

CIVIL OPERATIONAL WORKS VANTAGE YATALA - STAGE 2

DRAWING INDEX		
DRAWING No.	REV.	DRAWING TITLE
594I ENG OPW2 001	F	DRAWING INDEX AND LOCALITY PLAN
594I ENG OPW2 002	B	GENERAL NOTES SHEET 1 OF 2
594I ENG OPW2 003	B	GENERAL NOTES SHEET 2 OF 2
594I ENG OPW2 004	B	LEGEND
594I ENG OPW2 005	C	KEY PLAN LAYOUT
594I ENG OPW2 010	B	EXISTING SURFACE AND FEATURES PLAN SHEET 1 OF 8
594I ENG OPW2 011	B	EXISTING SURFACE AND FEATURES PLAN SHEET 2 OF 8
594I ENG OPW2 012	B	EXISTING SURFACE AND FEATURES PLAN SHEET 3 OF 8
594I ENG OPW2 013	B	EXISTING SURFACE AND FEATURES PLAN SHEET 4 OF 8
594I ENG OPW2 014	B	EXISTING SURFACE AND FEATURES PLAN SHEET 5 OF 8
594I ENG OPW2 015	B	EXISTING SURFACE AND FEATURES PLAN SHEET 6 OF 8
594I ENG OPW2 016	B	EXISTING SURFACE AND FEATURES PLAN SHEET 7 OF 8
594I ENG OPW2 017	B	EXISTING SURFACE AND FEATURES PLAN SHEET 8 OF 8
594I ENG OPW2 050	D	SEDIMENT AND EROSION CONTROL PLAN SHEET 1 OF 8
594I ENG OPW2 051	D	SEDIMENT AND EROSION CONTROL PLAN SHEET 2 OF 8
594I ENG OPW2 052	D	SEDIMENT AND EROSION CONTROL PLAN SHEET 3 OF 8
594I ENG OPW2 053	C	SEDIMENT AND EROSION CONTROL PLAN SHEET 4 OF 8
594I ENG OPW2 054	E	SEDIMENT AND EROSION CONTROL PLAN SHEET 5 OF 8
594I ENG OPW2 055	C	SEDIMENT AND EROSION CONTROL PLAN SHEET 6 OF 8
594I ENG OPW2 056	B	SEDIMENT AND EROSION CONTROL PLAN SHEET 7 OF 8
594I ENG OPW2 057	B	SEDIMENT AND EROSION CONTROL PLAN SHEET 8 OF 8
594I ENG OPW2 058	C	CONSTRUCTION PHASE SEDIMENT BASIN 1 LAYOUT SHEET 1 OF 4
594I ENG OPW2 059	C	CONSTRUCTION PHASE SEDIMENT BASIN 1 LAYOUT SHEET 2 OF 4
594I ENG OPW2 060	B	CONSTRUCTION PHASE SEDIMENT BASIN 1 LAYOUT SHEET 3 OF 4
594I ENG OPW2 061	B	CONSTRUCTION PHASE SEDIMENT BASIN 1 LAYOUT SHEET 4 OF 4
594I ENG OPW2 062	B	CONSTRUCTION PHASE SEDIMENT BASIN SECTIONS
594I ENG OPW2 063	B	CONSTRUCTION PHASE SEDIMENT BASIN TYPICAL SECTIONS
594I ENG OPW2 064	B	SEDIMENT AND EROSION TYPICAL DETAILS
594I ENG OPW2 300	D	OVERALL SERVICES LAYOUT PLAN SHEET 1 OF 8
594I ENG OPW2 301	D	OVERALL SERVICES LAYOUT PLAN SHEET 2 OF 8
594I ENG OPW2 302	D	OVERALL SERVICES LAYOUT PLAN SHEET 3 OF 8
594I ENG OPW2 303	C	OVERALL SERVICES LAYOUT PLAN SHEET 4 OF 8
594I ENG OPW2 304	D	OVERALL SERVICES LAYOUT PLAN SHEET 5 OF 8
594I ENG OPW2 305	C	OVERALL SERVICES LAYOUT PLAN SHEET 6 OF 8
594I ENG OPW2 306	B	OVERALL SERVICES LAYOUT PLAN SHEET 7 OF 8
594I ENG OPW2 307	B	OVERALL SERVICES LAYOUT PLAN SHEET 8 OF 8
594I ENG OPW2 400	E	ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 1 OF 7
594I ENG OPW2 401	D	ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 2 OF 7
594I ENG OPW2 402	D	ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 3 OF 7
594I ENG OPW2 403	C	ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 4 OF 7
594I ENG OPW2 404	E	ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 5 OF 7
594I ENG OPW2 405	C	ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 6 OF 7
594I ENG OPW2 406	B	ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 7 OF 7
594I ENG OPW2 407	A	ACCESS DRIVEWAY LAYOUT PLAN
594I ENG OPW2 408	A	ACCESS DRIVEWAY TYPICAL DETAILS
594I ENG OPW2 410	B	TYPICAL SECTIONS AND DETAILS SHEET 1 OF 3
594I ENG OPW2 411	B	TYPICAL SECTIONS AND DETAILS SHEET 2 OF 3
594I ENG OPW2 412	B	TYPICAL SECTIONS AND DETAILS SHEET 3 OF 3
594I ENG OPW2 420	C	CONTROL LINE LAYOUT PLAN
594I ENG OPW2 421	B	CONTROL LINE SETOUT TABLES SHEET 1 OF 2
594I ENG OPW2 422	B	CONTROL LINE SETOUT TABLES SHEET 2 OF 2
594I ENG OPW2 430	C	HIGHLANDS STREET LONGITUDINAL SECTION SHEET 1 OF 2
594I ENG OPW2 431	B	HIGHLANDS STREET LONGITUDINAL SECTION SHEET 2 OF 2
594I ENG OPW2 432	B	FAIRWAY STREET LONGITUDINAL SECTION
594I ENG OPW2 433	B	AMGROW DAM OVERFLOW DRAIN LONGITUDINAL SECTION
594I ENG OPW2 450	C	HIGHLANDS STREET CROSS SECTIONS SHEET 1 OF 9
594I ENG OPW2 451	C	HIGHLANDS STREET CROSS SECTIONS SHEET 2 OF 9
594I ENG OPW2 452	C	HIGHLANDS STREET CROSS SECTIONS SHEET 3 OF 9
594I ENG OPW2 453	C	HIGHLANDS STREET CROSS SECTIONS SHEET 4 OF 9
594I ENG OPW2 454	C	HIGHLANDS STREET CROSS SECTIONS SHEET 5 OF 9
594I ENG OPW2 455	C	HIGHLANDS STREET CROSS SECTIONS SHEET 6 OF 9
594I ENG OPW2 456	B	HIGHLANDS STREET CROSS SECTIONS SHEET 7 OF 9
594I ENG OPW2 457	B	HIGHLANDS STREET CROSS SECTIONS SHEET 8 OF 9
594I ENG OPW2 458	B	HIGHLANDS STREET CROSS SECTIONS SHEET 9 OF 9
594I ENG OPW2 459	B	FAIRWAY STREET CROSS SECTIONS SHEET 1 OF 4
594I ENG OPW2 460	C	FAIRWAY STREET CROSS SECTIONS SHEET 2 OF 4
594I ENG OPW2 461	B	FAIRWAY STREET CROSS SECTIONS SHEET 3 OF 4
594I ENG OPW2 462	B	FAIRWAY STREET CROSS SECTIONS SHEET 4 OF 4
594I ENG OPW2 490	D	ROAD INTERSECTION DETAILS SHEET 1 OF 5
594I ENG OPW2 491	C	ROAD INTERSECTION DETAILS SHEET 2 OF 5
594I ENG OPW2 492	D	ROAD INTERSECTION DETAILS SHEET 3 OF 5

594I ENG OPW2 493	C	ROAD INTERSECTION DETAILS SHEET 4 OF 5
594I ENG OPW2 494	D	ROAD INTERSECTION DETAILS SHEET 5 OF 5
594I ENG OPW2 495	B	ROAD INTERSECTION SETOUT TABLES
594I ENG OPW2 500	C	STORMWATER DRAINAGE CATCHMENT PLAN
594I ENG OPW2 510	C	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 1 OF 14
594I ENG OPW2 511	C	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 2 OF 14
594I ENG OPW2 512	B	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 3 OF 14
594I ENG OPW2 513	C	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 4 OF 14
594I ENG OPW2 514	B	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 5 OF 14
594I ENG OPW2 515	C	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 6 OF 14
594I ENG OPW2 516	C	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 7 OF 14
594I ENG OPW2 517	B	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 8 OF 14
594I ENG OPW2 518	C	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 9 OF 14
594I ENG OPW2 519	C	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 10 OF 14
594I ENG OPW2 520	C	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 11 OF 14
594I ENG OPW2 521	C	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 12 OF 14
594I ENG OPW2 522	B	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 13 OF 14
594I ENG OPW2 523	B	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 14 OF 14
594I ENG OPW2 550	C	STORMWATER DRAINAGE CALCULATION TABLES SHEET 1 OF 6
594I ENG OPW2 551	C	STORMWATER DRAINAGE CALCULATION TABLES SHEET 2 OF 6
594I ENG OPW2 552	C	STORMWATER DRAINAGE CALCULATION TABLES SHEET 3 OF 6
594I ENG OPW2 553	C	STORMWATER DRAINAGE CALCULATION TABLES SHEET 4 OF 6
594I ENG OPW2 554	C	STORMWATER DRAINAGE CALCULATION TABLES SHEET 5 OF 6
594I ENG OPW2 555	C	STORMWATER DRAINAGE CALCULATION TABLES SHEET 6 OF 6
594I ENG OPW2 570	B	OPERATIONAL PHASE BIORETENTION BASIN SHEET 1 OF 4
594I ENG OPW2 571	C	OPERATIONAL PHASE BIORETENTION BASIN SHEET 2 OF 4
594I ENG OPW2 572	B	OPERATIONAL PHASE BIORETENTION BASIN SHEET 3 OF 4
594I ENG OPW2 573	B	OPERATIONAL PHASE BIORETENTION BASIN SHEET 4 OF 4
594I ENG OPW2 580	B	COARSE SEDIMENT FOREBAY 1 SETOUT SHEET 1 OF 4
594I ENG OPW2 581	C	COARSE SEDIMENT FOREBAY 2 SETOUT SHEET 2 OF 4
594I ENG OPW2 582	B	COARSE SEDIMENT FOREBAY 3 SETOUT SHEET 3 OF 4
594I ENG OPW2 583	B	COARSE SEDIMENT FOREBAY 4 SETOUT SHEET 4 OF 4
594I ENG OPW2 584	B	INTERNAL MAINTENANCE BUND SETOUT
594I ENG OPW2 590	C	SPLITTER PIT GENERAL ARRANGEMENT
594I ENG OPW2 600	E	SEWER RETICULATION LAYOUT PLAN SHEET 1 OF 8
594I ENG OPW2 601	D	SEWER RETICULATION LAYOUT PLAN SHEET 2 OF 8
594I ENG OPW2 602	D	SEWER RETICULATION LAYOUT PLAN SHEET 3 OF 8
594I ENG OPW2 603	D	SEWER RETICULATION LAYOUT PLAN SHEET 4 OF 8
594I ENG OPW2 604	E	SEWER RETICULATION LAYOUT PLAN SHEET 5 OF 8
594I ENG OPW2 605	D	SEWER RETICULATION LAYOUT PLAN SHEET 6 OF 8
594I ENG OPW2 606	C	SEWER RETICULATION LAYOUT PLAN SHEET 7 OF 8
594I ENG OPW2 607	C	SEWER RETICULATION LAYOUT PLAN SHEET 8 OF 8
594I ENG OPW2 610	C	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 1 OF 10
594I ENG OPW2 611	D	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 2 OF 10
594I ENG OPW2 612	C	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 3 OF 10
594I ENG OPW2 613	C	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 4 OF 10
594I ENG OPW2 614	C	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 5 OF 10
594I ENG OPW2 615	D	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 6 OF 10
594I ENG OPW2 616	C	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 7 OF 10
594I ENG OPW2 617	D	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 8 OF 10
594I ENG OPW2 618	D	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 9 OF 10
594I ENG OPW2 619	D	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 10 OF 10
594I ENG OPW2 700	C	WATER RETICULATION LAYOUT PLAN SHEET 1 OF 4
594I ENG OPW2 701	C	WATER RETICULATION LAYOUT PLAN SHEET 2 OF 4
594I ENG OPW2 702	C	WATER RETICULATION LAYOUT PLAN SHEET 2 OF 4
594I ENG OPW2 703	C	WATER RETICULATION LAYOUT PLAN SHEET 4 OF 4
594I ENG OPW2 710	A	WATER RETICULATION TYPICAL DETAILS SHEET 1 OF 2
594I ENG OPW2 711	A	WATER RETICULATION TYPICAL DETAILS SHEET 2 OF 2
594I ENG OPW2 800	E	LINEMARKING AND SIGNAGE PLAN SHEET 1 OF 3
594I ENG OPW2 801	E	LINEMARKING AND SIGNAGE PLAN SHEET 2 OF 3
594I ENG OPW2 802	E	LINEMARKING AND SIGNAGE PLAN SHEET 3 OF 3
594I ENG OPW2 900	C	A-DOUBLE SWEEP PATH ANALYSIS MASTER PLAN
594I ENG OPW2 901	C	A-DOUBLE SWEEP PATH ANALYSIS SHEET 1 OF 5
594I ENG OPW2 902	C	A-DOUBLE SWEEP PATH ANALYSIS SHEET 2 OF 5
594I ENG OPW2 903	C	A-DOUBLE SWEEP PATH ANALYSIS SHEET 3 OF 5
594I ENG OPW2 905	C	A-DOUBLE SWEEP PATH ANALYSIS SHEET 5 OF 5
594I ENG OPW2 904	C	A-DOUBLE SWEEP PATH ANALYSIS SHEET 4 OF 5

STANDARD DRAWINGS			
DRAWING No.	REV.	ASSOCIATION	DRAWING TITLE
DS-010	F	IPWEA	ACCESS CHAMBER – STORMWATER ACCESS CHAMBER DETAILS – 1050 TO 2100 DIA
DS-015	C	IPWEA	ACCESS CHAMBER – MANHOLE FRAME – ROADWAY AND NON ROADWAY – 1050 TO 2100 DIA
DS-018	C	IPWEA	ACCESS CHAMBER – MANHOLE RISER DETAILS
DS-019	C	IPWEA	ACCESS CHAMBER – MANHOLE ROVER (ROADWAY)
DS-020	C	IPWEA	ACCESS CHAMBER – MANHOLE ROVER (NON ROADWAY)
DS-021	C	IPWEA	ACCESS CHAMBER – MANHOLE COVER CONCRETE INFILL (PEDESTRIAN TRAFFIC) 1050 TO 2100 DIA
DS-030	F	IPWEA	EXCAVATION, BEDDING & BACKFILL – RIGID & FLEXIBLE DRAINAGE PIPES
DS-031	D	IPWEA	EXCAVATION, BEDDING & BACKFILL PRECAST – BOX CULVERTS
DS-040	E	IPWEA	SEDIMENT CONTROL – SEDIMENT CONTROL DEVICES – SEDIMENT FENCE, ENTRY/EXIT SEDIMENT TRAP
DS-041	E	IPWEA	SEDIMENT CONTROL – SEDIMENT CONTROL DEVICES – KERB AND FIELD INLET, CHECK DAMS & STRAW BALES
DS-050	E	IPWEA	DRAINAGE PITS – FIELD INLET TYPE 1 AND TYPE 2
DS-061	B	IPWEA	DRAINAGE PITS – KERB INLET – PRECAST LINTEL DETAILS
DS-062	D	IPWEA	DRAINAGE PITS – KERB INLET – GRATE AND FRAME
DS-063	C	IPWEA	DRAINAGE PITS – KERB INLET – LIP IN LINE – GENERAL ARRANGEMENT
DS-065	I	IPWEA	PATHWAYS – CONCRETE PATHWAY CONSTRUCTION DETAILS
DS-073	A	IPWEA	BIORETENTION DRAINAGE PROFILE – TYPE 3 – CONVENTIONAL
DS-075	A	IPWEA	LARGE BIORETENTION SEDIMENT FOREBAY
DS-076	A	IPWEA	BIORETENTION WEIR
DS-078	A	IPWEA	BIORETENTION STANDARD NOTES
GS-041	D	IPWEA	FENCING – CHAIN WIRE SECURITY FENCING
RS-049	E	IPWEA	VEHICLE CROSSING – RESIDENTIAL DRIVEWAYS – PLAN 1 OF 2
RS-050	G	IPWEA	VEHICLE CROSSING – RESIDENTIAL DRIVEWAYS – PLAN 2 OF 2
RS-080	F	IPWEA	KERB AND CHANNEL – PROFILES AND DIMENSIONS – INCLUDING EDGE RESTRAINTS, MEDIAN & CHANNEL
RS-090	J	IPWEA	KERB RAMPS – RAMPED PEDESTRIAN
RS-091	F	IPWEA	KERB RAMPS – RAMPED AND CUT THROUGH TREATMENTS – FOR PEDESTRIAN CROSSINGS, SLIP LANES AND MEDIANS
RS-094	F	IPWEA	KERB RAMPS – LOCATIONS AND CONFIGURATIONS
RS-130	F	IPWEA	ROAD FURNITURE – STREET NAME SIGN AND LOCATION (FINGERBOARD)
RS-131	G	IPWEA	ROAD FURNITURE – TRAFFIC SIGN INSTALLATION DETAILS
RS-140	F	IPWEA	SUBSOIL DRAINS – DETAILS AND LOCATION
RS-142	F	IPWEA	SUBSOIL DRAINS – ACCESS POINTS
SDI033	K	DTMR	KERB AND CHANNEL
SDI304	N	DTMR	PIPE CULVERTS – WINGWALLS, HEADWALLS AND APRON FOR PIPE DIA 750 TO 2400
02-003	2	CoGC	TYPICAL CROSS SECTIONS – COLLECTOR STREETS – PLAN 2 OF 2
02-005	I	CoGC	PUBLIC UTILITY PLANT CORRIDOR ALLOCATIONS IN PUBLIC ROAD VERGES
02-601	I	CoGC	NEW ROADS – SERVICE CONDUIT CROSSINGS
02-602	I	CoGC	ROAD CROSSING – TRENCH RESTORATION – FLEXIBLE PAVEMENTS
03-008	I	CoGC	FIELD INLET AND INTER – ALLOTMENT DRAINAGE PIT
03-101	I	CoGC	STORMWATER ACCESS CHAMBER 1050 DIA TO 1500 DIA
03-102	I	CoGC	STORMWATER ACCESS CHAMBER 1050 DIA TO 1500 DIA ROOF SLABS
03-201	I	CoGC	EXCAVATION AND BEDDING OF CONCRETE STORMWATER PIPES
05-014	I	CoGC	CHAIN WIRE FENCING – 1.8m HIGH



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 OPW2 001 – REV F
JULY 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 SEEDED 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 SEEDED, 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(I), 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 (I) SHOULD ONLY BE USED UPON RECOMMENDATION FROM GEOTECHNICAL SPECIALIST.
6. SPILLWAY 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 CLOTH, 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 CLEAR 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

3. 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 1 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
	BRIFEN 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 — S — S — S — S — S —	PROPOSED SEWER
— SW — SW — SW — SW — SW — SW — SW — SW —	PROPOSED STORMWATER
— RW — RW — RW — RW —	PROPOSED ROOF WATER
— SS — SS — SS — SS — SS — SS — SS — SS —	PROPOSED ROOF WATER
— W — W — W — W — W — W — W — W —	PROPOSED SUBSOIL
— W — W — W — W — W — W — W — W —	PROPOSED WATER
— RW — RW — RW — RW —	PROPOSED RECYCLED WATER
— OIL — OIL — OIL — OIL — OIL — OIL — OIL — OIL —	PROPOSED OIL
— F — F — F — F — F — F — F — F —	PROPOSED FUEL
— G — G — G — G — G — G — G — G —	PROPOSED GAS
— P — P — P — P — P — P — P — P —	PROPOSED PIPELINE
— HV — HV — HV — HV — HV — HV — HV — HV —	PROPOSED HIGH VOLTAGE ELECTRICITY
— E — E — E — E — E — E — E — E —	PROPOSED UNDERGROUND ELECTRICITY
— E V — E V — E V — E V — E V — E V — E V —	PROPOSED OVERHEAD ELECTRICITY
— L — L — L — L — L — L — L — L —	PROPOSED LIGHTING
— T — T — T — T — T — T — T — T —	PROPOSED TELSTRA
— C — C — C — C — C — C — C — C —	PROPOSED COMMUNICATIONS
— GE — GE — GE — GE — GE — GE — GE — GE —	PROPOSED GAS, ELECT
— GT — GT — GT — GT — GT — GT — GT — GT —	PROPOSED GAS, TELSTRA
— ET — ET — ET — ET — ET — ET — ET — ET —	PROPOSED ELECT, TELSTRA
— GET — GET — GET — GET — GET — GET — GET — GET —	PROPOSED GAS, ELECTRICITY, TELSTRA
— RM — RM — RM —	EXISTING RISING MAIN
— S — S — S — S — S — S — S — S —	EXISTING SEWER
— SW — SW — SW — SW — SW — SW — SW — SW —	EXISTING STORMWATER
— RW — RW — RW — RW —	EXISTING ROOF WATER
— SS — SS — SS — SS — SS — SS — SS — SS —	EXISTING SUBSOIL
— W — W — W — W — W — W — W — W —	EXISTING WATER
— W — W — W — W — W — W — W — W —	EXISTING RECYCLED WATER
— OIL — OIL — OIL — OIL — OIL — OIL — OIL — OIL —	EXISTING OIL
— F — F — F — F — F — F — F — F —	EXISTING FUEL
— G — G — G — G — G — G — G — G —	EXISTING GAS
— P — P — P — P — P — P — P — P —	EXISTING PIPELINE
— HV — HV — HV — HV — HV — HV — HV — HV —	EXISTING HIGH VOLTAGE ELECTRICITY
— E — E — E — E — E — E — E — E —	EXISTING UNDERGROUND ELECTRICITY
— E V — E V — E V — E V — E V — E V — E V —	EXISTING OVERHEAD ELECTRICITY
— L — L — L — L — L — L — L — L —	EXISTING LIGHTING
— T — T — T — T — T — T — T — T —	EXISTING TELSTRA
— C — C — C — C — C — C — C — C —	EXISTING COMMUNICATIONS
— GE — GE — GE — GE — GE — GE — GE — GE —	EXISTING GAS, ELECT
— GT — GT — GT — GT — GT — GT — GT — GT —	EXISTING GAS, TELSTRA
— ET — ET — ET — ET — ET — ET — ET — ET —	EXISTING ELECT, TELSTRA
— GET — GET — GET — GET — GET — 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 —	DEMOLISH FUEL
— HV — X — HV — X — HV — X — HV — X —	DEMOLISH HIGH VOLTAGE ELECTRICITY
— E — X — E — X — E — X — E — X —	DEMOLISH UNDERGROUND ELECTRICITY
— E — X — E — X — E — X — E — X —	DEMOLISH OVERHEAD ELECTRICITY
— L — X — L — X — L — X — L — X —	DEMOLISH LIGHTING
— G — X — G — X — G — X — G — X —	DEMOLISH GAS
— P — X — P — X — P — X — P — X —	DEMOLISH PIPELINE
— T — X — T — X — T — X — T — X —	DEMOLISH TELSTRA
— 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)
MD(K)	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
o BIN	EXISTING BIN
□ PB	POST BOX
	TELEPHONE BOX
• MP	TELSTRA PIT
• WM	TELSTRA MARKER POST
• V	WATER METER
• F.H.	WATER VALVE
o TAP	FIRE HYDRANT
	WATER TAP
	WATER HYDRANT
	WATER TEE
	WATER REDUCER
	WATER ENDCAP
	WATER CONNECTION
	WATER CROSSING
	WATER DICL
	SEWER MAINTENANCE HOLE
	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/LIP
	SETOUT POINT
	OFFSET PIT WITH GRATE
	IN LINE PIT WITH GRATE
	JUNCTION PIT
	LETTERBOX PIT
	GRATED INLET PIT
	MANHOLE
	GULLY PIT (LIP IN LINE) BARRIER KEY
	GULLY PIT (LIP IN LINE) BARRIER KEY
	GULLY PIT (LIP IN LINE) ROLL TOP KEY
	GULLY PIT (LIP IN LINE) ROLL TOP KEY
	GULLY PIT (KERB IN LINE) – GRADE
	GULLY PIT (KERB IN LINE) – SAG
	INFILTRATION TRENCH
	HEADWALL
	GROSS POLLUTANT TRAP
	STORMWATER CHAMBER

SMALL MEDIUM

SMALL MEDIUM

SMALL MEDIUM

SMALL MEDIUM

SMALL MEDIUM

SMALL MEDIUM

SMALL MEDIUM

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

G:\Projects\5941\ENGINEERING\Acad\CIVIL WORKS STAGE 2\Current\5941 ENG OPW2 002-004.dwg



Project: VANTAGE YATALA
STAGE 2

Site Address:
60 STAPYLTON JACOBS WEL
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
NOT FOR CONSTRUCTION

© 2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

LEGEND

[illegible]

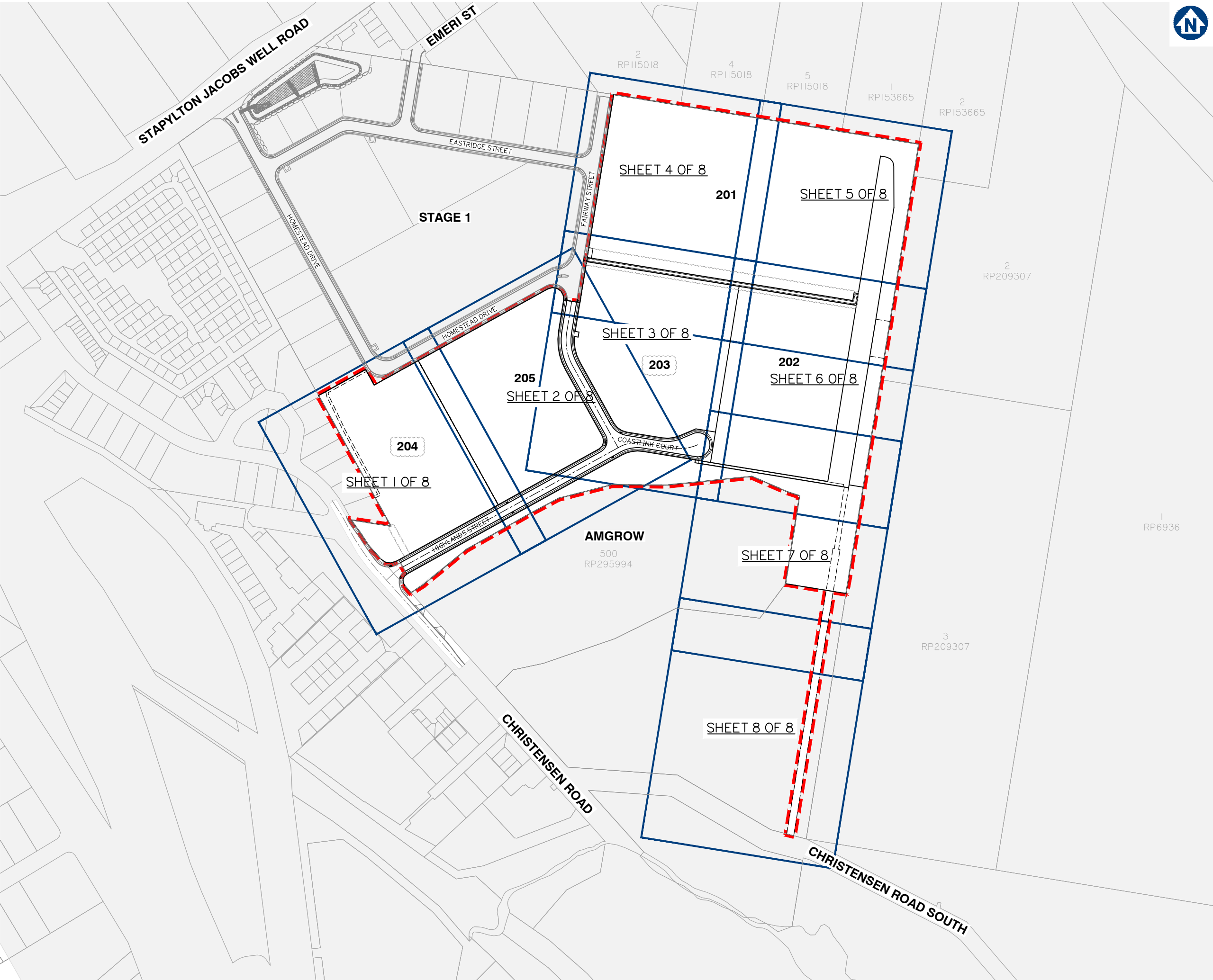
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB
A	30/07/21	ORIGINAL ISSUE	LAB
Issue	Date	Description	DRN

NOT APPLICABLE

Scale at A1:	NTS
--------------	-----

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No:	Rev. No:
5941 ENG OPW2 004	B



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:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

KEY PLAN LAYOUT

Issue	Date	Description	LAB	MG	DRN	CHK
C	05/07/22	LOT NUMBER AND BOUNDARY UPDATED	LAB	MG		
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG		
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG		
A	30/07/21	ORIGINAL ISSUE	LAB	MG		

SCALE IN METRES



1:1500 (FULL SIZE A1)
1:3000 (HALF SIZE A3)

Scale at A1: 1:1500

Designed: IG

Drafted: LAB / IG

Approved: MG

RPEQ: 16939

Signed:

Date: 05/07/2022

Drawing No:
5941 ENG OPW2 005

Rev. No:
C

KEY PLAN LAYOUT



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

VANTAGE YATALA STAGE 2

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

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

ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

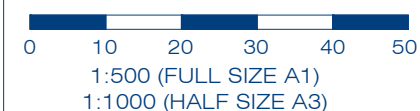
© 2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
EXISTING SURFACE
AND FEATURES PLAN
SHEET 1 OF 8

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MC	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MC	
A	30/07/21	ORIGINAL ISSUE	LAB	MC	
Issue	Date	Description	DRN	CH	

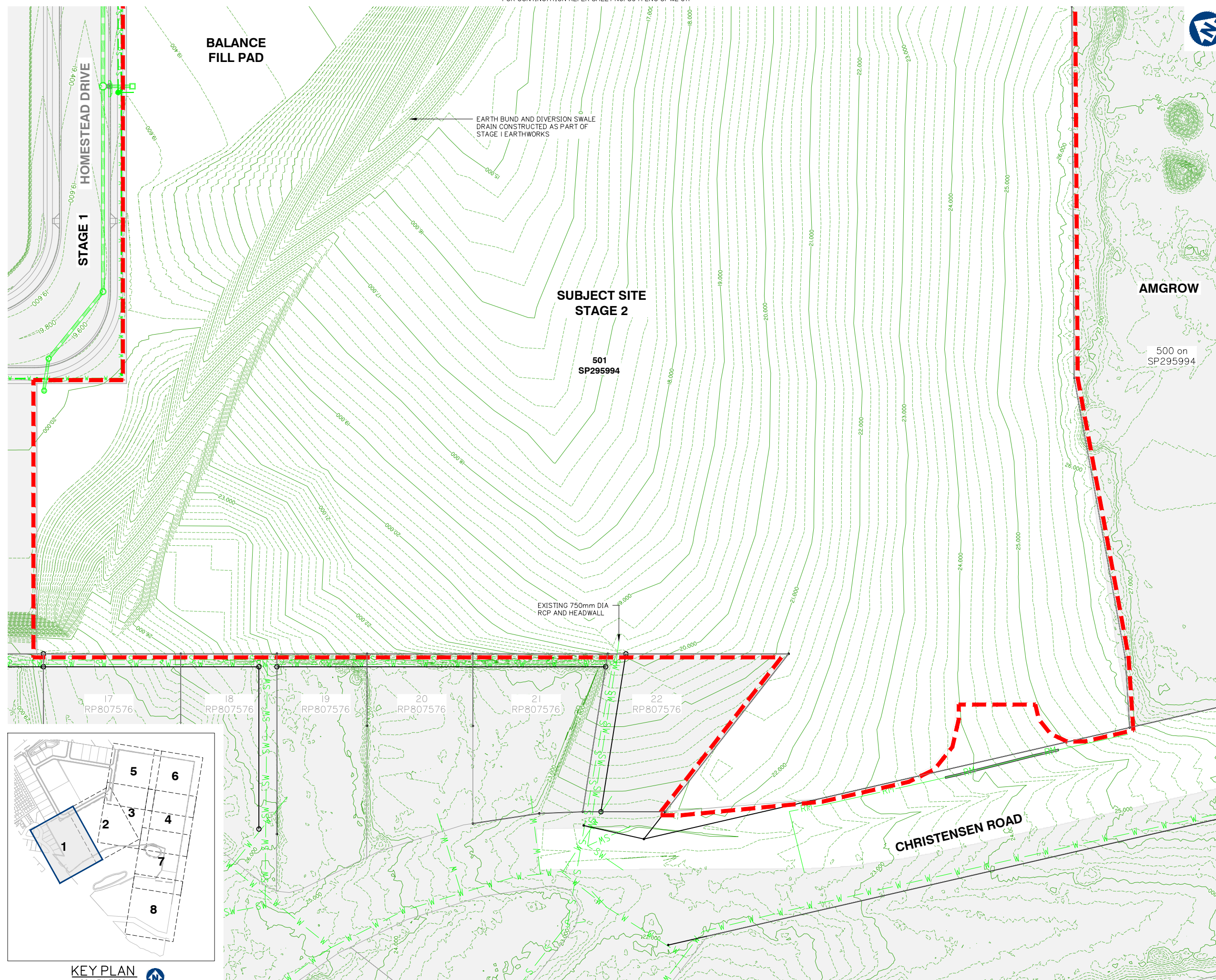
SCALE IN METRES



Scale at A1:	1:500
--------------	-------

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No:	Rev. No:
5941 ENG OPW2 010	B





FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

VANTAGE YATALA STAGE 2

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

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

ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

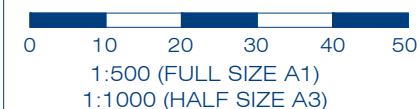
©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
EXISTING SURFACE
AND FEATURES PLAN
SHEET 2 OF 8

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MC	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MC	
A	30/07/21	ORIGINAL ISSUE	LAB	MC	
Issue	Date	Description	DRN	CH	

SCALE IN METRES

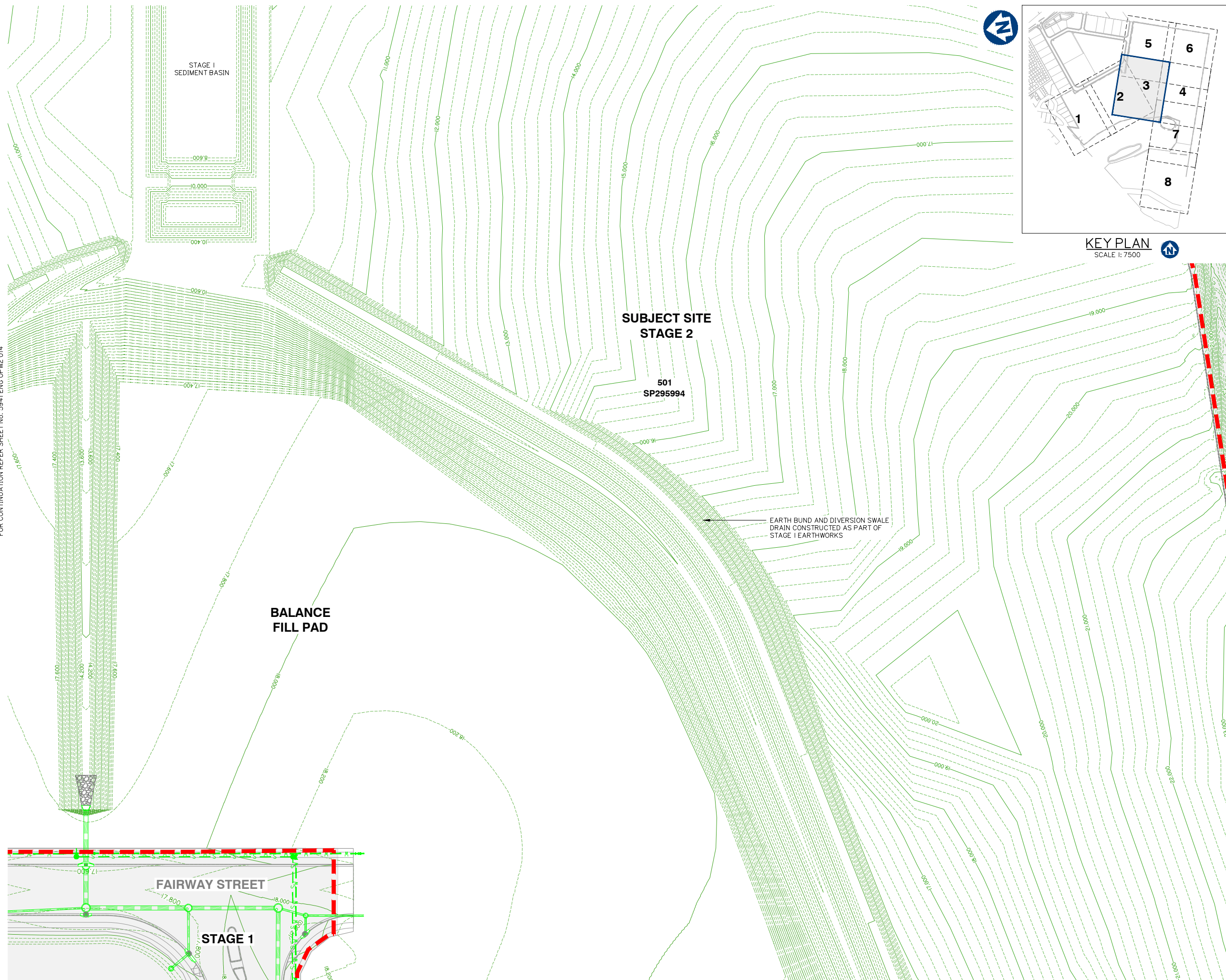


Scale at A1:	1:500
--------------	-------

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No:	Rev. No:
5941 ENG OPW2 011	B





Client:



Project:

VANTAGE YATALA 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
NOT FOR CONSTRUCTION

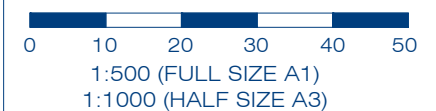
© 2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
EXISTING SURFACE
AND FEATURES PLAN
SHEET 3 OF 8

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES



Scale at A1:	1:500
--------------	-------

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No:	Rev. No:
5941 ENG OPW2 012	B



Project:

VANTAGE YATALA 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:	-
RI:	-

ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

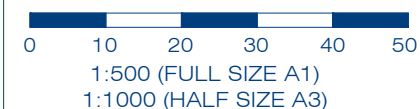
© 2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
EXISTING SURFACE
AND FEATURES PLAN
SHEET 4 OF 8

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	
Issue	Date	Description	DRN	CHK	

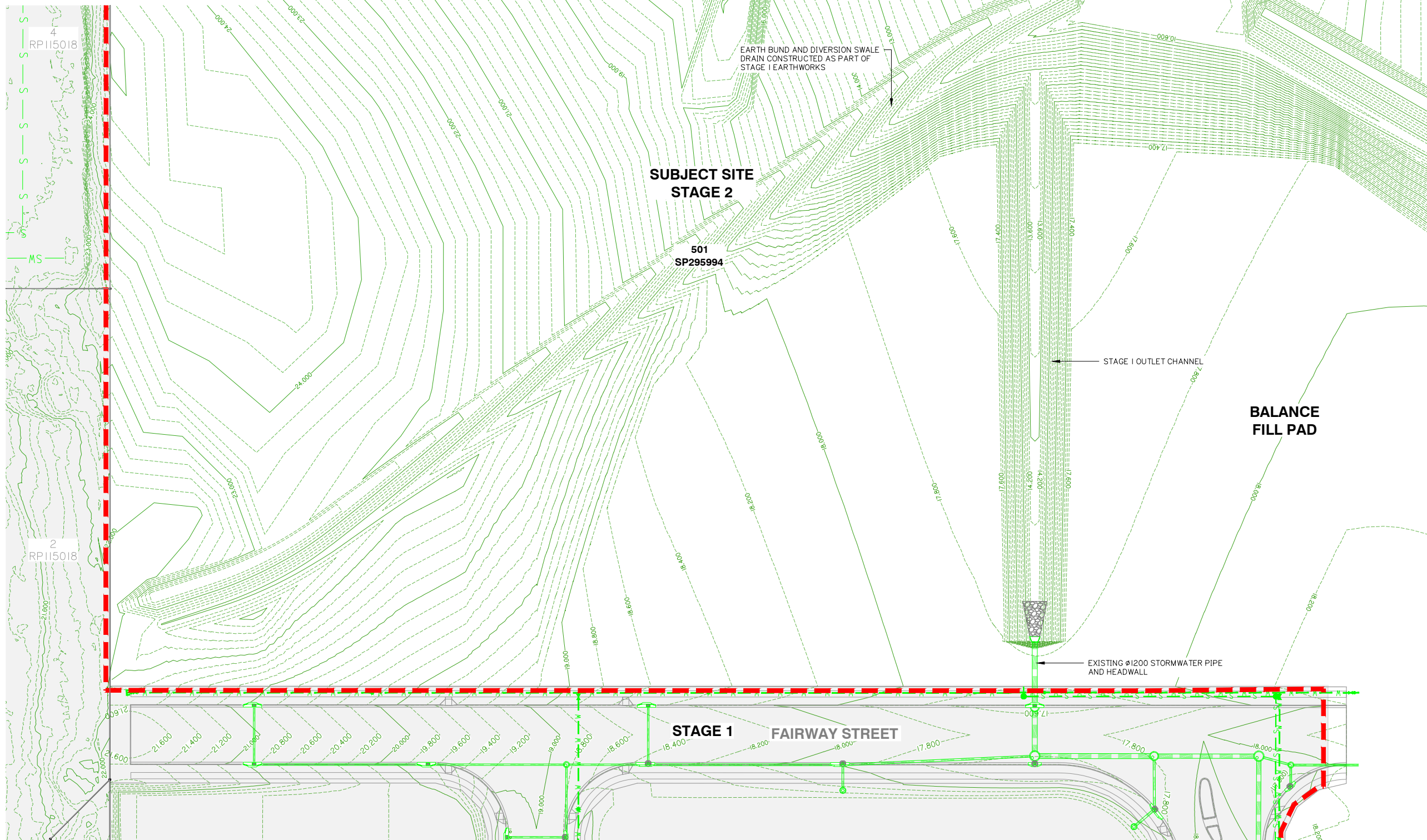
SCALE IN METRES



Scale at A1: 1:500

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No:	Rev. No:
5941 ENG OPW2 013	B



Project:

Site Address:

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
NOT FOR CONSTRUCTION

© 2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
EXISTING SURFACE
AND FEATURES PLAN
SHEET 5 OF 8

B	26/11/21	ISSUED FOR CONSTRUCTION				LAB	MG
S	10/09/21	INFORMATION REQUEST RESPONSE				LAB	MG
A	30/07/21	ORIGINAL ISSUE				LAB	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:	LAB / IG
----------	----------

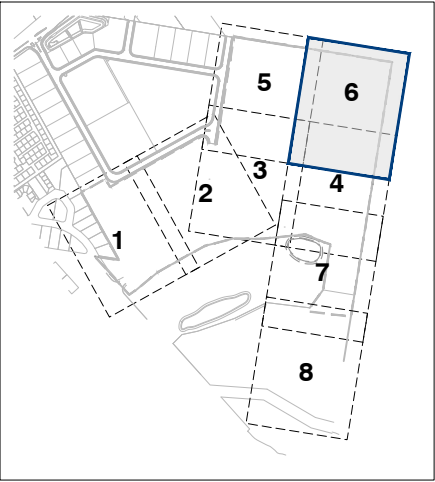
Approved:	MG
-----------	----

RPEQ:	16939
-------	-------

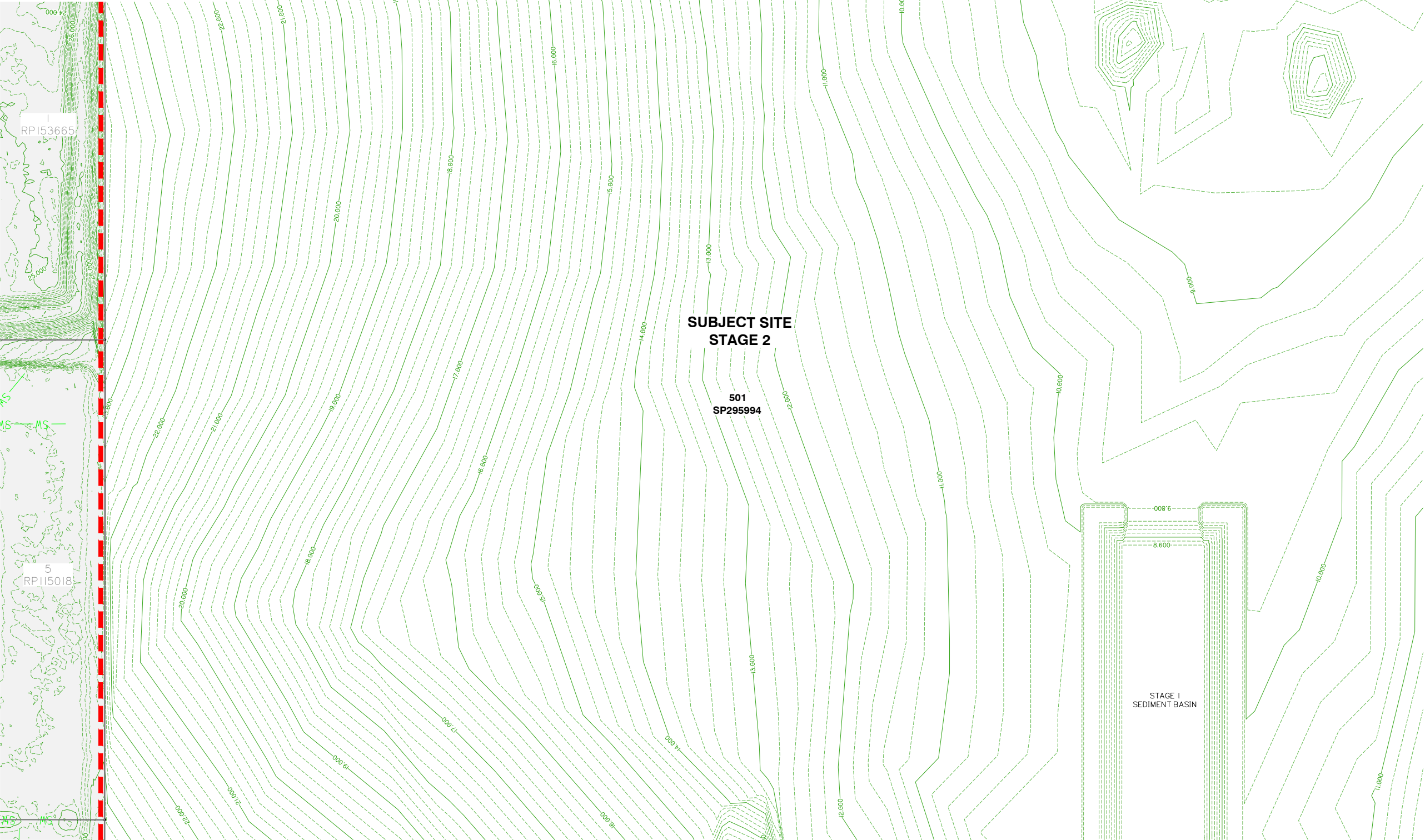
Signed:	
---------	--

Date:	10/09/2021
-------	------------

Drawing No:	Rev. No:
5941 ENG OPW2 014	B



KEY PLAN
SCALE 1:7500



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, Beenleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
EXISTING SURFACE
AND FEATURES PLAN
SHEET 6 OF 8

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES



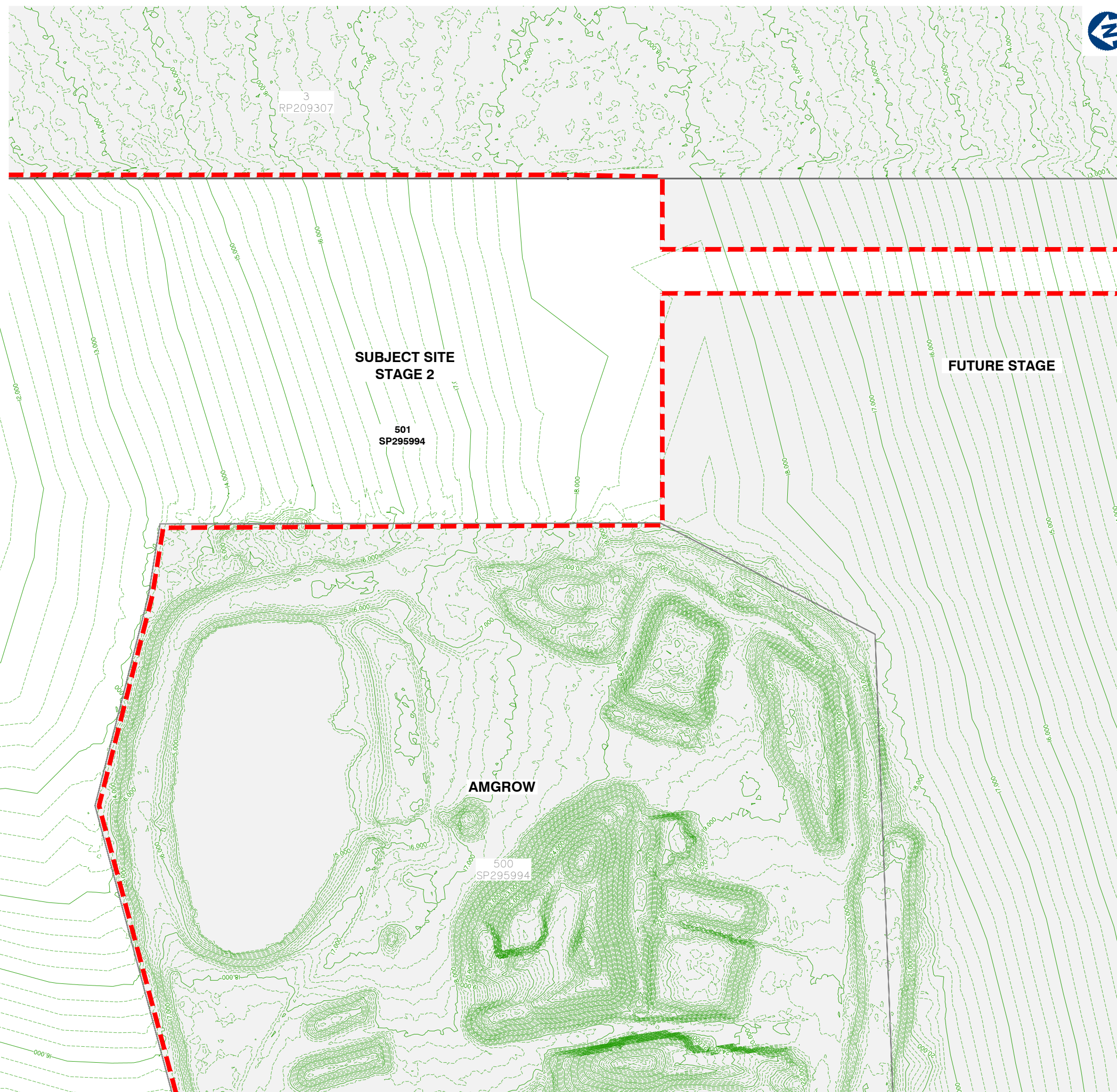
Scale at A1: 1:500

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No:
5941 ENG OPW2 015

Rev. No:
B

EXISTING SURFACE AND FEATURES PLAN SHEET 6 OF 8



FOR CONTINUATION REFER SHEET No. 594| ENG OPW2 0|3

3. $\frac{1}{2}$



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, Beenleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA 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
NOT FOR CONSTRUCTION

© 2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
EXISTING SURFACE
AND FEATURES PLAN
SHEET 7 OF 8

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MO	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MO	
A	30/07/21	ORIGINAL ISSUE	LAB	MO	
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:	LAB / IG
----------	----------

Approved:	MG
-----------	----

RPEQ:	16939
-------	-------

Signed:	
---------	--

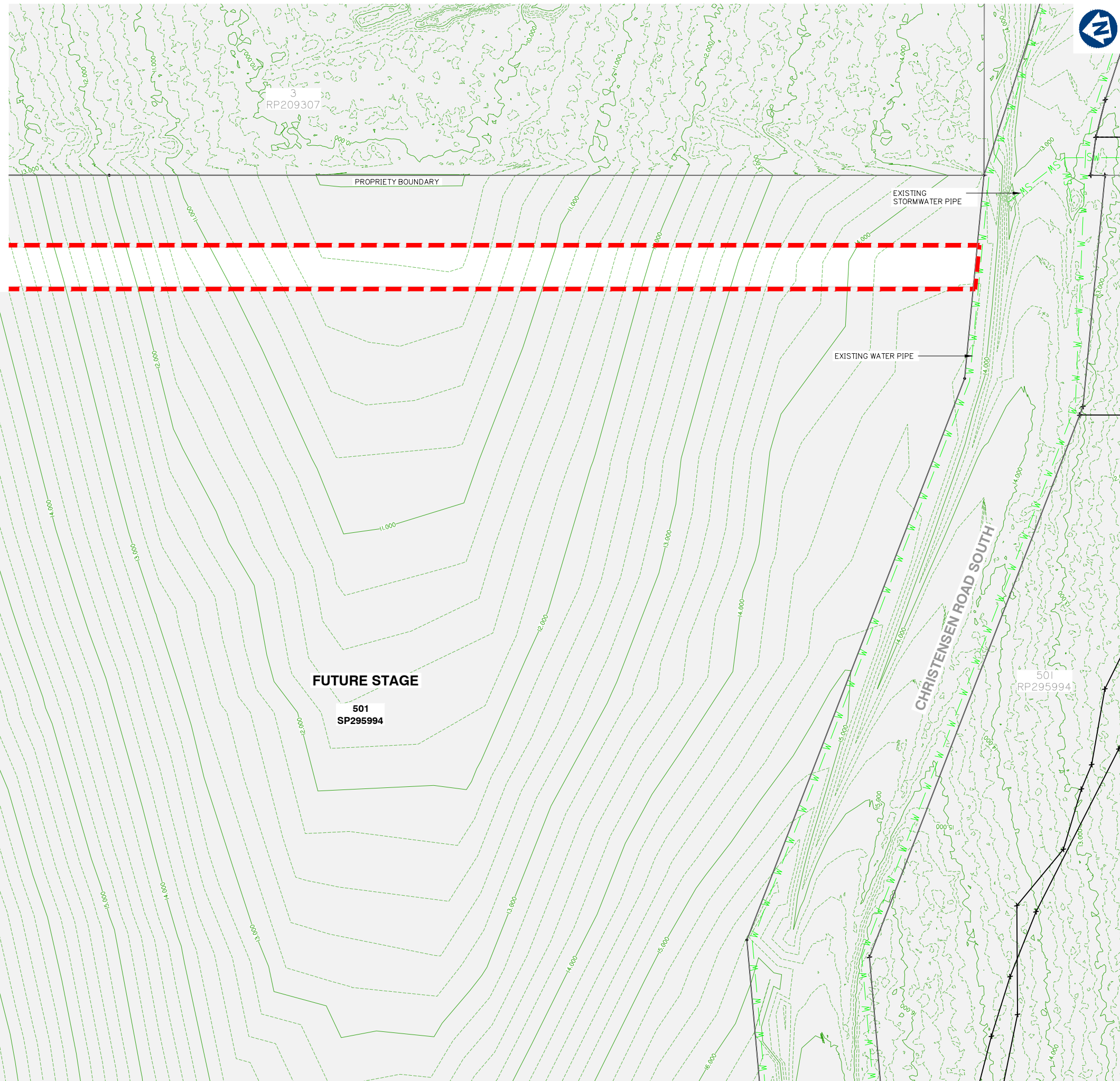
Date:	10/09/2021
-------	------------

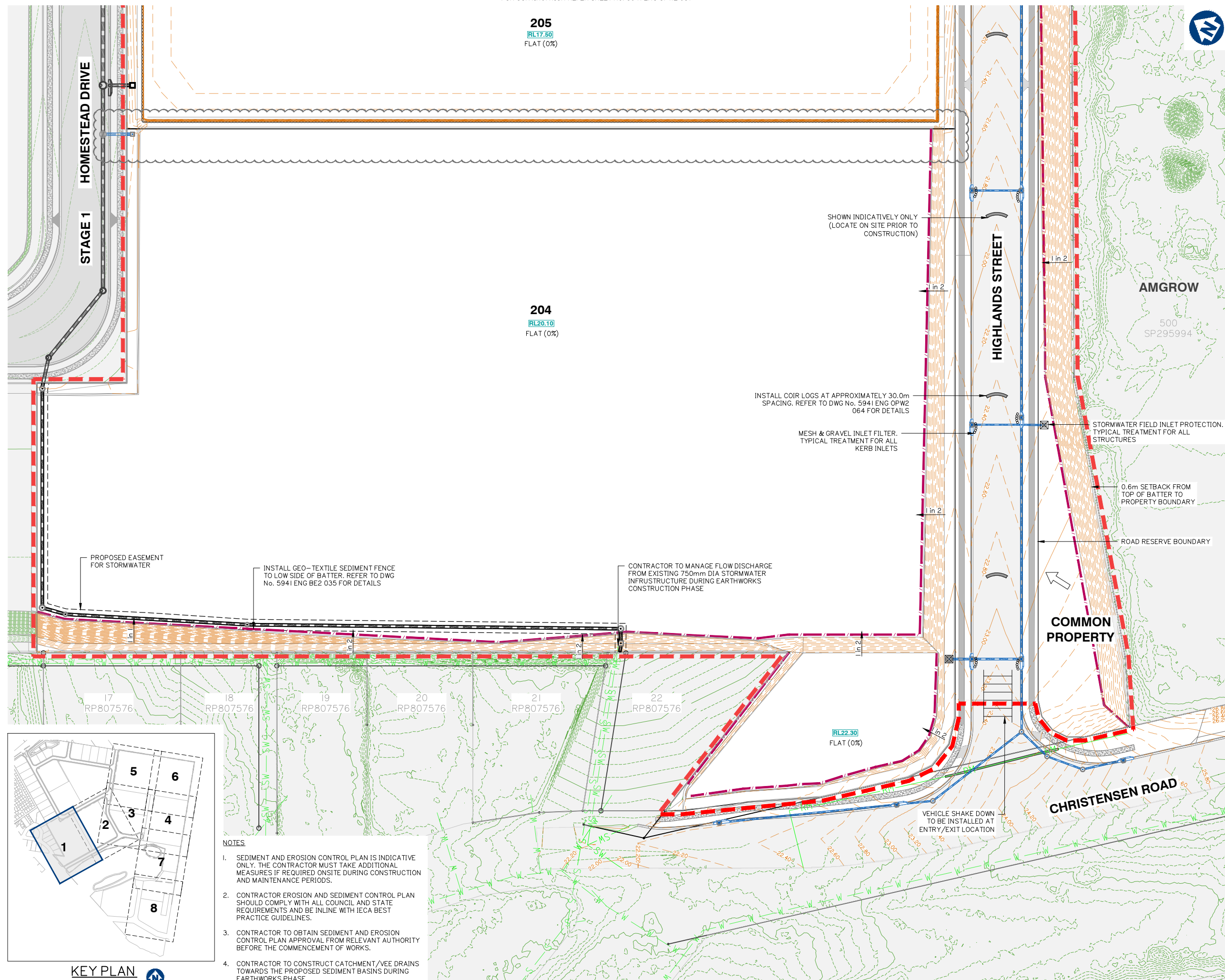
Drawing No:	Rev. No:
5941 ENG OPW2 016	B

Rev. No:
B

G:\Projects\5941\ENGINEERING\Acad\CIVIL WORKS STAGE 2\Current\5941 ENG OPW2 010-017.dwg

EXISTING SURFACE AND FEATURES PLAN SHEET 7 OF 8





Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives

All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

SEDIMENT AND
EROSION CONTROL
PLAN SHEET 1 OF 8

Issue	Date	Description	LAB	MG	DRN	CHK
D	19/07/22	LOT BOUNDARY, LOT NUMBER CONTOURS UPDATED	LAB	MG		
C	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG		
C	09/11/21	KERB RAMP LOCATION AMENDED	JH	MG		
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG		
A	30/07/21	ORIGINAL ISSUE	LAB	MG		

SCALE IN METRES



1:500 (FULL SIZE A1)

1:1000 (HALF SIZE A3)

Scale at A1: 1:500

Designed: IG

Drafted: LAB / IG

Approved: MG

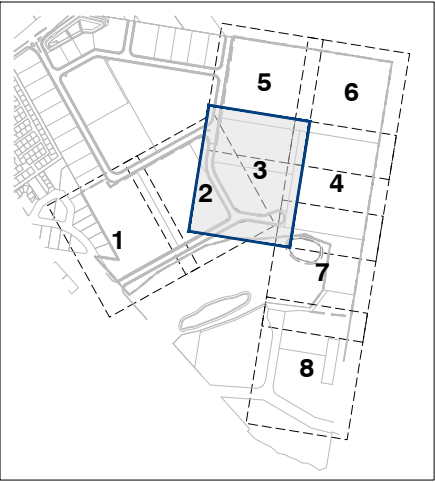
RPEQ: 16939

Signed:

Date: 05/07/2022

Drawing No:
5941 ENG OPW2 050

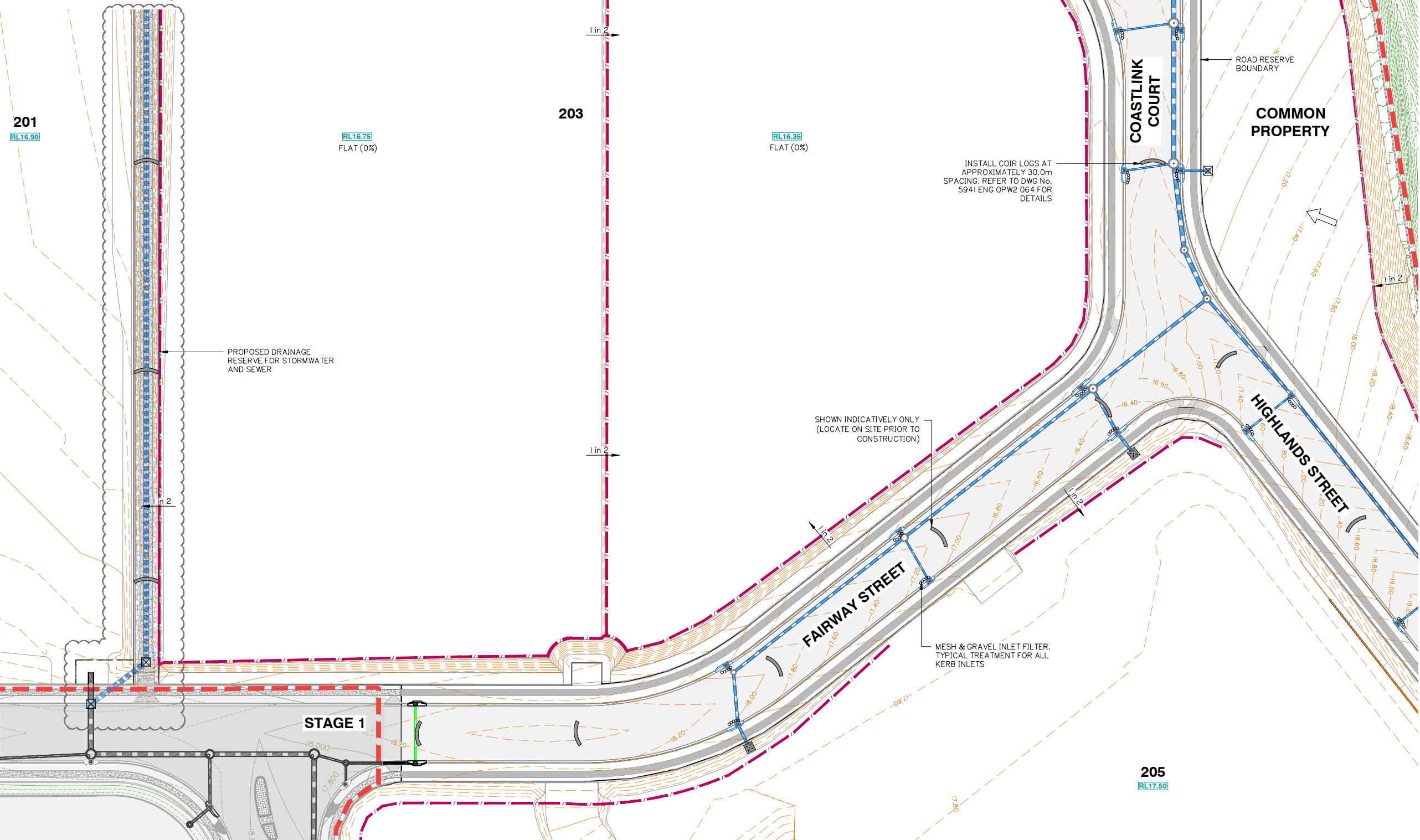
Rev. No:
D



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 INLINE 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:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

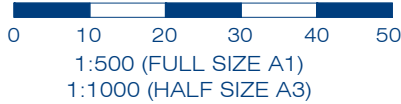
©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
SEDIMENT AND
EROSION CONTROL
PLAN SHEET 3 OF 8

Issue	Date	Description	LAB	MG	DRN	CHK
D	19/07/22	LOT BOUNDARY, LOT NUMBER, STORMWATER UPDATED	LAB	MG		
C	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG		
C	09/11/21	KERB RAMP LOCATION AMENDED	JH	MG		
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG		
A	30/07/21	ORIGINAL ISSUE	LAB	MG		

SCALE IN METRES



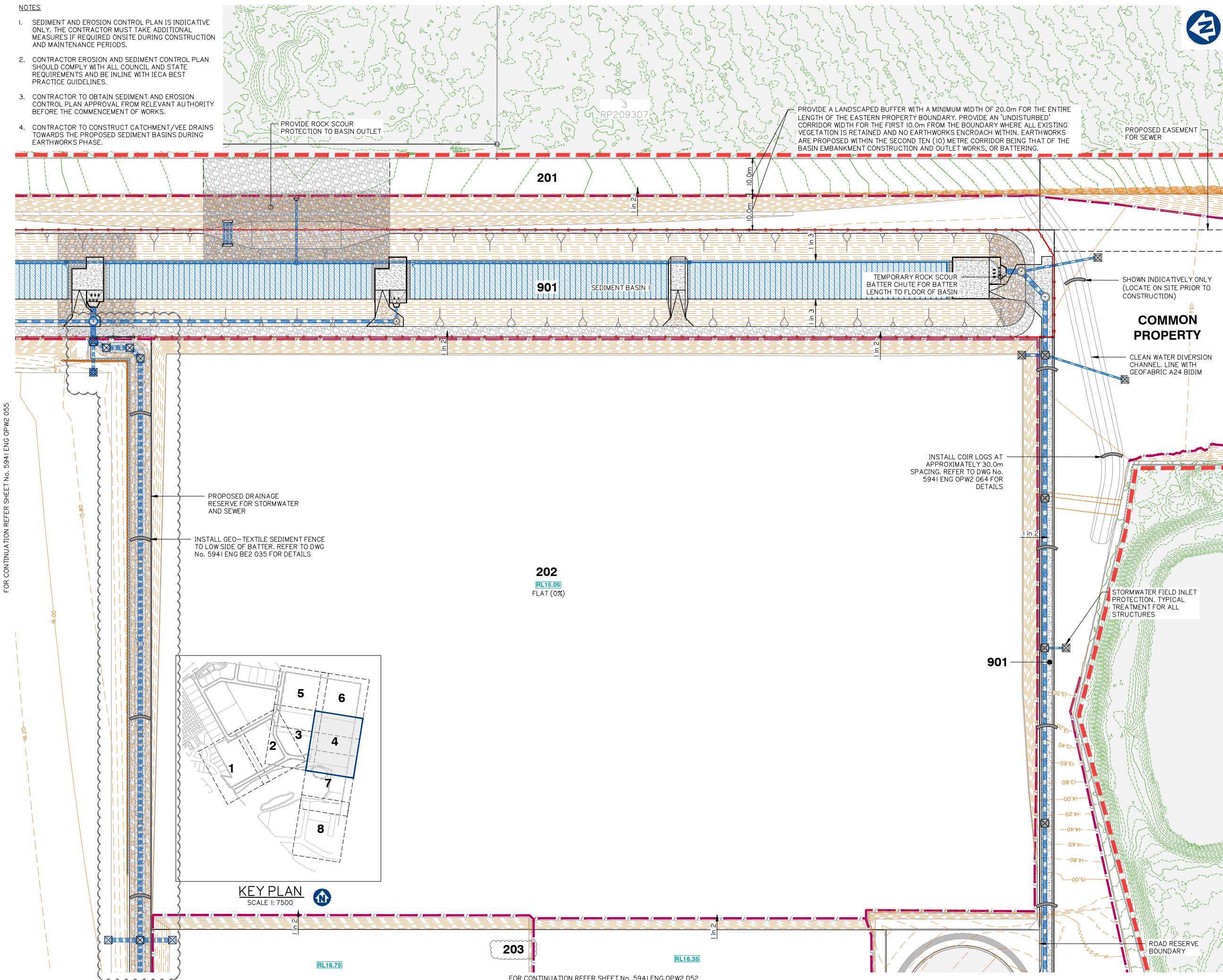
Scale at A1: 1:500

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	05/07/2022

Drawing No:
5941 ENG OPW2 052

Rev. No:
D

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:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA 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
NOT FOR CONSTRUCTION

© 2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

SEDIMENT AND
EROSION CONTROL
PLAN SHEET 4 OF 8

C	19/07/22	LOT BOUNDARY, LOT NUMBER CONTOURS UPDATED	LAB	MG	
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	
Issue	Date	Description	DRN	CHK	

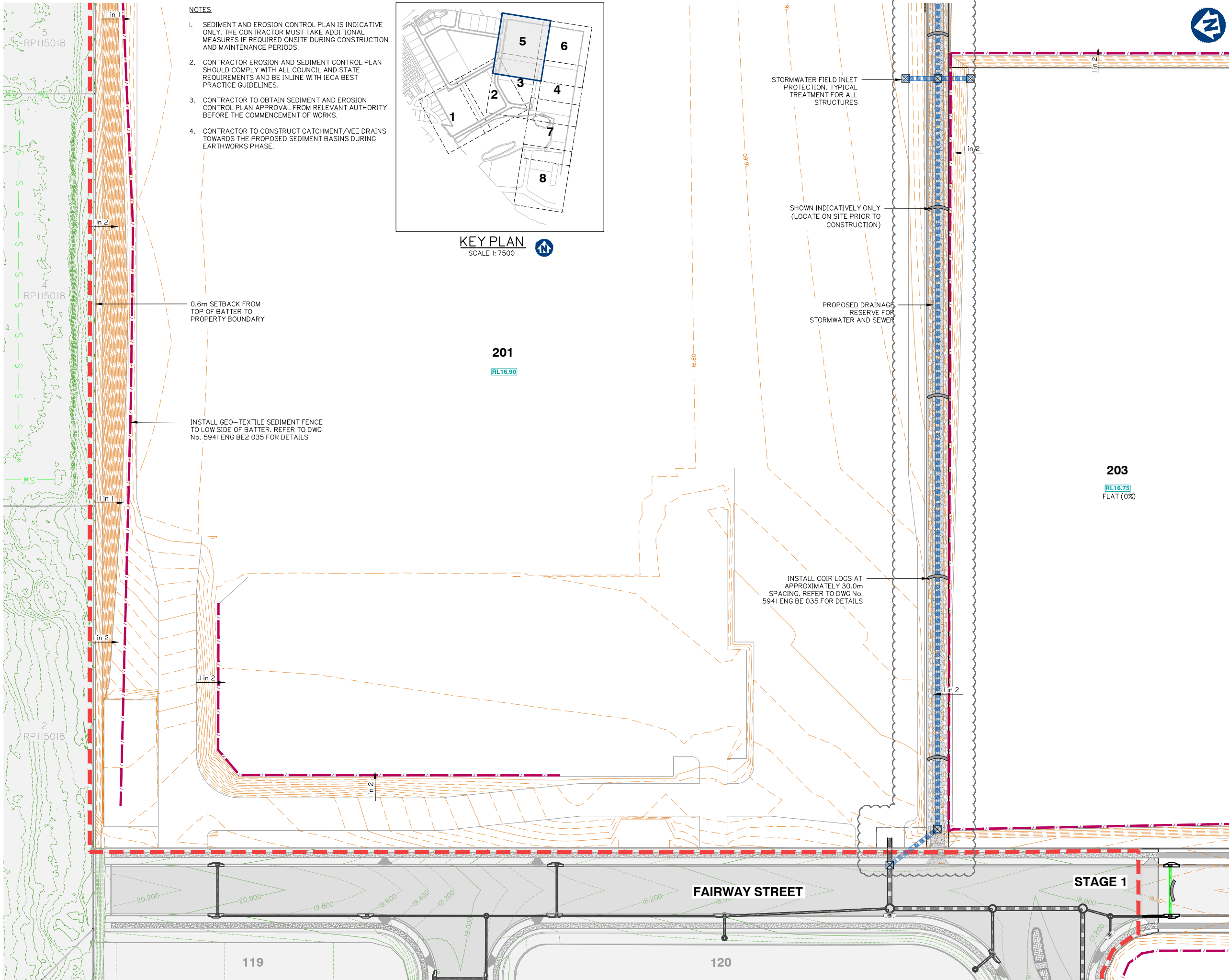
SCALE IN METRES



Scale at A1:	1:500
--------------	-------

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	05/07/2022

Drawing No:	Rev. No:
5941 ENG OPW2 053	C



Client:



Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
SEDIMENT AND
EROSION CONTROL
PLAN SHEET 5 OF 8

Issue	Date	Description	LAB	MG
E	19/07/22	LOT BOUNDARY AND STORMWATER UPDATED	LAB	MG
D	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
D	09/11/21	KERB RAMP LOCATION AMENDED	JH	MG
C	15/09/21	CONTOURS AMENDED	LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	MG

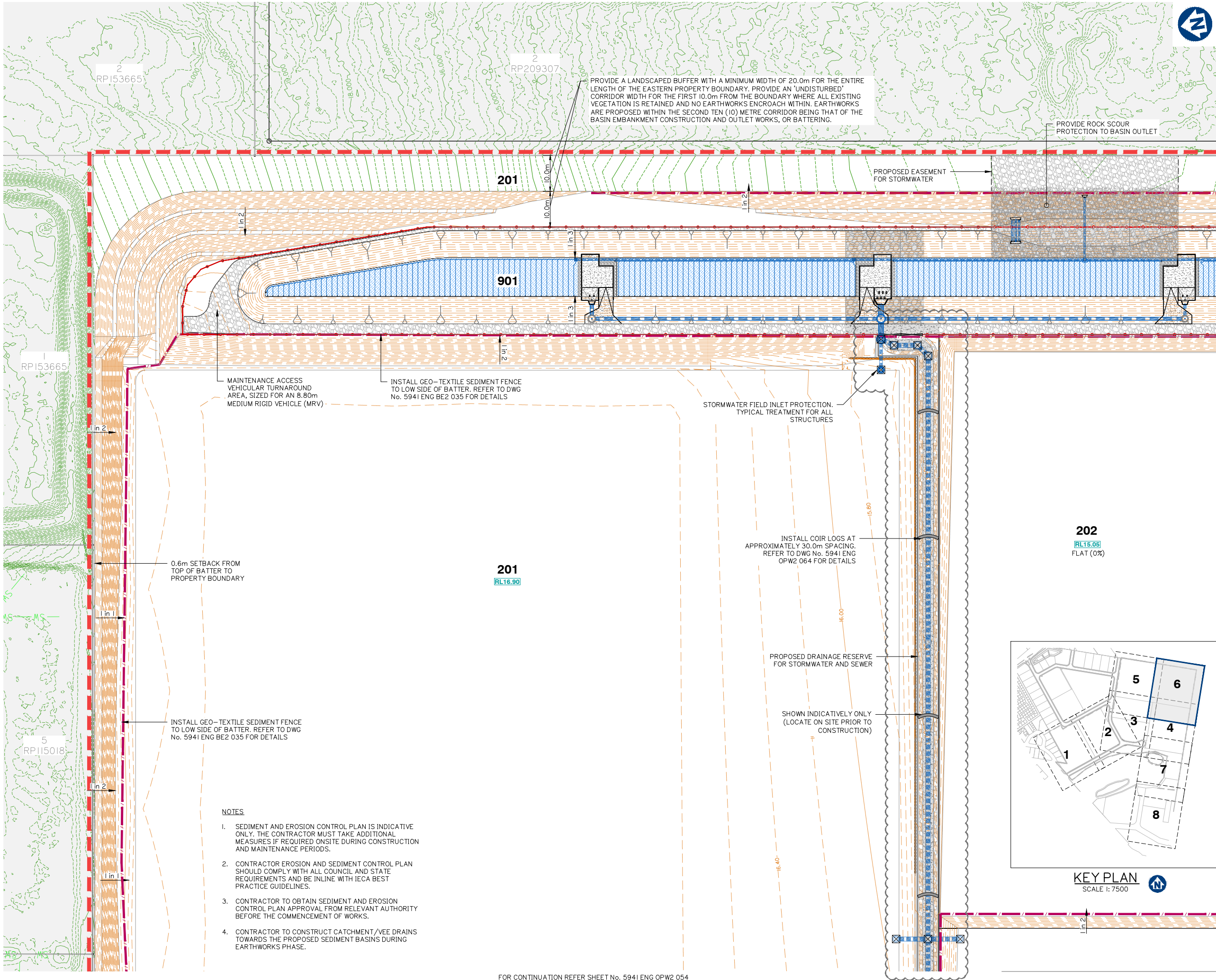
SCALE IN METRES



Scale at A1: 1:500

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	05/07/2022

Drawing No: 5941 ENG OPW2 054 Rev. No: E



Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be
reproduced or transmitted in any form or by any means,
electronic, mechanical, photocopying, recording, or
otherwise, without the written permission of Gassman
Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
SEDIMENT AND
EROSION CONTROL
PLAN SHEET 6 OF 8

Rev	Date	Description	LAB	MG
C	19/07/22	LOT BOUNDARY AND STORMWATER UPDATED	LAB	MG
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	MG
Issue	Date	Description	DRN	CHK

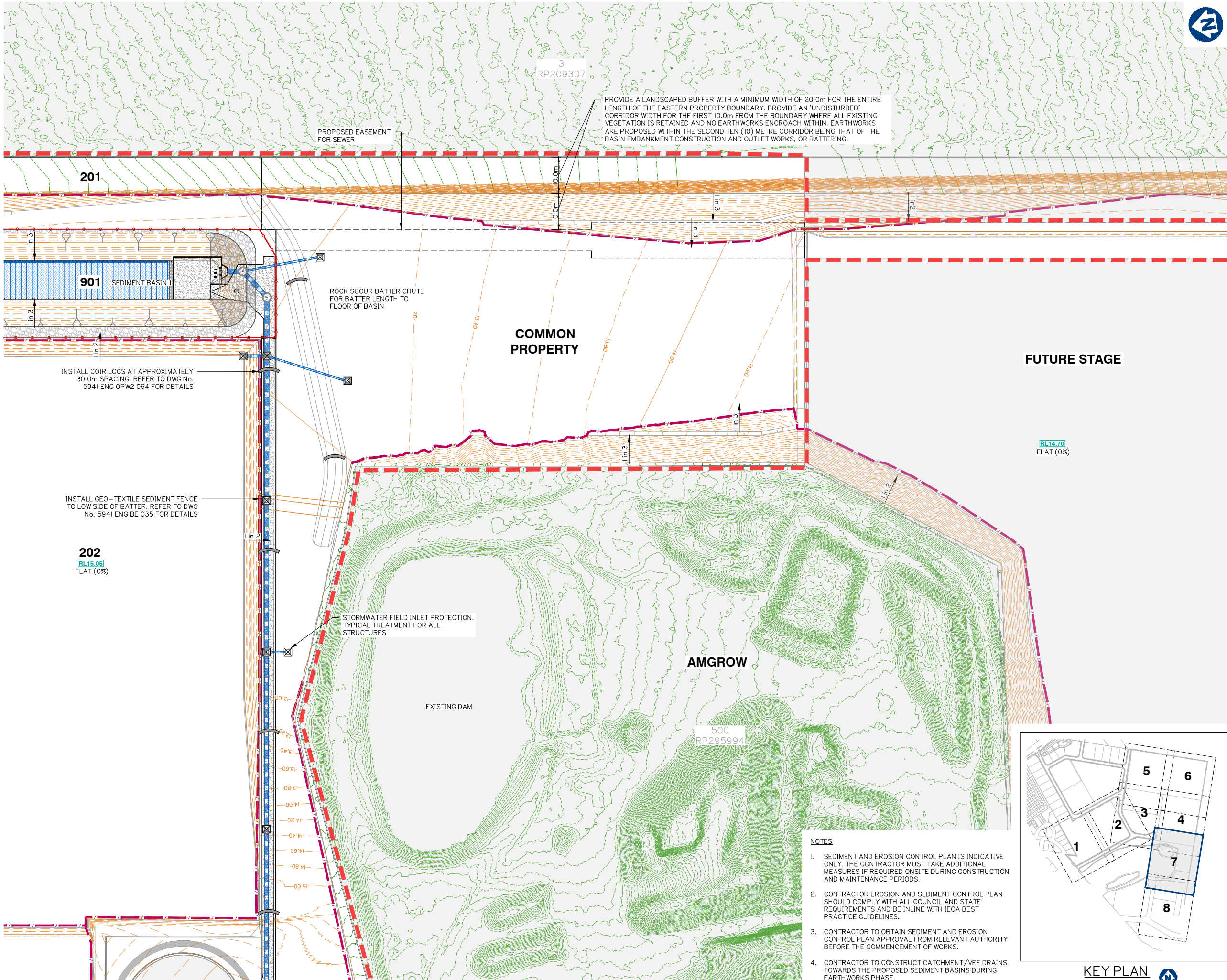
SCALE IN METRES

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

Scale at A1: 1:500

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	05/07/2022

Drawing No: 5941 ENG OPW2 055
Rev. No: C



FOR CONTINUATION REFER SHEET No. 5941 ENG OPW2 053

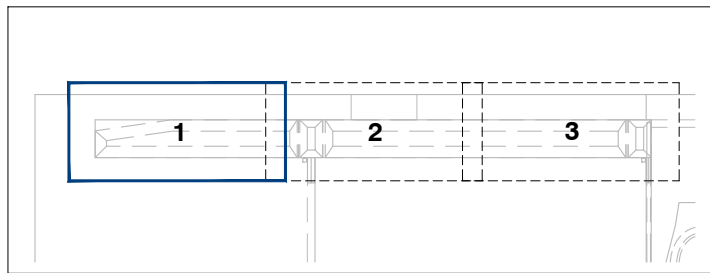
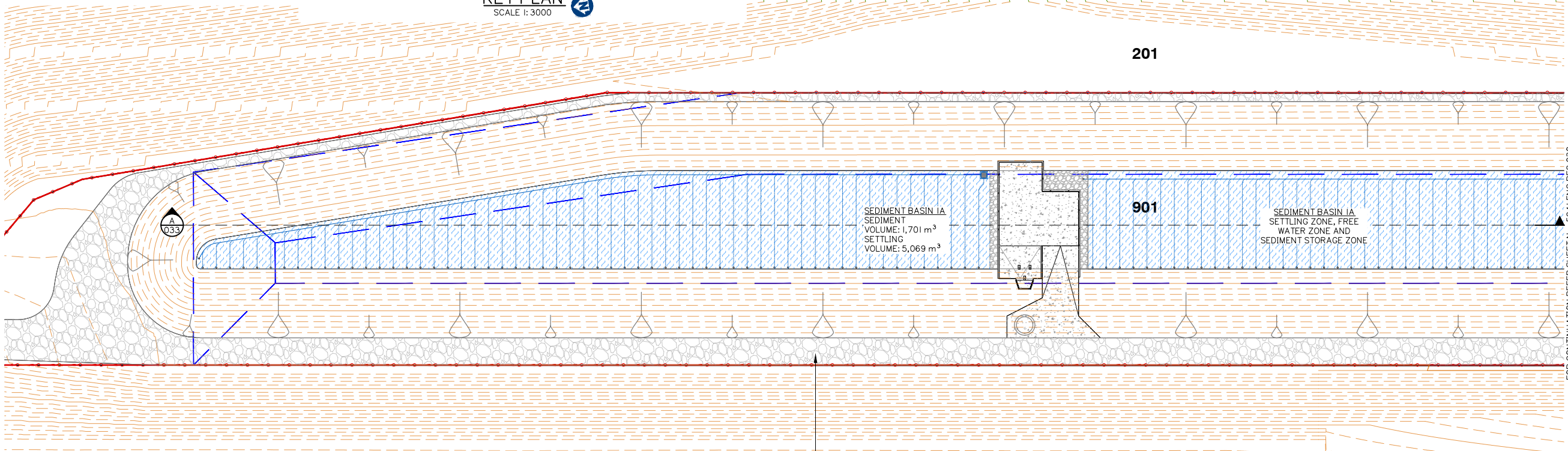
FOR CONTINUATION REFER SHEET No. 5941 ENG OPW2 057

Issue	Date	Description	LAB	MG
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	MG

Scale at A1:	1:500
Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

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.

KEY PLAN
SCALE 1:3000

FOR CONTINUATION REFER SHEET No. 5941 ENG BE2 030

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-IA	> 12 MONTHS	NO	LEASE	> 5Ha	YES	TYPE A	IFOD-FLOW	

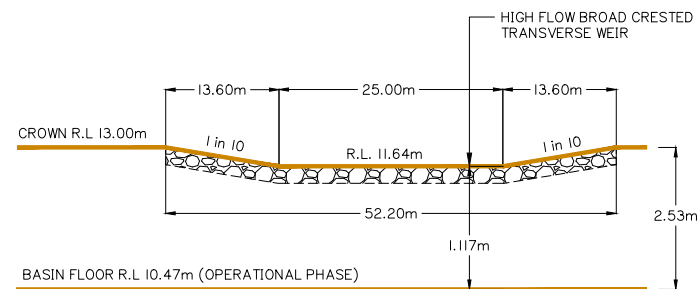
BASIN ID	CATCHMENT AREA	DESIGN EVENT	$I_{x \text{ yr, 24 hr}}$	WATER TEMPERATURE	K_s	SETTLING ZONE DEPTH (D_s)	W: L	OPTIMUM LOW-FLOW DECAT RATE	SELECTED LOW-FLOW DECAT RATE (Q_d)	MIN SETTLING ZONE VOLUME (Min V_s)	MIN SETTLING ZONE SURFACE AREA (Min A_s)	LIMITING CRITERIA
LPoD-IA	(Ha)	(1: X YEARS)	(mm/hr)	(°C)	(s/m)	(m)	(1: X)	(L/s/Ha)	(L/s/Ha)	(m³)	(m²)	VOLUME
LPoD-IA	23.067	1	4.53	20	11150	1.9	5.1	9	9	5669	2315	

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
LPoD-IA	(m³)	(m²)	(m/s)	(m)	(m³)	(m³)	(m)	(1: X)	(m)	(m)	(m)
LPoD-IA	5669	2984	0.014	0.34	567	1701	0.76	3	29.89	152.42	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)				
LPoD-IA	> 12 MONTHS	1: 50	0.80	0.92	25.00	143.00	8.43	0.20	25.00	11.64	12.29

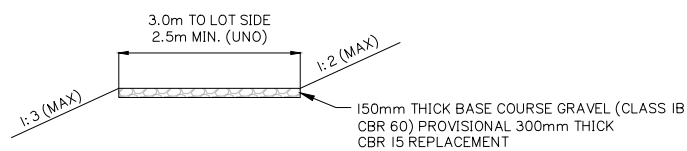
BASIN ID	FLOW RATE		FLUME DESIGN PARAMETERS				VELOCITY CHECK			OUTPUT PARAMETERS		
	BASIN DESIGN FLOW (m³/s)	FLUME DESIGN FLOW (m³/s)	BASE WIDTH (m)	SLIDE SLOPE (1: x)	LONGITUDINAL SLOPE (m/m)	FLUME LINING	MAX ALLOWABLE VELOCITY (m/s)	MANNINGS ROUGHNESS	VELOCITY (m/s)	FLOW DEPTH (m)	FLUME DEPTH (m)	CALCULATED FLOW (m³/s)
LPoD-IA	8.43	12.65	b	x	s	CONCRETE	5.00	0.013	4.419	0.42	0.57	12.70

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	11.64	12.29	11.84	6.0	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:

FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207THIS 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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives

All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

CONSTRUCTION PHASE
SEDIMENT BASIN 1
LAYOUT SHEET 1 OF 4

Issue	Date	Description	LAB	MG	LAB	MG	LAB	MG	LAB	MG	LAB	MG
C	19/07/22	LAYOUT UPDATES	LAB	MG								
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG								
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG								
A	30/07/21	ORIGINAL ISSUE	LAB	MG								

SCALE IN METRES

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

Scale at A1:

1:250

Designed:

IG

Drafted:

LAB / IG

Approved:

MG

RPEQ:

16939

Signed:

Date:

10/09/2021

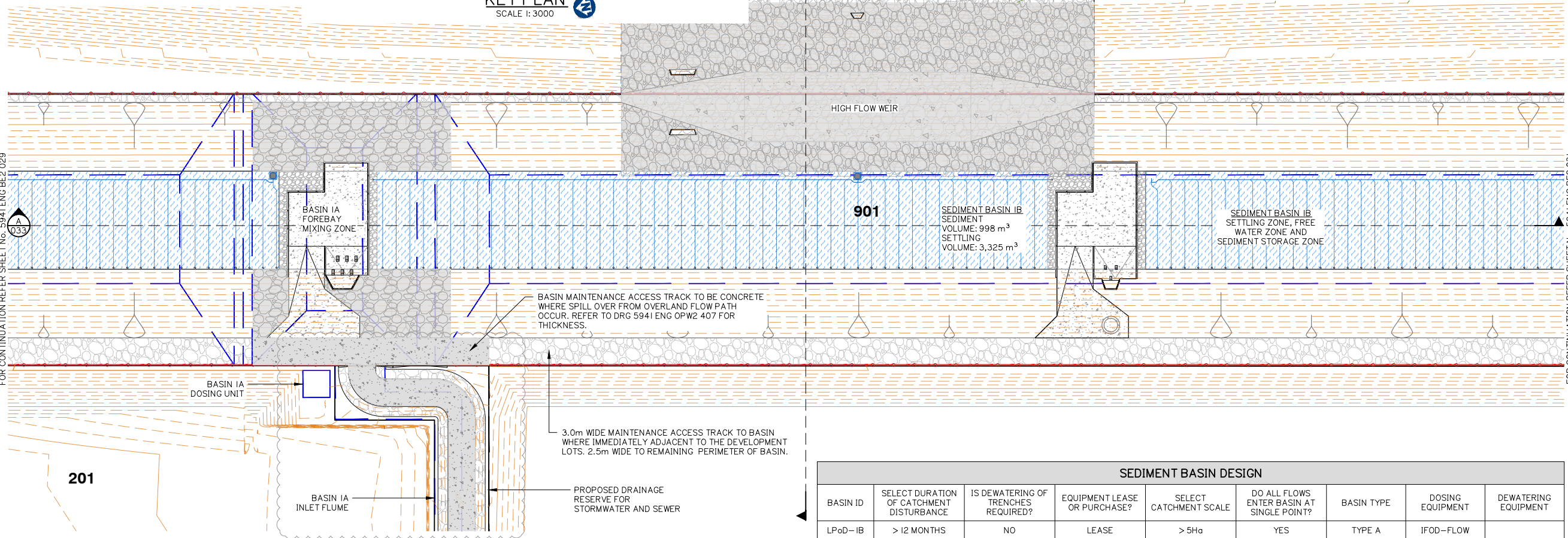
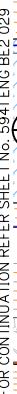
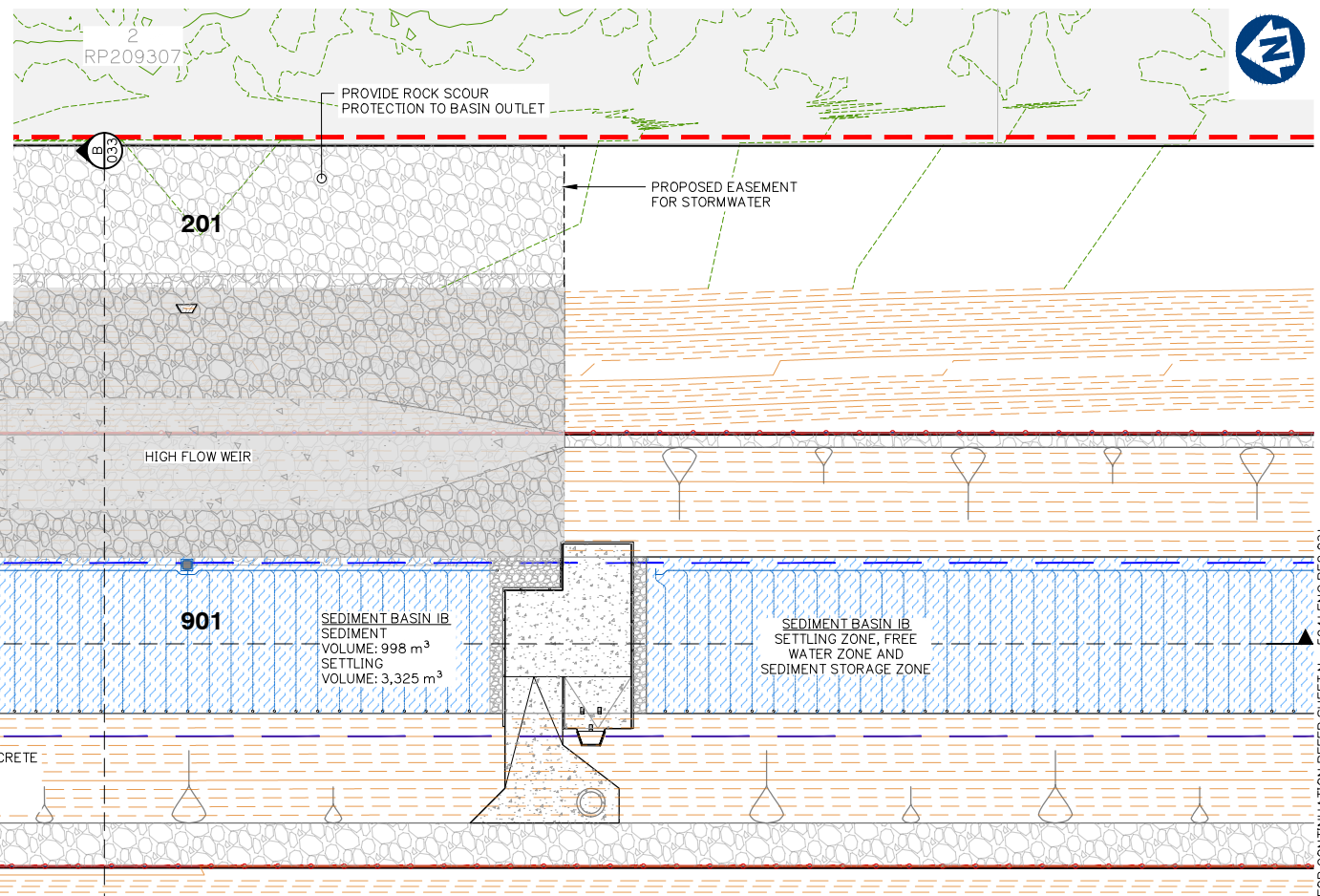
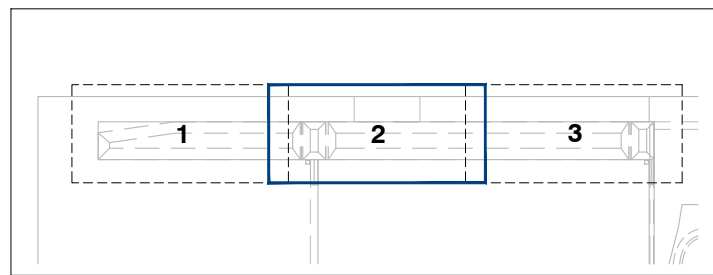
Drawing No:

5941 ENG OPW2 058

Rev. No:

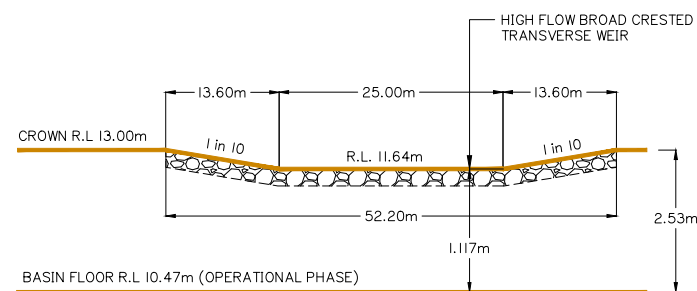
C

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.

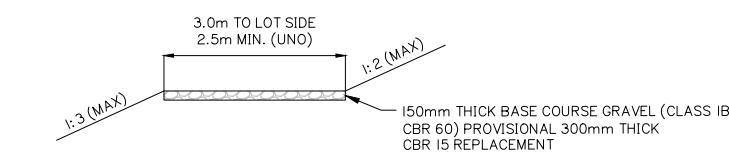


SEDIMENT BASIN DESIGN								
BASIN ID	SELECT DURATION OF CATCHMENT DISTURBANCE	IS DEWATERING OF TRENCHES REQUIRED?	EQUIPMENT LEASE OR PURCHASE?	SELECT CATCHMENT SCALE	DO ALL FLOWS ENTER BASIN AT SINGLE POINT?	BASIN TYPE	DOSING EQUIPMENT	DEWATERING EQUIPMENT
LPoD-IB	> 12 MONTHS	NO	LEASE	> 5Ha	YES	TYPE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

BASIN ID	CATCHMENT AREA	DESIGN EVENT	$I_{x\text{ yr, 24 hr}}$	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 ($\text{Min } V_s$)	MIN SETTLING ZONE SURFACE AREA ($\text{Min } A_s$)	LIMITING CRITERIA
	(Ha)	(1: X YEARS)	(mm/hr)	(°C)	(s/m)	(m)	(1: X)	(L/s/Ha)	(L/s/Ha)	(m^3)	(m^2)	
LPoD-IB	13.352	I	4.53	20	11150	1.82	3.1	9	9	3325	1358	VOLUME



WEIR / SPILLWAY – TYPICAL ELEVATION
N.T.S



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

	SETTLING ZONE			FREE WATER ZONE		SEDIMENT STORAGE ZONE		OVERALL DIMENSIONS RELATIVE TO SPILLWAY CREST (EXCL. FOREBAY)			
BASIN ID	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 (1: X)	WIDTH (m)	LENGTH (m)	DEPTH (m)
	(m³)	(m²)		(m/s)	(m)	(m³)	(m³)				
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)	(m ³ /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	11.64	12.29

	Flow Rate		Flume Design Parameters				Velocity Check			Output Parameters		
Basin ID	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	11.64	12.29	11.84	4.0	2.0	0.6



Client:



Project:

VANTAGE YATALA 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
NOT FOR CONSTRUCTION

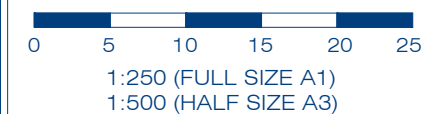
© 2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

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

C	19/07/22	STORMWATER ALIGNMENT UPDATED	LAB	MG	
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES



Scale at A1:	1:250
--------------	-------

Designed:	IG
-----------	----

Drafted:	LAB / IG
----------	----------

Approved:	MG
-----------	----

RPEQ:	16939
-------	-------

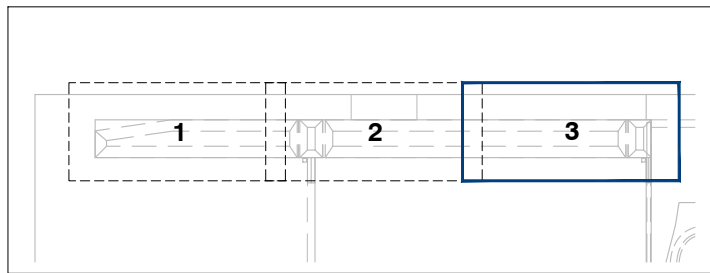
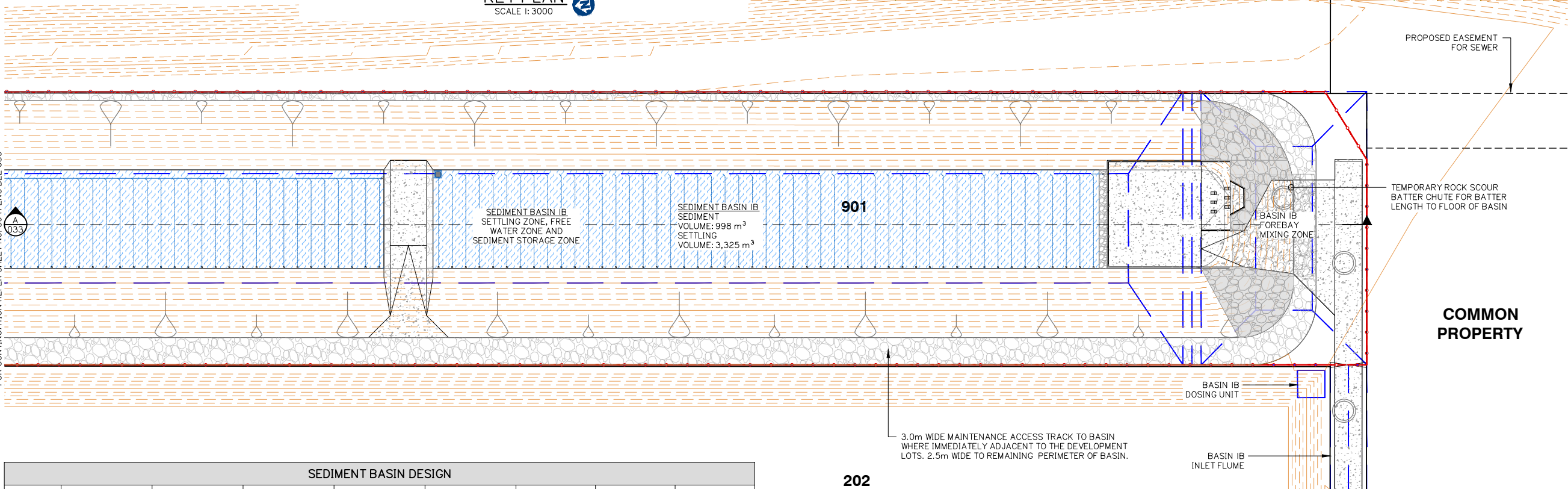
Signed:	
---------	---

Date:	05/07/2022
-------	------------

Drawing No:	Rev. No:
5941 ENG OPW2 059	C

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.

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	

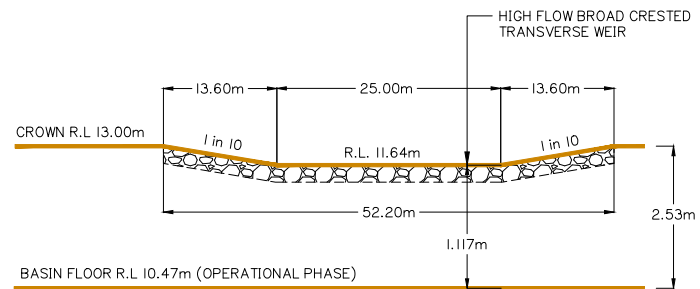
BASIN ID	CATCHMENT AREA	DESIGN EVENT	$I_{x \text{ yr, 24 hr}}$	WATER TEMPERATURE	K_s	SETTLING ZONE DEPTH (D_s)	W: L	OPTIMUM LOW-FLOW DECAT RATE	SELECTED LOW-FLOW DECAT RATE (Q_d)	MIN SETTLING ZONE VOLUME (Min V_s)	MIN SETTLING ZONE SURFACE AREA (Min A_s)	LIMITING CRITERIA
LPoD-IB	(Ha)	(1: X YEARS)	(mm/hr)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

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
LPoD-IB	(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	11.64	12.29

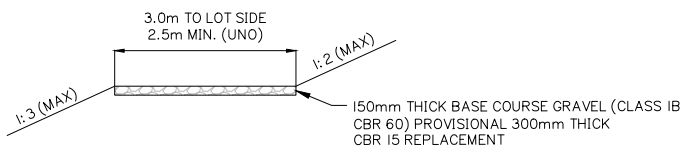
FLOW RATE		FLUME DESIGN PARAMETERS				VELOCITY CHECK			OUTPUT PARAMETERS			
BASIN ID	BASIN DESIGN FLOW (m³/s)	FLUME DESIGN FLOW (m³/s)	BASE WIDTH (m)	SLIDE SLOPE (1: x)	LONGITUDINAL SLOPE (m/m)	FLUME LINING	MAX ALLOWABLE VELOCITY (m/s)	MANNINGS ROUGHNESS	VELOCITY (m/s)	FLOW DEPTH (m)	FLUME DEPTH (m)	CALCULATED FLOW (m³/s)
LPoD-IB	4.95	7.43	b	x	s	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	11.64	12.29	11.84	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:

FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
STAGE 2

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207THIS 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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives

All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

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

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	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:

LAB / IG

Approved:

MG

RPEQ:

16939

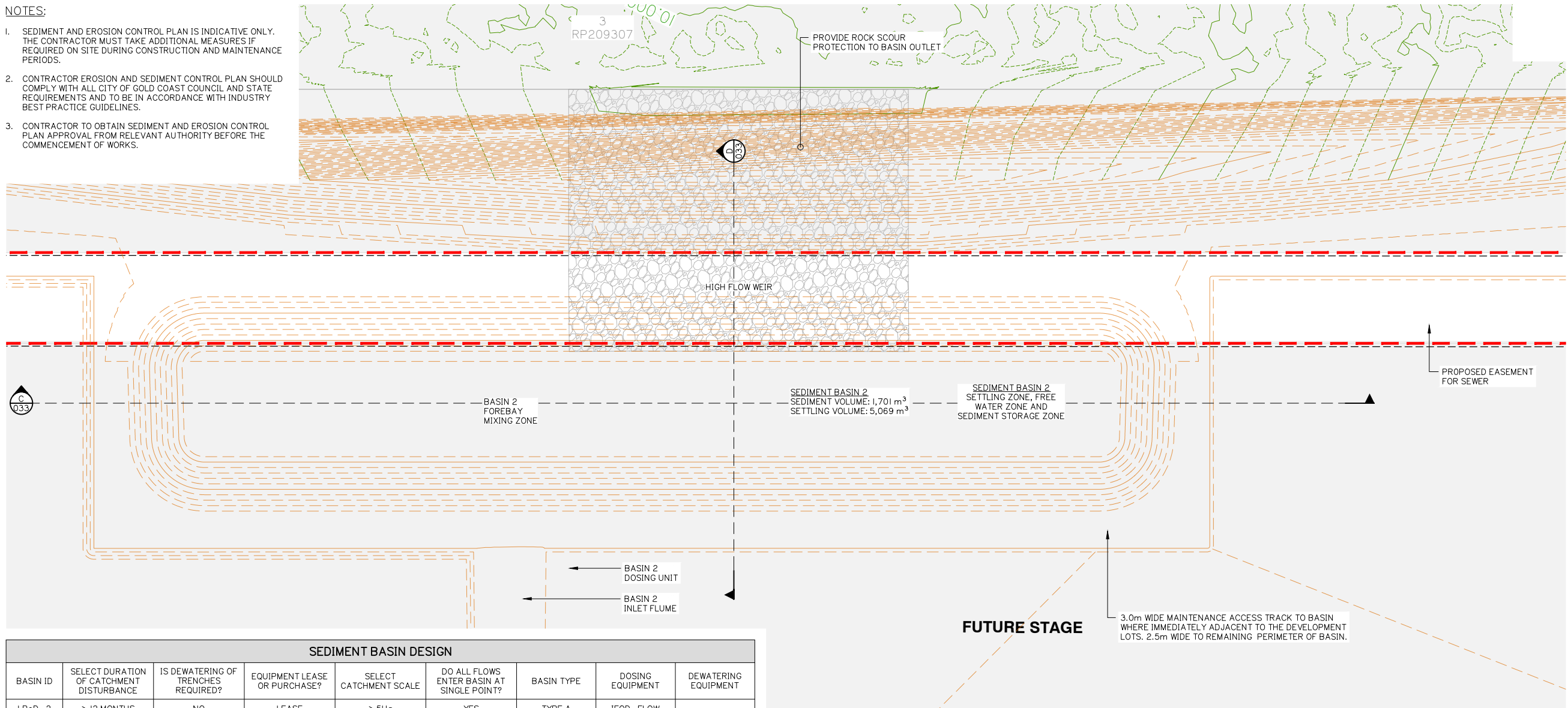
Signed:

Date:

10/09/2021

Drawing No:
5941 ENG OPW2 060Rev. No:
B

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	IFOD-FLOW	

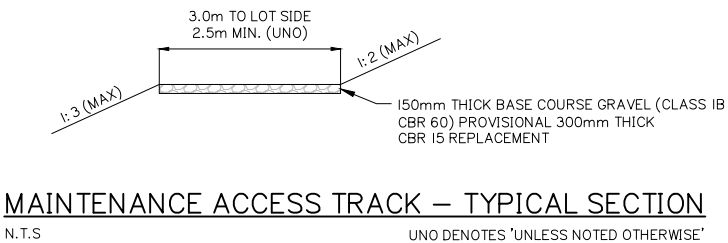
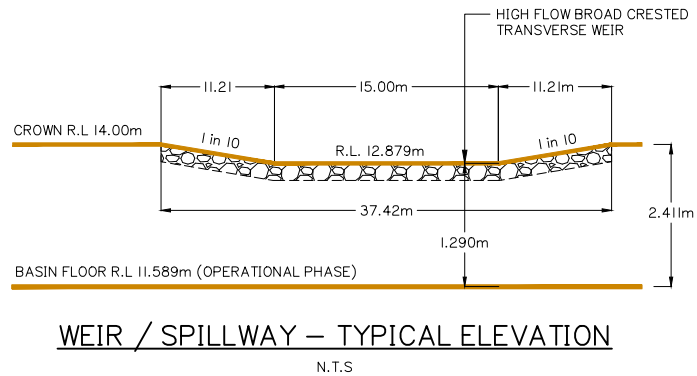
BASIN ID	CATCHMENT AREA	DESIGN EVENT	$I_{x \text{ yr}, 24 \text{ hr}}$	WATER TEMPERATURE	K_s	SETTLING ZONE DEPTH (D_s)	W: L	OPTIMUM LOW-FLOW DECAN T RATE	SELECTED LOW-FLOW DECAN T RATE (Q_A)	MIN SETT LING ZONE VOLUME (Min V_s)	MIN SETT LING ZONE SURFACE AREA (Min A_s)	LIMITING CRITERIA
	(Ha)	(1: X YEARS)	(mm/hr)	(°C)	(s/m)	(m)	(1: X)	(L/s/Ha)	(L/s/Ha)	(m ³)	(m ²)	
LPoD-2	9.904	I	4.53	20	III50	1.76	3	9	9	2434	994	VOLUME

	SETTLING ZONE				FREE WATER ZONE		SEDIMENT STORAGE ZONE		OVERALL DIMENSIONS RELATIVE TO SPILLWAY CREST (EXCL. FOREBAY)			
BASIN ID	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	2434	1383	0.007	0.35	243	730	0.89	3	26.75	80.25	3.00	

	SPILLWAY										
BASIN ID	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)	(m³/s)	(m)	(m)	(m)	(m)
LPoD-2	> 12 MONTHS	1: 50	0.80	0.92	25	143	3.62	0.20	15.0	12.879	13.529

	FLOW RATE		FLUME DESIGN PARAMETERS				VELOCITY CHECK			OUTPUT PARAMETERS		
BASIN ID	BASIN DESIGN FLOW (m³/s)	FLUME DESIGN FLOW (m³/s)	BASE WIDTH (m)	SLIDE SLOPE (1:)	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-2	3.62	5.43	3.00	2.00	0.01	CONCRETE	5.00	0.013	3.515	0.42	0.57	5.67

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-2	3164.1	80.3	26.8	3.00	644.01	8.0	26.8	3.00	15.0	12.88	13.53	13.08	3.0	2.0	0.6



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, Beenleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA 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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

CONSTRUCTION PHASE
SEDIMENT BASIN 1
LAYOUT SHEET 4 OF 4

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	
Issue	Date	Description	DRN	Ch-K	

SCALE IN METRES



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

Scale at A1:

1:250

Designed:

IG

Drafted:

LAB / IC

Approved

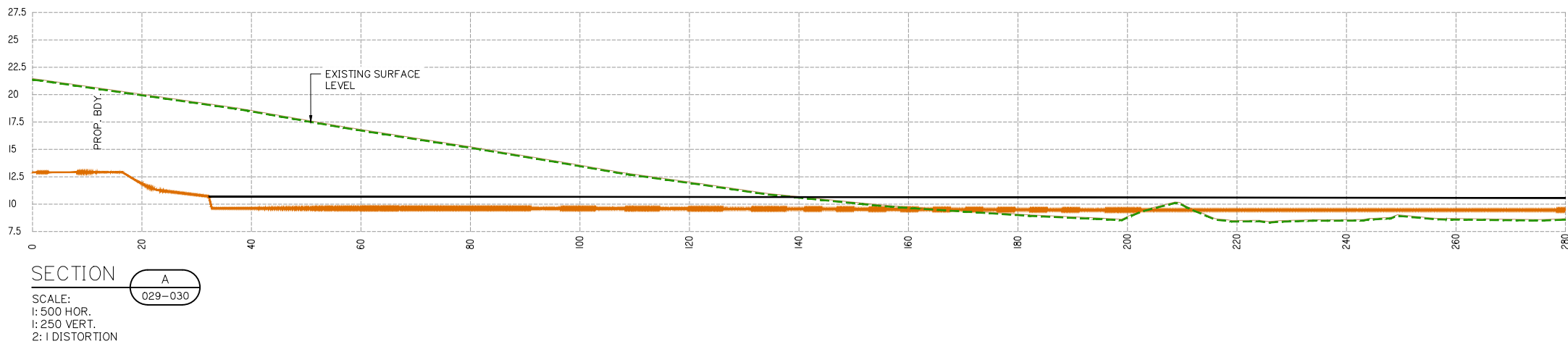
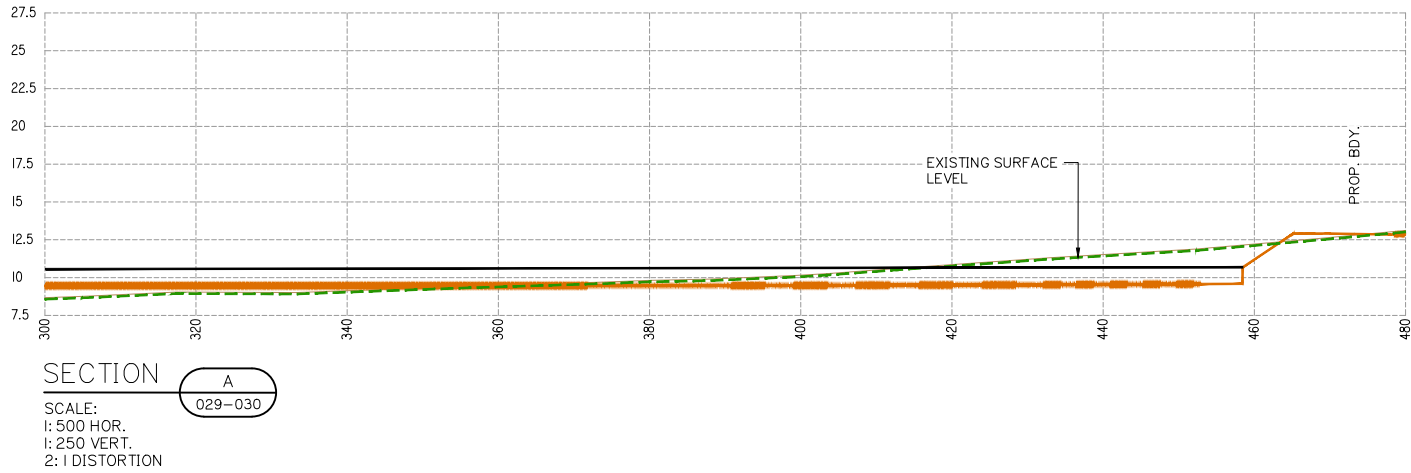
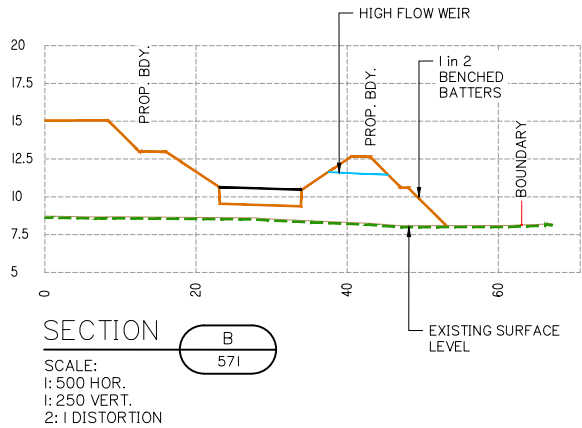
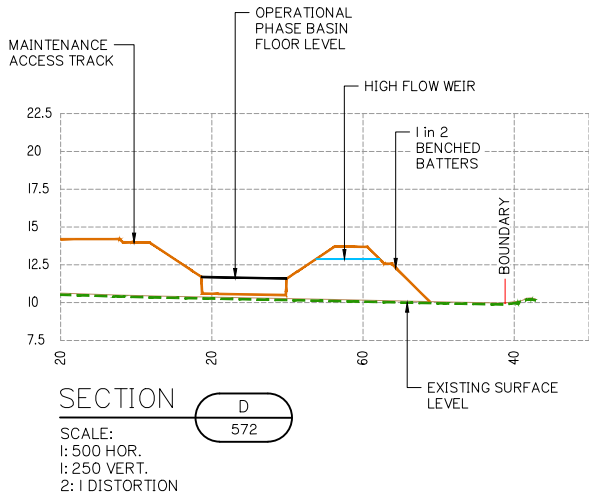
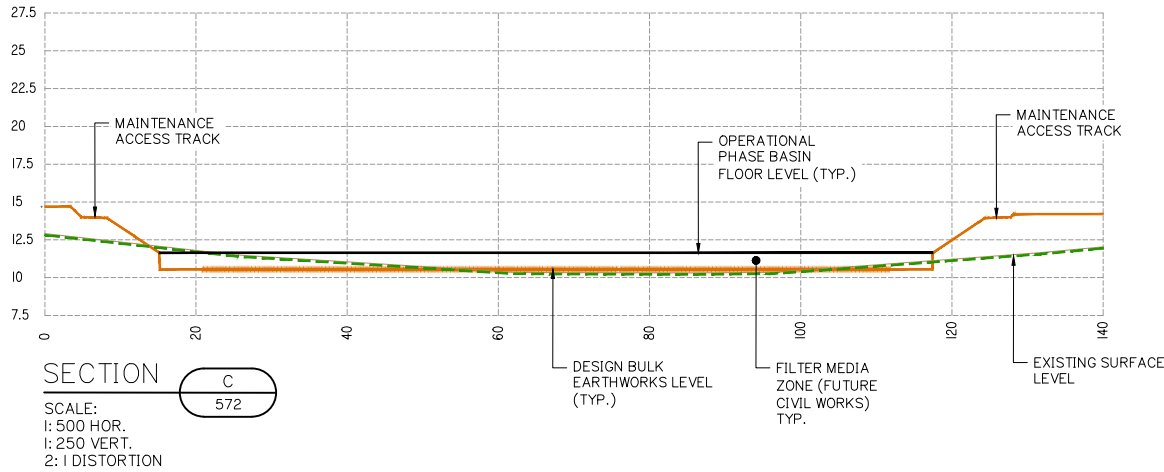
BBFO:

1

Many

Drawing No:
5941 ENG OPW2 061

Rev. No:
B



NOTE:
I. SEDIMENT ACCUMULATION DEPTHS, FREE WATER ZONES, AND SETTLEMENT DEPTHS ARE OMITTED FROM CROSS SECTIONS FOR CLARITY. REFER TO CALCULATION TABLES ON DRAWINGS 5941 ENG OPW2 058-061



planning | environment | landscape | engineering | survey
T: 3807 3333 | F: 3287 5461 | www.gassman.com.au
Gold Coast & Logan | 176 Business Street, Yatala QLD | PO Box 392, Beerleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

CONSTRUCTION PHASE SEDIMENT BASIN SECTIONS

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES



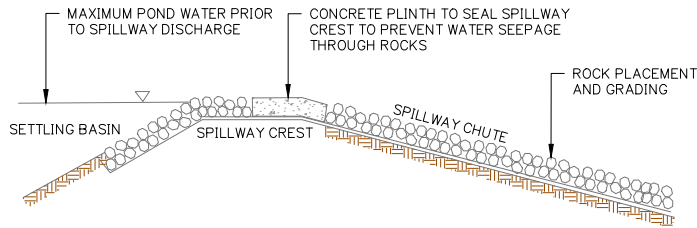
1:250 (FULL SIZE A1)
1:500 (HALF SIZE A3)

Scale at A1: 1:250

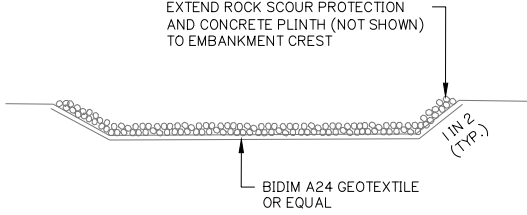
Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No: 5941 ENG OPW2 062
Rev. No: B

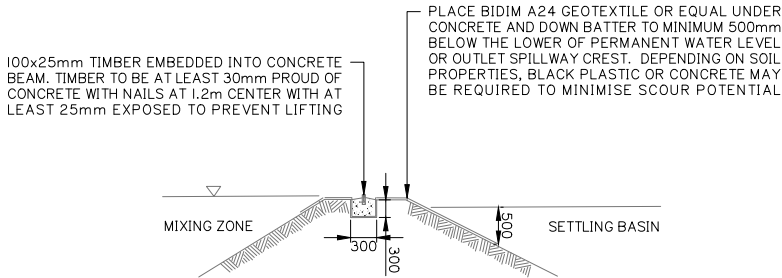
CONSTRUCTION PHASE SEDIMENT BASIN SECTIONS



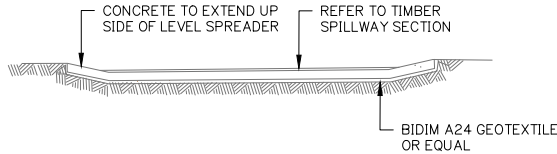
OUTLET SPILLWAY DETAILS
TYPICAL CROSS SECTION
NOT TO SCALE



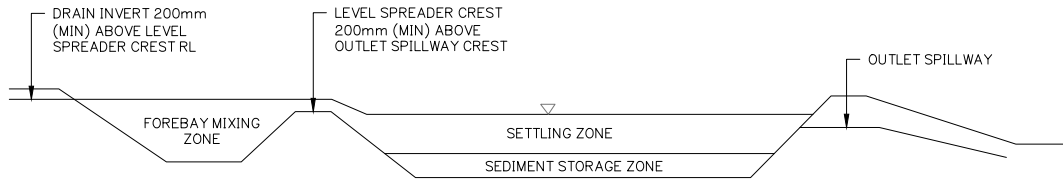
OUTLET SPILLWAY DETAILS
TYPICAL LONGITUDINAL SECTION
NOT TO SCALE



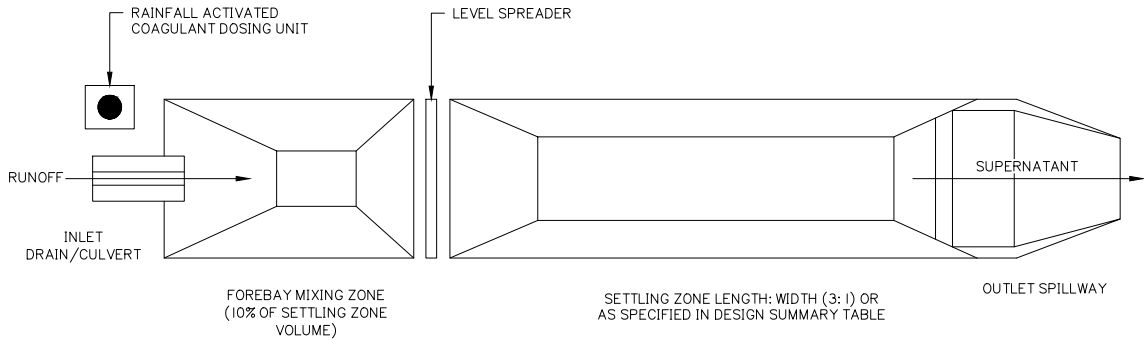
LEVEL SPREADER DETAILS
TYPICAL CROSS SECTION
NOT TO SCALE



LEVEL SPREADER DETAILS
TYPICAL LONG SECTION
NOT TO SCALE



TYPE A SEDIMENT BASIN LONGITUDINAL SECTION (TYP.)
NOT TO SCALE



TYPE A SEDIMENT BASIN PLAN VIEW (TYP.)
NOT TO SCALE

CONSTRUCTION PHASE SEDIMENT BASIN TYPICAL SECTIONS

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
CONSTRUCTION PHASE
SEDIMENT BASIN TYPICAL
SECTIONS

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES

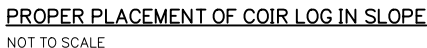
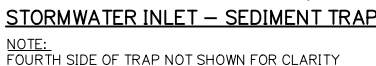
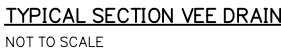
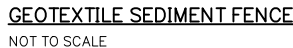
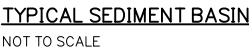
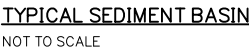
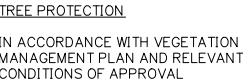
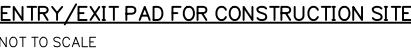


1:250 (FULL SIZE A1)
1:500 (HALF SIZE A3)

Scale at A1: 1:250

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No: 5941 ENG OPW2 063
Rev. No: B



Project:

VANTAGE YATALA 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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

SEDIMENT AND EROSION TYPICAL DETAILS

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MC	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MC	
A	30/07/21	ORIGINAL ISSUE	LAB	MC	
Issue	Date	Description	DRN	CH	

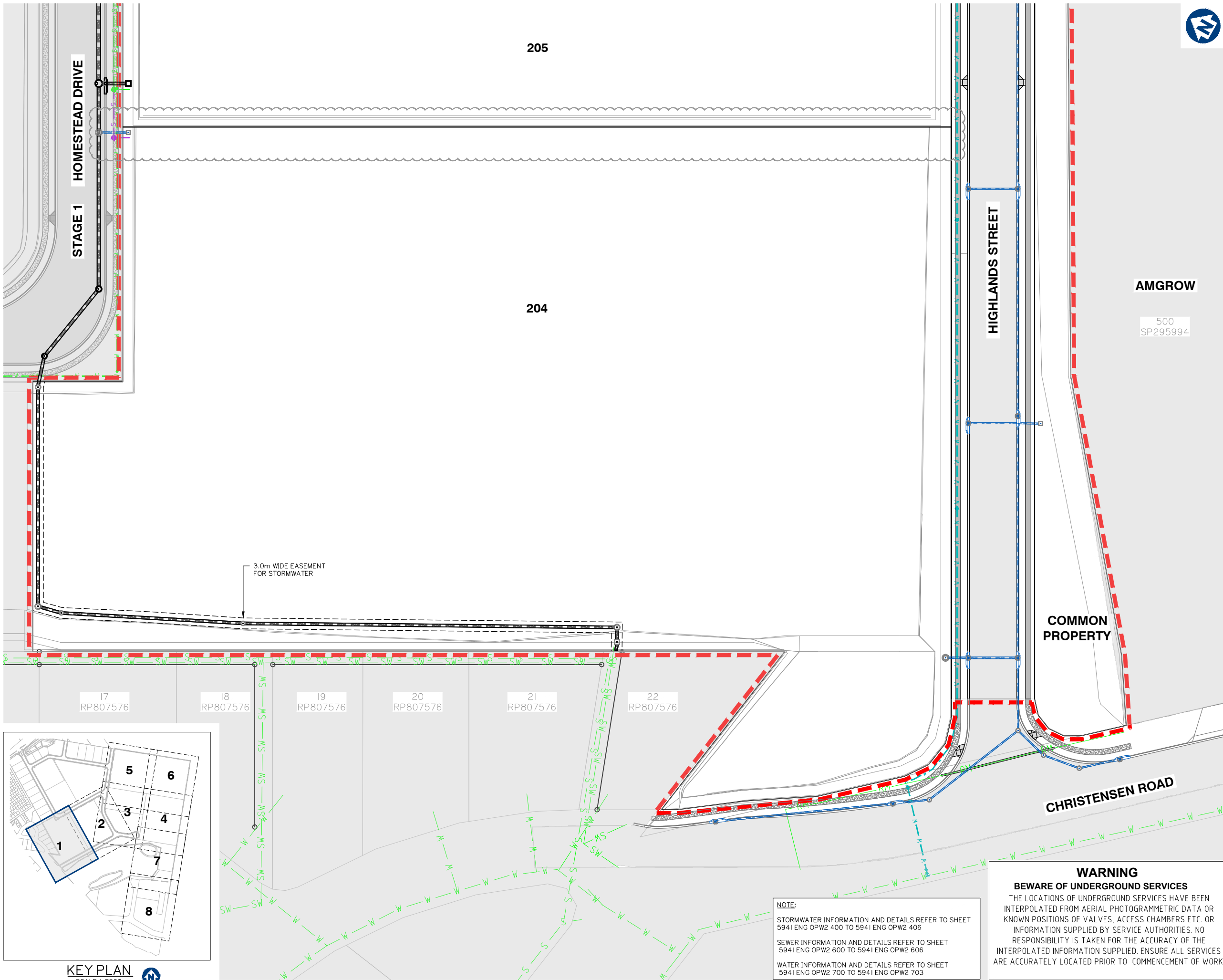
SCALE NOT
APPLICABLE

Scale at A1:

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No:
5941 ENG OPW2 064

Rev. No:
B



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:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives

All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
OVERALL SERVICES
LAYOUT PLAN
SHEET 1 OF 8

Issue	Date	Description	LAB	MG	DRN	CHK
D	19/07/22	LOT BOUNDARY, STORMWATER AND SEWER UPDATED	LAB	MG		
C	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG		
C	09/11/21	KERB RAMP LOCATION AMENDED	JH	MG		
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG		
A	30/07/21	ORIGINAL ISSUE	LAB	MG		

SCALE IN METRES



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

Scale at A1: 1:500

Designed: IG

Drafted: LAB / IG

Approved: MG

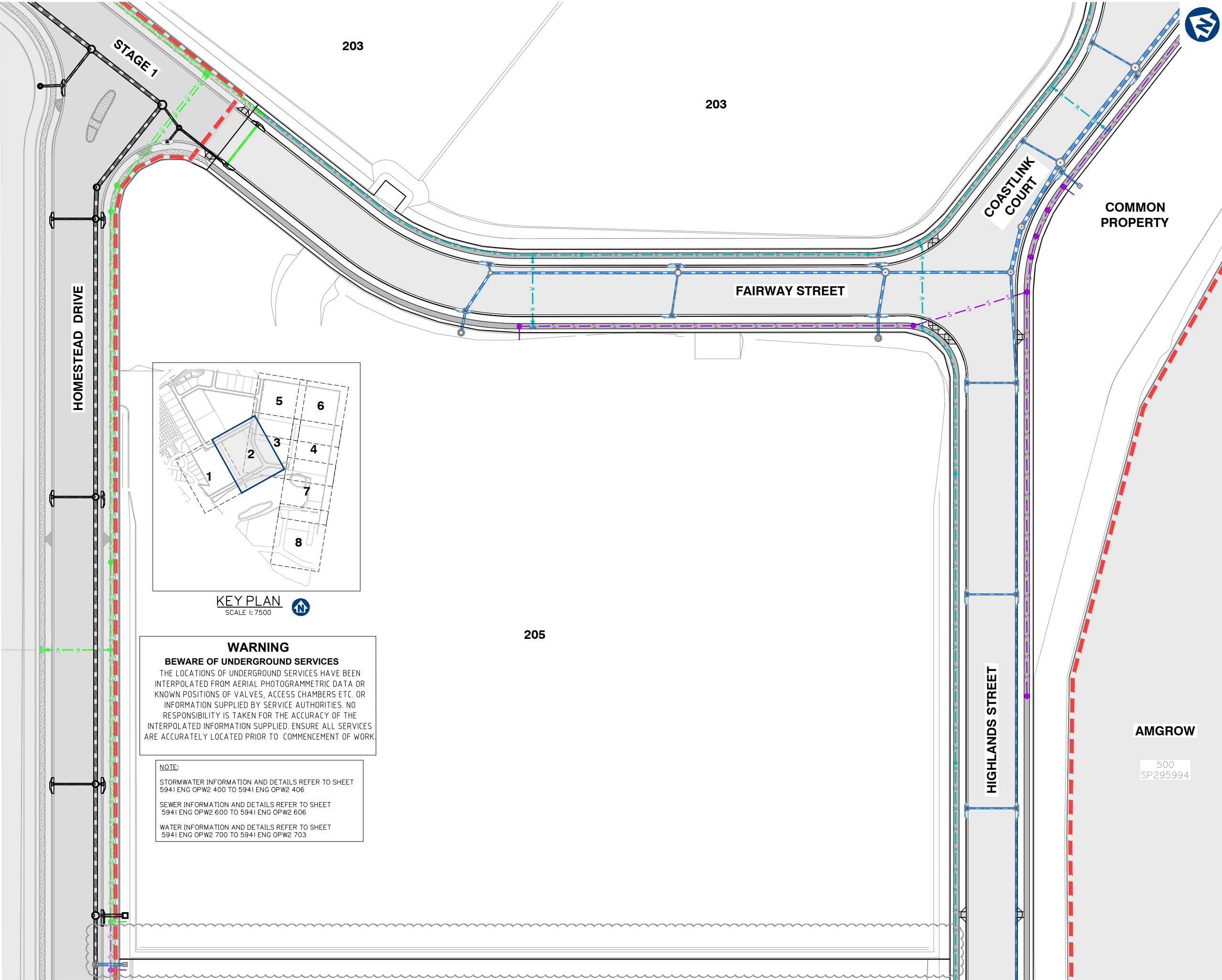
RPEQ: 16939

Signed:

Date: 05/07/2022

Drawing No:
5941 ENG OPW2 300

Rev. No:
D



Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
OVERALL
SERVICES LAYOUT
PLAN SHEET 2 OF 8

Issue	Date	Description	LAB	MG	DRN	CHK
D	19/07/22	LOT BOUNDARY, LOT NUMBER, CONTOURS UPDATED	LAB	MG		
C	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG		
C	09/11/21	KERB RAMP LOCATION AMENDED	JH	MG		
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG		
A	30/07/21	ORIGINAL ISSUE	LAB	MG		

SCALE IN METRES



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

Scale at A1: 1:500

Designed: IG

Drafted: LAB / IG

Approved: MG

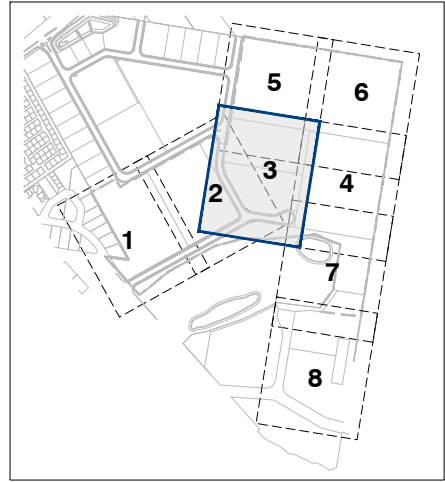
RPEQ: 16939

Signed:

Date: 05/07/2022

Drawing No:
5941 ENG OPW2 301

Rev. No:
D



KEY PLAN
SCALE 1:7500

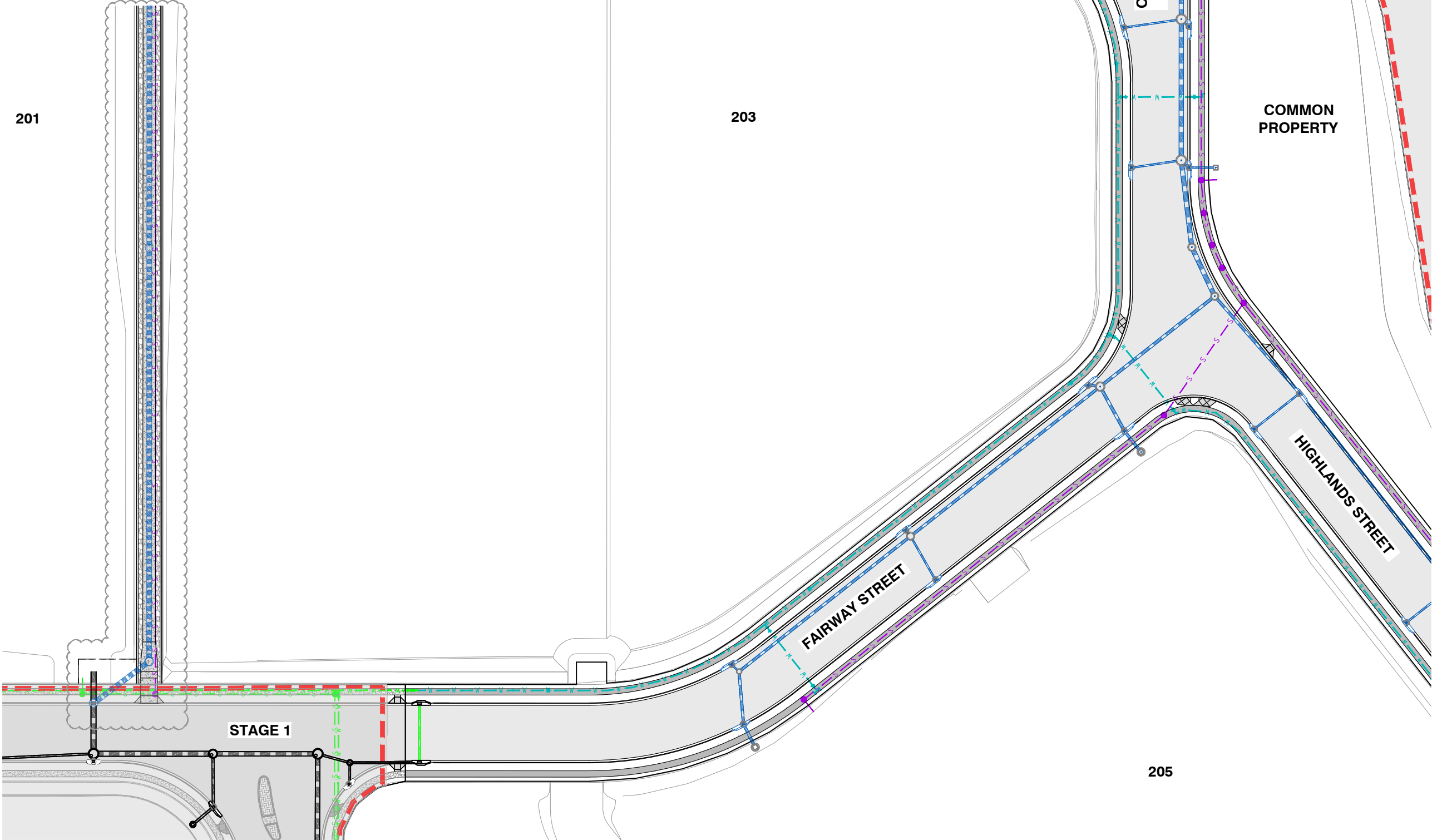
WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN INTERPOLATED FROM AERIAL PHOTOGRAMMETRIC DATA OR KNOWN POSITIONS OF VALVES, ACCESS CHAMBERS ETC. OR INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES ARE ACCURATELY LOCATED PRIOR TO COMMENCEMENT OF WORK.

NOTE:
STORMWATER INFORMATION AND DETAILS REFER TO SHEET 5941 ENG OPW2 400 TO 5941 ENG OPW2 406
SEWER INFORMATION AND DETAILS REFER TO SHEET 5941 ENG OPW2 600 TO 5941 ENG OPW2 606
WATER INFORMATION AND DETAILS REFER TO SHEET 5941 ENG OPW2 700 TO 5941 ENG OPW2 703

201

203

COMMON
PROPERTY



205

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
OVERALL
SERVICES LAYOUT
PLAN SHEET 3 OF 8

Issue	Date	Description	LAB	MG	DRN	CHK
D	19/07/22	LOT BOUNDARY, STORMWATER AND SEWER UPDATED	LAB	MG		
C	28/11/21	ISSUED FOR CONSTRUCTION	LAB	MG		
C	09/11/21	KERB RAMP LOCATION AMENDED	JH	MG		
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG		
A	30/07/21	ORIGINAL ISSUE	LAB	MG		

SCALE IN METRES



Scale at A1: 1:500

Designed: IG

Drafted: LAB / IG

Approved: MG

RPEQ: 16939

Signed:

Date: 05/07/2022

Drawing No:
5941 ENG OPW2 302

Rev. No:
D

BEWARE OF UNDERGROUND SERVICES

THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN INTERPOLATED FROM AERIAL PHOTOGRAMMETRIC DATA OR KNOWN POSITIONS OF VALVES, ACCESS CHAMBERS ETC. OR INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES ARE ACCURATELY LOCATED PRIOR TO COMMENCEMENT OF WORK.

NOTE:

STORMWATER INFORMATION AND DETAILS REFER TO SHEET
594I ENG OPW2 400 TO 594I ENG OPW2 406

SEWER INFORMATION AND DETAILS REFER TO SHEET
594I ENG OPW2 600 TO 594I ENG OPW2 606

WATER INFORMATION AND DETAILS REFER TO SHEET
594I ENG OPW2 700 TO 594I ENG OPW2 703



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, Beenleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA 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
NOT FOR CONSTRUCTION

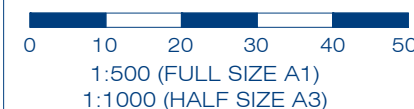
©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
OVERALL SERVICES
LAYOUT PLAN SHEET 4
OF 8

C	19/07/22	LOT BOUNDARY, STORMWATER AND SEWER UPDATED	LAB	MC	
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MC	
B	1/09/21	INFORMATION REQUEST RESPONSE	LAB	MC	
A	30/07/21	ORIGINAL ISSUE	LAB	MC	
Issue	Date	Description	DRN	CH	

SCALE IN METRES



Scale at A1:	1:500
--------------	-------

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	05/07/2022

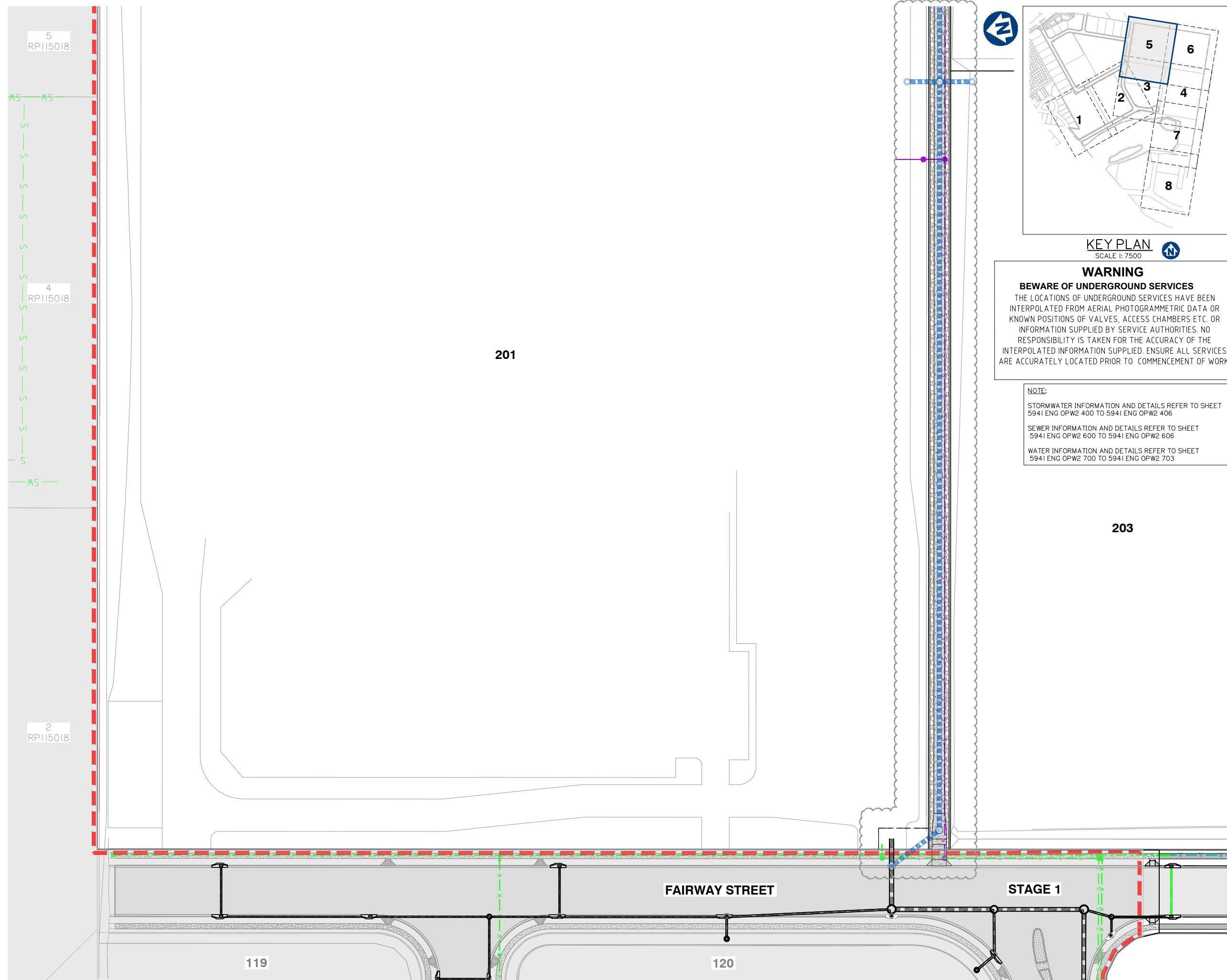
Drawing No:	Rev. No:
5941 ENG OPW2 303	C

FOR CONTINUATION REFER SHEET No. 5941ENG OPW2 305

FOR CONTINUATION REFER SUBJECT N - 5041 ENIC ODWS 306

FOR CONTINUATION REFER SHEET No. 594| ENG OPW2 302

OVERALL SERVICES LAYOUT PLAN SHEET 4 OF 8



KEY PLAN
SCALE 1:7500

WARNING

BEWARE OF UNDERGROUND SERVICES

THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN INTERPOLATED FROM AERIAL PHOTOGRAMMETRIC DATA OR KNOWN POSITIONS OF VALVES, ACCESS CHAMBERS ETC. OR INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES ARE ACCURATELY LOCATED PRIOR TO COMMENCEMENT OF WORK.

NOTE:

STORMWATER INFORMATION AND DETAILS REFER TO SHEET
5941 ENG OPW2 400 TO 5941 ENG OPW2 406

SEWER INFORMATION AND DETAILS REFER TO SHEET
5941 ENG OPW2 600 TO 5941 ENG OPW2 606

WATER INFORMATION AND DETAILS REFER TO SHEET
5941 ENG OPW2 700 TO 5941 ENG OPW2 703



gassman
development
perspectives

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, Beenleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA 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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
OVERALL SERVICES
LAYOUT PLAN SHEET
5 OF 8

D	1907/22	LOT BOUNDARY, STORMWATER AND SEWER UPDATED	LAB	MG	
C	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
C	09/11/21	KERB RAMP LOCATION AMENDED	JH	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	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:	LAB / IG
----------	----------

Approved:	MC
-----------	----

RPEQ:	16939
-------	-------

Signed:	
---------	---

Date:	05/07/2022
-------	------------

Drawing No:	Rev. No:
5941 ENG OPW2 304	D

2
RP153665

2
RP209307

NOTE:
STORMWATER INFORMATION AND DETAILS REFER TO SHEET
5941 ENG OPW2 400 TO 5941 ENG OPW2 406
SEWER INFORMATION AND DETAILS REFER TO SHEET
5941 ENG OPW2 600 TO 5941 ENG OPW2 606
WATER INFORMATION AND DETAILS REFER TO SHEET
5941 ENG OPW2 700 TO 5941 ENG OPW2 703

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN
INTERPOLATED FROM AERIAL PHOTOGRAMMETRIC DATA OR
KNOWN POSITIONS OF VALVES, ACCESS CHAMBERS ETC. OR
INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO
RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE
INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES
ARE ACCURATELY LOCATED PRIOR TO COMMENCEMENT OF WORK.



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:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be
reproduced or transmitted in any form or by any means,
electronic, mechanical, photocopying, recording, or
otherwise, without the written permission of Gassman
Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

OVERALL SERVICES LAYOUT
PLAN SHEET 6 OF 8

Issue	Date	Description	LAB	MG	DRN	CHK
C	19/07/22	LOT BOUNDARY, STORMWATER AND SEWER UPDATED	LAB	MG		
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG		
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG		
A	30/07/21	ORIGINAL ISSUE	LAB	MG		

SCALE IN METRES



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

Scale at A1: 1:500

Designed: IG
Drafted: LAB / IG
Approved: MG
RPEQ: 16939
Signed:
Date: 05/07/2022

Drawing No:
5941 ENG OPW2 305

Rev. No:
C

1
RP153665

5
RP115018

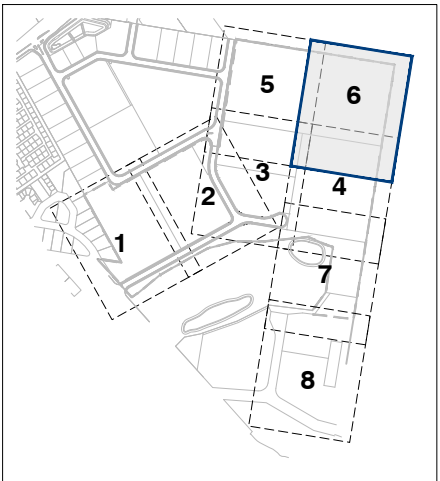
201

202

FOR CONTINUATION REFER SHEET No. 5941 ENG OPW2 303

FOR CONTINUATION REFER SHEET No. 5941 ENG OPW2 304

OVERALL SERVICES LAYOUT PLAN SHEET 6 OF 8



KEY PLAN
SCALE 1: 7500



BEWARE OF UNDERGROUND SERVICES

NOTE:

WATER INFORMATION AND DETAILS REFER TO SHEET
594I ENG OPW2 700 TO 594I ENG OPW2 703

201

202

**FUTURE
STAGE**

500
RP295994



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

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

OVERALL SERVICES LAYOUT
PLAN SHEET 7 OF 8

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	MG
Issue	Date	Description	DRN	CHK

Scale at A1:	1:500
--------------	-------

Designed:	IG
-----------	----

Drafted:	LAB / IG
----------	----------

Approved:	MG
-----------	----

RPEQ:	16939
-------	-------

Signed:	
Date:	10/09/2021

Drawing No:
5941 ENG OPW2 306

Rev. No:
B

KEY PLAN
SCALE 1: 7500



THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN INTERPOLATED FROM AERIAL PHOTOGRAMMETRIC DATA OR KNOWN POSITIONS OF VALVES, ACCESS CHAMBERS ETC. OR INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES ACCURATELY LOCATED PRIOR TO COMMENCEMENT OF WORK

WATER INFORMATION AND DETAILS REFER TO SHEET
594I ENG OPW2 700 TO 594I ENG OPW2 703

3
RP209307

FUTURE STAGE

CHRISTENSEN ROAD SOUTH



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, Beenleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA 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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

OVERALL SERVICES
LAYOUT PLAN SHEET 8
OF 8

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES



Scale at A1: 1:500

Designed:	IG
-----------	----

Drafted:	LAB / IG
----------	----------

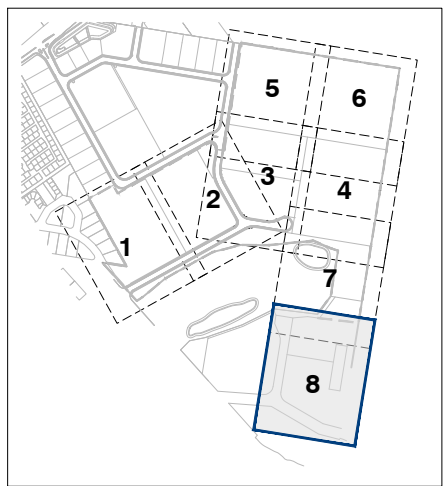
Approved:	MG
-----------	----

RPEQ:	16939
-------	-------

Signed:	
---------	---

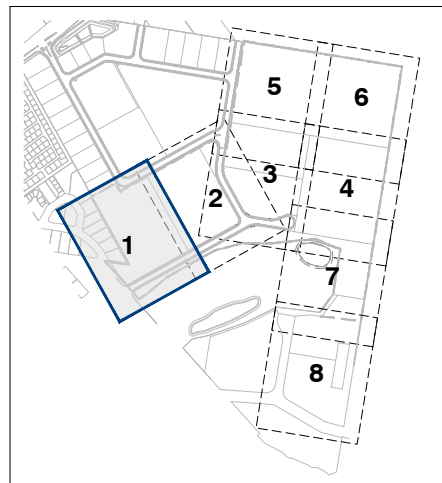
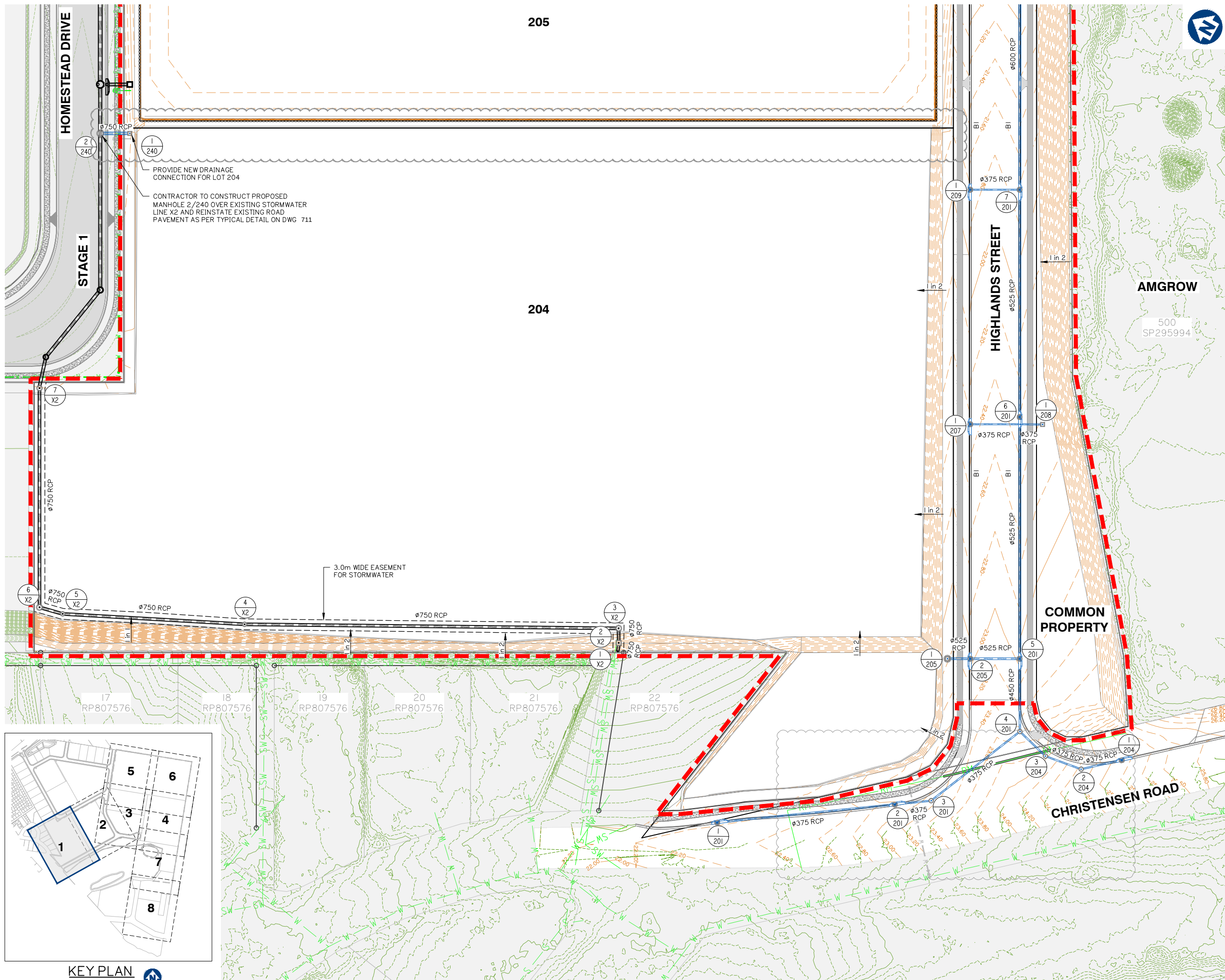
Date:	10/09/2021
-------	------------

Drawing No:
5941 ENG OPW2 307

Rev. No:
B

KEY PLAN
SCALE 1:7500





KEY PLAN
SCALE 1:7500

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives

All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

ROADWORKS AND
DRAINAGE LAYOUT
PLAN SHEET 1 OF 7

Issue	Date	Description	LAB	MG	DRN	CHK
E	19/07/22	EX RM, LOT BOUNDARY, STORMWATER UPDATED	LAB	MG		
D	24/06/22	LOT BOUNDARY AND LOT 203 NUMBER	LAB	MG		
C	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG		
C	09/11/21	KERB RAMP LOCATION AMENDED	JH	MG		
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG		
A	30/07/21	ORIGINAL ISSUE	LAB	MG		

SCALE IN METRES



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

Scale at A1: 1:500

Designed: IG

Drafted: LAB / IG

Approved: MG

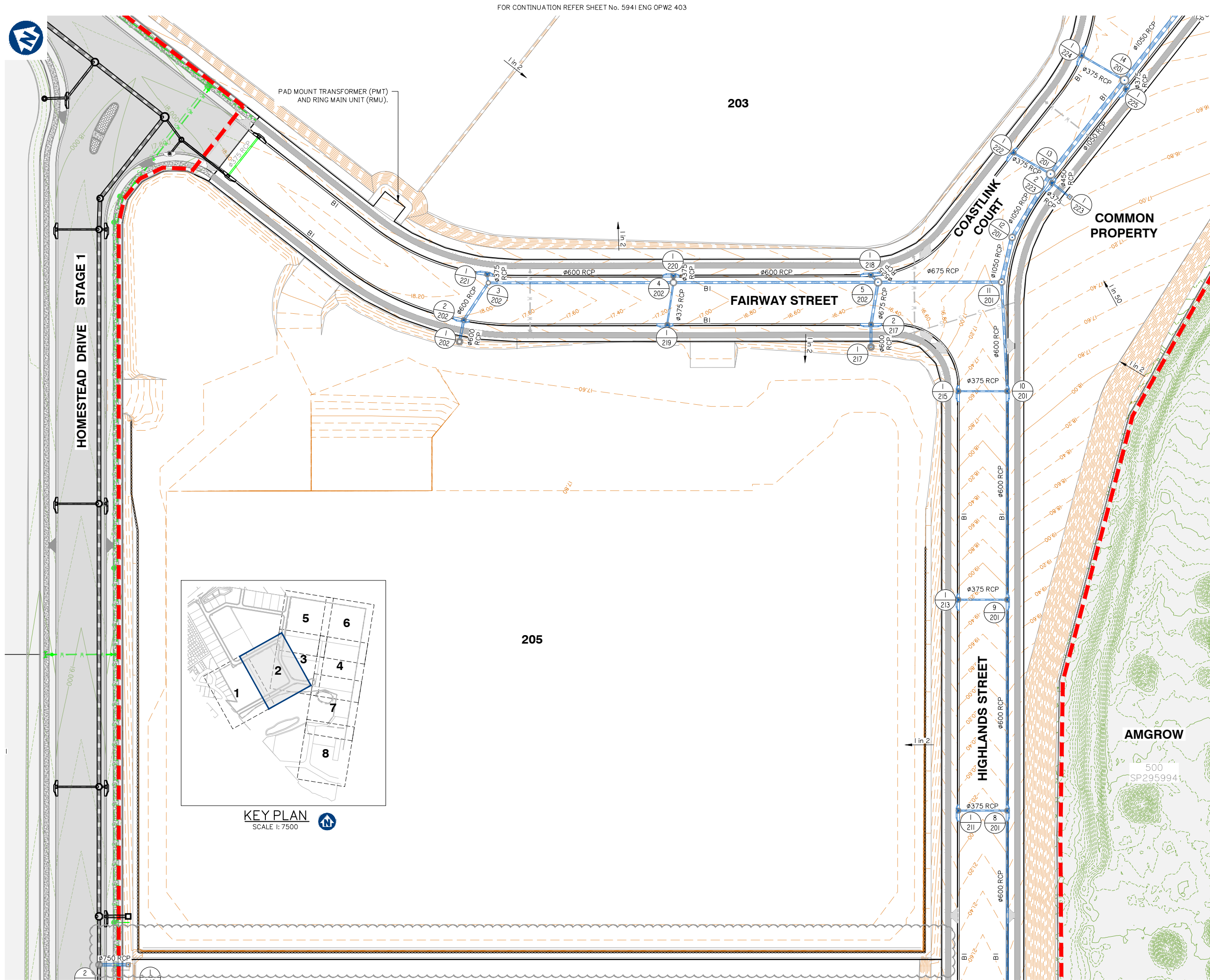
RPEQ: 16939

Signed:

Date: 05/07/2022

Drawing No:
5941 ENG OPW2 400

Rev. No:
E



FOR CONTINUATION REFER SHEET No. 5941 ENG OPW2 403

203

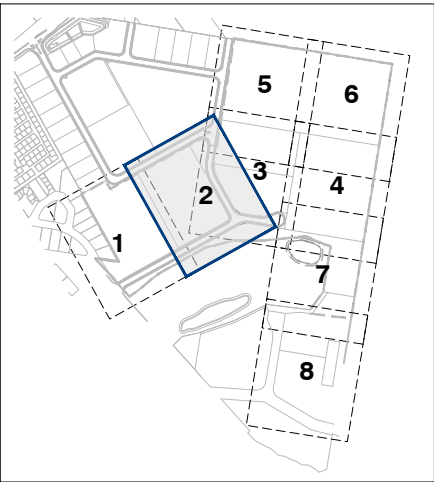
FAIRWAY STREET

COASTLINK COURT

COMMON PROPERTY

AMGROW

500
SP295994



KEY PLAN
SCALE 1: 7500

205

FOR CONTINUATION REFER SHEET No. 5941 ENG OPW2 400

ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 2 OF 7



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:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be
reproduced or transmitted in any form or by any means,
electronic, mechanical, photocopying, recording, or
otherwise, without the written permission of Gassman
Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

ROADWORKS AND
DRAINAGE LAYOUT
PLAN SHEET 2 OF 7

Issue	Date	Description	LAB	MG	CHK
D	19/07/22	LOT BOUNDARY AND LOT 203 NUMBER	LAB	MG	
C	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
C	09/11/21	KERB RAMP LOCATION AMENDED	JH	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	

SCALE IN METRES



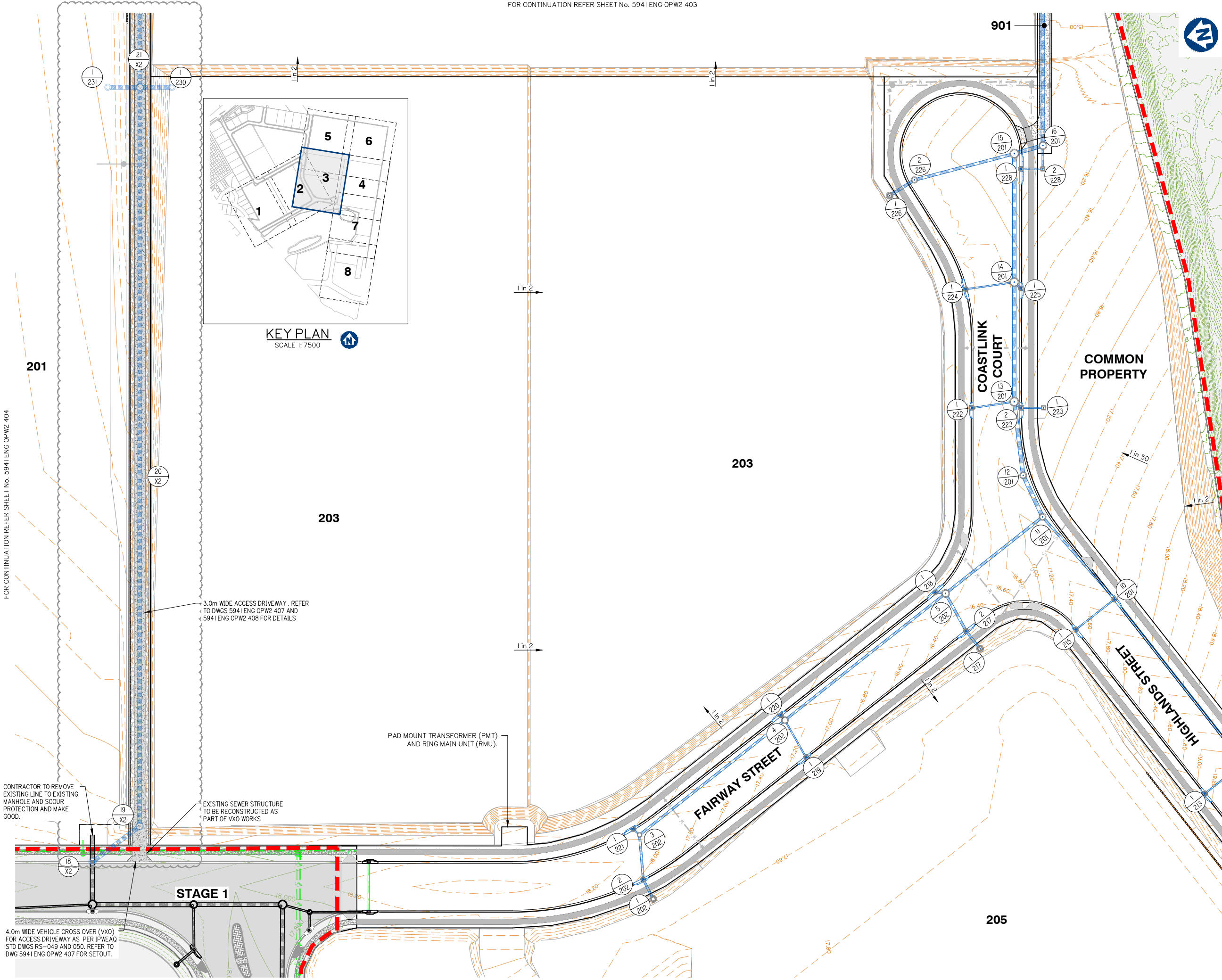
1:500 (FULL SIZE A1)
1:1000 (HALF SIZE A3)

Scale at A1: 1:500

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	05/07/2022

Drawing No:
5941 ENG OPW2 401

Rev. No:
D



FOR CONTINUATION REFER SHEET No. 5941 ENG OPW2 404

CONTRACTOR TO REMOVE EXISTING LINE TO EXISTING MANHOLE AND SCOUR PROTECTION AND MAKE GOOD.

EXISTING SEWER STRUCTURE TO BE RECONSTRUCTED AS PART OF VCO WORKS

4.0m WIDE VEHICLE CROSS OVER (VCO) FOR ACCESS DRIVEWAY AS PER IPWEAQ STD DWGS RS-049 AND 050. REFER TO DWG 5941 ENG OPW2 407 FOR SETOUT.

3.0m WIDE ACCESS DRIVEWAY . REFER TO DWGS 5941 ENG OPW2 407 AND 5941 ENG OPW2 408 FOR DETAILS

PAD MOUNT TRANSFORMER (PMT) AND RING MAIN UNIT (RMU).



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:

VANTAGE YATALA 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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

ROADWORKS AND DRAINAGE LAYOUT
PLAN SHEET 3 OF 7

Issue	Date	Description	LAB	MG	DRN	CHK
D	19/07/22	LOT BOUNDARY STORMWATER SEWER UPDATED	LAB	MG		
C	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG		
C	09/11/21	KERB RAMP LOCATION AMENDED	JH	MG		
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG		
A	30/07/21	ORIGINAL ISSUE	LAB	MG		

SCALE IN METRES



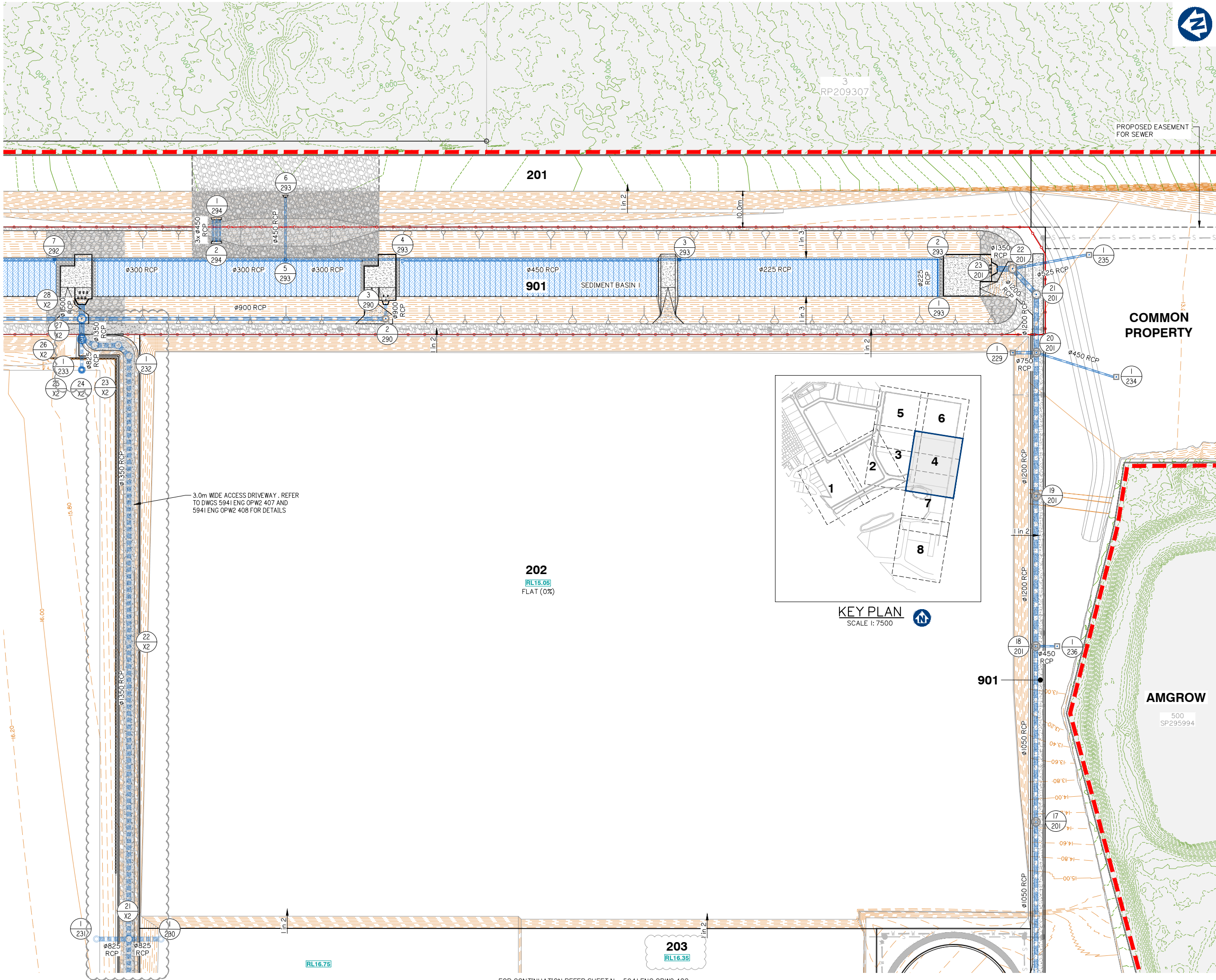
1:500 (FULL SIZE A1)
1:1000 (HALF SIZE A3)

Scale at A1: 1:500

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	05/07/2022

Drawing No:
5941 ENG OPW2 402

Rev. No:
D



Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be
reproduced or transmitted in any form or by any means,
electronic, mechanical, photocopying, recording, or
otherwise, without the written permission of Gassman
Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

ROADWORKS AND
DRAINAGE LAYOUT
PLAN SHEET 4 OF 7

Issue	Date	Description	LAB	MG	CHK
C	19/07/22	LOT BOUNDARY, NUMBER AND STORMWATER UPDATED	LAB	MG	
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	

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:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	05/07/2022

Drawing No:
5941 ENG OPW2 403

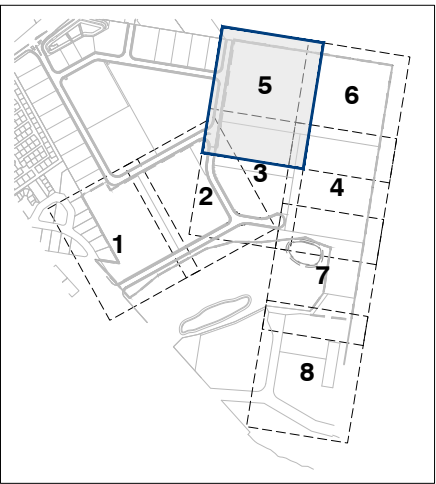
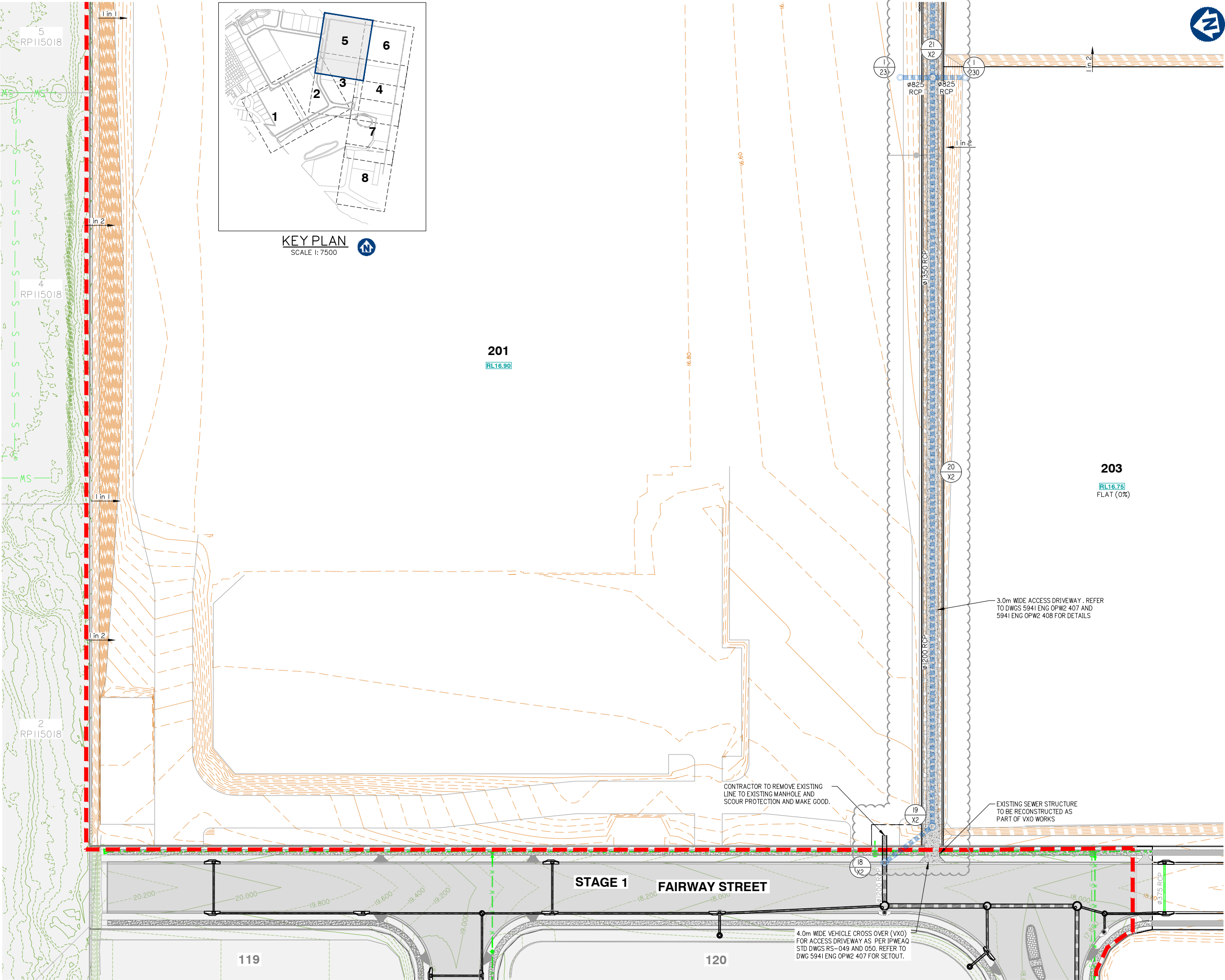
Rev. No:
C

FOR CONTINUATION REFER SHEET No. 5941 ENG OPW2 405

FOR CONTINUATION REFER SHEET No. 5941 ENG OPW2 406

FOR CONTINUATION REFER SHEET No. 5941 ENG OPW2 402

ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 4 OF 7



KEY PLAN
SCALE 1:7500

201
RL16.90

203

FLAT (0%)

3.0m WIDE ACCESS DRIVEWAY. REFER
TO DWGS 5941 ENG OPW2 407 AND
5941 ENG OPW2 408 FOR DETAILS

CONTRACTOR TO REMOVE EXISTING
LINE TO EXISTING MANHOLE AND
SCOUR PROTECTION AND MAKE GOOD.

EXISTING SEWER STRUCTURE
TO BE RECONSTRUCTED AS
PART OF VXO WORKS

4.0m WIDE VEHICLE CROSS OVER (VXO)
FOR ACCESS DRIVEWAY AS PER IPWEAO
STD DWGS RS-049 AND 050. REFER TO
DWG 5941 ENG OPW2 407 FOR SETOUT.



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:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be
reproduced or transmitted in any form or by any means,
electronic, mechanical, photocopying, recording, or
otherwise, without the written permission of Gassman
Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

ROADWORKS AND
DRAINAGE LAYOUT
PLAN SHEET 5 OF 7

Issue	Date	Description	LAB	MG	DRN	CHK
E	19/07/22	LOT BOUNDARY AND STORMWATER UPDATED	LAB	MG		
D	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG		
D	09/11/21	KERB RAMP LOCATION AMENDED	JH	MG		
C	15/09/21	CONTOURS AMENDED	LAB	MG		
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG		
A	30/07/21	ORIGINAL ISSUE	LAB	MG		

SCALE IN METRES



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

Scale at A1: 1:500

Designed: IG

Drafted: LAB / IG

Approved: MG

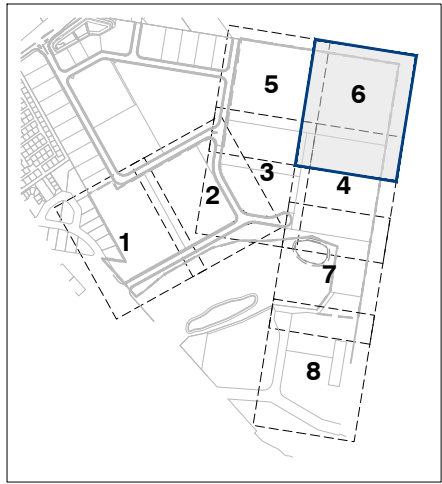
RPEQ: 16939

Signed:

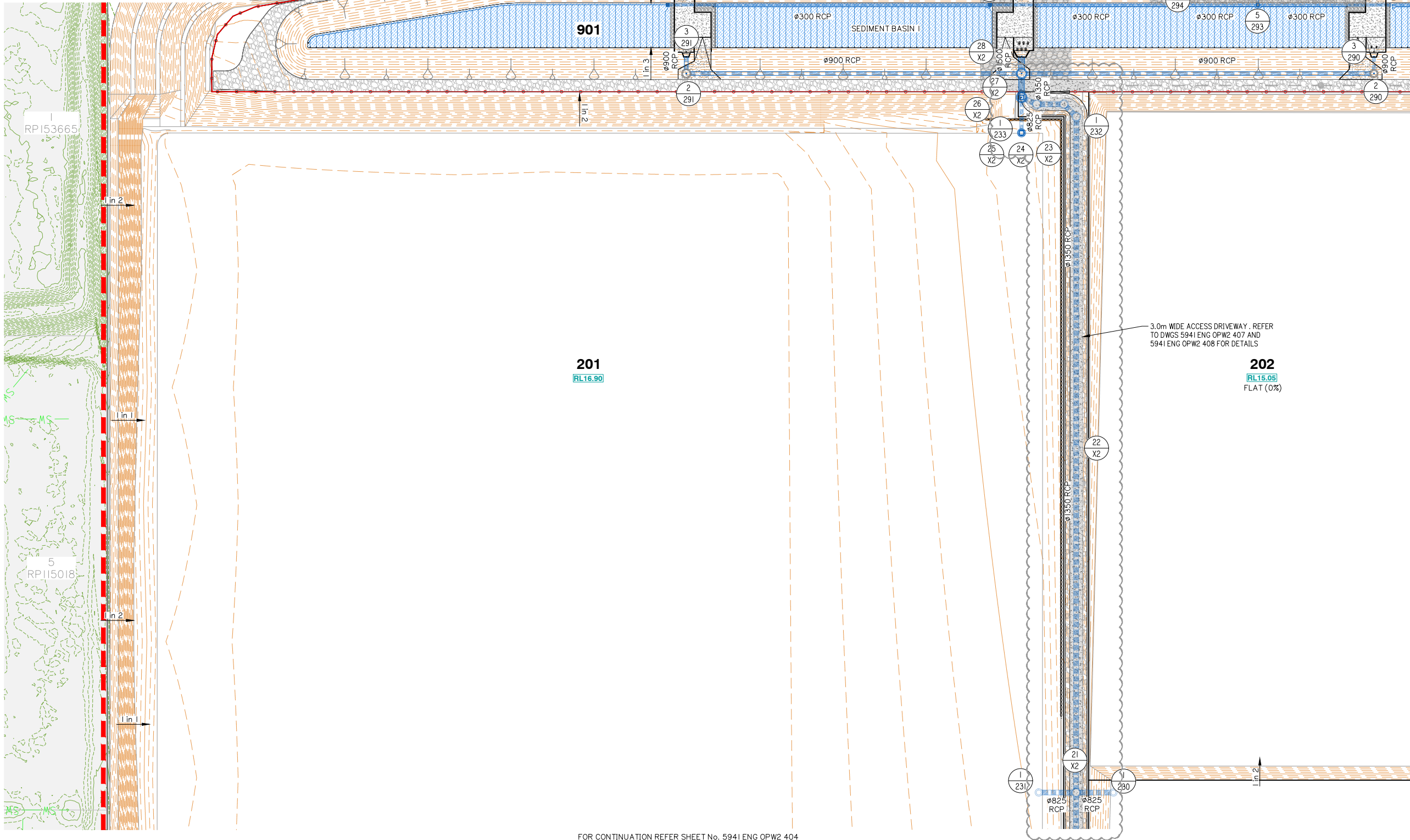
Date: 05/07/2022

Drawing No:
5941 ENG OPW2 404

Rev. No:
E



KEY PLAN
SCALE 1:7500



FOR CONTINUATION REFER SHEET No. 5941 ENG OPW2 403



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, Beenleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
ROADWORKS AND
DRAINAGE LAYOUT
PLAN SHEET 6 OF 7

C	19/07/22	LOT BOUNDARY AND STORMWATER UPDATED	LAB	MG	
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	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: LAB / IG

Approved: MG

RPEQ: 16939

Signed:

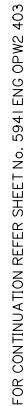
Date: 05/07/2022

Drawing No:
5941 ENG OPW2 405

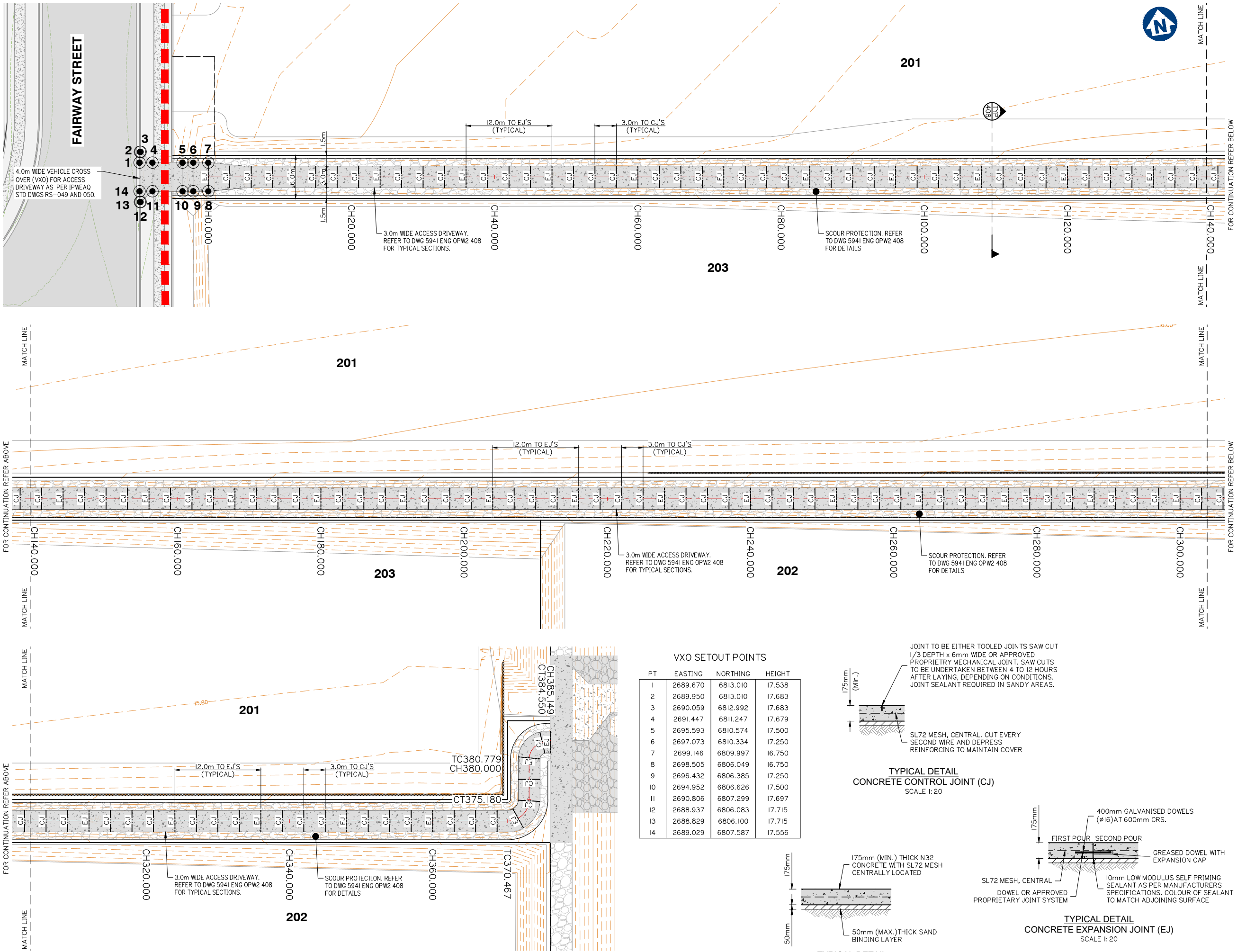
Rev. No:
C

FOR CONTINUATION REFER SHEET No. 5941 ENG OPW2 404

ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 6 OF 7



Drawing No:	Rev. No:
5941 ENG OPW2 406	B



ACCESS DRIVEWAY LAYOUT PLAN

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

ACCESS DRIVEWAY
LAYOUT PLAN

A	19/07/22	ORIGINAL ISSUE	JH	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: LAB / IG

Approved: MG

RPEQ: 16939

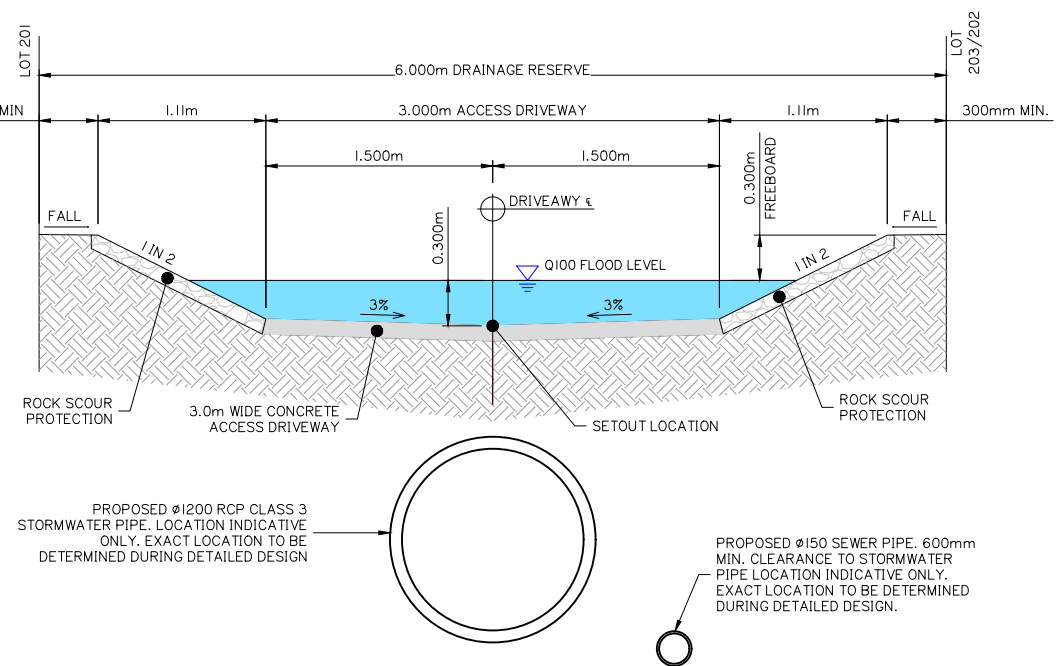
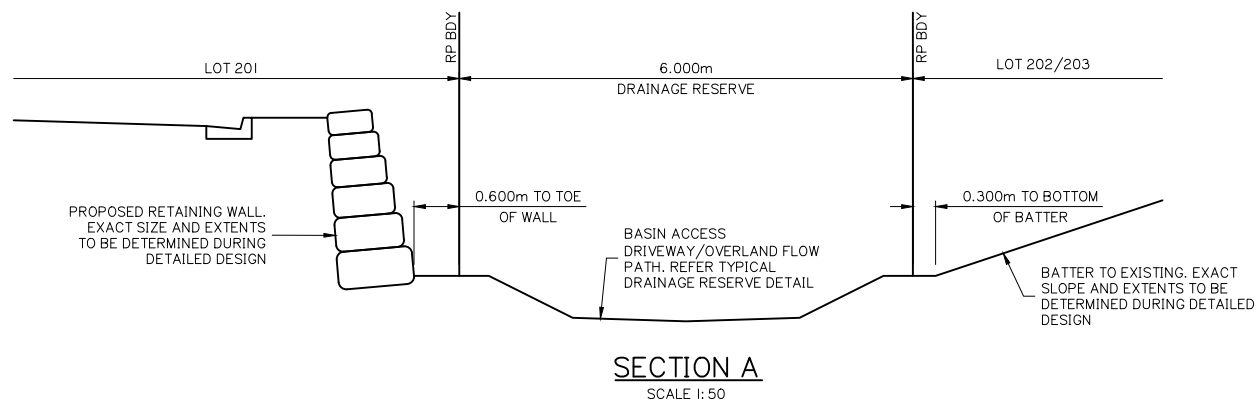
Signed:

Date: 05/07/2022

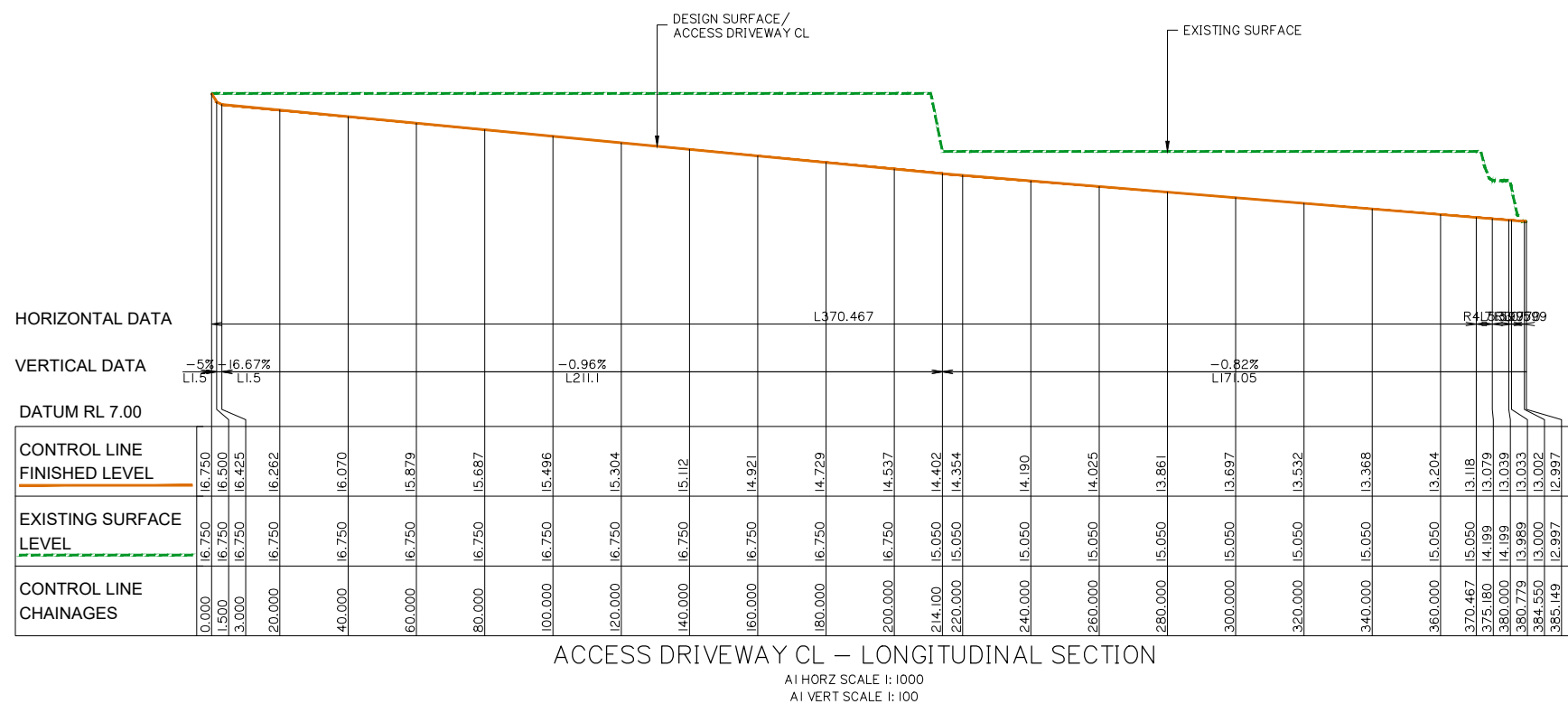
Drawing No:
5941 ENG OPW2 407

Rev. No:
A

ACCESS DRIVEWAY CL – SETOUT TABLE								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	2698.826	6808.023	16.750	99°13'15.50"	R = −3.000	4.713	90°00'28.56"
	20.000	2718.567	6804.818	16.262	99°13'15.50"			
	40.000	2738.309	6801.613	16.070	99°13'15.50"			
	60.000	2758.050	6798.409	15.879	99°13'15.50"			
	80.000	2777.792	6795.204	15.687	99°13'15.50"			
	100.000	2797.533	6791.999	15.496	99°13'15.50"			
	120.000	2817.275	6788.794	15.304	99°13'15.50"			
	140.000	2837.017	6785.589	15.112	99°13'15.50"			
	160.000	2856.758	6782.384	14.921	99°13'15.50"			
	180.000	2876.500	6779.179	14.729	99°13'15.50"			
	200.000	2896.241	6775.975	14.537	99°13'15.50"			
	220.000	2915.983	6772.770	14.354	99°13'15.50"			
	240.000	2935.724	6769.565	14.190	99°13'15.50"			
	260.000	2955.466	6766.360	14.025	99°13'15.50"			
	280.000	2975.207	6763.155	13.861	99°13'15.50"			
	300.000	2994.949	6759.950	13.697	99°13'15.50"			
	320.000	3014.691	6756.746	13.532	99°13'15.50"			
	340.000	3034.432	6753.541	13.368	99°13'15.50"			
	360.000	3054.174	6750.336	13.204	99°13'15.50"			
	TC	370.467	3064.506	6748.659	13.118			
IP 2	372.824	3067.467	6748.178	13.098		R = 2.400	3.770	90°00'26.57"
CT	375.180	3067.948	6751.139	13.079	9°12'46.95"			
	380.000	3068.719	6755.897	13.039	9°12'46.95"			
TC	380.779	3068.844	6756.666	13.033	9°12'46.95"			
IP 3	382.664	3069.229	6759.036	13.018				
CT	384.550	3071.598	6758.651	13.002	99°13'13.51"			
IP 4	385.149	3072.189	6758.555	12.997	99°13'13.51"			



TYPICAL ACCESS DRIVEWAY/
DRAINAGE RESERVE DETAIL
SCALE 1:25



Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA 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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

ACCESS DRIVEWAY TYPICAL DETAILS

A	19/07/22		ORIGINAL ISSUE	JH	M/C
Issue	Date		Description	DRN	CH

SCALE IN METRES



1:1000 (FULL SIZE A1)
1:2000 (HALF SIZE A3)

Scale at A1:

1:1000

Designed:

10

Drafted:

LAB / IG

Approved

MG

RPEQ:

16939

Signed:

Michael K...

Date:

05/07/2022

Drawing No:

5941 ENG OPW2 408

Rev. No:

A

Client:



Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

TYPICAL SECTIONS AND
DETAILS SHEET 1 OF 3

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES

NOT APPLICABLE

Scale at A1:	NTS
Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No: 5941 ENG OPW2 410 Rev. No: B

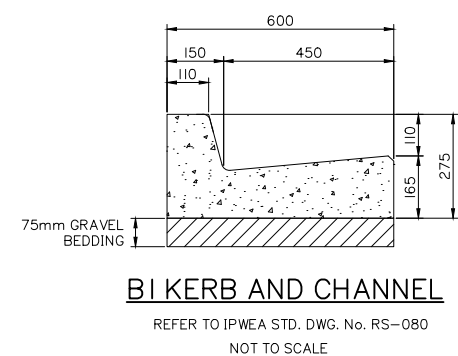
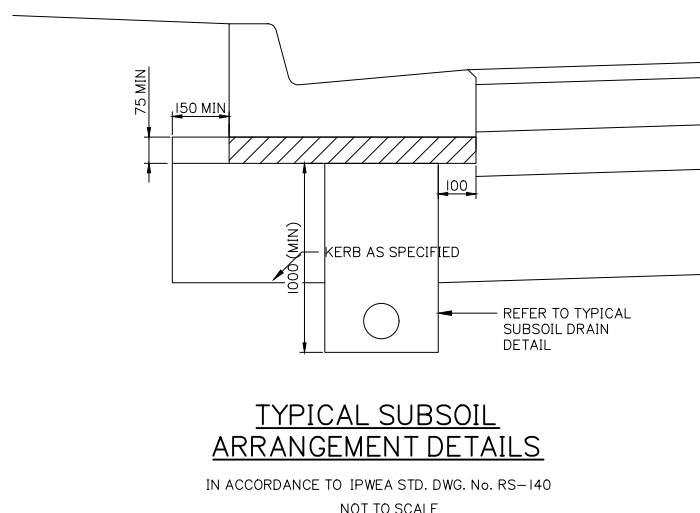
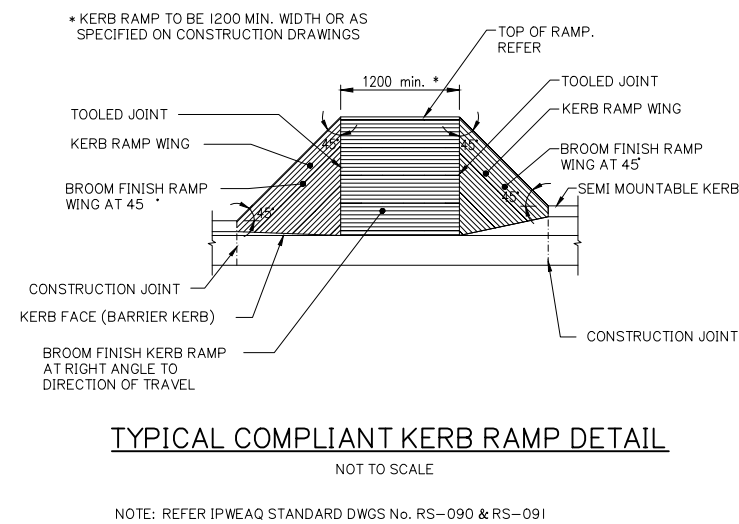
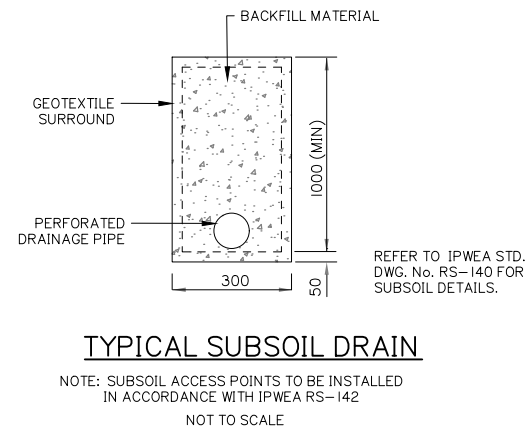
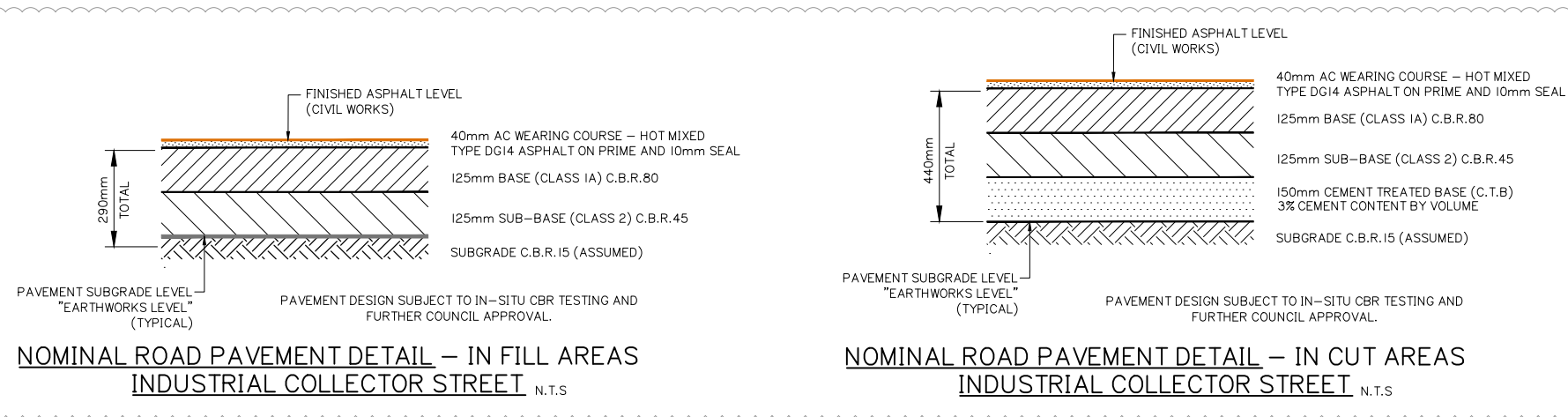




Diagram illustrating the layout of control joints (CJ) and dowelled expansion joints (DEJ) in a concrete slab.

The slab width is 1.5m UNO.

Control joints (CJ) are spaced at 1.5m centres.

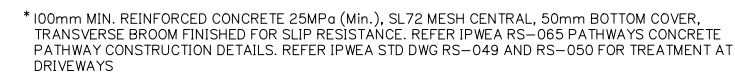
Dowelled expansion joints (DEJ) are spaced at 6.0m MAX BETWEEN DEJ's.

The diagram shows a section of the slab with a width of 1.5m UNO. The spacing between control joints is 1.5m. The spacing between dowelled expansion joints is 6.0m MAX BETWEEN DEJ's. The diagram also shows the location of control joints and dowelled expansion joints.

CONTROL JOINTS AT 1.5m CENTRES. SAW CUT JOINTS ARE TO BE UNDERTAKEN BETWEEN 4-12 HOURS AFTER LAYING

DOWELLED EXPANSION JOINTS AT 6m CENTRES

SCALE: N.T.S



SCALE: NTS

SCALE: N.T.S

N.T.S



gassman
development
perspectives

est. 1985

planning | environment | landscape | engineering | survey

T: 3807 3333 | F: 3287 5461 | www.gassman.com.au

Gold Coast & Logan | 176 Business Street, Yatala QLD | PO Box 392, Beenleigh 4207



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

VANTAGE YATALA STAGE 2

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

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

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

ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

© 2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

TYPICAL SECTIONS AND
DETAILS SHEET 2 OF 3

B	26/11/21	ISSUED FOR CONSTRUCTION			LAB MG
B	10/09/21	INFORMATION REQUEST RESPONSE			LAB MG
A	30/07/21	ORIGINAL ISSUE			LAB MG
Issue	Date	Description			DRN CHK

SCALE IN METRES

NOT APPLICABLE

Scale at A1:	NTS
--------------	-----

Designed:	IG
-----------	----

Drafted:	LAB / IG
----------	----------

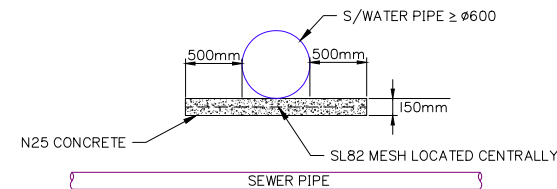
Approved:	MG
-----------	----

RPEQ:	16939
-------	-------

Signed:	
---------	---

Date:	10/09/2021
-------	------------

Drawing No:	Rev. No:
5941 ENG OPW2 411	B



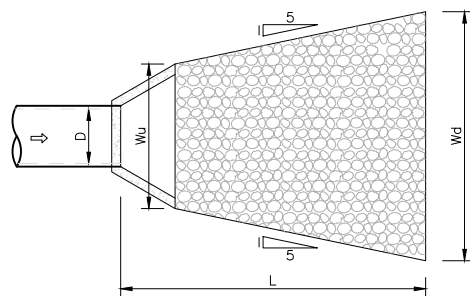
BRIDGING DETAILS FOR STORMWATER PIPES $\geq \phi 600$

NOT TO SCALE

OUTLET PROTECTION TABLE									
CULVERT No.	PIPE ϕ	OUTLET VELOCITY	LENGTH OF PROTECTION	UPSTREAM WIDTH	DOWNSTREAM WIDTH	NOMINAL ROCK SIZE	THICKNESS OF PROTECTION	PROTECTION AREA	PROTECTION VOLUME
	D (mm)	V (m/s)	L (mm)	Wu (mm)	Wd (mm)	d ₅₀ (mm)	t (mm)	(m ²)	(m ³)
25/X2	1500	4.31	15000	2370	7968	500	1000	77.5	77.5
290/3	900	1.82	5400	2040	3860	200	700	15.9	6.4
291/3	900	1.83	5400	2040	3860	200	700	15.9	6.4
23/201	1350	2.24	10800	2370	6288	300	600	46.8	28.1
293/6	450	2.15	2700	1850	2690	200	400	6.1	2.5
294/1	3/450	1.56	3600	3700	4660	400	600	7.5	4.5

Diagram illustrating the flow of water through a geotextile filter. The filter is labeled "APPROVED NO-FINES GEOFABRIC". The flow is indicated by an arrow and labeled "l in 2 (max)". The filter thickness is labeled "2 x d₅₀ (MIN)". The length of the filter is labeled "L". The diameter of the cylinder is labeled "D".

N.T.S



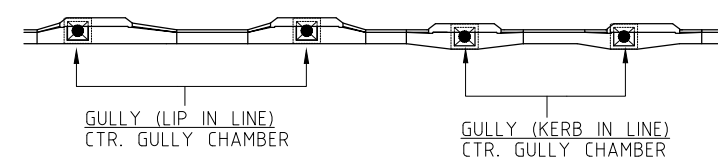
N.T.S

ROCK GRADATION TABLE						
SMALLEST DIMENSION IN (mm)						% OF ROCK SMALLER THAN SIZE SHOWN
150d ₅₀	200d ₅₀	300d ₅₀	400d ₅₀	500d ₅₀	600d ₅₀	
300	380	525	630	750	850	100
200	300	450	550	650	750	50–70
150	200	300	400	500	600	35–50
50	75	100	130	150	175	2–10

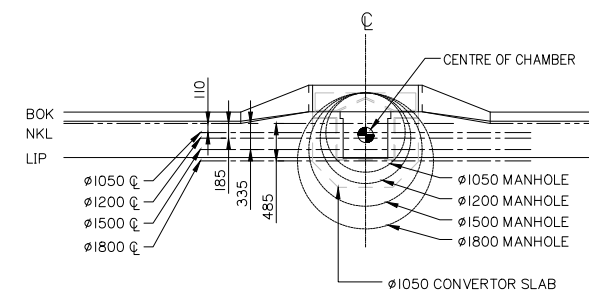
ROCK SIZE (M)	ROCK MASS (KG)	MIN. PERCENTAGE OF ROCKS LARGER THAN
0.40	100	0
0.30	35	50
0.15	25	90

- MINIMUM THICKNESS ROCK PROTECTION: 800mm MIN – UNDERLAY ROCK PROTECTION WITH "TERRAFIX" XP310 GEOFABRIC OR EQUIVALENT.
- ROCKS SHALL BE DENSE, HARD & DURABLE.
- ANGULAR ROCK TO BE LAYED WITH LARGEST FACE VISIBLE.
- ROCK SIZE TO BE GRADED AS PER TABLE SHOWN.
- REFER ALSO ENERGY DISSIPATION DESIGN CALCULATIONS (ABOVE)

STRUCTURE TYPE	HORIZONTAL CONTROL (REFERENCE POINT LOCATION)	VERTICAL CONTROL (REFERENCE LEVEL)
MANHOLE	CENTRE OF MANHOLE	FINISHED SURFACE LEVEL
DRAINWAY GULLY PIT	SETOUT TO CENTRE OF CHAMBER BOK NKL LIP Ø1050 Ø1200 Ø1500 Ø1050 MANHOLE Ø1200 MANHOLE Ø1500 MANHOLE	FINISHED SURFACE LEVEL (INVERT OF KERB) <i>REFER ALSO BELOW</i>
HEADWALL	INTERSECTION OF HEADWALL FACE & PIPE CENTRELINE	INVERT LEVEL
FIELD INLET PIT	CENTRE OF PIT	FINISHED SURFACE LEVEL



DETAIL – SETOUT POINTS FOR IPWEA GULLY PITS



SCALE 1:50



**gassman
development
perspectives**
est 1985

planning | environment | landscape | engineering | survey

T: 3807 3333 | F: 3287 5461 | www.gassman.com.au

Gold Coast & Logan | 176 Business Street, Yatala QLD | PO Box 392, Beenleigh 4207



FRASERS
PROPERTY

FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

VANTAGE YATALA STAGE 2

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

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

ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

© 2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

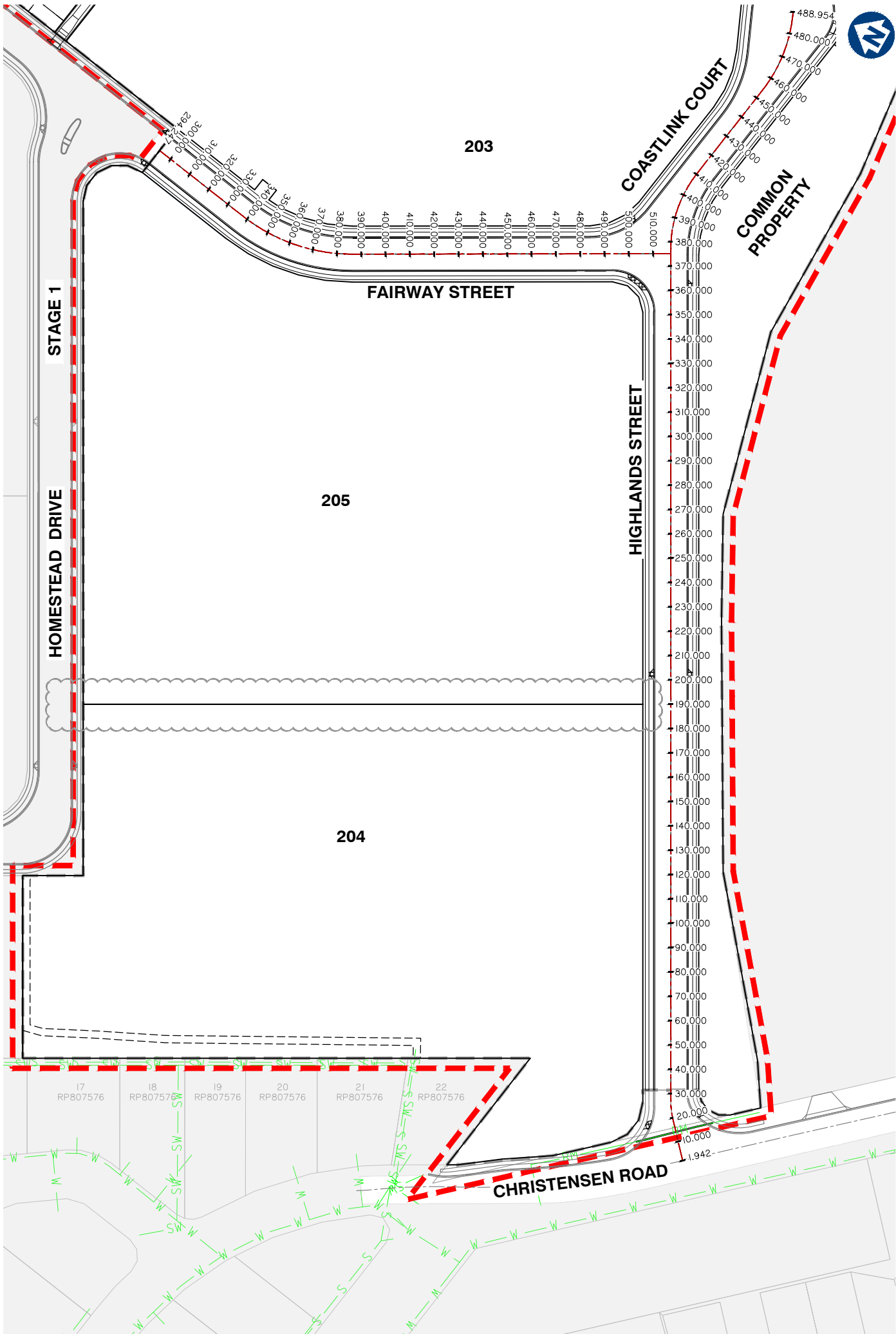
TYPICAL SECTIONS AND
DETAILS SHEET 3 OF 3

B	26/11/21	ISSUED FOR CONSTRUCTION			LAB MG
B	1/09/21	INFORMATION REQUEST RESPONSE			LAB MG
A	30/07/21	ORIGINAL ISSUE			LAB MG
Issue	Date	Description			DRN CHK

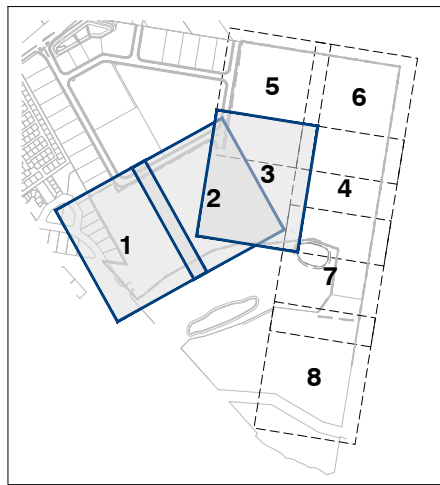
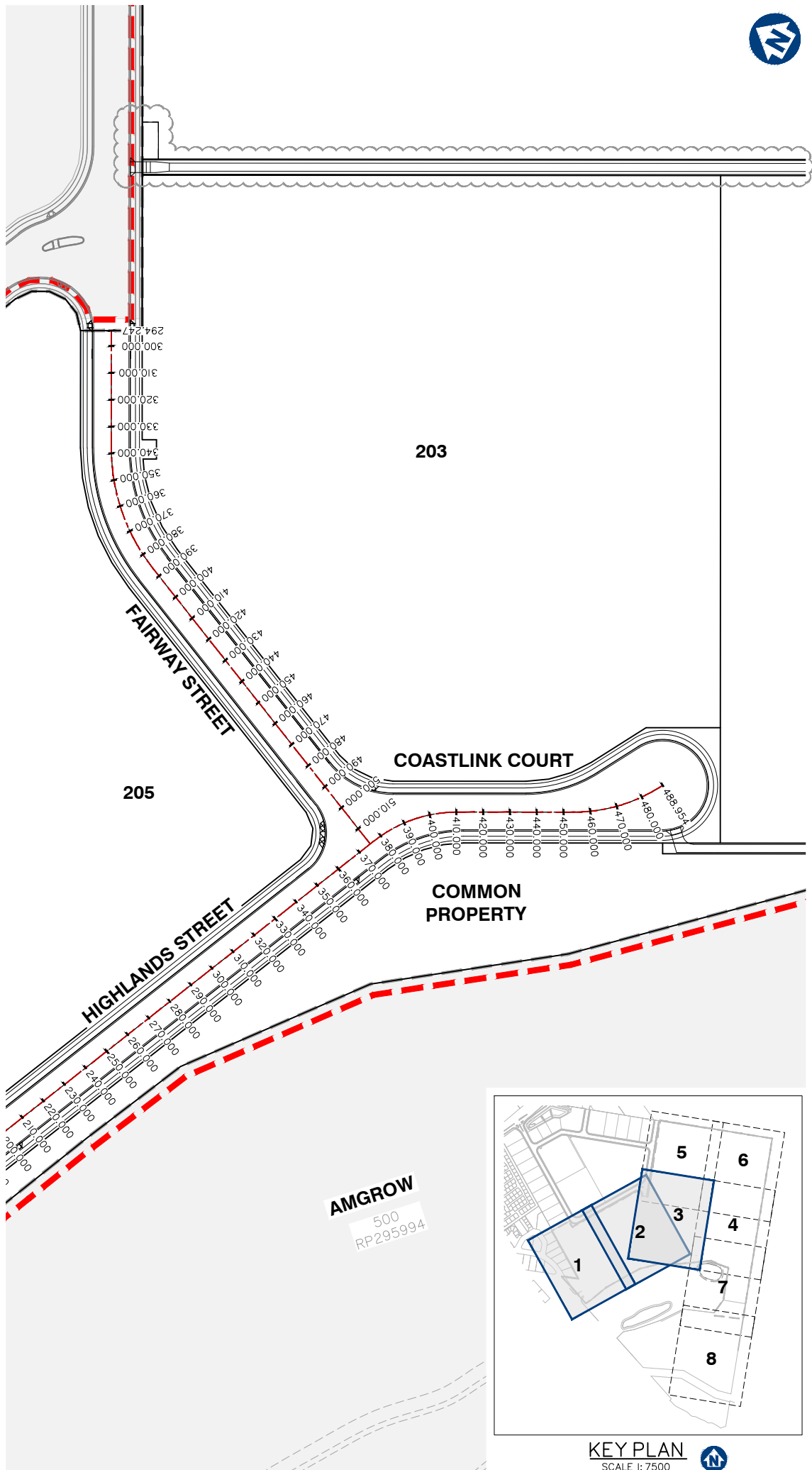
NOT APPLICABLE
(OR AS NOTED)

Date:	10/09/2021
-------	------------

Rev. No:
B



CONTROL LINE LAYOUT PLAN



KEY PLAN
SCALE 1:7500

Client:



FRASERS
PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be
reproduced or transmitted in any form or by any means,
electronic, mechanical, photocopying, recording, or
otherwise, without the written permission of Gassman
Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

CONTROL LINE LAYOUT
PLAN

Issue	Date	Description	LAB	MG	LAB	MG	LAB	MG
C	19/07/22	LOT BOUNDARIES AND NUMBERS UPDATED	LAB	MG				
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG				
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG				
A	30/07/21	ORIGINAL ISSUE	LAB	MG				

SCALE IN METRES

0 20 40 60 80 100
1:1000 (FULL SIZE A1)
1:2000 (HALF SIZE A3)

Scale at A1: 1:1000

Designed: IG

Drafted: LAB / IG

Approved: MG

RPEQ: 16939

Signed:

Date: 05/07/2022

Drawing No:
5941 ENG OPW2 420

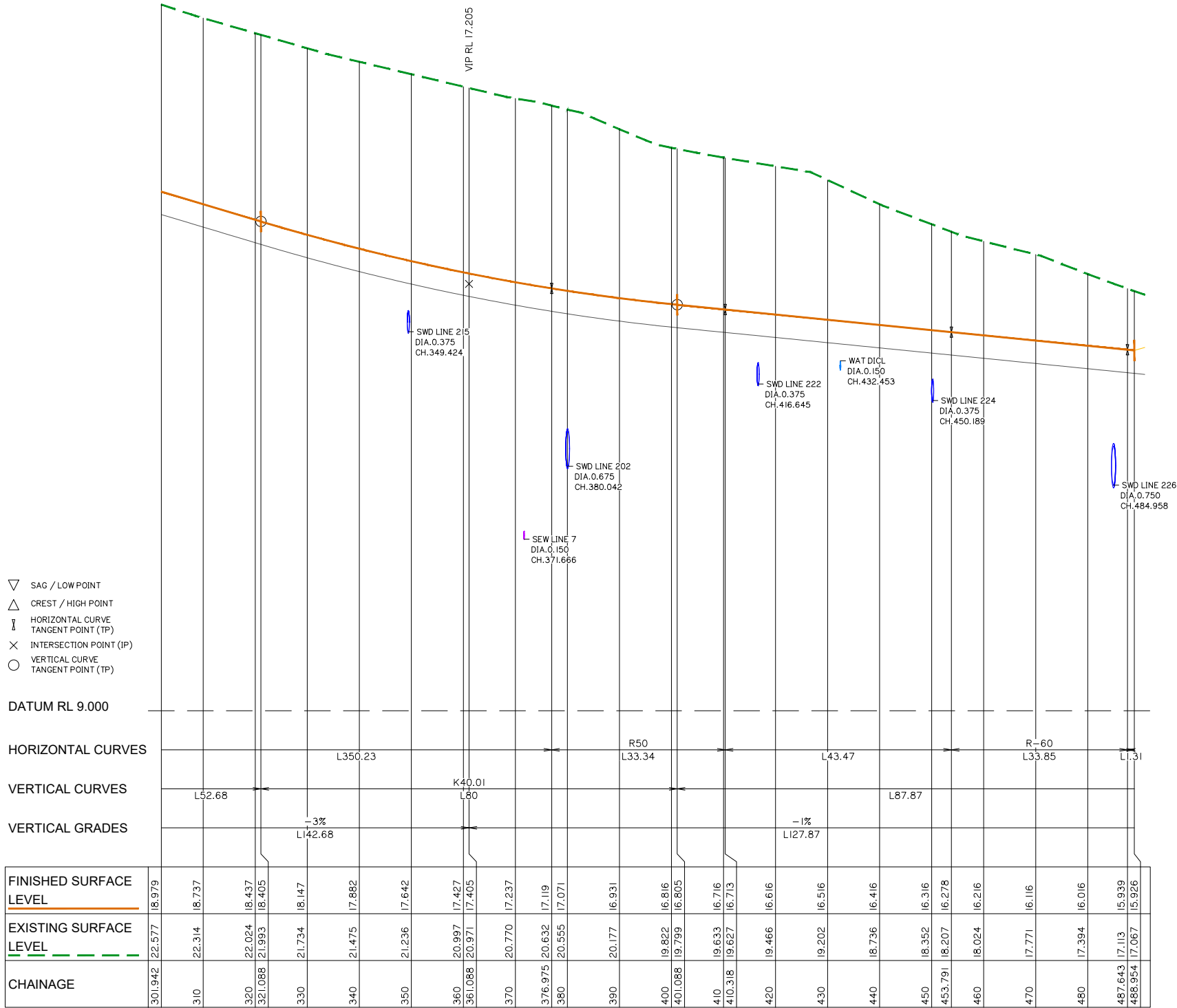
Rev. No:
C

CONTROL LINE SETOUT TABLE – ROAD 01									
PT	CHAINAGE	EASTING	NORTHING	FSL	SUBGRADE	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	1.942	2413.875	6361.399	24.141	23.851	47°57'48.81"			
	10.000	2419.860	6366.795	23.900	23.610	47°57'48.81"			
TC	19.908	2427.219	6373.429	23.627	23.337	47°57'48.81"			
	20.000	2427.287	6373.491	23.625	23.335	48°08'21.35"			
IP 2	23.324	2429.767	6375.727	23.545	23.255		R = 30.000	6.833	13°02'58.02"
CT	26.741	2432.768	6377.390	23.468	23.178	61°00'46.82"			
	30.000	2435.619	6378.969	23.401	23.111	61°00'46.82"			
	40.000	2444.367	6383.815	23.217	22.927	61°00'46.82"			
	50.000	2453.114	6388.662	23.074	22.784	61°00'46.82"			
	60.000	2461.861	6393.508	22.970	22.680	61°00'46.82"			
	70.000	2470.609	6398.354	22.876	22.586	61°00'46.82"			
	80.000	2479.356	6403.200	22.782	22.492	61°00'46.82"			
	90.000	2488.103	6408.046	22.689	22.399	61°00'46.82"			
	100.000	2496.850	6412.892	22.595	22.305	61°00'46.82"			
	110.000	2505.598	6417.738	22.501	22.211	61°00'46.82"			
	120.000	2514.345	6422.584	22.407	22.117	61°00'46.82"			
	130.000	2523.092	6427.430	22.314	22.024	61°00'46.82"			
	140.000	2531.840	6432.277	22.220	21.930	61°00'46.82"			
	150.000	2540.587	6437.123	22.126	21.836	61°00'46.82"			
	160.000	2549.334	6441.969	22.032	21.742	61°00'46.82"			
	170.000	2558.082	6446.815	21.938	21.648	61°00'46.82"			
	180.000	2566.829	6451.661	21.831	21.541	61°00'46.82"			
	190.000	2575.576	6456.507	21.703	21.413	61°00'46.82"			
	200.000	2584.323	6461.353	21.554	21.264	61°00'46.82"			
	210.000	2593.071	6466.199	21.385	21.095	61°00'46.82"			
	220.000	2601.818	6471.045	21.195	20.905	61°00'46.82"			
	230.000	2610.565	6475.892	20.985	20.695	61°00'46.82"			
	240.000	2619.313	6480.738	20.754	20.464	61°00'46.82"			
	250.000	2628.060	6485.584	20.502	20.212	61°00'46.82"			
	260.000	2636.807	6490.430	20.230	19.940	61°00'46.82"			
	270.000	2645.555	6495.276	19.937	19.647	61°00'46.82"			
	280.000	2654.302	6500.122	19.637	19.347	61°00'46.82"			
	290.000	2663.049	6504.968	19.337	19.047	61°00'46.82"			
	300.000	2671.796	6509.814	19.037	18.747	61°00'46.82"			
	310.000	2680.544	6514.660	18.737	18.447	61°00'46.82"			
	320.000	2689.291	6519.507	18.437	18.147	61°00'46.82"			
	330.000	2698.038	6524.353	18.147	17.857	61°00'46.82"			
	340.000	2706.786	6529.199	17.882	17.592	61°00'46.82"			
	350.000	2715.533	6534.045	17.642	17.352	61°00'46.82"			
	360.000	2724.280	6538.891	17.427	17.137	61°00'46.82"			
	370.000	2733.027	6543.737	17.237	16.947	61°00'46.82"			
TC	376.975	2739.129	6547.117	17.119	16.829	61°00'46.82"			
	380.000	2741.818	6548.502	17.071	16.781	64°28'44.93"			
	390.000	2751.211	6551.883	16.931	16.641	75°56'17.89"			
IP 3	393.647	2754.277	6555.510	16.886	16.596		R = 50.000	33.343	38°12'28.35"

CONTROL LINE SETOUT TABLE – ROAD 01									
PT	CHAINAGE	EASTING	NORTHING	FSL	SUBGRADE	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
	400.000	2761.089	6553.329	16.816	16.526	87°23'50.85"			
	410.000	2771.058	6552.785	16.716	16.426	98°51'23.81"			
CT	410.318	2771.372	6552.735	16.713	16.423	99°13'15.18"			
	420.000	2780.929	6551.183	16.616	16.326	99°13'15.18"			
	430.000	2790.799	6549.581	16.516	16.226	99°13'15.18"			
	440.000	2800.670	6547.978	16.416	16.126	99°13'15.18"			
	450.000	2810.541	6546.376	16.316	16.026	99°13'15.18"			
TC	453.791	2814.283	6545.769	16.278	15.988	99°13'15.18"			
	460.000	2820.452	6545.092	16.216	15.926	93°17'31.45"			
	470.000	2830.437	6545.351	16.116	15.826	83°44'33.98"			
IP 4	470.717	2831.448	6542.982	16.108	15.818		R = -60.000	33.851	32°19'32.74"
	480.000	2840.241	6547.262	16.016	15.726	74°11'36.52"			
CT	487.643	2847.443	6549.806	15.939	15.649	66°53'42.44"			
IP 5	488.954	2848.649	6550.320	15.926	15.636	66°53'42.44"			

PT	CHAINAGE	EASTING	NORTHING	FSL	SUBGRADE	BEARING	RAD./SPIRAL	A.LENGTH	DEFL.ANGLE
	290.000	2673.355	6754.715	18.243	17.953	189°13'15.11"			
	300.000	2671.752	6744.845	18.328	18.038	189°13'15.11"			
	310.000	2670.150	6734.974	18.402	18.112	189°13'15.11"			
	320.000	2668.547	6725.103	18.445	18.155	189°13'15.11"			
	330.000	2666.945	6715.232	18.458	18.168	189°13'15.11"			
TC	337.977	2665.667	6707.358	18.446	18.156	189°13'15.11"			
	340.000	2665.371	6705.357	18.440	18.150	187°37'20.40"			
	350.000	2664.731	6695.386	18.392	18.102	179°43'10.08"			
	360.000	2665.468	6685.421	18.313	18.023	171°48'59.76"			
IP 3	362.206	2661.633	6682.510	18.292	18.002		R = -72.500	48.458	38°17'45.40"
	370.000	2667.569	6675.652	18.204	17.914	163°54'49.44"			
	380.000	2670.992	6666.265	18.063	17.773	156°00'39.13"			
CT	386.436	2673.866	6660.509	17.961	17.671	150°55'29.71"			
	390.000	2675.598	6657.394	17.903	17.613	150°55'29.71"			
	400.000	2680.458	6648.654	17.743	17.453	150°55'29.71"			
	410.000	2685.317	6639.914	17.583	17.293	150°55'29.71"			
	420.000	2690.177	6631.174	17.422	17.132	150°55'29.71"			
	430.000	2695.037	6622.434	17.262	16.972	150°55'29.71"			
	440.000	2699.896	6613.694	17.102	16.812	150°55'29.71"			
	450.000	2704.756	6604.955	16.941	16.651	150°55'29.71"			
	460.000	2709.615	6596.215	16.781	16.491	150°55'29.71"			
	470.000	2714.475	6587.475	16.621	16.331	150°55'29.71"			
	480.000	2719.334	6578.735	16.470	16.180	150°55'29.71"			
	490.000	2724.194	6569.995	16.461	16.171	150°55'29.71"			
	500.000	2729.053	6561.255	16.636	16.346	150°55'29.71"			
	510.000	2733.913	6552.516	16.933	16.643	150°55'29.71"			
IP 4	517.250	2737.436	6546.179	17.150	16.860	150°55'29.71"			

 gassman development perspectives 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, Beenleigh 4207				
Client:				
 FRASERS PROPERTY FRASERS PROPERTY (AUSTRALIA) PTY. LTD.				
Project:				
VANTAGE YATALA 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 NOT FOR CONSTRUCTION				
©2012 Gassman Development Perspectives All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.				
ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES				
DRAWING TITLE				
CONTROL LINE SETOUT TABLES SHEET 1 OF 2				
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	MG
Issue	Date	Description	DRN	CHK
SCALE IN METRES				
NOT APPLICABLE				
Scale at A1:		NTS		
Designed:		IG		
Drafted:		LAB / IG		
Approved:		MG		
RPEQ:		16939		
Signed:				
Date:		10/09/2021		
Drawing No:			Rev. No:	
5941 ENG OPW2 421			B	



HIGHLANDS - LONGITUDINAL SECTION (cont.)



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, Beenleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives

All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
HIGHLANDS STREET
LONGITUDINAL SECTION
SHEET 2 OF 2

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES

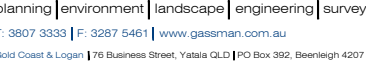
HORZ: Scale 1:500 - Lengths are in Metres.
0 5 10 15 20 25 30 35 40

VERT: Scale 1:50 - Lengths are in Metres.
0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No: 5941 ENG OPW2 431 Rev. No: B



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

VANTAGE YATALA STAGE 2

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

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

ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

[illegible]

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MC
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MC
A	30/07/21	ORIGINAL ISSUE	LAB	MC
Issue	Date	Description	DRN	CHI

HORZ: Scale 1:500 - Lengths are in Metres.

VERT: 

AS SHOWN

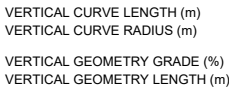
IG

LAB / IG

MC

10/09/2021

Drawing No:	Rev. No:
5941 ENG OPW2 433	B



DATUM RL = 10.200

[illegible]

LONGITUDINAL SECTION - AMGROW DAM OVERFLOW DRAIN

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

HIGHLANDS STREET CROSS
SECTIONS SHEET 1 OF 9

C	19/07/22	SEWER LINE UPDATED	LAB	MG
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES

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

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

Scale at A1: AS SHOWN

Designed: IG

Drafted: LAB / IG

Approved: MG

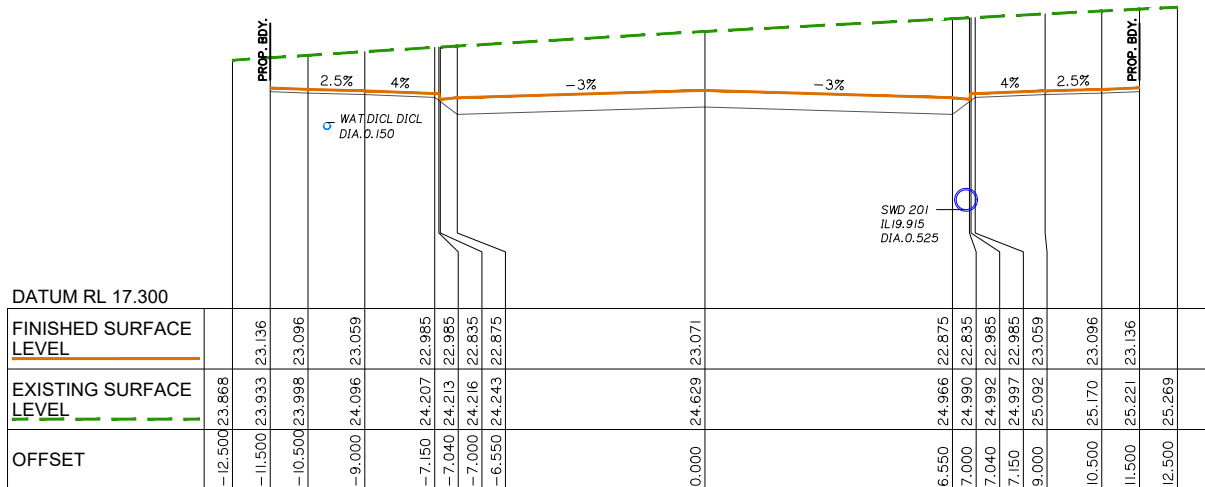
RPEQ: 16939

Signed:

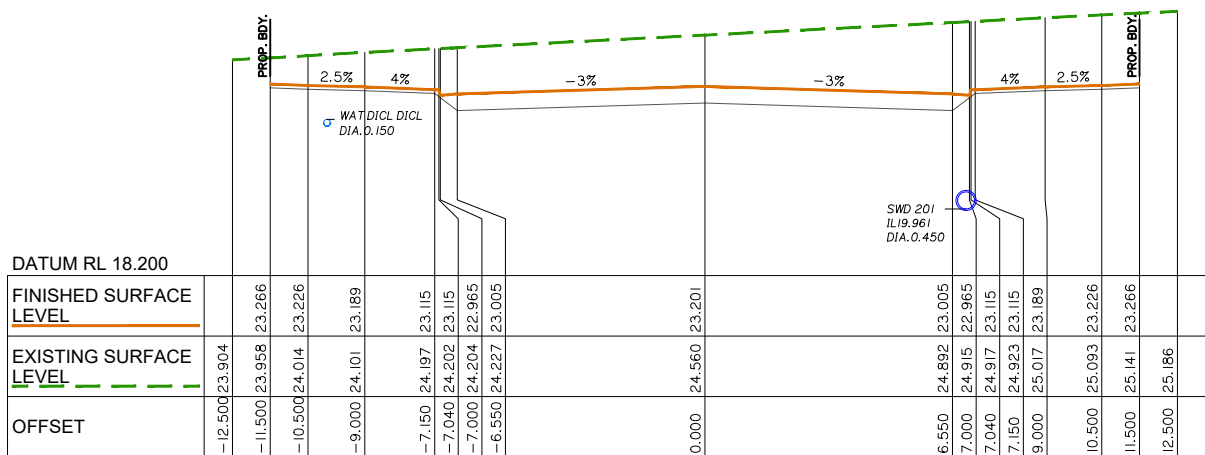
Date: 05/07/2022

Drawing No:
5941 ENG OPW2 450

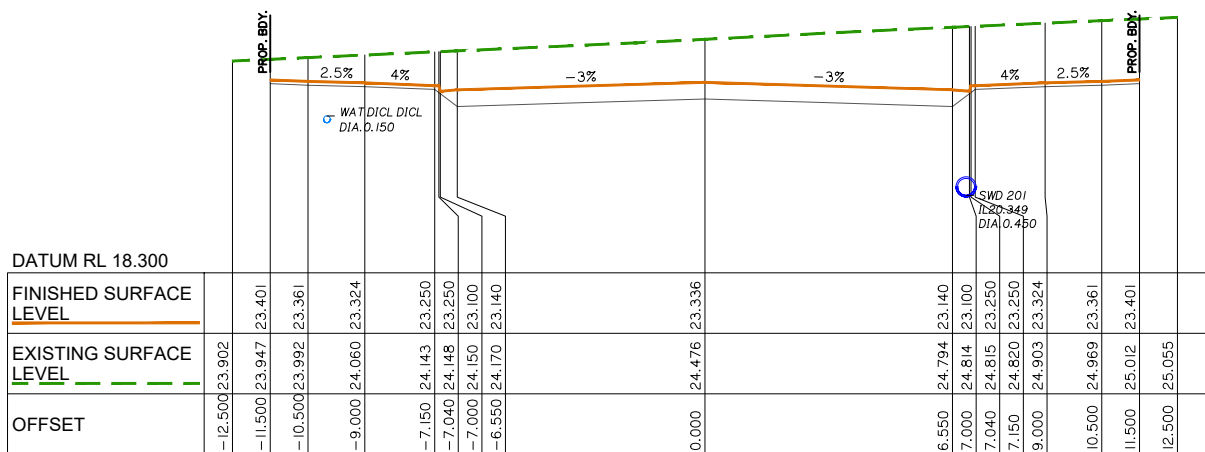
Rev. No:
C



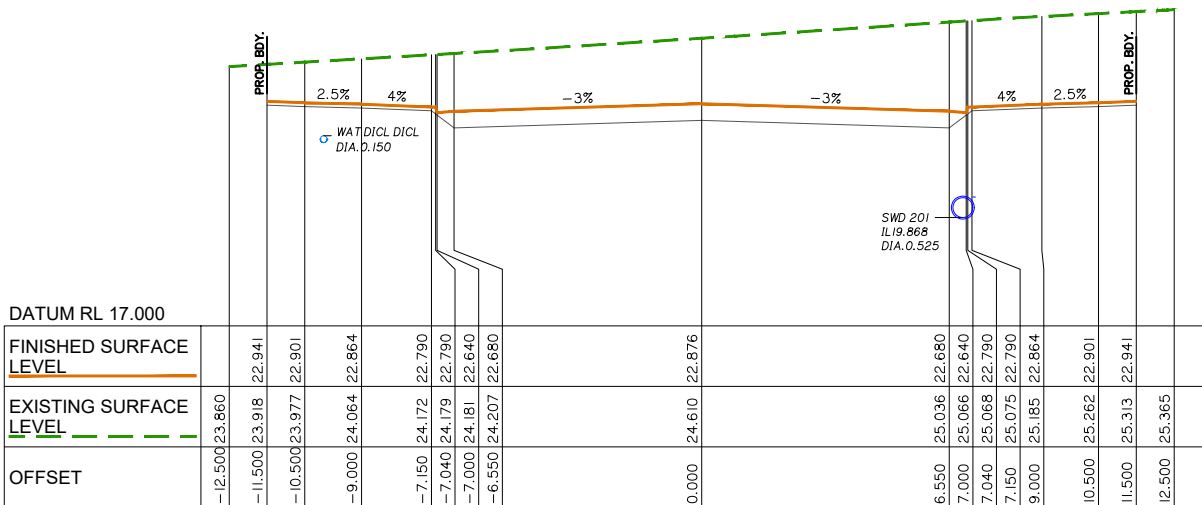
CH 50.000



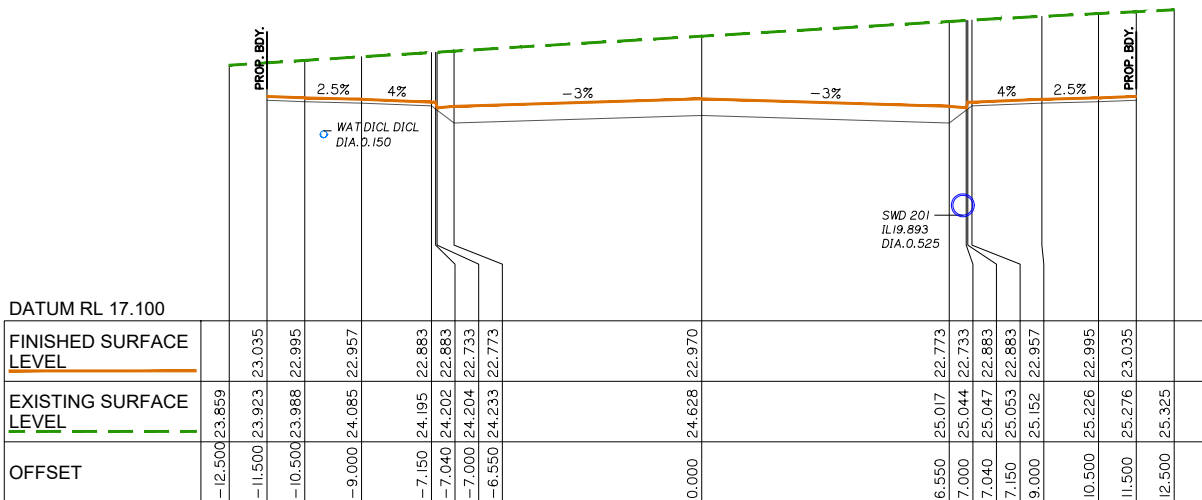
CH 40.000



CH 31.436



CH 70.000



CH 60.000

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

HIGHLANDS STREET CROSS
SECTIONS SHEET 2 OF 9

C	19/07/22	SEWER LINE UPDATED	LAB	MG
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES

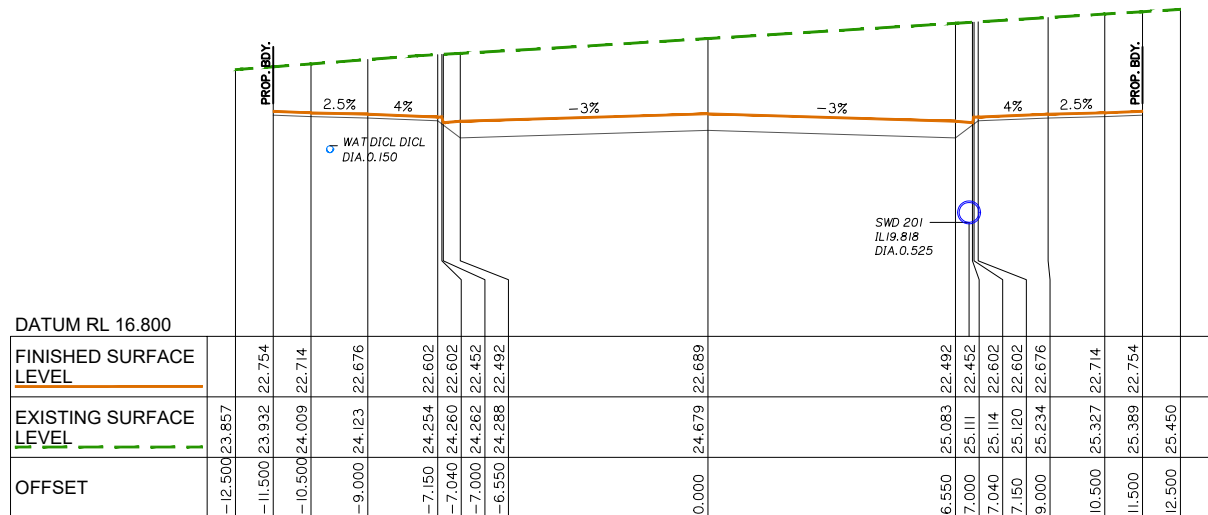
HORZ: Scale 1:100 - Lengths are in Metres.

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

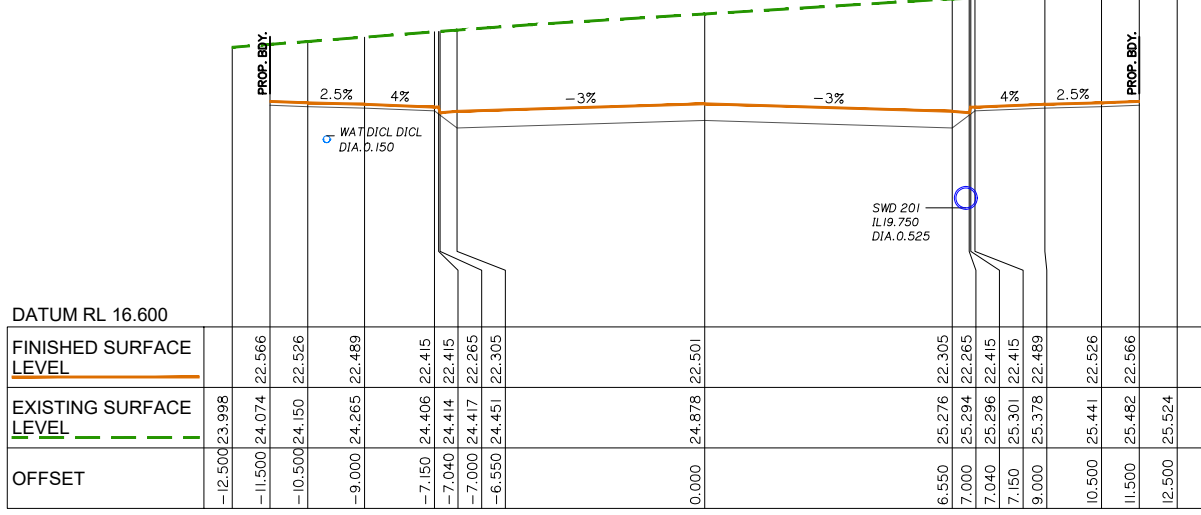
Scale at A1: AS SHOWN

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	05/07/2022

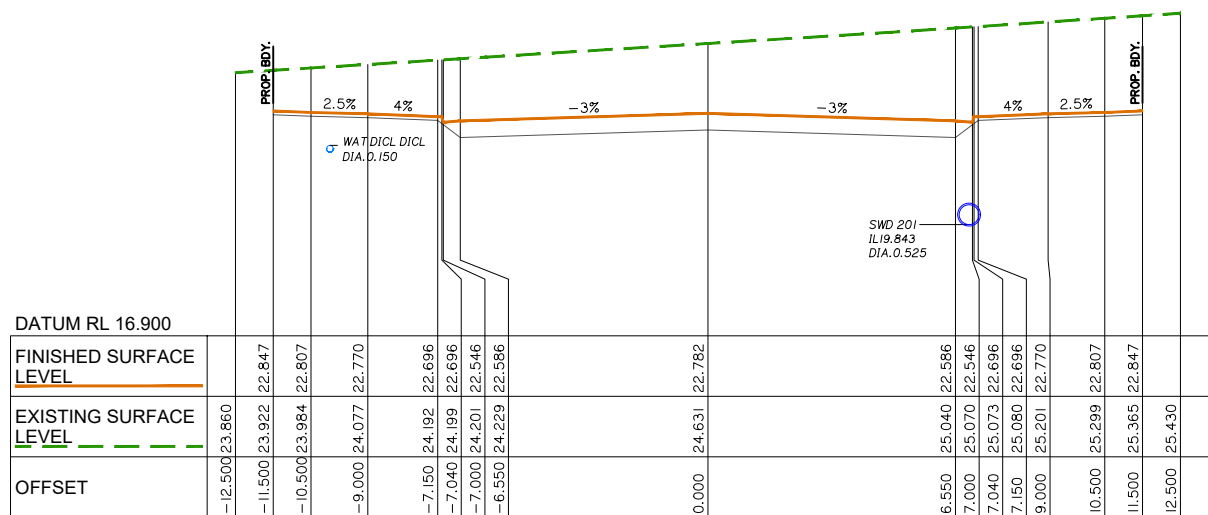
Drawing No: 5941 ENG OPW2 451
Rev. No: C



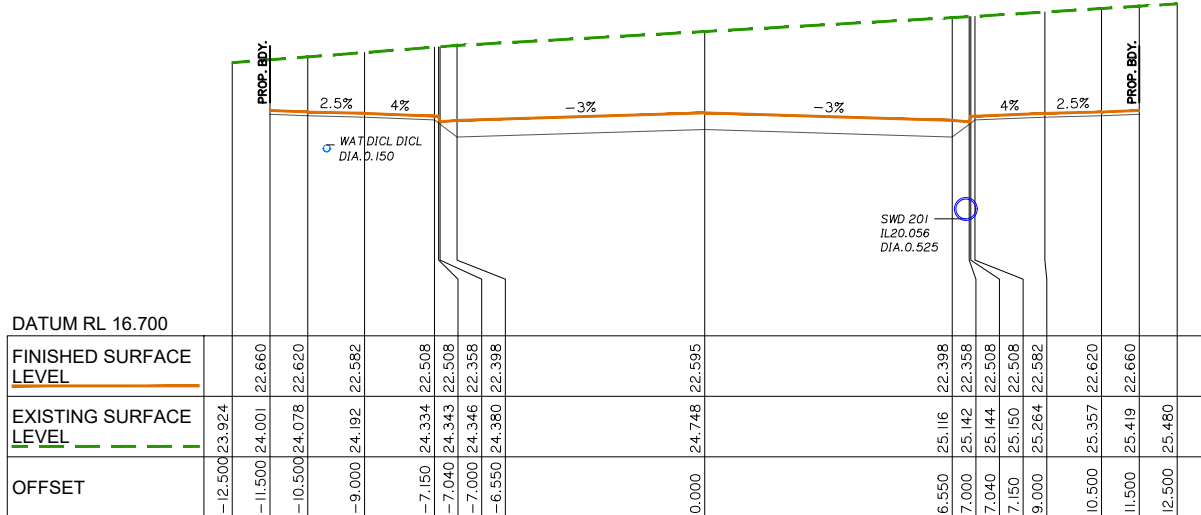
CH 90.000



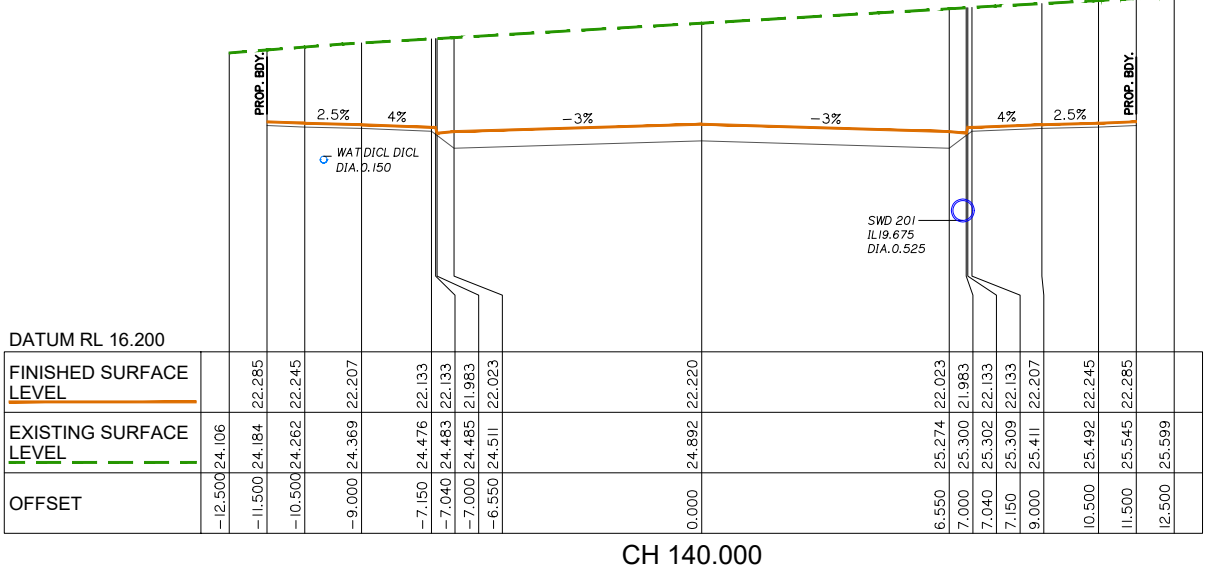
CH 110.000

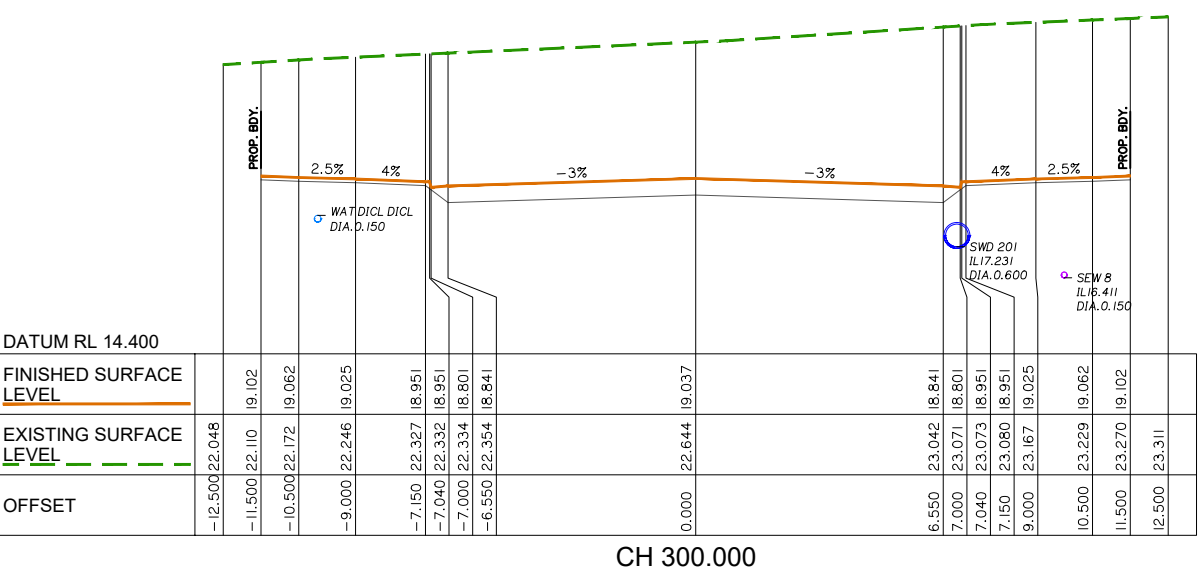


CH 80.000



CH 100.000





Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives

All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

HIGHLANDS STREET CROSS
SECTIONS SHEET 8 OF 9

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES

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

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

Scale at A1: AS SHOWN

Designed: IG

Drafted: LAB / IG

Approved: MG

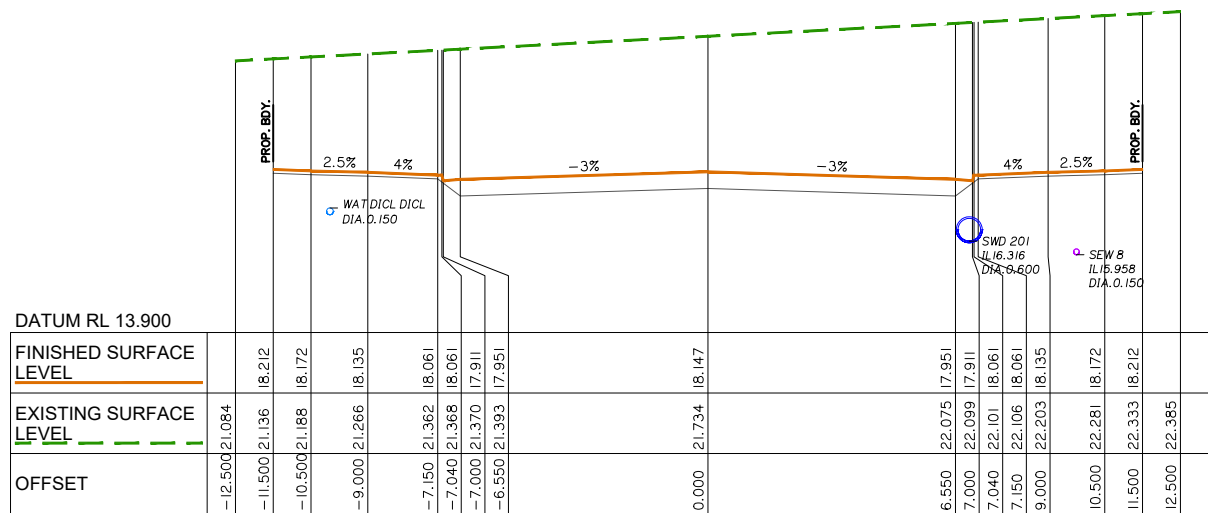
RPEQ: 16939

Signed:

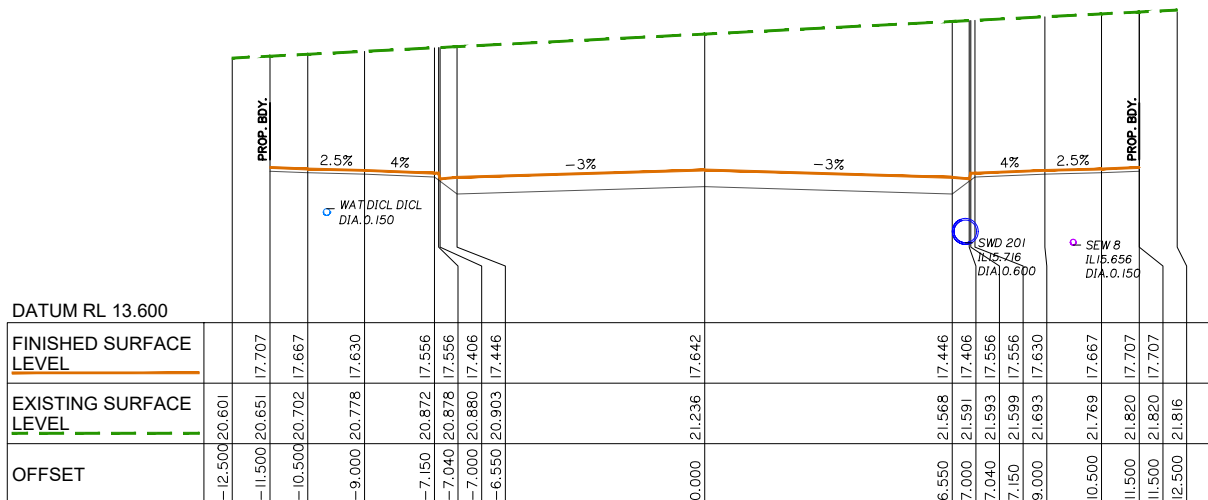
Date: 10/09/2021

Drawing No:
5941 ENG OPW2 457

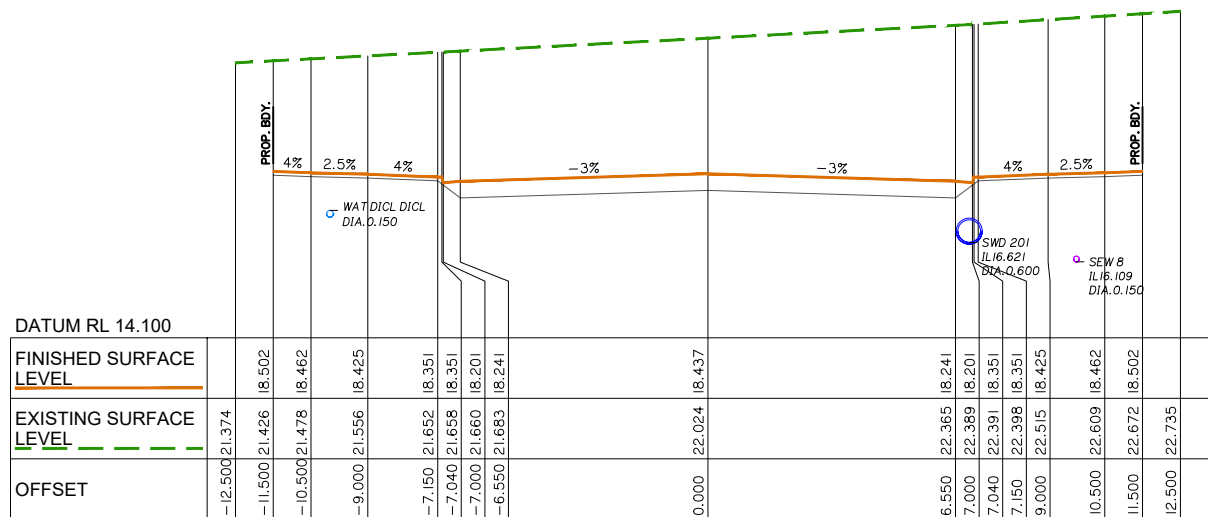
Rev. No:
B



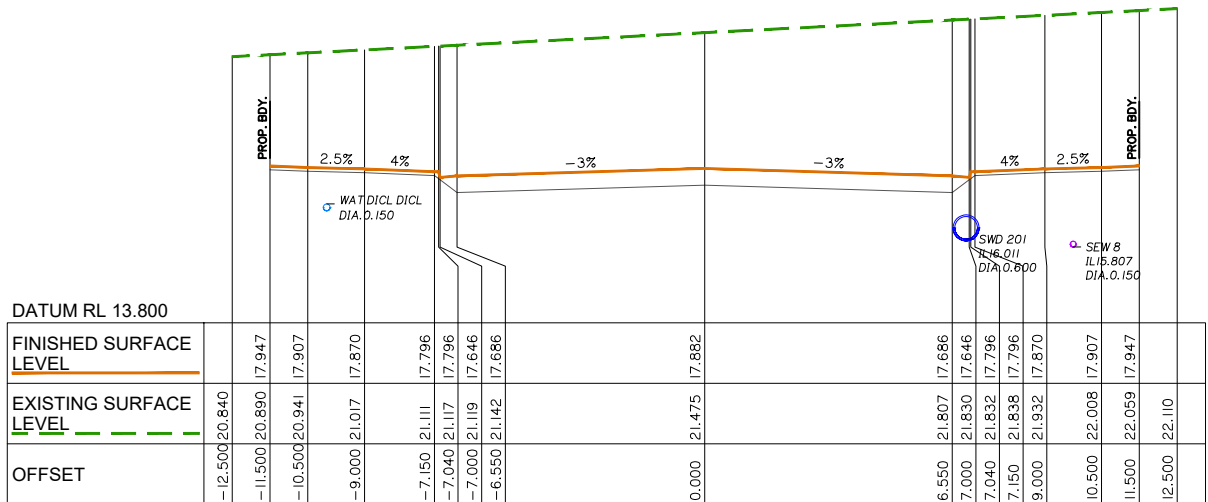
CH 330.000



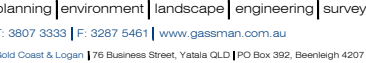
CH 350.000



CH 320.000



CH 340.000



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

VANTAGE YATALA STAGE 2

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

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

ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

FAIRWAY STREET CROSS
SECTIONS SHEET 4 OF 4

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	
Issue	Date	Description	DRN	CH-K	

HORZ:

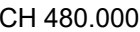
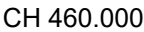
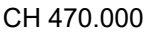
HORZ:

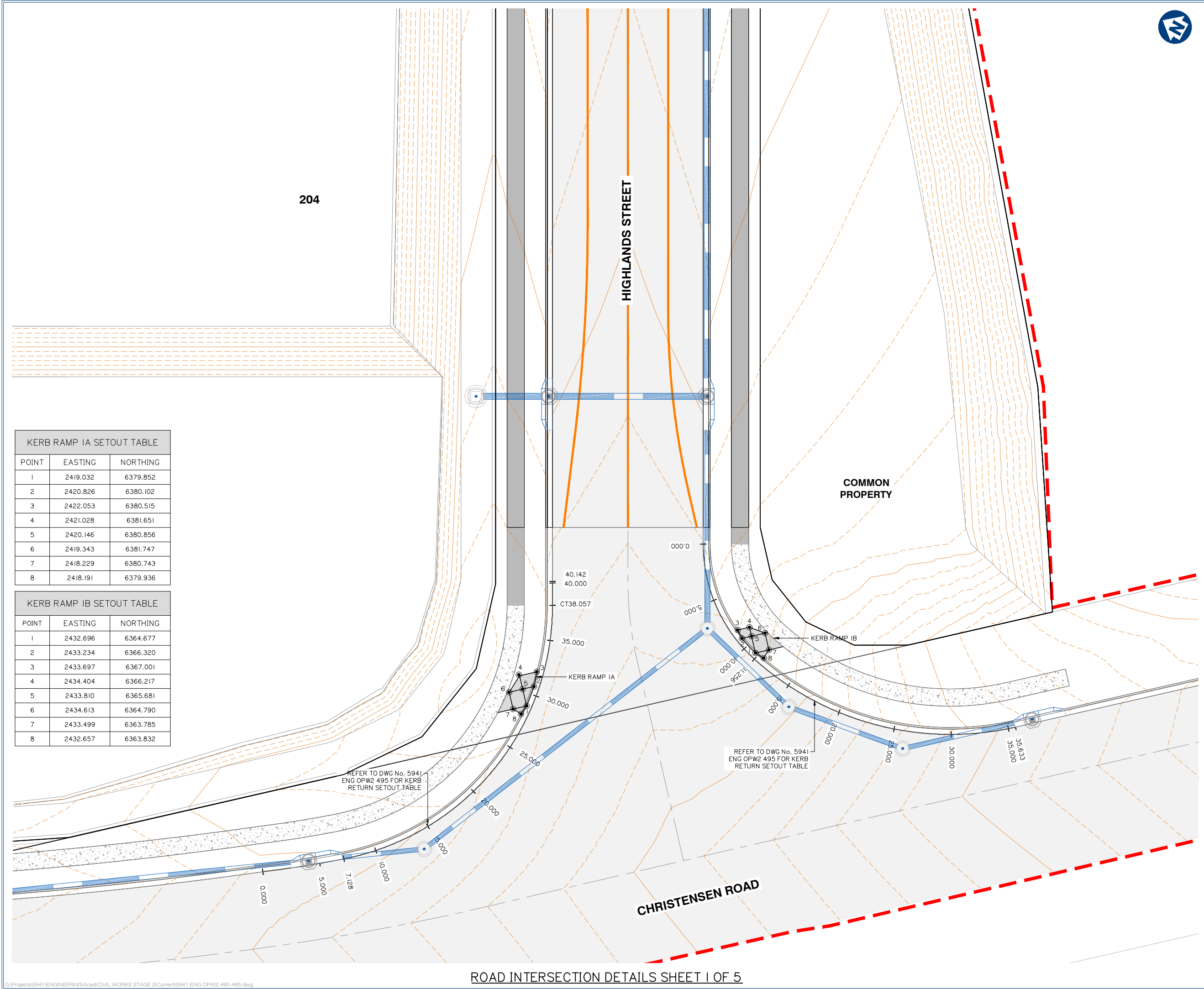
VERT: 

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No:	Rev. No:
5941 ENG OPW2 462	B





KERB RAMP IA SETOUT TABLE		
POINT	EASTING	NORTHING
1	2419.032	6379.852
2	2420.826	6380.102
3	2422.053	6380.515
4	2421.028	6381.651
5	2420.146	6380.856
6	2419.343	6381.747
7	2418.229	6380.743
8	2418.191	6379.936

KERB RAMP IB SETOUT TABLE		
POINT	EASTING	NORTHING
1	2432.696	6364.677
2	2433.234	6366.320
3	2433.697	6367.001
4	2434.404	6366.217
5	2433.810	6365.681
6	2434.613	6364.790
7	2433.499	6363.785
8	2432.657	6363.832



planning | environment | landscape | engineering | survey
T: 3807 3333 | F: 3287 5461 | www.gassman.com.au
Gold Coast & Logan | 176 Business Street, Yatala QLD | PO Box 392, Beenleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:
VANTAGE YATALA
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
NOT FOR CONSTRUCTION

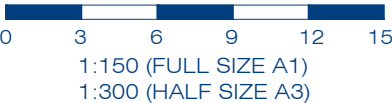
©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
ROAD INTERSECTION
DETAILS SHEET 1 OF 5

Issue	Date	Description	LAB	MG	DRN	CHK
D	19/07/22	LOT NUMBER UPDATED	LAB	MG		
C	28/11/21	ISSUED FOR CONSTRUCTION	LAB	MG		
C	09/11/21	KERB RAMP LOCATION AMENDED	JH	MG		
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG		
A	30/07/21	ORIGINAL ISSUE	LAB	MG		

SCALE IN METRES



Scale at A1: 1:150

Designed: IG

Drafted: LAB / IG

Approved: MG

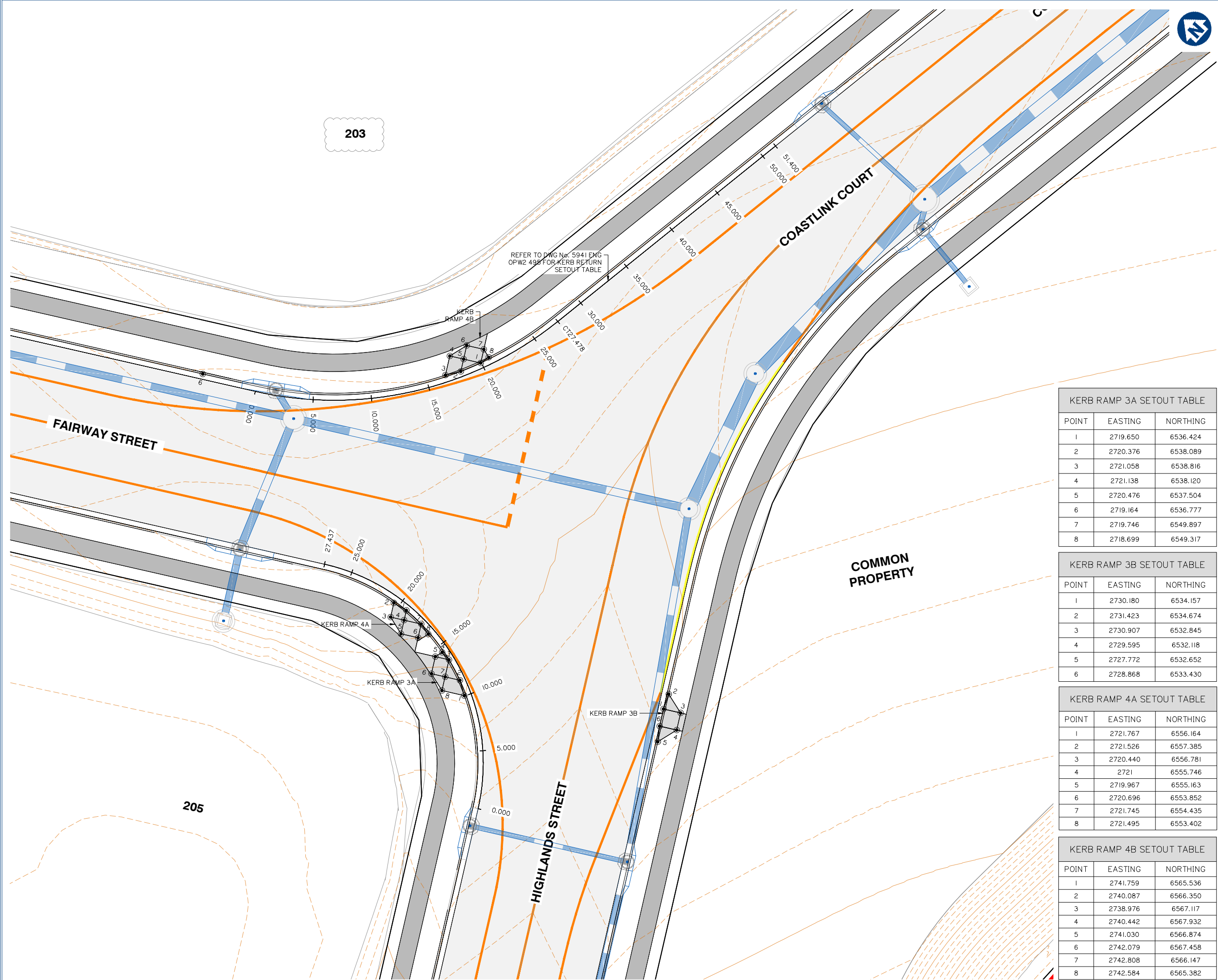
RPEQ: 16939

Signed: 
Date: 05/07/2022

Drawing No: 5941 ENG OPW2 490 Rev. No: D



KERB RAMP 2B SETOUT TABLE		
POINT	EASTING	NORTHING
1	2591.596	6457.209
2	2591.081	6455.380
3	2589.769	6454.653
4	2587.946	6455.186
5	2589.042	6455.965
6	2590.354	6456.692



Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

ROAD INTERSECTION
DETAILS SHEET 3 OF 5

Issue	Date	Description	LAB	MG	LAB	MG	LAB	MG
D	19/07/22	LOT NUMBER UPDATED	LAB	MG				
C	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG				
C	09/11/21	KERB RAMP LOCATION AMENDED	JH	MG				
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG				
A	30/07/21	ORIGINAL ISSUE	LAB	MG				

SCALE IN METRES



1:150 (FULL SIZE A1)
1:300 (HALF SIZE A3)

Scale at A1:

1:150

Designed:

IG

Drafted:

LAB / IG

Approved:

MG

RPEQ:

16939

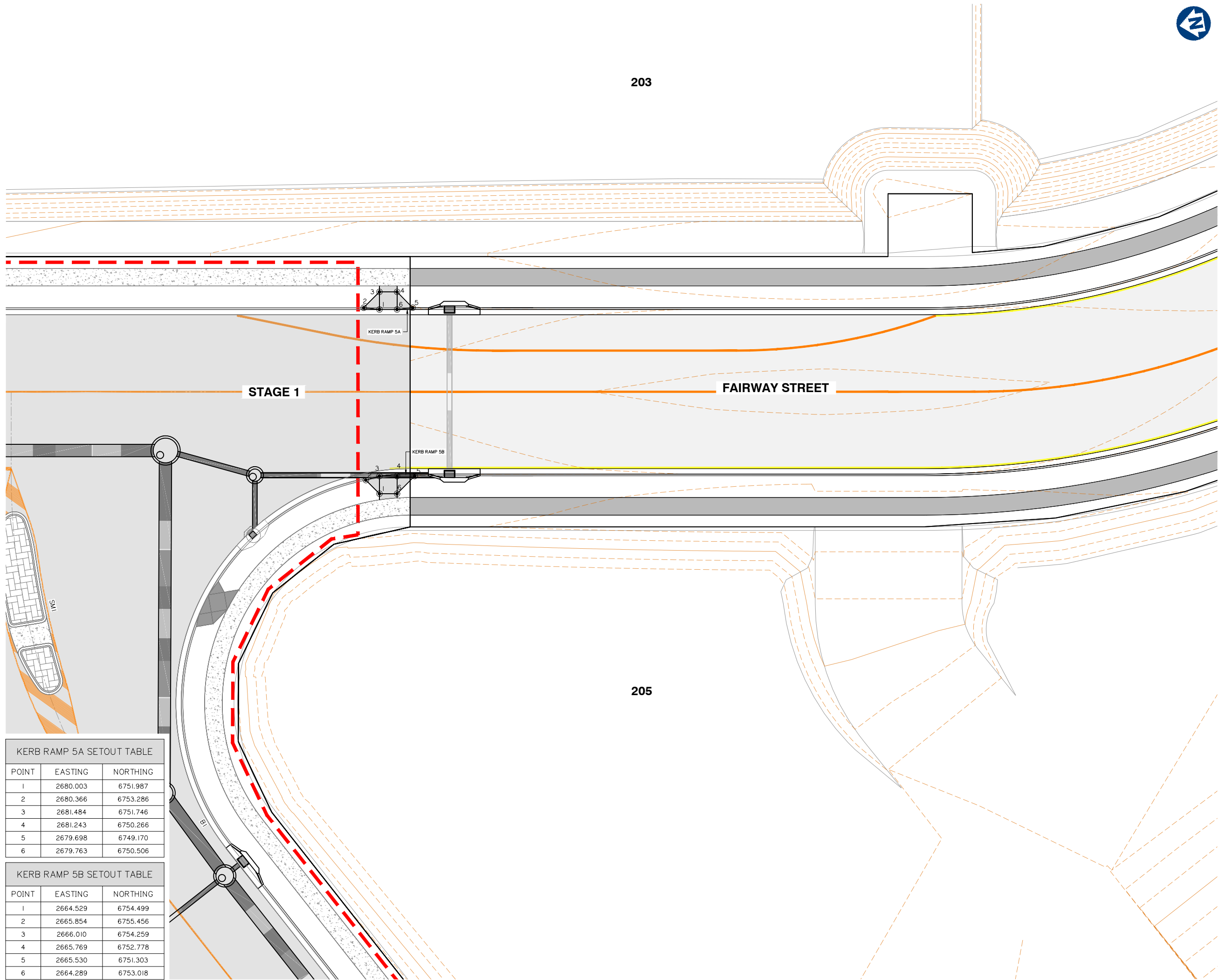
Signed:

Date:

05/07/2022

Drawing No:
5941 ENG OPW2 492

Rev. No:
D



KERB RAMP 5A SETOUT TABLE		
POINT	EASTING	NORTHING
1	2680.003	6751.987
2	2680.366	6753.286
3	2681.484	6751.746
4	2681.243	6750.266
5	2679.698	6749.170
6	2679.763	6750.506

KERB RAMP 5B SETOUT TABLE		
POINT	EASTING	NORTHING
1	2664.529	6754.499
2	2665.854	6755.456
3	2666.010	6754.259
4	2665.769	6752.778
5	2665.530	6751.303
6	2664.289	6753.018



Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be
reproduced or transmitted in any form or by any means,
electronic, mechanical, photocopying, recording, or
otherwise, without the written permission of Gassman
Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

ROAD INTERSECTION
DETAILS SHEET 4 OF 5

Issue	Date	Description	LAB	MG
C	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
C	09/11/21	KERB RAMP LOCATION AMENDED	JH	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	MG

SCALE IN METRES



1:150 (FULL SIZE A1)
1:300 (HALF SIZE A3)

Scale at A1: 1:150

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No: 5941 ENG OPW2 493 Rev. No: C



**FRASERS
PROPERTY**
FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

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

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

© 2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

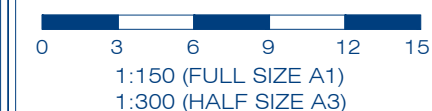
ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

ROAD INTERSECTION
DETAILS SHEET 5 OF 5

[illegible]

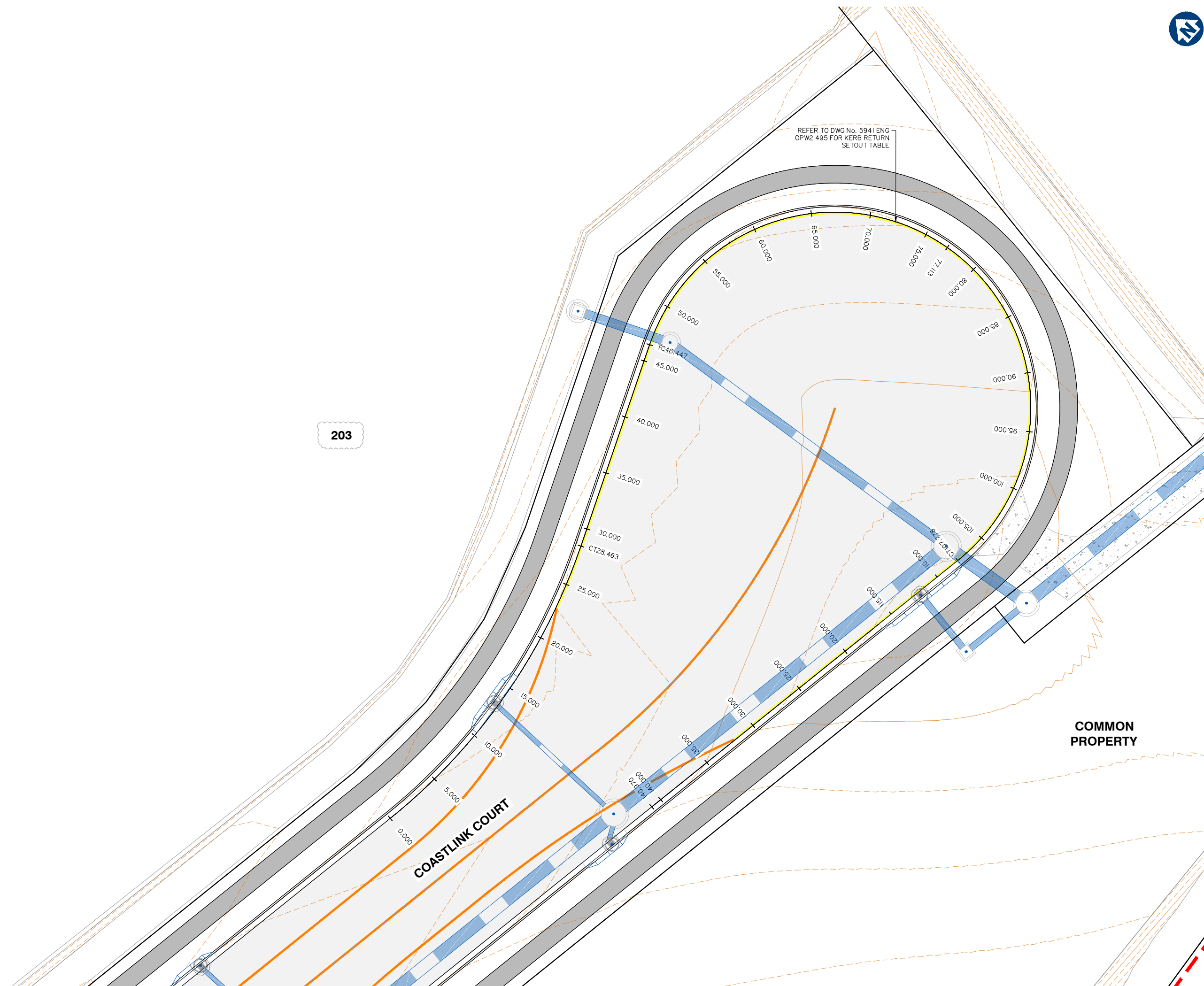
SCALE IN METRES



Scale at A1:	1:150
--------------	-------

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	05/07/2022

Drawing No:	Rev. No:
5941 ENG OPW2 494	D



CHRISTENSEN ROAD TO HIGHLANDS STREET KERB RETURN (LOK) – SETOUT TABLE								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	2395.317	6392.916	22.778	144°00'36.62"			
IP 2	3.564	2397.412	6390.031	22.788		R = –100.578	7.128	4°03'37.76"
	5.000	2398.354	6388.945	22.797	141°09'42.62"			
CC	7.128	2399.706	6387.301	22.818	139°56'58.86"			
	10.000	2401.690	6385.227	22.857	132°37'10.18"			
	15.000	2405.714	6382.277	22.955	119°51'31.47"			
	20.000	2410.291	6380.289	23.094	107°05'52.76"			
IP 3	22.593	2411.601	6373.151	23.168		R = –22.450	30.929	78°56'11.86"
	25.000	2415.193	6379.361	23.222	94°20'14.05"			
	30.000	2420.180	6379.539	23.286	81°34'35.34"			
	35.000	2425.004	6380.814	23.288	68°48'56.63"			
CT	38.057	2427.771	6382.109	23.257	61°00'47.00"			
	40.000	2429.470	6383.051	23.226	61°00'47.00"			
IP 4	40.142	2429.594	6383.120	23.223	61°00'47.00"			

HIGHLANDS STREET TO CHRISTENSEN ROAD KERB RETURN (LOK) – SETOUT TABLE								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	2438.775	6373.230	23.165	241°00'47.00"			
	5.000	2434.946	6370.059	23.291	219°42'48.63"			
IP 2	5.628	2433.543	6370.331	23.313		R = –13.450	11.256	47°56'57.35"
	10.000	2432.532	6365.713	23.500	198°24'50.27"			
CC	11.256	2432.191	6364.505	23.566	193°03'49.65"			
	15.000	2431.615	6360.809	23.792	184°38'05.10"			
	20.000	2431.702	6355.817	24.153	173°22'41.57"			
IP 3	23.445	2429.204	6351.632	24.382		R = –25.450	24.377	54°52'52.15"
	25.000	2432.761	6350.939	24.476	162°07'18.03"			
	30.000	2434.752	6346.361	24.737	150°51'54.49"			
	35.000	2437.599	6342.260	24.937	139°36'30.95"			
IP 4	35.633	2438.015	6341.783	24.958	138°10'57.50"			

HIGHLANDS STREET TO FAIRWAY STREET KERB RETURN (LOK) – SETOUT TABLE								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	2713.236	6540.260	17.423	61°00'47.00"			
	5.000	2717.205	6543.273	17.273	44°35'45.34"			
	10.000	2720.161	6547.284	17.048	28°10'43.67"			
IP 2	13.719	2728.523	6548.730	16.832		R = –17.450	27.437	90°05'17.29"
	15.000	2721.863	6551.967	16.754	11°45'42.01"			
	20.000	2722.172	6556.941	16.504	355°20'40.35"			
	25.000	2721.063	6561.799	16.345	338°55'38.68"			
IP 3	27.437	2720.031	6564.004	16.300	330°55'29.71"			

FAIRWAY STREET TO HIGHLANDS STREET KERB RETURN (LOK) – SETOUT TABLE								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	2727.075	6578.293	16.247	150°55'29.71"			
	5.000	2729.852	6574.141	16.243	141°31'00.28"			
	10.000	2733.270	6570.500	16.259	132°06'30.85"			
IP 2	13.739	2734.245	6565.398	16.282		R = –30.450	27.478	51°42'14.22"
	15.000	2737.237	6567.466	16.293	122°42'01.43"			
	20.000	2741.647	6565.122	16.346	113°17'32.00"			
	25.000	2746.381	6563.530	16.417	103°53'02.58"			
CT	27.478	2748.808	6563.033	16.457	99°13'15.49"			
	30.000	2751.297	6562.629	16.492	99°13'15.49"			
	35.000	2756.233	6561.828	16.540	99°13'15.49"			
	40.000	2761.168	6561.027	16.562	99°13'15.49"			
	45.000	2766.104	6560.226	16.559	99°13'15.49"			
	50.000	2771.039	6559.424	16.529	99°13'15.49"			
IP 3	51.400	2772.421	6559.200	16.516	99°13'15.49"			

COASTLINK COURT CUL–DE–SAC (LOK) – SETOUT TABLE								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	2797.731	6555.091	16.260	99°13'15.49"			
	5.000	2802.698	6554.536	16.200	93°32'32.99"			
	10.000	2807.696	6554.474	16.167	87°51'50.49"			
IP 2	14.232	2812.164	6552.748	16.161		R = –50.450	28.463	32°19'31.28"
	15.000	2812.675	6554.908	16.162	82°11'07.99"			
	20.000	2817.587	6555.832	16.183	76°30'25.49"			
	25.000	2822.383	6557.237	16.213	70°49'42.99"			
CT	28.463	2825.612	6558.486	16.234	66°53'44.21"			
	30.000	2827.026	6559.089	16.243	66°53'44.21"			
	35.000	2831.625	6561.051	16.273	66°53'44.21"			
	40.000	2836.224	6563.013	16.303	66°53'44.21"			
	45.000	2840.823	6564.975	16.333	66°53'44.21"			
TC	46.447	2842.154	6565.543	16.342	66°53'44.21"			
	50.000	2845.546	6566.577	16.363	79°11'40.66"			
	55.000	2850.523	6566.764	16.393	96°30'16.32"			
	60.000	2855.331	6565.461	16.423	113°48'51.97"			
IP 3	61.780	2862.415	6574.187	16.433		R = 16.550	30.665	106°09'45.64"
	65.000	2859.534	6562.787	16.441	131°07'27.62"			
	70.000	2862.750	6558.984	16.427	148°26'03.27"			
	75.000	2864.689	6554.396	16.379	165°44'38.92"			
CC	77.113	2865.077	6552.321	16.348	173°03'29.85"			
	80.000	2865.175	6549.439	16.297	183°03'14.57"			
	85.000	2864.164	6544.561	16.182	200°21'50.22"			
	90.000	2861.748	6540.206	16.045	217°40'25.88"			
IP 4	92.445	2867.740	6530.455	15.978		R = 16.550	30.665	106°09'45.64"
	95.000	2858.145	6536.766	15.907	234°59'01.53"			
	100.000	2853.682	6534.554	15.770	252°17'37.18"			
	105.000	2848.763	6533.771	15.635	269°36'12.83"			
CT	107.778	2845.997	6533.984	15.584	279°13'15.49"			
	110.000	2843.803	6534.340	15.562	279°13'15.49"			
	115.000	2838.868	6535.142	15.572	279°13'15.49"			
	120.000	2833.933	6535.943	15.664	279°13'15.49"			
	125.000	2828.997	6536.744	15.779	279°13'15.49"			
	130.000	2824.062	6537.545	15.894	279°13'15.49"			
	135.000	2819.126	6538.346	15.998	279°13'15.49"			
	140.000	2814.191	6539.148	16.071	279°13'15.49"			
IP 5	140.970	2813.233	6539.303	16.081	279°13'15.49"			



planning | environment | landscape | engineering | survey
T: 3807 3333 | F: 3287 5461 | www.gassman.com.au
Gold Coast & Logan | 176 Business Street, Yatala QLD | PO Box 392, Beenleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

ROAD INTERSECTION
SETOUT TABLES

B	26/11/21	ISSUED FOR CONSTRUCTION			LAB MG
B	10/09/21	INFORMATION REQUEST RESPONSE			LAB MG
A	30/07/21	ORIGINAL ISSUE			LAB MG
Issue	Date	Description			DRN CHK

SCALE NOT
APPLICABLE

Scale at A1: N.T.S

Designed: IG

Drafted: LAB / IG

Approved: MG

RPEQ: 16939

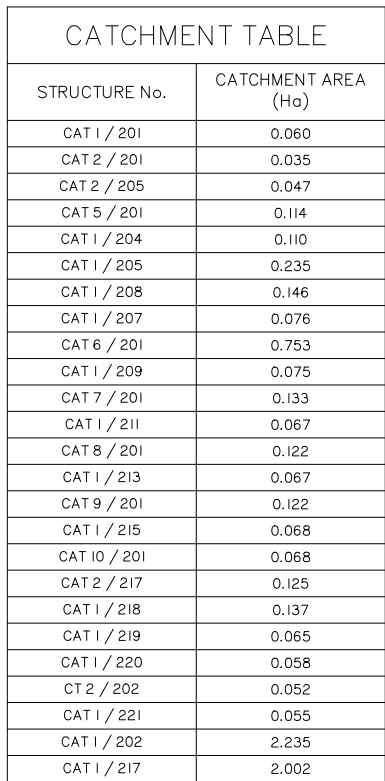
Signed:

Date: 10/09/2021

Drawing No:
5941 ENG OPW2 495

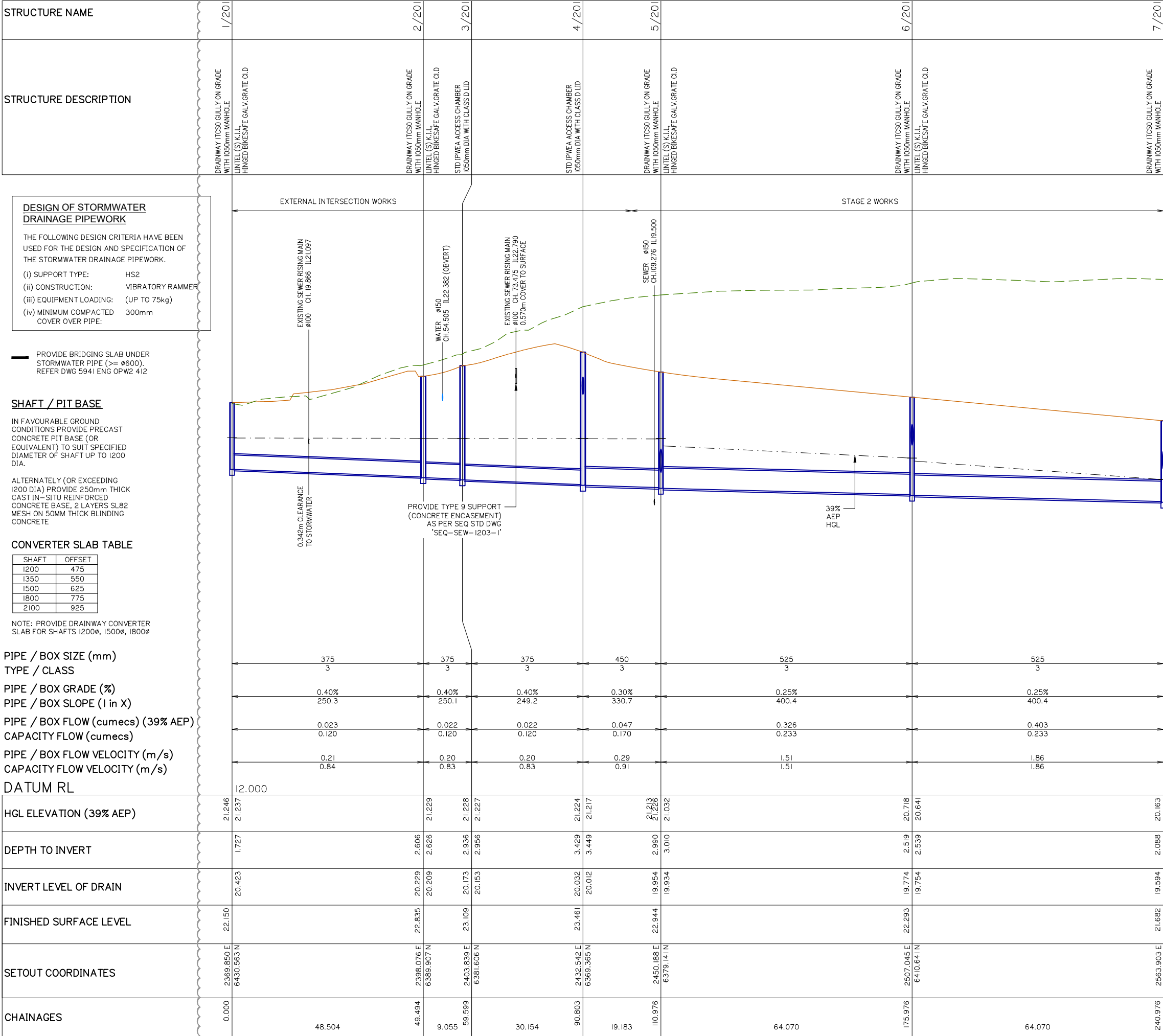
Rev. No:
B

ROAD INTERSECTION SETOUT TABLES



CATCHMENT TABLE	
STRUCTURE NO.	CATCHMENT AREA (Ha)
CAT 2 / 223	0.074
CAT 1 / 223	0.297
CAT 1 / 222	0.016
CAT 2 / 225	0.038
CAT 2 / 228	0.308
CAT 1 / 224	0.055
CAT 1 / 228	0.210
CAT 1 / 236	0.172
CAT 17 / 201	0.022
CAT 18 / 201	0.020
CAT 19 / 201	0.017
CAT 20 / 201	0.018
CAT 1 / 235	0.947
CAT 1 / 234	0.262
CAT 1 / 239	2.180
CAT 1 / 206	2.075
CAT 1 / 230	2.279
CAT 1 / 232	1.947
CAT 20 / X2	0.062
CAT 21/ X2	0.066
CAT 22 / X2	0.049
CAT 23 / X2	0.052
CAT 1 / 231	4.914
CAT 1 / 233	3.878
CAT 2 / X2	1.927

Drawing No:	Rev. No:
5941 ENG OPW2 500	C



STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 1 OF 14

C	26/06/22	LINE 201 AND 204 UPDATED	JH	MG	
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES

Scale 1:500 - Lengths are in Metres.

HORIZ: 0 5 10 15 20 25 30 35 40

Scale 1:50 - Lengths are in Metres.

VERT: 0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 3 OF 14

LINE202



G:\Projects\5941\ENGINEERING\Acad\CIVIL WORKS STAGE 2\Current\5941 ENG OPW2 510.dwg

STRUCTURE NAME	1/223
STRUCTURE DESCRIPTION	STD IPWEA ACCESS CHAMBER 1200mm DIA WITH CONVERTOR SLAB AND 900x900 FI WITH GALV. GRATE CI. D

DESIGN OF STORMWATER DRAINAGE PIPEWORK

THE FOLLOWING DESIGN CRITERIA HAVE BEEN USED FOR THE DESIGN AND SPECIFICATION OF THE STORMWATER DRAINAGE PIPEWORK.

- (i) SUPPORT TYPE: HS2
(ii) CONSTRUCTION: VIBRATORY RAMMER
(iii) EQUIPMENT LOADING: (UP TO 75kg)
(iv) MINIMUM COMPACTED COVER OVER PIPE: 300mm

PROVIDE BRIDGING SLAB UNDER STORMWATER PIPE ($\geq \phi 600$). REFER DWG 5941 ENG OPW2 412

SHAFT / PIT BASE

IN FAVOURABLE GROUND CONDITIONS PROVIDE PRECAST CONCRETE PIT BASE (OR EQUIVALENT) TO SUIT SPECIFIED DIAMETER OF SHAFT UP TO 1200 DIA.

ALTERNATELY (OR EXCEEDING 1200 DIA) PROVIDE 250mm THICK CAST IN-SITU REINFORCED CONCRETE BASE, 2 LAYERS SL82 MESH ON 50MM THICK BLINDING CONCRETE

CONVERTER SLAB TABLE

SHAFT	OFFSET
1200	475
1350	550
1500	625
1800	775
2100	925

NOTE: PROVIDE DRAINWAY CONVERTER SLAB FOR SHAFTS 1200 ϕ , 1500 ϕ , 1800 ϕ

PIPE / BOX SIZE (mm)
TYPE / CLASS
PIPE / BOX GRADE (%)
PIPE / BOX SLOPE (1 in X)
PIPE / BOX FLOW (cumecs) (39% AEP)
CAPACITY FLOW (cumecs)
PIPE / BOX FLOW VELOCITY (m/s)
CAPACITY FLOW VELOCITY (m/s)

DATUM RL

HGL ELEVATION (39% AEP)	15.531	15.382	15.271	15.193	15.105	14.306	14.261
DEPTH TO INVERT	1.574	1.574	1.306	1.421	1.508	3.331	
INVERT LEVEL OF DRAIN	15.187	15.187	15.124	15.009	14.983	13.160	
FINISHED SURFACE LEVEL	16.761		16.430		16.491		
SETOUT COORDINATES	2774.537 E 6538.848 N		2775.545 E 6545.057 N		2777.552 E 6546.666 N		
CHAINAGES	0.000	5.423	6.290	1.246	9.003		

LINE223

STRUCTURE NAME	1/224
STRUCTURE DESCRIPTION	STD IPWEA ACCESS CHAMBER 1200mm DIA WITH CONVERTOR SLAB AND 900x900 FI WITH GALV. GRATE CI. D

LINE224

STRUCTURE NAME	1/225
STRUCTURE DESCRIPTION	STD IPWEA ACCESS CHAMBER 1200mm DIA WITH CONVERTOR SLAB AND 900x900 FI WITH GALV. GRATE CI. D

LINE225

STRUCTURE NAME	1/226
STRUCTURE DESCRIPTION	STD IPWEA ACCESS CHAMBER 1200mm DIA WITH CONVERTOR SLAB AND 900x900 FI WITH GALV. GRATE CI. D

LINE226

STRUCTURE NAME	1/228
STRUCTURE DESCRIPTION	STD IPWEA ACCESS CHAMBER 1500mm DIA WITH CONVERTOR SLAB AND 900x900 FI WITH GALV. GRATE CI. D

LINE228

STRUCTURE NAME	1/229
STRUCTURE DESCRIPTION	STD IPWEA ACCESS CHAMBER 1800mm DIA WITH CONVERTOR SLAB AND 1200x1200 FI WITH GALV. GRATE CI. D

LINE229

STRUCTURE NAME	1/230
STRUCTURE DESCRIPTION	STD IPWEA ACCESS CHAMBER 2100mm DIA WITH CONVERTOR SLAB AND 900x900 FI WITH GALV. GRATE CI. D

LINE230

STRUCTURE NAME	1/231
STRUCTURE DESCRIPTION	STD IPWEA ACCESS CHAMBER 2100mm DIA WITH CONVERTOR SLAB AND 900x900 FI WITH GALV. GRATE CI. D

LINE231

STRUCTURE NAME	1/232
STRUCTURE DESCRIPTION	STD IPWEA ACCESS CHAMBER 2100mm DIA WITH CONVERTOR SLAB AND 900x900 FI WITH GALV. GRATE CI. D

LINE232

STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 6 OF 14



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, Beenleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives

All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 6 OF 14

C	19/07/22	STORMWATER UPDATES	JH	MG
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES

Scale 1:500 - Lengths are in Metres.

HORIZ: 0 5 10 15 20 25 30 35 40

Scale 1:50 - Lengths are in Metres.

VERT: 0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No:
5941 ENG OPW2 515

Rev. No:
C

LINEX2

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD

Project:

VANTAGE YATALA 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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives

All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 9 OF 14

C	19/07/22	STORMWATER UPDATES	JH	MC	
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MC	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MC	
A	30/07/21	ORIGINAL ISSUE	LAB	MC	
Issue	Date	Description	DRN	CH	

SCALE IN METRES

HORZ:  Scale 1:500 - Lengths are in Metres.

VERT: 

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No:	Rev. No:
5941 ENG OPW2 518	C

LINEX2

STORMWATER LONGITUDINAL SECTIONS SHEET 10 OF 14

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA 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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives

All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 10 OF 14

C	19/07/22	STORMWATER UPDATES	JH	MC	
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MC	
B	1/10/02/1	INFORMATION REQUEST RESPONSE	LAB	MC	
A	30/07/21	ORIGINAL ISSUE	LAB	MC	
Issue	Date	Description	DRN	CH	

SCALE IN METRES

Scale 1:500 - Lengths are in Metres

HORZ:

VERT: 

Scale at A1: AS SHOWN

Designed:	IG
-----------	----

Drafted:	LAB / IG
----------	----------

Approved:	MG
-----------	----

RPEQ:	16939
-------	-------

Signed:	
---------	---

Date:	10/09/2021
-------	------------

Drawing No:
5941 ENG OPW2 519

Rev. No:
C

STRUCTURE NAME	20 / X2	21 / X2	22 / X2	23 / X2
STRUCTURE DESCRIPTION	STD IPWEA ACCESS CHAMBER 2100mm DIA WITH CONVERTOR SLAB AND 900x900 FI WITH GALV. GRATE CI. D	STD IPWEA ACCESS CHAMBER 2100mm DIA WITH CONVERTOR SLAB AND 900x900 FI WITH GALV. GRATE CI. D	STD IPWEA ACCESS CHAMBER 2100mm DIA WITH CONVERTOR SLAB AND 900x900 FI WITH GALV. GRATE CI. D	STD IPWEA ACCESS CHAMBER 2100mm DIA WITH CONVERTOR SLAB AND 900x900 FI WITH GALV. GRATE CI. D

DESIGN OF STORMWATER DRAINAGE PIPEWORK

THE FOLLOWING DESIGN CRITERIA HAVE BEEN USED FOR THE DESIGN AND SPECIFICATION OF THE STORMWATER DRAINAGE PIPEWORK.

(i) SUPPORT TYPE:

HS2

(ii) CONSTRUCTION:

VIBRATORY RAMMER

(iii) EQUIPMENT LOADING:

(UP TO 75kg)

(iv) MINIMUM COMPACTED COVER OVER PIPE:

300mm

— PROVIDE BRIDGING SLAB UNDER STORMWATER PIPE (>= Ø600). REFER DWG 5941 ENG OPW2 412

SHAFT / PIT BASE

IN FAVOURABLE GROUND CONDITIONS PROVIDE PRECAST CONCRETE PIT BASE (OR EQUIVALENT) TO SUIT SPECIFIED DIAMETER OF SHAFT UP TO 1200 DIA.

ALTERNATELY (OR EXCEEDING 1200 DIA) PROVIDE 250mm THICK CAST IN-SITU REINFORCED CONCRETE BASE, 2 LAYERS SL82 MESH ON 50MM THICK BLINDING CONCRETE

CONVERTER SLAB TABLE

SHAFT	OFFSET
1200	475
1350	550
1500	625
1800	775
2100	925

NOTE: PROVIDE DRAINWAY CONVERTER SLAB FOR SHAFTS 1200Ø, 1500Ø, 1800Ø

PIPE / BOX SIZE (mm)
TYPE / CLASS
PIPE / BOX GRADE (%)
PIPE / BOX SLOPE (1 in X)
PIPE / BOX FLOW (cumecs) (39% AEP)
CAPACITY FLOW (cumecs)
PIPE / BOX FLOW VELOCITY (m/s)
CAPACITY FLOW VELOCITY (m/s)
DATUM RL

HGL ELEVATION (39% AEP)	14.825 14.771	14.463 14.239	13.727 13.614	13.117 13.080
DEPTH TO INVERT	2.169 2.189	2.213 2.233	2.191 2.211	2.098 2.118
INVERT LEVEL OF DRAIN	13.340 13.320	12.250 12.230	11.583 11.563	11.019 10.999
FINISHED SURFACE LEVEL	15.509	14.463	13.774	13.117
SETOUT COORDINATES	2796.143 E 6792.225 N	2903.824 E 6774.744 N	2985.641 E 6761.461 N	3064.505 E 6748.659 N
CHAINAGES	722.135 106.990	831.225 80.789	914.113 77.797	994.010

LINEX2



planning | environment | landscape | engineering | survey
T: 3807 3333 | F: 3287 5461 | www.gassman.com.au
Gold Coast & Logan | 176 Business Street, Yatala QLD | PO Box 392, Beerleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives

All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 11 OF 14

C	19/07/22	STORMWATER UPDATES	JH	MG	
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES

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

Scale 1:50 - Lengths are in Metres.
VERT: 0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0

Scale at A1: AS SHOWN

Designed: IG

Drafted: LAB / IG

Approved: MG

RPEQ: 16939

Signed:

Date: 10/09/2021

Drawing No:
5941 ENG OPW2 520

Rev. No:
C

LINE 292

STORMWATER LONGITUDINAL SECTIONS SHEET 13 OF 14

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA 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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives

All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 13 OF 14

B	26/11/21	ISSUED FOR CONSTRUCTION			LAB MC
B	10/09/21	INFORMATION REQUEST RESPONSE			LAB MC
A	30/07/21	ORIGINAL ISSUE			LAB MC
Issue	Date	Description			DRN CH

SCALE IN METRES

Scale 1:500 - Lengths are in Metres

HORZ: 

VERT:  Scale 1:50 - Lengths are in Metres.

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No:	Rev. No:
5941 ENG OPW2 522	B

STRUCTURE NAME

293 / 1

STRUCTURE DESCRIPTION

uPVC BEND

DESIGN OF STORMWATER DRAINAGE PIPEWORK

THE FOLLOWING DESIGN CRITERIA HAVE BEEN USED FOR THE DESIGN AND SPECIFICATION OF THE STORMWATER DRAINAGE PIPEWORK.

(i) SUPPORT TYPE:HS2

(ii) CONSTRUCTION:VIBRATORY RAMMER

(iii) EQUIPMENT LOADING:(UP TO 75kg)

(iv) MINIMUM COMPACTED COVER OVER PIPE:300mm

— PROVIDE BRIDGING SLAB UNDER STORMWATER PIPE (>= ø600). REFER DWG 5941 ENG OPW2 412

SHAFT / PIT BASE

IN FAVOURABLE GROUND CONDITIONS PROVIDE PRECAST CONCRETE PIT BASE (OR EQUIVALENT) TO SUIT SPECIFIED DIAMETER OF SHAFT UP TO 1200 DIA.

ALTERNATELY (OR EXCEEDING 1200 DIA) PROVIDE 250mm THICK CAST IN-SITU REINFORCED CONCRETE BASE, 2 LAYERS SL82 MESH ON 50MM THICK BLINDING CONCRETE

CONVERTER SLAB TABLE

SHAFT	OFFSET
1200	475
1350	550
1500	625
1800	775
2100	925

NOTE: PROVIDE DRAINWAY CONVERTER SLAB FOR SHAFTS 1200ø, 1500ø, 1800ø

PIPE / BOX SIZE (mm)

TYPE / CLASS

PIPE / BOX GRADE (%)

PIPE / BOX SLOPE (I in X)

PIPE / BOX FLOW (cumecs) (39% AEP)

CAPACITY FLOW (cumecs)

PIPE / BOX FLOW VELOCITY (m/s)

CAPACITY FLOW VELOCITY (m/s)

DATUM RL

225

uPVC SN8

0.40%

250.0

0.000

0.028

0.00

0.00

0.000

225

uPVC SN8

0.40%

250.0

0.000

0.028

0.00

0.00

0.000

300

uPVC SN8

0.30%

333.3

0.053

0.053

0.75

0.85

300

uPVC SN8

0.30%

333.3

0.106

0.053

1.50

1.50

450

3

1.13%

88.6

0.265

0.303

1.67

2.15

(3x)450

3

1.15%

87.3

0.211

0.916

0.44

1.56

0.000

HGL ELEVATION (39% AEP)

10.267

10.267

10.267

9.972

9.440

9.484

9.185

9.034

11.147

11.253

11.325

DEPTH TO INVERT

1.299

1.340

1.929

2.182

2.299

2.359

0.820

0.820

0.750

0.750

0.780

INVERT LEVEL OF DRAIN

9.171

9.130

8.841

8.588

8.471

8.411

8.214

8.214

11.000

11.000

11.070

FINISHED SURFACE LEVEL

10.470

10.470

10.470

10.470

10.470

10.470

8.214

11.000

11.070

SETOUT COORDINATES

3044.928 E
6523.049 N

3055.018 E
6521.415 N

3066.487 E
6592.657 N

3078.695 E
6669.179 N

3084.035 E
6701.233 N

3101.261 E
6698.455 N

3098.220 E
6718.469 N

3092.187 E
6719.443 N

CHAINAGES

0.000

10.221

82.282

159.901

192.365

209.814

0.000

6.111

293 / 2

uPVC BEND

293 / 3

STD IPWEA ACCESS CHAMBER 1050mm DIA
WITH CONVERTOR SLAB AND 600x600 FI
WITH GALV. GRATE CI. D

293 / 4

STD IPWEA ACCESS CHAMBER 1050mm DIA
WITH CONVERTOR SLAB AND 600x600 FI
WITH GALV. GRATE CI. D

293 / 5

STD IPWEA ACCESS CHAMBER 1050mm DIA
WITH CONVERTOR SLAB AND 600x600 FI
WITH GALV. GRATE CI. D

293 / 6

450mm DIA OUTLET HEADWALL
INSTALL GALV TUBULAR HANDRAIL
REFER LOCAL AUTHORITY STD DWG

294 / 1

3 / 450mm DIA OUTLET HEADWALL
INSTALL GALV TUBULAR HANDRAIL
REFER LOCAL AUTHORITY STD DWG

294 / 2

3 / 450mm DIA INLET HEADWALL
INSTALL GALV TUBULAR HANDRAIL
REFER LOCAL AUTHORITY STD DWG

4EY
HGL

STORMWATER DRAINAGE CALCULATION TABLES SHEET 1 OF 6

Client:					
		FRASERS PROPERTY			
FRASERS PROPERTY (AUSTRALIA) PTY. LTD.					
Project: VANTAGE YATALA 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 NOT FOR CONSTRUCTION					
©2012 Gassman Development Perspectives All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.					
ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES					
DRAWING TITLE STORMWATER DRAINAGE CALCULATION TABLES SHEET 1 OF 6					
C	19/07/22	CALC TABLE UPDATED			JH MG
B	26/11/21	ISSUED FOR CONSTRUCTION			LAB MG
B	10/09/21	INFORMATION REQUEST RESPONSE			LAB MG
A	30/07/21	ORIGINAL ISSUE			LAB MG
Issue	Date	Description			DRN CHK
SCALE IN METRES NOT APPLICABLE					
Scale at A1:		NOT APPLICABLE			
Designed:		IG			
Drafted:		LAB / IG			
Approved:		MG			
RPEQ:		16939			
Signed:					
Date:		10/09/2021			
Drawing No:				Rev. No:	
5941 ENG OPW2 550				C	

LOCATION					SUB-CATCHMENT RUNOFF										INLET DESIGN										DRAIN DESIGN										HEADLOSSES										PART FULL					DESIGN LEVELS				
DESIGN ARI	STRUCTURE No.	DRAIN SECTION	SUB-CATCHMENTS CONTRIBUTING	LAND USE	% SLOPE OF CATCHMENT	SUB-CATCHMENT TIME OF CONCENTRATION	RAINFALL INTENSITY	10Y RUNOFF CO-EFFICIENT	CO-EFFICIENT OF RUNOFF	SUB-CATCHMENT AREA	EQUIVALENT AREA	SUM OF (C*A)	SUB-CATCHMENT DISCHARGE	FLOW IN 18C (W.C. BYPASS)	% ROAD GRADE AT INLET	MINOR FLOW ROAD CAPACITY	INLET TYPE	FLOW INTO INLET	BYPASS FLOW	BYPASS STRUCTURE No.	CRITICAL TIME OF CONCENTRATION	RAINFALL INTENSITY	TOTAL (C*A)	MAJOR TOTAL FLOW	MAJOR SURFACE FLOW CAPACITY	MAJOR SURFACE FLOW	PIPE FLOW	REACH LENGTH	PIPE GRADE	PIPE/BOX DIMENSIONS (CLASS)	FLOW VELOCITY FULL (PIPE GRADE VELOCITY)	TIME OF FLOW IN REACH	STRUCTURE CHART No.	STRUCTURE RATIOS FOR 'K' VALUE CALCULATIONS	VELOCITY HEAD	U/S HEADLOSS COEFFICIENT	U/S PIPE STRUCTURE HEADLOSS	LAT. HEADLOSS CO-EFFICIENT	LAT. PIPE STRUCTURE HEADLOSS	W.S.E CO-EFFICIENT	CHANGE IN W.S.E	PIPE FRICTION SLOPE	PIPE FRICTION HEADLOSS (F'S)	DEPTH	VELOCITY	PIPE U/S LL	PIPE D/S LL	PIPE U/S H.G.L	PIPE D/S H.G.L	W.S.E	SURFACE OF 18C INVERT LEVEL	STRUCTURE No.		
YRS					%	min	mm/h			ha	ha	ha	l/s	l/s	%	l/s		l/s	l/s		min.	mm/h	ha	l/s	l/s	l/s	l/s	m	%	mm	m/s	min.			m		m			m	%	m	m	m/s	m	m	m	m	m	m	m			
2	100	1/208	1/208 to 6/201			5	138	0.73	0.73	0.138	0.102	0.102	39	39			900x900 FI	39	0		5	138	0.102	60	76		39	5.423	1	375	0.4	0.032	1/208	G2	0.006	9.7	0.062				0.062	1.5	0.04	0.115	1.4	21.24	21.18	21.38	21.3	21.44	22.62	1/208		
						5	307	0.73	1	0.071	0.07	0.07	60	76	0							5	307	0.07	60	76		39	5.423	1	375	0.4	0.032	1/208	G2	0.006	9.7	0.062				0.062	1.5	0.04	0.115	1.4	21.24	21.18	21.38	21.3	21.44	22.62	1/208	
						5	307	0.73	1	0.063	0.062	0.062	54	72	0							5	307	0.062	53	72		21	12.99	0.99	375	0.2	0.041	1/209	G2	0.002	9.7	0.017				0.017	1.14	0.12	0.084	1.1	20.61	20.48	20.71	20.56	20.72	21.68	1/209	
						5	307	0.73	1	0.063	0.062	0.062	54	72	0							5	307	0.062	53	72		21	12.99	0.99	375	0.2	0.041	1/209	G2	0.002	9.7	0.017				0.017	1.14	0.12	0.084	1.1	20.61	20.48	20.71	20.56	20.72	21.68	1/209	
						5	307	0.73	1	0.063	0.062	0.062	54	72	0							5	307	0.062	53	72		21	12.99	0.99	375	0.2	0.041	1/209	G2	0.002	9.7	0.017				0.017	1.14	0.12	0.084	1.1	20.61	20.48	20.71	20.56	20.72	21.68	1/209	
						5	307	0.73	1	0.063	0.062	0.062	54	72	0							5	307	0.062	53	72		21	12.99	0.99	375	0.2	0.041	1/209	G2	0.002	9.7	0.017				0.017	1.14	0.12	0.084	1.1	20.61	20.48	20.71	20.56	20.72	21.68	1/209	
						5	307	0.73	1	0.063	0.062	0.062	54	72	0							5	307	0.062	53	72		21	12.99	0.99	375	0.2	0.041	1/209	G2	0.002	9.7	0.017				0.017	1.14	0.12	0.084	1.1	20.61	20.48	20.71	20.56	20.72	21.68	1/209	
						5	307	0.73	1	0.063	0.062	0.062	54	72	0							5	307	0.062	53	72		21	12.99	0.99	375	0.2	0.041	1/209	G2	0.002	9.7	0.017				0.017	1.14	0.12	0.084	1.1	20.61	20.48	20.71	20.56	20.72	21.68	1/209	
						5	307	0.73	1	0.063	0.062	0.062	54	72	0							5	307	0.062	53	72		21	12.99	0.99	375	0.2	0.041	1/209	G2	0.002	9.7	0.017				0.017	1.14	0.12	0.084	1.1	20.61	20.48	20.71	20.56	20.72	21.68	1/209	
						5	307	0.73	1	0.063	0.062	0.062	54	72	0							5	307	0.062	53	72		21	12.99	0.99	375	0.2	0.041	1/209	G2	0.002	9.7	0.017				0.017	1.14	0.12	0.084	1.1	20.61	20.48	20.71	20.56	20.72	21.68	1/209	
						5	307	0.73	1	0.063	0.062	0.062	54	72	0							5	307	0.062	53	72		21	12.99	0.99	375	0.2	0.041	1/209	G2	0.002	9.7	0.017				0.017	1.14	0.12	0.084	1.1	20.61	20.48	20.71	20.56	20.72	21.68	1/209	
						5	307	0.73	1	0.063	0.062	0.062	54	72	0							5	307	0.062	53	72		21	12.99	0.99	375	0.2	0.041	1/209	G2	0.002	9.7	0.017				0.017	1.14	0.12	0.084	1.1	20.61	20.48	20.71	20.56	20.72	21.68	1/209	
						5	307	0.73	1	0.063	0.062	0.062	54	72	0							5	307	0.062	53	72		21	12.99	0.99	375	0.2	0.041	1/209	G2	0.002	9.7	0.017				0.017	1.14	0.12	0.084	1.1	20.61	20.48	20.71	20.56	20.72	21.68	1/209	
						5	307	0.73	1	0.063	0.062	0.062	54	72	0							5	307	0.062	53	72		21	12.99	0.99	375	0.2	0.041	1/209	G2	0.002	9.7	0.017				0.017	1.14	0.12	0.084	1.1	20.61	20.48	20.71	20.56	20.72	21.68	1/209	
						5	307	0.73	1	0.063	0.062	0.062	54	72	0							5	307	0.062	53	72		21	12.99	0.99	375	0.2	0.041	1/209	G2	0.002	9.7	0.017				0.017	1.14	0.12	0.084	1.1	20.61	20.48	20.71	20.56	20.72	21.68	1/209	
						5	307	0.73	1	0.063	0.062	0.062	54	72	0							5	307	0.062	53	72		21	12.99	0.99	375	0.2	0.041	1/209	G2	0.002	9.7	0.017				0.017	1.14	0.12	0.084	1.1	20.61	20.48	20.71	20.56	20.72	21.68	1/209	
						5	307	0.73	1	0.063	0.062	0.062	54	72	0							5	307	0.062	53	72		21	12.99	0.99	375	0.2	0.041	1/209	G2	0.002	9.7	0.017				0.017	1.14	0.12	0.084	1.1	20.61	20.48	20.71	20.56	20.72	21.68	1/209	
						5	307	0.73	1	0.063	0.062	0.062	54	72	0							5	307	0.062	53	72		21	12.99	0.99	375	0.2	0.041	1/209	G2	0.002	9.7	0.017				0.017	1.14	0.12	0.084	1.1	20.61	20.4						

LOCATION				TIME		SUB-CATCHMENT RUNOFF							INLET DESIGN										DRAIN DESIGN										HEADLOSSES										PART FULL				DESIGN LEVELS							
DESIGN ARI	STRUCTURE No.	DRAIN SECTION	SUB-CATCHMENTS CONTRIBUTING	LAND USE	SLOPE OF CATCHMENT	SUB-CATCHMENT TIME OF CONCENTRATION	RAINFALL INTENSITY	10Y RUNOFF CO-EFFICIENT	CO-EFFICIENT OF RUNOFF	SUB-CATCHMENT AREA	EQUIVALENT AREA	SUM OF (C*A)	SUB-CATCHMENT DISCHARGE	FLOW IN R&C (W/C BYPASS)	ROAD GRADE AT INLET	MINOR FLOW ROAD CAPACITY	INLET TYPE	FLOW INTO INLET	BYPASS FLOW	BYPASS STRUCTURE No.	CRITICAL TIME OF CONCENTRATION	RAINFALL INTENSITY	TOTAL (C*A)	MAJOR TOTAL FLOW	MAJOR SURFACE FLOW CAPACITY	MAJOR SURFACE FLOW	PIPE FLOW	REACH LENGTH	PIPE GRADE	PIPE/BOX DIMENSIONS (CLASS)	FLOW VELOCITY FULL (PIPE GRADE VELOCITY)	TIME OF FLOW IN REACH	STRUCTURE CHART No.	STRUCTURE RATIOS FOR 'K' VALUE CALCULATIONS	VELOCITY HEAD	U/S HEADLOSS COEFFICIENT	U/S PIPE STRUCTURE HEADLOSS	LAT. HEADLOSS CO-EFFICIENT	LAT. PIPE STRUCTURE HEADLOSS	W.S.E CO-EFFICIENT	CHANGE IN W.S.E	PIPE FRICTION SLOPE	PIPE FRICTION HEADLOSS (L'S)	DEPTH	VELOCITY	PIPE U/S LL	PIPE D/S LL	PIPE U/S H.G.L	PIPE D/S H.G.L	W.S.E	SURFACE OF R&C INVERT LEVEL	STRUCTURE No.		
YRS					%	min	mm/h			ha	ha	ha	l/s	l/s	%	l/s		l/s	l/s		min.	mm/h	ha	l/s	l/s	l/s	l/s	m	%	mm	m/s	min.			m		m			m	%	m	m	m/s	m	m	m	m	m	m	m			
2	100	1/EXT2	1/EXT2 to 2/EXT2			5	138	0.73	0.73	0.015	0.015	0.015	16	16			1200x1200 FI	16	0		5	138	0.042	157		48	16	9.64	1	450	0.1	0.016	1/EXT2	G1	0.001	4.78	0.002				0.002	0	0	0.07	1.0	4.693	4.596	5.595	5.595	5.598	7.984	1/EXT2		
2	100	2/EXT2	2/EXT2 to 3/EXT2			5	138	0.73	0.73	0.107	0.079	0.079	30	30			GRADE_BK_4800_Up	30	0		5.16	137	0.121	184		40	46	27.64	0.66	675	0.1	0.06	2/EXT2	G1/T1/T2	0.001	2.68	0.002				0.002	0	0.001	0.114	1.2	4.399	4.216	5.593	5.592	5.595	6.767	2/EXT2		
2	100	3/EXT2	3/EXT2 to 4/EXT2			5	138	0.73	0.73	0.135	0.099	0.099	38	59			GRADE_BK_4800_Up	59	0		5.56	135	0.22	209		35	103	12.57	0.15	750	0.2	0.048	3/EXT2	G1/T4/T8	0.003	2.43	0.007			2.48	0.007	0.01	0.001	0.24	0.9	4.153	4.134	5.585	5.584	5.592	6.686	3/EXT2		
2	100	4/EXT2	4/EXT2 to 2/100			5	307		1	0.019	0.019	0.019	16	16			ACC_CHA_1800				5.88	134	0.511	16		16	210	25.12	0.1	1050	0.2	0.1	4/EXT2	T2/T4	0.003	0.3	0.001				0.001	0.01	0.001	0.338	0.9	4.094	4.069	5.583	5.582	5.584	7.181	4/EXT2		
2	100	1/EXT3	1/EXT3 to 2/EXT3			5	138	0.73	0.73	0.154	0.113	0.113	43	43	2.25		GRADE_BK_4800_Up	42	1	3/EXT3	5	138	0.113	0			42	12.57	4	375	0.4	0.08	1/EXT3	G1	0.007	7	0.052				0.052	4.5	0.36	0.084	2.3	7.553	7.05	7.7	7.134	7.752	9.662	1/EXT3		
2	100	2/EXT3	2/EXT3 to 3/EXT3			5	0			0	0	0	0	696			ACC_CHA_1050				5.09	138	0.127	0		696	47	12.57	2	375	0.4	0.09	2/EXT3	T8/T10	0.009	1.73	0.016			2	0.019	2.26	0.232	0.106	1.8	6.614	6.363	6.771	6.487	6.789	9.341	2/EXT3		
2	100	3/EXT3	3/EXT3 to 4/EXT3			5	138	0.73	0.73	0.015	0.011	0.011	4	6	2.13		GRADE_BK_2400_Up	6	0	4/EXT3	5.21	137	0.138	0			53	23.26	1.5	375	0.5	0.186	3/EXT3	T1	0.012	0.7	0.008				0.008	1.56	0.347	0.121	1.7	6.313	5.964	6.479	6.117	6.487	9.026	3/EXT3		
2	100	4/EXT3	4/EXT3 to 5/EXT3			5	138	0.73	0.73	0.034	0.025	0.025	10	10	2		GRADE_BK_2400_Up	10	0	5/EXT3	5.43	136	0.163	0			62	19.95	2	375	0.6	0.186	4/EXT3	T1/T2	0.016	0.92	0.015				0.015	2.29	0.328	0.122	2.0	5.922	5.523	6.102	5.645	6.117	8.537	4/EXT3		
2	100	5/EXT3	5/EXT3 to 2/100			5	138	0.73	0.73	0.031	0.023	0.023	9	9	1.5		GRADE_BK_2400_Up	9	0	2/100	5.6	135	0.187	0			70	44.29	2	450	0.4	0.325	5/EXT3	T1	0.01	0.14	0.001				0.001	0.05	0.082	0.122	2.0	5.423	4.537	5.605	5.582	5.607	8.125	5/EXT3		
2	100	1/EXT4	1/EXT4 to 2/EXT3			5	138	0.73	0.73	0.019	0.014	0.014	5	5			900x900 FI	5	0		5	138	0.014	0			5	2.968	2	375	0.1	0.002	1/EXT4	G1	0	7	0.001				0.001	2.49	0.044	0.037	1.0	7.792	7.732	7.843	7.769	7.844	9.186	1/EXT4		
2	100	1/TMR1	1/TMR1 to 2/TMR1			0	0			0	0	0	0	0			DM				1	194	0	0			0	7.1	1.01	1500	0.0	0	1/TMR1		0	2	0				0	1.01	0.072	0	0.0	3.262	3.19	3.262	3.19	3.262	5.649	1/TMR1		
2	100	2/TMR1															HW outlet auto				2.57	368	0	0									2/TMR1															3.19	5.171	2/TMR1				
2	100	1/TMR2	1/TMR2 to 2/TMR2														DM				1	194	0	0			0	7.065	516.5	1500	0.0	0	1/TMR2		0	2	0				0	516.5	36.49	0	0.0	3.527	-32.97	3.527	-32.97	3.527	5.027	1/TMR2		
2	100	2/TMR2															HW outlet auto				5.01	307	3.708	3162									2/TMR2																	-32.97	-31.47	2/TMR2		
2	100	1/TMR3	1/TMR3 to 2/TMR3														DM				1	194	0				0	2.438	0.29	450	0.0	0	1/TMR3		0	2	0				0	0.29	0.007	0	0.0	1.832	1.825	1.832	1.825	1.832	2.282	1/TMR3		
2	100	2/TMR3															HW outlet auto				5.39	302	4.105	3444									2/TMR3																			1.825	2.275	2/TMR3
2	100	1/X2	1/X2 to 2/X2														DM				1.57	175	0				386	1.598	0.19	750	0.9	0.023	1/X2		0.039	2	0.078				0.078	0.1	0.002	0.48	1.3	17.52	17.52	19.03	19.03	19.11	19.83	1/X2		
2	100	2/X2	2/X2 to 3/X2			5	138	0.73	0.73	1.822	1.344	1.344	515	1211			1500x1500 FI	1211	0		5	138	1.344	3571			1597	2.627	0.23	750	3.6	0.158	2/X2		0	0	0				0	0	0	0.75	3.6	17.5	17.49	19.03	19.03	19.03	18.86	2/X2		
2	100	3/X2	3/X2 to 4/X2														ACC_CHA_1350				5.01	138	1.344	3713			1597	102.5	0.2	750	3.6	6.166	3/X2		0	0	0				0	0	0	0.75	3.6	17.43	17.22	19.03	19.03	19.03	20.1	3/X2		
2	100	4/X2	4/X2 to 5/X2									</																																										

[illegible]

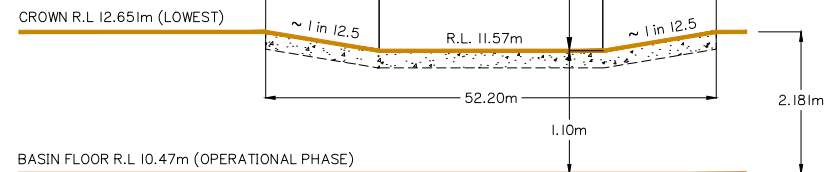
12d Model RUNOFF 'C' METHOD	DIRECT	C2 VALUE	0.73	C10 VALUE	0.86	C100 VALUE	1.00
-----------------------------	--------	----------	------	-----------	------	------------	------

LOCATION						TIME		SUB-CATCHMENT RUNOFF							INLET DESIGN							DRAIN DESIGN										HEADLOSSES													PART FULL			DESIGN LEVELS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
DESIGN ARI	STRUCTURE No.	DRAIN SECTION	SUB-CATCHMENTS CONTRIBUTING	LAND USE	SLOPE OF CATCHMENT	SUB-CATCHMENT TIME OF CONCENTRATION	I	C10	C	A	C*A	+CA	Q																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

DESIGN ARI	LOCATION				TIME			SUB-CATCHMENT RUNOFF					INLET DESIGN					DRAIN DESIGN										HEADLOSSES										PART FULL		DESIGN LEVELS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	STRUCTURE No.	DRAIN SECTION	SUB-CATCHMENTS CONTRIBUTING	LAND USE	SLOPE OF CATCHMENT	SUB-CATCHMENT TIME OF CONCENTRATION	RAINFALL INTENSITY	C10	C	A	C*A	+CA	Q	FLOW IN K&C (INC BYPASS)	ROAD GRADE AT INLET	MINOR FLOW ROAD CAPACITY	INLET TYPE	FLOW INTO INLET	BYPASS FLOW	BYPASS STRUCTURE No.	CRITICAL TIME OF CONCENTRATION	I	+CA	Qt	Qm	Qs	Qp	L	S	PIPE/BOX DIMENSIONS (CLASS)	V	T	STRUCTURE CHART No.	STRUCTURE RATIOS FOR "K" VALUE CALCULATIONS	V2/2g	Ku	hu	KL	HL	Kw	hw	sF	HF	DEPTH	VELOCITY	PIPE U/S LL	PIPE D/S LL	PIPE U/S H.G.L	PIPE D/S H.G.L	W.S.E	SURFACE OF K&C INVERT LEVEL	STRUCTURE No.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
yrs					%	m/n	mm/h			ha	ha	ha	l/s	l/s	%	l/s		l/s	l/s		m/n	mm/h	ha	l/s	l/s	l/s	l/s	m	%	mm	m/s	min.			m		m		m		m	%	m	m/s	m	m	m	m	m	m	m	m	m																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
2 100	8/X2	8/X2 to 9/X2						0.73 0.73						W/D = 0 0	0			ACC_CHA_1200				6.05	133	1.344				1578	22.67	0.2	825 3	3.0	1.114	8/X2		0	0	0				0	0	0	0.825	3.0	16.74	16.7	19.03	19.03	19.03	19.72	8/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
2 100	9/X2	9/X2 to 10a/X2												W/D = 0 0	0			ACC_CHA_1350				6.18	132	1.344				1576	41.98	0.5	900 3	2.5	1.735	9/X2		0	0	0				0	0	0	0.9	2.5	16.65	16.44	19.03	19.03	19.03	19.68	9/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
2 100	10a/X2	10a/X2 to 10/X2												W/D = 0 0	0			ACC_CHA_1500				6.46	131	3.831				2476	12.07	0.5	900 3	3.9	0.782	10a/X2		0	0	0				0	0	0	0.9	3.9	16.4	16.34	19.03	19.03	19.03	19.45	10a/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
2 100	10/X2	10/X2 to 11/X2											0	0				ACC_CHA_1500				6.51	131	3.898				2472	34.88	0.5	1050 3	2.9	1.663	10/X2		0	0	0				0	0	0	1.05	2.9	16.32	16.14	19.03	19.03	19.03	19.37	10/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
2 100	11/X2	11/X2 to 12/X2											W/D = 0 0	0				ACC_CHA_1500				6.72	130	4.028				2529	77.96	0.4	1050 3	2.9	3.794	11/X2	T1/T2	0.321	0.21	0.067				0.067	0.54	0.42	1.05	2.9	16.09	15.78	18.96	18.54	19.03	19.13	11/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
2 100	12/X2	12/X2 to 13/X2											0	0				ACC_CHA_1500				7.16	128	4.174				2506	75.47	0.25	1050 3	2.9	3.635	12/X2	T1	0.334	0.2	0.067				0.067	0.56	0.423	1.05	2.9	15.73	15.54	18.47	18.05	18.54	18.63	12/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
2 100	13/X2	13/X2 to 14/X2											W/D = 0 0	0				ACC_CHA_1500				7.6	126	4.316				2482	7.24	0.5	1050 3	2.9	0.346	13/X2	T1/T2	0	0.21	0				0	0	0	1.05	2.9	15.52	15.48	18.05	18.05	18.05	18.14	13/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
2 100	14/X2	14/X2 to 15/X2											W/D = 0 0	0				ACC_CHA_1500				7.64	125	4.316				2480	27.35	0.5	1050 3	2.9	1.304	14/X2	T2/T4	0.407	0.47	0.191				0.191	0.68	0.187	1.05	2.9	15.4	15.27	17.86	17.67	18.05	18.09	14/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
2 100	15/X2	15/X2 to 16/X2											0	0				ACC_CHA_2100				7.8	125	4.435				2556	22.97	0.51	1050 3	3.0	1.13	15/X2	T8/T10	0.223	1.79	0.399				1.95	0.434	0.37	0.086	1.05	3.0	15.18	15.07	17.28	17.19	17.71	17.94	15/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
2 100	16/X2	16/X2 to 17/X2											W/D = 0 0	0				ACC_CHA_1800				7.93	124	5.847				3078	26.45	0.51	1200 3	2.7	1.199	16/X2	T1/T2	0.378	0.2	0.074				0.074	0.53	0.14	1.012	3.0	15.01	14.87	17.11	16.97	17.19	17.81	16/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
2 100	17/X2	17/X2 to 18/X2											W/D = 0 0	0				ACC_CHA_2100				8.07	123	6.576				3333	10.05	1	1200 3	3.0	0.494	17/X2	T8/T10	0.443	1.98	0.876				2.36	1.047	0.62	0.063	0.802	4.2	14.71	14.61	16.1	16.04	17.15	17.6	17/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
2 100	18/X2	18/X2 to 19/X2			5	138	0.73 0.73	0.73	0.102	0.076	0.076	29	53	0.04				1800 900x900 FI	53	0		8.11	123	6.715				3377	14.59	1.8	1200 RCP	3.0	0.727	18/X2	T4/T8	0.455	0.97	0.443				1.01	0.46	0.74	0.213	0.667	5.2	14.59	14.33	15.59	15.48	16.05	17.52	18/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
2 100	19/X2	19/X2 to 20/X2											W/D = 0 0	0				ACC_CHA_2100				8.16	123	6.715				3373	96.14	1	1350 RCP	2.4	3.781	19/X2	T4/T8	0.283	0.7	0.199				0.83	0.235	0.42	0.581	0.741	4.2	14.3	13.34	15.28	14.89	15.52	16.69	19/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
2 100	20/X2	20/X2 to 21/X2			5	138	0.73 0.73	0.73	0.059	0.043	0.043	17	17					2100 900x900 FI	17	0		8.54	121	6.76				3354	107	1	1350 RCP	2.3	4.173	20/X2	T1	0.28	0.22	0.063				0.063	0.34	0.36	0.738	4.2	13.32	12.25	14.82	14.46	14.89	15.51	20/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
2 100	21/X2	21/X2 to 22/X2			5	138	0.73 0.73	0.73	0.064	0.047	0.047	18	18					2100 900x900 FI	18	0		7.56	126	11.48				5091	80.79	0.8	1350 RCP	3.6	4.793	21/X2	T2/T4	0.491	0.43	0.213				0.213	0.59	0.476	1.088	4.1	12.23	11.58	14.25	13.77	14.46	14.46	21/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
2 100	22/X2	22/X2 to 23/X2			5	138	0.73 0.73	0.73	0.045	0.033	0.033	13	13					2100 900x900 FI	13	0		7.89	124	11.52				5053	77.8	0.7	1350 RCP	3.5	4.577	22/X2	T1	0.574	0.21	0.121				0.121	0.69	0.536	1.17	3.8	11.56	11.02	13.65	13.12	13.77	13.77	22/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
2 100	23/X2	23/X2 to 24/X2			5	138	0.73 0.73	0.73	0.049	0.036	0.036	14	14					2100 900x900 FI	14	0		8.22	123	12.94				5486	2.142	0.6	1500 RCP	3.1	0.111	23/X2	T4	0.058	0.62	0.037				0.037	0.06	0.001	1.139	3.8	11	10.99	13.08	13.08	13.12	13.12	23/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
2 100	24/X2	24/X2 to 25/X2											0	0				ACC_CHA_2100				8.23	122	12.94				5484	4.447	0.6	1500 3	3.1	0.23	24/X2	T4	0.061	0.59	0.036				0.036	0.06	0.003	1.139	3.8	10.97	10.94	13.04	13.04	13.08	13.08	24/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
2 100	25/X2	25/X2 to 26/X2											W/D = 0 0	0				ACC_CHA_2100				8.25	122	12.94				5481	1.917	0.6	1500 3	3.1	0.099	25/X2	T2/T4	0.282	0.3	0.084				0.084	0.29	0.006	1.138	3.8	10.92	10.91	12.96	12.95	13.04	13.04	25/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
2 100	26/X2	26/X2 to 27/X2			5	138	0.73 0.73	0.73	0.327	0.241	0.241	92	92					2100 900x900 FI	92	0		8.26	122	15.94				6501	3.641	0.6	1500 RCP	3.7	0.223	26/X2	T4/T8	0.69	1.05	0.728				1.1	0.76	1.41	0.024	1.5	3.7	10.89	10.87	12.22	12.17	12.98	13.11	26/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
2 100	27/X2	27/X2 to 28/X2											0	0				ACC_CHA_2100				8.28	122	15.94				3877	2.977	0.77	1500 RCP	2.2	0.109	27/X2	T1	0.246	0.2	0.049				0.049	7.79	0	0.817	3.9	10.85	10.82	11.87	11.64	11.92	12.95	27/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
2 100	28/X2												W/D = 0 0	0				HW outlet															28/X2																				11.64	12.32	28/X2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
2 100													W/D = 0 0	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

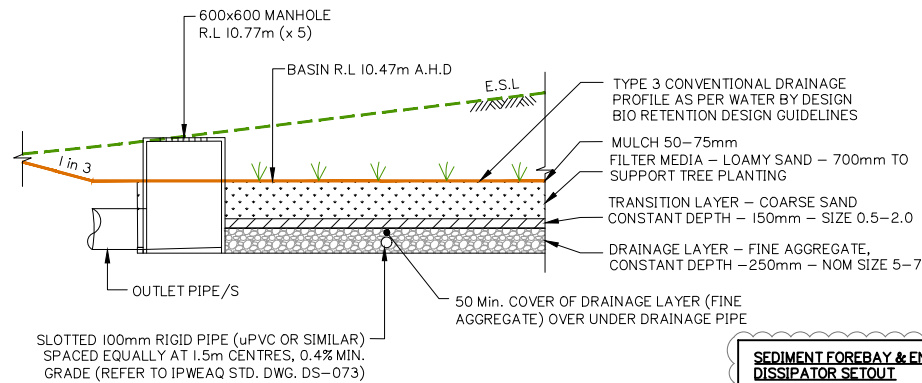
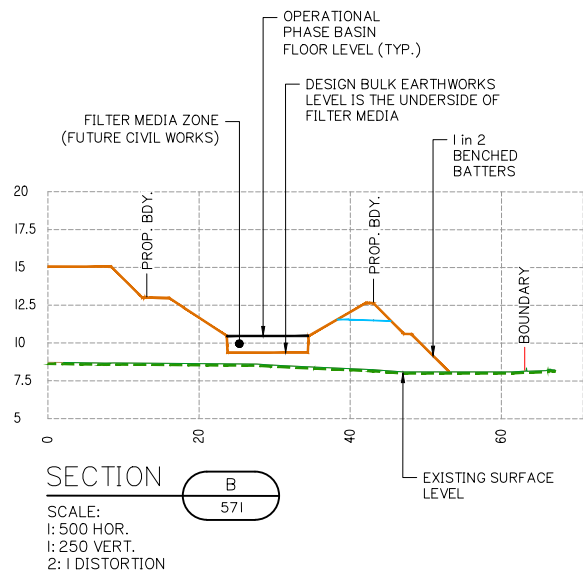




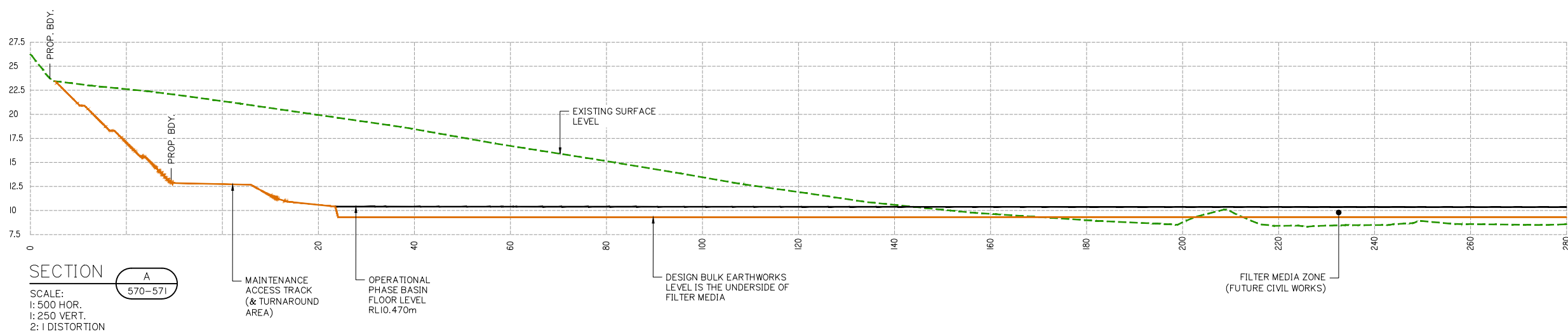
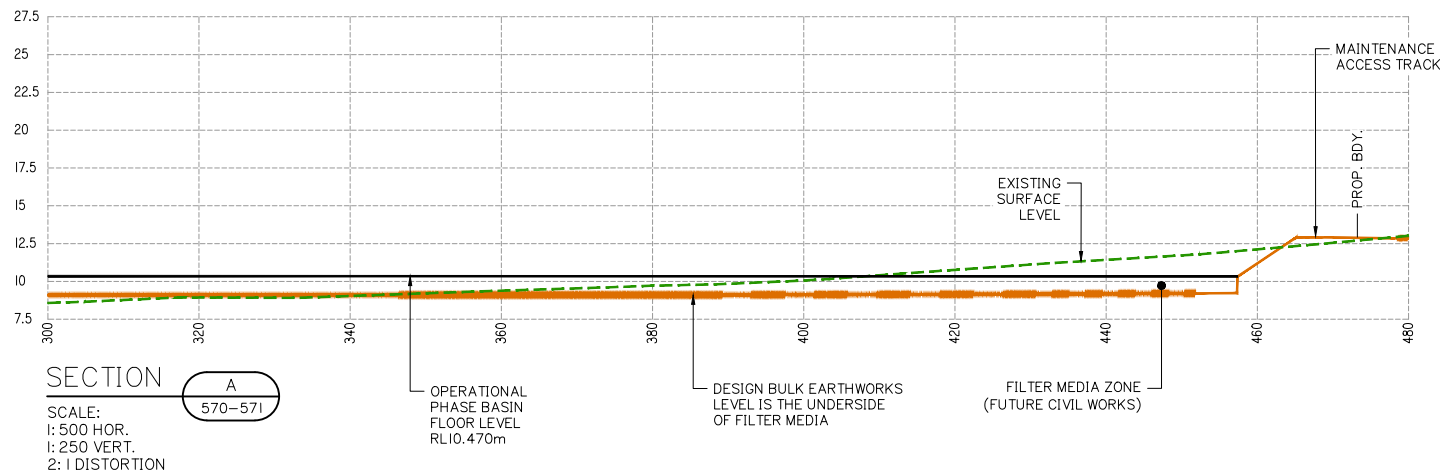
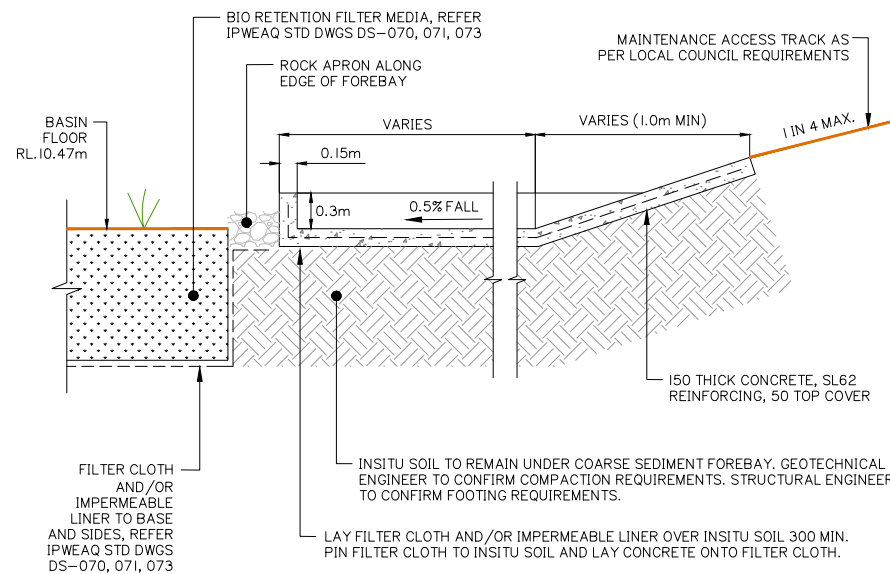
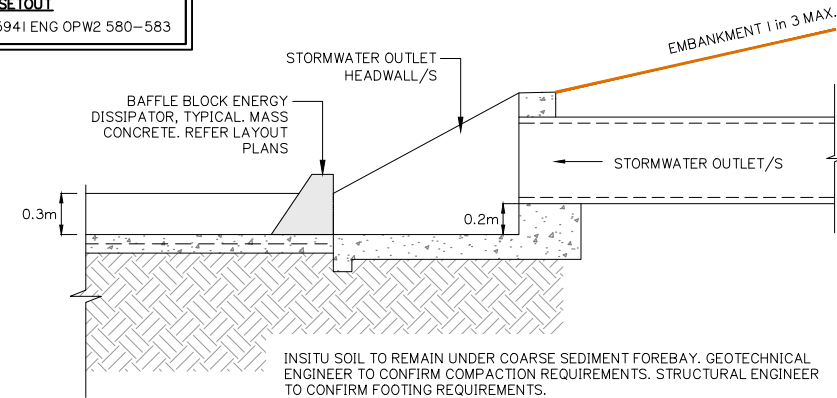


NOTE:

- BASIN INUNDATION DEPTHS OMITTED FROM CROSS SECTIONS FOR CLARITY. REFER TO CALCULATION TABLES ON DRAWINGS 5941 ENG BE2 570-572



SEDIMENT FOREBAY & ENERGY DISSIPATOR SETOUT
REFER DWG 5941 ENG OPW2 580-583



Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives

All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

OPERATIONAL PHASE
BIORETENTION BASIN
SHEET 4 OF 4

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES

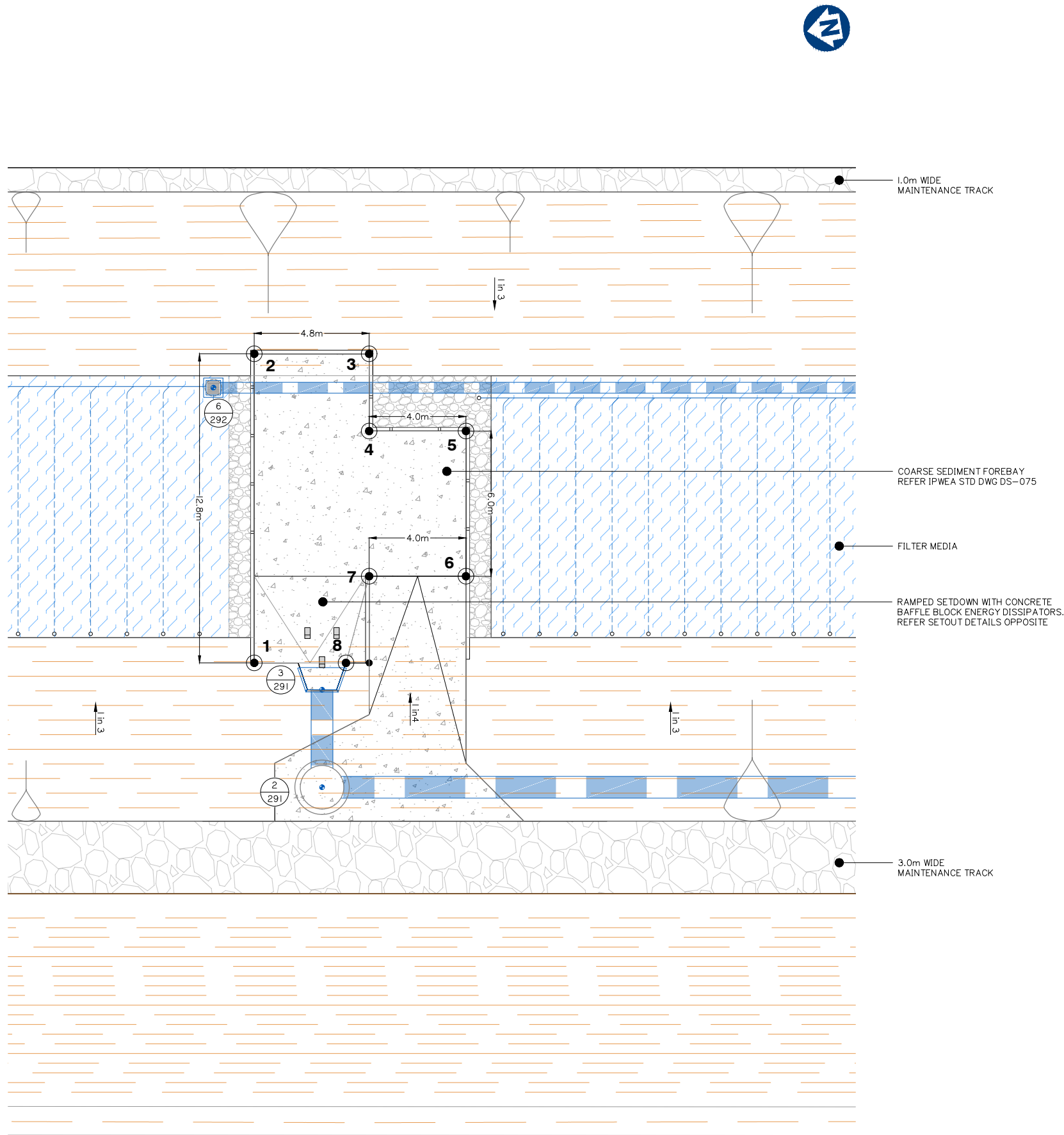


Scale at A1: 1:500

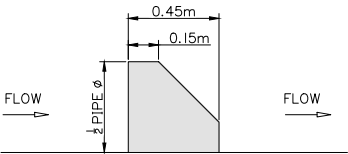
Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No:
5941 ENG OPW2 573

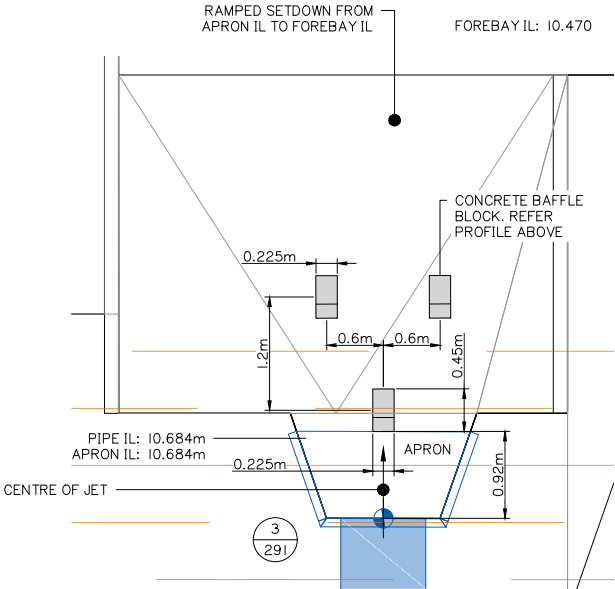
Rev. No:
B



FOREBAY I – SETOUT TABLE			
SETOUT POINT	NORTHING	EASTING	RL (m, AHD)
1	3095.311	6841.680	10.684m
2	3107.917	6839.638	10.47m
3	3107.158	6834.949	10.47m
4	3104.009	6835.459	10.47m
5	3103.369	6831.511	10.47m
6	3097.447	6832.470	10.47m
7	3098.086	6836.418	10.47m
8	3094.705	6837.937	10.684m



BAFFLE BLOCK PROFILE 1:25



BAFFLE BLOCK SETOUT 1:40

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
COARSE SEDIMENT
FOREBAY 1 SETOUT
SHEET 1 OF 4

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES



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

Scale at A1: 1:100

Designed: IG

Drafted: LAB / IG

Approved: MG

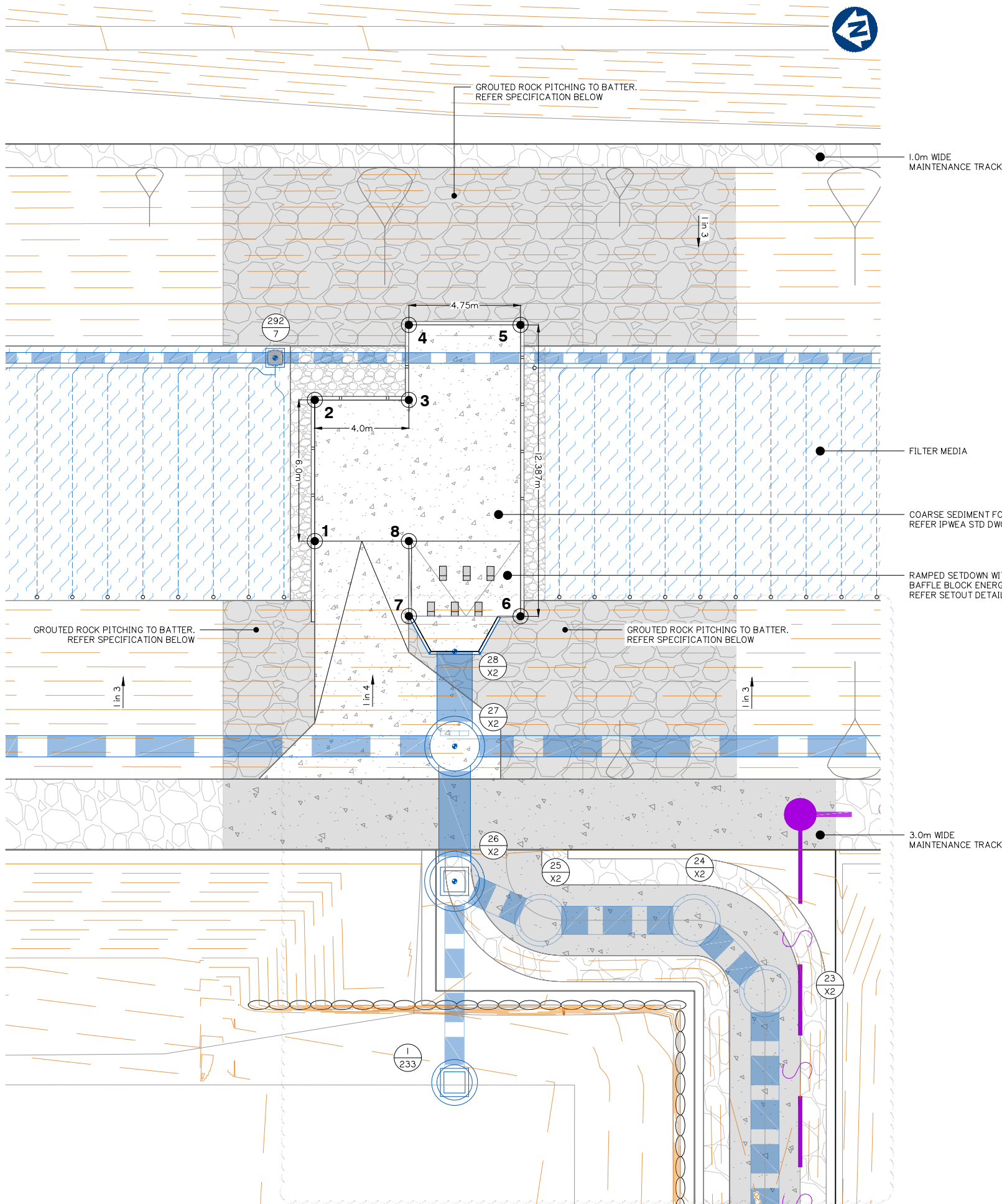
RPEQ: 16939

Signed:

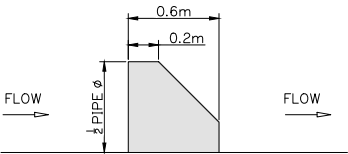
Date: 10/09/2021

Drawing No:
5941 ENG OPW2 580

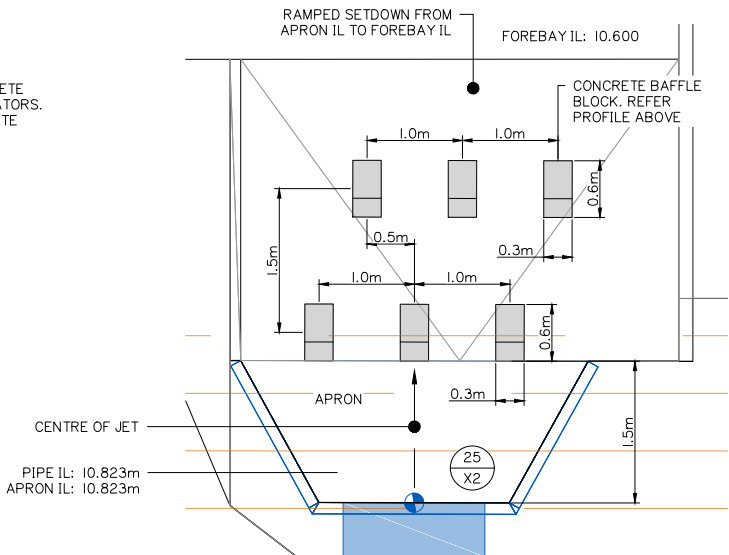
Rev. No:
B



FOREBAY 2 – SETOUT TABLE			
SETOUT POINT	NORTHING	EASTING	RL (m, AHD)
1	3086.440	6764.504	10.60m
2	3092.363	6763.545	10.60m
3	3091.723	6759.596	10.60m
4	3094.872	6759.086	10.60m
5	3094.113	6754.397	10.60m
6	3081.886	6756.377	10.823m
7	3082.653	6761.065	10.823m
8	3085.800	6760.555	10.60m



BAFFLE BLOCK PROFILE 1:25



BAFFLE BLOCK SETOUT 1:40

GROUTED ROCK PITCHING

GROUTED ROCK PITCHING 450mm THICK.

ROCK SHALL BE UNWEATHERED, CLEAN, HARD AND DURABLE GRADED 150-200mm WITH ESSENTIALLY FLAT FACES. GROUT SHALL BE 20MPa CEMENT MORTAR MADE FROM 1:3 GP CEMENT / SAND MIXTURE WITH SUFFICIENT WATER ADDED TO GIVE IT A PLASTIC LIKE TEXTURE THAT WILL RETAIN ITS SHAPE AND NOT FLOW LIKE A LIQUID

GROUTED ROCK FINISH

EXPOSED SURFACES SHALL HAVE A MINIMUM 80% OF EXPOSED ROCK WITH A CLOSE FACED MAXIMUM MORTAR SETBACK OF 10mm. EXCESS CEMENT MORTAR COATING SHALL BE REMOVED. THE FINISHED SURFACE SHALL HAVE A GENERALLY FLAT, EVEN AND NEAT APPEARANCE, AND WILL NOT HAVE ANY SHARP OR ANGULAR POINTS

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
COARSE SEDIMENT
FOREBAY 2 SETOUT
SHEET 2 OF 4

Issue	Date	Description	LAB	MG
C	19/07/22	STORMWATER AND LOT BOUNDARY UPDATED	LAB	MG
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	MG

SCALE IN METRES



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

Scale at A1: 1:100

Designed: IG

Drafted: LAB / IG

Approved: MG

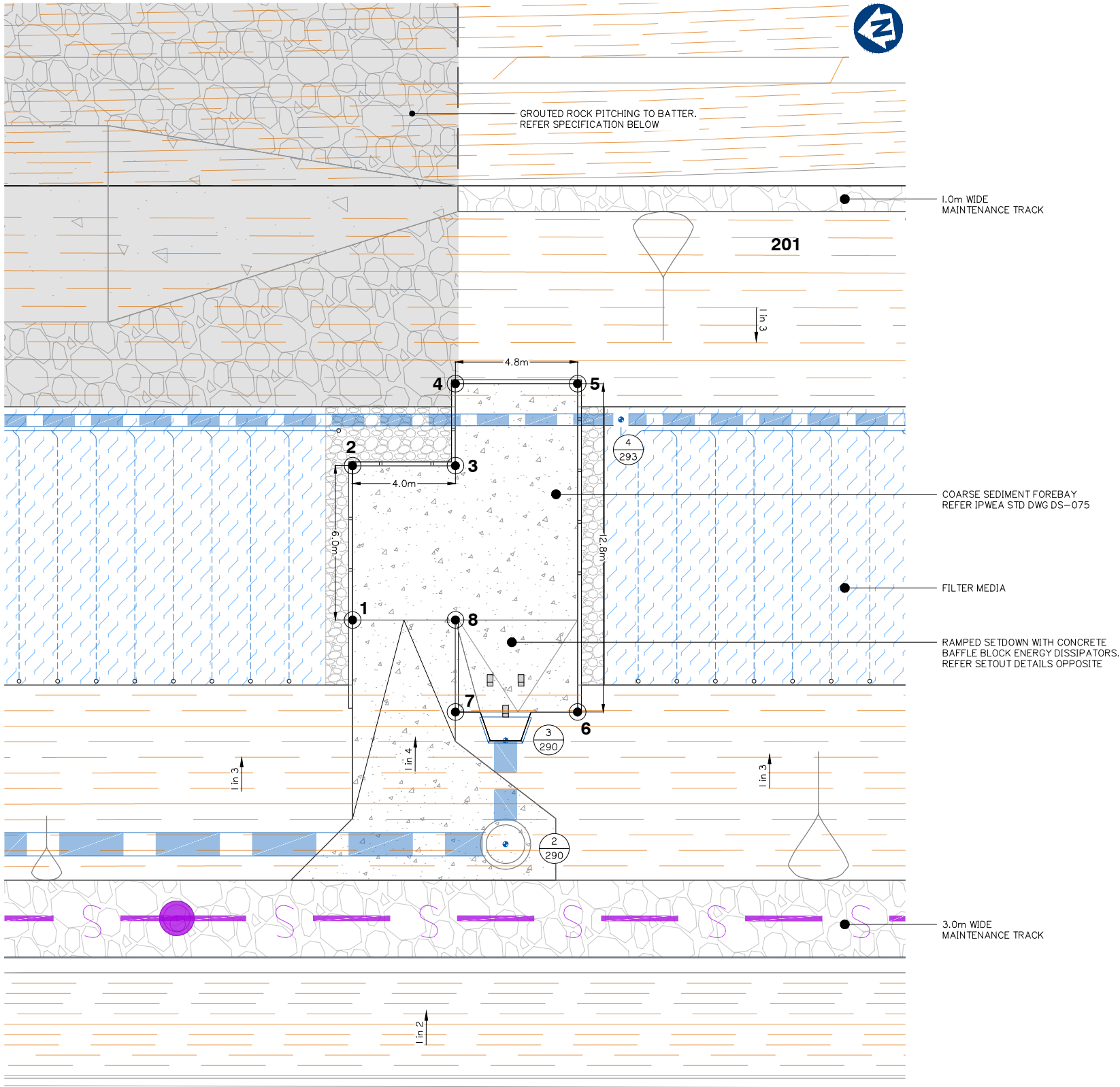
RPEQ: 16939

Signed:

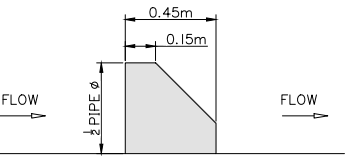
Date: 05/07/2022

Drawing No:
5941 ENG OPW2 581

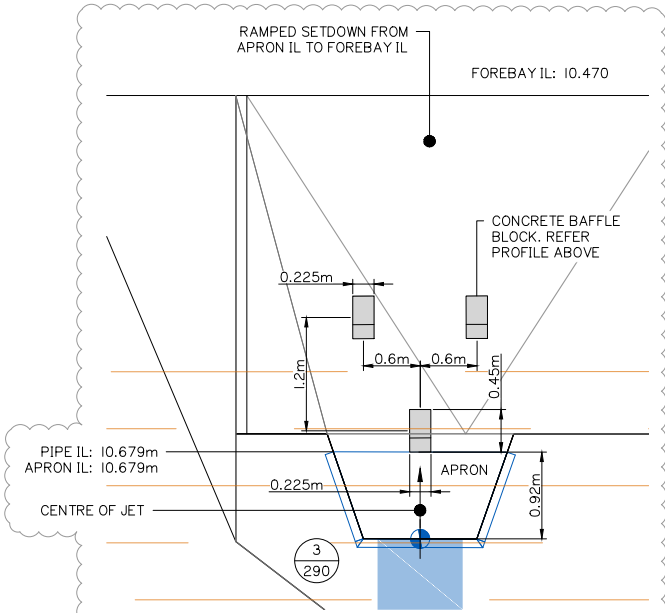
Rev. No:
C



FOREBAY 3 – SETOUT TABLE			
SETOUT POINT	NORTHING	EASTING	RL (m, AHD)
1	3072.874	6680.730	10.47m
2	3078.796	6679.770	10.47m
3	3078.157	6675.822	10.47m
4	3081.306	6675.312	10.47m
5	3080.547	6670.623	10.47m
6	3068.941	6672.664	10.679m
7	3068.700	6677.353	10.679m
8	3072.234	6676.781	10.47m



BAFFLE BLOCK PROFILE 1:25



BAFFLE BLOCK SETOUT 1:40

GROUTED ROCK PITCHING

GROUTED ROCK PITCHING 450mm THICK.

ROCK SHALL BE UNWEATHERED, CLEAN, HARD AND DURABLE GRADED 150–200mm WITH ESSENTIALLY FLAT FACES. GROUT SHALL BE 20MPa CEMENT MORTAR MADE FROM 1:3 GP CEMENT / SAND MIXTURE WITH SUFFICIENT WATER ADDED TO GIVE IT A PLASTIC LIKE TEXTURE THAT WILL RETAIN ITS SHAPE AND NOT FLOW LIKE A LIQUID

GROUTED ROCK FINISH

EXPOSED SURFACES SHALL HAVE A MINIMUM 80% OF EXPOSED ROCK WITH A CLOSE FACED MAXIMUM MORTAR SETBACK OF 10mm. EXCESS CEMENT MORTAR COATING SHALL BE REMOVED. THE FINISHED SURFACE SHALL HAVE A GENERALLY FLAT, EVEN AND NEAT APPEARANCE, AND WILL NOT HAVE ANY SHARP OR ANGULAR POINTS

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
COARSE SEDIMENT
FOREBAY 3 SETOUT
SHEET 3 OF 4

B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES



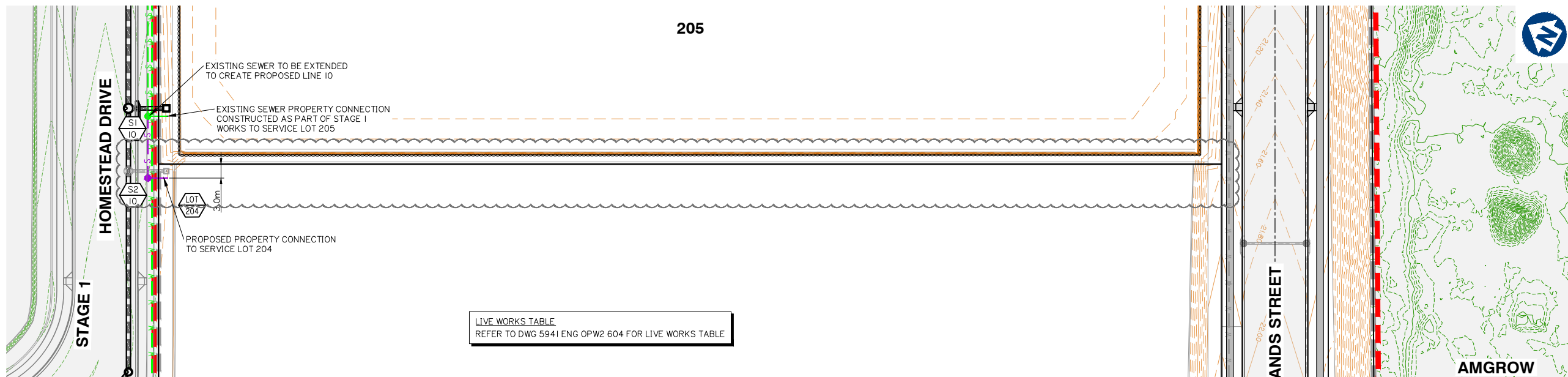
1:100 (FULL SIZE A1)
1:200 (HALF SIZE A3)

Scale at A1: 1:100

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No: 5941 ENG OPW2 582
Rev. No: B

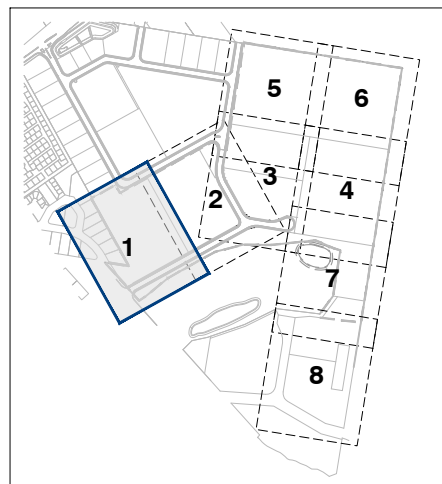
205



LIVE WORKS TABLE
REFER TO DWG 5941 ENG OPW2 604 FOR LIVE WORKS TABLE

SEWER STRUCTURE SETOUT TABLE

STRUCTURE No.	EASTING	NORTHING
S34 / 5	2691.281	6807.728
S33 / 5	2788.689	6791.915
S32 / 5	2882.346	6776.711
S31 / 5	2977.009	6761.343
S30 / 5	3071.672	6745.976
S29 / 5	3062.518	6689.330
S28 / 5	3043.289	6570.881
S27 / 5	3031.107	6495.500
S26 / 5	3056.277	6491.413
S25 / 5	3037.355	6374.560
S24 / 5	3019.779	6266.019
S23 / 5	3012.428	6220.626
S22 / 5	2993.446	6103.406
S21 / 5	2978.609	6011.788
S15 / 7	2655.014	6697.983
S14 / 7	2655.449	6687.005
S13 / 7	2657.343	6676.183
S12 / 7	2660.662	6665.710
S11 / 7	2665.373	6655.720
S10 / 7	2718.378	6560.392
S9 / 7	2741.733	6537.414
S8 / 7	2750.768	6541.133
S7 / 7	2756.520	6542.638
S6 / 7	2764.358	6543.338
S5 / 7	2772.130	6542.734
S4 / 7	2864.436	6527.749
S3 / 7	2863.615	6522.690
S2 / 7	2947.361	6509.095
S1 / 7	3013.008	6498.438
S1 / 8	2643.921	6483.225
S1 / 9	2870.677	6566.196
S1 / 10	2466.432	6674.779
S2 / 10	2454.738	6668.301
LOT 201 PC	2884.520	6790.100
LOT 202 PC	3014.358	6506.754
LOT 203 PC	2871.366	6570.440
LOT 204 PC	2456.822	6664.539
LOT 205 PC	2662.095	6653.898
LOT CP PC	2771.601	6539.021

KEY PLAN
SCALE 1:7500

SEWER STRUCTURE LEGEND
● SEWER MAINTENANCE HOLE
TYPE P3-1050Ø (U.N.O)
TYPE C-1500Ø AS NOTED

CAUTION

EXISTING STORMWATER,
WATER AND SEWER IN
THIS AREA

DEEP STRUCTURES NOTE:

REFER TO ATTACHED PROTEST ENGINEERING FORM 15 DATED
21/01/22 FOR STRUCTURES GREATER THAN 6m DEEP.

NOTE:

CONTRACTOR TO CONFIRM LOCATIONS AND LEVELS OF EXISTING
SERVICES PRIOR TO COMMENCEMENT OF WORKS AND NOTIFY
SUPERINTENDENT IF DIFFERENT FROM THOSE SHOWN.

MANHOLE COVERS AND SURROUNDS:

INSTALL ALL SEWER MAINTENANCE STRUCTURE CLASS D TRAFFICABLE
LIDS WITH COMPOSITE LIDS (NON-CORROSIVE) AND FRAMES IN
ACCORDANCE WITH SEWERAGE STANDARD DRAWING
SEQ-SEW-1308-1, 9, 10, 11.

INTERNAL CORROSION COATING TO BE APPLIED TO ALL MAINTENANCE
HOLES AS PER CLAUSE 7.6.2 OF SEQ D&C CODE VERSION 2 (JULY 2019)

WARNING

BEWARE OF UNDERGROUND SERVICES

THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN
INTERPOLATED FROM AERIAL PHOTOGRAMMETRIC DATA OR
KNOWN POSITIONS OF VALVES, ACCESS CHAMBERS ETC. OR
INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO
RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE
INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES
ARE ACCURATELY LOCATED PRIOR TO COMMENCEMENT OF WORK.

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives

All rights reserved. No part of this document may be
reproduced or transmitted in any form or by any means,
electronic, mechanical, photocopying, recording, or
otherwise, without the written permission of Gassman
Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

SEWER RETICULATION
LAYOUT PLAN SHEET 1 OF 8

Issue	Date	Description	LAB	MG	CHK
E	19/07/22	LOT NUMBER UPDATED	LAB	MG	
D	24/06/22	EXISTING RM AND ENCASING ADDED	JH	MG	
C	22/04/22	ISSUED FOR CONSTRUCTION	LAB	MG	
C	31/01/22	DEEP STRUCTURES NOTE ADDED	JH	MG	
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	

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: LAB / IG

Approved: MG

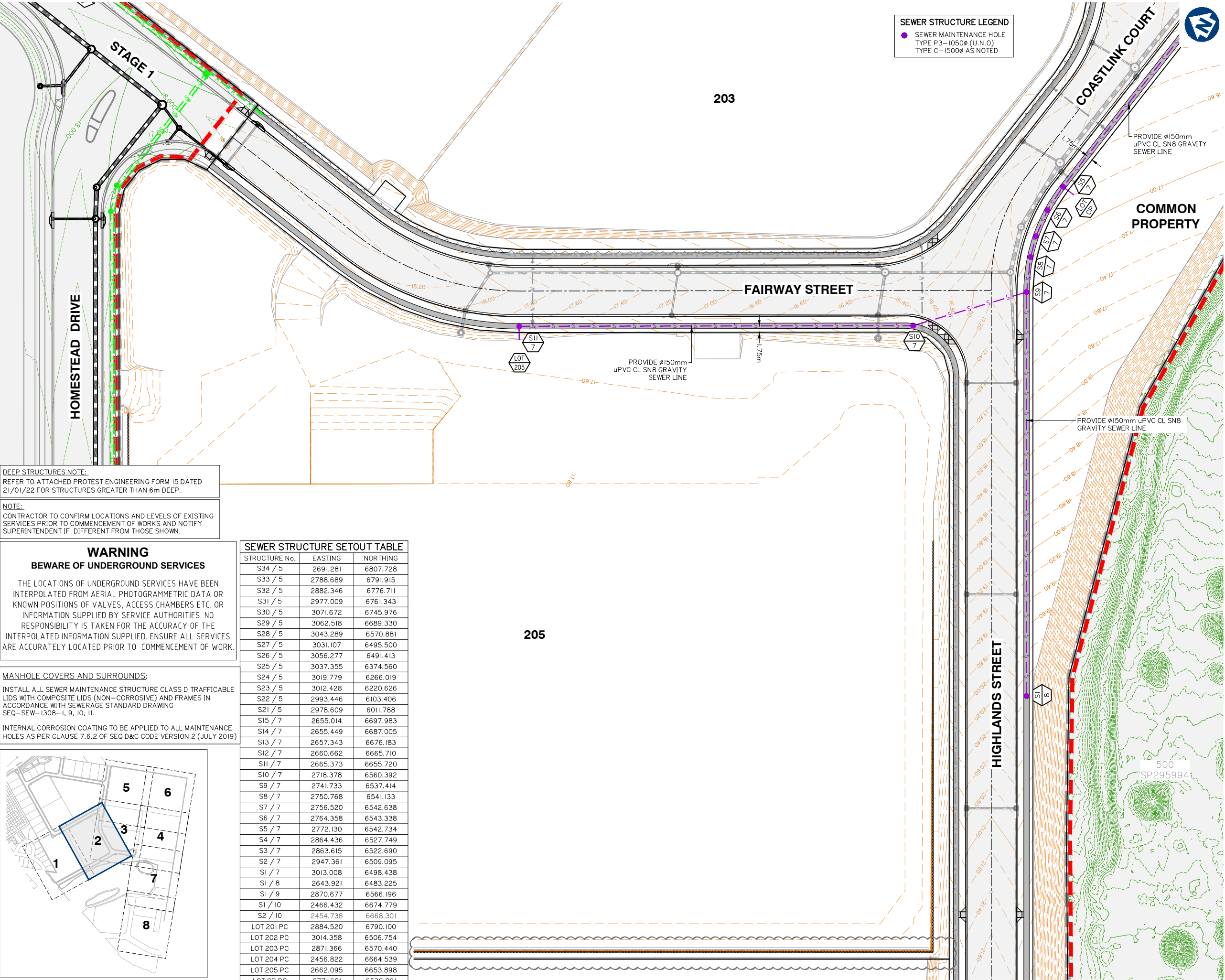
RPEQ: 16939

Signed:

Date: 05/07/2022

Drawing No:
5941 ENG OPW2 600

Rev. No:
E



Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

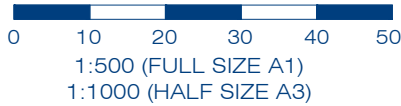
ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

SEWER RETICULATION
LAYOUT PLAN SHEET 2 OF 8

Issue	Date	Description	LAB	MG	CHK
D	19/07/22	LOT NUMBER, LOT BOUNDARY AND SEWER UPDATED	LAB	MG	
C	22/04/22	ISSUED FOR CONSTRUCTION	LAB	MG	
C	31/01/22	DEEP STRUCTURES NOTE ADDED	JH	MG	
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	

SCALE IN METRES



Scale at A1: 1:500

Designed: IG

Drafted: LAB / IG

Approved: MG

RPEQ: 16939

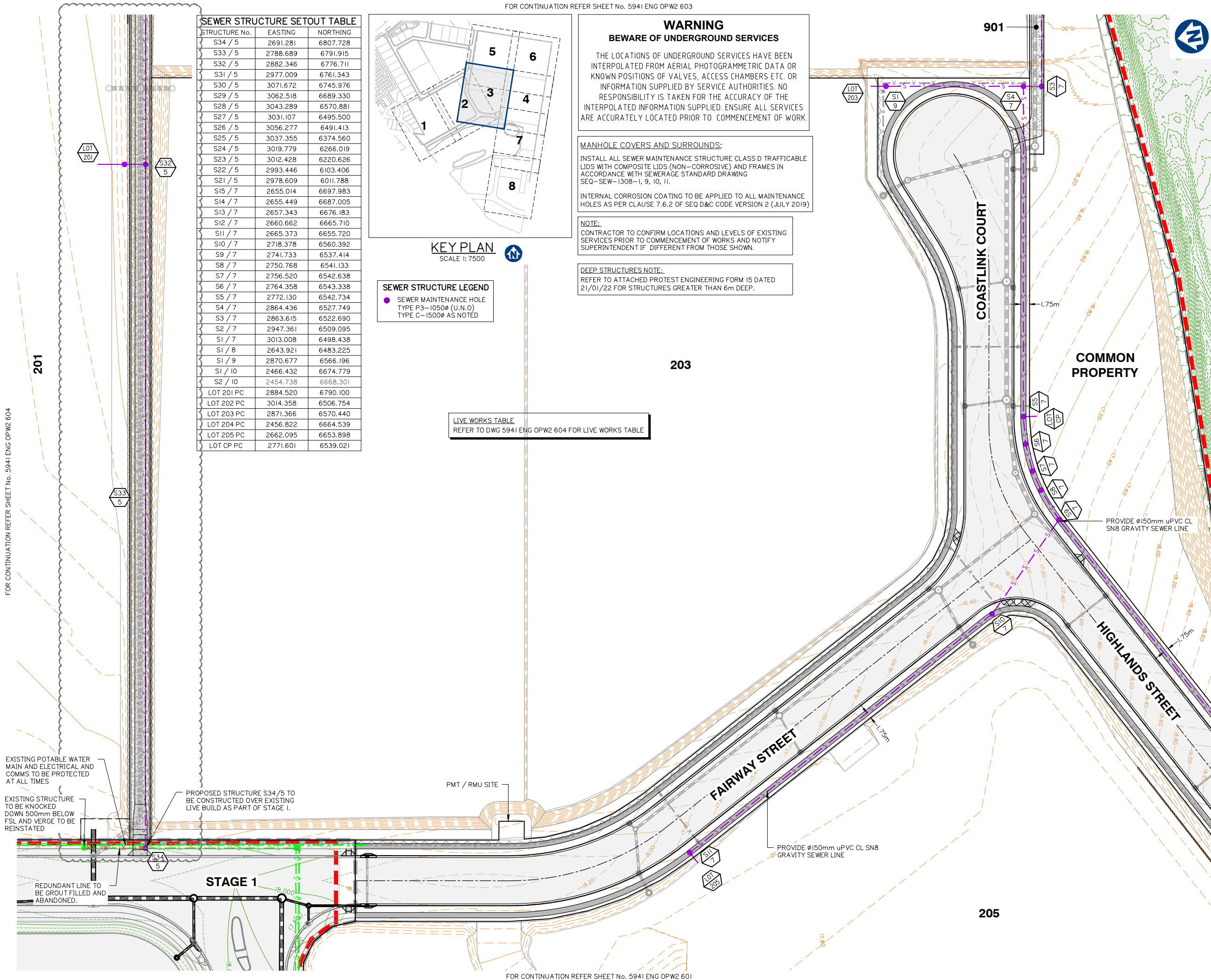
Signed:

Date: 05/07/2022

Drawing No:
5941 ENG OPW2 601

Rev. No:
D

FOR CONTINUATION REFER SHEET No. 5941 ENG OPW2 604



FOR CONTINUATION REFER SHEET No. 5941 ENG OPW2 601

SEWER RETICULATION LAYOUT PLAN SHEET 3 OF 8



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:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

SEWER RETICULATION
LAYOUT PLAN SHEET 3 OF 8

Rev	Date	Description	By	Check
D	19/07/22	LOT BOUNDARY, LOT NUMBER, SEWER UPDATED	LAB	MG
C	22/04/22	ISSUED FOR CONSTRUCTION	LAB	MG
C	31/01/22	DEEP STRUCTURES NOTE ADDED	JH	MG
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	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: LAB / IG

Approved: MG

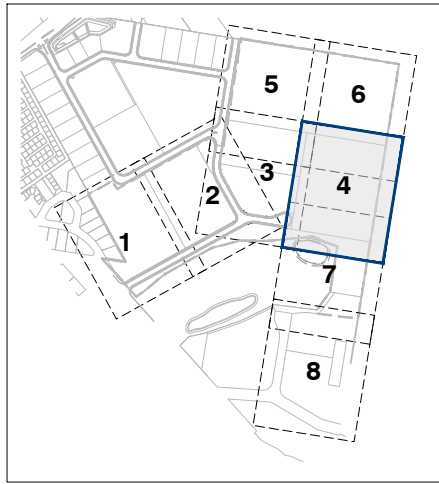
RPEQ: 16939

Signed:

Date: 05/07/2022

Drawing No:
5941 ENG OPW2 602

Rev. No:
D



KEY PLAN
SCALE 1:7500

**WARNING
BEWARE OF UNDERGROUND SERVICES**

THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN INTERPOLATED FROM AERIAL PHOTOGRAMMETRIC DATA OR KNOWN POSITIONS OF VALVES, ACCESS CHAMBERS ETC. OR INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES ARE ACCURATELY LOCATED PRIOR TO COMMENCEMENT OF WORK.

NOTE:
CONTRACTOR TO CONFIRM LOCATIONS AND LEVELS OF EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORKS AND NOTIFY SUPERINTENDENT IF DIFFERENT FROM THOSE SHOWN.

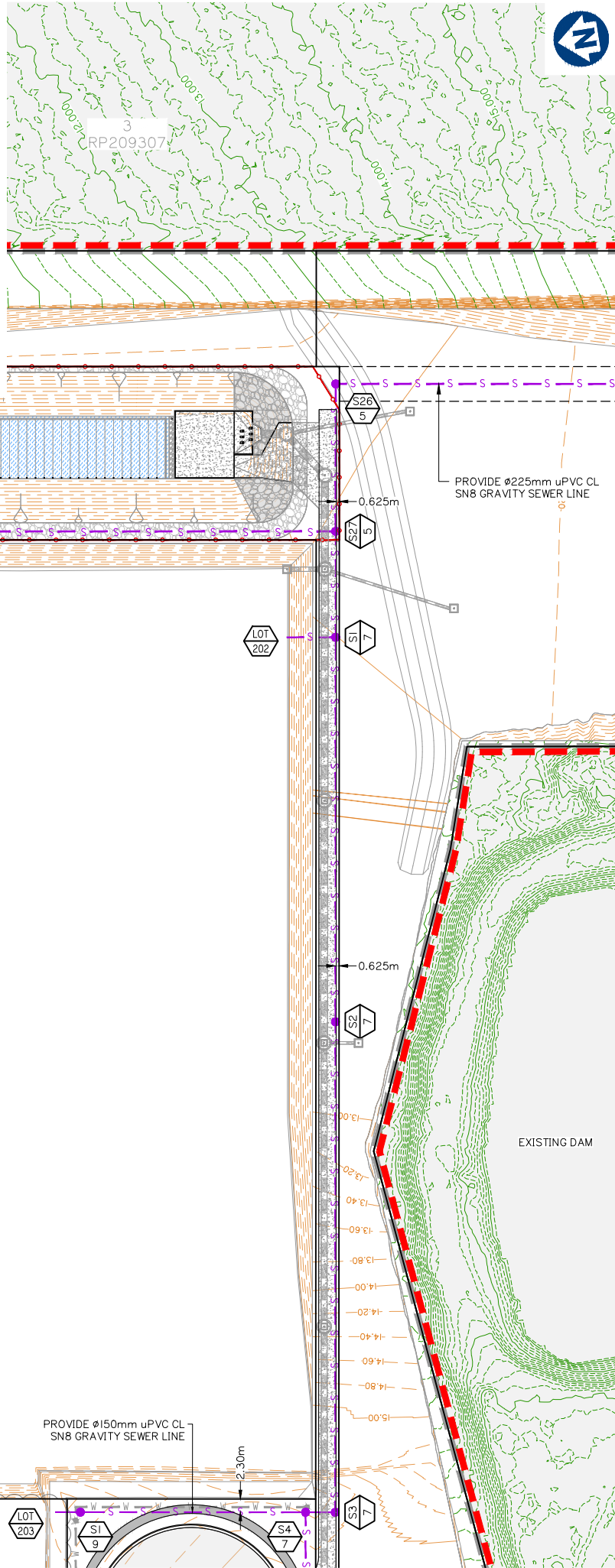
MANHOLE COVERS AND SURROUNDS:

INSTALL ALL SEWER MAINTENANCE STRUCTURE CLASS D TRAFFICABLE LIDS WITH COMPOSITE LIDS (NON-CORROSIVE) AND FRAMES IN ACCORDANCE WITH SEWERAGE STANDARD DRAWING SEQ-SEW-1308-I, 9, 10, 11.

INTERNAL CORROSION COATING TO BE APPLIED TO ALL MAINTENANCE HOLES AS PER CLAUSE 7.6.2 OF SEQ D&C CODE VERSION 2 (JULY 2019)

STRUCTURE No.	EASTING	NORTHING
S34 / 5	2691.281	6807.728
S33 / 5	2788.689	6791.915
S32 / 5	2882.346	6776.711
S31 / 5	2977.009	6761.343
S30 / 5	3071.672	6745.976
S29 / 5	3062.518	6689.330
S28 / 5	3043.289	6570.881
S27 / 5	3031.107	6495.500
S26 / 5	3056.277	6491.413
S25 / 5	3037.355	6374.560
S24 / 5	3019.779	6266.019
S23 / 5	3012.428	6220.626
S22 / 5	2993.446	6103.406
S21 / 5	2978.609	6011.788
S15 / 7	2655.014	6697.983
S14 / 7	2655.449	6687.005
S13 / 7	2657.343	6676.183
S12 / 7	2660.662	6665.710
S11 / 7	2665.373	6655.720

S10 / 7	2718.378	6560.392
S9 / 7	2741.733	6537.414
S8 / 7	2750.768	6541.133
S7 / 7	2756.520	6542.638
S6 / 7	2764.358	6543.338
S5 / 7	2772.130	6542.734
S4 / 7	2864.436	6527.749
S3 / 7	2863.615	6522.690
S2 / 7	2947.361	6509.095
S1 / 7	3013.008	6498.438
S1 / 8	2643.921	6483.225
S1 / 9	2870.677	6566.196
S1 / 10	2466.432	6674.779
S2 / 10	2454.738	6668.301
LOT 201 PC	2884.520	6790.100
LOT 202 PC	3014.358	6506.754
LOT 203 PC	2871.366	6570.440
LOT 204 PC	2456.822	6664.539
LOT 205 PC	2662.095	6653.898
LOT CP PC	2771.601	6539.021



DEEP STRUCTURES NOTE:
REFER TO ATTACHED PROTEST ENGINEERING FORM IS DATED 21/01/22 FOR STRUCTURES GREATER THAN 6m DEEP.

SEWER STRUCTURE LEGEND
● SEWER MAINTENANCE HOLE
TYPE P3-1050ø (U.N.O)
TYPE C-1500ø AS NOTED

PROVIDE ø150mm uPVC CL
SN8 GRAVITY SEWER LINE

PROVIDE ø225mm uPVC CL
SN8 GRAVITY SEWER LINE

PROVIDE ø225mm uPVC CL
SN8 GRAVITY SEWER LINE

PROVIDE ø150mm uPVC CL
SN8 GRAVITY SEWER LINE

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

SEWER RETICULATION
LAYOUT PLAN SHEET 4 OF 8

Issue	Date	Description	LAB	MG	DRN	CHK
D	19/07/22	LOT NUMBER, LOT BOUNDARY AND SEWER UPDATED	LAB	MG		
C	22/04/22	ISSUED FOR CONSTRUCTION	LAB	MG		
C	31/01/22	DEEP STRUCTURES NOTE ADDED	JH	MG		
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG		
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG		
A	30/07/21	ORIGINAL ISSUE	LAB	MG		

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: LAB / IG
Approved: MG
RPEQ: 16939
Signed:
Date: 05/07/2022

Drawing No: 5941 ENG OPW2 603
Rev. No: D

FOR CONTINUATION REFER SHEET No. 5941 ENG OPW2 605

FOR CONTINUATION REFER SHEET No. 5941 ENG OPW2 606

FOR CONTINUATION REFER SHEET No. 5941 ENG OPW2 602

SEWER RETICULATION LAYOUT PLAN SHEET 4 OF 8

SEWER STRUCTURE SETOUT TABLE		
STRUCTURE No.	EASTING	NORTHING
S34 / 5	2691.281	6807.728
S33 / 5	2788.689	6791.915
S32 / 5	2882.346	6776.711
S31 / 5	2977.009	6761.343
S30 / 5	3071.672	6745.976
S29 / 5	3062.518	6689.330
S28 / 5	3043.289	6570.881
S27 / 5	3031.107	6495.500
S26 / 5	3056.277	6491.413
S25 / 5	3037.355	6374.560
S24 / 5	3019.779	6266.019
S23 / 5	3012.428	6220.626
S22 / 5	2993.446	6103.406
S21 / 5	2978.609	6011.788
S15 / 7	2655.014	6697.983
S14 / 7	2655.449	6687.005
S13 / 7	2657.343	6676.183
S12 / 7	2660.662	6665.710
S11 / 7	2665.373	6655.720

S10 / 7	2718.378	6560.392
S9 / 7	2741.733	6537.414
S8 / 7	2750.768	6541.133
S7 / 7	2756.520	6542.638
S6 / 7	2764.358	6543.338
S5 / 7	2772.130	6542.734
S4 / 7	2864.436	6527.749
S3 / 7	2863.615	6522.690
S2 / 7	2947.361	6509.095
S1 / 7	3013.008	6498.438
SI / 8	2643.921	6483.225
SI / 9	2870.677	6566.196
SI / 10	2466.432	6674.779
S2 / 10	2454.738	6668.301
LOT 201 PC	2884.520	6790.100
LOT 202 PC	3014.358	6506.754
LOT 203 PC	2871.366	6570.440
LOT 204 PC	2456.822	6664.539
LOT 205 PC	2662.095	6653.898
LOT CP PC	2771.601	6539.021

WARNING
BEWARE OF UNDERGROUND SERVICES

THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN INTERPOLATED FROM AERIAL PHOTOGRAMMETRIC DATA OR KNOWN POSITIONS OF VALVES, ACCESS CHAMBERS ETC. OR INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES ARE ACCURATELY LOCATED PRIOR TO COMMENCEMENT OF WORK.

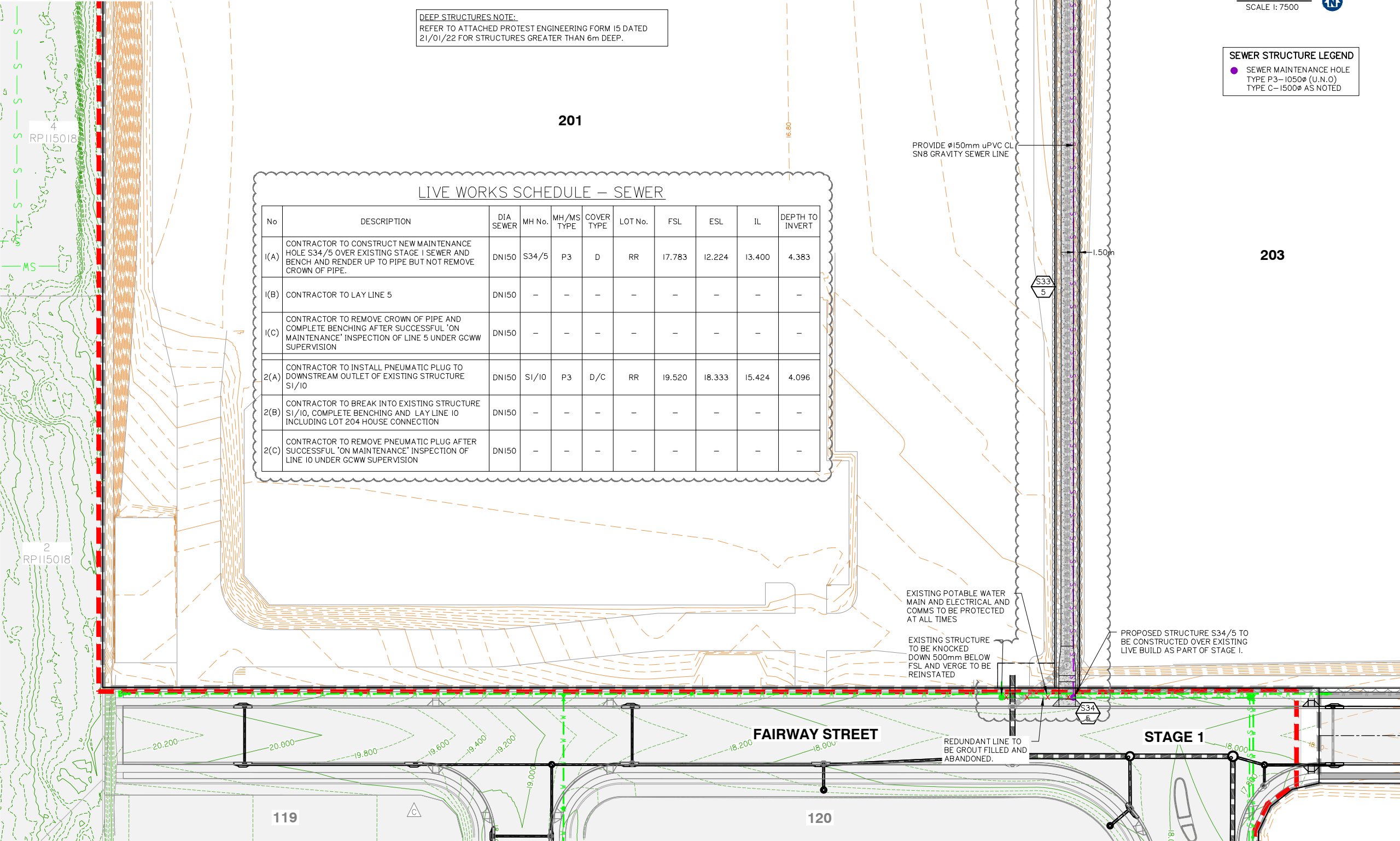
MANHOLE COVERS AND SURROUNDS:

INSTALL ALL SEWER MAINTENANCE STRUCTURE CLASS D TRAFFICABLE LIDS WITH COMPOSITE LIDS (NON-CORROSIVE) AND FRAMES IN ACCORDANCE WITH SEWERAGE STANDARD DRAWING SEQ-SEW-1308-1, 9, 10, 11.

INTERNAL CORROSION COATING TO BE APPLIED TO ALL MAINTENANCE HOLES AS PER CLAUSE 7.6.2 OF SEQ D&C CODE VERSION 2 (JULY 2019)

NOTE:
CONTRACTOR TO CONFIRM LOCATIONS AND LEVELS OF EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORKS AND NOTIFY SUPERINTENDENT IF DIFFERENT FROM THOSE SHOWN.

DEEP STRUCTURES NOTE:
REFER TO ATTACHED PROTEST ENGINEERING FORM I5 DATED 21/01/22 FOR STRUCTURES GREATER THAN 6m DEEP.



Issue	Date	Description	LAB	MG	DRN	CHK
E	19/07/22	LOT NUMBER, LOT BOUNDARY AND SEWER UPDATED	LAB	MG		
D	23/04/22	ISSUED FOR CONSTRUCTION	LAB	MG		
D	31/01/22	DEEP STRUCTURES NOTE ADDED	JH	MG		
C	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG		
C	15/09/21	CONTOURS AMENDED	LAB	MG		
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG		
A	30/07/21	ORIGINAL ISSUE	LAB	MG		

WARNING
BEWARE OF UNDERGROUND SERVICES

THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN INTERPOLATED FROM AERIAL PHOTOGRAMMETRIC DATA OR KNOWN POSITIONS OF VALVES, ACCESS CHAMBERS ETC. OR INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES ARE ACCURATELY LOCATED PRIOR TO COMMENCEMENT OF WORK.

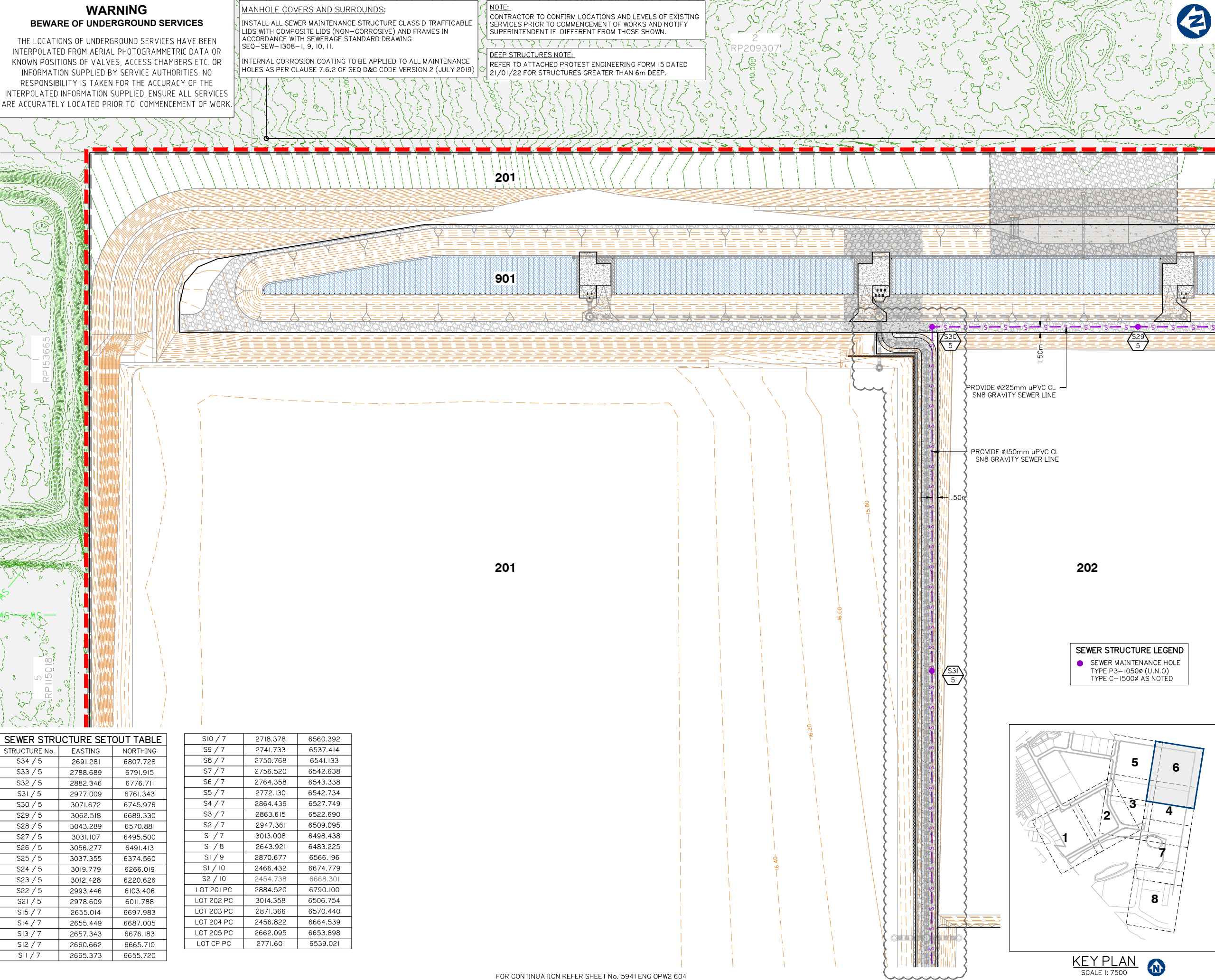
MANHOLE COVERS AND SURROUNDS:

INSTALL ALL SEWER MAINTENANCE STRUCTURE CLASS D TRAFFICABLE LIDS WITH COMPOSITE LIDS (NON-CORROSIVE) AND FRAMES IN ACCORDANCE WITH SEWERAGE STANDARD DRAWING SEQ-SEW-1308-1, 9, 10, 11.

INTERNAL CORROSION COATING TO BE APPLIED TO ALL MAINTENANCE HOLES AS PER CLAUSE 7.6.2 OF SEQ D&C CODE VERSION 2 (JULY 2019)

NOTE:
CONTRACTOR TO CONFIRM LOCATIONS AND LEVELS OF EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORKS AND NOTIFY SUPERINTENDENT IF DIFFERENT FROM THOSE SHOWN.

DEEP STRUCTURES NOTE:
REFER TO ATTACHED PROTEST ENGINEERING FORM I5 DATED 21/01/22 FOR STRUCTURES GREATER THAN 6m DEEP.

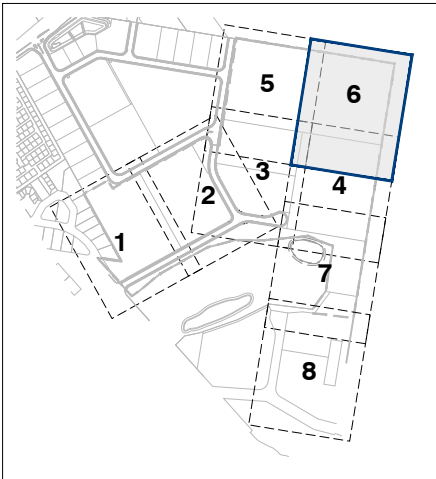


SEWER STRUCTURE SETOUT TABLE		
STRUCTURE No.	EASTING	NORTHING
S34 / 5	2691.281	6807.728
S33 / 5	2788.689	6791.915
S32 / 5	2882.346	6776.711
S31 / 5	2977.009	6761.343
S30 / 5	3071.672	6745.976
S29 / 5	3062.518	6689.330
S28 / 5	3043.289	6570.881
S27 / 5	3031.107	6495.500
S26 / 5	3056.277	6491.413
S25 / 5	3037.355	6374.560
S24 / 5	3019.779	6266.019
S23 / 5	3012.428	6220.626
S22 / 5	2993.446	6103.406
S21 / 5	2978.609	6011.788
S15 / 7	2655.014	6697.983
S14 / 7	2655.449	6687.005
S13 / 7	2657.343	6676.183
S12 / 7	2660.662	6665.710
S11 / 7	2665.373	6655.720

S10 / 7	2718.378	6560.392
S9 / 7	2741.733	6537.414
S8 / 7	2750.768	6541.133
S7 / 7	2756.520	6542.638
S6 / 7	2764.358	6543.338
S5 / 7	2772.130	6542.734
S4 / 7	2864.436	6527.749
S3 / 7	2863.615	6522.690
S2 / 7	2947.361	6509.095
S1 / 7	3013.008	6498.438
S1 / 8	2643.921	6483.225
S1 / 9	2870.677	6566.196
S1 / 10	2466.432	6674.779
S2 / 10	2454.738	6668.301
LOT 201 PC	2884.520	6790.100
LOT 202 PC	3014.358	6506.754
LOT 203 PC	2871.366	6570.440
LOT 204 PC	2456.822	6664.539
LOT 205 PC	2662.095	6653.898
LOT CP PC	2771.601	6539.021

SEWER STRUCTURE LEGEND

- SEWER MAINTENANCE HOLE
- TYPE P3-1050ø (U.N.O)
- TYPE C-1500ø AS NOTED



KEY PLAN
SCALE 1:7500

FOR CONTINUATION REFER SHEET No. 5941 ENG OPW2 603

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

SEWER RETICULATION
LAYOUT PLAN SHEET 6 OF 8

Issue	Date	Description	LAB	MG	CHK
D	19/07/22	LOT NUMBER, LOT BOUNDARY AND SEWER UPDATED	LAB	MG	
C	22/04/22	ISSUED FOR CONSTRUCTION	LAB	MG	
C	31/01/22	DEEP STRUCTURES NOTE ADDED	JH	MG	
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	

SCALE IN METRES



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

Scale at A1: 1:500

Designed: IG

Drafted: LAB / IG

Approved: MG

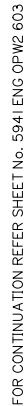
RPEQ: 16939

Signed:

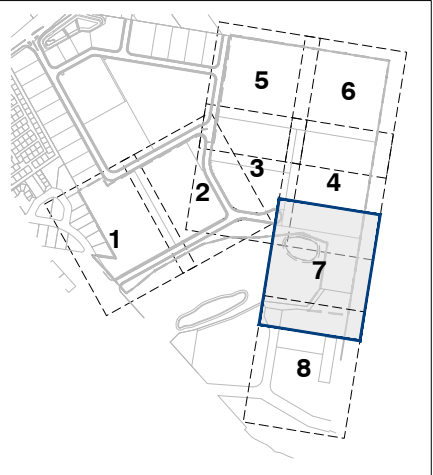
Date: 05/07/2022

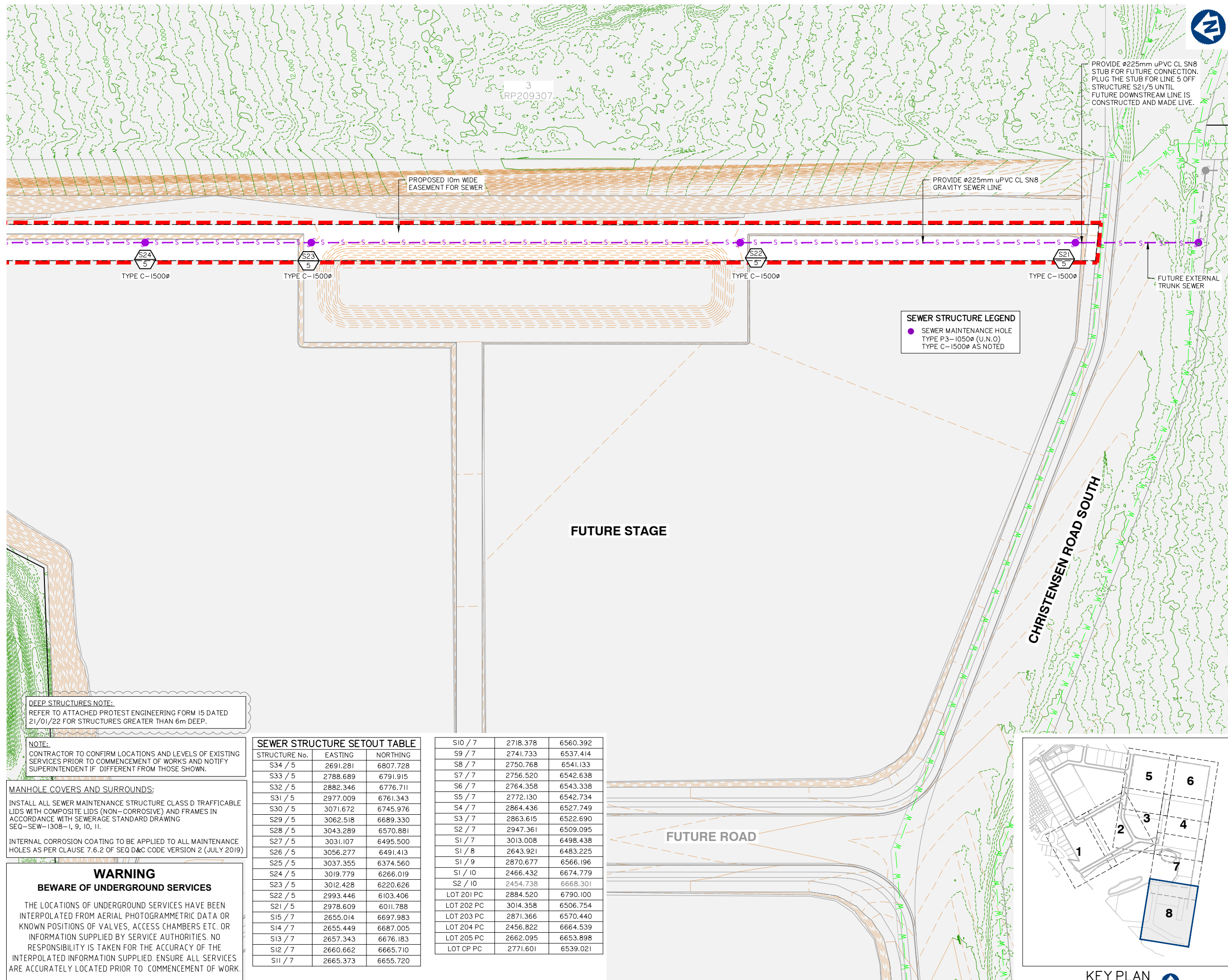
Drawing No:
5941 ENG OPW2 605

Rev. No:
D



S10 / 7	2718.378	6560.392
S9 / 7	2741.733	6537.414
S8 / 7	2750.768	6541.133
S7 / 7	2756.520	6542.638
S6 / 7	2764.358	6543.338
S5 / 7	2772.130	6542.734
S4 / 7	2864.436	6527.749
S3 / 7	2863.615	6522.990
S2 / 7	2947.361	6509.095
SI / 7	3013.008	6498.438
SI / 8	2643.921	6483.225
SI / 9	2870.677	6566.196
SI / 10	2466.432	6674.779
S2 / 10	2454.738	6668.301
LOT 201 PC	2884.520	6790.100
LOT 202 PC	3014.358	6506.754
LOT 203 PC	2871.366	6570.440
LOT 204 PC	2456.822	6664.539
LOT 205 PC	2662.095	6653.898
LOT CP PC	2771.601	6539.021





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, Beenleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA 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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

SEWER RETICULATION
LAYOUT PLAN SHEET 8 OF 8

C	22/04/22	ISSUED FOR CONSTRUCTION	LAB	MG	
B	31/01/22	DEEP STRUCTURES NOTE ADDED	JH	MG	
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	
Issued On	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:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No:
5941 ENG OPW2 607

Rev. No:
C

LINE 5

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA 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: A
Meridian: -
Contour Interval: -
PSM: -
RL: -

ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
SEWER RETICULATION
LONGITUDINAL SECTIONS
SHEET 1 OF 10

C	22/04/22		ISSUED FOR CONSTRUCTION	LAB	MG
C	31/01/22		NOTE 13 ADDED	JH	MG
B	28/11/21		ISSUED FOR CONSTRUCTION	LAB	MG
B	10/09/21		INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21		ORIGINAL ISSUE	LAB	MG
Issue	Date		Description	DRN	Ch-K

SCALE IN METRES

HORZ:

Scale 1:50 - Lengths are in Metres.

VERT:

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No:
5941 ENG OPW2 610

Rev. No:
C

MAINTENANCE HOLE / SHAFT No.

S22/5

MH / MS COVER TYPE

D/C

MH / MS TYPE

C

MH / MS DROP TYPE

V

LINE DEFLECTION & BRANCHES

I

INTERNAL CORROSION PROTECTION

Y

PROPERTY CONNECTION TYPE

I

RIGSS STRUCTURE DROPS		RIGSS STRUCTURE LIDS	
V	STRAIGHT THROUGH SEWER SEQ DWG SEQ-SEW-1303-1	B	NON-TRAFFICABLE LID
W	OBLIQUE 45° "Y" JUNCTION SEQ DWG SEQ-SEW-1303-1	D	TRAFFICABLE LID
X	INTERNAL BACKDROP SEQ DWG SEQ-SEW-1303-1	C	COMPOSITE
Z	VERTICAL DROP JUNCTION STD DWG SEQ-SEW-1314-1	CONSTRUCT BRIDGING STRUCTURE SPANNING THE SEWER TRENCH	
		TRENCHSTOPS, BULKHEADS & CONCRETE ENCASEMENTS	

RIGSS STRUCTURE TYPES	
P3	1050mm DIA. PRE-CAST MAINTENANCE HOLE WITH CONVERSION SLAB AND PRE-CAST BASE. INSTALL CLASS D 'COMPOSITE' COVER. SEQ STD DWG SEQ-SEW-1300-1
C	1500mm DIA. CAST-IN-SITU MAINTENANCE HOLE INSTALL DUCTILE IRON CLASS D 'COMPOSITE' COVER. REFER SEQ STD DWG SEQ-SEW-1307-1. REFER NOTE 12
J1	TYPE "J1" MAINTENANCE SHAFT (3.0m MAXIMUM DEPTH TO IL) SEQ STD DWG SEQ-SEW-1314-2
BND	LONG RADIUS BEND (R3.0m) SEQ STD DWG SEQ-SEW-1314-3

RIGSS PROPERTY CONNECTION TYPES	
V	STRAIGHT THROUGH SEWER (250mm MAX. DROP FOR 150ø) SEQ STD DWG SEQ-SEW-1303-1
W	OBLIQUE 45° "Y" JUNCTION (250mm-600mm DROP FOR 150ø) SEQ STD DWG SEQ-SEW-1303-1
X	INTERNAL BACKDROP (600mm MIN. DROP FOR 150ø) SEQ STD DWG SEQ-SEW-1303-1
Z	DROP JUNCTION TO DN300 RISER OF MAINTENANCE SHAFT SEQ STD DWG SEQ-SEW-1314-1 AND 1314-2

RIGSS GENERAL NOTES	
1	ALL uPVC SEWER PIPE TO BE CLASS SN8 INCLUDING ALL PROPERTY CONNECTIONS.
2	EMBEDMENT TYPES AS INDICATED ON LONGITUDINAL SECTIONS AND SEQ-SEW-1201-1
3	ALL BENDS TO BE LONG RADIUS BEND, 3.0m RADIUS. REFER DWG SEQ-SEW-1314-3
4	ALL MAINTENANCE SHAFTS (MS) SHALL HAVE 300mmø PVC RISERS, AND NOT EXCEED 3.0m DEPTH (FSL TO INVERT LEVEL).
5	CONTRACTOR TO VERIFY DOWNSTREAM EXISTING PIPE LEVELS PRIOR TO COMMENCEMENT OF PIPEWORK.
6	POLYETHYLENE (PE) LINING TO BE INSTALLED TO ALL MAINTENANCE STRUCTURES TYPE P3. REFER LONGITUDINAL SECTIONS. REFER ALSO SEQ-SPS-1407-1-A & 2-B
7	WHERE NOTED ON THE DRAWINGS, CONTRACTOR TO CONSTRUCT BRIDGING SLAB SPANNING THE SEWER TRENCH. REFER TYPICAL SECTIONS AND DETAILS ON DWG No. 5941 ENG OPW2 410
8	WHERE NOTED ON THE DRAWINGS, TRENCHSTOPS, BULKHEADS AND CONCRETE ENCASEMENTS TO BE INSTALLED IN ACCORDANCE WITH THE SEQ SEWER CODE.
9	ALL PROPERTY CONNECTIONS TO BE 150ø uPVC CLASS SN8 UNLESS NOTED OTHERWISE.
10	DESIGN OF DEEP SEWER STRUCTURES GREATER THAN 5 METRES TO BE CARRIED OUT BY A SUITABLY QUALIFIED STRUCTURAL ENGINEER IN ACCORDANCE WITH SEQ SEWER CODE CLAUSE 4.6.2.2, AND PE LINING REQUIREMENTS. REFER ALSO NOTE 12.
11	ALL MAINTENANCE HOLES WHERE TRAFFICABLE LIDS ARE SPECIFIED TO BE COMPOSITE LIDS AND FRAMES (NON-CORROSIVE). FOR ALL MANHOLES WHERE INTERNAL PROTECTION COATINGS ARE REQUIRED AS PER CLAUSE 7.6.2(1) TO (VII) OF THE SEWERAGE CLAUSE. REFER SEQ CIVIL IPAM LIST.
12	MAINTENANCE HOLES OVER 6.0m DEEP REQUIRE SPECIAL DESIGN & CERTIFICATION BY A REGISTERED PROFESSIONAL ENGINEER OF QUEENSLAND (RPEQ) AS PER SEQ STD DWG SEQ-SEW-1307-1
13	REFER TO ATTACHED PROTEST ENGINEERING FORM 15 DATED 21/01/22 FOR STRUCTURES GREATER THAN 6m DEEP

DATUM RL 3.000

PROPERTY DESCRIPTION

PRIVATE LOT

PRIVATE LOT

PRIVATE LOT

PIPE SIZE (mm), CLASS

DN225
uPVC SN8

DN225
uPVC SN8

DN225
uPVC SN8

GRADE (1 IN X) CTR - CTR OF STRUCTURE

1 IN 300

1 IN 300

1 IN 300

LENGTH

118.747

45.985

109.955

EMBEDMENT TYPE

4

4

4

PIPE GRADE (%)

0.333%

0.333%

0.333%

DEPTH TO INVERT

6.383
6.363

5.986
5.966

6.576
6.556

5.566

INVERT LEVEL

7.536
7.556

7.952
7.973

8.125
8.145

18.511

FINISHED SURFACE LEVEL

13.918

13.936

14.700

14.075

EXISTING SURFACE LEVEL

11.291

12.355

14.938

18.070

CHAINAGE

1407.129

1525.876

1571.860

1681.815

LINE 5

FOR CAST-IN-SITU STRUCTURES EXCEEDING
6.0m DEPTH, CONTRACTOR TO PROVIDE FORM 15
CERTIFICATION FOR ACCEPTANCE BY COUNCIL
PRIOR TO CONSTRUCTION COMMENCING

CH 0.000 D 6.350
CH 45.985 D 6.350
LOT 5444 IL 8.35



planning | environment | landscape | engineering | survey
T: 3807 3333 | F: 3287 5461 | www.gassman.com.au
Gold Coast & Logan | 176 Business Street, Yatala QLD | PO Box 392, Beerleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be
reproduced or transmitted in any form or by any means,
electronic, mechanical, photocopying, recording, or
otherwise, without the written permission of Gassman
Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
SEWER RETICULATION
LONGITUDINAL SECTIONS
SHEET 2 OF 10

D	19/07/22	SEWER UPDATED	JH	MG	
C	22/04/22	ISSUED FOR CONSTRUCTION	LAB	MG	
C	31/01/22	NOTE 13 ADDED	JH	MG	
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES

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

VERT: Scale 1:50 - Lengths are in Metres.
0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	12/07/2022

Drawing No: 5941 ENG OPW2 611 Rev. No: D

MAINTENANCE HOLE / SHAFT No.

MH / MS COVER TYPE

MH / MS TYPE

MH / MS DROP TYPE

LINE DEFLECTION & BRANCHES

INTERNAL CORROSION PROTECTION

PROPERTY CONNECTION TYPE

RIGSS STRUCTURE DROPS		RIGSS STRUCTURE LIDS	
V	STRAIGHT THROUGH SEWER SEQ DWG SEQ-SEW-1303-1	B	NON-TRAFFICABLE LID
W	OBLIQUE 45° "Y" JUNCTION SEQ DWG SEQ-SEW-1303-1	D	TRAFFICABLE LID
X	INTERNAL BACKDROP SEQ DWG SEQ-SEW-1303-1	C	COMPOSITE
Z	VERTICAL DROP JUNCTION STD DWG SEQ-SEW-1314-1		
		CONSTRUCT BRIDGING STRUCTURE SPANNING THE SEWER TRENCH	
		TRENCHSTOPS, BULKHEADS & CONCRETE ENCASEMENTS	

RIGSS STRUCTURE TYPES	
P3	1050mm DIA. PRE-CAST MAINTENANCE HOLE WITH CONVERSION SLAB AND PRE-CAST BASE. INSTALL CLASS D 'COMPOSITE' COVER. SEQ STD DWG SEQ-SEW-1300-1
C	1500mm DIA. CAST IN-SITU MAINTENANCE HOLE INSTALL DUCTILE IRON CLASS D 'COMPOSITE' COVER. REFER SEQ STD DWG SEQ-SEW-1307-1. REFER NOTE 12
J1	TYPE "J1" MAINTENANCE SHAFT (3.0m MAXIMUM DEPTH TO IL) SEQ STD DWG SEQ-SEW-1314-2
BND	LONG RADIUS BEND (R3.0m) SEQ STD DWG SEQ-SEW-1314-3

RIGSS PROPERTY CONNECTION TYPES	
V	STRAIGHT THROUGH SEWER (250mm MAX. DROP FOR 150#) SEQ STD DWG SEQ-SEW-1303-1
W	OBLIQUE 45° "Y" JUNCTION (250mm-600mm DROP FOR 150#) SEQ STD DWG SEQ-SEW-1303-1
X	INTERNAL BACKDROP (600mm MIN. DROP FOR 150#) SEQ STD DWG SEQ-SEW-1303-1
Z	DROP JUNCTION TO DN300 RISER OF MAINTENANCE SHAFT SEQ STD DWG SEQ-SEW-1314-1 AND 1314-2

RIGSS GENERAL NOTES	
1	ALL uPVC SEWER PIPE TO BE CLASS SN8 INCLUDING ALL PROPERTY CONNECTIONS.
2	EMBEDMENT TYPES AS INDICATED ON LONGITUDINAL SECTIONS AND SEQ-SEW-1201-1
3	ALL BENDS TO BE LONG RADIUS BEND, 3.0m RADIUS. REFER DWG SEQ-SEW-1314-3
4	ALL MAINTENANCE SHAFTS (MS) SHALL HAVE 300mm# PVC RISERS, AND NOT EXCEED 3.0m DEPTH (FSL TO INVERT LEVEL).
5	CONTRACTOR TO VERIFY DOWNSTREAM EXISTING PIPE LEVELS PRIOR TO COMMENCEMENT OF PIPEWORK.
6	POLYETHYLENE (PE) LINING TO BE INSTALLED TO ALL MAINTENANCE STRUCTURES TYPE P3. REFER LONGITUDINAL SECTIONS. REFER ALSO SEQ-SPS-1407-1-A & 2-B
7	WHERE NOTED ON THE DRAWINGS, CONTRACTOR TO CONSTRUCT BRIDGING SLAB SPANNING THE SEWER TRENCH. REFER TYPICAL SECTIONS AND DETAILS ON DWG No. 5941 ENG OPW2 410
8	WHERE NOTED ON THE DRAWINGS, TRENCHSTOPS, BULKHEADS AND CONCRETE ENCASEMENTS TO BE INSTALLED IN ACCORDANCE WITH THE SEQ SEWER CODE.
9	ALL PROPERTY CONNECTIONS TO BE 150# uPVC CLASS SN8 UNLESS NOTED OTHERWISE.
10	DESIGN OF DEEP SEWER STRUCTURES GREATER THAN 5 METRES TO BE CARRIED OUT BY A SUITABLY QUALIFIED STRUCTURAL ENGINEER IN ACCORDANCE WITH SEQ SEWER CODE CLAUSE 4.6.2.2, AND PE LINING REQUIREMENTS. REFER ALSO NOTE 12.
11	ALL MAINTENANCE HOLES WHERE TRAFFICABLE LIDS ARE SPECIFIED TO BE COMPOSITE LIDS AND FRAMES (NON-CORROSIVE). FOR ALL MANHOLES WHERE INTERNAL PROTECTION COATINGS ARE REQUIRED AS PER CLAUSE 7.6.2(1) TO (VII) OF THE SEWERAGE CLAUSE. REFER SEQ CIVIL IPAM LIST.
12	MAINTENANCE HOLES OVER 6.0m DEEP REQUIRE SPECIAL DESIGN & CERTIFICATION BY A REGISTERED PROFESSIONAL ENGINEER OF QUEENSLAND (RPEQ) AS PER SEQ STD DWG SEQ-SEW-1307-1
13	REFER TO ATTACHED PROTEST ENGINEERING FORM 15 DATED 21/01/22 FOR STRUCTURES GREATER THAN 6m DEEP

DATUM RL 3.000

PROPERTY DESCRIPTION	PRIVATE LOT		PRIVATE LOT		PRIVATE LOT	
PIPE SIZE (mm), CLASS	DN225 uPVC SN8		DN225 uPVC SN8		DN225 uPVC SN8	
GRADE (1 IN X) CTR - CTR OF STRUCTURE	1 IN 300		1 IN 300		1 IN 300	
LENGTH	118.375		25.500		76.359	
EMBEDMENT TYPE	4		4		4	
PIPE GRADE (%)	0.334%		0.333%		0.333%	
DEPTH TO INVERT	5.566 5.544	3.956 3.876	3.924 3.841	3.560		
INVERT LEVEL	8.511 8.531	8.926 9.006	9.091 9.174	9.428		
FINISHED SURFACE LEVEL	14.075	12.882	13.015	12.989		
EXISTING SURFACE LEVEL	18.070	12.907	12.616	10.202		
CHAINAGE	1681.815	1800.190	1825.690	1902.050		

LINE 5



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, Beenleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be
reproduced or transmitted in any form or by any means,
electronic, mechanical, photocopying, recording, or
otherwise, without the written permission of Gassman
Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 3 OF 10

C	22/04/22	ISSUED FOR CONSTRUCTION	LAB	MG	
C	31/01/22	NOTE 13 ADDED	JH	MG	
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES

Scale 1:500 - Lengths are in Metres.
HORZ: 0 5 10 15 20 25 30 35 40
Scale 1:50 - Lengths are in Metres.
VERT: 0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No: 5941 ENG OPW2 612 Rev. No: C

MAINTENANCE HOLE / SHAFT No.

MH / MS COVER TYPE	D
MH / MS TYPE	J1
MH / MS DROP TYPE	V
LINE DEFLECTION & BRANCHES	-
INTERNAL CORROSION PROTECTION	Y
PROPERTY CONNECTION TYPE	I

RIGSS STRUCTURE DROPS		RIGSS STRUCTURE LIDS	
V	STRAIGHT THROUGH SEWER SEQ DWG SEQ-SEW-1303-1	B	NON-TRAFFICABLE LID
W	OBLIQUE 45° "Y" JUNCTION SEQ DWG SEQ-SEW-1303-1	D	TRAFFICABLE LID
X	INTERNAL BACKDROP SEQ DWG SEQ-SEW-1303-1	C	COMPOSITE
Z	VERTICAL DROP JUNCTION STD DWG SEQ-SEW-1314-1	CONSTRUCT BRIDGING STRUCTURE SPANNING THE SEWER TRENCH	
		TRENCHSTOPS, BULKHEADS & CONCRETE ENCASEMENTS	

RIGSS STRUCTURE TYPES	
P3	1050mm DIA. PRE-CAST MAINTENANCE HOLE WITH CONVERSION SLAB AND PRE-CAST BASE. INSTALL CLASS D 'COMPOSITE' COVER. SEQ STD DWG SEQ-SEW-1300-1
C	1500mm DIA. CAST IN-SITU MAINTENANCE HOLE INSTALL DUCTILE IRON CLASS D 'COMPOSITE' COVER. REFER SEQ STD DWG SEQ-SEW-1307-1. REFER NOTE 12
J1	TYPE "J1" MAINTENANCE SHAFT (3.0m MAXIMUM DEPTH TO IL) SEQ STD DWG SEQ-SEW-1314-2
BND	LONG RADIUS BEND (R3.0m) SEQ STD DWG SEQ-SEW-1314-3

RIGSS PROPERTY CONNECTION TYPES	
V	STRAIGHT THROUGH SEWER (250mm MAX. DROP FOR 150ø) SEQ STD DWG SEQ-SEW-1303-1
W	OBLIQUE 45° "Y" JUNCTION (250mm-600mm DROP FOR 150ø) SEQ STD DWG SEQ-SEW-1303-1
X	INTERNAL BACKDROP (600mm MIN. DROP FOR 150ø) SEQ STD DWG SEQ-SEW-1303-1
Z	DROP JUNCTION TO DN300 RISER OF MAINTENANCE SHAFT SEQ STD DWG SEQ-SEW-1314-1 AND 1314-2

RIGSS GENERAL NOTES	
1	ALL uPVC SEWER PIPE TO BE CLASS SN8 INCLUDING ALL PROPERTY CONNECTIONS.
2	EMBEDMENT TYPES AS INDICATED ON LONGITUDINAL SECTIONS AND SEQ-SEW-1201-1
3	ALL BENDS TO BE LONG RADIUS BEND, 3.0m RADIUS. REFER DWG SEQ-SEW-1314-3
4	ALL MAINTENANCE SHAFTS (MS) SHALL HAVE 300mmø PVC RISERS, AND NOT EXCEED 3.0m DEPTH (FSL TO INVERT LEVEL).
5	CONTRACTOR TO VERIFY DOWNSTREAM EXISTING PIPE LEVELS PRIOR TO COMMENCEMENT OF PIPEWORK.
6	POLYETHYLENE (PE) LINING TO BE INSTALLED TO ALL MAINTENANCE STRUCTURES TYPE P3. REFER LONGITUDINAL SECTIONS. REFER ALSO SEQ-SPS-1407-1-A & 2-B
7	WHERE NOTED ON THE DRAWINGS, CONTRACTOR TO CONSTRUCT BRIDGING SLAB SPANNING THE SEWER TRENCH. REFER TYPICAL SECTIONS AND DETAILS ON DWG No. 5941 ENG OPW2 410
8	WHERE NOTED ON THE DRAWINGS, TRENCHSTOPS, BULKHEADS AND CONCRETE ENCASEMENTS TO BE INSTALLED IN ACCORDANCE WITH THE SEQ SEWER CODE.
9	ALL PROPERTY CONNECTIONS TO BE 150ø uPVC CLASS SN8 UNLESS NOTED OTHERWISE.
10	DESIGN OF DEEP SEWER STRUCTURES GREATER THAN 5 METRES TO BE CARRIED OUT BY A SUITABLY QUALIFIED STRUCTURAL ENGINEER IN ACCORDANCE WITH SEQ SEWER CODE CLAUSE 4.6.2.2, AND PE LINING REQUIREMENTS. REFER ALSO NOTE 12.
11	ALL MAINTENANCE HOLES WHERE TRAFFICABLE LIDS ARE SPECIFIED TO BE COMPOSITE LIDS AND FRAMES (NON-CORROSIVE). FOR ALL MANHOLES WHERE INTERNAL PROTECTION COATINGS ARE REQUIRED AS PER CLAUSE 7.6.2(1) TO (VII) OF THE SEWERAGE CLAUSE. REFER SEQ CIVIL IPAM LIST.
12	MAINTENANCE HOLES OVER 6.0m DEEP REQUIRE SPECIAL DESIGN & CERTIFICATION BY A REGISTERED PROFESSIONAL ENGINEER OF QUEENSLAND (RPEQ) AS PER SEQ STD DWG SEQ-SEW-1307-1
13	REFER TO ATTACHED PROTEST ENGINEERING FORM 15 DATED 21/01/22 FOR STRUCTURES GREATER THAN 6m DEEP

DATUM RL 3.000

PROPERTY DESCRIPTION	DRAINAGE RESERVE		DRAINAGE RESERVE	
	DN225 uPVC SN8	DN225 uPVC SN8	DN150 uPVC SN8	DN150 uPVC SN8
PIPE SIZE (mm), CLASS				
GRADE (1 IN X) CTR - CTR OF STRUCTURE	1 IN 300	1 IN 300	1 IN 180	1 IN 180
LENGTH	120.000	57.380	21.571	21.571
EMBEDMENT TYPE	3	3	3	3
PIPE GRADE (%)	0.333%	0.333%	0.556%	0.556%
DEPTH TO INVERT	3.560 3.540	3.140 3.120	2.928 2.608	2.884 2.884
INVERT LEVEL	9.428 9.448	9.848 9.868	10.059 10.379	10.499 10.499
FINISHED SURFACE LEVEL	12.989	12.988	12.987	13.383
EXISTING SURFACE LEVEL	10.202	2022.0509.949	2079.4308.718	2101.001.8.971
CHAINAGE	1902.050	2022.0509.949	2079.4308.718	2101.001.8.971

LINE 5

S29/5

D

J1

V

-

Y

-

S30/5

D/C

P3

V

-90°

Y

-

S31/5

D/C

P3

V

-

Y

-

SN0232 4825
CH 2086.776 IL10.991
CL 0.367

CONSTRUCT BRIDGING STRUCTURE
SPANNING THE SEWER TRENCH



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, Beenleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be
reproduced or transmitted in any form or by any means,
electronic, mechanical, photocopying, recording, or
otherwise, without the written permission of Gassman
Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
SEWER RETICULATION
LONGITUDINAL SECTIONS
SHEET 4 OF 10

C	22/04/22	ISSUED FOR CONSTRUCTION	LAB	MG	
C	31/01/22	NOTE 13 ADDED	JH	MG	
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES

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

VERT: Scale 1:50 - Lengths are in Metres.
0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No: 5941 ENG OPW2 613 Rev. No: C

MAINTENANCE HOLE / SHAFT No.

S33/5

MH / MS COVER TYPE

MH / MS TYPE

MH / MS DROP TYPE

LINE DEFLECTION & BRANCHES

INTERNAL CORROSION PROTECTION

PROPERTY CONNECTION TYPE

RIGSS STRUCTURE DROPS		RIGSS STRUCTURE LIDS	
V	STRAIGHT THROUGH SEWER SEQ DWG SEQ-SEW-1303-1	B	NON-TRAFFICABLE LID
W	OBLIQUE 45° "Y" JUNCTION SEQ DWG SEQ-SEW-1303-1	D	TRAFFICABLE LID
X	INTERNAL BACKDROP SEQ DWG SEQ-SEW-1303-1	C	COMPOSITE
Z	VERTICAL DROP JUNCTION STD DWG SEQ-SEW-1314-1	CONSTRUCT BRIDGING STRUCTURE SPANNING THE SEWER TRENCH	
		TRENCHSTOPS, BULKHEADS & CONCRETE ENCASEMENTS	

RIGSS STRUCTURE TYPES	
P3	1050mm DIA. PRE-CAST MAINTENANCE HOLE WITH CONVERSION SLAB AND PRE-CAST BASE. INSTALL CLASS D 'COMPOSITE' COVER. SEQ STD DWG SEQ-SEW-1300-1
C	1500mm DIA. CAST-IN-SITU MAINTENANCE HOLE INSTALL DUCTILE IRON CLASS D 'COMPOSITE' COVER. REFER SEQ STD DWG SEQ-SEW-1307-1. REFER NOTE 12
J1	TYPE "J1" MAINTENANCE SHAFT (3.0m MAXIMUM DEPTH TO IL) SEQ STD DWG SEQ-SEW-1314-2
BND	LONG RADIUS BEND (R3.0m) SEQ STD DWG SEQ-SEW-1314-3

RIGSS PROPERTY CONNECTION TYPES	
V	STRAIGHT THROUGH SEWER (250mm MAX. DROP FOR 150ø) SEQ STD DWG SEQ-SEW-1303-1
W	OBLIQUE 45° "Y" JUNCTION (250mm-600mm DROP FOR 150ø) SEQ STD DWG SEQ-SEW-1303-1
X	INTERNAL BACKDROP (600mm MIN. DROP FOR 150ø) SEQ STD DWG SEQ-SEW-1303-1
Z	DROP JUNCTION TO DN300 RISER OF MAINTENANCE SHAFT SEQ STD DWG SEQ-SEW-1314-1 AND 1314-2

RIGSS GENERAL NOTES	
1	ALL uPVC SEWER PIPE TO BE CLASS SN8 INCLUDING ALL PROPERTY CONNECTIONS.
2	EMBEDMENT TYPES AS INDICATED ON LONGITUDINAL SECTIONS AND SEQ-SEW-1201-1
3	ALL BENDS TO BE LONG RADIUS BEND, 3.0m RADIUS. REFER DWG SEQ-SEW-1314-3
4	ALL MAINTENANCE SHAFTS (MS) SHALL HAVE 300mmø PVC RISERS, AND NOT EXCEED 3.0m DEPTH (FSL TO INVERT LEVEL).
5	CONTRACTOR TO VERIFY DOWNSTREAM EXISTING PIPE LEVELS PRIOR TO COMMENCEMENT OF PIPEWORK.
6	POLYETHYLENE (PE) LINING TO BE INSTALLED TO ALL MAINTENANCE STRUCTURES TYPE P3. REFER LONGITUDINAL SECTIONS. REFER ALSO SEQ-SPS-1407-1-A & 2-B
7	WHERE NOTED ON THE DRAWINGS, CONTRACTOR TO CONSTRUCT BRIDGING SLAB SPANNING THE SEWER TRENCH. REFER TYPICAL SECTIONS AND DETAILS ON DWG No. 5941 ENG OPW2 410
8	WHERE NOTED ON THE DRAWINGS, TRENCHSTOPS, BULKHEADS AND CONCRETE ENCASEMENTS TO BE INSTALLED IN ACCORDANCE WITH THE SEQ SEWER CODE.
9	ALL PROPERTY CONNECTIONS TO BE 150ø uPVC CLASS SN8 UNLESS NOTED OTHERWISE.
10	DESIGN OF DEEP SEWER STRUCTURES GREATER THAN 5 METRES TO BE CARRIED OUT BY A SUITABLY QUALIFIED STRUCTURAL ENGINEER IN ACCORDANCE WITH SEQ SEWER CODE CLAUSE 4.6.2.2, AND PE LINING REQUIREMENTS. REFER ALSO NOTE 12.
11	ALL MAINTENANCE HOLES WHERE TRAFFICABLE LIDS ARE SPECIFIED TO BE COMPOSITE LIDS AND FRAMES (NON-CORROSIVE). FOR ALL MANHOLES WHERE INTERNAL PROTECTION COATINGS ARE REQUIRED AS PER CLAUSE 7.6.2(1) TO (VII) OF THE SEWERAGE CLAUSE. REFER SEQ CIVIL IPAM LIST.
12	MAINTENANCE HOLES OVER 6.0m DEEP REQUIRE SPECIAL DESIGN & CERTIFICATION BY A REGISTERED PROFESSIONAL ENGINEER OF QUEENSLAND (RPEQ) AS PER SEQ STD DWG SEQ-SEW-1307-1
13	REFER TO ATTACHED PROTEST ENGINEERING FORM 15 DATED 21/01/22 FOR STRUCTURES GREATER THAN 6m DEEP

DATUM RL

PROPERTY DESCRIPTION

PIPE SIZE (mm), CLASS

GRADE (1 IN X) CTR - CTR OF STRUCTURE

LENGTH

EMBEDMENT TYPE

PIPE GRADE (%)

DEPTH TO INVERT

INVERT LEVEL

FINISHED SURFACE LEVEL

EXISTING SURFACE LEVEL

CHAINAGE

LINE 5

S34/5

D/C

P3

V

90°

Y

I

4.383

13.400

17.783

12.224

2464.801



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, Beenleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives

All rights reserved. No part of this document may be
reproduced or transmitted in any form or by any means,
electronic, mechanical, photocopying, recording, or
otherwise, without the written permission of Gassman
Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 6 OF 10

D	19/07/22	SEWER UPDATED	JH	MG	
C	22/04/22	ISSUED FOR CONSTRUCTION	LAB	MG	
C	31/01/22	NOTE 13 ADDED	JH	MG	
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES

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

VERT: Scale 1:50 - Lengths are in Metres.
0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	12/07/2022

Drawing No:
5941 ENG OPW2 615

Rev. No:
D

MAINTENANCE HOLE / SHAFT No.

MH / MS COVER TYPE

MH / MS TYPE

MH / MS DROP TYPE

LINE DEFLECTION & BRANCHES

INTERNAL CORROSION PROTECTION

PROPERTY CONNECTION TYPE

RIGSS STRUCTURE DROPS		RIGSS STRUCTURE LIDS	
V	STRAIGHT THROUGH SEWER SEQ DWG SEQ-SEW-1303-1	B	NON-TRAFFICABLE LID
W	OBLIQUE 45° "Y" JUNCTION SEQ DWG SEQ-SEW-1303-1	D	TRAFFICABLE LID
X	INTERNAL BACKDROP SEQ DWG SEQ-SEW-1303-1	C	COMPOSITE
Z	VERTICAL DROP JUNCTION STD DWG SEQ-SEW-1314-1	CONSTRUCT BRIDGING STRUCTURE SPANNING THE SEWER TRENCH	
		TRENCHSTOPS, BULKHEADS & CONCRETE ENCASEMENTS	

RIGSS STRUCTURE TYPES	
P3	1050mm DIA. PRE-CAST MAINTENANCE HOLE WITH CONVERSION SLAB AND PRE-CAST BASE. INSTALL CLASS D 'COMPOSITE' COVER. SEQ STD DWG SEQ-SEW-1300-1
C	1500mm DIA. CAST-IN-SITU MAINTENANCE HOLE INSTALL DUCTILE IRON CLASS D 'COMPOSITE' COVER. REFER SEQ STD DWG SEQ-SEW-1307-1. REFER NOTE 12
J1	TYPE "J1" MAINTENANCE SHAFT (3.0m MAXIMUM DEPTH TO IL) SEQ STD DWG SEQ-SEW-1314-2
BND	LONG RADIUS BEND (R3.0m) SEQ STD DWG SEQ-SEW-1314-3

RIGSS PROPERTY CONNECTION TYPES	
V	STRAIGHT THROUGH SEWER (250mm MAX. DROP FOR 150#) SEQ STD DWG SEQ-SEW-1303-1
W	OBLIQUE 45° "Y" JUNCTION (250mm-600mm DROP FOR 150#) SEQ STD DWG SEQ-SEW-1303-1
X	INTERNAL BACKDROP (600mm MIN. DROP FOR 150#) SEQ STD DWG SEQ-SEW-1303-1
Z	DROP JUNCTION TO DN300 RISER OF MAINTENANCE SHAFT SEQ STD DWG SEQ-SEW-1314-1 AND 1314-2

RIGSS GENERAL NOTES	
1	ALL uPVC SEWER PIPE TO BE CLASS SN8 INCLUDING ALL PROPERTY CONNECTIONS.
2	EMBEDMENT TYPES AS INDICATED ON LONGITUDINAL SECTIONS AND SEQ-SEW-1201-1
3	ALL BENDS TO BE LONG RADIUS BEND, 3.0m RADIUS. REFER DWG SEQ-SEW-1314-3
4	ALL MAINTENANCE SHAFTS (MS) SHALL HAVE 300mm# PVC RISERS, AND NOT EXCEED 3.0m DEPTH (FSL TO INVERT LEVEL).
5	CONTRACTOR TO VERIFY DOWNSTREAM EXISTING PIPE LEVELS PRIOR TO COMMENCEMENT OF PIPEWORK.
6	POLYETHYLENE (PE) LINING TO BE INSTALLED TO ALL MAINTENANCE STRUCTURES TYPE P3. REFER LONGITUDINAL SECTIONS. REFER ALSO SEQ-SPS-1407-1-A & 2-B
7	WHERE NOTED ON THE DRAWINGS, CONTRACTOR TO CONSTRUCT BRIDGING SLAB SPANNING THE SEWER TRENCH. REFER TYPICAL SECTIONS AND DETAILS ON DWG No. 5941 ENG OPW2 410
8	WHERE NOTED ON THE DRAWINGS, TRENCHSTOPS, BULKHEADS AND CONCRETE ENCASEMENTS TO BE INSTALLED IN ACCORDANCE WITH THE SEQ SEWER CODE.
9	ALL PROPERTY CONNECTIONS TO BE 150# uPVC CLASS SN8 UNLESS NOTED OTHERWISE.
10	DESIGN OF DEEP SEWER STRUCTURES GREATER THAN 5 METRES TO BE CARRIED OUT BY A SUITABLY QUALIFIED STRUCTURAL ENGINEER IN ACCORDANCE WITH SEQ SEWER CODE CLAUSE 4.6.2.2, AND PE LINING REQUIREMENTS. REFER ALSO NOTE 12.
11	ALL MAINTENANCE HOLES WHERE TRAFFICABLE LIDS ARE SPECIFIED TO BE COMPOSITE LIDS AND FRAMES (NON-CORROSIVE). FOR ALL MANHOLES WHERE INTERNAL PROTECTION COATINGS ARE REQUIRED AS PER CLAUSE 7.6.2.(1) TO (VII) OF THE SEWERAGE CLAUSE. REFER SEQ CIVIL IPAM LIST.
12	MAINTENANCE HOLES OVER 6.0m DEEP REQUIRE SPECIAL DESIGN & CERTIFICATION BY A REGISTERED PROFESSIONAL ENGINEER OF QUEENSLAND (RPEQ) AS PER SEQ STD DWG SEQ-SEW-1307-1
13	REFER TO ATTACHED PROTEST ENGINEERING FORM 15 DATED 21/01/22 FOR STRUCTURES GREATER THAN 6m DEEP

DATUM RL

PROPERTY DESCRIPTION

PIPE SIZE (mm), CLASS

GRADE (1 IN X) CTR - CTR OF STRUCTURE

LENGTH

EMBEDMENT TYPE

PIPE GRADE (%)

DEPTH TO INVERT

INVERT LEVEL

FINISHED SURFACE LEVEL

EXISTING SURFACE LEVEL

CHAINAGE

LINE 7

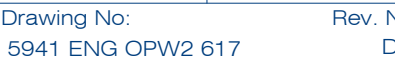
SW0234 #450
CH 7.029 ILL 269
CLL 1.866

SW0236 #450
CH 18.408 ILL 173
CLL 1.865

SW0201 #1050
CH 171.577 ILL 962
CLL 1.145

CONSTRUCT BRIDGING STRUCTURE
SPANNING THE SEWER TRENCH

G:\Projects\5941\ENGINEERING\Acad\CIVIL WORKS STAGE 2\Current\5941 ENG OPW2 610.dwg



MAINTENANCE HOLE / SHAFT No.

S9/7

MH / MS COVER TYPE	D/C
MH / MS TYPE	P3
MH / MS DROP TYPE	V
LINE DEFLECTION & BRANCHES	7
INTERNAL CORROSION PROTECTION	Y
PROPERTY CONNECTION TYPE	I

RIGSS STRUCTURE DROPS		RIGSS STRUCTURE LIDS	
V	STRAIGHT THROUGH SEWER SEQ DWG SEQ-SEW-1303-1	B	NON-TRAFFICABLE LID
W	OBLIQUE 45° "Y" JUNCTION SEQ DWG SEQ-SEW-1303-1	D	TRAFFICABLE LID
X	INTERNAL BACKDROP SEQ DWG SEQ-SEW-1303-1	C	COMPOSITE
Z	VERTICAL DROP JUNCTION STD DWG SEQ-SEW-1314-1	CONSTRUCT BRIDGING STRUCTURE SPANNING THE SEWER TRENCH	
		TRENCHSTOPS, BULKHEADS & CONCRETE ENCASEMENTS	

RIGSS STRUCTURE TYPES	
P3	1050mm DIA. PRE-CAST MAINTENANCE HOLE WITH CONVERSION SLAB AND PRE-CAST BASE. INSTALL CLASS D 'COMPOSITE' COVER. SEQ STD DWG SEQ-SEW-1300-1
C	1500mm DIA. CAST IN-SITU MAINTENANCE HOLE INSTALL DUCTILE IRON CLASS D 'COMPOSITE' COVER. REFER SEQ STD DWG SEQ-SEW-1307-1. REFER NOTE 12
J1	TYPE "J1" MAINTENANCE SHAFT (3.0m MAXIMUM DEPTH TO IL) SEQ STD DWG SEQ-SEW-1314-2
BND	LONG RADIUS BEND (R3.0m) SEQ STD DWG SEQ-SEW-1314-3

RIGSS PROPERTY CONNECTION TYPES	
V	STRAIGHT THROUGH SEWER (250mm MAX. DROP FOR 150ø) SEQ STD DWG SEQ-SEW-1303-1
W	OBLIQUE 45° "Y" JUNCTION (250mm-600mm DROP FOR 150ø) SEQ STD DWG SEQ-SEW-1303-1
X	INTERNAL BACKDROP (600mm MIN. DROP FOR 150ø) SEQ STD DWG SEQ-SEW-1303-1
Z	DROP JUNCTION TO DN300 RISER OF MAINTENANCE SHAFT SEQ STD DWG SEQ-SEW-1314-1 AND 1314-2

RIGSS GENERAL NOTES	
1	ALL uPVC SEWER PIPE TO BE CLASS SN8 INCLUDING ALL PROPERTY CONNECTIONS.
2	EMBEDMENT TYPES AS INDICATED ON LONGITUDINAL SECTIONS AND SEQ-SEW-1201-1
3	ALL BENDS TO BE LONG RADIUS BEND, 3.0m RADIUS. REFER DWG SEQ-SEW-1314-3
4	ALL MAINTENANCE SHAFTS (MS) SHALL HAVE 300mmø PVC RISERS, AND NOT EXCEED 3.0m DEPTH (FSL TO INVERT LEVEL).
5	CONTRACTOR TO VERIFY DOWNSTREAM EXISTING PIPE LEVELS PRIOR TO COMMENCEMENT OF PIPEWORK.
6	POLYETHYLENE (PE) LINING TO BE INSTALLED TO ALL MAINTENANCE STRUCTURES TYPE P3. REFER LONGITUDINAL SECTIONS. REFER ALSO SEQ-SPS-1407-1-A & 2-B
7	WHERE NOTED ON THE DRAWINGS, CONTRACTOR TO CONSTRUCT BRIDGING SLAB SPANNING THE SEWER TRENCH. REFER TYPICAL SECTIONS AND DETAILS ON DWG No. 5941 ENG OPW2 410
8	WHERE NOTED ON THE DRAWINGS, TRENCHSTOPS, BULKHEADS AND CONCRETE ENCASEMENTS TO BE INSTALLED IN ACCORDANCE WITH THE SEQ SEWER CODE.
9	ALL PROPERTY CONNECTIONS TO BE 150ø uPVC CLASS SN8 UNLESS NOTED OTHERWISE.
10	DESIGN OF DEEP SEWER STRUCTURES GREATER THAN 5 METRES TO BE CARRIED OUT BY A SUITABLY QUALIFIED STRUCTURAL ENGINEER IN ACCORDANCE WITH SEQ SEWER CODE CLAUSE 4.6.2.2, AND PE LINING REQUIREMENTS. REFER ALSO NOTE 12.
11	ALL MAINTENANCE HOLES WHERE TRAFFICABLE LIDS ARE SPECIFIED TO BE COMPOSITE LIDS AND FRAMES (NON-CORROSIVE). FOR ALL MANHOLES WHERE INTERNAL PROTECTION COATINGS ARE REQUIRED AS PER CLAUSE 7.6.2(1) TO (VII) OF THE SEWERAGE CLAUSE. REFER SEQ CIVIL IPAM LIST.
12	MAINTENANCE HOLES OVER 6.0m DEEP REQUIRE SPECIAL DESIGN & CERTIFICATION BY A REGISTERED PROFESSIONAL ENGINEER OF QUEENSLAND (RPEQ) AS PER SEQ STD DWG SEQ-SEW-1307-1
13	REFER TO ATTACHED PROTEST ENGINEERING FORM 15 DATED 21/01/22 FOR STRUCTURES GREATER THAN 6m DEEP

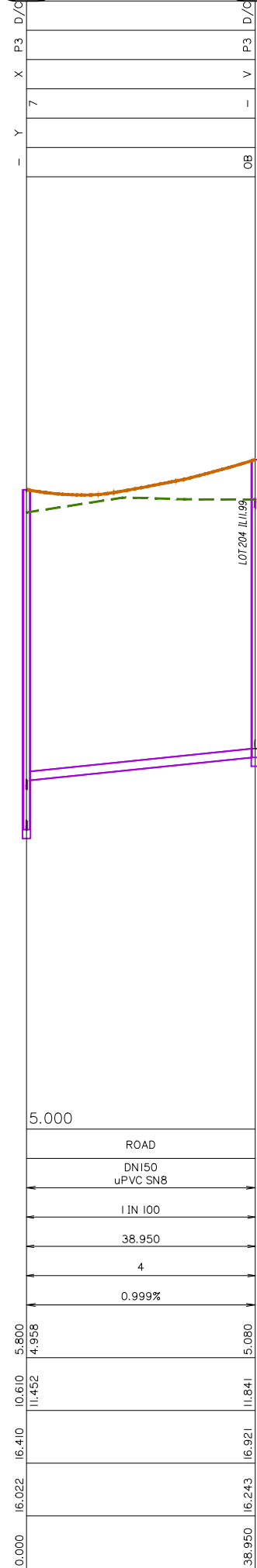
DATUM RL 10.000

PROPERTY DESCRIPTION	ROAD	
PIPE SIZE (mm), CLASS	DN150 uPVC SN8	
GRADE (1 IN X) CTR - CTR OF STRUCTURE	1 IN 67	
LENGTH	111.820	
EMBEDMENT TYPE	4	
PIPE GRADE (%)	1.502%	
DEPTH TO INVERT	4.972 1.875	3.188
INVERT LEVEL	12.193 15.292	16.970
FINISHED SURFACE LEVEL	17.165	20.158
EXISTING SURFACE LEVEL	20.872	24.174
CHAINAGE	0.000	111.820

LINE 8

SI/8

S4/7

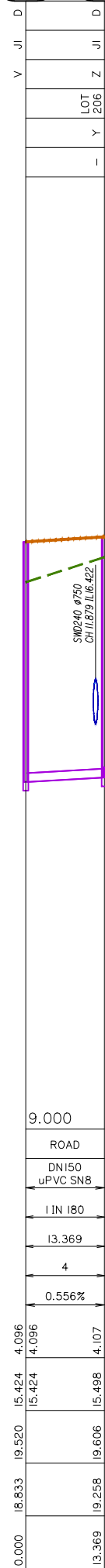


LINE 9

SI/9

SI/10

S2/10



LINE 10



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, Beenleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives

All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 9 OF 10

D	19/07/22	SEWER UPDATED	LAB	MG
C	22/04/22	ISSUED FOR CONSTRUCTION	LAB	MG
C	31/01/22	NOTE 13 ADDED	JH	MG
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES

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

Scale 1:50 - Lengths are in Metres.
VERT: 0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	12/07/2022

Drawing No: 5941 ENG OPW2 618 Rev. No: D



Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA 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:
Meridian:
Contour Interval:
PSM:
RL:

ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
SEWER RETICULATION
LONGITUDINAL SECTIONS
SHEET 10 OF 10

D	19/07/22	SEWER UPDATED	JH	MG	
C	22/04/22	ISSUED FOR CONSTRUCTION	LAB	MG	
G	31/01/22	NOTE 13 ADDED	JH	MG	
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	33/07/21	ORIGINAL ISSUE	LAB	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES

HORZ: 

Scale 1:50 - Lengths are in Metres.

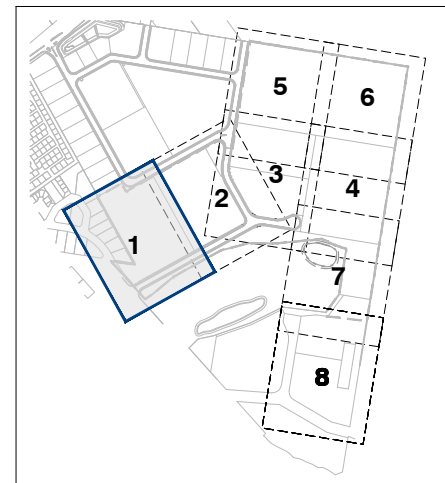
VERT:

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	12/07/2022

Drawing No:
5941 ENG OPW2 619

Rev. No:
D



No	DESCRIPTION	DIA MAIN	FSL	ESL	IL	DEPTH TO INVERT (FSL)
I(A)	CONTRACTOR TO ORGANISE FOR GCWW TO SHUT OFF WATER MAIN AT THE NEAREST UPSTREAM SLUICE VALVE.					
I(B)	CONTRACTOR TO MAKE CONNECTION TO EXISTING WATER MAIN IN ACCORDANCE WITH THE "CUT-IN CONNECTION" METHOD AS DETAILED UNDER GCWW SUPERVISION LOCATION DENOTED AS <u>POINT 12</u> .	150mm DICL PN35	23.645m	23.645m	22.665m (TBC)	0.98m
I(C)	SLUICE VALVE SHALL REMAIN CLOSED UNTIL AFTER SUCCESSFUL "ON MAINTENANCE INSPECTION" NOTE: ALL WORKS TO BE CARRIED OUT UNDER GCWW SUPERVISION AND AT DEVELOPERS EXPENSE.					

No	DESCRIPTION
1	FIRE HYDRANT
2	DICL BEND 90°
3	DICL BEND 45°
4	DICL BEND 22.5°
5	DICL BEND 11.25°
6	SLUICE VALVE
7	150X150 TEE
8	DICL BEND 6°
9	150X150 TEE WITH BLANK FLANGES
10	150Ø 90° BEND WITH BLANK FLANGE
11	LIVE CONNECTION, REFER LIVE WORKS SCHEDULE
12	LIVE CONNECTION, REFER LIVE WORKS SCHEDULE AND DETAIL: A ON DWG-DWG 700

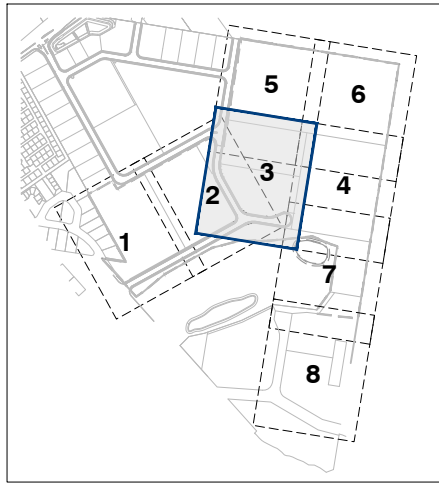
MINIMUM 0.75m COVER—

Ø150 u
EXIST
PORTA
WATER

NOTE:
CONTRACTOR TO CONFIRM LOCATIONS AND LEVELS OF EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORKS AND NOTIFY SUPERINTENDENT IF DIFFERENT FROM THOSE SHOWN.

BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN
INTERPOLATED FROM AERIAL PHOTOGRAMMETRIC DATA OR
KNOWN POSITIONS OF VALVES, ACCESS CHAMBERS ETC. OR
INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO
RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE
INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES
ARE ACCURATELY LOCATED PRIOR TO COMMENCEMENT OF WORK

Drawing No:	Rev. No:
5941 ENG OPW2 700	C

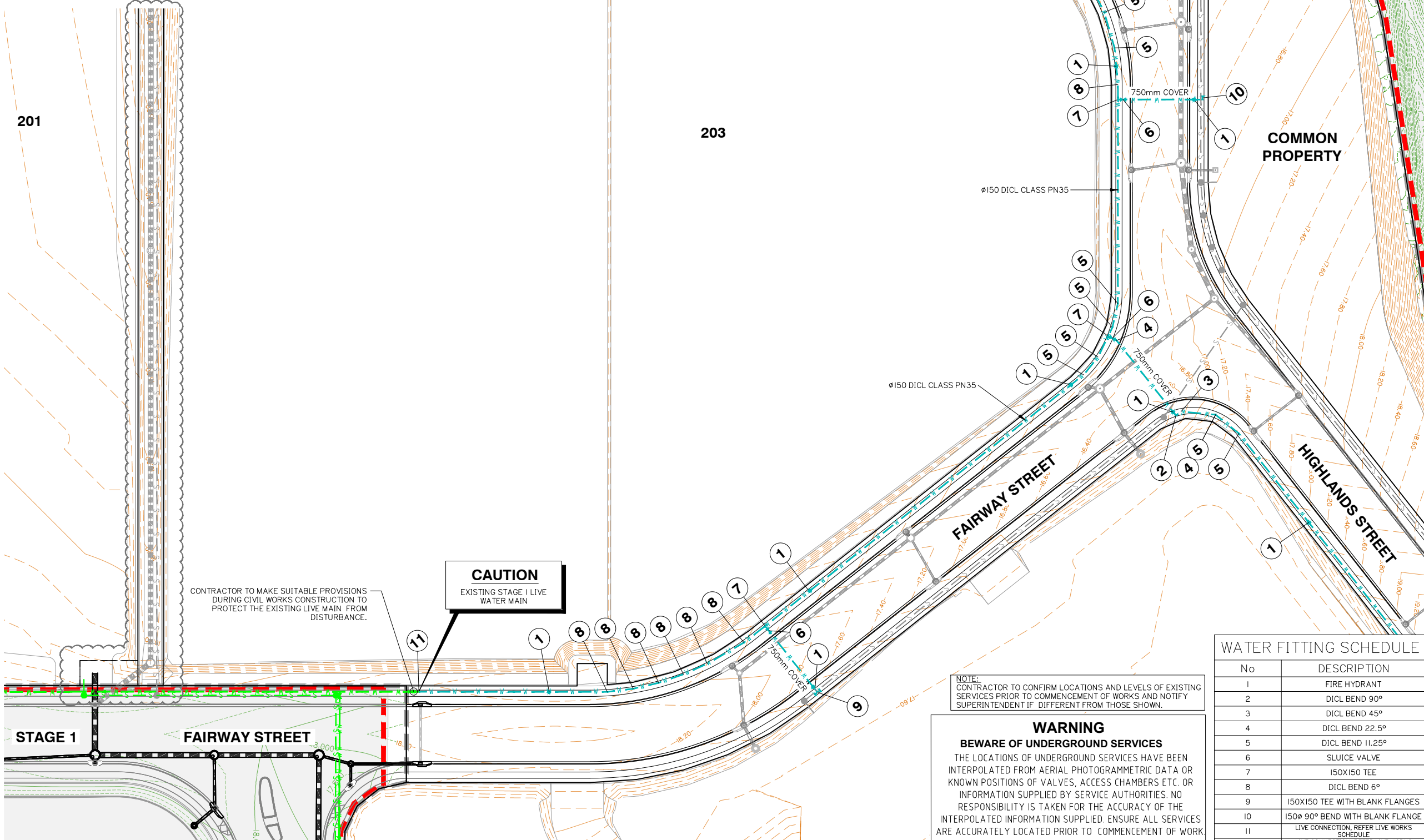


KEY PLAN
SCALE 1:7500

LIVE WORKS SCHEDULE – WATER

No	DESCRIPTION	DIA MAIN	FSL	ESL	IL	DEPTH TO INVERT (FSL)
I(A)	CONTRACTOR TO ORGANISE FOR GCWW TO SHUT OFF WATER MAIN AT THE NEAREST UPSTREAM SLUICE VALVE.					
I(B)	CONTRACTOR TO CONNECT TO EXISTING LIVE Ø150 WATER MAIN AT EXISTING BLANK FLANGE LOCATION DENOTED AS POINT 11.	150mm DI CL	18.319m	13.376m	17.339m	0.98m
I(C)	SLUICE VALVE SHALL REMAIN CLOSED UNTIL AFTER SUCCESSFUL "ON MAINTENANCE INSPECTION" NOTE: ALL WORKS TO BE CARRIED OUT UNDER GCWW SUPERVISION AND AT DEVELOPER'S EXPENSE.					

CONTRACTOR TO ENSURE MINIMUM 0.75m COVER OVER WATER MAINS IN INDUSTRIALS AREAS AS PER SEQ CODE STD. DWG. SEQ-WAT-1200-2



FOR CONTINUATION REFER SHEET No. 5941 ENG OPW2 701

WATER RETICULATION LAYOUT PLAN SHEET 2 OF 4

No	DESCRIPTION
1	FIRE HYDRANT
2	DICL BEND 90°
3	DICL BEND 45°
4	DICL BEND 22.5°
5	DICL BEND 11.25°
6	SLUICE VALVE
7	150X150 TEE
8	DICL BEND 6°
9	150X150 TEE WITH BLANK FLANGES
10	150Ø 90° BEND WITH BLANK FLANGE
11	LIVE CONNECTION, REFER LIVE WORKS SCHEDULE
12	LIVE CONNECTION, REFER LIVE WORKS SCHEDULE AND DETAIL A ON DWG OPW2 700

NOTE:
CONTRACTOR TO CONFIRM LOCATIONS AND LEVELS OF EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORKS AND NOTIFY SUPERINTENDENT IF DIFFERENT FROM THOSE SHOWN.

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN INTERPOLATED FROM AERIAL PHOTOGRAMMETRIC DATA OR KNOWN POSITIONS OF VALVES, ACCESS CHAMBERS ETC. OR INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES ARE ACCURATELY LOCATED PRIOR TO COMMENCEMENT OF WORK.

Client:



Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

WATER RETICULATION
LAYOUT PLAN SHEET 2 OF 4

Issue	Date	Description	LAB	MG
C	19/07/22	LOT NUMBER UPDATED	LAB	MG
B	22/04/22	ISSUED FOR CONSTRUCTION	LAB	MG
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	MG

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: LAB / IG

Approved: MG

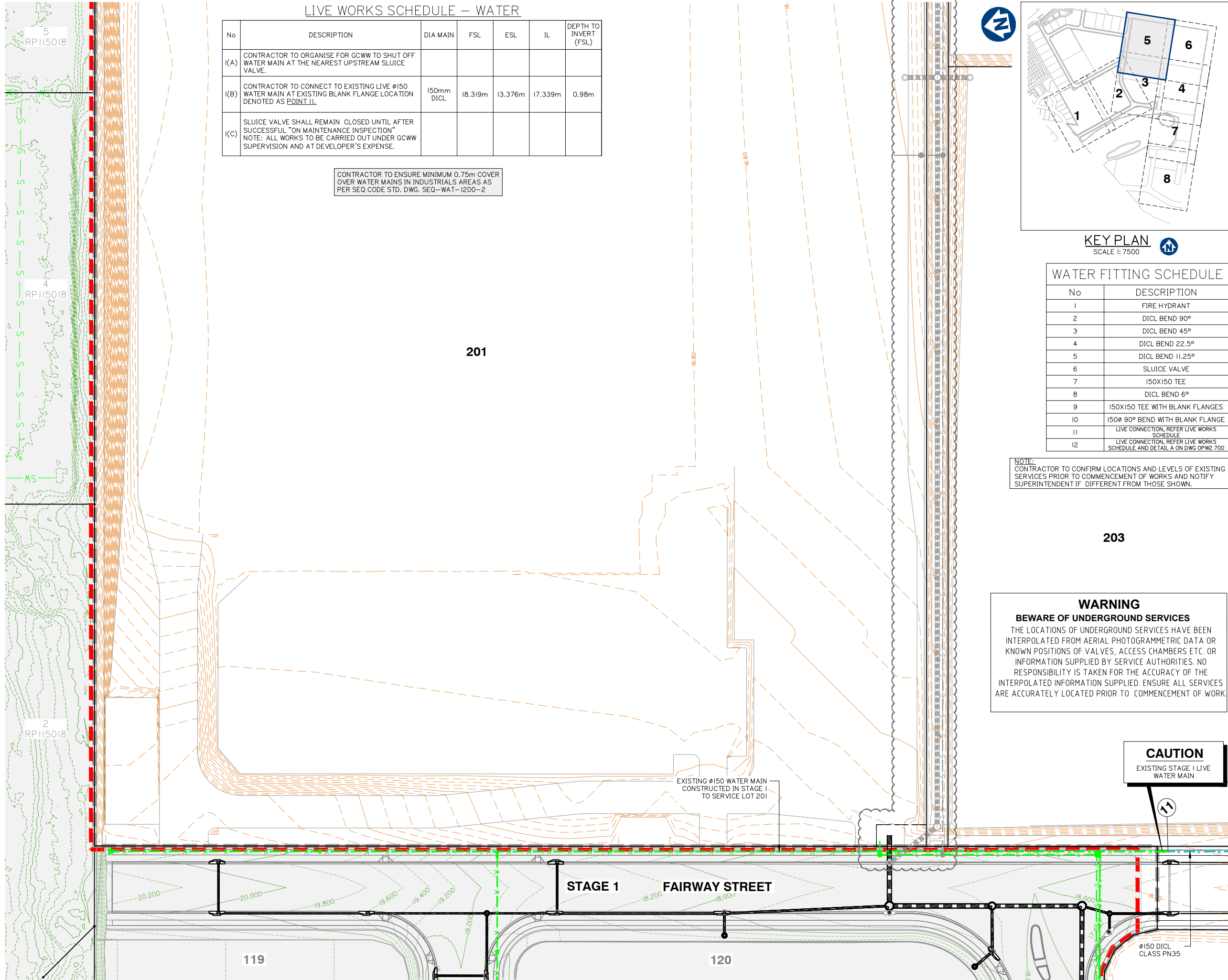
RPEQ: 16939

Signed:

Date: 05/07/2022

Drawing No: 5941 ENG OPW2 702

Rev. No: C



LIVE WORKS SCHEDULE – WATER						
No	DESCRIPTION	DIA MAIN	FSL	ESL	IL	DEPTH TO INVERT (FSL)
I(A)	CONTRACTOR TO ORGANISE FOR GCWW TO SHUT OFF WATER MAIN AT THE NEAREST UPSTREAM SLUICE VALVE.					
I(B)	CONTRACTOR TO CONNECT TO EXISTING LIVE Ø150 WATER MAIN AT EXISTING BLANK FLANGE LOCATION DENOTED AS POINT II.	150mm DICL	18.319m	13.376m	17.339m	0.98m
I(C)	SLUICE VALVE SHALL REMAIN CLOSED UNTIL AFTER SUCCESSFUL "ON MAINTENANCE INSPECTION" NOTE: ALL WORKS TO BE CARRIED OUT UNDER GCWW SUPERVISION AND AT DEVELOPER'S EXPENSE.					

CONTRACTOR TO ENSURE MINIMUM 0.75m COVER OVER WATER MAINS IN INDUSTRIALS AREAS AS PER SEQ CODE STD. DWG. SEQ-WAT-1200-2

WATER FITTING SCHEDULE

No	DESCRIPTION
1	FIRE HYDRANT
2	DICL BEND 90°
3	DICL BEND 45°
4	DICL BEND 22.5°
5	DICL BEND 11.25°
6	SLUICE VALVE
7	150X150 TEE
8	DICL BEND 6°
9	150X150 TEE WITH BLANK FLANGES
10	150Ø 90° BEND WITH BLANK FLANGE
11	LIVE CONNECTION, REFER LIVE WORKS SCHEDULE
12	LIVE CONNECTION, REFER LIVE WORKS SCHEDULE AND DETAIL A ON DWG OPW2 700

NOTE:
CONTRACTOR TO CONFIRM LOCATIONS AND LEVELS OF EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORKS AND NOTIFY SUPERINTENDENT IF DIFFERENT FROM THOSE SHOWN.

WARNING

BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN INTERPOLATED FROM AERIAL PHOTOGRAMMETRIC DATA OR KNOWN POSITIONS OF VALVES, ACCESS CHAMBERS ETC. OR INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES ARE ACCURATELY LOCATED PRIOR TO COMMENCEMENT OF WORK

CAUTION

EXISTING STAGE 1 LIVE WATER MAIN

FOR CONTINUATION REFER SHEET No. 5941 ENG OPW2 702

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

WATER RETICULATION
LAYOUT PLAN SHEET 4 OF 4

Rev	Date	Description	LAB	MG
C	19/07/22	LOT BOUNDARY UPDATED	LAB	MG
B	22/04/22	ISSUED FOR CONSTRUCTION	LAB	MG
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG
A	30/07/21	ORIGINAL ISSUE	LAB	MG
Issue	Date	Description	LAB	MG

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: LAB / IG

Approved: MG

RPEQ: 16939

Signed:

Date: 05/07/2022

Drawing No:
5941 ENG OPW2 703

Rev. No:
C

Client:

FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
WATER RETICULATION
TYPICAL DETAILS SHEET 1
OF 2

A	22/04/22	ISSUED FOR CONSTRUCTION	LAB	MG	
A	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
A	10/09/21	ORIGINAL ISSUE	LAB	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES
NOT APPLICABLE

Scale at A1:	NTS
Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	10/09/2021

Drawing No: 5941 ENG OPW2 710 Rev. No: A

THRUST BLOCK LENGTH

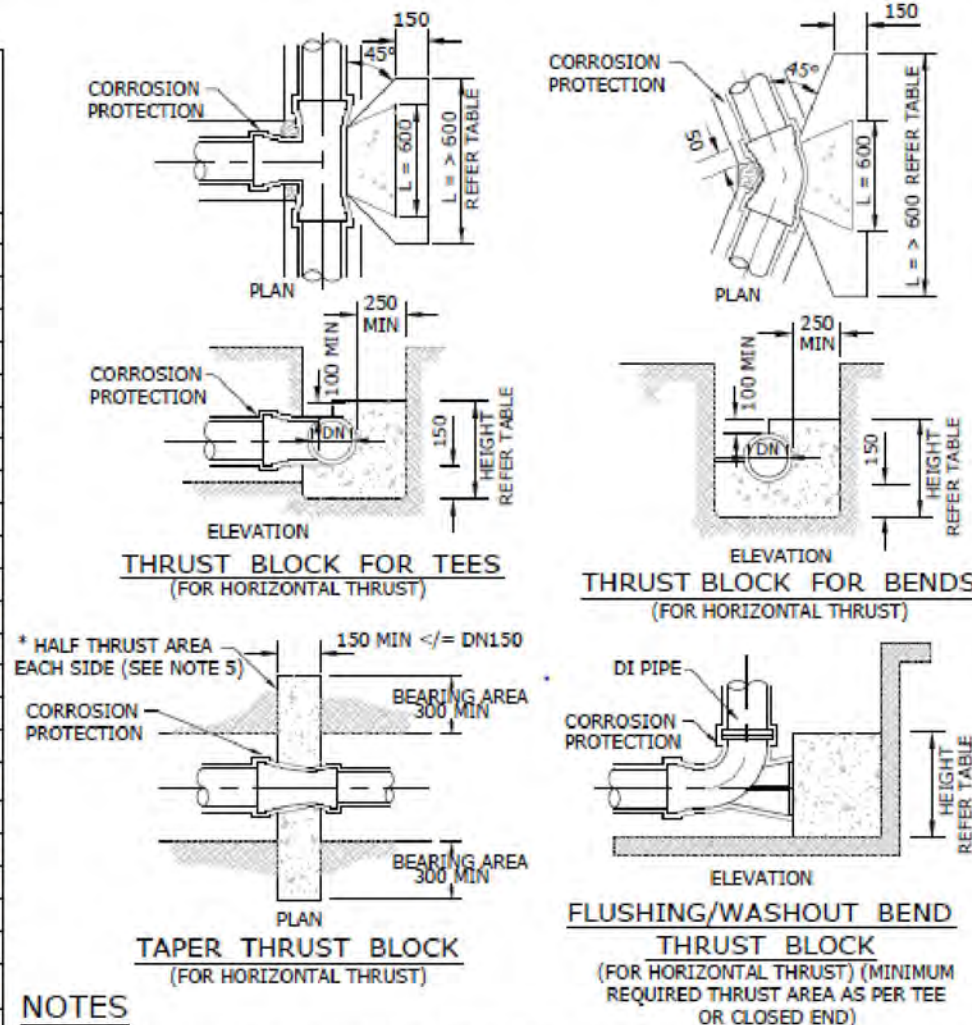
PIPE DN.	FITTING	MAX. THRUST IN KN	THRUST BLOCK HEIGHT	STIFF CLAY 50 KPa.	VERY STIFF CLAY SANDY LOAM 100KPa.	SAND & GRAVEL HARD CLAY 150KPa.	SAND & GRAVEL CEMENTED WITH CLAY 200KPa.	ROCK 240KPa
100	90° BEND	19.8	400	1000	•	•	•	•
	60° BEND	14.0		700	•	•	•	•
	45° BEND	10.7		•	•	•	•	•
	22.5° BEND	5.5		•	•	•	•	•
	11.25° BEND	2.7		•	•	•	•	•
	TEE OR CLOSED END	14.0		700	•	•	•	•
150	90° BEND	41.7	450	1860	930	•	•	•
	60° BEND	29.5		1320	660	•	•	•
	45° BEND	22.6		1000	•	•	•	•
	22.5° BEND	11.5		•	•	•	•	•
	11.25° BEND	5.8		•	•	•	•	•
	TEE OR CLOSED END	29.5		1300	660	•	•	•
200	90° BEND	71.7	550	*	1300	870	650	•
	60° BEND	50.7		1850	920	•	•	•
	45° BEND	38.8		1410	700	•	•	•
	22.5° BEND	19.8		720	•	•	•	•
	11.25° BEND	9.9		•	•	•	•	•
	TEE OR CLOSED END	50.7		1850	920	•	•	•
225	90° BEND	89.4	600	*	1500	1000	750	•
	60° BEND	63.2		2110	1060	700	•	•
	45° BEND	48.4		1620	810	•	•	•
	22.5° BEND	24.6		830	•	•	•	•
	11.25° BEND	12.4		•	•	•	•	•
	TEE OR CLOSED END	63.2		210	1060	700	•	•
250	90° BEND	109.0	650	*	1700	1120	840	700
	60° BEND	77.1		2400	1200	800	•	•
	45° BEND	59.0		1820	910	•	•	•
	22.5° BEND	30.1		930	•	•	•	•
	11.25° BEND	15.1		•	•	•	•	•
	TEE OR CLOSED END	77.1		2400	1200	800	•	•
300	90° BEND	158.6	700	*	2270	1510	1140	950
	60° BEND	112.2		*	1600	1070	800	670
	45° BEND	85.9		2453	1230	820	•	•
	22.5° BEND	43.8		1250	630	•	•	•
	11.25° BEND	22.0		630	•	•	•	•
	TEE OR CLOSED END	112.2		*	1600	1070	800	750

THRUST BLOCK DIMENSIONS - 1200kPa

• INDICATES BLOCK LENGTH OF 600
* = SPECIAL DESIGN

THRUST BLOCK LENGTH

PIPE DN.	FITTING	MAX. THRUST IN KN	THRUST BLOCK HEIGHT	STIFF CLAY 50 KPa.	VERY STIFF CLAY SANDY LOAM 100KPa.	SAND & GRAVEL HARD CLAY 150KPa.	SAND & GRAVEL CEMENTED WITH CLAY 200KPa.	ROCK 240KPa
375	90° BEND	241.9	800	*	*	2220	1510	1260
	60° BEND	171.0		*	2140	1430	1070	890
	45° BEND	130.9		*	1640	1090	820	680
	22.5° BEND	66.7		1670	840	•	•	•
	11.25° BEND	33.5		840	•	•	•	•
	TEE OR CLOSED END	171.0		*	2140	1430	1070	890
450	90° BEND	342.6	900	*	*	2540	1900	1590
	60° BEND	242.3		*	2690	1800	1350	1120
	45° BEND	185.4		*	2060	1375	1030	860
	22.5° BEND	94.5		2100	1050	700	•	•
	11.25° BEND	47.5		1060	•	•	•	•
	TEE OR CLOSED END	242.3		*	2690	1800	1350	1120
500	90° BEND	418	1000	*	*	2790	2090	1740
	60° BEND	295.6		*	*	1970	1480	1230
	45° BEND	226.2		*	2260	1510	1130	940
	22.5° BEND	115.3		2310	1150	770	•	•
	11.25° BEND	58.0		1160	•	•	•	•
	TEE OR CLOSED END	295.5		*	*	1970	1480	1230
600	90° BEND	593	1100	*	*	*	2700	2250
	60° BEND	419		*	*	2540	1910	1590
	45° BEND	320		*	2920	1950	1460	1220
	22.5° BEND	164		2980	1490	990	750	620
	11.25° BEND	82.2		1500	750	•	•	•
	TEE OR CLOSED END	419		*	*	2540	1910	1590
750	90° BEND	909	1300	*	*	*	*	2920
	60° BEND	643		*	*	*	2480	2060
	45° BEND	492		*	*	2530	1890	1580
	22.5° BEND	251		*	1930	1290	970	810
	11.25° BEND	126.1		1940	970	650	•	•
	TEE OR CLOSED END	643		*	*	*	2480	2060
900 (Ø960 MSCL)	90° BEND	1,228	1500	*	*	*	*	3420
	60° BEND	868		*	*	*	2900	2420
	45° BEND	664		*	*	2960	2220	1850
	22.5° BEND	339		*	2260	1510	1130	940
	11.25° BEND	170		2270	1140	760	•	•
	TEE OR CLOSED END	868		*	*	*	3300	2650



NOTES

- ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
- CAST THE THRUST AREA OF ALL THRUST BLOCKS AGAINST A CLEAN FACE OF UNDISTURBED NATURAL SOIL. SOIL CLASSIFICATIONS USED ON THIS DRAWING ARE EXPLAINED IN SEQ-WAT-1200-1. DO NOT USE STANDARD THRUST BLOCKS AS SPECIFIED IN THIS DRAWING IN SOILS WITH < 50kPa BEARING CAPACITY EG;
 - VERY SOFT, SOFT OR FIRM CLAY.
 - LOOSE CLEAN SAND,
 - UNCOMPACTED FILL OR REFUSE.A GEOTECHNICAL ASSESSMENT AND INDIVIDUAL DESIGN IS REQUIRED FOR THESE SOILS.
- THRUST BLOCKS NOT TO INTERFERE WITH OTHER SERVICES OR BE LOCATED OUTSIDE THE WATER MAIN ALLOCATION WITHOUT WATER AGENCY APPROVAL.
- ALL CONCRETE GRADE N20. TABLE OF DIMENSIONS BASED ON REQUIRED TEST PRESSURE OF 1200kPa AND ACTUAL DI CL PIPE DIAMETERS.
- THE MINIMUM THRUST AREA FOR TAPER THRUST BLOCKS TO BE EQUAL TO THE DIFFERENCE BETWEEN THE THRUST AREAS FOR TEES OR CLOSED ENDS OF EQUIVALENT DIAMETER TO THOSE EACH SIDE OF TAPER. THE DETAIL SHOWN IS FOR < OR = DN150 MAINS. FOR LARGER MAINS, THE TAPER THRUST BLOCK SHALL BE REINFORCED AND OF A SIZE AS SHOWN IN SEQ-WAT-1206-1.
- FOR DOWNWARD VERTICAL THRUST, THE ALLOWABLE BEARING PRESSURES FOR VARIOUS SOILS MAY BE TAKEN AS TWICE THAT FOR HORIZONTAL THRUST SHOWN.
- WHEN POURING CONCRETE AGAINST FITTINGS PLACE A MEMBRANE OF POLYETHYLENE, PVC OR FELT BETWEEN THE FITTING AND CONCRETE TO PREVENT DAMAGE TO THE FITTING. PIPE JOINTS TO BE CLEAR OF CONCRETE.
- CONCRETE THRUST BLOCK ANCHORS FOR VALVES TO BE AS DETAILED ON SEQ-WAT-1205-1.

IN ACCORDANCE WITH SEQ-WAT-1205-1



LINE MARKING LEGEND

		WIDTH (mm)	
		MINIMUM	PREFERRED
DIVIDING LINE – MDL			100
EDGE LINE – EL			100
BROKEN LINE LANE – BL			100
CONTINUITY LINE – CL			200
GIVE WAY LINE GWL			300



gassman
development
perspectives

est 1985

planning | environment | landscape | engineering | survey

☎ 3807 3333 | F: 3287 5461 | www.gassman.com.au

Gold Coast & Logan | 176 Business Street, Yatala QLD | PO Box 392, Beentleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA 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
NOT FOR CONSTRUCTION

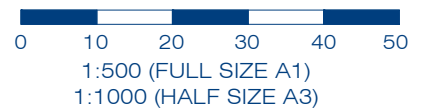
©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
LINEMARKING AND
SIGNAGE PLAN
SHEET 1 OF 3

E	19/07/22	LOT NUMBER, LOT BOUNDARY UPDATED	LAB	MG	
D	28/03/22	LINEMARKING AMENDED	LAB	MG	
C	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG	
G	29/11/21	DIVIDING LINEMARKING ADDED	LAB	MG	
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG	
A	30/07/21	ORIGINAL ISSUE	LAB	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES



Scale at A1:	1:500
--------------	-------

Designed:	IG
-----------	----

Drafted:	LAB / IG
----------	----------

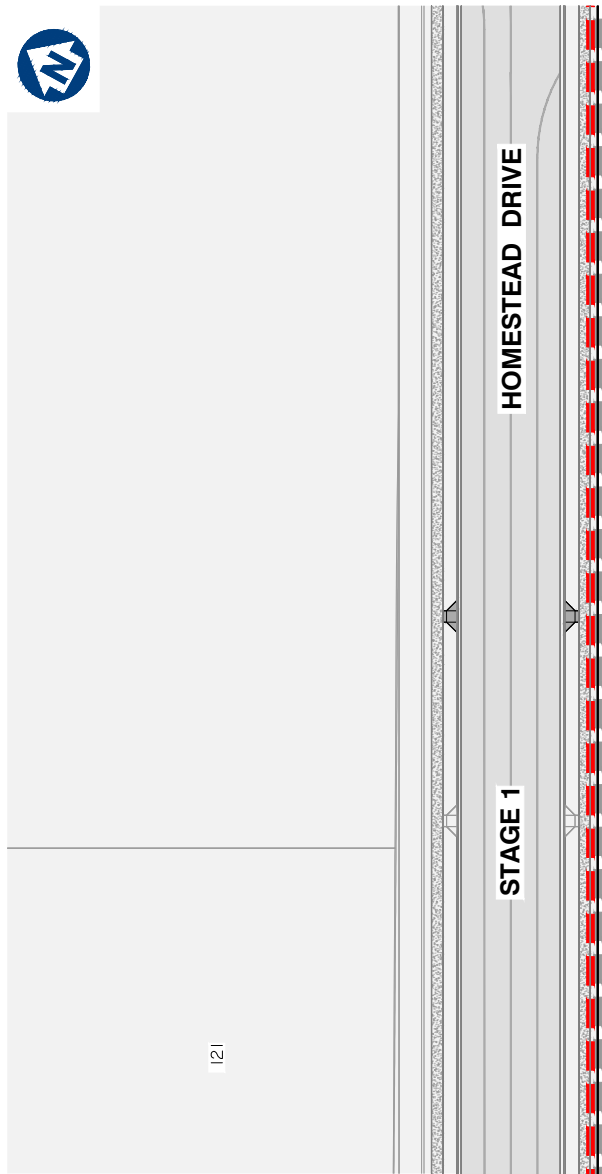
Approved:	MG
-----------	----

RPEQ:	16939
-------	-------

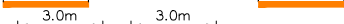
Signed:	
---------	---

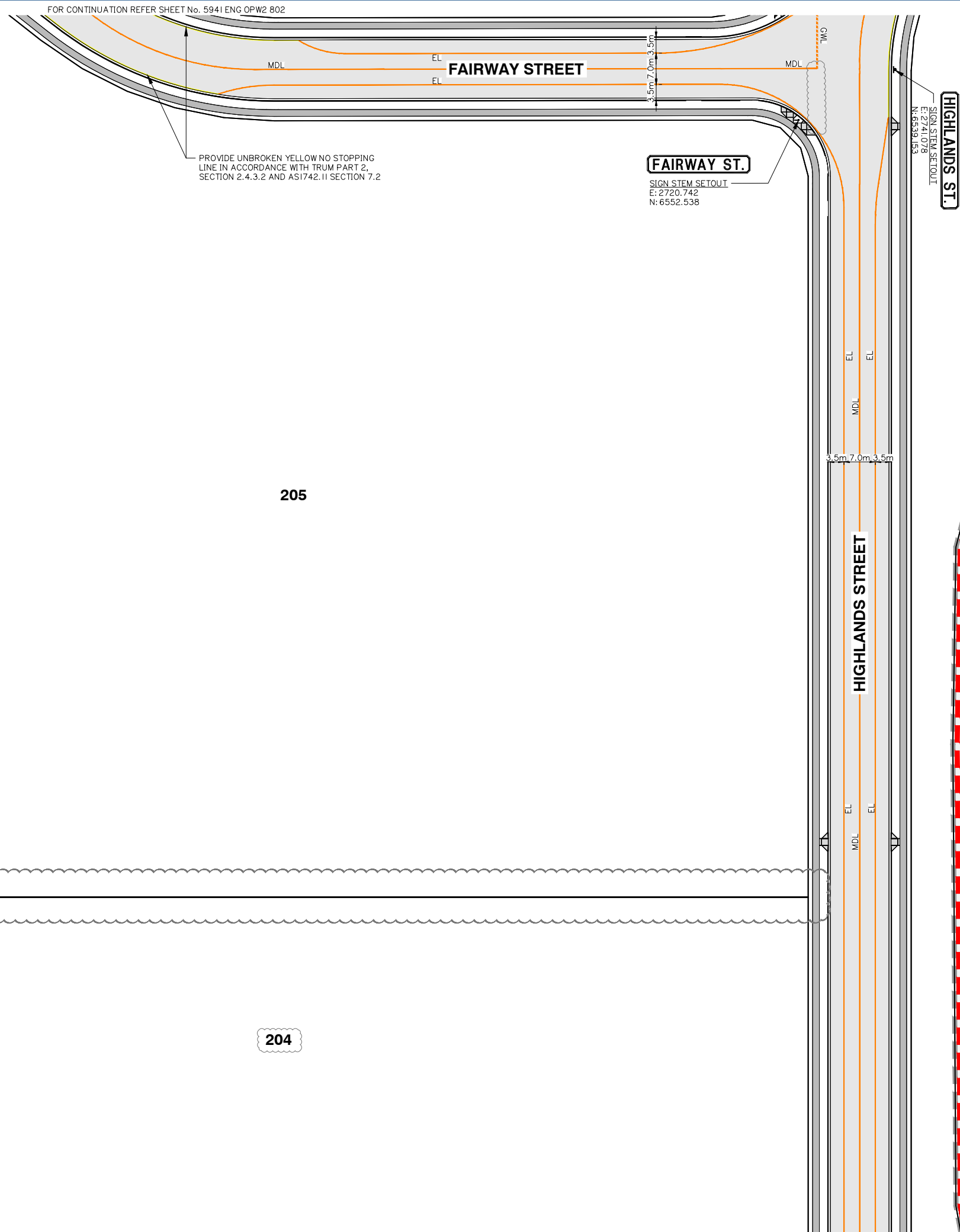
Date:	05/07/2022
-------	------------

Drawing No:	Rev. No:
5941 ENG OPW2 800	E



LINEMARKING LEGEND

		WIDTH (mm)	
		MINIMUM	PREFERRED
DIVIDING LINE – MDL		100	100
EDGE LINE – EL		100	150
BROKEN LINE LANE – BL		100	100
CONTINUITY LINE – CL		200	200
GIVE WAY LINE GWL		300	300



FOR CONTINUATION REFER SHEET No. 594I ENG OPW2 800

LINEMARKING AND SIGNAGE PLAN SHEET 2 OF 3



VANTAGE YATALA STAGE 2

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

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

All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
LINEMARKING AND
SIGNAGE PLAN
SHEET 2 OF 3

E	19/07/22	LOT NUMBER, LOT BOUNDARY UPDATED			LAB	MG
D	28/03/22	LOT RECONFIGURATION			LAB	MG
C	26/11/21	ISSUED FOR CONSTRUCTION			LAB	MG
C	25/11/21	DIVIDING LINEMARKING ADDED			LAB	MG
B	10/09/21	INFORMATION REQUEST RESPONSE			LAB	MG
A	30/07/21	ORIGINAL ISSUE			LAB	MG
Issue	Date	Description			DRN	CHK

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

Scale at A1:	1:500
--------------	-------

Designed:	IG
-----------	----

Drafted:	LAB / IG
----------	----------

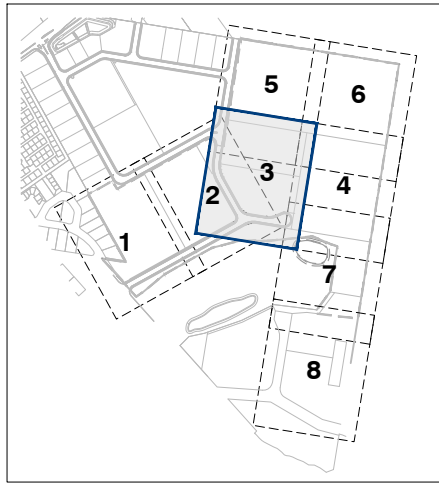
Approved:	MG
-----------	----

RPEQ:	16939
-------	-------

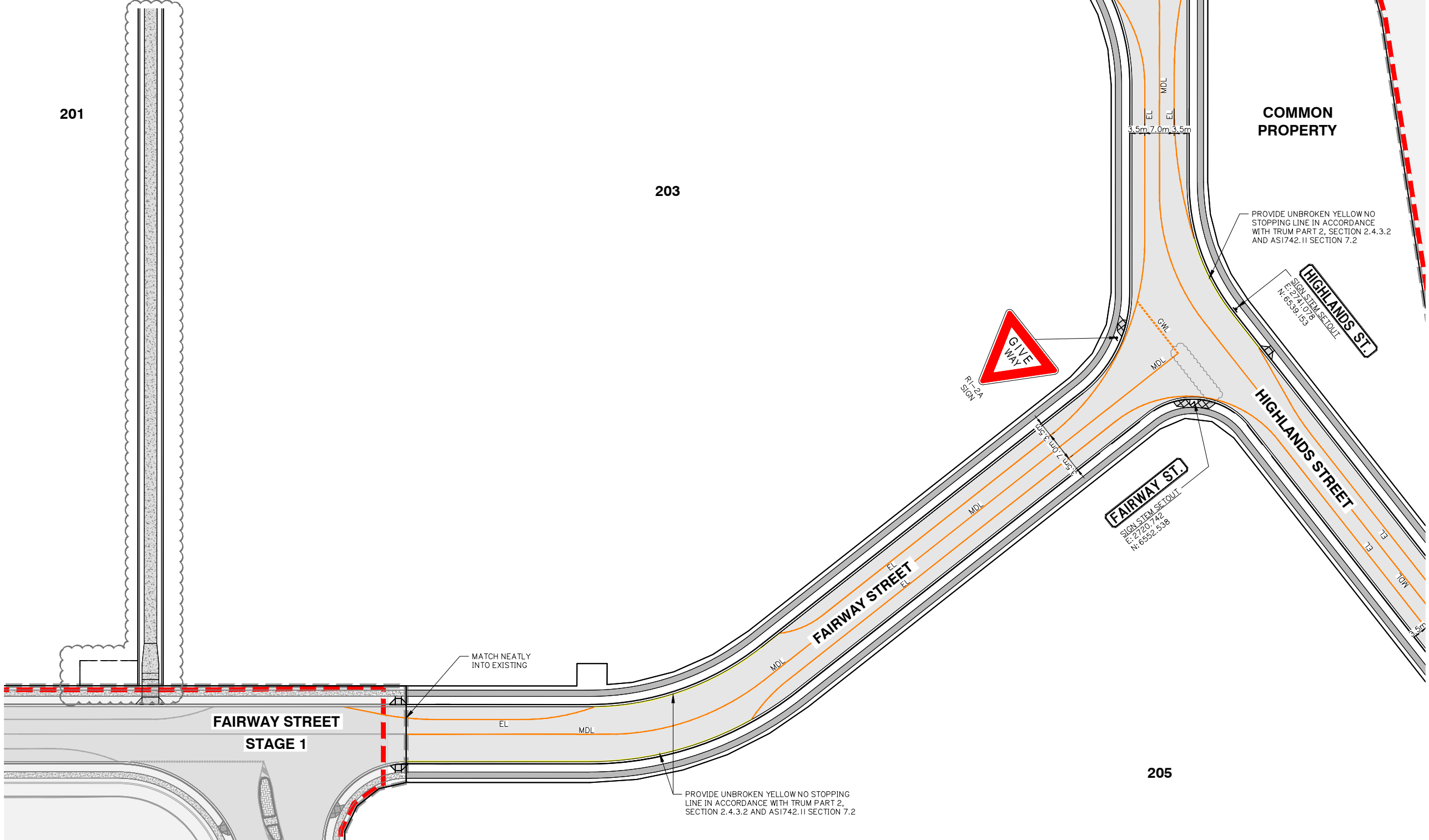
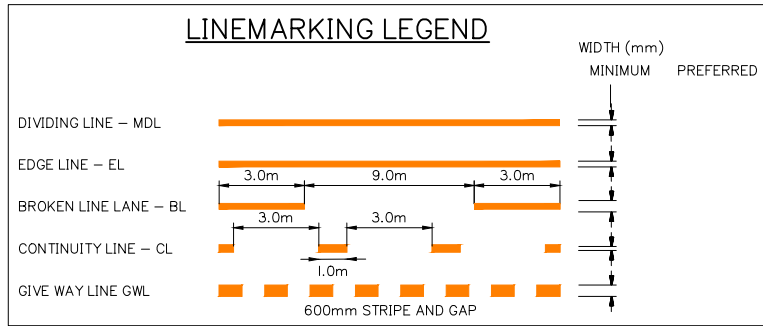
Signed:	
---------	---

Date:	05/07/2022
-------	------------

Drawing No:	Rev. No:
5941 ENG OPW2 801	E



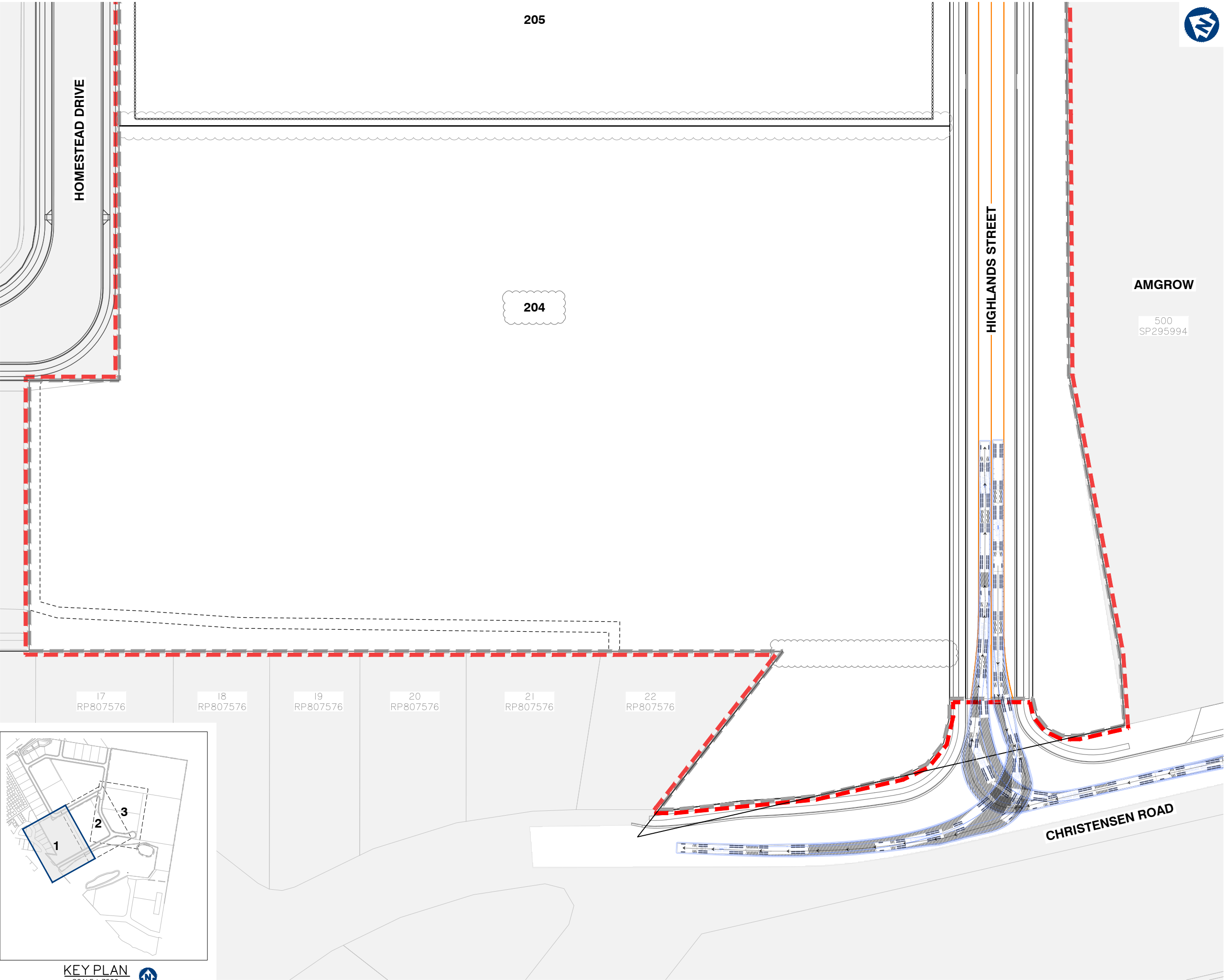
KEY PLAN
SCALE 1:7500



Issue	Date	Description	LAB	MG	DRN	CHK
E	19/07/22	LOT NUMBER, LOT BOUNDARY UPDATED	LAB	MG		
D	28/03/22	LINEMARKING AMENDED	LAB	MG		
C	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG		
C	25/11/21	DIVIDING LINEMARKING ADDED	LAB	MG		
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG		
A	30/07/21	ORIGINAL ISSUE	LAB	MG		

Scale at A1:	1:500
Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	05/07/2022





KEY PLAN
SCALE 1: 7500



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, Beenleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

A-DOUBLE SWEEP PATH
ANALYSIS SHEET 1 OF 5

Issue	Date	Description	LAB	MG	DRN	CHK
C	19/07/22	LOT BOUNDARY AND LOT NUMBER UPDATED	LAB	MG		
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG		
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG		
A	30/07/21	ORIGINAL ISSUE	LAB	MG		

SCALE IN METRES

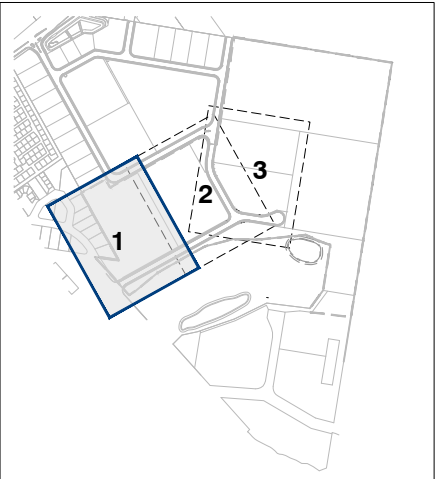
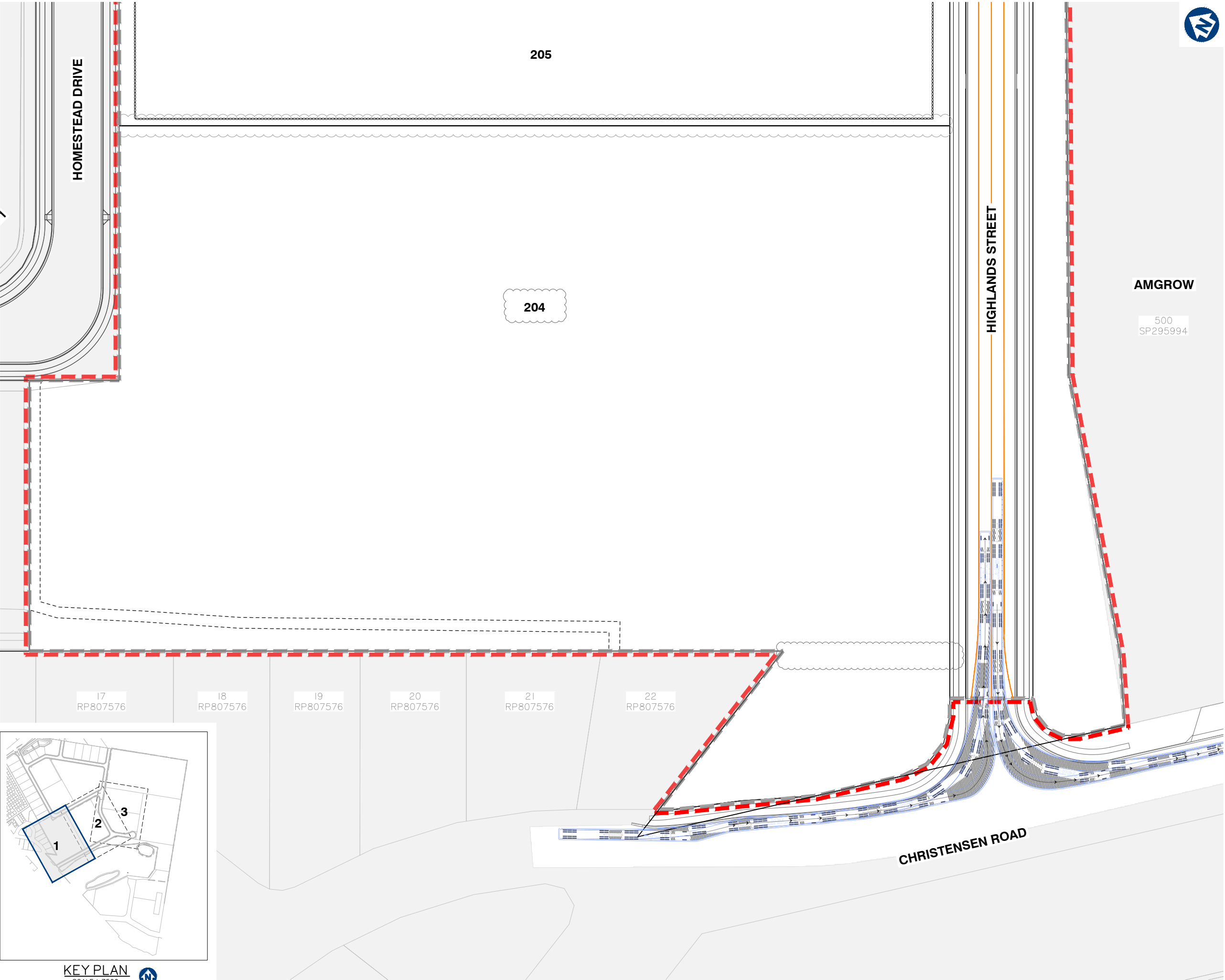


1:500 (FULL SIZE A1)
1:1000 (HALF SIZE A3)

Scale at A1: 1:500

Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	05/07/2022

Drawing No: 5941 ENG OPW2 901
Rev. No: C



KEY PLAN
SCALE 1: 7500



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, Beenleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA
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
NOT FOR CONSTRUCTION

©2012 Gassman Development Perspectives
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of Gassman Development Perspectives.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

A-DOUBLE SWEEP PATH
ANALYSIS SHEET 2 OF 5

Issue	Date	Description	LAB	MG	DRN	CHK
C	19/07/22	LOT BOUNDARY AND LOT NUMBER UPDATED	LAB	MG		
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG		
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG		
A	30/07/21	ORIGINAL ISSUE	LAB	MG		

SCALE IN METRES



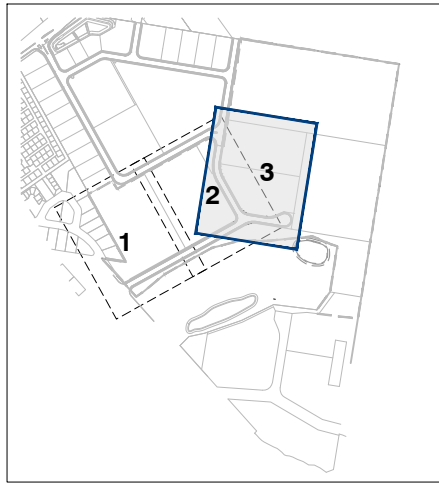
1:500 (FULL SIZE A1)
1:1000 (HALF SIZE A3)

Scale at A1: 1:500

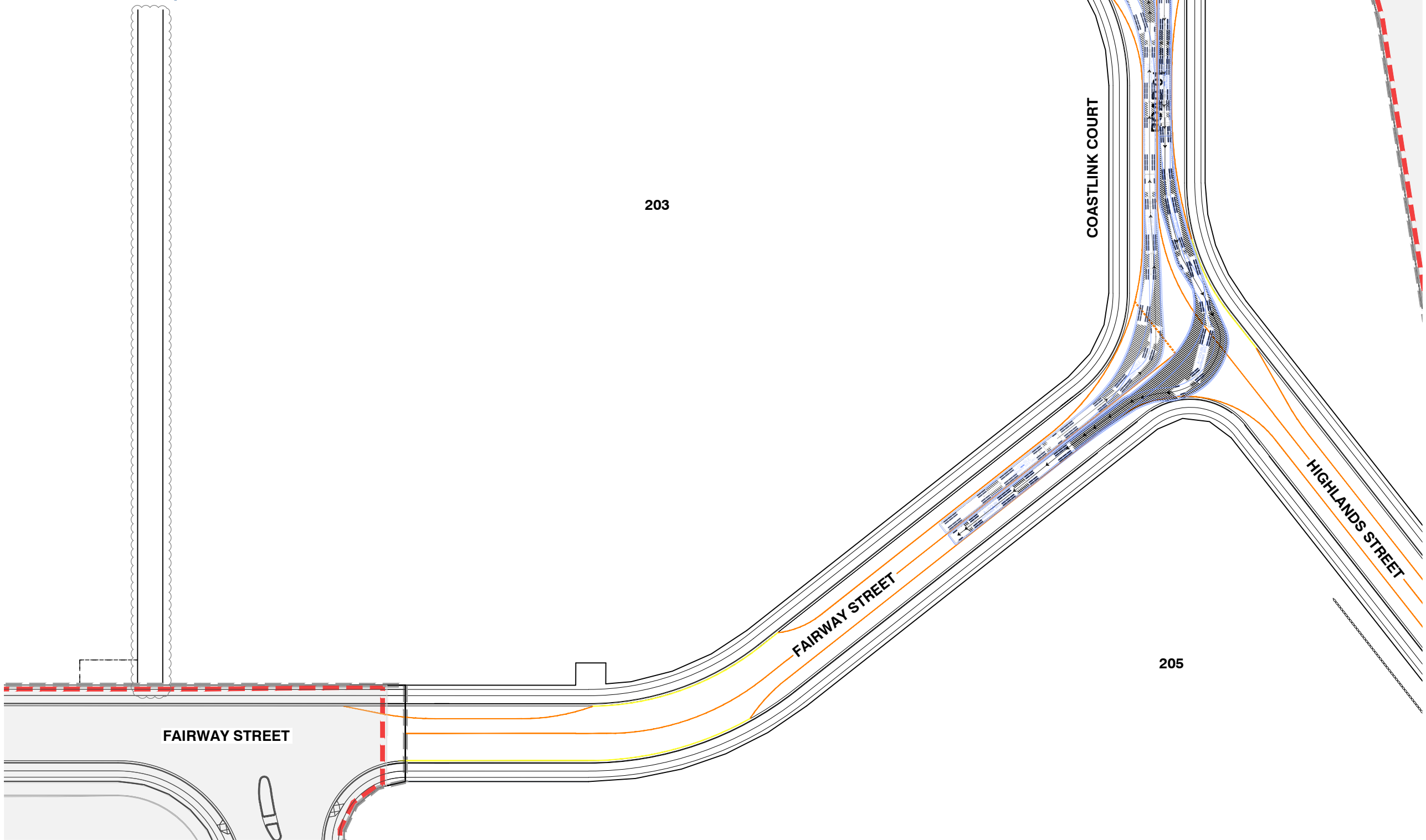
Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	05/07/2022

Drawing No:
5941 ENG OPW2 902

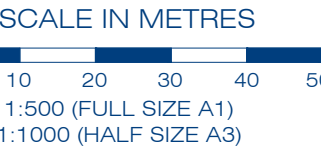
Rev. No:
C



KEY PLAN
SCALE 1:7500



Issue	Date	Description	LAB	MG	LAB	MG	LAB	MG
C	19/07/22	LOT BOUNDARY AND LOT NUMBER UPDATED	LAB	MG				
B	26/11/21	ISSUED FOR CONSTRUCTION	LAB	MG				
B	10/09/21	INFORMATION REQUEST RESPONSE	LAB	MG				
A	30/07/21	ORIGINAL ISSUE	LAB	MG				



Scale at A1:	1:500
Designed:	IG
Drafted:	LAB / IG
Approved:	MG
RPEQ:	16939
Signed:	
Date:	05/07/2022

