)
LPoD-2	344	38.1	12.7	1.50	73	3.8	12.7	1.50	10	14.050	14.70	14.250



WEIR / SPILLWAY – TYPICAL ELEVATION

N.T.S.



MAINTENANCE ACCESS TRACK – TYPICAL SECTION

N.T.S.

UNO DENOTES 'UNLESS NOTED OTHERWISE'

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

RPD:

Lot: 502
Plan: SP316137
Local Authority: CITY OF GOLD COAST
COUNCIL
Level Datum: AHD
Meridian: -
Contour interval: -
PSM: -
RL: -

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ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
CONSTRUCTION PHASE
SEDIMENT BASIN 2
LAYOUT SHEET 4 OF 4

Issue	Date	Description	IG	MG	BA	CHK
C	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG		
B	15-02-2021	INFORMATION REQUEST RESPONSE	IG	MG		
A	20-11-2020	ORIGINAL ISSUE	BA	MG		

SCALE IN METRES



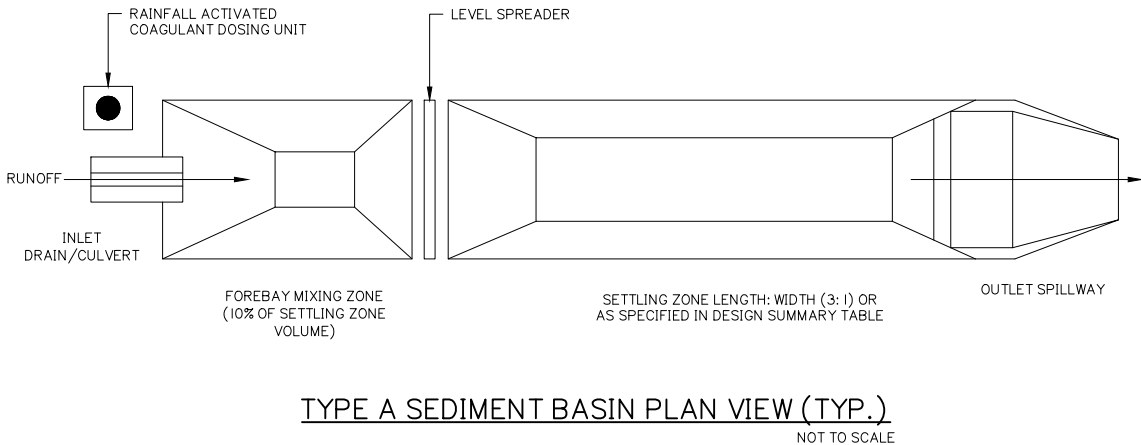
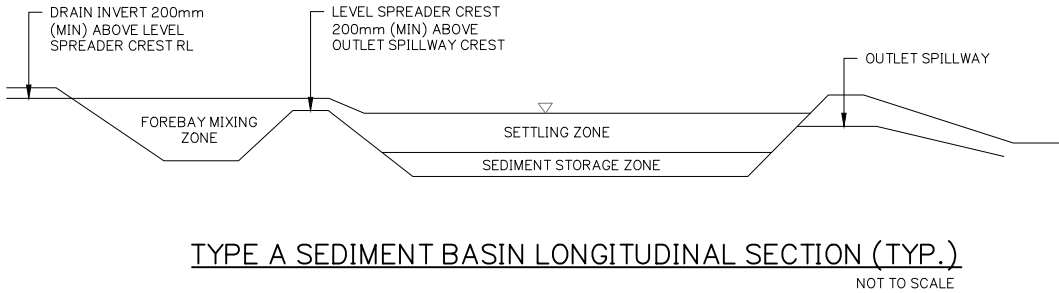
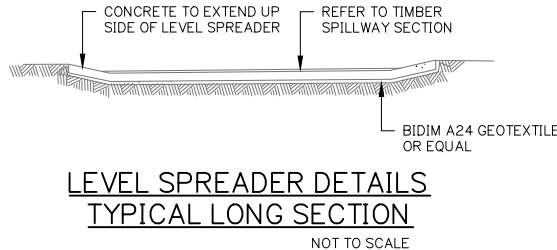
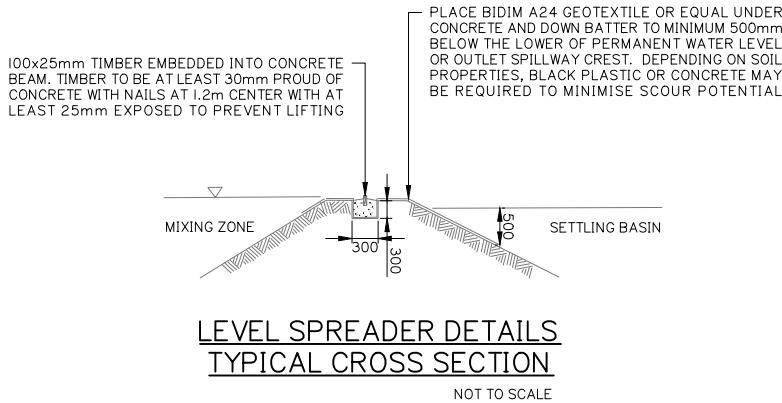
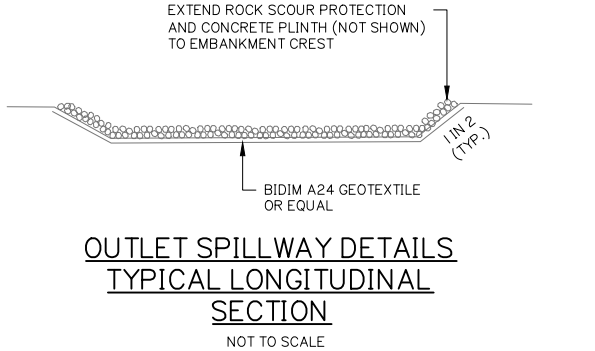
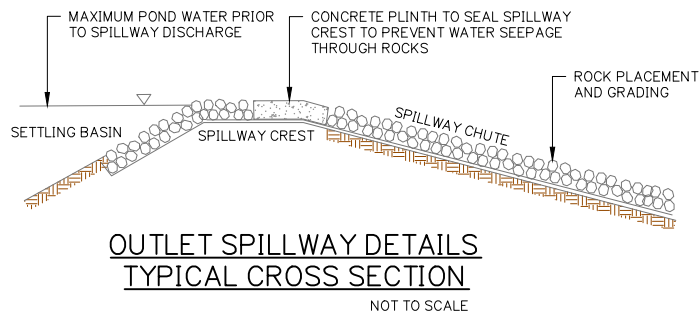
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1:500 (HALF SIZE A3)

Scale at A1: 1:250

Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	24-09-2021

Drawing No:
5941 ENG BE2 032

Rev. No:
C



Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

RPD:

Lot: 502
Plan: SP316137
Local Authority: CITY OF GOLD COAST
COUNCIL
Level Datum: AHD
Meridian: -
Contour interval: -
PSM: -
RL: -

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DRAWING TITLE
CONSTRUCTION PHASE
SEDIMENT BASIN TYPICAL
SECTIONS

B	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG	
A	20-11-2020	ORIGINAL ISSUE	BA	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES



1:250 (FULL SIZE A1)
1:500 (HALF SIZE A3)

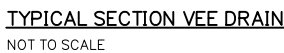
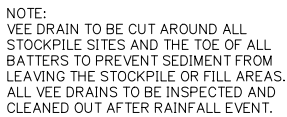
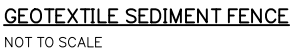
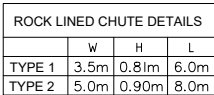
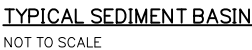
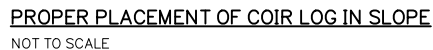
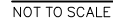
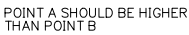
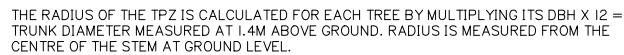
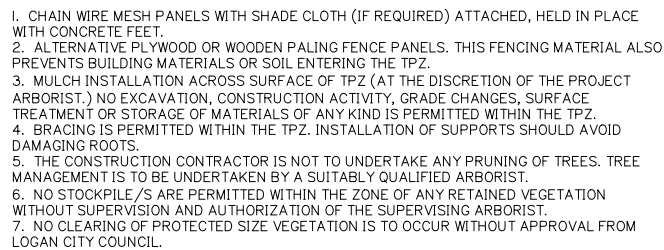
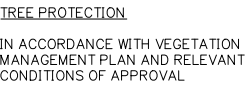
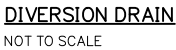
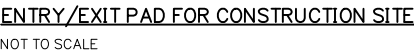
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Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	24-09-2021

Drawing No:
5941 ENG BE2 034

Rev. No:
B

CONSTRUCTION PHASE SEDIMENT BASIN TYPICAL SECTIONS



NOTE:
FOURTH SIDE OF TRAP NOT SHOWN FOR CLARITY

Client:



Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

RPD:

Lot: 502
Plan: SP316137
Local Authority: CITY OF GOLD COAST
COUNCIL

Level Datum: AHD
Meridian: -
Contour Interval: -
PSM: -
RL: -

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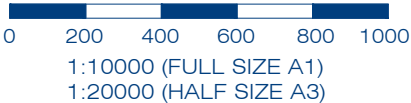
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DRAWING TITLE

SEDIMENT AND EROSION TYPICAL DETAILS

B	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED		IG	MC
A	20-11-2020	ORIGINAL ISSUE		BA	MC
Issue	Date	Description		DRN	CH

SCALE IN METRES



Scale at A1: N.T.S

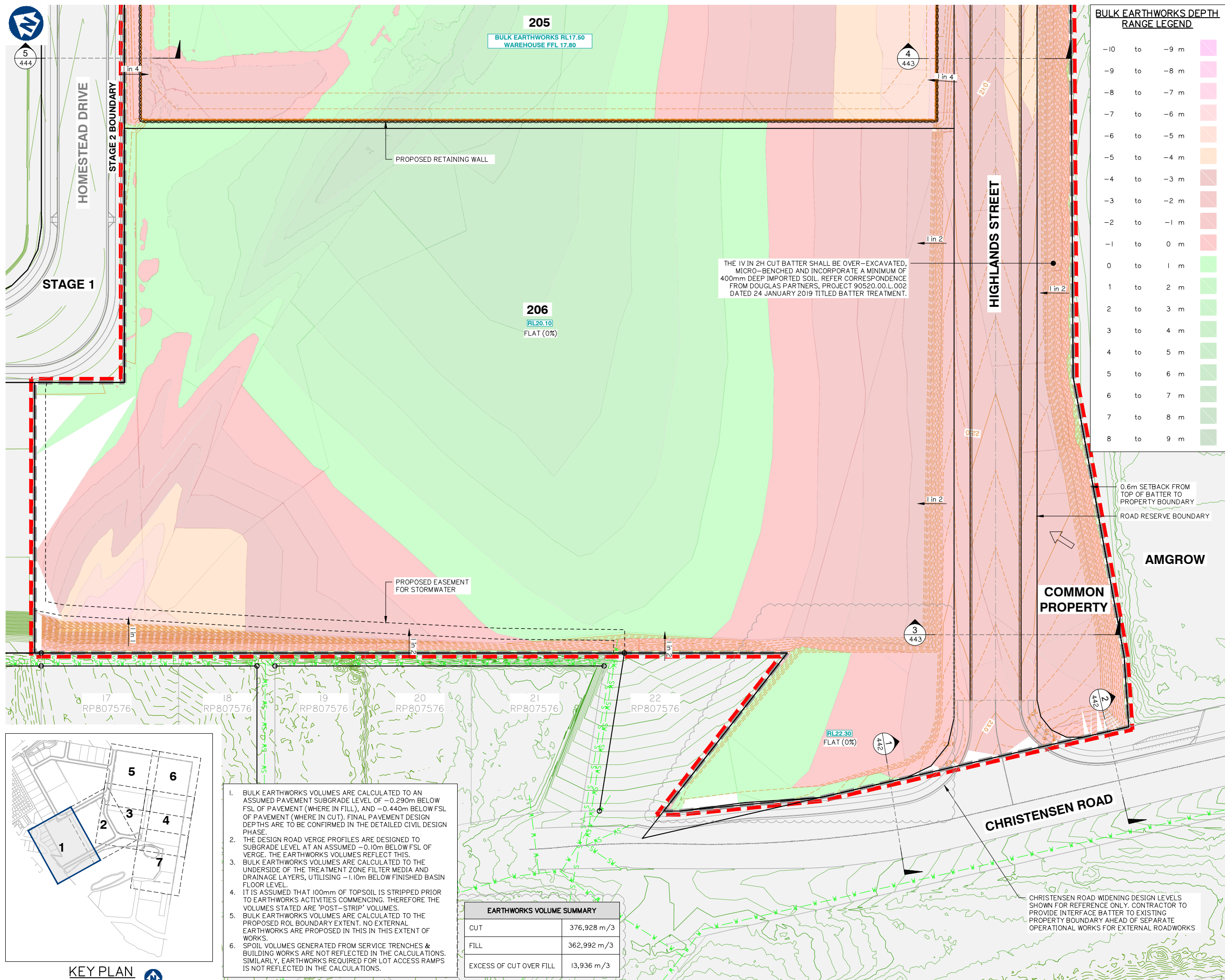
Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG

RPEQ:	16939
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Signed: 

Drawing No:
5941 ENG BE2 035

Rev. No:
B



Client:

FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

RPD:

Lot: 502
Plan: SP316137
Local Authority: CITY OF GOLD COAST
COUNCIL
Level Datum: AHD
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DRAWING TITLE

BULK EARTHWORKS
LAYOUT PLAN SHEET 1 OF 7

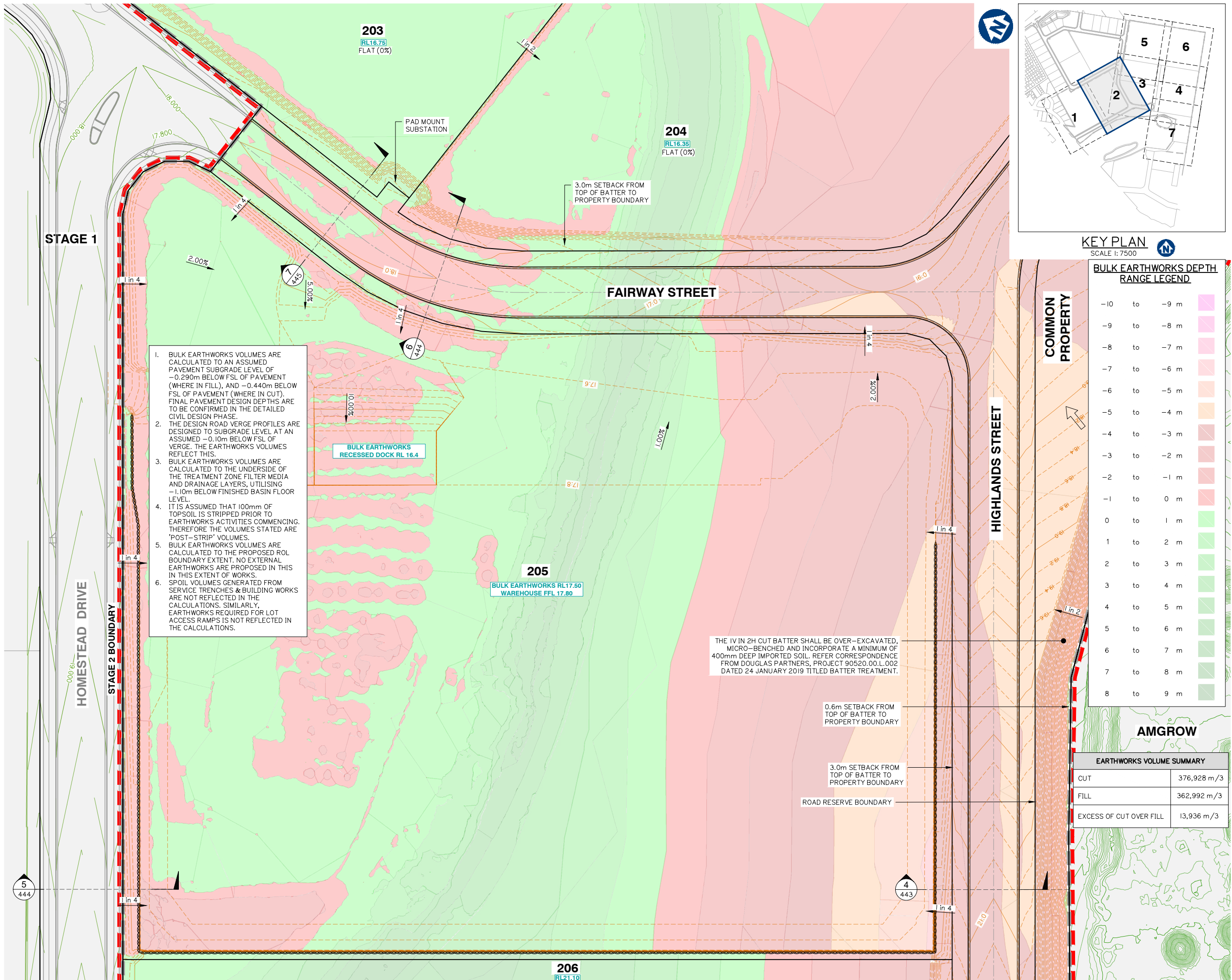
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1:1000 (HALF SIZE A3)

Scale at A1: 1:500

Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	23-05-2022

Drawing No:
5941 ENG BE2 050Rev. No:
F



Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

RPD:

Lot: 502
Plan: SP316137
Local Authority: CITY OF GOLD COAST
COUNCIL
Level Datum: AHD
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DRAWING TITLE

BULK EARTHWORKS
LAYOUT PLAN SHEET 2 OF 7

SCALE IN METRES



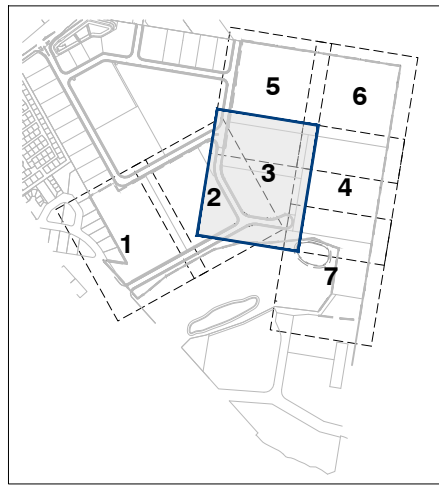
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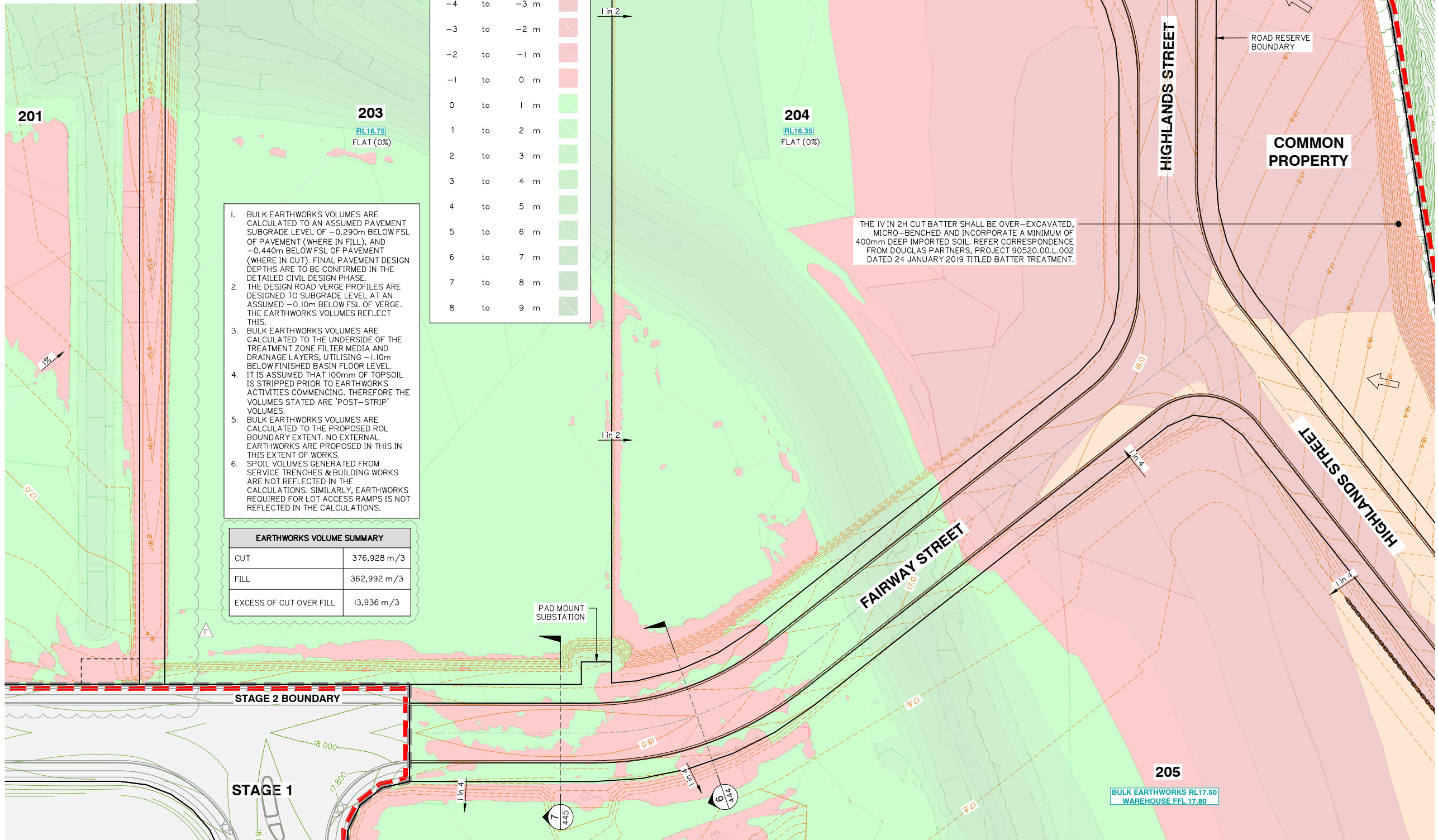
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Drafted: IG / BA / LAB
Approved: MG
RPEQ: 16939
Signed:
Date: 10-02-2022

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Rev. No:
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KEY PLAN
SCALE 1:7500



- BULK EARTHWORKS VOLUMES ARE CALCULATED TO AN ASSUMED PAVEMENT SUBGRADE LEVEL OF -0.230m BELOW FSL OF PAVEMENT (WHERE IN FILL), AND -0.440m BELOW FSL OF PAVEMENT (WHERE IN CUT). FINAL PAVEMENT DESIGN DEPTHS ARE TO BE CONFIRMED IN THE DETAILED CIVIL DESIGN PHASE.
- THE DESIGN ROAD VERGE PROFILES ARE DESIGNED TO SUBGRADE LEVEL AT AN ASSUMED -0.10m BELOW FSL OF VERGE. THE EARTHWORKS VOLUMES REFLECT THIS.
- BULK EARTHWORKS VOLUMES ARE CALCULATED TO THE UNDERSIDE OF THE TREATMENT ZONE FILTER MEDIA AND DRAINAGE LAYERS, UTILISING -1.10m BELOW FINISHED BASIN FLOOR LEVEL. IT IS ASSUMED THAT 100mm OF TOP SOIL IS STRIPPED PRIOR TO EARTHWORKS ACTIVITIES COMMENCING. THEREFORE THE VOLUMES STATED ARE 'POST-STRIP' VOLUMES.
- BULK EARTHWORKS VOLUMES ARE CALCULATED TO THE PROPOSED ROL BOUNDARY EXTENT. NO EXTERNAL EARTHWORKS ARE PROPOSED IN THIS IN THIS EXTENT OF WORKS.
- SPOIL VOLUMES GENERATED FROM SERVICE TRENCHES & BUILDING WORKS ARE NOT REFLECTED IN THE CALCULATIONS. SIMILARLY, EARTHWORKS REQUIRED FOR LOT ACCESS RAMPS IS NOT REFLECTED IN THE CALCULATIONS.

EARTHWORKS VOLUME SUMMARY	
CUT	376,928 m ³
FILL	362,992 m ³
EXCESS OF CUT OVER FILL	13,936 m ³

Client:



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Project:

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STAGE 2

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DRAWING TITLE

BULK EARTHWORKS
LAYOUT PLAN SHEET 3 OF 7

Rev	Date	Description	By	Check
F	23-05-2022	LOT 201 BOUNDARY AND EARTHWORKS	LAB	MG
E	10-02-2022	LOT 205 BOUNDARY AND EARTHWORKS	DV	MG
D	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG
C	31-03-2021	INFORMATION REQUEST RESPONSE	IG	MG
B	15-02-2021	INFORMATION REQUEST RESPONSE	IG	MG
A	20-11-2020	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	By	Check

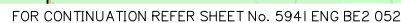
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1:500 (FULL SIZE A1)
1:1000 (HALF SIZE A3)

Scale at A1: 1:500

Designed:	IG
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DRAWING TITLE

BULK EARTHWORKS
LAYOUT PLAN SHEET 4 OF 7

F	23-05-2022	LOT 201 BOUNDARY AND EARTHWORKS	LAB	MO	
E	10-02-2022	RETAINING WALLS LOT 205	DV	MO	
D	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MO	
C	31-03-2021	INFORMATION REQUEST RESPONSE	IG	MO	
B	15-02-2021	INFORMATION REQUEST RESPONSE	IG	MO	
A	20-11-2020	ORIGINAL ISSUE	IG	MO	
Issue	Date	Description	DRN	CHN	

SCALE IN METRES



1:500 (FULL SIZE A1)
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Scale at A1: 1:500

Designed:	IG
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Drafted:	IG / BA / LAB
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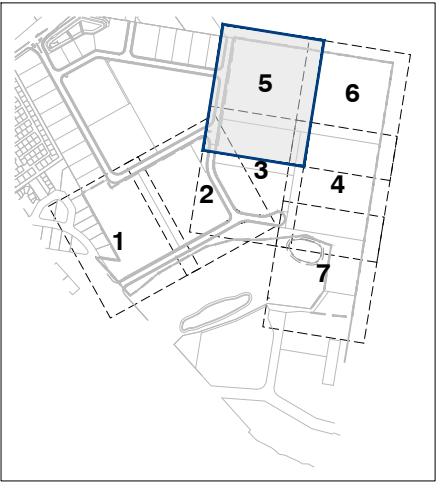
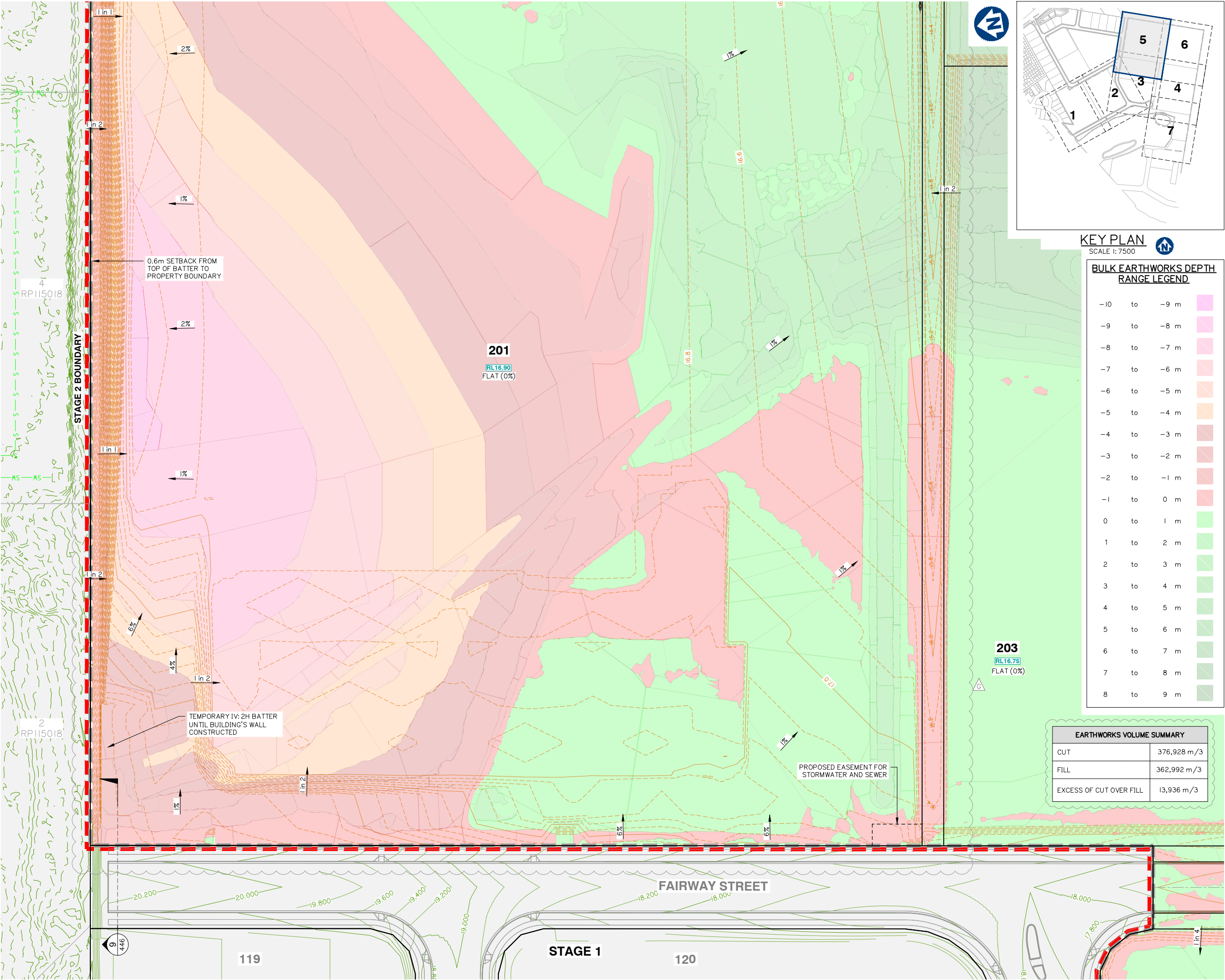
Approved:	MG
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RPEQ:	16939
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Date:	23-05-2022
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Drawing No:	Rev. No:
5941 ENG BE2 053	F



KEY PLAN
SCALE 1: 7500

BULK EARTHWORKS DEPTH RANGE LEGEND		
-10	to	-9 m
-9	to	-8 m
-8	to	-7 m
-7	to	-6 m
-6	to	-5 m
-5	to	-4 m
-4	to	-3 m
-3	to	-2 m
-2	to	-1 m
-1	to	0 m
0	to	1 m
1	to	2 m
2	to	3 m
3	to	4 m
4	to	5 m
5	to	6 m
6	to	7 m
7	to	8 m
8	to	9 m

EARTHWORKS VOLUME SUMMARY	
CUT	376,928 m ³
FILL	362,992 m ³
EXCESS OF CUT OVER FILL	13,936 m ³

FOR CONTINUATION REFER SHEET No. 5941 ENG BE2 055



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DRAWING TITLE

BULK EARTHWORKS
LAYOUT PLAN SHEET 5 OF 7

Rev	Date	Description	By	Check
G	23-05-2022	LOT 201 BOUNDARY AND EARTHWORKS	LAB	MG
F	10-02-2022	BATTER ALONG FAIRWAY STREET REDUCED	DV	MG
E	15-11-2021	RETAINING WALLS LOT 205	DV	MG
D	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG
C	31-03-2021	INFORMATION REQUEST RESPONSE	IG	MG
B	15-02-2021	INFORMATION REQUEST RESPONSE	IG	MG
A	20-11-2020	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	By	Check

SCALE IN METRES



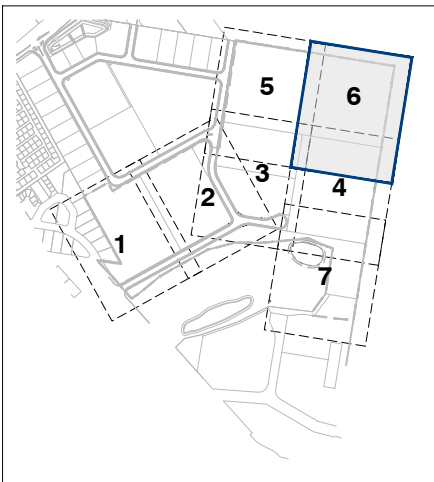
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Rev. No:
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DRAWING TITLE

BULK EARTHWORKS
LAYOUT PLAN SHEET 6 OF 7

E	23-05-2022	LOT 201 BOUNDARY AND EARTHWORKS	LAB	MG	
D	10-05-2022	RETAINING WALLS LOT 209	DV	MG	
C	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG	
B	31/03/21	INFORMATION REQUEST RESPONSE	JN	MG	
A	20-11-2020	ORIGINAL ISSUE	BA	MG	
Issue	Date	Description	IPN	CHK	

SCALE IN METRES



1:500 (FULL SIZE A1)
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Scale at A1: 1:500

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Approved:	MG
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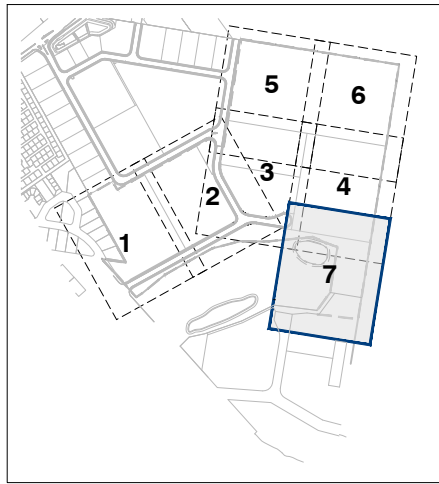
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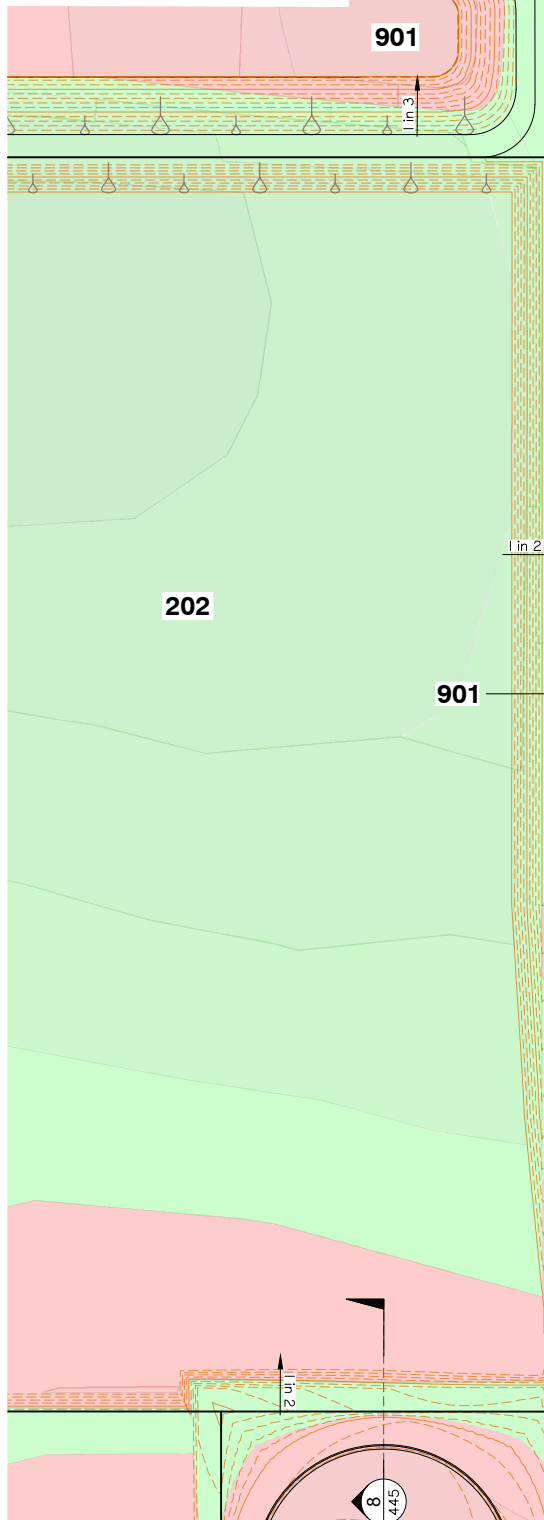
Date: 23-05-2022

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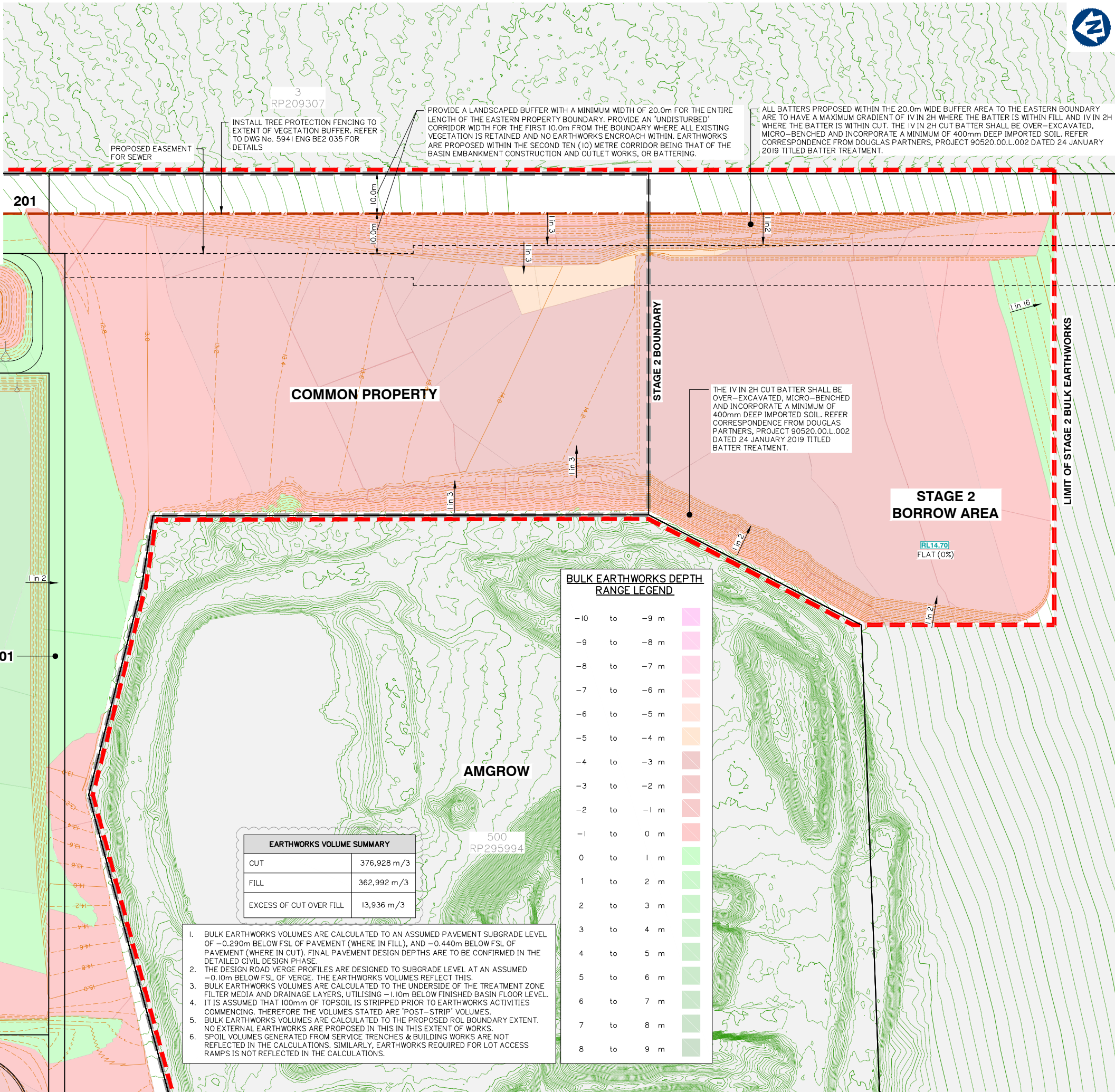


KEY PLAN
SCALE 1: 7500



FOR CONTINUATION REFER SHEET No. 5941 ENG BE2 053

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BULK EARTHWORKS LAYOUT PLAN SHEET 7 OF 7



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Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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Local Authority: CITY OF GOLD COAST
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DRAWING TITLE

BULK EARTHWORKS
LAYOUT PLAN SHEET 7 OF 7

Issue	Date	Description	BA	MG	CHK
E	10-02-2022	RETAINING WALLS LOT 205	DV	MG	
D	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG	
C	31-03-2021	INFORMATION REQUEST RESPONSE	IG	MG	
B	15-02-2021	INFORMATION REQUEST RESPONSE	IG	MG	
A	20-11-2020	ORIGINAL ISSUE	BA	MG	

SCALE IN METRES



Scale at A1: 1:500

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Rev. No:
E



Project: **VantageYatala**
STAGE 2

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COUNCIL
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DRAWING TITLE
FINISHED BULK
EARTHWORKS SURFACE
LEVEL PLAN SHEET 1 OF 7

E	23-05-2022	LOT 205/207 BOUNDARY AND EARTHWORKS	LAB	MG		
D	10-02-2022	LOT 205 BOUNDARY AND EARTHWORKS	DV	MG		
C	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG		
B	15-02-2021	INFORMATION REQUEST RESPONSE	IG	MG		
A	20-11-2020	ORIGINAL ISSUE	BA	MG		
			TBN			

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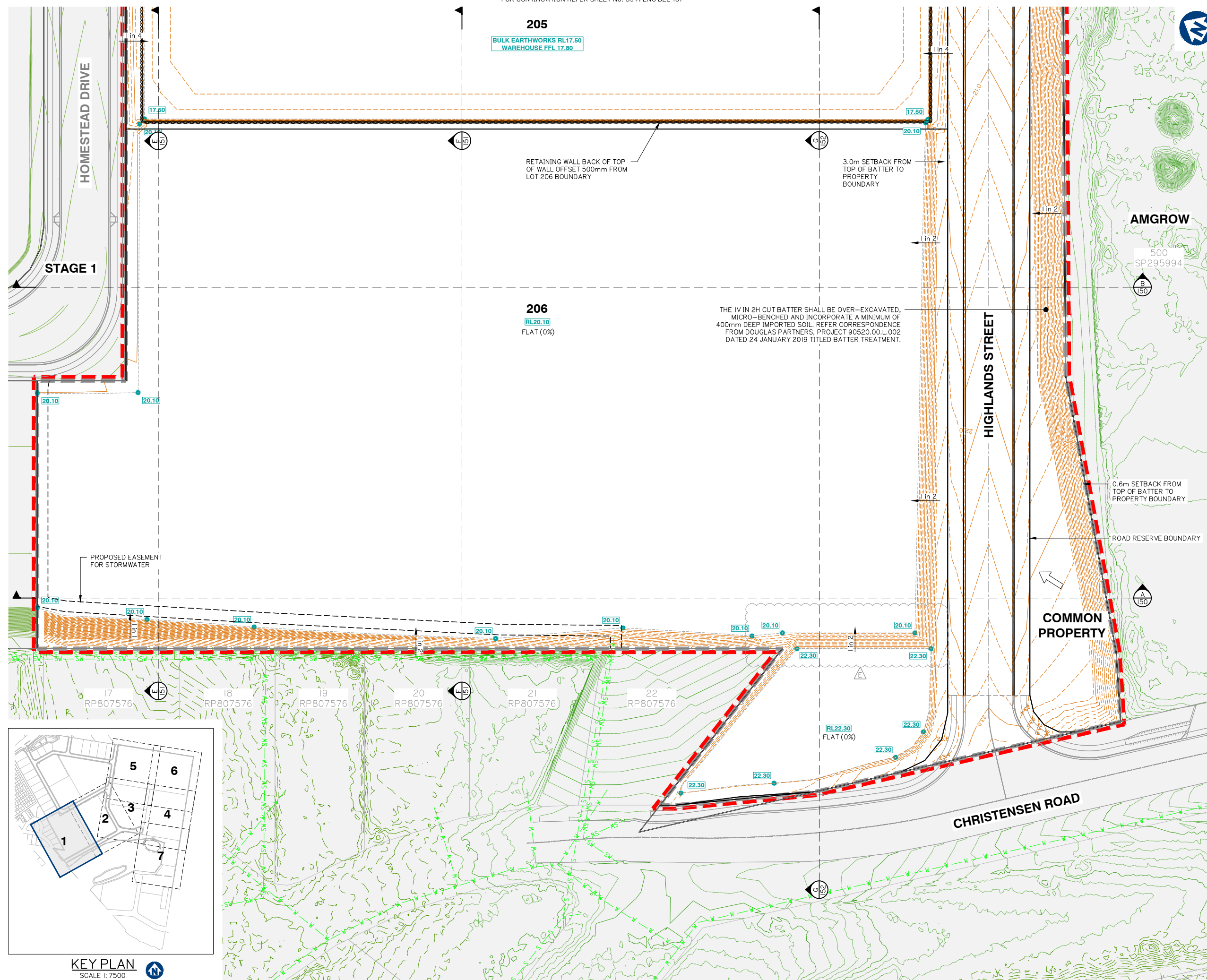
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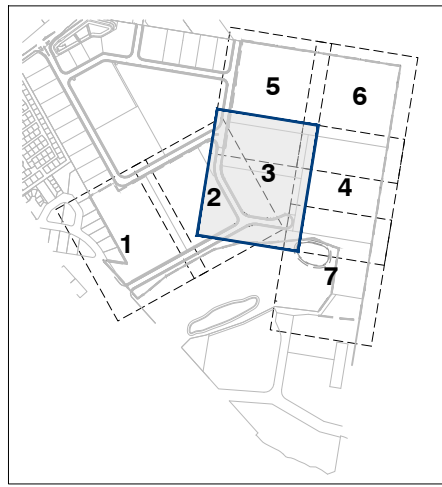
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Scale at A1: 1:500

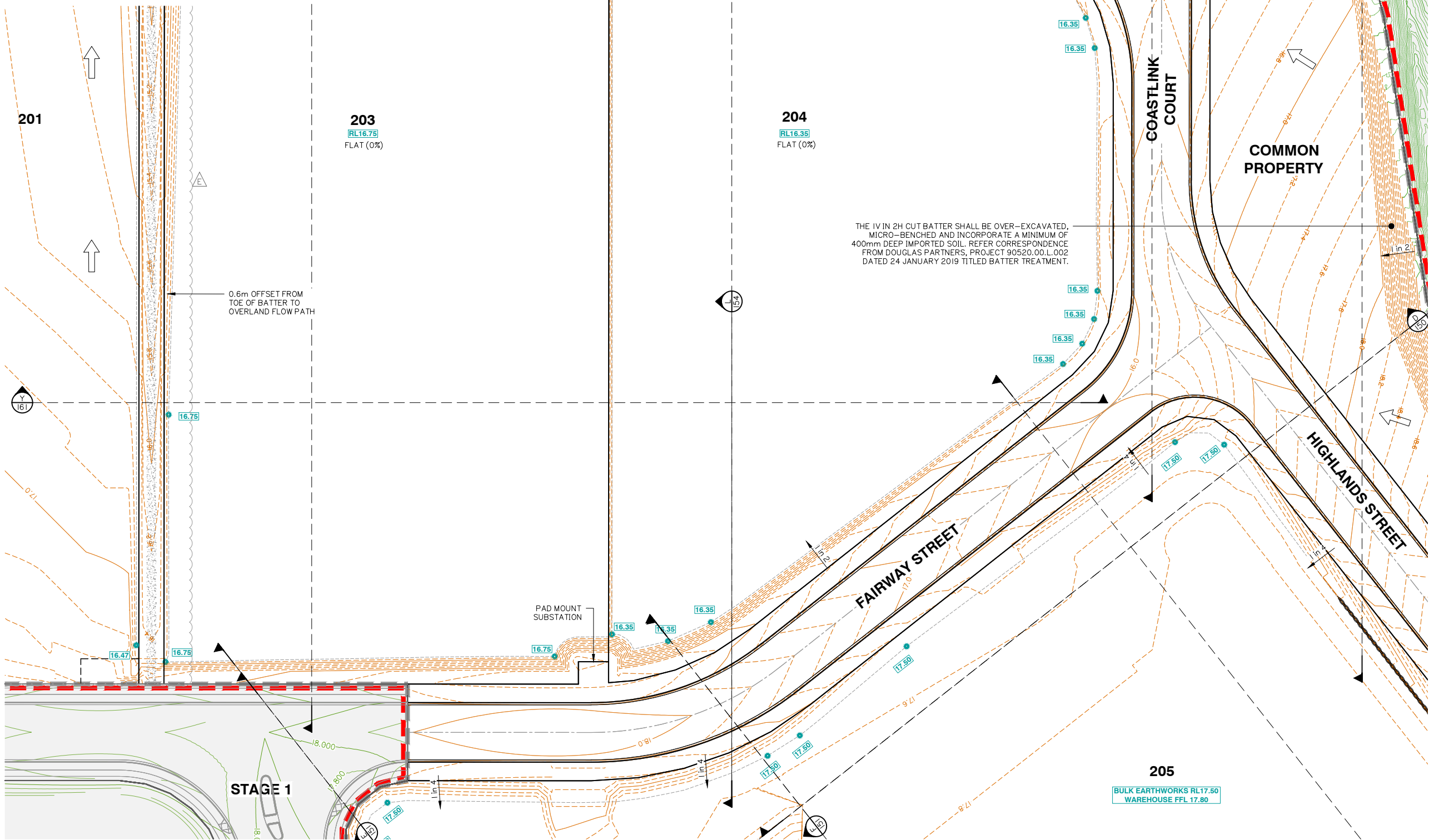
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5941 ENG BE2 100	E





KEY PLAN
SCALE 1: 7500



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FINISHED BULK EARTHWORKS SURFACE LEVEL PLAN SHEET 3 OF 7

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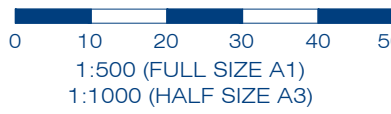
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FINISHED BULK
EARTHWORKS SURFACE
LEVEL PLAN SHEET 3 OF 7

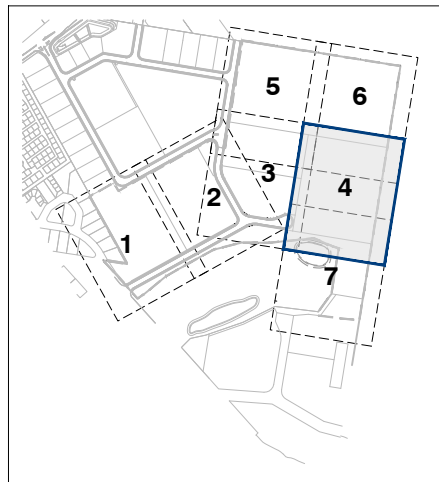
Issue	Date	Description	BA	MG	DRN	CHK
E	23-05-2022	LOT 201 BOUNDARY ALIGNMENT	LAB	MG		
D	10-02-2022	LOT 205 BOUNDARY AND EARTHWORKS	DV	MG		
C	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG		
B	15-02-2021	INFORMATION REQUEST RESPONSE	IG	MG		
A	20-11-2020	ORIGINAL ISSUE	BA	MG		

SCALE IN METRES

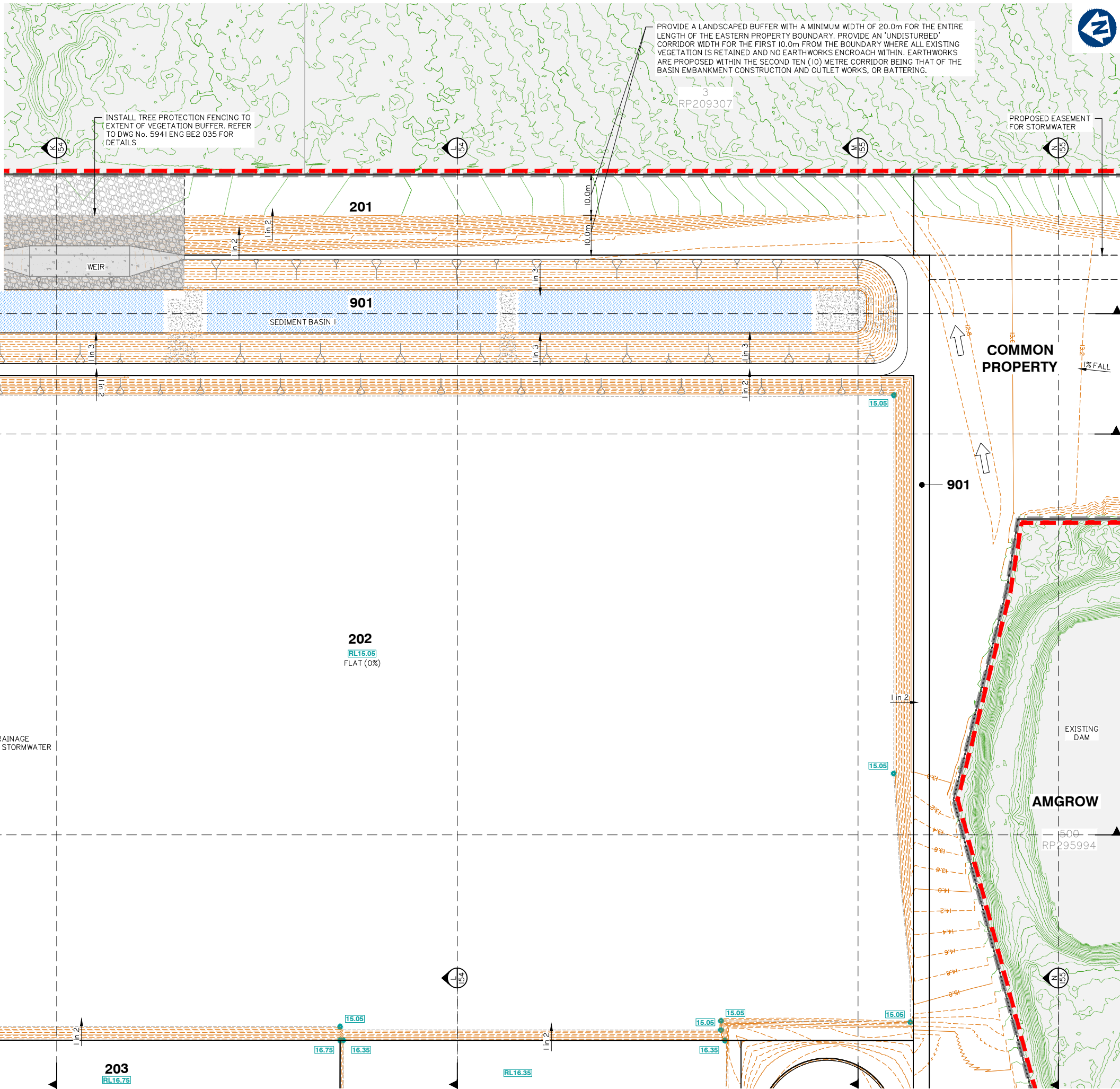


Scale at A1:	1:500
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KEY PLAN
SCALE 1: 7500



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FOR CONTINUATION REFER SHEET No. 5941 ENG BE2 106

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FINISHED BULK EARTHWORKS SURFACE LEVEL PLAN SHEET 4 OF 7

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FINISHED BULK
EARTHWORKS SURFACE
LEVEL PLAN SHEET 4 OF 7

D	23-05-2022	LOT 201 BOUNDARY ALIGNMENT	LAB	MG
C	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG
B	31/03/21	INFORMATION REQUEST RESPONSE	IG	MG
A	20-11-2020	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES



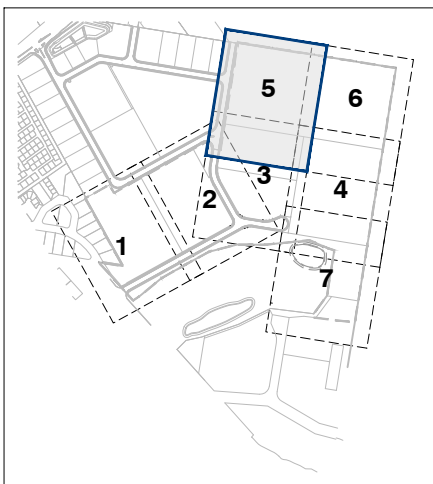
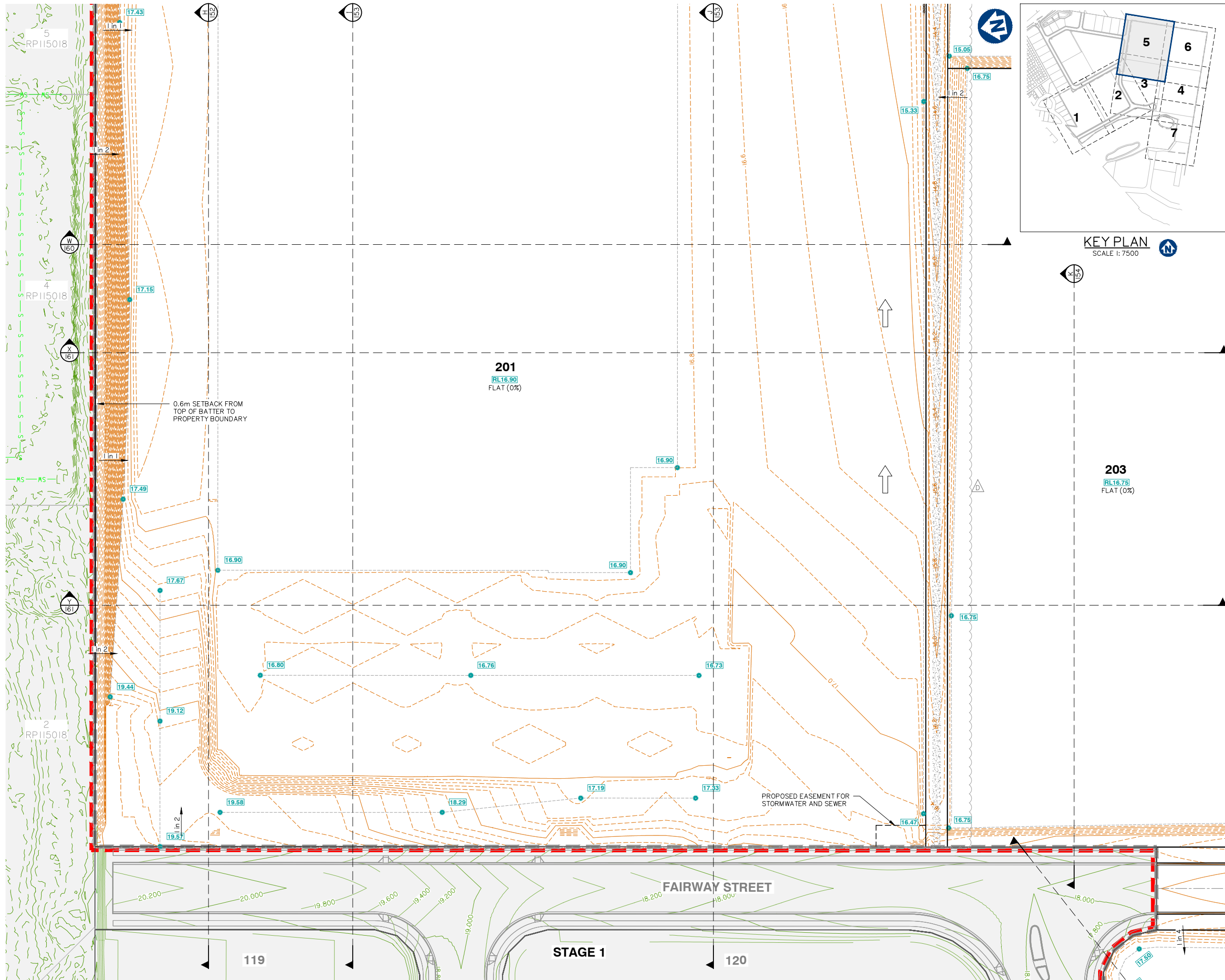
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1:1000 (HALF SIZE A3)

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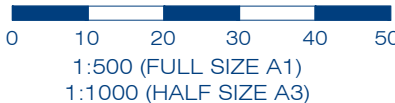
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DRAWING TITLE
FINISHED BULK
EARTHWORKS SURFACE
LEVEL PLAN SHEET 5 OF 7

Issue	Date	Description	BA	MG	DRN	CHK
D	23-05-2022	LOT 201 BOUNDARY ALIGNMENT	LAB	MG		
C	17-12-2021	BATTER ALONG FAIRWAY STREET REDUCED	DV	MG		
B	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG		
A	20-11-2020	ORIGINAL ISSUE	BA	MG		

SCALE IN METRES

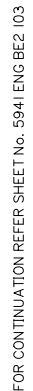


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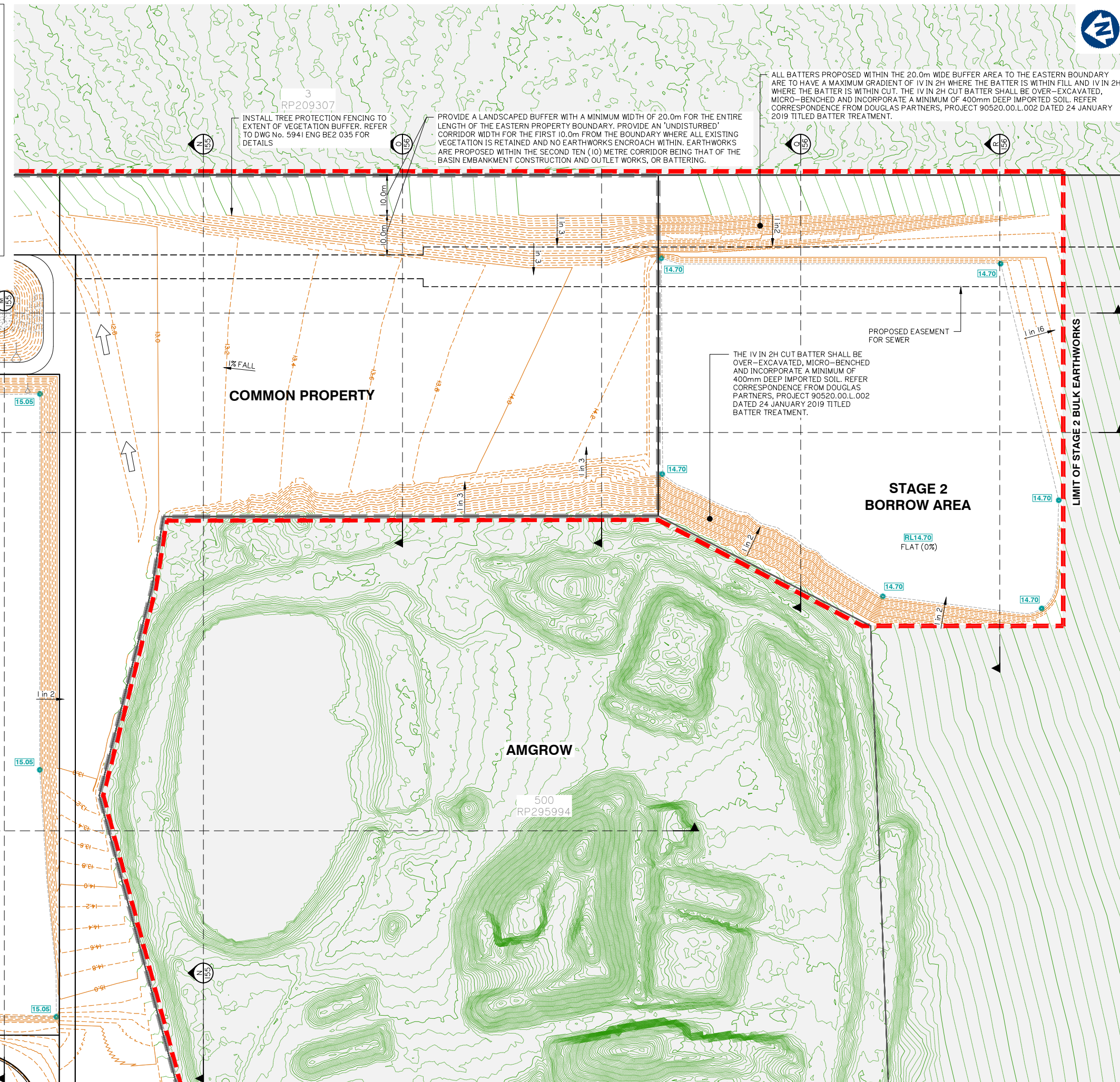
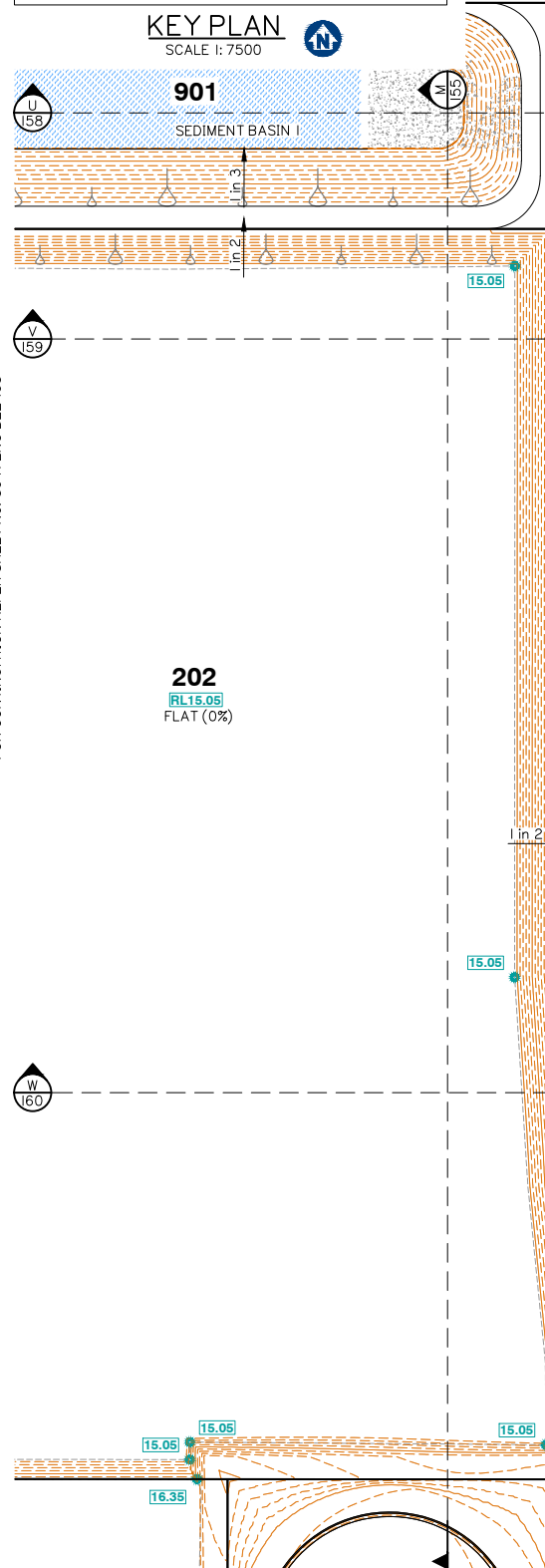
Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	23-05-2022

Drawing No:
5941 ENG BE2 104

Rev. No:
D



Drawing No:	Rev. No:
5941 ENG BE2 105	D



Client:



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Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

RPD:

Lot: 502
Plan: SP316137
Local Authority: CITY OF GOLD COAST
COUNCIL
Level Datum: AHD
Meridian: -
Contour Interval: -
PSM: -
RL: -

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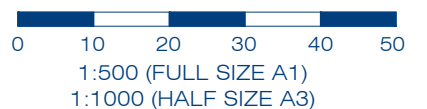
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DRAWING TITLE
FINISHED BULK
EARTHWORKS SURFACE
LEVEL PLAN SHEET 7 OF 7

D	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG		
C	31-03-2021	INFORMATION REQUEST RESPONSE	IG	MG		
B	15-09-2021	INFORMATION REQUEST RESPONSE	IG	MG		
A	20-11-2020	ORIGINAL ISSUE	BA	MG		
Issue	Date	Description	DRN	CHK		

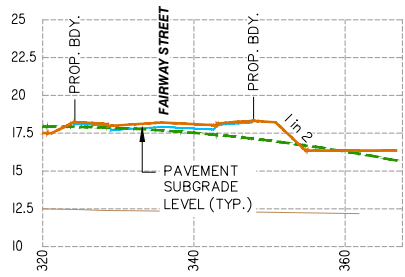
SCALE IN METRES



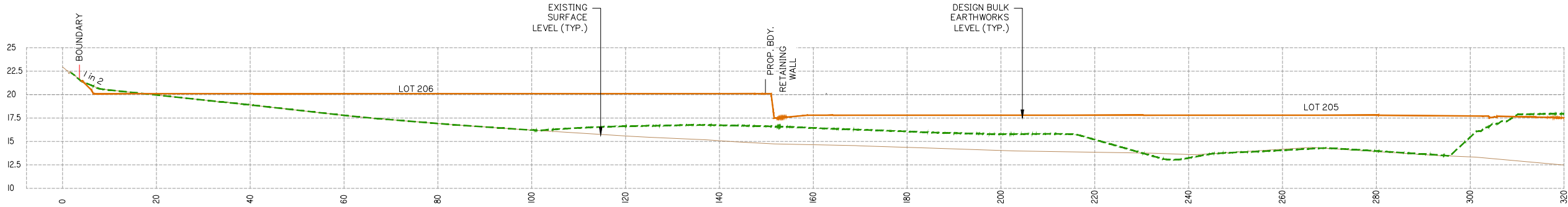
Scale at A1:	1:500
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Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	24-09-2021

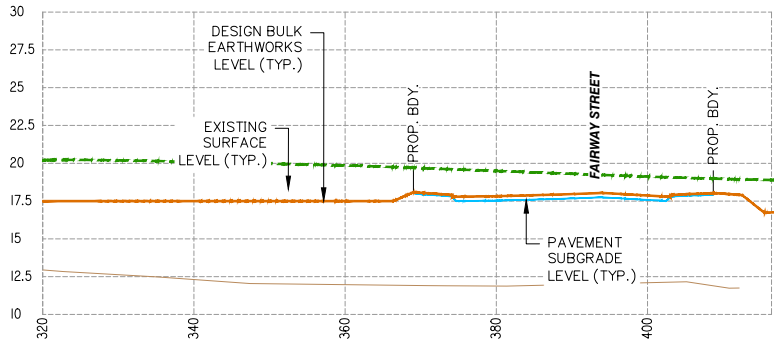
Drawing No:	Rev. No:
5941 ENG BE2 106	D



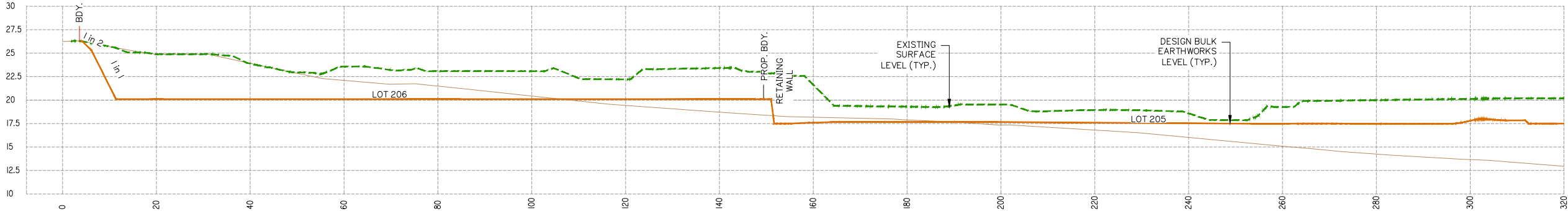
SECTION F
SCALE:
1: 500 HOR.
1: 250 VERT.
2: 1 DISTORTION



SECTION F
SCALE:
1: 500 HOR.
1: 250 VERT.
2: 1 DISTORTION



SECTION E
SCALE:
1: 500 HOR.
1: 250 VERT.
2: 1 DISTORTION



SECTION E
SCALE:
1: 500 HOR.
1: 250 VERT.
2: 1 DISTORTION



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Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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DRAWING TITLE
FINISHED BULK
EARTHWORKS CROSS
SECTIONS SHEET 2 OF 11

D	09-11-2021	LOT 205 BOUNDARY AND EARTHWORKS	IG	MG	
C	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG	
B	15-02-2021	INFORMATION REQUEST RESPONSE	IG	MG	
A	20-11-2020	ORIGINAL ISSUE	BA	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES

Scale 1:500 - Lengths are in Metres.
HOZ: 0 5 10 15 20 25 30 35 40

Scale 1:250 - Lengths are in Metres.
VERT: 0 2 4 6 8 10 12 14 16 18 20

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	11-11-2021

Drawing No: 5941 ENG BE2 151
Rev. No: D

FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 2 OF 11

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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BE PRINTED IN COLOUR

RPD:

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Plan: SP316137
Local Authority: CITY OF GOLD COAST
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Level Datum: AHD
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DRAWING TITLE

FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 3 OF 11

Rev	Date	Description	By	CHK
F	17-12-2021	BATTER ALONG FAIRWAY STREET REDUCED	DV	MG
E	09-11-2021	LOT 205 BOUNDARY AND EARTHWORKS	IG	MG
D	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG
C	31-03-2021	INFORMATION REQUEST RESPONSE	IG	MG
B	15-02-2021	INFORMATION REQUEST RESPONSE	IG	MG
A	20-11-2020	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	By	CHK

SCALE IN METRES

Scale 1:500 - Lengths are in Metres.
HOZ: 0 5 10 15 20 25 30 35 40

Scale 1:250 - Lengths are in Metres.
VERT: 0 2 4 6 8 10 12 14 16 18 20

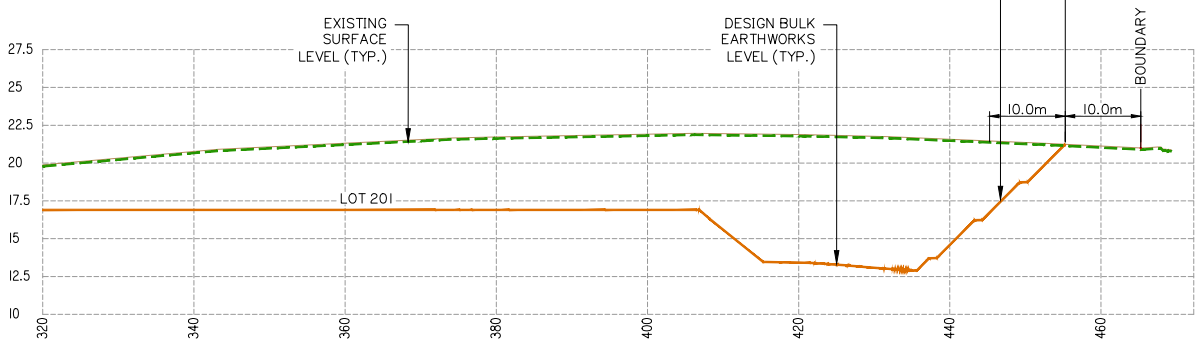
Scale at A1: AS SHOWN

Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	17-12-2021

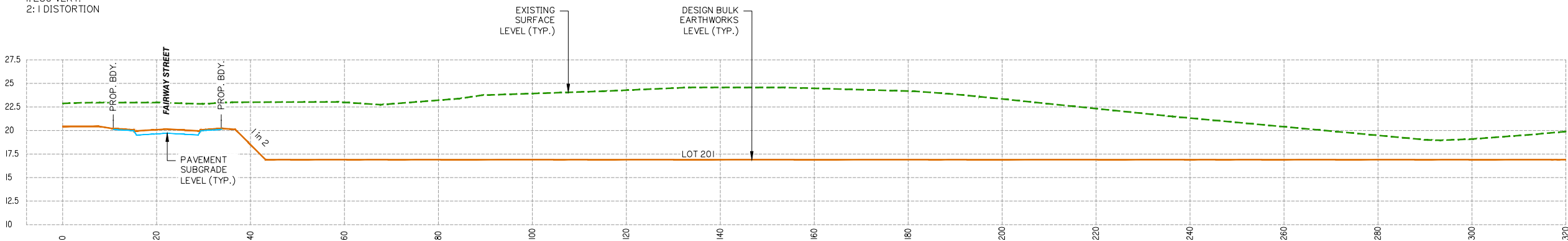
Drawing No: 5941 ENG BE2 152
Rev. No: F

ALL BATTERS PROPOSED WITHIN THE 20.0m WIDE BUFFER AREA TO THE EASTERN BOUNDARY ARE TO HAVE A MAXIMUM GRADIENT OF 1V IN 2H WHERE THE BATTER IS WITHIN FILL AND 1V IN 2H WHERE THE BATTER IS WITHIN CUT. THE 1V IN 2H CUT BATTER SHALL BE OVER-EXCAVATED, MICRO-BENCHED AND INCORPORATE A MINIMUM OF 400mm DEEP IMPORTED SOIL. REFER CORRESPONDENCE FROM DOUGLAS PARTNERS, PROJECT 90520.00.L.002 DATED 24 JANUARY 2019 TITLED BATTER TREATMENT.

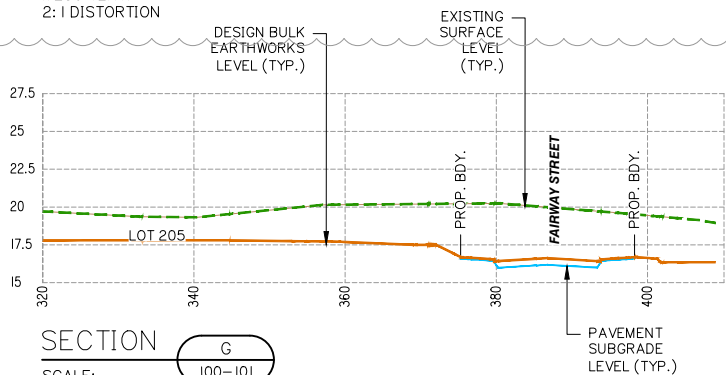
PROVIDE A LANDSCAPED BUFFER WITH A MINIMUM WIDTH OF 20.0m FOR THE ENTIRE LENGTH OF THE EASTERN PROPERTY BOUNDARY. PROVIDE AN 'UNDISTURBED' CORRIDOR WIDTH FOR THE FIRST 10.0m FROM THE BOUNDARY WHERE ALL EXISTING VEGETATION IS RETAINED AND NO EARTHWORKS ENCROACH WITHIN. EARTHWORKS ARE PROPOSED WITHIN THE SECOND TEN (10) METRE CORRIDOR BEING THAT OF THE BASIN EMBANKMENT CONSTRUCTION AND OUTLET WORKS, OR BATTERING.



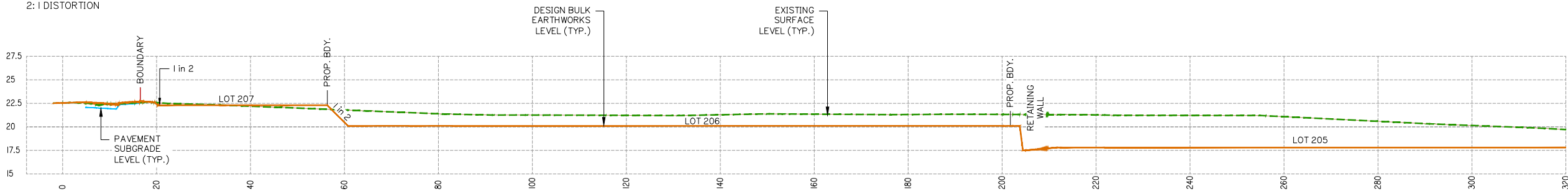
SECTION H
104-105
SCALE:
1: 500 HOR.
1: 250 VERT.
2: 1 DISTORTION



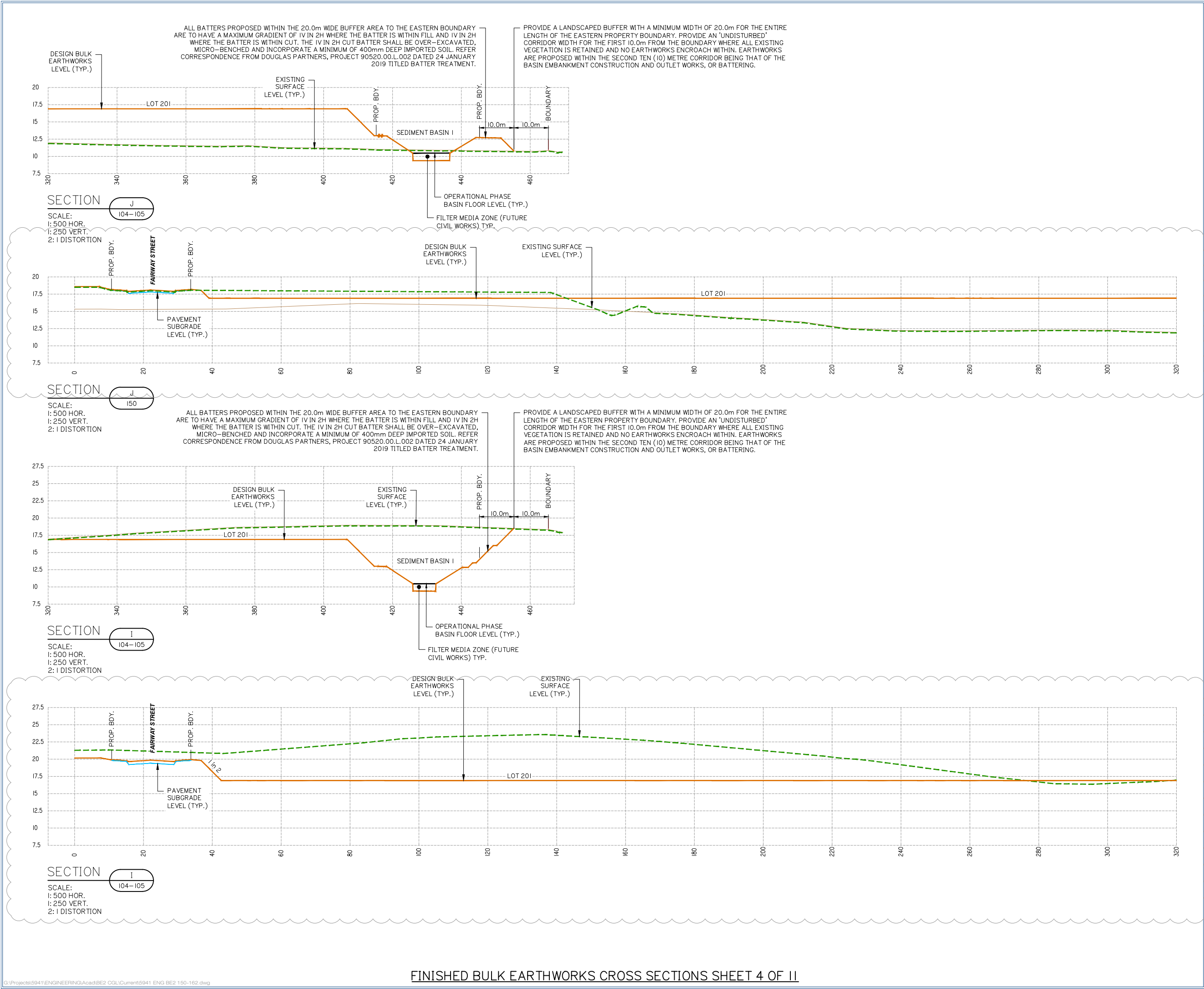
SECTION H
104-105
SCALE:
1: 500 HOR.
1: 250 VERT.
2: 1 DISTORTION



SECTION G
100-101
SCALE:
1: 500 HOR.
1: 250 VERT.
2: 1 DISTORTION



SECTION G
100-101
SCALE:
1: 500 HOR.
1: 250 VERT.
2: 1 DISTORTION



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(AUSTRALIA) PTY. LTD.

Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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RPD:

Lot: 502
Plan: SP316137
Local Authority: CITY OF GOLD COAST
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DRAWING TITLE

FINISHED BULK EARTHWORKS CROSS SECTIONS SHEET 4 OF 11

D	17-12-2021	BATTER ALONG FAIRWAY STREET REDUCED	DV	MG	
C	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG	
B	31/03/21	INFORMATION REQUEST RESPONSE	IG	MG	
A	20-11-2020	ORIGINAL ISSUE	BA	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES

Scale 1:500 - Lengths are in Metres.
HOZ: 0 5 10 15 20 25 30 35 40

Scale 1:250 - Lengths are in Metres.
VERT: 0 2 4 6 8 10 12 14 16 18 20

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	17-12-2021

Drawing No:
5941 ENG BE2 153

Rev. No:
D

Client:



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(AUSTRALIA) PTY. LTD.

Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
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THIS DRAWING IS INTENDED TO
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RPD:

Lot: 502
Plan: SP316137
Local Authority: CITY OF GOLD COAST
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Level Datum: AHD
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DRAWING TITLE
FINISHED BULK
EARTHWORKS CROSS
SECTIONS SHEET 6 OF 11

C	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG	
B	31/03/21	INFORMATION REQUEST RESPONSE	IG	MG	
A	20-11-2020	ORIGINAL ISSUE	BA	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES

Scale 1:500 - Lengths are in Metres.
HOZ: 0 5 10 15 20 25 30 35 40

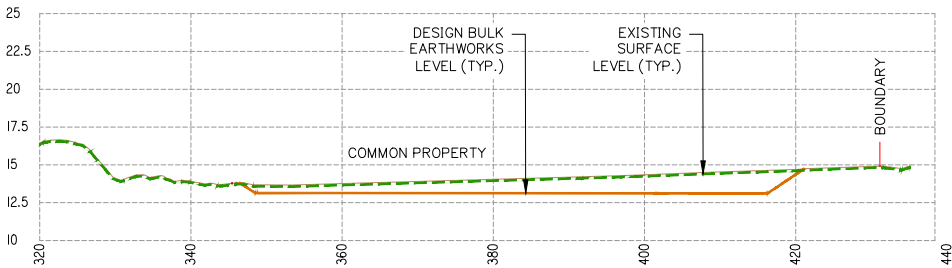
Scale 1:250 - Lengths are in Metres.
VERT: 0 2 4 6 8 10 12 14 16 18 20

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	24-09-2021

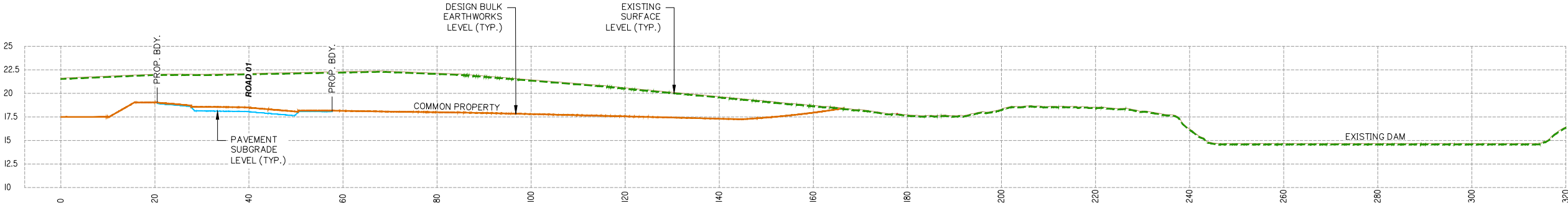
Drawing No:
5941 ENG BE2 155

Rev. No:
C



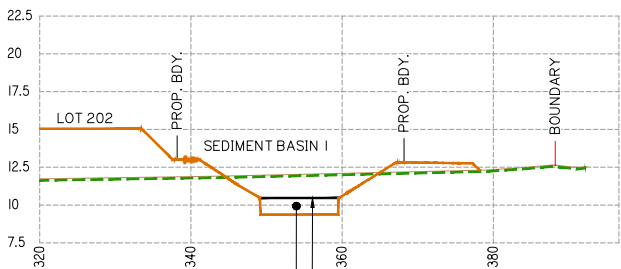
SECTION

SCALE:
1: 500 HOR.
1: 250 VERT.
2: 1 DISTORTION



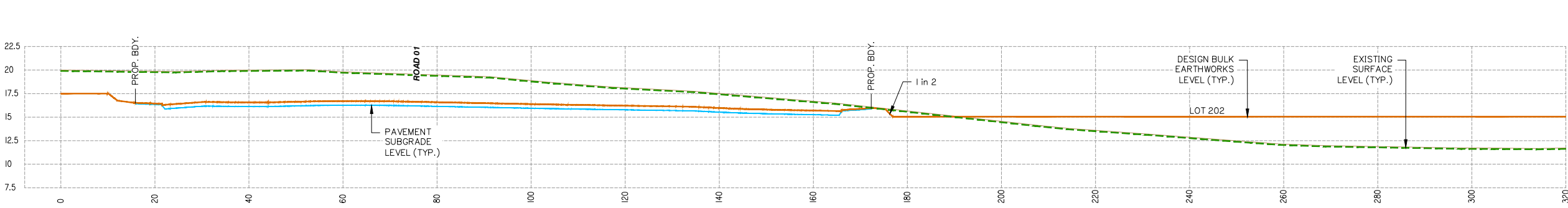
SECTION

SCALE:
1: 500 HOR.
1: 250 VERT.
2: 1 DISTORTION



SECTION

SCALE:
1: 500 HOR.
1: 250 VERT.
2: 1 DISTORTION



SECTION

SCALE:
1: 500 HOR.
1: 250 VERT.
2: 1 DISTORTION



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VantageYatala

STAGE 2

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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Plan: SP316137
Local Authority: CITY OF GOLD COAST
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Level Datum: AHD
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DRAWING TITLE
FINISHED BULK
EARTHWORKS CROSS
SECTIONS SHEET 7 OF 11

[illegible]

SCALE IN METRES

Scale 1:500 - Lengths are in Metres.

HOZ: 

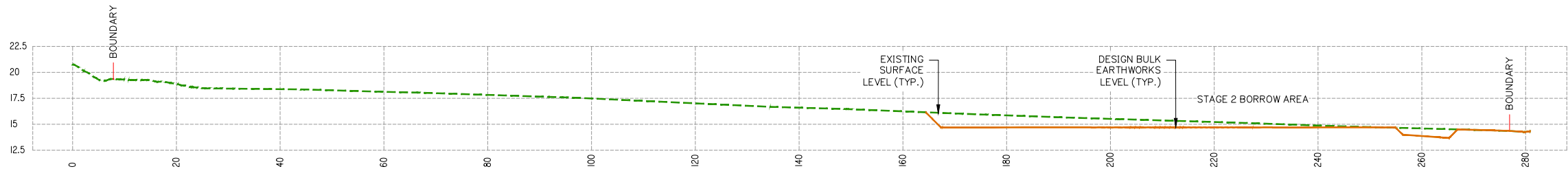
Scale 1:250 - Lengths are in Metres.

VERT: 

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	24-09-2021

Drawing No:	Rev. No:
5941 ENG BE2 156	B

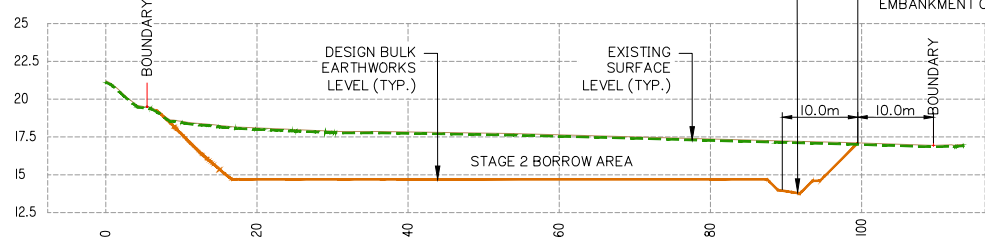


SCALE: 106-108

SCALE:
1: 500 HOR.
1: 250 VERT.
2: 1 DISTORTION

ALL BATTERS PROPOSED WITHIN THE 20.0m WIDE BUFFER AREA TO THE EASTERN BOUNDARY ARE TO HAVE A MAXIMUM GRADIENT OF 1V IN 2H WHERE THE BATTER IS WITHIN FILL AND 1V IN 2H WHERE THE BATTER IS WITHIN CUT. THE 1V IN 2H CUT BATTER SHALL BE OVER-EXCAVATED, MICRO-BENCHED AND INCORPORATE A MINIMUM OF 400mm DEEP IMPORTED SOIL. REFER CORRESPONDENCE FROM DOUGLAS PARTNERS, PROJECT 90520.00.L002 DATED 24 JANUARY 2019 TITLED BATTER TREATMENT.

PROVIDE A LANDSCAPED BUFFER WITH A MINIMUM WIDTH OF 20.0m FOR THE ENTIRE LENGTH OF THE EASTERN PROPERTY BOUNDARY. PROVIDE AN "UNDISTURBED" CORRIDOR WIDTH FOR THE FIRST 10.0m FROM THE BOUNDARY WHERE ALL EXISTING VEGETATION IS RETAINED AND NO EARTHWORKS ENCROACH WITHIN. EARTHWORKS ARE PROPOSED WITHIN THE SECOND TEN (10) METRE CORRIDOR BEING THAT OF THE BASIN EMBANKMENT CONSTRUCTION AND OUTLET WORKS, OR BATTERING.

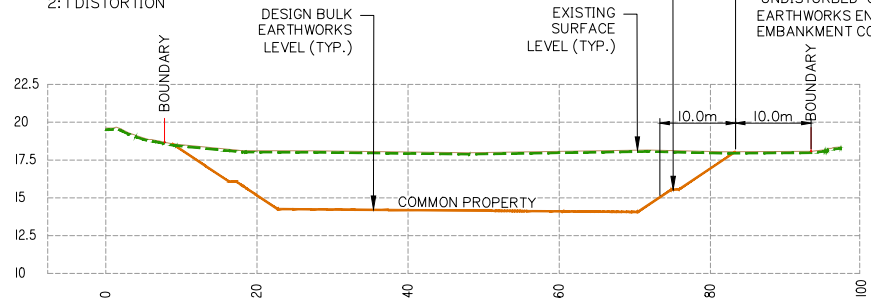


SCALE: 106

SCALE:
1: 500 HOR.
1: 250 VERT.
2: 1 DISTORTION

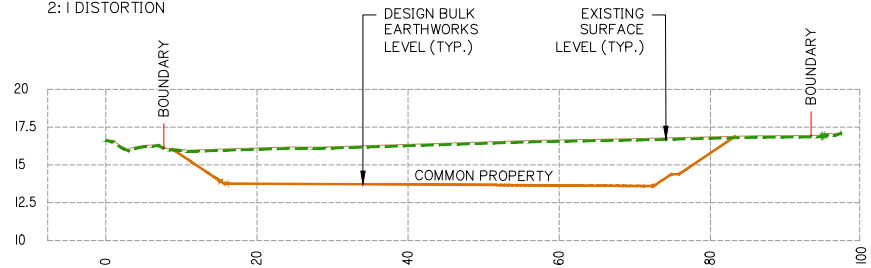
ALL BATTERS PROPOSED WITHIN THE 20.0m WIDE BUFFER AREA TO THE EASTERN BUFFER ARE TO HAVE A MAXIMUM GRADIENT OF 1V IN 2H WHERE THE BATTER IS WITHIN FILL AND 1V IN 2H WHERE THE BATTER IS WITHIN CUT. THE 1V IN 2H CUT BATTER SHALL BE OVER-EXCAVATED, MICRO-BENCHED AND INCORPORATE A MINIMUM OF 400mm DEEP IMPORTED SOIL. REFER CORRESPONDENCE FROM DOUGLAS PARTNERS, PROJECT 90520.00.L002 DATED 24 JANUARY 2019 TITLED BATTER TREATMENT.

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SCALE: 106

SCALE:
1: 500 HOR.
1: 250 VERT.
2: 1 DISTORTION



SCALE: 106

SCALE:
1: 500 HOR.
1: 250 VERT.
2: 1 DISTORTION



Project: **VantageYatala**
STAGE 2

Site Address:
60 STAPYLTON JACOBS WELL
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DRAWING TITLE
FINISHED BULK
EARTHWORKS CROSS
SECTIONS SHEET 8 OF 11

24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG
31/03/21	INFORMATION REQUEST RESPONSE	IG
20-11-2020	ORIGINAL ISSUE	BA
Date	Description	DRN

SCALE IN METRES

Scale 1:500 - Lengths are in Metres.

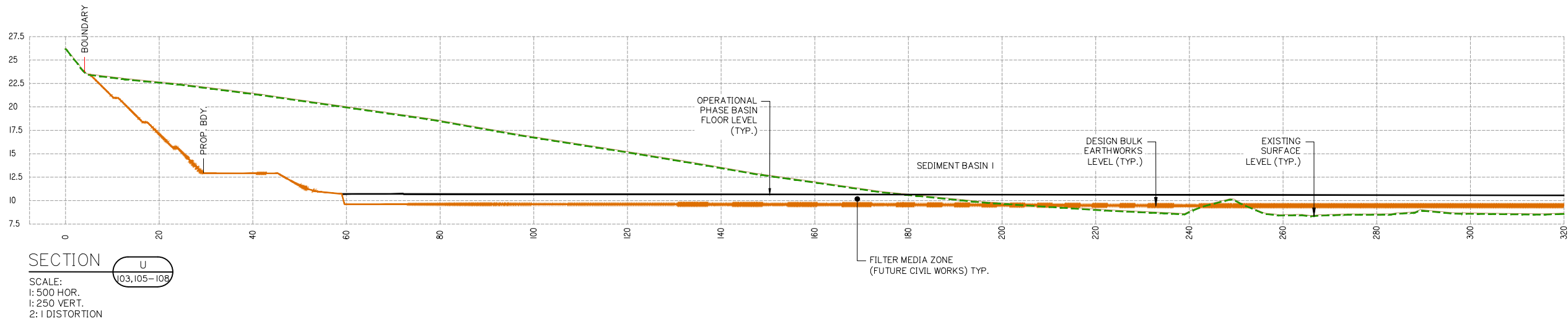
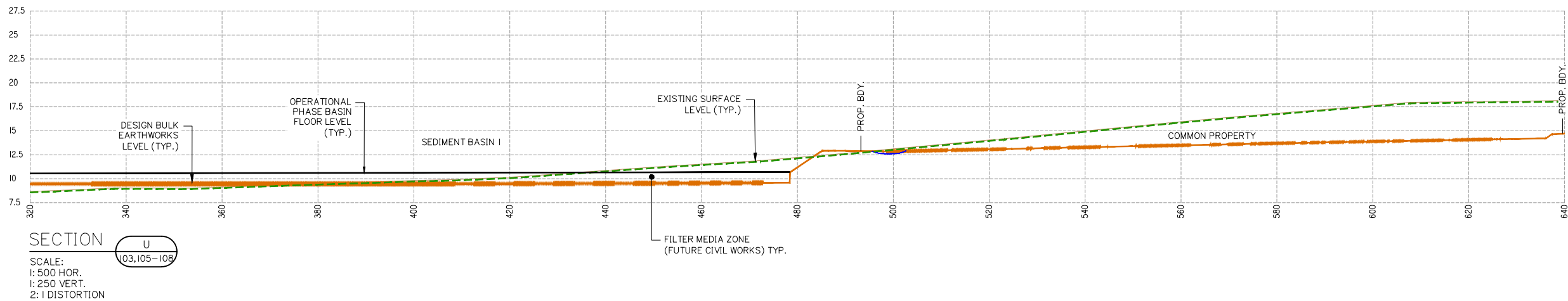
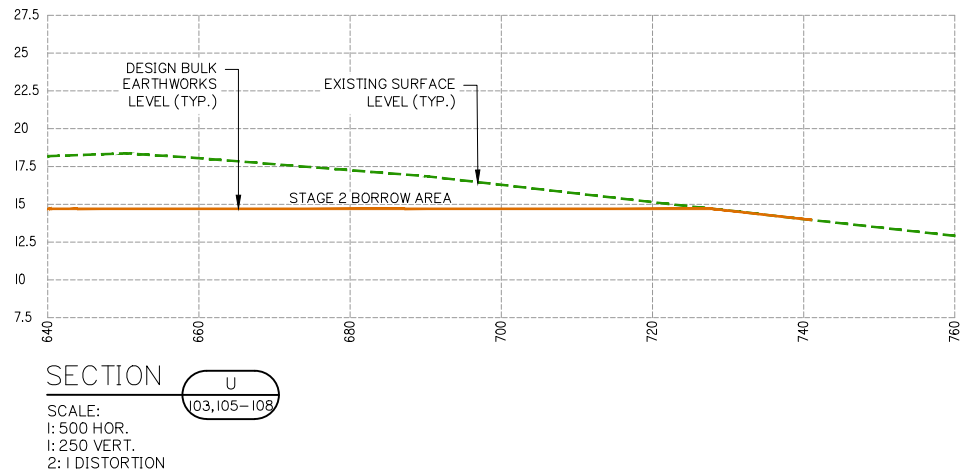
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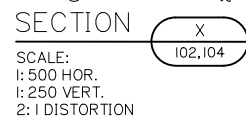
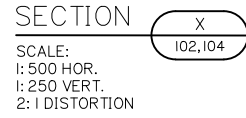
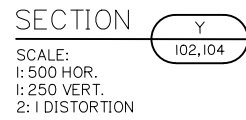
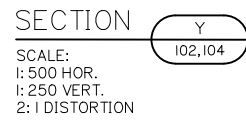
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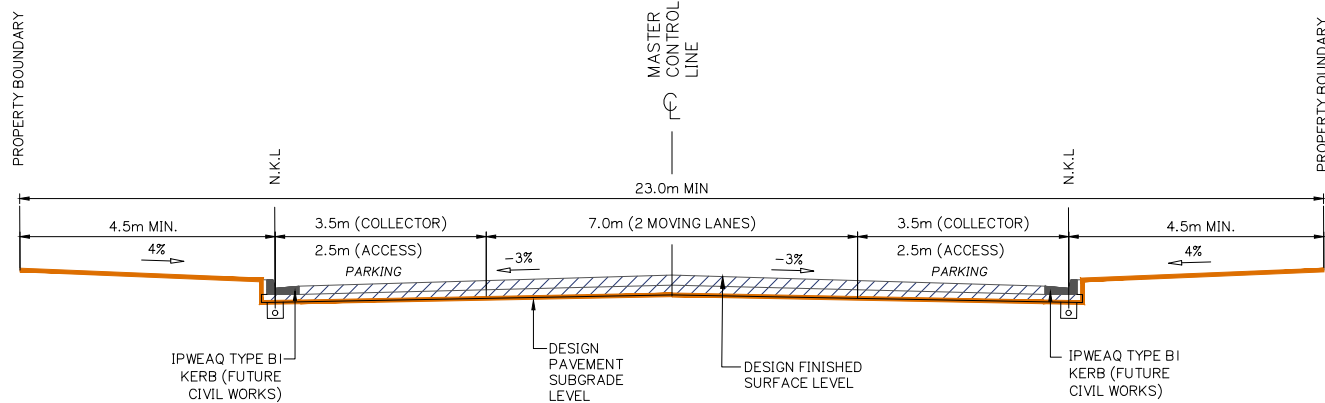
Scale at A1: AS SHOWN

Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
PEQ:	16939
Signed:	
Date:	24-09-2021

Drawing No:	Rev. N
041 ENG BE2 158	C



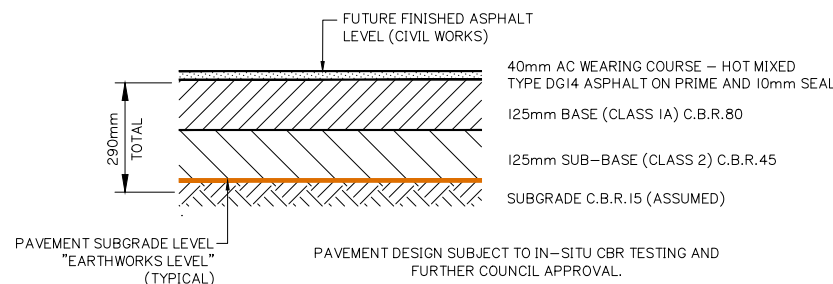




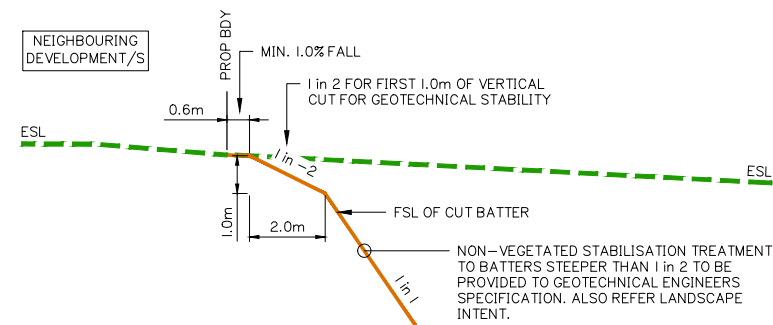
TYPICAL CROSS SECTION – INDUSTRIAL / COMMERCIAL
COLLECTOR AND ACCESS STREETS (23.0m)
FAIRWAY STREET AND ROAD 01

REFER ALSO CoGC STD DWG 05-02-2004 FOR DETAILS

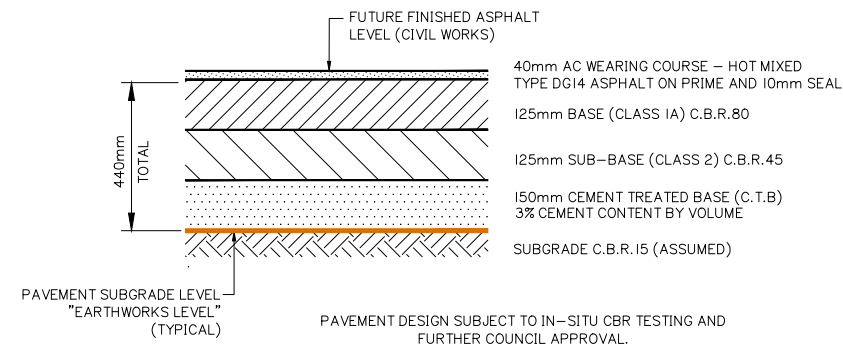
ONLY THE BULK EARTHWORKS IS APPLICABLE.
A SEPARATE APPLICATION WILL BE SUBMITTED
FOR THE CIVIL ROADWORKS ASSOCIATED WITH
THE RECONFIGURATION OF LOTS.



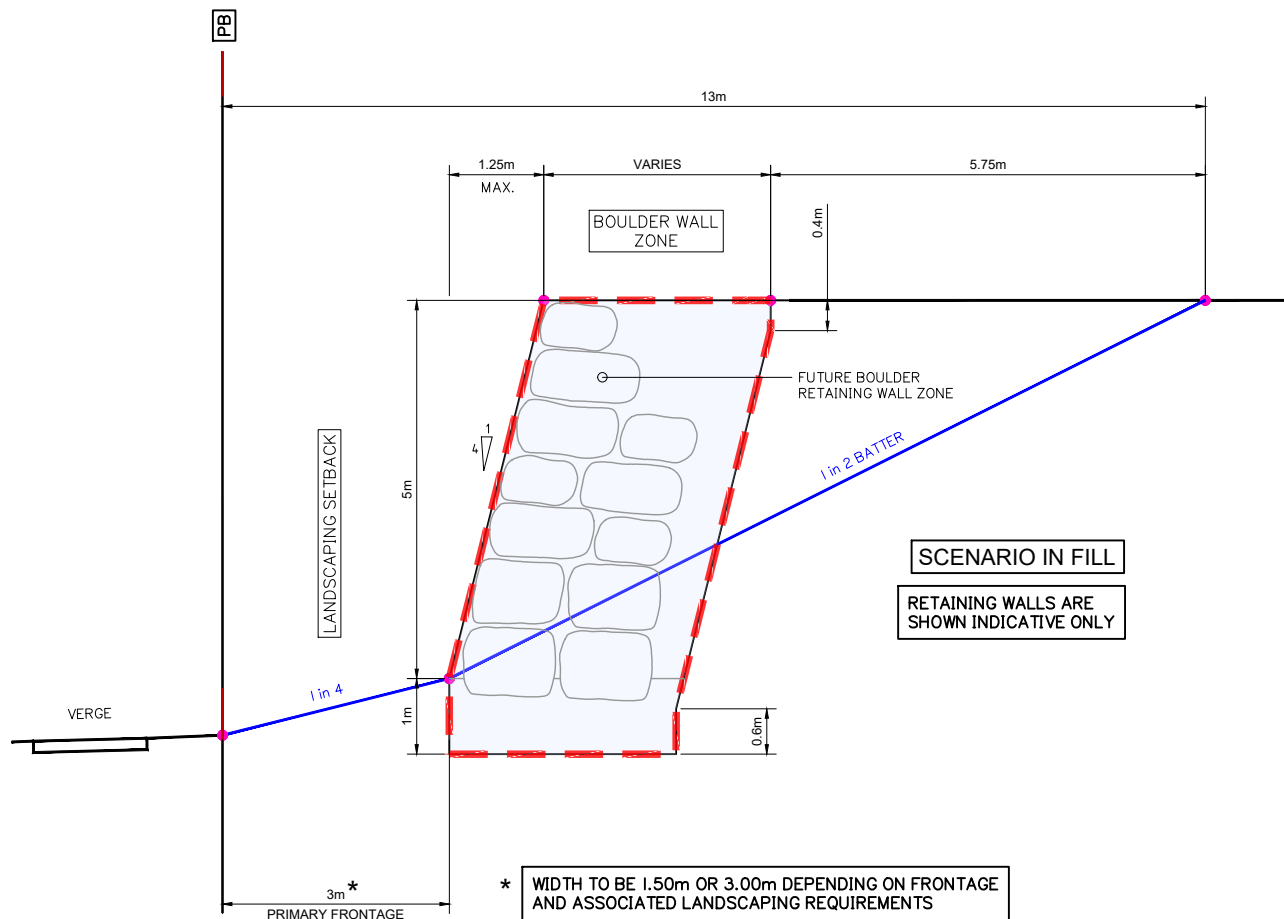
NOMINAL ROAD PAVEMENT DETAIL – IN FILL AREAS
INDUSTRIAL COLLECTOR & ACCESS STREET N.T.S



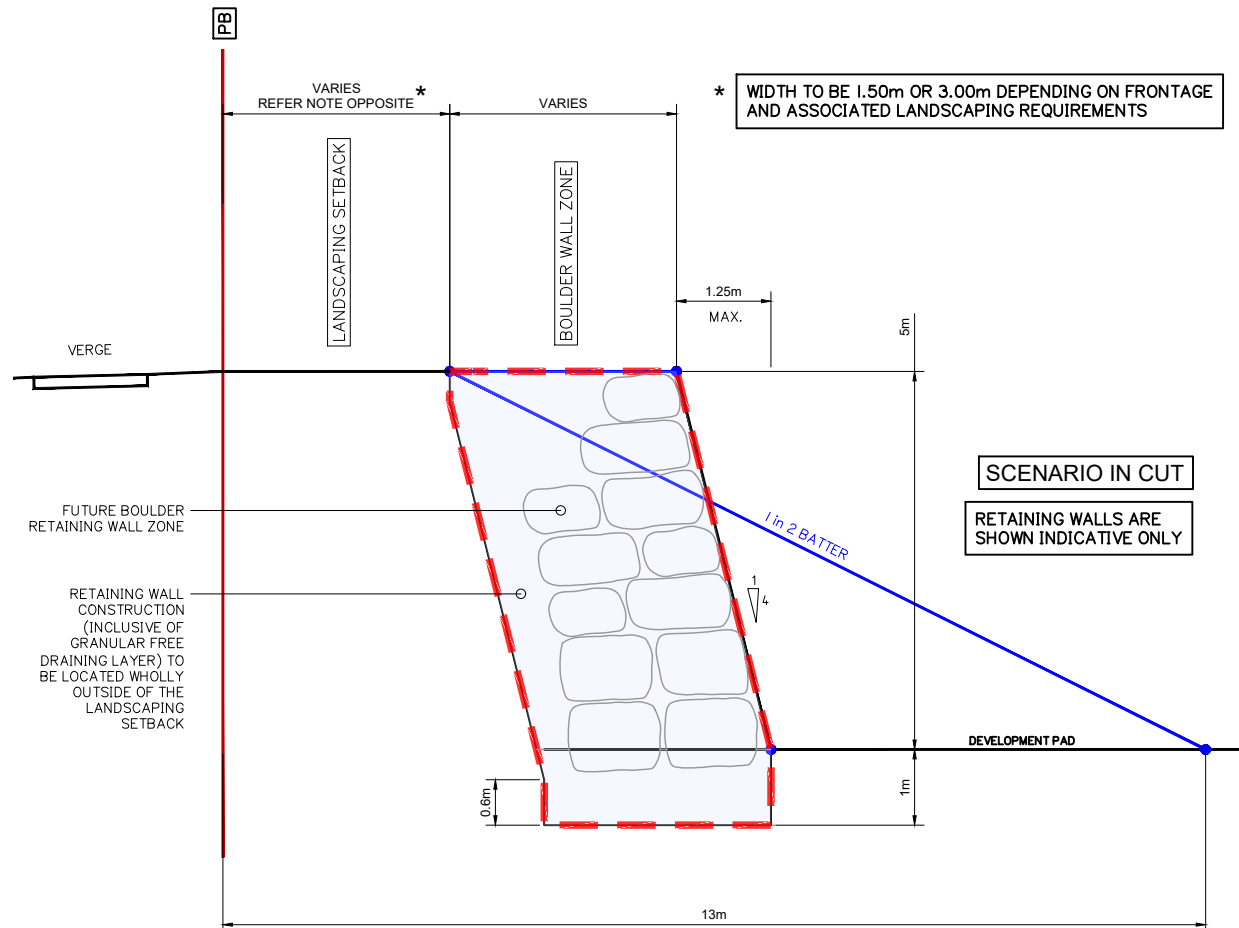
TYPICAL TOP OF CUT BATTER TREATMENT AT
NEIGHBOURING DEVELOPMENT INTERFACES SCALE 1: 100



NOMINAL ROAD PAVEMENT DETAIL – IN CUT AREAS
INDUSTRIAL COLLECTOR & ACCESS STREET N.T.S



TYPICAL SECTION OF:
BOULDER RETAINING WALL (2.5m to 5.0m MAXIMUM HEIGHT)
SHOWING TOE OF EMBANKMENT OFFSET FOR TEMPORARY CONSTRUCTION BATTERS – IN FILL



TYPICAL SECTION OF:
BOULDER RETAINING WALL (2.5m to 5.0m MAXIMUM HEIGHT)
SHOWING TOE OF EMBANKMENT OFFSET FOR TEMPORARY CONSTRUCTION BATTERS – IN CUT

BULK EARTHWORKS ROAD TYPICAL SECTIONS

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

RPD:

Lot: 502
Plan: SP316137
Local Authority: CITY OF GOLD COAST
COUNCIL
Level Datum: AHD
Meridian: -
Contour interval: -
PSM: -
RL: -

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DRAWING TITLE

BULK EARTHWORKS ROAD
TYPICAL SECTIONS

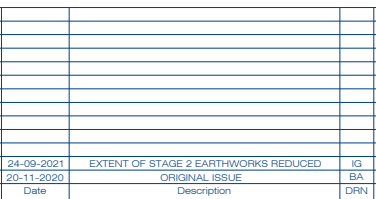
Issue	Date	Description	BA	MG	DRN	CHK
C	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG		
B	15-02-2021	INFORMATION REQUEST RESPONSE	IG	MG		
A	20-11-2020	ORIGINAL ISSUE	BA	MG		

SCALE IN METRES

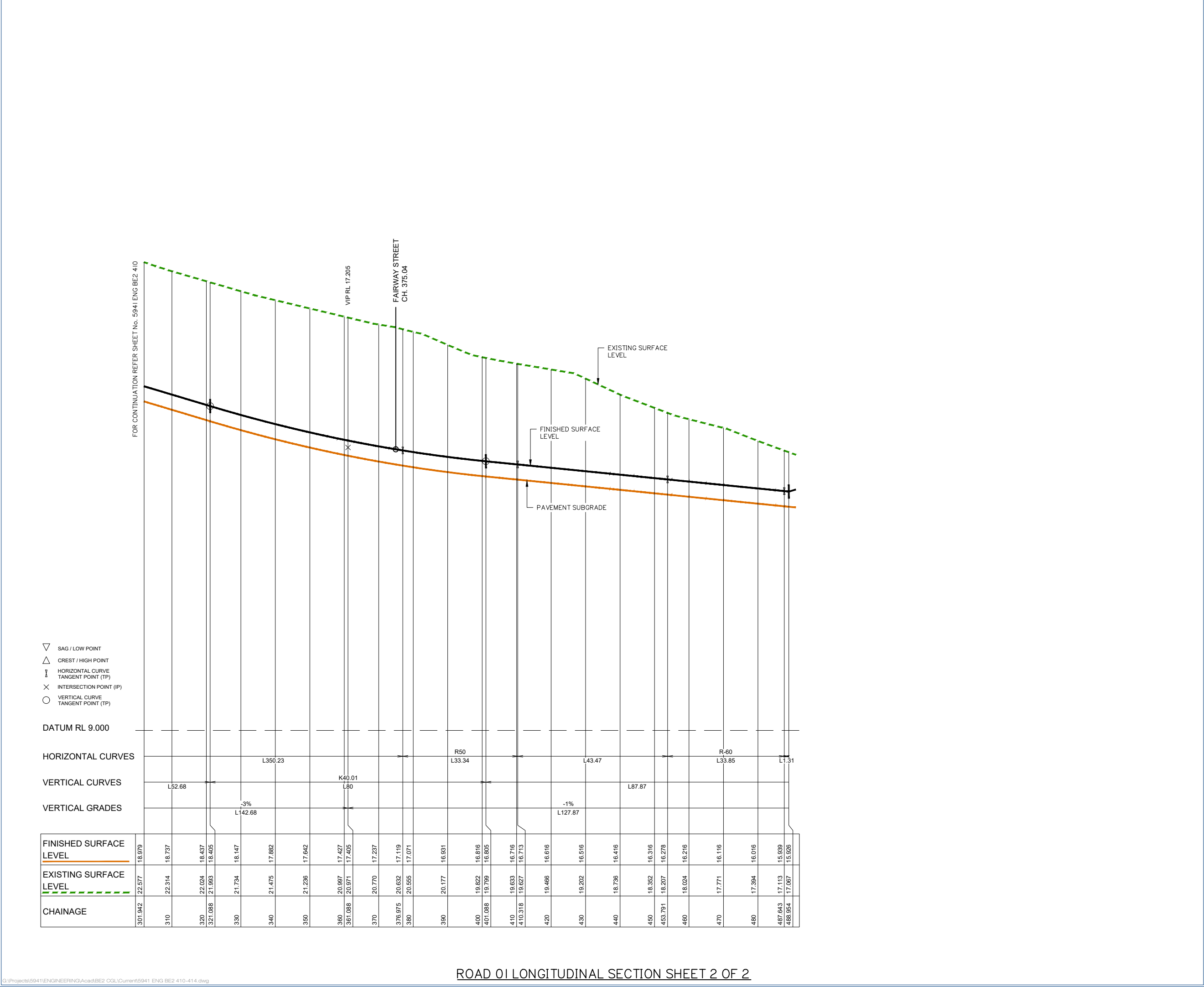
NOT APPLICABLE

Scale at A1:	NTS
Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	24-09-2021

Drawing No: 5941 ENG BE2 163
Rev. No: C



Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
PEQ:	16939
Signed:	
Date:	24-09-2021



ROAD 01 LONGITUDINAL SECTION SHEET 2 OF 2

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

RPD:

Lot: 502
Plan: SP316137
Local Authority: CITY OF GOLD COAST
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Level Datum: AHD
Meridian: -
Contour Interval: -
PSM: -
RL: -

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DRAWING TITLE

ROAD 01 LONGITUDINAL
SECTION SHEET 2 OF 2

B	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG	
A	20-11-2020	ORIGINAL ISSUE	BA	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES

Scale 1:500 - Lengths are in Metres.
HOZ: 0 5 10 15 20 25 30 35 40

Scale 1:100 - Lengths are in Metres.
VERT: 0 1 2 3 4 5 6 7 8

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	24-09-2021

Drawing No: 5941 ENG BE2 411 Rev. No: B

SCALE IN METRES

Scale 1:500 - Lengths are in Metres.

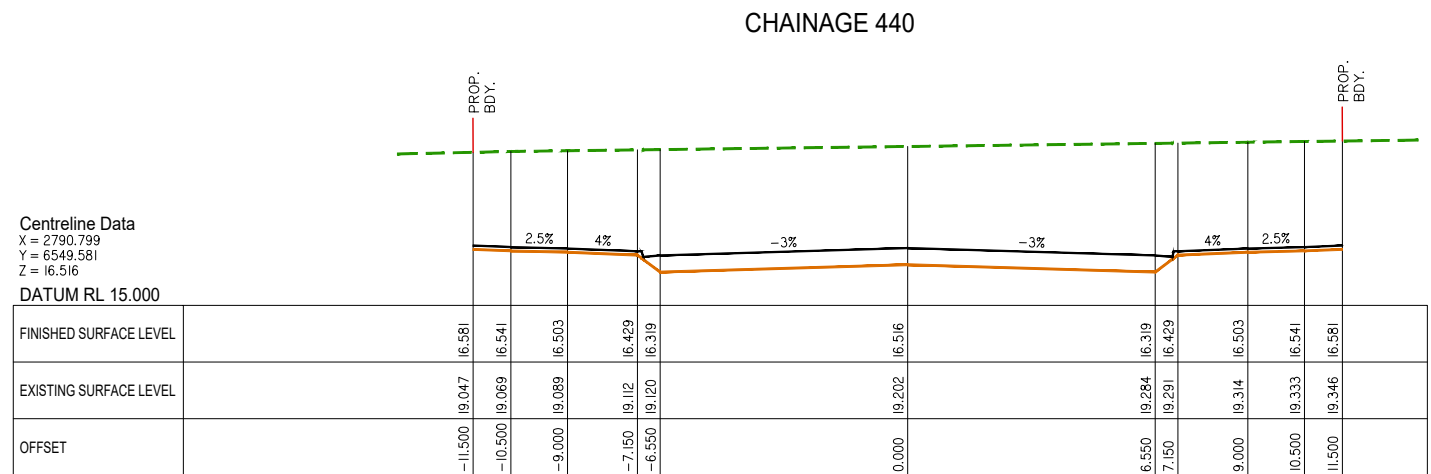
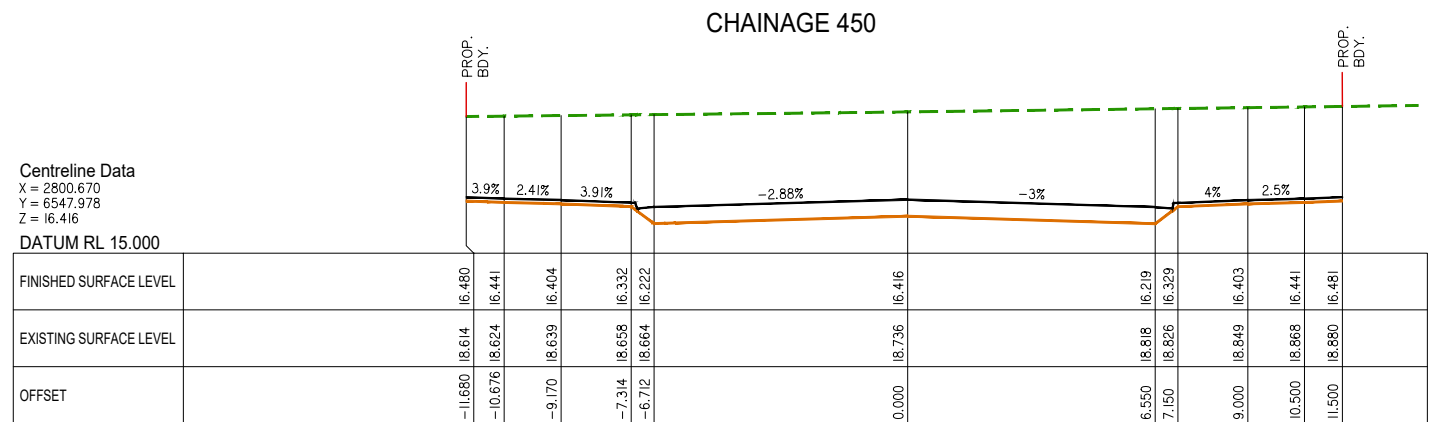
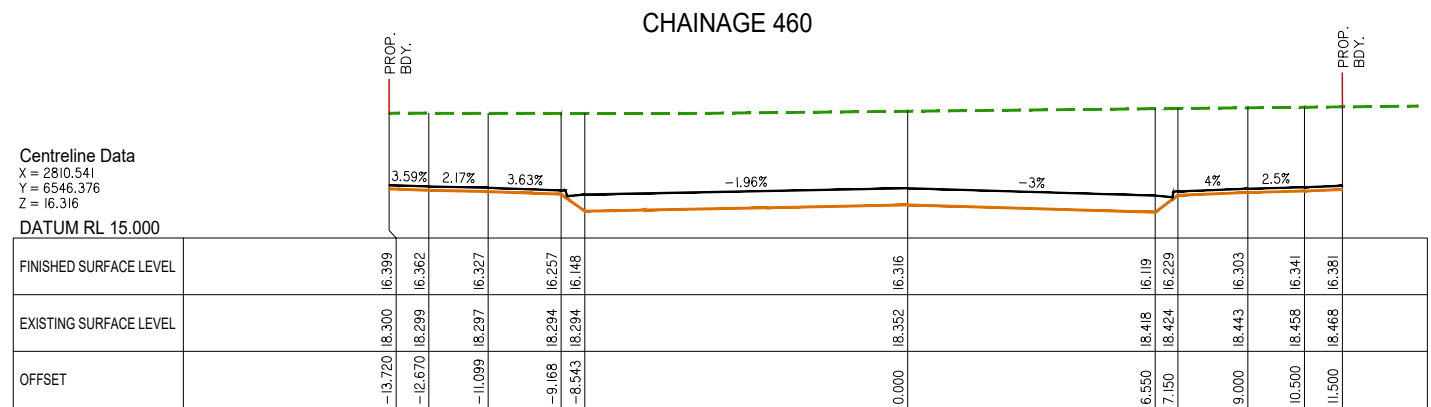
HOZ: 

VERT: 

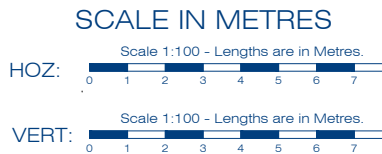
Scale at A1:	AS SHOWN
Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
PEQ:	16939
Signed:	
Date:	24-09-2021







B	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IQ
A	20-11-2020	ORIGINAL ISSUE	BA
ue	Date	Description	DNR



Scale at A1:	AS SHOWN
Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	24-09-2021

B	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG
A	20-11-2020	ORIGINAL ISSUE	BA
ue	Date	Description	DNR

Scale 1:100 - Lengths are in Metres.

HOZ: 0 1 2 3 4 5 6 7

Scale 1:100 - Lengths are in Metres.

VERT: 0 1 2 3 4 5 6 7

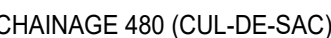
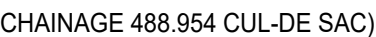
Designed:	IG
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Approved:	MG
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Signed:	
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Drawing No: _____ Rev. No: _____

0941 ENG BE2 437 B



Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
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RPD:

Lot: 502
Plan: SP316137
Local Authority: CITY OF GOLD COAST
COUNCIL

Level Datum: AHD
Meridian: -
Contour Interval: -
PSM: -
RL: -

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DRAWING TITLE

FAIRWAY STREET CROSS
SECTIONS SHEET 3 OF 4

B	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IQ	MG	
A	20-11-2020	ORIGINAL ISSUE	BA	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES

Scale 1:100 - Lengths are in Metres.

HOZ: 

Scale 1:100 - Lengths are in Metres.

VERT: 

Scale at A1: AS SHOWN

Designed:	IG
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Drafted:	IG / BA / LAB
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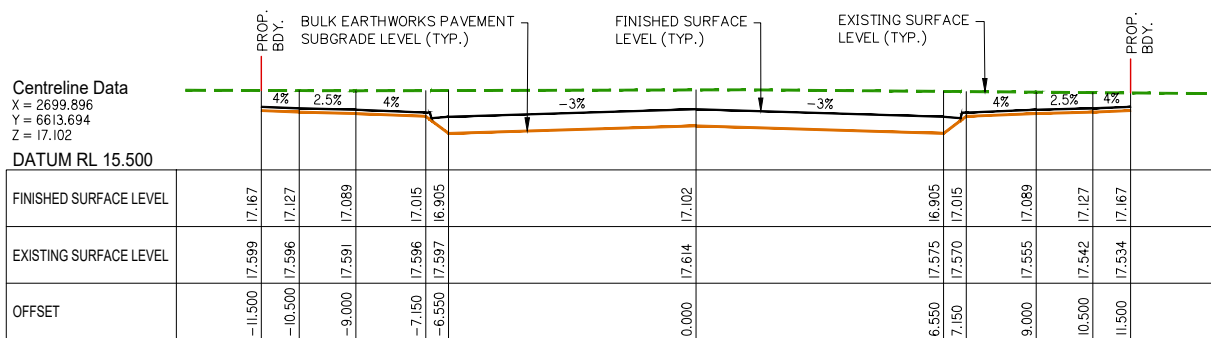
Approved:	MG
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RPEQ:	16939
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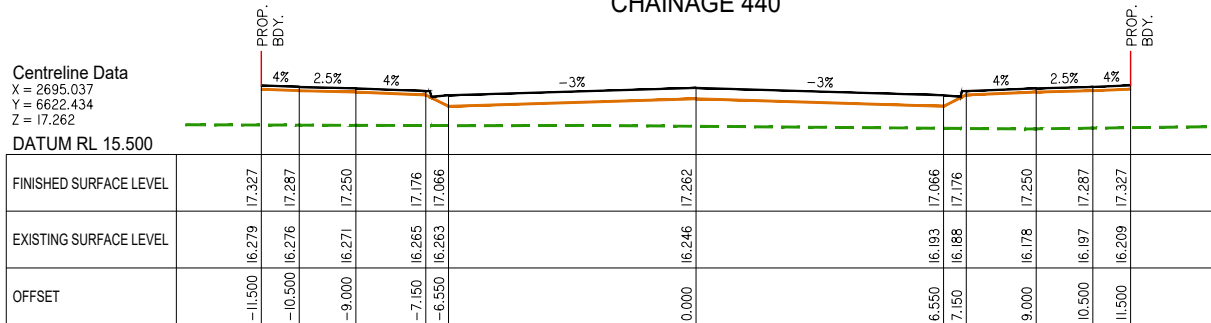
Signed:	
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Date:	24-09-2021
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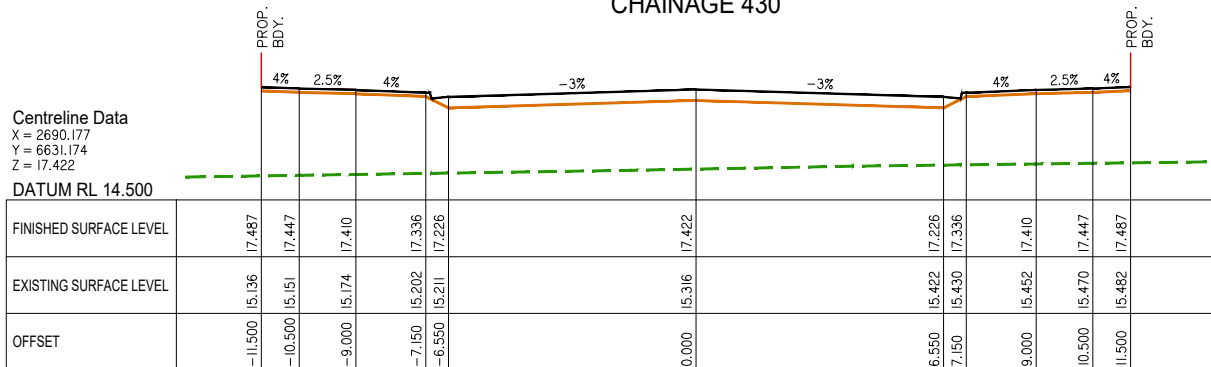
Drawing No:	Rev. No:
5941 ENG BE2 440	B



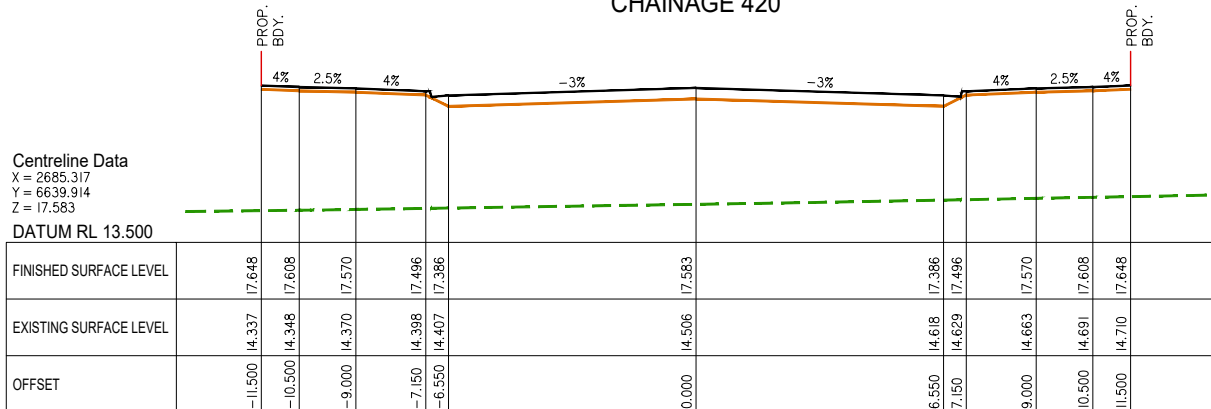
CHAINAGE 440



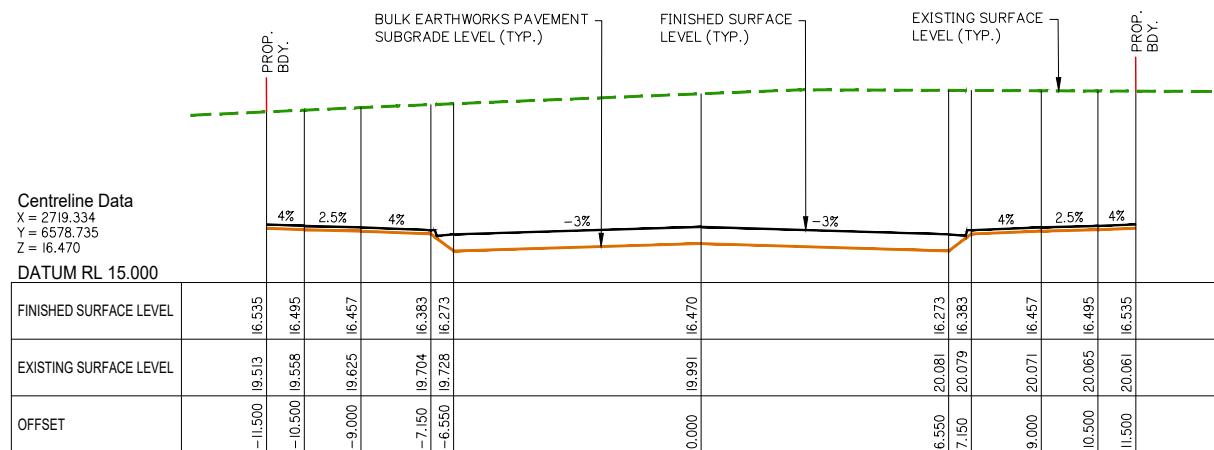
CHAINAGE 430



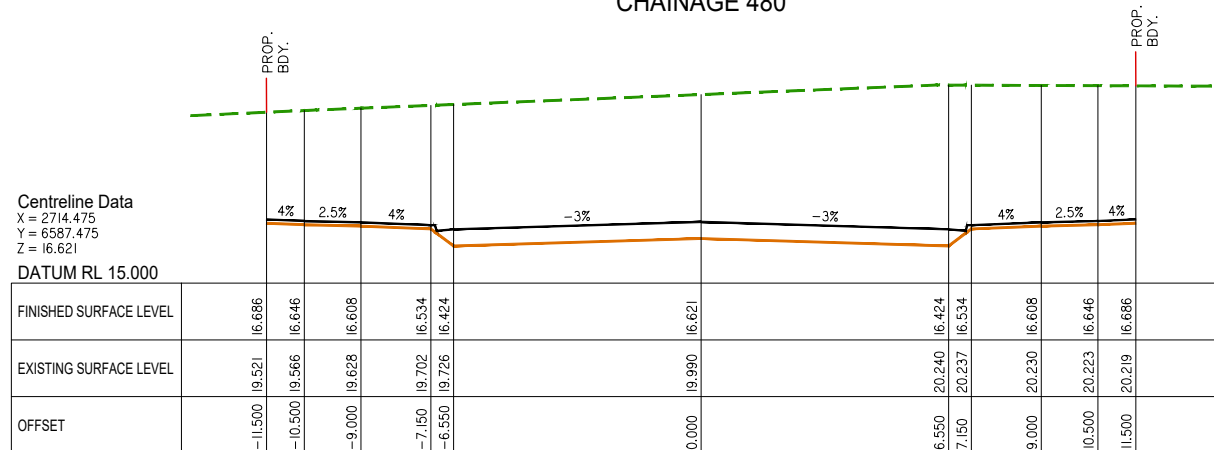
CHAINAGE 420



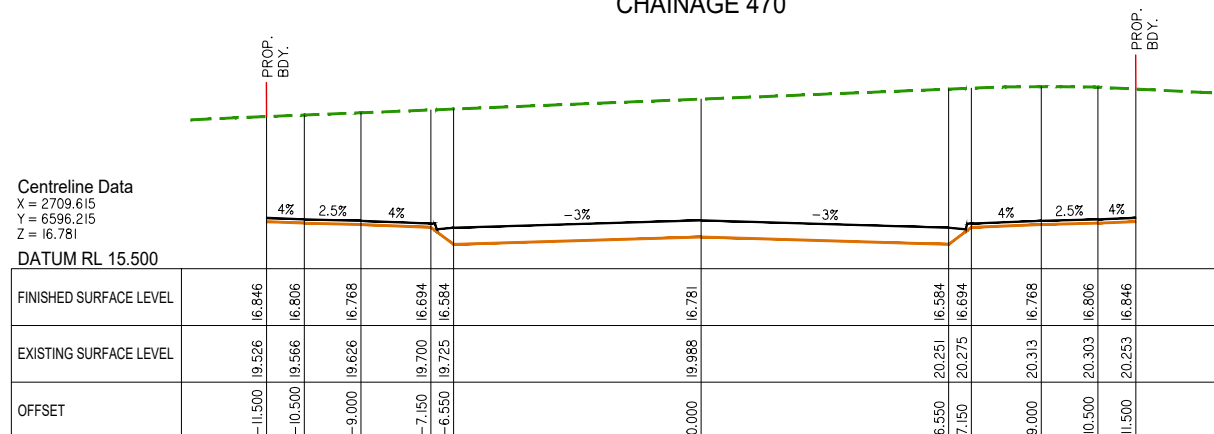
CHAINAGE 410



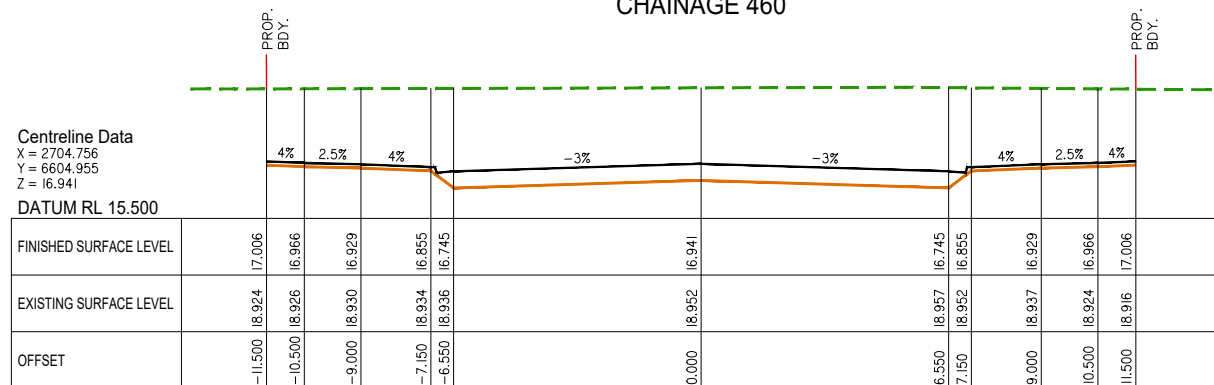
CHAINAGE 480



CHAINAGE 470



CHAINAGE 460



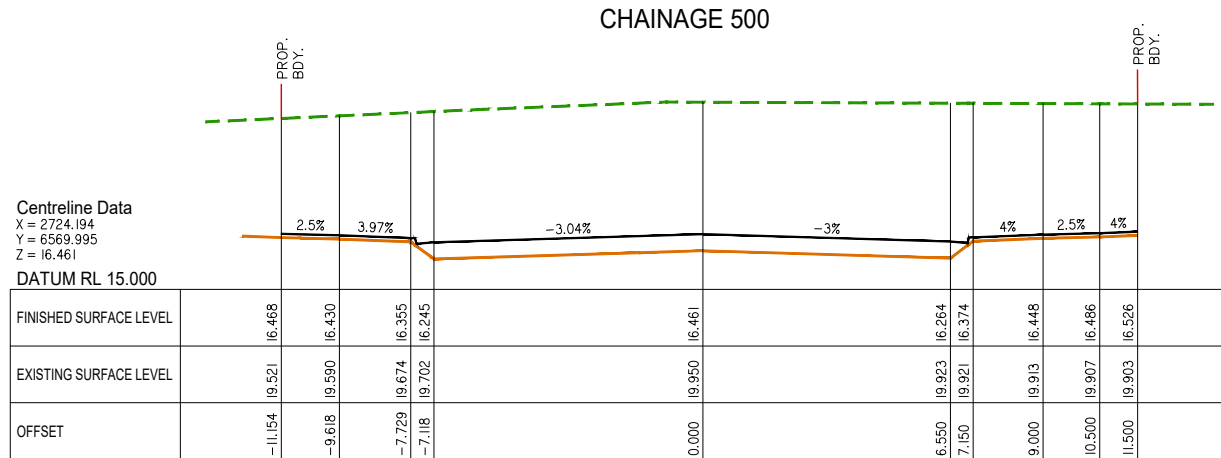
CHAINAGE 450

SCALE IN METRES

HOZ:  Scale 1:100 - Lengths are in Metres.

VERT:  Scale 1:100 - Lengths are in Metres.

Scale at A1:	AS SHOWN
Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	24-09-2021





Site Address:
60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

RPD:
 Lot: 502
 Plan: SP316137
 Local Authority: CITY OF GOLD COAST
 COUNCIL
 Level Datum: AHD
 Meridian: -
 Contour Interval: -
 DSM: -
 L: -

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DRAWING TITLE

ROAD USER SAFETY CROSS
SECTIONS - SHEET 2 OF 5

SCALE IN METRES

2 4 6 8 10

1:100 (FULL SIZE A1)

1:200 (HALF SIZE A3)

Designed:	IG
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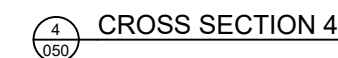
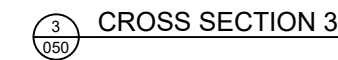
Approved:	MG
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PEQ: 16939

Signed: 

ate:	10-11-2021
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041 ENG BE2 443 Rev. N C



ROAD USER SAFETY CROSS SECTIONS – SHEET 2 OF 5



Project: **VantageYatala**
STAGE 2

Site Address:
60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

RPD:
 Plot: 502
 Plan: SP316137
 Local Authority: CITY OF GOLD COAST
 COUNCIL
 Level Datum: AHD
 Meridian: -
 Contour Interval: -
 DSM: -
 L: -

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DRAWING TITLE

ROAD USER SAFETY CROSS
SECTIONS - SHEET 3 OF 5[illegible]

10-11-2021	LOT 205 RETAINING WALLS ADDED	IG
24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG
15-02-2021	ORIGINAL ISSUE	BA
Date	Description	DRN

SCALE IN METRES

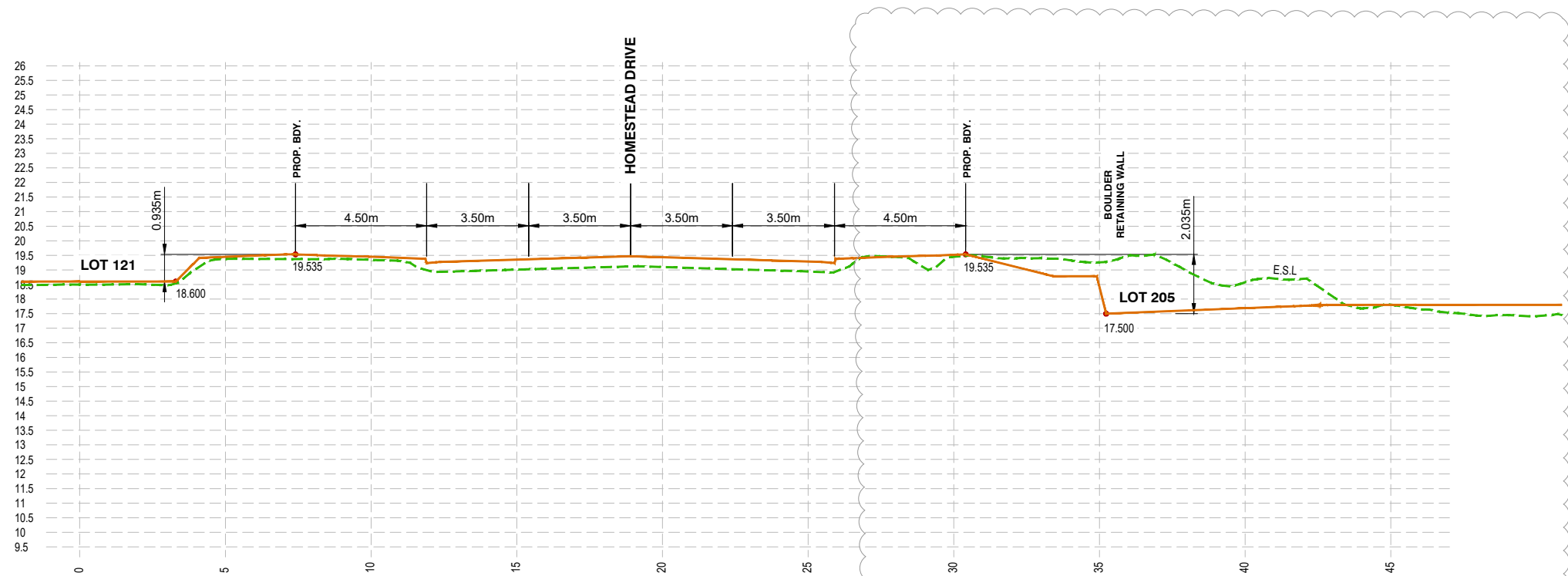


1:100 (FULL SIZE A1)
1:200 (HALF SIZE A3)

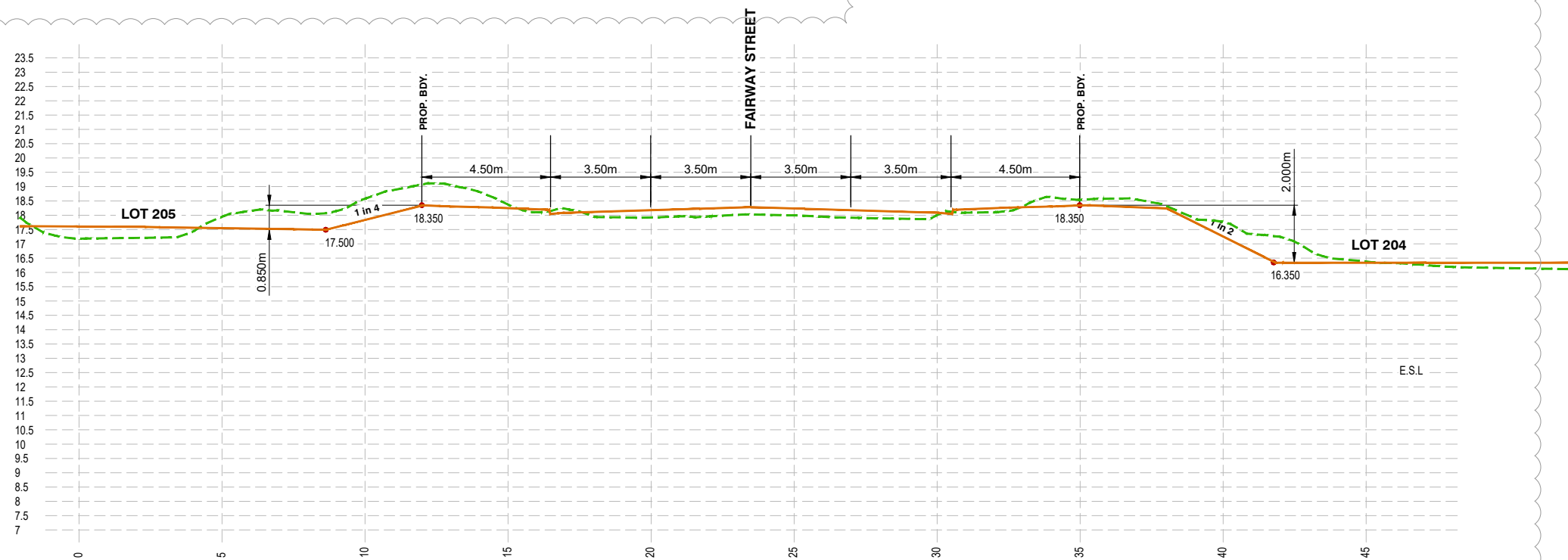
Scale at A1: 1:100

Designed:	IG
Drafted:	IG BA / LAB
Approved:	MG
PEQ:	16939
Signed:	
Date:	10-11-2021

Drawing No: Rev. N
041 ENG BE2 444 C



 CROSS SECTION 5



 CROSS SECTION 6



Project: **VantageYatala**
STAGE 2

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RPD:	
Lot:	502
Plan:	SP316137
Local Authority:	CITY OF GOLD COAST COUNCIL
Level Datum:	AHD
Meridian:	-
Contour Interval:	-
PSM:	-
RL:	-

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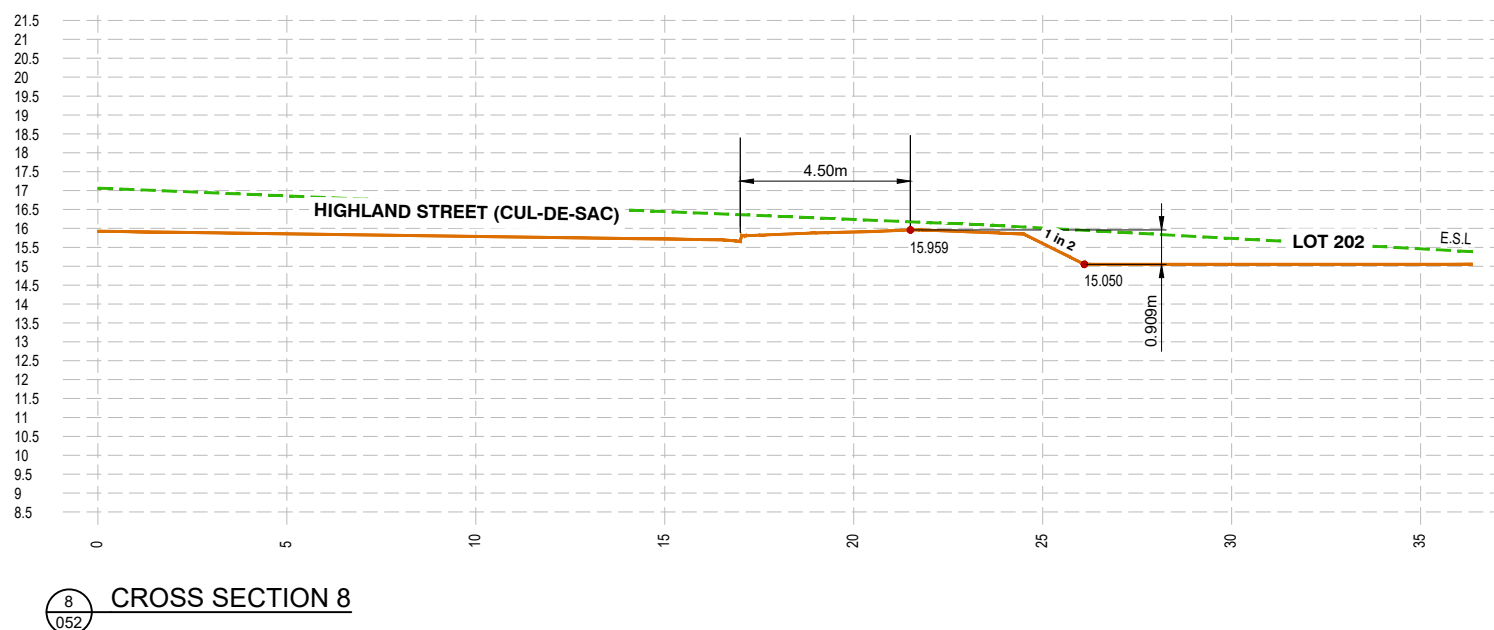
ROAD USER SAFETY CROSS
SECTIONS - SHEET 4 OF 5

G	10-11-2021	LOT 205 RETAINING WALLS ADDED		IG	M
B	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED		IG	M
A	15-09-2021	ORIGINAL ISSUE		BA	M
Issue	Date	Description		DEN	CH

Size	1:100 (FULL SIZE A1)	1:200 (HALF SIZE A3)
2	2	2
4	4	4
6	6	6

Designed:	IG
Drafted:	IG BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10-11-2021

ROAD USER SAFETY CROSS SECTIONS – SHEET 4 OF 5





FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project: **VantageYatala**
STAGE 2

Site Address:
60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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RPD:	
Lot:	502
Plan:	SP316137
Local Authority:	CITY OF GOLD COAST COUNCIL
Level Datum:	AHD
Meridian:	-
Contour Interval:	-
PSM:	-
RI :	-

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ROAD USER SAFETY CROSS
SECTIONS - SHEET 5 OF 5

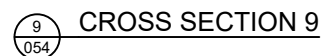
B	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IC	M
A	15-02-2021	ORIGINAL ISSUE	BA	M
ISSUE	Date	Description	DEN	CH

1:100 (FULL SIZE A1)
1:200 (HALF SIZE A3)

Scale at A1:	1:100
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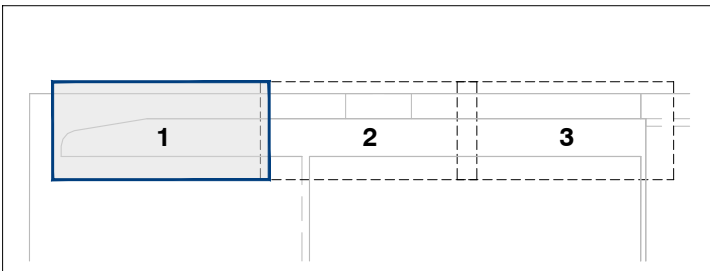
Designed:	IG
Drafted:	IG BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	24-09-2021

Drawing No:	Rev. No:
5941 ENG BE2 446	B

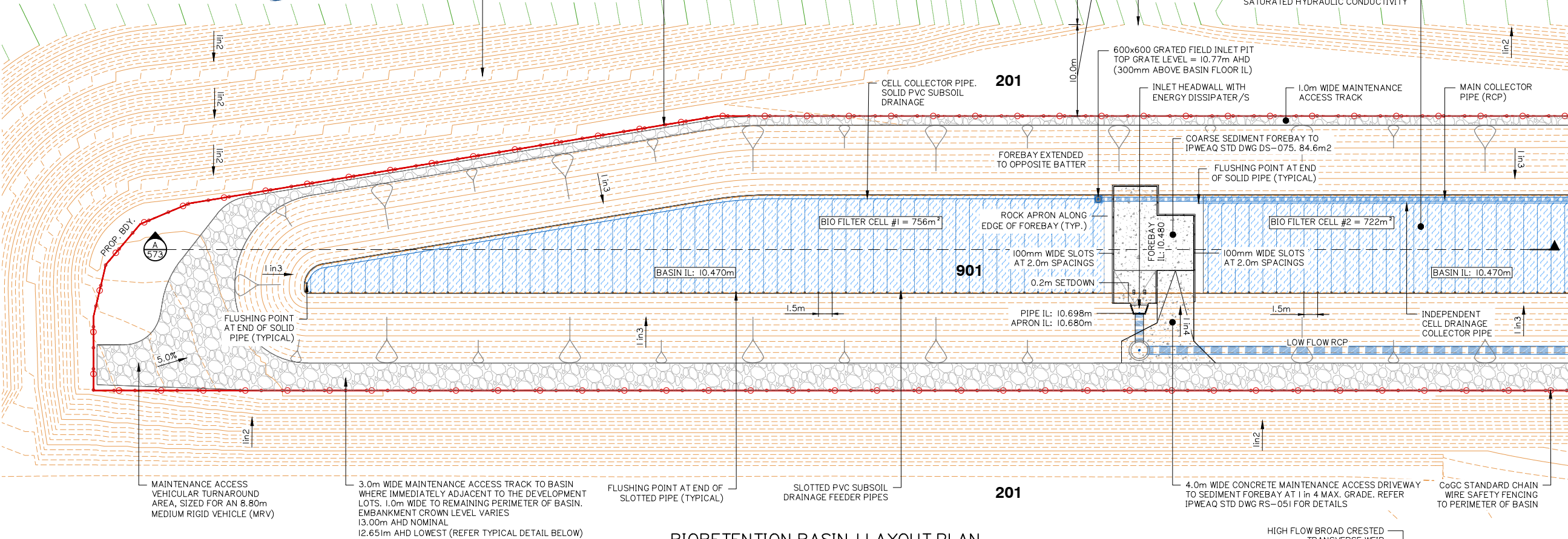


ROAD USER SAFETY CROSS SECTIONS – SHEET 5 OF 5

[illegible]



KEY PLAN
SCALE 1: 3000



BIORETENTION BASIN I LAYOUT PLAN

SCALE 1: 250 (A1)

DETENTION BASIN VOLUME TABLE *

- 14,789m³ TO CROWN (RL. 12.651)
- 8,076m³ TO 1% AEP WSL (RL. 11.946)
- 5,073m³ TO WEIR LEVEL (RL. 11.570)

* DEDUCTING 0.30m EXTENDED DETENTION VOLUME OF 1,446m³

BIO-RETENTION NOTES:

MINIMUM BIO-RETENTION 'PROFILE' IS TO BE 1.10m AND IS TO CONSIST OF THE FOLLOWING:

* 0.70 OF SANDY LOAM MATERIAL WITH A HYDRAULIC CONDUCTIVITY OF 200mm/h AND A PARTICLE SIZE OF 0.45-0.50mm.

* 0.15m OF COURSE SAND. PARTICLE SIZE TYPICALLY 0.5-2.0mm.

* 0.25m OF GRAVEL DRAINAGE. PARTICLE SIZE 5-7mm SCREENING.

BIO RETENTION - COARSE SEDIMENT FOREBAY SIZING GUIDE CALCULATIONS

$$V_s = A_c \times R \times L_o \times F = 11.0722 \text{ m}^3$$

$$R = 1 - \left[1 + \frac{1}{n} \times \frac{V_s}{Q/A_f} \right]^{-n}$$

$$0.8 = 1 - \left[1 + \frac{0.10}{0.5} \times \frac{11.0722}{2.7508/A_f} \right]^{-0.5} \quad A_f = 330.1 \text{ m}^2$$

$$D_s = \frac{V_s}{A_f} \quad D_s = \frac{11.0722}{330.1} = 0.034 \text{ m}$$

OPTIMIZATION OF MINIMUM FOREBAY SIZE:

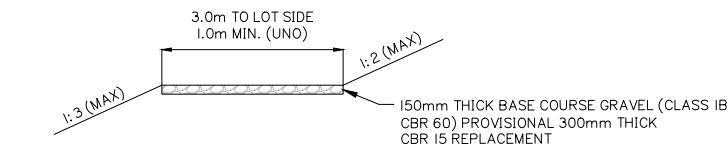
$$D_s = \frac{11.0722 \text{ m}^3}{253.977 \text{ m}^2} = 0.044 \text{ m}$$

CALCULATED FOR 3 FOREBAYS AT 84.659m² ea.

$V_s = 11.0722 \text{ m}^3$ (Workings Above)
 $A_c = 23.067 \text{ ha}$ (Refer Catchment Plans)
UNMITIGATED POST-DEVELOPMENT FLOW
 $Q = 2.7508 \text{ m}^3/\text{s}$ (3 month ARI)
 $V_s = 0.1 \text{ m}^3/\text{s}$ (Recommended for Imm Particle)
 $R = 0.8$ (Recommended 80% Capture)
 $L_o = 0.6$ (From Healthy Waterways Guide)
 $n = 0.5$ (Recommended Turbulence)
 $F_c = 1.0$ (Frequency of Clean Out / Yr)

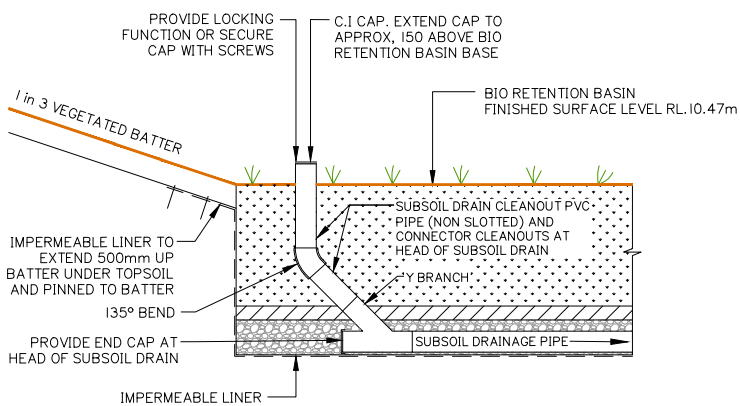
REFER TO BIO RETENTION TECHNICAL DESIGN GUIDELINES FOR FURTHER INFORMATION

AEP (%)	MAX. WATER ELEVATION (m) A.H.D.	MAX. WATER DEPTH (m)
63.2	11.484	1.014
0.5EY	11.627	1.157
20	11.722	1.252
10	11.789	1.319
5	11.844	1.374
2	11.902	1.432
1	11.946	1.476



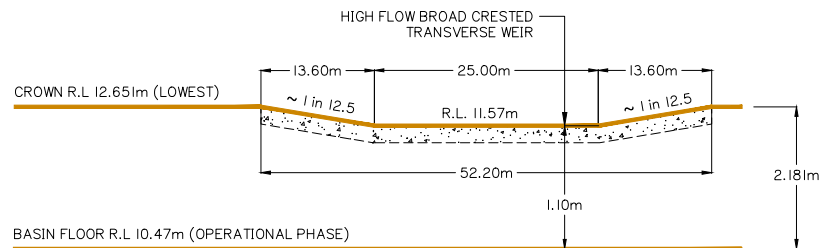
MAINTENANCE ACCESS TRACK - TYPICAL SECTION

N.T.S. UNO DENOTES 'UNLESS NOTED OTHERWISE'



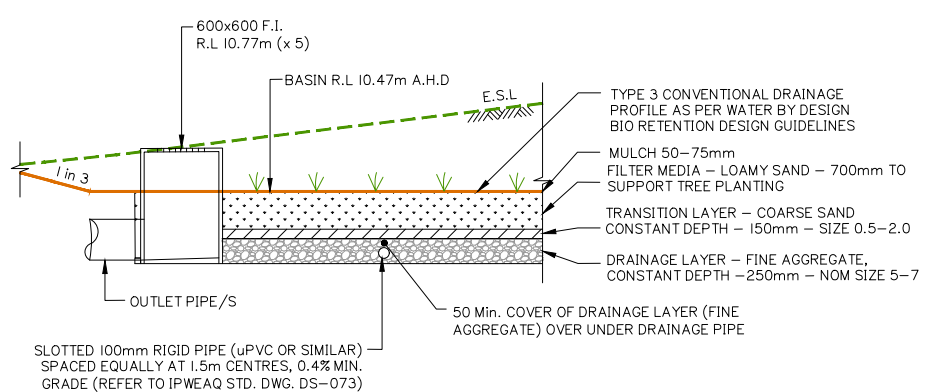
SUBSOIL DRAIN CLEANOUT - IN BASIN

N.T.S.



WEIR / SPILLWAY - TYPICAL ELEVATION

N.T.S.



TYPICAL BIO-RETENTION BASIN DETAIL

N.T.S.

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

RPD:

Lot: 502
Plan: SP316137
Local Authority: CITY OF GOLD COAST COUNCIL
Level Datum: AHD
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Contour Interval: -
PSM: -
RL: -

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DRAWING TITLE
OPERATIONAL PHASE
BIORETENTION BASIN
SHEET 1 OF 4

D	24-09-2021	EXTENT OF STAGE 2 EARTHWORKS REDUCED	IG	MG
C	31-03-2021	INFORMATION REQUEST RESPONSE	IG	MG
B	15-02-2021	INFORMATION REQUEST RESPONSE	IG	MG
A	20-11-2020	ORIGINAL ISSUE	BA	MG
ISSUE	Date	Description	BA	CHK

SCALE IN METRES



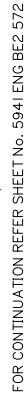
1:250 (FULL SIZE A1)
1:500 (HALF SIZE A3)

Scale at A1: 1:250

Designed:	IG
Drafted:	IG / BA / LAB
Approved:	MG
RPEQ:	16939
Signed:	
Date:	24-09-2021

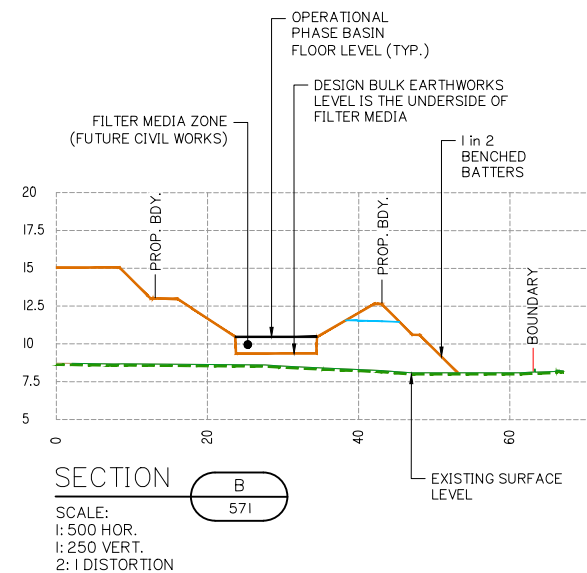
Drawing No:
5941 ENG BE2 570

Rev. No:
D



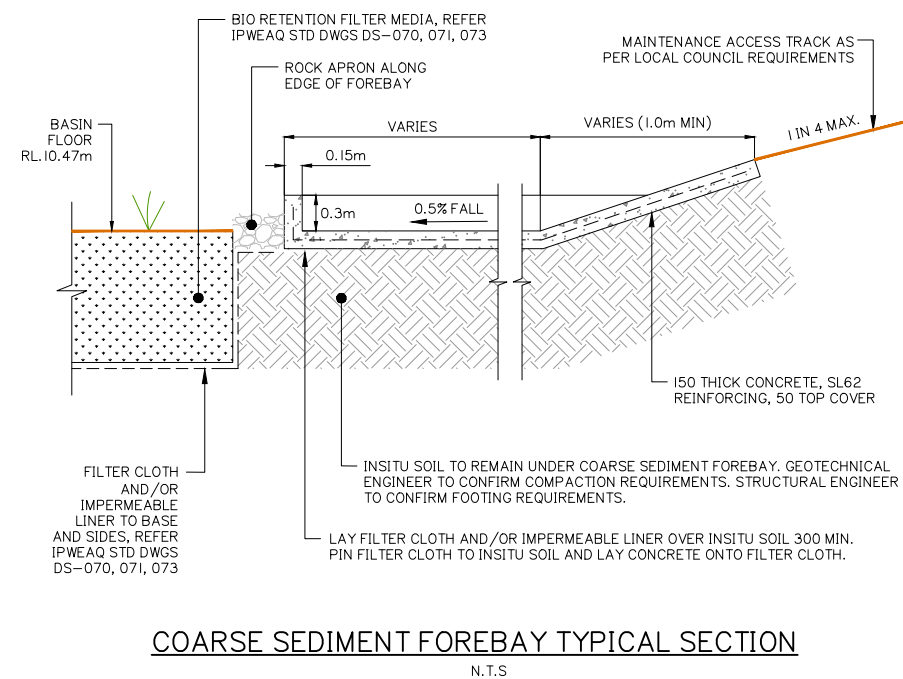
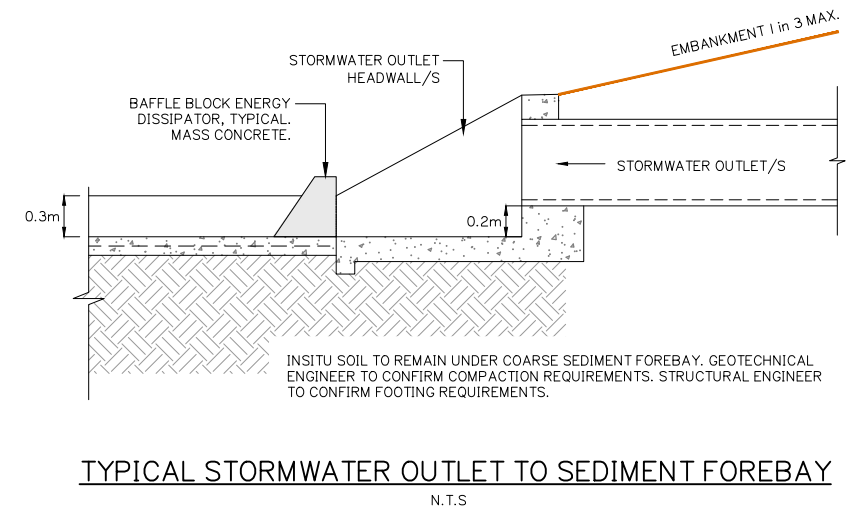
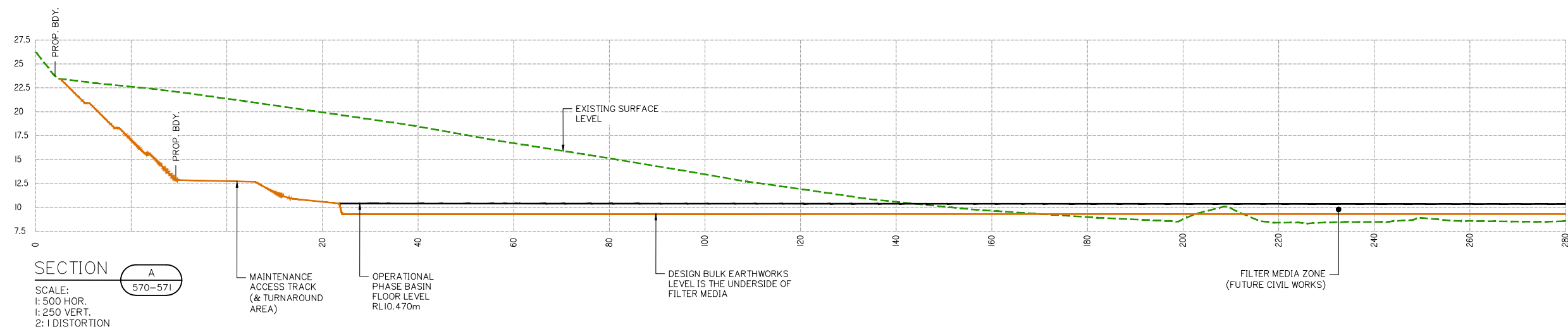
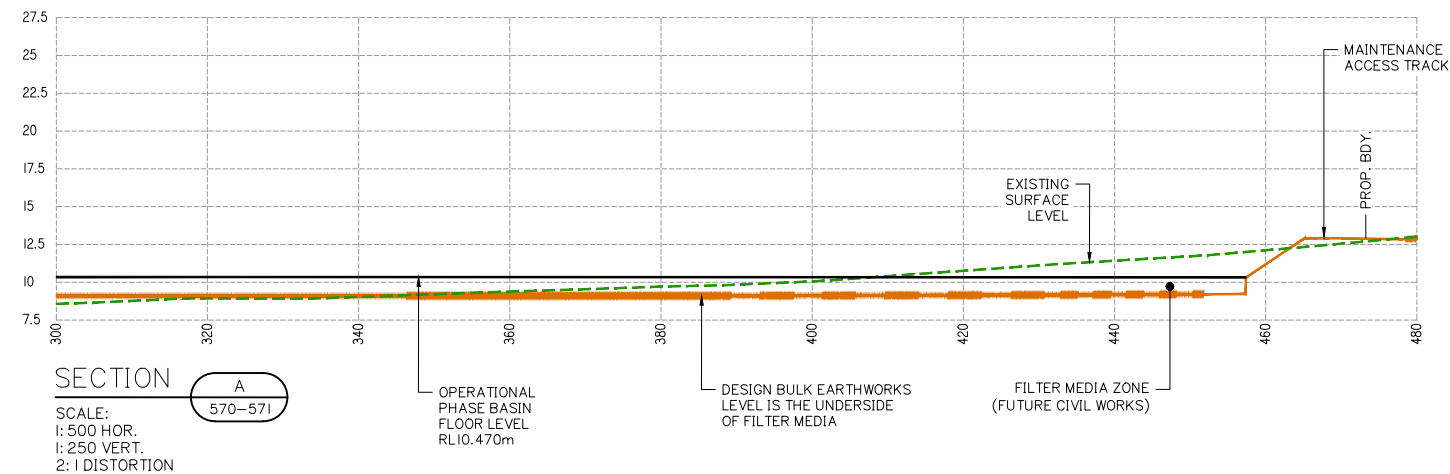
Drawing No:	Rev. No:
5941 ENG BE2 571	E

OPERATIONAL PHASE BIORETENTION BASIN SHEET 3 OF 4



NOTE:

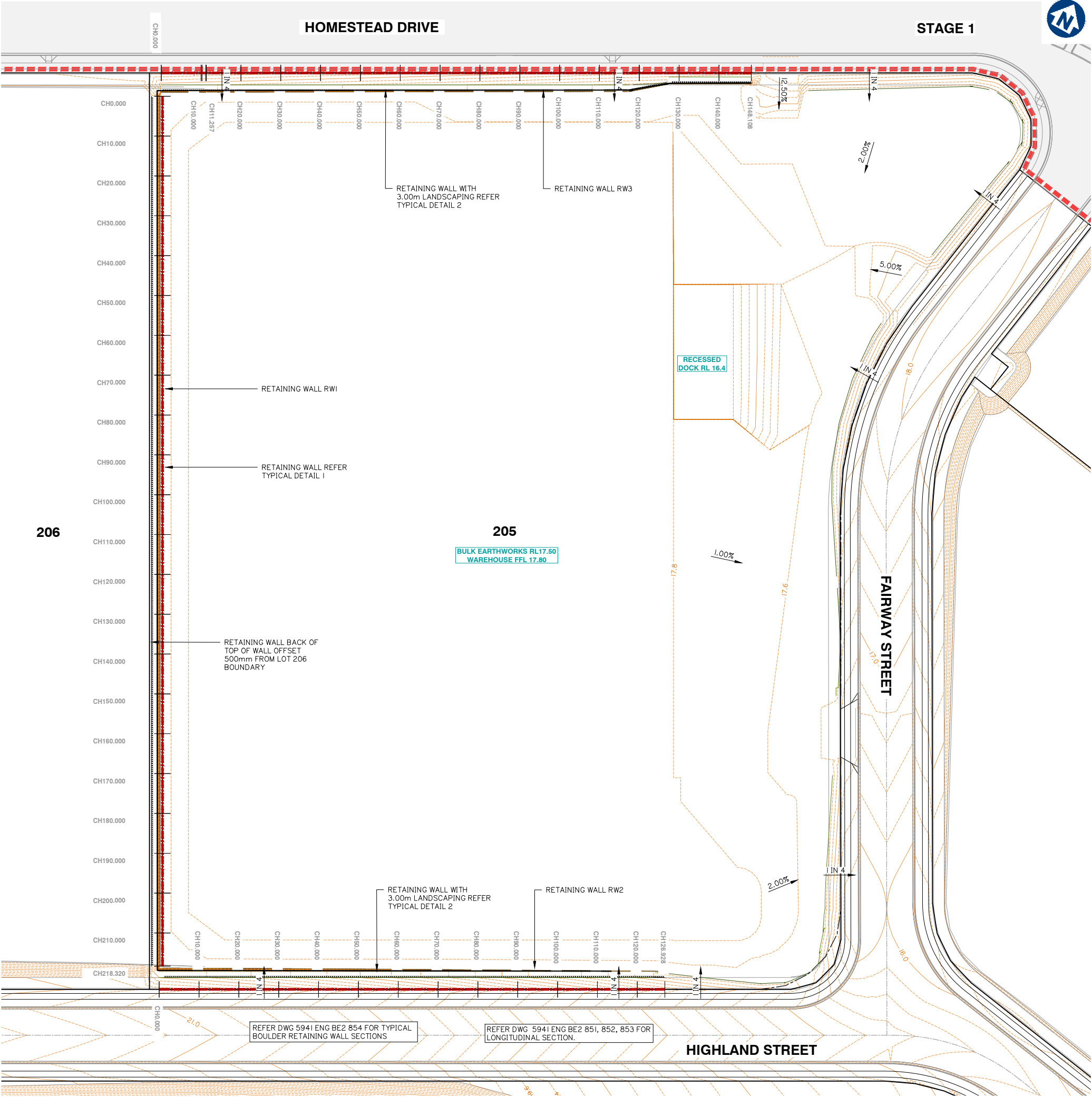
I. BASIN INUNDATION DEPTHS OMITTED FROM CROSS SECTIONS FOR CLARITY. REFER TO CALCULATION TABLES ON DRAWINGS 594I ENG BE2 570-572



RETAINING WALL 1					
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING
IP 1	0.000	2464.155	6664.200	17.500	151°00'47.00"
	10.000	2469.001	6655.453	17.500	151°00'47.00"
	20.000	2473.847	6646.705	17.500	151°00'47.00"
	30.000	2478.693	6637.958	17.500	151°00'47.00"
	40.000	2483.539	6629.211	17.500	151°00'47.00"
	50.000	2488.385	6620.463	17.500	151°00'47.00"
	60.000	2493.231	6611.716	17.500	151°00'47.00"
	70.000	2498.077	6602.969	17.500	151°00'47.00"
	80.000	2502.923	6594.221	17.500	151°00'47.00"
	90.000	2507.769	6585.474	17.500	151°00'47.00"
	100.000	2512.616	6576.727	17.500	151°00'47.00"
	110.000	2517.462	6567.980	17.500	151°00'47.00"
	120.000	2522.308	6559.232	17.500	151°00'47.00"
	130.000	2527.154	6550.485	17.500	151°00'47.00"
	140.000	2532.000	6541.738	17.500	151°00'47.00"
	150.000	2536.846	6532.990	17.500	151°00'47.00"
	160.000	2541.692	6524.243	17.500	151°00'47.00"
	170.000	2546.538	6515.496	17.500	151°00'47.00"
	180.000	2551.384	6506.748	17.500	151°00'47.00"
	190.000	2556.231	6498.001	17.500	151°00'47.00"
	200.000	2561.077	6489.254	17.500	151°00'47.00"
	210.000	2565.923	6480.507	17.500	151°00'47.00"
IP 2	218.320	2569.955	6473.229	17.500	151°00'47.00"

RETAINING WALL 2					
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING
IP 1	0.000	2572.080	6467.717	21.735	61°00'47.00"
	10.000	2580.827	6472.563	21.581	61°00'47.00"
	20.000	2589.574	6477.409	21.407	61°00'47.00"
	30.000	2598.321	6482.255	21.212	61°00'47.00"
	40.000	2607.069	6487.101	20.997	61°00'47.00"
	50.000	2615.816	6491.948	20.761	61°00'47.00"
	60.000	2624.563	6496.794	20.504	61°00'47.00"
	70.000	2633.311	6501.640	20.227	61°00'47.00"
	80.000	2642.058	6506.486	19.931	61°00'47.00"
	90.000	2650.805	6511.332	19.631	61°00'47.00"
	100.000	2659.553	6516.178	19.331	61°00'47.00"
	110.000	2668.300	6521.024	19.031	61°00'47.00"
	120.000	2677.047	6525.870	18.731	61°00'47.00"
IP 2	126.928	2683.108	6529.228	18.523	61°00'47.00"

RETAINING WALL 3					
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING
IP 1	0.000	2461.057	6669.171	19.640	61°00'47.00"
	10.000	2469.804	6674.018	19.576	61°00'47.00"
IP 2	10.257	2470.029	6674.142	19.575	
IP 3	10.257	2470.029	6674.142	19.575	
IP 4	10.257	2470.029	6674.142	19.575	
IP 5	10.257	2470.029	6674.142	19.575	
IP 6	11.257	2470.904	6674.627	19.568	
IP 7	11.257	2470.904	6674.627	19.568	
	20.000	2478.552	6678.864	19.513	61°00'47.00"
	30.000	2487.299	6683.710	19.449	61°00'47.00"
	40.000	2496.046	6688.556	19.385	61°00'47.00"
	50.000	2504.793	6693.402	19.321	61°00'47.00"
	60.000	2513.541	6698.248	19.257	61°00'47.00"
	70.000	2522.288	6703.094	19.194	61°00'47.00"
	80.000	2531.035	6707.940	19.130	61°00'47.00"
	90.000	2539.783	6712.786	19.066	61°00'47.00"
	100.000	2548.530	6717.633	19.002	61°00'47.00"
	110.000	2557.277	6722.479	18.938	61°00'47.00"
	120.000	2566.025	6727.325	18.875	61°00'47.00"
	130.000	2574.772	6732.171	18.811	61°00'47.00"
	140.000	2583.519	6737.017	18.747	61°00'47.00"
IP 8	148.108	2590.611	6740.946	18.695	61°00'47.00"



planning | environment | landscape | engineering | survey
T: 3807 3333 | F: 3287 5461 | www.gassman.com.au
Gold Coast & Logan | 76 Business Street, Yatala QLD | PO Box 392, Beerleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VantageYatala
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

RPD:

Lot: 501
Plan: SP295994
Local Authority: CITY OF GOLD COAST
COUNCIL
Level Datum: AHD
Meridian: -
Contour Interval: -
PSM: -
RL: -

ISSUED FOR APPROVAL
FOR CONSTRUCTION

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ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
LOT 205 BOULDER
RETAINING WALL CONTROL
LINE AND SETOUT TABLE

Issue	Date	Description	DRN	CHK
A	10-02-2022	ISSUED FOR APPROVAL	CV	MG
A	27-01-2022	ISSUED FOR TENDER	CV	MG

SCALE IN METRES



1:500 (FULL SIZE A1)
1:1000 (HALF SIZE A3)

Scale at A1: 1:500

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10-02-2022

Drawing No:
5941 ENG BE2 850

Rev. No:
A



CONTROL LINE CHAINAGES	0.000	21.735	17.500	3.485	20.985	21.735	TOP DESIGN SURFACE LEVEL
	10.000	21.581	17.500	3.331	20.831	21.581	
	20.000	21.407	17.500	3.157	20.657	21.407	
	30.000	21.212	17.500	2.962	20.462	21.212	
	40.000	20.997	17.500	2.747	20.247	20.997	
	50.000	20.761	17.500	2.511	20.011	20.761	
	60.000	20.504	17.500	2.254	19.754	20.504	
	70.000	20.227	17.500	1.977	19.477	20.227	
	75.758	20.058	17.500	1.808	19.308	20.058	
	80.000	19.931	17.500	1.681	19.181	19.931	
	90.000	19.631	17.500	1.381	18.881	19.631	
	100.000	19.331	17.500	1.081	18.581	19.331	
	110.000	19.031	17.500	0.781	18.281	19.031	



TOP DESIGN SURFACE LEVEL	19.031		18.731	18.523
TOP OF WALL DESIGN LEVELS	18.281		17.981	17.773
HEIGHT OF FACE OF RETAINING WALL	0.781		0.481	0.273
BOTTOM OF WALL DESIGN LEVELS	17.500		17.500	17.500
EXISTING SURFACE LEVEL	19.031		18.731	18.523
CONTROL LINE CHAINAGES	110.000		120.000	126.928

VERT 1:50

A1 SCALE: HOR 1:200
VERT 1:50

MAXIMUM HEIGHT OF WALL: 3.485m

FACE AREA: 259m²



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(AUSTRALIA) PTY. LTD.

Project:

VantageYatala

STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

RPD:

Lot: 501
Plan: SP295994
Local Authority: CITY OF GOLD COAST
COUNCIL

Level Datum:	AHD
Meridian:	-
Contour Interval:	-
PSM:	-
RL:	-

ISSUED FOR TENDER

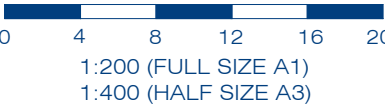
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DRAWING TITLE
LOT 205 BOULDER RETAINING
WALL LONGITUDINAL
SECTION RW2

A	10-02-2022		ISSUED FOR APPROVAL	DV	MG	
A	27-01-2022		ISSUED FOR TENDER	DV	MG	
Issue	Date		Description	DRN	CHK	

SCALE IN METRES



Scale at A1: AS NOTED

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10-02-2022

Drawing No:	Rev. No:
5941 ENG BE2 850	A

