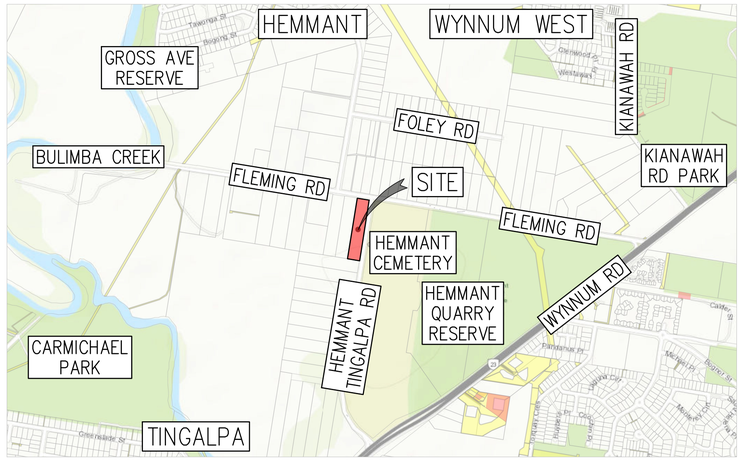
BRAVO CONSULT
www.bravoconsult.com.au | 07 3062 9319

3582 – CIVIL ENGINEERING WORKS

489 HEMMANT TINGALPA ROAD, TINGALPA, QUEENSLAND, 4173

DEVELOPMENT APPROVAL – RECONFIGURING A LOT DEVELOPMENT PERMIT

BCC DS
RECEIVED
28/09/2026
APPLICATION REF
A007057635



LOCALITY PLAN
SCALE 1:10000

GENERAL PROJECT NOTES

1. ALL DIMENSIONS ARE INDICATED IN MILLIMETERS U.N.O.
2. GENERAL NOTES SHALL APPLY TO THE ENTIRE SCOPE OF WORKS.
3. ALL WORKS, TESTING AND MATERIALS SHALL COMPLY WITH THE RELEVANT PROJECT DRAWINGS AND SPECIFICATIONS AS WELL AS ALL CURRENT COUNCIL AND SERVICE PROVIDER STANDARDS, SPECIFICATIONS AND GUIDELINES.
4. SCHEDULING OF THE PROCEDURAL TESTING OF WORKS SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
5. CONNECTION TO EXISTING SERVICES:
   - 5.1. EXISTING SERVICES POSITION, SIZE, DEPTH AND INVERT LEVELS SHALL BE CHECKED ON SITE AND COMMUNICATED TO THE CIVIL WORKS ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
   - 5.2. CONNECTION TO EXISTING SERVICES SHALL BE DONE AT THE DEVELOPER'S COST.
6. ALL NEW SERVICES TO BE CONSTRUCTED STARTING AT THE PROPOSED CONNECTION POINT.
7. ALL DRAINAGE RUNS TO BE ACCESSIBLE ALONG THE ENTIRE PIPE LENGTH.
8. NO BACKFILLING OF TRENCHES FOR NEWLY INSTALLED SERVICES OR EXCAVATED EXISTING SERVICES MAY BE DONE WITHOUT APPROVAL FROM THE APPOINTED RPEQ.
9. ALL WORKS MUST BE CARRIED OUT IN ACCORDANCE WITH THE SPECIFICATIONS AND REQUIREMENTS OF THE WORKPLACE HEALTH AND SAFETY ACT.
10. SAFETY ISSUES FOR EACH DEVICE TO BE CONSIDERED AND MONITORED TO THE SATISFACTION OF THE SUPERINTENDENT.
11. WHERE APPLICABLE, TRAFFIC MANAGEMENT MUST BE PROVIDED FOR THE FULL DURATION OF CONSTRUCTION IN ACCORDANCE WITH "THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
12. ALL WORK AGAINST EXISTING FEATURES TO BE JOINED AND FINISHED OFF NEATLY.
13. ALL MEASURING DEVICES, SAFETY EQUIPMENT AND MACHINERY REQUIRED FOR INSPECTIONS OR MEETINGS, AS SPECIFIED OR REQUESTED BY THE ENGINEER, MUST BE PROVIDED BY THE CONTRACTOR.
14. ALL EXISTING AREAS TO BE MAINTAINED MUST BE RESTORED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR UPON COMPLETION OF WORKS.
15. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT 'BEFORE YOU DIG' TO LOCATE EXISTING UTILITIES PRIOR TO EXCAVATION. ANY DAMAGES TO EXISTING PUBLIC UTILITIES, CAUSED BY THE CONTRACTOR, WILL BE REPAIRED BY THE RELEVANT AUTHORITY AT THE CONTRACTOR'S EXPENSE.
16. ALL PROPERTY BOUNDARIES SHOWN ARE SUBJECT TO FIELD SURVEY CONFIRMATION BY A REGISTERED SURVEYOR.
17. IF THE AS-CONSTRUCTED SURVEY DOES NOT FORM PART OF THE CONTRACTOR'S SCOPE OF WORKS, THE CONTRACTOR MUST COORDINATE WORKS WITH THE NOMINATED SURVEYOR.
18. ALL ENVIRONMENTAL WORK, INCLUDING CLEARING, MUST BE IMPLEMENTED PRIOR TO ANY CONSTRUCTION COMMENCING.

DRAWING SCHEDULE

DRAWING NO.	DRAWING TITLE	REV.
3582-01-C001	BCC COVER SHEET, DRAWING SCHEDULE, LOCALITY MAP AND GENERAL NOTES	C
3582-01-CN001	CONCRETE LAYOUTS – PART 1	C
3582-01-CN002	CONCRETE LAYOUTS – PART 2	B
3582-01-CN003	CONCRETE LAYOUTS – DETAILS AND NOTES	A
3582-01-EC001	EROSION AND SEDIMENT CONTROL LAYOUT AND NOTES	C
3582-01-EC002	EROSION AND SEDIMENT CONTROL DETAILS	A
3582-01-EW001	EARTHWORKS LAYOUT – PART 1 AND NOTES	B
3582-01-EW002	EARTHWORKS LAYOUT – PART 2 AND NOTES	C
3582-01-EW003	EARTHWORKS SECTIONS – PART 1	B
3582-01-EW004	EARTHWORKS SECTIONS – PART 2	A
3582-01-R001	ROAD ALIGNMENT 01 LAYOUT AND PROFILE VIEW	C
3582-01-R002	ROAD ALIGNMENT 02 LAYOUT AND PROFILE VIEW	B
3582-01-R003	ROAD ALIGNMENT 01 SECTIONS	A
3582-01-R004	ROAD ALIGNMENT 02 SECTIONS	A
3582-01-R005	TYPICAL ROAD DETAILS	B
3582-01-RM001	ROAD MARKINGS LAYOUT – PART 1	C
3582-01-RM002	ROAD MARKINGS LAYOUT – PART 2 AND NOTES	B
3582-01-RW001	RETAINING WALL LAYOUT, NOTES AND DETAILS	C
3582-01-RW002	RETAINING WALL ELEVATIONS	B
3582-01-SW001	STORMWATER DRAINAGE LAYOUT AND NOTES	C
3582-01-SW002	STORMWATER DRAINAGE LONGITUDINAL SECTIONS – PART 1	C
3582-01-SW003	STORMWATER DRAINAGE LONGITUDINAL SECTIONS – PART 2	C
3582-01-SW005	BIORETENTION BASIN LAYOUT AND DETAILS	B
3582-01-SW006	BIORETENTION BASIN SECTIONS AND DETAILS	B
3582-01-SW007	HEADWALL LAYOUT AND DETAILS	A

BEFORE YOU DIG www.byda.com.au

BEFORE YOU DIG AUSTRALIA (BYDA) DOCUMENTATION MUST BE OBTAINED BEFORE ANY ON-SITE CONSTRUCTION OR EXCAVATION IS ALLOWED TO COMMENCE. PROJECT DOCUMENTATION IS TO BE READ IN CONJUNCTION WITH THE BEFORE YOU DIG PLANS AND OTHER RELEVANT DOCUMENTATION.

EXISTING SERVICES NOTE

THIS DESIGN HAS BEEN PREPARED BASED ON THE SERVICE AUTHORITY AS-CONSTRUCTED AND DETAIL AND CONTOUR SURVEY INFORMATION. POT HOLING WAS DONE TO VERIFY EXISTING SERVICES LOCATIONS AND DEPTHS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE DESIGN ON SITE.

REAL PROPERTY DESCRIPTION

DEVELOPMENT APPROVAL – ROL DEVELOPMENT PERMIT

LOT 5 RP 32978

COUNCIL FILE REF: A006705978

NOT FOR CONSTRUCTION

SCALE 1:10000 — 0 100 200 300 400 500 600 800 1000m / 50 150 250 350 450 700 900

DRAFTING AND RPEQ CERTIFICATION

BRAVO CONSULT
www.bravoconsult.com.au | 07 3062 9319

RPEQ CERTIFICATION

DATE 21/09/2026 SIGNED

NAME OF SIGNATORY ISAAC SCOT

RPEQ No. 16797

REV No.	DATE	DESCRIPTION	DRAWN	RPEQ	RPEQ No.
A	23/04/26	ISSUED FOR APPROVAL	S.V.	–	–
B	16/09/26	ISSUED FOR APPROVAL – DRAWING REGISTER UPDATED	S.V.	–	–
C	21/09/26	ISSUED FOR APPROVAL – DRAWING REGISTER UPDATED	S.V.	–	–

	INITIALS	DATE
DRAWN	S.V.	21/09/26
CHECKED	I.S.	21/09/26
APPROVED	I.S.	21/09/26

SIZE A1 SCALE AS SHOWN

PROJECT 489 HEMMANT TINGALPA ROAD, TINGALPA, QLD, 4173

CLIENT SRBH SOLUTIONS (PTY) LTD, ATF SRBH SOLUTIONS TRUST

DRAWING BCC COVER SHEET, DRAWING SCHEDULE, LOCALITY MAP AND GENERAL NOTES

DRAWING STATUS TENDER ○ INFORMATION ○ APPROVAL ● CONSTRUCTION ○ AS-CONSTRUCTED ○

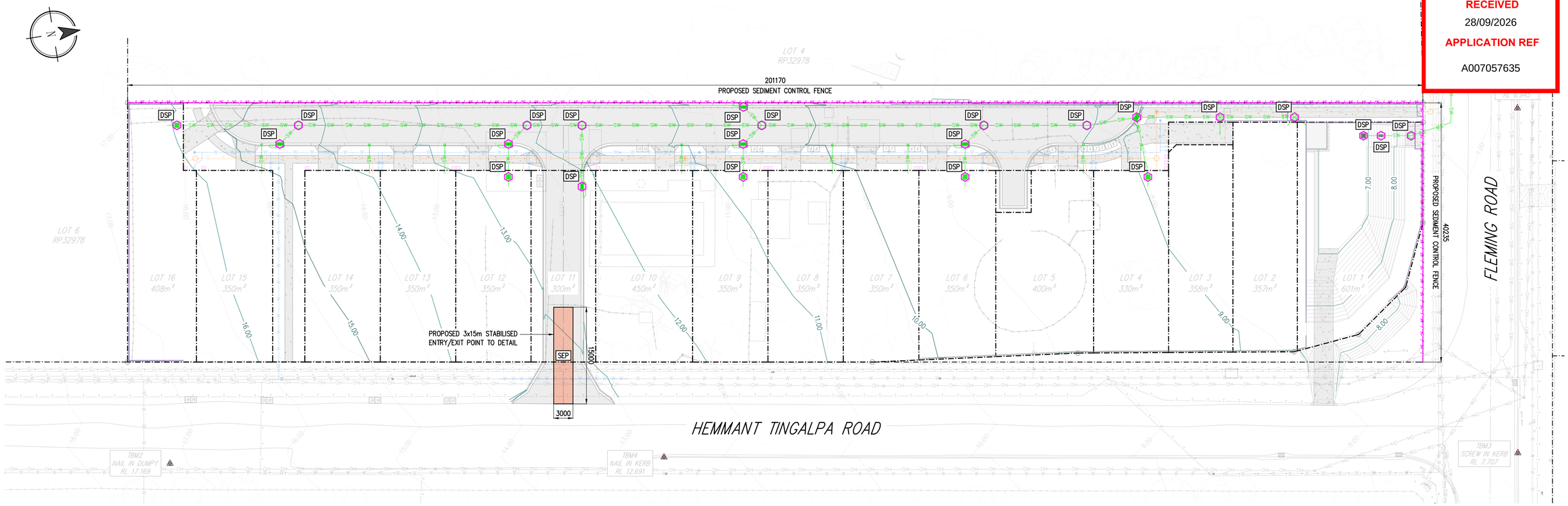
DRAWING No. 3582-01-C001

REVISION C

SHEET 01 **OF** 01

BCC DS
RECEIVED
28/09/2026
APPLICATION REF
A007057635

BCC DS
RECEIVED
28/09/2026
APPLICATION REF
A007057635



EROSION AND SEDIMENT CONTROL LAYOUT

SCALE 1:300

LEGEND

- NEW STORMWATER PIPE AND MANHOLE
- NEW STORMWATER KERB ADAPTOR
- NEW STORMWATER PIT
- NEW STORMWATER INLET PIT
- NEW STORMWATER GULLY PIT
- EXISTING STORMWATER PIPE AND CHAMBER
- EXISTING STORMWATER INLET PIT
- EXISTING STORMWATER HEADWALL
- NEW SEWER PIPE AND MANHOLE
- NEW SEWER MAINTENANCE SHAFT
- NEW SEWER PROPERTY CONNECTION
- NEW SEWER INSPECTION SLAB
- EXISTING SEWER PIPE AND MANHOLE
- NEW WATER PIPE
- NEW WATER VALVE
- NEW WATER HYDRANT
- NEW WATER METER – SINGLE DOMESTIC
- EXISTING WATER PIPE
- EXISTING WATER VALVE
- EXISTING WATER HYDRANT
- EXISTING TELECOM SERVICE AND PIT
- EXISTING GAS LINE

LEGEND

- EXISTING O/H ELECTRICITY AND POLE
- EXISTING SERVICES – TO BE ABANDONED
- PROPERTY BOUNDARY
- EXISTING FENCE LINE
- 10.00 FINAL SURFACE LEVEL CONTOURS
- EXISTING GROUND LEVEL CONTOURS
- SURVEY REFERENCE MARK
- NEW CONCRETE
- EXISTING CONCRETE
- NEW ASPHALT
- NEW TURFED AREA
- NEW RETAINING WALL
- NEW SEDIMENT CONTROL FENCE
- SEP NEW STABILISED ENTRY AND EXIT
- DSP NEW DRAINAGE STRUCTURE PROTECTION

EROSION AND SEDIMENT CONTROL NOTES

1. GENERAL

1.1. EROSION AND SEDIMENT CONTROL LAYOUT AND DETAILS MUST BE READ IN CONJUNCTION WITH THE APPROVED STORMWATER DRAINAGE LAYOUTS AND NOTES.
1.2. CONSTRUCTION MUST BE PROGRAMMED TO ALLOW FOR SURFACE TREATMENTS AND PERIMETER LANDSCAPING AS EARLY AS POSSIBLE.
1.3. WORKS PROGRAM TO BE SUBMITTED FOR REVIEW AT THE PROJECT PRE-START MEETING. PROGRAM MAY BE REVISED TO ENSURE SUFFICIENT EROSION AND SEDIMENT CONTROL MEASURES.
1.4. SAFETY MEASURES TO BE CONSIDERED AND MONITORED FOR EACH DEVICE AS PER THE SUPERINTENDENT REQUIREMENTS.
1.5. SEDIMENT FENCE FILTER FABRIC TO BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
1.6. SEDIMENT MANAGEMENT DEVICES TO BE INSTALLED PRIOR TO CONSTRUCTION COMMENCING. DEVICES MUST BE MAINTAINED AT AN ACCEPTABLE CONDITION FOR THE ENTIRE CONSTRUCTION PERIOD.
1.7. SEDIMENT FENCES MUST BE CLEANED WHEN CAPACITY REDUCTION REACHES 30%.
1.8. DRAINAGE STRUCTURE PROTECTION MUST BE CLEANED AFTER EACH SIGNIFICANT RUN-OFF PRODUCING STORM EVENT.
1.9. CONTRACTOR TO PROVIDE SITE ACCESS. SITE ACCESS LOCATION AND WASH DOWN AREA MUST BE MAINTAINED FOR THE ENTIRE CONSTRUCTION PERIOD. SITE ACCESS TO BE EXCLUSIVELY VIA THE SHAKEDOWN FACILITY. ALL VEHICLES MUST BE WASHED DOWN BEFORE LEAVING THE SITE.
1.10. TEMPORARY DRAINAGE CONTROLS TO BE IN PLACE TO DIVERT FLOW FROM UNDISTURBED AREAS AROUND DISTURBED AREAS AND DIRECT FLOW FROM DISTURBED AREAS TO CONTROL DEVICES.
1.11. PONDED RAINFALL TO BE PUMPED TROUGH A SEDIMENT FENCE PRIOR TO DISCHARGING INTO ANY DOWNSTREAM STORMWATER SYSTEMS.
1.12. STRAW BALES USED AS SEDIMENT DEVICES TO BE REPLACED AFTER 6 WEEKS (MAXIMUM SERVICE PERIOD).

ENVIRONMENTAL NOTES

1. VEGETATION PROTECTION

1.1. TREE PROTECTION ZONE (TPZ) AND STRUCTURAL ROOT ZONE (SRZ) TO BE DETERMINED BY THE CONTRACTOR. ZONES TO COMPLY WITH AS 4970-2009.
1.2. TREES ALONG FOOTPATHS MUST BE TRANSPLANTED PRIOR TO CONSTRUCTION OR REPLACED IF DESTROYED.
1.3. RUBBER OR HARDWOOD GIRDLES MUST BE CONSTRUCTED USING 1.8m BATTENS, CLOSELY SPACED AND ARRANGED VERTICALLY FROM GROUND LEVEL. GIRDLES TO BE STRAPPED TO TREES PRIOR TO CONSTRUCTION COMMENCING AND MUST REMAIN IN PLACE UNTIL COMPLETION.
1.4. TUNNEL UNDER TREE ROOTS RATHER THAN SEVERING ROOTS. SUITABLE FUNGICIDE TO BE USED IN THE DAMAGED AREA IF ROOTS ARE SEVERED. FOR FURTHER ADVICE, CONTACT THE RELEVANT COUNCIL ARBORIST.
1.5. IF TREE LOPPING IS REQUIRED, THE WORK MUST BE CARRIED OUT BY AN APPROVED ARBORIST.
1.6. ALL ENVIRONMENTAL PROTECTION PROCEDURES AND MEASURES, INCLUDING CLEARING, MUST BE IMPLEMENTED PRIOR TO ANY CONSTRUCTION COMMENCING.

2. SOIL

2.1. TOPSOIL AND SUBSOIL TO BE STOCKPILED SEPARATELY.
2.2. PREVENTION OF SEDIMENT ENTERING THE STORMWATER SYSTEM TO BE IN PLACE WITH APPROPRIATE SEDIMENT CONTROLS AROUND STOCKPILES WHERE REQUIRED.

3. CREEK CROSSING

3.1. SILT CONTROL MEASURES TO BE IN PLACE DOWNSTREAM FROM ALL EXCAVATION WORKS WHERE APPLICABLE.
3.2. PREVENT SEDIMENT FROM ENTERING A CREEK USING THE APPROPRIATE SEDIMENT CONTROLS.
3.3. NO SOIL ALLOWED TO BE STOCKPILED WITHIN 5m OF A CREEK.

ENVIRONMENTAL NOTES (CONTINUED)

4. REHABILITATION

4.1. PRE-DISTURBANCE SOIL PROFILES AND COMPACTION LEVELS TO BE REINSTATED FOLLOWING CONSTRUCTION.
4.2. PRE-DISTURBANCE VEGETATION PATTERNS TO BE RESTORED FOLLOWING CONSTRUCTION.

5. SAFETY

5.1. ALL DESIGN AND CONSTRUCTION TO COMPLY WITH ALL RELEVANT QUEENSLAND LEGISLATION.

BEFORE YOU DIG
www.byda.com.au

BEFORE YOU DIG AUSTRALIA (BYDA) DOCUMENTATION MUST BE OBTAINED BEFORE ANY ON-SITE CONSTRUCTION OR EXCAVATION IS ALLOWED TO COMMENCE. PROJECT DOCUMENTATION IS TO BE READ IN CONJUNCTION WITH THE BEFORE YOU DIG PLANS AND OTHER RELEVANT DOCUMENTATION.

NOT FOR CONSTRUCTION

EXISTING SERVICES NOTE

THIS DESIGN HAS BEEN PREPARED BASED ON THE SERVICE AUTHORITY AS-CONSTRUCTED AND DETAIL AND CONTOUR SURVEY INFORMATION. POT HOLING WAS DONE TO VERIFY EXISTING SERVICES LOCATIONS AND DEPTHS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE DESIGN ON SITE.

REAL PROPERTY DESCRIPTION

DEVELOPMENT APPROVAL – ROL DEVELOPMENT PERMIT

LOT 5 RP 32978

COUNCIL FILE REF: A006705978

REFER TO DRAWING 3582-01-EC002 FOR EROSION AND SEDIMENT CONTROL DETAILS

SCALE 1:300 0 5 10 15 20 22m (4 3 2 1)

DRAFTING AND RPEQ CERTIFICATION

BRAVO CONSULT
www.bravoconsult.com.au | 07 3062 9319

RPEQ CERTIFICATION

DATE 21/09/2026 SIGNED
NAME OF SIGNATORY ISAAC SCOT
RPEQ No. 16797

REV No.	DATE	DESCRIPTION	DRAWN	RPEQ	RPEQ No.
A	23/04/26	ISSUED FOR APPROVAL	S.V.	–	–
B	16/09/26	ISSUED FOR APPROVAL	S.V.	–	–
C	21/09/26	ISSUED FOR APPROVAL	S.V.	–	–

	INITIALS	DATE
DRAWN	S.V.	21/09/26
CHECKED	I.S.	21/09/26
APPROVED	I.S.	21/09/26

SIZE A1 SCALE AS SHOWN

PROJECT 489 HEMMANT TINGALPA ROAD, TINGALPA, QLD, 4173

CLIENT SRBH SOLUTIONS (PTY) LTD, ATF SRBH SOLUTIONS TRUST

DRAWING EROSION AND SEDIMENT CONTROL LAYOUT AND NOTES

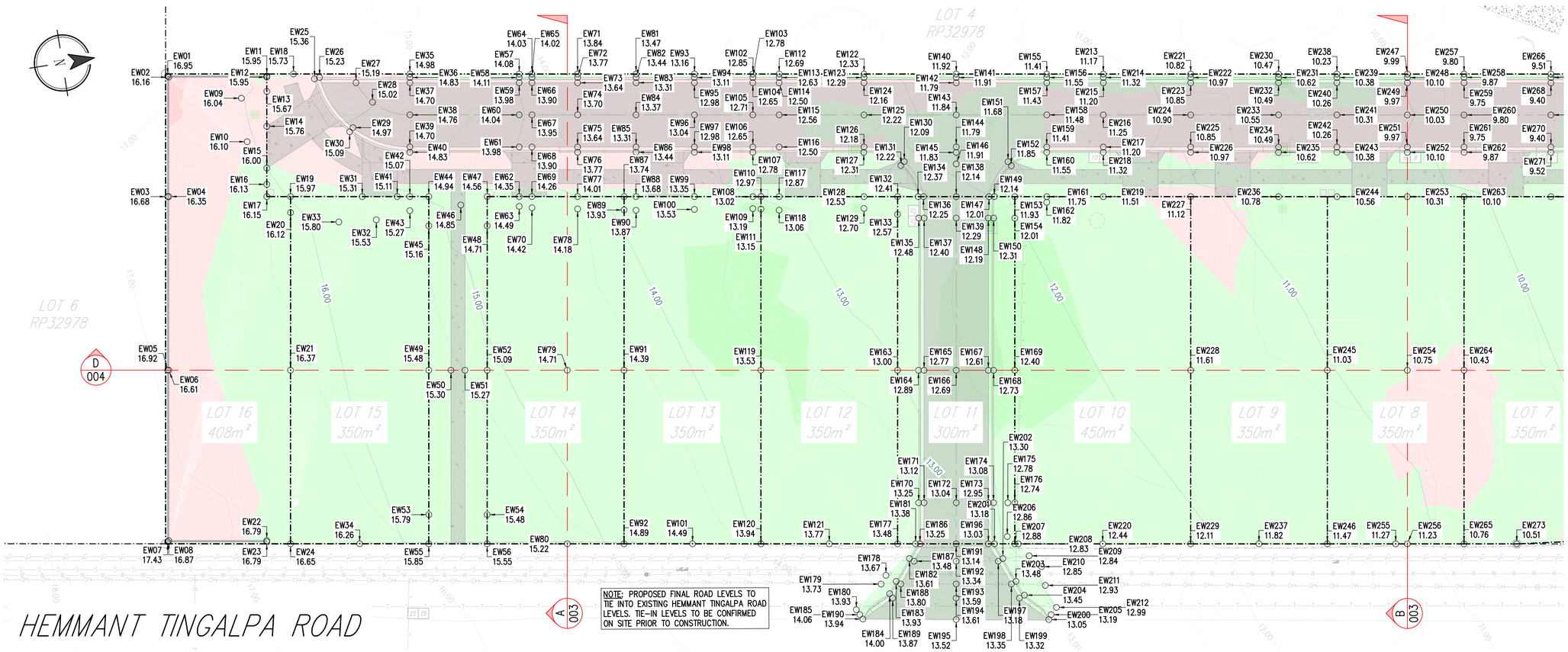
DRAWING STATUS TENDER ○ INFORMATION ○ APPROVAL ● CONSTRUCTION ○ AS-CONSTRUCTED ○

DRAWING No. 3582-01-EC001

REVISION C

SHEET 01 **OF** 02

BCC DS
RECEIVED
28/09/2026
APPLICATION REF
A007057635



EARTHWORKS LAYOUT – PART 1
SCALE 1:200

LEGEND

- EXISTING WATER HYDRANT
- EXISTING TELECOM SERVICE AND PIT
- EXISTING GAS LINE
- EXISTING O/H ELECTRICITY AND POLE
- EXISTING SERVICES – TO BE ABANDONED
- PROPERTY BOUNDARY
- EXISTING FENCE LINE
- FINAL SURFACE LEVEL CONTOURS
- EXISTING GROUND LEVEL CONTOURS
- SURVEY REFERENCE MARK
- NEW CONCRETE
- EXISTING CONCRETE
- NEW ASPHALT
- NEW RETAINING WALL
- AREA OF FILL
- AREA OF CUT

CUT AND FILL HATCH

CUT	−0.706m TO −0.500m
CUT	−0.500m TO −0.000m
FILL	+0.000m TO +0.500m
FILL	+0.500m TO +1.000m
FILL	+1.000m TO +1.462m

BCC DS
RECEIVED
28/09/2026
APPLICATION REF
A007057635

EARTHWORKS NOTES

1. ALL LEVELS TO AUSTRALIAN HEIGHT DATUM (AHD).
2. DESIGN SURFACE CONTOURS SHOWN AT 1m INTERVALS.
3. EXISTING GROUND LEVEL CONTOURS SHOWN AT 1m INTERVALS.
4. CONSTRUCTION AREA TO BE STRIPPED OF ALL GRASS, SHRUBS, ORGANIC MATERIAL, RUBBISH, DELETERIOUS MATERIALS AND UNSUITABLE TOPSOIL AS INSTRUCTED BY THE RPEQ. STRIPPED MATERIAL TO BE REMOVED OFF SITE.
5. STRIPPED TOPSOIL TO BE REMOVED OFF SITE UNLESS INSTRUCTED OTHERWISE. STRIPPED TOPSOIL SHALL NOT BE USED AS FILLING MATERIAL WITHOUT PRIOR COUNCIL APPROVAL.
6. ALL EARTHWORKS TO BE DONE IN ACCORDANCE WITH BRISBANE CITY COUNCIL (BCC) STANDARDS, SPECIFICATIONS AND GUIDELINES AS WELL AS AS3798–2007 REQUIREMENTS.
7. IN ACCORDANCE WITH LEVEL 1 OF AS3798–2007 THE GEOTECHNICAL SUPERVISION OF EARTHWORKS IS TO BE DONE BY A N.A.T.A. REGISTERED GEOTECHNICAL TESTING AUTHORITY AT THE CONTRACTOR'S EXPENSE.
8. CONTRACTOR TO PROVIDE THE ENGINEER WITH ALL TESTING THROUGHOUT THE PROJECT AND MUST NOTIFY THE ENGINEER OF ALL NON–CONFORMANCES. NON–CONFORMING ITEMS TO BE REMEDIED AS INSTRUCTED BY THE ENGINEER.
9. FILL AREA SUBGRADE TO BE PROOF ROLLED, IN THE PRESENCE OF THE ENGINEER, PRIOR TO FILL

EARTHWORKS NOTES (CONTINUED)

OPERATIONS. SOFT AND/OR COMPRESSIBLE MATERIAL SHALL BE REPLACED WITH ALTERNATIVE MATERIAL AND COMPACTED TO A DENSITY AS PER PROJECT SPECIFICATIONS OR AS INSTRUCTED BY THE ENGINEER.

10. FILL MATERIALS TO BE PLACED IN RELATIVELY HORIZONTAL LAYERS WITH A MAXIMUM PLACEMENT THICKNESS OF 250mm. DIFFERENT THICKNESSES COULD BE APPLICABLE AS A RESULT OF EQUIPMENT, TYPE OF COMPACTION AND OTHER FACTORS. MATERIALS TO BE COMPACTED TO A MINIMUM DRY DENSITY RATIO RELATIVE TO THE STANDARD COMPACTIVE EFFORT.
11. EACH FILL LAYER TO BE COMPACTED TO THE SPECIFIED MINIMUM DRY DENSITY.
12. SITE SOILS SHALL BE PLACED NEAR OPTIMUM MOISTURE CONTENT (O.M.C.) FOR GENERAL EARTHWORKS. A RANGE OF ±2% IS RECOMMENDED.
13. CLAYEY BACKFILL MUST NOT BE PLACED TOO DRY OF O.M.C. TO AVOID FUTURE SWELLING WITH CHANGES TO MOISTURE CONTENT OR INUNDATION FROM WATER.
14. CONTRACTOR TO NOTIFY THE SUPERINTENDENT UPON COMPLETION OF EARTHWORKS OPERATIONS. THE FINISHED SURFACE MUST BE PROOF ROLLED AND WITNESSED BY THE ENGINEER.
15. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE SITE AND SURROUNDING AREAS FROM DAMAGE AS A RESULT OF STORMWATER RUN–OFF DURING CONSTRUCTION.
16. TEMPORARY DIVERSION DRAINS OR ANY OTHER REQUIRED DRAINAGE CONTROL DEVICES MUST BE IMPLEMENTED

EARTHWORKS NOTES (CONTINUED)

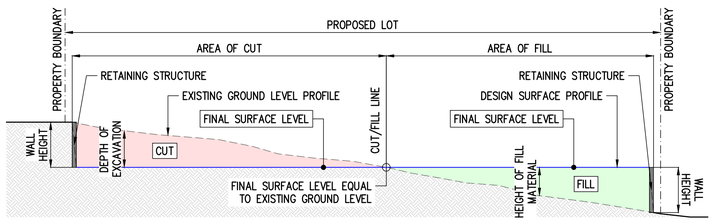
DURING CONSTRUCTION TO MINIMISE THE EFFECTS OF WEATHER CONDITIONS. SHOULD THERE BE DAMAGE TO THE WORKS AND/OR SURROUNDING AREAS AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE IN NOT PROVIDING ADEQUATE PROTECTION, NO EXTENSION OF TIME WILL BE GRANTED.

17. IMPORTED FILL MATERIAL TO BE GRANULAR FILL WITH LOW PLASTICITY AND MATERIAL CHARACTERISTICS: CBR 10% MIN. (SUBJECT TO APPROVAL FROM ENGINEER)
18. SUITABLE FILL MATERIAL IS TO COMPLY WITH CLAUSE 4.3, AS3798, GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS.
19. ALL BATTERS SHOULD BE PROTECTED FROM EROSION BY SURFACE PROTECTION. THE TYPE OF SURFACE PROTECTION WILL BE DEPENDANT ON FACTORS INCLUDING BATTER SLOPE, TYPE OF MATERIAL, ASPECT, AESTHETIC REQUIREMENTS ETC.
20. AS PER SECTION 11 OF THE ENVIRONMENTAL PROTECTION ACT (EPA) 1994): ALL FILL MATERIALS ON SITE, ONLY COMPRISED OF NATURAL EARTH AND ROCK, MUST BE FREE OF CONTAMINANTS, NOXIOUS, HAZARDOUS, DELETERIOUS AND ORGANIC MATERIALS.
21. THE RELEVANT EPA POLICIES, PARTICULARLY THOSE REGARDING THE PRESENCE AND TREATMENT OF FIRE ANTS, APPLY TO ANY MOVEMENT OF MATERIAL TO AND FROM SITE.

Earthworks Cut/Fill Summary

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
TOPSOIL VOLUMES (75mm STRIP)	1.000	1.000	8136.99sq.m	610.27 Cu. M.	0.00 Cu. M.	610.27 Cu. M.<Cut>
EARTHWORKS VOLUMES (EXCL. TOPSOIL)	1.000	1.000	8135.46sq.m	189.04 Cu. M.	3425.49 Cu. M.	3236.45 Cu. M.<Fill>
Totals			16272.45sq.m	799.31 Cu. M.	3425.49 Cu. M.	2626.18 Cu. M.<Fill>

NOTE: INDICATED SURFACE LEVELS AND SUBSEQUENT EARTHWORKS VOLUMES ARE FINAL SURFACE LEVELS – SUBTRACT PAVEMENT SURFACING AND LAYERS.



TYPICAL SECTION THROUGH EARTHWORKS
SCALE N.T.S.

BEFORE YOU DIG www.byda.com.au

BEFORE YOU DIG AUSTRALIA (BYDA) DOCUMENTATION MUST BE OBTAINED BEFORE ANY ON–SITE CONSTRUCTION OR EXCAVATION IS ALLOWED TO COMMENCE. PROJECT DOCUMENTATION IS TO BE READ IN CONJUNCTION WITH THE BEFORE YOU DIG PLANS AND OTHER RELEVANT DOCUMENTATION.

NOT FOR CONSTRUCTION

EXISTING SERVICES NOTE

THIS DESIGN HAS BEEN PREPARED BASED ON THE SERVICE AUTHORITY AS–CONSTRUCTED AND DETAIL AND CONTOUR SURVEY INFORMATION. POT HOLING WAS DONE TO VERIFY EXISTING SERVICES LOCATIONS AND DEPTHS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE DESIGN ON SITE.

REAL PROPERTY DESCRIPTION

DEVELOPMENT APPROVAL – ROL DEVELOPMENT PERMIT

LOT 5 RP 32978

COUNCIL FILE REF: A006705978

REFER TO DRAWING 3582–01–EW002 FOR EARTHWORKS LAYOUT – PART 2 AND NOTES
REFER TO DRAWING 3582–01–EW003 FOR EARTHWORKS SECTIONS – PART 1
REFER TO DRAWING 3582–01–EW004 FOR EARTHWORKS SECTIONS – PART 2
REFER TO DRAWING 3582–01–RW001 FOR RETAINING WALL LAYOUT, NOTES AND DETAILS
REFER TO DRAWING 3582–01–RW002 FOR RETAINING WALL ELEVATIONS

SCALE 1:200 — 0 4 8 12 16 20m — 4 3 2 1

DRAFTING AND RPEQ CERTIFICATION

BRAVO CONSULT
www.bravoconsult.com.au | 07 3062 9319

RPEQ CERTIFICATION

DATE 16/09/2026 SIGNED
NAME OF SIGNATORY ISAAC SCOT
RPEQ No. 16797

REV No.	DATE	DESCRIPTION	DRAWN	RPEQ	RPEQ No.
A	23/04/26	ISSUED FOR APPROVAL	S.V.	–	–
B	16/09/26	ISSUED FOR APPROVAL	S.V.	–	–

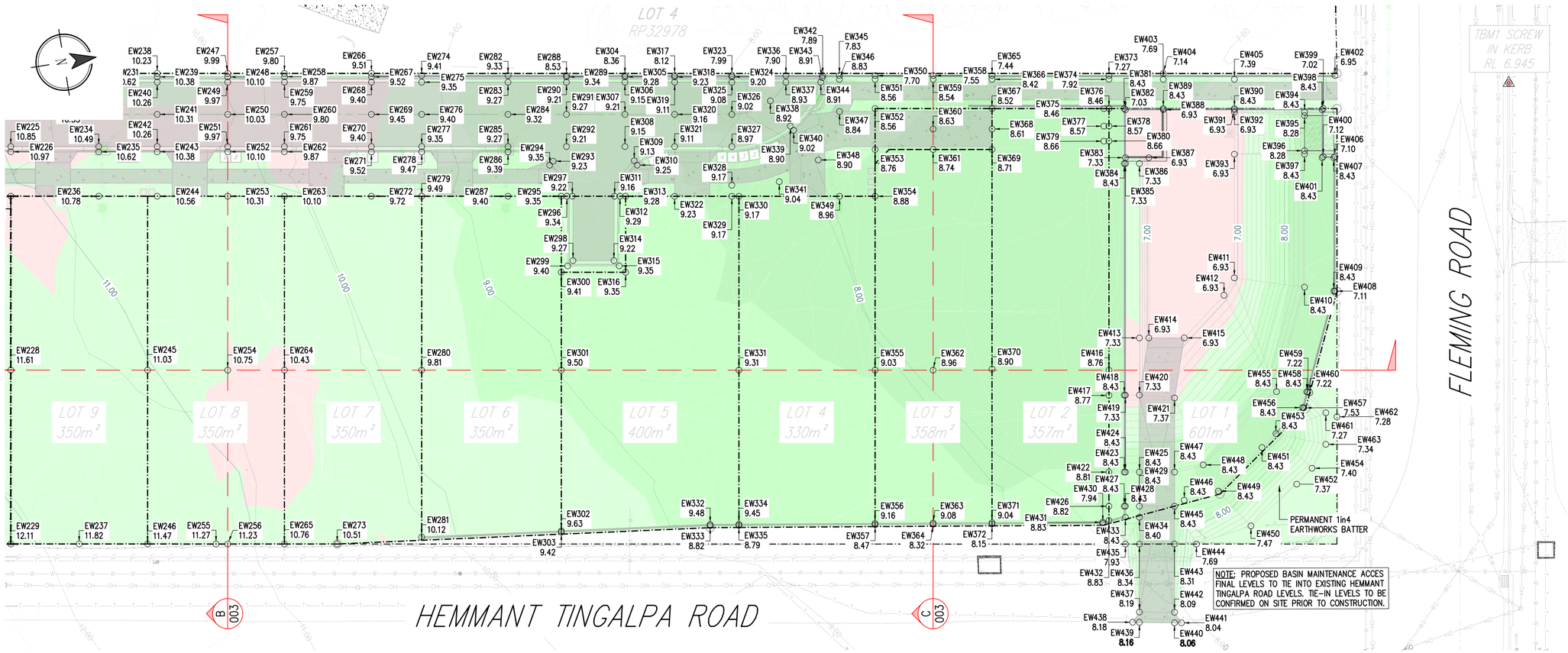
	INITIALS	DATE
DRAWN	S.V.	16/09/26
CHECKED	I.S.	16/09/26
APPROVED	I.S.	16/09/26
SIZE A1	SCALE AS SHOWN	

PROJECT: 489 HEMMANT TINGALPA ROAD, TINGALPA, QLD, 4173
CLIENT: SRBH SOLUTIONS (PTY) LTD, ATF SRBH SOLUTIONS TRUST
DRAWING: EARTHWORKS LAYOUT – PART 1 AND NOTES

DRAWING STATUS: TENDER | INFORMATION | APPROVAL | CONSTRUCTION | AS–CONSTRUCTED

DRAWING No. 3351–01–EW001
REVISION B
SHEET 01 OF 04

BCC DS
RECEIVED
28/09/2026
APPLICATION REF
A007057635



EARTHWORKS LAYOUT – PART 2
SCALE 1:200

BCC DS
RECEIVED
28/09/2026
APPLICATION REF
A007057635

LEGEND

- EXISTING WATER HYDRANT
- EXISTING TELECOM SERVICE AND PIT
- EXISTING GAS LINE
- EXISTING O/H ELECTRICITY AND POLE
- EXISTING SERVICES – TO BE ABANDONED
- PROPERTY BOUNDARY
- EXISTING FENCE LINE
- FINAL SURFACE LEVEL CONTOURS
- EXISTING GROUND LEVEL CONTOURS
- SURVEY REFERENCE MARK
- NEW CONCRETE
- EXISTING CONCRETE
- NEW ASPHALT
- NEW RETAINING WALL
- AREA OF FILL
- AREA OF CUT

CUT AND FILL HATCH

CUT	−0.706m TO −0.500m
CUT	−0.500m TO −0.000m
FILL	+0.000m TO +0.500m
FILL	+0.500m TO +1.000m
FILL	+1.000m TO +1.462m

EARTHWORKS NOTES

1. ALL LEVELS TO AUSTRALIAN HEIGHT DATUM (AHD).
2. DESIGN SURFACE CONTOURS SHOWN AT 1m INTERVALS.
3. EXISTING GROUND LEVEL CONTOURS SHOWN AT 1m INTERVALS.
4. CONSTRUCTION AREA TO BE STRIPPED OF ALL GRASS, SHRUBS, ORGANIC MATERIAL, RUBBISH, DELETERIOUS MATERIALS AND UNSUITABLE TOPSOIL AS INSTRUCTED BY THE RPEQ. STRIPPED MATERIAL TO BE REMOVED OFF SITE.
5. STRIPPED TOPSOIL TO BE REMOVED OFF SITE UNLESS INSTRUCTED OTHERWISE. STRIPPED TOPSOIL SHALL NOT BE USED AS FILLING MATERIAL WITHOUT PRIOR COUNCIL APPROVAL.
6. ALL EARTHWORKS TO BE DONE IN ACCORDANCE WITH BRISBANE CITY COUNCIL (BCC) STANDARDS, SPECIFICATIONS AND GUIDELINES AS WELL AS AS3798–2007 REQUIREMENTS.
7. IN ACCORDANCE WITH LEVEL 1 OF AS3798–2007 THE GEOTECHNICAL SUPERVISION OF EARTHWORKS IS TO BE DONE BY A N.A.T.A. REGISTERED GEOTECHNICAL TESTING AUTHORITY AT THE CONTRACTOR'S EXPENSE.
8. CONTRACTOR TO PROVIDE THE ENGINEER WITH ALL TESTING THROUGHOUT THE PROJECT AND MUST NOTIFY THE ENGINEER OF ALL NON–CONFORMANCES. NON–CONFORMING ITEMS TO BE REMEDIED AS INSTRUCTED BY THE ENGINEER.
9. FILL AREA SUBGRADE TO BE PROOF ROLLED, IN THE PRESENCE OF THE ENGINEER, PRIOR TO FILL

EARTHWORKS NOTES (CONTINUED)

OPERATIONS. SOFT AND/OR COMPRESSIBLE MATERIAL SHALL BE REPLACED WITH ALTERNATIVE MATERIAL AND COMPACTED TO A DENSITY AS PER PROJECT SPECIFICATIONS OR AS INSTRUCTED BY THE ENGINEER.

10. FILL MATERIALS TO BE PLACED IN RELATIVELY HORIZONTAL LAYERS WITH A MAXIMUM PLACEMENT THICKNESS OF 250mm. DIFFERENT THICKNESSES COULD BE APPLICABLE AS A RESULT OF EQUIPMENT, TYPE OF COMPACTION AND OTHER FACTORS. MATERIALS TO BE COMPACTED TO A MINIMUM DRY DENSITY RATIO RELATIVE TO THE STANDARD COMPACTIVE EFFORT.
11. EACH FILL LAYER TO BE COMPACTED TO THE SPECIFIED MINIMUM DRY DENSITY.
12. SITE SOILS SHALL BE PLACED NEAR OPTIMUM MOISTURE CONTENT (O.M.C.) FOR GENERAL EARTHWORKS. A RANGE OF ±2% IS RECOMMENDED.
13. CLAYEY BACKFILL MUST NOT BE PLACED TOO DRY OF O.M.C. TO AVOID FUTURE SWELLING WITH CHANGES TO MOISTURE CONTENT OR INUNDATION FROM WATER.
14. CONTRACTOR TO NOTIFY THE SUPERINTENDENT UPON COMPLETION OF EARTHWORKS OPERATIONS. THE FINISHED SURFACE MUST BE PROOF ROLLED AND WITNESSED BY THE ENGINEER.
15. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE SITE AND SURROUNDING AREAS FROM DAMAGE AS A RESULT OF STORMWATER RUN–OFF DURING CONSTRUCTION.
16. TEMPORARY DIVERSION DRAINS OR ANY OTHER REQUIRED DRAINAGE CONTROL DEVICES MUST BE IMPLEMENTED

EARTHWORKS NOTES (CONTINUED)

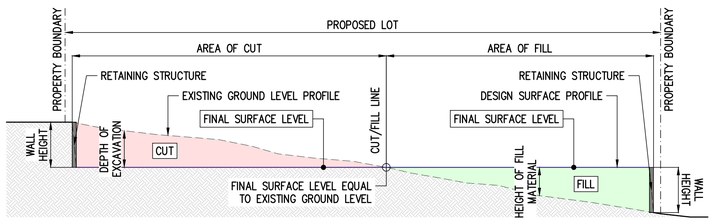
DURING CONSTRUCTION TO MINIMISE THE EFFECTS OF WEATHER CONDITIONS. SHOULD THERE BE DAMAGE TO THE WORKS AND/OR SURROUNDING AREAS AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE IN NOT PROVIDING ADEQUATE PROTECTION, NO EXTENSION OF TIME WILL BE GRANTED.

17. IMPORTED FILL MATERIAL TO BE GRANULAR FILL WITH LOW PLASTICITY AND MATERIAL CHARACTERISTICS: CBR 10% MIN. (SUBJECT TO APPROVAL FROM ENGINEER)
18. SUITABLE FILL MATERIAL IS TO COMPLY WITH CLAUSE 4.3, AS3798, GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS.
19. ALL BATTERS SHOULD BE PROTECTED FROM EROSION BY SURFACE PROTECTION. THE TYPE OF SURFACE PROTECTION WILL BE DEPENDANT ON FACTORS INCLUDING BATTER SLOPE, TYPE OF MATERIAL, ASPECT, AESTHETIC REQUIREMENTS ETC.
20. AS PER SECTION 11 OF THE ENVIRONMENTAL PROTECTION ACT (EPA) 1994): ALL FILL MATERIALS ON SITE, ONLY COMPRISED OF NATURAL EARTH AND ROCK, MUST BE FREE OF CONTAMINANTS, NOXIOUS, HAZARDOUS, DELETERIOUS AND ORGANIC MATERIALS.
21. THE RELEVANT EPA POLICIES, PARTICULARLY THOSE REGARDING THE PRESENCE AND TREATMENT OF FIRE ANTS, APPLY TO ANY MOVEMENT OF MATERIAL TO AND FROM SITE.

Earthworks Cut/Fill Summary

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
TOPSOIL VOLUMES (75mm STRIP)	1.000	1.000	8136.99sq.m	610.27 Cu. M.	0.00 Cu. M.	610.27 Cu. M.<Cut>
EARTHWORKS VOLUMES (EXCL. TOPSOIL)	1.000	1.000	8135.46sq.m	189.04 Cu. M.	3425.49 Cu. M.	3236.45 Cu. M.<Fill>
Totals			16272.45sq.m	799.31 Cu. M.	3425.49 Cu. M.	2626.18 Cu. M.<Fill>

NOTE: INDICATED SURFACE LEVELS AND SUBSEQUENT EARTHWORKS VOLUMES ARE FINAL SURFACE LEVELS – SUBTRACT PAVEMENT SURFACING AND LAYERS.



TYPICAL SECTION THROUGH EARTHWORKS
SCALE N.T.S.

BEFORE YOU DIG www.byda.com.au

BEFORE YOU DIG AUSTRALIA (BYDA) DOCUMENTATION MUST BE OBTAINED BEFORE ANY ON–SITE CONSTRUCTION OR EXCAVATION IS ALLOWED TO COMMENCE. PROJECT DOCUMENTATION IS TO BE READ IN CONJUNCTION WITH THE BEFORE YOU DIG PLANS AND OTHER RELEVANT DOCUMENTATION.

NOT FOR CONSTRUCTION

EXISTING SERVICES NOTE

THIS DESIGN HAS BEEN PREPARED BASED ON THE SERVICE AUTHORITY AS–CONSTRUCTED AND DETAIL AND CONTOUR SURVEY INFORMATION. POT HOLING WAS DONE TO VERIFY EXISTING SERVICES LOCATIONS AND DEPTHS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE DESIGN ON SITE.

REAL PROPERTY DESCRIPTION

DEVELOPMENT APPROVAL – ROL DEVELOPMENT PERMIT

LOT 5 RP 32978

COUNCIL FILE REF: A006705978

REFER TO DRAWING 3582–01–EW001 FOR EARTHWORKS LAYOUT – PART 1 AND NOTES
REFER TO DRAWING 3582–01–EW003 FOR EARTHWORKS SECTIONS – PART 1
REFER TO DRAWING 3582–01–EW004 FOR EARTHWORKS SECTIONS – PART 2
REFER TO DRAWING 3582–01–RW001 FOR RETAINING WALL LAYOUT, NOTES AND DETAILS
REFER TO DRAWING 3582–01–RW002 FOR RETAINING WALL ELEVATIONS

SCALE 1:200 — 0 4 8 12 16 20m (4 3 2 1)

DRAFTING AND RPEQ CERTIFICATION

BRAVO CONSULT
www.bravoconsult.com.au | 07 3062 9319

RPEQ CERTIFICATION

DATE 21/09/2026 SIGNED
NAME OF SIGNATORY ISAAC SCOT
RPEQ No. 16797

REV No.	DATE	DESCRIPTION	DRAWN	RPEQ	RPEQ No.
A	23/04/26	ISSUED FOR APPROVAL	S.V.	–	–
B	16/09/26	ISSUED FOR APPROVAL	S.V.	–	–
C	21/09/26	ISSUED FOR APPROVAL	S.V.	–	–

	INITIALS	DATE
DRAWN	S.V.	21/09/26
CHECKED	I.S.	21/09/26
APPROVED	I.S.	21/09/26
SIZE A1	SCALE AS SHOWN	

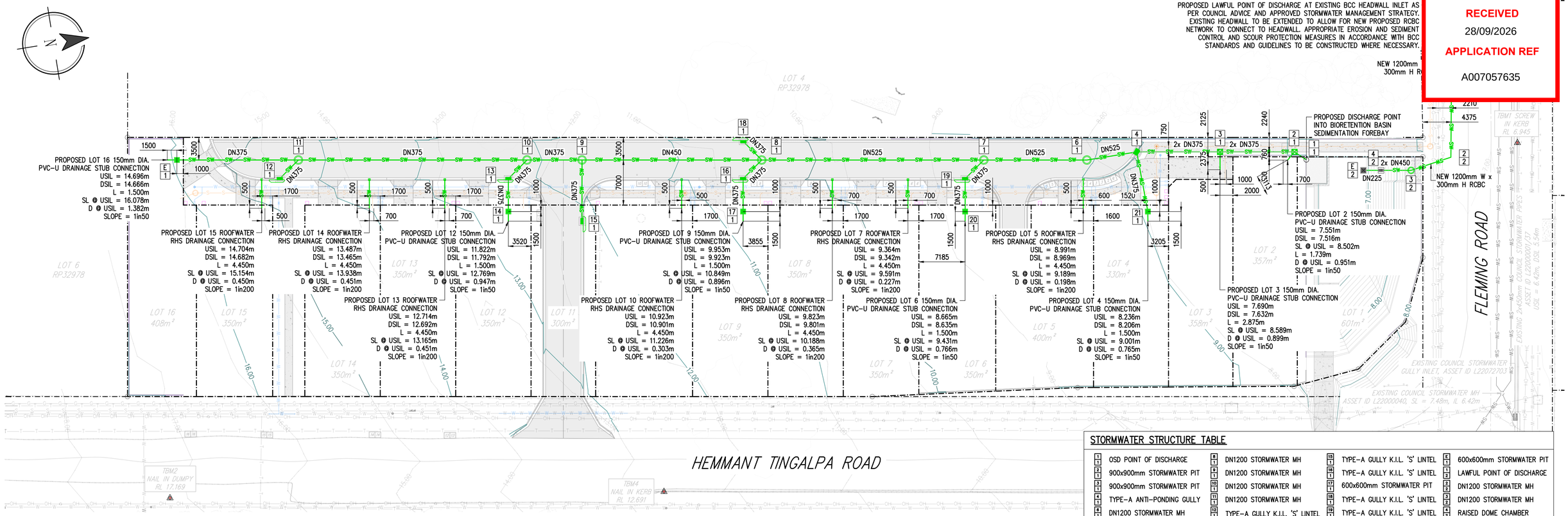
PROJECT: 489 HEMMANT TINGALPA ROAD, TINGALPA, QLD, 4173
CLIENT: SRBH SOLUTIONS (PTY) LTD, ATF SRBH SOLUTIONS TRUST
DRAWING: EARTHWORKS LAYOUT – PART 2 AND NOTES

DRAWING STATUS: TENDER | INFORMATION | APPROVAL | CONSTRUCTION | AS–CONSTRUCTED

DRAWING No. 3351–01–EW002
REVISION C
SHEET 02 OF 04

BCC DS
RECEIVED
29/09/2026
APPLICATION REF
A007057635

BCC DS
RECEIVED
28/09/2026
APPLICATION REF
A007057635



STORMWATER DRAINAGE LAYOUT
SCALE 1:300

STORMWATER STRUCTURE TABLE

1 OSD POINT OF DISCHARGE	9 DN1200 STORMWATER MH	18 TYPE-A GULLY K.I.L. 'S' LINTEL	6 600x600mm STORMWATER PIT
2 900x900mm STORMWATER PIT	10 DN1200 STORMWATER MH	19 TYPE-A GULLY K.I.L. 'S' LINTEL	1 LAWFUL POINT OF DISCHARGE
3 900x900mm STORMWATER PIT	11 DN1200 STORMWATER MH	20 600x600mm STORMWATER PIT	2 DN1200 STORMWATER MH
4 TYPE-A ANTI-PONDING GULLY	12 DN1200 STORMWATER MH	21 600x600mm STORMWATER PIT	3 DN1200 STORMWATER MH
5 DN1200 STORMWATER MH	13 TYPE-A GULLY K.I.L. 'S' LINTEL		4 RAISED DOME CHAMBER
6 DN1200 STORMWATER MH	14 TYPE-A GULLY K.I.L. 'S' LINTEL		5 TYPE-1 RAISED GRATE
	15 TYPE-A GULLY K.I.L. 'S' LINTEL		
	16 600x600mm STORMWATER PIT		
	17 600x600mm STORMWATER PIT		

LEGEND

- NEW STORMWATER PIPE AND MANHOLE
- NEW STORMWATER KERB ADAPTOR
- NEW STORMWATER PIT
- NEW STORMWATER INLET PIT
- NEW STORMWATER GULLY PIT
- EXISTING STORMWATER PIPE AND CHAMBER
- EXISTING STORMWATER INLET PIT
- EXISTING STORMWATER HEADWALL
- NEW SEWER PIPE AND MANHOLE
- NEW SEWER MAINTENANCE SHAFT
- NEW SEWER PROPERTY CONNECTION
- NEW SEWER INSPECTION SLAB
- EXISTING SEWER PIPE AND MANHOLE
- NEW WATER PIPE
- NEW WATER VALVE
- NEW WATER HYDRANT
- NEW WATER METER - SINGLE DOMESTIC
- EXISTING WATER PIPE
- EXISTING WATER VALVE
- EXISTING WATER HYDRANT
- EXISTING TELECOM SERVICE AND PIT
- EXISTING GAS LINE

LEGEND

- EXISTING O/H ELECTRICITY AND POLE
- EXISTING SERVICES - TO BE ABANDONED
- PROPERTY BOUNDARY
- EXISTING FENCE LINE
- FINAL SURFACE LEVEL CONTOURS
- EXISTING GROUND LEVEL CONTOURS
- SURVEY REFERENCE MARK
- NEW CONCRETE
- EXISTING CONCRETE
- NEW ASPHALT
- NEW TURFED AREA
- NEW RETAINING WALL

BEFORE YOU DIG www.byda.com.au

BEFORE YOU DIG AUSTRALIA (BYDA) DOCUMENTATION MUST BE OBTAINED BEFORE ANY ON-SITE CONSTRUCTION OR EXCAVATION IS ALLOWED TO COMMENCE. PROJECT DOCUMENTATION IS TO BE READ IN CONJUNCTION WITH THE BEFORE YOU DIG PLANS AND OTHER RELEVANT DOCUMENTATION.

STORMWATER DRAINAGE NOTES

1. GENERAL

1.1. ALL STORMWATER DRAINAGE EXCAVATION AND CONSTRUCTION TO BE IN ACCORDANCE WITH THE AS3500 PLUMBING AND DRAINAGE CODE AS WELL AS THE RELEVANT LOCAL AUTHORITY SPECIFICATIONS AND DETAILS.
1.2. ALL LEVELS TO AHD.
1.3. ALL DIMENSIONS ARE IN MILLIMETERS U.N.O.
1.4. ALL DIMENSIONS TO BE CHECKED AND CONFIRMED ON SITE PRIOR TO CONSTRUCTION COMMENCING.
1.5. NO DIMENSIONS MAY BE OBTAINED BY SCALING DRAWINGS.
1.6. ALL PVC STORMWATER PIPES TO BE PVC-U CLASS "SN8" U.N.O.
1.7. ALL RCP AND FRC PIPES TO BE MINIMUM CLASS "4" U.N.O.
1.8. ALL MATERIALS SHALL MEET THE RELEVANT AS1254 AND AS1273 REQUIREMENTS AND SPECIFICATIONS.
1.9. STORMWATER PIPES TO BE INSTALLED AT A MINIMUM GRADE OF 1.0% (1:100 SLOPE) U.N.O.
1.10. ROOFWATER RHS DRAINS ACROSS VERGE TO BE LAID WITH THE MAX. AVAILABLE COVER AND A MINIMUM SLOPE OF 1in200.
1.14. ALL ROOFWATER DRAINAGE RHS TO BE 150x100x4mm CONNECTED TO KERB ADAPTOR OUTLET.
1.15. FULL HEIGHT KERB ADAPTORS TO MATCH KERB AND CHANNEL PROFILES AS PER BSD-8114.
1.16. ALL TYPE-A GULLY PITS TO BE TYPE 'C' (SLIMLINE TYPE) KERB-IN-LINE ON-GRADE INLETS AS PER BSD-8057.
1.17. ALL TYPE-A GULLY PITS TO HAVE 2.4m LONG 'S' (SMALL) CONCRETE LINTEL AS PER BSD-8055.
1.18. ALL TYPE-A ANTI-PONDING SAG INLETS AS PER BSD-8056.
1.19. CONTRACTOR MUST VERIFY THAT ALL PIPE LEVELS AND GRADES CAN BE ACHIEVED PRIOR TO STORMWATER CONSTRUCTION. ANY DEVIATIONS MUST BE REFERRED TO THE SUPERINTENDENT FOR ANY NECESSARY ALTERATIONS PRIOR TO PIPEWORK CONSTRUCTION COMMENCING.

STORMWATER DRAINAGE NOTES (CONTINUED)

1.17. EXISTING SERVICES POSITIONS, SIZES AND DEPTH/INVERT LEVELS TO BE CONFIRMED ON SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND CONFIRMED WITH THE ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
1.18. CONSTRUCTION OF NEW SERVICES TO BE DONE STARTING AT THE CONNECTION POINT TO EXISTING SERVICES.
1.19. ADEQUATE BRIDGING PROTECTION TO BE PROVIDED WHERE PIPES ARE LAID WITHIN THE ZONE OF INFLUENCE OF STRUCTURAL LOADINGS. ALL BRIDGING IS TO BE DESIGNED BY A RPEQ.
1.20. PIT STRUCTURE BENCHING TO HAVE SMOOTH, FINISHED SURFACE.
1.21. PIPES MAY NOT PROJECT INSIDE THE PIT SHAFT.
1.22. THE CONTRACTOR MUST NOTIFY ALL RELEVANT AUTHORITIES AND PAY ALL FEES NECESSARY PRIOR TO CONSTRUCTION COMMENCING.
1.23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING SERVICES AND FOR THE REPAIR OF ANY SERVICES DAMAGED AS A RESULT OF THE WORKS.
1.24. FOOTPATHS AND PRIVATE PROPERTY SHALL BE REINSTATED TO THEIR ORIGINAL CONDITION AFTER COMPLETION OF WORKS IN THE AREA.
1.20. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE WORKPLACE HEALTH AND SAFETY ACT 1995. THE CONTRACTOR MUST ENSURE THE REQUIREMENTS OF ALL SPECIFICATIONS WITH REGARDS TO 'NOTIFICATION IN RELATION TO A NOTIFIABLE PROJECT ARE FULFILLED'.
1.21. ALL STORMWATER PIPES REQUIRING COUNCIL APPROVAL MUST BE SURVEYED PRIOR TO BACKFILLING. AN MGA SURVEY FROM A REGISTERED SURVEYOR MUST BE SUBMITTED FOR REVIEW AND APPROVAL. ALL TRENCHES THAT HAVE BEEN BACKFILLED PRIOR TO THE SURVEY MUST BE EXCAVATED AND THE PIPE EXPOSED FOR THE SURVEY.

STORMWATER DRAINAGE NOTES (CONTINUED)

2. LAWFUL POINT OF DISCHARGE (LPD)

2.1. THE LAWFUL POINT OF DISCHARGE FOR THE DEVELOPMENT IS THE EXISTING COUNCIL HEADWALL IN FLEMING RD.
2.2. ALL MINOR STORM FLOWS THAT FALL OR PASS ONTO THE SITE MUST DRAIN TO THE LAWFUL POINT OF DISCHARGE IN ACCORDANCE WITH THE QUEENSLAND URBAN DRAINAGE MANUAL (QUDM).

3. STORMWATER DESIGN

3.1. STORMWATER DESIGN MUST HAVE A MINIMUM FREEBOARD DETERMINED IN ACCORDANCE WITH THE REQUIREMENTS OF THE QUEENSLAND URBAN DRAINAGE MANUAL (QUDM) FOR OVERLAND FLOW PATHS AND PROVIDE AN UNDERGROUND NETWORK DESING TO CATER FOR THE MINOR STORM OF 2 YEAR ARI.

4. OVERLAND FLOW

4.1. THE MINIMUM BUILDING PAS LEVEL FOR LOT 2 IS TO BE 8.673m AHD, OR BEING 200mm ABOVE ADJACENT DRIVEWAY LEVELS IN EMT-A, AND A MIN 150mm ABOVE ADJACENT STORMWATER BASIN EMBANKMENT LEVELS.
4.2. THE MINIMUM BUILDING PAD LEVEL FOR LOT 3 IS TO BE 8.727m AHD, OR BEING 200mm ABOVE ADJACENT DRIVEWAY LEVELS IN EMT-B.

5. DISTURBED AREAS

ALL DISTURBED VERGE AREAS TO BE A MINIMUM OF 75mm TOPSOILED AND TURFED UPON COMPLETION OF WORKS. RESTORATION WORKS PROFILE TO TIE INTO EXISTING.

6. ADAC AS-CONSTRUCTED SUBMISSION

ADAC XML IS REQUIRED FOR A STORMWATER DEVELOPMENT IF CONSTRUCTED BY A PRIVATE CONTRACTOR. IT IS A REQUIREMENT THAT ALL AS-CON PACKAGES MUST COMPLY WITH BCC REQUIREMENTS.

STORMWATER INSPECTION NOTES

MAJOR STORMWATER INSPECTIONS:

1. MANDATORY HOLDING POINTS FOR WORKS
   - ☑ PRESTART MEETING
   - ☑ PIPE LAID AND BEDDED IN TRENCH PRIOR TO BACKFILL
   - ☑ AS-CONSTRUCTED SURVEY OF WORKS PRIOR TO BACKFILL
   - ☑ ON MAINTENANCE
2. THE CONTRACTOR MUST PROVIDE THE CERTIFYING ENGINEER THE FOLLOWING PRIOR TO THE RELEASE OF AS-CONSTRUCTED CERTIFICATION
   - ☑ PIPE LAYER'S ACCREDITATION (DRAINER'S LICENSE)
   - ☑ TRENCH BACKFILL COMPACTION TEST RESULTS
   - ☑ BEDDING MATERIAL GRADING (10mm DRAINAGE GRAVEL)
   - ☑ AS-CONSTRUCTED SURVEY PREPARED BY A LICENSED SURVEYOR
   - ☑ CCTV SURVEY (IN DUPLICATE)
   - ☑ PHOTOGRAPHIC EVIDENCE AT ALL STAGES OF CONSTRUCTION
3. SCHEDULING OF TESTING AND WORKS TO ALLOW FOLLOWING OF THIS PROCESS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR
4. IF THE AS CONSTRUCTED SURVEY DOES NOT FORM PART OF THE CONTRACTOR'S SCOPE OF WORKS, THE CONTRACTOR MUST COORDINATE WORKS WITH THE NOMINATED SURVEYOR. CONTRACTOR TO GIVE THE SURVEYOR AS MUCH NOTICE AS POSSIBLE TO PROGRAM SURVEY WORKS.

NOT FOR CONSTRUCTION

EXISTING SERVICES NOTE

THIS DESIGN HAS BEEN PREPARED BASED ON THE SERVICE AUTHORITY AS-CONSTRUCTED AND DETAIL AND CONTOUR SURVEY INFORMATION. POT HOLING WAS DONE TO VERIFY EXISTING SERVICES LOCATIONS AND DEPTHS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE DESIGN ON SITE.

REAL PROPERTY DESCRIPTION

DEVELOPMENT APPROVAL - ROL DEVELOPMENT PERMIT

LOT 5 RP 32978

COUNCIL FILE REF: A006705978

REFER TO DRAWING 3582-01-SW002 FOR STORMWATER LONGITUDINAL SECTIONS - PART 1
REFER TO DRAWING 3582-01-SW003 FOR STORMWATER LONGITUDINAL SECTIONS - PART 2
REFER TO DRAWING 3582-01-SW005 FOR BIORETENTION LAYOUT AND DETAILS
REFER TO DRAWING 3582-01-SW006 FOR BIORETENTION BASIN SECTIONS AND DETAILS
REFER TO DRAWING 3582-01-SW007 FOR HEADWALL LAYOUTS AND DETAILS

SCALE 1:300 0 5 10 15 20 22m (4 3 2 1)

DRAFTING AND RPEQ CERTIFICATION

BRAVO CONSULT
www.bravoconsult.com.au | 07 3062 9319

RPEQ CERTIFICATION
DATE 21/09/2026 SIGNED
NAME OF SIGNATORY ISAAC SCOT
RPEQ No. 16797

REV No.	DATE	DESCRIPTION	DRAWN	RPEQ	RPEQ No.
A	23/04/26	ISSUED FOR APPROVAL	S.V.	–	–
B	16/09/26	ISSUED FOR APPROVAL	S.V.	–	–
C	21/09/26	ISSUED FOR APPROVAL	S.V.	–	–

	INITIALS	DATE
DRAWN	S.V.	21/09/26
CHECKED	I.S.	21/09/26
APPROVED	I.S.	21/09/26
SIZE A1	SCALE AS SHOWN	

PROJECT: 489 HEMMANT TINGALPA ROAD, TINGALPA, QLD, 4173
CLIENT: SRBH SOLUTIONS (PTY) LTD, ATF SRBH SOLUTIONS TRUST
DRAWING: STORMWATER DRAINAGE LAYOUT AND NOTES

DRAWING STATUS: TENDER ○ INFORMATION ○ APPROVAL ◉ CONSTRUCTION ○ AS-CONSTRUCTED ○
DRAWING No. 3582-01-SW001
REVISION C
SHEET 01 OF 06

BCC DS
RECEIVED
28/09/2026
APPLICATION REF
A007057635

FLEMING ROAD

IN AREAS WHERE 1m OR MORE DROP IS FOUND, SAFETY FENCE TO BSD STANDARD DRAWING SERIES 7000 IS REQUIRED (BSD-7001 – BSD-7005)

ON-SITE DETENTION (OSD) DETAILS	
TYPE OF DETENTION	BIORETENTION BASIN
BASIN AREA	423.80m²
BASIN FLOOR LEVEL	6.93m AHD
EXTENDED DETENTION DEPTH	300mm
TOP OF BASIN LEVEL	8.43m AHD
TOTAL BASIN DEPTH	1.5m
TOTAL BASIN VOLUME	382.83m³
SPILLWAY LEVEL	8.28m AHD

OUTLET DETAILS		
OUTLET TYPE	SIZE (Ø,mm)	BASE OFFSET (m)
GRATE	900x900mm	0.300
ORIFICE	550mm W x 175mm H	0.470
	725mm W x 150mm H	0.730
GRATE	DOME COVER	1.050
SPILLWAY	3000x150mm	1.350
DRAINAGE PIPE	225mm dia.	–0.542
OUTLET PIPE	2x450mm dia.	–0.723

ARI (y)		
1		
2		
5		
10		
20		
50		
100	790	260

BCC DS
RECEIVED
28/09/2026
APPLICATION REF
A007057635

EXISTING COUNCIL STORMWATER PIPES

LAWFUL POINT OF DISCHARGE (LPD)
EXISTING HEADWALL TO BE EXTENDED TO ALLOW FOR NEW PROPOSED STORMWATER RCBC TO CONNECT. APPROPRIATE EROSION AND SEDIMENT CONTROL AND SCOUR PROTECTION MEASURES TO BE IMPLEMENTED AS PER COUNCIL STANDARD DRAWING BSD-8101.

EXISTING PORTION OF TH EXISTING COUNCIL STORMWATER HEADWALL AND PIPED CULVERTS TO REMAIN UNCHANGED

EXISTING STREET SIGN TO REMAIN

EDGE OF ROAD

PROPOSED NEW 1200mm W x 300mm H RCBC

70°

CHANGE IN PROPOSED RCBC ALIGNMENT

PROPOSED NEW 1200mm W x 300mm H RCBC SLOPED @ 1in200

PROPOSED NEW STORMWATER MAINTENANCE HOLE

APPROPRIATE EROSION AND SEDIMENT CONTROL AND SCOUR PROTECTION AT SPILLWAY DISCHARGE TO LOWER LEVEL (BOTTOM OF WALL UP TO PROPERTY BOUNDARY)

PROPOSED 3m WIDE SPILLWAY ACROSS 2.5m WIDE EMBANKMENT CREST

NOTE: PROPOSED STORMWATER PIPE NETWORK IS NOT ALLOWED TO CONNECT DIRECTLY ONTO THE EXISTING PIPED CULVERTS.

LEGEND

- NEW STORMWATER PIPE AND MAINTENANCE PIT
- NEW STORMWATER PIPE AND DRAINAGE PIT
- NEW STORMWATER HEADWALL
- NEW BASIN OUTLET STRUCTURE
- EXISTING STORMWATER LINE AND STRUCTURE
- NEW SEWER PIPE AND PROPERTY CONNECTION
- EXISTING SEWER LINE AND MAINTENANCE HOLE
- EXISTING WATER LINE AND VALVE
- EXISTING HYDRANT
- EXISTING FENCE LINE
- EXISTING TELSTRA SERVICE AND PIT
- EXISTING GAS SERVICE
- EXISTING O/H ELECTRICAL SERVICE AND POLE
- PROPERTY BOUNDARY
- 10.00 FINAL SURFACE LEVEL CONTOURS
- EXISTING GROUND LEVEL CONTOURS
- NEW RETAINING WALL
- NEW CONCRETE

PROPOSED RETAINING WALL
2.5m WIDE EMBANKMENT CREST

PROPOSED 2x DN450 CL2 RCP STORMWATER PIPE. REFER TO DRAWINGS 3582-001-SW001 TO SW003 FOR LONGSECTIONS.

PROPOSED 225mm DIA PVC-U STORMWATER PIPE. REFER TO DRAWINGS 3582-001-SW001 TO SW003 FOR LONGSECTIONS.

EXISTING FENCE LINE TO BE REVISED

1000x1000mm BASIN ORIFICE OUTLET STRUCTURE TO DETAIL (DOME TOP TO COUNCIL STANDARDS)

1000x1000mm LOW OUTLET PIT STRUCTURE (TYPE-1 RAISED GRATE TOP)

LOT 4 RP32978

PROPERTY BOUNDARY

PROPOSED RETAINING WALL

PROPOSED FOOTPATH

PROPOSED RETAINING WALL

NOTE: BIORETENTION BASIN EMBANKMENTS TO BE SLOPED @1in4 MAX

NOTE: BIORETENTION BASIN TO HAVE 300mm EXTENDED DETENTION DEPTH (EDD) AS PER DETAILS AND SECTIONS.

1in4 EMBANKMENT SLOPE

1in4 EMBANKMENT SLOPE

NOTE: BIORETENTION BASIN EMBANKMENT SLOPE TO TRANSITION FROM 1in6 TO 1in4 MAX

BIORETENTION FILTER
FILTER AREA = 127.6m
SAT. HYDRAULIC CONDUCTIVITY = 180mm/h
FILTER DEPTH = 0.6m
TN CONTENT = 800mg/kg
ORTHOPHOSPHATE CONTENT = 40mg/kg

PROPOSED STORMWATER OUTLET TO COUNCIL STANDARDS

300mm WIDE ROCK APRON ALONG FOREBAY PERIMETER

300mm HIGH 100mm THK SEDIMENT FOREBAY WALL WITH CONCRETE BREAKOUTS FOR LOW FLOWS

PROPOSED 1.2m WIDE MAINTENANCE BERM 100mm ABOVE EDD

SEDIMENTATION FOREBAY TO SLOPE @ 0.5% MIN. TOWARDS CONCRETE BREAKOUTS IN WALL

4000

3130

1200

DISCHARGE POINT OF STORMWATER NETWORK INTO PROPOSED BIORETENTION BASIN. DISCHARGE LEVEL TO BE 100mm ABOVE SEDIMENTATION FOREBAY LEVEL.

SEDIMENTATION FOREBAY TO COUNCIL STANDARDS.
1 YEAR CLEANOUT FREQUENCY VOLUME REQUIRED = 0.52m³
DESIGN VOLUME = 3.76m³

PROPOSED 2xDN375 RCP CL2 PIPE. REFER TO DRAWINGS 3582-001-SW001 TO SW003 FOR LONGSECTIONS.

NOTE: SAFETY FENCE TO BE INSTALLED AT ANY DROP 1m OR MORE

1310

PROPOSED PROPERTY BOUNDARY

PROPOSED RETAINING WALL
TRANSITION RET.WALL HEIGHT TO ZERO

1in6 CONCRETE MAINTENANCE ACCESS

TRANSITION RET.WALL HEIGHT TO ZERO

±1in30 CONCRETE MAINTENANCE ACCESS

PROPOSED 3m WIDE R.C. BASIN MAINTENANCE ACCESS DRIVEWAY

CURRENT PROPERTY BOUNDARY

AREA DESIGNATED FOR COUNCIL ROAD DEDICATION

PROPOSED PROPERTY BOUNDARY

PROPOSED RETAINING WALL
2.5m WIDE EMBANKMENT CREST

1in4 EMBANKMENT SLOPE

BASIN ACCESS TO HAVE LOCKRAIL GATE PER COUNCIL STANDARD DRAWING BSD-7051 BSD-7054 & BSD-7055

EXISTING ADVERTISEMENT SIGN TO BE REMOVED

1in6 EMBANKMENT SLOPE

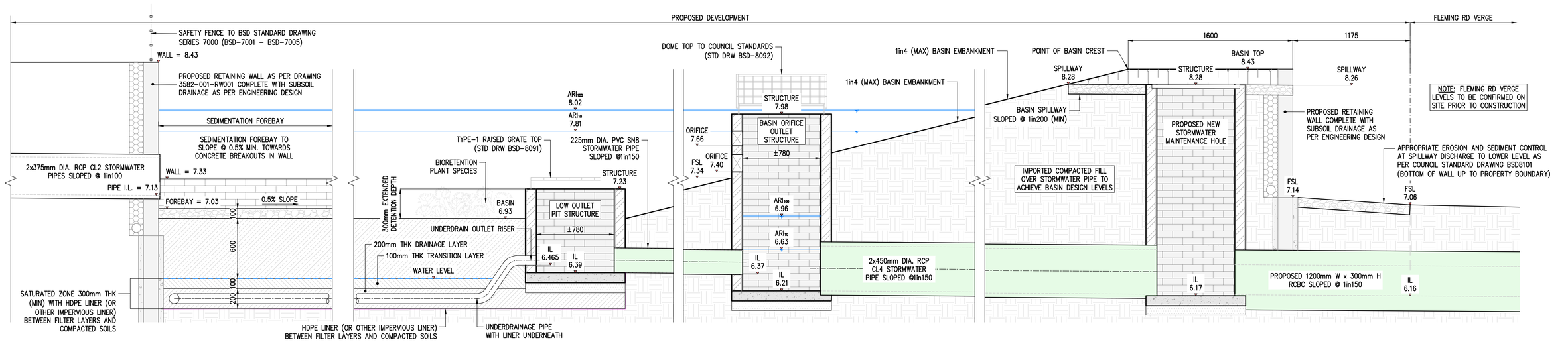
2500

PROPOSED BASIN MAINTENANCE ACCESS TO TIE INTO COUNCIL ROAD LEVELS

HEMMANT TINGALPA RD

EDGE OF ROAD

BIORETENTION BASIN LAYOUT
SCALE 1:100



SECTION THROUGH BASIN OUTLET
SCALE 1:20

SCALE 1:20 — 0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.2 1.4 1.6 1.8 2m

SCALE 1:100 — 0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 6.0 7.0 8.0 9.0 10m

BEFORE YOU DIG www.byda.com.au

BEFORE YOU DIG AUSTRALIA (BYDA) DOCUMENTATION MUST BE OBTAINED BEFORE ANY ON-SITE CONSTRUCTION OR EXCAVATION IS ALLOWED TO COMMENCE. PROJECT DOCUMENTATION IS TO BE READ IN CONJUNCTION WITH THE BEFORE YOU DIG PLANS AND OTHER RELEVANT DOCUMENTATION.

NOT FOR CONSTRUCTION

EXISTING SERVICES NOTE

THIS DESIGN HAS BEEN PREPARED BASED ON THE SERVICE AUTHORITY AS-CONSTRUCTED AND DETAIL AND CONTOUR SURVEY INFORMATION. POT HOLING WAS DONE TO VERIFY EXISTING SERVICES LOCATIONS AND DEPTHS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE DESIGN ON SITE.

REAL PROPERTY DESCRIPTION

DEVELOPMENT APPROVAL – ROL DEVELOPMENT PERMIT

LOT 5 RP 32978

COUNCIL FILE REF: A006705978

REFER TO DRAWING 3582-01-SW001 FOR STORMWATER DRAINAGE LAYOUT AND NOTES
REFER TO DRAWING 3582-01-SW002 FOR STORMWATER DRAINAGE LONGITUDINAL SECTIONS – PART 1
REFER TO DRAWING 3582-01-SW003 FOR STORMWATER DRAINAGE LONGITUDINAL SECTIONS – PART 2 REFER TO DRAWING 3582-01-SW006 FOR BIORETENTION BASIN SECTIONS AND DETAILS
REFER TO DRAWING 3582-01-SW007 FOR HEADWALL LAYOUTS AND DETAILS

DRAFTING AND RPEQ CERTIFICATION

BRAVO CONSULT
www.bravoconsult.com.au | 07 3062 9319

RPEQ CERTIFICATION

DATE 16/09/2026 SIGNED

NAME OF SIGNATORY ISAAC SCOT

RPEQ No. 16797

REV No.	DATE	DESCRIPTION	DRAWN	RPEQ	RPEQ No.
A	23/04/26	ISSUED FOR APPROVAL	S.V.	–	–
B	16/09/26	ISSUED FOR APPROVAL	S.V.	–	–

	INITIALS	DATE
DRAWN	S.V.	16/09/26
CHECKED	I.S.	16/09/26
APPROVED	I.S.	16/09/26

SIZE A1 | SCALE AS SHOWN

PROJECT 489 HEMMANT TINGALPA ROAD, TINGALPA, QLD, 4173

CLIENT SRBH SOLUTIONS (PTY) LTD, ATF SRBH SOLUTIONS TRUST

DRAWING BIORETENTION BASIN LAYOUT AND DETAILS

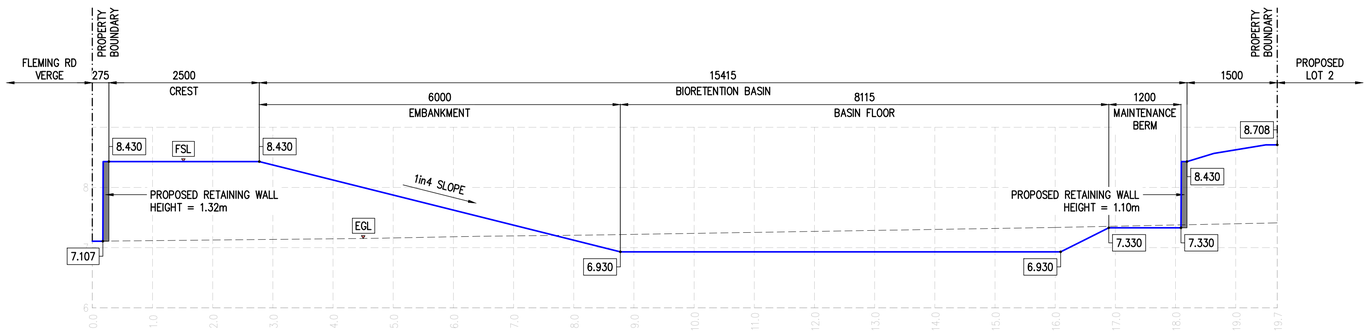
DRAWING STATUS TENDER ○ INFORMATION ○ APPROVAL ● CONSTRUCTION ○ AS-CONSTRUCTED ○

DRAWING No. 3351-01-SW005

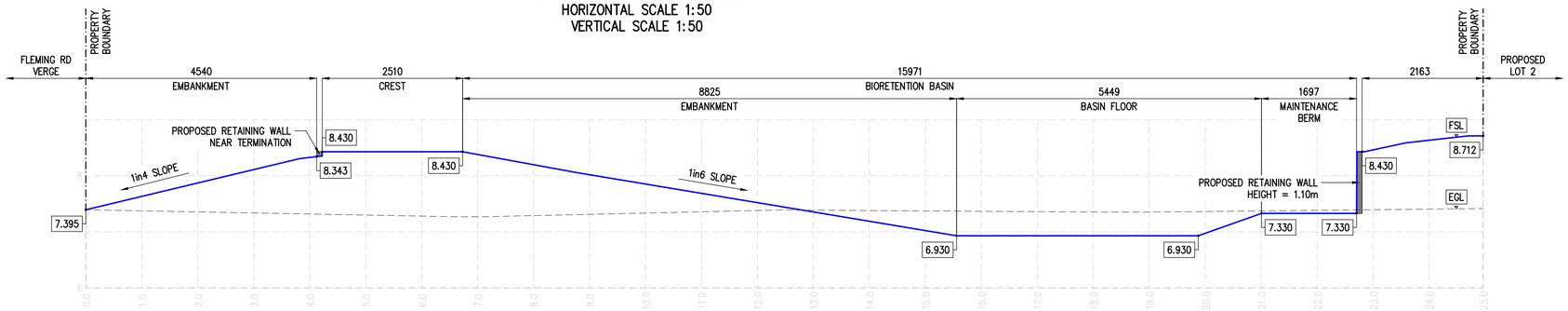
REVISION B

SHEET 04 **OF** 06

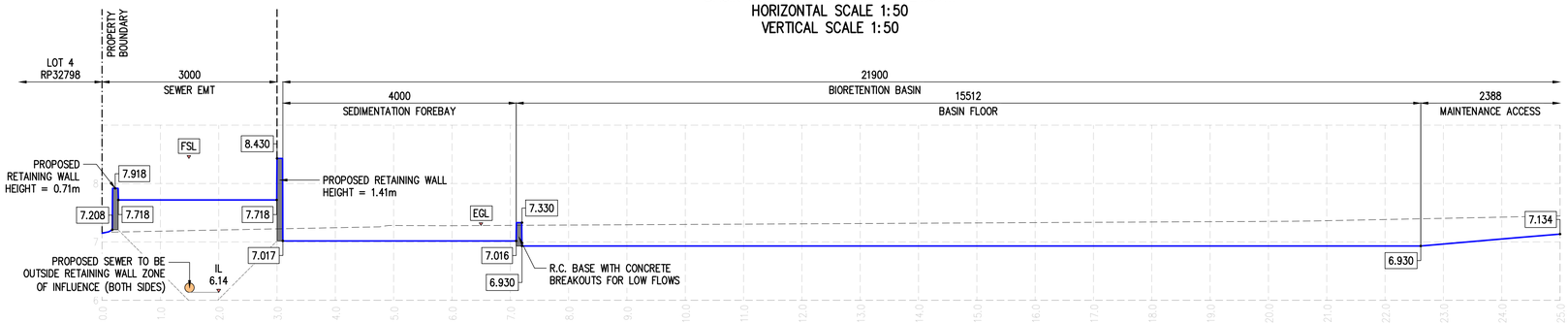
BCC DS
RECEIVED
28/09/2026
APPLICATION REF
A007057635



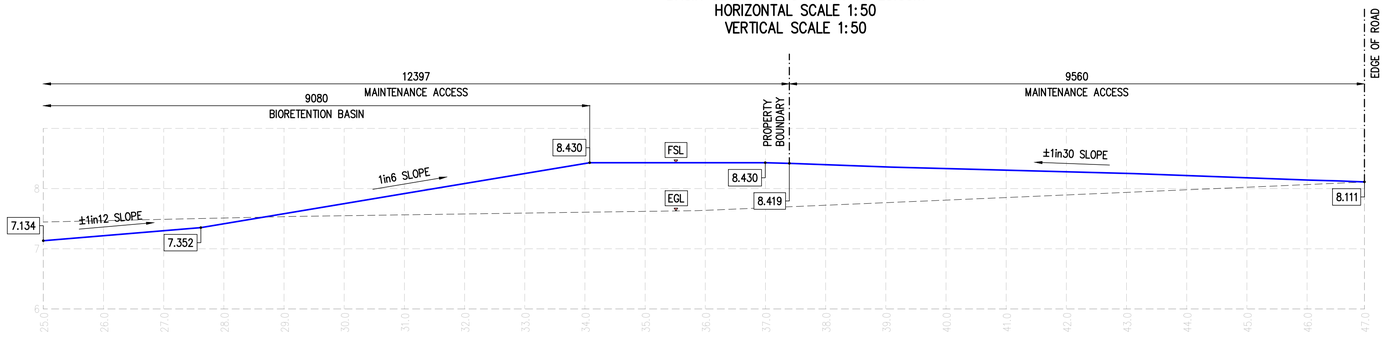
BASIN SECTION A–A 0.00m TO 19.69m
HORIZONTAL SCALE 1:50
VERTICAL SCALE 1:50



BASIN SECTION B–B 0.00m TO 24.97m
HORIZONTAL SCALE 1:50
VERTICAL SCALE 1:50



BASIN SECTION C–C 0.00m TO 25.00m
HORIZONTAL SCALE 1:50
VERTICAL SCALE 1:50



BASIN SECTION C–C 25.00m TO 46.95m
HORIZONTAL SCALE 1:50
VERTICAL SCALE 1:50

REFER TO DRAWING 3582–01–SW001 FOR STORMWATER DRAINAGE LAYOUT AND NOTES
REFER TO DRAWING 3582–01–SW002 FOR STORMWATER DRAINAGE LONGITUDINAL SECTIONS – PART 1
REFER TO DRAWING 3582–01–SW003 FOR STORMWATER DRAINAGE LONGITUDINAL SECTIONS – PART 2
REFER TO DRAWING 3582–01–SW005 FOR BIORETENTION BASIN LAYOUT AND DETAILS
REFER TO DRAWING 3582–01–SW007 FOR HEADWALL LAYOUTS AND DETAILS

EXISTING SERVICES NOTE

THIS DESIGN HAS BEEN PREPARED BASED ON THE SERVICE AUTHORITY AS–CONSTRUCTED AND DETAIL AND CONTOUR SURVEY INFORMATION. POT HOLING WAS DONE TO VERIFY EXISTING SERVICES LOCATIONS AND DEPTHS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE DESIGN ON SITE.

REAL PROPERTY DESCRIPTION

DEVELOPMENT APPROVAL – ROL DEVELOPMENT PERMIT

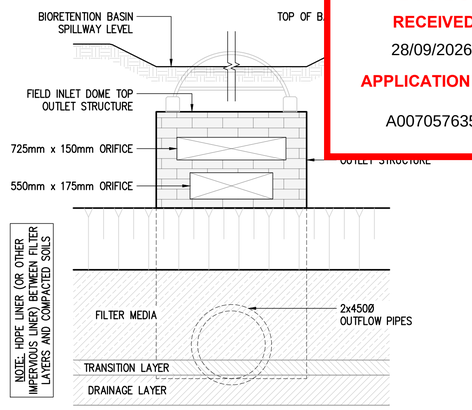
LOT 5 RP 32978

COUNCIL FILE REF: A006705978

NOT FOR CONSTRUCTION

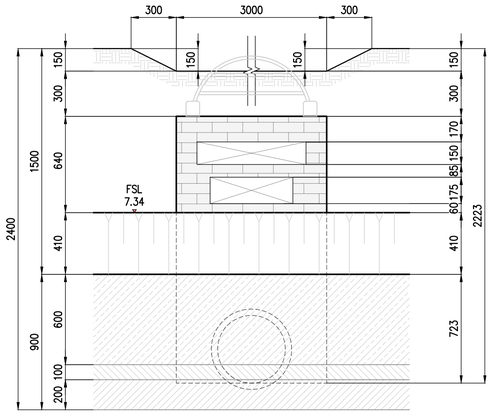
BEFORE YOU DIG www.byda.com.au

BEFORE YOU DIG AUSTRALIA (BYDA) DOCUMENTATION MUST BE OBTAINED BEFORE ANY ON–SITE CONSTRUCTION OR EXCAVATION IS ALLOWED TO COMMENCE. PROJECT DOCUMENTATION IS TO BE READ IN CONJUNCTION WITH THE BEFORE YOU DIG PLANS AND OTHER RELEVANT DOCUMENTATION.



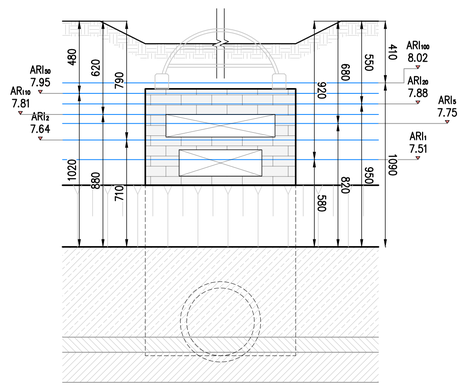
BASIN OUTLET STRUCTURE DETAIL–1

SCALE 1:20



BASIN OUTLET STRUCTURE DETAIL–2

SCALE 1:20



BASIN OUTLET STRUCTURE DETAIL–3

SCALE 1:20

SCALE 1:20 0 0.5 1 2.0m

SCALE 1:50 0.8 0.4 0 1 2 3 4 5m
1 0.6 0.2

DRAFTING AND RPEQ CERTIFICATION

BRAVO CONSULT
www.bravoconsult.com.au | 07 3062 9319

RPEQ CERTIFICATION

DATE 16/09/2026 SIGNED

NAME OF SIGNATORY ISAAC SCOT

RPEQ No. 16797

REV No.	DATE	DESCRIPTION	DRAWN	RPEQ	RPEQ No.
A	23/04/26	ISSUED FOR APPROVAL	S.V.	–	–
B	16/09/26	ISSUED FOR APPROVAL	S.V.	–	–

	INITIALS	DATE
DRAWN	S.V.	16/09/26
CHECKED	I.S.	16/09/26
APPROVED	I.S.	16/09/26

SIZE A1 SCALE AS SHOWN

PROJECT 489 HEMMANT TINGALPA ROAD, TINGALPA, QLD, 4173

CLIENT SRBH SOLUTIONS (PTY) LTD, ATF SRBH SOLUTIONS TRUST

DRAWING BIORETENTION BASIN SECTIONS AND DETAILS

DRAWING STATUS TENDER ○ INFORMATION ○ APPROVAL ● CONSTRUCTION ○ AS–CONSTRUCTED ○

DRAWING No. 3351–SW006

REVISION B

SHEET 05 **OF** 06

BCC DS
RECEIVED
28/09/2026
APPLICATION REF
A007057635

BCC DS
RECEIVED
28/09/2026
APPLICATION REF
A007057635