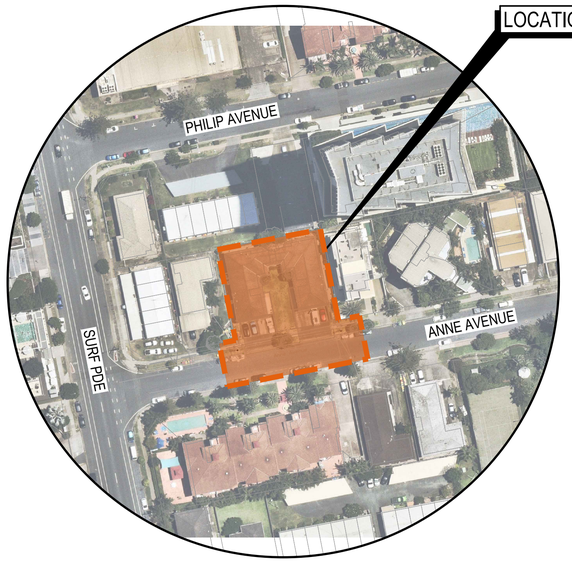
AVVA BROADBEACH (19-21 ANNE AVENUE, BROADBEACH)

OPERATIONAL WORKS
CITY OF GOLD COAST

DRAWING SCHEDULE	
DRAWING NUMBER	DESCRIPTION
AVA-AAP-DD-00-DRG-CI-0001	COVER SHEET, LOCALITY PLAN AND DRAWING SCHEDULE
AVA-AAP-DD-00-DRG-CI-0041	ABNORMAL CIVIL RISK REGISTER
AVA-AAP-DD-00-DRG-CI-0051	MANDATORY INSPECTION AND TESTING REGISTER
EARTHWORKS	
AVA-AAP-DD-00-DRG-CI-0071	EXISTING SURVEY AND DEMOLITION PLAN
~~AVA-AAP-DD-00-DRG-CI-0101~~	~~EARTHWORKS CUT AND FILL LAYOUT PLAN~~
AVA-AAP-DD-00-DRG-CI-0171	EROSION AND SEDIMENT CONTROL PLAN
AVA-AAP-DD-00-DRG-CI-0191	EROSION AND SEDIMENT CONTROL DETAILS
CIVILWORKS	
AVA-AAP-DD-00-DRG-CI-0201	CIVIL WORKS PLAN
AVA-AAP-DD-00-DRG-CI-0361	CIVIL WORKS DETAILS SHEET 1
AVA-AAP-DD-00-DRG-CI-0362	CIVIL WORKS DETAILS SHEET 2
STORMWATER MANAGEMENT	
~~AVA-AAP-DD-00-DRG-CI-0401~~	~~STORMWATER MANAGEMENT DETAIL SHEET 1~~
~~AVA-AAP-DD-00-DRG-CI-0491~~	~~BIO-RETENTION PLAN~~
~~AVA-AAP-DD-00-DRG-CI-0492~~	~~BIO-RETENTION NOTES~~
SERVICES	
AVA-AAP-DD-00-DRG-CI-0521	SEWERAGE RETICULATION PLAN
AVA-AAP-DD-00-DRG-CI-0621	WATER CONNECTION DETAILS
AVA-AAP-DD-00-DRG-CI-0622	MASTER WATER METER DETAIL PLAN AND SECTION
AVA-AAP-DD-00-DRG-CI-0623	EXTERNAL WATER RETICULATION DETAILS



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Issue	Description	DR	CH	VE	Date
03	ISSUE FOR OPW APPROVAL	J.B	L.S	J.S	28.11.25
02	70% DESIGN ISSUE	J.B	L.S	J.S	21.11.25
01	FOR INFORMATION	J.B	L.S	J.S	27.10.25

100mm on Original

Scales

0 10 20 40 60 80 100m

1 : 1000

Surveyor: BENNETT + BENNETT

Architect: BDA ARCHITECTURE

Client: MARY ANNE DEVELOPMENTS

Status: FOR APPROVAL
CONSTRUCTION SUBJECT TO APPROVAL

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Original Issue Signatures			
Drawn	J.BONAPOS	Original Size	A1
Designed	L.SCOTT	Height Datum	AHD
Project Manager	J.STOCKWELL	Grid	MGA/20-56
Verified	R.MULLIGAN		

Project: AVVA BROADBEACH
19-21 ANNE AVENUE,
BROADBEACH

Title: COVER SHEET, LOCALITY PLAN AND DRAWING SCHEDULE

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Project Number: 30265222

Drawing No.: AVA-AAP-DD-00-DRG-CI-0001

Issue: 03

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HAZARD / RISK ASSESSMENT REGISTER - OPERATIONAL WORKS

PROJECT	AVVA BROADBEACH
LOCATION	19-21 ANNE AVENUE, BROADBEACH
PROJECT NUMBER	30265222
PROJECT DESCRIPTION	OPERATIONAL WORKS APPLICATION

A HAZARD is something with the potential to cause harm.
RISK is a combination of the likelihood of the harm occurring and the severity of the harm should it occur.
CONTROLS are measures to eliminate or reduce risk to an acceptable level.
ABNORMAL RISKS are aspects of our project, structure or materials as identified by our design which may present significant hazards that are unusual, not obvious or may be difficult to manage

Risk ID No	Project Phase	Hazard / Risk Description	Risk Manager	Consequence / Likely Harm	Likelihood	Severity	Initial Risk Rating = L x S	Treatment Option Mitigation Action Plan for Avoidance Controls to be Provided	Consequence / Likely Harm	Likelihood	Severity	Residual Risk Rating = L x S	- Adopted Treatment - Reason - By Whom	Comment
1	DESIGN AND CONSTRUCTION	Existing Services	Principal and Contractor	Damage to existing infrastructure or compromise in functionality or injury to person	3	5	15	Existing services to be located on site and protected as required. Where augmentation to existing services is required to compliment proposed earthworks appropriate modification details and approvals shall be sought from the relevant authority.	As identified but lesser chance	1	5	5	-As per treatment option -Statutory process - Necessary for safety -Principal / Contractor	Specific potholing was undertaken to mitigate design risk
2	DESIGN AND CONSTRUCTION	Connection to Existing Services	Contractor	Damage to existing infrastructure or injury to person	3	5	15	Live connections are required to municipal sewers and pressure water mains. These present potential risks. Contractor shall seek all relevant approvals from Gold Coast Water (i.e. connection approvals, safe work method statements etc)	As identified but lesser chance	1	5	5	-As per treatment option -Statutory process - Necessary for safety -Principal / Contractor	Arcadis has designed all water and sewer connections as per seq code
3	CONSTRUCTION	Open trench during night / Portions of the services may be constructed using open trench. Private site operators or others may fall into trenches	Contractor	Falling from heights / Major injury	3	4	12	Trench is backfilled each day before contractor leaves site	Trench is filled and therefore cannot be fallen into	1	4	4	- Treatment may be adopted - cost prohibitive but highly effected at reducing likelihood - Civil Contractor	Contractor to provide preferred management measure in safe work method statement
	CONSTRUCTION		Contractor					Contractor provides man-proof fencing around open trench areas with adequate warning of deep excavation as well as covering open trench with boards.	Adequate warning and protection provided to prevent non-intentional entry.	1	4	4	- Treatment may be adopted - Cost and likelihood reduction effective - Civil Contractor	
4	CONSTRUCTION	External footpath disturbance during construction activities	Contractor	Slip / Trip / Fall	4	3	12	Contractor provides alternative pedestrian routes	As identified but lesser chance	2	3	6	- Contractor to prepare a pedestrian management plan	

LIKELIHOOD	SCORE
OCCURRENCE VIRTUALLY INEVITABLE, MAY OCCUR MANY TIMES	5
OCCURRENCE NOT SURPRISING, MAY OCCUR MORE THAN ONCE	4
LIKELY TO OCCUR SOMETIMES	3
UNLIKELY TO OCCUR, THOUGH CONCEIVABLE	2
SO UNLIKELY THAT PROBABILITY IS CLOSE TO ZERO	1

SEVERITY	SCORE
FATALITY	5
MAJOR INJURY	4
SIGNIFICANT INJURY	3
FIRST AID INJURY	2
MINOR INJURY	1



RISK RATING RESULTS		
15-25	VERY HIGH	THIS ACTIVITY MUST NOT BE UNDERTAKEN, OR SHOULD BE STOPPED, UNTIL ADDITIONAL MEASURES HAVE BEEN PUT IN PLACE TO REDUCE THE RISK
8-12	HIGH	ALL REASONABLY PRACTICABLE CONTROL MEASURES MUST BE PUT IN PLACE BEFORE THIS TASK MAY PROCEED
3-6	MEDIUM	CONTROL MEASURES MUST BE PUT IN PLACE TO REDUCE THIS RISK UNLESS IT WOULD INVOLVE EXCESSIVE COST FOR LITTLE BENEFIT
1-2	LOW	NO FURTHER ACTION REQUIRED UNLESS BENEFICIAL ACTION CAN BE EASILY UNDERTAKEN

Issue	Description	DR	CH	VE	Date
02	ISSUE FOR OPW APPROVAL	J.B	L.S	R.M	28.11.25
01	FOR INFORMATION	J.B	L.S	J.S	27.10.25

100mm on Original

Scales: N/A

Surveyor: BENNETT + BENNETT

Architect: BDA ARCHITECTURE

Client: MARY ANNE DEVELOPMENTS

Status: FOR APPROVAL
CONSTRUCTION SUBJECT TO APPROVAL

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Original Issue Signatures

Drawn	J.BONAPOS	Original Size	A1
Designed	L.SCOTT	Height Datum	AHD
Project Manager	J.STOCKWELL	Grid	MGA/20-56
Verified	R.MULLIGAN		

Project: AVVA BROADBEACH
19-21 ANNE AVENUE,
BROADBEACH

Title: ABNORMAL CIVIL
RISK REGISTER

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Project Number: 30265222

Drawing No.: AVA-AAP-DD-00-DRG-CI-0041

Issue: 02

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INSPECTIONS AND QUALITY ASSURANCE TESTING REGISTER - OPERATIONAL WORKS	
PROJECT	AVVA BROADBEACH
LOCATION	19-21 ANNE AVENUE, BROADBEACH
PROJECT NUMBER	30265222
PROJECT DESCRIPTION	OPERATIONAL WORKS APPLICATION

QUALITY ASSURANCE AND TESTING DOCUMENTATION REGISTER

No.	Item		Received	Reviewed	Comments
1.0	**Roadworks**				
	1.0	Photos			
	2.0	AC Core Testing (if applicable)			
	3.0	Lean Mix Details (if applicable)			
	3.0	Footpaths			
	4.0	Kerb & Channel			
	5.0	As Constructed Survey			
2.0	**VXO & Concrete Driveways**				
	1.0	Concrete test results			
	2.0	Photos			
	3.0	CoGC Development Compliance Inspection Reports			
	4.0	Adopted Verge Setout			
	5.0	As-Constructed Survey			
3.0	**Stormwater Drainage and Management Devices**				
	1.0	Delivery Dockets/Product Certifications			
	a.	Pipes			
	b.	Pits			
	c.	Grates			
	d.	Lids			
	e.	Kerb Adaptors			
	f.	Manufacturer Precast Structure(s)			
	2.0	Testing Documentation			
	a.	Concrete UCS Testing			
	b.	Compaction Testing			
	4.0	Photos			
	5.0	As-Constructed Survey			
4.0	**Sewage Reticulation**				
	1.0	Delivery Dockets/Product Certifications			
	a.	Pipes			
	b.	Maintenance Shafts			
	c.	Lean Mix			
	2.0	Bedding Material			
	a.	PSD Test Results			
	b.	Materials Quality Specifications			
	3.0	Testing Documentation			
	a.	Pipe Pressure Test			
	b.	Vacuum Testing			
	c.	Ovality & Inclination Test Results			
	d.	Trench Compaction Density Test Results			
	e.	Infiltration Report (if applicable)			
	f.	CCTV Report			
	4.0	Photos			
	5.0	As-Constructed Survey			
5.0	**Water Reticulation**				
	1.000	Delivery Dockets/Product Certifications			
	a.	Pipes			
	b.	Fittings/Hydrants			
	c.	Hydrant/SV Covers			
	d.	Lean Mix			
	2.0	Bedding Material			
	a.	PSD Test Results			
	b.	Materials Quality Specifications			
	3.0	Testing Documentation			
	a.	Hydrostatic Pressure Test			
	b.	Chlorination Testing			
	c.	Under pressure cut-in (tapped) connections assembly pressure test			
	d.	Trench Compaction Density Test Results			
	4.0	Water Meter Form			
	5.0	Photos			
	6.0	As-Constructed Survey			

MANDATORY INSPECTIONS REGISTER

City Inspections (Arcadis and Council)

No.	Item	Council Department	Date	Comment
1.0	Pre-start inspection	Contributed Assets & Water and Waste		
2.0	Prior to commencing sewerage and/or water reticulation	Contributed Assets & Water and Waste		
3.0	Vehicular crossing pre-pour, including footpath tie ins	Development Compliance		
4.0	Vehicular crossing post-pour	Development Compliance		
5.0	All thrust and anchor blocks	Contributed Assets & Water and Waste		
6.0	Placement of hydrostatic seals on all elements	Contributed Assets & Water and Waste		
7.0	Pre-live connection inspection for sewerage and water reticulation	Contributed Assets & Water and Waste		
8.0	Pre-seal	Contributed Assets		
9.0	Concrete pre-pour inspection for footpath	Contributed Assets		
10.0	Water and sewerage inspection	Contributed Assets & Water and Waste		
11.0	Practical completion (On-Maintenance)	Contributed Assets & Water and Waste		
12.0	Final defects liability (Off-Maintenance)	Contributed Assets & Water and Waste		

Other Inspections (Arcadis)

No.	Item	Council Department	Date	Comment
1.0	Kerb Adapters and Boundary Pits	N/A		
2.0	Bio-retention Basin	N/A		
3.0	Detention Tank	N/A		

ALL NOMINATED INSPECTIONS AND QUALITY ASSURANCE DOCUMENTATION MUST BE READ IN CONJUNCTION WITH THE DESIGN DRAWINGS, COUNCIL APPROVAL DOCUMENTATION AND CITY PLANNING SCHEME

ALL INSPECTIONS AND TESTING DOCUMENTATION SUBJECT TO CITY OF GOLD COAST AND GOLD COAST WATER APPROVAL & CONFORMANCE BY CITY REPRESENTATIVE .

Issue	Description	DR	CH	VE	Date
02	ISSUE FOR APPROVAL	J.B	L.S	R.M	28.11.25
01	FOR INFORMATION	J.B	L.S	J.S	27.10.25

100mm on Original

Scales: N/A

Surveyor: BENNETT + BENNETT

Architect: BDA ARCHITECTURE

Client: MARY ANNE DEVELOPMENTS

Status: FOR APPROVAL
CONSTRUCTION SUBJECT TO APPROVAL

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Original Issue Signatures

Drawn	J.BONAPOS	Original Size	A1
Designed	L.SCOTT	Height Datum	AHD
Project Manager	J.STOCKWELL	Grid	MGA/20-56
Verified	R.MULLIGAN		

Project: AVVA BROADBEACH
19-21 ANNE AVENUE,
BROADBEACH

Title: MANDATORY INSPECTION AND TESTING REGISTER

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Project Number: 30265222

Drawing No.: AVA-AAP-DD-00-DRG-CI-0051

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LEGEND

- EXISTING SURFACE CONTOURS
- EXISTING STORMWATER DRAINAGE
- EXISTING SEWERAGE RETICULATION
- EXISTING WATER RETICULATION
- EXISTING UNDERGROUND ELECTRICAL
- EXISTING OVERHEAD ELECTRICAL
- EXISTING COMMUNICATIONS
- EXISTING GAS
- SERVICE TO BE DECOMMISSIONED
- EXTENT OF WORK BOUNDARY
- REMOVE EXISTING VXO AND FOOTPATH
- REMOVE EXISTING VEGETATION

SERVICE CONFLICT NOTES

1. THE EXISTING UTILITY SERVICES INFORMATION SHOWN HAS BEEN COMPILED FROM SURVEY INFORMATION SUPPLIED BY THE VARIOUS SERVICE AUTHORITIES.
2. THE INFORMATION IS NOT INTENDED TO PROVIDE THE CONTRACTOR WITH COMPLETE OR ACCURATE INFORMATION CONCERNING THE LOCATION AND EXTENT OF UTILITY SERVICES.
3. THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR ANY DAMAGE INCURRED TO EXISTING UTILITY SERVICES OR STRUCTURES AS A RESULT OF THE EXECUTION OF WORK UNDER THE CONTRACT.
4. NO WORK SHALL BE CARRIED OUT WITHIN 5 METRES OF ANY EXISTING SERVICES WITHOUT PRIOR RECORDED CONSULTATION WITH THE RELEVANT AUTHORITY.
5. THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH AND EXTENT OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORK.
6. ALL EXISTING SERVICES AND STRUCTURES ARE TO BE MAINTAINED IN GOOD ORDER FOR THE DURATION OF THE CONTRACT AND WHERE RELOCATION IS REQUIRED, REFER SPECIFICATION.

WARNING : EXISTING SERVICES
EXISTING SERVICES EXIST IN THIS VICINITY. THE CONTRACTOR IS TO CONTACT THE RELEVANT AUTHORITIES TO CONFIRM EXACT LOCATION OF SERVICES ON SITE PRIOR TO ANY EXCAVATION OR CONSTRUCTION COMMENCING.

EXISTING SERVICES PLOTTED FROM SURVEY AND POTHOLING. PLEASE REFER TO SURVEY/POTHOLING PLAN BY LAMBERT LOCATIONS FOR FURTHER DETAILS.

ALL WORKS SUBJECT TO CITY OF GOLD COAST AND GOLD COAST WATER APPROVAL.

Issue	Description	DR	CH	VE	Date
03	ISSUE FOR OPW APPROVAL	J.B	L.S	R.M	28.11.25
02	70% DESIGN ISSUE	J.B	L.S	R.M	21.11.25
01	FOR INFORMATION	J.B	L.S	J.S	27.10.25

Scales

0 1 2 4 6 8 10m

1 : 100

100mm on Original

Surveyor: BENNETT + BENNETT

Architect: BDA ARCHITECTURE

Client: MARY ANNE DEVELOPMENTS

Status: FOR APPROVAL
CONSTRUCTION SUBJECT TO APPROVAL

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Original Issue Signatures

Drawn	J.BONAPOS	Original Size	A1
Designed	L.SCOTT	Height Datum	AHD
Project Manager	J.STOCKWELL	Grid	MGA/20-56
Verified	R.MULLIGAN		

Project: AVVA BROADBEACH
19-21 ANNE AVENUE,
BROADBEACH

Title: EXISTING SURVEY AND DEMOLITION PLAN

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Project Number: 30265222

Drawing No.: AVA-AAP-DD-00-DRG-CI-0071

Issue: 03

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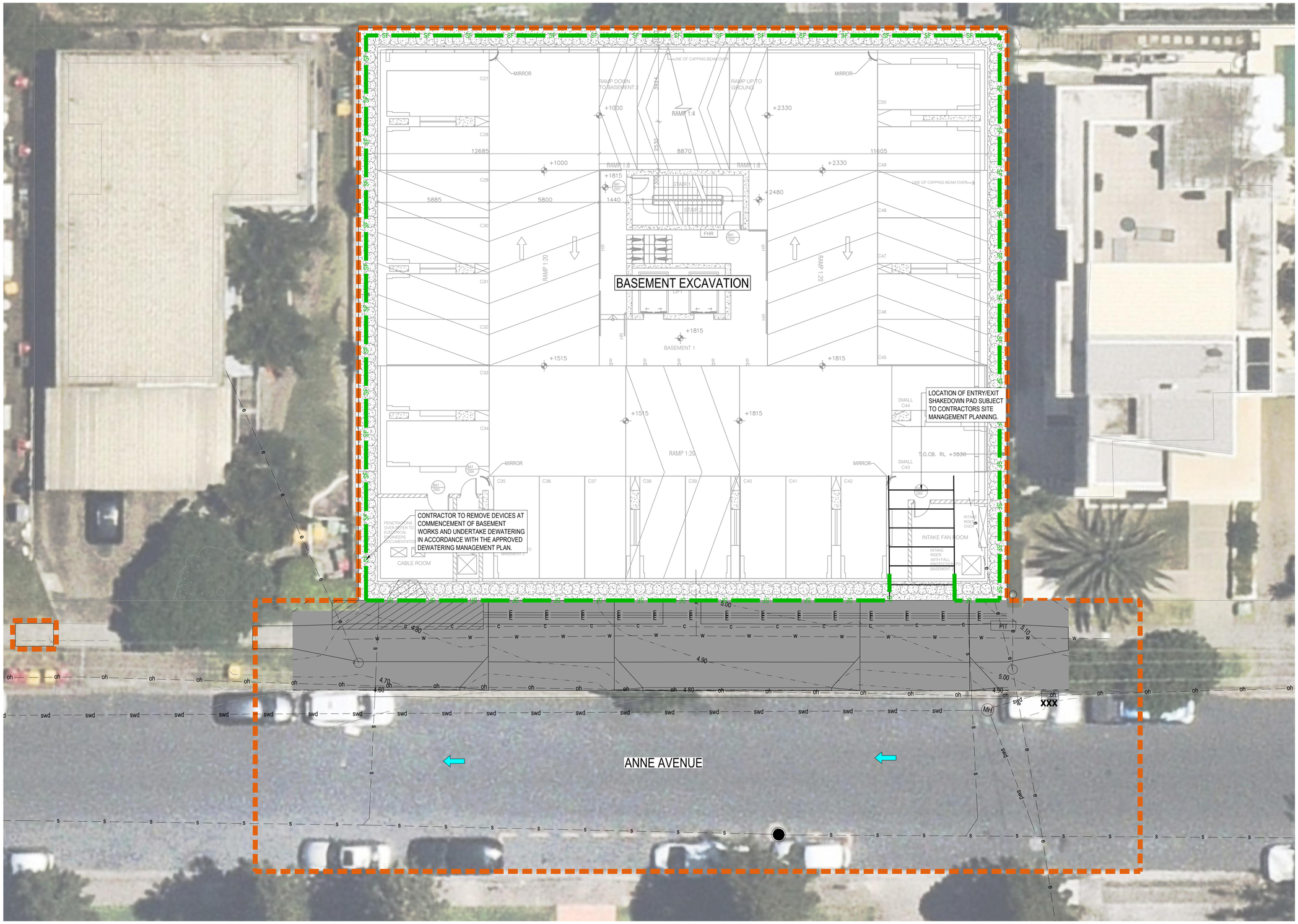

LEGEND

- EXTENT OF WORK BOUNDARY
- 5.0 PROPOSED SURFACE CONTOURS
- 5.0 EXISTING SURFACE CONTOURS
- TURF
- SF SILT FENCE
- XXX GULLY TREATMENT ON GRADE
- SAG GULLY TREATMENT
- CONSTRUCTION ENTRY/EXIT PAD
- DIRECTION OF OVERLAND FLOW

NOTES

1. FOR SEDIMENT AND EROSION CONTROL DETAILS AND NOTES REFER DRAWING No. 0191.
2. SEDIMENT AND EROSION CONTROL PLAN IS TO BE READ IN CONJUNCTION WITH THE ENVIRONMENT MANAGEMENT PLAN AND LANDSCAPING DRAWINGS.

ALL WORKS SUBJECT TO CITY OF GOLD COAST AND GOLD COAST WATER APPROVAL.

WARNING : EXISTING SERVICES
EXISTING SERVICES EXIST IN THIS VICINITY. THE CONTRACTOR IS TO CONTACT THE RELEVANT AUTHORITIES TO CONFIRM EXACT LOCATION OF SERVICES ON SITE PRIOR TO ANY EXCAVATION OR CONSTRUCTION COMMENCING.

EXISTING SERVICES PLOTTED FROM SURVEY AND POTHOLING. PLEASE REFER TO SURVEY/POTHOLING PLAN BY LAMBERT LOCATIONS FOR FURTHER DETAILS.

Issue	Description	DR	CH	VE	Date
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01	FOR INFORMATION	J.B	L.S	J.S	27.10.25

100mm on Original

Scales

0 1 2 4 6 8 10m

1 : 100

Surveyor: BENNETT + BENNETT

Architect: BDA ARCHITECTURE

Client: MARY ANNE DEVELOPMENTS

Status: FOR APPROVAL
CONSTRUCTION SUBJECT TO APPROVAL

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Drawn	J.BONAPOS	Original Size	A1
Designed	L.SCOTT	Height Datum	AHD
Project Manager	J.STOCKWELL	Grid	MGA/20-56
Verified	R.MULLIGAN		

Project: AVVA BROADBEACH
19-21 ANNE AVENUE,
BROADBEACH

Title: EROSION AND SEDIMENT CONTROL PLAN

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Project Number: 30265222

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SEDIMENT CONTROL

1. OPTIMUM BENEFIT MUST BE MADE OF EVERY OPPORTUNITY TO TRAP SEDIMENT WITHIN THE WORK SITE, & AS CLOSE AS PRACTICABLE TO ITS SOURCE.
2. SEDIMENT TRAPS MUST BE INSTALLED & OPERATED TO BOTH COLLECT & RETAIN SEDIMENT.
3. THE POTENTIAL SAFETY RISK OF A PROPOSED SEDIMENT TRAP TO SITE WORKERS & THE PUBLIC MUST BE GIVEN APPROPRIATE CONSIDERATION, ESPECIALLY THOSE DEVICES LOCATED WITHIN PUBLICLY ACCESSIBLE AREAS.
4. ALL REASONABLE & PRACTICABLE MEASURES MUST BE TAKEN TO PREVENT, OR AT LEAST MINIMISE, THE RELEASE OF SEDIMENT FROM THE SITE.
5. SUITABLE ALL-WEATHER MAINTENANCE ACCESS MUST BE PROVIDED TO ALL SEDIMENT CONTROL DEVICES.

SEDIMENT FENCE

1. SEDIMENT FENCE TO BE INSTALLED ALONG A LINE OF CONSTANT GROUND ELEVATION WHEREVER PRACTICAL.
2. BOTH ENDS OF THE SEDIMENT FENCE TO EXTEND UP THE SLOPE AT LEAST 1m.
3. SUPPORT POST TO BE SPACED A MAXIMUM 2m UNLESS THE FENCE IS SUPPORTED BY A TOP WIRE OR MESH BACKING, IN WHICH CASE 3m MAXIMUM SPACING.
4. FENCE 'RETURNS' SHALL BE INSTALLED AT MAXIMUM 20m SPACING IF FENCE IS INSTALLED ALONG THE CONTOUR, OTHERWISE 5 TO 10m MAXIMUM SPACING DEPENDING ON SLOPE.
5. MINIMUM 4 STAPLES OR TIE WIRES PER STAKE.

MATERIALS:

1. FABRIC: POLYPROPYLENE, POLYAMIDE, NYLON, POLYESTER, OR POLYETHYLENE WOVEN OR NON-WOVEN FABRIC, AT LEAST 700mm IN WIDTH & A MINIMUM UNIT WEIGHT OF 140GSM. ALL FABRICS TO CONTAIN ULTRAVIOLET INHIBITORS & STABILISERS TO PROVIDE A MINIMUM OF 6 MONTHS OF USEABLE CONSTRUCTION LIFE (ULTRAVIOLET STABILITY EXCEEDING 70%).
2. FABRIC REINFORCEMENTS: WIRE OR STEEL MESH MINIMUM 14-GAUGE WITH A MAXIMUM MESH SPACING OF 200mm.
3. SUPPORT POSTS/STAKES: 1500mm² (MIN.) HARDWOOD, 2500mm² (MIN.) SOFTWOOD, OR 1.5kg/m (MIN) STEEL STAR PICKETS SUITABLE FOR ATTACHING FABRIC.

INSTALLATION OF A SPILL-THROUGH WEIR:

1. LOCATE THE SPILL-THROUGH WEIR SUCH THAT THE WEIR CREST WILL BE LOWER THAN THE GROUND LEVEL AT EACH END OF THE FENCE.
2. ENSURE THE CREST OF THE SPILL-THROUGH WEIR IS AT LEAST 300mm ABOVE THE GROUND ELEVATION.
3. SECURELY TIE A HORIZONTAL CROSS MEMBER (WEIR) TO THE SUPPORT POSTS/STAKES EACH SIDE OF THE WEIR. CUT THE FABRIC DOWN THE SIDE OF EACH POST & FOLD THE FABRIC OVER THE CROSS MEMBER & APPROPRIATELY SECURE THE FABRIC.
4. INSTALL A SUITABLE SPLASH PAD &/OR CHUTE IMMEDIATELY DOWN-SLOPE OF THE SPILL-THROUGH WEIR TO CONTROL SOIL EROSION & APPROPRIATELY DISCHARGE THE CONCENTRATED FLOW PASSING OVER THE WEIR.

INSTALLATION FABRIC DROP INLET PROTECTION:

1. ENSURE THAT THE INSTALLATION OF THE SEDIMENT TRAP WILL NOT CAUSE UNDESIRABLE SAFETY OR FLOODING ISSUES.
2. WHERE POSSIBLE, EXCAVATE A 200x200mm TRENCH AROUND THE INLET STRUCTURE.
3. SPACE STAKES EVENLY AROUND THE PERIMETER OF THE STORMWATER INLET AT A MAXIMUM 1m SPACING & SECURELY DRIVE THEM INTO THE GROUND.
4. WHERE NECESSARY, INSTALL A HORIZONTAL SPILL-THROUGH WEIR TO LIMIT THE MAXIMUM HEIGHT WATER PONDING AROUND THE STRUCTURE.
5. ENSURE THE MAXIMUM POND HEIGHT WILL NOT CAUSE A SAFETY HAZARD, INCLUDING UNDESIRABLE FLOODING OF AN ADJACENT PROPERTY OR ROADWAY. WHEREVER PRACTICAL, THE SPILL-THROUGH WEIR SHOULD BE AT LEAST 300mm ABOVE GROUND LEVEL.
6. IF A SPILL THROUGH WEIR IS NOT INSTALLED, THEN FRAME THE TOP OF THE STAKES WITH HORIZONTAL CROSS MEMBERS.
7. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS.
8. PLACE THE BOTTOM 300mm OF FABRIC IN THE EXCAVATED TRENCH
9. SECURELY FASTEN THE FABRIC TO THE STAKES & CROSS MEMBERS AT THE FABRIC JOINT, OVERLAP THE FABRIC TO THE NEXT STAKE.
10. BACKFILL THE TRENCH WITH AT LEAST 200mm OF AGGREGATE OR COMPACTED SOIL. IF A TRENCH CANNOT BE EXCAVATED, LAY THE BOTTOM 300mm OF FABRIC EVENLY ON THE GROUND SURFACE & COVER WITH A 300mm LAYER OF AGGREGATE, NOT EARTH OR SOIL.
11. WHERE REQUIRED, INSTALL A FLOW CONTROL BUND TO MAINTAIN THE SPECIFIED POOL DEPTH & CONTROL THE MOVEMENT OF WATER.
12. TAKE ALL NECESSARY MEASURES TO MINIMISE THE SAFETY RISK CAUSED BY THE STRUCTURE & TO PREVENT UNSAFE ENTRY INTO THE STORMWATER INLET.

SITE ACCESS

1. PRIOR TO THE COMMENCEMENT OF SITE WORKS, THE LOCATION OF THE SITE ACCESS POINT(S) MUST BE VERIFIED WITH THE RELEVANT REGULATORY AUTHORITY.
2. SITE ACCESS MUST BE RESTRICTED TO THE MINIMUM PRACTICAL NUMBER OF LOCATIONS.
3. SITE EXIT POINTS MUST BE APPROPRIATELY MANAGED TO MINIMISE THE RISK OF SEDIMENT BEING TRACKED ONTO SEALED, PUBLIC ROADWAYS.
4. INSTALL SEDIMENT FENCING &/OR BARRIER FENCING TO CONFINE INGRESS TO & EGRESS FROM THE SITE TO STABILISED ACCESS POINTS ONLY.
5. STORMWATER RUNOFF FROM ACCESS ROADS & STABILISED ENTRY/EXIT POINTS MUST DRAIN TO AN APPROPRIATE SEDIMENT CONTROL DEVICE.

CONSTRUCTION EXIT - ROCK PAD

MATERIALS:

1. ROCK: WELL GRADED, HARD, ANGULAR, EROSION RESISTANT ROCK, NOMINAL DIAMETER OF 50 TO 75mm (SMALL DISTURBANCES) OR 100 TO 150mm (LARGE DISTURBANCES). ALL REASONABLE MEASURES MUST BE TAKEN TO OBTAIN ROCK OF NEAR UNIFORM SIZE.
2. FOOTPATH STABILISING AGGREGATE: 25 TO 50mm GRAVEL OR AGGREGATE.
3. GEOTEXTILE FABRIC: HEAVY-DUTY, NEEDLE -PUNCHED, NON-WOVEN FILTER CLOTH ('BIDIM' A24 OR EQUIVALENT).

INSTALLATION:

1. CLEAR THE LOCATION OF THE ROCK PAD, REMOVING STUMPS, ROOTS & OTHER VEGETATION TO PROVIDE A FIRM FOUNDATION SO THAT THE ROCK IS NOT PRESSED INTO SOFT GROUND. CLEAR SUFFICIENT WIDTH TO ALLOW PASSAGE OF LARGE VEHICLES, BUT CLEAR ONLY THAT NECESSARY FOR THE EXIT. DO NOT CLEAR ADJACENT AREAS UNTIL THE REQUIRED EROSION & SEDIMENT CONTROL DEVICES ARE IN PLACE.
2. IF THE EXPOSED SOIL IS SOFT, PLASTIC OR CLAYEY, PLACE A SUB-BASE OF CRUSHED ROCK OR A LAYER OF HEAVY-DUTY FILTER CLOTH TO PROVIDE A FIRM FOUNDATION.
3. PLACE THE ROCK PAD FORMING A MINIMUM 200mm THICK LAYER OF CLEAN, OPEN-VOID ROCK.
4. IF THE ASSOCIATED CONSTRUCTION SITE IS UP-SLOPE OF THE ROCKPAD, THUS CAUSING STORMWATER RUNOFF TO FLOW TOWARD THE ROCK PAD, THEN FORM A MINIMUM 300mm HIGH FLOW CONTROL BERM ACROSS THE ROCK PAD TO DIVERT SUCH RUNOFF TO A SUITABLE SEDIMENT TRAP.
5. THE LENGTH OF THE ROCK PAD SHOULD BE AT LEAST 15m WHERE PRACTICABLE, & AS WIDE AS THE FULL WIDTH OF THE ENTRY OR EXIT & AT LEAST 3m. THE ROCK PAD SHOULD COMMENCE AT THE EDGE OF THE OFF-SITE SEALED ROAD OR PAVEMENT.
6. FLARE THE END THE ROCK PAD WHERE IT MEETS THE PAVEMENT SO THAT THE WHEELS OF TURNING VEHICLES DO NOT TRAVEL OVER UNPROTECTED SOIL.
7. IF THE FOOTPATH IS OPEN TO PEDESTRIAN MOVEMENT, THEN COVER THE COARSE ROCK WITH FINE AGGREGATE OR GRAVEL, OR OTHERWISE TAKE WHATEVER MEASURES ARE NEEDED TO MAKE THE AREA SAFE.

FILTER SOCKS-CONCENTRATED FLOW

MATERIALS:

1. SOCKS: MINIMUM Ø200mm SYNTHETIC OR BIODEGRADABLE TUBES MANUFACTURED FROM NON-WOVEN OR COMPOSITE FABRIC SUITABLE FOR THE "FILTRATION" OF COURSE SEDIMENT.
2. FILL MATERIALS: STRAW, CANE MULCH, COMPOSTED MATERIAL (AS4454), COARSE SAND, OR CLEAN AGGREGATE

INSTALLATION:

1. ENSURE THE SOCKS ARE PLACED INDIVIDUALLY OR COLLECTIVELY (AS A SINGLE SEDIMENT TRAP) SUCH THAT:
   - i) LEAKAGE AROUND OR UNDER THE SOCKS IS MINIMISED;
   - ii) ADJOINING SOCKS ARE TIGHTLY BUTTED OR OVERLAPPED AT LEAST 450mm.
   - iii) THE SURFACE AREA OF POTENTIAL WATER PONDING UP-SLOPE OF EACH SEDIMENT TRAP IS MAXIMISED.
   - iv) TO THE MAXIMUM DEGREE PRACTICAL, ALL SEDIMENT-LADEN WATER WILL PASS THROUGH THE FORMED POND BEFORE FLOWING OVER THE DOWN-SLOPE END OF THE SEDIMENT TRAP.

DRAINAGE CONTROL

1. WHEREVER REASONABLE & PRACTICABLE, STORMWATER RUNOFF ENTERING THE SITE FROM EXTERNAL AREAS, & NON-SEDIMENT LADEN (CLEAN) STORMWATER RUNOFF ENTERING A WORK AREA OR AREA OF SOIL DISTURBANCE, MUST BE DIVERTED AROUND OR THROUGH THAT AREA IN A MANNER THAT MINIMISES SOIL EROSION & THE CONTAMINATION OF THAT WATER FOR ALL DISCHARGES UP TO THE SPECIFIED DESIGN STORM DISCHARGE.
2. DURING THE CONSTRUCTION PERIOD, ALL REASONABLE & PRACTICABLE MEASURES MUST BE IMPLEMENTED TO CONTROL FLOW VELOCITIES IN SUCH A MANNER THAT PREVENTS SOIL EROSION ALONG DRAINAGE PATHS & AT THE ENTRANCE & EXIT OF ALL DRAINS & DRAINAGE PIPES DURING ALL STORMS UP TO THE RELEVANT DESIGN STORM DISCHARGE.
3. TO THE MAXIMUM DEGREE REASONABLE & PRACTICABLE, ALL WATERS DISCHARGED DURING THE CONSTRUCTION PHASE MUST DISCHARGE ONTO STABLE LAND, IN A NON-EROSIVE MANNER, & AT A LEGAL POINT OF DISCHARGE.
4. DURING THE CONSTRUCTION PERIOD, ROOF WATER MUST BE MANAGED IN A MANNER THAT MINIMISES SOIL EROSION THROUGHOUT THE SITE, & SITE WETNESS WITHIN ACTIVE WORK AREAS.

EROSION CONTROL

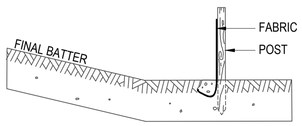
1. THE APPLICATION OF LIQUID-BASED DUST SUPPRESSION MEASURES MUST ENSURE THAT SEDIMENT-LADEN RUNOFF RESULTING FROM SUCH MEASURES DOES NOT CREATE A TRAFFIC OR ENVIRONMENTAL HAZARD.
2. ALL TEMPORARY EARTH BANKS, FLOW DIVERSION SYSTEMS, & EMBANKMENTS ASSOCIATED WITH CONSTRUCTED SEDIMENT BASINS MUST BE MACHINE-COMPACTED, SEEDED & MULCHED FOR THE PURPOSE OF ESTABLISHING A TEMPORARY VEGETATIVE COVER WITHIN 10 DAYS AFTER GRADING.
3. UNPROTECTED SLOPE LENGTHS MUST NOT EXCEED 80M, OR AN EQUIVALENT VERTICAL FALL OF 3M.
4. THE CONSTRUCTION & STABILISATION OF EARTH BATTERS STEEPER THAN 6:1 (H:V) MUST BE STAGED SUCH THAT NO MORE THAN 3 VERTICAL-METRES OF ANY BATTER IS EXPOSED TO RAINFALL AT ANY INSTANT.
5. SYNTHETIC REINFORCED EROSION CONTROL MATS & BLANKETS MUST NOT BE PLACED WITHIN, OR ADJACENT TO, RIPARIAN ZONES & WATERCOURSES IF SUCH MATERIALS ARE LIKELY TO CAUSE ENVIRONMENTAL HARM TO WILDLIFE OR WILDLIFE HABITATS.
6. A MINIMUM 60% GROUND COVER MUST BE ACHIEVED ON ALL NON-COMPLETED EARTHWORKS EXPOSED TO ACCELERATED SOIL EROSION IF FURTHER CONSTRUCTION ACTIVITIES OR SOIL DISTURBANCES ARE LIKELY TO BE SUSPENDED FOR MORE THAN 30 DAYS DURING THOSE MONTHS WHEN THE EXPECTED RAINFALL IS LESS THAN 30mm; MINIMUM 70% COVER WITHIN 30 DAYS IF BETWEEN 30 & 45mm; MINIMUM 70% COVER WITHIN 20 DAYS IF BETWEEN 45 & 100mm; MINIMUM 75% COVER WITHIN 10 DAYS IF BETWEEN 100 & 225mm; & MINIMUM 80% COVER WITHIN 5 DAYS IF GREATER THAN 225mm. (ALTERNATIVE TO ABOVE)

EROSION CONTROL MAT LINING

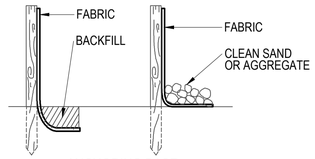
1. EROSION CONTROL MATS MUST BE STORED AWAY FROM DIRECT SUNLIGHT OR COVERED WITH ULTRAVIOLET PROTECTIVE SHEETING UNTIL THE SITE IS READY FOR THEIR INSTALLATION.
2. VEHICLES & CONSTRUCTION EQUIPMENT MUST NOT BE PERMITTED TO MANEUVER OVER THE MATTING UNLESS IT HAS BEEN COVERED WITH A LAYER OF SOIL OR GRAVEL AT LEAST 150mm THICK.
3. IF THE CHANNEL IS TO BE GRASSED, PREPARE A SMOOTH SEED BED OF APPROXIMATELY 75mm OF TOPSOIL, SEED, FERTILISE, WATER & RAKE TO REMOVE ANY REMAINING SURFACE IRREGULARITIES.
4. EXCAVATE A 300mm DEEP BY 150mm WIDE ANCHOR TRENCH ALONG THE FULL WIDTH OF THE UPSTREAM END OF THE AREA TO BE TREATED.
5. AT LEAST 300mm OF THE MAT MUST BE ANCHORED INTO THE TRENCH WITH THE ROLL OF MATTING RESTING ON THE GROUND UP-SLOPE OF THE TRENCH.
6. WHEN SPREADING THE MATS, AVOID STRETCHING THE FABRIC. THE MATS SHOULD REMAIN IN GOOD CONTACT WITH THE SOIL.
7. THE INSTALLATION PROCEDURE MUST ENSURE THAT THE MAT ACHIEVES & RETAINS GOOD CONTACT WITH THE SOIL.
8. DAMAGED MATTING MUST BE REPAIRED OR REPLACED.

TURF LINED

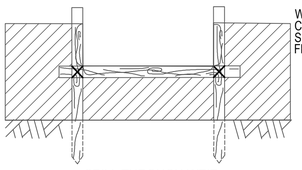
1. TURF SHOULD BE USED WITHIN 12 HOURS OF DELIVERY, OTHERWISE ENSURE THE TURF IS STORED IN CONDITIONS APPROPRIATE FOR THE WEATHER CONDITIONS (e.g. A SHADED AREA).
2. MOISTENING THE TURF AFTER IT IS UNROLLED WILL HELP MAINTAIN ITS VIABILITY.
3. TURF SHOULD BE LAID ON A MINIMUM 75mm BED OF ADEQUATELY FERTILISED TOPSOIL. RAKE THE SOIL SURFACE TO BREAK THE CRUST JUST BEFORE LAYING THE TURF.
4. DURING THE WARMER MONTHS, LIGHTLY IRRIGATE THE SOIL IMMEDIATELY BEFORE LAYING THE TURF.
5. ENSURE THE TURF IS NOT LAID ON GRAVEL, HEAVILY COMPACTED SOILS, OR SOILS THAT HAVE BEEN RECENTLY TREATED WITH HERBICIDES.
6. ENSURE THE TURF EXTENDS UP THE SIDES OF THE DRAIN AT LEAST 100mm ABOVE THE ELEVATION OF THE CHANNEL INVERT, OR AT LEAST TO A SUFFICIENT ELEVATION TO FULLY CONTAIN EXPECTED CHANNEL FLOW.
7. ON CHANNEL GRADIENTS OF 3:1(H:V) OR STEEPER, OR IN SITUATIONS WHERE HIGH FLOW VELOCITIES (i.e. VELOCITY >1.5m/s) ARE LIKELY WITHIN THE FIRST TWO WEEK FOLLOWING PLACEMENT, SECURE THE INDIVIDUAL TURF STRIPS WITH WOODEN OR PLASTIC PEGS.
8. ENSURE THAT INTIMATE CONTACT IS ACHIEVED & MAINTAINED BETWEEN THE TURF & THE SOIL SUCH THAT SEEPAGE FLOW BENEATH THE TURF IS AVOIDED.
9. WATER UNTIL THE SOIL IS WET 100mm BELOW THE TURF. THEREAFTER, WATERING SHOULD BE SUFFICIENT TO MAINTAIN & PROMOTE HEALTHY GROWTH.

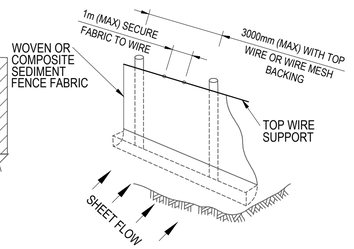


LOCATION OF FENCE RELATIVE TO BASE OF SLOPE

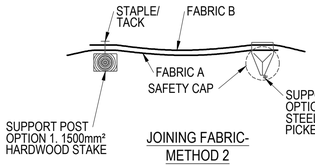


ANCHORING BASE OF FABRIC

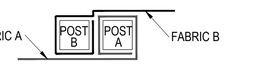

SPILL THROUGH WEIR



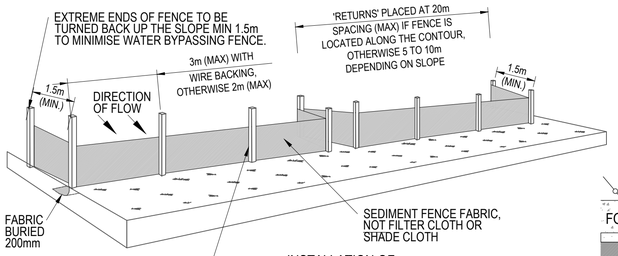
INSTALLATION WITH TOP WIRE SUPPORT



JOINING FABRIC- METHOD 2

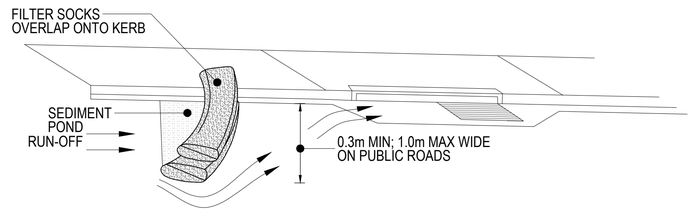


FABRIC TO FOLD AROUND EACH STAKE ONE FULL TURN. STAKE B TO BE DRIVEN TIGHTLY AGAINST STAKE A. THE TOPS OF BOTH STAKES TO BE SECURED WITH WIRE.
JOINING FABRIC - METHOD 1

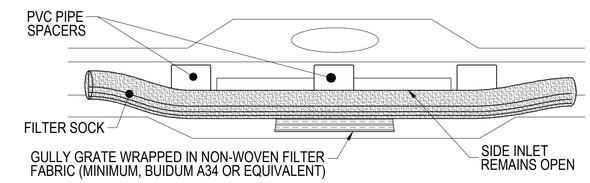


INSTALLATION OF SEDIMENT FENCE

SEDIMENT FENCE

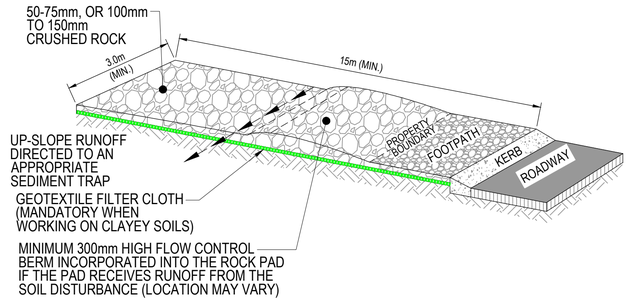


ON-GRADE KERB INLET SEDIMENT TRAP

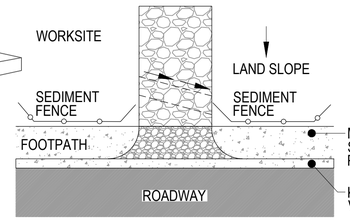


SAG INLET SEDIMENT TRAP

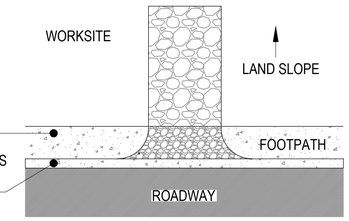
FILTER SOCKS - CONCENTRATED FLOWS



ROCK ENTRY/EXIT PAD FOR CONSTRUCTION SITES



ROCK PAD SLOPING TOWARDS THE ROAD



ROCK PAD SLOPING AWAY FROM ROAD

CONSTRUCTION EXIT - ROCK PAD
(CONSTRUCTION SITES ONLY)

Issue	Description	DR	CH	VE	Date
02	ISSUE FOR OPW APPROVAL	J.B	L.S	R.M	28.11.25
01	FOR INFORMATION	J.B	R.D	B.W	27.10.25

100mm on Original

Scales

Surveyor: BENNETT + BENNETT

Architect: BDA ARCHITECTURE

Client: MARY ANNE DEVELOPMENTS

Status: FOR APPROVAL
CONSTRUCTION SUBJECT TO APPROVAL

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Original Issue Signatures			
Drawn	J.BONAPOS	Original Size	A1
Designed	L.SCOTT	Height Datum	AHD
Project Manager	J.STOCKWELL	Grid	MGA/20-56
Verified	R.MULLIGAN		

Project: AVVA BROADBEACH
19-21 ANNE AVENUE, BROADBEACH

Title: EROSION AND SEDIMENT CONTROL DETAILS

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Project Number: 30265222

Drawing No.: AVA-AAP-DD-00-DRG-CI-0191

Issue: 02

Date Plotted: 28 Nov 2025 - 03:19PM File Name: C:\Users\ls94340\DC\ACCDocs\Arcadis ACC AU\AAU-30265222-AVVA\Project Files\10_WIP\10_Civil\STG_00\DRG\AVA-AAP-DD-00-DRG-CI-0191-ESCDetails.dwg

NOTES

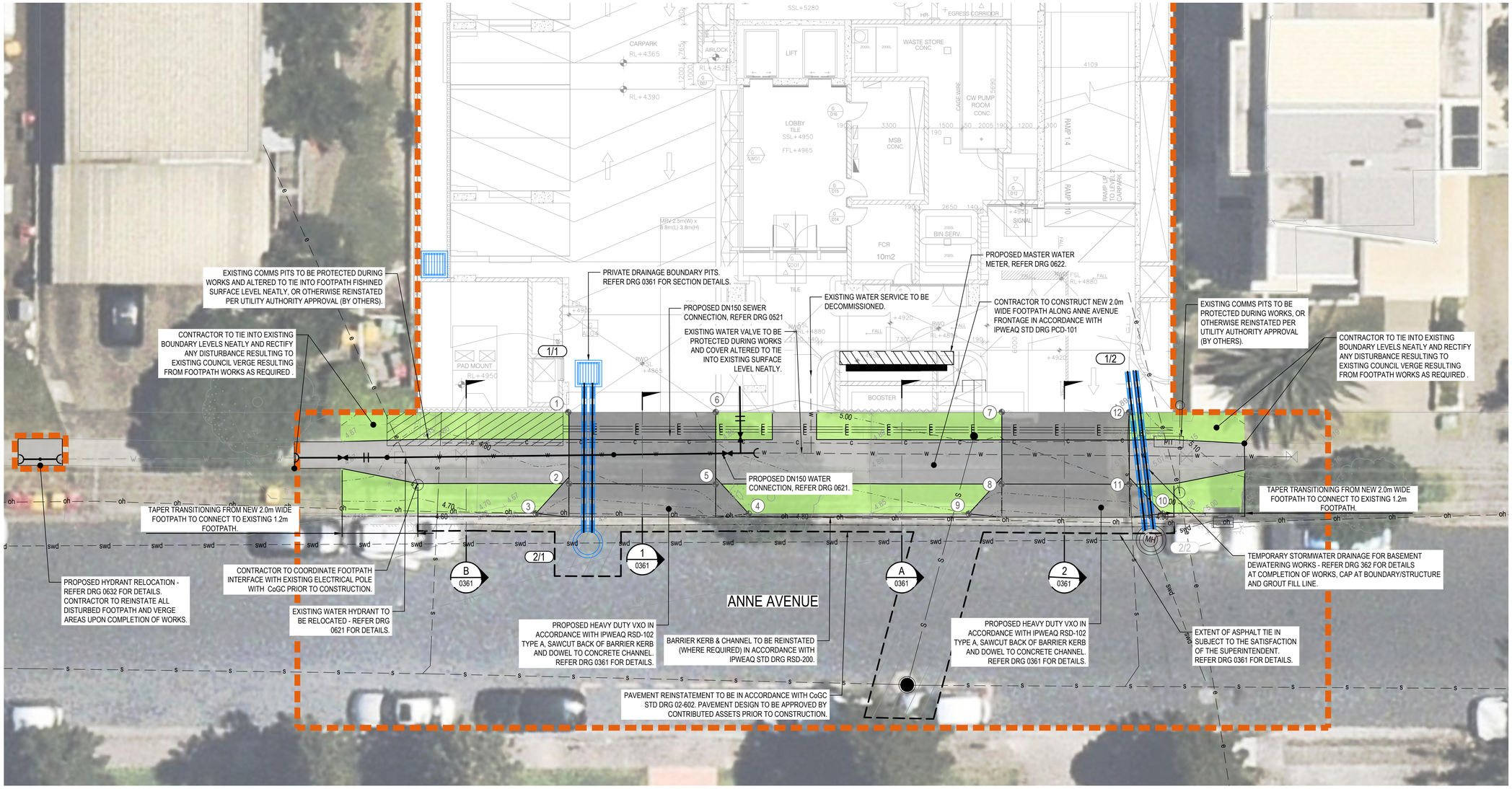
1. NOTWITHSTANDING THE DETAILS SHOWN ON THE DRAWINGS ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH COGC STANDARD SPECIFICATIONS AND DRAWINGS.
2. ALL DISTURBED AREAS SHALL BE TOPSOILED (MINIMUM THICKNESS 100mm) AND PROVIDED WITH GRADE B TURF UNLESS OTHERWISE SPECIFIED BY PUBLIC LANDSCAPE APPROVAL.
3. SUBGRADE TEST RESULTS TO BE FORWARDED TO SUPERINTENDENT FOR DETERMINATION OF BOX DEPTHS PRIOR TO EXCAVATION. TESTS SHALL INCLUDE SOAKED C.B.R. AND/OR OTHER TESTS AS REQUESTED BY THE SUPERINTENDENT.
4. THE CONTRACTOR SHALL OBTAIN THE LOCATION OF ALL SERVICES AND CONFIRM ANY DISCREPANCIES WITH THE SUPERINTENDENT PRIOR TO COMMENCEMENT OF WORKS. THE CONTRACTOR SHALL PROTECT THESE SERVICES PRIOR TO WORKING IN THE VICINITY. ANY DAMAGE WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
5. TEMPORARY WARNING SIGNS TO BE ERECTED AS PER DEPARTMENT OF TRANSPORT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
6. ALL TRENCH BACK FILL MATERIAL UNDER ROAD PAVEMENT SHALL BE CBR 15 OR APPROVED EQUIVALENT.
7. REINSTATE / RECONSTRUCT ALL EXISTING WATER VALVE / TELSTRA BOXES, SEWER MANHOLES ETC. TO MATCH FINISHED SURFACE LEVELS WITHIN THE AFFECTED WORK AREAS. CONTRACTOR SHALL SEEK APPROVALS FROM AUTHORITIES WHERE REQUIRED TO CONDUCT WORKS.
8. CONTRACTOR SHALL SEEK APPROVALS FROM AUTHORITIES WHERE REQUIRED TO CONDUCT WORKS.
9. REINSTATE THE AFFECTED WORK AREA TO PRIOR CONDITION INCLUDING FENCES, GATES, DRIVEWAYS ETC. WITH EXISTING OR MATCHING MATERIALS U.N.O BY SITE ENGINEER/COUNCIL.
10. PEDESTRIAN ENTRY AND VXO FINISHES PER LANDSCAPE OPW APPROVAL.
11. THE CONTRACTOR SHALL TIE ALL NEW FOOTPATHS AND VXOS NEATLY INTO EXISTING FOOTPATHS AND VERGE FEATURES TO ENSURE NO TRIP HAZARDS OR STORMWATER PONDING.

VERGE SPOT LEVELS

POINT	EASTING	NORTHING	LEVEL
1	542505.718	6899132.409	4.890
2	542509.342	6899129.233	4.778
3	542505.129	6899127.625	4.726
4	542514.600	6899129.464	4.816
5	542512.861	6899130.499	4.835
6	542512.234	6899133.691	4.954
7	542524.940	6899136.191	5.062
8	542525.566	6899133.002	4.950
9	542542.355	6899131.388	4.899
10	542532.969	6899131.038	4.975
11	542531.231	6899134.119	5.002
12	542530.591	6899137.303	5.114

LEGEND

- PROPOSED SURFACE CONTOURS
- EXISTING SURFACE CONTOURS
- PROPOSED BARRIER KERB & CHANNEL
- PROPOSED STORMWATER PIPE & PIT (CIVIL WORKS)
- PROPOSED STORMWATER PIPE & PIT (REFER BUILDING HYDRAULICS)
- PROPOSED SEWERAGE RETICULATION & INSPECTION OPENING (CIVIL WORKS)
- PROPOSED SEWERAGE RETICULATION (REFER BUILDING HYDRAULICS)
- PROPOSED WATER RETICULATION (CIVIL WORKS)
- PROPOSED WATER RETICULATION (REFER BUILDING HYDRAULICS)
- UNDERGROUND ELECTRICAL (REFER ELECTRICAL ENGINEER)
- EXISTING STORMWATER DRAINAGE
- EXISTING SEWERAGE RETICULATION
- EXISTING WATER RETICULATION
- EXISTING UNDERGROUND ELECTRICAL
- EXISTING OVERHEAD ELECTRICAL
- EXISTING COMMUNICATIONS
- EXISTING GAS
- SERVICE TO BE DECOMMISSIONED
- EXTENT OF WORK BOUNDARY
- EDGE OF BASEMENT WALL
- PAVEMENT CUTBACK LINE
- PROPOSED ASPHALT RECTIFICATION REFER TO COGC STD DRG 02-602 FOR SERVICES AND DRG 00211 ELSEWHERE
- PROPOSED CONCRETE FOOTPATH. REFER TO IPWEA STD DRG PCD-101
- PROPOSED CONCRETE VXO. REFER TO IPWEA STD DRG RSD-102
- PROPOSED TOP SOIL AND TURF/ LANDSCAPE REFER NOTE 2



ALL WORKS SUBJECT TO CITY OF GOLD COAST AND GOLD COAST WATER APPROVAL.

WARNING : EXISTING SERVICES
EXISTING SERVICES EXIST IN THIS VICINITY. THE CONTRACTOR IS TO CONTACT THE RELEVANT AUTHORITIES TO CONFIRM EXACT LOCATION OF SERVICES ON SITE PRIOR TO ANY EXCAVATION OR CONSTRUCTION COMMENCING.

EXISTING SERVICES PLOTTED FROM SURVEY AND POTHOLING. PLEASE REFER TO SURVEY/POTHOLING PLAN BY LAMBERT LOCATIONS FOR FURTHER DETAILS.

Issue	Description	DR	CH	VE	Date
03	ISSUE FOR OPW APPROVAL	J.B	L.S	R.M	28.11.25
02	70% DESIGN ISSUE	J.B	L.S	R.M	21.11.25
01	FOR INFORMATION	J.B	L.S	J.S	27.10.25

100mm on Original

Scales

0 1 2 4 6 8 10m

1 : 100

Surveyor: BENNETT + BENNETT

Architect: BDA ARCHITECTURE

Client: MARY ANNE DEVELOPMENTS

Status: FOR APPROVAL
CONSTRUCTION SUBJECT TO APPROVAL

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Original Issue Signatures			
Drawn	J.BONAPOS	Original Size	A1
Designed	L.SCOTT	Height Datum	AHD
Project Manager	J.STOCKWELL	Grid	MGA/20-56
Verified	R.MULLIGAN		

Project: AVVA BROADBEACH
19-21 ANNE AVENUE, BROADBEACH

Title: CIVIL WORKS PLAN

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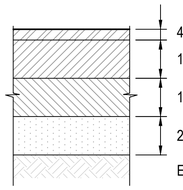
Project Number: 30265222

Drawing No.: AVA-AAP-DD-00-DRG-CI-0201

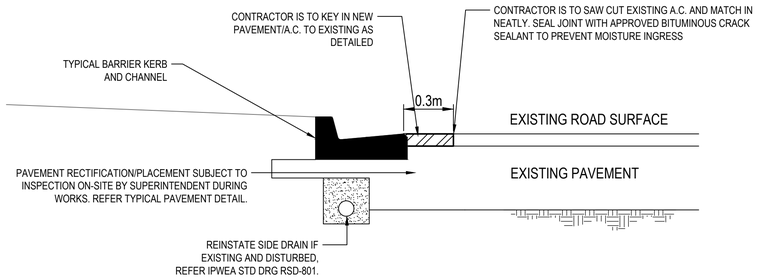
Issue: 03

Date Plotted: 28 Nov 2025 - 03:06PM File Name: C:\Users\ls94340\DC\ACCDocs\Arcadis ACC AU\AAU-30265222-AVVA\Project Files\10_WIP\10_Civil\STG_00\DRG\AVA-AAP-DD-00-DRG-CI-0201-CIWorksPlan.dwg



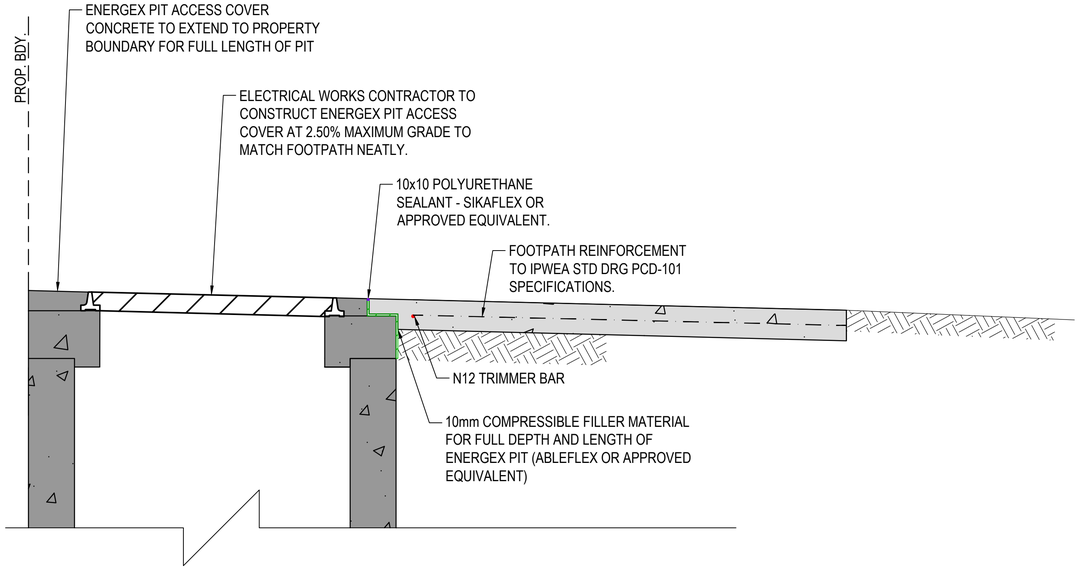
TYPICAL PAVEMENT SPECIFICATION

COLLECTOR STREET - ASSUMED CBR 3.0
TO BE CONFIRMED ON SITE ONCE PAVEMENT EXPOSED AND
TO THE SATISFACTION OF COUNCIL.
ALL TRENCH RESTORATION IN ACCORDANCE
WITH CoGC STD DWG 02-602 UNLESS OTHERWISE APPROVED



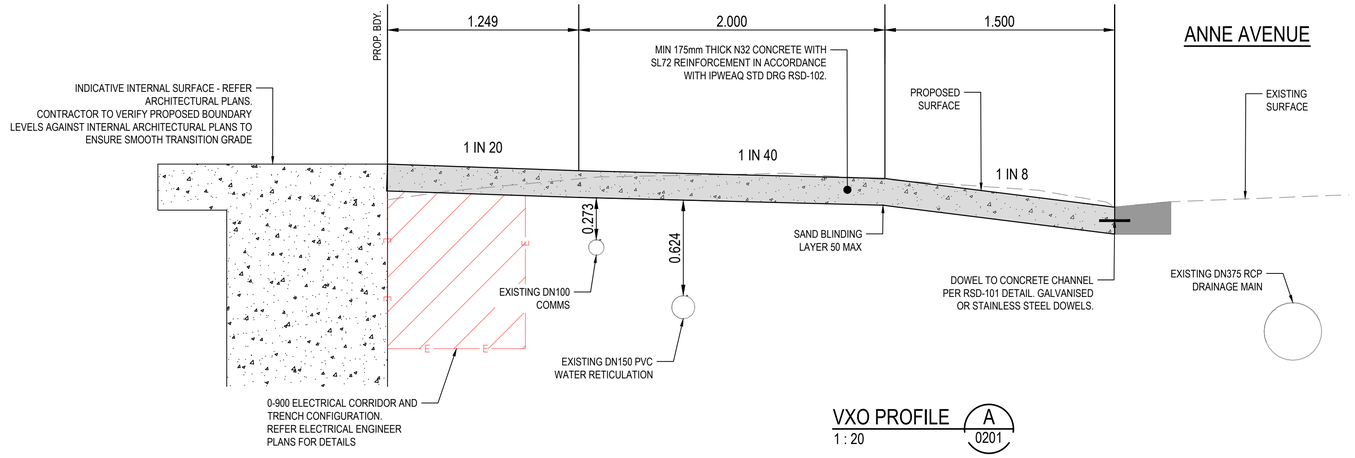
TYPICAL CONNECTION TO EXISTING PAVEMENT ADJACENT TO KERB

SHOWING LONGITUDINAL CONSTRUCTION DETAIL
FOR CONNECTION TO EXISTING PAVEMENT/A.C.
SCALE 1:20

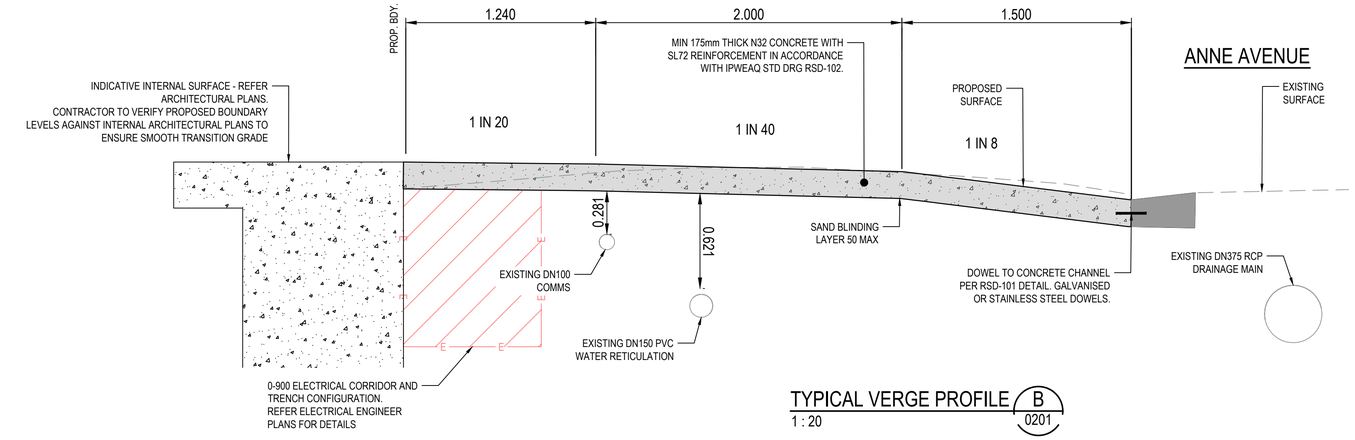


TYPICAL JUNCTION DETAIL - COUNCIL FOOTPATH TO ENERGEX PIT

N.T.S



VXO PROFILE A
1 : 20 — 0201



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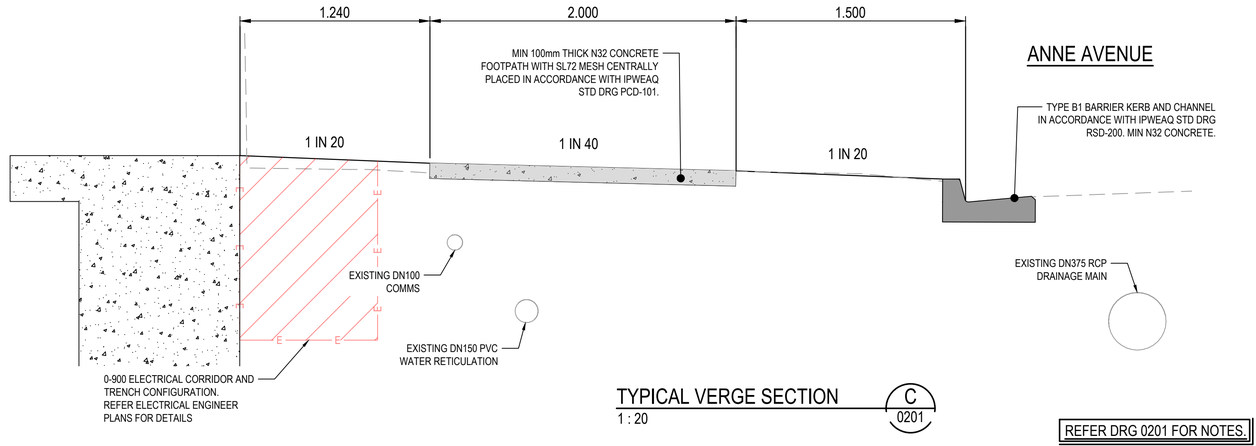
1 : 20 — 0201



TYPICAL VERGE SECTION C
1 : 20 — 0201

REFER DRG 0201 FOR NOTES.

Issue	Description	DR	CH	VE	Date
03	ISSUE FOR OPW APPROVAL	J.B	L.S	R.M	28.11.25
02	70% DESIGN ISSUE	J.B	L.S	R.M	21.11.25
01	FOR INFORMATION	J.B	L.S	J.S	27.10.25

Scales
0 0.5 1 1.5 2m
1 : 20

Surveyor: BENNETT + BENNETT

Architect: BDA ARCHITECTURE

Client: MARY ANNE DEVELOPMENTS

Status: FOR APPROVAL
CONSTRUCTION SUBJECT TO APPROVAL

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Original Issue Signatures			
Drawn	J.BONAPOS	Original Size	A1
Designed	L.SCOTT	Height Datum	AHD
Project Manager	J.STOCKWELL	Grid	MGA/20-56
Verified	R.MULLIGAN		

Project: AVVA BROADBEACH
19-21 ANNE AVENUE,
BROADBEACH

Title: CIVIL WORKS DETAILS
SHEET 1

ARCADIS
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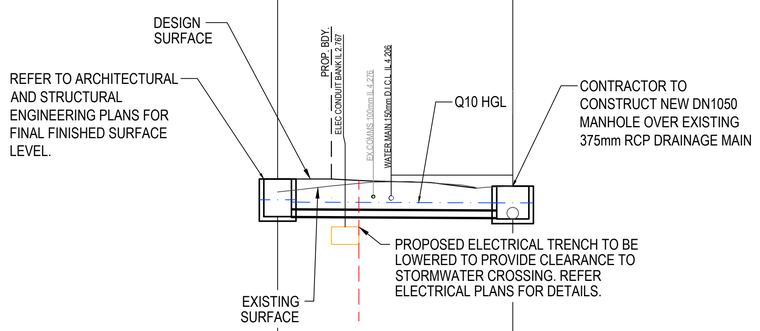
Project Number: 30265222

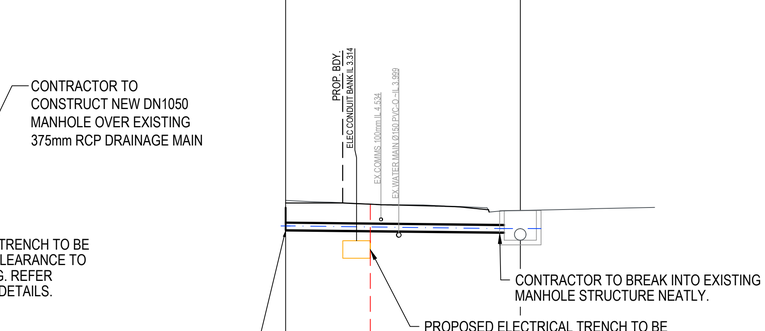
Drawing No.: AVA-AAP-DD-00-DRG-CI-0361

Issue: 03

100mm on Original

Date Plotted: 28 Nov 2025 - 02:11PM File Name: C:\Users\ls94340\DC\ACCDocs\Arcadis ACC AU\AAU-30265222-AVVA\Project Files\10_WIP\10_Civil\STG_00\DRG\AVA-AAP-DD-00-DRG-CI-0361-CIWDetails.dwg





CO-ORDINATES	542506.243E 6899134.300N				542507.698E 6899126.763N	542530.346E 6899139.145N				542532.649E 6899131.832N	
STRUCTURE NAME	1/1				2/1	1/2				2/2	
STRUCTURE DESCRIPTION	900x900 BOUNDARY PIT				IPWEA STD 1050mm DIA	PIPE CONNECTION				EXISTING MANHOLE 1050mm DIA	
PIPE SIZE (mm)	(2x)225					(2x)225					
PIPE CLASS	PVC SN8					PVC SN8					
PIPE GRADE (%)	0.50%					1.00%					
PIPE SLOPE (1 in X)	200.0					100.0					
FULL PIPE FLOW VELOCITY (m/s)	0.63					0.63					
PART PIPE FLOW VELOCITY (m/s)	0.88					1.16					
DATUM RL	-10.000					-9.000					
HYDRAULIC GRADE LEVEL	4.224	4.146			4.122	4.370				4.282	
PIPE FLOW (cumecs)	0.050					0.050					
PIPE CAPACITY AT GRADE (cumecs)	0.064					0.090					
DEPTH TO INVERT	1.226			1.030	1.070	0.225			0.711	0.971	
INVERT LEVEL OF DRAIN	3.674			3.636	3.596	4.239			4.162	3.902	
DESIGN (& EXISTING) SURFACE LEVEL	4.900			4.666		4.464 (5.202)			4.873		
CHAINAGES	0.000	7.676		7.676		0.000	7.666		7.666		
LINE	1					2					

REFER DRG 0201 FOR NOTES.

Issue	Description	DR	CH	VE	Date
02	ISSUE FOR OPW APPROVAL	L.B	L.S	J.S	28.11.25
01	70% DESIGN ISSUE	J.B	L.S	J.S	21.11.25

Scales

0 0.5 1 1.5 2m

1 : 20

100mm on Original

Surveyor: BENNETT + BENNETT

Architect: BDA ARCHITECTURE

Client: MARY ANNE DEVELOPMENTS

Status: FOR APPROVAL
CONSTRUCTION SUBJECT TO APPROVAL

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Original Issue Signatures

Drawn	J.BONAPOS	Original Size	A1
Designed	L.SCOTT	Height Datum	AHD
Project Manager	J.STOCKWELL	Grid	MGA/20-56
Verified	R.MULLIGAN		

Project: AVVA BROADBEACH
19-21 ANNE AVENUE,
BROADBEACH

Title: CIVIL WORKS DETAILS
SHEET 2

ARCADIS
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Tel No: +61 7 5503 4800
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Project Number: 30265222

Drawing No.: AVA-AAP-DD-00-DRG-CI-0362

Issue: 02

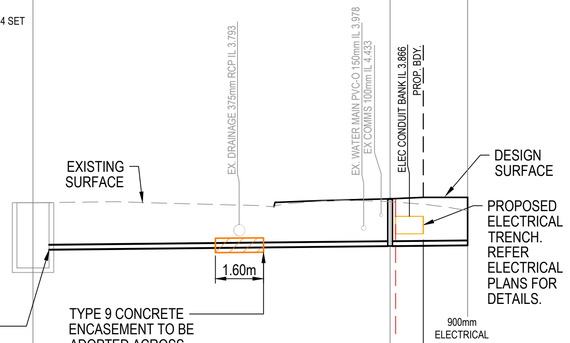
Date Plotted: 28 Nov 2025 - 02:10PM File Name: C:\Users\ls94340\DC\ACCDocs\Arcadis ACC AU\AAU-30265222-AVVA\Project Files\10_WIP\10_Civil\STG_00\DRG\AVA-AAP-DD-00-DRG-CI-0361-CIWDetails.dwg

STRUCTURE CO-ORDINATES		E542523.142 N6899123.253		E542520.968 N6899134.305	E542520.485 N6899136.755
MANHOLE NO.		1/S1		2/S1	3/S1
MANHOLE TYPE		EX DN1050		I/O	PC
LID TYPE					
JUNCTION LINE					
DROP TYPE		X		V	
DEPTH TO HC					1.513
HC INVERT LEVEL					3.494
HC TYPE					A
HC LOT No					
CH. FROM D/S MH					2.532

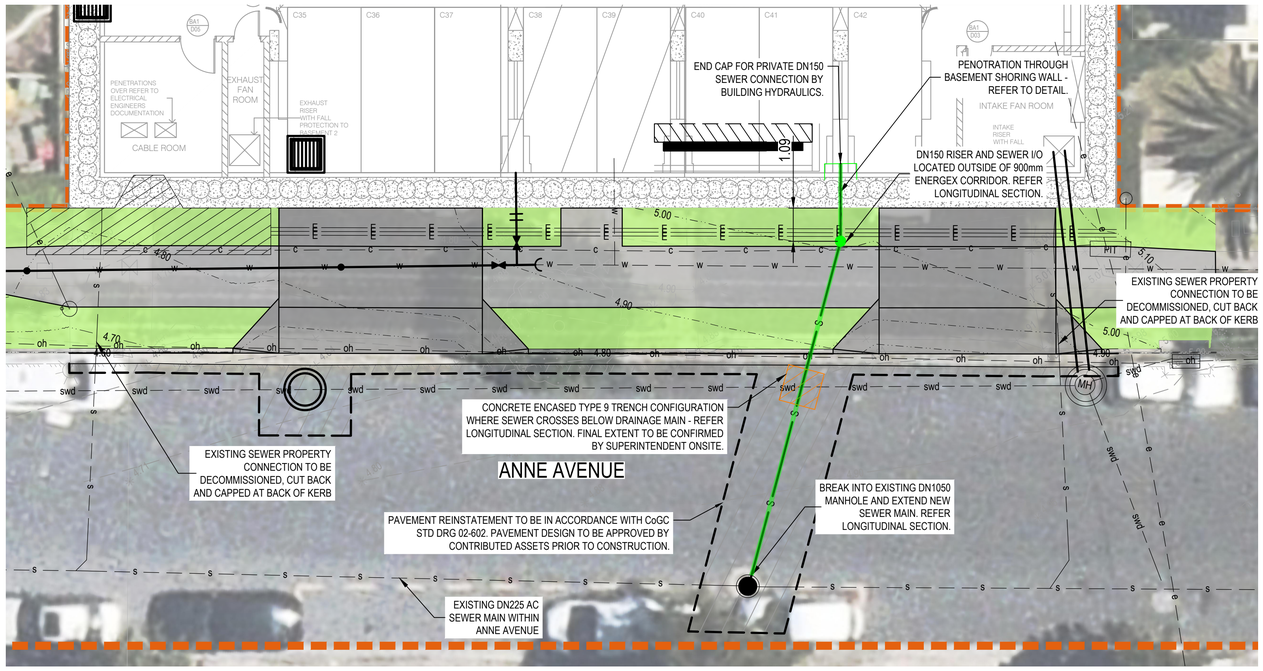
MAINTENANCE HOLE TYPES:
P1-P3 = PRE-CAST CONCRETE
A = CAST IN-SITU CONCRETE 1.050Ø
B = CAST IN-SITU CONCRETE 1.200Ø
C = CAST IN-SITU CONCRETE 1.500Ø
G = uPVC MAINTENANCE SHAFT 0.300Ø
FOR MAINTENNANCE SHAFT TYPES REFER SEQ-SEW-1314 SET
FOR MH COVER TYPES REFER SEQ-SEW-1308 SET

LOCATION:
OP = OPEN SPACE RD = ROAD
PP = PRIVATE PROPERTY FP = FOOTPATH/VERGE

FOR SEWER EMBEDMENT SUPPORT TYPE 3 DETAILS REFER SEQ WATER DWG SEQ-SEW-1201-1. UNLESS OTHERWISE DIRECTED ON SITE



DATUM R.L.		-3.0			
LOCATION		RD	FP		PP
DIAMETER		DN150PVC SN8			
GRADE (1 IN ...)		100			100
LENGTH		11.659m			2.532m
JUNCTION INVERT LEVEL					
DEPTH TO INVERT	2.128	1.528		1.541	1.516
INVERT LEVEL	2.752	3.352		3.469	3.494
FINISHED SURFACE LEVEL				5.010	5.010
NATURAL SURFACE LEVEL	4.880			4.913	4.626
CHAINAGE		0.000	11.659	11.659	2.532 14.191
LINE NUMBER		LINE S1			



SEWER LAYOUT PLAN
1 : 100

SHORING WALL PENETRATION TYPICAL DETAIL
SCALE 1:20

LEGEND

- PROPOSED SURFACE CONTOURS
- EXISTING SURFACE CONTOURS
- PROPOSED BARRIER KERB & CHANNEL
- PROPOSED STORMWATER PIPE & PIT (CIVIL WORKS)
- PROPOSED STORMWATER PIPE & PIT (REFER BUILDING HYDRAULICS)
- PROPOSED SEWERAGE RETICULATION & INSPECTION OPENING (CIVIL WORKS)
- PROPOSED SEWERAGE RETICULATION (REFER BUILDING HYDRAULICS)
- PROPOSED WATER RETICULATION (CIVIL WORKS)
- PROPOSED WATER RETICULATION (REFER BUILDING HYDRAULICS)
- UNDERGROUND ELECTRICAL (REFER ELECTRICAL ENGINEER)
- EXISTING STORMWATER DRAINAGE
- EXISTING SEWERAGE RETICULATION
- EXISTING WATER RETICULATION
- EXISTING UNDERGROUND ELECTRICAL
- EXISTING OVERHEAD ELECTRICAL
- EXISTING COMMUNICATIONS
- EXISTING GAS
- SERVICE TO BE DECOMMISSIONED
- EXTENT OF WORK BOUNDARY
- EDGE OF BASEMENT WALL
- PAVEMENT CUTBACK LINE
- PROPOSED ASPHALT RECTIFICATION REFER TO COGC STD DRG 02-602 FOR SERVICES AND DRG 00211 ELSEWHERE
- PROPOSED CONCRETE FOOTPATH. REFER TO IPWEA STD DRG PCD-101
- PROPOSED CONCRETE VXO. REFER TO IPWEA STD DRG RSD-102
- PROPOSED TOP SOIL AND TURF/ LANDSCAPE REFER NOTE 2
- STORMWATER TREATMENT DEVICE

SCHEDULE OF LIVE SEWER WORKS - SITE PROPERTY CONNECTIONS (PRELIMINARY)

METHODOLOGY TO BE DISCUSSED AND AGREED WITH COUNCIL'S CONTRIBUTED ASSETS TEAM AT THE PRE-START MEETING / THROUGHOUT CONSTRUCTION

DESCRIPTION
1. CONTRACTOR TO ESTABLISH LIVE WORKS METHODOLOGY WITH CoGC W& W (i.e. NIGHT WORKS AND TEMPORARY PLUGGING UPSTREAM, OR TEMPORARY BYPASS, ETC.).
2. CONTRACTOR TO IMPLEMENT PRE-WORK MEASURES
3. CONTRACTOR TO EXPOSE EXISTING SEWER AND CONNECTION POINT, REMOVE REDUNDANT PIPEWORK, CONFIRM GROUND CONDITIONS AND CONNECT FLEXIBLE COUPLING TO EXISTING PROPERTY CONNECTION FOR REUSE.
4. CONTRACTOR TO CONSTRUCT DN150 PROPERTY CONNECTION UP TO SEWER I/O AND TERMINATE WITH END CAP.
5. CONTRACTOR SHALL CONSIDER TIMING OF WORKS TO AVOID PEAK SEWAGE FLOW.

GENERAL NOTES

1. THE CONTRACTOR SHALL OBTAIN THE LOCATION OF ALL SERVICES AND PROTECT THESE SERVICES PRIOR TO COMMENCEMENT OF ANY WORKS ANY DAMAGE WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. CONTRACTOR TO ADVISE ANY DISCREPANCIES OF THE LOCATION OF SERVICES TO THE SUPERVISING ENGINEER.
2. THE CONTRACTOR SHALL ADVISE THE SUPERINTENDENT IMMEDIATELY IF MIN. & MAX. DEPTHS AS DEFINED BY SEQ WATER ARE EXCEEDED DURING CONSTRUCTION.
3. ALL WORK & MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SEQ SEWERAGE CODE SPECIFICATIONS & STANDARDS.
4. THE CONSTRUCTION ON THE SEWERAGE WORK SHOWN ON THIS DRAWING SHALL BE SUPERVISED BY AN ENGINEER WHO HAS RPEQ REGISTRATION. SEWERAGE WORKS NOT COMPLYING WITH THE REQUIREMENT WILL NOT BE PERMITTED TO CONNECT INTO THE SEQ SERVICE PROVIDER SEWERAGE SYSTEM.
5. ALL WORK ASSOCIATED WITH LIVE SEWERS OR MAINTENANCE HOLES SHALL BE CARRIED OUT BY THE CONTRACTOR UNDER SUPERVISION OF WATER & WASTE.
6. SEWER SHALL BE DISUSED / ABANDONED IN ACCORDANCE WITH PREOCEDURES SET OUT IN THE SEQ SEWER CODE.
7. THE CONTRACTOR IS TO COMPLETE AND OBTAIN APPROVAL FOR COUNCIL'S APPLICATION TO WORK ON THE CITY'S INFRASTRUCTURE.
8. BENCH MARK & LEVELS TO AHD.

SAFETY

1. THE DESIGN & CONSTRUCTION OF THE WORKS SHALL COMPLY WITH ALL QUEENSLAND LEGISLATION.

ALL WORKS SUBJECT TO CITY OF GOLD COAST AND GOLD COAST WATER APPROVAL.

WARNING : EXISTING SERVICES
EXISTING SERVICES EXIST IN THIS VICINITY. THE CONTRACTOR IS TO CONTACT THE RELEVANT AUTHORITIES TO CONFIRM EXACT LOCATION OF SERVICES ON SITE PRIOR TO ANY EXCAVATION OR CONSTRUCTION COMMENCING.

EXISTING SERVICES PLOTTED FROM SURVEY AND POTHOLING. PLEASE REFER TO SURVEY/POTHOLING PLAN BY BENNETT + BENNETT FOR FURTHER DETAILS.

Issue	Description	DR	CH	VE	Date
03	ISSUE FOR OPW APPROVAL	J.B	L.S	R.M	28.11.25
02	70% DESIGN ISSUE	J.B	L.S	R.M	21.11.25
01	FOR INFORMATION	J.B	L.S	J.S	27.10.25

100mm on Original

Scales
0 0.5 1 1.5 2m
1 : 20
0 1 2 4 6 8 10m
1 : 100

Surveyor: BENNETT + BENNETT
Architect: BDA ARCHITECTURE
Client: MARY ANNE DEVELOPMENTS

Status: FOR APPROVAL
CONSTRUCTION SUBJECT TO APPROVAL

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Original Issue Signatures			
Drawn	J.BONAPOS	Original Size	A1
Designed	L.SCOTT	Height Datum	AHD
Project Manager	J.STOCKWELL	Grid	MGA/20-56
Verified	R.MULLIGAN		

Project: AVVA BROADBEACH
19-21 ANNE AVENUE, BROADBEACH

Title: SEWERAGE RETICULATION PLAN

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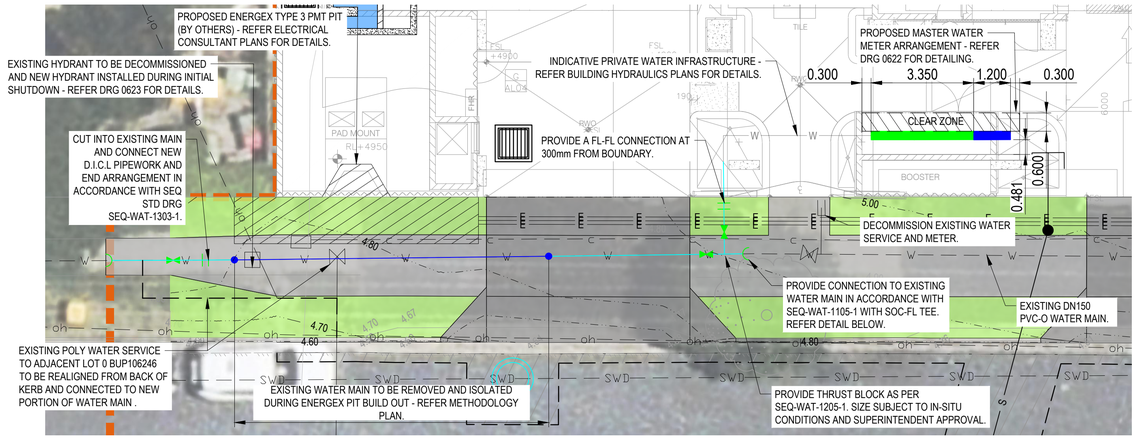
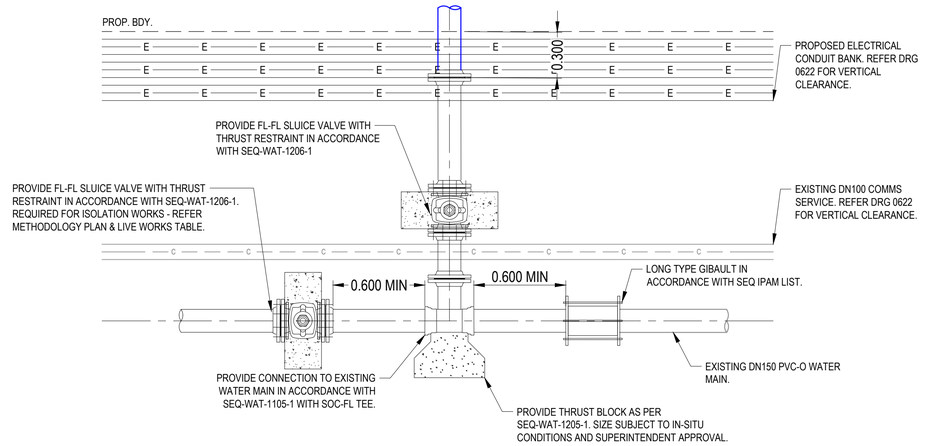
Project Number: 30265222
Drawing No.: AVA-AAP-DD-00-DRG-CI-0521
Issue: 03

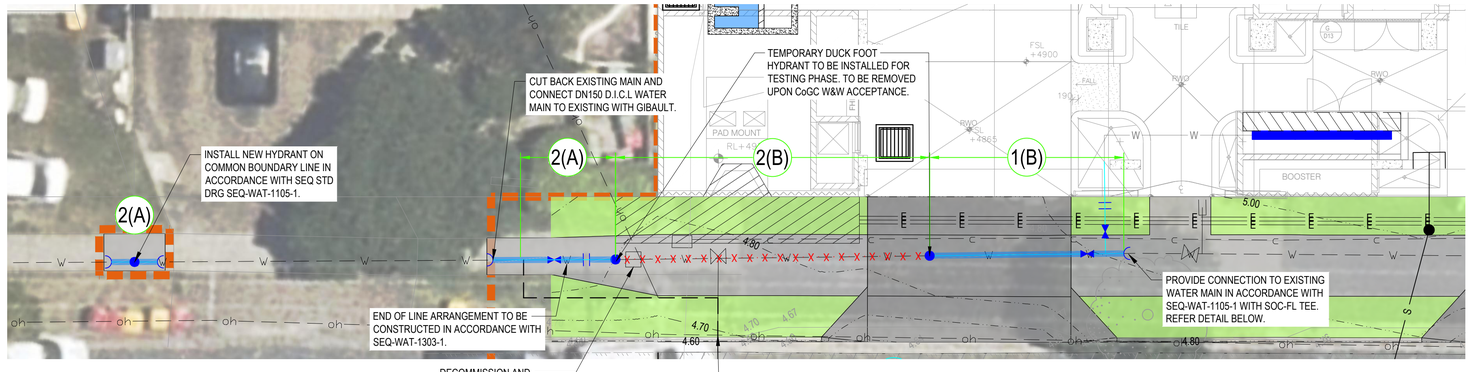
Date Plotted: 28 Nov 2025 - 02:41PM File Name: C:\Users\ls94340\DC\ACCDocs\Arcadis ACC AU\AAU-30265222-AVVA\Project Files\10_WIP\10_Civil\STG_00\DRG\AVA-AAP-DD-00-DRG-CI-0521-SEWLayoutPlan.dwg



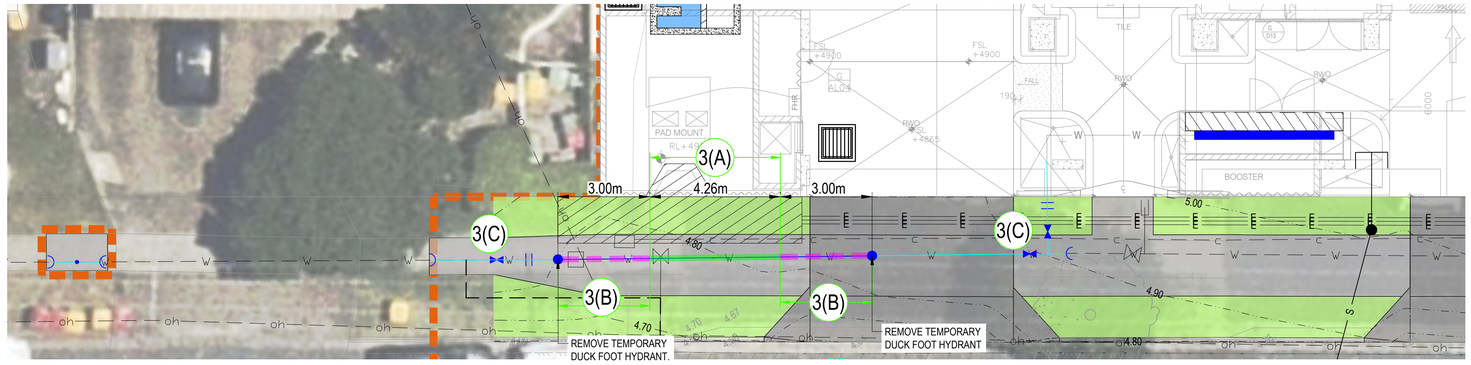
WATER LAYOUT PLAN
1 : 100



WATER CONNECTION - DETAIL SECTION A
1 : 20



METHODOLOGY PLAN - PHASE 1
1 : 100



METHODOLOGY PLAN - PHASE 2
1 : 100

PHASING KEY

- PHASE 1 - LIVE CONNECTION WORKS
- PHASE 2A - REPLACEMENT MAIN
- PHASE 2B - LIVENING WORKS

ALL PIPE TO BE PRECHLORINATED PN35 D.I.C.L IN ACCORDANCE WITH SEQ CODE IPAM LIST

EXISTING SERVICES PLOTTED FROM SURVEY AND POTHOLING. PLEASE REFER TO SURVEY/POTHOLING PLAN BY BENNETT + BENNETT FOR FURTHER DETAILS.

ALL WORKS SUBJECT TO CITY OF GOLD COAST AND GOLD COAST WATER APPROVAL.

WARNING : EXISTING SERVICES
EXISTING SERVICES EXIST IN THIS VICINITY. THE CONTRACTOR IS TO CONTACT THE RELEVANT AUTHORITIES TO CONFIRM EXACT LOCATION OF SERVICES ON SITE PRIOR TO ANY EXCAVATION OR CONSTRUCTION COMMENCING.

MINIMUM COVER TO WATER MAINS

LOCATION	≦Ø200mm NB
NON-ROADWAYS	600mm
SEALED ROADS	600mm
MAJOR ROADS / EMBANKMENT	750mm
FREEWAYS	1200mm

SCHEDULE OF LIVE WATER WORKS (PRELIMINARY)

METHODOLOGY TO BE DISCUSSED AND AGREED WITH COUNCIL'S CONTRIBUTED ASSETS TEAM AT THE PRE-START MEETING / THROUGHOUT CONSTRUCTION

NO.	WORKS DESCRIPTION	WATER DIA	CONNECTION DEPTH
1(A)	CONTRACTOR TO ARRANGE NECESSARY LIVE WORKS PERMITS AND TRAFFIC CONTROL PRIOR TO PRESTART MEETING.	150mm	850mm
1(B)	CONTRACTOR TO COORDINATE TO ARRANGE SHUTDOWN OF WORKABLE SECTION OF EXISTING MAIN AND EXPOSE IN PREPARATION. ONCE SHUTDOWN IS COMMENCED, CONTRACTOR TO MAKE CONNECTION IN ACCORDANCE WITH CUT-IN VALVE METHODOLOGY AS OUTLINED IN SEQ STD DRG SEQ-WAT-1105-1 AND EXTEND CONNECTION MAIN INTO DEVELOPMENT.		
2(A)	DURING 1(B) SHUTDOWN, CONTRACTOR TO CUT BACK EXISTING MAIN AND INSTALL END OF LINE ARRANGEMENT VALVE, PUDDLE FLANGE AND TERMINATING TEMPORRARY DUCKFOOT HYDRANT GENERALLY IN ACCORDANCE WITH SEQ-WAT-1303-1.		
2(B)	ONCE VALVING INSTALLED, CONTRACTOR TO REMOVE REDUNDANT WATER MAIN AND COMMENCE ENERGEX PIT CONSTRUCTION.		
3(A)	UPON COMPLETION OF ELECTRICAL PIT WORKS, CONTRACTOR TO LAY REPLACEMENT PORTION OF WATER MAIN AS SHOWN. .CONTRACTOR TO NOTIFY SUPERINTENDENT/CoGC W&W FOR PRACTICAL COMPLETION INSPECTION. NOTE - TESTING METHODOLOGY TO BE CONFIRMED AT PRESTART MEETING.		
3(B)	UPON ACCEPTANCE BY CoGC W&W, CONTRACTOR TO REMOVE TEMPORARY HYDRANTS AND CONNECT UP REPLACEMENT MAIN TO INSTALLED VALVES UNDER CoGC W&W SUPERVISION.		
3(C)	UPON ACCEPTANCE BY LOCAL AUTHORITY, SWITCH VALVES ON AND LIVEN WATER MAIN.		

LEGEND

- PROPOSED SURFACE CONTOURS
- EXISTING SURFACE CONTOURS
- PROPOSED BARRIER KERB & CHANNEL
- SWD — PROPOSED STORMWATER PIPE & PIT (CIVIL WORKS)
- SWD — PROPOSED STORMWATER PIPE & PIT (REFER BUILDING HYDRAULICS)
- S — PROPOSED SEWERAGE RETICULATION & INSPECTION OPENING (CIVIL WORKS)
- S — PROPOSED SEWERAGE RETICULATION (REFER BUILDING HYDRAULICS)
- W — PROPOSED WATER RETICULATION (CIVIL WORKS)
- W — PROPOSED WATER RETICULATION (REFER BUILDING HYDRAULICS)
- E — UNDERGROUND ELECTRICAL (REFER ELECTRICAL ENGINEER)
- swd — EXISTING STORMWATER DRAINAGE
- s — EXISTING SEWERAGE RETICULATION
- w — EXISTING WATER RETICULATION
- e — EXISTING UNDERGROUND ELECTRICAL
- oh — EXISTING OVERHEAD ELECTRICAL
- c — EXISTING COMMUNICATIONS
- g — EXISTING GAS
- SERVICE TO BE DECOMMISSIONED
- EXTENT OF WORK BOUNDARY
- EDGE OF BASEMENT WALL
- PAVEMENT CUTBACK LINE
- PROPOSED ASPHALT RECTIFICATION REFER TO COGC STD DRG 02-602 FOR SERVICES AND DRG 00211 ELSEWHERE
- PROPOSED CONCRETE FOOTPATH. REFER TO IPWEA STD DRG PCD-101
- PROPOSED CONCRETE VXO. REFER TO IPWEA STD DRG RSD-102
- PROPOSED TOP SOIL AND TURF/ LANDSCAPE REFER NOTE 2
- STORMWATER TREATMENT DEVICE

GENERAL NOTES

1. ALL FITTINGS SHALL BE D.I.CLASS PN16 FL-FL TO AS 2280-1986 UNLESS NOTED OTHERWISE.
2. ANCHOR BLOCKS SHALL BE INSTALLED AT ALL BENDS, JUNCTIONS AND DEAD ENDS.
3. THE CONTRACTOR SHALL OBTAIN THE LOCATION OF ALL SERVICES AND PROTECT THESE SERVICES PRIOR TO WORKING IN THE VICINITY. ANY DAMAGE WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
4. ADOPT LIP OF KERB OR SHOULDER OF ROAD AS PERMANENT LEVEL.
5. COVER ON MAINS FROM PERMANENT LEVEL TO BE AS SHOWN IN SEQ-WAT-1200-2.
6. ALL MATERIALS USED IN THE WORKS SHALL COMPLY WITH THE SEQ-SP'S ACCEPTED PRODUCTS AND MATERIALS LIST OR BE APPROPRIATELY SHOWN, LISTED & DEFINED IN THE ENGINEERING SUBMISSION SO THAT THE ALTERNATIVE PRODUCT OR MATERIAL CAN BE ASSESSED AND IF APPROPRIATE, APPROVED BY SEQ-SP.
7. TEST / CHLORINATION POINTS TO BE INSTALLED IN ACCORDANCE WITH STANDARD DRAWING NO.SEQ-WAT-1410-1.
8. THE CONSTRUCTION OF THE WATER RETICULATION WORK SHOWN ON THIS DRAWING MUST BE SUPERVISED BY AN ENGINEER WHO HAS RPEQ REGISTRATION. WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT TO THE RETICULATION SYSTEM.
9. CONTRACTOR TO PROVIDE KERB MARKERS TO SEQ-CODE REQUIREMENT. REFER DRG 0381.
10. THE CONTRACTOR IS TO COMPLETE AND OBTAIN APPROVAL FOR COUNCIL'S APPLICATION TO WORK ON THE CITY'S INFRASTRUCTURE.
11. EXISTING REDUNDANT WATER METERS MUST BE DISCONNECTED TO SATISFACTION OF GOLD COAST WATER & WASTE (GCWW).

SAFETY

1. THE DESIGN & CONSTRUCTION OF THE WORKS SHALL COMPLY WITH ALL QUEENSLAND LEGISLATION.

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01	FOR INFORMATION	J.B	L.S	J.S	27.10.25

100mm on Original

Scales

0 0.5 1 1.5 2m
1 : 20
0 1 2 4 6 8 10m
1 : 100

Surveyor: BENNETT + BENNETT

Architect: BDA ARCHITECTURE

Client: MARY ANNE DEVELOPMENTS

Status: FOR APPROVAL
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Original Issue Signatures			
Drawn	J.BONAPOS	Original Size	A1
Designed	L.SCOTT	Height Datum	AHD
Project Manager	J.STOCKWELL	Grid	MGA/20-56
Verified	R.MULLIGAN		

Project: AVVA BROADBEACH
19-21 ANNE AVENUE, BROADBEACH

Title: WATER CONNECTION DETAILS

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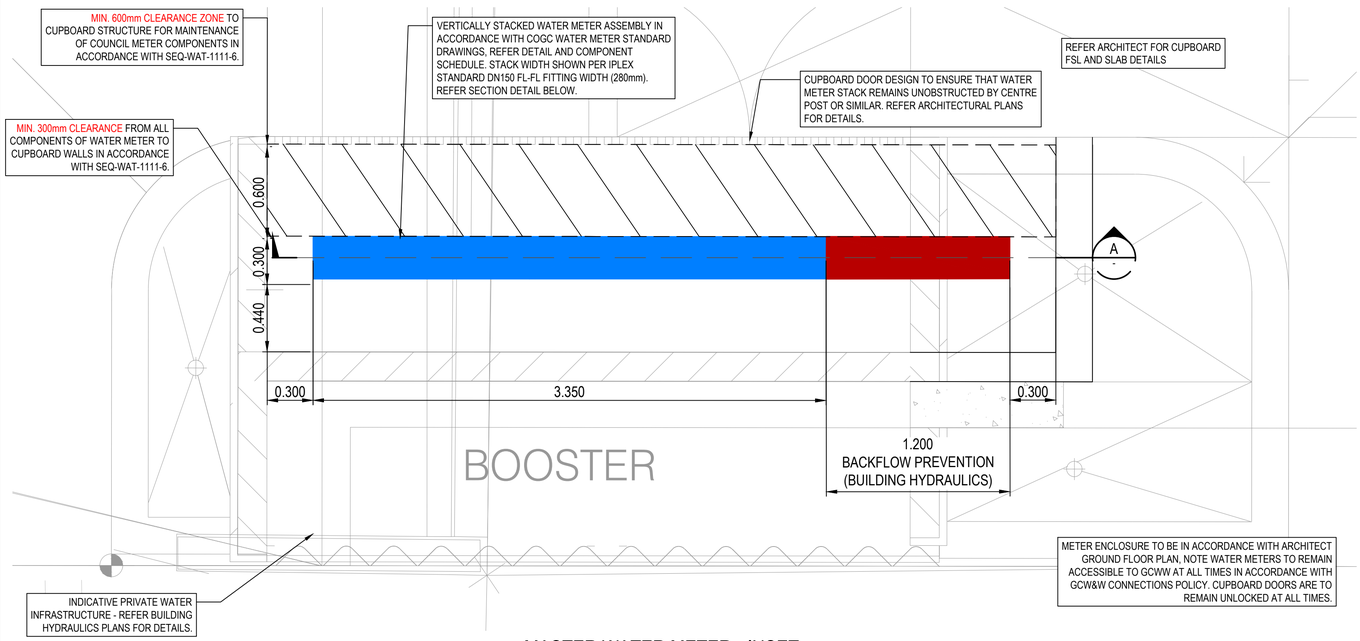
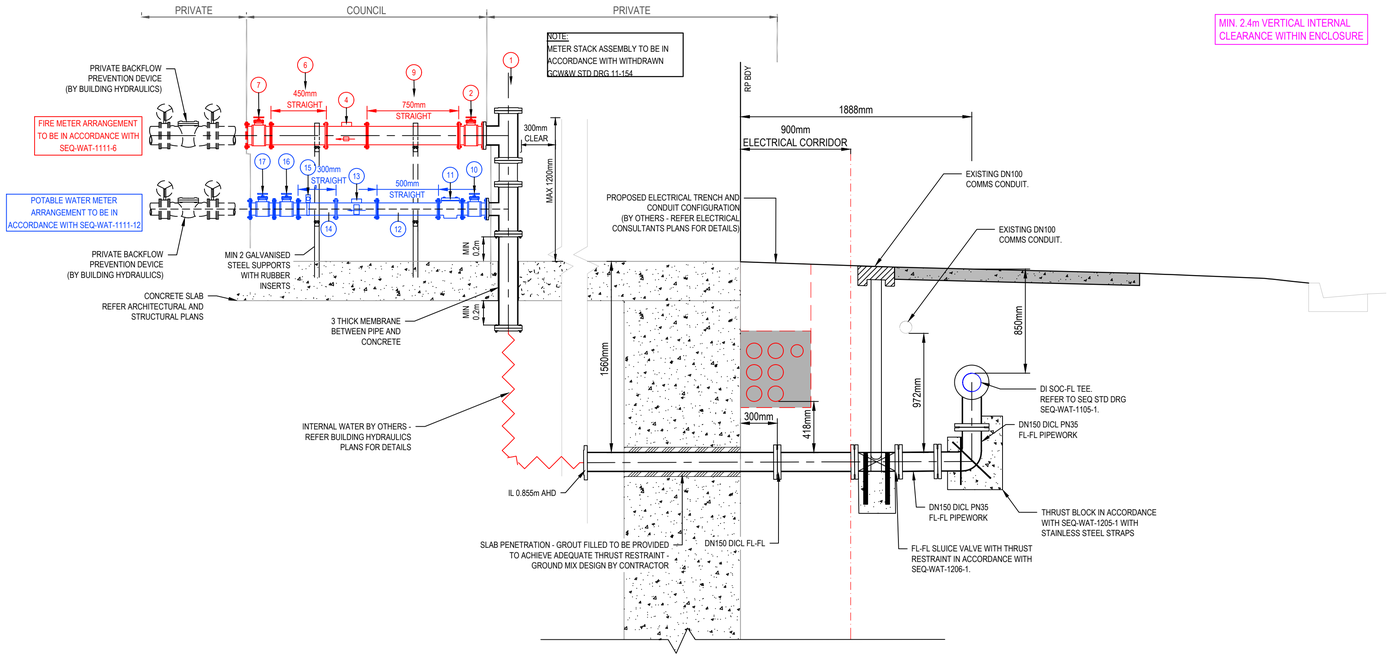
Issue: 03

Date Plotted: 28 Nov 2025 - 03:25PM File Name: C:\Users\ls94340\DC\ACCDocs\Arcadis ACC AU\AAU-30265222-AVVA\Project Files\10_WIP\10_Civil\STG_00\DRG\AVA-AAP-DD-00-DRG-CI-0621-WaterDetails.dwg



MASTER WATER METER - INSET
1 : 20



MASTER WATER METER - DETAIL SECTION A
1 : 25

MIN. 2.4m VERTICAL INTERNAL CLEARANCE WITHIN ENCLOSURE

COMPONENT SCHEDULE

ALL COMPONENTS TO BE IN ACCORDANCE WITH SEQ IPAM LIST AND SEQ STANDARD DRAWINGS METER ASSEMBLY SPECIFICATIONS AND COMPONENTS SECHEDULE FOR PROPERTY SERVICE INSTALLATIONS AND METER STANDARD DRAWINGS NOMINATED BELOW. FURTHER SPECIFICATIONS ARE PROVIDED ON THESE STANDARD DRAWINGS.

METER	No.	ITEM	DESCRIPTION
FIRE METER (SEQ-WAT-1111-6)	1.	SERVICE PIPE AND OFFTAKE	DN150 FL-FL DI, THERMAL BONDED EPOXY COATED
	2.	ISOLATION VALVE	DN150 FL-FL GATE VALVE,THERMAL BONDED EPOXY COATED.
	4.	FIRE SERVICE WATER METER	150MM ULTRASONIC / ELECTROMAGNETIC METER
	6.	PIPE (3D)	DN150 DI FL-FL, 450MM LONG
	7.	ISOLATION VALVE	DN150 FL-FL GATE VALVE
	8.	BACKFLOW PREVENTION DEVICE (REFER SEQ STD DRG SEQ-WAT-1111-6 NOTE 5&6 AND AS 3500 SECTION 4)	AS/NZS 2845.1 COMPLIANT
	9.	PIPE (5D)	DN150 DI FL-FL, 750MM LONG
WATER METER (SEQ-WAT-1111-12)	10.	ISOLATION VALVE	DN100 FL-FL GATE VALVE, THERMAL BONDED EPOXY COATED
	11.	STRAINER	DN100 FL-FL SWING CHECK VALVE
	12.	PIPE (5D)	DN100 FL-FL, 500MM LONG
	13.	WATER METER	100MM MECHANICAL METER (REFER SEQ STD DRG SEQ-WAT-1111-12)
	14.	PIPE (3D)	DN100 FL-FL, 300MM LONG WITH 25MM TAPPING
	15.	TESTING PORT	DN25 BSP BALL VALVE
	16.	NON RETURN VALVE	DN100 FL-FL SWING CHECK VALVE
	17.	CUSTOMER ISOLATION VALVE	DN100 FL-FL GATE VALVE THERMAL BONDED EPOXY COATED.

LEGEND

- PROPOSED SURFACE CONTOURS
- EXISTING SURFACE CONTOURS
- PROPOSED BARRIER KERB & CHANNEL
- SWD — PROPOSED STORMWATER PIPE & PIT (CIVIL WORKS)
- SWD — PROPOSED STORMWATER PIPE & PIT (REFER BUILDING HYDRAULICS)
- S — PROPOSED SEWERAGE RETICULATION & INSPECTION OPENING (CIVIL WORKS)
- S — PROPOSED SEWERAGE RETICULATION (REFER BUILDING HYDRAULICS)
- W — PROPOSED WATER RETICULATION (CIVIL WORKS)
- W — PROPOSED WATER RETICULATION (REFER BUILDING HYDRAULICS)
- E — UNDERGROUND ELECTRICAL (REFER ELECTRICAL ENGINEER)
- swd — EXISTING STORMWATER DRAINAGE
- s — EXISTING SEWERAGE RETICULATION
- w — EXISTING WATER RETICULATION
- e — EXISTING UNDERGROUND ELECTRICAL
- oh — EXISTING OVERHEAD ELECTRICAL
- c — EXISTING COMMUNICATIONS
- g — EXISTING GAS
- SERVICE TO BE DECOMMISSIONED
- EXTENT OF WORK BOUNDARY
- EDGE OF BASEMENT WALL
- PAVEMENT CUTBACK LINE
- PROPOSED ASPHALT RECTIFICATION REFER TO COGC STD DRG 02-602 FOR SERVICES AND DRG 00211 ELSEWHERE
- PROPOSED CONCRETE FOOTPATH. REFER TO IPWEA STD DRG PCD-101
- PROPOSED CONCRETE VXO. REFER TO IPWEA STD DRG RSD-102
- PROPOSED TOP SOIL AND TURF/ LANDSCAPE REFER NOTE 2
- STORMWATER TREATMENT DEVICE

ALL WORKS SUBJECT TO CITY OF GOLD COAST AND GOLD COAST WATER APPROVAL.

WARNING : EXISTING SERVICES
EXISTING SERVICES EXIST IN THIS VICINITY. THE CONTRACTOR IS TO CONTACT THE RELEVANT AUTHORITIES TO CONFIRM EXACT LOCATION OF SERVICES ON SITE PRIOR TO ANY EXCAVATION OR CONSTRUCTION COMMENCING.

EXISTING SERVICES PLOTTED FROM SURVEY AND POTHOLING. PLEASE REFER TO SURVEY/POTHOLING PLAN BY LAMBERT LOCATIONS FOR FURTHER DETAILS.

THE CONTRACTOR IS TO COMPLETE AND OBTAIN APPROVAL FOR COUNCIL'S APPLICATION TO WORK ON THE CITY'S INFRASTRUCTURE.

Issue	Description	DR	CH	VE	Date
03	ISSUE FOR OPW APPROVAL	J.B	L.S	R.M	28.11.25
02	70% DESIGN ISSUE	J.B	L.S	R.M	21.11.25
01	FOR INFORMATION	J.B	L.S	J.S	27.10.25

100mm on Original

Scales
0 0.5 1 1.5 2m
1 : 20
0 0.5 1 1.5 2 2.5m
1 : 25

Surveyor: BENNETT + BENNETT
Architect: BDA ARCHITECTURE
Client: MARY ANNE DEVELOPMENTS

Status: FOR APPROVAL
CONSTRUCTION SUBJECT TO APPROVAL

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Original Issue Signatures

Drawn	J.BONAPOS	Original Size	A1
Designed	L.SCOTT	Height Datum	AHD
Project Manager	J.STOCKWELL	Grid	MGA/20-56
Verified	R.MULLIGAN		

Project: AVVA BROADBEACH
19-21 ANNE AVENUE, BROADBEACH

Title: MASTER WATER METER DETAIL PLAN AND SECTION

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Arcadis Australia Pacific Pty Limited
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Tel No: +61 7 5503 4800
www.arcadis.com/au

Project Number: 30265222

Drawing No.: AVA-AAP-DD-00-DRG-CI-0622

Issue: 03

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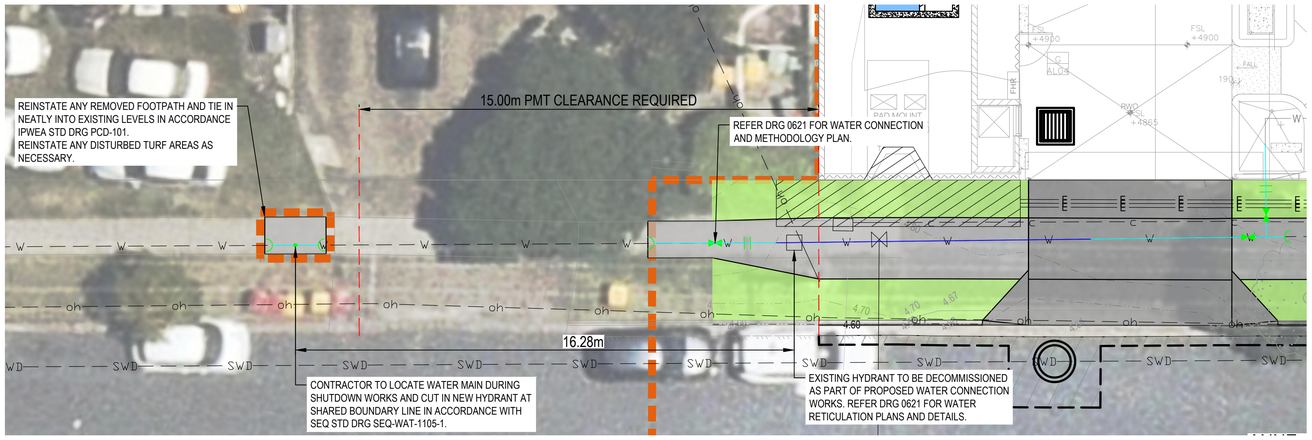
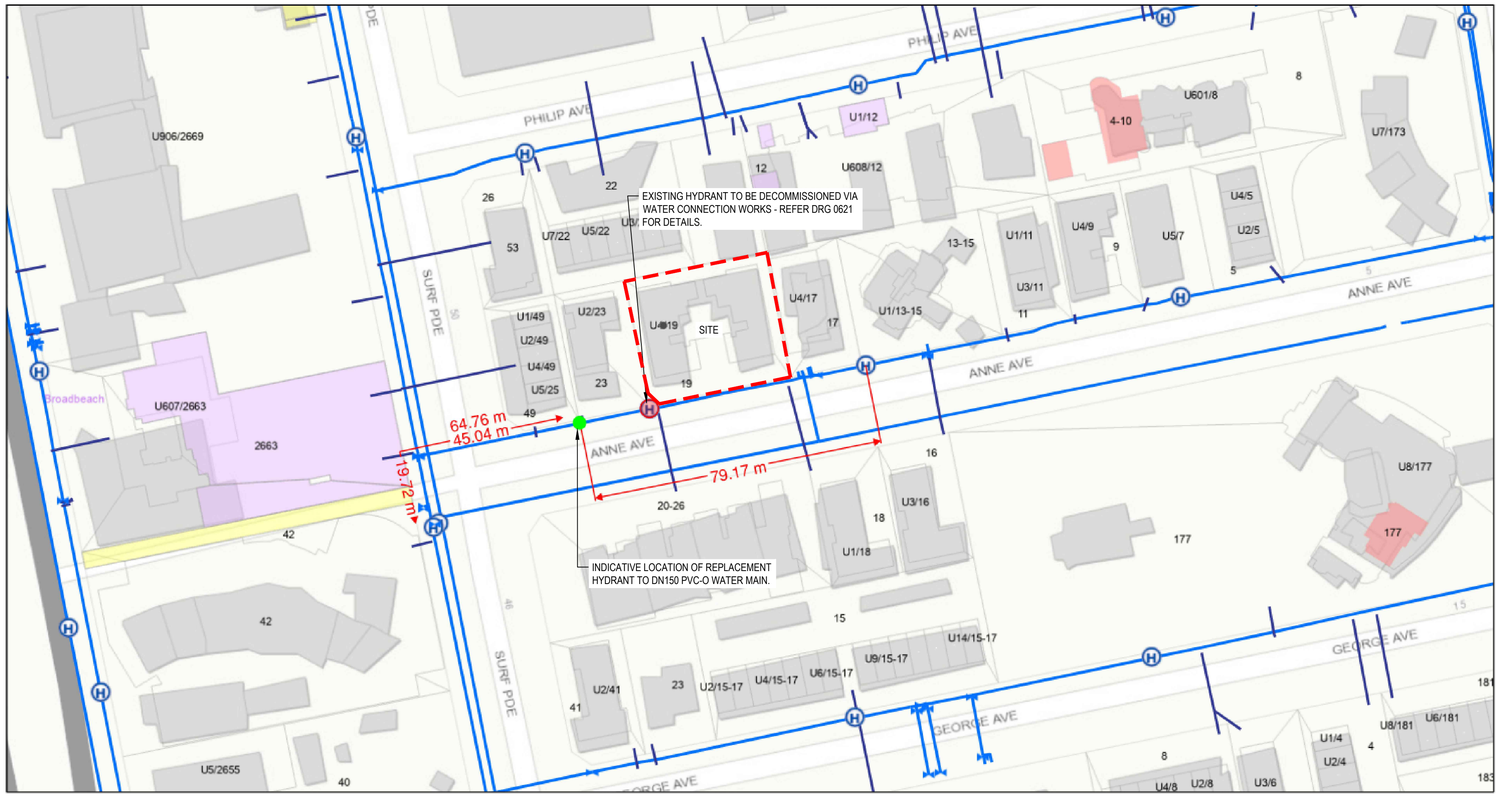


EXTERNAL WATER LAYOUT PLAN
1 : 100



EXISTING COUNCIL INFRASTRUCTURE MAPPING
N.T.S

CoGC MAPPING LEGEND

- LGA_Boundary
- Water Valve
- Water Hydrant Potable
- Water Service Connection Potable
- Potable Water Pipe
- Locality Boundaries
- Cadastral parcels
- Base
- Easement
- Strata (Lot)
- Volumetric
- Addresses

LEGEND

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- EDGE OF BASEMENT WALL
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SAFETY

1. THE DESIGN & CONSTRUCTION OF THE WORKS SHALL COMPLY WITH ALL QUEENSLAND LEGISLATION.

Issue	Description	DR	CH	VE	Date
01	ISSUE FOR OPW APPROVAL	J.B	L.S	R.M	28.11.25

100mm on Original

Scales
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0 1 2 4 6 8 10m
1 : 100

Surveyor: BENNETT + BENNETT
Architect: BDA ARCHITECTURE
Client: MARY ANNE DEVELOPMENTS

Status: FOR APPROVAL
CONSTRUCTION SUBJECT TO APPROVAL

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Project: AVVA BROADBEACH
19-21 ANNE AVENUE,
BROADBEACH

Title: EXTERNAL WATER RETICULATION DETAILS

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Project Number: 30265222
Drawing No.: AVA-AAP-DD-00-DRG-CI-0623
Issue: 01

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