

IRR - ATTACHMENT C

AMENDED BULK EARTHWORK PLANS



gassman **development perspectives**

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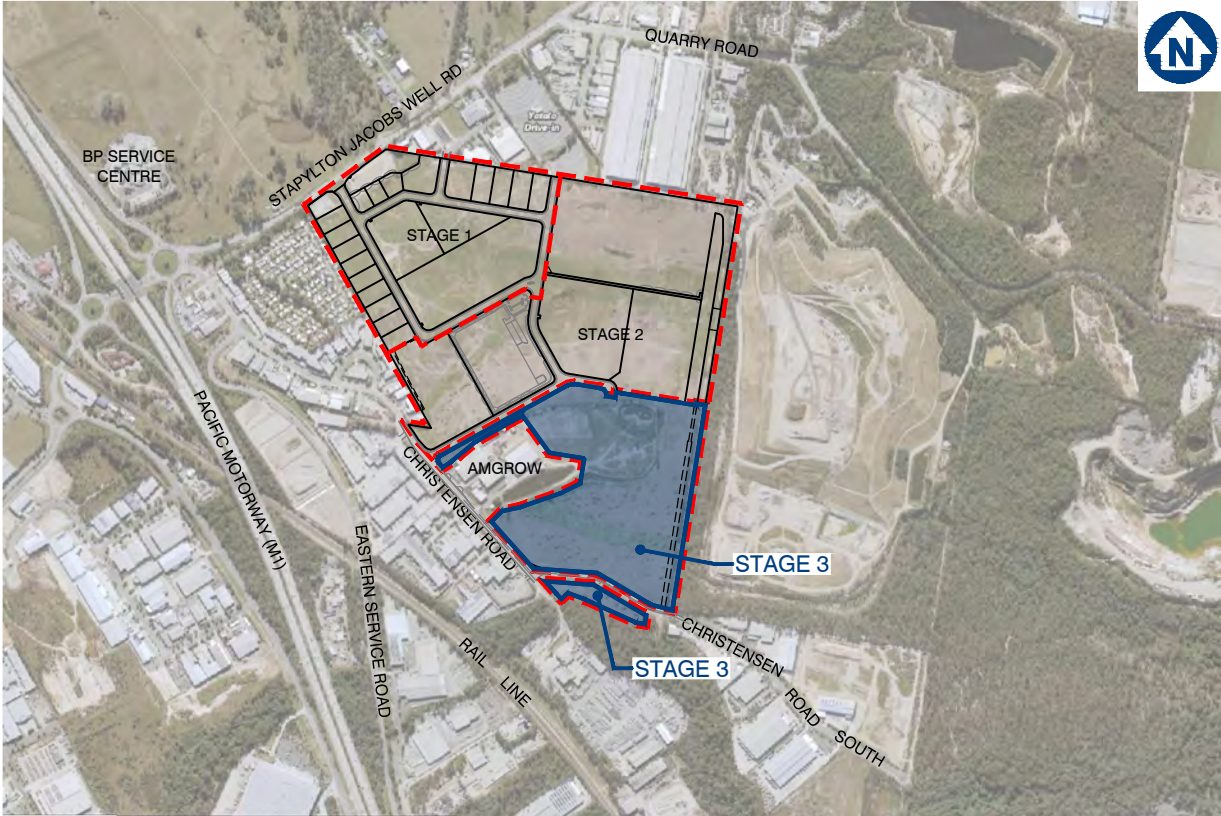
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OPERATIONAL WORKS APPLICATION FOR CHANGE TO GROUND LEVEL

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LOCALITY PLAN

NOT TO SCALE

CLIENT
FPI QUEENSLAND
PTY LTD

SITE ADDRESS
LOT 501 ON SP295994
60 STAPYLTON JACOBS WELL ROAD,
STAPYLTON, QLD 4207

ISSUED FOR TENDER

DWG NO.5941 ENG BE3 001 - C

MAY 2023

GENERAL NOTES

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

8. **DAMS AND PONDS**
WHERE POSSIBLE, WATER FROM DAMS AND PONDS SHALL BE MAINTAINED AND UTILISED FOR CONSTRUCTION PURPOSES AND DUST SUPPRESSION. DAMS AND PONDS NOT TO BE RETAINED SHALL BE DEWATERED, CLEARED OF ANY FOREIGN MATTER AND ORGANIC MATERIAL WITH THIS MATERIAL TO BE REMOVED OFF SITE.
9. **RETAINING STRUCTURES**
THE DESIGN AND STRUCTURAL CERTIFICATION OF RETAINING STRUCTURES SHALL BE UNDERTAKEN BY THE CONTRACTOR'S STRUCTURAL ENGINEER (RPEQ) IN CONSULTATION WITH THE PROJECT'S CIVIL ENGINEER AND LANDSCAPE CONSULTANT. THE CONTRACTOR IS RESPONSIBLE FOR THE SUBMISSION AND APPROVAL COORDINATION OF THE ASSOCIATED DRAWINGS AND CERTIFICATION TO GCCC. 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-SREADING.
11. **GRASSING / SEEDING**
ALL CUT & FILL AREAS AND DISTURBED AREAS SHALL BE GRASSED OR SEED

SEDIMENT AND EROSION

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

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

1.2. MINIMISE SOIL EROSION FROM WATER AND WIND

1.3. MINIMISE ADVERSE EFFECTS OF SEDIMENT RUNOFF.

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

1.5. 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 COMPLETED.
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 SITE 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

CONSTRUCTION SEQUENCE/SILT MANAGEMENT PROGRAM

1. **PRE START**

1.1. ERECT SITE SIGNAGE. CONSTRUCT ENTRY AND EXIT POINT AS INDICATED CONSTRUCT VEHICLE WASH-DOWN AREA AND ASSOCIATED SILT MANAGEMENT DEVICES.

1.2. CONSTRUCT SITE OFFICE AND STORAGE COMPOUND AREA

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

1.4. 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.

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

1.6. CONSTRUCT BASIN TO FULL DEPTH.

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

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



EARTHWORKS

1. **PRECEDENCE**
EARTHWORKS SPECIFICATION PREPARED BY PROJECT GEOTECHNICAL ENGINEER TO TAKE PRECEDENCE OVER STANDARD COUNCIL EARTHWORKS NOTES.
2. **TOPSOIL STRIPPING**
TOPSOIL SHALL BE STRIPPED ACROSS THE ENTIRE LIMIT OF THE EARTHWORKS CUT AND FILL AREAS AND SHALL BE STOCKPILED IN A LOCATION APPROVED BY THE SUPERINTENDENT. THE EXISTING STRATA IS TO BE TREATED IN ACCORDANCE WITH THE SPECIFICATION PRIOR TO PLACING ANY FILL. TOPSOIL STRIPPING DEPTHS TO BE AS PER DWG 5941 ENG BE3 011.
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.

5.1. 100% DRY DENSITY RATIO IN COHESIVE MATERIAL OR 80% IN COHESIONLESS MATERIAL FOR ROAD SUBGRADE.

5.2. 98% DRY DENSITY RATIO IN COHESIVE MATERIAL OR 65% IN COHESIONLESS MATERIAL FOR ALL AREAS OTHER THAN THE ROADWAY AND BUILDING PADS.

5.3. 98% DRY DENSITY RATIO IN COHESIVE MATERIAL OR 70% IN COHESIONLESS MATERIAL FOR BUILDING PADS.
6. **PAVEMENT DEPTHS**
EARTHWORKS VOLUMES DO NOT INCLUDE DESIGN PAVEMENT DEPTHS AS INDICATED ON THE TYPICAL BULK EARTHWORKS ROAD SECTION.
7. **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.
8. **ROCK**
THE CONTRACTOR IS TO INCLUDE ROCK EXCAVATION AS PART OF THEIR EARTHWORKS RATES UNLESS SCHEDULED OTHERWISE WITHIN THE CONTRACT DOCUMENT.



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VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329845
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

ISSUED FOR APPROVAL

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Drawing Title:

GENERAL NOTES
SHEET 1 OF 2

C	05/07/23	FOR APPROVAL	JH	MG
B	24/05/23	ISSUED FOR TENDER	JH	MG
A	05/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE	A1 UNREDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES	A3 REDUCED

Scale:

NOT APPLICABLE

PROJECT NORTH POINT

Project No: 5941	
Designed: JH	Drafted: JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	05/05/2023

Drawing No: 5941 ENG BE3 002	Revision: C
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HES BASIN GENERAL NOTES

AUTO DOSER

1. PROVIDED AS EITHER 'FLOC BOX' OR 'F00D-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 EMERSON CLASS 2(i), 3, 4 OR 5 AND FREE OF ROOTS, WOODY VEGETATION, ROCKS AND OTHER UNSUITABLE MATERIAL. SOIL WITH EMERSON CLASS 4 AND 5 MAY NOT BE SUITABLE DEPENDING ON PARTICLE SIZE DISTRIBUTION AND DEGREE OF DISPERSION. CLASS 2 (i) SHOULD ONLY BE USED UPON RECOMMENDATION FROM GEOTECHNICAL SPECIALIST.
6. SPILLWAY ROCK: HARD, ANGULAR, DURABLE, WEATHER RESISTANT AND EVENLY GRADED ROCK WITH 50% BY WEIGHT LARGER THAN THE SPECIFIED NOMINAL (D50) ROCK SIZE. LARGE ROCK SHOULD DOMINATE, WITH SUFFICIENT SMALL ROCK TO FILL THE VOIDS BETWEEN LARGER ROCK. THE DIAMETER OF THE LARGEST ROCK SHOULD BE NO LARGER THAN 1.5 TIMES THE NOMINAL ROCK SIZE. THE SPECIFIC GRAVITY SHOULD BE AT LEAST 2.5.
7. GEOTEXTILE FABRIC: HEAVY DUTY, NEEDLE-PUNCHED, NON-WOVEN CLOTH, MINIMUM 'BIDIM' A24 OR EQUIVALENT.

CONSTRUCTION

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

CUT-OFF TRENCH

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 1 SHEET OF FILTER FABRIC IS REQUIRED, OVERLAP THE EDGES BY AT LEAST 300mm AND PLACE ANCHOR PINS AT MINIMUM 1m SPACING ALONG THE OVERLAP. BURY THE UPSTREAM END OF THE FILTER FABRIC A MINIMUM 300mm BELOW GROUND AND WHERE NECESSARY, BURY THE LOWER END OF THE FABRIC OR OVERLAP A MINIMUM 300mm OVER THE NEXT DOWNSTREAM SECTION AS REQUIRED. ENSURE THE FILTER FABRIC EXTENDS AT LEAST 1000mm UPSTREAM OF THE SPILLWAY CREST.
36. TAKE CARE NOT TO DAMAGE THE FABRIC DURING OR AFTER PLACEMENT. IF DAMAGE OCCURS, REMOVE THE ROCK AND REPAIR THE SHEET BY ADDING ANOTHER LAYER OF FABRIC WITH A MINIMUM OVERLAP OF 300mm AROUND THE DAMAGED AREA. IF EXTENSIVE DAMAGE IS SUSPECTED, REMOVE AND REPLACE THE ENTIRE SHEET.
37. WHERE LARGE ROCK IS USED, OR MACHINE PLACEMENT IS DIFFICULT, A MINIMUM 100mm LAYER OF FINE GRAVEL, AGGREGATE, OR SAND MAY BE NEEDED TO PROTECT THE FABRIC.
38. PLACEMENT OF ROCK SHOULD FOLLOW IMMEDIATELY AFTER PLACEMENT OF THE FILTER FABRIC. PLACE ROCK SO THAT IT FORMS A DENSE, WELL GRADED MASS OF ROCK WITH A MINIMUM OF VOIDS. THE DESIRED DISTRIBUTION OF ROCK THROUGHOUT THE MASS MAY BE OBTAINED BY SELECTIVE LOADING AT THE QUARRY AND CONTROLLED DUMPING DURING FINAL PLACEMENT.
39. THE FINISHED SLOPE SHOULD BE FREE OF POCKETS OF SMALL ROCK OR CLUSTERS OF LARGE ROCKS. HAND PLACING MAY BE NECESSARY TO ACHIEVE THE PROPER DISTRIBUTION OF ROCK SIZES TO PRODUCE A RELATIVELY SMOOTH, UNIFORM SURFACE. THE FINISHED GRADE OF THE ROCK SHOULD BLEND WITH THE SURROUNDING AREA. NO OVER FALL OR PROTRUSION OF ROCK SHOULD BE APPARENT.
40. ENSURE THAT THE FINAL ARRANGEMENT OF THE SPILLWAY CREST WILL NOT PROMOTE EXCESSIVE FLOW THROUGH THE ROCK SUCH THAT THE WATER CAN BE RETAINED WITHIN THE SETTLING BASIN AT THE ELEVATION NO LESS THAN 50mm ABOVE OF BELOW THE NOMINATED SPILLWAY CREST ELEVATION.



planning | environment | landscape | engineering | survey
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Client:



FPI QUEENSLAND PTY LTD

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329845
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

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Drawing Title:

GENERAL NOTES
SHEET 2 OF 2

C	05/07/23	FOR APPROVAL	JH	MG
B	24/05/23	ISSUED FOR TENDER	JH	MG
A	05/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES
A1 UNREDUCED
A3 REDUCED

Scale:

NOT APPLICABLE

PROJECT NORTH POINT

Project No.	5941
Designed: JH	Drafted: JH
Approved: MG	
RPEQ	16939
Signed:	
Date:	05/05/2023
Drawing No:	Revision
5941 ENG BE3 003	C

Client:



FPI QUEENSLAND PTY LTD

Project:

**VANTAGE YATALA
STAGE 3**

Site Address:

**LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207**

RPD:

Lot: **504**
Plan: **SP329845**
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Drawing Title:

DRAWING LEGENDS

C	05/07/23	FOR APPROVAL	JH	MG	
B	24/05/23	ISSUED FOR TENDER	JH	MG	
A	05/05/23	ORIGINAL ISSUE	JH	MG	
Rev	Date	Description	DRN	CHK	

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:

NOT APPLICABLE

PROJECT NORTH POINT

Project No. 5941	
Designed: JH	Drafted: JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	05/05/2023
Drawing No: 5941 ENG BE3 004	Revision C

FEATURE LEGEND

	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

SERVICES LEGEND

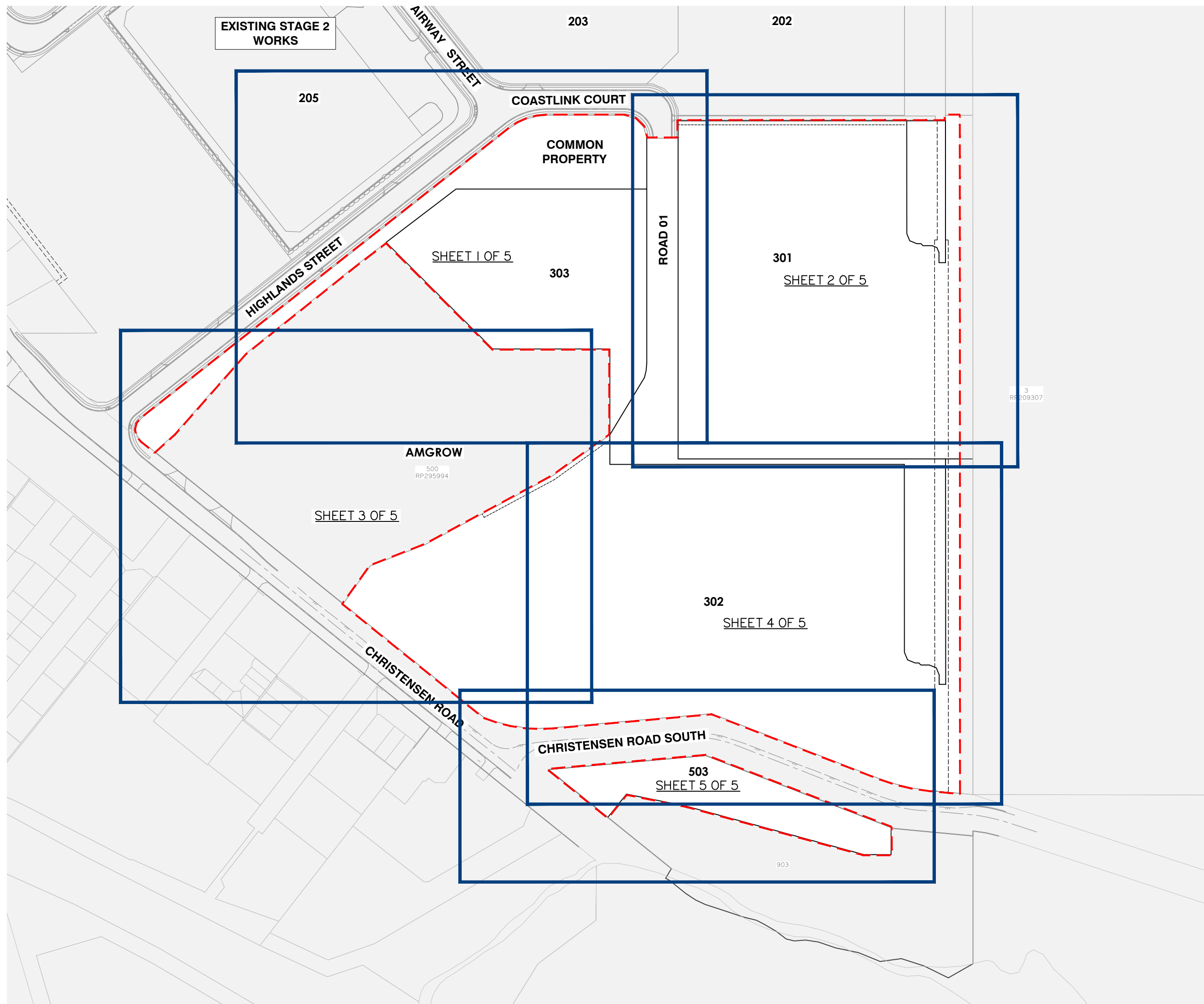
	PROPOSED RISING MAIN
	PROPOSED SEWER
	PROPOSED STORMWATER
	PROPOSED ROOFWATER
	PROPOSED SUBSOIL
	PROPOSED WATER
	PROPOSED RECYCLED WATER
	PROPOSED OIL
	PROPOSED FUEL
	PROPOSED GAS
	PROPOSED PIPELINE
	PROPOSED HIGH VOLTAGE ELECTRICITY
	PROPOSED UNDERGROUND ELECTRICITY
	PROPOSED OVERHEAD ELECTRICITY
	PROPOSED LIGHTING
	PROPOSED TELSTRA
	PROPOSED COMMUNICATIONS
	PROPOSED GAS, ELECT
	PROPOSED GAS, TELSTRA
	PROPOSED ELECT, TELSTRA
	PROPOSED GAS, ELECTRICITY, TELSTRA
	EXISTING RISING MAIN
	EXISTING SEWER
	EXISTING STORMWATER
	EXISTING ROOFWATER
	EXISTING SUBSOIL
	EXISTING WATER
	EXISTING RECYCLED WATER
	EXISTING OIL
	EXISTING FUEL
	EXISTING GAS
	EXISTING PIPELINE
	EXISTING HIGH VOLTAGE ELECTRICITY
	EXISTING UNDERGROUND ELECTRICITY
	EXISTING OVERHEAD ELECTRICITY
	EXISTING LIGHTING
	EXISTING TELSTRA
	EXISTING COMMUNICATIONS
	EXISTING GAS, ELECT
	EXISTING GAS, TELSTRA
	EXISTING ELECT, TELSTRA
	EXISTING GAS, ELECTRICITY, TELSTRA
	DEMOLISH RISING MAIN
	DEMOLISH SEWER
	DEMOLISH STORMWATER
	DEMOLISH SUBSOIL
	DEMOLISH WATER
	DEMOLISH OIL
	DEMOLISH FUEL
	DEMOLISH HIGH VOLTAGE ELECTRICITY
	DEMOLISH UNDERGROUND ELECTRICITY
	DEMOLISH OVERHEAD ELECTRICITY
	DEMOLISH LIGHTING
	DEMOLISH GAS
	DEMOLISH PIPELINE
	DEMOLISH TELSTRA
	DEMOLISH COMMUNICATIONS

SYMBOLS

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 DICL
	SEWER MAINTENANCE HOLE
	SEWER RODDING END
	SEWER BEND
	SEWER MAINTENANCE SHAFT
	SEWER 'T' END
	SEWER SLUICE VALVE
	SEWER PIT
	SEWER PUMP STATION
	TEMPORARY SEWER PUMP STATION
	SEWER / STORMWATER PIT NO/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 - GRADE
	GULLY PIT (LIP INLINE) BARRIER KERB - SAG
	GULLY PIT (LIP INLINE) ROLL TOP KERB - GRADE
	GULLY PIT (LIP INLINE) ROLL TOP KERB - SAG
	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

DRAWING LEGENDS



Client:



FPI QUEENSLAND PTY LTD

Project:

VANTAGE YATALA STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207

RPD:

Lot:	504
Plan:	SP329845
Local Authority:	CITY OF GOLD COAST
Level Datum:	AHD
Meridian:	
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Drawing Title:

KEY PLAN LAYOUT

C	05/07/23	LAYOUT UPDATED	JH	MG	
B	24/05/23	ISSUED FOR TENDER	JH	MG	
A	05/05/23	ORIGINAL ISSUE	JH	MG	
Rev	Date	Description	DRN	G/K	
DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE					
CULVERT AND PIPE SIZES IN MILLIMETRES					
			A1 UNREDUCED A3 REDUCED		

Scale:



0 12.5 25 37.5 50 62.5m

1:1250 (A1) 1:2500 (A3)

PROJECT NORTH POINT



Project No. 5941

Designed: JH

Drafted: JH

Approved:

MG

RPEQ

16939

Signed:

[Signature]

Date:

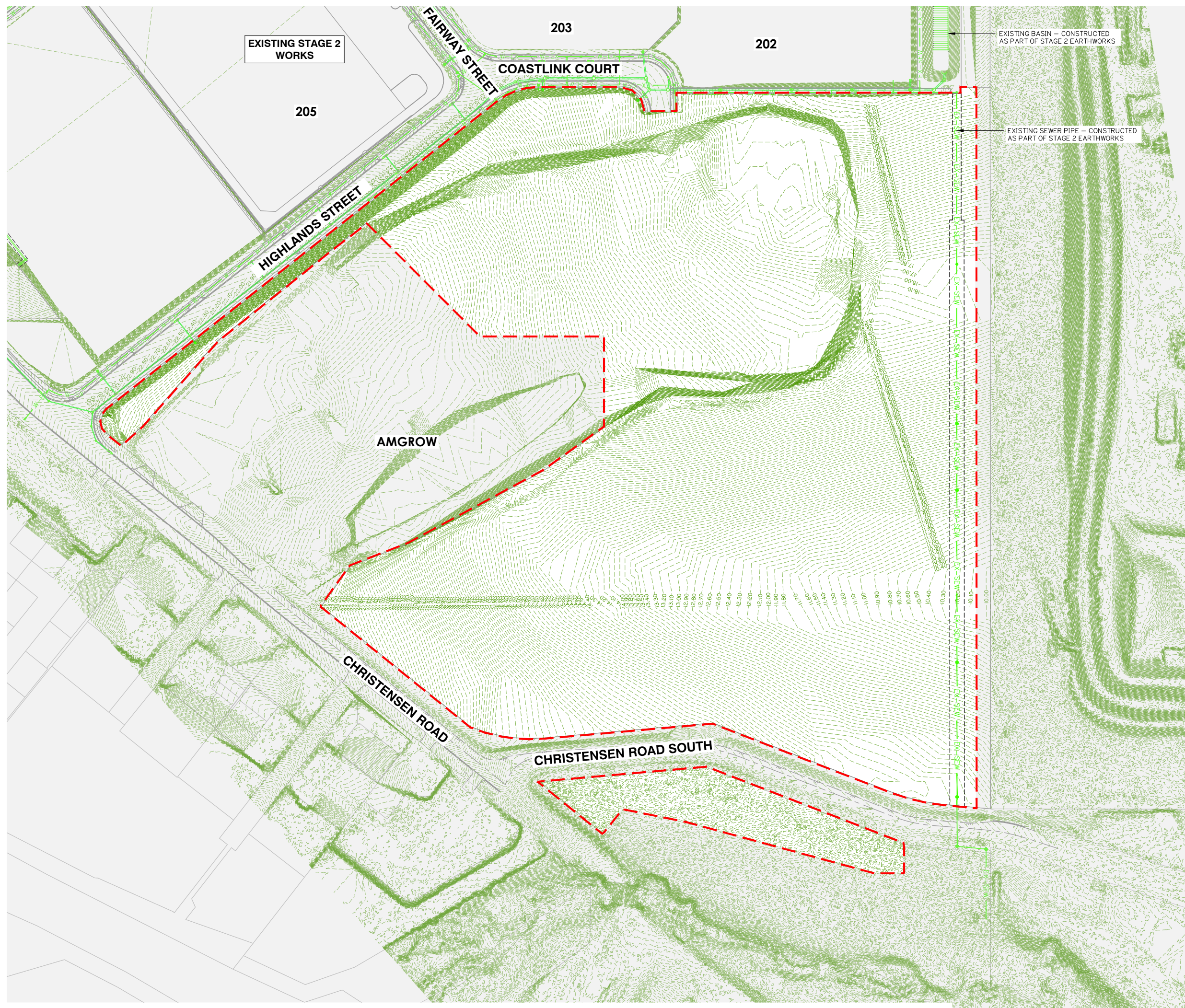
5/05/2023

Drawing No:

5941 ENG BE3 005

Revision

C



Client:



FPI QUEENSLAND PTY LTD

Project:

VANTAGE YATALA STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329845
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
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Drawing Title:

EXISTING LAYOUT PLAN

G	05/07/23		FOR APPROVAL	JH	MG
B	24/05/23		ISSUED FOR TENDER	JH	MG
A	05/05/23		ORIGINAL ISSUE	JH	MG
Rev	Date		Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE.	A1 UNREDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES	A3 REDUCED

Scale:



PROJECT NORTH POINT



Project No. 5941

Designed: JH

Drafted: JH

Approved:

MG

RPEQ

16939

Signed:

[Signature]

Date:

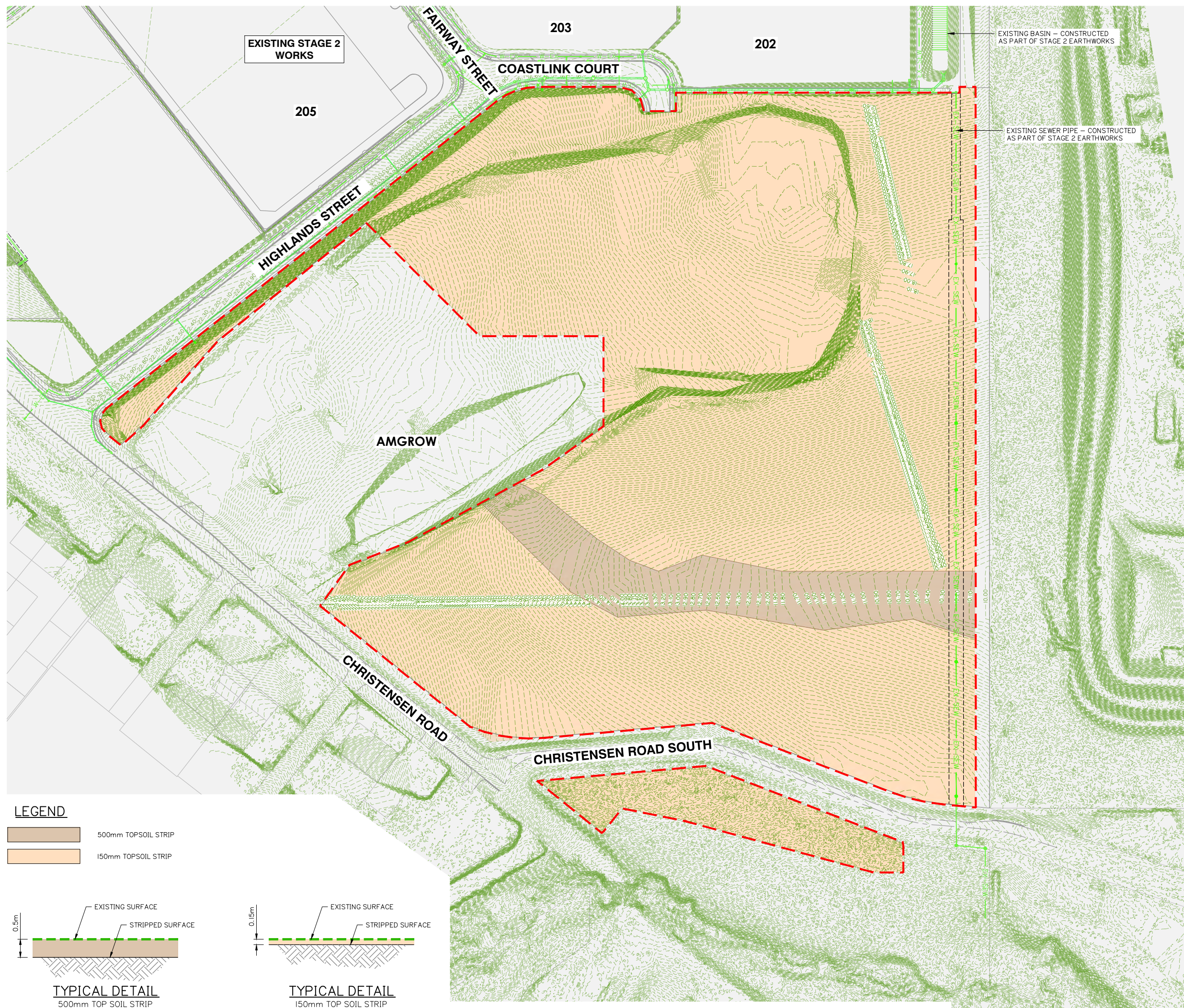
05/05/2023

Drawing No:

Revision

5941 ENG BE3 010

C



Client:



FPI QUEENSLAND PTY LTD

Project:

VANTAGE YATALA STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329845
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
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Drawing Title:

SITE STRIPPING LAYOUT PLAN

B	05/07/23	FOR APPROVAL	JH	MC	
A	24/05/23	ORIGINAL ISSUE	JH	MC	
Rev	Date	Description	DRN	CHK	

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE.	A1 UNREDUCED
CULVERT AND PIPE SIZES IN MILLIMETRES	A3 REDUCED

Scale:



PROJECT NORTH POINT



Project No. 5941

Designed: JH

Drafted: JH

Approved:

MG

RPEQ

16939

Signed:

W. H. H. H.

Date:

24/05/2023

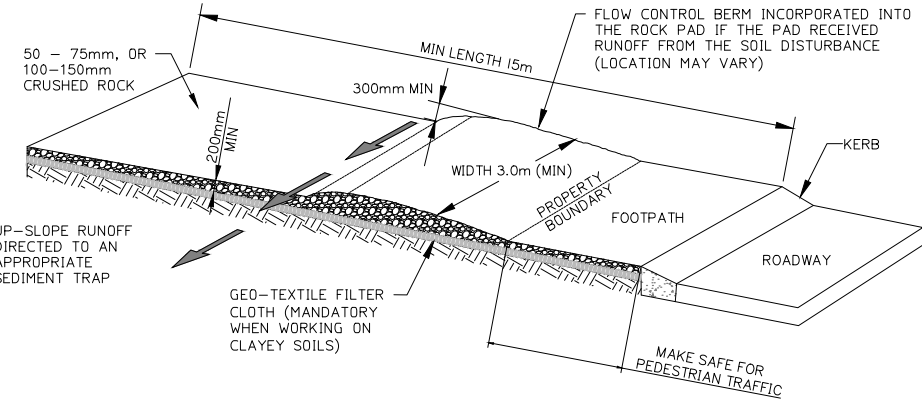
Drawing No:

Revision

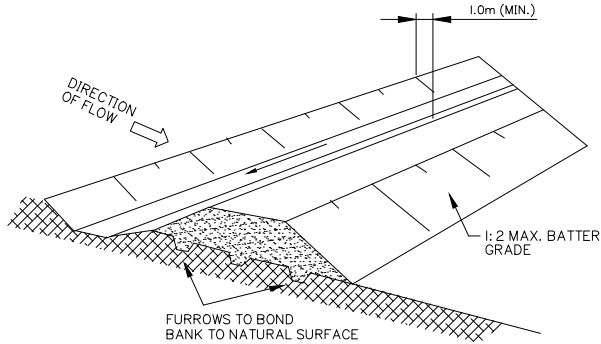
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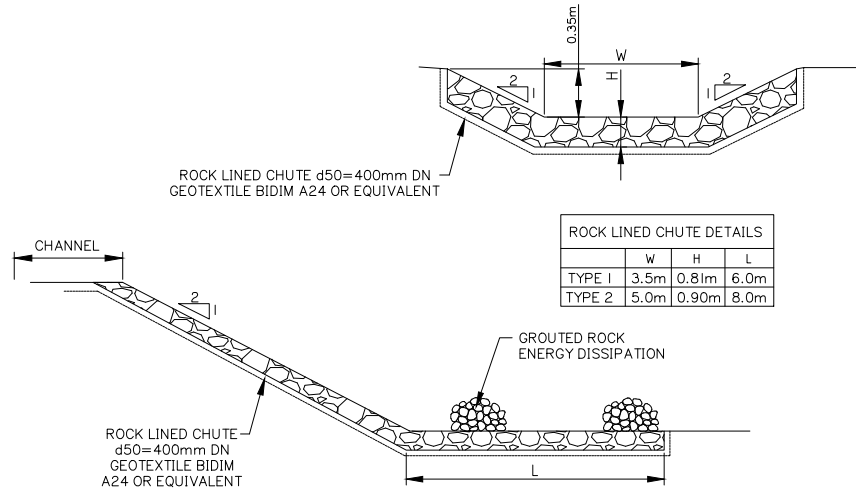
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ENTRY/EXIT PAD FOR CONSTRUCTION SITE
NOT TO SCALE

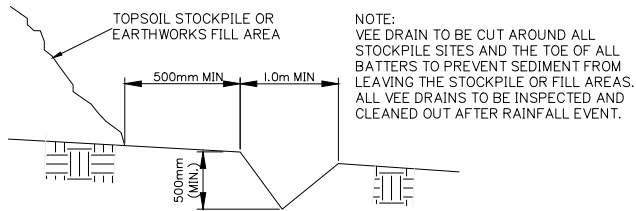


DIVERSION DRAIN
NOT TO SCALE

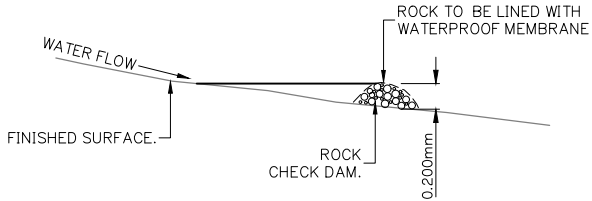


ROCK LINED CHUTE
NOT TO SCALE

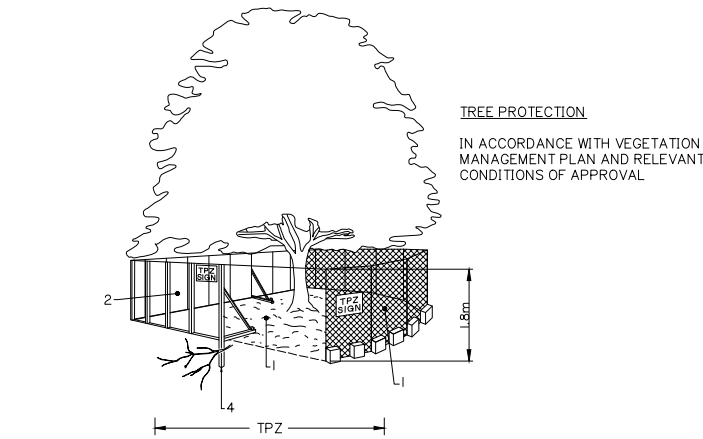
ROCK LINED CHUTE DETAILS			
	W	H	L
TYPE 1	3.5m	0.81m	6.0m
TYPE 2	5.0m	0.90m	8.0m



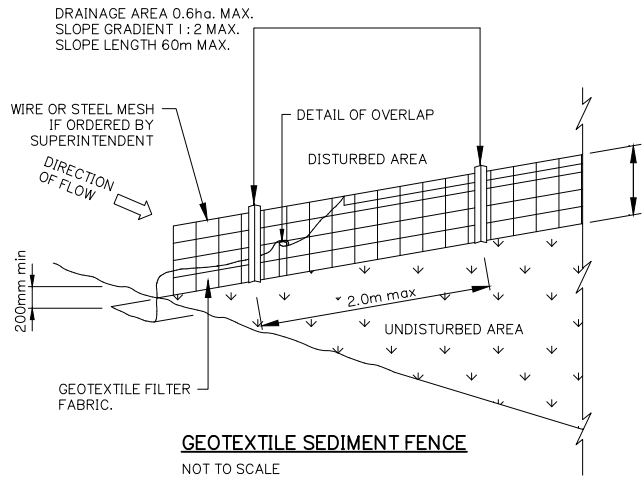
TYPICAL SECTION VEE DRAIN
NOT TO SCALE



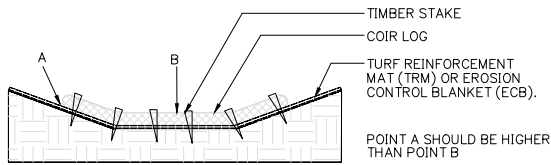
CUT OFF DRAIN END DETAIL
N.T.S.



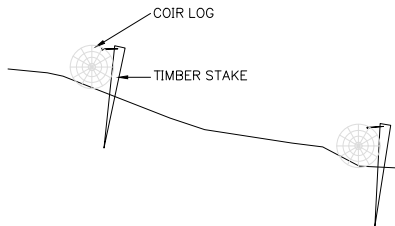
TREE PROTECTION
IN ACCORDANCE WITH VEGETATION
MANAGEMENT PLAN AND RELEVANT
CONDITIONS OF APPROVAL



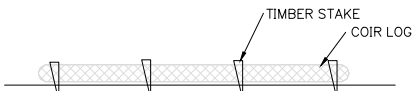
GEOTEXTILE SEDIMENT FENCE
NOT TO SCALE



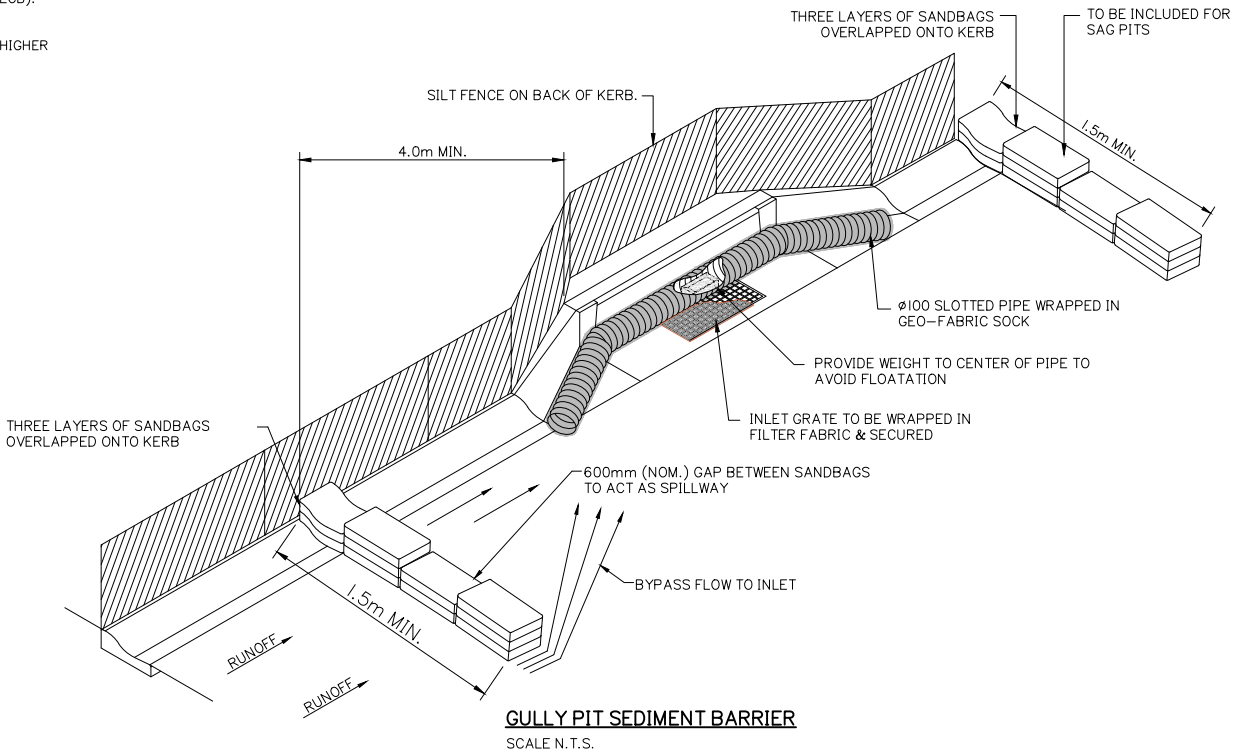
PROPER PLACEMENT OF COIR LOG IN DRAINAGE PATH
NOT TO SCALE



COIR LOG AND TIMBER STAKES STABILISING SLOPE
NOT TO SCALE



PROPER PLACEMENT OF COIR LOG IN SLOPE
NOT TO SCALE



GULLY PIT SEDIMENT BARRIER
SCALE N.T.S.

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

Client:



FPI QUEENSLAND PTY LTD

Project:

**VANTAGE YATALA
STAGE 3**

Site Address:

**LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207**

RPD:

Lot: 504
Plan: SP329845
Local Authority: CITY OF GOLD COAST
Level Datum: AHD
Meridian:
PSM:
RL:

ISSUED FOR APPROVAL

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Drawing Title:

**SEDIMENT AND EROSION
CONTROL NOTES
AND DETAILS**

Rev	Date	Description	DRN	CHK
C	05/07/23	FOR APPROVAL	JH	MG
B	24/05/23	ISSUED FOR TENDER	JH	MG
A	05/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:

NOT APPLICABLE

PROJECT NORTH POINT

Project No.	5941	Revision	
Designed:	JH	Drafted:	JH
Approved:			MG
RPEQ			16939
Signed:			
Date:			05/05/2023
Drawing No:	5941 ENG BE3 020	Revision	C

Client:



FPI QUEENSLAND PTY LTD

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329845
Local Authority: CITY OF GOLD COAST
Level Datum: AHD
Meridian:
PSM:
RL:

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GENERAL NOTES.

Drawing Title:

SEDIMENT AND EROSION
CONTROL LAYOUT PLAN
SHEET 1 OF 5

Rev	Date	Description	DRN	CHK
C	05/07/23	LAYOUT UPDATED	JH	MG
B	24/05/23	ISSUED FOR TENDER	JH	MG
A	05/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:

0 5 10 15 20 25m 1:500 (A1) 1:1000 (A3)

PROJECT NORTH POINT



Project No. 5941

Designed: JH

Drafted: JH

Approved:

MG

RPEQ

16939

Signed:

Date:

05/05/2023

Drawing No:

5941 ENG BE3 021

Revision

C

EXISTING STAGE 2
WORKS

205

FAIRWAY STREET

COASTLINK COURT

INSTALL GEO-TEXTILE SEDIMENT FENCE
TO LOW SIDE OF BATTER. REFER TO DWG
No. 5941 ENG BE3 020 FOR DETAILS

SHOWN INDICATIVELY ONLY
(LOCATE ON SITE PRIOR TO
CONSTRUCTION)

VEHICLE SHAKE DOWN
TO BE INSTALLED AT
ENTRY/EXIT LOCATION

COMMON
PROPERTY

HIGHLANDS STREET

INSTALL COIR LOGS AT APPROXIMATELY
30.0m SPACING. REFER TO DWG No.
5941 ENG BE3 020 FOR DETAILS

303

ROAD 01

AMGROW

500
RP295994

NOTE:

- FOR GENERAL DRAWING LEGENDS, REFER TO 5941 ENG BE3 004.
- FOR GENERAL NOTES, REFER TO 5941 ENG BE3 002 AND 5941 ENG BE3 003.
- FOR SEDIMENT & EROSION NOTES AND DETAILS REFER TO 5941 ENG BE3 020.

KEY PLAN
NOT TO SCALE

SEDIMENT AND EROSION CONTROL LAYOUT PLAN SHEET 1 OF 5

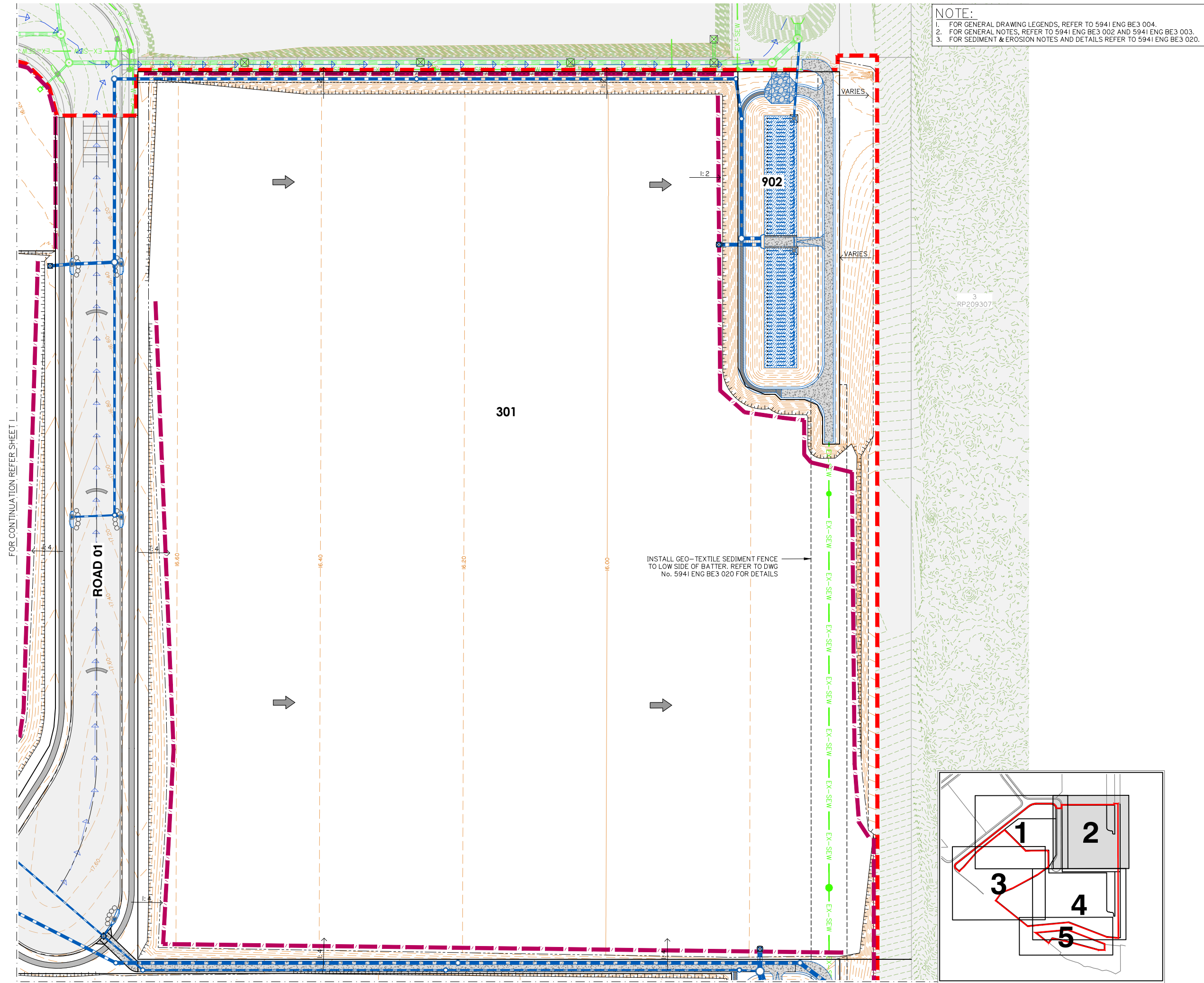
FOR CONTINUATION REFER SHEET 3

FOR CONTINUATION REFER SHEET 2

FOR CONTINUATION REFER SHEET 3

G:\Projects\5941 ENGINEERING\Acad\BE3 021\CURRENT\5941 ENG BE3 020.dwg

G:\Projects\5941\ENGINEERING\Acad\BE3\CG\CURRENT\5941 ENG BE3 020.dwg



- NOTE:
1. FOR GENERAL DRAWING LEGENDS, REFER TO 5941 ENG BE3 004.
 2. FOR GENERAL NOTES, REFER TO 5941 ENG BE3 002 AND 5941 ENG BE3 003.
 3. FOR SEDIMENT & EROSION NOTES AND DETAILS REFER TO 5941 ENG BE3 020.

Client:



FPI QUEENSLAND PTY LTD

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329845
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

ISSUED FOR APPROVAL

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Drawing Title:

SEDIMENT AND EROSION
CONTROL LAYOUT PLAN
SHEET 2 OF 5

Rev	Date	Description	DRN	CHK
C	05/07/23	LAYOUT UPDATED	JH	MG
B	24/05/23	ISSUED FOR TENDER	JH	MG
A	05/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

Scale:
0 5 10 15 20 25m 1:500 (A1) 1:1000 (A3)

PROJECT NORTH POINT



Project No. 5941

Designed: JH

Drafted: JH

Approved:

MG

RPEQ

16939

Signed:

[Signature]

Date:

05/05/2023

Drawing No:

5941 ENG BE3 022

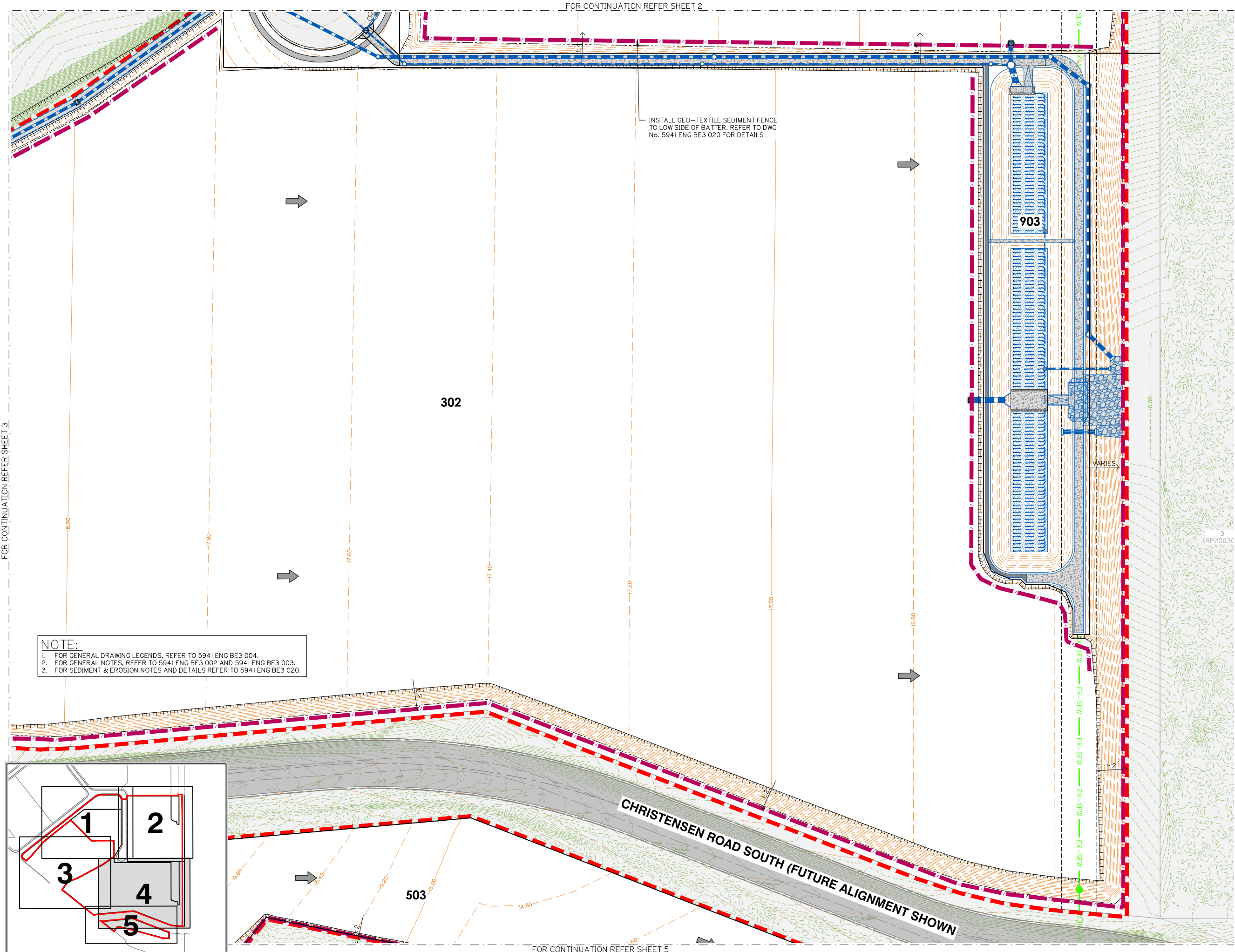
Revision

C

KEY PLAN
NOT TO SCALE

FOR CONTINUATION REFER SHEET 4

SEDIMENT AND EROSION CONTROL LAYOUT PLAN SHEET 2 OF 5

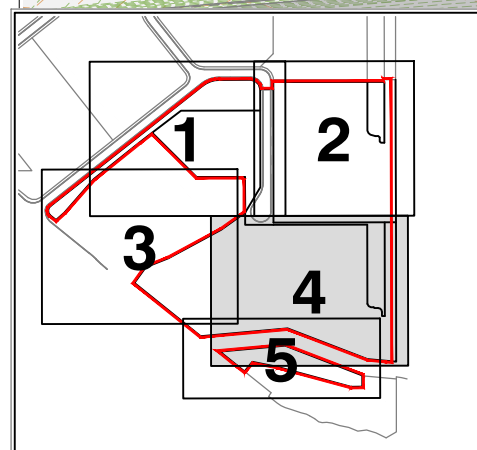


FOR CONTINUATION REFER SHEET 2

INSTALL GEO-TEXTILE SEDIMENT FENCE TO LOW SIDE OF BATTER, REFER TO DWG No. 5941 ENG BE3 020 FOR DETAILS

FOR CONTINUATION REFER SHEET 3

NOTE:
1. FOR GENERAL DRAWING LEGENDS, REFER TO 5941 ENG BE3 004.
2. FOR GENERAL NOTES, REFER TO 5941 ENG BE3 002 AND 5941 ENG BE3 003.
3. FOR SEDIMENT & EROSION NOTES AND DETAILS REFER TO 5941 ENG BE3 020.



FOR CONTINUATION REFER SHEET 5

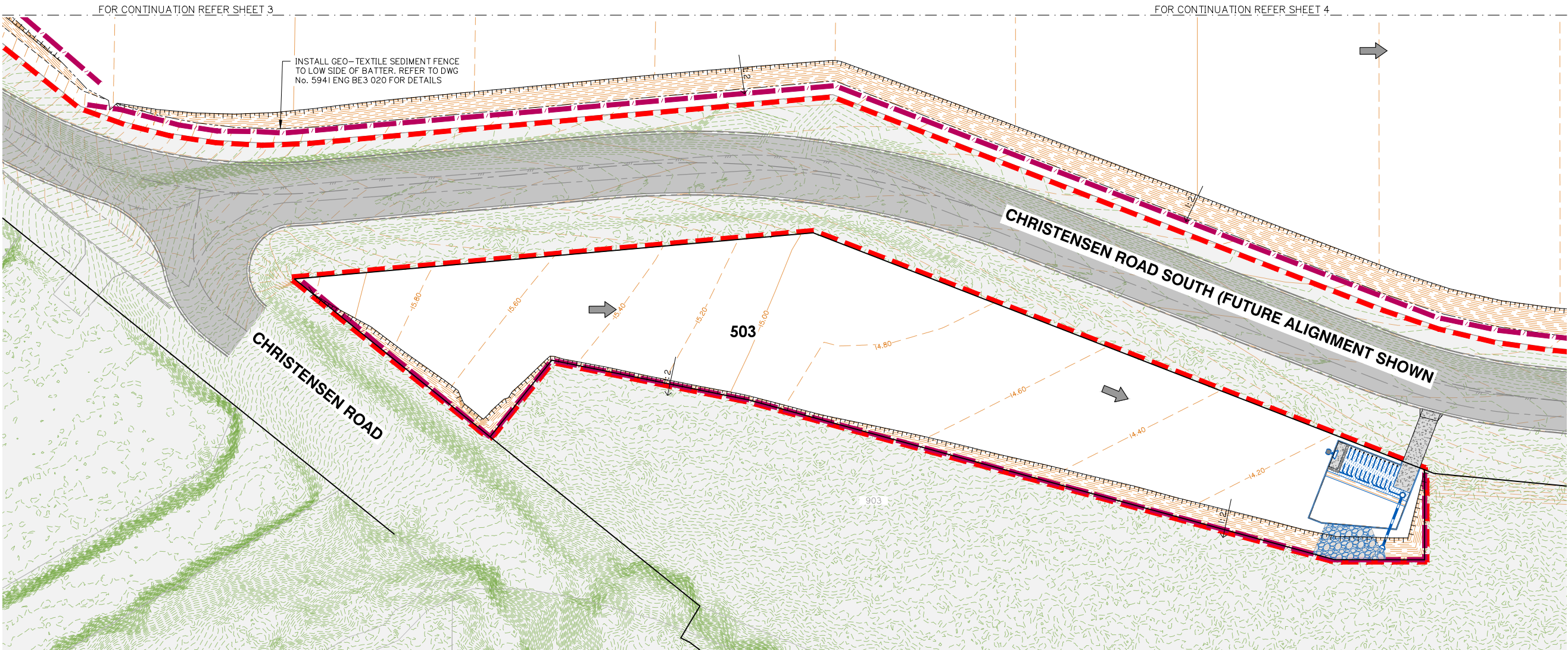
Rev	Date	Description	DRN	CHK
C	05/07/23	LAYOUT UPDATED	JH	MG
B	24/05/23	ISSUED FOR TENDER	JH	MG
A	05/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

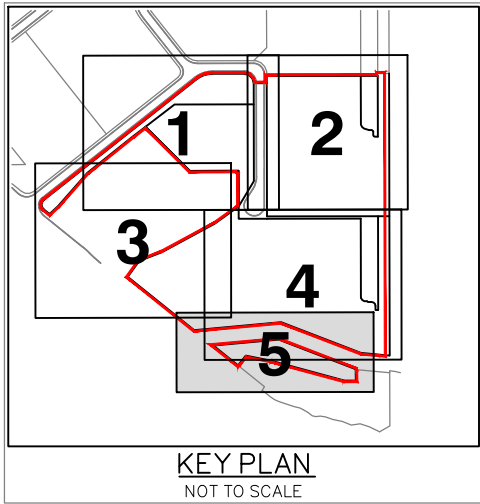
Scale:
0 5 10 15 20 25m
1:500 (A1) 1:1000 (A3)

Project No:	5941
Designed:	JH
Drafted:	JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	05/05/2023
Drawing No:	5941 ENG BE3 024
Revision	C



NOTE:

1. FOR GENERAL DRAWING LEGENDS, REFER TO 5941 ENG BE3 004.
2. FOR GENERAL NOTES, REFER TO 5941 ENG BE3 002 AND 5941 ENG BE3 003.
3. FOR SEDIMENT & EROSION NOTES AND DETAILS REFER TO 5941 ENG BE3 020.



Rev	Date	Description	JH	MG
C	05/07/23	LAYOUT UPDATED	JH	MG
B	24/05/23	ISSUED FOR TENDER	JH	MG
A	05/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

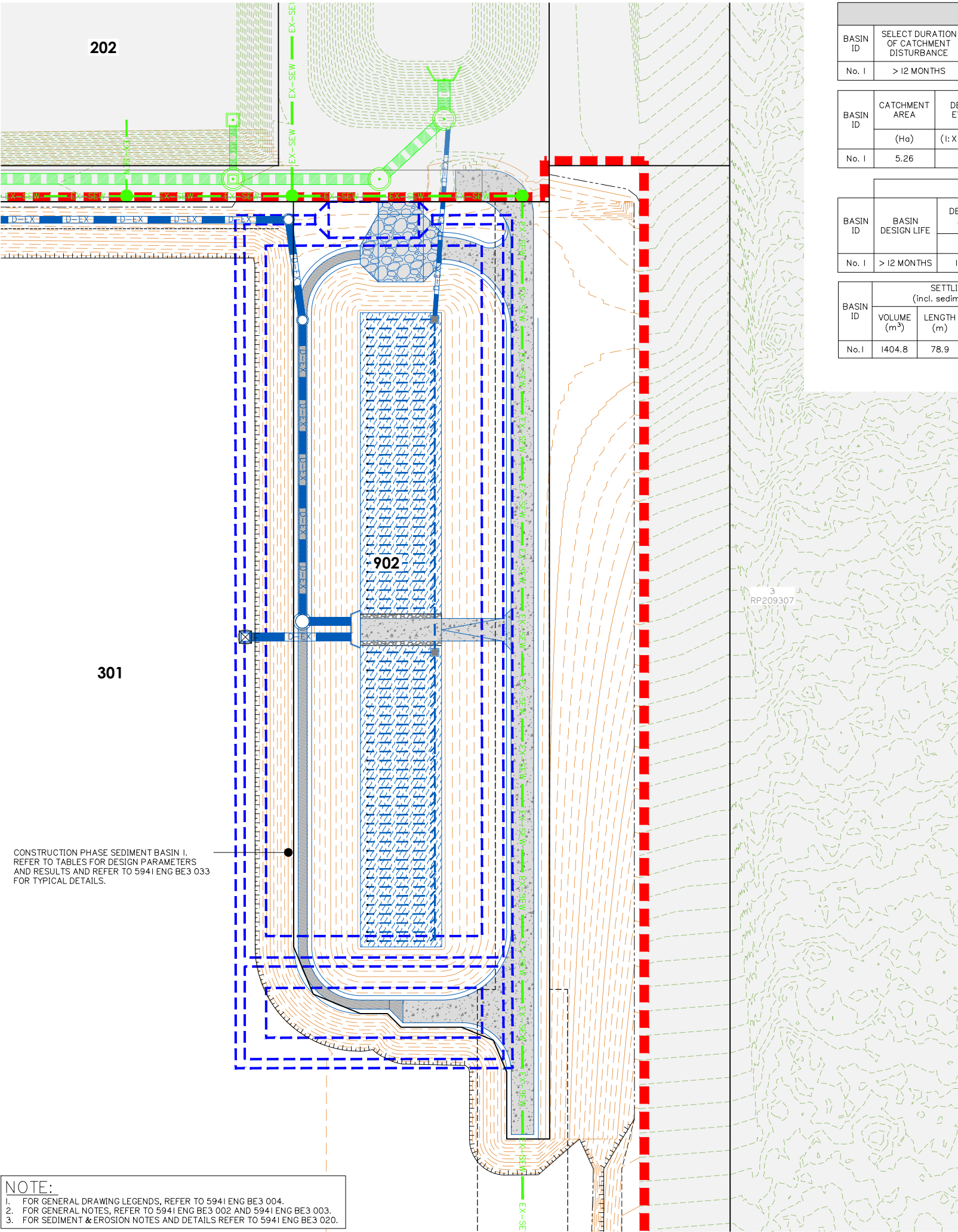
Scale:

0 5 10 15 20 25m

1:500 (A1) 1:1000 (A3)



Project No. 5941	
Designed: JH	Drafted: JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	05/05/2023
Drawing No: 5941 ENG BE3 025	Revision: C



NOTE:

- FOR GENERAL DRAWING LEGENDS, REFER TO 5941 ENG BE3 004.
- FOR GENERAL NOTES, REFER TO 5941 ENG BE3 002 AND 5941 ENG BE3 003.
- FOR SEDIMENT & EROSION NOTES AND DETAILS REFER TO 5941 ENG BE3 020.

SEDIMENT BASIN I DESIGN							
BASIN ID	SELECT DURATION OF CATCHMENT DISTURBANCE	IS DEWATERING OF TRENCHES REQUIRED?	EQUIPMENT LEASE OR PURCHASE?	SELECT CATCHMENT SCALE	DO ALL FLOWS ENTER BASIN AT SINGLE POINT?	BASIN TYPE	DOSING EQUIPMENT
No. I	> 12 MONTHS	NO	LEASE	> 5Ha	NO	TYPE B	IFOD+RAIN

BASIN ID	CATCHMENT AREA	DESIGN EVENT	I_x yr. 24 hr	WATER TEMPERATURE	K_s	SETTLING ZONE DEPTH (D_s)	W:L	OPTIMUM LOW-FLOW DECANT RATE	SELECTED LOW-FLOW DECANT RATE (Q_d)	MIN SETTLING ZONE VOLUME (Min V_s)	MIN SETTLING ZONE SURFACE AREA (Min A_s)	LIMITING CRITERIA
No. I	(Ha)	(I: X YEARS)	(mm/hr)	(°C)	(s/m)	(m)	(I: X)	(L/s/Ha)	(L/s/Ha)	(m³)	(m²)	VOLUME
No. I	5.26	I	64.2	20	—	0.8	3	—	—	1081.0	—	

SPILLWAY											
BASIN ID	BASIN DESIGN LIFE	DESIGN ARI	C_{10}	C	t_c	I	Q	HEAD OVER SPILLWAY	SPILLWAY CREST LENGTH	SPILLWAY CREST RL	MIN EMBANKMENT RL
		yr				(mm/hr)	(m³/s)				
No. I	> 12 MONTHS	I: 20	0.80	0.84	20.00	34.40	0.46	0.50	0.80	13.50	14.45

BASIN ID	SETTLING ZONE (incl. sediment storage)				FOREBAY				HYDRAULIC CONTROLS			
	VOLUME (m³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	VOLUME (m³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	SPILLWAY CREST LENGTH (m)	SPILLWAY CREST (RL)	EMBANKMENT (RL)	LEVEL SPREADER CREST (RL)
No. I	1404.8	78.9	26.3	0.8	163.9	10.8	26.3	0.8	1.7	13.50	14.45	13.70



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T: 3807 3333 | F: 3287 5461 | www.gassman.com.au
Gold Coast | 76 Business Street, Yatala QLD | PO Box 392, Beerleigh 4207

Client:



FPI QUEENSLAND PTY LTD

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329845
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

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Drawing Title:

CONSTRUCTION PHASE
BIO-RETENTION BASIN 1
LAYOUT PLAN

C	05/07/23	LAYOUT UPDATED	JH	MG	
B	24/05/23	ISSUED FOR TENDER	JH	MG	
A	05/05/23	ORIGINAL ISSUE	JH	MG	
Rev	Date	Description	DRN	CHK	

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
A1 UNREDUCED
A3 REDUCED

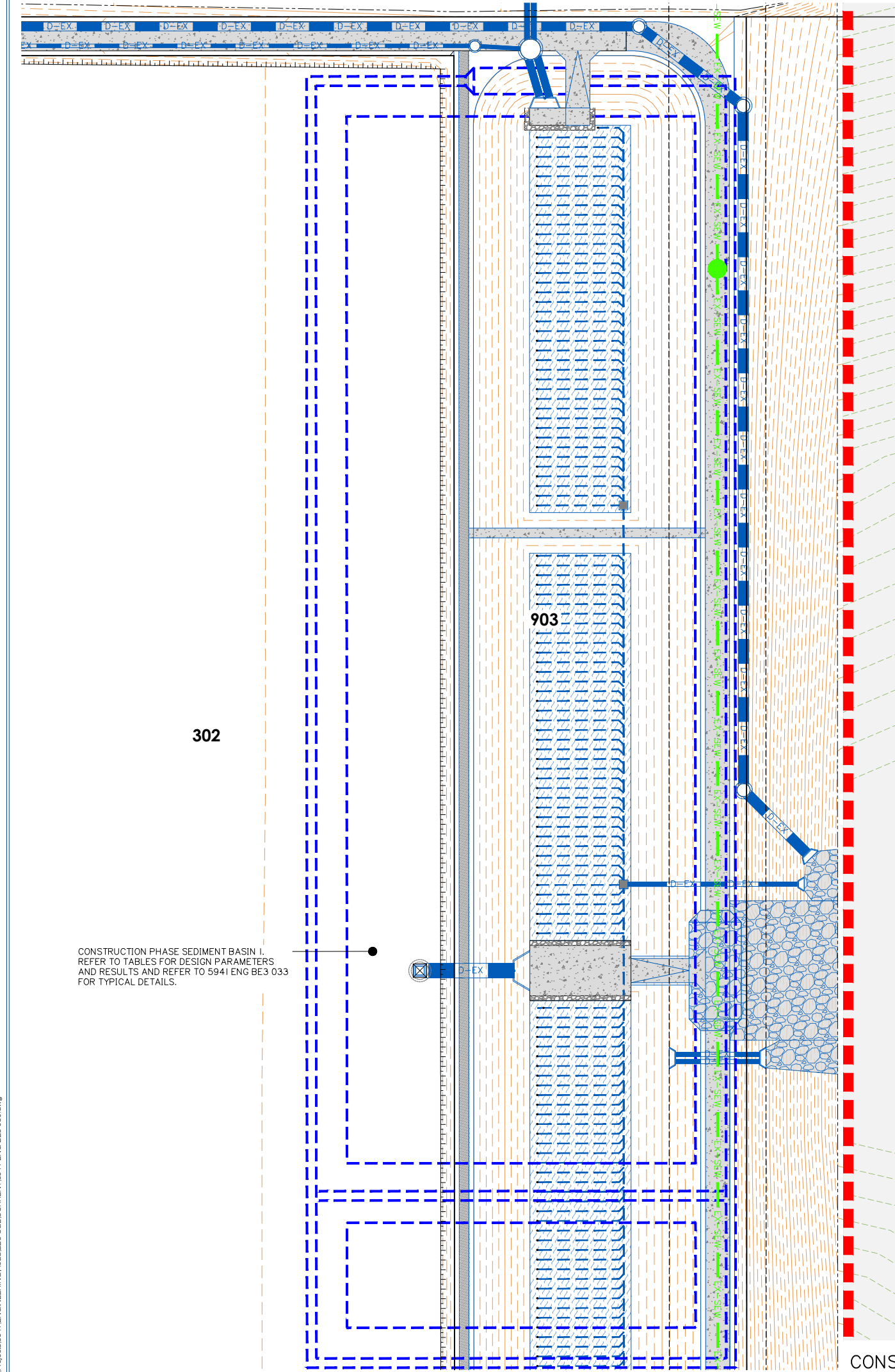
Scale:
0 2.5 5.0 7.5 10 12.5m
1:250 (A1) 1:500 (A3)

PROJECT NORTH POINT



Project No. 5941	
Designed: JH	Drafted: JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	05/05/2023
Drawing No: 5941 ENG BE3 030	Revision: C

G:\Projects\5941\ENGINEERING\Acad\BE3\CG\CURRENT\5941 ENG BE3 030.dwg



CONSTRUCTION PHASE SEDIMENT BASIN 1.
REFER TO TABLES FOR DESIGN PARAMETERS
AND RESULTS AND REFER TO 5941 ENG BE3 033
FOR TYPICAL DETAILS.

SEDIMENT BASIN 2 DESIGN							
BASIN ID	SELECT DURATION OF CATCHMENT DISTURBANCE	IS DEWATERING OF TRENCHES REQUIRED?	EQUIPMENT LEASE OR PURCHASE?	SELECT CATCHMENT SCALE	DO ALL FLOWS ENTER BASIN AT SINGLE POINT?	BASIN TYPE	DOSING EQUIPMENT
No. 2	> 12 MONTHS	NO	LEASE	> 5Ha	NO	TYPE B	IFOD-RAIN

BASIN ID	CATCHMENT AREA	DESIGN EVENT	I _x yr. 24 hr	WATER TEMPERATURE	K _s	SETTLING ZONE DEPTH (D _s)	W: L	OPTIMUM LOW-FLOW DECANT RATE	SELECTED LOW-FLOW DECANT RATE (Q _d)	MIN SETTLING ZONE VOLUME (Min V _s)	MIN SETTLING ZONE SURFACE AREA (Min A _s)	LIMITING CRITERIA
	(Ha)	(1: X YEARS)	(mm/hr)	(°C)	(s/m)	(m)	(1: X)	(L/s/Ha)	(L/s/Ha)	(m³)	(m²)	
No. 2	11.01	I	64.2	20	—	0.8	3	—	—	2904.5	—	VOLUME

SPILLWAY											
BASIN ID	BASIN DESIGN LIFE	DESIGN ARI	C ₁₀	C	t _c	I	Q	HEAD OVER SPILLWAY	SPILLWAY CREST LENGTH	SPILLWAY CREST RL	MIN EMBANKMENT RL
		yr				(mm/hr)	(m³/s)				
No. 2	> 12 MONTHS	1: 20	0.80	0.84	20.00	34.40	0.46	0.50	0.80	13.50	14.45

BASIN ID	SETTLING ZONE (incl. sediment storage)				FOREBAY				HYDRAULIC CONTROLS			
	VOLUME (m³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	VOLUME (m³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	SPILLWAY CREST LENGTH (m)	SPILLWAY CREST (RL)	EMBANKMENT (RL)	LEVEL SPREADER CREST (RL)
No.2	2940.5	111.7	37.2	0.79	327.4	11.2	37.2	0.79	3.5	16.20	16.95	16.40

CONSTRUCTION PHASE BIO-RETENTION BASIN 2 LAYOUT PLAN

NOTE:

- FOR GENERAL DRAWING LEGENDS, REFER TO 5941 ENG BE3 004.
- FOR GENERAL NOTES, REFER TO 5941 ENG BE3 002 AND 5941 ENG BE3 003.
- FOR SEDIMENT & EROSION NOTES AND DETAILS REFER TO 5941 ENG BE3 020.



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

Client:



FPI QUEENSLAND PTY LTD

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329845
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

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Drawing Title:

CONSTRUCTION PHASE
BIO-RETENTION BASIN 2
LAYOUT PLAN

Rev	Date	Description	DRN	CHK
C	05/07/23	LAYOUT UPDATED	JH	MG
B	24/05/23	ISSUED FOR TENDER	JH	MG
A	05/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES
A1 UNREDUCED
A3 REDUCED

Scale:

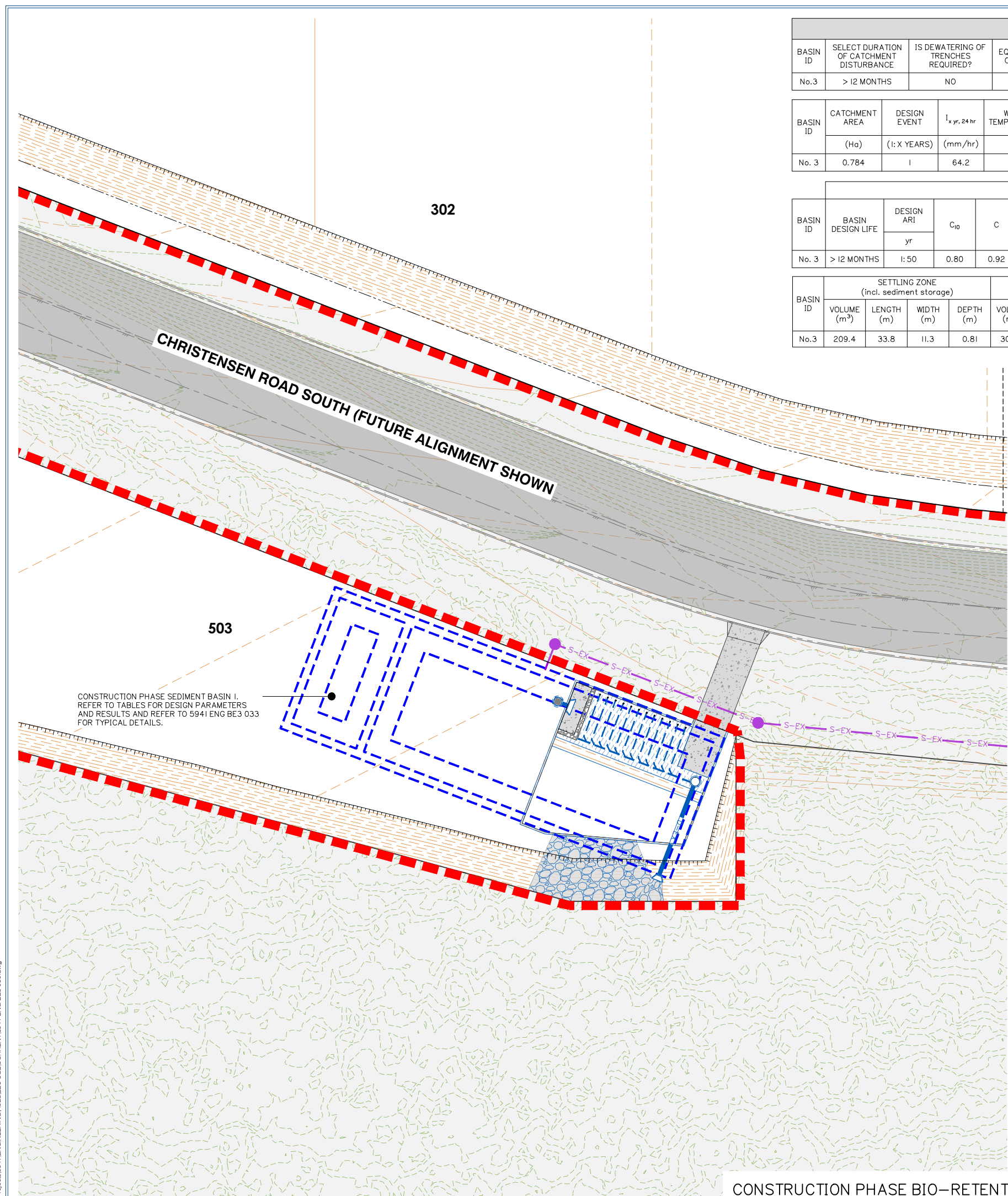
0 2.5 5.0 7.5 10 12.5m 1:250 (A1) 1:500 (A3)

PROJECT NORTH POINT



Project No. 5941	
Designed: JH	Drafted: JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	05/05/2023
Drawing No: 5941 ENG BE3 031	Revision: C

G:\Projects\5941\ENGINEERING\ASad\BE3\OGL\CURRENT\5941 ENG BE3 030.dwg



CONSTRUCTION PHASE SEDIMENT BASIN 1.
REFER TO TABLES FOR DESIGN PARAMETERS
AND RESULTS AND REFER TO 5941 ENG BE3 033
FOR TYPICAL DETAILS.

SEDIMENT BASIN 3 DESIGN							
BASIN ID	SELECT DURATION OF CATCHMENT DISTURBANCE	IS DEWATERING OF TRENCHES REQUIRED?	EQUIPMENT LEASE OR PURCHASE?	SELECT CATCHMENT SCALE	DO ALL FLOWS ENTER BASIN AT SINGLE POINT?	BASIN TYPE	DOSING EQUIPMENT
No.3	> 12 MONTHS	NO	LEASE	< 5Ha	NO	TYPE B	FLOC-BOX

BASIN ID	CATCHMENT AREA	DESIGN EVENT	I _x yr. 24 hr	WATER TEMPERATURE	K _s	SETTLING ZONE DEPTH (D _s)	W: L	OPTIMUM LOW-FLOW DECANT RATE	SELECTED LOW-FLOW DECANT RATE (Q _d)	MIN SETTLING ZONE VOLUME (Min V _s)	MIN SETTLING ZONE SURFACE AREA (Min A _s)	LIMITING CRITERIA
	(Ha)	(1: X YEARS)	(mm/hr)	(°C)	(s/m)	(m)	(1: X)	(L/s/Ha)	(L/s/Ha)	(m³)	(m²)	
No. 3	0.784	I	64.2	20	—	0.6	3	—	—	161	—	VOLUME

SPILLWAY											
BASIN ID	BASIN DESIGN LIFE	DESIGN ARI	C ₁₀	C	t _c	I	Q	HEAD OVER SPILLWAY	SPILLWAY CREST LENGTH	SPILLWAY CREST RL	MIN EMBANKMENT RL
		yr				(mm/hr)	(m³/s)				
No. 3	> 12 MONTHS	1: 50	0.80	0.92	20.00	34.40	0.07	0.30	3.00	13.90	14.20

BASIN ID	SETTLING ZONE (incl. sediment storage)				FOREBAY				HYDRAULIC CONTROLS			
	VOLUME (m³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	VOLUME (m³)	LENGTH (m)	WIDTH (m)	DEPTH (m)	SPILLWAY CREST LENGTH (m)	SPILLWAY CREST (RL)	EMBANKMENT (RL)	LEVEL SPREADER CREST (RL)
No.3	209.4	33.8	11.3	0.81	30.77	3.4	11.3	0.81	3.0	13.90	14.2	13.92

- NOTE:
- FOR GENERAL DRAWING LEGENDS, REFER TO 5941 ENG BE3 004.
 - FOR GENERAL NOTES, REFER TO 5941 ENG BE3 002 AND 5941 ENG BE3 003.
 - FOR SEDIMENT & EROSION NOTES AND DETAILS REFER TO 5941 ENG BE3 020.

Rev	Date	Description	DRN	CHK
C	05/07/23	LAYOUT UPDATED	JH	MG
B	24/05/23	ISSUED FOR TENDER	JH	MG
A	05/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:
0 2.5 5.0 7.5 10 12.5m
1:250 (A1) 1:500 (A3)

Client:



FPI QUEENSLAND PTY LTD

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207

RPD:

Lot: 504
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RL:

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Drawing Title:

CONSTRUCTION PHASE
TYPICAL DETAILS

C	05/07/23	FOR APPROVAL	JH	MG
B	24/05/23	ISSUED FOR TENDER	JH	MG
A	05/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

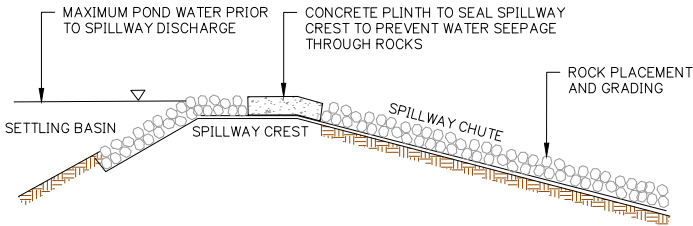
A1 UNREDUCED
A3 REDUCED

Scale:

NOT APPLICABLE

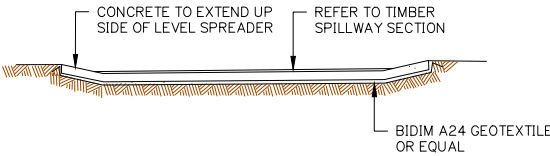
PROJECT NORTH POINT

Project No.	5941
Designed: JH	Drafted: JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	05/05/2023
Drawing No:	Revision
5941 ENG BE3 033	C



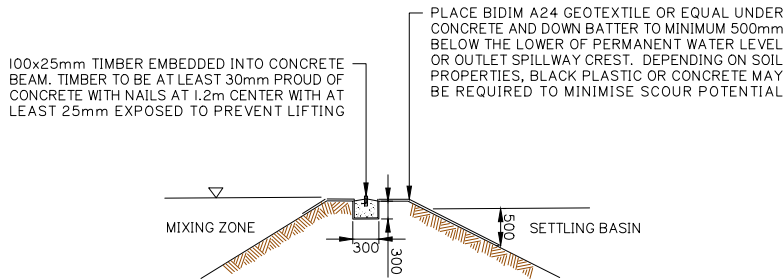
OUTLET SPILLWAY DETAILS
TYPICAL CROSS SECTION

NOT TO SCALE



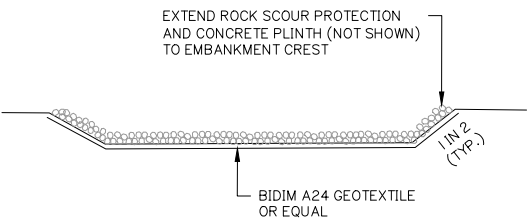
LEVEL SPREADER DETAILS
TYPICAL LONG SECTION

NOT TO SCALE



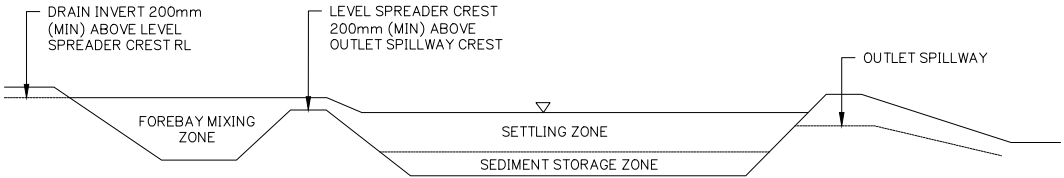
LEVEL SPREADER DETAILS
TYPICAL CROSS SECTION

NOT TO SCALE



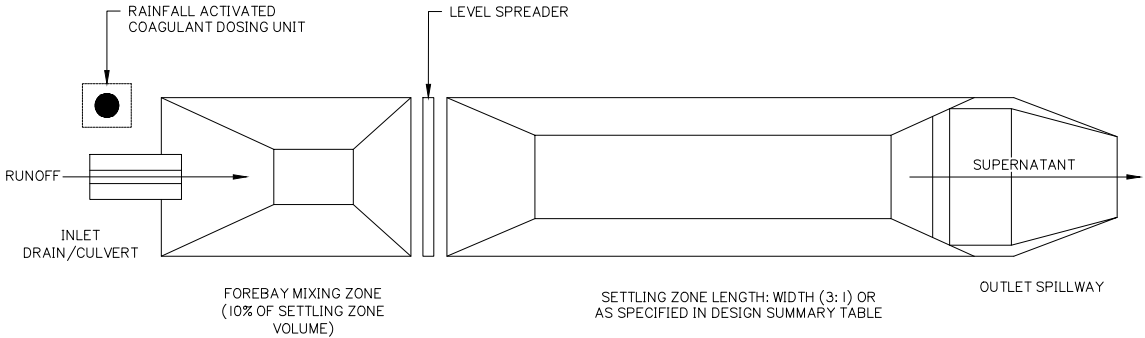
OUTLET SPILLWAY DETAILS
TYPICAL LONGITUDINAL SECTION

NOT TO SCALE



TYPE A SEDIMENT BASIN LONGITUDINAL SECTION (TYP.)

NOT TO SCALE



TYPE A SEDIMENT BASIN PLAN VIEW (TYP.)

NOT TO SCALE

CONSTRUCTION PHASE TYPICAL DETAILS

BULK EARTHWORKS DEPTH RANGE LEGEND

-10	to	-9 m	
-9	to	-8 m	
-8	to	-7 m	
-7	to	-6 m	
-6	to	-5 m	
-5	to	-4 m	
-4	to	-3 m	
-3	to	-2 m	
-2	to	-1 m	
-1	to	0 m	
0	to	1 m	
1	to	2 m	
2	to	3 m	
3	to	4 m	
4	to	5 m	
5	to	6 m	
6	to	7 m	
7	to	8 m	
8	to	9 m	

1. BULK EARTHWORKS VOLUMES ARE CALCULATED TO AN ASSUMED PAVEMENT SUBGRADE LEVEL OF -0.290m BELOW FSL OF PAVEMENT (WHERE IN FILL), AND -0.440m BELOW FSL OF PAVEMENT (WHERE IN CUT). FINAL PAVEMENT DESIGN DEPTHS ARE TO BE CONFIRMED IN THE DETAILED CIVIL DESIGN PHASE.
2. THE DESIGN ROAD VERGE PROFILES ARE DESIGNED TO SUBGRADE LEVEL AT AN ASSUMED -0.10m BELOW FSL OF VERGE. THE EARTHWORKS VOLUMES REFLECT THIS.
3. BULK EARTHWORKS VOLUMES ARE CALCULATED TO THE UNDERSIDE OF THE TREATMENT ZONE FILTER MEDIA AND DRAINAGE LAYERS, UTILISING -1.10m BELOW FINISHED BASIN FLOOR LEVEL. TOPSOIL IS STRIPPING PRIOR TO EARTHWORKS ACTIVITIES AS PER DWG 5941 ENG BE3 011. THEREFORE THE VOLUMES STATED ARE 'POST-STRIP' VOLUMES.
4. BULK EARTHWORKS VOLUMES ARE CALCULATED TO THE PROPOSED ROL BOUNDARY EXTENT. NO EXTERNAL EARTHWORKS ARE PROPOSED IN THIS IN THIS EXTENT OF WORKS.
5. SPOIL VOLUMES GENERATED FROM SERVICE TRENCHES & BUILDING WORKS ARE NOT REFLECTED IN THE CALCULATIONS. SIMILARLY, EARTHWORKS REQUIRED FOR LOT ACCESS RAMPS IS NOT REFLECTED IN THE CALCULATIONS.

EARTHWORKS VOLUME SUMMARY

CUT	203,744 m ³
FILL	240,566 m ³
FILL TO IMPORT	36,911 m ³

205

EXISTING STAGE 2 WORKS

203

202

COASTLINK COURT

COMMON PROPERTY

HIGHLANDS STREET

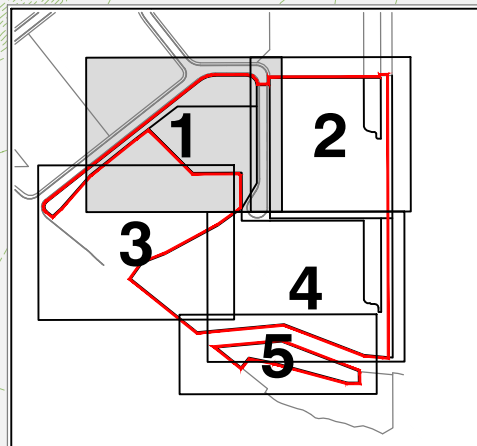
303

ROAD 01

AMGROW

500
RP295994

THE IV in 2H CUT BATTER SHALL BE OVER-EXCAVATED, MICRO-BENCHED AND INCORPORATE A MINIMUM OF 400mm DEEP IMPORTED SOIL. REFER CORRESPONDENCE FROM DOUGLAS PARTNERS, PROJECT 90520.00.L.002 DATED 24 JANUARY 2019 TITLED, BATTER TREATMENT



KEY PLAN
NOT TO SCALE

Client:



FPI QUEENSLAND PTY LTD

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329845
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

ISSUED FOR APPROVAL

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Drawing Title:

BULK EARTHWORKS
LAYOUT PLAN
SHEET 1 OF 5

C	05/07/23	LAYOUT UPDATED	JH	MG
B	24/05/23	ISSUED FOR TENDER	JH	MG
A	05/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

Scale:
0 5 10 15 20 25m
1:500 (A1) 1:1000 (A3)

PROJECT NORTH POINT



Project No. 5941

Designed: JH

Drafted: JH

Approved:

MG

RPEQ

16939

Signed:

Date:

05/05/2023

Drawing No:

5941 ENG BE3 050

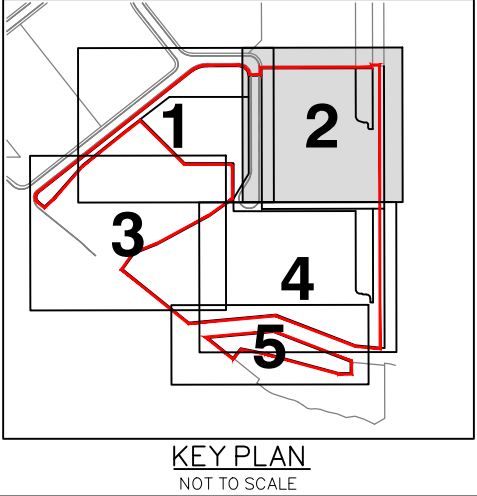
Revision

C

FOR CONTINUATION REFER SHEET 1



FOR CONTINUATION REFER SHEET 4



EARTHWORKS VOLUME SUMMARY

CUT	203,744 m ³
FILL	240,566 m ³
FILL TO IMPORT	36,911 m ³

1. BULK EARTHWORKS VOLUMES ARE CALCULATED TO AN ASSUMED PAVEMENT SUBGRADE LEVEL OF -0.290m BELOW FSL OF PAVEMENT (WHERE IN FILL), AND -0.440m BELOW FSL OF PAVEMENT (WHERE IN CUT). FINAL PAVEMENT DESIGN DEPTHS ARE TO BE CONFIRMED IN THE DETAILED CIVIL DESIGN PHASE.
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BULK EARTHWORKS DEPTH RANGE LEGEND

-10	to	-9 m	
-9	to	-8 m	
-8	to	-7 m	
-7	to	-6 m	
-6	to	-5 m	
-5	to	-4 m	
-4	to	-3 m	
-3	to	-2 m	
-2	to	-1 m	
-1	to	0 m	
0	to	1 m	
1	to	2 m	
2	to	3 m	
3	to	4 m	
4	to	5 m	
5	to	6 m	
6	to	7 m	
7	to	8 m	
8	to	9 m	

Client:



FPI QUEENSLAND PTY LTD

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329845
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

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Drawing Title:

BULK EARTHWORKS
LAYOUT PLAN
SHEET 2 OF 5

C	05/07/23	LAYOUT UPDATED	JH	MG
B	24/05/23	ISSUED FOR TENDER	JH	MG
A	05/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

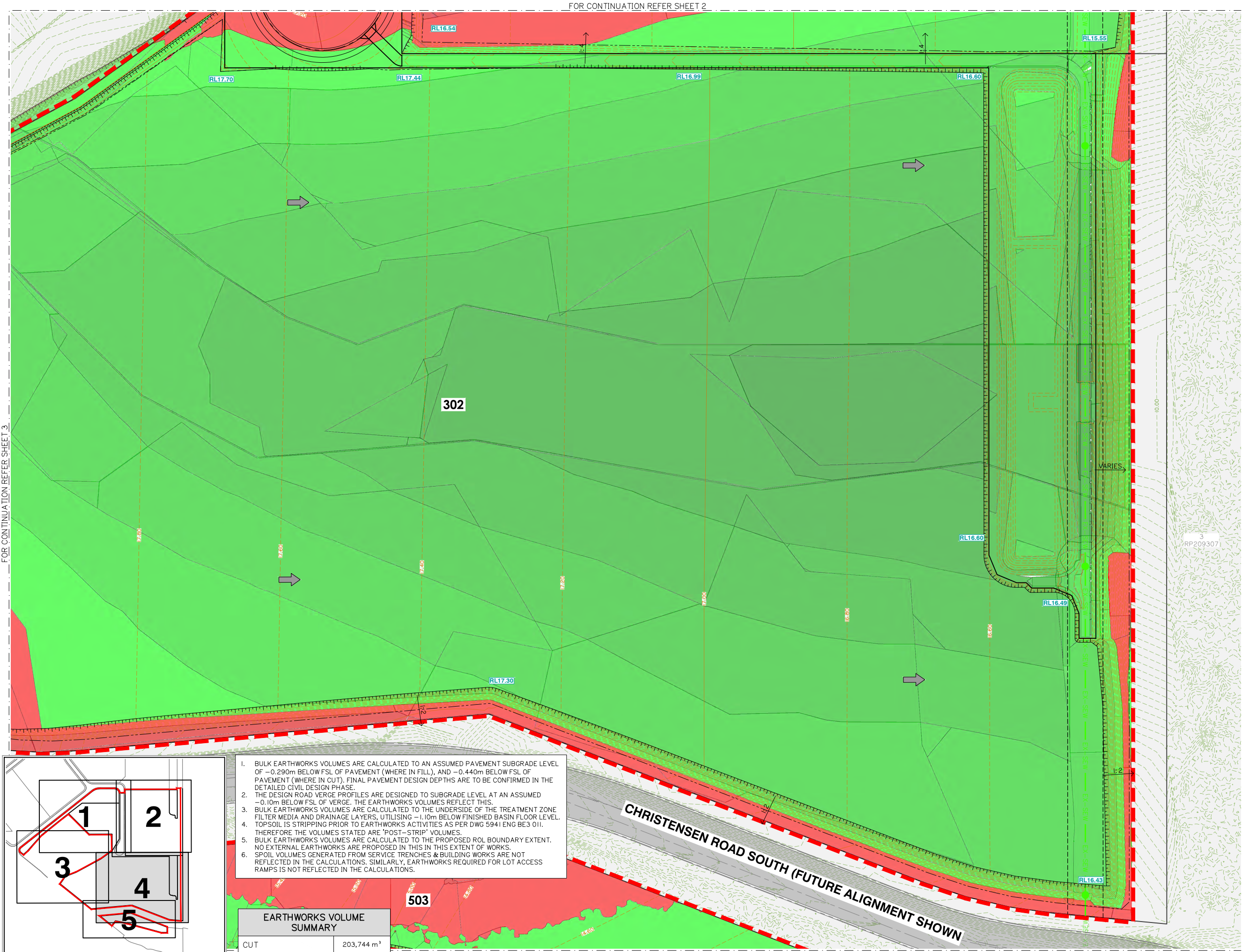
Scale:

0 5 10 15 20 25m 1:500 (A1) 1:1000 (A3)

PROJECT NORTH POINT



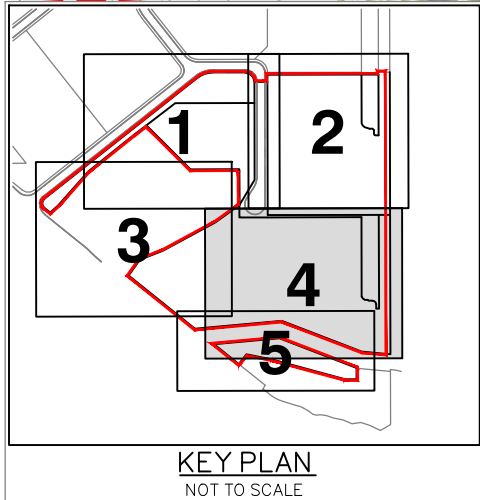
Project No. 5941	
Designed: JH	Drafted: JH
Approved: MG	
RPEQ 16939	
Signed:	
Date: 05/05/2023	
Drawing No: 5941 ENG BE3 051	Revision: C



FOR CONTINUATION REFER SHEET 3

FOR CONTINUATION REFER SHEET 2

FOR CONTINUATION REFER SHEET 5



1. BULK EARTHWORKS VOLUMES ARE CALCULATED TO AN ASSUMED PAVEMENT SUBGRADE LEVEL OF -0.290m BELOW FSL OF PAVEMENT (WHERE IN FILL), AND -0.440m BELOW FSL OF PAVEMENT (WHERE IN CUT). FINAL PAVEMENT DESIGN DEPTHS ARE TO BE CONFIRMED IN THE DETAILED CIVIL DESIGN PHASE.
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EARTHWORKS VOLUME SUMMARY	
CUT	203,744 m³
FILL	240,566 m³
FILL TO IMPORT	36,911 m³

BULK EARTHWORKS LAYOUT PLAN SHEET 4 OF 5

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Drawing Title:
**BULK EARTHWORKS
LAYOUT PLAN
SHEET 4 OF 5**

C	05/07/23	LAYOUT UPDATED	JH	MG
B	24/05/23	ISSUED FOR TENDER	JH	MG
A	05/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:
0 5 10 15 20 25m
1:500 (A1) 1:1000 (A3)

PROJECT NORTH POINT



Project No:	5941	Designed:	JH	Drafted:	JH
Approved:	MG	RPEQ:	16939	Signed:	
Date:	05/05/2023	Drawing No:	5941 ENG BE3 053	Revision:	C



Project:

VANTAGE YATALA
STAGE 3

RPD:

Lot:	504
Plan:	SP329845
Local Authority:	CITY OF GOLD COAST
Level Datum:	AHD
Meridian:	
PSM:	
RL:	

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C	05/07/23	LAYOUT UPDATED	JH	M
B	24/05/23	ISSUED FOR TENDER	JH	M
A	05/05/23	ORIGINAL ISSUE	JH	M
Rev	Date	Description	JH	M
			DRN	CH
DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE			A1 UNREDUCED	
CULVERT AND PIPE SIZES IN MILLIMETRES			A3 REDUCED	

PROJECT NORTH POINT

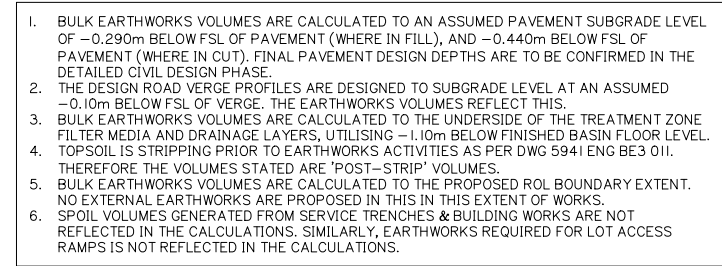
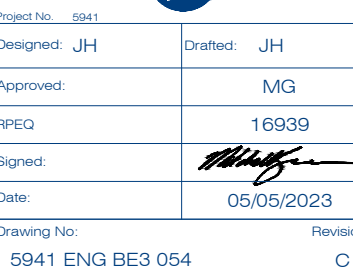
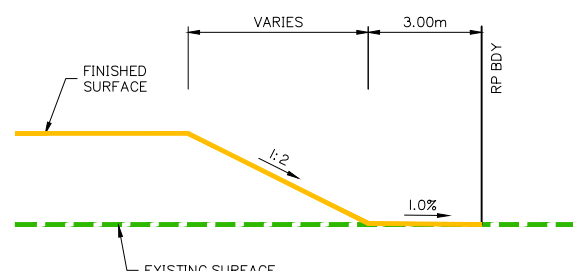


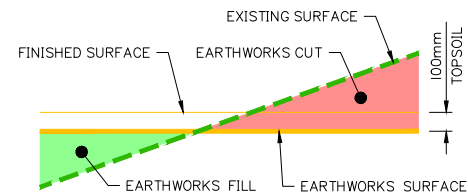
Diagram illustrating the cross-section of a road shoulder and slope. The diagram shows the transition from the existing surface to the finished surface.

- RP BDY**: Right of Way Boundary.
- 2.00m**: Horizontal distance from the boundary to the start of the slope.
- 2.00m**: Horizontal distance of the slope.
- VARIES**: Horizontal distance from the end of the slope to the existing surface.
- 2.0%**: Slope grade.
- 1:2**: Slope ratio.
- 1:1**: Slope ratio.
- EXISTING SURFACE**: The current ground level.
- FINISHED SURFACE**: The proposed road surface.

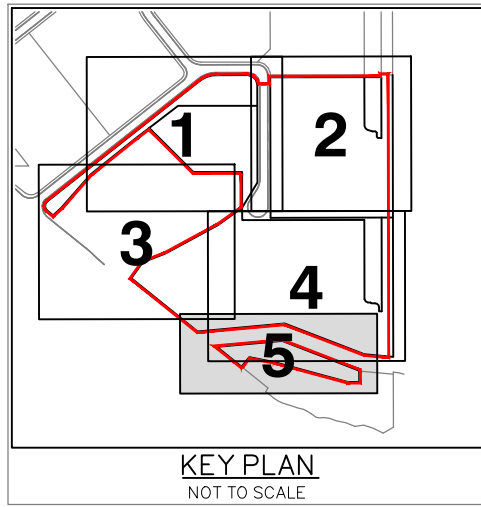
TYPICAL DETAIL CUT BATTER AT BOUNDARY SCALE 1:100



TYPICAL DETAIL
FILL BATTER AT BOUNDARY
SCALE 1:100



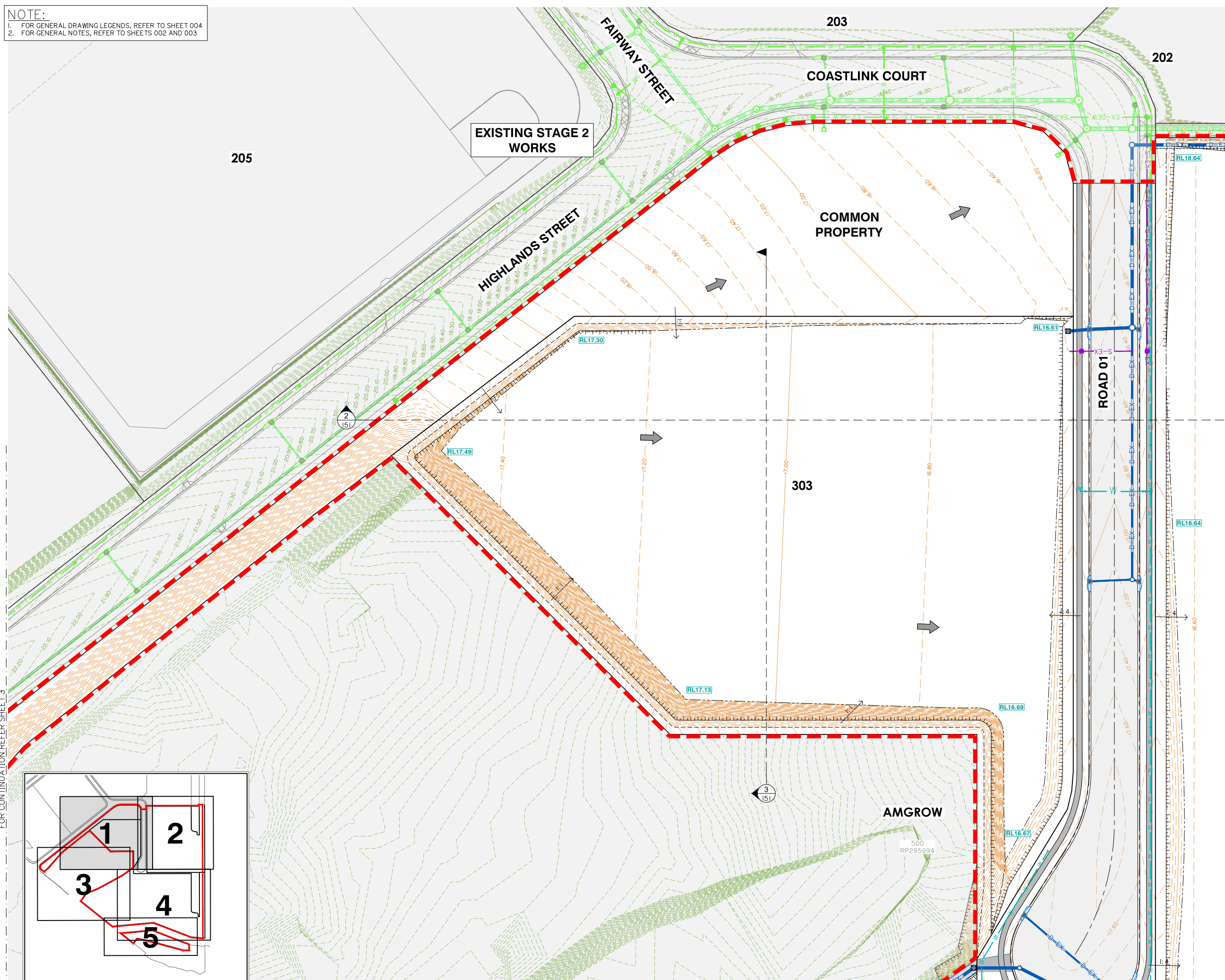
TYPICAL DETAIL
EARTHWORKS PROFILE
SCALE 1:20



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

NOTE:

1. FOR GENERAL DRAWING LEGENDS, REFER TO SHEET 004
2. FOR GENERAL NOTES, REFER TO SHEETS 002 AND 003



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est 1985

planning | environment | landscape | engineering | survey

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Gold Coast | 76 Business Street, Yatala QLD | PO Box 392, Beenleigh 4207

Client:



FPI QUEENSLAND PTY LTD

Project:

VANTAGE YATALA STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207

RPD:

Lot:	504
Plan:	SP329845
Local Authority:	CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

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Drawing Title:

FINISHED SURFACE
LAYOUT PLAN
SHEET 1 OF 5

C	05/07/23	LAYOUT UPDATED	JH	MG
B	24/05/23	ISSUED FOR TENDER	JH	MG
A	05/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK
DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE CULVERT AND PIPE SIZES IN MILLIMETRES			A1 UNREDUCED	
			A3 REDUCED	

Scale:

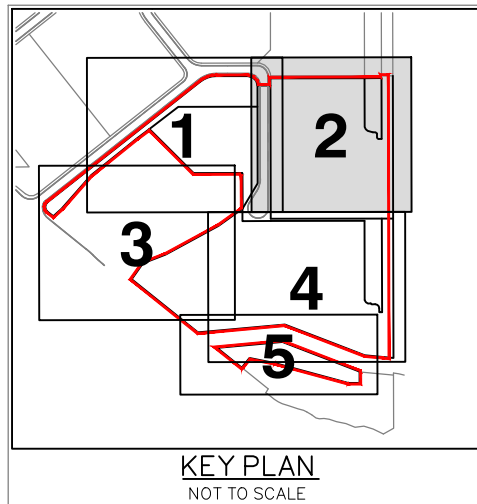
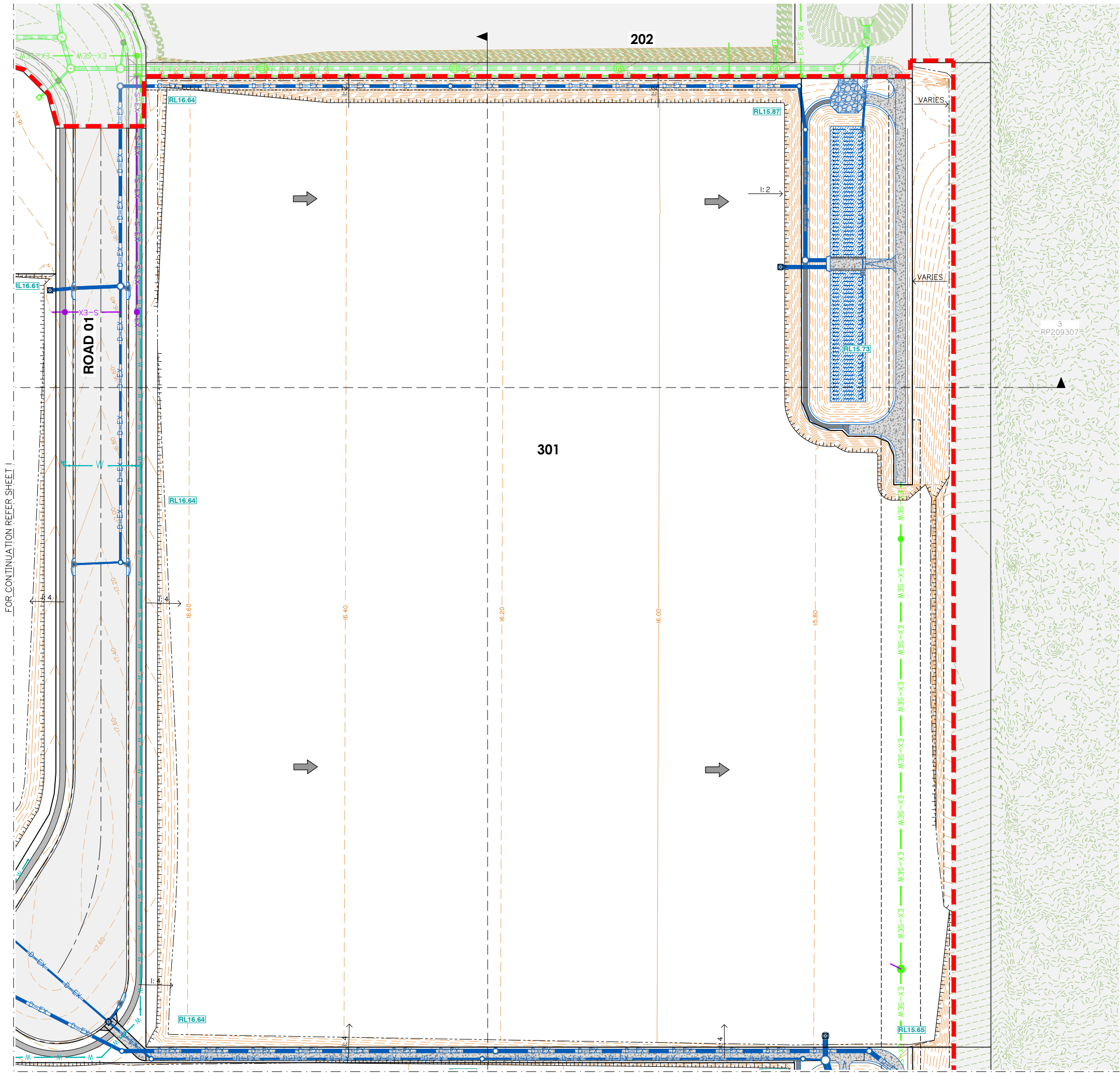


0 5 10 15 20 25m 1:500 (A1) 1:1000 (A3)

PROJECT NORTH POINT



Project No. 5941	
Designed: JH	Drafted: JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	05/05/2023
Drawing No: 5941 ENG BE3 100	
Revision: C	

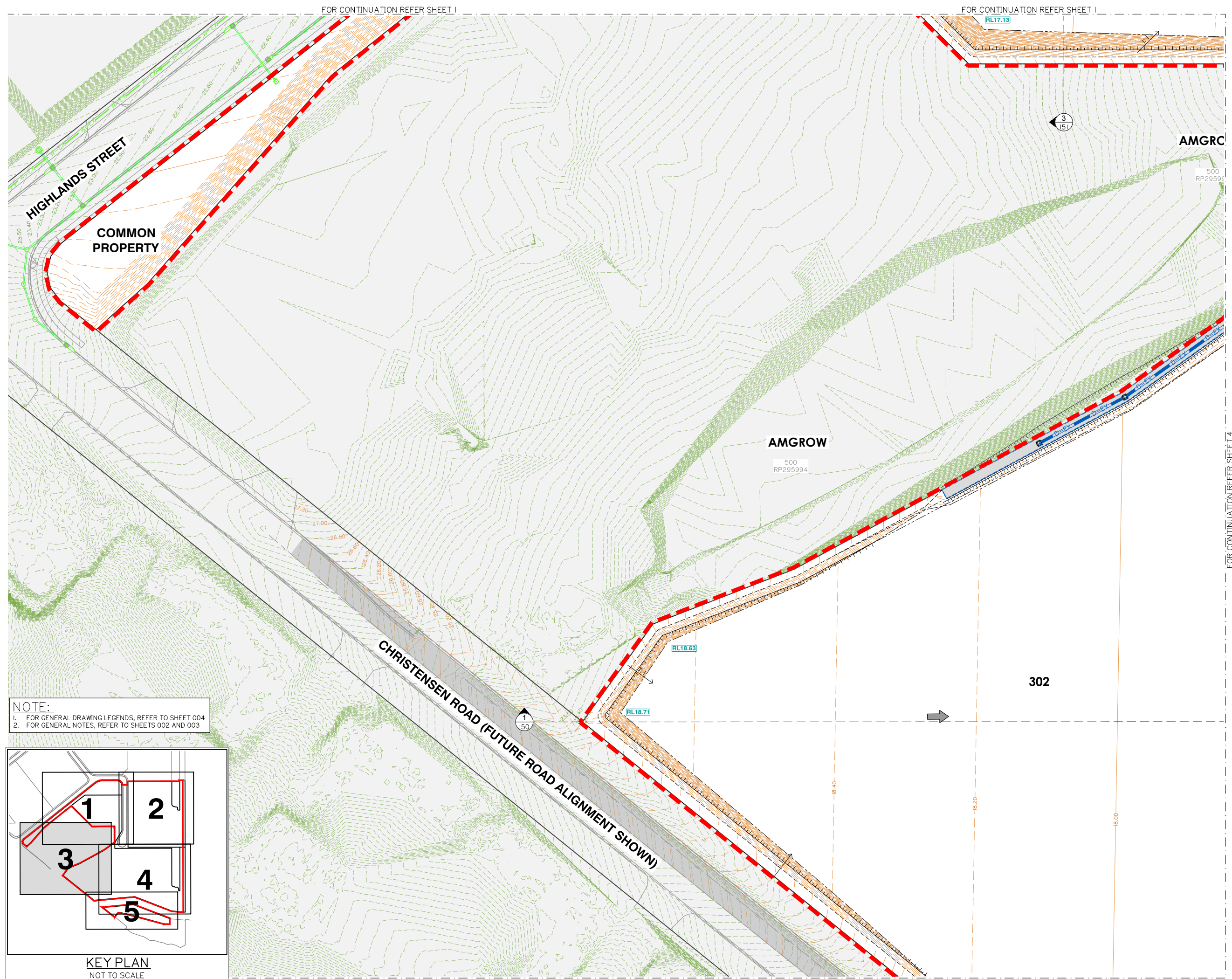


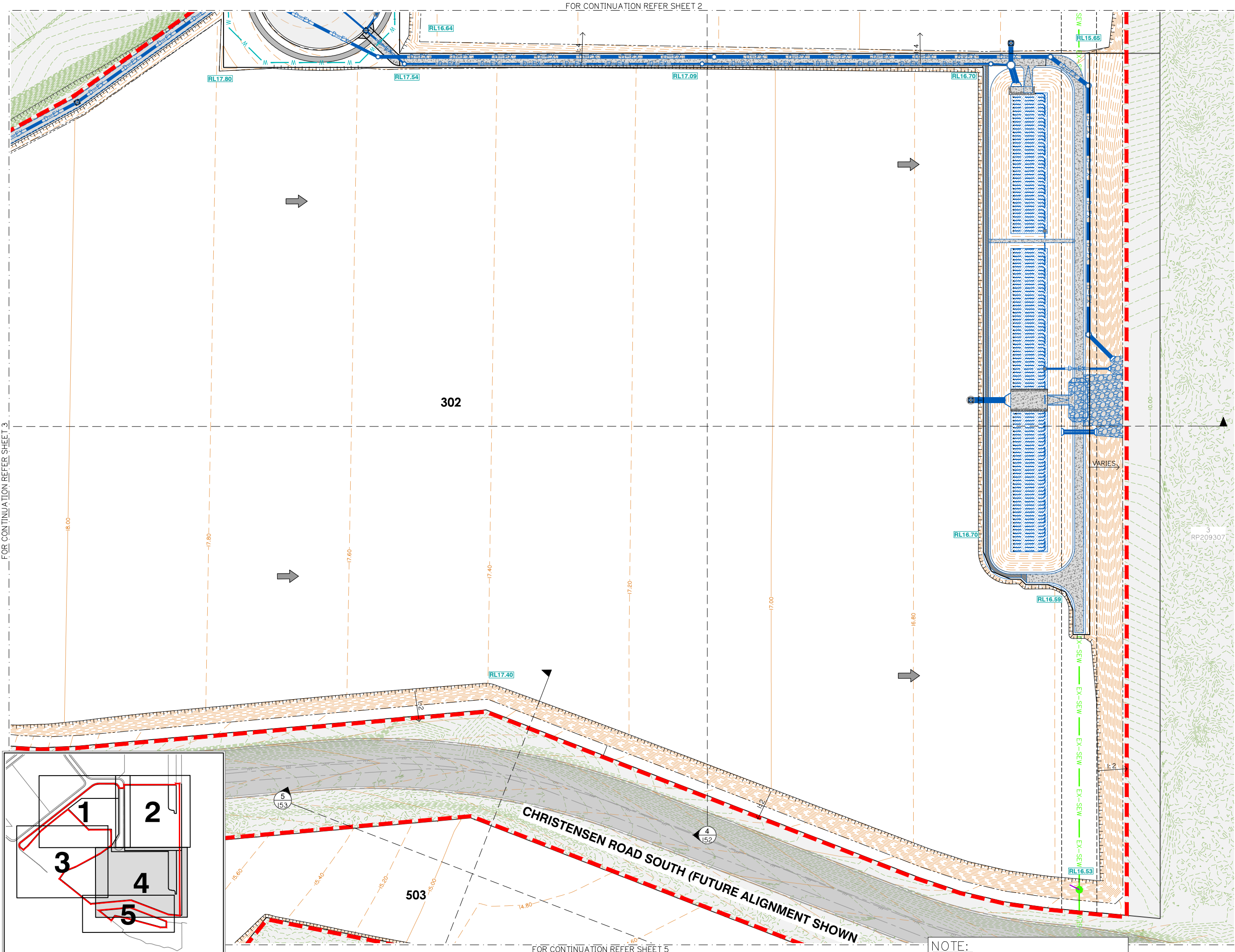
NOTE:
1. FOR GENERAL DRAWING LEGENDS, REFER TO SHEET 004
2. FOR GENERAL NOTES, REFER TO SHEETS 002 AND 003

Rev	Date	Description	DRN	CHK
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DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

Scale:
0 5 10 15 20 25m
1:500 (A1) 1:1000 (A3)

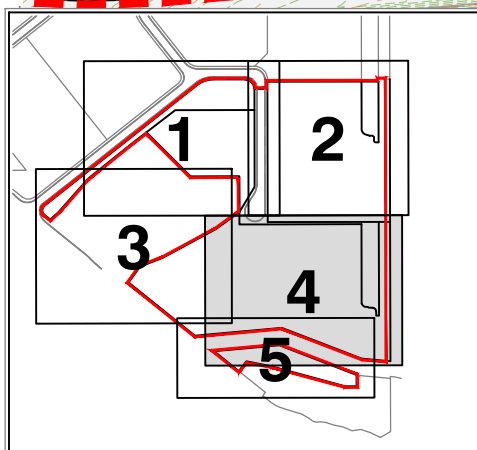




FOR CONTINUATION REFER SHEET 3

FOR CONTINUATION REFER SHEET 2

FOR CONTINUATION REFER SHEET 5



KEY PLAN
NOT TO SCALE

NOTE:
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Gold Coast | 76 Business Street, Yatala QLD | PO Box 392, Beerleigh 4207

Client:



FRASERS
PROPERTY

FPI QUEENSLAND PTY LTD

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207

RPD:

Lot: 504
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Drawing Title:

FINISHED SURFACE
LAYOUT PLAN
SHEET 4 OF 5

Rev	Date	Description	DRN	CHK
C	05/07/23	LAYOUT UPDATED	JH	MG
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A	05/05/23	ORIGINAL ISSUE	JH	MG

DIMENSIONS IN METRES EXCEPT WHERE
SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:

0 5 10 15 20 25m

1:500 (A1) 1:1000 (A3)

PROJECT NORTH POINT



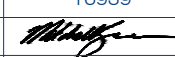
Project No. 5941

Designed: JH

Drafted: JH

Approved: MG

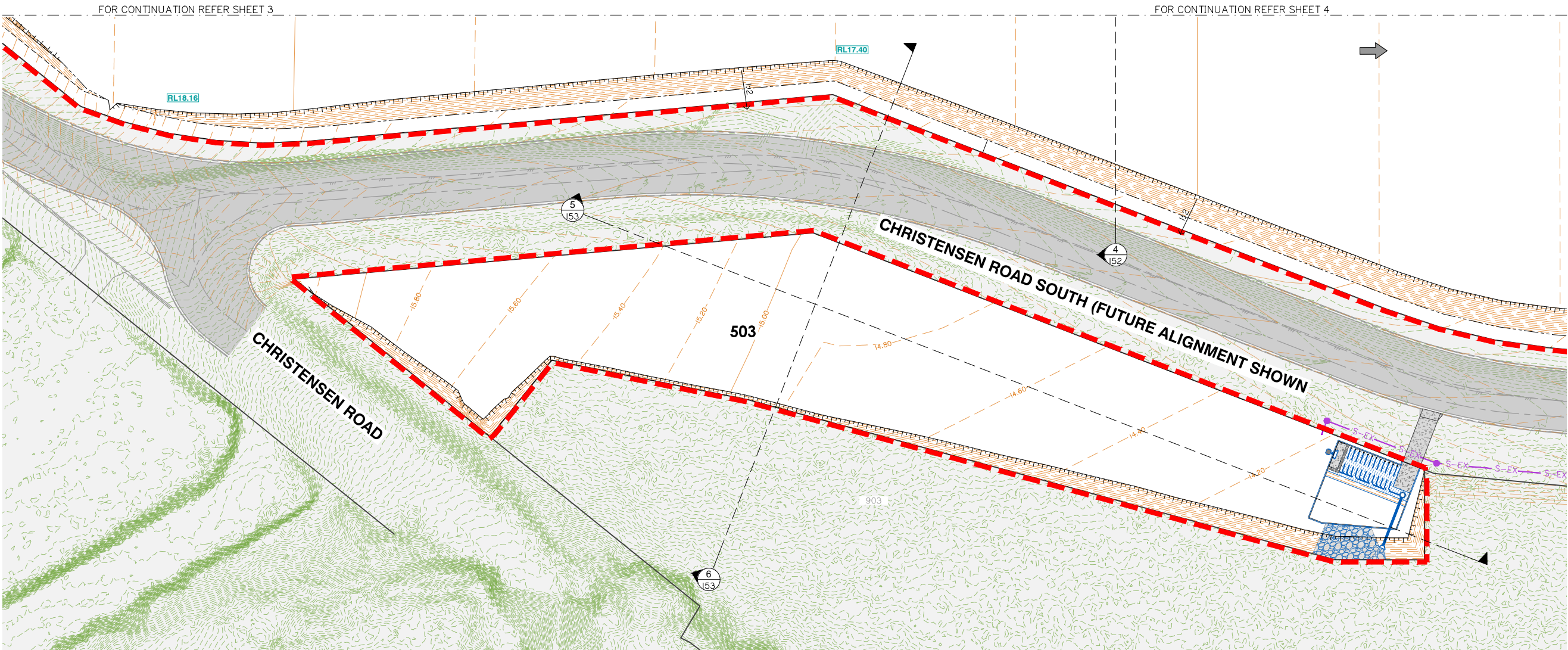
RPEQ 16939

Signed: 

Date: 05/05/2023

Drawing No: 5941 ENG BE3 103

Revision: C



Rev	Date	Description	DRN	CHK
C	05/07/23	LAYOUT UPDATED	JH	MG
B	24/05/23	ISSUED FOR TENDER	JH	MG
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DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:

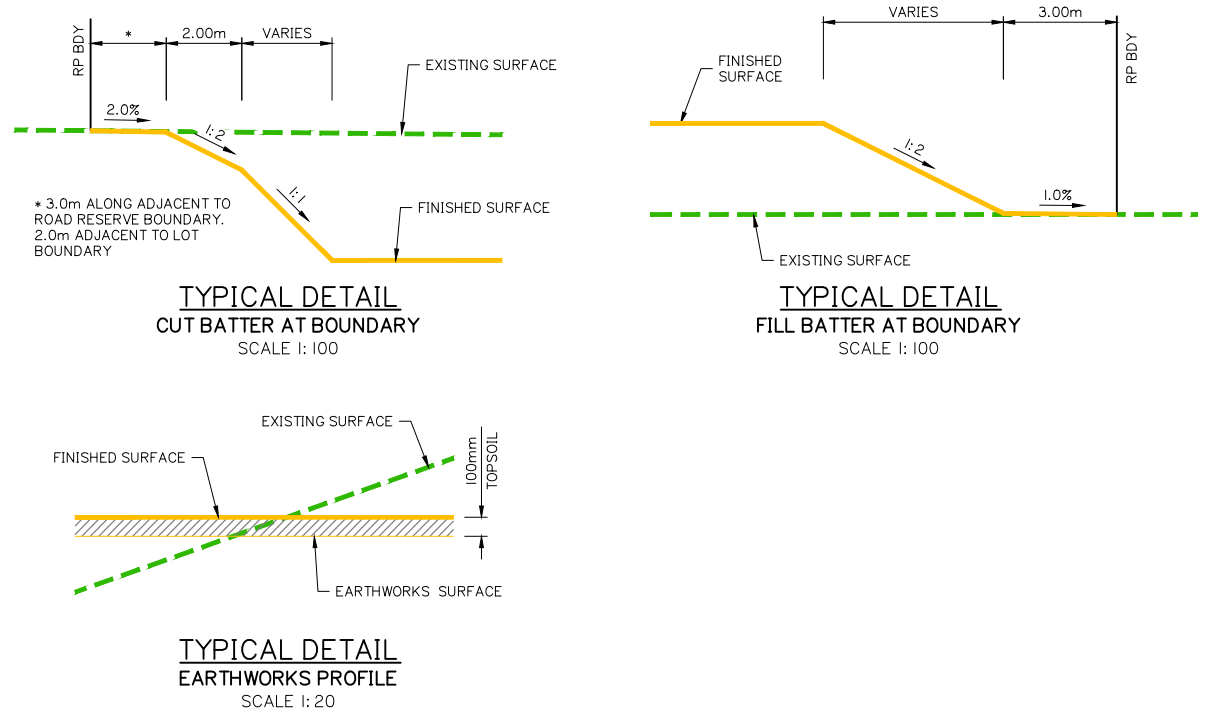
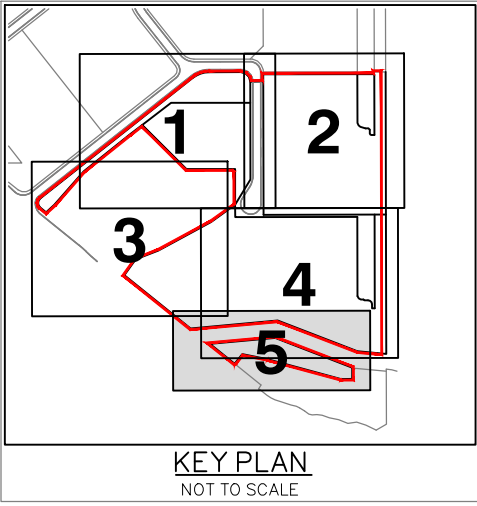
0 5 10 15 20 25m

1:500 (A1) 1:1000 (A3)

PROJECT NORTH POINT



Project No. 5941	
Designed: JH	Drafted: JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	05/05/2023
Drawing No: 5941 ENG BE3 104	Revision: C



NOTE:

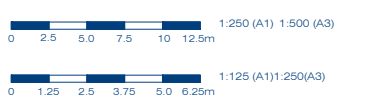
1. FOR GENERAL DRAWING LEGENDS, REFER TO SHEET 004

2. FOR GENERAL NOTES, REFER TO SHEETS 002 AND 003

C	05/07/23	SECTIONS UPDATED	JH	MG
B	24/05/23	ISSUED FOR TENDER	JH	MG
A	05/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

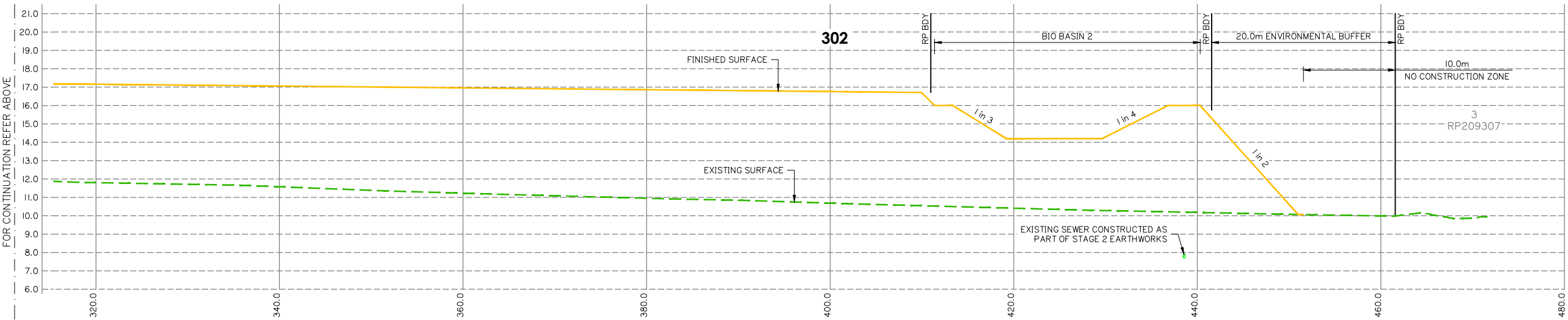
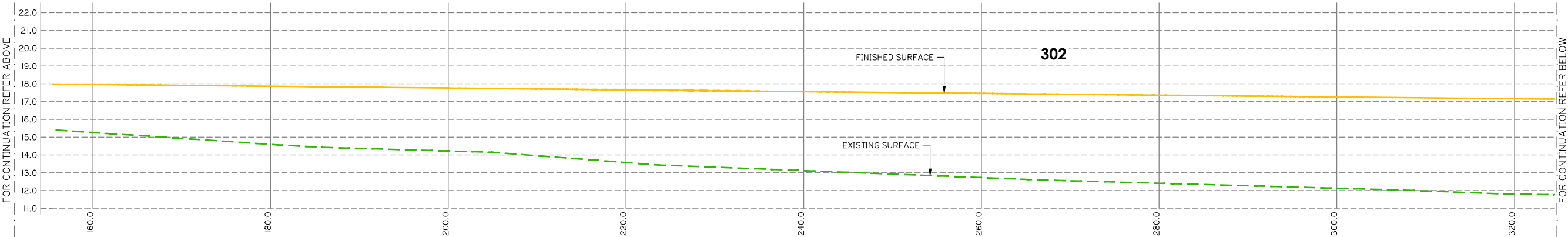
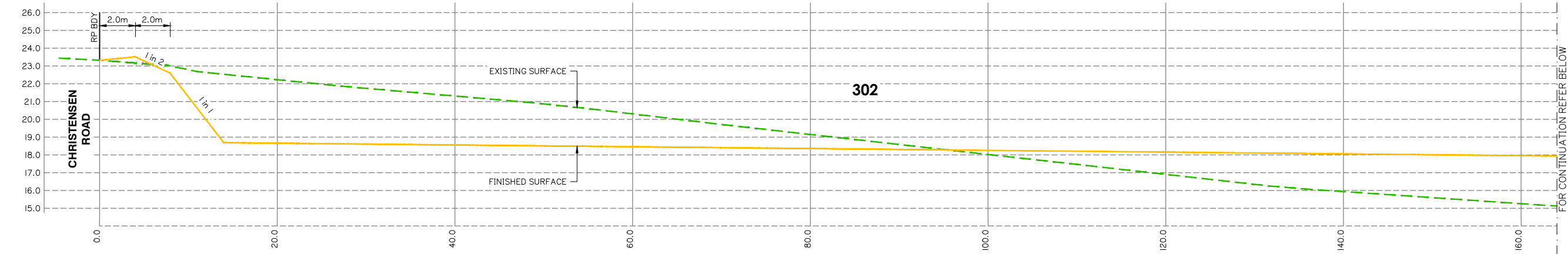
DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

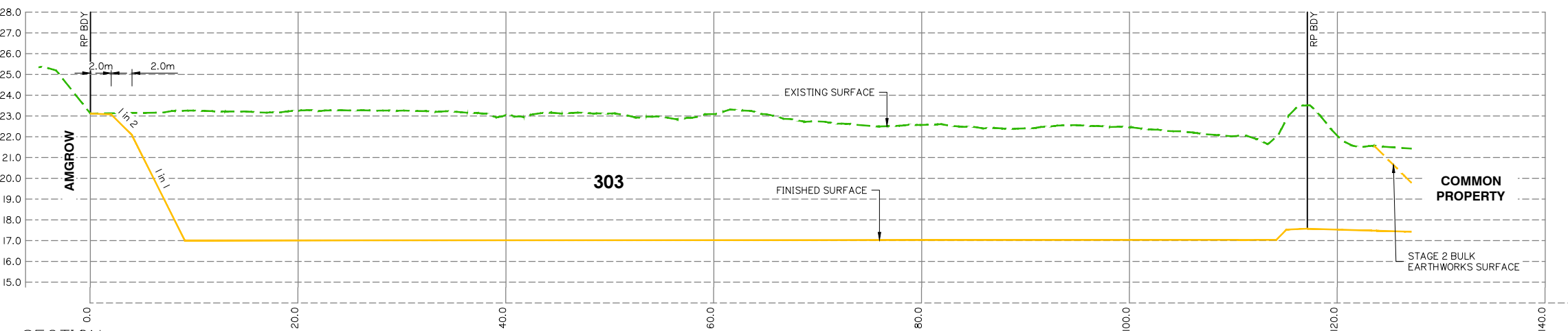
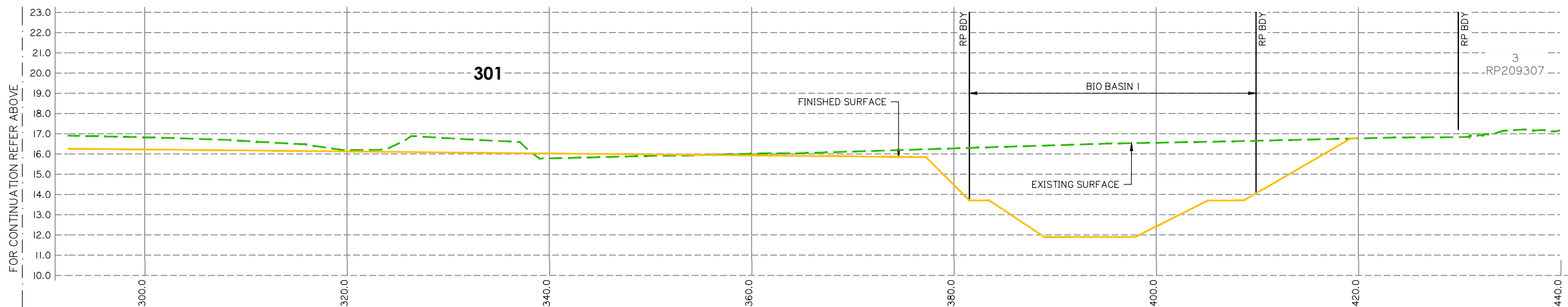
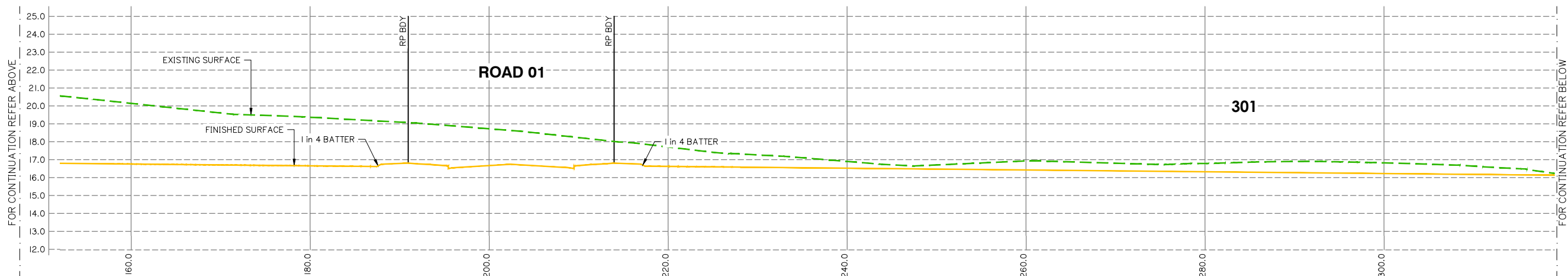
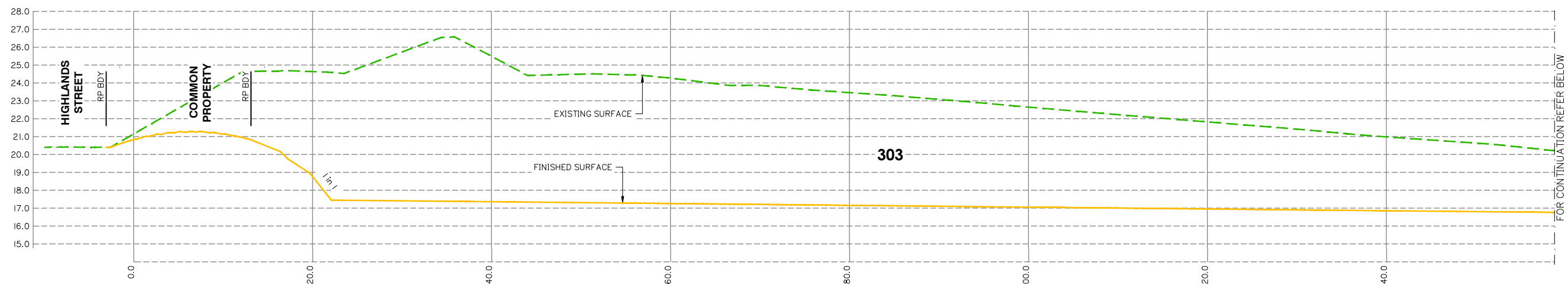


PROJECT NORTH POINT

Project No:	5941	Revision	
Designed:	JH	Drafted:	JH
Approved:			MG
RPEQ			16939
Signed:			
Date:			05/05/2023
Drawing No:	5941 ENG BE3 150	Revision	C



SECTION 1
102
SCALE:
1: 250 HORIZ.
1: 125 VERT.



FINISHED SURFACE CROSS SECTIONS SHEET 2 OF 4

Client:



FPI QUEENSLAND PTY LTD

Project:

VANTAGE YATALA STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329845
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

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Drawing Title:

FINISHED SURFACE
CROSS SECTIONS
SHEET 2 OF 4

C	05/07/23	SECTIONS UPDATED	JH	MG	
B	24/05/23	ISSUED FOR TENDER	JH	MG	
A	05/05/23	ORIGINAL ISSUE	JH	MG	
Rev	Date	Description	DRN	CHK	
DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE CULVERT AND PIPE SIZES IN MILLIMETRES			A1 UNREDUCED		
			A3 REDUCED		

Scale:

0 2.5 5.0 7.5 10 12.5m 1:250 (A1) 1:500 (A3)

0 1.25 2.5 3.75 5.0 6.25m 1:125 (A1) 1:250 (A3)

PROJECT NORTH POINT

Project No. 5941

Designed: JH

Approved:

MG

RPEQ

6939

Signed:

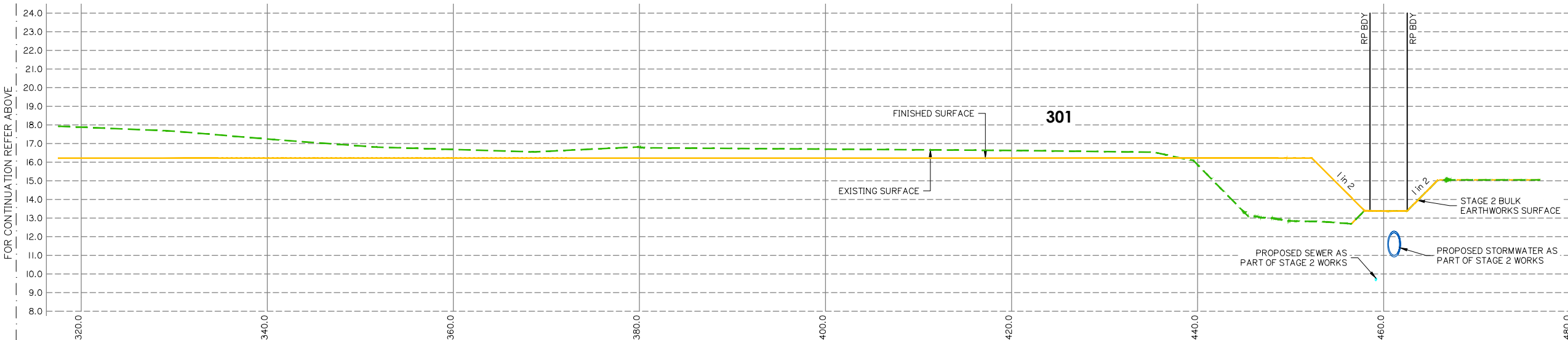
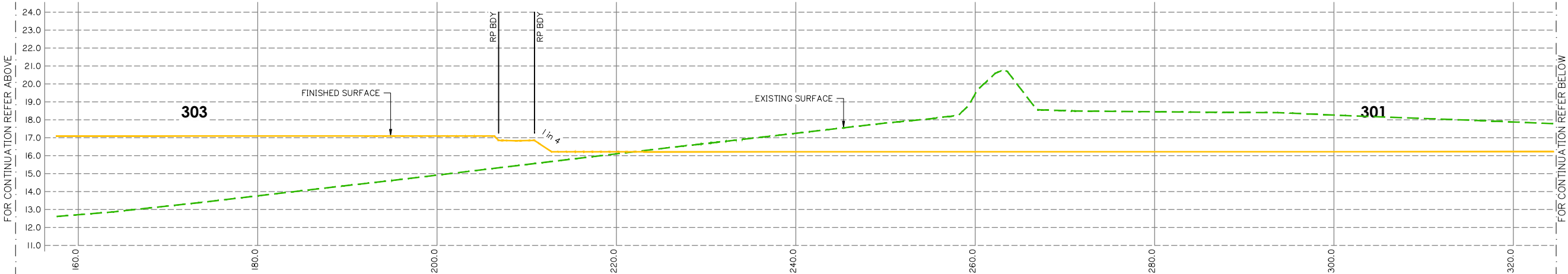
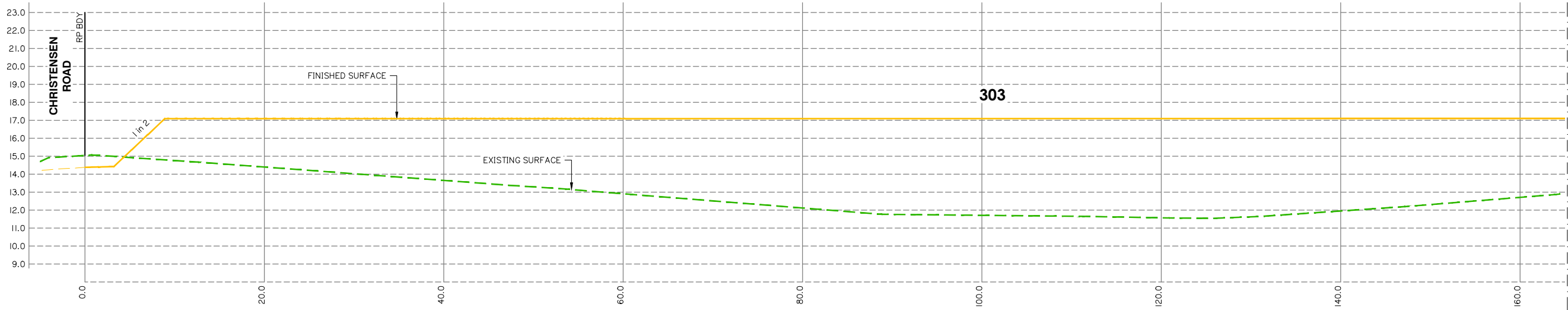
[Signature]

Date:

05/2023

Drawing No:
5941 ENG BE3 151

C

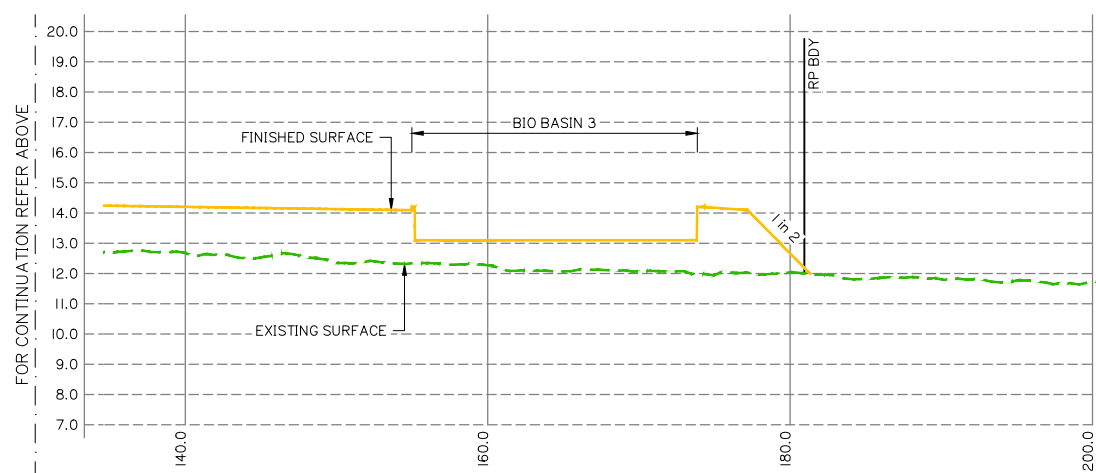


SECTION 4
SCALE:
I: 250 HORIZ.
I: 125 VERT.

C	05/07/23	SECTIONS UPDATED	JH	MG	
B	24/05/23	ISSUED FOR TENDER	JH	MG	
A	05/05/23	ORIGINAL ISSUE	JH	MG	
Rev	Date	Description	DRN	CHK	
DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE			A1 UNREDUCED		
CULVERT AND PIPE SIZES IN MILLIMETRES			A3 REDUCED		

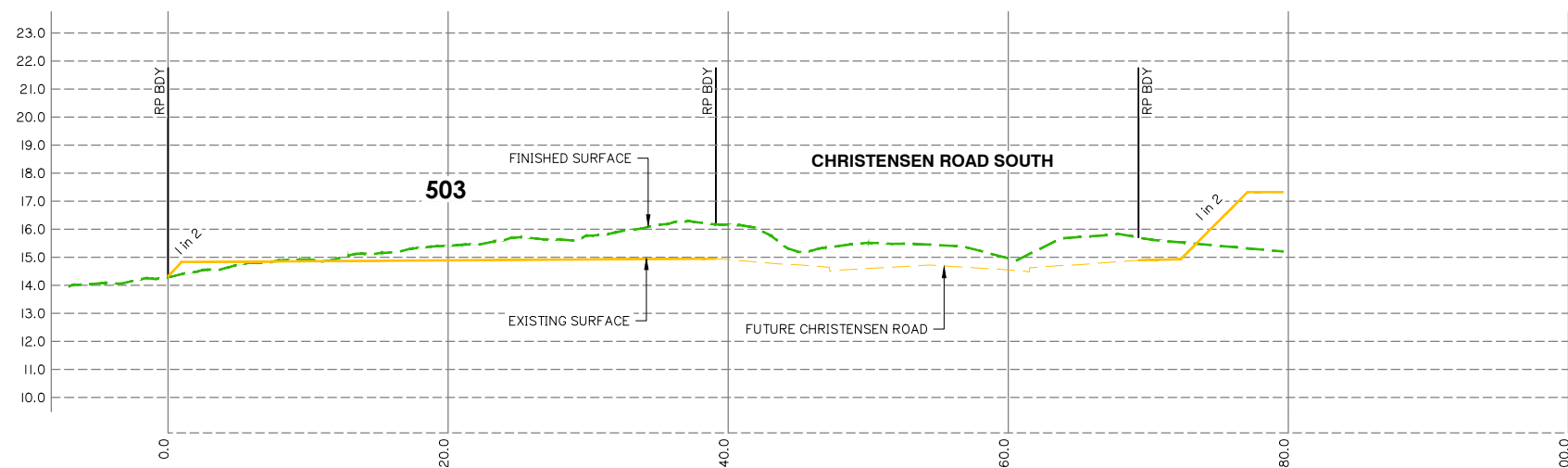
Scale:
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0 1.25 2.5 3.75 5.0 6.25m 1:125 (A1) 1:250 (A3)

PROJECT NORTH POINT	
Project No. 5941	
Designed: JH	Drafted: JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	05/05/2023
Drawing No: 5941 ENG BE3 152	Revision C



$$\frac{5}{104}$$

SCALE:
I: 250 HORIZ.
I: 125 VERT.



$$\frac{6}{104}$$

SCALE:
I: 250 HORIZ.
I: 125 VERT.



Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207

RPD:	
Lot:	504
Plan:	SP329845
Local Authority:	CITY OF GOLD COAST
Level Datum: AHD	
Meridian:	
PSM:	
RL:	

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Drawing Title:

FINISHED SURFACE
CROSS SECTIONS
SHEET 4 OF 4

C	05/07/23	SECTIONS UPDATED	JH	MG	
B	24/05/23	ISSUED FOR TENDER	JH	MG	
A	05/05/23	ORIGINAL ISSUE	JH	MG	
Rev	Date	Description	DRN	CHK	
DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE			A1 UNREDUCED		
CULVERT AND PIPE SIZES IN MILLIMETRES			A3 REDUCED		

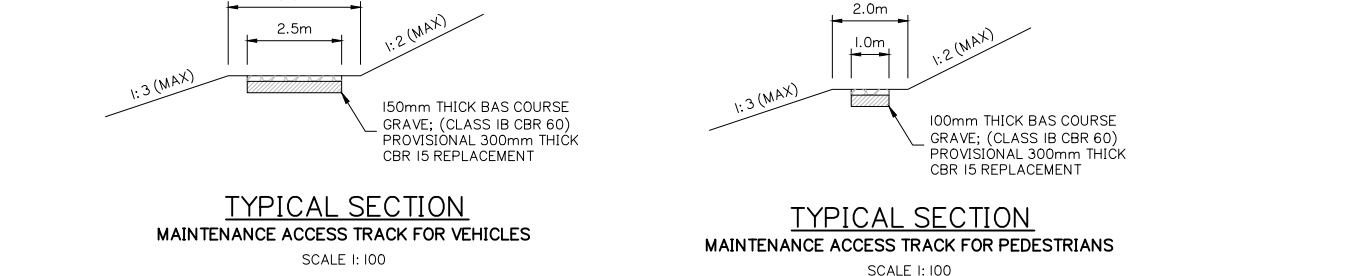
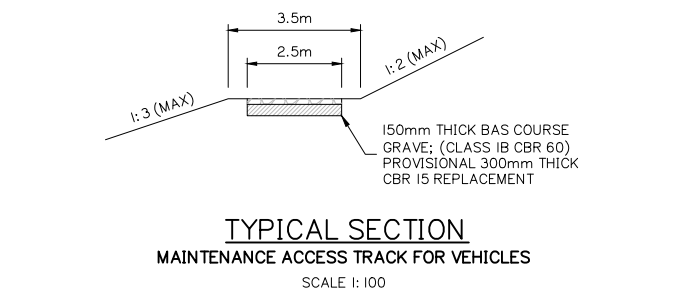
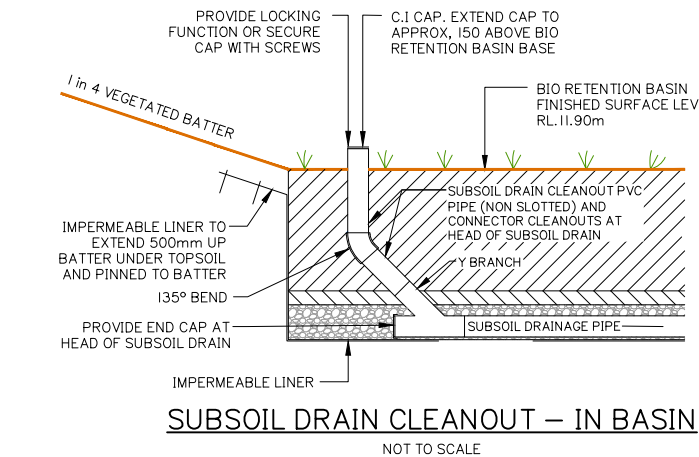
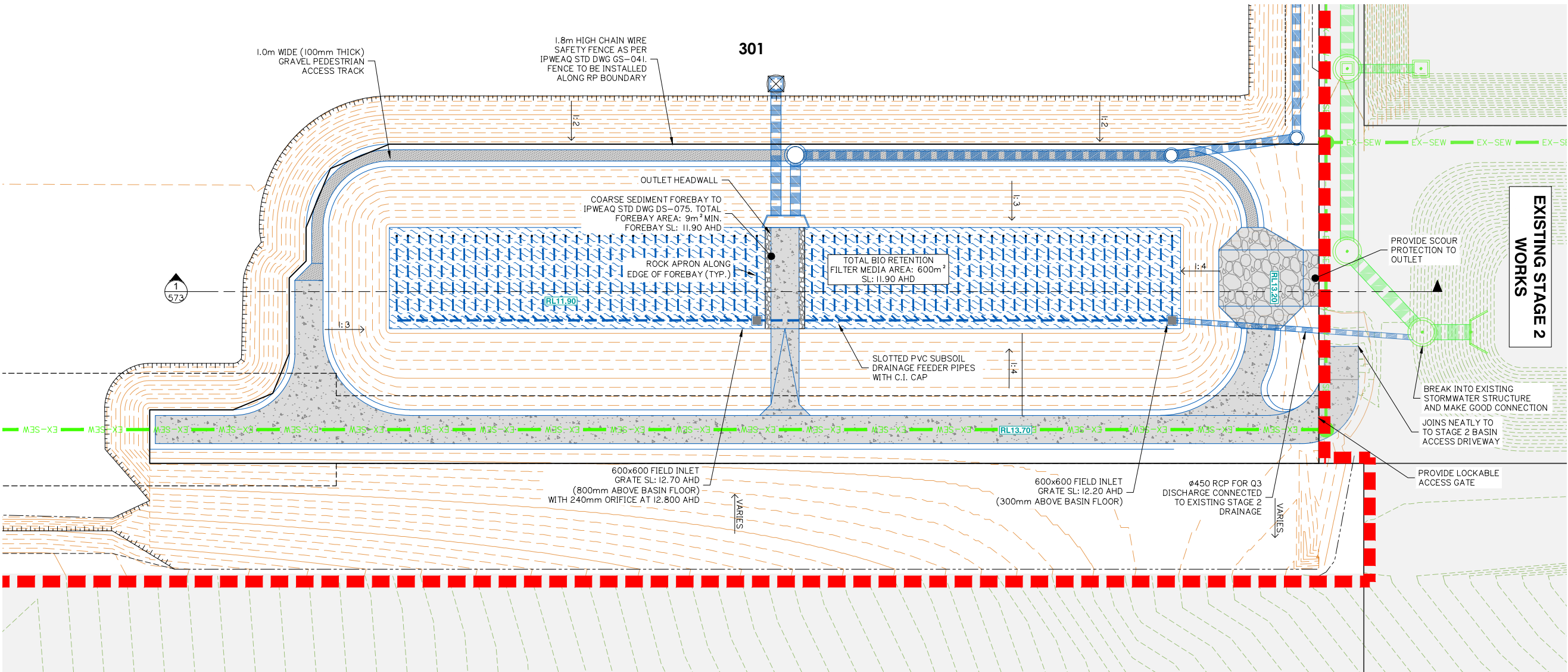
Scale:

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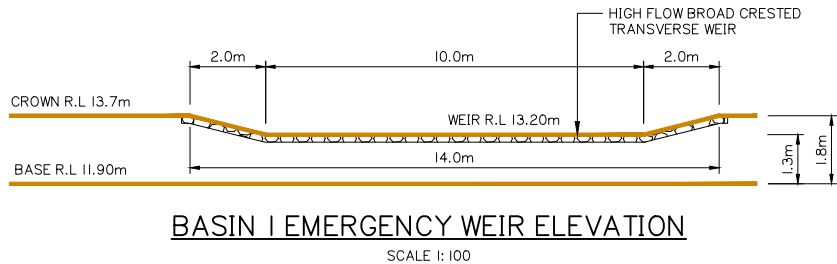
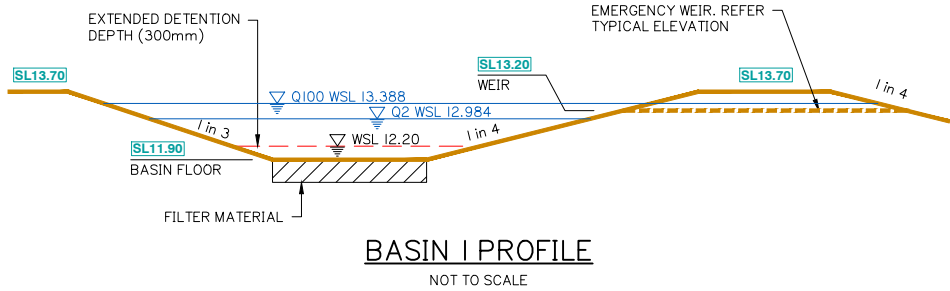
0 1.25 2.5 3.75 5.0 6.25m 1:125 (A1) 1:250 (A3)

PROJECT NORTH POINT

Project No. 5941	
Designed: JH	Drafted: JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	05/05/2023
Drawing No. 5941 ENG BE3 153	
Revision C	



WATER SURFACE LEVEL TABLE	
EVENT (ARI)	LEVEL (AHD)
Q1	12.871
Q2	12.984
Q5	13.099
Q10	13.148
Q20	13.260
Q50	13.341
Q100	13.388



NOTE:
1. FOR GENERAL DRAWING LEGENDS, REFER TO SHEET 004
2. FOR GENERAL NOTES, REFER TO SHEETS 002 AND 003



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planning | environment | landscape | engineering | survey

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

Gold Coast | 76 Business Street, Yatala QLD | PO Box 392, Beenleigh 4207

Client:



FRASERS
PROPERTY

FRASERS PROPERTY LTD

Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329845
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

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Drawing Title:

OPERATIONAL PHASE
BIORETENTION BASIN 1
LAYOUT PLAN

C	05/07/23	LAYOUT UPDATED	JH	MG
B	24/05/23	ISSUED FOR TENDER	JH	MG
A	05/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED
A3 REDUCED

Scale:

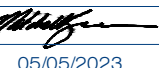
0 2 4 6 8 10m

1:200 (A1) 1:400 (A3)

PROJECT NORTH POINT



Project No: 5941

Designed: JH
Approved: MG
RPEQ: 16939
Signed: 
Date: 05/05/2023

Drafted: JH
Revision: C

Drawing No: 5941 ENG BE3 570

Client:



Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329845
Local Authority: CITY OF GOLD COAST
Level Datum: AHD
Meridian:
PSM:
RL:

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Drawing Title:

OPERATIONAL PHASE
BIORETENTION BASIN 2
LAYOUT PLAN

Rev	Date	Description	JH	MG
C	05/07/23	LAYOUT UPDATED	JH	MG
B	24/05/23	ISSUED FOR TENDER	JH	MG
A	05/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	JH	MG
			DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES

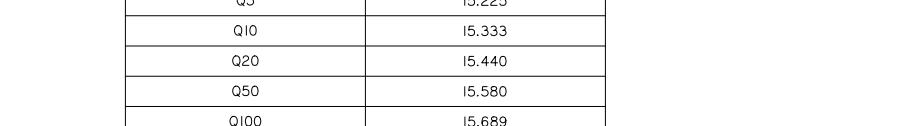
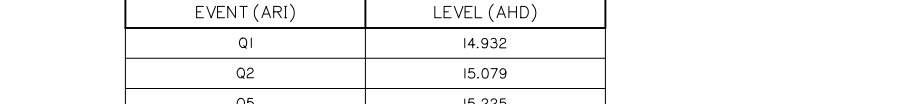
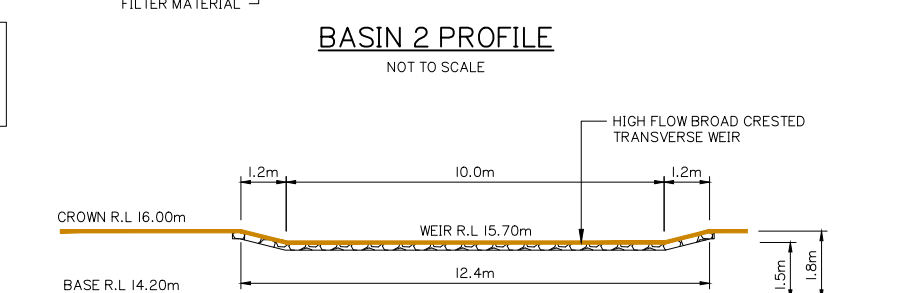
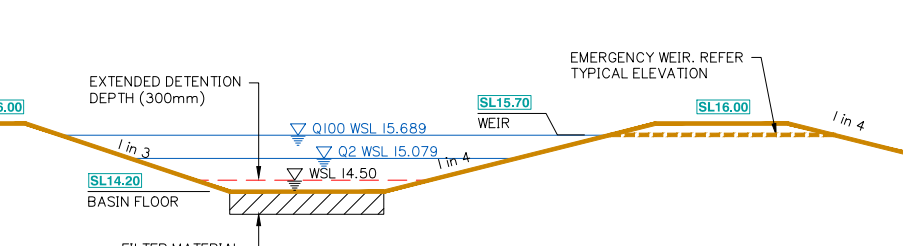
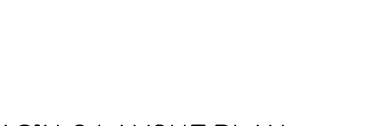
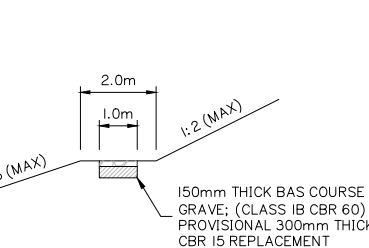
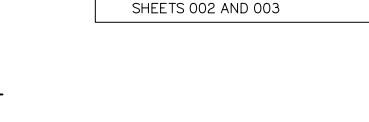
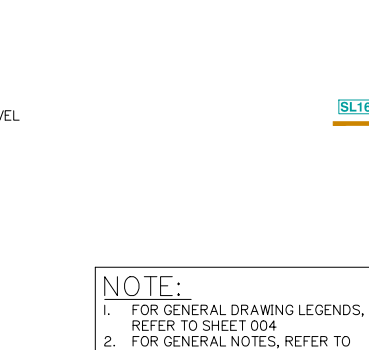
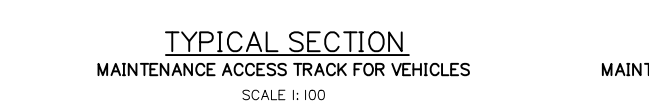
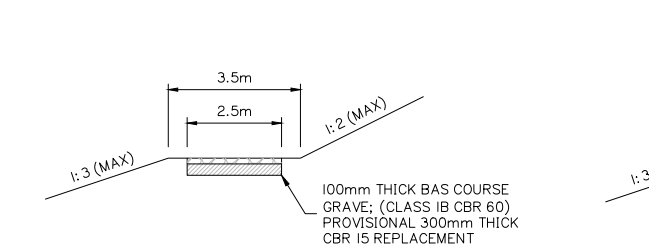
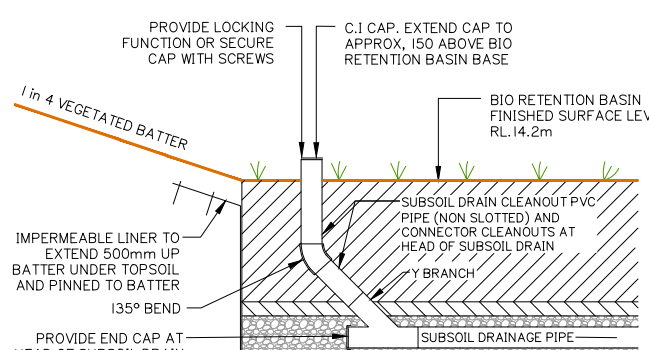
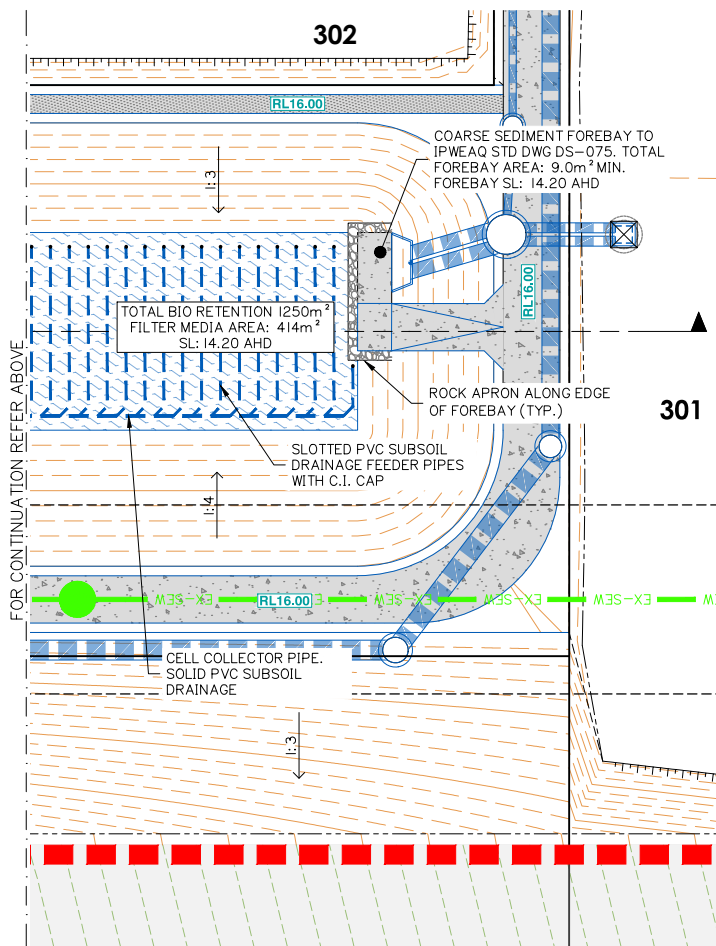
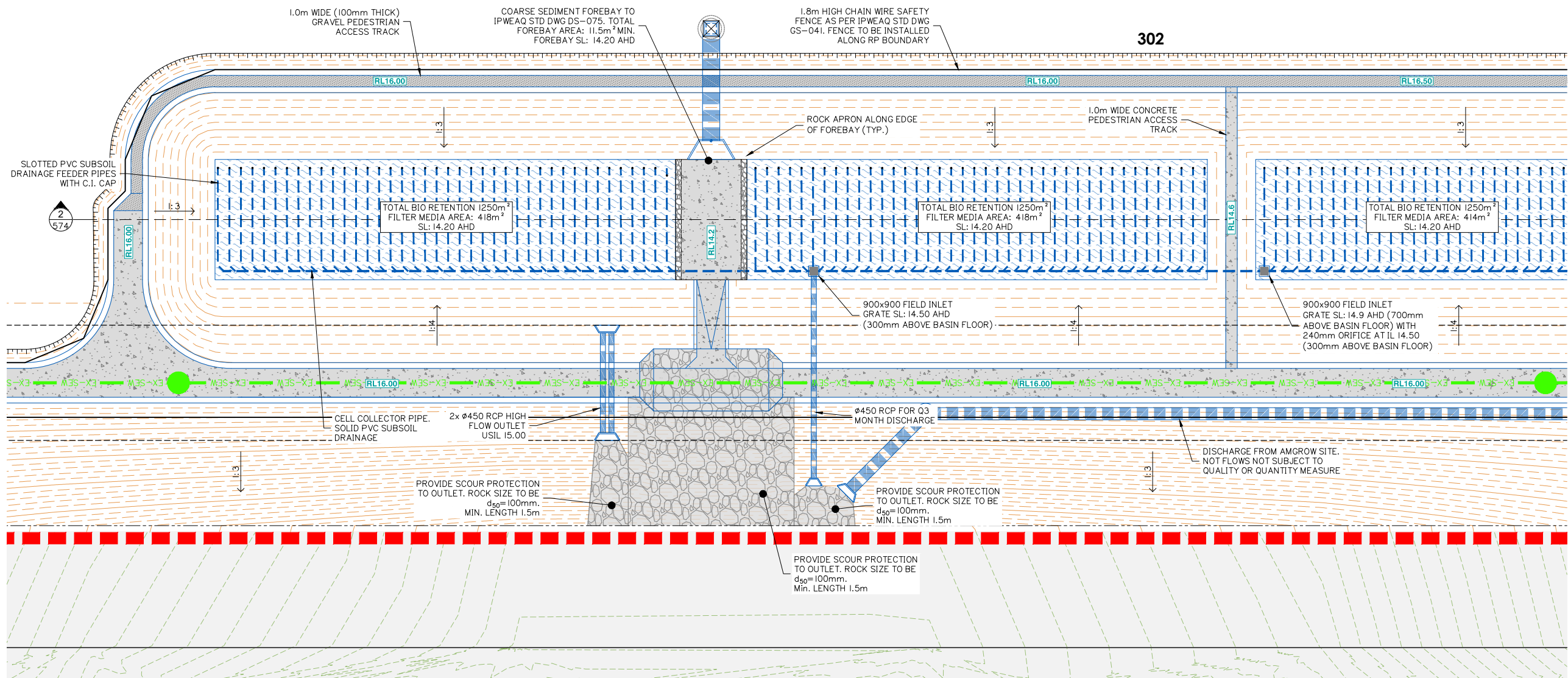
A1 UNREDUCED
A3 REDUCED

Scale:
0 2 4 6 8 10m
1:200 (A1) 1:400 (A3)

PROJECT NORTH POINT

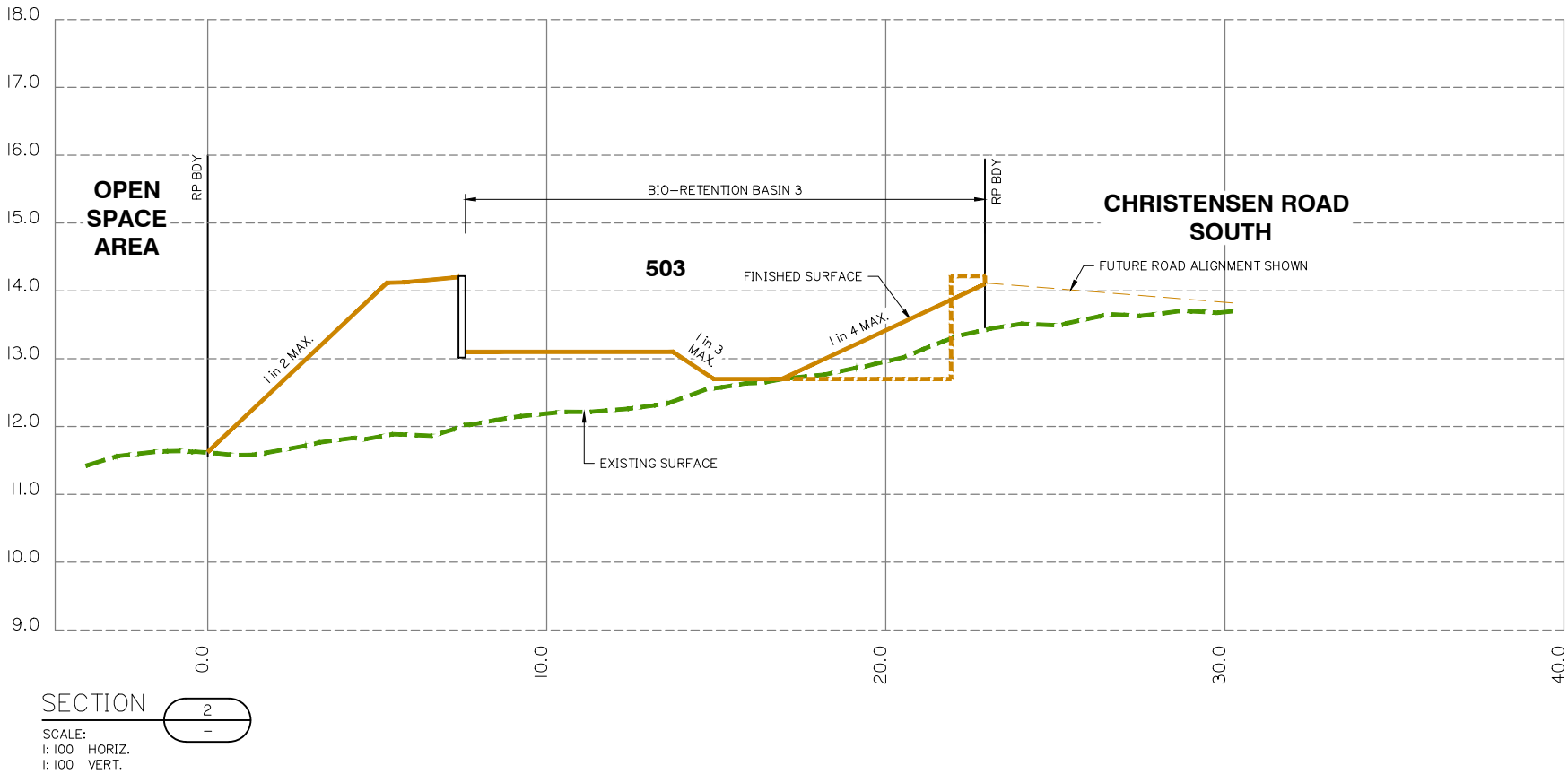
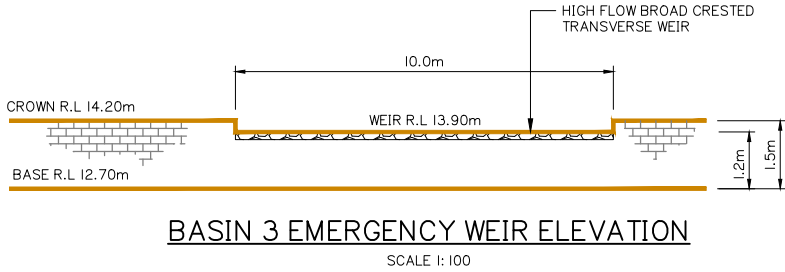
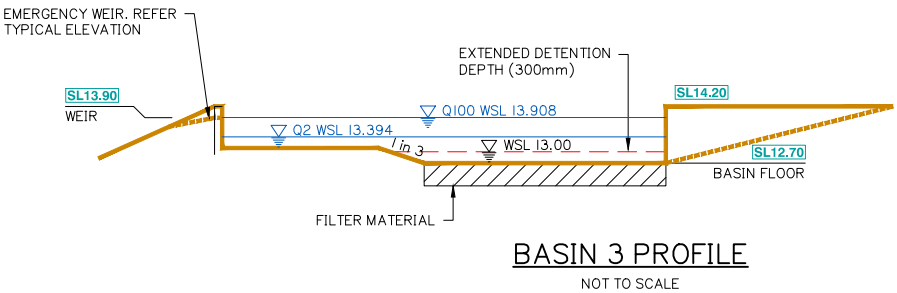
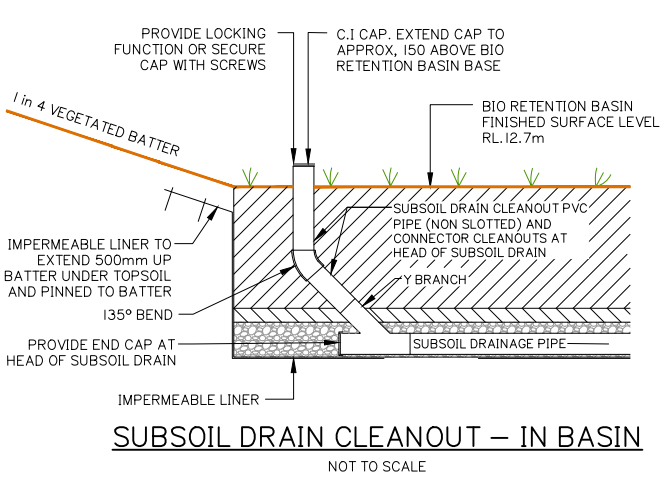
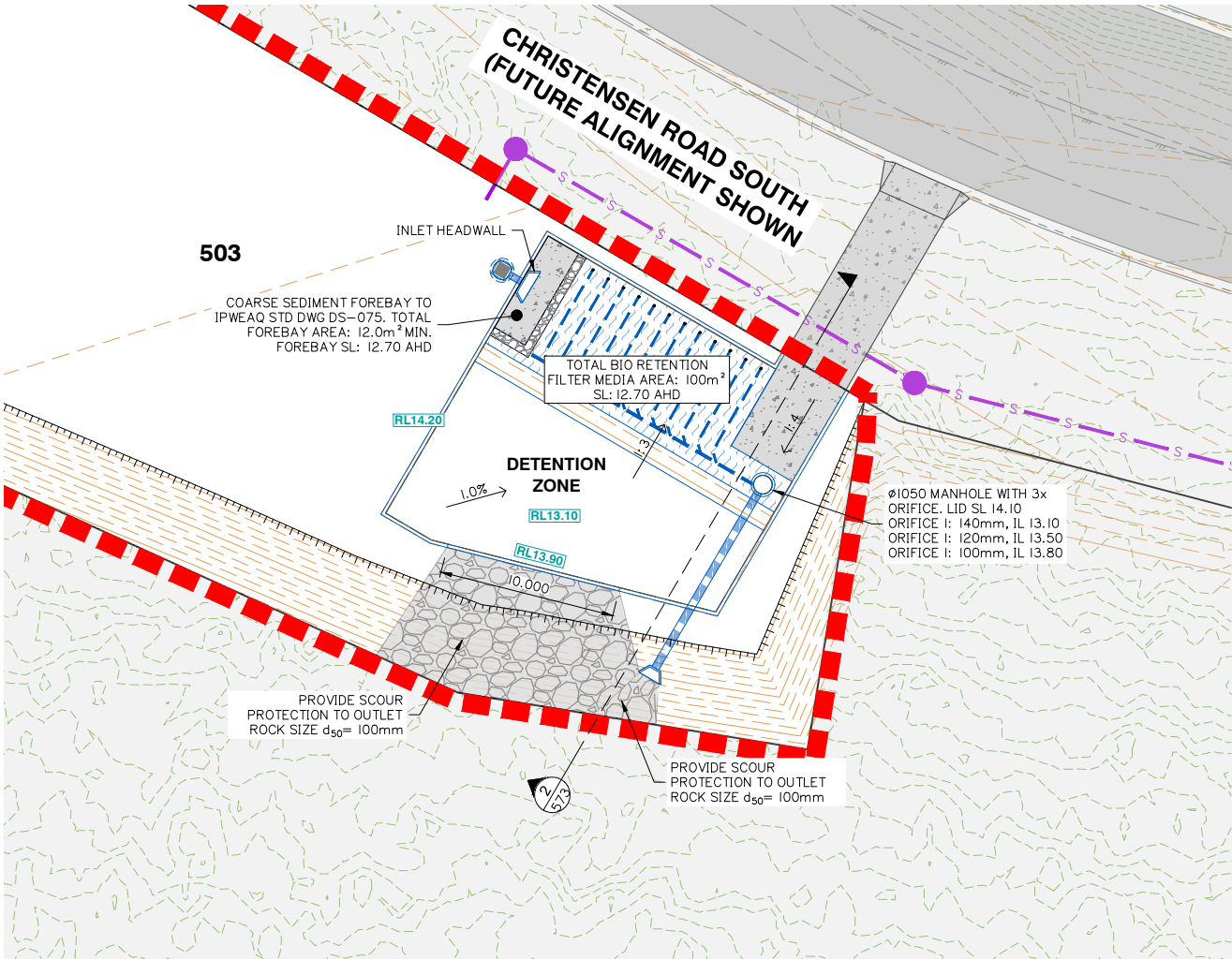


Project No:	5941	Revision	
Designed:	JH	Drafted:	JH
Approved:			MG
RPEQ			16939
Signed:			
Date:			05/05/2023
Drawing No:	5941 ENG BE3 571		



WATER SURFACE LEVEL TABLE

EVENT (ARI)	LEVEL (AHD)
Q1	14.932
Q2	15.079
Q5	15.225
Q10	15.333
Q20	15.440
Q50	15.580
Q100	15.689



WATER SURFACE LEVEL TABLE

EVENT (ARI)	LEVEL (AHD)
Q1	13.296
Q2	13.394
Q5	13.521
Q10	13.625
Q20	13.731
Q50	13.837
Q100	13.908

Client:



Project: VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329845
Local Authority: CITY OF GOLD COAST

Level Datum: AHD
Meridian:
PSM:
RL:

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Drawing Title:

OPERATIONAL PHASE
BIORETENTION BASIN 3
LAYOUT PLAN

C	05/07/23	LAYOUT UPDATED	JH MG
B	24/05/23	ISSUED FOR TENDER	JH MG
A	05/05/23	ORIGINAL ISSUE	JH MG
Rev	Date	Description	DRN CHK
DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE CULVERT AND PIPE SIZES IN MILLIMETRES			A1 UNREDUCED A3 REDUCED

Scale:



PROJECT NORTH POINT



Project No. 5941

Designed: JH

Drafted: JH

Approved:

MG

RPEQ

16939

Signed:

Date:

05/05/2023

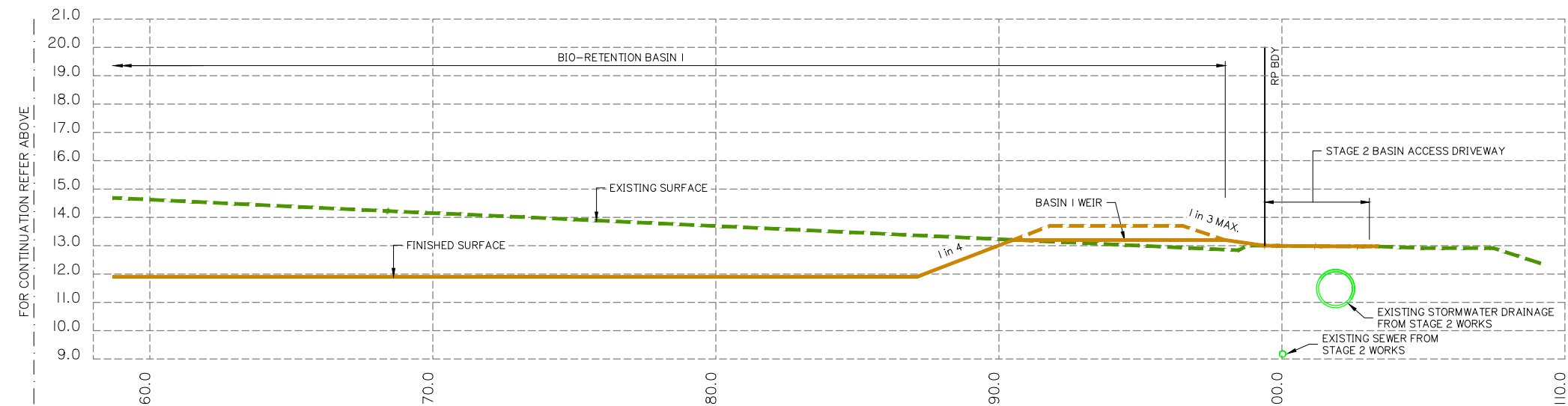
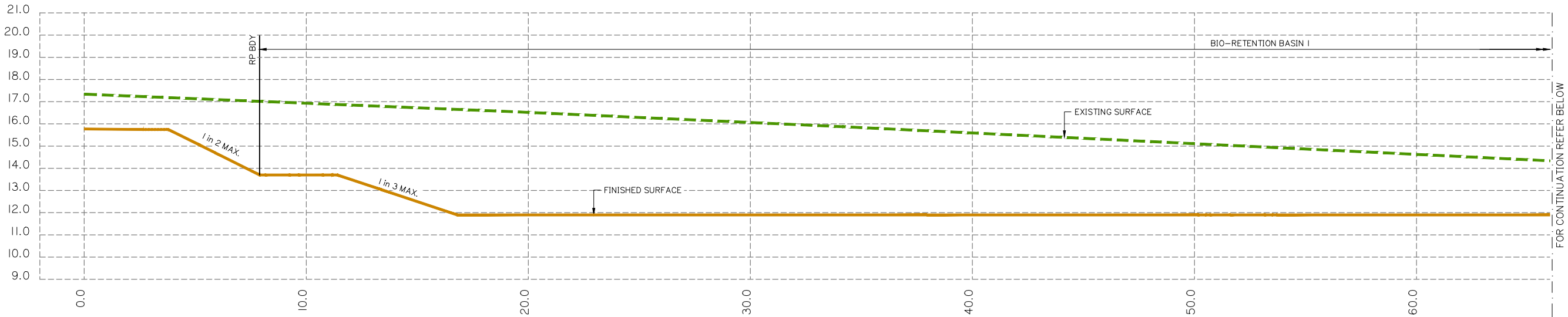
Drawing No:

Revision

5941 ENG BE3 572

C

OPERATIONAL PHASE BIORETENTION BASIN 3 LAYOUT PLAN



SECTION 1
SCALE:
1: 100 HORIZ.
1: 100 VERT.

Client:



Project:

VANTAGE YATALA
STAGE 3

Site Address:

LOT 504 HOMESTEAD
DRIVE, STAYPLTON
QLD, 4207

RPD:

Lot: 504
Plan: SP329845
Local Authority: CITY OF GOLD COAST
Level Datum: AHD
Meridian:
PSM:
RL:

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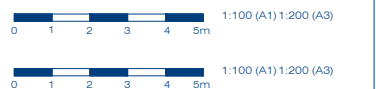
Drawing Title:

OPERATIONAL PHASE
BIORETENTION BASIN
SECTIONS SHEET 1 OF 2

C	05/07/23	SECTIONS UPDATED	JH	MG
B	24/05/23	ISSUED FOR TENDER	JH	MG
A	05/05/23	ORIGINAL ISSUE	JH	MG
Rev	Date	Description	DRN	CHK

DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE
CULVERT AND PIPE SIZES IN MILLIMETRES
A1 UNREDUCED
A3 REDUCED

Scale:



PROJECT NORTH POINT

Project No.	5941
Designed: JH	Drafted: JH
Approved:	MG
RPEQ	16939
Signed:	
Date:	05/05/2023
Drawing No:	5941 ENG BE3 573
Revision	C

