

STAGE 1 CIVIL OPERATIONAL WORKS

VANTAGE YATALA



planning | environment | landscape | engineering | survey

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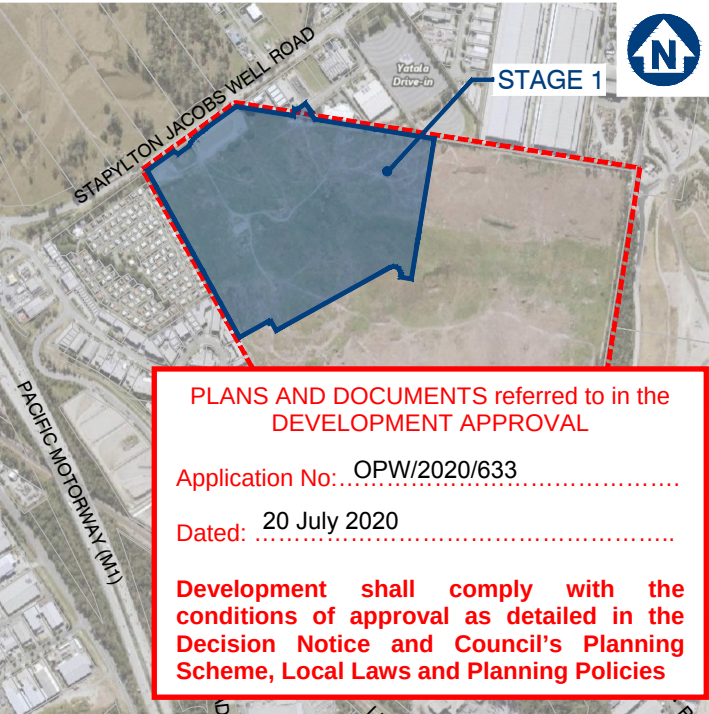
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DRAWING INDEX		
DRAWING No.	REV No.	DRAWING TITLE
594I ENG OPWI 001	B	DRAWING INDEX AND LOCALITY PLAN
594I ENG OPWI 002	A	GENERAL NOTES SHEET 1 OF 3
594I ENG OPWI 003	A	GENERAL NOTES SHEET 2 OF 3
594I ENG OPWI 004	A	GENERAL NOTES SHEET 3 OF 3
594I ENG OPWI 005	A	LEGEND
594I ENG OPWI 006	B	KEY PLAN LAYOUT
594I ENG OPWI 010	A	EXISTING SURFACE AND FEATURE PLAN
594I ENG OPWI 020	A	EMERI STREET DEMOLITION AND PROTECTION LAYOUT PLAN
594I ENG OPWI 050	B	SEDIMENT AND EROSION CONTROL PLAN SHEET 1 OF 6
594I ENG OPWI 051	A	SEDIMENT AND EROSION CONTROL PLAN SHEET 2 OF 6
594I ENG OPWI 052	B	SEDIMENT AND EROSION CONTROL PLAN SHEET 3 OF 6
594I ENG OPWI 053	B	SEDIMENT AND EROSION CONTROL PLAN SHEET 4 OF 6
594I ENG OPWI 054	B	SEDIMENT AND EROSION CONTROL PLAN SHEET 5 OF 6
594I ENG OPWI 055	B	SEDIMENT AND EROSION CONTROL PLAN SHEET 6 OF 6
594I ENG OPWI 056	B	CONSTRUCTION PHASE SEDIMENT BASIN 1 LAYOUT
594I ENG OPWI 057	A	CONSTRUCTION PHASE SEDIMENT BASIN 1 SECTIONS
594I ENG OPWI 058	A	CONSTRUCTION PHASE SEDIMENT BASIN 2 LAYOUT
594I ENG OPWI 059	A	CONSTRUCTION PHASE SEDIMENT BASIN 2 SECTIONS
594I ENG OPWI 060	A	SEDIMENT AND EROSION TYPICAL DETAILS
594I ENG OPWI 300	B	OVERALL SERVICES LAYOUT PLAN SHEET 1 OF 4
594I ENG OPWI 301	B	OVERALL SERVICES LAYOUT PLAN SHEET 2 OF 4
594I ENG OPWI 302	B	OVERALL SERVICES LAYOUT PLAN SHEET 3 OF 4
594I ENG OPWI 303	B	OVERALL SERVICES LAYOUT PLAN SHEET 4 OF 4
594I ENG OPWI 400	B	ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 1 OF 4
594I ENG OPWI 401	B	ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 2 OF 4
594I ENG OPWI 402	B	ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 3 OF 4
594I ENG OPWI 403	B	ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 4 OF 4
594I ENG OPWI 410	A	TYPICAL SECTIONS AND DETAILS SHEET 1 OF 3
594I ENG OPWI 411	B	TYPICAL SECTIONS AND DETAILS SHEET 2 OF 3
594I ENG OPWI 412	A	TYPICAL SECTIONS AND DETAILS SHEET 3 OF 3
594I ENG OPWI 420	B	CONTROL LINE LAYOUT PLAN
594I ENG OPWI 421	B	ROAD CONTROL LINE SETOUT TABLES SHEET 1 OF 2
594I ENG OPWI 422	B	ROAD CONTROL LINE SETOUT TABLES SHEET 2 OF 2
594I ENG OPWI 430	B	ROAD LONGITUDINAL SECTION – HOMESTEAD DRIVE SHEET 1 OF 3
594I ENG OPWI 431	B	ROAD LONGITUDINAL SECTION – HOMESTEAD DRIVE SHEET 2 OF 3
594I ENG OPWI 432	B	ROAD LONGITUDINAL SECTION – HOMESTEAD DRIVE SHEET 3 OF 3
594I ENG OPWI 433	B	ROAD LONGITUDINAL SECTION – EASTRIDGE STREET SHEET 1 OF 2
594I ENG OPWI 434	B	ROAD LONGITUDINAL SECTION – EASTRIDGE STREET SHEET 2 OF 2
594I ENG OPWI 435	B	ROAD LONGITUDINAL SECTION – FAIRWAY STREET SHEET 1 OF 2
594I ENG OPWI 436	B	ROAD LONGITUDINAL SECTION – FAIRWAY STREET SHEET 2 OF 2
594I ENG OPWI 437	A	ROAD LONGITUDINAL SECTION – EMERI STREET EXTENSION
594I ENG OPWI 450	B	ROAD CROSS SECTIONS – HOMESTEAD DRIVE SHEET 1 OF 14
594I ENG OPWI 451	B	ROAD CROSS SECTIONS – HOMESTEAD DRIVE SHEET 2 OF 14
594I ENG OPWI 452	B	ROAD CROSS SECTIONS – HOMESTEAD DRIVE SHEET 3 OF 14
594I ENG OPWI 453	B	ROAD CROSS SECTIONS – HOMESTEAD DRIVE SHEET 4 OF 14
594I ENG OPWI 454	B	ROAD CROSS SECTIONS – HOMESTEAD DRIVE SHEET 5 OF 14
594I ENG OPWI 455	B	ROAD CROSS SECTIONS – HOMESTEAD DRIVE SHEET 6 OF 14
594I ENG OPWI 456	B	ROAD CROSS SECTIONS – HOMESTEAD DRIVE SHEET 7 OF 14
594I ENG OPWI 457	B	ROAD CROSS SECTIONS – HOMESTEAD DRIVE SHEET 8 OF 14
594I ENG OPWI 458	B	ROAD CROSS SECTIONS – HOMESTEAD DRIVE SHEET 9 OF 14
594I ENG OPWI 459	B	ROAD CROSS SECTIONS – HOMESTEAD DRIVE SHEET 10 OF 14
594I ENG OPWI 460	B	ROAD CROSS SECTIONS – HOMESTEAD DRIVE SHEET 11 OF 14
594I ENG OPWI 461	B	ROAD CROSS SECTIONS – HOMESTEAD DRIVE SHEET 12 OF 14
594I ENG OPWI 462	B	ROAD CROSS SECTIONS – HOMESTEAD DRIVE SHEET 13 OF 14
594I ENG OPWI 463	B	ROAD CROSS SECTIONS – HOMESTEAD DRIVE SHEET 14 OF 14
594I ENG OPWI 464	A	ROAD CROSS SECTIONS – EASTRIDGE STREET SHEET 1 OF 8
594I ENG OPWI 465	A	ROAD CROSS SECTIONS – EASTRIDGE STREET SHEET 2 OF 8
594I ENG OPWI 466	A	ROAD CROSS SECTIONS – EASTRIDGE STREET SHEET 3 OF 8
594I ENG OPWI 467	A	ROAD CROSS SECTIONS – EASTRIDGE STREET SHEET 4 OF 8
594I ENG OPWI 468	A	ROAD CROSS SECTIONS – EASTRIDGE STREET SHEET 5 OF 8
594I ENG OPWI 469	A	ROAD CROSS SECTIONS – EASTRIDGE STREET SHEET 6 OF 8
594I ENG OPWI 470	A	ROAD CROSS SECTIONS – EASTRIDGE STREET SHEET 7 OF 8
594I ENG OPWI 471	A	ROAD CROSS SECTIONS – EASTRIDGE STREET SHEET 8 OF 8

DRAWING INDEX		
DRAWING No.	REV No.	DRAWING TITLE
594I ENG OPWI 472	B	ROAD CROSS SECTIONS – FAIRWAY STREET SHEET 1 OF 6
594I ENG OPWI 473	B	ROAD CROSS SECTIONS – FAIRWAY DRIVE STREET 2 OF 6
594I ENG OPWI 474	B	ROAD CROSS SECTIONS – FAIRWAY STREET SHEET 3 OF 6
594I ENG OPWI 475	B	ROAD CROSS SECTIONS – FAIRWAY STREET SHEET 4 OF 6
594I ENG OPWI 476	B	ROAD CROSS SECTIONS – FAIRWAY STREET SHEET 5 OF 6
594I ENG OPWI 477	B	ROAD CROSS SECTIONS – FAIRWAY STREET SHEET 6 OF 6
594I ENG OPWI 478	A	ROAD CROSS SECTIONS – EMERI STREET EXTENSION SHEET 1 OF 2
594I ENG OPWI 479	A	ROAD CROSS SECTIONS – EMERI STREET EXTENSION SHEET 2 OF 2
594I ENG OPWI 480	B	KERB ISLAND SETOUT DETAILS SHEET 1 OF 2
594I ENG OPWI 481	B	KERB ISLAND SETOUT DETAILS SHEET 2 OF 2
594I ENG OPWI 490	B	ROAD INTERSECTION DETAILS SHEET 1 OF 8
594I ENG OPWI 491	B	ROAD INTERSECTION DETAILS SHEET 2 OF 8
594I ENG OPWI 492	B	ROAD INTERSECTION DETAILS SHEET 3 OF 8
594I ENG OPWI 493	B	ROAD INTERSECTION DETAILS SHEET 4 OF 8
594I ENG OPWI 494	A	ROAD INTERSECTION DETAILS SHEET 5 OF 8
594I ENG OPWI 495	A	ROAD INTERSECTION DETAILS SHEET 6 OF 8
594I ENG OPWI 496	B	ROAD INTERSECTION DETAILS SHEET 7 OF 8
594I ENG OPWI 497	B	ROAD INTERSECTION DETAILS SHEET 8 OF 8
594I ENG OPWI 500	B	STORMWATER DRAINAGE CATCHMENT PLAN
594I ENG OPWI 510	B	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 1 OF 18
594I ENG OPWI 511	B	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 2 OF 18
594I ENG OPWI 512	B	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 3 OF 18
594I ENG OPWI 513	A	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 4 OF 18
594I ENG OPWI 514	B	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 5 OF 18
594I ENG OPWI 515	B	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 6 OF 18
594I ENG OPWI 516	B	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 7 OF 18
594I ENG OPWI 517	B	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 8 OF 18
594I ENG OPWI 518	A	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 9 OF 18
594I ENG OPWI 519	A	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 10 OF 18
594I ENG OPWI 520	A	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 11 OF 18
594I ENG OPWI 521	B	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 12 OF 18
594I ENG OPWI 522	B	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 13 OF 18
594I ENG OPWI 523	B	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 14 OF 18
594I ENG OPWI 524	B	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 15 OF 18
594I ENG OPWI 525	A	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 16 OF 18
594I ENG OPWI 526	B	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 17 OF 18
594I ENG OPWI 527	B	STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 18 OF 18
594I ENG OPWI 550	A	39% AEP STORMWATER DRAINAGE CALCULATIONS TABLES SHEET 1 OF 2
594I ENG OPWI 551	A	39% AEP STORMWATER DRAINAGE CALCULATIONS TABLES SHEET 2 OF 2
594I ENG OPWI 552	A	1% AEP STORMWATER DRAINAGE CALCULATIONS TABLES SHEET 1 OF 2
594I ENG OPWI 553	A	1% AEP STORMWATER DRAINAGE CALCULATIONS TABLES SHEET 2 OF 2
594I ENG OPWI 570	B	OPERATIONAL PHASE BIORETENTION BASIN SHEET 1 OF 2
594I ENG OPWI 571	A	OPERATIONAL PHASE BIORETENTION BASIN SHEET 2 OF 2
594I ENG OPWI 572	B	OPERATIONAL PHASE BIORETENTION BASIN SETOUT DETAILS
594I ENG OPWI 600	B	SEWER RETICULATION LAYOUT PLAN SHEET 1 OF 4
594I ENG OPWI 601	B	SEWER RETICULATION LAYOUT PLAN SHEET 2 OF 4
594I ENG OPWI 602	B	SEWER RETICULATION LAYOUT PLAN SHEET 3 OF 4
594I ENG OPWI 603	B	SEWER RETICULATION LAYOUT PLAN SHEET 4 OF 4
594I ENG OPWI 610	B	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 1 OF 11
594I ENG OPWI 611	B	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 2 OF 11
594I ENG OPWI 612	B	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 3 OF 11
594I ENG OPWI 613	B	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 4 OF 11
594I ENG OPWI 614	B	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 5 OF 11
594I ENG OPWI 615	B	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 6 OF 11
594I ENG OPWI 616	B	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 7 OF 11
594I ENG OPWI 617	B	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 8 OF 11
594I ENG OPWI 618	B	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 9 OF 11
594I ENG OPWI 619	B	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 10 OF 11
594I ENG OPWI 620	B	SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 11 OF 11
594I ENG OPWI 700	B	WATER RETICULATION LAYOUT PLAN SHEET 1 OF 4
594I ENG OPWI 701	B	WATER RETICULATION LAYOUT PLAN SHEET 2 OF 4
594I ENG OPWI 702	B	WATER RETICULATION LAYOUT PLAN SHEET 3 OF 4
594I ENG OPWI 703	B	WATER RETICULATION LAYOUT PLAN SHEET 4 OF 4

DRAWING INDEX		
DRAWING No.	REV No.	DRAWING TITLE
594I ENG OPWI 704	A	WATER RETICULATION TYPICAL DETAILS
594I ENG OPWI 800	B	LINEMARKING AND SIGNAGE PLAN SHEET 1 OF 5
594I ENG OPWI 801	A	LINEMARKING AND SIGNAGE PLAN SHEET 2 OF 5
594I ENG OPWI 802	B	LINEMARKING AND SIGNAGE PLAN SHEET 3 OF 5
594I ENG OPWI 803	B	LINEMARKING AND SIGNAGE PLAN SHEET 4 OF 5
594I ENG OPWI 804	B	LINEMARKING AND SIGNAGE PLAN SHEET 5 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
SD1033	K	DTMR	KERB AND CHANNEL
SD1304	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



PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No.: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies

LOCALITY PLAN

SCALE 1: 8000 (A1)

CLIENT



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

SITE ADDRESS

60 STAPYLTON JACOBS WELL ROAD
STAPYLTON QLD 4207

DWG No. 594I ENG OPWI 001 – REV B

MAY 2020

1. CONTRACT DOCUMENTATION
ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE CONTRACT SPECIFICATION AND C&G 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 WHEN 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.

1. **PRECEDENCE**
EARTHWORKS SPECIFICATION PREPARED BY PROJECT GEOTECHNICAL ENGINEER TO TAKE PRECEDENCE OVER STANDARD COUNCIL EARTHWORKS NOTES.
2. **TOPSOIL STRIPPING**
TOPSOIL SHALL BE STRIPPED PREPARED 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.

- 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 (RPEC) 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 GOGC. 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.

- a. 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 SEED, 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 CoGo. THE CONTRACTOR SHALL ALLOW FOR THE COST OF THESE WORKS WITHIN THEIR SUBMITTED TENDER PRICE.

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.

- 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 TRIMMING).
- 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 CLEARED 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).

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



planning | environment | landscape | engineering | survey
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Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

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:
RI :

ISSUED FOR APPROVAL
NOT FOR CONSTRUCTION

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ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

GENERAL NOTES
SHEET 1 OF 3

A Issue	01-05-2020	ORIGINAL ISSUE Description		BA DRN	MCH

SCALE IN METRES

NOT APPLICABLE

Scale at A1: NTS

Designed:	IG
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Drafted:	BA
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Approved:	MG
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RPEQ:	16939
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Signed:	
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Date:	01-05-2020
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Drawing No:	Rev. No:
5941 ENG OPW1 002	A

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 AREA FOR A DISTANCE NOT EXCEEDING FIVE (5) METRES ALL AROUND MUST BE CLEARED OF ALL TREES, SCRUB, STUMPS, ROOTS, DEAD TIMBER AND RUBBISH AND DISPOSED OF IN A SUITABLE MANNER, DELAY CLEARING THE MAIN BASIN AREA UNTIL THE EMBANKMENT IS COMPLETE.
13. ENSURE ALL HOLES MADE BY GRUBBING WITHIN THE EMBANKMENT FOOTPRINT ARE FILLED WITH SOUND MATERIAL, ADEQUATELY COMPACTED, AND FINISHED FLUSH WITH THE NATURAL SURFACE.

CUT-OFF TRENCH

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

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

EMBANKMENT

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

ESTABLISHING THE SETTLING POND

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

SPILLWAY CONSTRUCTION

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

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

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

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

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

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Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

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:	-

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DRAWING TITLE

LEGEND

SCALE IN METRES

NOT APPLICABLE

Scale at A1:	NTS
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Designed:	IG
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Drafted:	BA
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Approved:	MC
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RPEQ:	16939
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Signed:	
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Date:	01-05-2020
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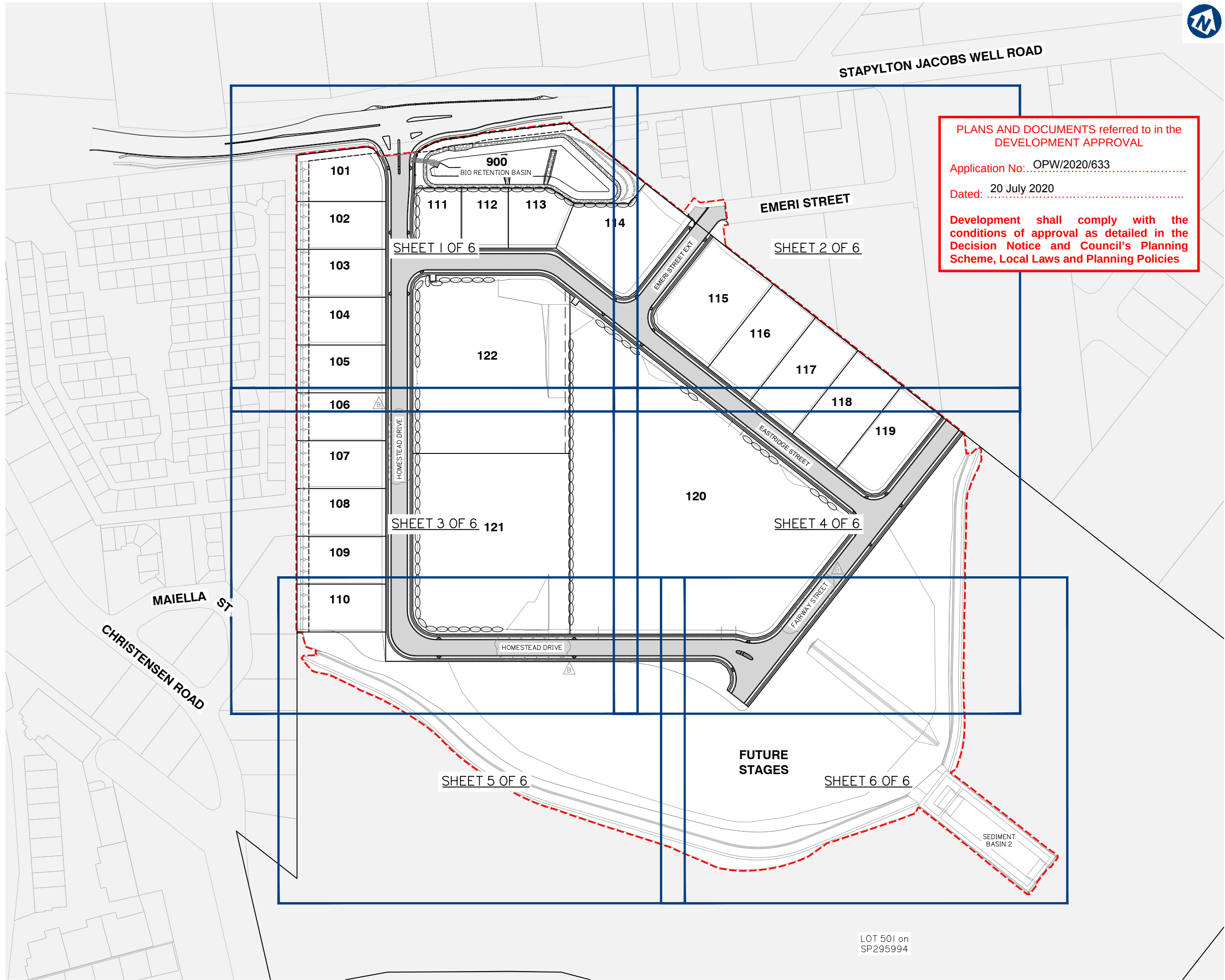
Drawing No:	Rev. No:
5941 ENG OPW1 005	A

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



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COUNCIL
Level Datum: AHD
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DRAWING TITLE

KEY PLAN LAYOUT

Issue	Date	Description	BA	MG
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG
A	01-05-2020	ORIGINAL ISSUE	BA	MG

SCALE IN METRES

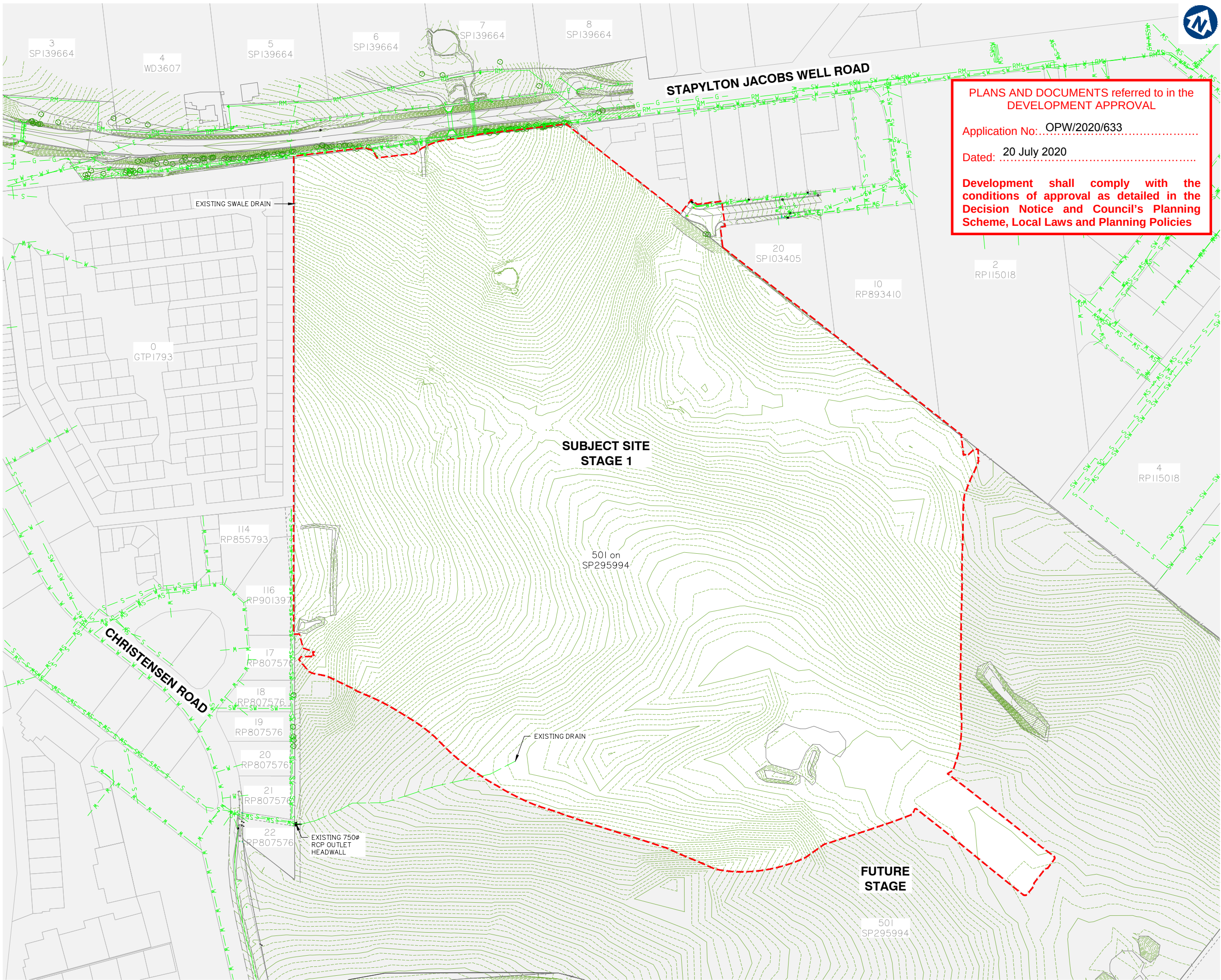


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1:3000 (HALF SIZE A3)

Scale at A1: 1:1500

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No: 5941 ENG OPW1 006
Rev. No: B



PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

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Project:

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DRAWING TITLE

EXISTING SURFACE AND
FEATURE PLAN

Issue	Date	Original Issue Description	BA DRN	MG CHK
A	01-05-2020	ORIGINAL ISSUE	BA	MG

SCALE IN METRES



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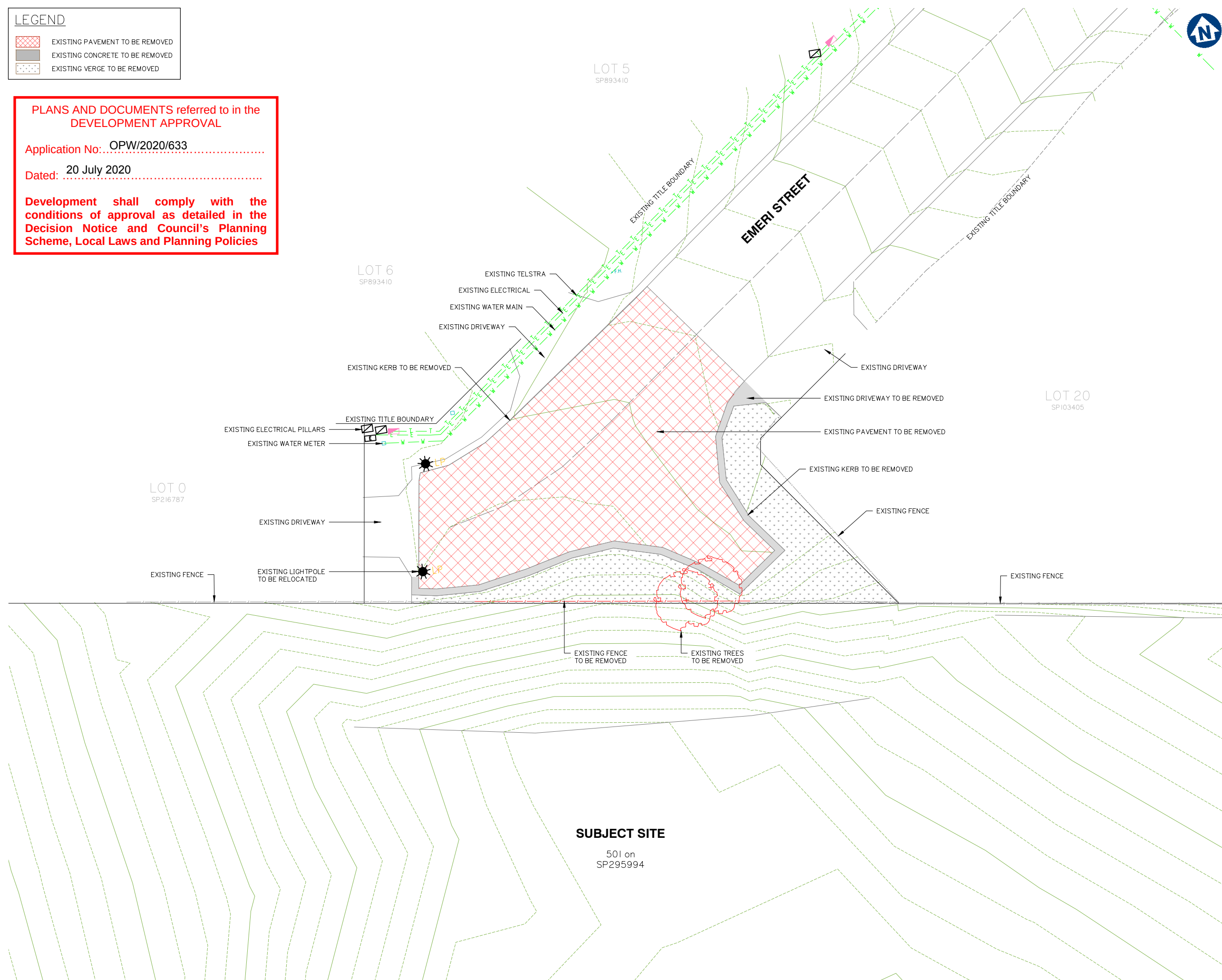
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Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No: 5941 ENG OPW1 010
Rev. No:

	EXISTING PAVEMENT TO BE REMOVED
	EXISTING CONCRETE TO BE REMOVED
	EXISTING VERGE TO BE REMOVED

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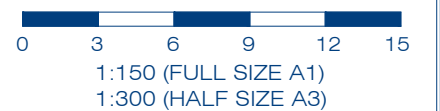
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DRAWING TITLE

EMERI STREET DEMOLITION
AND PROTECTION LAYOUT
PLAN

A	01-05-2020	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	DRN	CHK

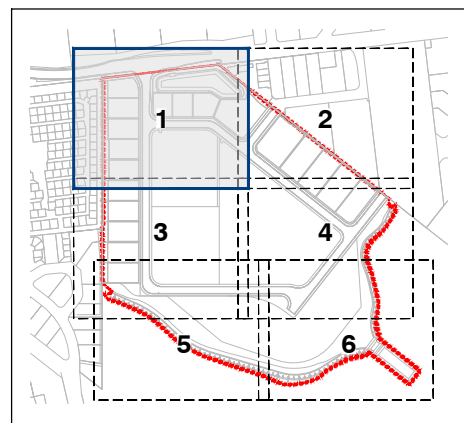
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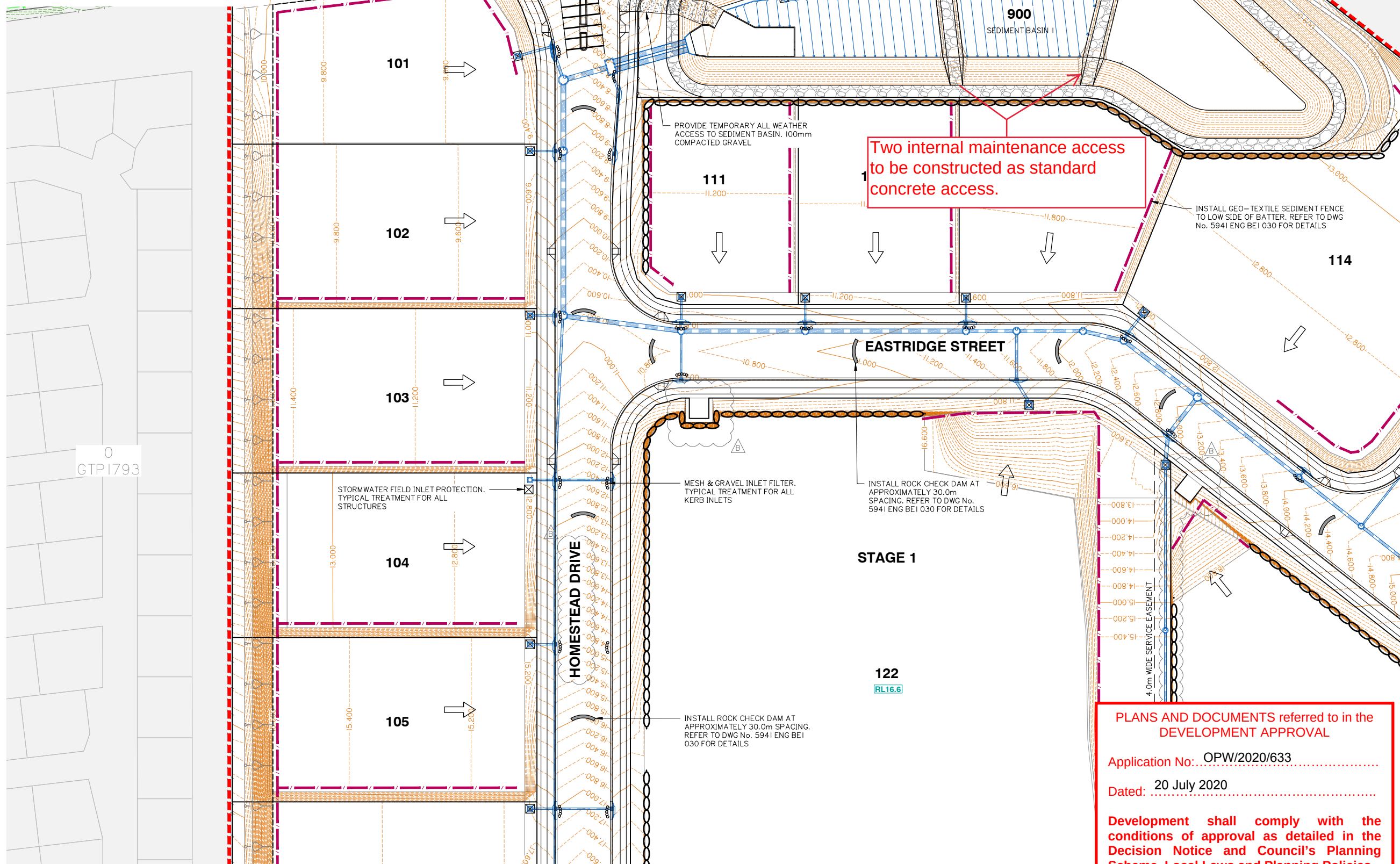
Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:	Rev. No:
5941 ENG OPW1 020	A



KEY PLAN
SCALE 1:7500

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



SEDIMENT AND EROSION CONTROL PLAN SHEET 1 OF 6

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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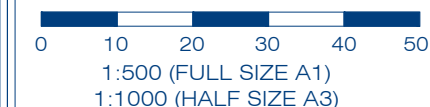
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DRAWING TITLE
SEDIMENT AND
EROSION CONTROL
PLAN SHEET 1 OF 6

Issue	Date	Description	BA	MG	CHK
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG	
A	01-05-2020	ORIGINAL ISSUE	BA	MG	

SCALE IN METRES



Scale at A1: 1:500

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

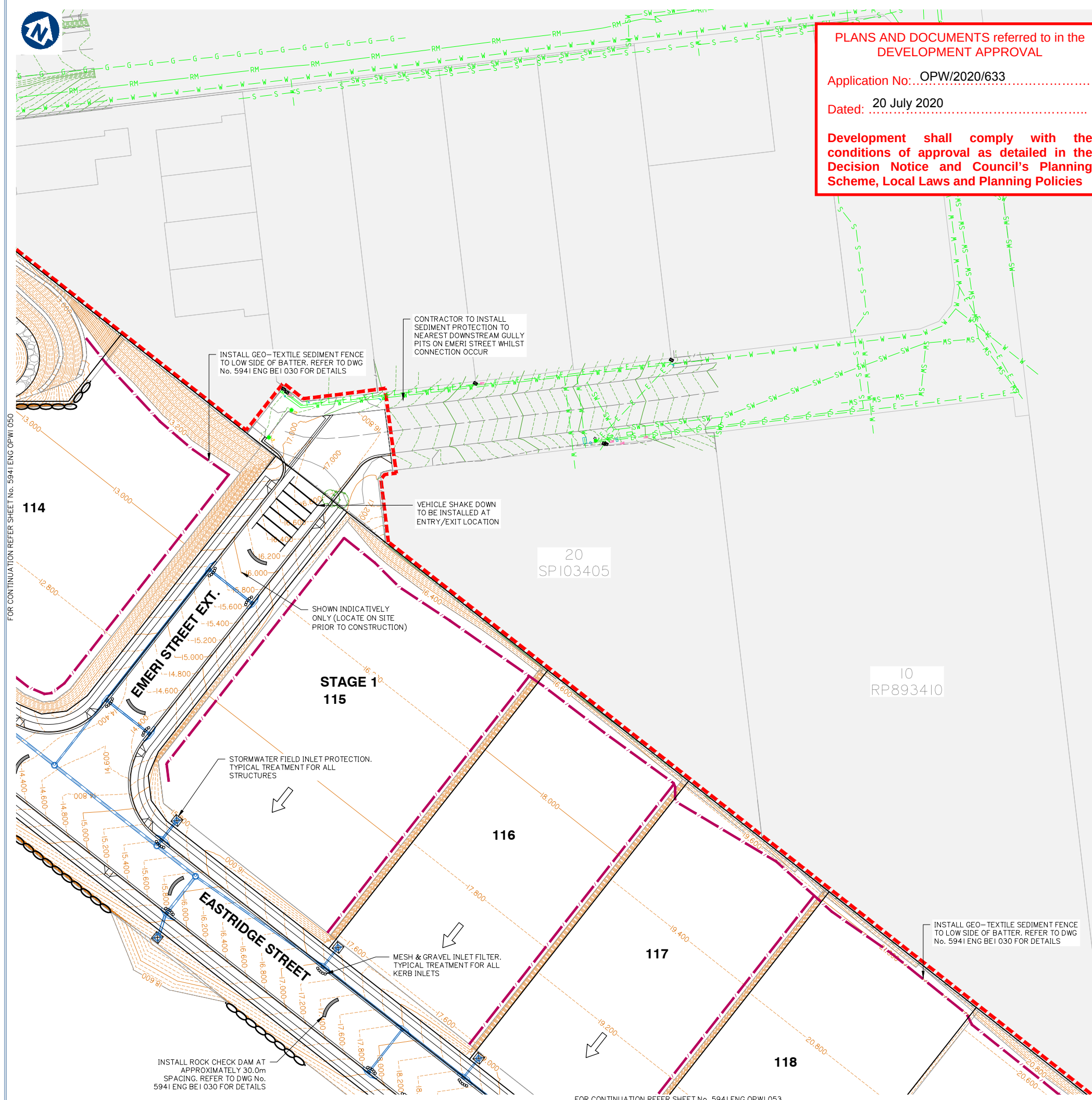
Drawing No: 5941 ENG OPW1 050 Rev. No: B

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies

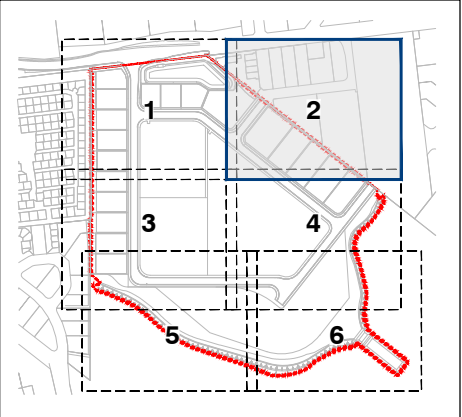


PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



KEY PLAN
SCALE 1: 7500

- NOTES
1. SEDIMENT AND EROSION CONTROL PLAN IS INDICATIVE ONLY. THE CONTRACTOR MUST TAKE ADDITIONAL MEASURES IF REQUIRED ONSITE DURING CONSTRUCTION AND MAINTENANCE PERIODS.
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 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.
 5. CONTRACTOR TO STABILISE EXPOSED SURFACES UPON COMPLETE OF WORKS TO MINIMISE SEDIMENT RUN OFF AND DUST.



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Client:



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

Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL ROAD, STAPYLTON QLD 4207

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RPD:

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

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DRAWING TITLE

SEDIMENT AND EROSION CONTROL PLAN SHEET 2 OF 6

A	01-05-2020	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES

0 10 20 30 40 50

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

Scale at A1: 1:500

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No: 5941 ENG OPW1 051 Rev. No: A



FOR CONTINUATION REFER SHEET No. 5941 ENG OPW1 052

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

STAGE 1

120
RL18.6

INSTALL GEO-TEXTILE SEDIMENT FENCE TO LOW SIDE OF BATTER. REFER TO DWG No. 5941 ENG BE1 030 FOR DETAILS

STORMWATER FIELD INLET PROTECTION. TYPICAL TREATMENT FOR ALL STRUCTURES

MESH & GRAVEL INLET FILTER. TYPICAL TREATMENT FOR ALL KERB INLETS

INSTALL ROCK CHECK DAM AT APPROXIMATELY 30.0m SPACING. REFER TO DWG No. 5941 ENG BE1 030 FOR DETAILS

HOMESTEAD DRIVE

FAIRWAY STREET

118

119

YATALA DRIVE-IN

2
RPI15018

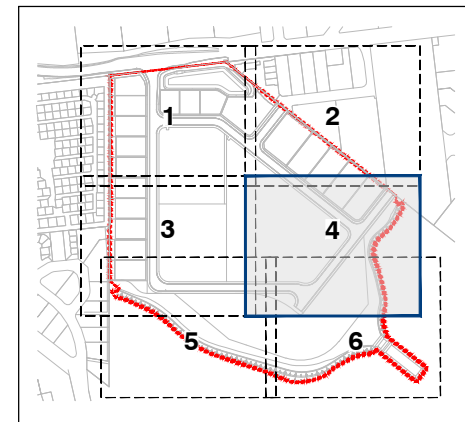
FUTURE
STAGE

501
SP295994

NOTES

1. SEDIMENT AND EROSION CONTROL PLAN IS INDICATIVE ONLY. THE CONTRACTOR MUST TAKE ADDITIONAL MEASURES IF REQUIRED ONSITE DURING CONSTRUCTION AND MAINTENANCE PERIODS.
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5. CONTRACTOR TO STABILISE EXPOSED SURFACES UPON COMPLETE OF WORKS TO MINIMISE SEDIMENT RUN OFF AND DUST.

TEMPORARY STOCKPILE LOCATION FOR SURPLUS TOPSOIL



KEY PLAN
SCALE 1: 7500

Client:

FRASERS PROPERTY
FRASERS PROPERTY (AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL ROAD, STAPYLTON QLD 4207

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DRAWING TITLE
SEDIMENT AND EROSION CONTROL PLAN SHEET 4 OF 6

B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG
A	01-05-2020	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	DRN	CHK

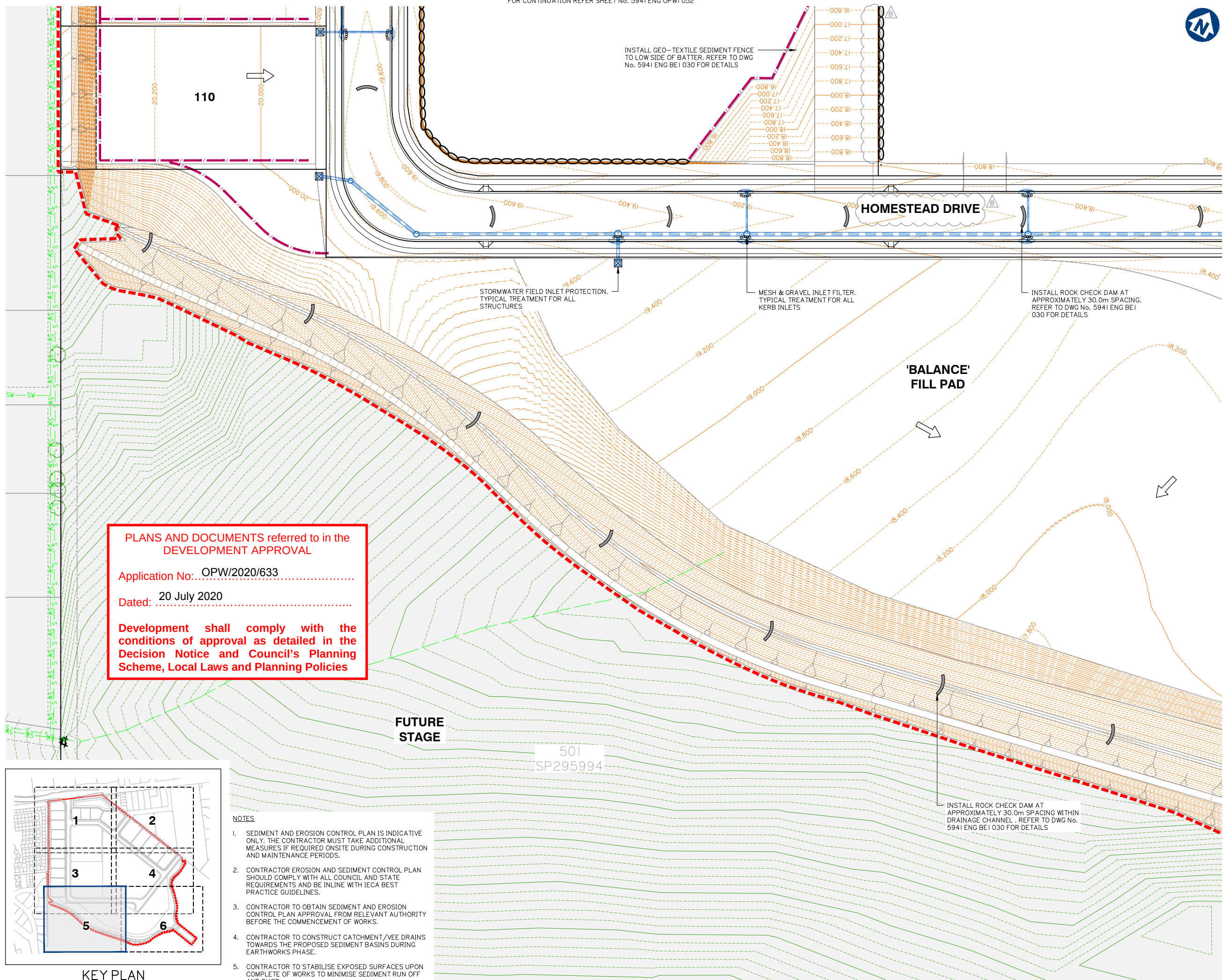
SCALE IN METRES

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

Scale at A1: 1:500

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No: 5941 ENG OPW1 053
Rev. No: B



KEY PLAN
SCALE 1: 7500



Client:

Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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RPD:

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PSM: -
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DRAWING TITLE

SEDIMENT AND
EROSION CONTROL
PLAN SHEET 6 OF 6

B	12-06-2020	INFORMATION REQUEST RESPONSE		BA	MG
A	01-05-2020	ORIGINAL ISSUE		BA	MG
Issue	Date	Description	DRN	CHK	

SCALE IN METRES



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

Scale at A1: 1:500

Designed:	IG
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Drafted:	BA
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Approved:	MG
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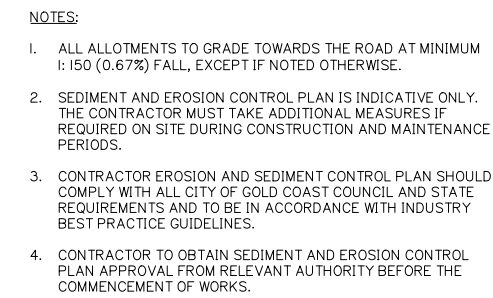
RPEQ:	16939
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Signed:	
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Date:	01-05-2020
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Drawing No:
5941 ENG OPW1 055

Rev. No:
B



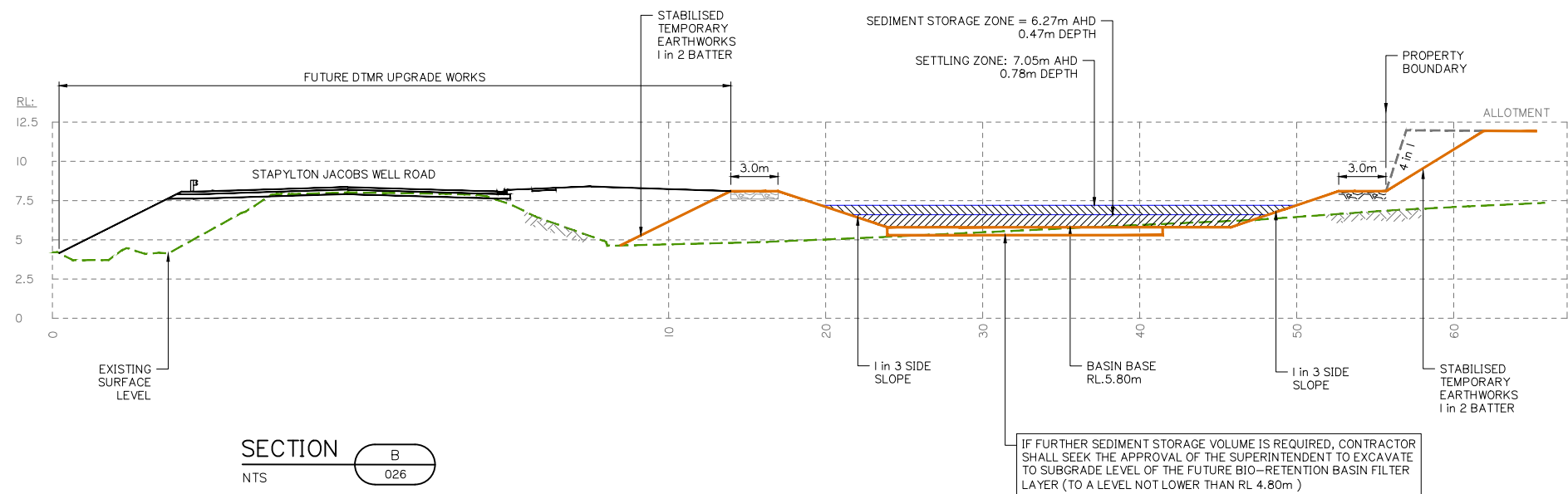
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STABILISED BATTERS IN
ACCORDANCE WITH CITY OF
GOLD COAST REQUIREMENTS

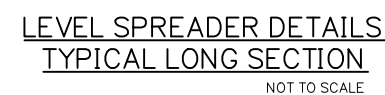
SCALE 1:500 (AI)

IF FURTHER SEDIMENT STORAGE VOLUME IS REQUIRED, CONTRACTOR SHALL SEEK THE APPROVAL OF THE SUPERINTENDENT TO EXCAVATE TO SUBGRADE LEVEL OF THE FUTURE BIO-RETENTION BASIN FILTER LAYER (TO A LEVEL NOT LOWER THAN RL 4.80m)

N.T.S.



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VANTAGE YATALA

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DRAWING TITLE
CONSTRUCTION PHASE
SEDIMENT BASIN 2
SECTIONS

A	01-05-2020		ORIGINAL ISSUE	BA	MG
Issue	Date		Description	(R/N)	(Y/N)

SCALE IN METRES

NOT TO SCALE

Scale at A1: NTS

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

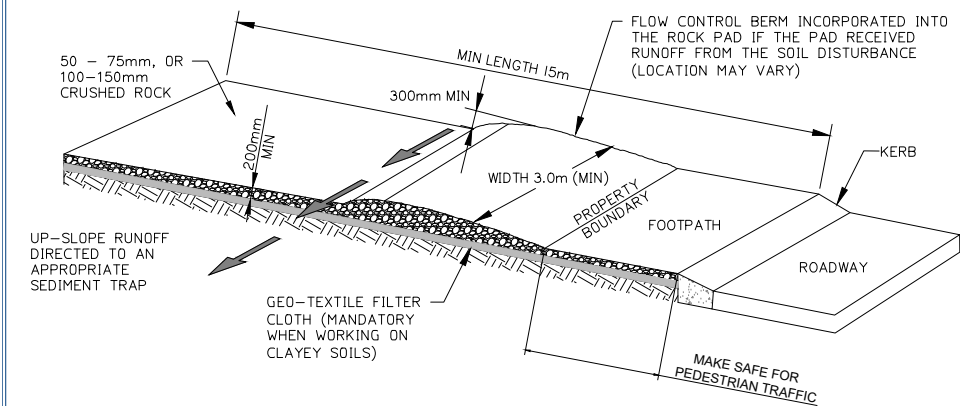
Drawing No:	Rev. No:
5941 ENG OPW1 059	A

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

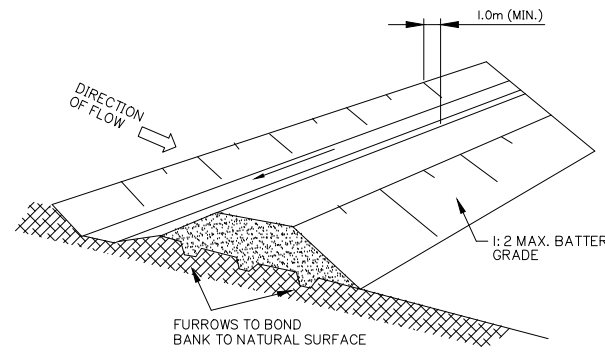
Application No: OPW/2020/633

Dated: 20 July 2020

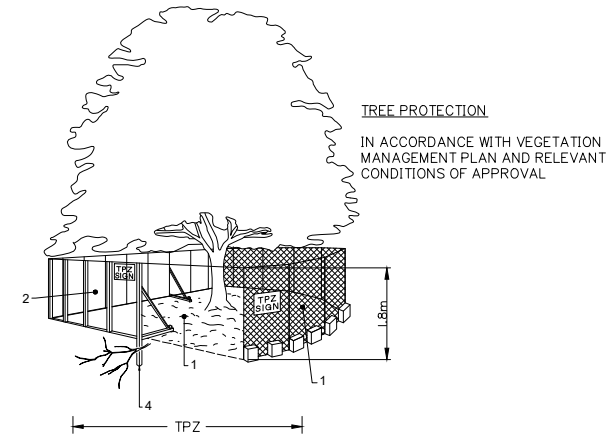
Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



ENTRY/EXIT PAD FOR CONSTRUCTION SITE
NOT TO SCALE



DIVERSION DRAIN
NOT TO SCALE



TREE PROTECTION
IN ACCORDANCE WITH VEGETATION
MANAGEMENT PLAN AND RELEVANT
CONDITIONS OF APPROVAL

FENCING AS PER AS: 4970

1. CHAIN WIRE MESH PANELS WITH SHADE CLOTH (IF REQUIRED) ATTACHED, HELD IN PLACE WITH CONCRETE FEET.
2. ALTERNATIVE PLYWOOD OR WOODEN PALING FENCE PANELS. THIS FENCING MATERIAL ALSO PREVENTS BUILDING MATERIALS OR SOIL ENTERING THE TPZ.
3. MULCH INSTALLATION ACROSS SURFACE OF TPZ (AT THE DISCRETION OF THE PROJECT ARBORIST.) NO EXCAVATION, CONSTRUCTION ACTIVITY, GRADE CHANGES, SURFACE TREATMENT OR STORAGE OF MATERIALS OF ANY KIND IS PERMITTED WITHIN THE TPZ.
4. BRACING IS PERMITTED WITHIN THE TPZ. INSTALLATION OF SUPPORTS SHOULD AVOID DAMAGING ROOTS.
5. THE CONSTRUCTION CONTRACTOR IS NOT TO UNDERTAKE ANY PRUNING OF TREES. TREE MANAGEMENT IS TO BE UNDERTAKEN BY A SUITABLY QUALIFIED ARBORIST.
6. NO STOCKPILE/S ARE PERMITTED WITHIN THE ZONE OF ANY RETAINED VEGETATION WITHOUT SUPERVISION AND AUTHORIZATION OF THE SUPERVISING ARBORIST.
7. NO CLEARING OF PROTECTED SIZE VEGETATION IS TO OCCUR WITHOUT APPROVAL FROM LOGAN CITY COUNCIL.

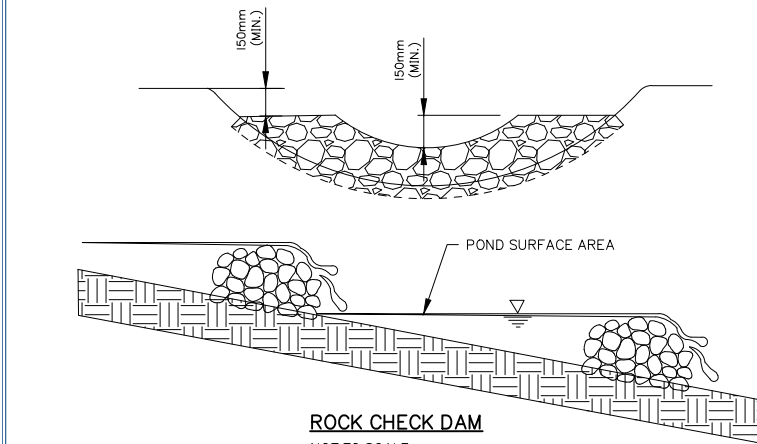
DETERMINING THE TPZ

THE RADIUS OF THE TPZ IS CALCULATED FOR EACH TREE BY MULTIPLYING ITS DBH X 12 = TRUNK DIAMETER MEASURED AT 1.4M ABOVE GROUND. RADIUS IS MEASURED FROM THE CENTRE OF THE STEM AT GROUND LEVEL.

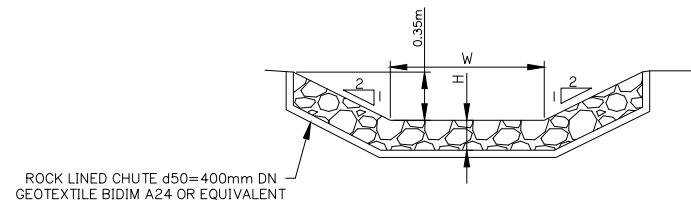
A TPZ SHOULD NOT BE LESS THAN 2M NOR GREATER THAN 15M (EXCEPT WHERE CROWN PROTECTION IS REQUIRED).
THE TPZ OF PALMS, OTHER MONOCOTS, CYCADS AND TREE FERNS SHOULD NOT BE LESS THAN 1M OUTSIDE THE CROWN PROJECTION.

PROTECTIVE FENCING

NOT TO SCALE

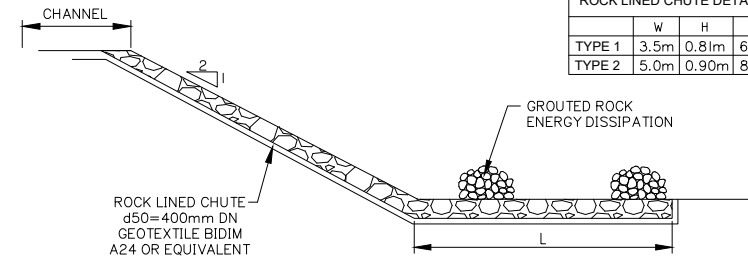


ROCK CHECK DAM
NOT TO SCALE



ROCK LINED CHUTE d50=400mm DN
GEOTEXTILE BIDIM A24 OR EQUIVALENT

ROCK LINED CHUTE DETAILS			
	W	H	L
TYPE 1	3.5m	0.81m	6.0m
TYPE 2	5.0m	0.90m	8.0m



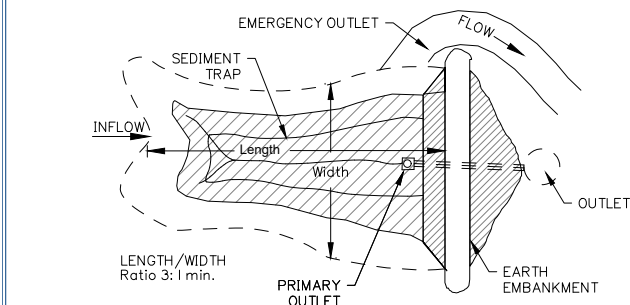
ROCK LINED CHUTE
NOT TO SCALE

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

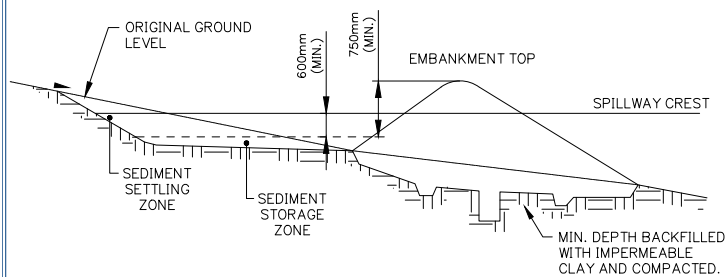
Application No.: OPW/2020/633

Dated: 20 July 2020

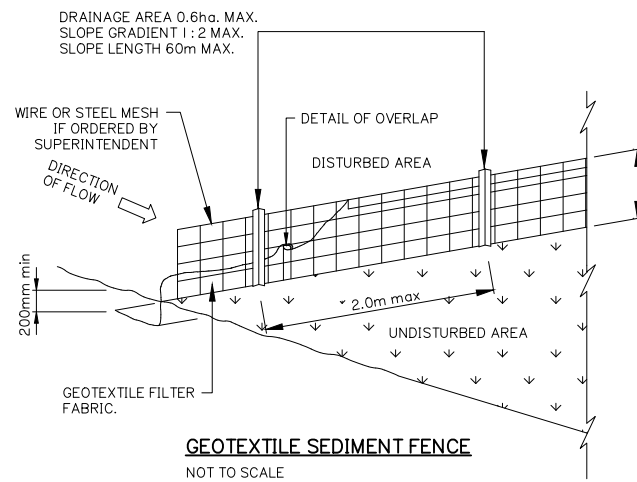
Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies



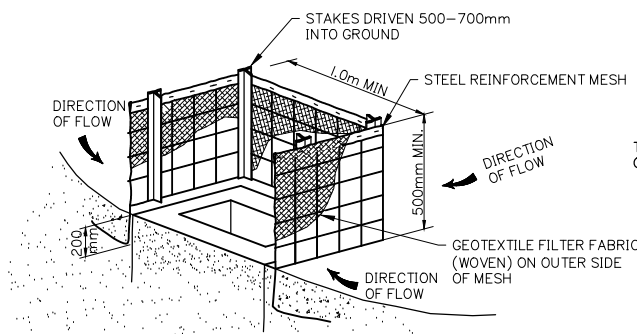
TYPICAL SEDIMENT BASIN
NOT TO SCALE



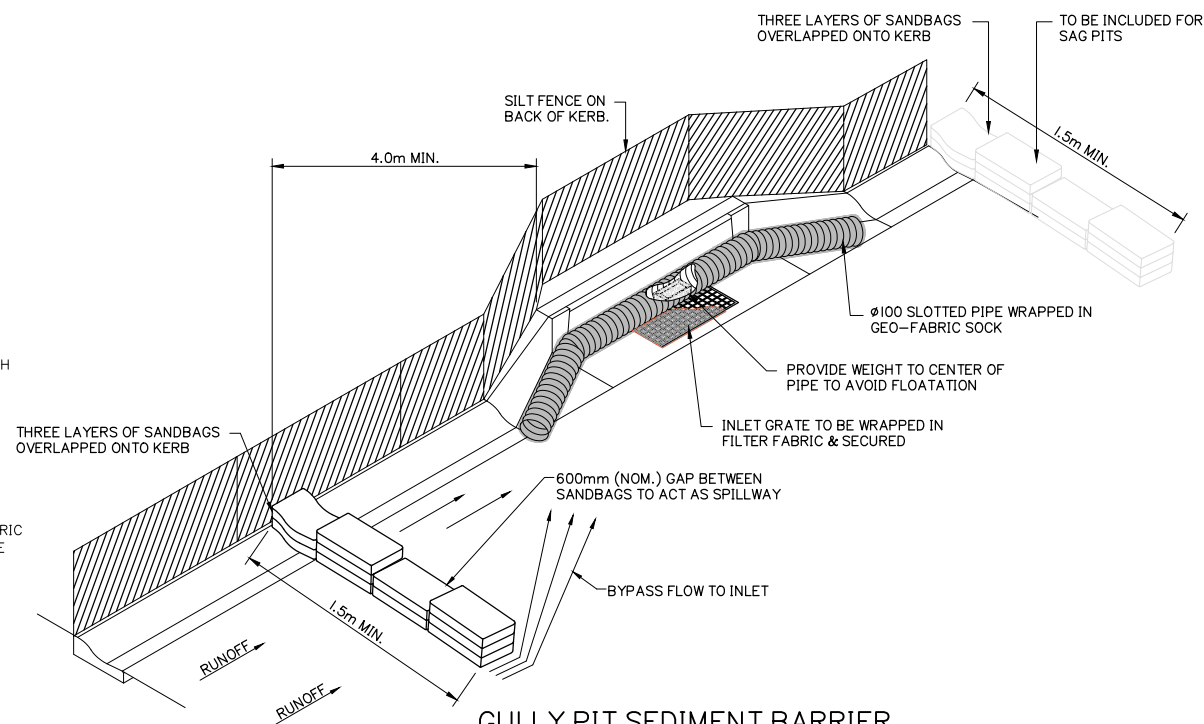
TYPICAL SECTION VEE DRAIN
NOT TO SCALE



GEOTEXTILE SEDIMENT FENCE
NOT TO SCALE



STORMWATER INLET - SEDIMENT TRAP
NOTE:
FOURTH SIDE OF TRAP NOT SHOWN FOR CLARITY



GULLY PIT SEDIMENT BARRIER
SCALE N.T.S.

SEDIMENT AND EROSION TYPICAL DETAILS

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

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: -

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DRAWING TITLE

SEDIMENT AND EROSION
TYPICAL DETAILS

A	01-05-2020	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES

NOT APPLICABLE

Scale at A1:

NTS

Designed:

IG

Drafted:

BA

Approved:

MG

RPEQ:

16939

Signed:

Michael

Date:

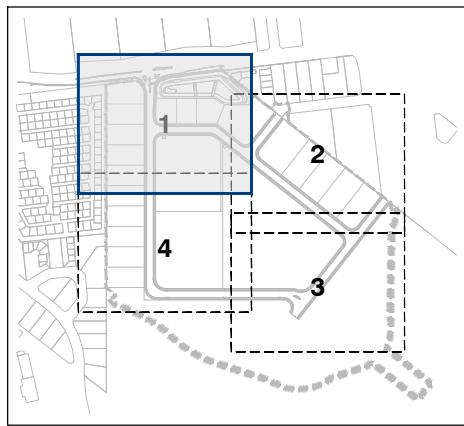
01-05-2020

Drawing No:

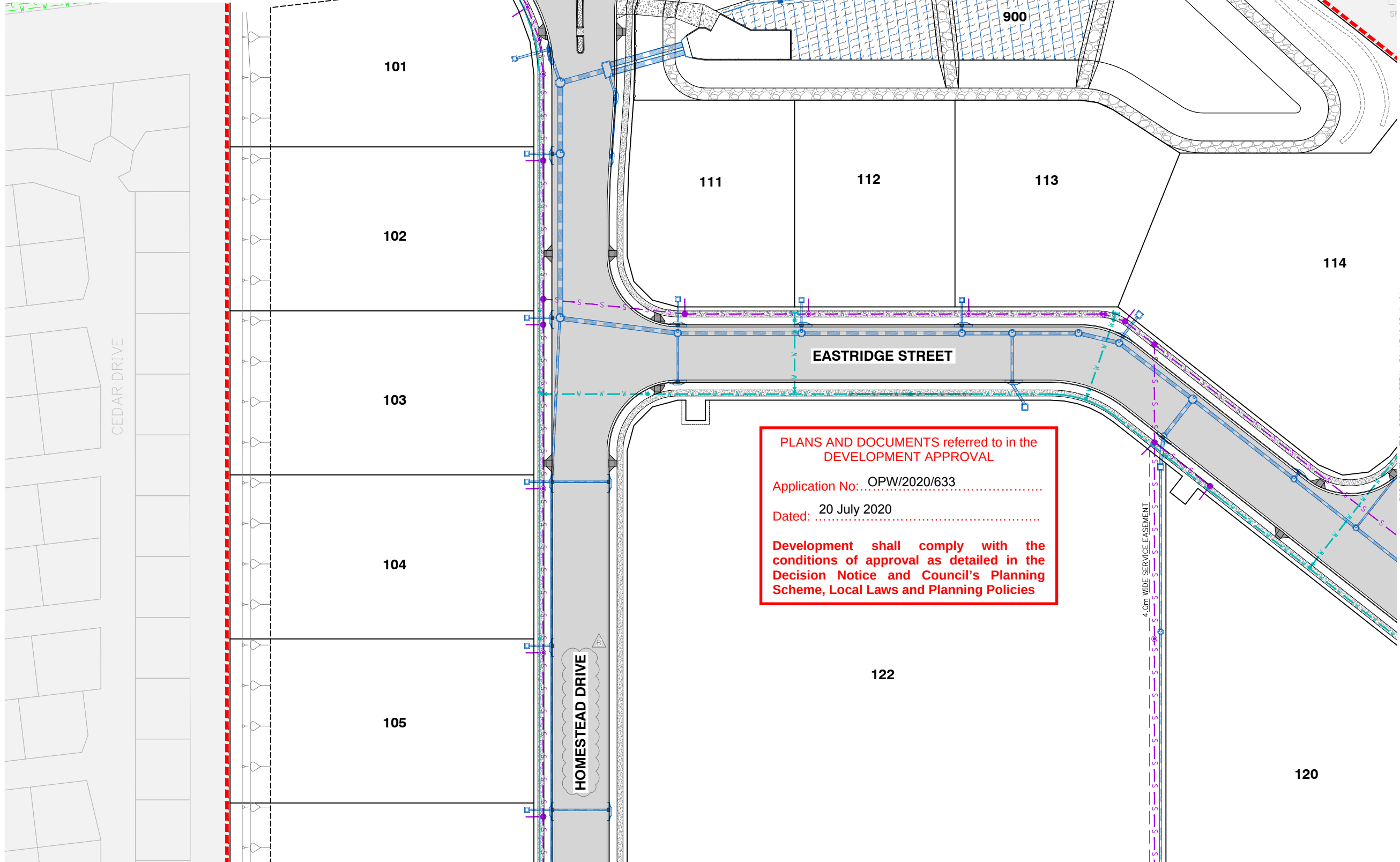
5941 ENG OPW1 060

Rev. No:

A



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.

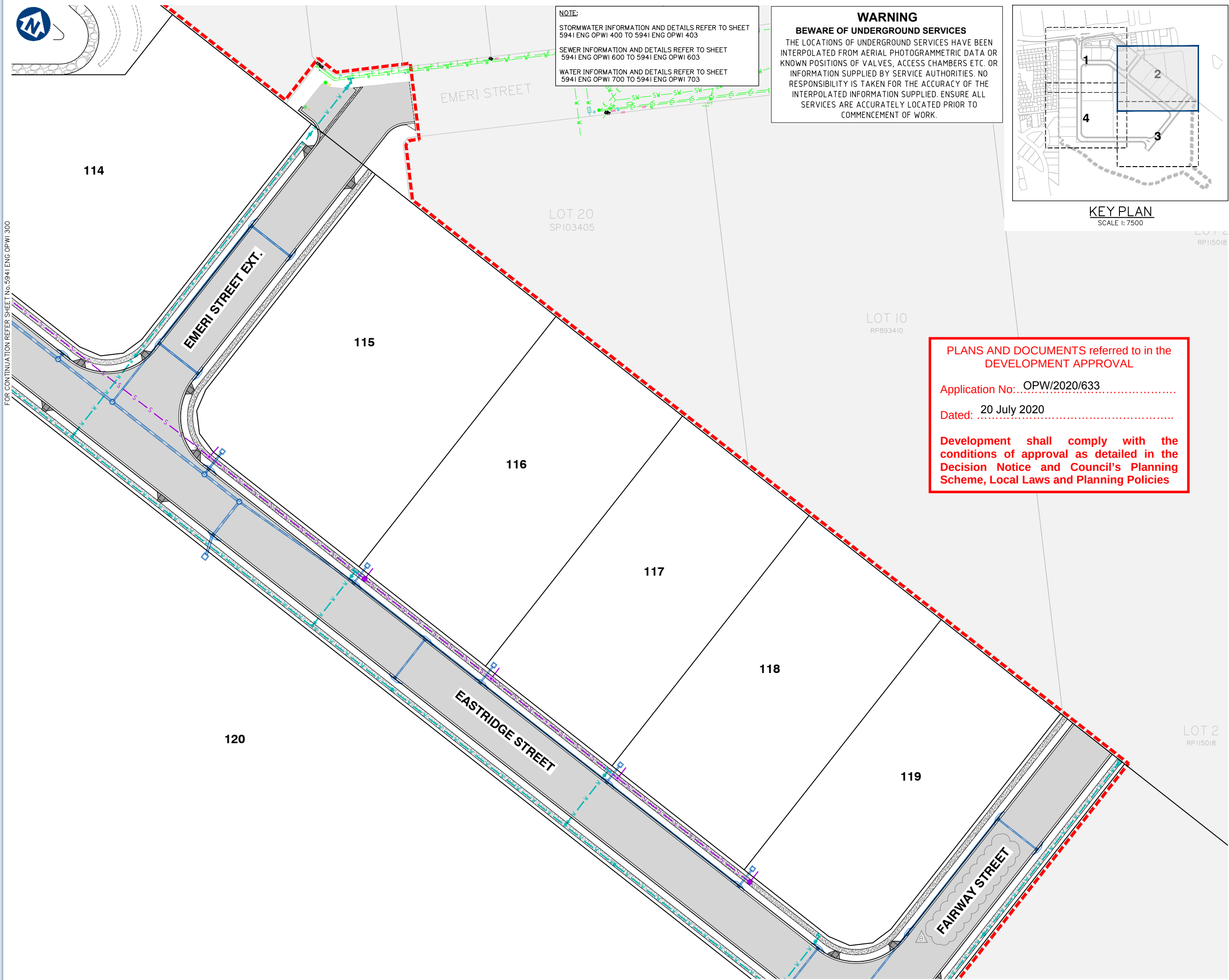
NOTE:
STORMWATER INFORMATION AND DETAILS REFER TO SHEET 5941 ENG OPW1 400 TO 5941 ENG OPW1 403
SEWER INFORMATION AND DETAILS REFER TO SHEET 5941 ENG OPW1 600 TO 5941 ENG OPW1 603
WATER INFORMATION AND DETAILS REFER TO SHEET 5941 ENG OPW1 700 TO 5941 ENG OPW1 703

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL
Application No.: OPW/2020/633
Dated: 20 July 2020
Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

Issue	Date	Description	BA	MG	CHK
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG	
A	01-05-2020	ORIGINAL ISSUE	BA	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:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020



Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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RPD:

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

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DRAWING TITLE

OVERALL SERVICES LAYOUT
PLAN SHEET 2 OF 4

Issue	Date	Description	BA	MG
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG
A	01-05-2020	ORIGINAL ISSUE	BA	MG

SCALE IN METRES



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

Scale at A1: 1:500

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:
5941 ENG OPW1 301

Rev. No:
B



NOTE:
STORMWATER INFORMATION AND DETAILS REFER TO SHEET
5941 ENG OPW1 400 TO 5941 ENG OPW1 403
SEWER INFORMATION AND DETAILS REFER TO SHEET
5941 ENG OPW1 600 TO 5941 ENG OPW1 603
WATER INFORMATION AND DETAILS REFER TO SHEET
5941 ENG OPW1 700 TO 5941 ENG OPW1 703

WARNING
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INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL
SERVICES ARE ACCURATELY LOCATED PRIOR TO
COMMENCEMENT OF WORK.

120

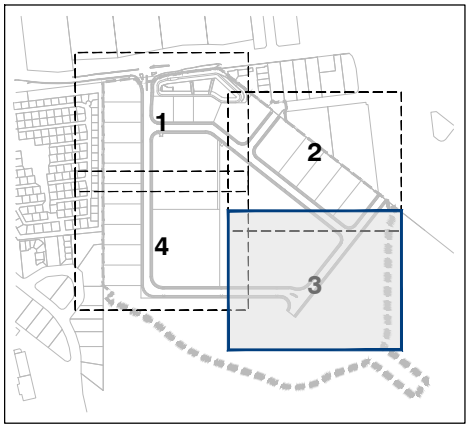
FOR CONTINUATION REFER SHEET No.5941 ENG OPW1 301

119

EASTRIDGE STREET

FAIRWAY STREET

HOMESTEAD DRIVE



KEY PLAN
SCALE 1: 7500

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies

FUTURE STAGES

OVERALL SERVICES LAYOUT PLAN SHEET 3 OF 4



planning | environment | landscape | engineering | survey
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Gold Coast & Logan | 76 Business Street, Yatala QLD | PO Box 392, Beerleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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RPD:

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

OVERALL SERVICES LAYOUT
PLAN SHEET 3 OF 4

Issue	Date	Description	BA	MG
B	09-06-2020	INFORMATION REQUEST RESPONSE	BA	MG
A	01-05-2020	ORIGINAL ISSUE	BA	MG

SCALE IN METRES



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

Scale at A1: 1:500

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No: 5941 ENG OPW1 302
Rev. No: B

FOR CONTINUATION REFER SHEET No.5941 ENG OPW1 303



WARNING
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RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE
INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL
SERVICES ARE ACCURATELY LOCATED PRIOR TO
COMMENCEMENT OF WORK.

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



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(AUSTRALIA) PTY. LTD.

VANTAGE YATALA

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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

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DRAWING TITLE

OVERALL SERVICES LAYOUT
PLAN SHEET 4 OF 4

B	12-06-2020	INFORMATION REQUEST RESPONSE		BA	MG
A	01-05-2020	ORIGINAL ISSUE		BA	MG
Issue	Date	Description		DRN	CHK

SCALE IN METRES



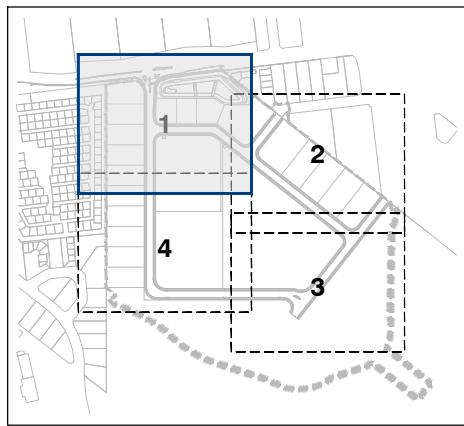
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Scale at A1:	1:500
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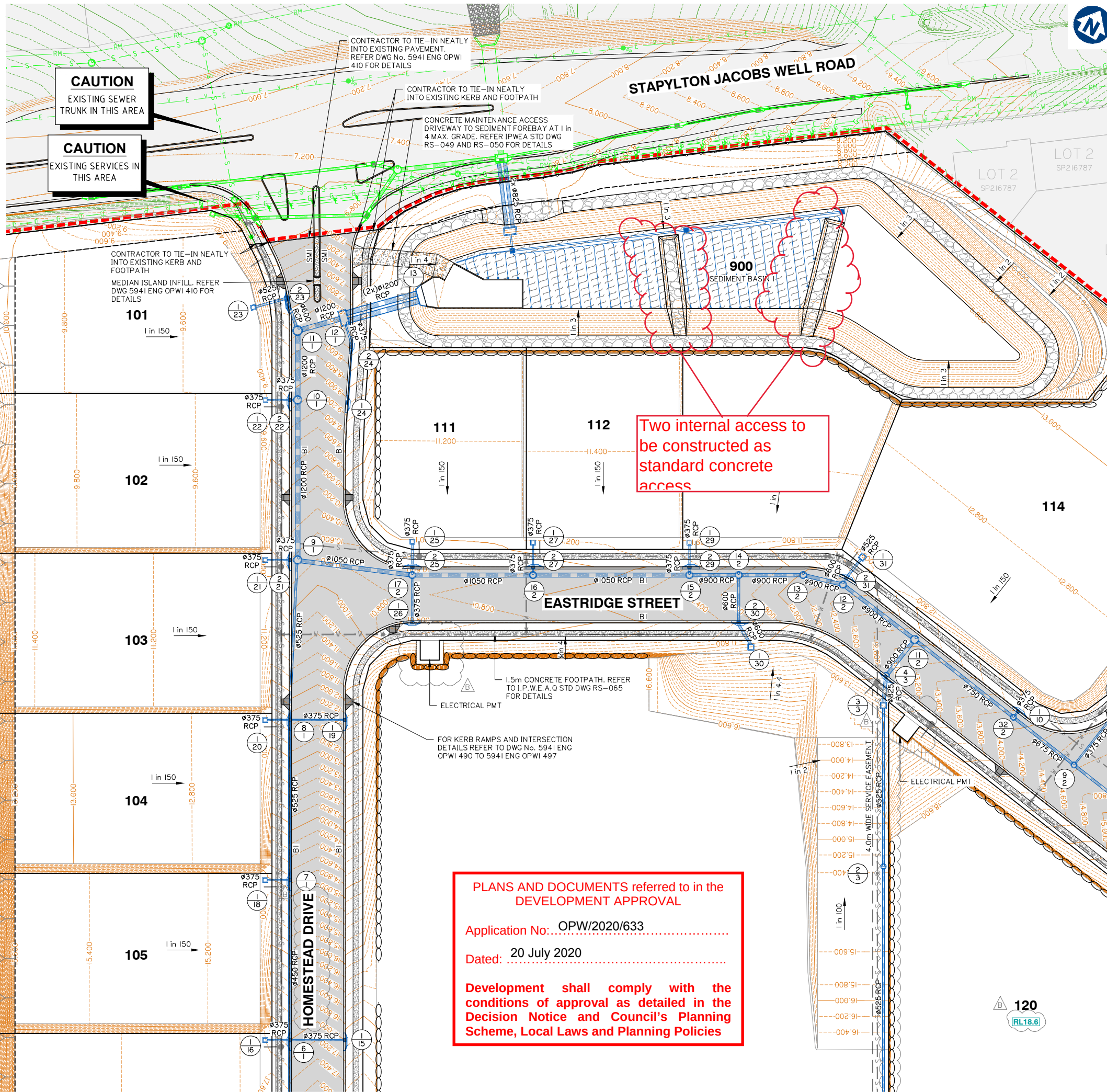
Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:	Rev. No:
5941 ENG OPW1 303	B

OVERALL SERVICES LAYOUT PLAN SHEET 4 OF 4



KEY PLAN
SCALE 1: 7500



CAUTION
EXISTING SEWER
TRUNK IN THIS AREA

CAUTION
EXISTING SERVICES IN
THIS AREA

CONTRACTOR TO TIE-IN NEATLY
INTO EXISTING PAVEMENT.
REFER DWG No. 5941 ENG OPW1
410 FOR DETAILS

CONTRACTOR TO TIE-IN NEATLY
INTO EXISTING KERB AND FOOTPATH

CONCRETE MAINTENANCE ACCESS
DRIVEWAY TO SEDIMENT FOREBAY AT 1 in
4 MAX. GRADE. REFER IPWEA STD DWG
RS-049 AND RS-050 FOR DETAILS

CONTRACTOR TO TIE-IN NEATLY
INTO EXISTING KERB AND
FOOTPATH
MEDIAN ISLAND INFILL. REFER
DWG 5941 ENG OPW1 410 FOR
DETAILS

Two internal access to
be constructed as
standard concrete
access

1.5m CONCRETE FOOTPATH. REFER
TO I.P.W.E.A.Q STD DWG RS-065
FOR DETAILS

FOR KERB RAMPS AND INTERSECTION
DETAILS REFER TO DWG No. 5941 ENG
OPW1 490 TO 5941 ENG OPW1 497

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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RPD:

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

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DRAWING TITLE
ROADWORKS AND
DRAINAGE LAYOUT PLAN
SHEET 1 OF 4

Rev	Date	Description	By	Check
A	01-05-2020	ORIGINAL ISSUE	BA	MG
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG

SCALE IN METRES

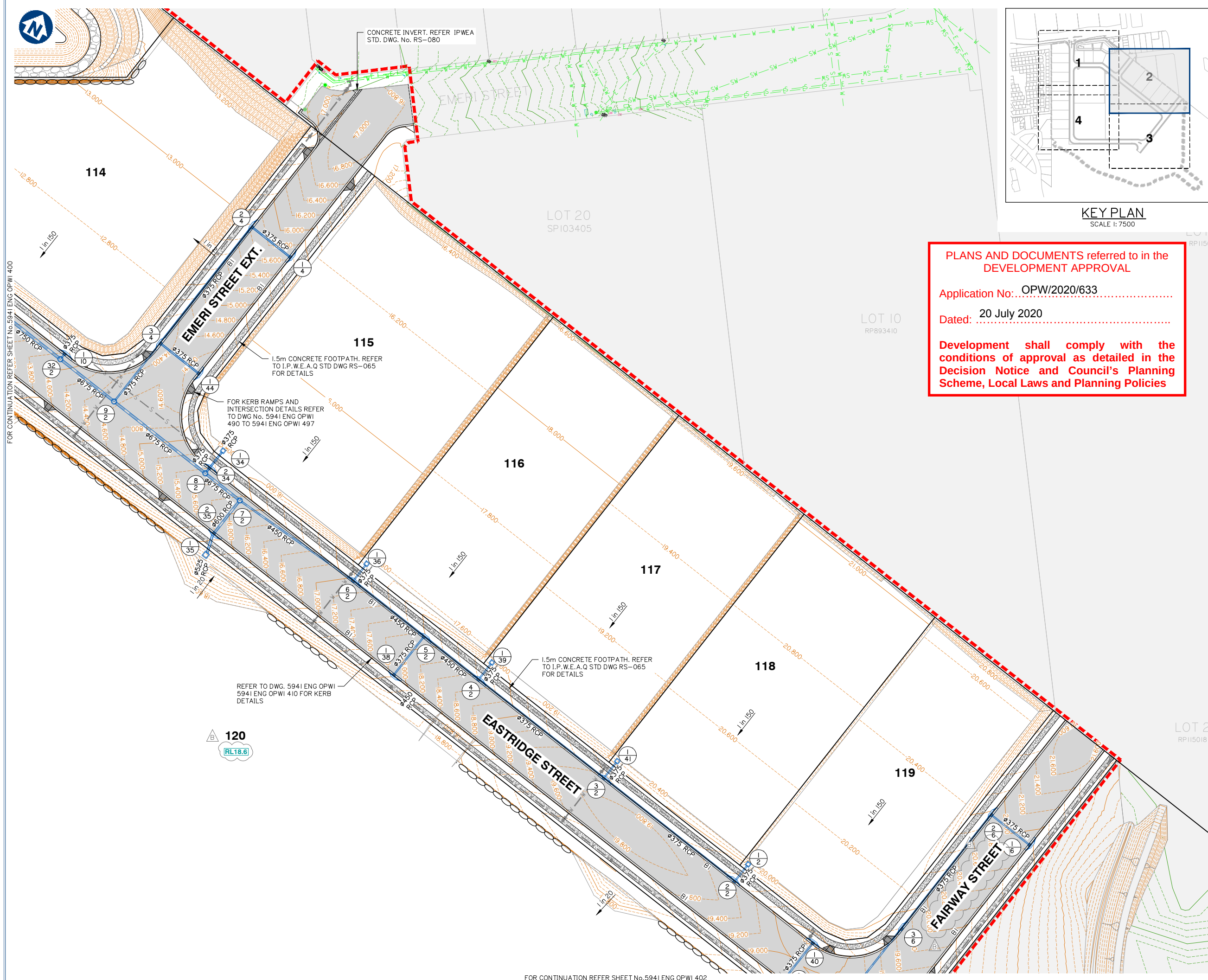
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1:1000 (HALF SIZE A3)

Scale at A1: 1:500

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:
5941 ENG OPW1 400

Rev. No:
B



Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

DRAWING TITLE
ROADWORKS AND
DRAINAGE LAYOUT PLAN
SHEET 2 OF 4

[illegible]

Drawing No:	Rev. No:
5941 ENG OPW1 401	B



PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

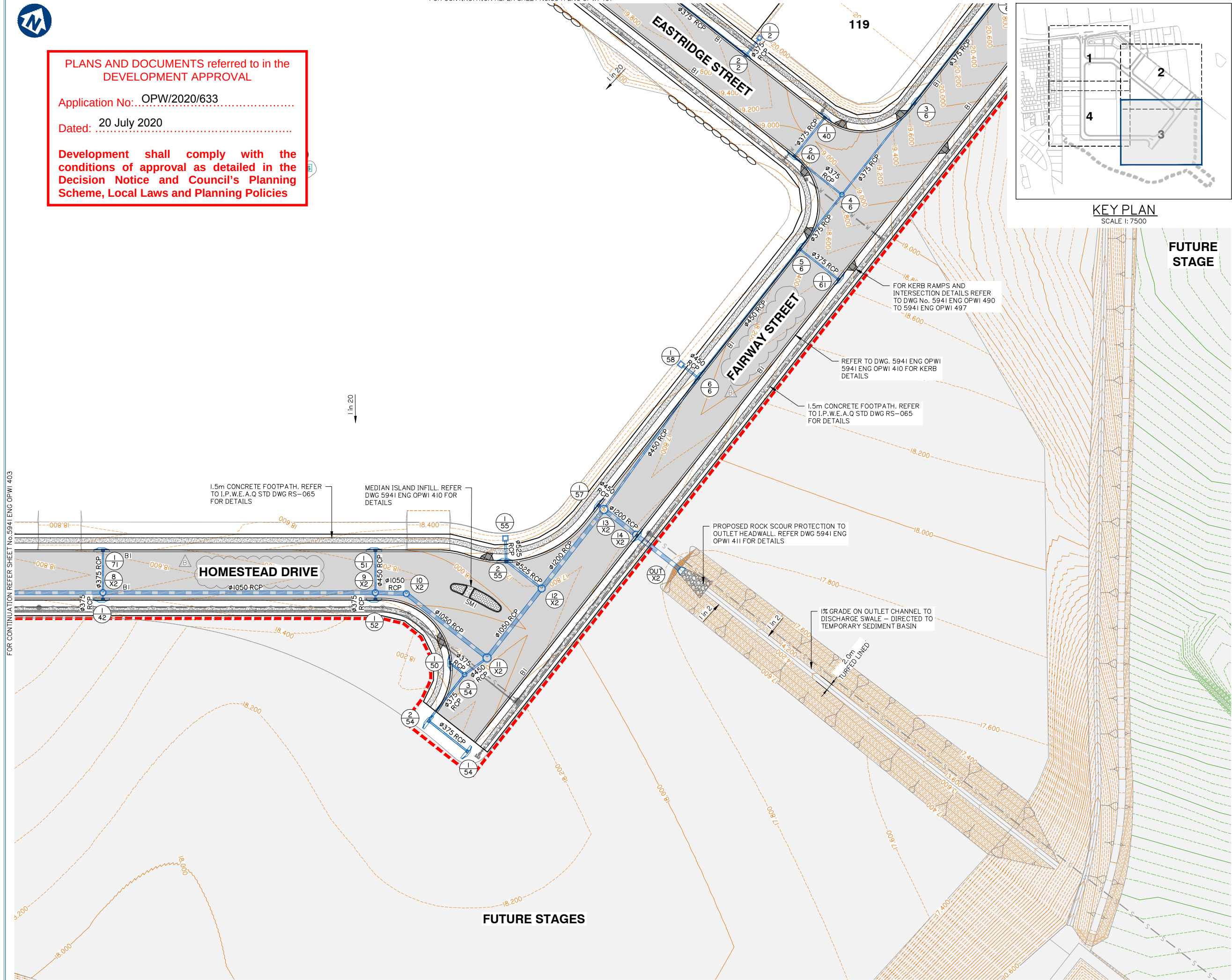
Application No: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the
conditions of approval as detailed in the
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Scheme, Local Laws and Planning Policies

FOR CONTINUATION REFER SHEET No.5941 ENG OPW1 401

FOR CONTINUATION REFER SHEET No.5941 ENG OPW1 403



FUTURE STAGES

KEY PLAN
SCALE 1:7500

FUTURE
STAGE



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Client:



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(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

Site Address:

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ROAD, STAPYLTON QLD 4207

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RPD:

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

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DRAWING TITLE
ROADWORKS AND
DRAINAGE LAYOUT PLAN
SHEET 3 OF 4

Issue	Date	Description	BA	MG
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG
A	01-05-2020	ORIGINAL ISSUE	BA	MG

SCALE IN METRES

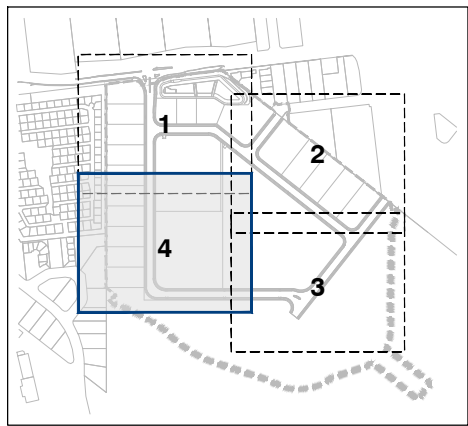


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1:1000 (HALF SIZE A3)

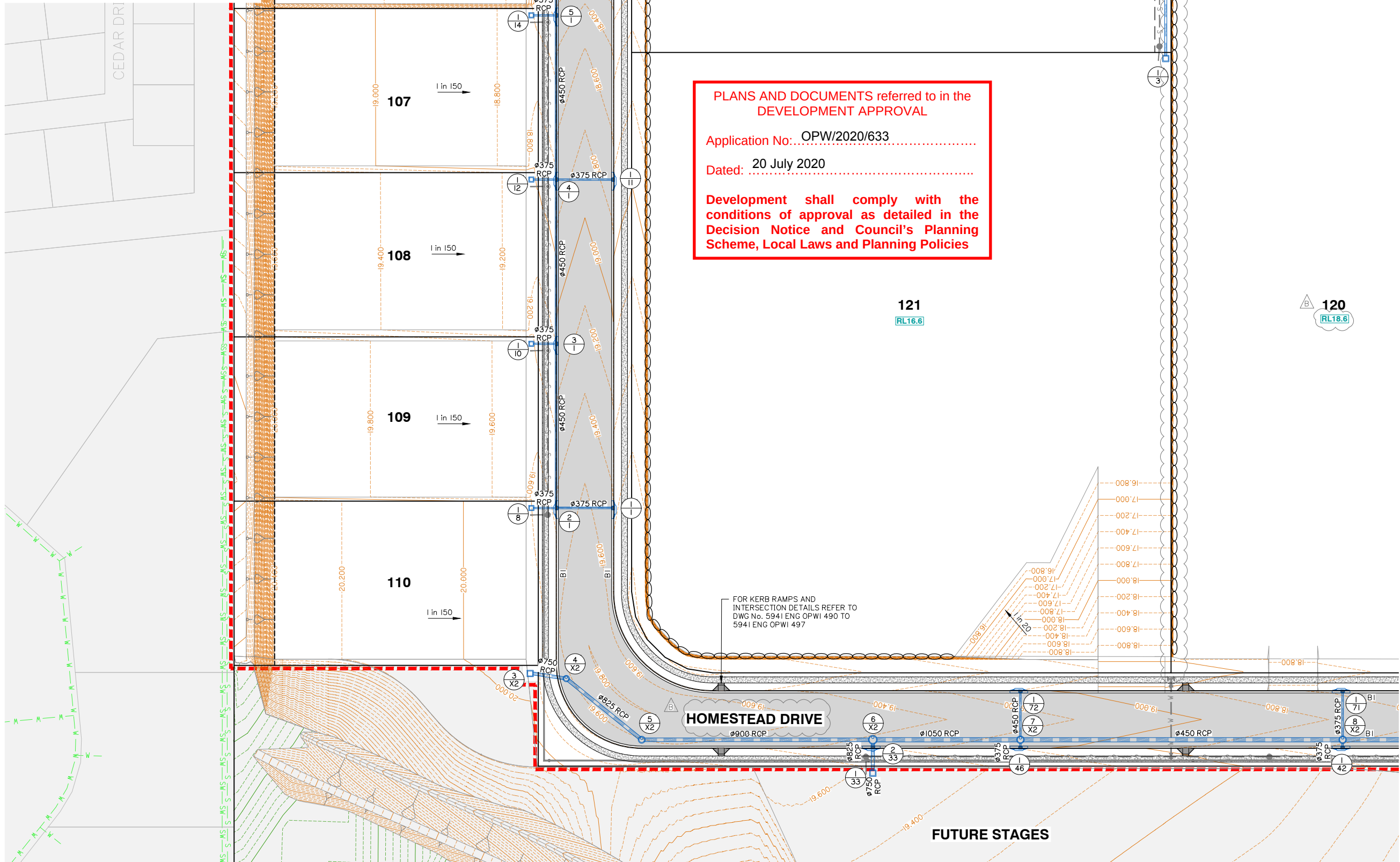
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Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No: 5941 ENG OPW1 402 Rev. No: B



KEY PLAN
SCALE 1: 7500



PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

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Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies



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Client:

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Project:

VANTAGE YATALA

Site Address:

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RPD:

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

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

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DRAWING TITLE

ROADWORKS AND
DRAINAGE LAYOUT PLAN
SHEET 4 OF 4

Issue	Date	Description	BA	MG
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG
A	01-05-2020	ORIGINAL ISSUE	BA	MG

SCALE IN METRES

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

Scale at A1: 1:500

Designed: IG

Drafted: BA

Approved: MG

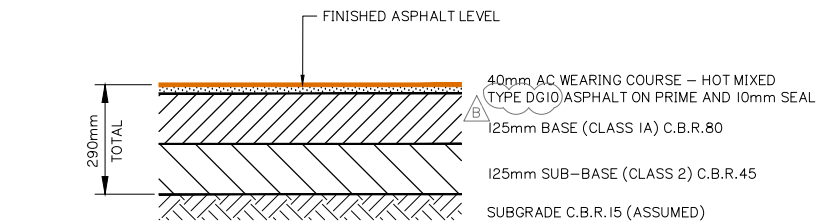
RPEQ: 16939

Signed:

Date: 01-05-2020

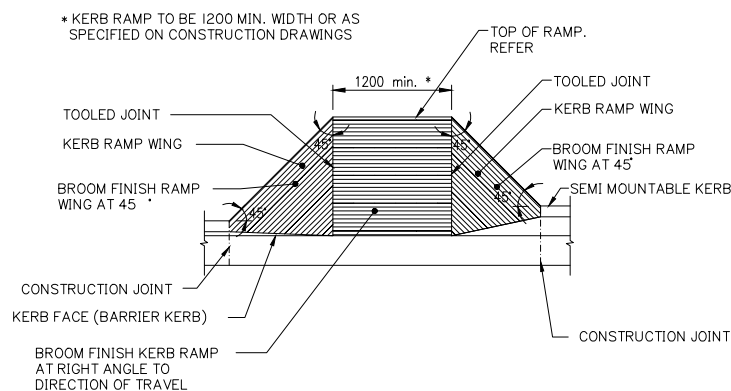
Drawing No: 5941 ENG OPW1 403

Rev. No: B



NOMINAL ROAD PAVEMENT DETAIL INDUSTRIAL COLLECTOR & ACCESS STREET

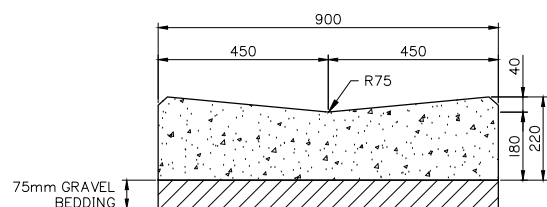
PAVEMENT DESIGN SUBJECT TO IN-SITU CBR TESTING AND FURTHER COUNCIL APPROVAL.
N.T.S



TYPICAL COMPLIANT KERB RAMP DETAIL

NOT TO SCALE

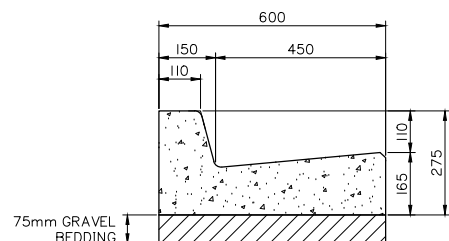
NOTE: REFER IPWEAQ STANDARD DWGS No. RS-090 & RS-091



CHANNEL

REFER TO IPWEA STD. DWG. No. RS-080

NOT TO SCALE



BI KERB AND CHANNEL

REFER TO IPWEA STD. DWG. No. RS-080

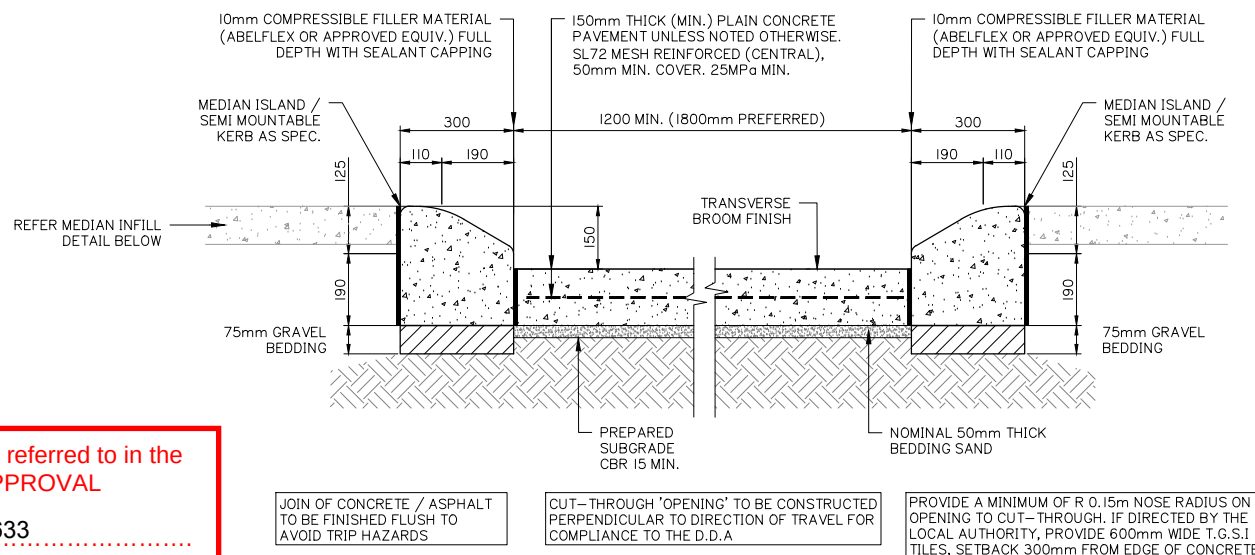
NOT TO SCALE

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2020/633

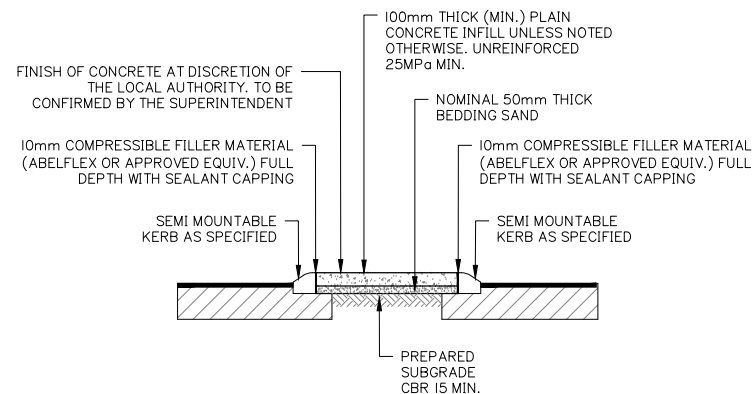
Dated: 20 July 2020

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



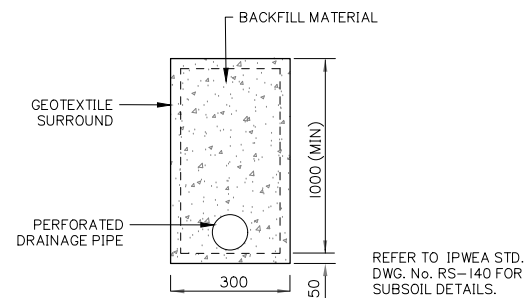
TYPICAL CUT-THROUGH TREATMENT FOR MEDIAN ISLAND

NOT TO SCALE



MEDIAN ISLAND INFILL

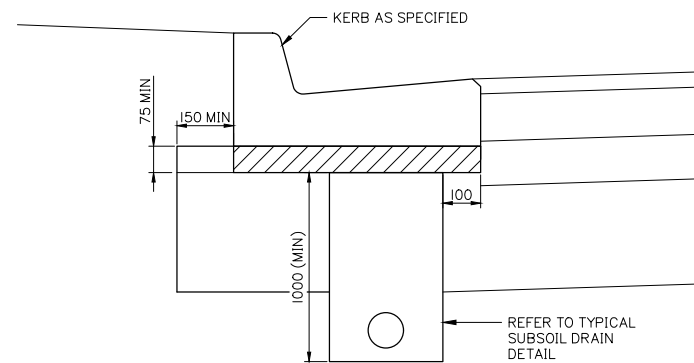
N.T.S
AS PER STANDARD DRAWING
IPWEA STD DWG No. RS-065.



TYPICAL SUBSOIL DRAIN

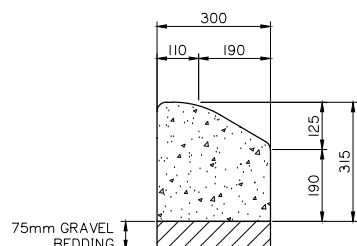
NOTE: SUBSOIL ACCESS POINTS TO BE INSTALLED IN ACCORDANCE WITH IPWEA RS-142

NOT TO SCALE



TYPICAL SUBSOIL ARRANGEMENT DETAILS

IN ACCORDANCE TO IPWEA STD. DWG. No. RS-140
NOT TO SCALE



SMI KERB (TYPE I3)

REFER TO DTMR STD. DWG. No. 1033

NOT TO SCALE

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

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

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ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

TYPICAL SECTIONS AND
DETAILS SHEET 1 OF 3

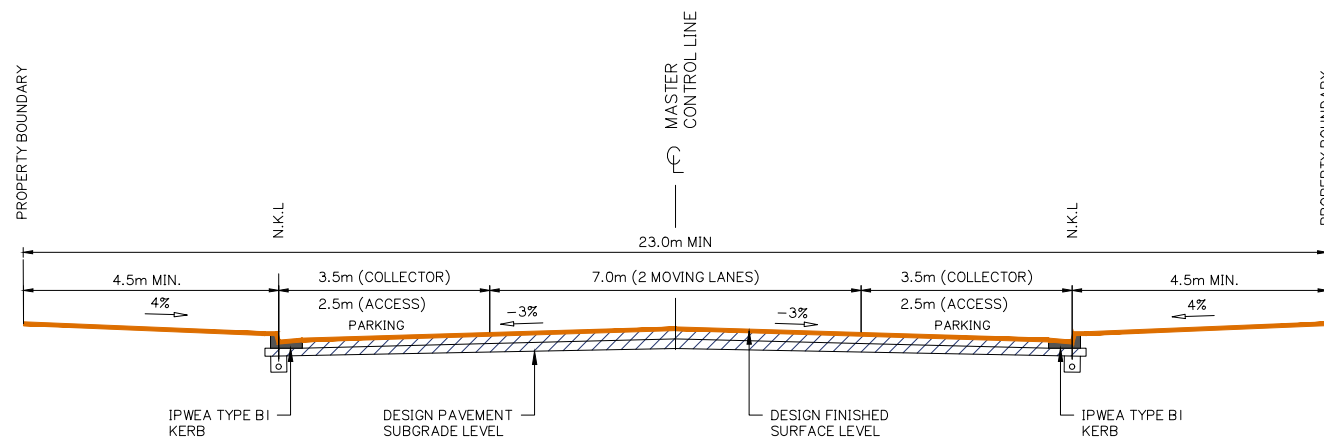
Rev	Date	Description	By	Check
A	01-05-2020	ORIGINAL ISSUE	BA	MG
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG

SCALE IN METRES

NOT APPLICABLE

Scale at A1:	NTS
Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No: 5941 ENG OPW1 410
Rev. No: B

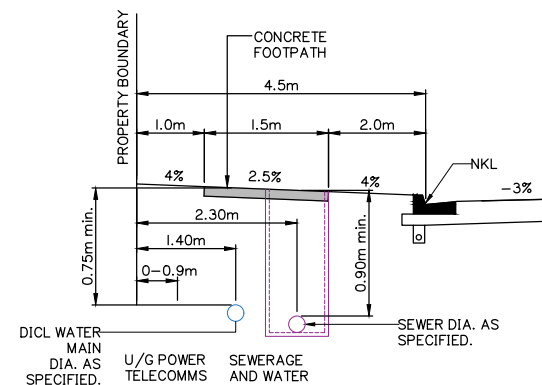


TYPICAL CROSS SECTION – INDUSTRIAL / COMMERCIAL

COLLECTOR AND ACCESS STREETS (23.0m)

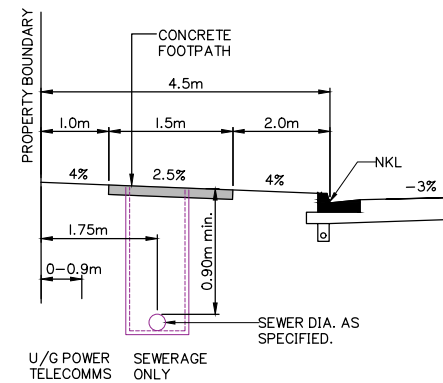
HOMESTEAD DRIVE, EASTRIDGE STREET, FAIRWAY STREET & EMERI STREET EXT.

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



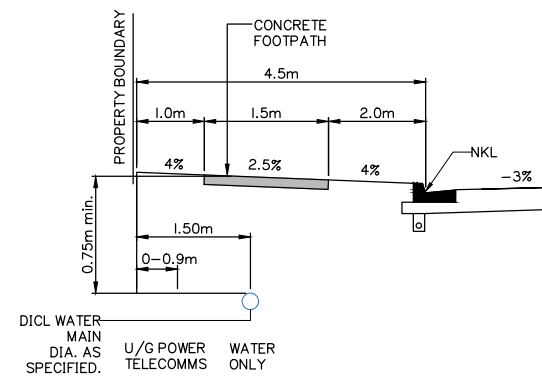
TYPICAL SERVICES IN SHARED VERGE POTABLE WATER AND SEWER RETICULATION

SCALE: N.T.S



TYPICAL SERVICES IN VERGE SEWER RETICULATION ONLY

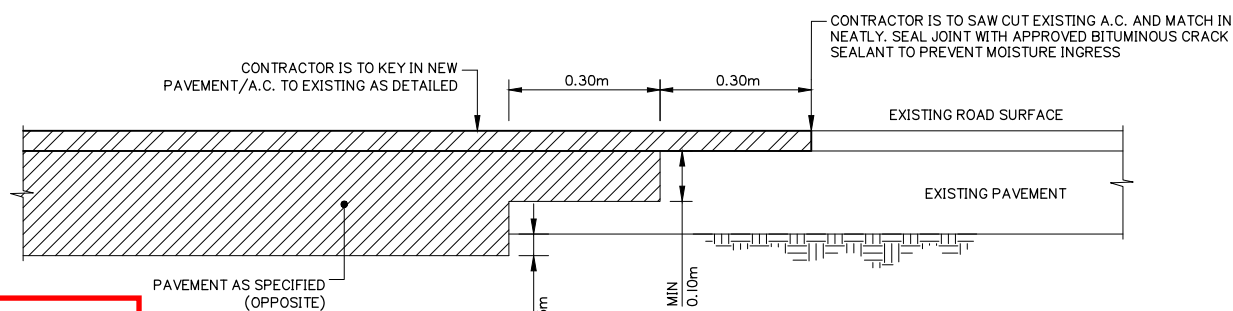
SCALE: N.T.S



TYPICAL SERVICES IN VERGE POTABLE WATER RETICULATION ONLY

SCALE: N.T.S

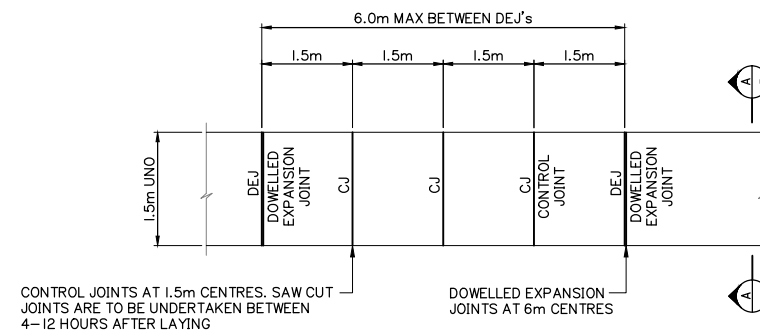
NOTE:
1. PUBLIC UTILITIES ALLOCATIONS ARE MEASURED FROM THE REAL PROPERTY BOUNDARY.
2. LIGHT POLE, TREE ALLOCATIONS AND FOOTPATHS ARE MEASURED FROM THE NOMINAL KERB LINE.



CONNECTION TO EXISTING PAVEMENT

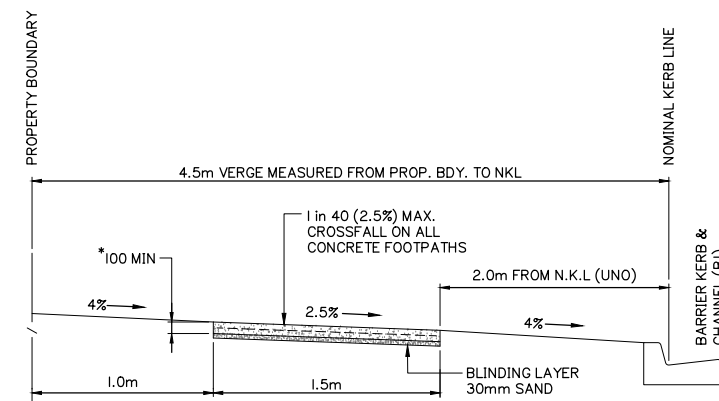
N.T.S

TYPICAL DETAIL
SHOWING LONGITUDINAL CONSTRUCTION DETAIL FOR
CONNECTION TO EXISTING PAVEMENT / A.C.



TYPICAL CONCRETE JOINTING PLAN

SCALE: N.T.S



SECTION A-A

SCALE: N.T.S

1.5m CONCRETE FOOTPATH DETAIL IN VERGE

*100mm MIN. REINFORCED CONCRETE 25MPa (Min.), SL72 MESH CENTRAL, 50mm BOTTOM COVER, TRANSVERSE BROOM FINISHED FOR SLIP RESISTANCE. REFER IPWEA RS-065 PATHWAYS CONCRETE PATHWAY CONSTRUCTION DETAILS. REFER IPWEA STD DWG RS-049 AND RS-050 FOR TREATMENT AT DRIVEWAYS

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

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60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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DRAWING TITLE

TYPICAL SECTIONS AND
DETAILS SHEET 2 OF 3

Issue	Date	Description	BA	MG
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG
A	01-05-2020	ORIGINAL ISSUE	BA	MG

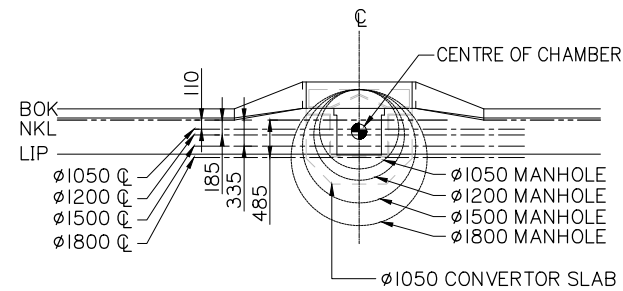
SCALE IN METRES

NOT APPLICABLE

Scale at A1:	NTS
Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

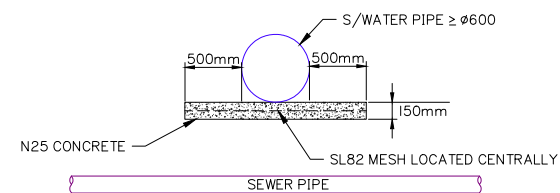
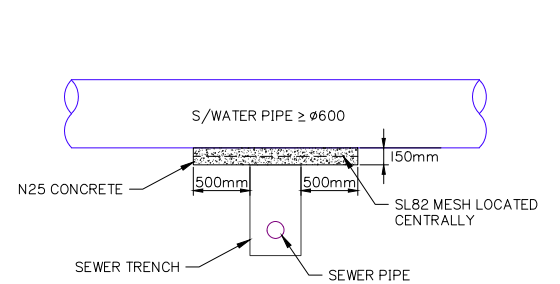
Drawing No: 5941 ENG OPW1 411 Rev. No: B

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

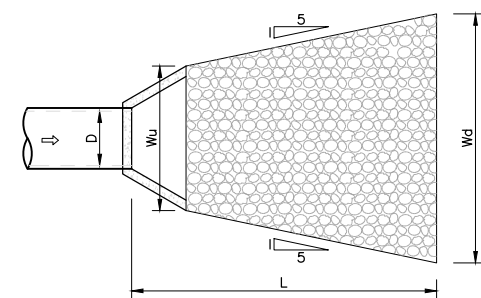
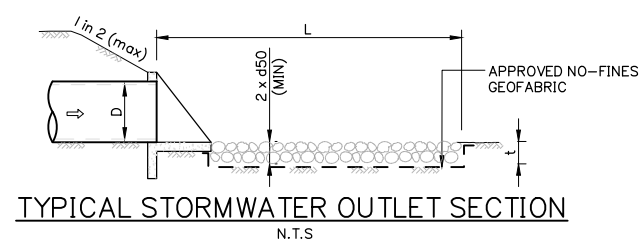


SCALE 1 : 50

1200 ID (1650 OD) x 150mm THICK – 1000mm HOLE
1350 ID (1830 OD) x 150mm THICK – 1000mm HOLE
1500 ID (1970 OD) x 175mm THICK – 1000mm HOLE
1650 ID (2100 OD) x 225mm THICK – 1000mm HOLE
1800 ID (2300 OD) x 225mm THICK – 1000mm HOLE
2000 ID (2450 OD) x 250mm THICK – 1000mm HOLE



NOT TO SCALE



N.T.S

STRUCTURE TYPE	HORIZONTAL CONTROL (REFERENCE POINT LOCATION)	VERTICAL CONTROL (REFERENCE LEVEL)
MANHOLE		FINISHED SURFACE LEVEL
GULLY PIT		FINISHED SURFACE LEVEL (INVERT OF KERB)
HEADWALL		INVERT LEVEL
FIELD INLET PIT		FINISHED SURFACE LEVEL

OUTLET PROTECTION TABLE									
CULVERT No.	PIPE Ø	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)
OUT/X2	1200	3.22	9600	2370	5808	600	600	39.25	23.55

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.

EXTERNAL INTERSECTION
DESIGN SHOWN FOR
REFERENCE ONLY

STAPYLTON JACOBS WELL ROAD

EMERI STREET

EMERI STREET EXT.

EASTRIDGE STREET

HOMESTEAD DRIVE

FAIRWAY STREET

MAIELLA ST

STAGE 1

'BALANCE' FILL PAD

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No.: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies

0 GTP1793

114 RP855793

116 RP901397

17 RP807576

18 RP807576

19 RP807576

20 SP103405

10 RP893410

2 RP115018

YATALA DRIVE-IN

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

Drawing No:	Rev. No:
5941 ENG OPW1 420	B

g:\Projects\5941\engineering\Acad\civil works stage 1\Current\5941 ENG OPW1 420-422.dwg

HOMESTEAD DRIVE – CONTROL LINE SETOUT TABLE								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	2186.394	7037.296	7.396	151°00'47.03"			
	10.000	2191.240	7028.549	7.091	151°00'47.03"			
	20.000	2196.086	7019.801	6.930	151°00'47.03"			
	30.000	2200.932	7011.054	7.359	151°00'47.03"			
	40.000	2205.778	7002.307	7.947	151°00'47.03"			
	50.000	2210.625	6993.559	8.482	151°00'47.03"			
	60.000	2215.471	6984.812	8.961	151°00'47.03"			
	70.000	2220.317	6976.065	9.395	151°00'47.03"			
	80.000	2225.163	6967.317	9.824	151°00'47.03"			
	90.000	2230.009	6958.570	10.217	151°00'47.03"			
	100.000	2234.855	6949.823	10.558	151°00'47.03"			
	110.000	2239.701	6941.076	10.860	151°00'47.03"			
	120.000	2244.547	6932.328	11.161	151°00'47.03"			
	130.000	2249.393	6923.581	11.527	151°00'47.03"			
	140.000	2254.239	6914.834	12.013	151°00'47.03"			
TC	150.000	2259.086	6906.086	12.600	151°00'47.03"			
	160.000	2263.932	6897.339	13.200	151°00'47.03"			
	170.000	2268.778	6888.592	13.800	151°00'47.03"			
	180.000	2273.624	6879.844	14.401	151°00'47.03"			
	190.000	2278.470	6871.097	15.001	151°00'47.03"			
	200.000	2283.316	6862.350	15.601	151°00'47.03"			
	210.000	2288.162	6853.603	16.201	151°00'47.03"			
	220.000	2293.008	6844.855	16.754	151°00'47.03"			
	230.000	2297.854	6836.108	17.222	151°00'47.03"			
	240.000	2302.700	6827.361	17.604	151°00'47.03"			
	250.000	2307.547	6818.613	17.913	151°00'47.03"			
	260.000	2312.393	6809.866	18.212	151°00'47.03"			
	270.000	2317.239	6801.119	18.460	151°00'47.03"			
	280.000	2322.085	6792.371	18.624	151°00'47.03"			
	290.000	2326.931	6783.624	18.723	151°00'47.03"			
IP 2	300.000	2331.777	6774.877	18.815	151°00'47.03"			
	310.000	2336.623	6766.129	18.907	151°00'47.03"			
	320.000	2341.469	6757.382	19.000	151°00'47.03"			
	330.000	2346.315	6748.635	19.092	151°00'47.03"			
	340.000	2351.161	6739.888	19.185	151°00'47.03"			
	350.000	2356.008	6731.140	19.277	151°00'47.03"			
	360.000	2360.854	6722.393	19.370	151°00'47.03"			
	370.000	2365.700	6713.646	19.462	151°00'47.03"			
	380.000	2370.546	6704.898	19.554	151°00'47.03"			
	390.000	2375.392	6696.151	19.636	151°00'47.03"			
	400.000	2380.238	6687.404	19.702	151°00'47.03"			
	410.000	2385.084	6678.656	19.753	151°00'47.03"			
	420.000	2389.964	6669.928	19.788	147°50'11.49"			
	430.000	2396.817	6662.738	19.807	124°55'05.57"			
	440.000	2405.929	6658.783	19.811	101°59'59.65"			
CT	450.000	2415.862	6658.689	19.799	79°04'53.73"			
	457.884	2423.242	6661.369	19.778	61°00'47.17"			
	460.000	2425.093	6662.394	19.771	61°00'47.17"			
	470.000	2433.840	6667.240	19.728	61°00'47.17"			
	480.000	2442.588	6672.086	19.669	61°00'47.17"			
	490.000	2451.335	6676.932	19.606	61°00'47.17"			
	500.000	2460.082	6681.778	19.542	61°00'47.17"			
	510.000	2468.830	6686.625	19.478	61°00'47.17"			
	520.000	2477.577	6691.471	19.414	61°00'47.17"			
	530.000	2486.324	6696.317	19.350	61°00'47.17"			
	540.000	2495.072	6701.163	19.287	61°00'47.17"			
	550.000	2503.819	6706.009	19.223	61°00'47.17"			
	560.000	2512.566	6710.855	19.159	61°00'47.17"			
	570.000	2521.314	6715.701	19.095	61°00'47.17"			
	580.000	2530.061	6720.547	19.031	61°00'47.17"			
IP 3	590.000	2538.808	6725.393	18.968	61°00'47.17"			
	600.000	2547.555	6730.239	18.904	61°00'47.17"			
	610.000	2556.303	6735.085	18.840	61°00'47.17"			
	620.000	2565.050	6739.932	18.776	61°00'47.17"			
	630.000	2573.797	6744.778	18.712	61°00'47.17"			
	640.000	2582.545	6749.624	18.648	61°00'47.17"			
	650.000	2591.292	6754.470	18.585	61°00'47.17"			
	660.000	2600.039	6759.316	18.521	61°00'47.17"			
	670.000	2608.787	6764.162	18.457	61°00'47.17"			
	680.000	2617.534	6769.008	18.393	61°00'47.17"			
	690.000	2626.281	6773.854	18.330	61°00'47.17"			
	700.000	2635.028	6778.700	18.267	61°00'47.17"			
R = -25.000							39.270	89°59'59.86"

HOMESTEAD DRIVE – CONTROL LINE SETOUT TABLE (CONT.)								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
TC	700.654	2635.601	6779.017	18.263	61°00'47.17"			
	710.000	2644.120	6782.832	18.205	70°44'55.86"			
	718.993	2652.264	6788.249	18.149		R = 55.000	36.676	38°12'26.65"
IP 3	720.000	2653.808	6785.255	18.143	81°09'58.55"			
	730.000	2663.774	6785.886	18.081	91°35'01.24"			
	737.331	2671.067	6785.197	18.035	99°13'13.83"			
CT	740.000	2673.702	6784.769	18.019	99°13'13.83"			
	744.473	2678.117	6784.052	17.991	99°13'13.83"			

EASTRIDGE STREET – CONTROL LINE SETOUT TABLE								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	2243.127	6934.892	11.072	61°00'44.11"			
	10.000	2251.874	6939.738	10.928	61°00'44.11"			
	20.000	2260.622	6944.584	10.805	61°00'44.11"			
	30.000	2269.369	6949.430	10.810	61°00'44.11"			
	40.000	2278.116	6954.276	10.879	61°00'44.11"			
	50.000	2286.863	6959.123	10.948	61°00'44.11"			
	60.000	2295.611	6963.969	11.018	61°00'44.11"			
	70.000	2304.358	6968.815	11.087	61°00'44.11"			
	80.000	2313.105	6973.661	11.191	61°00'44.11"			
	90.000	2321.852	6978.508	11.345	61°00'44.11"			
	100.000	2330.599	6983.354	11.550	61°00'44.11"			
	110.000	2339.347	6988.200	11.807	61°00'44.11"			
120.000	2348.094	6993.046	12.102	61°00'44.11"				
TC	120.021	2348.113	6993.057	12.103	61°00'44.11"			
IP 2	128.357	2355.687	6997.253	12.351		R = 25.000	16.672	38°12'31.40"
CT	130.000	2357.564	6996.046	12.400	83°52'53.88"			
	136.693	2364.234	6995.865	12.599	99°13'15.51"			
	140.000	2367.498	6995.336	12.698	99°13'15.51"			
	150.000	2377.369	6993.733	12.996	99°13'15.51"			
	160.000	2387.240	6992.131	13.294	99°13'15.51"			
	170.000	2397.111	6990.528	13.592	99°13'15.51"			
	180.000	2406.982	6988.926	13.890	99°13'15.51"			
	190.000	2416.852	6987.323	14.189	99°13'15.51"			
	200.000	2426.723	6985.721	14.487	99°13'15.51"			
	210.000	2436.594	6984.119	14.787	99°13'15.51"			
	220.000	2446.465	6982.516	15.087	99°13'15.51"			
	230.000	2456.335	6980.914	15.391	99°13'15.51"			
	240.000	2466.206	6979.311	15.700	99°13'15.51"			
	250.000	2476.077	6977.709	16.014	99°13'15.51"			
	260.000	2485.948	6976.106	16.331	99°13'15.51"			
	270.000	2495.819	6974.504	16.647	99°13'15.51"			
	280.000	2505.689	6972.902	16.964	99°13'15.51"			
	290.000	2515.560	6971.299	17.280	99°13'15.51"			
	300.000	2525.431	6969.697	17.597	99°13'15.51"			
	310.000	2535.302	6968.094	17.913	99°13'15.51"			
	320.000	2545.172	6966.492	18.230	99°13'15.51"			
	330.000	2555.043	6964.889	18.547	99°13'15.51"			
	340.000	2564.914	6963.287	18.863	99°13'15.51"			
	350.000	2574.785	6961.685	19.180	99°13'15.51"			
	360.000	2584.656	6960.082	19.471	99°13'15.51"			
	370.000	2594.526	6958.480	19.692	99°13'15.51"			
	380.000	2604.397	6956.877	19.843	99°13'15.51"			
	390.000	2614.268	6955.275	19.924	99°13'15.51"			
400.000	2624.139	6953.672	19.934	99°13'15.51"				
410.000	2634.009	6952.070	19.873	99°13'15.51"				
420.000	2643.880	6950.468	19.743	99°13'15.51"				
430.000	2653.751	6948.865	19.542	99°13'15.51"				
440.000	2663.622	6947.263	19.274	99°13'15.51"				
450.000	2673.493	6945.660	19.035	99°13'15.51"				
460.000	2683.363	6944.058	19.012	99°13'15.51"				
470.000	2693.234	6942.455	19.084	99°13'15.51"				
480.000	2703.105	6940.853	19.156	99°13'15.51"				
IP 3	480.461	2703.560	6940.779	19.160	99°13'15.51"			

FAIRWAY STREET – CONTROL LINE SETOUT TABLE					
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING
IP 1	-13.000	2721.908	7053.800	21.268	189°13'15.46"
	-10.000	2721.427	7050.839	21.427	189°13'15.46"
	0.000	2719.825	7040.968	21.739	189°13'15.46"
	10.000	2718.222	7031.097	21.712	189°13'15.46"
	20.000	2716.620	7021.226	21.442	189°13'15.46"
	30.000	2715.017	7011.356	21.162	189°13'15.46"
	40.000	2713.415	7001.485	20.881	189°13'15.46"
	50.000	2711.813	6991.614	20.601	189°13'15.46"
	60.000	2710.210	6981.743	20.320	189°13'15.46"
	70.000	2708.608	6971.873	20.040	189°13'15.46"
	80.000	2707.005	6962.002	19.759	189°13'15.46"
	90.000	2705.403	6952.131	19.479	189°13'15.46"
	100.000	2703.800	6942.260	19.198	189°13'15.46"
IP 2	101.500	2703.560	6940.779	19.156	
	110.000	2702.198	6932.389	18.918	189°13'15.11"
	120.000	2700.596	6922.519	18.681	189°13'15.11"
	130.000	2698.993	6912.648	18.517	189°13'15.11"
	140.000	2697.391	6902.777	18.413	189°13'15.11"
	150.000	2695.788	6892.906	18.315	189°13'15.11"
	160.000	2694.186	6883.036	18.217	189°13'15.11"
	170.000	2692.584	6873.165	18.119	189°13'15.11"
	180.000	2690.981	6863.294	18.021	189°13'15.11"
	190.000	2689.379	6853.423	17.923	189°13'15.11"
	200.000	2687.776	6843.552	17.832	189°13'15.11"
	210.000	2686.174	6833.682	17.774	189°13'15.11"
	220.000	2684.572	6823.811	17.754	189°13'15.11"
	230.000	2682.969	6813.940	17.770	189°13'15.11"
	240.000	2681.367	6804.069	17.822	189°13'15.11"
	250.000	2679.764	6794.199	17.904	189°13'15.11"
	260.000	2678.162	6784.328	17.989	189°13'15.11"
	270.000	2676.560	6774.457	18.074	189°13'15.11"
	280.000	2674.957	6764.586	18.158	189°13'15.11"
	290.000	2673.355	6754.715	18.243	189°13'15.11"
	300.000	2671.752	6744.845	18.328	189°13'15.11"

EMERI STREET EXTENSION – CONTROL LINE SETOUT TABLE								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	2437.631	6983.950		9°13'15.46"			
	10.000	2439.234	6993.821	14.689	9°13'15.46"			
	20.000	2440.836	7003.692	14.560	9°13'15.46"			
	30.000	2442.438	7013.562	14.524	9°13'15.46"			
	40.000	2444.041	7023.433	14.799	9°13'15.46"			
	50.000	2445.643	7033.304	15.166	9°13'15.46"			
	60.000	2447.246	7043.175	15.534	9°13'15.46"			
	70.000	2448.848	7053.046	15.902	9°13'15.46"			
	80.000	2450.451	7062.916	16.270	9°13'15.46"			
	90.000	2452.053	7072.787	16.637	9°13'15.46"			
	100.000	2453.655	7082.658	16.922	9°13'15.46"			
IP 2	100.500	2453.735	7083.151	16.931				
TC	108.617	2455.036	7091.164	17.010	9°13'18.14"			
	110.000	2455.305	7092.520	17.010	13°10'58.86"			
IP 3	116.386	2456.348	7099.243	16.964		R = 20.000	15.538	44°30'49.22"
	120.000	2459.875	7101.297	16.902	41°49'51.26"			
CT	124.155	2462.948	7104.085	16.800	53°44'07.36"			
IP 4	125.961	2464.403	7105.153	16.745	53°44'07.36"			



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Client:



Project:

VANTAGE YATALA

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: -

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DRAWING TITLE

ROAD CONTROL LINE SETOUT
TABLES SHEET 2 OF 2

B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG	
A	01-05-2020	ORIGINAL ISSUE	BA	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES

NOT APPLICABLE

Scale at A1: NOT APPLICABLE

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No: 5941 ENG OPW1 422 Rev. No: B

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the
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Scheme, Local Laws and Planning Policies

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Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

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ROAD, STAPYLTON QLD 4207

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DRAWING TITLE
ROAD LONGITUDINAL
SECTION - HOMESTEAD DRIVE
SHEET 1 OF 3

Issue	Date	Description	BA	MG
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG
A	01-05-2020	ORIGINAL ISSUE	BA	MG

SCALE IN METRES

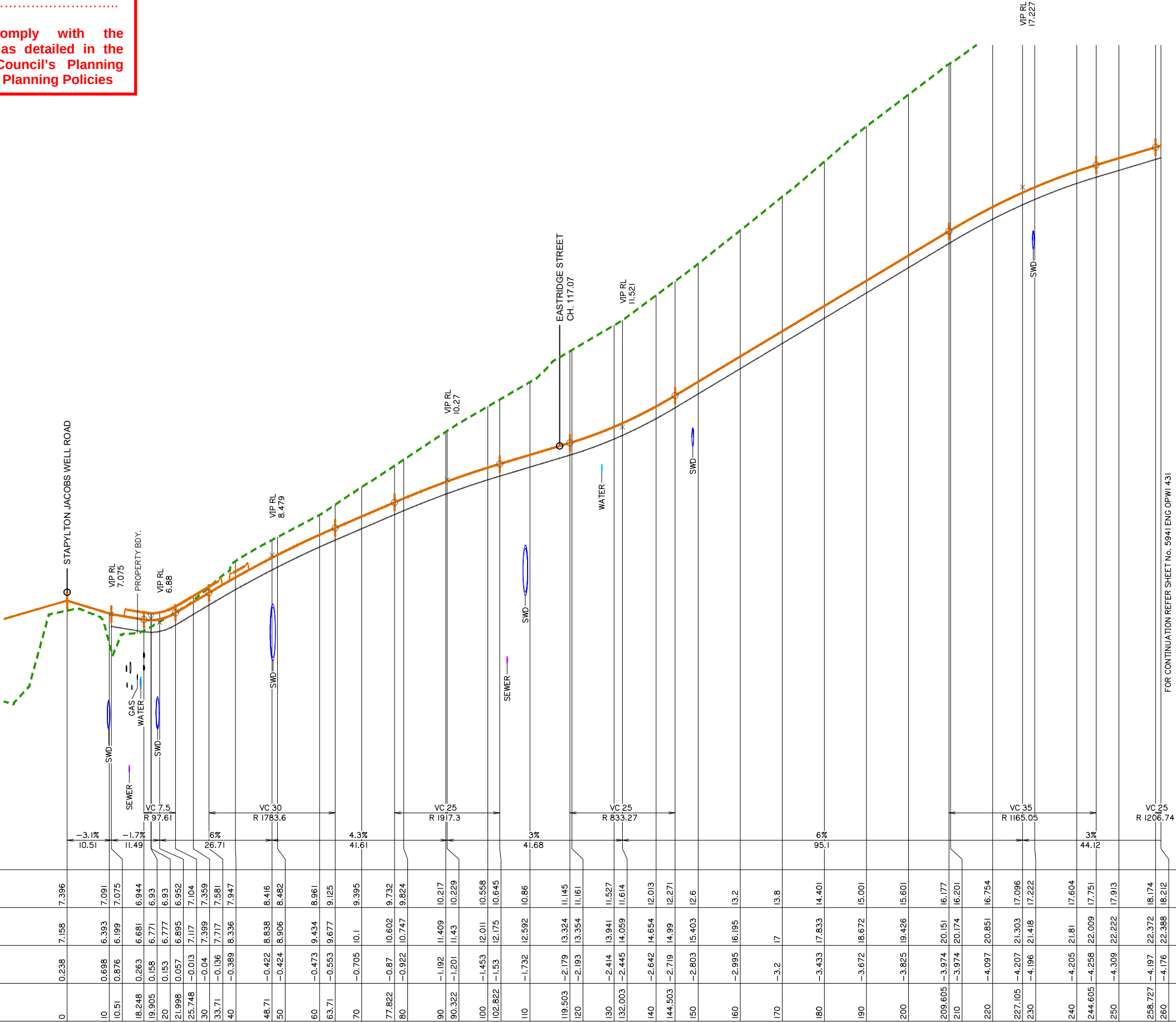
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HOZ: 0 5 10 15 20 25 30 35 40

Scale 1:50 - Lengths are in Metres.
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Scale at A1: AS SHOWN

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No: 5941 ENG OPW1 430 Rev. No: B



HORIZONTAL CURVE DATA

VERTICAL CURVE LENGTH (m)
VERTICAL CURVE RADIUS (m)
VERTICAL GEOMETRY GRADE (%)
VERTICAL GEOMETRY LENGTH (m)

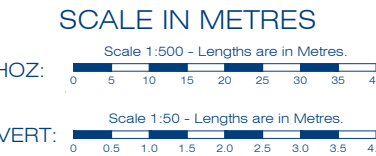
DATUM RL = 1.000

FINISHED SURFACE LEVEL	7.396	7.091	7.075	6.944	6.93	6.952	7.104	7.359	7.581	7.947	8.416	8.482	8.961	9.125	9.395	9.732	9.824	10.217	10.229	10.558	10.645	10.86	11.145	11.161	11.527	11.614	12.013	12.271	12.6	13.2	13.8	14.401	15.001	15.601	16.177	16.201	16.754	17.096	17.222	17.604	17.751	17.913	18.174	18.212
EXISTING SURFACE LEVEL	7.158	6.393	6.199	6.681	6.771	6.895	7.117	7.359	7.717	8.336	8.838	8.906	9.434	9.677	10.1	10.602	10.747	11.409	11.43	12.011	12.175	12.592	13.324	13.354	13.941	14.059	14.654	14.99	15.403	16.195	17	17.833	18.672	19.426	20.151	20.174	20.851	21.303	21.418	21.81	22.009	22.222	22.372	22.388
CUT / FILL DEPTH	0.238	0.698	0.876	0.263	0.158	0.057	-0.013	-0.04	-0.136	-0.389	-0.422	-0.424	-0.473	-0.553	-0.705	-0.87	-0.922	-1.192	-1.201	-1.453	-1.53	-1.732	-2.179	-2.193	-2.414	-2.445	-2.642	-2.719	-2.803	-2.395	-3.2	-3.433	-3.672	-3.825	-3.974	-3.974	-4.097	-4.207	-4.196	-4.205	-4.258	-4.309	-4.197	-4.176
CONTROL LINE CHAINAGE	0	10	10.51	18.248	19.905	20	21.998	25.748	33.71	40	48.71	50	60	63.71	70	77.822	80	90	90.322	100	102.822	110	119.503	120	130	132.003	140	144.503	150	160	170	180	190	200	209.605	210	220	227.105	230	240	244.605	250	258.727	260

LONGITUDINAL SECTION - HOMESTEAD DRIVE - SHEET 1 OF 3

ROAD LONGITUDINAL SECTION - HOMESTEAD DRIVE SHEET 1 OF 3

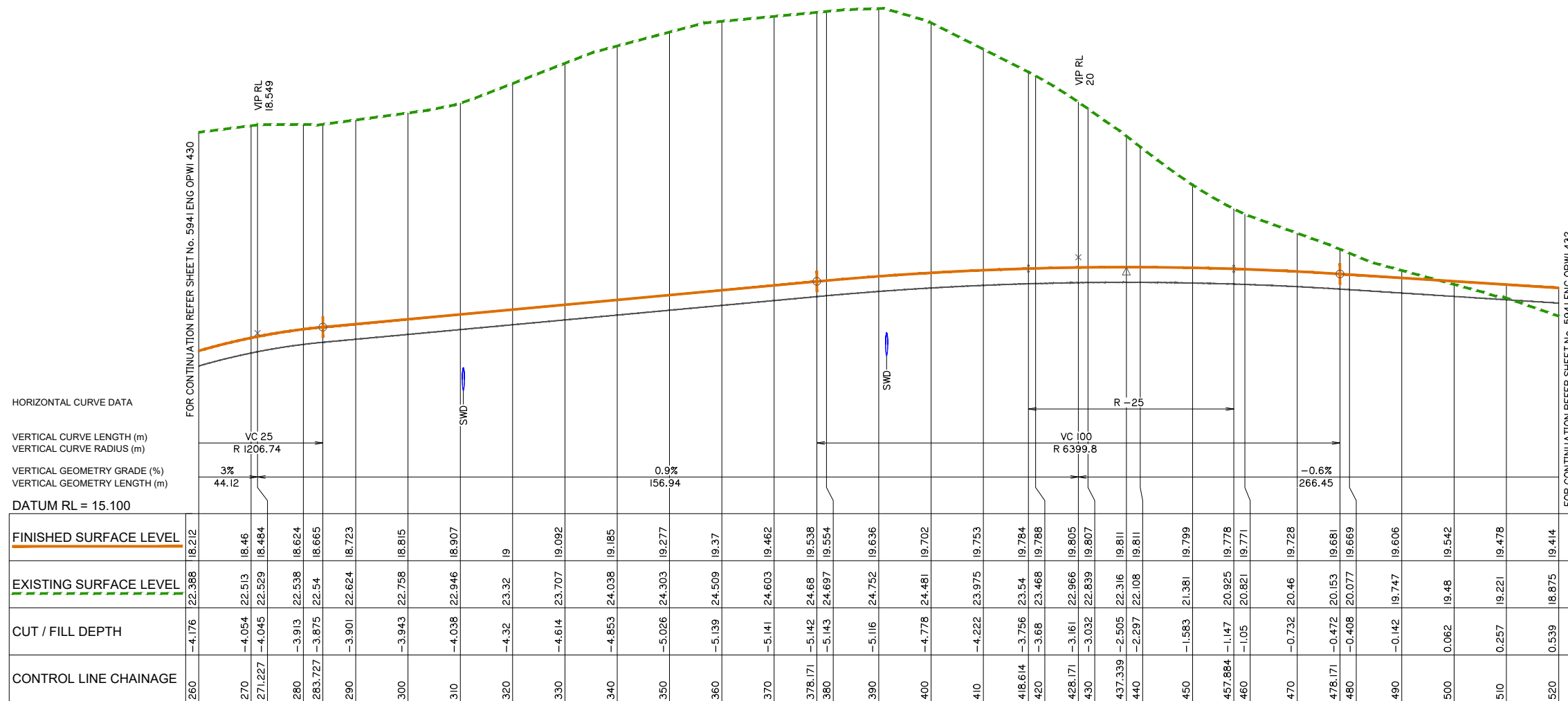
12-06-2020	INFORMATION REQUEST RESPONSE	BA
01-05-2020	ORIGINAL ISSUE	BA
Date	Description	DRN



Scale at A1:	AS SHOWN
Designed:	IG
Drafted:	BA
Approved:	MG
PEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No: 041 ENG OPW1 431 Rev. N B

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



ROAD LONGITUDINAL SECTION - (HOMESTEAD DRIVE) SHEET 2 OF 3



Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
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RPD:

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

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DRAWING TITLE
ROAD LONGITUDINAL SECTION - HOMESTEAD DRIVE
SHEET 2 OF 3

B	12-09-2020	INFORMATION REQUEST RESPONSE		BA	MG
A	01-05-2020	ORIGINAL ISSUE		BA	MG
Issue	Date	Description		DRN	CHK

SCALE IN METRES

Scale 1:500 - Lengths are in Metres.

HOZ: 

Scale 1:500 - Lengths are in Metres.

VERT: 

Scale at A1: AS SHOWN

Designed:	IG
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Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

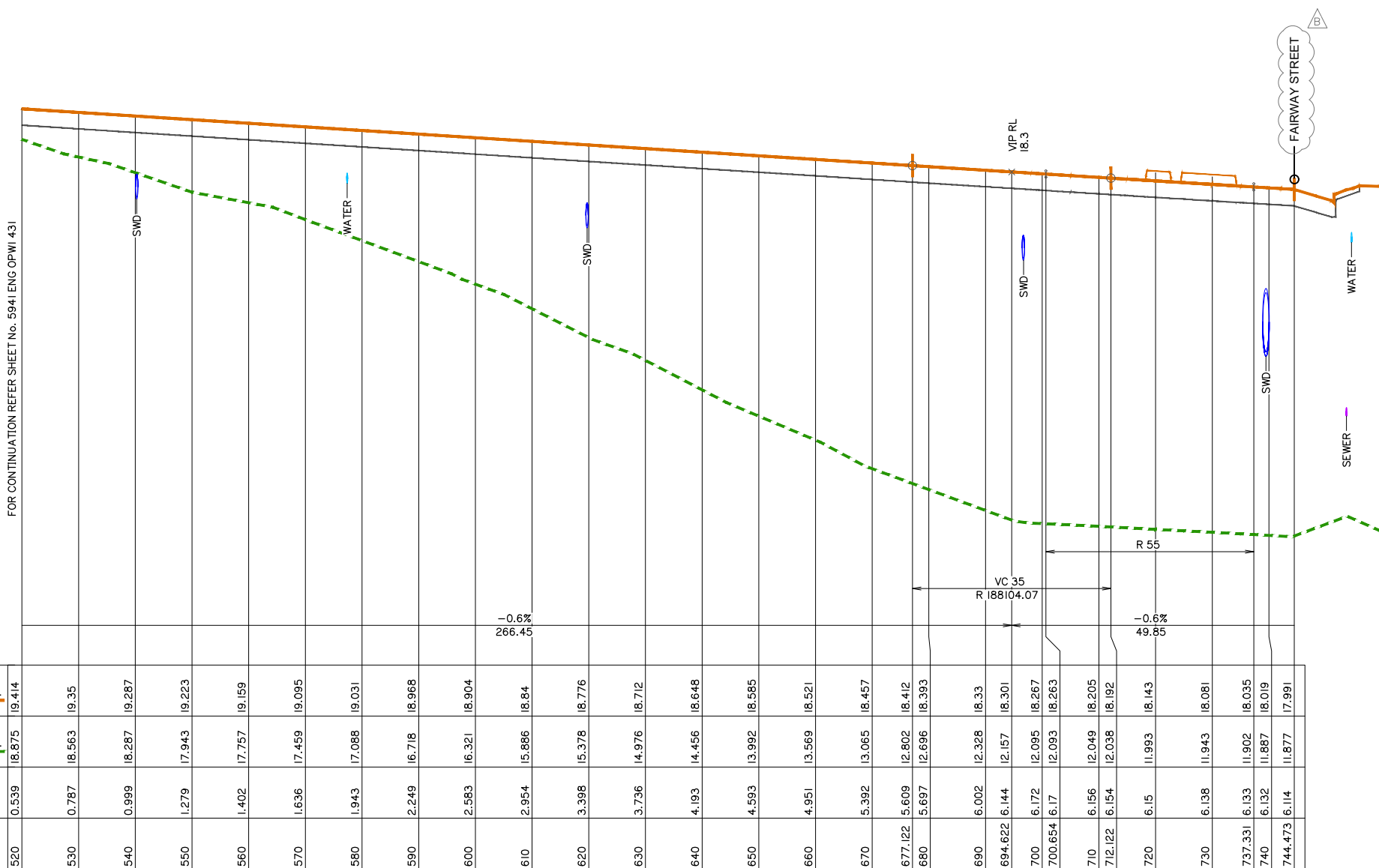
Drawing No:	Rev. No:
5941 ENG OPW1 432	B

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



HORIZONTAL CURVE DATA

VERTICAL CURVE LENGTH (m)
VERTICAL CURVE RADIUS (m)
VERTICAL GEOMETRY GRADE (%)
VERTICAL GEOMETRY LENGTH (m)

DATUM RL = 9.600

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CUT / FILL DEPTH

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LONGITUDINAL SECTION - HOMESTEAD DRIVE - SHEET 3 OF 3

ROAD LONGITUDINAL SECTION - (HOMESTEAD DRIVE) SHEET 3 OF 3

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

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Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

Site Address:

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ROAD, STAPYLTON QLD 4207

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RPD:

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Plan: SP295994
Local Authority: CITY OF GOLD COAST
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Level Datum: AHD
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DRAWING TITLE
ROAD LONGITUDINAL
SECTION - EASTRIDGE
STREET SHEET 1 OF 2

Rev	Date	Description	By	Check
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG
A	01-05-2020	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES

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

Scale 1:50 - 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: BA

Approved: MG

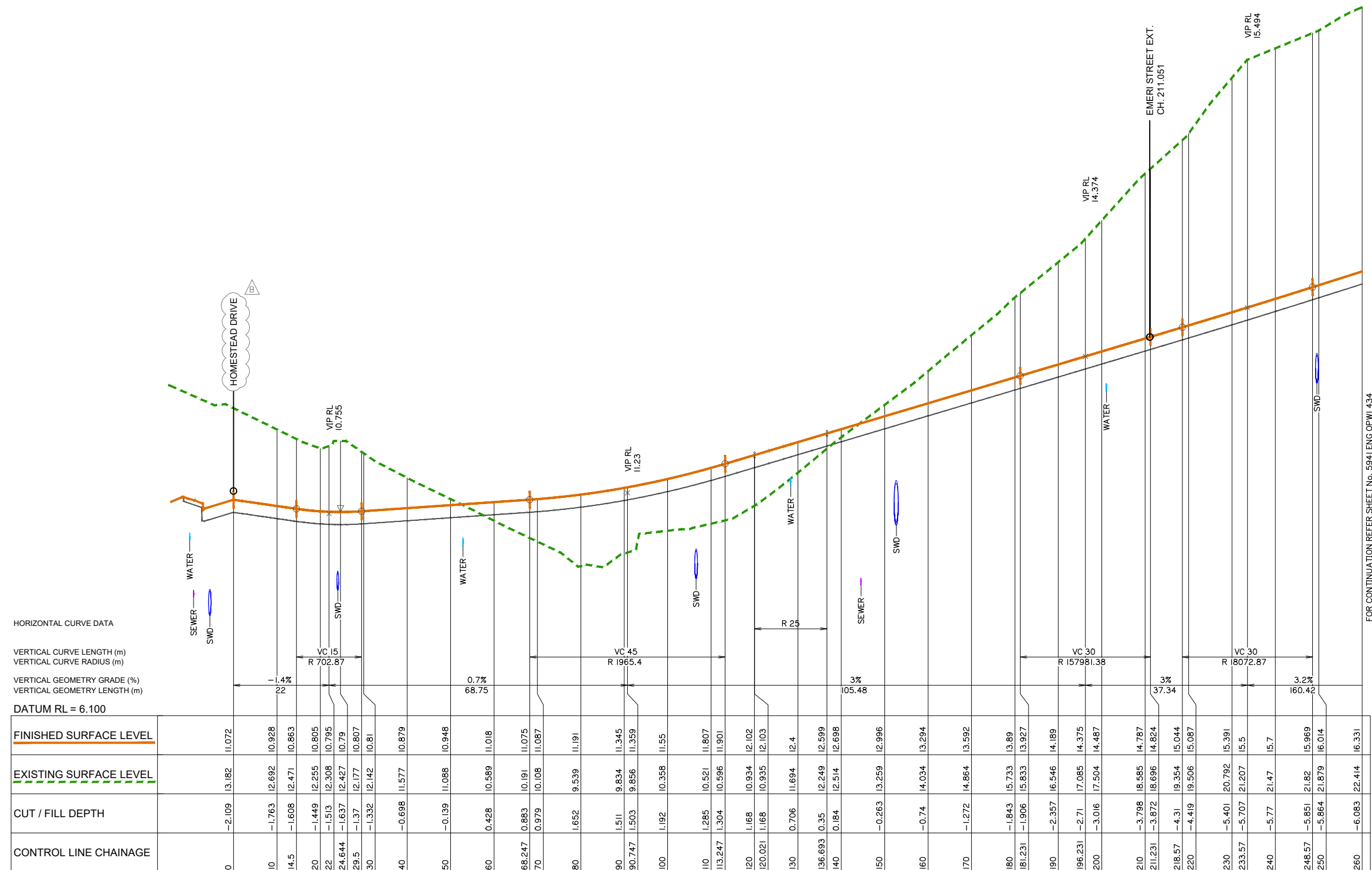
RPEQ: 16939

Signed:

Date: 01-05-2020

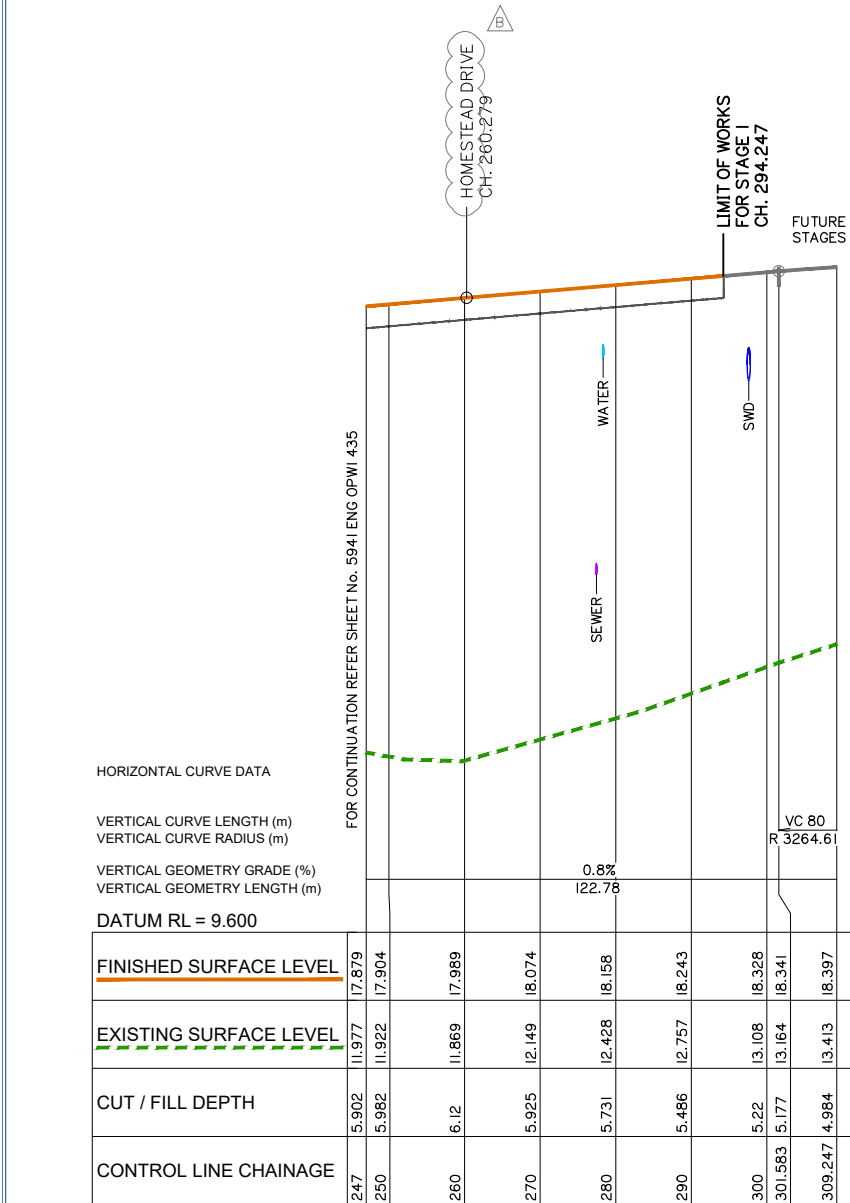
Drawing No:
5941 ENG OPW1 433

Rev. No:
B



LONGITUDINAL SECTION - EASTRIDGE STREET - SHEET 1 OF 2

ROAD LONGITUDINAL SECTION – EASTRIDGE STREET SHEET 1 OF 2



Client:



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Project:

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Site Address:

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Meridian: -
Contour interval: -
PSM: -
RL: -

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DRAWING TITLE
ROAD LONGITUDINAL
SECTION - FAIRWAY STREET
SHEET 2 OF 2

B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG	
A	01-05-2020	ORIGINAL ISSUE	BA	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES

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

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

Scale at A1: AS SHOWN

Designed: IG

Drafted: BA

Approved: MG

RPEQ: 16939

Signed:

Date: 01-05-2020

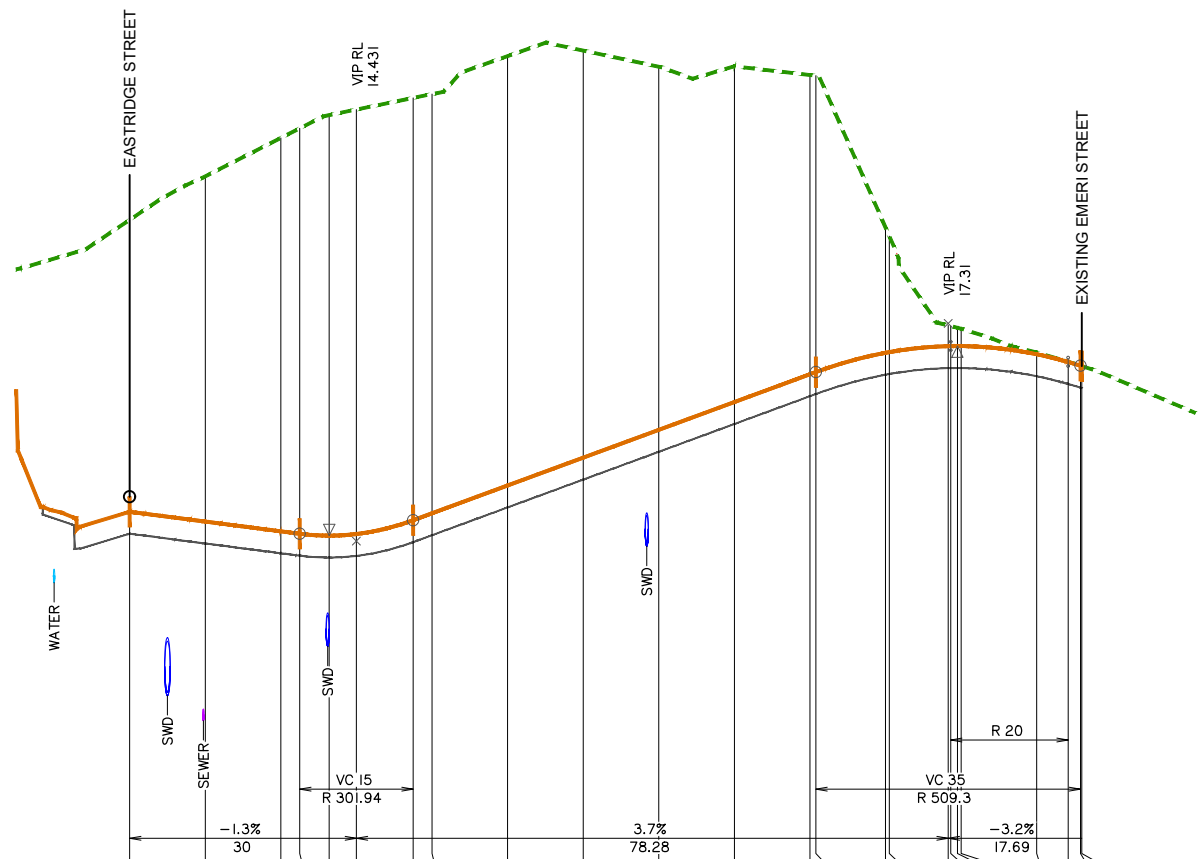
Drawing No: 5941 ENG OPW1 436
Rev. No: B

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the
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HORIZONTAL CURVE DATA

VERTICAL CURVE LENGTH (m)
VERTICAL CURVE RADIUS (m)
VERTICAL GEOMETRY GRADE (%)
VERTICAL GEOMETRY LENGTH (m)

DATUM RL = 9.800

FINISHED SURFACE LEVEL	14.818	14.689	14.56	14.528	14.503	14.524	14.707	14.799	15.166	15.534	15.902	16.27	16.637	16.666	16.922	16.931	17.009	17.01	17.01	17.01	16.902	16.8	16.75	16.745
EXISTING SURFACE LEVEL	18.68	19.255	19.762	19.889	20.064	20.138	20.292	20.343	20.845	20.918	20.704	20.71	20.594	20.585	18.578	18.464	17.283	17.275	17.252	17.239	16.925	16.802	16.75	16.745
CUT / FILL DEPTH	-3.861	-4.565	-5.202	-5.362	-5.562	-5.614	-5.585	-5.544	-5.678	-5.384	-4.803	-4.441	-3.957	-3.919	-1.656	-1.533	-0.275	-0.265	-0.242	-0.229	-0.023	-0.003	0	0
CONTROL LINE CHAINAGE	0	10	20	22.5	26.397	30	37.5	40	50	60	70	80	90	90.783	100	100.5	108.283	108.617	109.511	110	120	124.155	125.783	125.961

LONGITUDINAL SECTION - EMERI STREET EXTENSION - SHEET 1 OF 1

ROAD LONGITUDINAL SECTION – EMERI STREET EXTENSION



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DRAWING TITLE
ROAD LONGITUDINAL
SECTION - EMERI STREET
EXTENSION

A	01-05-2020	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES

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

Scale 1:50 - 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:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No: 5941 ENG OPW1 437
Rev. No: A

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Scale at A1:	1:100
Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020
Drawing No: 5941 ENG OPW1 450 Rev. M B	

Drawing No:	Rev. No:
5941 ENG OPW1 451	B

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



Project:	VANTAGE YATALA
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: -

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DRAWING TITLE
ROAD CROSS SECTIONS
- HOMESTEAD DRIVE
SHEET 4 OF 14

B	12-06-2020		INFORMATION REQUEST RESPONSE	BA	MG
A	01-05-2020		ORIGINAL ISSUE	BA	MG
Issue	Date		Description	DRN	CHK

SCALE IN METRES

Scale 1:100 - Lengths are in Metres.



A horizontal scale bar with alternating black and white segments. It is marked with numbers from 0 to 8 at regular intervals.

Scale at A1:	1:100
Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

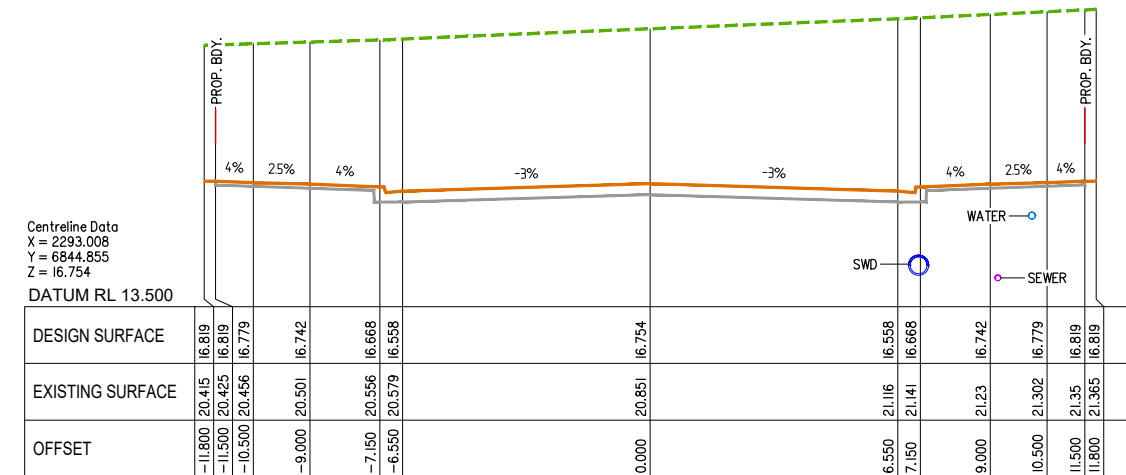
Drawing No:	Rev. No:
5941 ENG OPW1 453	B

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

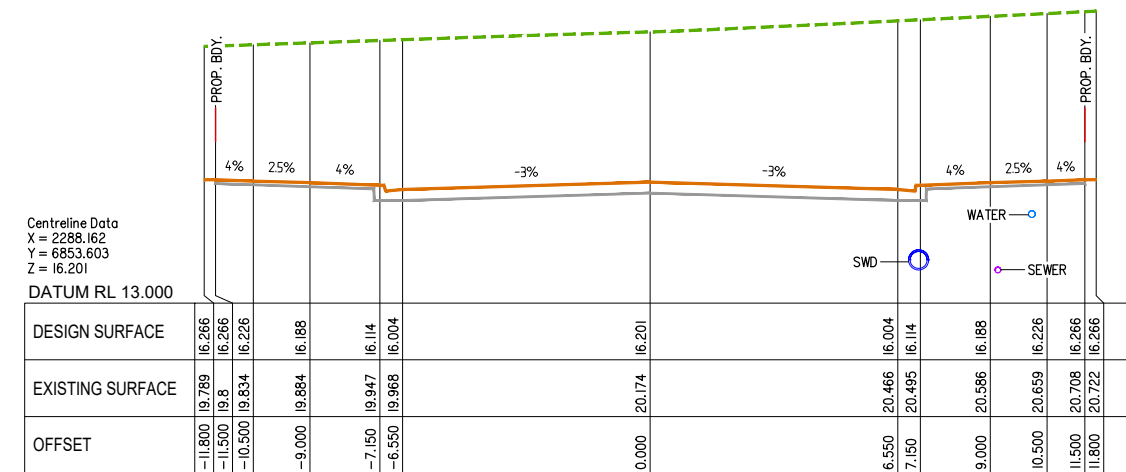
Application No: OPW/2020/633

Dated: 20 July 2020

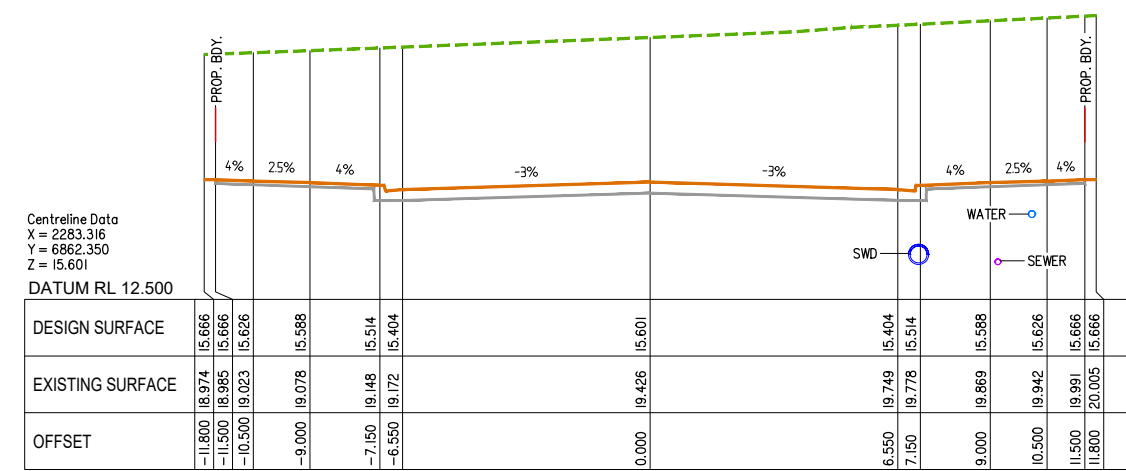
Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies



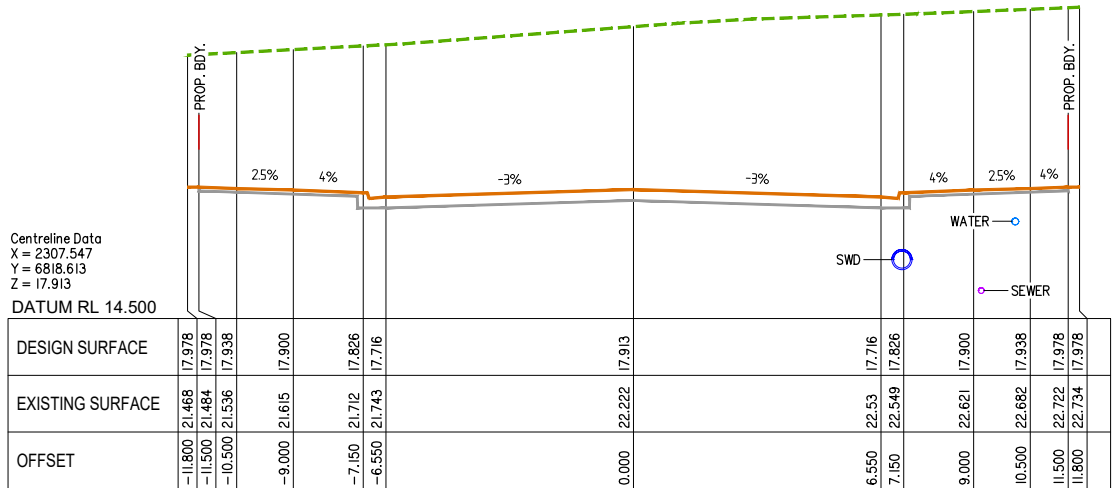
CHAINAGE 220



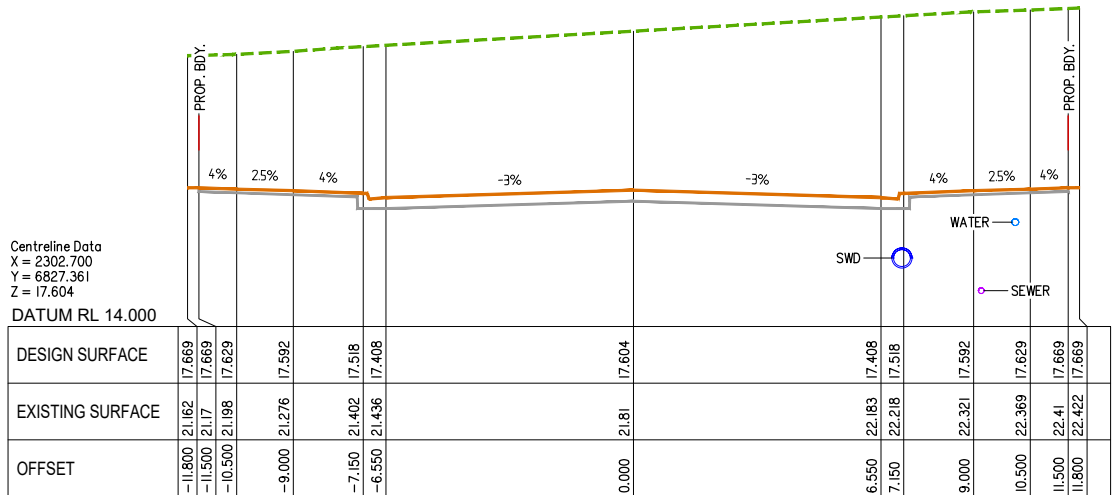
CHAINAGE 210



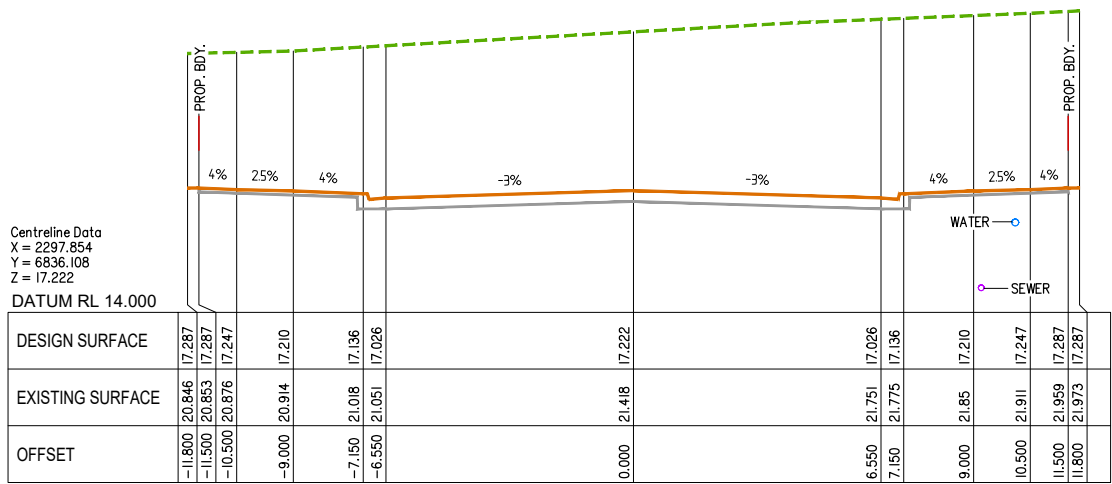
CHAINAGE 200



CHAINAGE 250



CHAINAGE 240



CHAINAGE 230

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

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: -

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DRAWING TITLE
ROAD CROSS SECTIONS
- HOMESTEAD DRIVE
SHEET 5 OF 14

B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG
A	01-05-2020	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES

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

Scale at A1: 1:100

Designed: IG

Drafted: BA

Approved: MG

RPEQ: 16939

Signed:

Date: 01-05-2020

Drawing No:
5941 ENG OPW1 454

Rev. No:
B

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



VANTAGE YATALA

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

RL:

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

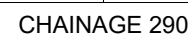
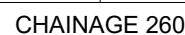
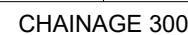
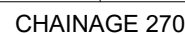
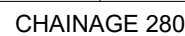
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG
A	01-05-2020	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	DRN	CHK

Scale 1:100 - Lengths are in Metres.



A horizontal scale bar with alternating black and white segments. Below the bar are numerical markings from 0 to 8 at regular intervals.

Drawing No:	Rev. No:
5941 ENG OPW1 455	B



Client:



Project:

VANTAGE YATALA

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:	-

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DRAWING TITLE
ROAD CROSS SECTIONS
- HOMESTEAD DRIVE
SHEET 14 OF 14

B	12-06-2020	INFORMATION REQUEST RESPONSE		BA	MG
A	01-05-2020	ORIGINAL ISSUE		BA	MG
Issue	Date	Description		DRN	CHK

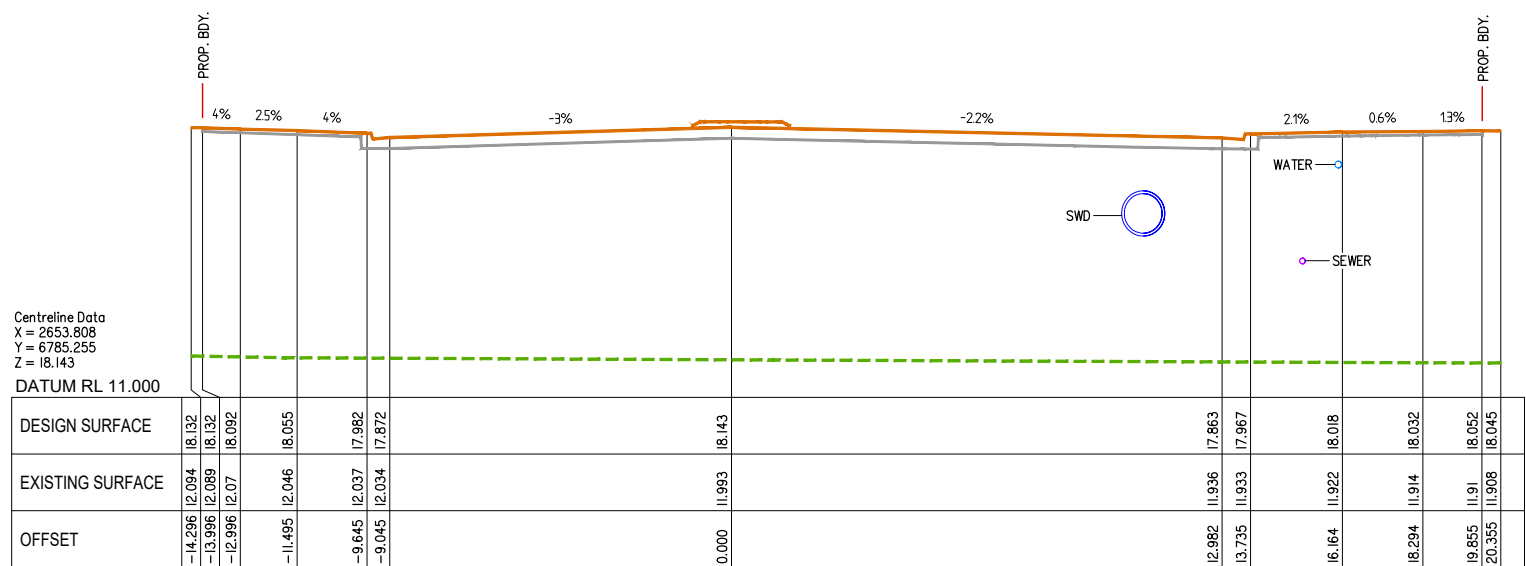
SCALE IN METRES



Scale at A1: 1:100

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:	Rev. No:
5941 ENG OPW1 463	B



CHAINAGE 720

ROAD CROSS SECTIONS – HOMESTEAD DRIVE SHEET 14 OF 14

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



Project:

VANTAGE YATALA

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: -

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DRAWING TITLE
ROAD CROSS SECTIONS
- EASTRIDGE STREET
SHEET 1 OF 8

A	01-05-2020	ORIGINAL ISSUE	BA	MG	
Issue	Date	Description	CRN	CHK	

SCALE IN METRES

Scale 1:100 - Lengths are in Metres.

Scale at A1:	1:100
Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:	Rev. No:
5941 ENG OPW1 464	A

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
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RPD:

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

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

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DRAWING TITLE
ROAD CROSS SECTIONS
- EASTRIDGE STREET
SHEET 2 OF 8

[illegible]

SCALE IN METRES

Scale 1:100 - Lengths are in Metres.

Scale at A1:	1:100
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Designed:	IG
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Drafted:	BA
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Approved:	MC
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RPEQ:	16939
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Signed:	
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Date:	01-05-2020
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Drawing No:	Rev. No:
5941 ENG OPW1 465	A

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



Project:

VANTAGE YATALA

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:	-

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DRAWING TITLE
ROAD CROSS SECTIONS
- EASTRIDGE STREET
SHEET 3 OF 8

SCALE IN METRES

Scale 1:100 - Lengths are in Metres.

A horizontal number line with tick marks at 0, 1, 2, 3, 4, 5, 6, and 7. The segment between 3 and 4 is shaded blue, representing the fraction $\frac{1}{4}$.

Scale at A1: 1:100

Designed:	IG
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Drafted:	BA
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Approved:	MG
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RPEQ:	16939
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Signed:	
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Date:	01-05-2020
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Drawing No:
5941 ENG OPW1 466

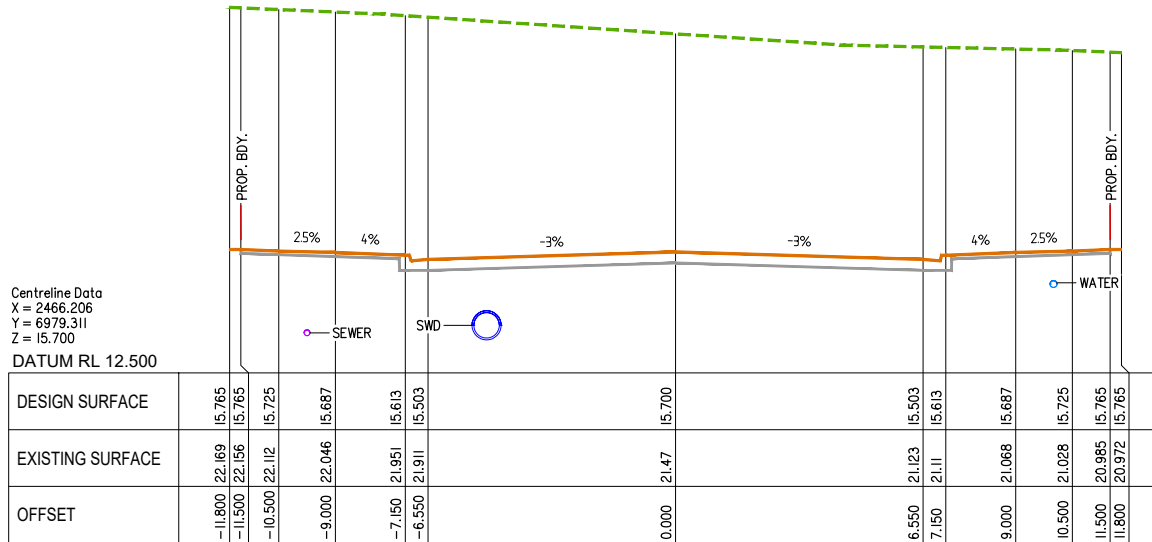
Rev. No:
A

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

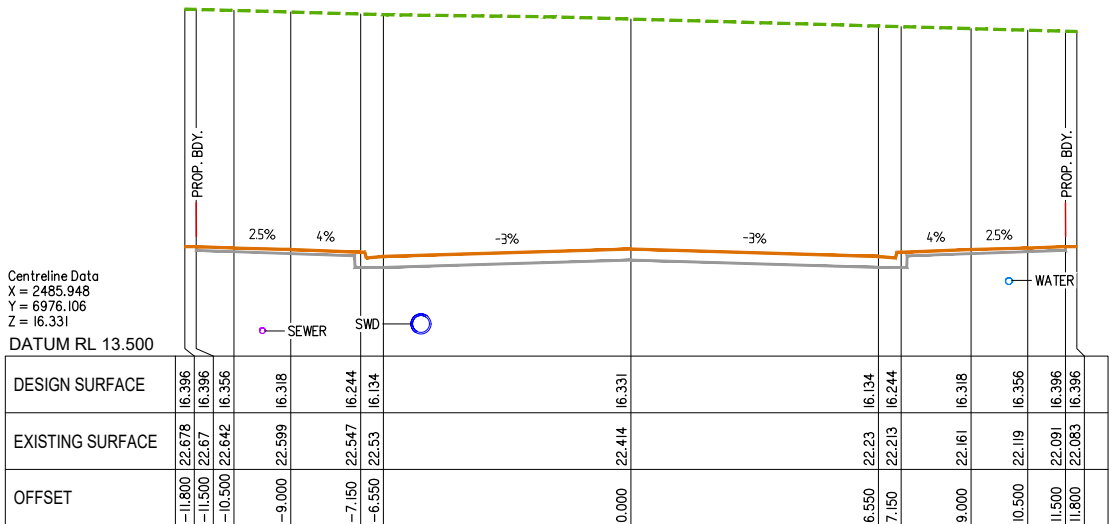
Application No: OPW/2020/633

Dated: 20 July 2020

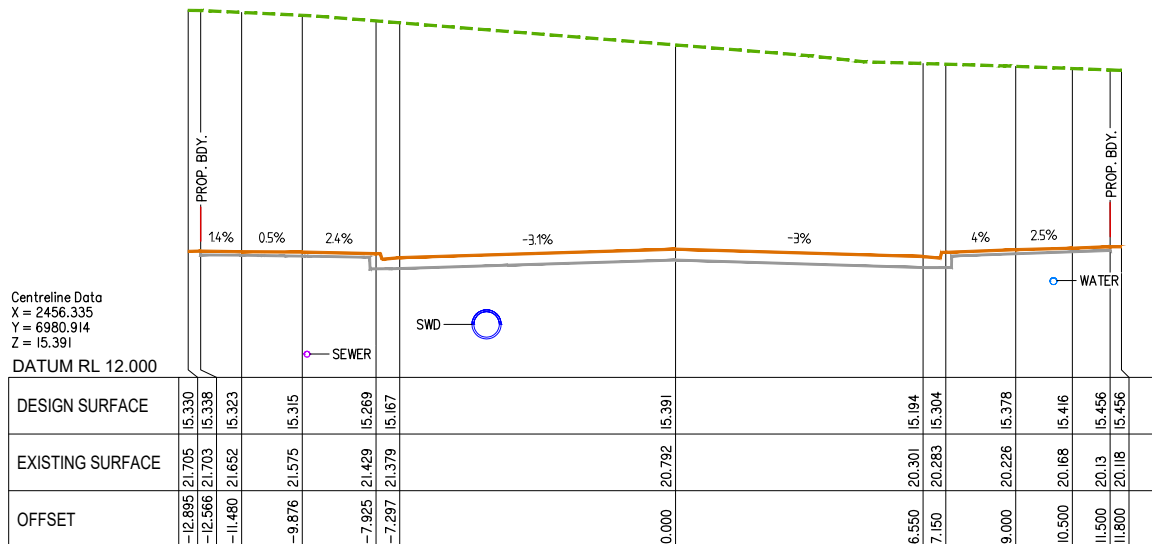
Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies



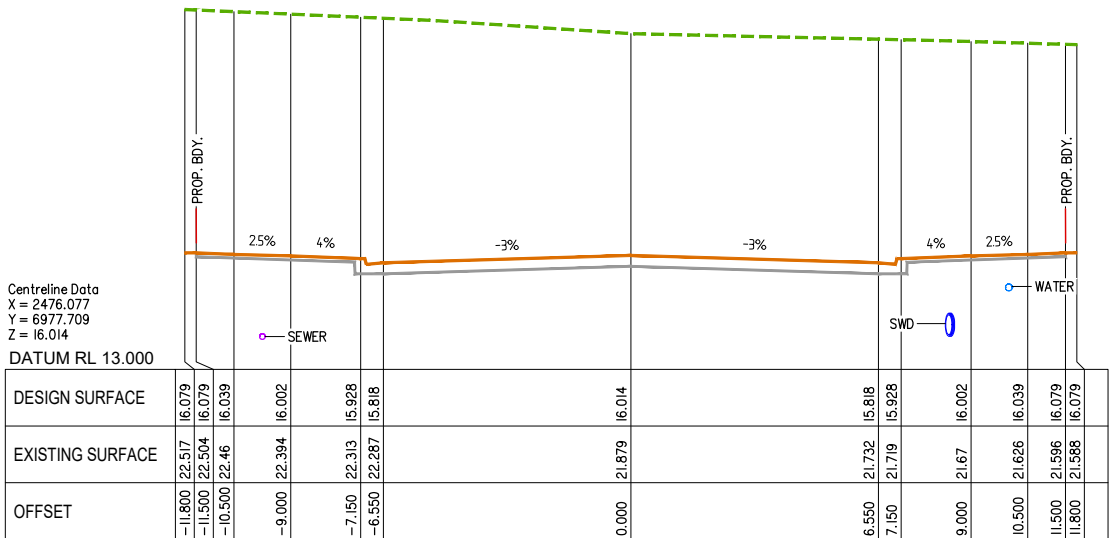
CHAINAGE 240



CHAINAGE 260



CHAINAGE 230



CHAINAGE 250

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

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: -

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DRAWING TITLE
ROAD CROSS SECTIONS
- EASTRIDGE STREET
SHEET 4 OF 8

A	01-05-2020	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES

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

Scale at A1: 1:100

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No: 5941 ENG OPW1 467
Rev. No: A



Project:

VANTAGE YATALA

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: -

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DRAWING TITLE
ROAD CROSS SECTIONS
- EASTRIDGE STREET
SHEET 6 OF 8

A Issue	01-05-2020 Date	ORIGINAL ISSUE Description	BA DRN	MG CHK

SCALE IN METRES

Scale 1:100 - Lengths are in Metres.

A horizontal scale bar with alternating black and white segments. Below the bar are numerical markings from 0 to 8 at regular intervals.

Scale at A1: 1:100

Designed:	IG
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Drafted:	BA
----------	----

Approved:	MG
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RPEQ:	16939
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Signed:	
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Date:	01-05-2020
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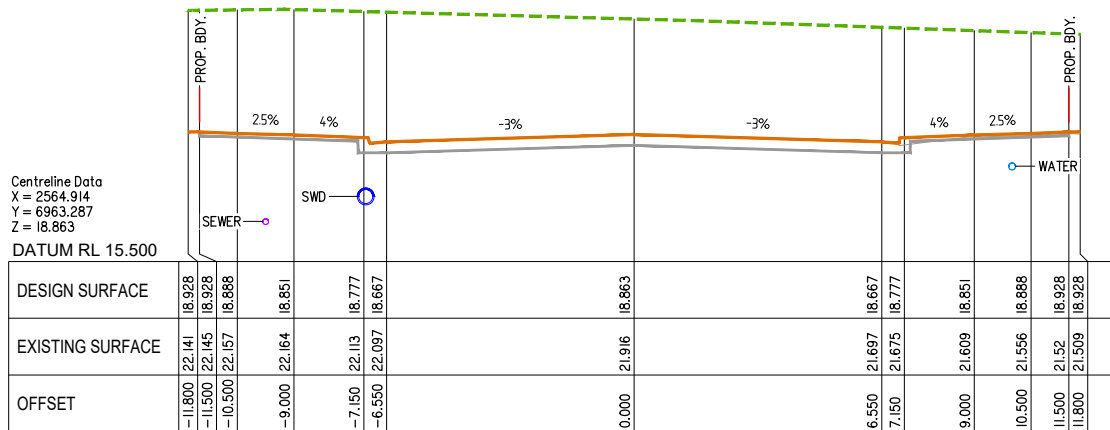
Drawing No:	Rev. No:
5941 ENG OPW1 469	A

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

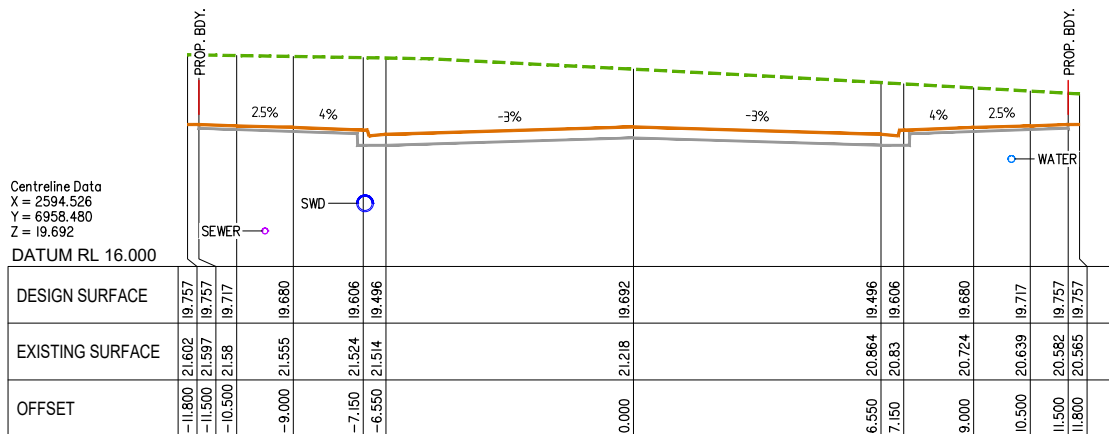
Application No: OPW/2020/633

Dated: 20 July 2020

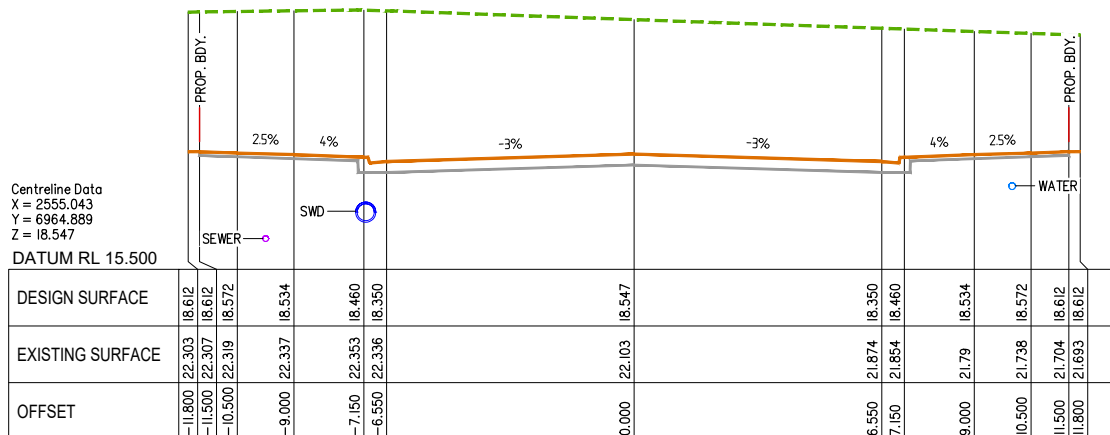
Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



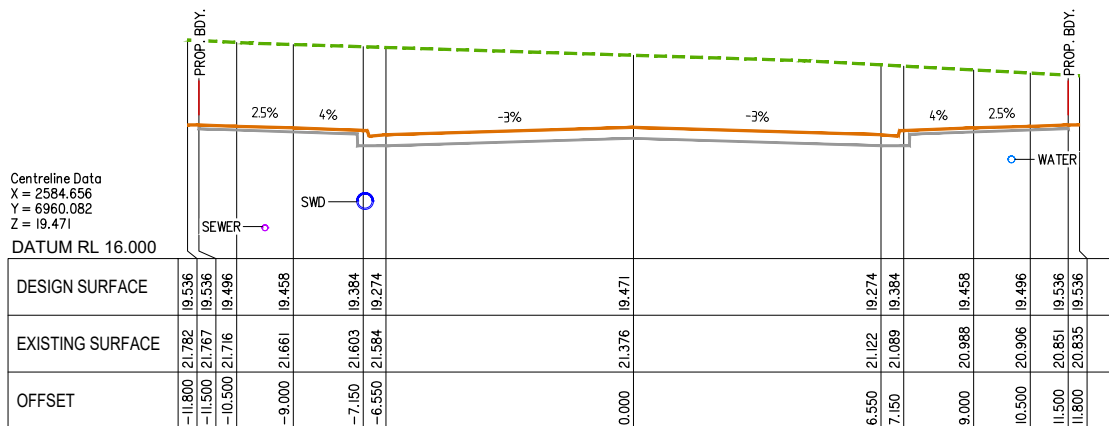
CHAINAGE 340



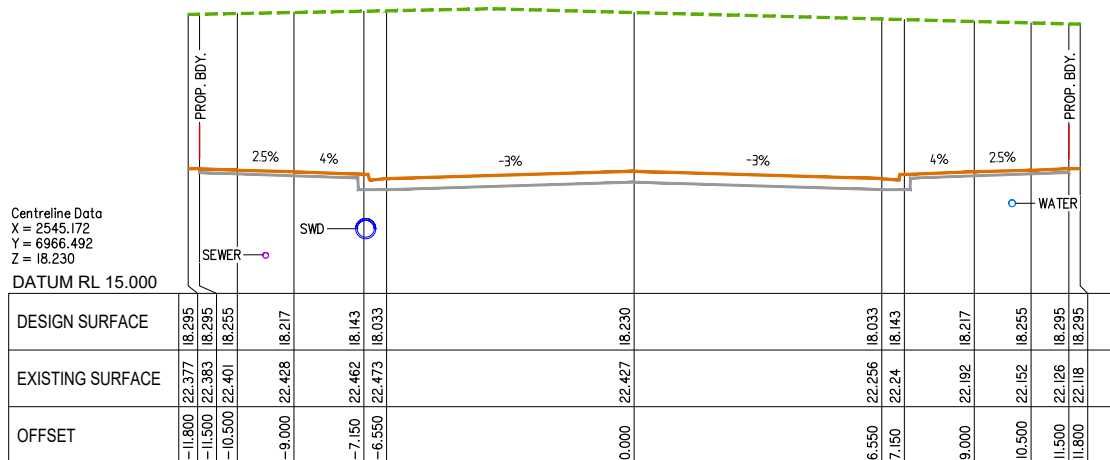
CHAINAGE 370



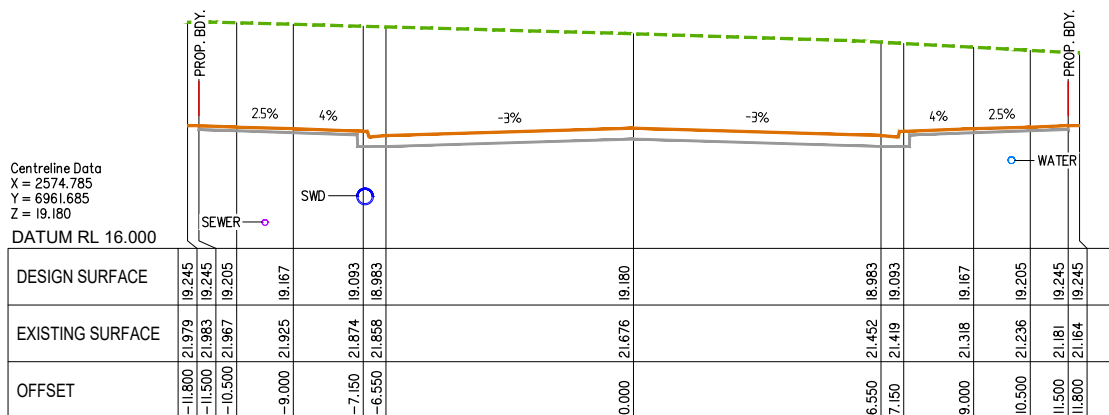
CHAINAGE 330



CHAINAGE 360



CHAINAGE 320



CHAINAGE 350

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



A	01-05-2020	ORIGINAL ISSUE						BA	MCH
Issue	Date	Description						DRN	CH



Scale at A1:	1:100
Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



Client:



**FRASERS
PROPERTY**

FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:	VANTAGE YATALA
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:	-

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DRAWING TITLE
ROAD CROSS SECTIONS
- FAIRWAY STREET
SHEET 1 OF 6

B	12-06-2020		INFORMATION REQUEST RESPONSE	BA	MG
A	01-05-2020		ORIGINAL ISSUE	BA	MG
Issue	Date		Description	DRN	CHK

SCALE IN METRES

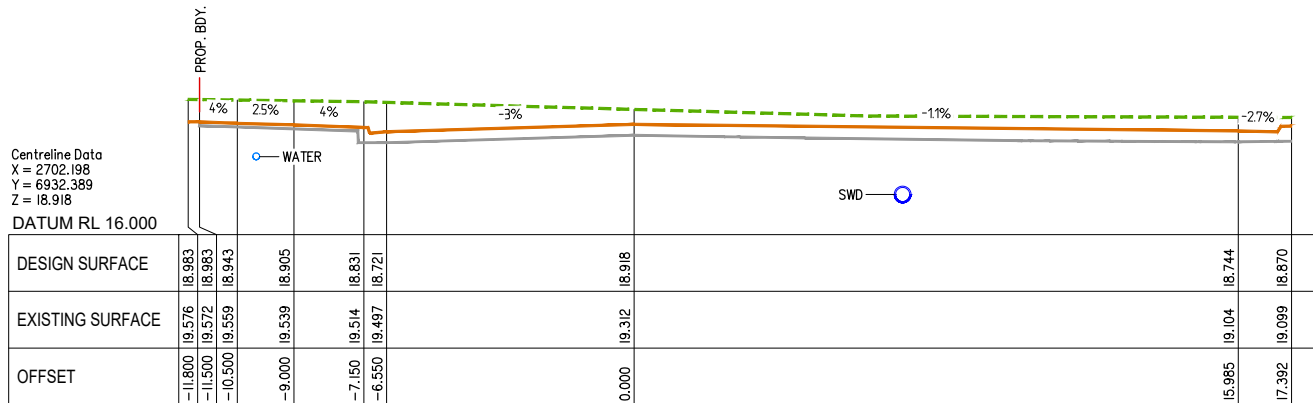
Scale 1:100 - Lengths are in Metres.



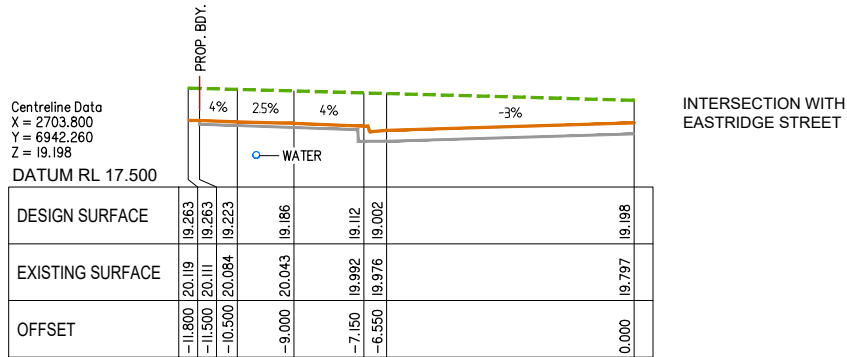
A horizontal scale bar with a black border. It is divided into 8 equal segments by vertical tick marks. Below the bar, the numbers 0, 1, 2, 3, 4, 5, 6, 7, and 8 are written in black, corresponding to each segment. The first segment (0 to 1) is filled with a solid blue color, while the remaining segments are white.

Scale at A1:	1:100
Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

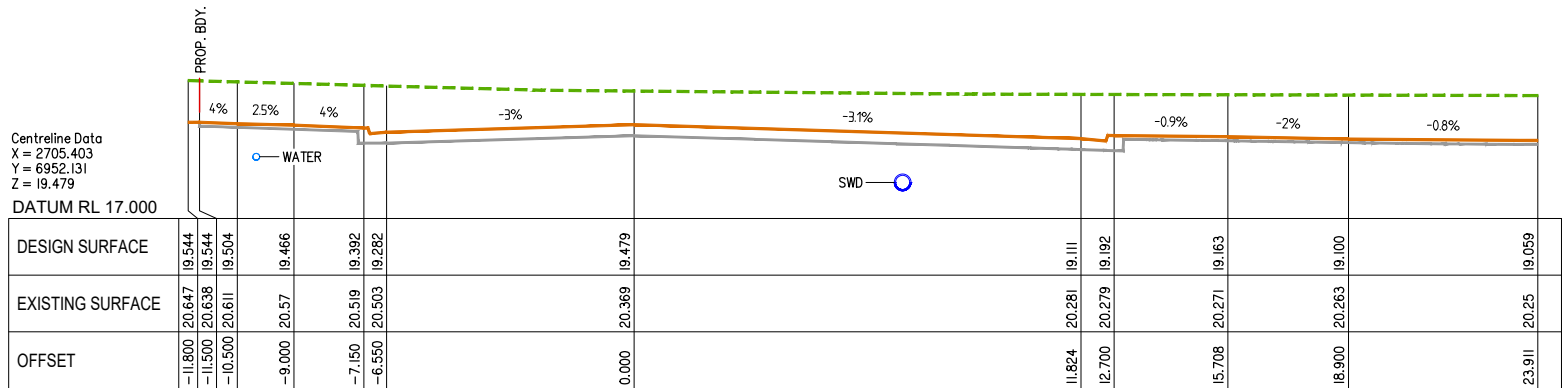
Drawing No:	Rev. No:
5941 ENG OPW1 472	B



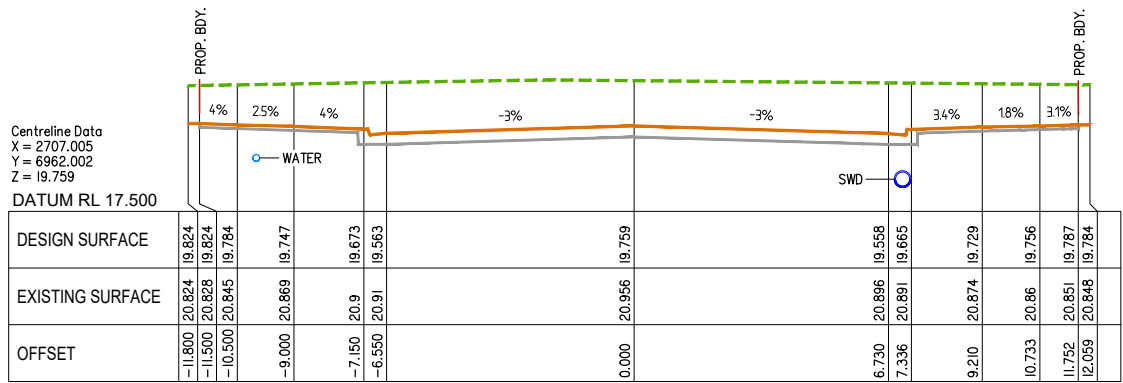
CHAINAGE 110



CHAINAGE 100



CHAINAGE 90



CHAINAGE 80

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

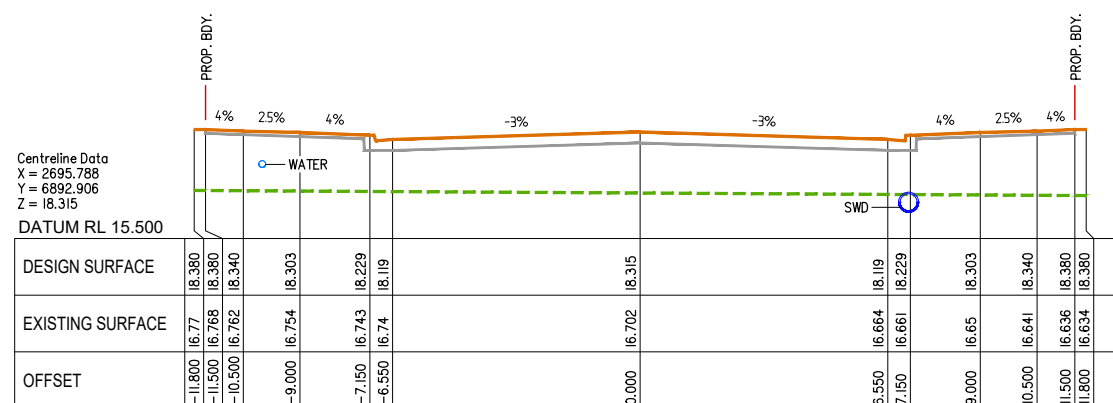
Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

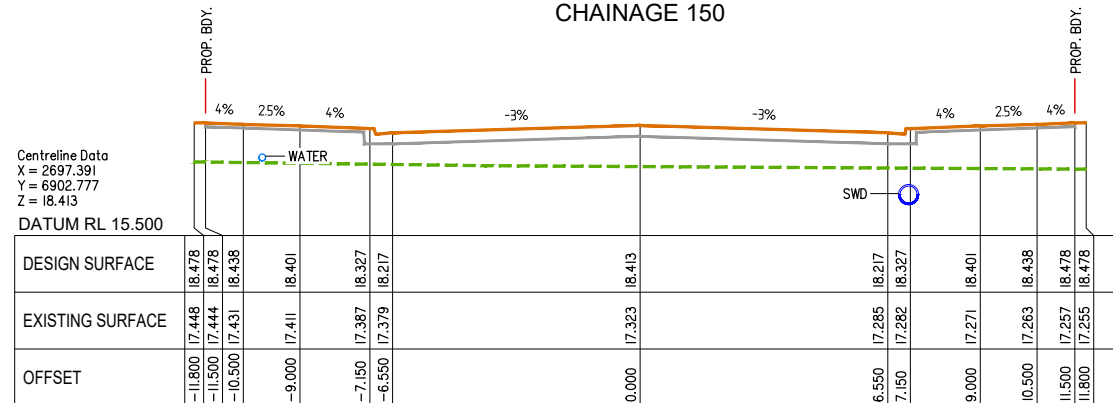
Application No: OPW/2020/633

Dated: 20 July 2020

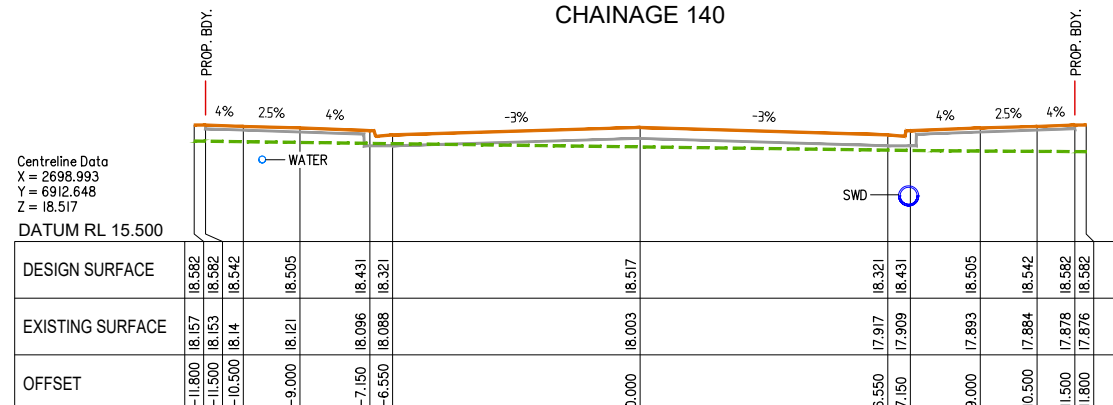
Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies



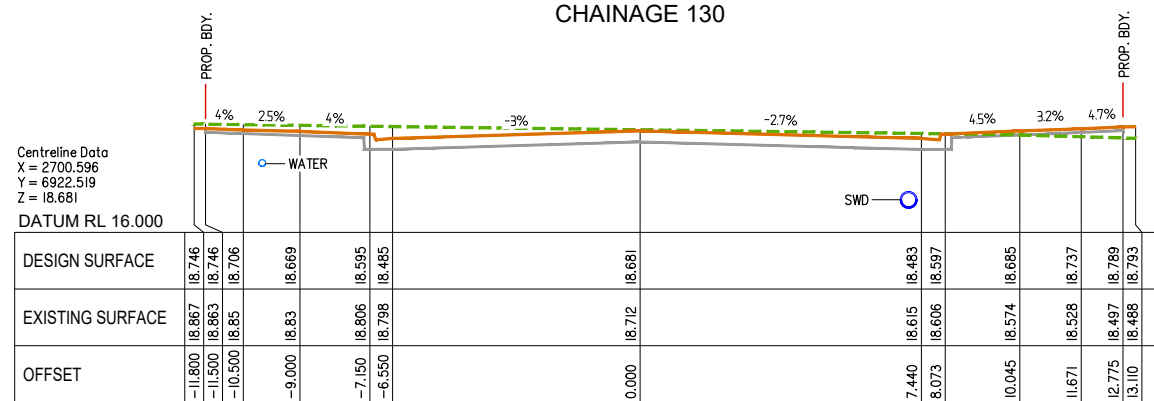
CHAINAGE 150



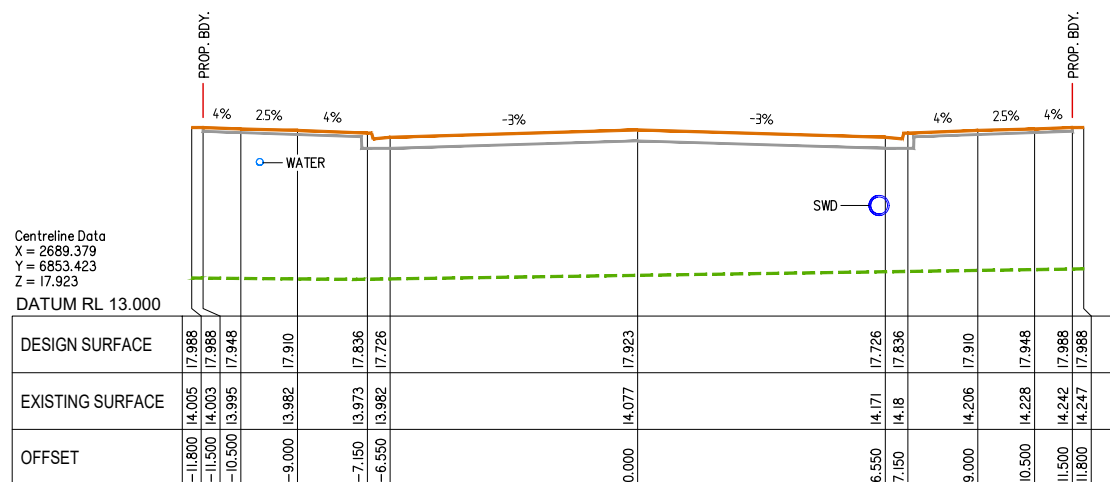
CHAINAGE 140



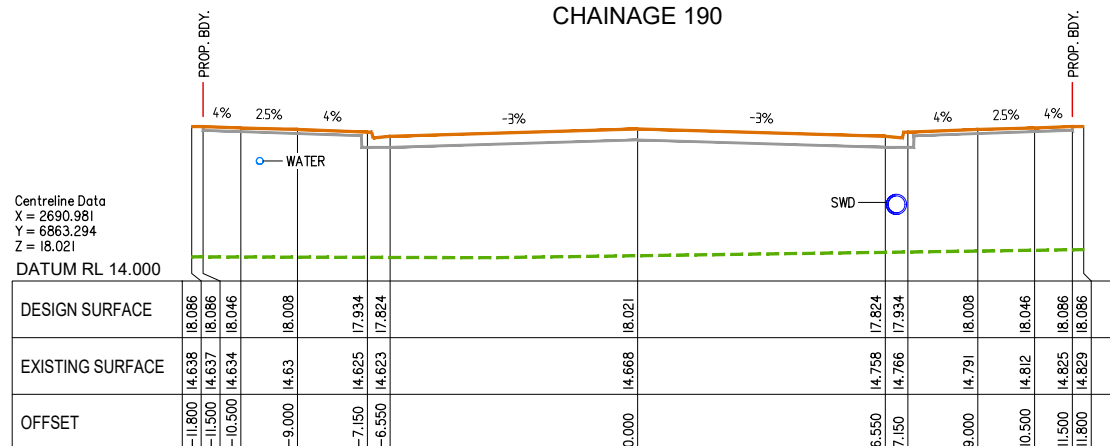
CHAINAGE 130



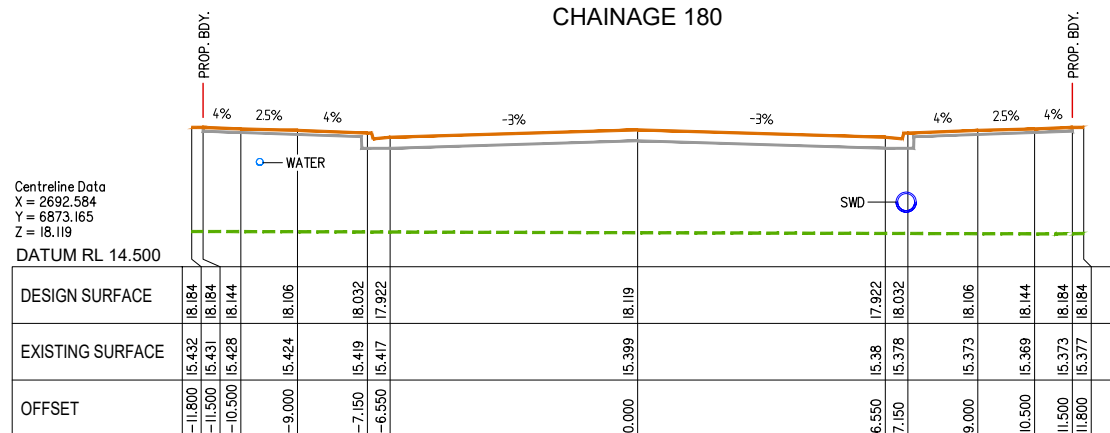
CHAINAGE 120



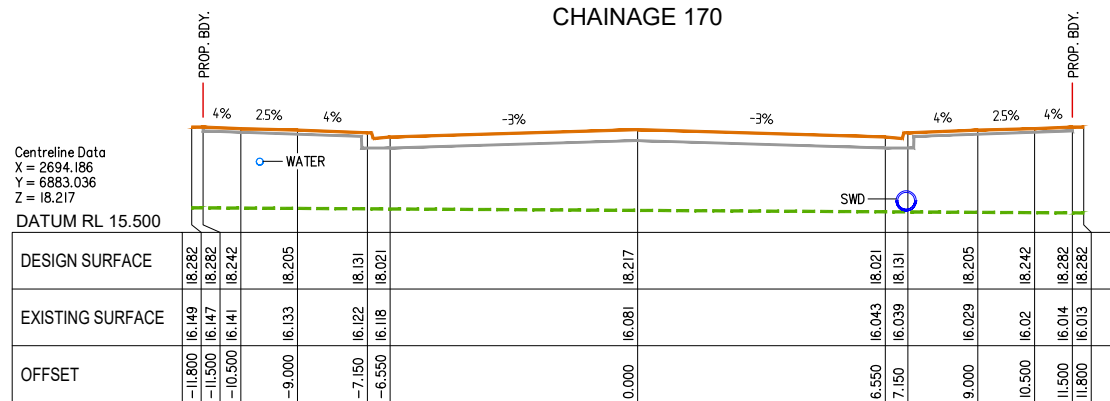
CHAINAGE 190



CHAINAGE 180



CHAINAGE 170



CHAINAGE 160

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
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RPD:

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

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DRAWING TITLE
ROAD CROSS SECTIONS
- FAIRWAY STREET
SHEET 3 OF 6

Rev	Date	Description	By	Check
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG
A	01-05-2020	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES

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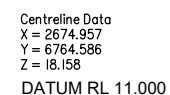
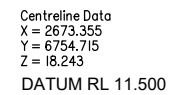
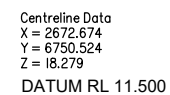
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Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:
5941 ENG OPW1 474

Rev. No:
B





CHAINAGE 280

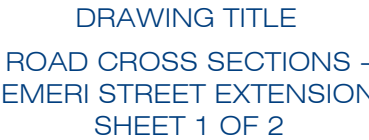
Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

DRAWING TITLE
ROAD CROSS SECTIONS
- FAIRWAY STREET
SHEET 6 OF 6

B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MC	
A	01-05-2020	ORIGINAL ISSUE	BA	MG	
Issue	Date	Description	DRN	CHK	

Rev. No:
B

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



Drawing No:	Rev. No:
5941 ENG OPW1 478	A



Project:

VANTAGE YATALA

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: -

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DRAWING TITLE
ROAD CROSS SECTIONS -
EMERI STREET EXTENSION
SHEET 2 OF 2

A Issue	01-05-2020 Date	ORIGINAL ISSUE Description	BA DRN	MG CHK

SCALE IN METRES

Scale 1:100 - Lengths are in Metres.

Scale at A1: 1:100

Designed:	IG
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Drafted:	BA
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Approved:	MG
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RPEQ:	16939
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Signed:	
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Date:	01-05-2020
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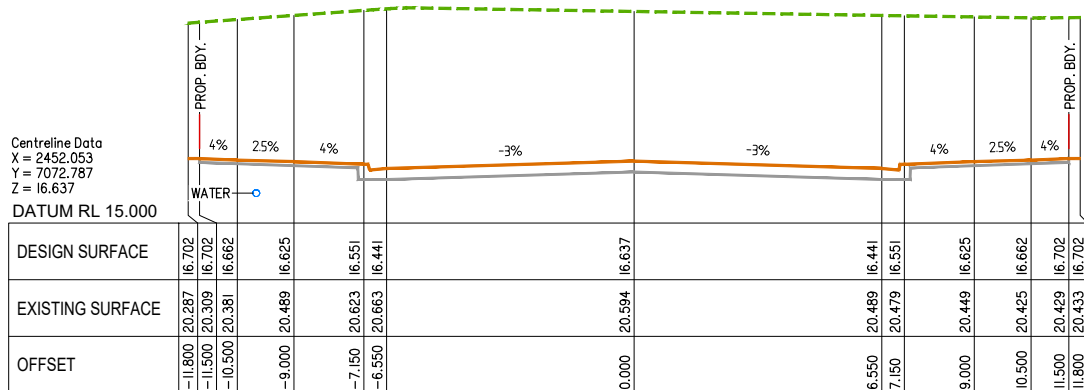
Drawing No:	Rev. No:
5941 ENG OPW1 479	A

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

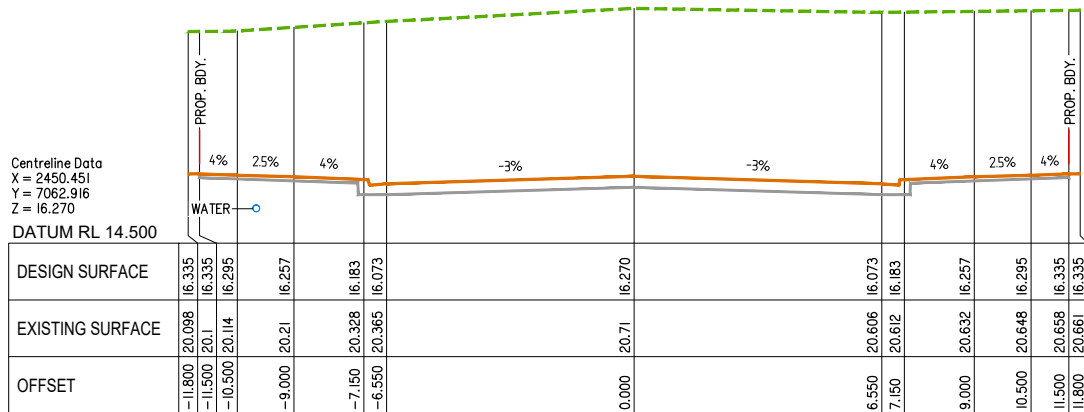
Application No: OPW/2020/633

Dated: 20 July 2020

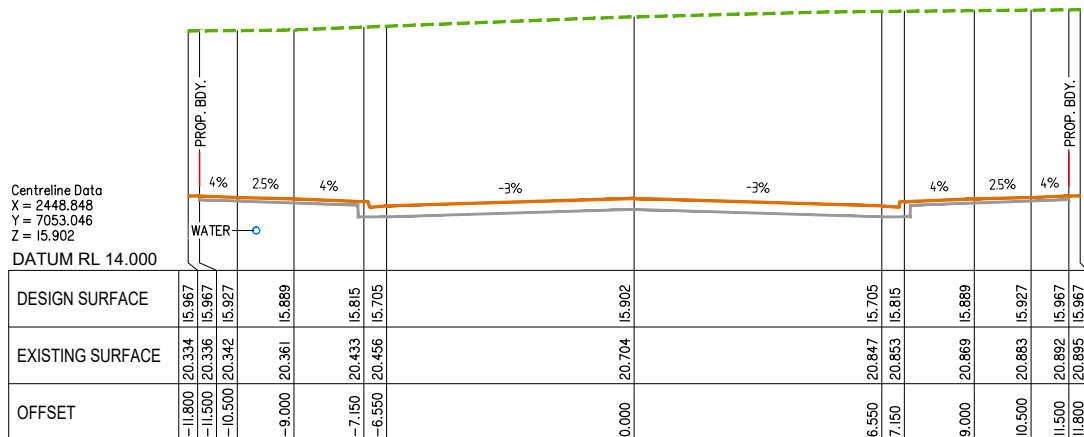
Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



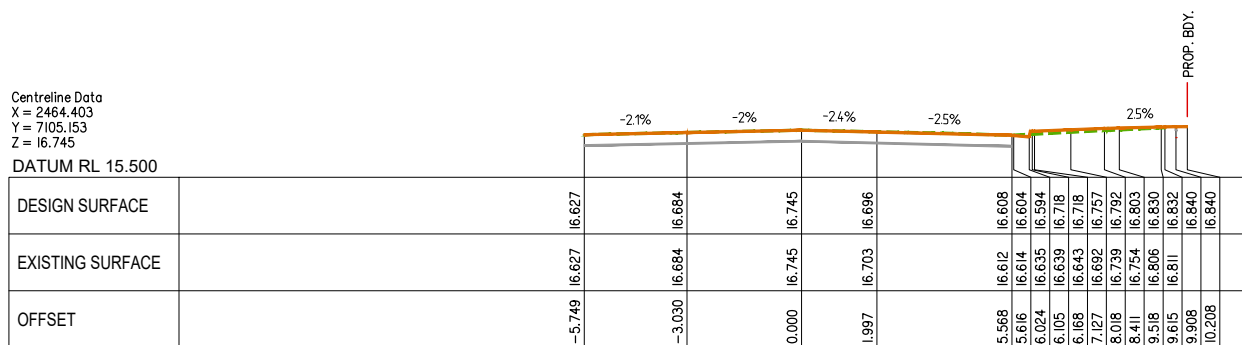
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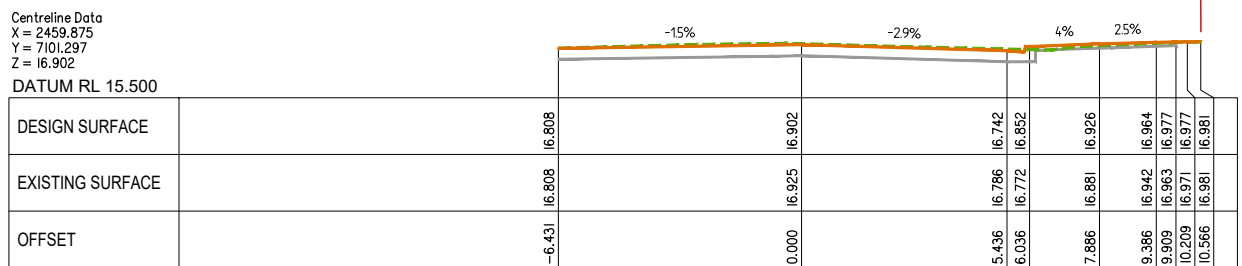
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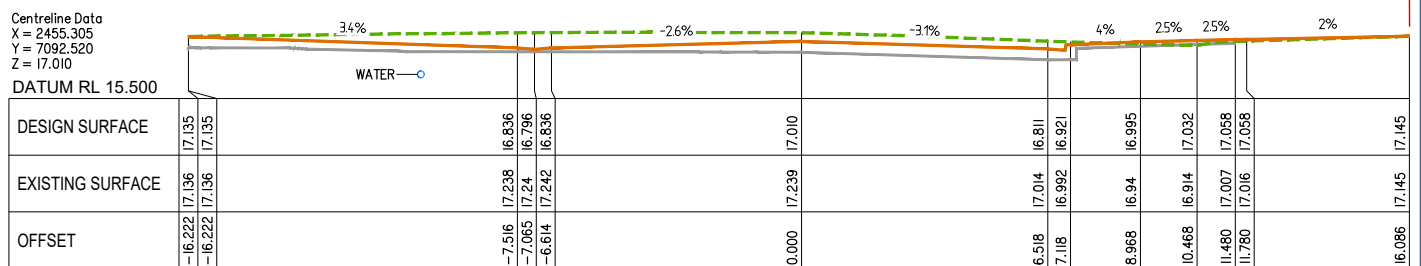
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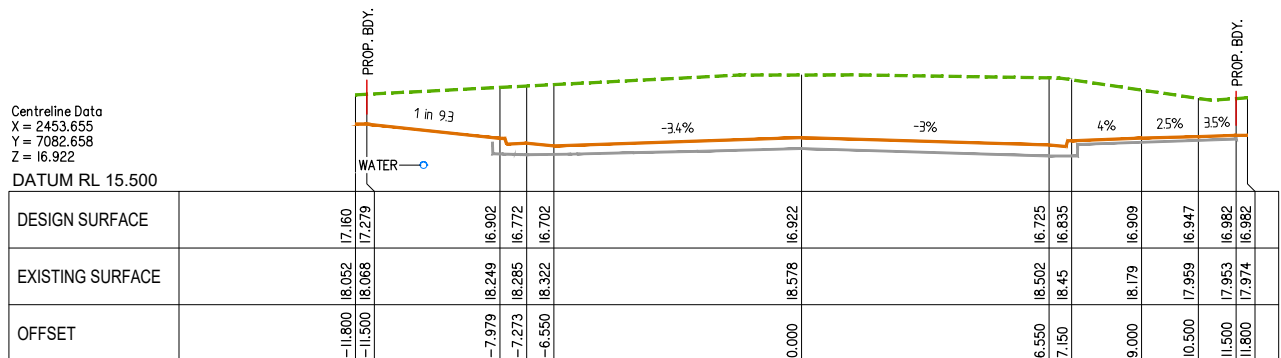
CHAINAGE 125.961



CHAINAGE 120



CHAINAGE 110



CHAINAGE 100



Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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RPD:

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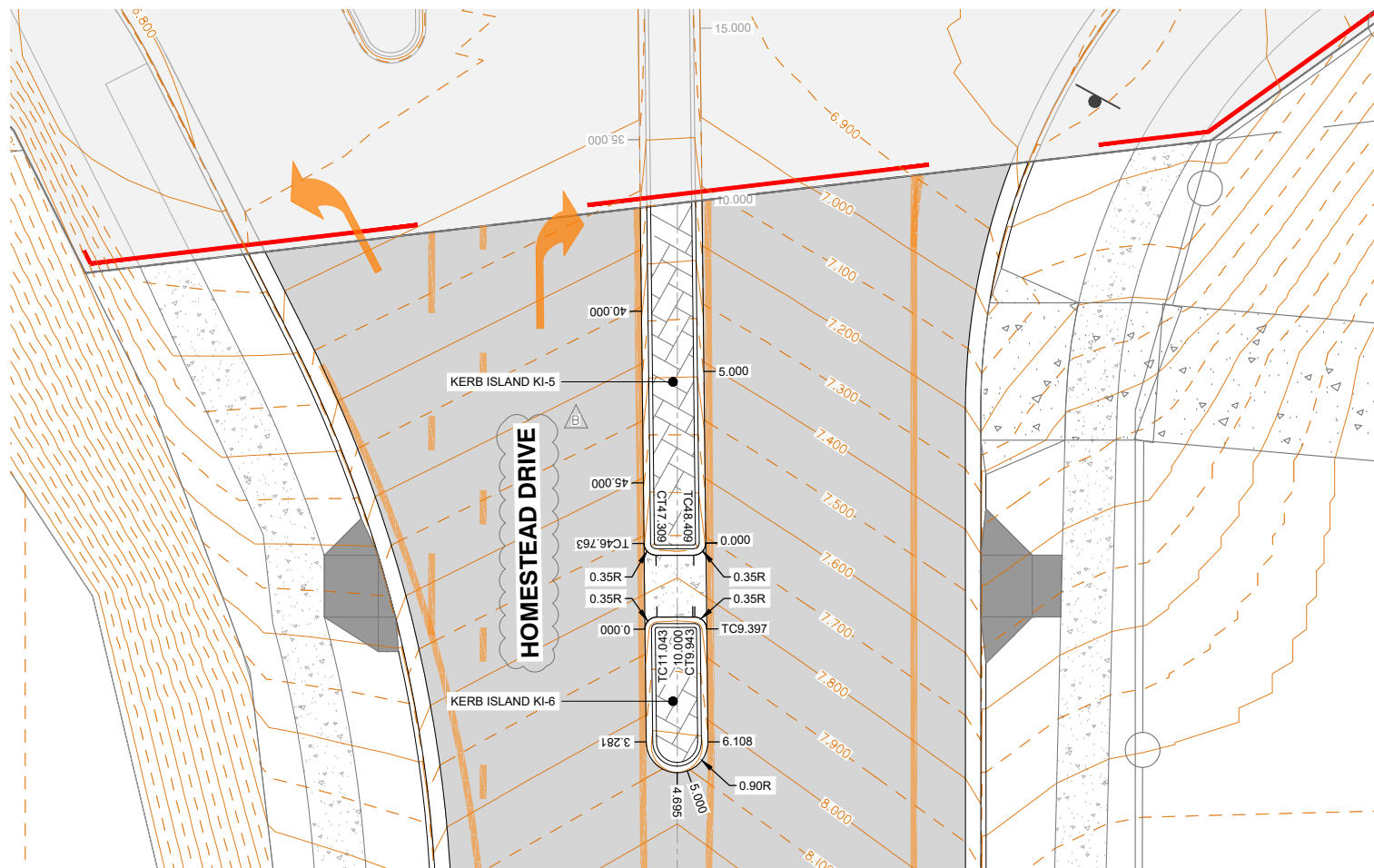
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DRAWING TITLE

KERB ISLAND SETOUT
DETAILS SHEET 1 OF 2



KERB ISLAND KI 5 & 6 LAYOUT PLAN

KERB ISLAND KI 5 SETOUT TABLE								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	2204.770	7005.837	7.711				
	5.000	2202.298	7010.183	7.416	330°22'28.51"			
	10.000	2199.826	7014.529	7.122	330°22'28.51"			
	15.000	2197.355	7018.876	6.932	330°22'28.51"			
	20.000	2194.883	7023.222	6.967	330°22'28.51"			
IP 2	21.974	2193.907	7024.938	7.000				
IP 3	22.681	2193.462	7025.720	7.014		R = -0.900	1.414	90°00'00.00"
CC	23.388	2192.680	7025.275	7.022	240°19'49.54"			
IP 4	24.095	2191.898	7024.829	7.014		R = -0.900	1.414	90°00'00.00"
IP 5	24.802	2192.343	7024.047	7.001				
	25.000	2192.441	7023.875	6.998	150°22'27.69"			
	30.000	2194.913	7019.529	6.930	150°22'27.69"			
	35.000	2197.384	7015.182	7.025	150°22'27.69"			
	40.000	2199.856	7010.836	7.308	150°22'27.69"			
	45.000	2202.328	7006.490	7.609	150°22'27.69"			
TC	46.763	2203.199	7004.957	7.714	150°22'27.69"			
IP 6	47.036	2203.370	7004.656	7.731		R = -0.350	0.546	89°22'32.57"
CT	47.309	2203.673	7004.824	7.744	60°59'55.12"			
TC	48.409	2204.635	7005.358	7.744	60°59'55.12"			
IP 7	48.686	2204.945	7005.529	7.729		R = -0.350	0.554	90°37'26.61"
CT	48.962	2204.770	7005.837	7.711	330°22'28.51"			

KERB ISLAND KI 6 SETOUT TABLE								
POINT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	2204.435	7002.784	7.859				
IP 2	3.281	2206.057	6999.932	8.043				
IP 3	3.281	2206.057	6999.932	8.043				
IP 4	3.988	2206.493	6999.145	8.085		R = -0.900	1.414	90°00'00.00"
CC	4.695	2207.280	6999.581	8.119	61°00'44.54"			
	5.000	2207.517	6999.771	8.105	41°34'06.64"			
IP 5	5.401	2208.068	7000.017	8.082		R = -0.900	1.414	90°00'00.00"
IP 6	6.108	2207.631	7000.804	8.037				
TC	9.397	2206.006	7003.663	7.854	330°22'28.51"			
IP 7	9.670	2205.834	7003.964	7.843		R = -0.350	0.546	89°22'33.39"
CT	9.943	2205.532	7003.796	7.847	240°59'55.12"			
	10.000	2205.482	7003.769	7.849	240°59'55.12"			
TC	11.043	2204.570	7003.263	7.849	240°59'55.12"			
IP 8	11.320	2204.260	7003.092	7.847		R = -0.350	0.554	90°37'27.43"
CT	11.597	2204.435	7002.784		150°22'27.69"			

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the
conditions of approval as detailed in the
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Scheme, Local Laws and Planning Policies

SCALE IN METRES



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

Scale at A1: 1:100

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No: 5941 ENG OPW1 480 Rev. No: B



FRASERS
PROPERTY

FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

VANTAGE YATALA

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

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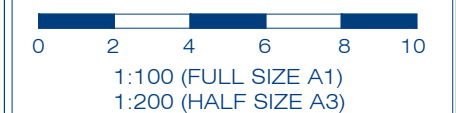
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DRAWING TITLE

KARB ISLAND SETOUT
DETAILS SHEET 2 OF 2

B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG
A	01-05-2020	ORIGINAL ISSUE	BA	MG
ISSUE	Date	Description	DRN	CHK

SCALE IN METRES



Scale at A1:	1:100
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Date:	01-05-2020

Drawing No:	Rev. No:
5941 ENG OPW1 481	B

KERB ISLAND KI-7 SETOUT TABLE								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	2656.491	6786.542	18.096				
IP 2	0.455	2656.488	6787.185	18.085		R = -0.500	0.910	104°17'11.26"
CC	0.910	2655.865	6787.023	18.083	255°26'26.86"			
IP 3	2.565	2654.257	6786.606	18.103		R = -15.160	3.310	12°30'39.87"
CC	4.220	2652.777	6785.849	18.126	242°55'46.99"			
	5.000	2652.249	6785.296	18.144	204°25'22.87"			
IP 4	5.013	2651.936	6785.419	18.144		R = -1.160	1.586	78°20'44.22"
CC	5.807	2652.187	6784.508	18.143	164°35'02.77"			
IP 5	6.600	2652.438	6783.597	18.124		R = -1.160	1.586	78°20'44.22"
IP 6	7.393	2653.381	6783.659	18.112				
IP 7	8.734	2654.712	6783.834	18.103		R = 71.159	2.683	2°09'37.25"
	10.000	2655.972	6783.951	18.095	84°36'47.61"			
CC	10.076	2656.047	6783.958	18.095	84°40'27.35"			
IP 8	10.446	2656.503	6784.001	18.096		R = -0.500	0.741	84°56'49.24"
CT	10.817	2656.501	6784.459	18.102	359°43'38.11"			

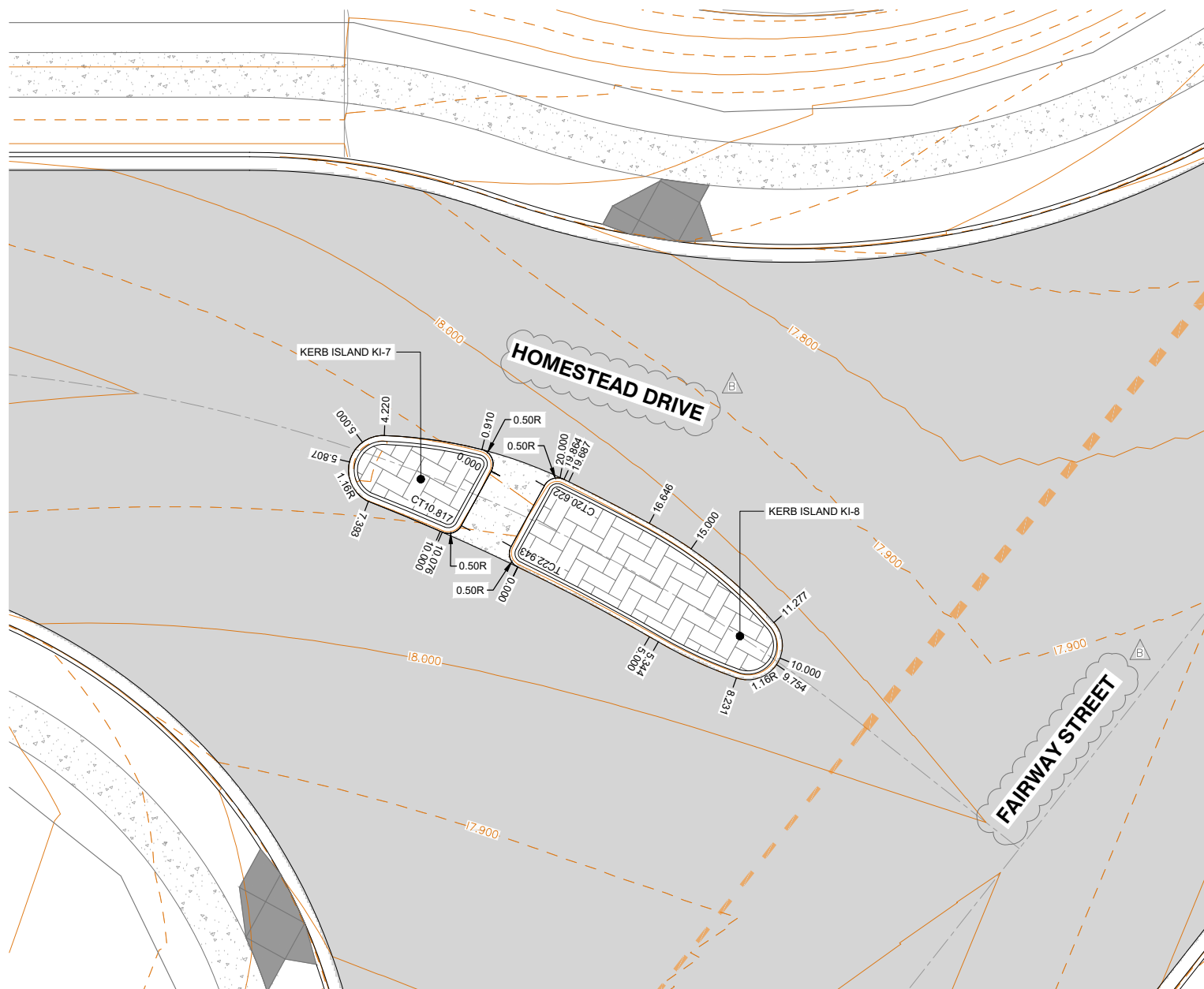
KERB ISLAND KI-8 SETOUT TABLE								
PT	CHAINAGE	EASTING	NORTHING	HEIGHT	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	2658.827	6784.163	18.078				
IP 2	2.672	2661.497	6784.306	18.062		R = 71.159	5.344	4°18'11.74"
	5.000	2663.825	6784.256	18.049	90°56'39.67"			
CC	5.344	2664.169	6784.249	18.047	91°13'18.18"			
IP 3	6.788	2665.617	6784.219	18.041		R = -15.160	2.886	10°54'30.50"
CC	8.231	2667.044	6784.462	18.038	80°18'47.68"			
IP 4	8.992	2667.924	6784.612	18.041		R = -1.160	1.523	75°13'12.90"
CC	9.754	2668.004	6785.503	18.053	5°05'34.78"			
	10.000	2668.000	6785.748	18.050	352°55'32.54"			
IP 5	10.515	2668.083	6786.393	18.038		R = -1.160	1.523	75°13'12.90"
IP 6	11.277	2667.243	6786.696	18.028				
IP 7	13.961	2664.688	6787.611	18.029		R = -15.160	5.370	20°17'38.99"
	15.000	2663.619	6787.510	18.031	275°37'17.11"			
IP 8	16.646	2661.975	6787.582	18.039				
IP 9	18.167	2660.454	6787.566	18.048		R = -79.156	3.041	2°12'04.85"
CC	19.687	2658.935	6787.492	18.057	267°11'54.77"			
IP 10	19.776	2658.847	6787.488	18.058		R = -15.160	0.177	0°40'06.87"
CC	19.864	2658.759	6787.482	18.059	266°31'47.90"			
	20.000	2658.626	6787.456	18.060	250°58'38.61"			
IP 11	20.243	2658.287	6787.454	18.065		R = -0.500	0.757	86°48'09.79"
CT	20.622	2658.289	6786.981	18.076	179°43'38.11"			
TC	22.943	2658.300	6784.660	18.092	179°43'38.11"			
IP 12	23.348	2658.303	6784.134	18.083		R = -0.500	0.810	92°48'31.67"

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



KERB ISLAND KI-7 & KI-8 LAYOUT PLAN

KERB ISLAND SETOUT DETAILS SHEET 2 OF 2



Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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RPD:

Lot: 501
Plan: SP295994
Local Authority: CITY OF GOLD COAST
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DRAWING TITLE

ROAD INTERSECTION
DETAILS SHEET 1 OF 8

Issue	Date	Description	BA	MG	DRN	CHK
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG		
A	01-05-2020	ORIGINAL ISSUE	BA	MG		

SCALE IN METRES



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

Scale at A1: 1:100

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No: 5941 ENG OPW1 490 Rev. No: B



KERB RAMP IA SETOUT TABLE			
POINT	EASTING	NORTHING	DESCRIPTION
1	2198.467	6998.737	BACK OF KERB
2	2197.954	6998.453	RAMP
3	2196.092	6998.564	RAMP
4	2195.221	7000.139	RAMP
5	1064.222	7001.595	BACK OF KERB
6	2196.597	7000.901	INVERT OF KERB
7	2197.908	6999.570	INVERT OF KERB

KERB RAMP IB SETOUT TABLE			
POINT	EASTING	NORTHING	DESCRIPTION
1	2211.426	7010.666	BACK OF KERB
2	2213.261	7010.139	RAMP
3	2214.134	7008.565	RAMP
4	2213.608	7006.730	BACK OF KERB
5	2212.822	7007.838	INVERT OF KERB
6	2211.949	7009.412	INVERT OF KERB

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2020/633

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HOMESTEAD DRIVE WIDEN LHS KERB SETOUT TABLE							
POINT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	2391.838	6679.982	151°00'47.03"			
	5.000	2394.682	6675.879	139°31'51.40"			
	10.000	2398.285	6672.425	128°02'55.76"			
	15.000	2402.504	6669.757	116°34'00.13"			
IP 2	19.596	2403.929	6658.157		R = -24.950	39.191	90°00'00.03"
	20.000	2407.170	6667.982	105°05'04.50"			
	25.000	2412.095	6667.172	93°36'08.87"			
	30.000	2417.083	6667.358	82°07'13.23"			
	35.000	2421.934	6668.534	70°38'17.60"			
IP 3	39.191	2425.754	6670.248	61°00'47.00"			

HOMESTEAD DRIVE WIDEN RHS KERB SETOUT TABLE							
POINT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	2383.529	6667.947	151°00'47.03"			
	5.000	2385.952	6663.574	151°00'47.03"			
	10.000	2388.375	6659.200	151°00'47.03"			
IP 2	11.000	2388.860	6658.325				
	15.000	2391.126	6655.037	139°51'38.18"			
	20.000	2394.780	6651.642	125°55'12.10"			
	25.000	2399.144	6649.228	111°58'46.01"			
IP 3	27.140	2398.819	6640.350		R = -20.550	32.280	89°59'59.29"
	30.000	2403.962	6647.936	98°02'19.93"			
	35.000	2408.949	6647.843	84°05'53.85"			
	40.000	2413.811	6648.954	70°09'27.76"			
CT	43.280	2416.794	6650.308	61°00'47.00"			
	45.000	2418.299	6651.142	61°00'47.00"			
	50.000	2422.673	6653.565	61°00'47.00"			
IP 4	54.280	2426.416	6655.639	61°00'47.00"			

KERB RAMP 2A SETOUT TABLE			
POINT	EASTING	NORTHING	DESCRIPTION
1	2425.463	6670.773	BACK OF KERB
2	2425.990	6672.608	RAMP
3	2427.302	6673.335	RAMP
4	2429.136	6672.808	RAMP
5	2428.029	6672.023	INVERT OF KERB
6	2426.716	6671.296	INVERT OF KERB

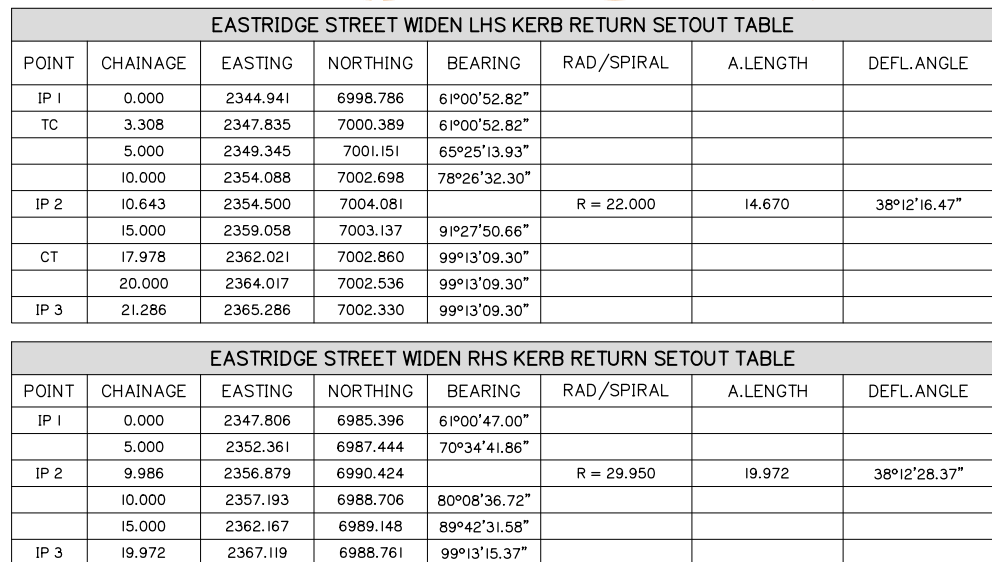
KERB RAMP 2B SETOUT TABLE			
POINT	EASTING	NORTHING	DESCRIPTION
1	2436.067	6660.300	BACK OF KERB
2	2435.540	6658.464	RAMP
3	2434.228	6657.738	RAMP
4	2432.393	6658.264	RAMP
5	2433.501	6659.050	INVERT OF KERB
6	2434.813	6659.777	INVERT OF KERB

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

ROAD INTERSECTION DETAILS SHEET 2 OF 8



Drawing No:	Rev. No:
5941 ENG OPW1 493	B



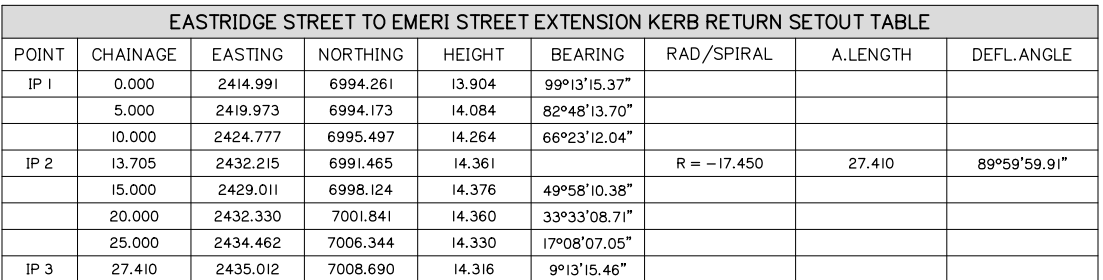
PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

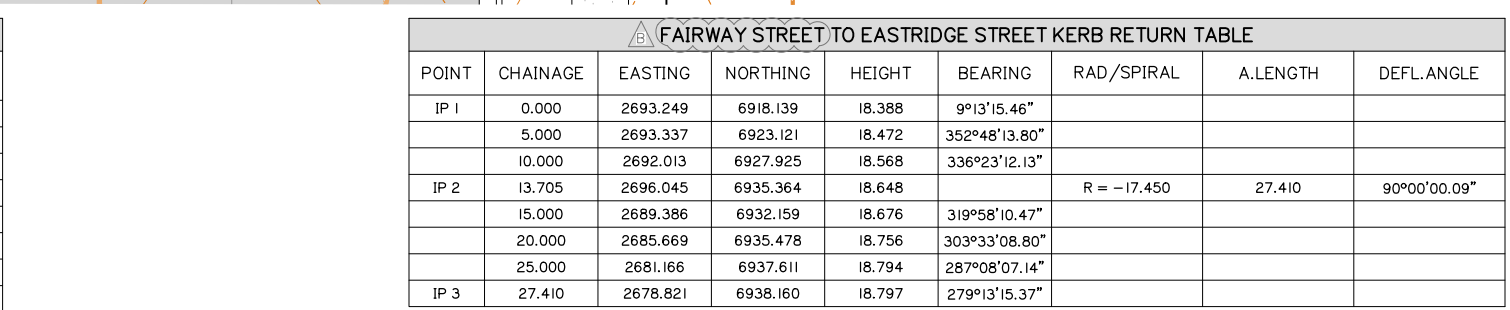
Application No: OPW/2020/633

Dated: 20 July 2020

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Drawing No:	Rev. No:
5941 ENG OPW1 494	A





PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

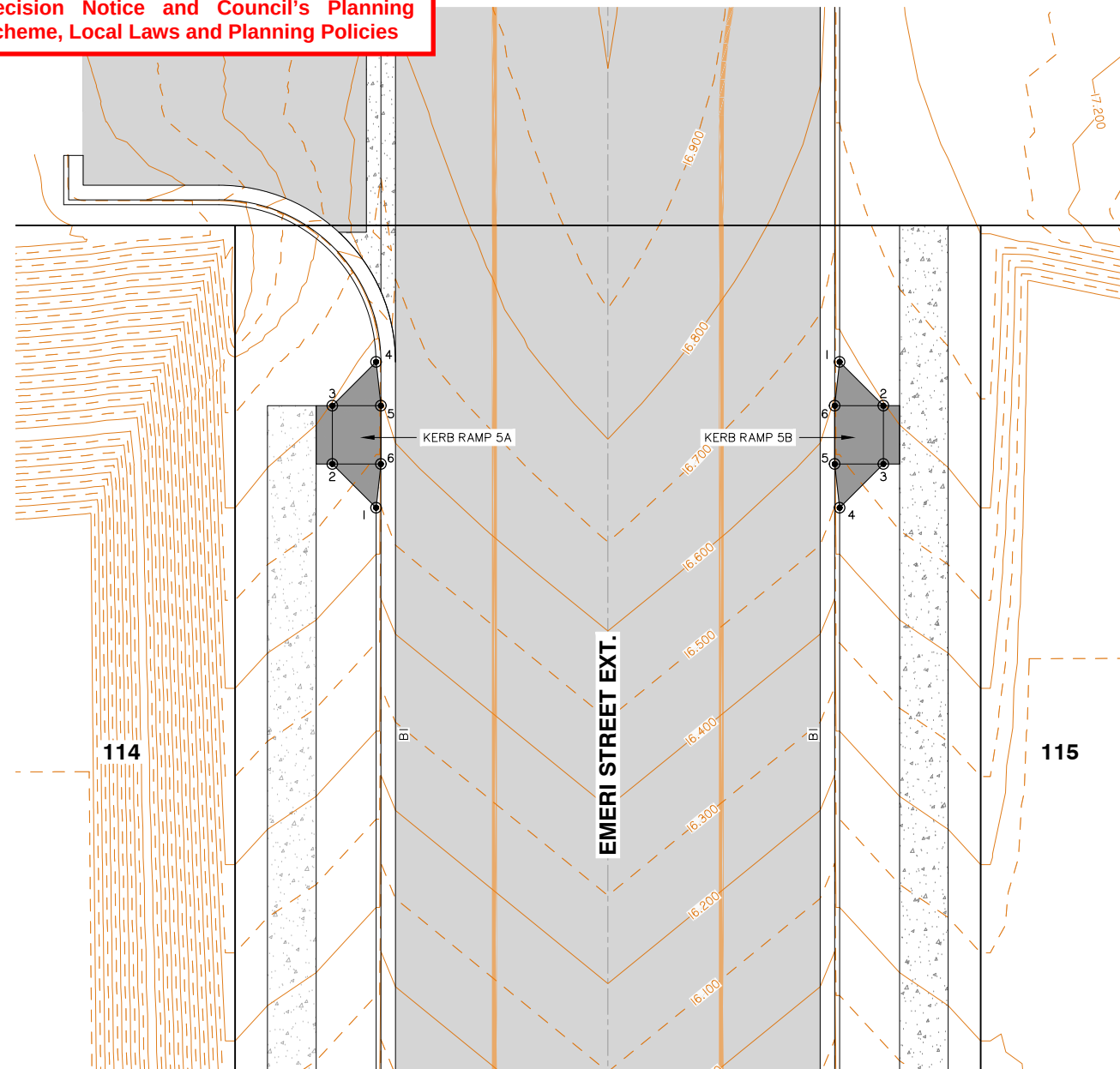
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Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies

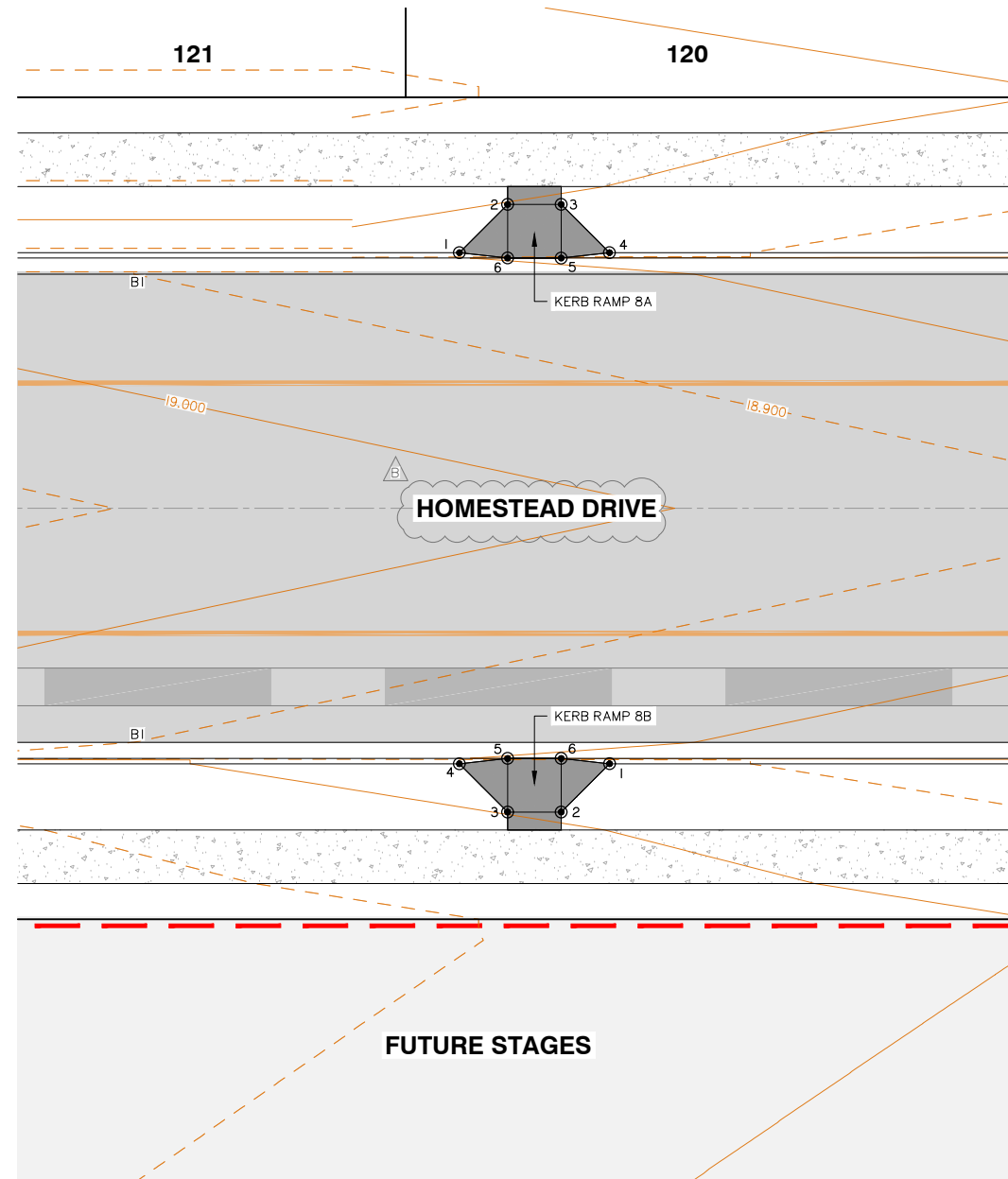
Dated: 20 July 2020

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



KERB RAMP 5A SETOUT TABLE			
POINT	EASTING	NORTHING	DESCRIPTION
1	2445.442	7076.685	BACK OF KERB
2	2444.326	7078.234	RAMP
3	2444.614	7080.011	RAMP
4	2446.163	7081.127	RAMP
5	2446.095	7079.770	INVERT OF KERB
6	2445.806	7077.992	INVERT OF KERB

KERB RAMP 5B SETOUT TABLE			
POINT	EASTING	NORTHING	DESCRIPTION
1	2460.278	7078.835	BACK OF KERB
2	2461.395	7077.287	RAMP
3	2461.106	7075.510	RAMP
4	2459.557	7074.394	RAMP
5	2459.625	7075.749	INVERT OF KERB
6	2459.914	7077.527	INVERT OF KERB



KERB RAMP 8A SETOUT TABLE			
POINT	EASTING	NORTHING	DESCRIPTION
1	2525.619	6726.261	BACK OF KERB
2	2526.146	6728.096	RAMP
3	2527.458	6728.823	RAMP
4	2529.293	6728.296	RAMP
5	2528.185	6727.511	INVERT OF KERB
6	2526.873	6726.784	INVERT OF KERB

KERB RAMP 8B SETOUT TABLE			
POINT	EASTING	NORTHING	DESCRIPTION
1	2536.224	6715.791	BACK OF KERB
2	2535.697	6713.952	RAMP
3	2534.385	6713.220	RAMP
4	2532.549	6713.752	RAMP
5	2533.658	6714.538	INVERT OF KERB
6	2534.970	6715.264	INVERT OF KERB



Client:



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Project:

VANTAGE YATALA

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:	-

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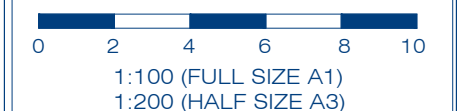
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DRAWING TITLE

ROAD INTERSECTION
DETAILS SHEET 8 OF 8

B	12-06-2020	INFORMATION REQUEST RESPONSE		BA	MG
A	01-05-2020	ORIGINAL ISSUE		BA	MG
Issue	Date	Description		DRN	CHK

SCALE IN METRES



Scale at A1:	1:100
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Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:	Rev. No:
5941 ENG OPW1 497	B

g:\Projects\5941\engineering\Acad\civil works stage 1\Current\5941 ENG OPW1 500.dwg



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Client:					
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Project:					
VANTAGE YATALA					
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			
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DRAWING TITLE					
STORMWATER DRAINAGE CATCHMENT PLAN					
B	12-06-2020	INFORMATION REQUEST RESPONSE		BA	MG
A	01-05-2020	ORIGINAL ISSUE		BA	MG
Issue	Date	Description		DfN	CHK
SCALE IN METRES					
0 30 60 90 120 150					
1:1500 (FULL SIZE A1)					
1:3000 (HALF SIZE A3)					
Scale at A1:		1:1500			
Designed:		IG			
Drafted:		BA			
Approved:		MG			
RPEQ:		16939			
Signed:					
Date:		01-05-2020			
Drawing No:				Rev. No:	
5941 ENG OPW1 500				B	

Project: 59411engineering\Acad\civil works stage 1\Curent\59411_ENG_CRM\1_510.dwg



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VANTAGE YATALA

50 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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DRAWING TITLE
STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 1 OF 18

B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	M
A	01-05-2020	ORIGINAL ISSUE	BA	M
Issue	Date	Description	DRN	Ch

HORZ: 

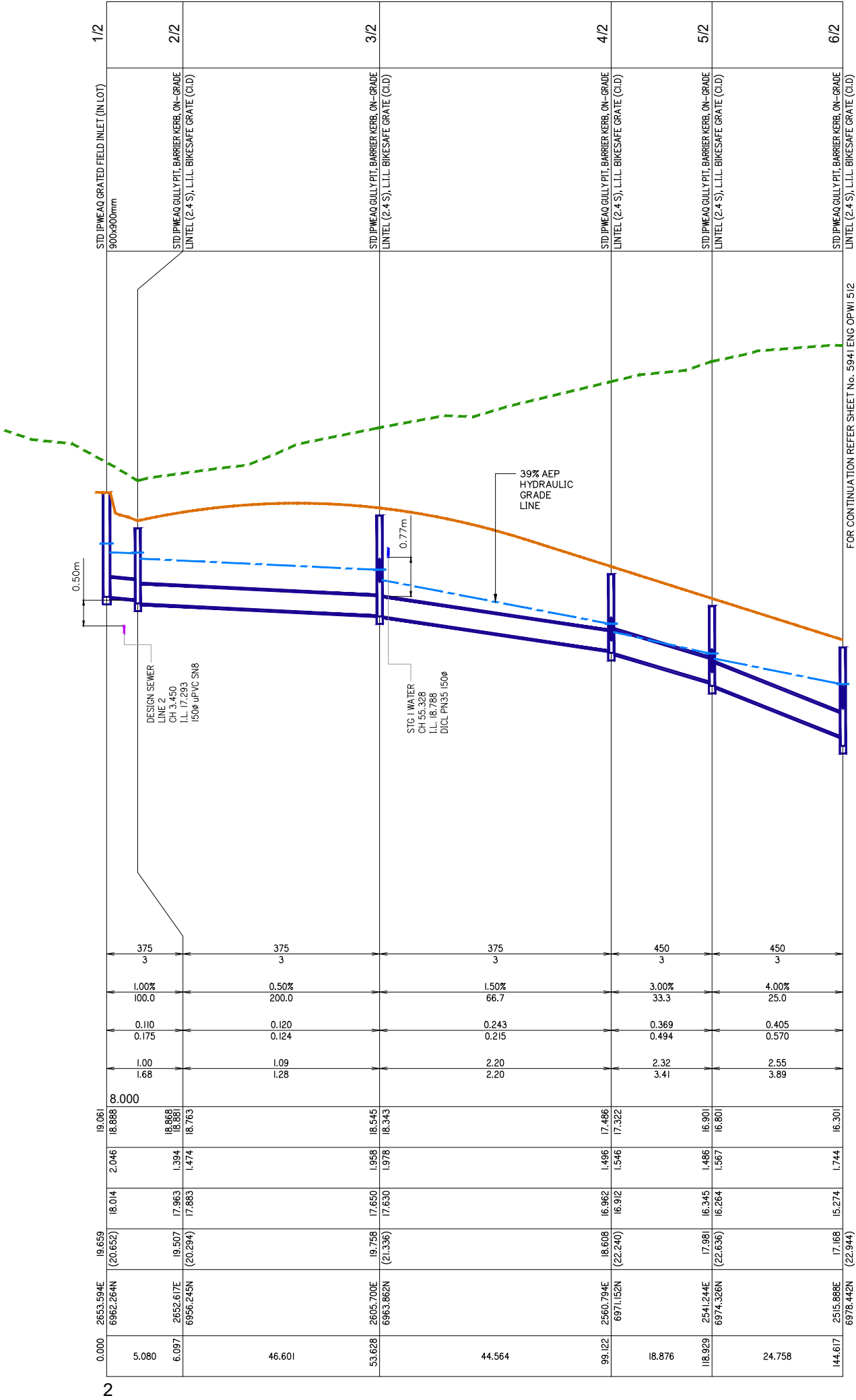
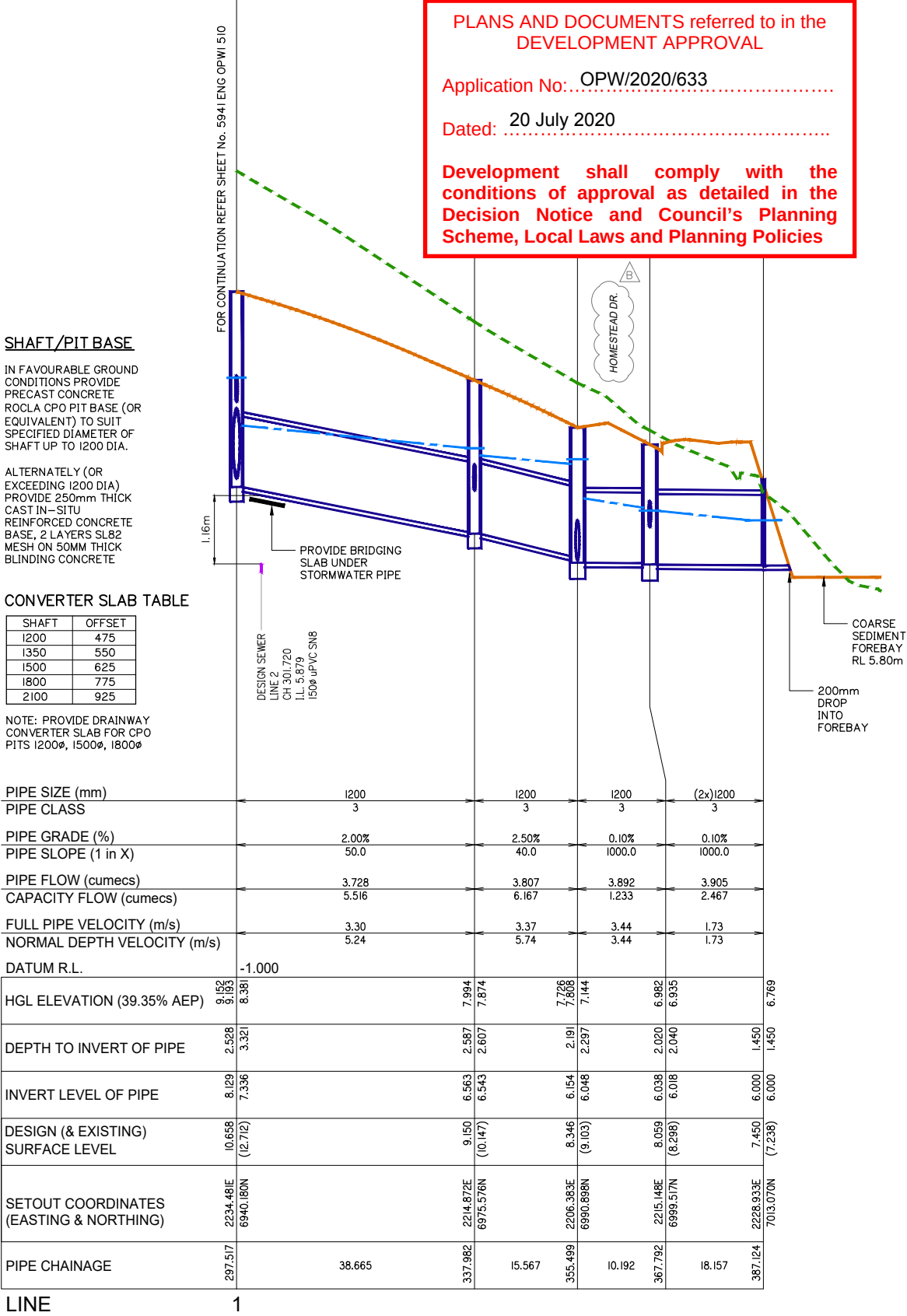
VERT: 

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:	Rev. No:
5941 ENG OPW1 510	B

STRUCTURE NAME	9/1					
STRUCTURE DESCRIPTION	STD IPWEAQ ACCESS CHAMBER 1800mm DIA	STD IPWEAQ ACCESS CHAMBER 1800mm DIA	STD IPWEAQ ACCESS CHAMBER 2100mm DIA	OVERSIZE CHAMBER CAST-IN-SITU 3566x1800mm - REFER DETAIL PLAN	1200mm DIA DUAL OUTLET HEADWALL DISCHARGE TO COARSE SEDIMENT FOREBAY REFER DETAIL PLAN	13/1



375	375	375	450	450
3	3	3	3	3
1.00%	0.50%	1.50%	3.00%	4.00%
100.0	200.0	66.7	33.3	25.0
0.110	0.120	0.243	0.369	0.405
0.175	0.124	0.215	0.494	0.570
1.00	1.09	2.20	2.32	2.55
1.68	1.28	2.20	3.41	3.89
8.000				
19.061	18.888	18.888	17.486	16.301
2.046	1.394	1.958	1.496	1.744
18.014	17.963	17.650	16.962	15.274
19.659	19.507	19.758	18.608	17.68
(20.652)	(20.294)	(21.336)	(22.240)	(22.944)
2653.594E	2652.617E	2605.700E	2560.794E	2515.888E
6962.264N	6956.245N	6963.862N	6971.052N	6974.326N
5.080	6.097	46.601	44.564	24.758
99.122	118.929	18.876	18.876	144.617



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Client:



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Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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DRAWING TITLE

STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 2 OF 18

B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG
A	01-05-2020	ORIGINAL ISSUE	BA	MG
ISSUE	Date	Description	DRN	CHK

SCALE IN METRES

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

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

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:
5941 ENG OPW1 511

Rev. No:
B

STRUCTURE NAME	1/3
STRUCTURE DESCRIPTION	STD IPWEAQ GRATED FIELD INLET (IN LOT) 1200x1200mm
STRUCTURE NAME	2/3
STRUCTURE DESCRIPTION	STD IPWEAQ ACCESS CHAMBER 1050mm DIA
STRUCTURE NAME	3/3
STRUCTURE DESCRIPTION	STD IPWEAQ GRATED FIELD INLET (IN LOT) 1200x1200mm
STRUCTURE NAME	4/3
STRUCTURE DESCRIPTION	DRAINWAY SYSTEM ON GRADE, L.I.L. 2.4m KERB INLET, GLASS (D) HINGED BIKESAFE GALV. GRATE ON TOP OF ROCLA (OR EQUIV.) CP-0 PIT SYSTEM CIRCULAR CHAMBER
STRUCTURE NAME	11/2
STRUCTURE DESCRIPTION	STD IPWEAQ ACCESS CHAMBER

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

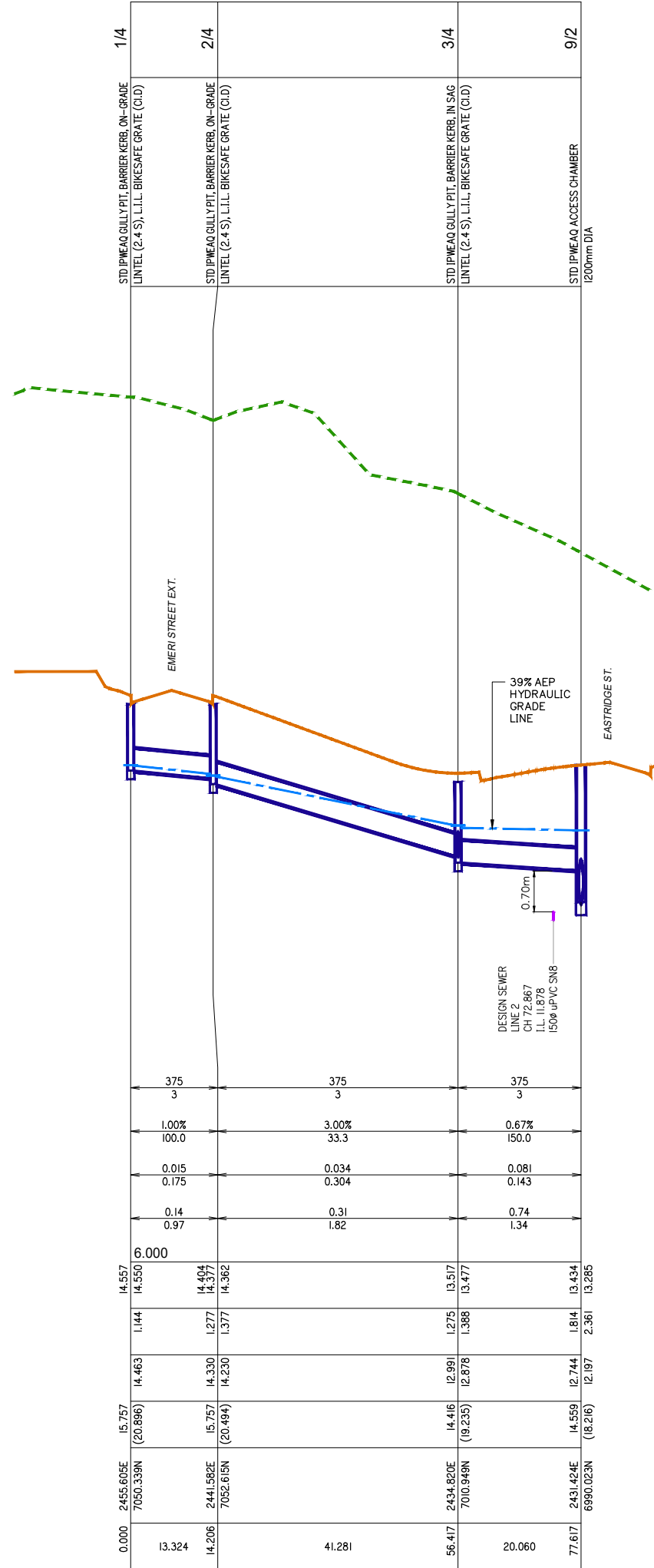
ALTERNATELY (OR
EXCEEDING 1200 DIA)
PROVIDE 250mm THICK
CAST IN-SITU
REINFORCED CONCRETE
BASE, 2 LAYERS SL82
MESH ON 50MM THICK
BLINDING CONCRETE

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

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

PIPE SIZE (mm)		525	525	825	900
PIPE CLASS		3	3	3	3
PIPE GRADE (%)		0.40%	5.02%	2.00%	1.50%
PIPE SLOPE (1 in X)		250.0	19.9	50.0	66.7
PIPE FLOW (cumecs)		0.559	0.547	0.874	0.913
CAPACITY FLOW (cumecs)		0.272	0.964	2.031	2.218
FULL PIPE VELOCITY (m/s)		2.58	2.53	1.64	1.44
NORMAL DEPTH VELOCITY (m/s)		2.58	4.59	3.66	3.32
DATUM R.L.	4.000				
HGL ELEVATION (39.35% AEP)	16.054 15.328		13.744 13.679	12.490 12.444	12.420 12.361
DEPTH TO INVERT OF PIPE	3.000		2.974 3.000	2.042 2.342	2.042 2.184
INVERT LEVEL OF PIPE	13.600		13.225 13.199	11.220 10.920	10.706 10.654
DESIGN (& EXISTING) SURFACE LEVEL	16.600 (17.771)		16.199 (15.405)	13.262 (13.599)	12.988 (13.379)
SETOUT COORDINATES (EASTING & NORTHING)	2447.716E 6866.110N	2401.660E 6944.233N	2381.944E 6979.820N	2378.839E 6986.238N	2380.779E
PIPE CHAINAGE	0.000	93.762	95.037	135.721	155.096

LINE 3



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

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DRAWING TITLE
STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 4 OF 18

A	01-05-2020	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	DRN	CHK

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

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

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:	Rev. No:
5941 ENG OPW1 513	A

STRUCTURE NAME	1/6	2/6	3/6	4/6	5/6	6/6	13/X2
STRUCTURE DESCRIPTION	STD IPWEAQ GULLY PIT, BARRIER KERB, ON-GRADE LINTEL (2.4 S), L.I.L. BIKESAFE GRATE (C/D)	STD IPWEAQ GULLY PIT, BARRIER KERB, ON-GRADE LINTEL (2.4 S), L.I.L. BIKESAFE GRATE (C/D)	STD IPWEAQ GULLY PIT, BARRIER KERB, ON-GRADE LINTEL (2.4 S), L.I.L. BIKESAFE GRATE (C/D)	STD IPWEAQ ACCESS CHAMBER 1050mm DIA	STD IPWEAQ GULLY PIT, BARRIER KERB, ON-GRADE LINTEL (2.4 S), L.I.L. BIKESAFE GRATE (C/D)	STD IPWEAQ GULLY PIT, BARRIER KERB, ON-GRADE LINTEL (2.4 S), L.I.L. BIKESAFE GRATE (C/D)	STD IPWEAQ ACCESS CHAMBER 2100mm DIA

SHAFT/PIT BASE

IN FAVOURABLE GROUND CONDITIONS PROVIDE PRECAST CONCRETE ROCLA CPO 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

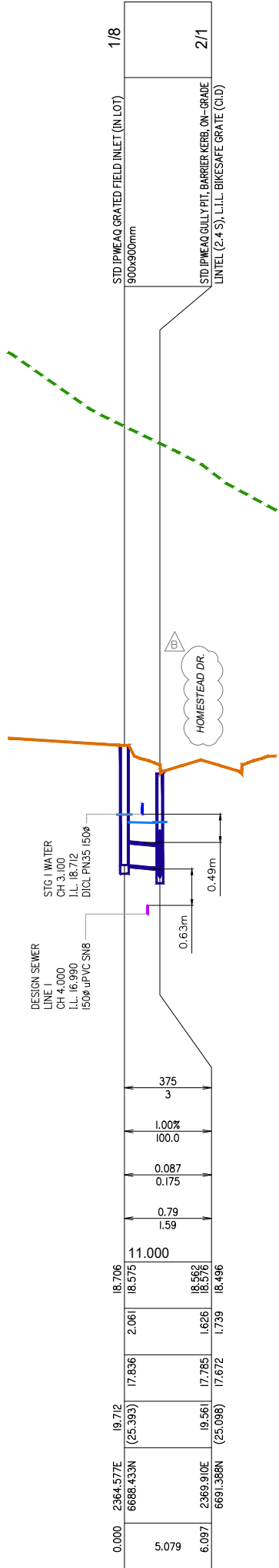
CONVERTER SLAB TABLE

SHAFT	OFFSET
I200	475
I350	550
I500	625
I800	775
I1000	925

NOTE: PROVIDE DRAINWAY CONVERTER SLAB FOR CPO PITS I200Ø, I500Ø, I800Ø

PIPE SIZE (mm)	375	375	375	375	450	450
PIPE CLASS	3	3	3	3	3	3
PIPE GRADE (%)	1.00%	3.00%	4.00%	2.00%	1.25%	1.00%
PIPE SLOPE (1 in X)	100.0	33.3	25.0	50.0	80.0	100.0
PIPE FLOW (cumecs)	0.013	0.024	0.037	0.085	0.137	0.256
CAPACITY FLOW (cumecs)	0.175	0.304	0.351	0.248	0.319	0.285
FULL PIPE VELOCITY (m/s)	0.12	0.22	0.34	0.77	0.86	1.61
NORMAL DEPTH VELOCITY (m/s)	0.94	1.64	2.06	2.03	1.93	2.03
DATUM R.L.	7.000					
HGL ELEVATION (39.35% AEP)	19.831 19.826	19.681 19.661		17.131 17.103	16.793 16.759	16.552 16.430
DEPTH TO INVERT OF PIPE	1.059	1.192 1.252	1.305 1.325	1.809 1.959	1.786 1.806	1.906 1.966
INVERT LEVEL OF PIPE	19.744	19.611 19.551	18.338 18.318	17.040 16.890	16.520 16.500	15.933 15.853
DESIGN (& EXISTING) SURFACE LEVEL	20.953 (22.656)	20.953 (22.862)	19.793 (21.145)	18.850 (19.219)	18.456 (18.044)	17.989 (15.071)
SETOUT COORDINATES (EASTING & NORTHING)	2721.334E 7005.936N	2707.31E 7008.213N	2700.682E 6967.381N	2695.404E 6934.866N	2692.288E 6915.960N	2684.863E 6869.937N
PIPE CHAINAGE	0.000 13.324 14.206		40.436	55.572 31.950	88.513 18.468 107.970	154.293 44.580

LINE 6



8

STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 5 OF 18



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Project:

VANTAGE YATALA

Site Address:

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ROAD, STAPYLTON QLD 4207

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RPD:

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Plan: SP295994
Local Authority: CITY OF GOLD COAST
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Level Datum: AHD
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DRAWING TITLE
STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 5 OF 18

Rev	Date	Description	By	Check
A	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG
B	01-05-2020	ORIGINAL ISSUE	BA	MG

SCALE IN METRES

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

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

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:
5941 ENG OPW1 514

Rev. No:
B

STRUCTURE NAME	1/10	
STRUCTURE DESCRIPTION	STD IPWEAQ GRATED FIELD INLET (IN LOT) 900x900mm	3/1 STD IPWEAQ GULLY PIT, BARRIER KERB, ON-GRADE LINTEL (2.4 S), L.L.L. BIKESAFE GRATE (C/D)

SHAFT/PIT BASE

IN FAVOURABLE GROUND CONDITIONS PROVIDE PRECAST CONCRETE ROCLA CPO 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
I200	475
I350	550
I500	625
I800	775
2100	925

NOTE: PROVIDE DRAINWAY CONVERTER SLAB FOR CPO PITS I200Ø, I500Ø, I800Ø

PIPE SIZE (mm)	375
PIPE CLASS	3
PIPE GRADE (%)	1.00%
PIPE SLOPE (1 in X)	100.0
PIPE FLOW (cumecs)	0.087
CAPACITY FLOW (cumecs)	0.175
FULL PIPE VELOCITY (m/s)	0.79
NORMAL DEPTH VELOCITY (m/s)	1.59
DATUM R.L.	11.000
HGL ELEVATION (39.35% AEP)	18.537 18.430
DEPTH TO INVERT OF PIPE	2.069
INVERT LEVEL OF PIPE	17.475
DESIGN (& EXISTING) SURFACE LEVEL	19.352 (24.965)
SETOUT COORDINATES (EASTING & NORTHING)	2344.967E 6723.830N
PIPE CHAINAGE	0.000 5.079

LINE 10

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No.: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

1/11	STD IPWEAQ GULLY PIT, BARRIER KERB, ON-GRADE LINTEL (2.4 S), L.L.L. BIKESAFE GRATE (C/D)	4/1 STD IPWEAQ GULLY PIT, BARRIER KERB, ON-GRADE LINTEL (2.4 S), L.L.L. BIKESAFE GRATE (C/D)
11	18.131 18.101 1.028 17.548 18.826 (22.603) 18.826 (23.370) 18.537 18.430 2.069 17.475 19.200 (24.965) 2344.967E 6723.830N 0.000 13.324	10.000 18.096 1.261 16.742 (23.370) 17.051 16.742 (23.370) 18.096 1.625 16.327 17.199 17.347 16.600 16.327 (22.849) 18.375 6797.576N 2311.081E 6797.576N 5.079 6.097

11

1/12	STD IPWEAQ GRATED FIELD INLET (IN LOT) 900x900mm	4/1 STD IPWEAQ GULLY PIT, BARRIER KERB, ON-GRADE LINTEL (2.4 S), L.L.L. BIKESAFE GRATE (C/D)
12	18.211 18.109 2.058 17.102 18.978 (23.737) 18.826 (23.370) 18.537 18.430 2.069 17.475 19.200 (24.965) 2344.967E 6723.830N 0.000 13.324	10.000 18.096 1.261 16.742 (23.370) 17.051 16.742 (23.370) 18.096 1.625 16.327 17.199 17.347 16.600 16.327 (22.849) 18.375 6797.576N 2311.081E 6797.576N 5.079 6.097

12

1/14	STD IPWEAQ GRATED FIELD INLET (IN LOT) 900x900mm	5/1 STD IPWEAQ GULLY PIT, BARRIER KERB, ON-GRADE LINTEL (2.4 S), L.L.L. BIKESAFE GRATE (C/D)
14	17.495 17.359 2.102 16.650 18.527 (23.132) 18.826 (23.370) 18.537 18.430 2.069 17.475 19.200 (24.965) 2344.967E 6723.830N 0.000 13.324	9.000 17.347 16.600 16.327 (22.849) 18.375 6797.576N 2311.081E 6797.576N 5.079 6.097

14

1/15	STD IPWEAQ GULLY PIT, BARRIER KERB, ON-GRADE LINTEL (2.4 S), L.L.L. BIKESAFE GRATE (C/D)	6/1 STD IPWEAQ GULLY PIT, BARRIER KERB, ON-GRADE LINTEL (2.4 S), L.L.L. BIKESAFE GRATE (C/D)
15	16.261 16.230 1.128 15.843 17.121 (21.007) 18.826 (23.370) 18.537 18.430 2.069 17.475 19.200 (24.965) 2344.967E 6723.830N 0.000 13.324	8.000 16.225 1.261 14.791 (14.791) 17.121 (21.007) 18.826 (23.370) 18.537 18.430 2.069 17.475 19.200 (24.965) 2344.967E 6723.830N 0.000 13.324

15



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Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

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: -

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ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 6 OF 18

B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG
A	01-05-2020	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES

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

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

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:
5941 ENG OPW1 515

Rev. No:
B

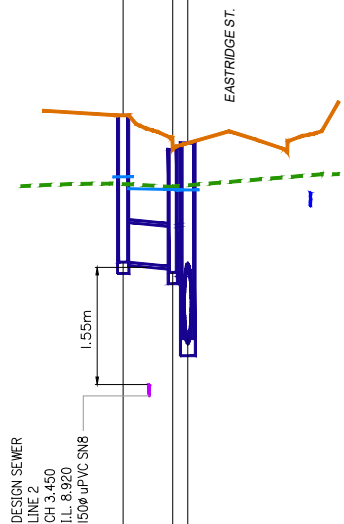
STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 6 OF 18





IN FAVOURABLE GROUND
CONDITIONS PROVIDE
PRECAST CONCRETE
ROCLA CPO 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



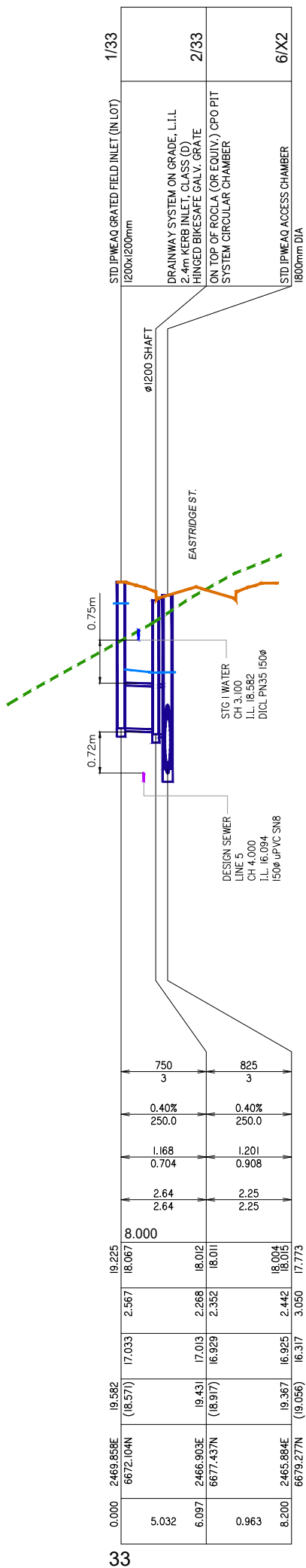
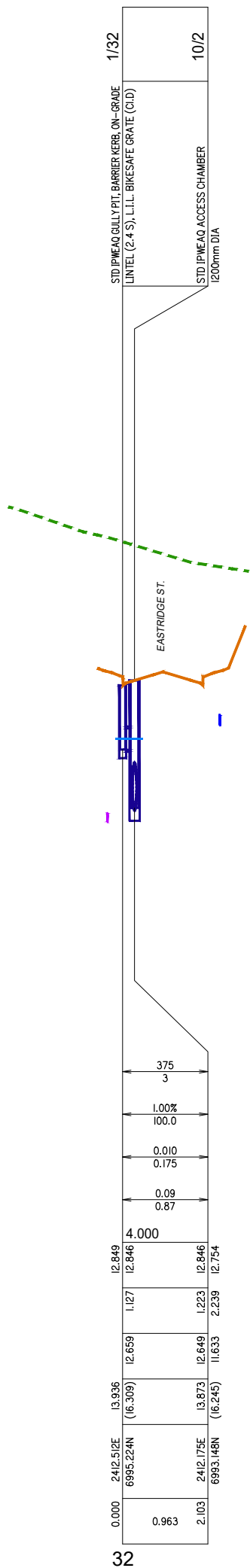
CONVERTER SLAB TABLE

SHAFT	OFFSET
I200	475
I350	550
I500	625
I800	775
I100	925

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

PIPE SIZE (mm)		525	600
PIPE CLASS		3	3
PIPE GRADE (%)		1.00%	1.00%
PIPE SLOPE (1 in X)		100.0	100.0
PIPE FLOW (cumecs)		0.179	0.197
CAPACITY FLOW (cumecs)		0.430	0.614
FULL PIPE VELOCITY (m/s)		0.83	0.70
NORMAL DEPTH VELOCITY (m/s)		1.90	1.93
DATUM R.L.		0.000	
HGL ELEVATION (39.35% AEP)	11.818 11.661	11.651 11.645	11.645 11.352
DEPTH TO INVERT OF PIPE	1.941	1.545 1.625	1.717 2.587
INVERT LEVEL OF PIPE	10.690	10.635 10.555	10.547 9.677
DESIGN (& EXISTING) SURFACE LEVEL	12.554 (11.721)	12.181 (11.690)	12.265 (11.706)
SETOUT COORDINATES (EASTING & NORTHING)	2359.11E 7010.070N	2358.194E 7003.588N	2358.166E 7001.592N
PIPE CHAINAGE	0.000	5.497 6.562	0.781 8.558

LINE 31

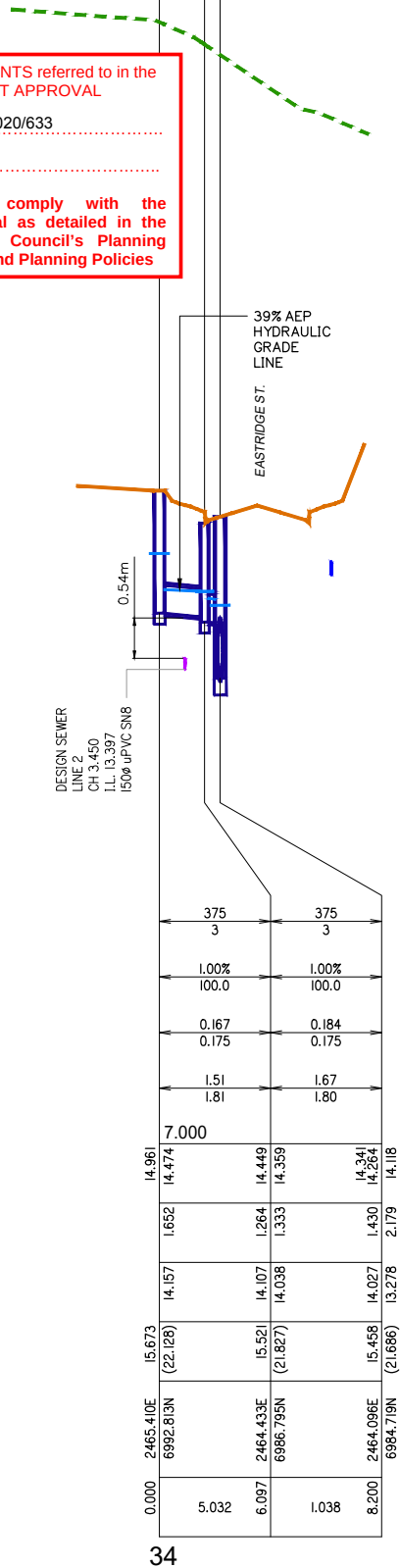


**PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL**

Application No: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



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Plan: SP295994
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COUNCIL

Level Datum: AHD
Meridian: -
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DRAWING TITLE
STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 10 OF 18

A	01-05-2020	ORIGINAL ISSUE	BA	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:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:
5941 ENG OPW1 519

Rev. No:
A

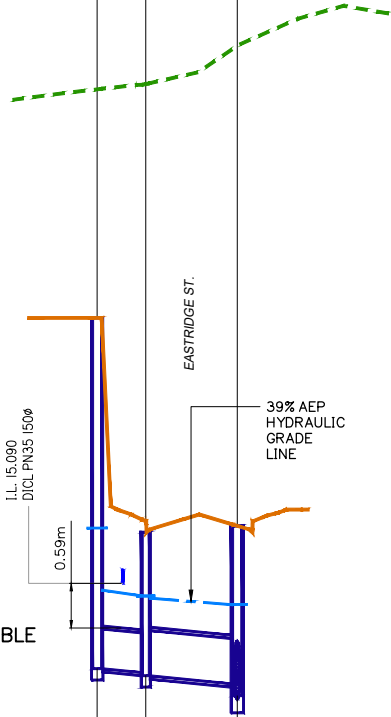
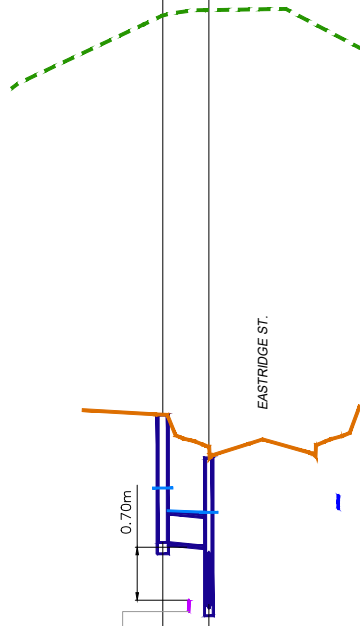
SHAFT/PIT BASE

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 CPO
PITS 1200 ϕ , 1500 ϕ , 1800 ϕ

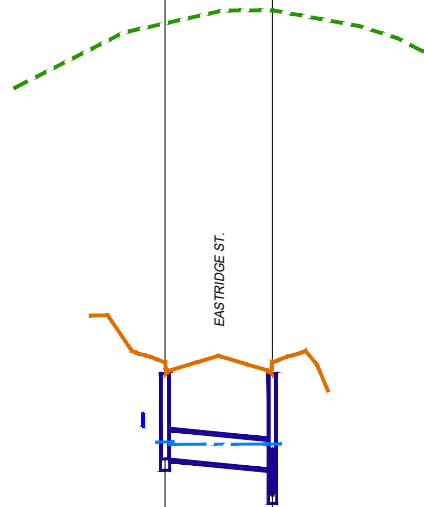
LINE36

**PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL**

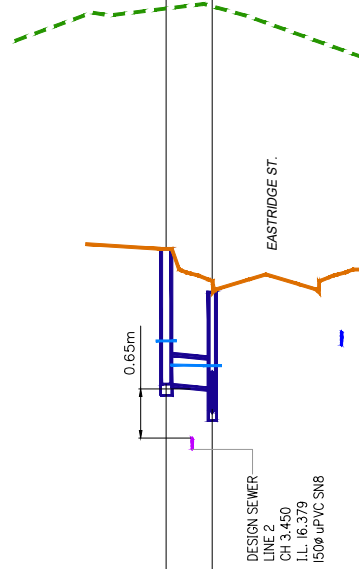
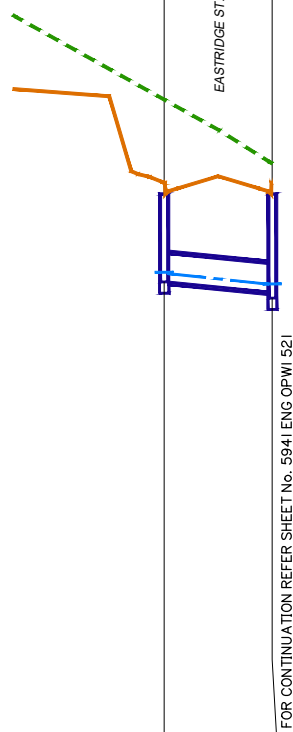
Application No: OPW/2020/633

Dated: 20 July 2020

**Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies**

38

39

40

Project:

VANTAGE YATALA

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:	-

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DRAWING TITLE
STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 11 OF 18

A	01-05-2020		ORIGINAL ISSUE	BA
ISSUE	Date		Description	DRN

SCALE IN METRES

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



A horizontal scale bar with a black bar and white markings. The scale is labeled from 0 to 4 with major ticks every 5 units (0, 5, 10, 15, 20, 25, 30, 35, 40). The text 'Scale 1:500 - Lengths are in Metres.' is written above the bar.

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



A vertical scale bar with a black bar and white markings. The scale is labeled from 0 to 4 with major ticks every 0.5 units (0, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0). The text 'Scale 1:50 - Lengths are in Metres.' is written above the bar.

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:	Rev. No:
5941 ENG OPW1 520	A

STRUCTURE NAME	2/40	4/6
STRUCTURE DESCRIPTION	STD IPWEAQ GULLY P/T, BARRIER KERB, ON-GRADE INTEL (2.4 S), L.I.L. BIKESAFE GRATE (GLO)	STD IPWEAQ ACCESS CHAMBER

SHAFT/PIT BASE

IN FAVOURABLE GROUND
CONDITIONS PROVIDE
PRECAST CONCRETE
ROCLA CPO 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

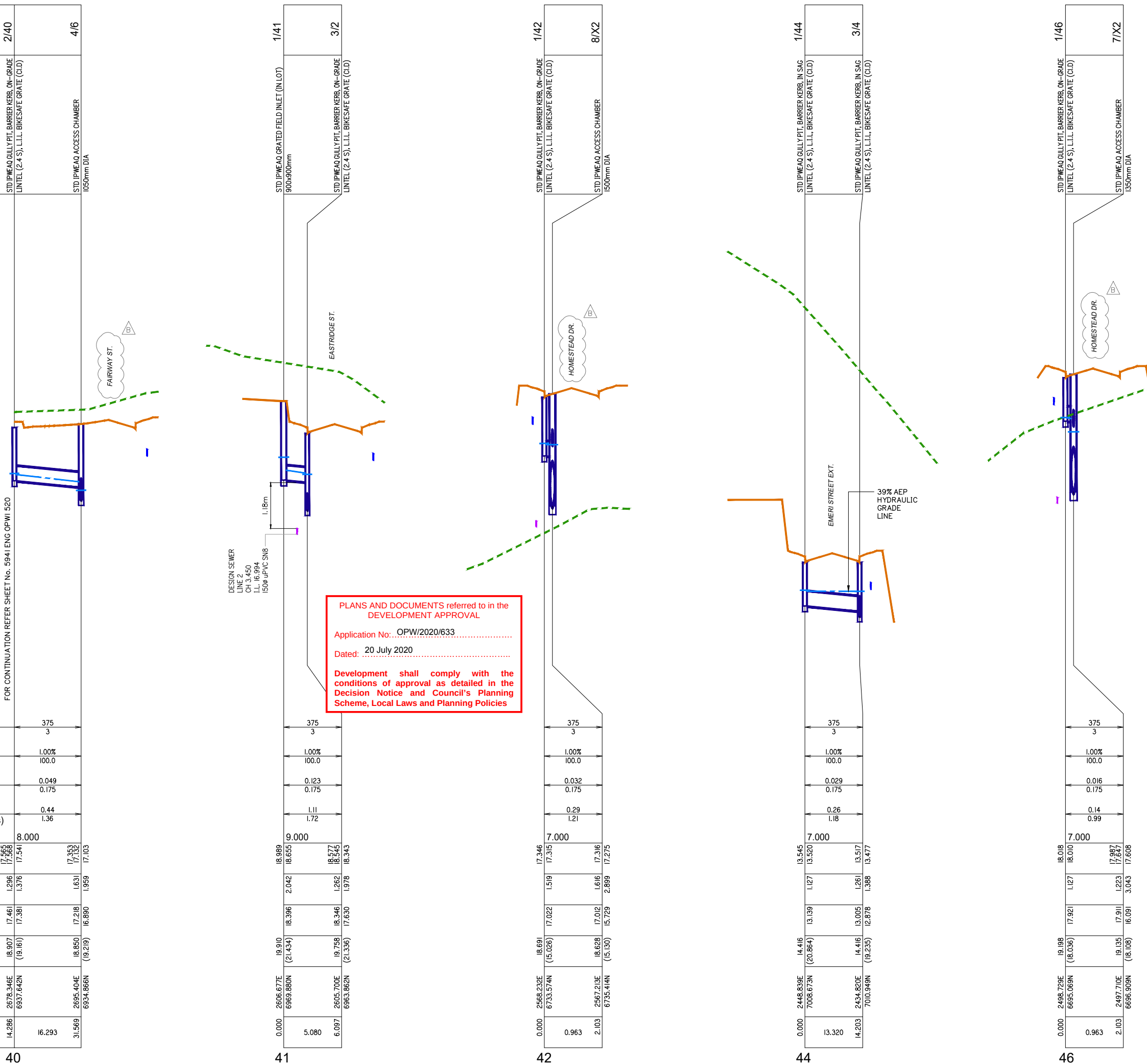
CONVERTER SLAB TABLE

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

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

PIPE SIZE (mm)		375
PIPE CLASS		3
PIPE GRADE (%)		1.00%
PIPE SLOPE (1 in X)		100.0
PIPE FLOW (cumecs)		0.049
CAPACITY FLOW (cumecs)		0.175
FULL PIPE VELOCITY (m/s)		0.44
NORMAL DEPTH VELOCITY (m/s)		1.36
DATUM R.L.		8.000
HGL ELEVATION (39.35% AEP)	17.565 17.558	17.541 17.353 17.132
DEPTH TO INVERT OF PIPE	1.296 1.376	1.631
INVERT LEVEL OF PIPE	17.461 17.381	17.218
DESIGN (& EXISTING) SURFACE LEVEL	18.907 (9.161)	18.950
SETOUT COORDINATES (EASTING & NORTHING)	2676.346E 6937.642N	2695.404E
PIPE CHAINAGE	14.286	16.293 31.569

LINE 40



Client



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(AUSTRALIA) PTY. LTD.

Project

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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RPD

Lot: 501
Plan: SP295994
Local Authority: CITY OF GOLD COAST
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Level Datum: AHD
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DRAWING TITLE
STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 12 OF 18

B	12-06-2020	INFORMATION REQUEST RESPONSE		BA	MC
A	01-05-2020	ORIGINAL ISSUE		BA	MC
Issue	Date	Description		DRN	CHI

SCALE IN METRES

Scale 1:500 - Lengths are in Metres

HORZ:

Scale 1:50 - Lengths are in Metres.

VERT:

Scale at A1: AS SHOWN

Designed:	IG
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Drafted:	BA
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Approved:	MG
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RPEQ:	16039
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Signed:	
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Date:	01-05-2020
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Drawing No:
5941 ENG OPW1 521

Rev. No:
B

STRUCTURE NAME	1/72	7/X2
STRUCTURE DESCRIPTION	STD IPWEAQ GULLY PIT, BARRIER KERB, ON- GRADE LINTEL (2.4 S), L.L.L. BIKESAFE GRATE (C/D)	STD IPWEAQ ACCESS CHAMBER 1500mm DIA

SHAFT/PIT BASE

IN FAVOURABLE GROUND CONDITIONS PROVIDE PRECAST CONCRETE ROCLA CPO 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
I200	475
I350	550
I500	625
I800	775
2100	925

NOTE: PROVIDE DRAINWAY CONVERTER SLAB FOR CPO PITS I200Ø, I500Ø, I800Ø

PIPE SIZE (mm)	375
PIPE CLASS	3
PIPE GRADE (%)	1.00%
PIPE SLOPE (1 in X)	100.0
PIPE FLOW (cumecs)	0.040
CAPACITY FLOW (cumecs)	0.175
FULL PIPE VELOCITY (m/s)	0.36
NORMAL DEPTH VELOCITY (m/s)	1.28
DATUM R.L.	7.000
HGL ELEVATION (39.35% AEP)	18.109 18.064
DEPTH TO INVERT OF PIPE	1.127 1.323
INVERT LEVEL OF PIPE	17.921 17.811
DESIGN (& EXISTING) SURFACE LEVEL	19.198 (18.522)
SETOUT COORDINATES (EASTING & NORTHING)	2491.845E 6707.496N
PIPE CHAINAGE	0.000 10.963

LINE 72

1/100	GRATED FIELD INLET (SPECIAL) 1500x2835mm CHAMBER (IN BASIN) HIGH FLOW OUTLET STRUCTURE w/ ORIFICE	3/100	CONNECTION TO EXISTING CATTLE 'CREEP' CONSTRUCT CONCRETE ENDWALL TO FILL ROBC OPENING AND SET I350Ø PIPE INTO WALL
2/100	DRAINWAY SYSTEM ON GRADE, L.L.L 3T/C KERB INLET, CLASS (D) HINGED BIKESAFE GALV. GRATE ON TOP OF SPECIAL OVERSIZE CHAMBER 1950x2900mm		

STAPYLTON JACOBS WELL RD.

1/100	GRATED FIELD INLET (SPECIAL) 1500x2835mm CHAMBER (IN BASIN) HIGH FLOW OUTLET STRUCTURE w/ ORIFICE	3/100	CONNECTION TO EXISTING CATTLE 'CREEP' CONSTRUCT CONCRETE ENDWALL TO FILL ROBC OPENING AND SET I350Ø PIPE INTO WALL
2/100	DRAINWAY SYSTEM ON GRADE, L.L.L 3T/C KERB INLET, CLASS (D) HINGED BIKESAFE GALV. GRATE ON TOP OF SPECIAL OVERSIZE CHAMBER 1950x2900mm		

1/100	GRATED FIELD INLET (SPECIAL) 1500x2835mm CHAMBER (IN BASIN) HIGH FLOW OUTLET STRUCTURE w/ ORIFICE	3/100	CONNECTION TO EXISTING CATTLE 'CREEP' CONSTRUCT CONCRETE ENDWALL TO FILL ROBC OPENING AND SET I350Ø PIPE INTO WALL
2/100	DRAINWAY SYSTEM ON GRADE, L.L.L 3T/C KERB INLET, CLASS (D) HINGED BIKESAFE GALV. GRATE ON TOP OF SPECIAL OVERSIZE CHAMBER 1950x2900mm		

100

STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 15 OF 18

1/101	STD IPWEAQ GRATED FIELD INLET 900x900mm (300mm ABOVE BASIN I.L.)	2/101	STD IPWEAQ GRATED FIELD INLET 900x900mm (300mm ABOVE BASIN I.L.)	3/101	STD IPWEAQ GRATED FIELD INLET 900x900mm (300mm ABOVE BASIN I.L.)	1/100	GRATED FIELD INLET (SPECIAL) 1500x2835mm IN BASIN HIGH FLOW OUTLET STRUCTURE w/ ORIFICE
-------	--	-------	--	-------	--	-------	---

STAPYLTON JACOBS WELL RD.

1/101	STD IPWEAQ GRATED FIELD INLET 900x900mm (300mm ABOVE BASIN I.L.)	2/101	STD IPWEAQ GRATED FIELD INLET 900x900mm (300mm ABOVE BASIN I.L.)	3/101	STD IPWEAQ GRATED FIELD INLET 900x900mm (300mm ABOVE BASIN I.L.)	1/100	GRATED FIELD INLET (SPECIAL) 1500x2835mm IN BASIN HIGH FLOW OUTLET STRUCTURE w/ ORIFICE
-------	--	-------	--	-------	--	-------	---

1/101	STD IPWEAQ GRATED FIELD INLET 900x900mm (300mm ABOVE BASIN I.L.)	2/101	STD IPWEAQ GRATED FIELD INLET 900x900mm (300mm ABOVE BASIN I.L.)	3/101	STD IPWEAQ GRATED FIELD INLET 900x900mm (300mm ABOVE BASIN I.L.)	1/100	GRATED FIELD INLET (SPECIAL) 1500x2835mm IN BASIN HIGH FLOW OUTLET STRUCTURE w/ ORIFICE
-------	--	-------	--	-------	--	-------	---

101

STRUCTURE NAME	1/102
STRUCTURE DESCRIPTION	PIPE CONNECTION – NO MANHOLE
	2/102
	DEFLECTION / PVC BEND
	3/101
	STD. IPWCAO GRATED FIELD INLET (IN LOT) 900x900mm (300mm ABOVE BASIN IL)

SHAFT/PIT BASE

IN FAVOURABLE GROUND
CONDITIONS PROVIDE
PRECAST CONCRETE
ROCLA CPO 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

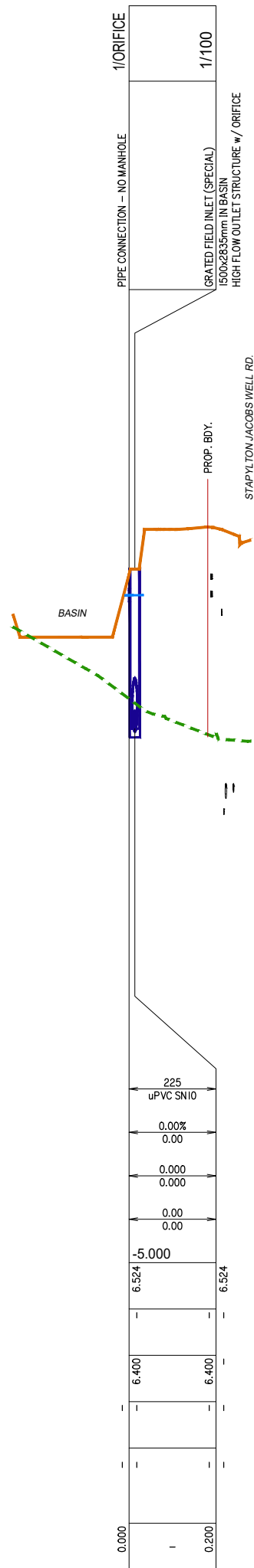
CONVERTER SLAB TABLE

SHAFT	OFFSET
I200	475
I350	550
I500	625
I800	775
I2100	925

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

PIPE SIZE (mm)		I50	I50
PIPE CLASS		uPVC SNI10	uPVC SNI10
PIPE GRADE (%)		1.00%	1.00%
PIPE SLOPE (1 in X)		100.0	100.0
PIPE FLOW (cumecs)		0.000	0.000
CAPACITY FLOW (cumecs)		0.013	0.013
FULL PIPE VELOCITY (m/s)		0.00	0.00
NORMAL DEPTH VELOCITY (m/s)		0.00	0.00
DATUM R.L.	-5.000		
HGL ELEVATION (39.35% AEP)	5.395	5.395	5.395
DEPTH TO INVERT OF PIPE	0.999	1.068	1.438
INVERT LEVEL OF PIPE	4.801	4.732	4.662
DESIGN (& EXISTING) SURFACE LEVEL	5.800 (5.691)	5.800 (5.373)	6.100 (5.038)
SETOUT COORDINATES (EASTING & NORTHING)	2233.280E 7025.546N	2237.998E 7030.523N	2244.088E 7034.928N
PIPE CHAINAGE	0.000	6.830	7.097

LINE 102



103

STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 16 OF 18

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

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DRAWING TITLE
STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 16 OF 18

A	01-05-2020			ORIGINAL ISSUE				BA	MO
Issue	Date			Description				DRI	CHK

SCALE IN METRES

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

Scale 1:50 - Lengths are in Metres.

VERT: 

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Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:
5941 ENG OPW1 525

Rev. No:
A

STRUCTURE NAME	STRUCTURE DESCRIPTION
3/X2	STD IPWEAQ GRATED FIELD INLET (IN LOT) 1200x1200mm PROVIDE 2.44m LENGTH STUB FOR FUTURE CONNECTION
4/X2	STD IPWEAQ ACCESS CHAMBER 1200mm DIA
5/X2	STD IPWEAQ ACCESS CHAMBER 1350mm DIA
6/X2	STD IPWEAQ ACCESS CHAMBER 1800mm DIA
7/X2	STD IPWEAQ ACCESS CHAMBER 1500mm DIA
8/X2	STD IPWEAQ ACCESS CHAMBER 1500mm DIA
9/X2	STD IPWEAQ ACCESS CHAMBER 1500mm DIA
10/X2	STD IPWEAQ ACCESS CHAMBER

IN FAVOURABLE GROUND
CONDITIONS PROVIDE
PRECAST CONCRETE
ROCLA CPO 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



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

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

PIPE SIZE (mm)	750		825		900		1050		1050		1050		1050
PIPE CLASS	3		3		3		3		3		3		3
PIPE GRADE (%)	0.20%		0.20%		0.50%		0.50%		0.40%		0.25%		0.50%
PIPE SLOPE (1 in X)	500.0		500.0		200.0		200.0		250.0		400.0		200.0
PIPE FLOW (cumecs)	0.572		0.570		0.564		1.636		1.671		1.690		1.701
CAPACITY FLOW (cumecs)	0.498		0.642		1.281		1.932		1.728		1.366		1.932
FULL PIPE VELOCITY (m/s)	1.29		1.07		0.89		1.89		1.93		1.95		1.96
NORMAL DEPTH VELOCITY (m/s)	1.29		1.36		1.95		2.50		2.27		1.95		2.52
DATUM R.L.	9.000										5.000		
HGL ELEVATION (39.35% AEP)	18.166 18.147		18.126 18.111		18.076 18.058		18.064 18.015 17.773		17.647 17.608		17.316 17.275		16.985 16.942 16.914
DEPTH TO INVERT OF PIPE	2.724 2.784		2.763 2.823		2.897 2.947		3.000 3.050		2.993 3.043		2.849 2.899		2.597 2.617 2.608
INVERT LEVEL OF PIPE	16.876 16.816		16.800 16.740		16.695 16.645		16.367 16.317		16.141 16.091		15.779 15.729		15.540 15.520 15.483
DESIGN (& EXISTING) SURFACE LEVEL	19.823 (23.563)		19.563 (23.021)		19.592 (21.167)		19.367 (19.056)		19.135 (8.108)		18.628 (5.130)		18.138 (12.082) 18.092 (12.040)
SETOUT COORDINATES (EASTING & NORTHING)	2384.070E 6652.630N		2392.470E 6655.849N		2416.043E 6651.664N		2465.884E 6679.277N		2497.710E 6696.909N		2567.213E 6735.414N		2634.538E 6772.713N 2642.323E 6776.685N
PIPE CHAINAGE	230.762 7.871 239.758 263.699		22.742		55.629		320.678 35.034 357.062		78.106		436.518 75.617		513.485 7.390 522.225

LINE	X2
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FRASERS PROPERTY
(AUSTRALIA) PTY. LTD

VANTAGE YATALA

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: -

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ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTE

STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 17 OF 18

B A Issue	12-06-2020 01-05-2020 Date	INFORMATION REQUEST RESPONSE ORIGINAL ISSUE Description	BA BA DRN	M M Ch

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

Scale 1:50 - Lengths are in Metres.

VERT: 

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:
5941 ENG OPW1 526

Rev. No
B

STRUCTURE NAME	10/X2	11/X2	12/X2	13/X2	14/X2	OUT/X2
STRUCTURE DESCRIPTION	STD IPWEAQ ACCESS CHAMBER 1500mm DIA	STD IPWEAQ ACCESS CHAMBER 2100mm DIA	STD IPWEAQ ACCESS CHAMBER 1800mm DIA	STD IPWEAQ ACCESS CHAMBER 2100mm DIA	DRAINWAY SYSTEM IN SAG, L.I.L 2.4m KERB INLET, CLASS (D) HINGED BIKESAFE GALV. GRATE ON TOP OF ROCLA (OR EQUIV.) CPO PIT SYSTEM CIRCULAR CHAMBER	1200mmØ SINGLE OUTLET HEADWALL PROVIDE APRON AND CUT-OFF WALL DISCHARGE TO OPEN CHANNEL PROVIDE ROCK OUTLET SCOUR PROTECTION

SHAFT/PIT BASE

IN FAVOURABLE GROUND CONDITIONS PROVIDE PRECAST CONCRETE ROCLA CPO 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
I200	475
I350	550
I500	625
I800	775
2100	925

NOTE: PROVIDE DRAINWAY CONVERTER SLAB FOR CPO PITS I200Ø, I500Ø, I800Ø

PIPE SIZE (mm)	1050		1050		1200		1200		1200		
PIPE CLASS	3		3		3		3		3		
PIPE GRADE (%)	0.50%		0.50%		0.50%		1.00%		0.72%		
PIPE SLOPE (1 in X)	200.0		200.0		200.0		100.0		138.4		
PIPE FLOW (cumecs)	1.698		1.735		2.221		2.464		2.520		
CAPACITY FLOW (cumecs)	1.932		1.932		2.758		3.900		3.316		
FULL PIPE VELOCITY (m/s)	1.96		2.00		1.96		2.18		2.23		
NORMAL DEPTH VELOCITY (m/s)	2.52		2.52		2.71		3.65		3.22		
DATUM R.L.	4.000										
HGL ELEVATION (39.35% AEP)	16.914	16.802		16.695	16.799	16.281		16.186	16.140		
DEPTH TO INVERT OF PIPE	2.608	2.688		2.677	2.757		2.748	2.808		2.732	2.894
INVERT LEVEL OF PIPE	15.483	15.403		15.264	15.184		15.066	15.006		14.871	14.709
DESIGN (& EXISTING) SURFACE LEVEL	18.092 (12.040)		17.942 (12.058)			17.814 (11.978)		17.604 (12.647)		17.551 (12.637)	15.921 (14.476)
SETOUT COORDINATES (EASTING & NORTHING)	2642.323E 6776.685N		2671.076E 6771.886N		2675.070E 6796.488N		2679.621E 6824.518N		2690.913E 6822.685N		2833.880E
PIPE CHAINAGE	522.225	27.801	551.376	23.574	576.300	27.047	604.697	10.300	616.137	15.273	632.000

LINE X2

STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 18 OF 18



planning | environment | landscape | engineering | survey
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Gold Coast & Logan | 176 Business Street, Yatala QLD | PO Box 392, Beenleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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BE PRINTED IN COLOUR

RPD:

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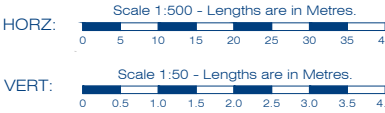
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DRAWING TITLE
STORMWATER DRAINAGE
LONGITUDINAL SECTIONS
SHEET 18 OF 18

B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG	
A	01-05-2020	ORIGINAL ISSUE	BA	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES



Scale at A1: AS SHOWN

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:
5941 ENG OPW1 527

Rev. No:
B

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No.: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies

STORMWATER DRAINAGE NETWORK - 39.35% AEP (2 YR ARI) DESIGN SHEET

LOCATION		SUB-CATCHMENT RUNOFF						INLET DESIGN						DRAIN DESIGN														HEAD LOSSES										PART FULL											
STRUCTURE No.	DRAIN SECTION	Tc SUB-CATCHMENT TIME OF CONC. min	I RAINFALL INTENSITY mm/hr	A SUB-CATCHMENT AREA ha	CA EQUIVALENT AREA ha	Qc SUB-CATCHMENT DISCHARGE L/s	Qa FLOW IN K&C (INC. BYPASS) L/s	ROAD GRADE AT INLET %	ROAD XFALL AT INLET %	INLET TYPE	INLET CURVE	Qg FLOW INTO INLET L/s	Qb BYPASS FLOW L/s	BYPASS STRUCTURE No.	Tc CRITICAL TIME OF CONC. min	I RAINFALL INTENSITY mm/hr	CA TOTAL (C x A) ha	Qint PEAK FLOW L/s	Q PIPE FLOW L/s	L REACH LENGTH m	S PIPE GRADE %	PIPE SIZE mm	PIPE CLASS	VH/QA FULL PIPE VELOCITY m/s	Qcap CAPACITY FLOW L/s	Vcap CAPACITY VELOCITY m/s	Vt TRAVEL VELOCITY m/s	CHART(S) USED	VH/Qg VELOCITY HEAD m	Us HEAD LOSS COEFFICIENT	hu US HEAD LOSS m	Kw W.S.E COEFFICIENT	hw CHANGE IN W.S.E m	Sf PIPE FRICTION SLOPE %	hf PIPE FRICTION HEAD LOSS m	dn NORMAL DEPTH m	Vn NORMAL DEPTH VEL. m/s	PIPE US I.L. m	PIPE DIS I.L. m	PIPE US H.G.L. m	PIPE D/S H.G.L. m	W.S.E m	GRATE LEVEL m						
1/1	1/1 to 2/1	5	138	0.862	0.050	18	18	0.93	3	GRADE_BK_2400_Lip	0.5G 3X	18	0	1/11	5	138	0.046	18	18	13.324	2	375	3	0.16	248	2.25	1.3	G1	0.001	7	0.009		0.009	0	0.001	0.068	1.3	18.283	18.016	18.562	18.562	18.571	19.411						
2/1	2/1 to 3/1	5	138	0.881	0.065	23	23	0.93	3	GRADE_BK_2400_Lip	0.5G 3X	23	0	3/1	5.06	138	0.334	128	128	39.535	1.25	450	3	0.8	319	2.61	1.89	T10	0.033	2	0.066	2.44	0.08	0.2	0.079	0.198	1.89	17.672	17.178	18.496	18.417	18.576	19.411						
3/1	3/1 to 4/1	5	138	0.846	0.037	13	13	0.93	3	GRADE_BK_2400_Lip	0.5G 3X	13	0	4/1	5.4	136	0.597	226	226	39.535	1	450	3	1.42	285	1.79	1.99	T2/T5	0.103	0.72	0.074		0.074	0.63	0.247	0.302	1.99	17.108	16.762	18.343	18.096	18.417	19.05						
4/1	4/1 to 5/1	5	138	0.847	0.038	13	13	0.93	3	GRADE_BK_2400_Lip	0.5G 3X	13	0	5/1	5.74	134	0.949	355	354	39.535	1	450	3	2.22	285	1.79	2.22	T2/T5	0.253	0.56	0.141		0.141	1.54	0.608	0.45	2.22	16.742	16.347	17.955	17.346	18.096	18.676						
5/1	5/1 to 6/1	5	138	0.846	0.037	13	13	2	3	GRADE_BK_2400_Lip	2G 3X	13	0	6/1	6.03	133	1.213	448	448	39.535	2.5	450	3	2.81	451	2.84	3.23	T1/T2	0.404	0.37	0.148		0.148	2.46	0.973	0.366	3.23	16.327	15.339	17.199	16.225	17.346	18.225						
6/1	6/1 to 7/1	5	138	0.844	0.036	13	13	4.5	3	GRADE_BK_2400_Lip	4G 3X	13	0	7/1	6.34	132	1.561	573	572	39.535	4.55	450	3	3.6	608	3.82	4.35	T8/T10	0.66	1.5	0.993	1.81	1.192	4.43	1.756	0.347	4.35	14.791	12.994	15.233	13.482	16.425	16.971						
7/1	7/1 to 8/1	5	138	0.845	0.036	13	13	6	3	GRADE_BK_2400_Lip	4G 3X	13	0	8/1	6.33	132	1.821	666	665	39.534	4.55	825	3	3.07	917	4.24	4.62	T10	0.482	1.74	0.84	1.98	0.955	2.91	1.165	0.332	4.62	12.141	10.344	12.643	11.493	13.598	14.715						
8/1	8/1 to 9/1	5	138	0.847	0.038	13	13	6	3	GRADE_BK_2400_Lip	4G 3X	13	0	2/21	6.47	131	2.173	790	790	39.155	4	525	3	3.65	860	3.98	4.51	T8/T10	0.679	1.51	1.021	1.85	1.259	3.37	1.319	0.396	4.51	9.695	8.129	10.471	9.153	11.73	12.287						
9/1	9/1 to 10/1									ACC_CHA_1880					6.46	131	10.249	3729	3729	38.665	2	1200	3	3.3	5516	4.88	5.24	T4/T8	0.555	1.39	0.772	1.47	0.813	1	0.482	0.723	5.24	7.336	6.583	8.381	7.594	9.194	10.657						
10/1	10/1 to 11/1									ACC_CHA_1880					6.58	130	10.513	3808	3808	15.967	2.5	1200	3	3.37	6167	5.45	5.74	T1/T2	0.578	0.21	0.12		0.12	0.95	0.148	0.682	5.74	6.543	6.154	7.874	7.726	7.994	9.15						
11/1	11/1 to 12/1									ACC_CHA_2160					6.63	130	10.734	3861	3861	10.192	0.1	1200	3	3.43	1233	1.09	3.43	T8/T10	0.346	1.68	0.582	1.92	0.664	1.59	0.054	1.2	3.43	6.048	6.038	7.144	6.982	7.808	8.345						
12/1	12/1 to 13/1									ACC_CHA_2160					6.68	130	10.792	3895	3895	18.157	0.1	(2x)1200	3	1.72	2467	1.09	1.72	T1	0.151	0	0		0	0.92	0.06	1.2	1.72	6.018	6	6.934	6.768	6.934	8.058						
13/1										HW outlet																																							
1/2	1/2 to 2/2	5	138	0.383	0.389	110	110			900x900 IG		110	0	2/2	5	138	0.287	110	110	5.23	0.97	375	3	1	173	1.57	1.66	G1	0.051	3.4	0.172		0.172	0.39	0.021	0.217	1.66	18.014	17.963	18.888	18.868	19.061	20.06						
2/2	2/2 to 3/2	5	138	0.835	0.028	10	10	2.82	3	GRADE_BK_2400_Lip	2G 3X	10	0	1/40	5.05	138	0.313	120	120	46.001	0.5	375	3	1.09	124	1.12	1.28	T10	0.06	1.75	0.105	1.97	0.119	0.47	0.218	0.297	1.28	17.883	17.85	18.762	18.545	18.881	19.357						
3/2	3/2 to 4/2	5	138	0.818	0.015	5	5	1	3	GRADE_BK_2400_Lip	1G 3X	5	0	4/2	5.06	135	0.65	243	243	44.564	1.5	375	3	2.2	215	1.95	2.2	T5	0.248	0.81	0.202		0.202	1.92	0.857	0.375	2.2	17.61	16.962	18.343	17.486	18.545	19.608						
4/2	4/2 to 5/2	5	138	0.850	0.041	15	15	3.17	3	GRADE_BK_2400_Lip	3G 3X	15	0	5/2	6	133	0.997	369	369	18.876	3	450	3	2.32	494	3.11	3.41	T2/T5	0.275	0.6	0.164		0.164	2.18	0.437	0.29	3.41	16.912	16.345	17.322	16.917	17.486	18.498						
5/2	5/2 to 6/2	5	138	0.823	0.018	7	7	3.17	3	GRADE_BK_2400_Lip	3G 3X	7	0	6/2	6.09	133	1.101	406	405	24.757	4	450	3	2.55	570	3.59	3.89	T1/T2	0.331	0.3	0.1		0.1	2.02	0.5	0.28	3.89	16.264	15.274	16.81	16.31	16.91	17.831						
6/2	6/2 to 7/2	5	138	0.829	0.024	8	8	3.17	3	GRADE_BK_2400_Lip	3G 3X	8	0	2/34	6.2	132	1.432	526	526	38.604	3.33	450	3	3.3	621	3.27	3.73	T2	0.557	0.33	0.182		0.182	3.4	1.311	0.373	3.73	15.084	13.798	16.128	14.817	16.31	17.018						
7/2	7/2 to 8/2									ACC_CHA_1280					5.76	134	2.827	1055	1055	11.316	2	675	3	2.95	1189	3.32	3.75	T5/T8	0.443	0.82	0.364	0.83	0.367	1.57	0.178	0.495	3.75	13.603	13.376	14.453	14.275	14.82	15.85						
8/2	8/2 to 9/2									ACC_CHA_1280					5.81	134	3.31	1233	1233	31.9	3.33	675	3	3.45	1534	4.29	4.76	T1/T2	0.606	0.24	0.146		0.146	2.15	0.886	0.459	4.76	13.278	12.217	14.129	13.443	14.275	15.457						
9/2	9/2 to 10/2									ACC_CHA_1280					5.92	134	3.527	1309</																															

STORMWATER DRAINAGE NETWORK - 39.35% AEP (2 YR ARI) DESIGN SHEET

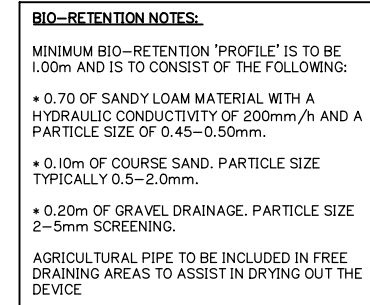
LOCATION		SUB-CATCHMENT RUNOFF						INLET DESIGN						DRAIN DESIGN														HEAD LOSSES																PART FULL									
STRUCTURE No.	DRAIN SECTION	Tc SUB-CATCHMENT TIME OF CONC. min	I RAINFALL INTENSITY mm/h	A SUB-CATCHMENT AREA ha	CA EQUIVALENT AREA ha	Qc SUB-CATCHMENT DISCHARGE L/s	Qa FLOW IN KAC (INC. BYPASS) L/s	ROAD GRADE AT INLET %	ROAD XFALL AT INLET %	INLET TYPE	INLET CURVE	Qg FLOW INTO INLET L/s	Qb BYPASS FLOW L/s	BYPASS STRUCTURE No.	Tc CRITICAL TIME OF CONC. min	I RAINFALL INTENSITY mm/hr	CA TOTAL (C + A) L/s	Qint PEAK FLOW L/s	Q PIPE FLOW L/s	L REACH LENGTH m	S PIPE GRADE %	PIPE SIZE mm	PIPE CLASS	Vh/QA FULL PIPE VELOCITY m/s	Qcap CAPACITY FLOW L/s	Vcap CAPACITY VELOCITY m/s	Vt TRAVEL VELOCITY m/s	CHART/S USED	Vh/Qg VELOCITY HEAD m	Ku US HEAD LOSS COEFFICIENT	hu US HEAD LOSS m	Kw W.S.E COEFFICIENT	hw CHANGE IN W.S.E m	Sf PIPE FRICTION SLOPE %	Hf PIPE FRICTION HEAD LOSS m	dn NORMAL DEPTH m	Vn NORMAL DEPTH VEL m/s	PIPE US I.L. m	PIPE US H.G.L. m	PIPE D/S H.G.L. m	W.S.E m	GRATE LEVEL m											
1/29	1/29 to 2/29	5	138	0.241	0.194	69	69			900x900 IG		69	0	2/29	5	138	0.181	69	69	5.182	0.37	375	3	0.63	173	1.56	1.48	G1	0.82	6.32	0.127		0.127	0.18	0.008	0.165	1.48	9.874	9.823	10.367	10.359	10.494	11.654										
2/29	2/29 to 1/52	5	138	0.847	0.038	14	14	1.2	3	GRADE_BK_2400_Lip	1G 3X	14	0	1/27	5.06	138	0.216	83	83	0.888	1	375	3	0.75	175	1.59	1.56	T1	0.029	0.91	0.026		0.026	0.22	0.002	0.181	1.56	9.793	9.744	10.333	10.331	10.359	11.189										
1/30	1/30 to 2/30	5	138	0.718	0.579	207	207			1200x1200 IG		207	0	1/12	5	138	0.539	207	207	5.717	1.32	600	3	0.73	620	2.19	1.97	G1	0.027	4.14	0.113		0.113	0.11	0.006	0.239	1.97	9.523	9.464	10.799	10.792	10.911	13										
2/30	2/30 to 14/2	5	138	0.062	0.050	18	18	2.8	3	GRADE_BK_2400_Lip	2G 3X	18	0	1/26	5.05	138	0.585	224	224	11.038	1	600	3	0.79	614	2.17	2	T2/T5	0.032	0.63	0.82		0.82	0.13	0.015	0.251	2	9.364	9.254	10.772	10.757	10.792	11.476										
1/31	1/31 to 2/31	5	138	0.622	0.552	179	179			1200x1200 IG		179	0	2/31	5	138	0.467	179	179	5.484	1	525	3	0.83	431	1.99	1.9	G1	0.035	4.48	0.156		0.156	0.17	0.01	0.236	1.9	10.69	10.635	11.664	11.654	11.82	12.631										
2/31	2/31 to 1/2/2	5	138	0.064	0.051	18	18	2.98	3	GRADE_BK_2400_Lip	2G 3X	18	0	2/29	5.05	138	0.515	197	197	0.781	1	600	3	0.7	614	2.17	1.93	T1/T2	0.025	0.24	0.006		0.006	0.1	0.001	0.234	1.93	10.555	10.547	11.648	11.648	11.854	12.18										
1/32	1/32 to 1/6/2	5	138	0.835	0.029	10	10	2.98	3	GRADE_BK_2400_Lip	2G 3X	10	0	2/31	5	138	0.027	10	10	1.038	0.33	375	3	0.09	169	1.53	0.84	G1	0	7	0.003		0.003	-0.91	0	0.062	0.84	12.659	12.649	12.851	12.851	12.854	13.786										
1/33	1/33 to 2/33	5	138	4.061	3.277	1168	1168			1200x1200 IG		1168	0	2/33	5	138	3.048	1168	1168	5.032	0.4	750	3	2.64	704	1.59	2.64	G1	0.357	3.43	1.223		1.223	1.1	0.055	0.75	2.64	17.033	17.013	17.887	17.832	19.11	19.6										
2/33	2/33 to 6/3/2	5	138	0.120	0.097	35	35	0.64	3	17CS0_UNCHECKED	0.5G 3X	35	0	1/46	5.03	138	1.319	1202	1202	0.888	0.43	825	3	2.25	946	1.77	2.25	T1	0.258	0.91	0.002		0.002	0.7	0.006	0.825	2.25	16.929	16.925	17.83	17.824	17.832	19.281										
1/34	1/34 to 2/34	5	138	0.580	0.468	167	167			900x900 IG		167	0	2/34	5	138	0.436	167	167	5.182	0.97	375	3	1.51	173	1.56	1.78	G1	0.117	4.17	0.487		0.487	0.58	0.042	0.297	1.78	14.157	14.107	14.478	14.449	14.965	15.809										
2/34	2/34 to 8/2	5	138	0.060	0.048	17	17	3.17	3	GRADE_BK_2400_Lip	3G 3X	17	0	1/44	5.05	138	0.481	184	184	1.038	1	375	3	1.67	175	1.59	1.8	T1	0.142	0.84	0.09		0.09	1.75	0.011	0.327	1.8	14.038	14.027	14.359	14.341	14.449	15.371										
1/35	1/35 to 2/35	5	138	1.812	1.462	521	521			1200x1200 IG		521	0	2/35	5	138	1.36	521	521	5.319	1.01	525	3	2.41	432	2	2.41	G1	0.296	2.76	0.818		0.818	1.47	0.078	0.525	2.41	13.962	13.908	15.008	14.93	15.826	18.6										
2/35	2/35 to 7/2	5	138	0.095	0.078	27	28	3.17	3	GRADE_BK_2400_Lip	3G 3X	28	0	4/3	5.04	138	1.431	548	548	11.038	1	600	3	1.94	614	2.17	2.46	T1/T2	0.192	0.13	0.025		0.025	0.8	0.088	0.442	2.46	13.868	13.757	14.905	14.817	14.93	15.764										
1/36	1/36 to 2/36	5	138	0.409	0.330	118	118			1200x1200 IG		118	0	6/2	5	138	0.307	118	118	5.079	1	375	3	1.07	175	1.59	1.7	G1	0.058	5.09	0.296		0.296	0.45	0.023	0.225	1.7	15.904	15.853	16.333	16.31	16.629	17.991										
1/38	1/38 to 5/2	5	138	0.115	0.092	33	33	3.17	3	GRADE_BK_2400_Lip	3G 3X	32	1	2/35	5	138	0.086	33	32	13.324	1	375	3	0.29	175	1.59	1.21	G1	0.004	7	0.031		0.031	-0.82	0.007	0.109	1.21	16.703	16.57	16.908	16.91	16.938	17.831										
1/39	1/39 to 2/39	5	138	0.409	0.330	118	118			900x900 IG		118	0	4/2	5	138	0.307	118	118	5.23	0.97	375	3	1.07	173	1.57	1.68	G1	0.058	5.47	0.318		0.318	0.21	0.041	0.227	1.68	17.244	17.193	17.497	17.486	17.815	19.032										
1/40	1/40 to 2/40	5	138	0.084	0.068	24	24			SAG_BK_2400_Lip	SAG	24	0	2/40	5	138	0.063	24	24	13.494	1	375	3	0.22	175	1.59	1.12	G1	0.002	7	0.017		0.017	1.08	0.133	0.094	1.12	17.995	17.481	17.706	17.585	17.723	18.757										
2/40	2/40 to 4/6	5	138	0.087	0.070	25	25	0.6	3	GRADE_BK_2400_Lip		25	0	5/6	5.2	137	0.129	49	49	16.293	1	375	3	0.44	175	1.59	1.36	G1/T10	0.01	2.36	0.024	2.73	0.027	1.15	0.153	0.136	1.36	17.381	17.218	17.541	17.353	17.568	18.757										
1/41	1/41 to 2/41	5	138	0.428	0.345	123	123			900x900 IG		123	0	3/2	5	138	0.321	123	123	5.23	0.97	375	3	1.11	173	1.57	1.7	G1	0.063	5.28	0.334		0.334	1.44	0.045	0.234	1.7	18.396	18.346	18.655	18.579	18.989	20.438										
1/42	1/42 to 8/3/2	5	138	0.115	0.093	33	33	0.64	3	GRADE_BK_2400_Lip	0.5G 3X	32	1	1/52	5	138	0.086	33	32	0.888	1.88	375	3	0.29	183	1.65	1.25	G1	0.004	7	0.031		0.031	-0.61	0.003	0.107	1.25	17.022	17.012	17.167	17.172	17.197	18.541										
1/44	1/44 to 3/4	5	138	0.101	0.082																																																

STORMWATER DRAINAGE NETWORK - 1.00% AEP (100 YR ARI) DESIGN SHEET

LOCATION		SUB-CATCHMENT RUNOFF						INLET DESIGN										DRAIN DESIGN										HEAD LOSSES										PART FULL									
STRUCTURE No.	DRAIN SECTION	Tc SUB-CATCHMENT TIME OF CONC. min	I RAINFALL INTENSITY mm/hr	A SUB-CATCHMENT AREA ha	CA EQUIVALENT AREA ha	Qc SUB-CATCHMENT DISCHARGE L/s	Qa FLOW IN K&C (INC. BYPASS) L/s	ROAD GRADE AT INLET %	ROAD XFALL AT INLET %	INLET TYPE	INLET CURVE	Qp FLOW INTO INLET L/s	Qb BYPASS FLOW L/s	BYPASS STRUCTURE No.	Tc CRITICAL TIME OF CONC. min	I RAINFALL INTENSITY mm/hr	CA TOTAL (C x A) ha	Qint PEAK FLOW L/s	Q PIPE FLOW L/s	L REACH LENGTH m	S PIPE GRADE %	PIPE SIZE mm	PIPE CLASS	Vh/QA FULL PIPE VELOCITY L/s	Qcap CAPACITY FLOW L/s	Vcap CAPACITY VELOCITY m/s	Vt TRAVEL VELOCITY m/s	CHART(S) USED	Vh/Qg VELOCITY HEAD m	Ku US HEAD LOSS COEFFICIENT	hu US HEAD LOSS m	Kw W.S.E COEFFICIENT	hw CHANGE IN W.S.E SLOPE %	Sf PIPE FRICTION SLOPE %	hf PIPE FRICTION HEAD LOSS m	dn NORMAL DEPTH m	Vn NORMAL DEPTH VEL. m/s	PIPE US I/L m	PIPE DIS I/L m	PIPE US H.G.L m	PIPE DIS H.G.L m	W.S.E m	GRATE LEVEL m				
1/1	1/1 to 2/1	5	307	0.062	0.062	49	49	0.93	3	GRADE_BK_2400_Lip	0.5G 3X	2	47	1/11	5	307	0.057	49	2	13.324	2	375	3	0.02	248	2.25	0.67	G1	0	3.14	0	0	0	0	0.023	0.67	18.283	18.016	19.411	19.411	19.411	19.411					
2/1	2/1 to 3/1	5	307	0.081	0.081	65	87	0.93	3	GRADE_BK_2400_Lip	0.5G 3X	-15	102	3/1	5.84	306	0.414	352	203	39.535	125	450	3	1.28	319	2.01	2.12	T10	0.083	1.55	0.129	1.83	0.161	0.51	0.2	0.261	2.12	17.672	17.178	19.25	19.05	19.411	19.411				
3/1	3/1 to 4/1	5	307	0.046	0.046	37	158	0.93	3	GRADE_BK_2400_Lip	0.5G 3X	-176	334	4/1	5.35	302	0.741	622	241	39.535	1	450	3	1.51	285	1.79	2.01	T5/T8	0.117	0.79	0.092		0.092	0.71	0.282	0.317	2.01	17.158	16.762	18.958	18.676	19.05	19.05				
4/1	4/1 to 5/1	5	307	0.047	0.047	37	394	0.93	3	GRADE_BK_2400_Lip	0.5G 3X	-176	570	5/1	5.68	298	1.179	976	268	39.535	1	450	3	1.68	285	1.79	2.04	T2/T5	0.145	0.71	0.103		0.103	0.88	0.348	0.346	2.04	16.742	16.347	18.573	18.225	18.676	18.676				
5/1	5/1 to 6/1	5	307	0.046	0.046	36	618	2	3	GRADE_BK_2400_Lip	2G 3X	-24	643	6/1	6.81	294	1.508	1229	449	39.535	2.5	450	3	2.82	451	2.84	3.23	T2/T5	0.406	0.68	0.275		0.275	2.48	0.979	0.367	3.23	16.337	15.339	17.95	16.971	18.225	18.225				
6/1	6/1 to 7/1	5	307	0.044	0.044	35	678	4.5	3	GRADE_BK_2400_Lip	4G 3X	-148	826	7/1	6.17	291	1.938	1569	516	39.535	4.55	450	3	3.24	608	3.82	4.29	T8/T10	0.536	1.46	0.783	1.8	0.965	3.26	1.291	0.318	4.29	14.791	12.994	16.006	14.715	16.971	16.971				
7/1	7/1 to 8/1	5	307	0.045	0.045	36	908	6	3	GRADE_BK_2400_Lip	4G 3X	-1	909	8/1	6.88	293	2.243	1823	687	39.534	4.55	525	3	3.17	917	4.24	4.65	T10	0.514	1.52	0.782	1.92	0.987	2.55	1.009	0.339	4.65	12.141	10.344	13.296	12.287	14.283	14.715				
8/1	8/1 to 9/1	5	307	0.047	0.047	37	991	6	3	GRADE_BK_2400_Lip	4G 3X	-39	1030	2/21	6.19	291	2.677	2164	818	39.155	4	525	3	3.78	860	3.98	4.52	T8/T10	0.728	1.49	1.083	1.86	1.351	3.61	1.414	0.409	4.52	9.695	8.129	10.935	9.521	12.286	12.287				
9/1	9/1 to 10/1									ACC_CHA_1880					6.19	291	12.633	10212	4152	38.665	2	1200	3	3.67	5516	4.88	5.35	T8	0.688	1.4	0.86	1.47	1.011	1.13	0.438	0.778	5.35	7.335	6.563	8.561	8.123	9.572	10.657				
10/1	10/1 to 11/1									ACC_CHA_1880					6.31	289	12.962	10420	4477	15.567	2.5	1200	3	3.96	6167	5.45	5.94	T1/T2	0.8	0.22	0.179		0.179	1.32	0.205	0.758	5.94	6.543	6.154	7.943	7.738	8.123	9.15				
11/1	11/1 to 12/1									ACC_CHA_2180					6.36	289	13.237	10619	4665	10.192	0.1	1200	3	4.13	1233	1.09	4.13	T8/T10	0.277	1.71	0.472	1.96	0.542	0.46	0.045	1.2	4.13	6.049	6.038	7.266	7.219	7.808	8.345				
12/1	12/1 to 13/1									ACC_CHA_2180					6.4	288	13.369	10657	4975	18.157	0.1	(2x)1200	3	2.2	2467	1.09	2.2	T1/T2	0.247	-1.39	-0.344		-0.344	0.41	0.074	1.2	2.2	6.018	6	7.563	7.489	7.219	8.058				
13/1										HW outlet																															7.489	7.45					
1/2	1/2 to 2/2	5	307	0.383	0.383	305	305			900x900 IG		264	41	2/2	5	307	0.358	305	264	5.23	0.97	375	3	2.39	173	1.57	2.39	G1	0.291	2.01	0.585		0.585	2.26	0.118	0.375	2.39	18.014	17.963	19.475	19.357	20.06	20.06				
2/2	2/2 to 3/2	5	307	0.035	0.035	28	69	2.82	3	GRADE_BK_2400_Lip	2G 3X	-227	296	1/40	5.84	307	0.39	332	36	46.601	0.5	375	3	0.33	124	1.12	0.97	T10	0.005	1.54	0.008	1.93	0.011	0.04	0.02	0.139	0.97	17.863	17.85	19.342	19.322	19.352	19.357				
3/2	3/2 to 4/2	5	307	0.018	0.018	15	85	1	3	GRADE_BK_2400_Lip	1G 3X	63	22	4/2	5.83	296	0.809	665	348	44.564	1.5	375	3	3.15	215	1.95	3.15	T8/T10	0.178	1.4	0.284	1.59	0.283	1.38	0.616	0.375	3.15	17.63	16.962	19.074	18.458	19.357	19.608				
4/2	4/2 to 5/2	5	307	0.050	0.050	40	158	3.17	3	GRADE_BK_2400_Lip	3G 3X	-130	287	5/2	6.87	293	1.242	1010	427	18.876	3	450	3	2.68	494	3.11	3.49	T2/T5	0.368	0.56	0.204		0.204	2.24	0.423	0.323	3.49	16.912	16.345	18.744	17.821	18.448	18.458				
5/2	5/2 to 6/2	5	307	0.023	0.023	18	305	3.17	3	GRADE_BK_2400_Lip	3G 3X	36	270	6/2	6.16	291	1.371	1110	455	24.757	4	450	3	2.86	570	3.59	3.98	T1	0.417	0.42	0.174		0.174	2.54	0.629	0.304	3.98	16.264	15.274	17.647	17.018	17.821	17.831				
6/2	6/2 to 7/2	5	307	0.029	0.029	23	393	3.17	3	GRADE_BK_2400_Lip	3G 3X	-149	542	2/34	6.23	291	1.782	1438	510	38.604	3.33	450	3	3.21	621	3.27	3.73	T2/T5	0.525	0.47	0.248		0.248	3.2	1.236	0.361	3.73	15.084	13.798	15.934	14.699	16.182	17.618				
7/2	7/2 to 8/2									ACC_CHA_1280					5.84	298	3.501	2902	895	11.316	2	675	3	2.5	1189	3.32	3.65	T2/T5	0.319	0.71	0.227		0.227	1.13	0.128	0.437	3.65	13.693	13.376	14.471	14.343	14.699	15.85				
8/2	8/2 to 9/2									ACC_CHA_1280					5.89	298	4.162	3393	1188	3.19	3.33	675	3	3.32	1534	4.29	4.73	T2	0.563	0.29	0.161		0.161	2	0.637	0.446	4.73	13.278	12.317	14.182	13.545	14.34343</					

STORMWATER DRAINAGE NETWORK - 1.00% AEP (100 YR ARI) DESIGN SHEET

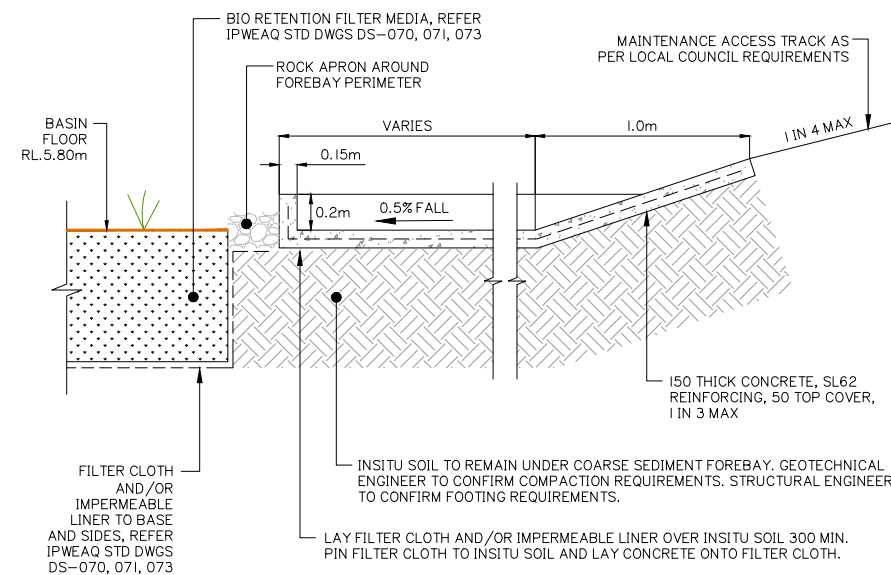
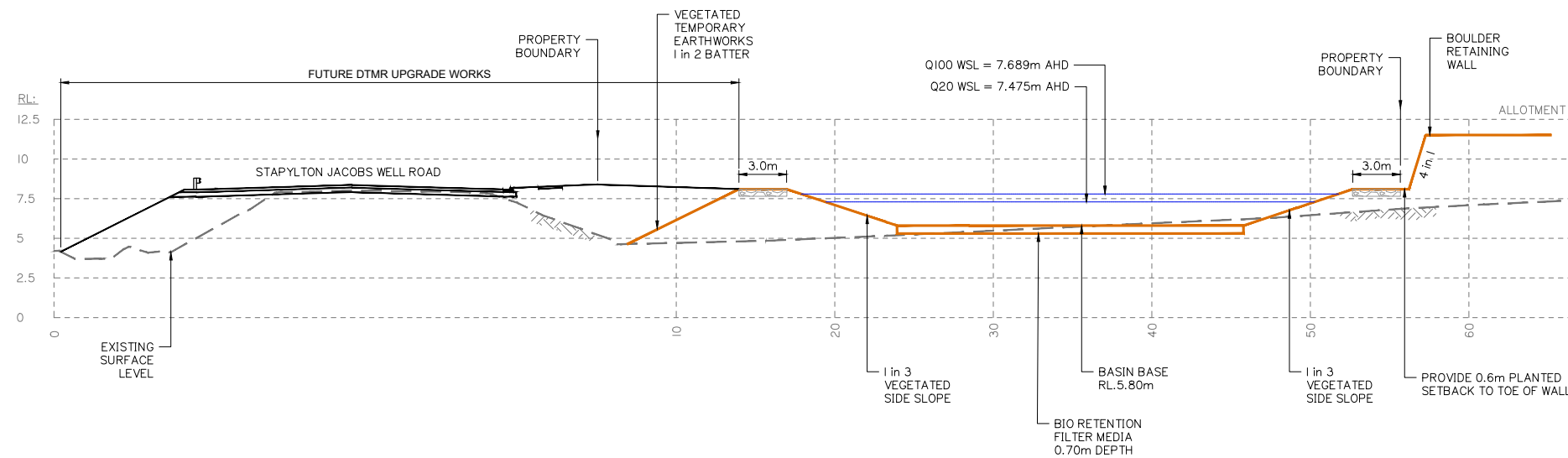
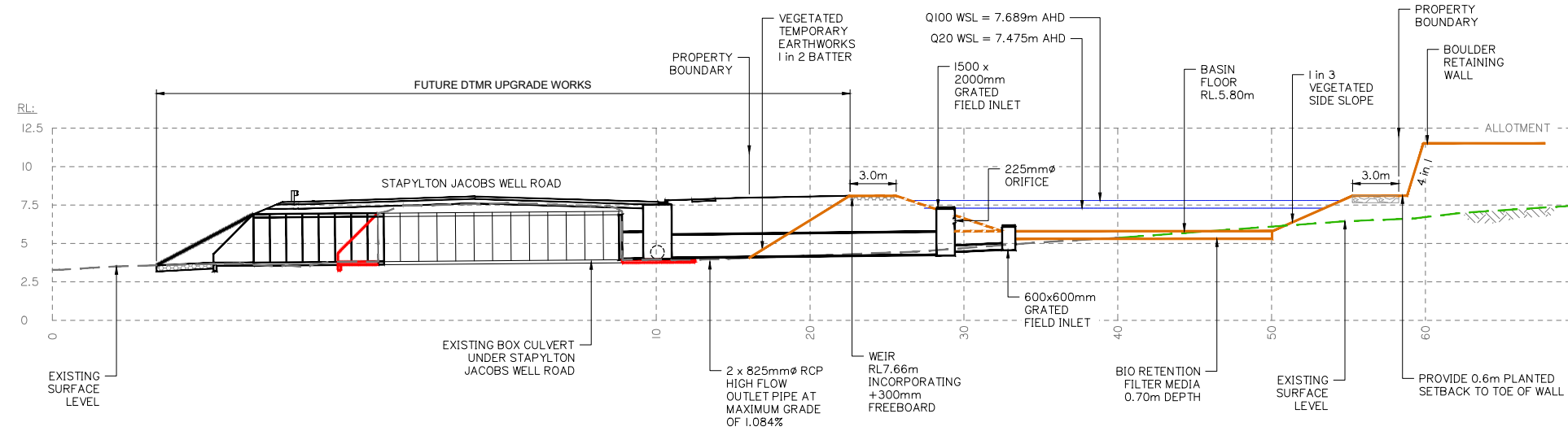
LOCATION		SUB-CATCHMENT RUNOFF						INLET DESIGN										DRAIN DESIGN										HEAD LOSSES										PART FULL									
STRUCTURE No.	DRAIN SECTION	Tc SUB-CATCHMENT TIME OF CONC. min	I RAINFALL INTENSITY mm/hr	A SUB-CATCHMENT AREA ha	CA EQUIVALENT AREA ha	Qc SUB-CATCHMENT DISCHARGE L/s	Qa FLOW IN K&C (INC. BYPASS) L/s	ROAD GRADE AT INLET %	ROAD FALL AT INLET %	INLET TYPE	INLET CURVE	Qp FLOW INTO INLET L/s	Qb BYPASS FLOW L/s	BYPASS STRUCTURE No.	Tc CRITICAL TIME OF CONC. min	I RAINFALL INTENSITY mm/hr	CA TOTAL (C x A) ha	Qnet PEAK FLOW L/s	Q PIPE FLOW L/s	L REACH LENGTH m	S PIPE GRADE %	PIPE SIZE mm	PIPE CLASS	VH/QA FULL PIPE VELOCITY m/s	Qcap CAPACITY FLOW L/s	Vcap CAPACITY VELOCITY m/s	Vt TRAVEL VELOCITY m/s	CHART(S) USED	VH/Qp VELOCITY HEAD m	Ku US HEAD LOSS COEFFICIENT	hu US HEAD LOSS m	Kw W.S.E COEFFICIENT	hw CHANGE IN W.S.E m	Sf PIPE FRICTION SLOPE %	hf PIPE FRICTION HEAD LOSS m	dn NORMAL DEPTH m	Vn NORMAL DEPTH VEL m/s	PIPE US I/L m	PIPE DIS I/L m	PIPE US H.G.L m	PIPE DIS H.G.L m	W.S.E m	GRATE LEVEL m				
1/29	1/29 to 2/29	5	307	0.241	0.241	192	192			900x900 IG		192	0	2/29	5	307	0.225	192	192	5.182	0.97	375	3	1.74	173	1.56	1.74	G1	0.154	2.6	0.401		0.401	1.2	0.062	0.375	1.74	9.874	9.823	10.891	10.829	11.292	11.654				
2/29	2/29 to 1/52	5	307	0.047	0.047	38	1241	1.2	3	GRADE_BK_2409_Lip	1G 3X	29	1212	1/27	5.85	306	0.269	229	220	0.888	1	375	3	1.99	175	1.59	1.99	T1	0.203	0.98	0.116		0.116	1.58	0.014	0.375	1.99	9.763	9.744	10.711	10.697	10.829	11.189				
1/30	1/30 to 2/30	5	307	0.718	0.718	572	572			1200x1200 IG		572	0	11/2	5	307	0.671	572	572	5.717	1.02	600	3	2.02	620	2.19	2.49	G1	0.209	2.39	0.499		0.499	0.87	0.05	0.455	2.49	9.523	9.464	11.526	11.476	12.825	13				
2/30	2/30 to 1/42	5	307	0.062	0.062	49	2975	2.8	3	GRADE_BK_2409_Lip	2G 3X	-428	3403	1/26	5.84	306	0.728	620	143	11.038	1	600	3	0.5	614	2.17	1.77	T2/T5	0.013	0.36	0.905		0.905	0.05	0.006	0.197	1.77	9.364	9.254	11.031	11.025	11.835	11.476				
1/31	1/31 to 2/31	5	307	0.622	0.622	496	496			1200x1200 IG		376	120	2/31	5	307	0.582	496	376	5.494	1	525	3	1.74	431	1.99	2.24	G1	0.154	2.66	0.409		0.409	0.76	0.042	0.38	2.24	10.69	10.635	12.222	12.18	12.631	12.631				
2/31	2/31 to 1/32	5	307	0.064	0.064	51	888	2.98	3	GRADE_BK_2409_Lip	2G 3X	-315	1203	2/29	5.84	306	0.641	546	60	0.781	1	600	3	0.21	614	2.17	1.38	T1/T2	0.002	-0.25	-0.001		-0.001	0.01	0	0.126	1.38	10.555	10.547	11.73	11.73	12.18	12.18				
1/32	1/32 to 1/32	5	307	0.035	0.035	28	871	2.98	3	GRADE_BK_2409_Lip	2G 3X	154	717	2/31	5	307	0.033	28	154	1.038	0.93	375	3	1.4	169	1.53	1.73	G1	0.099	4.43	0.441		0.441	0.31	0.008	0.282	1.73	12.659	12.649	12.968	12.964	13.408	13.786				
1/33	1/33 to 2/33	5	307	4.061	4.061	3236	3236			1200x1200 IG		680	2956	2/33	5	307	3.794	3236	680	5.032	0.4	750	3	1.54	704	1.59	1.82	G1	0.121	3.75	0.453		0.453	0.37	0.019	0.593	1.82	17.033	17.013	18.458	18.439	18.911	19.6				
2/33	2/33 to 6/32	5	307	0.120	0.120	96	3557	0.64	3	1TCS0_UNCHECKED	0.5G 3X	239	3317	1/46	5.85	306	3.907	3325	913	0.888	0.43	825	3	1.71	946	1.77	2.01	T1	0.140	0.99	0.147		0.147	0.4	0.004	0.652	2.01	16.929	16.925	18.293	18.289	18.439	19.291				
1/34	1/34 to 2/34	5	307	0.580	0.580	463	463			900x900 IG		197	266	2/34	5	307	0.542	463	197	5.182	0.97	375	3	1.78	173	1.56	1.78	G1	0.162	2.81	0.454		0.454	1.26	0.065	0.375	1.78	14.157	14.107	15.01	14.945	15.464	15.809				
2/34	2/34 to 8/2	5	307	0.060	0.060	48	856	3.17	3	GRADE_BK_2409_Lip	3G 3X	116	740	1/44	5.85	306	0.598	509	312	1.038	1	375	3	2.82	175	1.59	2.82	T1	0.406	1.27	0.514		0.514	3.93	0.033	0.375	2.82	14.018	14.027	14.431	14.39	14.945	15.371				
1/35	1/35 to 2/35	5	307	1.812	1.812	1444	1444			1200x1200 IG		481	963	2/35	5	307	1.693	1444	480	5.319	1.01	525	3	2.22	432	2	2.22	G1	0.251	2.23	0.561		0.561	1.25	0.066	0.525	2.22	13.962	13.908	15.83	15.764	16.391	18.6				
2/35	2/35 to 7/2	5	307	0.095	0.095	75	1128	3.17	3	GRADE_BK_2409_Lip	3G 3X	-40	1169	4/3	5.84	306	1.781	1516	437	11.038	1	600	3	1.55	614	2.17	2.36	T1/T2	0.122	-0.14	-0.017		-0.017	0.51	0.056	0.374	2.36	13.868	13.757	14.755	14.699	14.737	15.764				
1/36	1/36 to 2/36	5	307	0.409	0.409	326	326			1200x1200 IG		227	100	6/2	5	307	0.383	326	227	5.079	1	375	3	2.05	175	1.59	2.05	G1	0.215	2.28	0.488		0.488	1.67	0.085	0.375	2.05	15.984	15.853	17.103	17.018	17.591	17.591				
1/38	1/38 to 5/2	5	307	0.115	0.115	91	91	3.17	3	GRADE_BK_2409_Lip	3G 3X	1	90	2/35	5	307	0.107	91	1	13.324	1	375	3	0.01	175	1.59	0.48	G1	0	3.17	0		0	0	0	0.024	0.48	16.783	16.57	17.821	17.821	17.821	17.831				
1/39	1/39 to 2/39	5	307	0.409	0.409	326	326			900x900 IG		230	96	4/2	5	307	0.383	326	230	5.23	0.97	375	3	2.09	173	1.57	2.09	G1	0.222	2.18	0.484		0.484	1.72	0.09	0.375	2.09	17.244	17.193	18.548	18.458	19.032	19.032				
1/40	1/40 to 2/40	5	307	0.084	0.084	67	373			SAG_BK_2409_Lip	SAG	2	371	2/40	5	307	0.079	67	2	13.404	1	375	3	0.02	175	1.59	0.55	G1	0	3.13	0		0	0	0	0.03	0.55	17.955	17.461	18.731	18.731	18.731	18.757				
2/40	2/40 to 4/6	5	307	0.087	0.087	69	440	0.6	3	GRADE_BK_2409_Lip		93	348	5/6	5.41	302	0.16	134	93	16.293	1	375	3	0.84	175	1.59	1.61	G1/T10	0.036	2.67	0.096	2.68	0.097	0.28	0.046	0.194	1.61	17.381	17.218	18.634	18.589	18.731	18.757				
1/41	1/41 to 2/41	5	307	0.428	0.428	341	341			900x900 IG		271	70	3/2	5	307	0.4	341	271	5.23	0.97	375	3	2.45	173	1.57	2.45	G1	0.306	2.23	0.683		0.683	2.38	0.124	0.375	2.45	18.306	18.346	19.446	19.322	20.13	20.438				
1/42	1/42 to 8/32	5	307	0.115	0.115	92	3234	0.64	3	GRADE_BK_2409_Lip	0.5G 3X	212	3023	1/52	5	307	0.108	92	212	0.888	1.08	375	3	1.92	183	1.65	1.92	G1	0.188	2.46	0.462		0.462	1.46	0.013	0.375	1.92	17.022	17.012	18.052	18.039	18.514	18.541				
1/44	1/44 to 3/4	5	307	0.101	0.101	81																																									



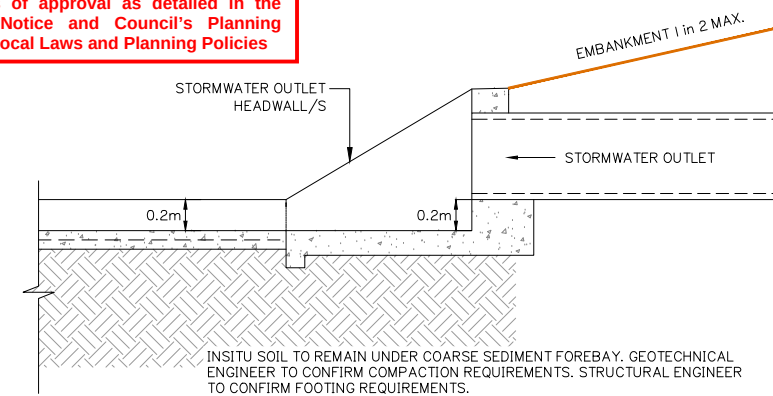
BIO RETENTION – COARSE SEDIMENT FOREBAY SIZING GUIDE CALCULATIONS	
$V_s = A_c \times R \times L_o \times F$	$= 7.234 \text{ m}^3$
$R = 1 - \left[1 + \frac{x}{n} \left(\frac{V_s}{Q/A_c} \right) \right]^{-n}$	
$0.8 = 1 - \left[\frac{1 + \frac{0.10}{0.5} \frac{0.10}{2.423/A_c}}{1} \right]^{-0.5}$	$A_f = 234.72 \text{ m}^2$
$D_s = \frac{V_s}{A_f}$	$D_s = \frac{7.234}{234.72} = 0.031 \text{ m}$
OPTIMIZATION OF <u>MINIMUM</u> FOREBAY SIZE:	
$D_s = \frac{7.234 \text{ m}^3}{175.2 \text{ m}^2}$	$= 0.041 \text{ m}$
$V_s = 7.234 \text{ m}^3$ (Workings Above) $A_c = 15.071 \text{ ha}$ (Refer Catchment Plans) UNMITIGATED POST–DEVELOPMENT FLOW $Q = 1.956 \text{ m}^3/\text{s}$ (3 month ARI = $0.5 \times 63.2\% \text{ AEP}$) $V_s = 0.1 \text{ m/s}$ (Recommended for Imm Particle) $R = 0.8$ (Recommended 80% Capture) $L_o = 0.6$ (From Healthy Waterways Guide) $n = 0.5$ (Recommended Turbulence) $F_c = 1.0$ (Frequency of Clean Out / Yr)	
REFER TO BIO RETENTION TECHNICAL DESIGN GUIDELINES FOR FURTHER INFORMATION	

AEP (%)	MAX. WATER ELEVATION (m) A.H.D.	MAX. WATER DEPTH (m)
63.2	6.635	0.835
50	6.720	0.920
20	7.057	1.257
10	7.179	1.379
5	7.256	1.456
2	7.357	1.557
1	7.489	1.689





N.T.S.



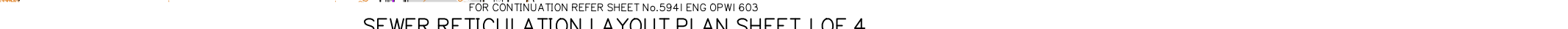
N.T.S

[illegible]

MANHOLE COVERS AND SURROUNDS:

INSTALL TO ALL NEW SEWER MAINTENANCE STRUCTURES CLASS D TRAFFICABLE COVER AND SURROUNDS WITH TYPE 'D' WATER SEALED SOLID TOP 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)



Original

Project:

THIS DRAWING IS INTENDED TO
BE PRINTED IN COLOUR

ISSUED FOR APPROVAL

1601

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE

SEWER RETICULATION
LAYOUT PLAN SHEET 1 OF 4

SCALE IN METRES

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

Scale at A1: 1:500

Designed:	1:500
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Designed:	IG
Drafted:	

Drafted.	BA
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Approved:	MG
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RPEQ:	16939
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Signed:	
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Date:	01-05-2020
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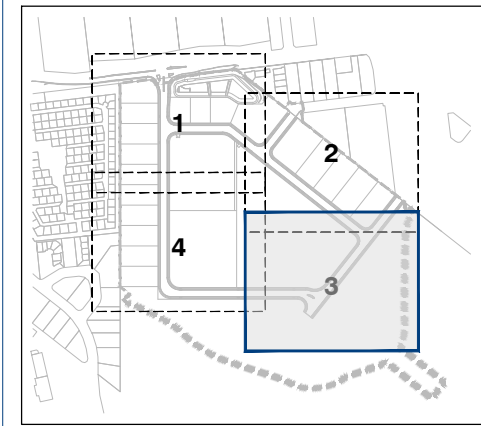
Drawing No:		Rev. No:	
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5941	ENG OPW1 600	B
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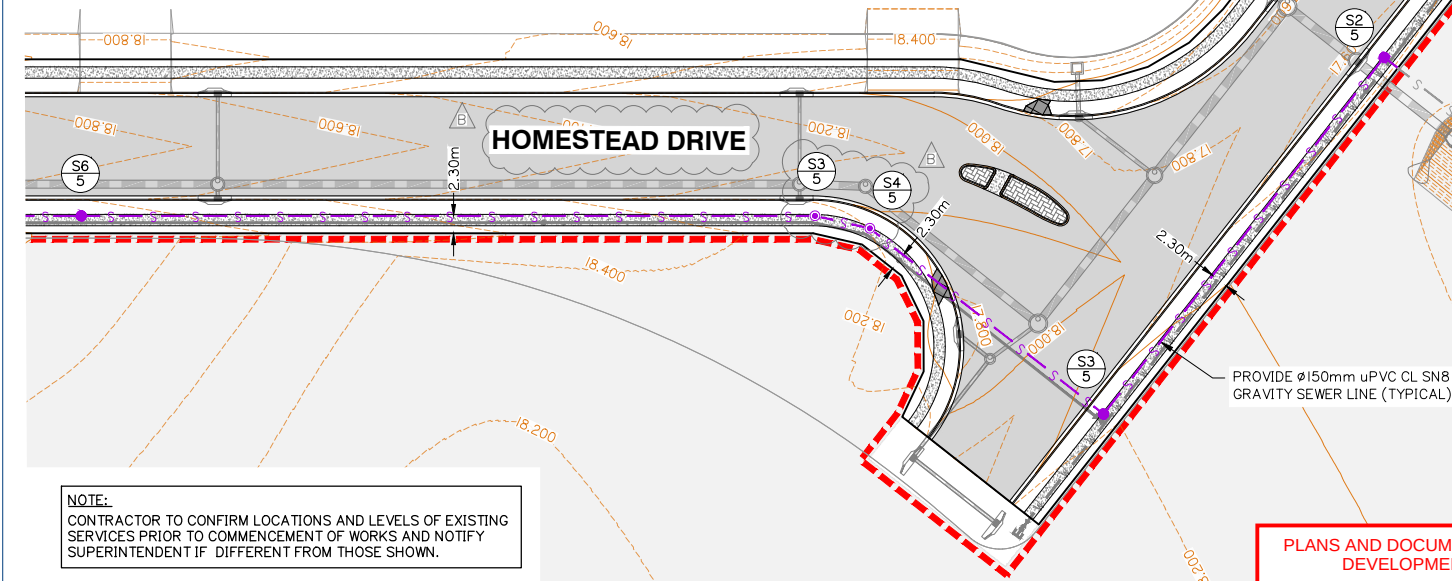
\\Projects\5941\engineering\Acad\civil works stage 1\Current\5941 ENG OPW1 600.dwg

FOR CONTINUATION REFER SHEET No.5941 ENG OPW1 603



KEY PLAN
SCALE 1: 7500

120
RL18.6



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:

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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

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FUTURE STAGES

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No.: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

SEWER STRUCTURE SETOUT TABLE		
STRUCTURE NO.	EASTING	NORTHING
S15/1	2368.90	6688.885
S14/1	2349.29	6724.281
S13/1	2329.68	6759.677
S12/1	2310.071	6795.073
S11/1	2290.461	6830.469
S10/1	2270.851	6865.865
S9/1	2251.241	6901.261
S8/1	2231.631	6936.657
S7/1	2228.555	6942.211
S6/1	2212.022	6972.053
S5/1	2201.684	6990.713
S4/1	2196.694	6997.665
S3/1	2190.233	7003.277
S2/1	2182.335	7008.663
S1/1	2176.367	7012.026
S11/2	2654.719	6958.586
S10/2	2607.803	6966.203
S9/2	2562.897	6973.492
S8/2	2517.991	6980.782
S7/2	2462.883	6989.728
S6/2	2365.966	7005.462
S5/2	2356.880	7006.937
S4/2	2351.295	7005.964
S3/2	2322.216	6989.854
S2/2	2287.605	6970.679
S1/2	2260.911	6955.890
S7/1	2228.555	6942.211
S3/3	2444.906	6862.974
S2/3	2401.144	6941.965
S1/3	2377.653	6984.367
S6/2	2365.966	7005.462
S1/4	2394.873	6981.571
S1/3	2377.653	6984.367
S7/5	2466.432	6674.779
S6/5	2553.455	6722.991
S5/5	2638.359	6770.028
S4/5	2645.503	6772.099
S3/5	2684.442	6765.600
S2/5	2694.062	6824.858
S1/5	3072.962	6763.348
S1/LOT 120	2394.184	6977.327

Client:

FRASERS
PROPERTY
FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

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: -

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DRAWING TITLE

SEWER RETICULATION
LAYOUT PLAN SHEET 3 OF 4

Rev.	Date	Description	BA	MG
A	01-05-2020	ORIGINAL ISSUE	BA	MG
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG
Issue	Date	Description	DRN	CHK

SCALE IN METRES

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

Scale at A1: 1:500

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No: 5941 ENG OPW1 602
Rev. No: B

SCALE 1: 7500

STRUCTURE NO.	EASTING	NORTHING
S15/1	2368.90	6688.885
S14/1	2349.29	6724.281
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S12/1	2310.071	6795.073
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S3/5	2684.442	6765.600
S2/5	2694.062	6824.858
S1/5	3072.962	6763.348
SI/LOT 106	2286.699	6828.385
SI/LOT 107	2306.309	6792.989
SI/LOT 108	2325.919	6757.593
SI/LOT 109	2345.529	6722.197
SI/LOT 110	2365.139	6686.801
SI/LOT 121	2446.340	6859.767
SI/LOT FUTURE	2468.516	6671.018

107

108

109

110

HOMESTEAD DRIVE

122
RL16.6

121
RL16.6

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

FUTURE STAGES

SEWER RETICULATION LAYOUT PLAN SHEET 4 OF 4

NOTE:
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MANHOLE COVERS AND SURROUNDS:

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TRAFFICABLE COVER AND SURROUNDS WITH TYPE 'D' WATER SEALED
SOLID TOP 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 2011)

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perspectives**
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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:



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(AUSTRALIA) PTY. LTD.

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

SEWER RETICULATION
LAYOUT PLAN SHEET 4 OF 4

B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG	
A	01-05-2020	ORIGINAL ISSUE	BA	MG	
Issue	Date	Description	DRN	CHK	

SCALE IN METRES



Scale at A1:	1:500
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Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:	Rev. No:
5941 ENG OPW1 603	B

MAINTENANCE HOLE / SHAFT NAME

MH / MS COVER TYPE
MH / MS TYPE
MH / MS DROP TYPE
LINE DEFLECTION ANG. & BRANCHES
PROPERTY CONNECTION TYPE
INTERNAL CORROSION PROTECTION

RIGSS STRUCTURE DROPS
V STRAIGHT THROUGH SEWER
W OBLIQUE 45° "Y" JUNCTION
X INTERNAL BACKDROP
Z VERTICAL DROP JUNCTION

CONSTRUCT BRIDGING
STRUCTURE SPANNING
THE SEWER TRENCH
TRENCHSTOPS, BULKHEADS
& CONCRETE ENCASEMENTS

RIGSS STRUCTURE LIDS
B NON-TRAFFICABLE LID
D TRAFFICABLE LID
C COMPOSITE

RIGSS STRUCTURE TYPES
P3 1050mm DIA. PRE-CAST MAINTENANCE HOLE WITH CONVERSION
SLAB AND PRE-CAST BASE. INSTALL DUCTILE IRON COVER
SEQ STD DWG SEQ-SEW-1303-1
JI TYPE "JI" MAINTENANCE STRUCTURE
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) TO HAVE 300mm# PVC RISERS
UNLESS NOTED OTHERWISE.
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 OPW1 030
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 SEWERS 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.
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.

DATUM RL	-5.000											3.000	
LOCATION DESCRIPTION	DTMR R/RESERVE	CoGC R/RESERVE	CoGC R/RESERVE	CoGC R/RESERVE	CoGC R/RESERVE	CoGC R/RESERVE	CoGC R/RESERVE	CoGC R/RESERVE	CoGC R/RESERVE	CoGC R/RESERVE	CoGC R/RESERVE	CoGC R/RESERVE	CoGC R/RESERVE
PIPE SIZE (mm), MATERIAL & CLASS		150, uPVC SN8	150, uPVC SN8	150, uPVC SN8	150, uPVC SN8	150, uPVC SN8	150, uPVC SN8	150, uPVC SN8	150, uPVC SN8	150, uPVC SN8	150, uPVC SN8	150, uPVC SN8	150, uPVC SN8
PIPE GRADE (1 IN X)		66.67	66.67	50	50	25	180	40	31.24	22.95	26.57	34.79	
PIPE LENGTH		6.850	9.560	8.558	8.558	21.332	34.117	6.349	40.465	40.465	40.465	40.465	
PIPE EMBEDMENT TYPE		4	4	4	4	4	4	4	4	4	4	4	
FINISHED (& EXISTING) SURFACE LEVEL	7.032 (7.615)	6.968 (7.718)	7.238 (8.117)	7.831 (8.558)	8.375 (9.112)	9.366 (10.426)	10.661 (12.632)	10.851 (13.011)	12.618 (15.884)	15.046 (19.072)	17.271 (21.944)	18.488 (22.962)	
DEPTH TO PIPE INVERT BELOW FSL	3.957 3.106 3.106	2.939 2.939 2.929	3.055 3.055 3.015	3.437 3.437 3.397	3.77 3.77 3.74	3.878 3.878 3.777	4.883 4.883 3.585	3.417 3.417 2.226	2.698 2.698 1.998	2.663 2.663 1.963	2.665 2.665 2.64	2.693 2.693	
PIPE INVERT LEVEL	3.075 3.926	4.029 4.039	4.182 4.222	4.394 4.434	4.605 4.635	5.488 5.588	5.778 7.276	7.434 8.625	9.92 10.62	12.383 13.083	14.607 14.632	15.795	
PIPE CHAINAGE	0	6.85	16.41	24.968	33.526	54.857	88.974	95.322	135.787	176.253	216.718	257.183	

LINE

1

SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 1 OF 11

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

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: -

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ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH GENERAL NOTES

DRAWING TITLE
SEWER RETICULATION
LONGITUDINAL SECTIONS
SHEET 1 OF 11

Rev	Date	Description	By	Check
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG
A	01-05-2020	ORIGINAL ISSUE	BA	MG
Issued	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 1:100 - Lengths are in Metres.
VERT: 0 1 2 3 4 5 6 7 8

Scale at A1: AS SHOWN

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No: 5941 ENG OPW1 610 Rev. No: B

MAINTENANCE HOLE / SHAFT NAME

MH / MS COVER TYPE

MH / MS TYPE

MH / MS DROP TYPE

LINE DEFLECTION ANG. & BRANCHES

PROPERTY CONNECTION TYPE

INTERNAL CORROSION PROTECTION

RIGSS STRUCTURE DROPS

V STRAIGHT THROUGH SEWER
SEQ STD DWG SEQ-1303-1

W OBLIQUE 45° "Y" JUNCTION
SEQ STD DWG SEQ-1303-1

X INTERNAL BACKDROP
SEQ STD DWG SEQ-1303-1

Z VERTICAL DROP JUNCTION
STD DWG SEQ-1314-1

CONSTRUCT BRIDGING
STRUCTURE SPANNING
THE SEWER TRENCH
TRENCHSTOPS, BULKHEADS
& CONCRETE ENCASEMENTS

RIGSS STRUCTURE LIDS
B NON-TRAFFICABLE LID
D TRAFFICABLE LID
C COMPOSITE

RIGSS STRUCTURE TYPES

P3 1050mm DIA. PRE-CAST MAINTENANCE HOLE WITH CONVERSION
SLAB AND PRE-CAST BASE. INSTALL DUCTILE IRON COVER
SEQ STD DWG SEQ-1300-1
JI TYPE "JI" MAINTENANCE STRUCTURE
SEQ STD DWG SEQ-1314-2
BND LONG RADIUS BEND (R3.0m)
SEQ STD DWG SEQ-1314-3

RIGSS PROPERTY CONNECTION TYPES

V STRAIGHT THROUGH SEWER (250mm MAX. DROP FOR 150#)
SEQ STD DWG SEQ-1303-1
W OBLIQUE 45° "Y" JUNCTION (250mm-600mm DROP FOR 150#)
SEQ STD DWG SEQ-1303-1
X INTERNAL BACKDROP (600mm MIN. DROP FOR 150#)
SEQ STD DWG SEQ-1303-1
Z DROP JUNCTION TO DN300 RISER OF MAINTENANCE SHAFT
SEQ STD DWG SEQ-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) TO HAVE 300mm# PVC RISERS
UNLESS NOTED OTHERWISE.
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 OPW1 030
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 SEWERS 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.
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.

LOCATION DESCRIPTION

PIPE SIZE (mm), MATERIAL & CLASS

PIPE GRADE (1 IN X)

PIPE LENGTH

PIPE EMBEDMENT TYPE

FINISHED (& EXISTING)
SURFACE LEVEL

DEPTH TO PIPE INVERT BELOW FSL

PIPE INVERT LEVEL

PIPE CHAINAGE

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies

LINE

1

SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 2 OF 11

S7/1

S1/2

S2/2

S3/2

D/C

D/C

D

D

P3

P3

JI

JI

V

X

V

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MAINTENANCE HOLE / SHAFT NAME

MH / MS COVER TYPE

MH / MS TYPE

MH / MS DROP TYPE

LINE DEFLECTION ANG. & BRANCHES

PROPERTY CONNECTION TYPE

INTERNAL CORROSION PROTECTION

RIGSS STRUCTURE DROPS

V STRAIGHT THROUGH SEWER

W OBLIQUE 45° "Y" JUNCTION

X INTERNAL BACKDROP

Z VERTICAL DROP JUNCTION

CONSTRUCT BRIDGING
STRUCTURE SPANNING
THE SEWER TRENCH

TRENCHSTOPS, BULKHEADS
& CONCRETE ENCASEMENTS

RIGSS STRUCTURE LIDS

B NON-TRAFFICABLE LID

D TRAFFICABLE LID

C COMPOSITE

RIGSS STRUCTURE TYPES

P3 1050mm DIA. PRE-CAST MAINTENANCE HOLE WITH CONVERSION

JI TYPE "JI" MAINTENANCE STRUCTURE

BND LONG RADIUS BEND (R3.0m)

RIGSS PROPERTY CONNECTION TYPES

V STRAIGHT THROUGH SEWER (250mm MAX. DROP FOR 150ø)

W OBLIQUE 45° "Y" JUNCTION (250mm-600mm DROP FOR 150ø)

X INTERNAL BACKDROP (600mm MIN. DROP FOR 150ø)

Z DROP JUNCTION TO DN300 RISER OF MAINTENANCE SHAFT

RIGSS GENERAL NOTES

1 ALL uPVC SEWER PIPE TO BE CLASS SN8 INCLUDING ALL

2 EMBEDMENT TYPES AS INDICATED ON LONGITUDINAL SECTIONS

3 ALL BENDS TO BE LONG RADIUS BEND

4 ALL MAINTENANCE SHAFTS (MS) TO HAVE 300mmø PVC RISERS

5 CONTRACTOR TO VERIFY DOWNSTREAM EXISTING PIPE LEVELS

6 POLYETHYLENE (PE) LINING TO BE INSTALLED TO ALL

7 WHERE NOTED ON THE DRAWINGS, CONTRACTOR TO CONSTRUCT

8 WHERE NOTED ON THE DRAWINGS, TRENCHSTOPS, BULKHEADS

9 ALL PROPERTY CONNECTIONS TO BE 150ø uPVC CLASS SN8

10 DESIGN OF DEEP SEWERS GREATER THAN 5 METRES TO BE

11 ALL MAINTENANCE HOLES WHERE TRAFFICABLE LIDS ARE

12 (NON-CORROSIVE). FOR ALL MANHOLES WHERE INTERNAL

13 PROTECTION COATINGS ARE REQUIRED AS PER CLAUSE 7.6.2(1)

14 TO (VII) OF THE SEWERAGE CLAUSE. REFER SEQ CIVIL IPAM LIST.

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PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

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DATUM RL

LOCATION DESCRIPTION

PIPE SIZE (mm), MATERIAL & CLASS

PIPE GRADE (1 IN X)

PIPE LENGTH

PIPE EMBEDMENT TYPE

FINISHED (& EXISTING)
SURFACE LEVEL

DEPTH TO PIPE INVERT BELOW FSL

PIPE INVERT LEVEL

PIPE CHAINAGE

LINE

2

SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 3 OF 11



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
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DRAWING TITLE
SEWER RETICULATION
LONGITUDINAL SECTIONS
SHEET 3 OF 11

Rev	Date	Description	Rev	Date	Description
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG	
A	01-05-2020	ORIGINAL ISSUE	BA	MG	
Issue	Date	Description	DRN	CHK	

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VERT: 0 1 2 3 4 5 6 7 8

Scale at A1: AS SHOWN

Designed: IG

Drafted: BA

Approved: MG

RPEQ: 16939

Signed:

Date: 01-05-2020

Drawing No:
5941 ENG OPW1 612

Rev. No:
B

MAINTENANCE HOLE / SHAFT NAME

MH / MS COVER TYPE

MH / MS TYPE

MH / MS DROP TYPE

LINE DEFLECTION ANG. & BRANCHES

PROPERTY CONNECTION TYPE

INTERNAL CORROSION PROTECTION

RIGSS STRUCTURE DROPS

V STRAIGHT THROUGH SEWER

W OBLIQUE 45° "Y" JUNCTION

X INTERNAL BACKDROP

Z VERTICAL DROP JUNCTION

CONSTRUCT BRIDGING
STRUCTURE SPANNING
THE SEWER TRENCH

TRENCHSTOPS, BULKHEADS
& CONCRETE ENCASEMENTS

RIGSS STRUCTURE LIDS

B NON-TRAFFICABLE LID

D TRAFFICABLE LID

C COMPOSITE

RIGSS STRUCTURE TYPES

P3 1050mm DIA. PRE-CAST MAINTENANCE HOLE WITH CONVERSION
SLAB AND PRE-CAST BASE. INSTALL DUCTILE IRON COVER
SEQ STD DWG SEQ-SEW-1300-1

JI TYPE "JI" MAINTENANCE STRUCTURE
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) TO HAVE 300mm# PVC RISERS
UNLESS NOTED OTHERWISE

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 OPW1 030

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 SEWERS 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.

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.

DATUM RL 6.000

LOCATION DESCRIPTION

PIPE SIZE (mm), MATERIAL & CLASS

PIPE GRADE (1 IN X)

PIPE LENGTH

PIPE EMBEDMENT TYPE

FINISHED (& EXISTING)
SURFACE LEVEL

DEPTH TO PIPE INVERT BELOW FSL

PIPE INVERT LEVEL

PIPE CHAINAGE

PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies

LINE

2

3

SEWER RETICULATION LONGITUDINAL SECTIONS SHEET 4 OF 11

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

THIS DRAWING IS INTENDED TO
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RPD:

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

Level Datum: AHD
Meridian: -
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RL: -

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DRAWING TITLE
SEWER RETICULATION
LONGITUDINAL SECTIONS
SHEET 4 OF 11

Rev	Date	Description	By	Check
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG
A	01-05-2020	ORIGINAL ISSUE	BA	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 1:100 - Lengths are in Metres.

VERT: 0 1 2 3 4 5 6 7 8

Scale at A1: AS SHOWN

Designed: IG

Drafted: BA

Approved: MG

RPEQ: 16939

Signed:

Date: 01-05-2020

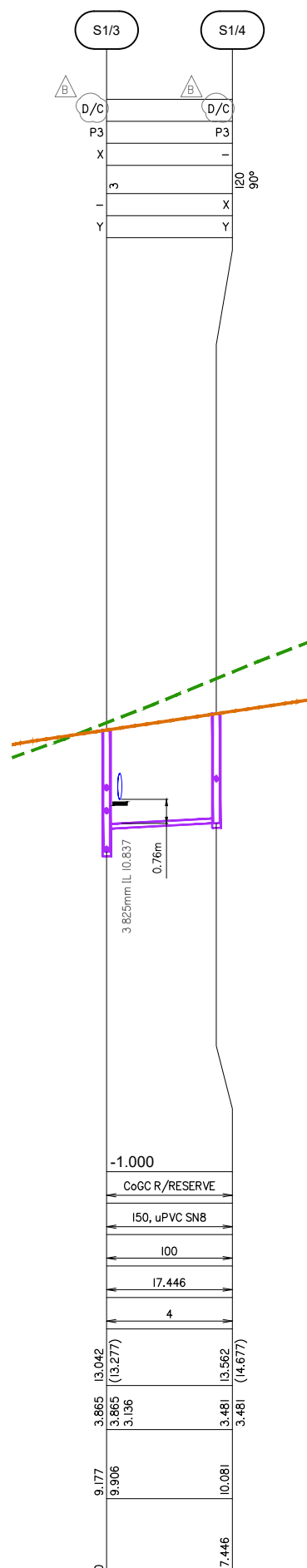
Drawing No:
5941 ENG OPW1 613

Rev. No:
B

DATUM RL	2.000		
LOCATION DESCRIPTION	WITHIN EASEMENT OVER LOT 122		
PIPE SIZE (mm), MATERIAL & CLASS	150, uPVC SN8		
PIPE GRADE (1 IN X)	180		
PIPE LENGTH	90.303		
PIPE EMBEDMENT TYPE	4		
FINISHED (& EXISTING) SURFACE LEVEL 	15.747 (15.425)		16.6 (17.873)
DEPTH TO PIPE INVERT BELOW FSL	2.673 2.673 2.648		3 3
PIPE INVERT LEVEL	13.074 13.099		13.6
PIPE CHAINAGE	72.59		62.893

LINE

3



4

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

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DRAWING TITLE
SEWER RETICULATION
LONGITUDINAL SECTIONS
SHEET 5 OF 11

	</				

SCALE IN METRES

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

VERT: 

Scale at A1: AS SHOWN

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Drafted:	BA
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5941 ENG OPW1 614	B



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MAINTENANCE HOLE / SHAFT NAME

MH / MS COVER TYPE

MH / MS TYPE

MH / MS DROP TYPE

LINE DEFLECTION ANG. & BRANCHES

PROPERTY CONNECTION TYPE

INTERNAL CORROSION PROTECTION

RIGSS STRUCTURE DROPS

V STRAIGHT THROUGH SEWER
SEQ DWG SEQ-SEW-1303-1

W OBLIQUE 45° "Y" JUNCTION
SEQ DWG SEQ-SEW-1303-1

X INTERNAL BACKDROP
SEQ DWG SEQ-SEW-1303-1

Z VERTICAL DROP JUNCTION
STD DWG SEQ-SEW-1314-1

CONSTRUCT BRIDGING
STRUCTURE SPANNING
THE SEWER TRENCH

TRENCHSTOPS, BULKHEADS
& CONCRETE ENCASEMENTS

RIGSS STRUCTURE LIDS

B NON-TRAFFICABLE LID

D TRAFFICABLE LID

C COMPOSITE

RIGSS STRUCTURE TYPES

P3 1050mm DIA. PRE-CAST MAINTENANCE HOLE WITH CONVERSION
SLAB AND PRE-CAST BASE. INSTALL DUCTILE IRON COVER
SEQ STD DWG SEQ-SEW-1300-1

JI TYPE "JI" MAINTENANCE STRUCTURE
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) TO HAVE 300mm# PVC RISERS
UNLESS NOTED OTHERWISE.

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 OPW1 030

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 SEWERS 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.

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.

DATUM RL

LOCATION DESCRIPTION

PIPE SIZE (mm), MATERIAL & CLASS

PIPE GRADE (1 IN X)

PIPE LENGTH

PIPE EMBEDMENT TYPE

FINISHED (& EXISTING)
SURFACE LEVEL

DEPTH TO PIPE INVERT BELOW FSL

PIPE INVERT LEVEL

PIPE CHAINAGE

0

1.345

122

14.000

150, uPVC SN8

100

4.345

4

13.042

13.277

13.096

2.651

2.651

9.177

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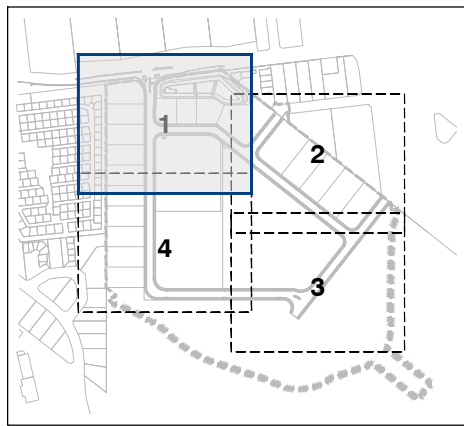
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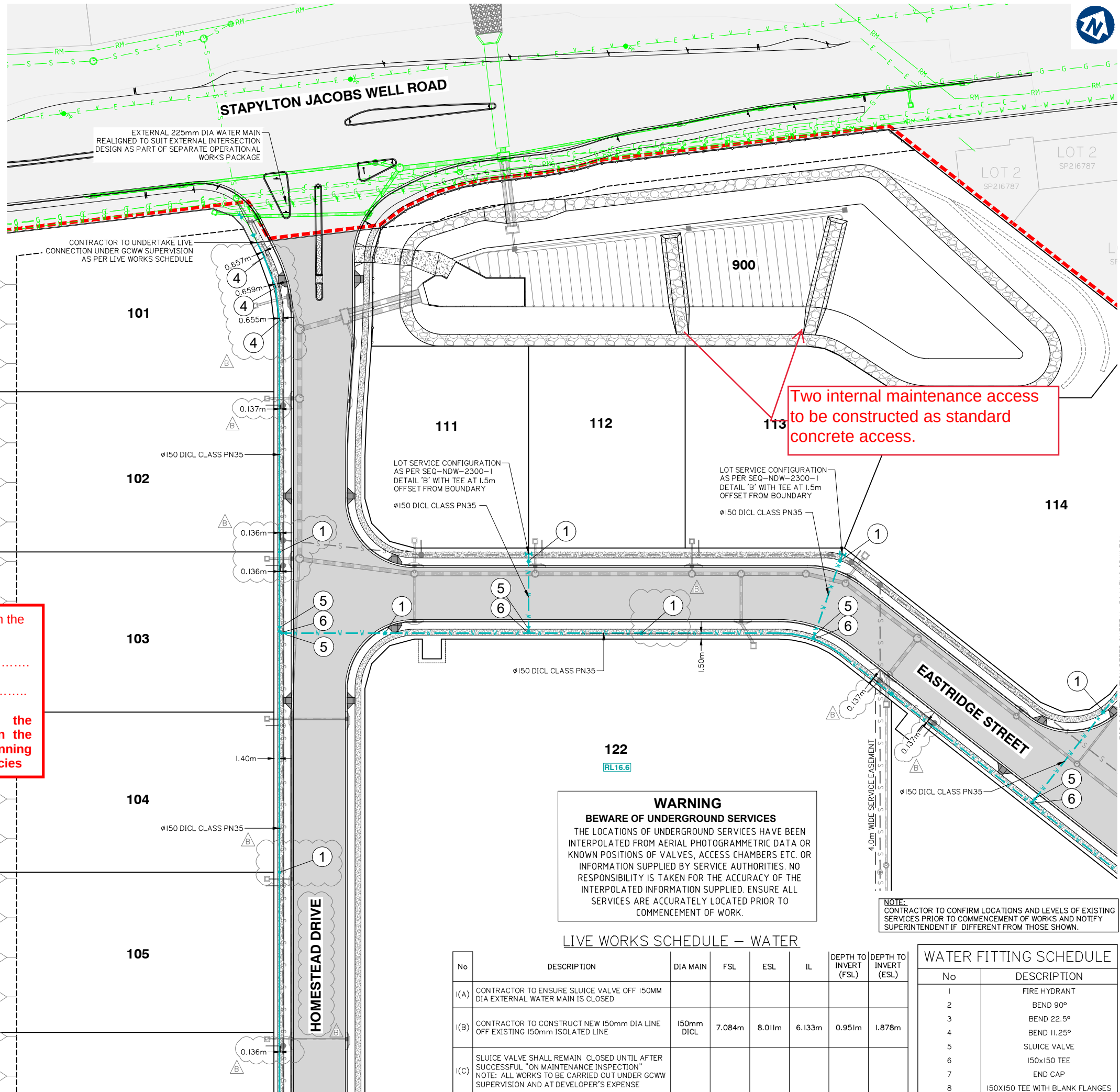
19.593

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KEY PLAN
SCALE 1:7500



PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No... OPW/2020/633

Dated: 20 July 2020

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies

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.

LIVE WORKS SCHEDULE – WATER

No	DESCRIPTION	DIA MAIN	FSL	ESL	IL	DEPTH TO INVERT (FSL)	DEPTH TO INVERT (ESL)
I(A)	CONTRACTOR TO ENSURE SLUICE VALVE OFF 150MM DIA EXTERNAL WATER MAIN IS CLOSED						
I(B)	CONTRACTOR TO CONSTRUCT NEW 150mm DIA LINE OFF EXISTING 150mm ISOLATED LINE	150mm DIA	7.084m	8.011m	6.133m	0.951m	1.878m
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						

WATER FITTING SCHEDULE

No	DESCRIPTION
1	FIRE HYDRANT
2	BEND 90°
3	BEND 22.5°
4	BEND 11.25°
5	SLUICE VALVE
6	150x150 TEE
7	END CAP
8	150x150 TEE WITH BLANK FLANGES

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

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: -

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DRAWING TITLE

WATER RETICULATION
LAYOUT PLAN SHEET 1 OF 4

Rev	Date	Description	By	Check
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG
A	01-05-2020	ORIGINAL ISSUE	BA	MG
Issue	Date	Description	DRN	CHK

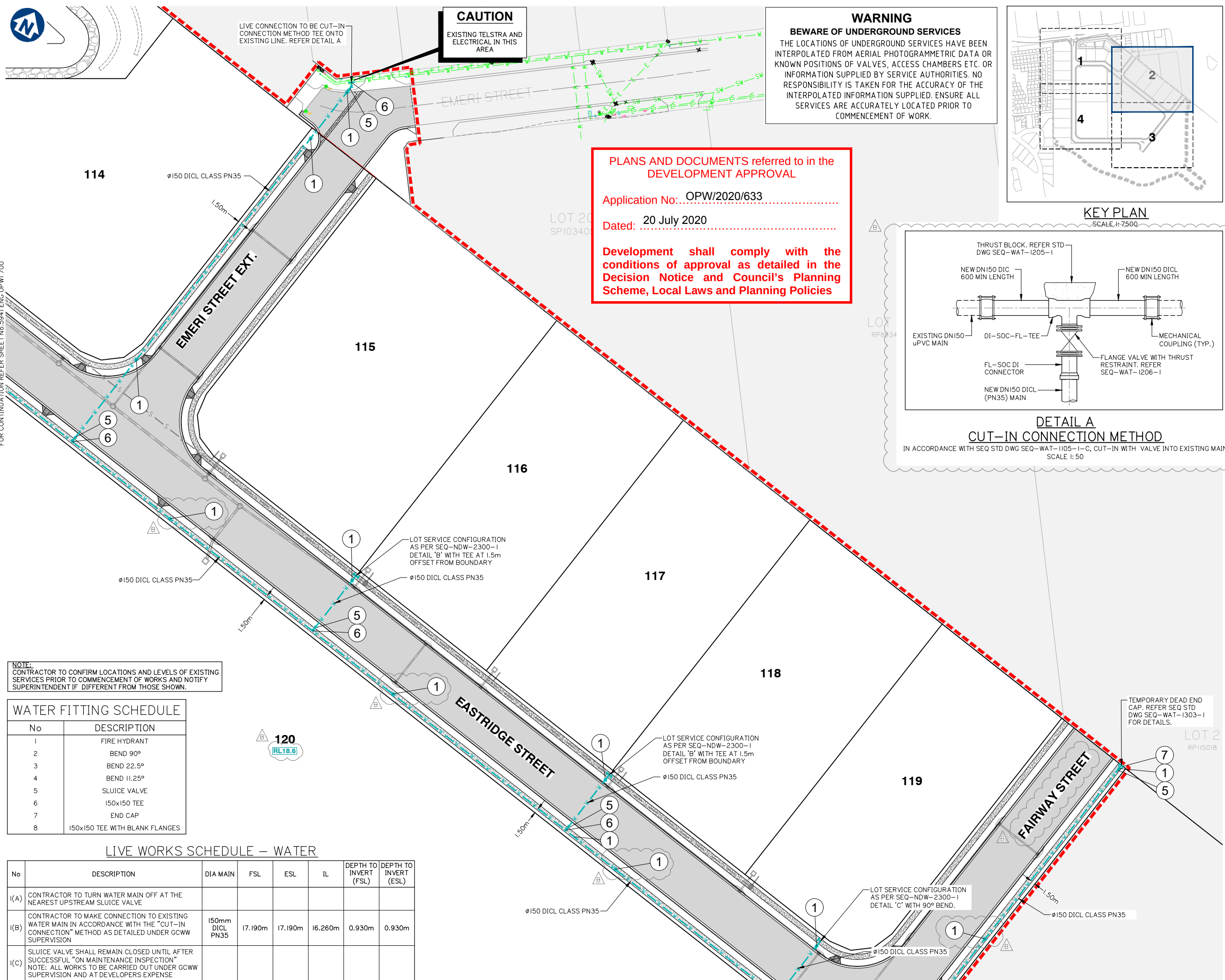
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1:1000 (HALF SIZE A3)

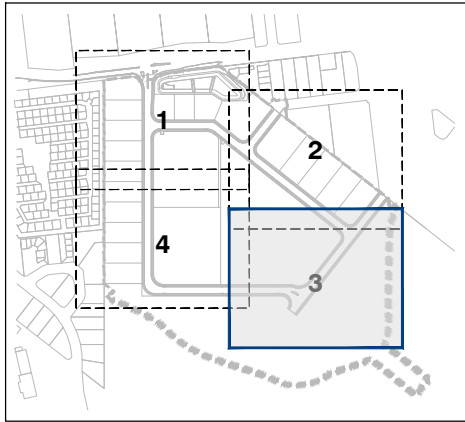
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Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No: 5941 ENG OPW1 700
Rev. No: B

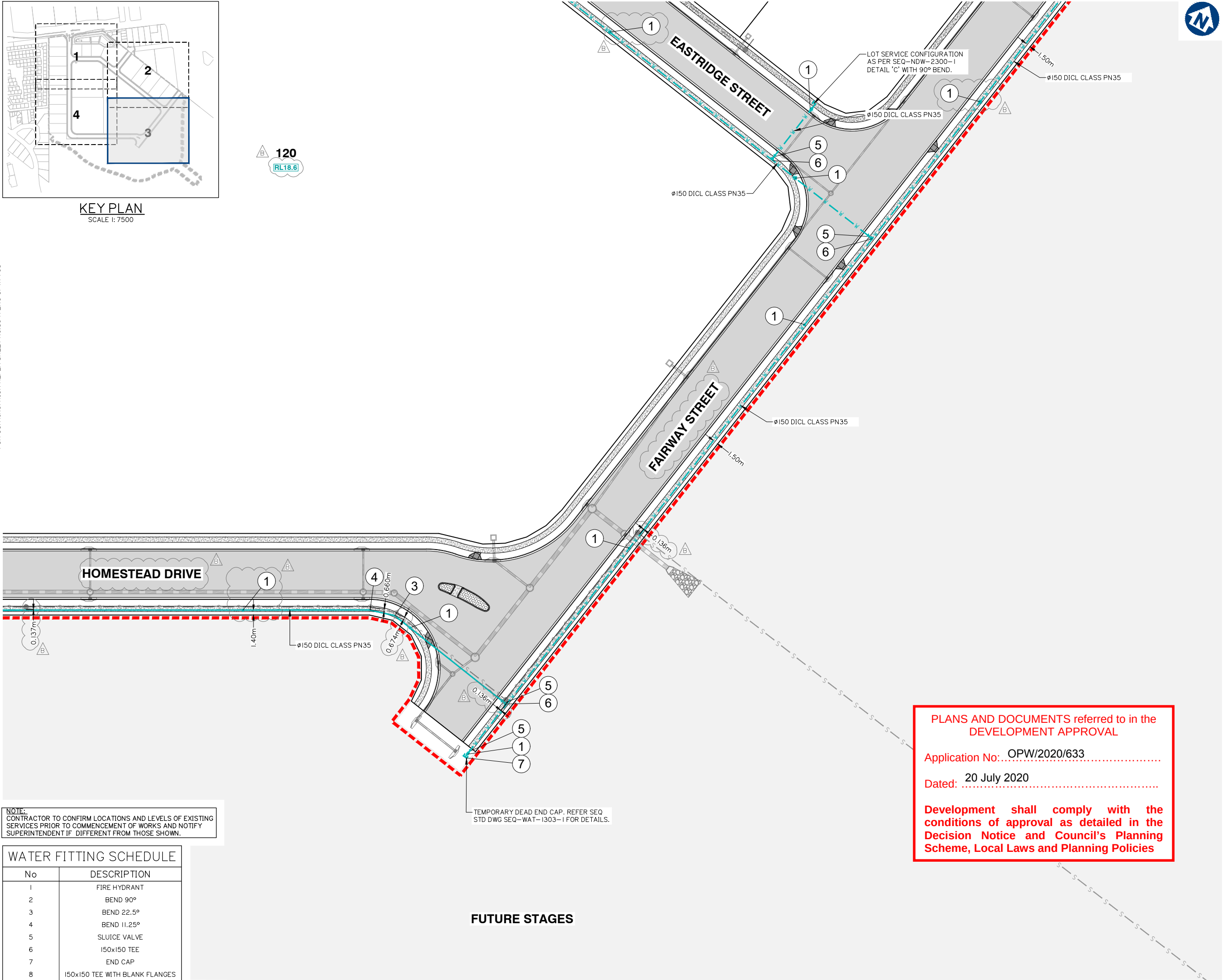


Rev. No:
B



KEY PLAN
SCALE 1: 7500

FOR CONTINUATION REFER SHEET No.5941 ENG OPW1 703



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

WATER FITTING SCHEDULE	
No	DESCRIPTION
1	FIRE HYDRANT
2	BEND 90°
3	BEND 22.5°
4	BEND 11.25°
5	SLUICE VALVE
6	150x150 TEE
7	END CAP
8	150x150 TEE WITH BLANK FLANGES

FUTURE STAGES

WATER RETICULATION LAYOUT PLAN SHEET 3 OF 4



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Gold Coast & Logan | 76 Business Street, Yatala QLD | PO Box 392, Beerleigh 4207

Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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RPD:

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

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DRAWING TITLE

WATER RETICULATION
LAYOUT PLAN SHEET 3 OF 4

Issue	Date	Description	BA	MG	CHK
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG	
A	01-05-2020	ORIGINAL ISSUE	BA	MG	

SCALE IN METRES

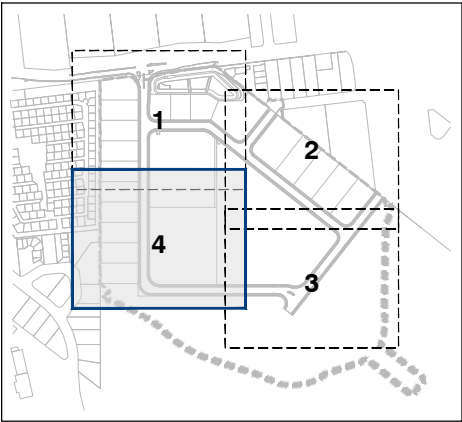


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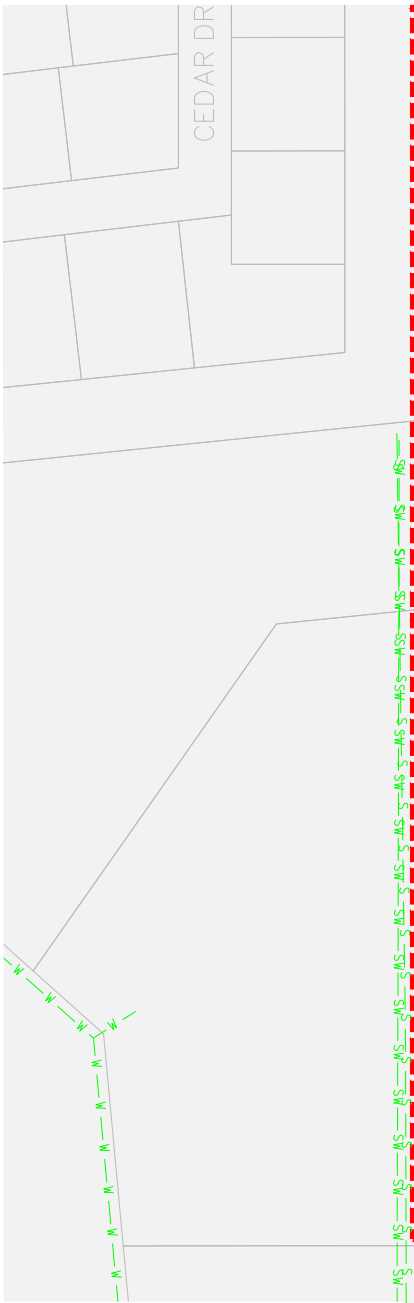
Scale at A1: 1:500

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No: 5941 ENG OPW1 702
Rev. No: B



KEY PLAN
SCALE 1: 7500



WATER FITTING SCHEDULE

No	DESCRIPTION
1	FIRE HYDRANT
2	BEND 90°
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4	BEND 11.25°
5	SLUICE VALVE
6	150x150 TEE
7	END CAP
8	150x150 TEE WITH BLANK FLANGES

NOTE:
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PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No:.....OPW/2020/633.....

Dated:20 July 2020.....

Development shall comply with the
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LOT SERVICE CONFIGURATION
AS PER SEQ-NDW-2300-1
DETAIL 'B' WITH TEE AT 1.5m
OFFSET FROM BOUNDARY

FUTURE STAGES



planning | environment | landscape | engineering | survey
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Gold Coast & Logan | 76 Business Street, Yatala QLD | PO Box 392, Beerleigh 4207

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DRAWING TITLE

WATER RETICULATION
LAYOUT PLAN SHEET 4 OF 4

SCALE IN METRES



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

Scale at A1: 1:500

Designed: IG

Drafted: BA

Approved: MG

RPEQ: 16939

Signed:

Date: 01-05-2020

Drawing No:
5941 ENG OPW1 703

Rev. No:
B

PIPE DN.	FITTING	MAX. THRUST IN KN	THRUST BLOCK HEIGHT	STIFF CLAY 50 kPa.	VERY STIFF CLAY SANDY LOAM 100kPa.	SAND & GRAVEL HARDCLAY 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

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 (0960 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

- INDICATES BLOCK LENGTH OF 600
- * = SPECIAL DESIGN

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



1. ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
2. 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.
3. THRUST BLOCKS NOT TO INTERFERE WITH OTHER SERVICES OR BE LOCATED OUTSIDE THE WATER MAIN ALLOCATION WITHOUT WATER AGENCY APPROVAL.
4. ALL CONCRETE GRADE N20, TABLE OF DIMENSIONS BASED ON REQUIRED TEST PRESSURE OF 1200kPa AND ACTUAL DICI PIPE DIAMETERS.
5. 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,
6. FOR DOWNWARD VERTICAL THRUST, THE ALLOWABLE BEARING PRESSURES FOR VARIOUS SOILS MAY BE TAKEN AS TWICE THAT FOR HORIZONTAL THRUST SHOWN.
7. 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,
8. CONCRETE THRUST BLOCK ANCHORS FOR VALVES TO BE AS DETAILED ON SEQ-WAT-1206-1.



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VANTAGE YATALA

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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Lot:	501
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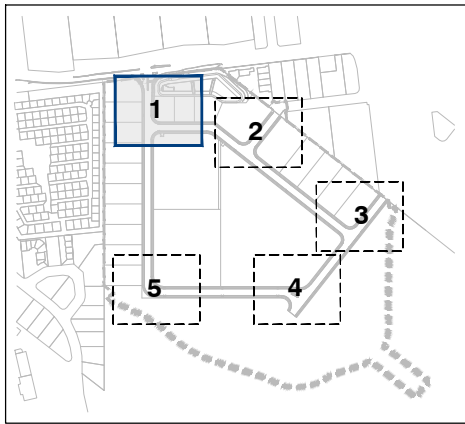
WATER RETICULATION TYPICAL DETAILS

A	01-05-2020		ORIGINAL ISSUE	BA	MO
Issue	Date		Description	RBN	CH

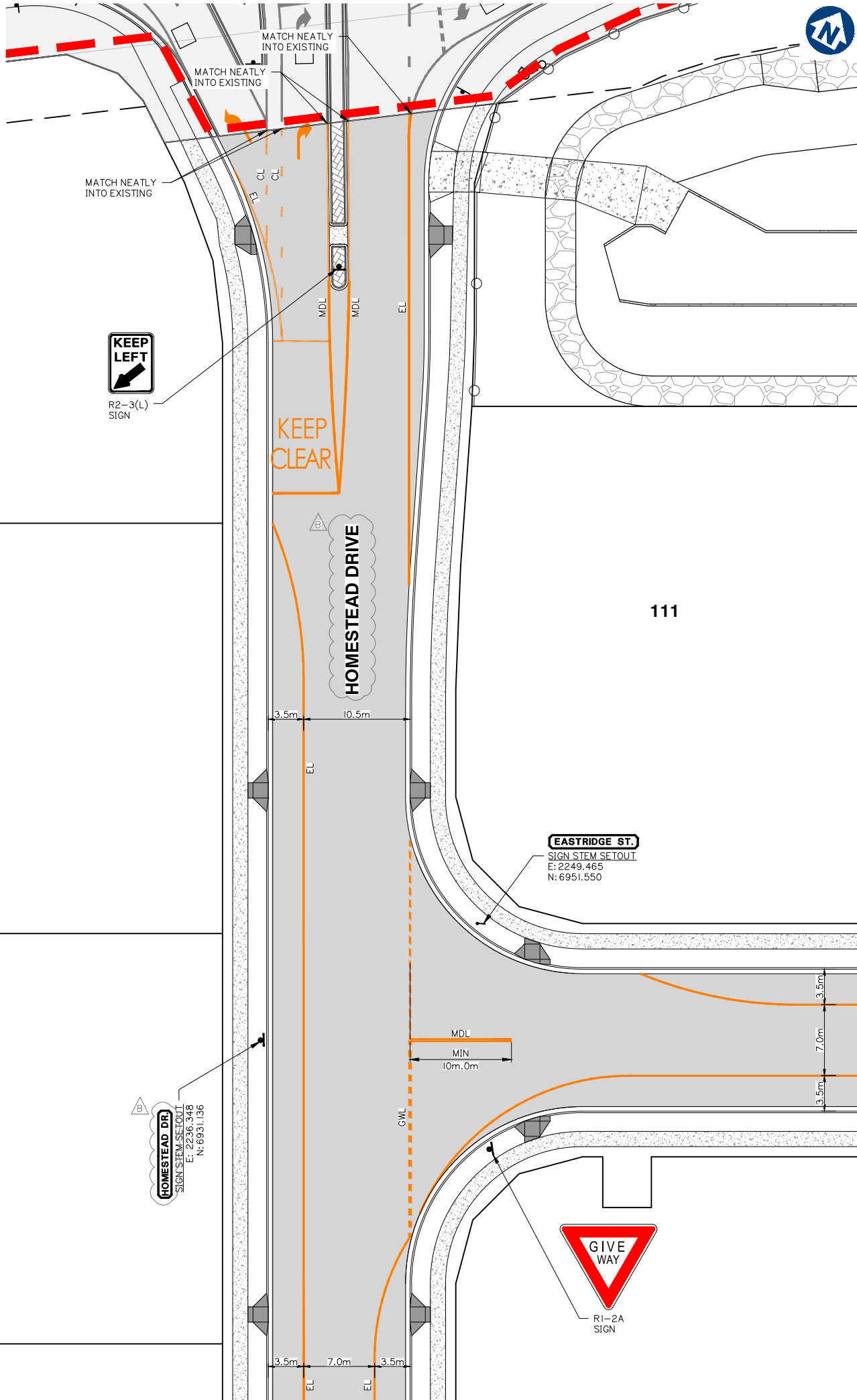
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Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:	Rev. No:
5941 ENG OPW1 704	A



KEY PLAN
SCALE 1: 7500



- NOTE:**
1. ALL LINE-MARKING, SIGNAGE AND REFLECTORISED PAVEMENT MARKERS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT DEPARTMENT OF MAIN ROADS "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
 2. EXTENT OF LINE-MARKING IS TO BE VERIFIED ON SITE WITH THE SUPERINTENDENT PRIOR TO INSTALLATION.
 3. EXACT LOCATION OF ALL SIGNS IS TO BE VERIFIED ON SITE WITH THE SUPERINTENDENT PRIOR TO INSTALLATION.
 4. ALL SIGN POSTS & SIGN RAILS TO BE GALVANISED UNLESS NOTED OTHERWISE.
 5. ALL TRAFFIC SIGNS TO BE SIZE "B" UNLESS NOTED OTHERWISE.
 6. FOR GUIDE POST INSTALLATION AND DETAILS, REFER DEPARTMENT OF MAIN ROADS STANDARD DRAWING No.1356
 7. FOR TRAFFIC SIGN SUPPORT DETAILS, REFER DEPARTMENT OF MAIN ROADS STANDARD DRAWING No.'s 1360 AND 1362
 8. ALL ROUTE NAMES ON NEW GUIDE SIGNS TO BE BLACK LETTERING ON WHITE BACKGROUND U.N.O.
 9. ALL SIGN MATERIAL TO BE CLASS I.
 10. ALL LINEMARKING TO BE REFLECTORISED WHITE.

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

PLANS AND DOCUMENTS referred to in the **DEVELOPMENT APPROVAL**

Application No: **OPW/2020/633**

Dated: **20 July 2020**

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

Issue	Date	Information Request Response	BA	MG
A	01-05-2020	ORIGINAL ISSUE	BA	MG

SCALE IN METRES

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

Scale at A1:	1:250
Designed:	IG
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RPEQ:	16939
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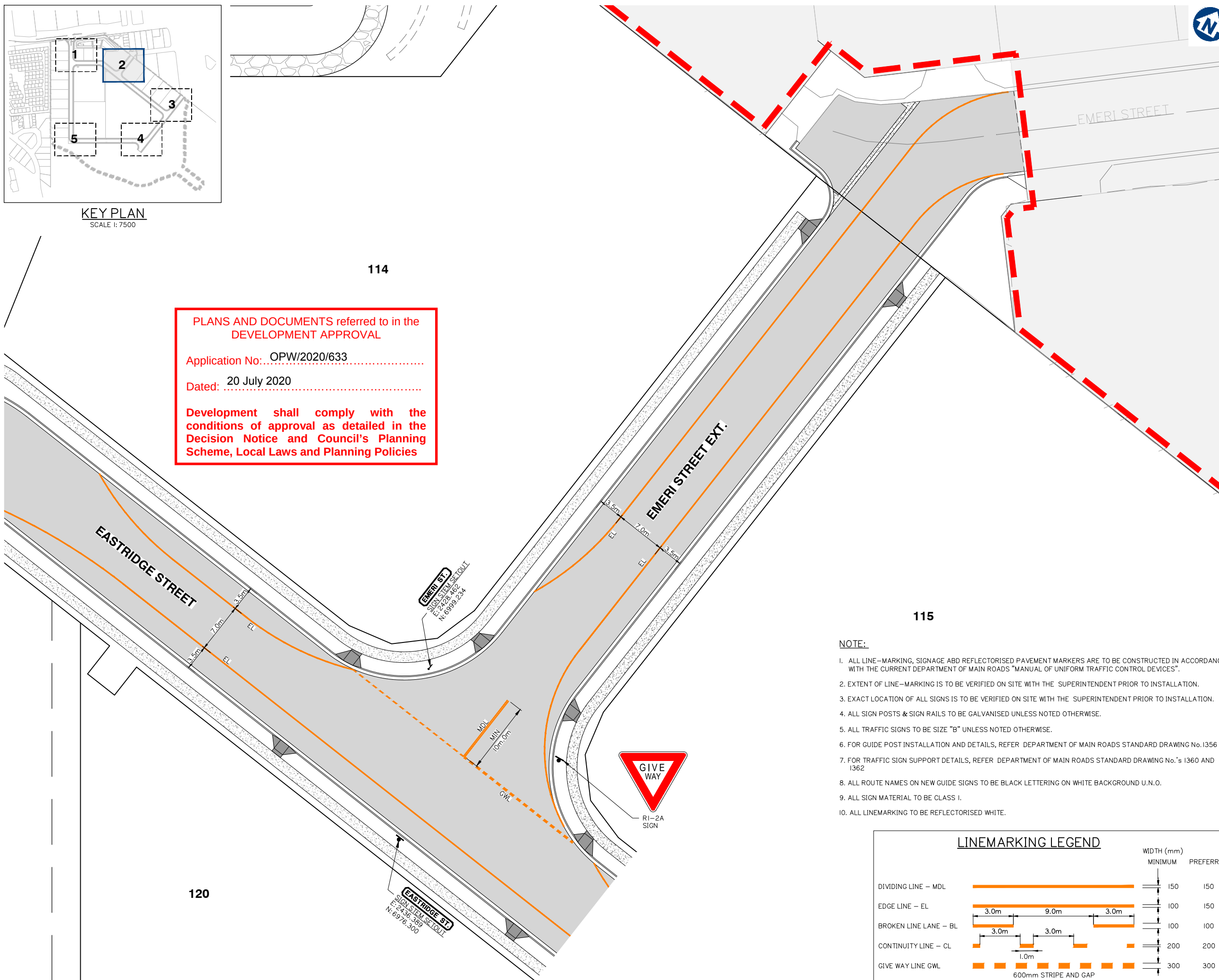
114

PLANS AND DOCUMENTS referred to in the
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Application No: OPW/2020/633

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Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



NOTE:

1. ALL LINE-MARKING, SIGNAGE AND REFLECTORISED PAVEMENT MARKERS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT DEPARTMENT OF MAIN ROADS "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
2. EXTENT OF LINE-MARKING IS TO BE VERIFIED ON SITE WITH THE SUPERINTENDENT PRIOR TO INSTALLATION.
3. EXACT LOCATION OF ALL SIGNS IS TO BE VERIFIED ON SITE WITH THE SUPERINTENDENT PRIOR TO INSTALLATION.
4. ALL SIGN POSTS & SIGN RAILS TO BE GALVANISED UNLESS NOTED OTHERWISE.
5. ALL TRAFFIC SIGNS TO BE SIZE "B" UNLESS NOTED OTHERWISE.
6. FOR GUIDE POST INSTALLATION AND DETAILS, REFER DEPARTMENT OF MAIN ROADS STANDARD DRAWING No. 1356
7. FOR TRAFFIC SIGN SUPPORT DETAILS, REFER DEPARTMENT OF MAIN ROADS STANDARD DRAWING No.'s 1360 AND 1362
8. ALL ROUTE NAMES ON NEW GUIDE SIGNS TO BE BLACK LETTERING ON WHITE BACKGROUND U.N.O.
9. ALL SIGN MATERIAL TO BE CLASS I.
10. ALL LINEMARKING TO BE REFLECTORISED WHITE.

LINEMARKING LEGEND

LINEMARKING LEGEND

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



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Client:



FRASERS PROPERTY
(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

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:	-

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DRAWING TITLE

LINEMARKING AND SIGNAGE
PLAN SHEET 2 OF 5

A	01-05-2020		ORIGINAL ISSUE	BA	M

SCALE IN METRES



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

Scale at A1:	1:250
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Designed:	IG
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Drafted:	BA
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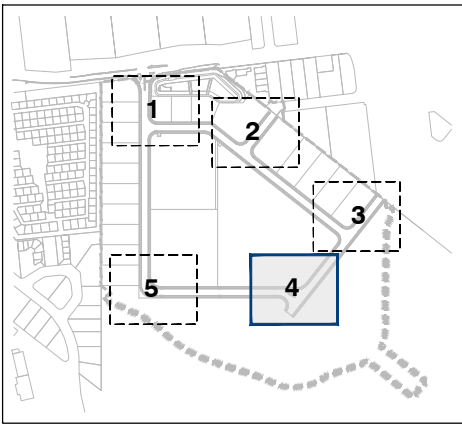
Approved:	MG
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RPEQ:	160
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	10939
Signed:	<i>M. J. K.</i>

	<i>M. M. M.</i>
Date:	01-05-2020

Drawing No:	Rev. No:
5941 ENG OPW1 801	A

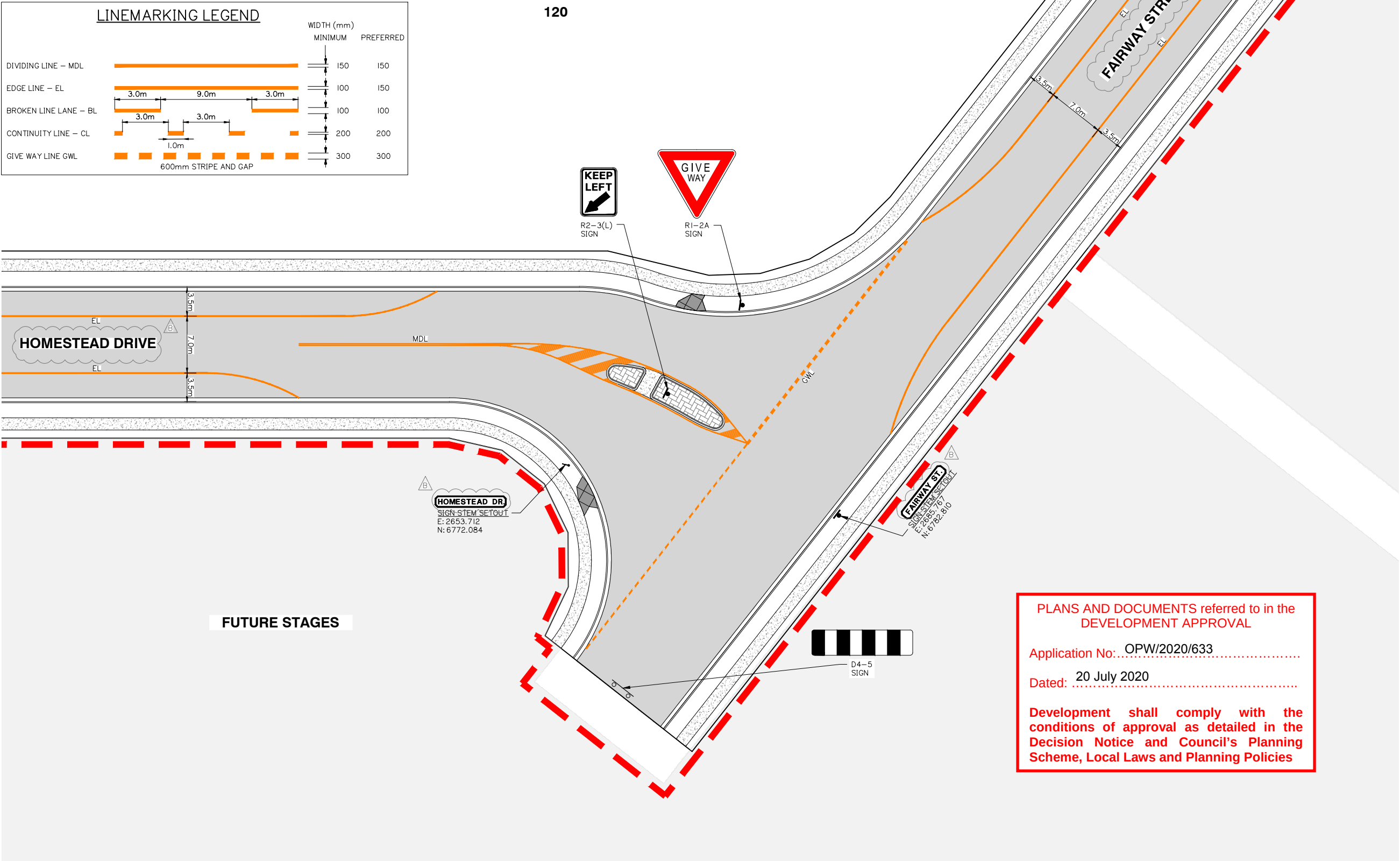


KEY PLAN

SCALE 1: 7500

LINEMARKING LEGEND

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



PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

Application No: OPW/2020/633

Dated: 20 July 2020

Development shall comply with the
conditions of approval as detailed in the
Decision Notice and Council's Planning
Scheme, Local Laws and Planning Policies



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Client:



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(AUSTRALIA) PTY. LTD.

Project:

VANTAGE YATALA

Site Address:

60 STAPYLTON JACOBS WELL
ROAD, STAPYLTON QLD 4207

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RPD:

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

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DRAWING TITLE

LINEMARKING AND SIGNAGE
PLAN SHEET 4 OF 5

Issue	Date	Description	BA	MG	CHK
B	12-06-2020	INFORMATION REQUEST RESPONSE	BA	MG	
A	01-05-2020	ORIGINAL ISSUE	BA	MG	

SCALE IN METRES



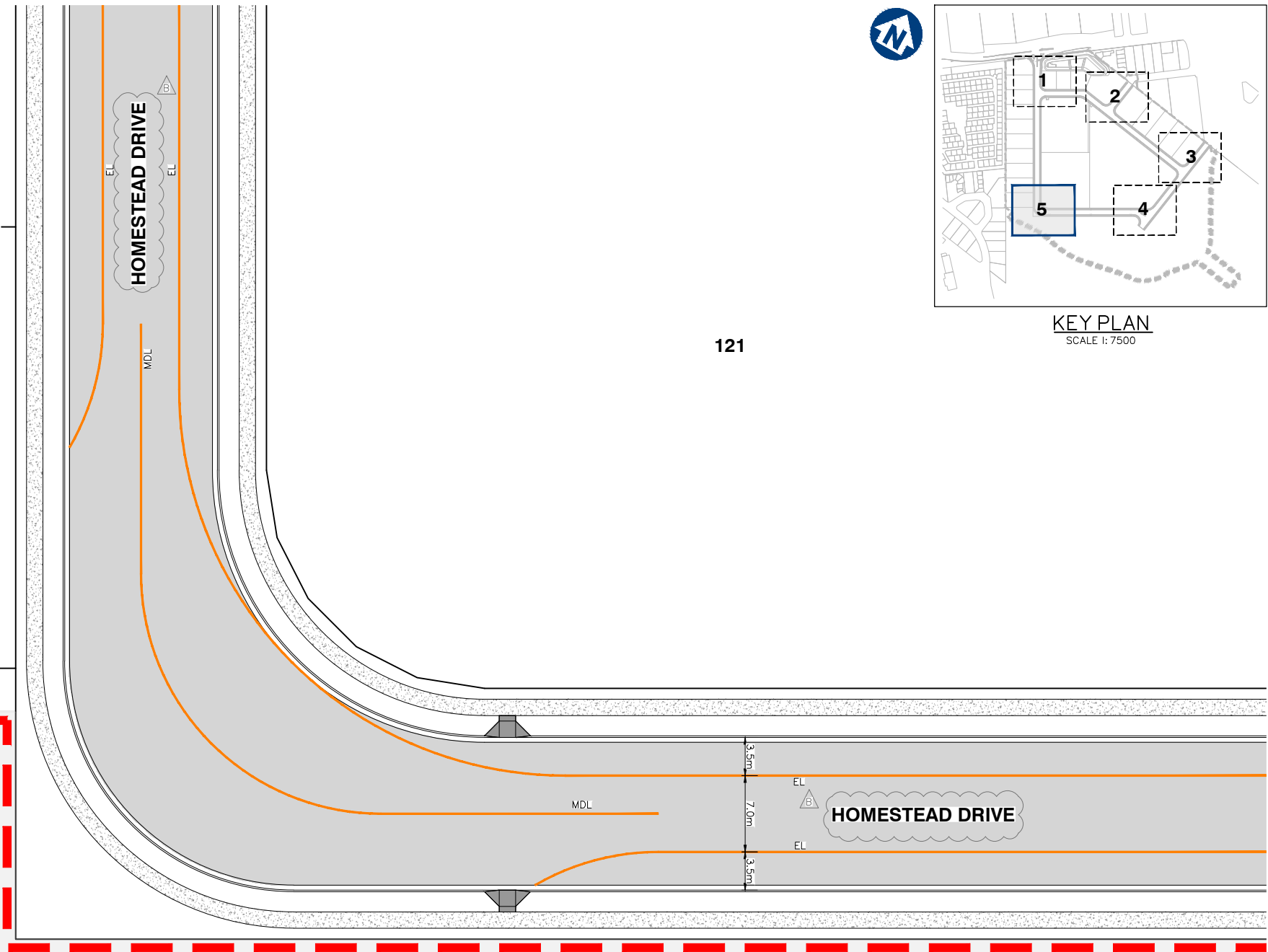
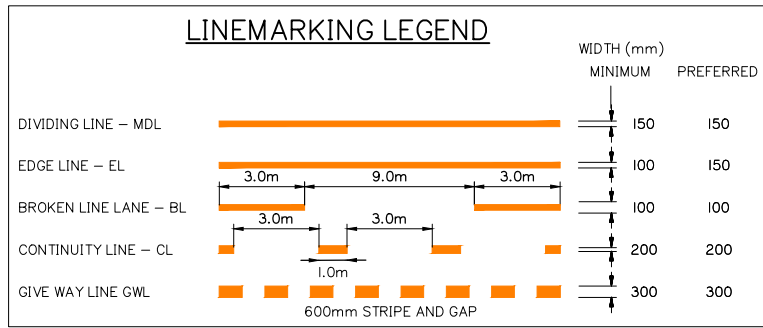
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1:500 (HALF SIZE A3)

Scale at A1: 1:250

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

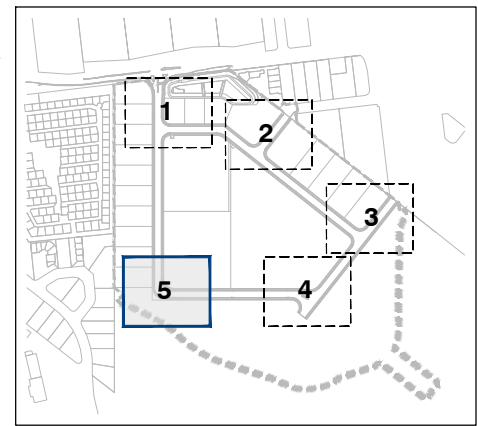
Drawing No: 5941 ENG OPW1 803
Rev. No: B

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FUTURE STAGE

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies



KEY PLAN
SCALE 1: 7500

121



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Client:



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Project:

VANTAGE YATALA

Site Address:

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ROAD, STAPYLTON QLD 4207

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RPD:

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

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DRAWING TITLE

LINEMARKING AND SIGNAGE
PLAN SHEET 5 OF 5

B	12-06-2020	INFORMATION REQUEST RESPONSE		BA	MG
A	01-05-2020	ORIGINAL ISSUE		BA	MG
Issue	Date	Description		DRN	CHK

SCALE IN METRES



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

Scale at A1: 1:250

Designed:	IG
Drafted:	BA
Approved:	MG
RPEQ:	16939
Signed:	
Date:	01-05-2020

Drawing No:	Rev. No:
5941 ENG OPW1 804	B