



Our reference: WR25/6784

16 April 2025

Department of Local Government, Water and Volunteers
PO Box 627
TOOWOOMBA QLD 4350
tony.watson@rdmw.qld.gov.au

Attention: Tony Watson

Dear Mr Watson

Response to request to agree to exemption certificate – Site 3 – Stream Gauge Stabilisation – Laidley Creek

The State Assessment and Referral Agency (SARA) received your request to agree to an exemption certificate being given for the development described below on 28 February 2025.

Under section 46(3)(b)(i) of the *Planning Act 2016*, SARA advises it agrees to issuing an exemption certificate for the development described below.

Applicant details

Applicant name: Department of Local Government, Water and Volunteers
Applicant contact details: PO Box 627
TOOWOOMBA QLD 4350
tony.watson@rdmw.qld.gov.au

Premises details

Street address: Forest Hill Fernvale Road, Forest Hill
Real property description: Lot 401 on CC2894
Local government area: Lockyer Valley Regional

Development details

Description: Development permit – Operational works for waterway barrier works

As described above in accordance with the following report submitted with the request.

Plans/specifications	Prepared by	Date	Reference no.	Version /issue
STREAM GAUGE STABILISATION DESIGN COVER SHEET SITE 3, 143229A - LAIDLEY CREEK AT WARREGO HIGHWAY	Alluvium Consulting Australia Pty. Ltd.	28 February 2025	0424125_D WG_143229 A_001	0
STREAM GAUGE STABILISATION DESIGN GENERAL NOTES SITE 3, 143229A - LAIDLEY CREEK AT WARREGO HIGHWAY	Alluvium Consulting Australia Pty. Ltd.	28 February 2025	0424125_D WG_143229 A_002	0
STREAM GAUGE STABILISATION DESIGN GENERAL ARRANGEMENT SITE 3, 143229A - LAIDLEY CREEK AT WARREGO HIGHWAY	Alluvium Consulting Australia Pty. Ltd.	28 February 2025	0424125_D WG_143229 A_003	0
STREAM GAUGE STABILISATION DESIGN DETAILS AND TABLES SITE 3, 143229A - LAIDLEY CREEK AT WARREGO HIGHWAY	Alluvium Consulting Australia Pty. Ltd.	28 February 2025	0424125_D WG_143229 A_004	0
STREAM GAUGE STABILISATION DESIGN SITE PHOTO DURING PREVIOUS REMEDICATION SITE 3, 143229A - LAIDLEY CREEK AT WARREGO HIGHWAY	Alluvium Consulting Australia Pty. Ltd.	28 February 2025	0424125_D WG_143229 A_005	0

Assessment manager provisions

The exemption certificate request relates to the following development under the Planning Regulation 2017:

- Schedule 10, Part 6, Division 4, Subdivision 2, Table 1, Item 1 - Operational work for waterway barrier works

For further information please contact Melinda Ruis, Manager, on (07) 3452 6808 or via email IpswichSARA@dasilgp.qld.gov.au who will be pleased to assist.

Yours sincerely



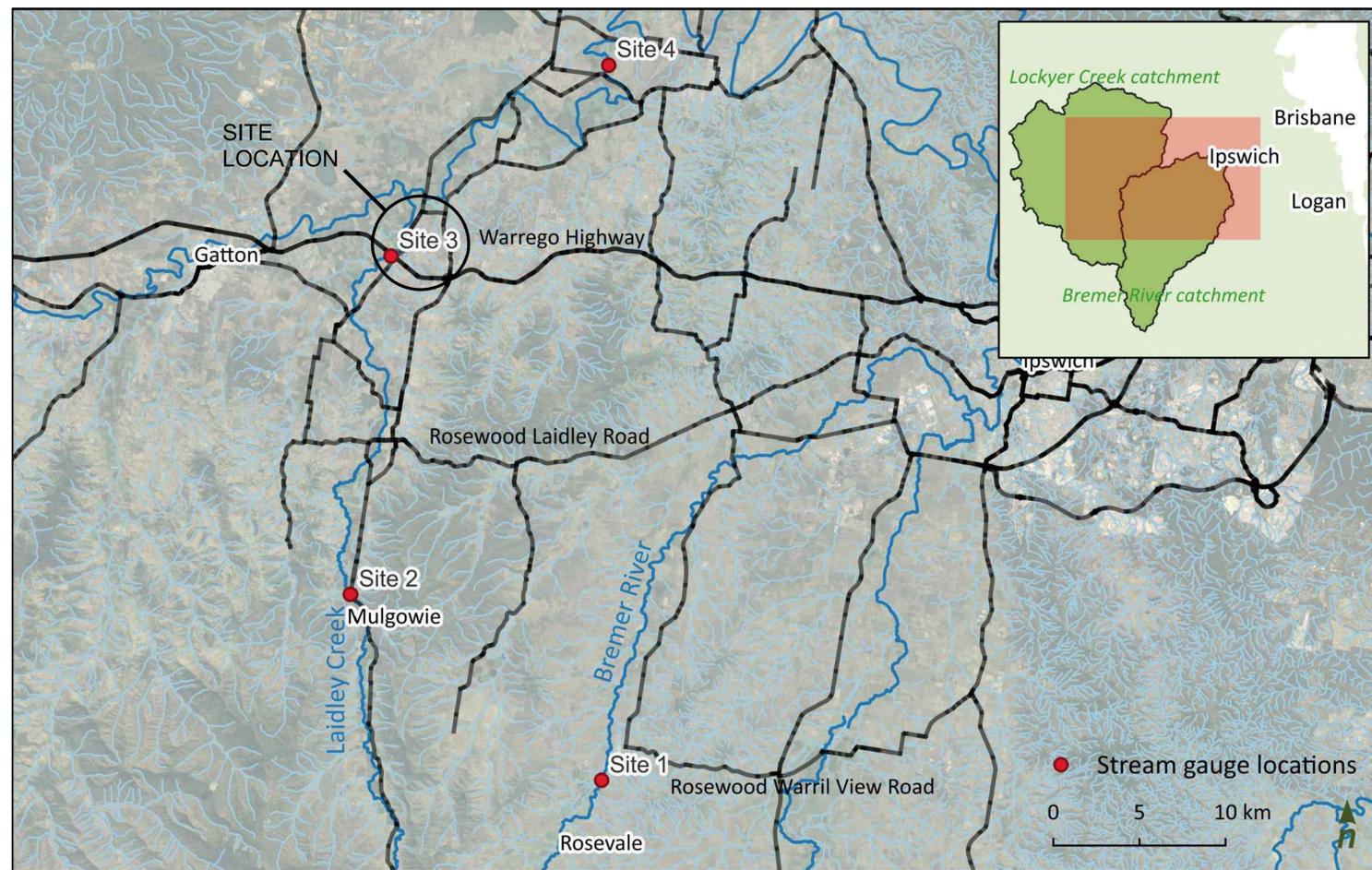
Dominique Gallagher
Director
Planning Services

DEPARTMENT OF LOCAL GOVERNMENT, WATER AND VOLUNTEERS

STREAM GAUGE STABILISATION DESIGN

SITE 3, 143229A - LAIDLEY CREEK AT WARREGO HIGHWAY

SHEET	TITLE	REVISION			
001	COVER SHEET	A	0		
002	GENERAL NOTES	A	0		
003	GENERAL ARRANGEMENT	A	0		
004	DETAILS AND TABLES	A	0		
005	SITE PHOTO	A	0		



SITE LOCALITY

ISSUED FOR TENDER

REV	DESCRIPTION	APP'D	DATE
0	ISSUE FOR TENDER	M.I.	28.02.25
A	PRELIMINARY ISSUE	M.I.	22.01.25



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DESIGNED: S. FRISBY	DRAWN: S. FRISBY	CHECKED: M. IVEZICH	APPROVED: M. IVEZICH	PROJECT No: 0424125
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DEPT OF LOCAL GOV, WATER & VOLUNTEERS			
STREAM GAUGE STABILISATION DESIGN			
COVER SHEET			
SITE 3, 143229A - LAIDLEY CREEK AT WARREGO HIGHWAY			
REVISION: 0	SHEET No.: 1 of 5	ORIGINAL SIZE: A1	DWG No: 0424125_DWG_143229A_001
		DATUM: mAHD (GDA20 z56)	

GENERAL

1. ALL WORKS AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT LOCAL AUTHORITY POLICIES, SPECIFICATIONS AND STANDARD DRAWINGS, OR IF THESE DO NOT APPLY THEN THE INSTITUTE OF PUBLIC WORK ENGINEERS QUEENSLAND AND NORTHERN TERRITORY STANDARD DRAWINGS AND AUSTRALIAN STANDARDS.
2. ALL CONSTRUCTION WORKS ARE TO BE JOINED NEATLY TO EXISTING WORKS.
3. PUBLIC UTILITIES - NOT WITHSTANDING THAT THE POSITIONS OF PUBLIC UTILITIES, FITTINGS, PIPES, POLES, MANHOLES ETC MAY BE INDICATED ON THE DRAWINGS, NO RESPONSIBILITY WILL BE ACCEPTED BY THE DESIGNER FOR THE ACCURACY OF THE REPRESENTATION OR THE OMISSION THEREOF.
4. DETAILED SURVEY OF THE SITE AREA SHALL BE UNDERTAKEN PRIOR TO COMMENCING WORK.
5. LOCATION AND LEVEL OF EXISTING SERVICES AND STRUCTURES SHALL BE ACCURATELY LOCATED ON SITE PRIOR TO COMMENCING WORKS. THE CONTRACTOR SHALL PROTECT ALL EXISTING SERVICES DURING CONSTRUCTION. ANY DAMAGE TO EXISTING SERVICES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
6. VEGETATION OUTSIDE WORK AREAS SHALL NOT BE DISTURBED UNLESS SPECIFICALLY AUTHORISED BY THE SUPERINTENDENT.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH ALL RELEVANT LEGISLATION.
8. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN THE STABILITY OF ANY TEMPORARY WORKS ON THE SITE.
9. THE CONTRACTOR SHALL CONFIRM THE CURRENCY OF THE SET OUT & LEVELS WITH THE SUPERINTENDENT PRIOR TO COMMENCING CONSTRUCTION.
10. THIS DESIGN HAS BEEN PREPARED BASED ON 2015 LIDAR DATA
 - 10.1. VERTICAL DATUM: AHD
 - 10.2. HORIZONTAL MERIDIAN: GDA2020, ZONE 56
11. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE LOCAL AUTHORITY SPECIFICATIONS AND THE DESIGN REPORT. IN THE EVENT OF A DISCREPANCY REFER TO THE SUPERINTENDENT FOR CLARIFICATION.
12. ALL DIMENSIONS RELEVANT TO SETTING OUT AND OFF-SITE WORK SHALL BE AS INDICATED ON ALLUVIUM CONSULTING DRAWINGS AND SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION COMMENCES. THE ENGINEERS' DRAWINGS SHALL NOT BE SCALED, UNLESS SPECIFICALLY NOTED OTHERWISE.
13. DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PROPOSED AND EXISTING WORKS IN A STABLE CONDITION AND ENSURING NO PART SHALL BE OVER STRESSED UNDER CONSTRUCTION ACTIVITIES.
14. THE APPROVAL FOR A SUBSTITUTION SHALL BE SOUGHT FROM THE SUPERINTENDENT BUT IS NOT AN AUTHORISATION FOR A VARIATION. ANY VARIATION MUST BE APPROVED BY THE SUPERINTENDENT BEFORE WORK COMMENCES.
15. THE ACCESS FOR THE WORK SITE SHALL BE AS INDICATED ON THE DRAWINGS OR AS APPROVED BY THE SUPERINTENDENT AND THE LOCAL AUTHORITIES. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY AND RELEVANT PERMITS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONSTRUCT AND MAINTAIN ACCESS AS THEY REQUIRE TO ALL PARTS OF CONTRACTOR'S WORK AREA.
16. THE CONTRACTOR'S COMPOUND SHALL BE LOCATED AS APPROVED BY SUPERINTENDENT.
17. CONTRACTOR SHALL UNDERTAKE ALL WORKS IN PROXIMITY TO EXISTING SERVICES AND INFRASTRUCTURE IN ACCORDANCE WITH THE RELEVANT UTILITY/AUTHORITY POLICIES AND PROCEDURES

18. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ANY RELEVANT COUNCIL APPROVALS OR WORK PERMITS RELATING TO THE WORKS DOCUMENTED IN THESE DRAWINGS HAVE BEEN OBTAINED PRIOR TO COMMENCING THE RELATED WORKS

GENERAL FILL

1. ALL FILL MATERIAL WILL BE UNCOHESIVE GRAVELS AND COBBLES SO COMPACTION SHOULD BE ACHIEVED BY TRACK ROLLING WITH MACHINERY IN 200mm LAYERS (LOOSE THICKNESS) TO ACHIEVE 75% OF DRY DENSITY INDEX.
2. ALL FILL MUST BE FREE OF CONTAMINATION (E.G. OILS CHEMICALS AND OTHER CONTAMINANTS).

EROSION & SEDIMENT CONTROL (ESC)

1. EROSION AND SEDIMENT CONTROL (ESC) PLAN TO BE DEVELOPED BY THE CONTRACTOR AND APPROVED BY DLGW.
2. SEDIMENT LOSS FROM THE WORK SITE SHALL BE MANAGED IN ACCORDANCE WITH CURRENT RELEVANT ENVIRONMENTAL GUIDELINES AND LEGISLATION. THIS WILL NECESSITATE THE USE OF APPROPRIATE EROSION AND SEDIMENT CONTROLS. THESE SHALL BE IMPLEMENTED AT THE SITE ESTABLISHMENT PHASE AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
3. ALL VEHICLES EXITING FROM THE SITE ARE TO BE WASHED DOWN, CLEANED AND TREATED SO AS TO PREVENT MATERIAL BEING TRACKED OR DEPOSITED ON PUBLIC ROADS. INSTALL MEASURES FOR CONTROL OF WASH DOWN.
4. ALL DISTURBED AREAS SHALL BE LEFT IN A STABLE CONDITION.
5. ALL VEHICLE MOVEMENTS TO BE RESTRICTED TO BUILDING WORKS AREA ONLY, UNLESS APPROVED OTHERWISE BY THE SUPERINTENDENT.
6. ALL VEGETATION WITHIN 4 m OF GENERAL MACHINE OPERATION SHALL BE PROTECTED WITH A STAR PICKET AND ROPE FENCE CONSTRUCTED AT LEAST 1m CLEAR OF THE VEGETATION;
7. EROSION CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR WHO SHALL COMPLY WITH LEGISLATED REQUIREMENTS.
8. SUITABLE DUST CONTROL MEASURES TO BE IMPLEMENTED AT ALL TIMES.
9. THE CONTRACTOR SHALL ADVISE THE SUPERINTENDENT ONCE THE ESC MEASURES HAVE BEEN INSTALLED.
10. NO SOIL SHOULD BE STOCKPILED WITHIN 25 m OF THE LOW FLOW CHANNEL INVERT.

REHABILITATION

1. REHABILITATION OF DISTURBED AREAS SHALL INCLUDE LAYDOWN AND STOCKPILE AREAS, ACCESS TRACKS AND OTHER AREAS DISTURBED AS PART OF THE WORKS. REHABILITATION SHALL NOT BE UNDERTAKEN UNTIL WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE DESIGN AND APPROVED BY THE SUPERINTENDENT.

CONSTRUCTION OF NEW CUT OFF WALL

1. A NEW CUT OFF WALL IS TO BE CONSTRUCTED IMMEDIATELY UPSTREAM OF THE EXISTING WEIR.
2. CUTOFF WALL TO EXTEND A MINIMUM OF 2m INTO THE BANK AND 0.5m INTO THE BED.
3. STRUCTURAL SPECIFICATION TO BE UNDERTAKEN BY OTHERS.
4. NEW CONCRETE WORK IS TO MATCH NEATLY INTO EXISTING CONCRETE WORK.
5. COFFER DAM AND WATER PUMP BYPASS WILL BE REQUIRED FOR THE CONSTRUCTION OF THE NEW CUTOFF WALL.

MATERIALS, SUPPLY AND PLACEMENT FOR ROCK WORKS

1. SUPPLY AND PLACEMENT OF ROCK TO BE IN ACCORDANCE WITH THESE DRAWINGS AND ONSITE DIRECTION BY DESIGN ENGINEER OR SITE SUPERINTENDENT.
2. ROCK PLACEMENT SHALL NOT COMMENCE UNTIL THE PREPARED SURFACE HAS BEEN APPROVED BY THE SUPERINTENDENT.
3. SUBSTRATE PRIOR TO ROCK PLACEMENT TO BE CLEARED OF LOOSE MATERIAL AND CONSIST OF NATURAL INDURATION CEMENTED COBBLE/ GRAVEL MATERIAL. ENGINEER TO INSPECT PRIOR TO PLACEMENT.
4. ROCK SHOULD NOT BE ADVERSELY AFFECTED BY REPEATED WETTING AND DRYING AND SHALL HAVE A CRUSHING STRENGTH OF NOT LESS THAN 25 MPa.
5. ROCK TO COMPRISE WELL-GRADED ANGULAR ROCK, FREE OF CRACKS AND FOREIGN MATERIAL.
6. ROCK SHALL BE CAREFULLY PLACED BY BUCKET FROM A LOADER OR EXCAVATOR FROM NO GREATER THAN 1.0m ABOVE THE MATERIAL ONTO WHICH IT IS PLACED.
7. ROCK SHALL BE WORKED INTO PLACE SO AS TO PRODUCE A BLANKET OF INTERLOCKING ROCK THAT HAS NO SIGNIFICANT VOIDS AND DOES NOT MOVE UNDERFOOT.
8. GRADING SHALL PRODUCE A CONSISTENT MIX OF ROCK SIZES.
9. ROCK USED FOR PROTECTION MUST MEET THE FOLLOWING SIZE SPECIFICATION IN EACH CASE:
 - 9.1. ROCK PROTECTION D50 = 300mm

ROCK SPECIFICATIONS	
EQUIVALENT SPHERICAL DIAMETER	PERCENT (BY WEIGHT) OF SMALLER SIZE
1.5 - 2.0 x D50	100
D50	50
0.3 - 0.4 x D50	10 to 20
0.1 x D50	1

REQUIREMENTS FOR WATERWAY BARRIER WORKS

FOR EROSION, SCOUR, EMBANKMENT, BANK SLUMPING AND BANK STABILISATION REPAIR AND REFURBISHMENT WORKS INCLUDING ADDITIONAL SCOUR PROTECTION PLACED AROUND THE INFRASTRUCTURE TO RESTORE WATERWAY BED AND BANKS TO NATURAL PROFILES CAN BE UNDERTAKEN SUBJECT TO THE FOLLOWING GENERAL STANDARDS:

- DISTURBANCE TO THE WATERWAY BED AND BANKS.
- AVOID OR MINIMISE IMPACTS TO AREAS CONTAINING AQUATIC VEGETATION.
- ENSURE THE LEAST VOLUME OF SOIL OR SEDIMENT IS DISTURBED.
- LIMIT THE USE OF MACHINERY WITHIN WATERWAYS AND USE MACHINERY NO LARGER THAN THAT REQUIRED FOR THE PURPOSE.
- PLAN AND MANAGE THE WORKS TO AVOID FISH STRESS. SIGNS OF DISTRESS IN FISH MAY INCLUDE GASPING AT THE WATER SURFACE, RAPID BREATHING, ROLLING OR LETHARGY. IF FISH IN DISTRESS ARE NOTICED, TAKE IMMEDIATE ACTION TO REMOVE OR REMEDIATE THE CAUSE OF STRESS E.G. REMOVE BARRIER, UNDERTAKE FISH SALVAGE.
- DO NOT COMMENCE WORKS WITHIN THE WATERWAY DURING TIMES OF ELEVATED FLOW.
- REMOVE SPOIL FROM WATERWAYS AND FISH HABITATS EXCEPT WHERE SPOIL IS DELIBERATELY USED FOR RE-PROFILING TO RESTORE BED AND BANKS TO NATURAL PROFILES.
- CONSTRUCTION MATERIAL USED IS CLEAN (MINIMAL FINE

- MATERIAL), FREE OF CONTAMINANTS, AND WILL NOT WASH AWAY AND INCREASE SEDIMENT LOADS IN DOWNSTREAM WATERS.
- PREVENT EROSION FROM OCCURRING AND PREVENT SEDIMENT FROM ENTERING THE WATERWAY. REFER TO THE BEST PRACTICE EROSION AND SEDIMENT CONTROL (BPESC) DOCUMENT.
- THE ROOTS OF VEGETATION ARE ONLY REMOVED WHERE PRACTICALLY NECESSARY.
- IF THE WORKS CAUSE FISH TO BECOME TRAPPED OR STRANDED IN A LOCATION THAT IS LIKELY TO RESULT IN HEAT STRESS, DEPLETED OXYGEN LEVELS, OR EVENTUAL DEATH, IMMEDIATELY IMPLEMENT FISH SALVAGE ACTIVITIES IN ACCORDANCE WITH THE GUIDELINES FOR FISH SALVAGE.
- TAKE IMMEDIATE ACTION TO IDENTIFY AND REMOVE THE CAUSE OF FISH KILLS. REPORT ANY UNUSUAL FISH DEATHS, SUCH AS DEATHS ASSOCIATED WITH THE WORKS BEING UNDERTAKEN, TO THE FISH KILL HOTLINE ON 1300 130 372 AND ADVISE THAT WORKS ARE OCCURRING UNDER THIS DOCUMENT.
- WHERE ANY PART OF THE WATERWAY BED OR BANKS ADJACENT TO THE WORKS HAS BEEN ALTERED BY THE WATERWAY BARRIER WORKS, RESTORE AND/OR REHABILITATE THE SITE SO THAT:
- STABILITY AND PROFILES OF THE BED AND BANKS ARE RE-INSTATED TO NATURAL WATERWAY PROFILES AND STABILITY WITHIN 5 BUSINESS DAYS OF THE COMPLETION OF THE WORKS.
- THE WATERWAY BED IS RETAINED OR RECONSTRUCTED WITH SUBSTRATE COMPARABLE TO THE NATURAL SUBSTRATE SIZE AND CONSISTENCY.
- SITE CONDITIONS ARE RETURNED TO A STATE THAT ALLOWS RAPID RE-ESTABLISHMENT OF NATIVE VEGETATION AND COVER; OR NATIVE SPECIES ARE REPLANTED TO RE-ESTABLISH THE NATURAL PLANT COMMUNITY.
- ANY PERSON(S) ENGAGED OR EMPLOYED TO CARRY OUT WORKS MUST BE PROVIDED WITH THESE GENERAL STANDARDS. A DIGITAL FORMAT IS ACCEPTABLE.

IN ACCORDANCE WITH SECTION 6.1, TABLE 4 OF THE ACCEPTED DEVELOPMENT REQUIREMENTS FOR OPERATIONAL WORK THAT IS CONSTRUCTING OR RAISING WATERWAY BARRIER WORKS, DATE EFFECTIVE 1ST OCTOBER 2018, THE FOLLOWING IS APPLICABLE.

WHERE APRONS AND/OR STREAM BED SCOUR PROTECTION ARE INSTALLED/REPLACED/MODIFIED AS PART OF MAINTENANCE ACTIVITIES:

- APRONS MUST ABUT CULVERT INVERTS (INCLUDING BURIED CULVERTS) AT THE SAME LEVEL (THIS IS TO ENSURE THAT THERE IS NO DROP IN ELEVATION AT THE JOIN) (APPENDIX 1, FIGURE 4).
- SCOUR PROTECTION MUST ABUT THE APRON (INCLUDING BURIED APRONS) AT THE SAME LEVEL (THIS IS TO ENSURE THAT THERE IS NO DROP IN ELEVATION AT THE JOIN) (APPENDIX 1, FIGURES 4 AND 5).
- THE STREAM BED MUST ABUT THE SCOUR PROTECTION OR THE APRON AT THE SAME LEVEL (THIS IS TO ENSURE THAT THERE IS NO DROP IN ELEVATION AT THE JOIN) (APPENDIX 1, FIGURES 4 AND 5).
- WHERE APRONS ARE AT BED LEVEL THEY MUST BE MUST BE ROUGHENED THROUGHOUT TO APPROXIMATELY SIMULATE NATURAL BED CONDITIONS.
- APRONS MUST BE INSTALLED AT NO STEEPER GRADIENT THAN THE WATERWAY BED GRADIENT

ISSUED FOR TENDER

0	ISSUE FOR TENDER	M.I.	28.02.25
A	PRELIMINARY ISSUE	M.I.	22.01.25
REV	DESCRIPTION	APP'D	DATE



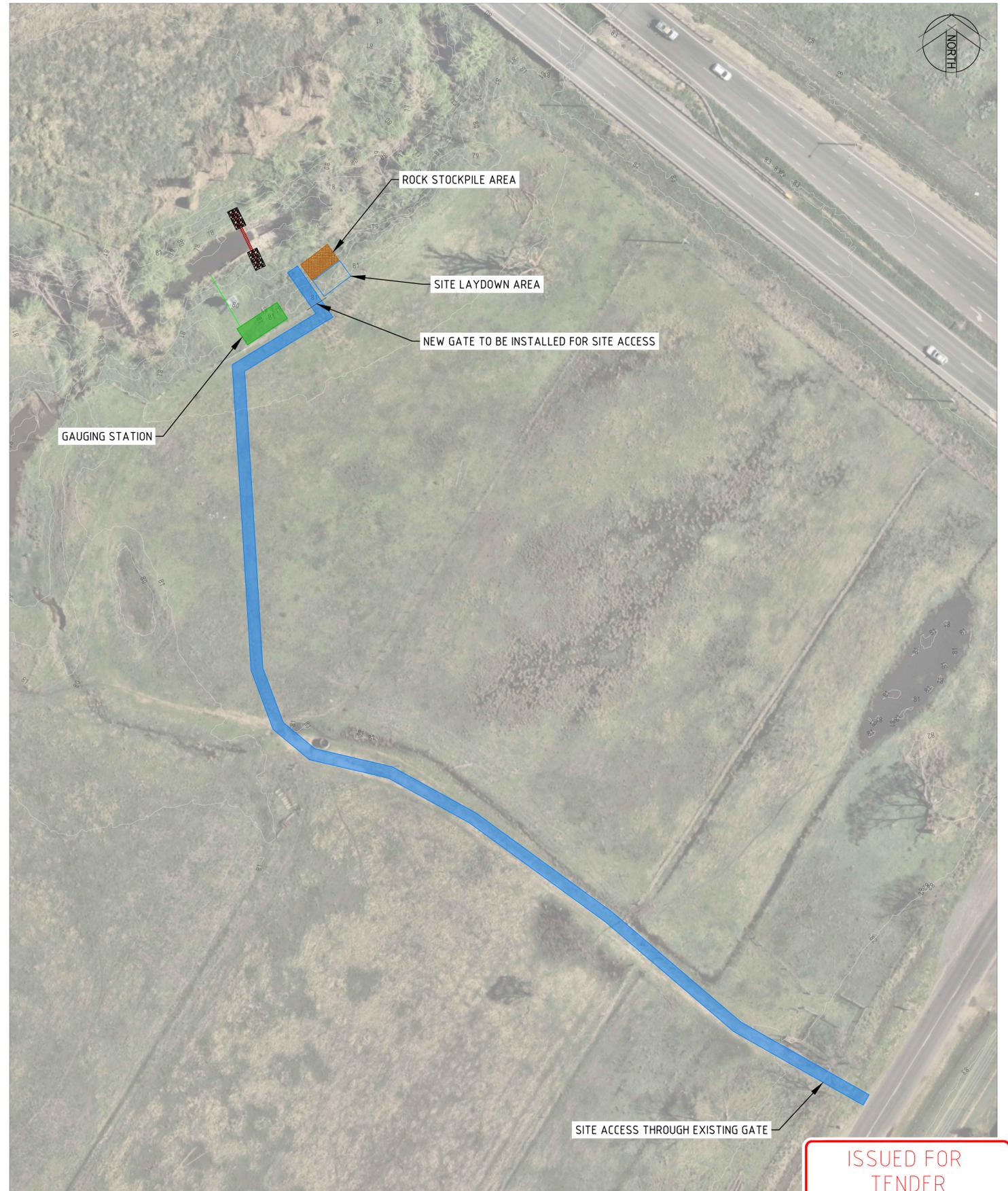
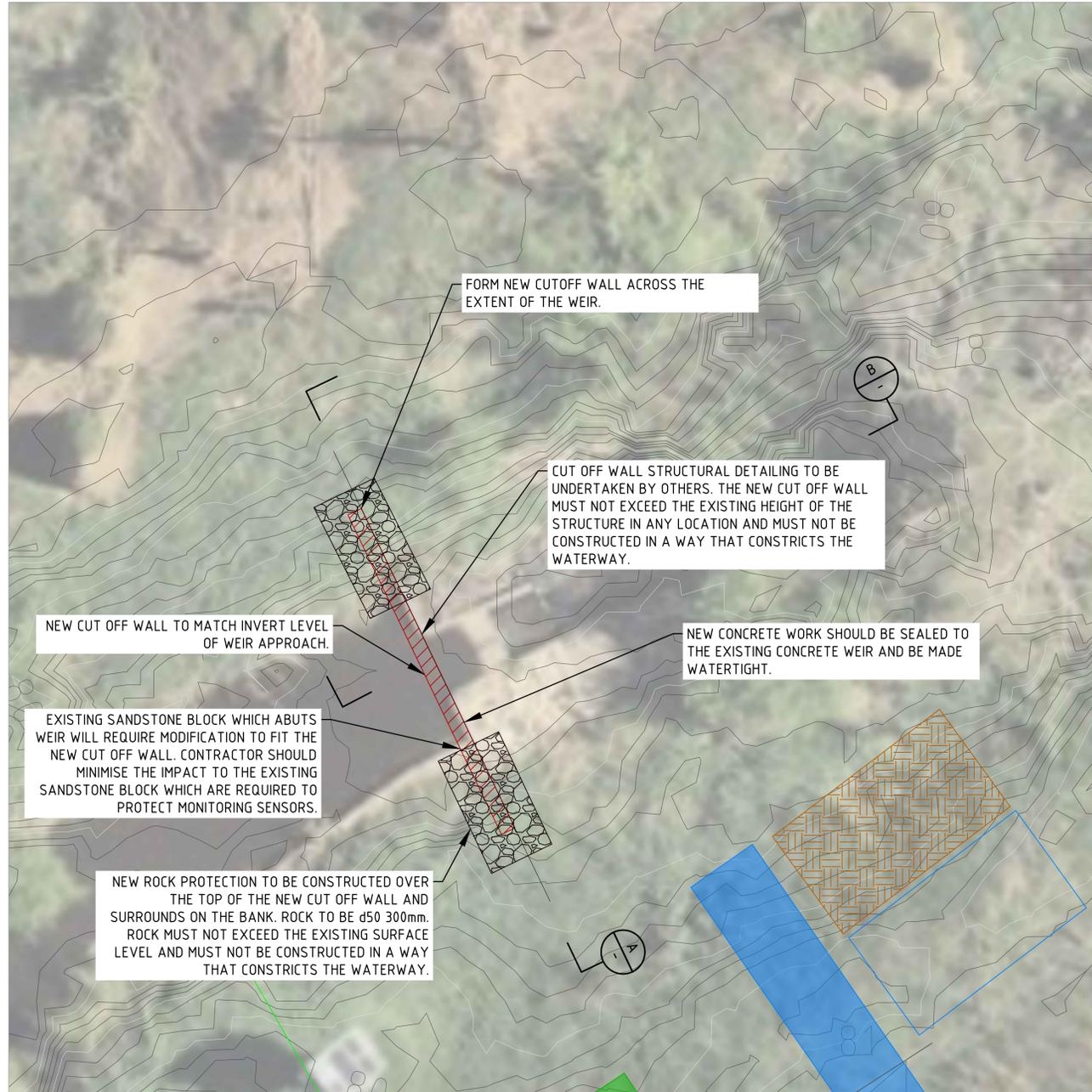
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DESIGNED: S. FRISBY	DRAWN: S. FRISBY	CHECKED: M. IVEZICH	APPROVED: M. IVEZICH	PROJECT No: 0424125
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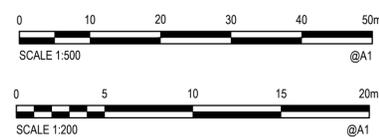
DEPT OF LOCAL GOV, WATER & VOLUNTEERS				
STREAM GAUGE STABILISATION DESIGN				
GENERAL NOTES				
SITE 3, 143229A - LAIDLEY CREEK AT WARREGO HIGHWAY				
REVISION: 0	SHEET No.: 2 of 5	ORIGINAL SIZE: A1	DWG NO: 0424125_DWG_143229A_002	
		DATUM: mAHD (GDA20 z56)		

LEGEND	
	EXISTING CONTOURS - MAJOR (1m)
	EXISTING CONTOURS - MINOR (0.25m)
	EXISTING CAPILLARY ALIGNMENT (INDICATIVE)
	EXISTING GAUGING HUT LOCATOIN
	PROPOSED ROCK PROTECTION
	PROPOSED WEIR WING WALL REMEDIATION
	PROPOSED SITE ACCESS
	PROPOSED STOCKPILE AREA
	PROPOSED SITE LAYDOWN AREA

- NOTES**
1. ALL DRAWINGS TO BE READ IN CONJUNCTION WITH GENERAL NOTES ON SHEET 002
 2. REFER TO SHEET 004 FOR DETAILED SECTION.
 3. ROCK AND NEW CUT OFF WALL MUST NOT EXCEED THE EXISTING SURFACE OR STRUCTURE LEVEL AND MUST NOT BE CONSTRUCTED IN A WAY THAT CONSTRICTS THE WATERWAY.
 4. SCOUR MAINTENANCE SHOULD BE UNDERTAKEN DURING MAINTENANCE WORKS IN ACCORDANCE WITH THE ACCEPTED DEVELOPMENT REQUIREMENTS FOR OPERATIONAL WORK THAT IS CONSTRUCTING OR RAISING WATERWAY BARRIER WORKS, DATE EFFECTIVE 1ST OCTOBER 2018, REQUIREMENTS ARE BRIEFLY OUTLINED ON SHEET 002.
 5. TIE ALL DISTURBED SURFACES NEATLY INTO EXISTING.
 6. MAKE GOOD ALL DISTURBED AREAS INCLUDING, BUT NOT LIMITED TO, SITE ACCESS, LAYDOWN AREA AND STOCKPILE AREAS.



REV	DESCRIPTION	APP'D	DATE
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A	PRELIMINARY ISSUE	M.I.	22.01.25

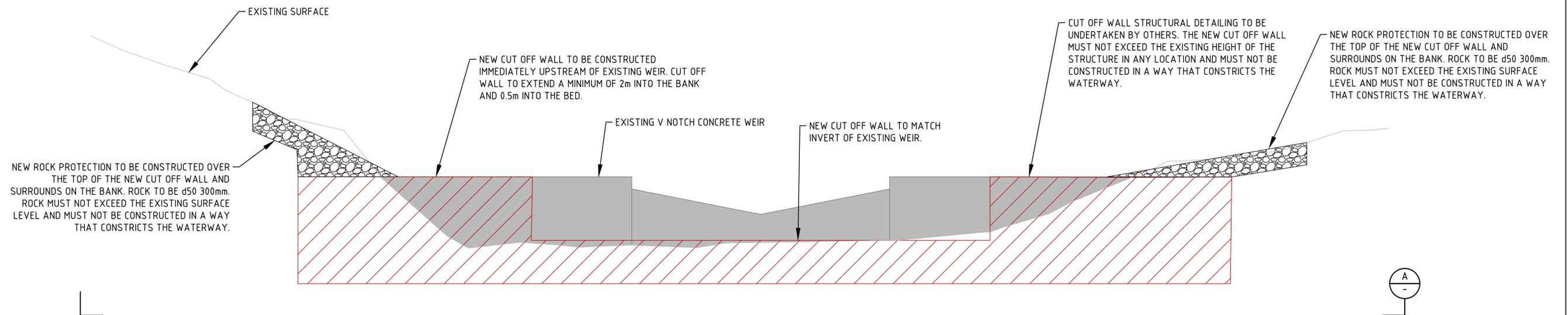


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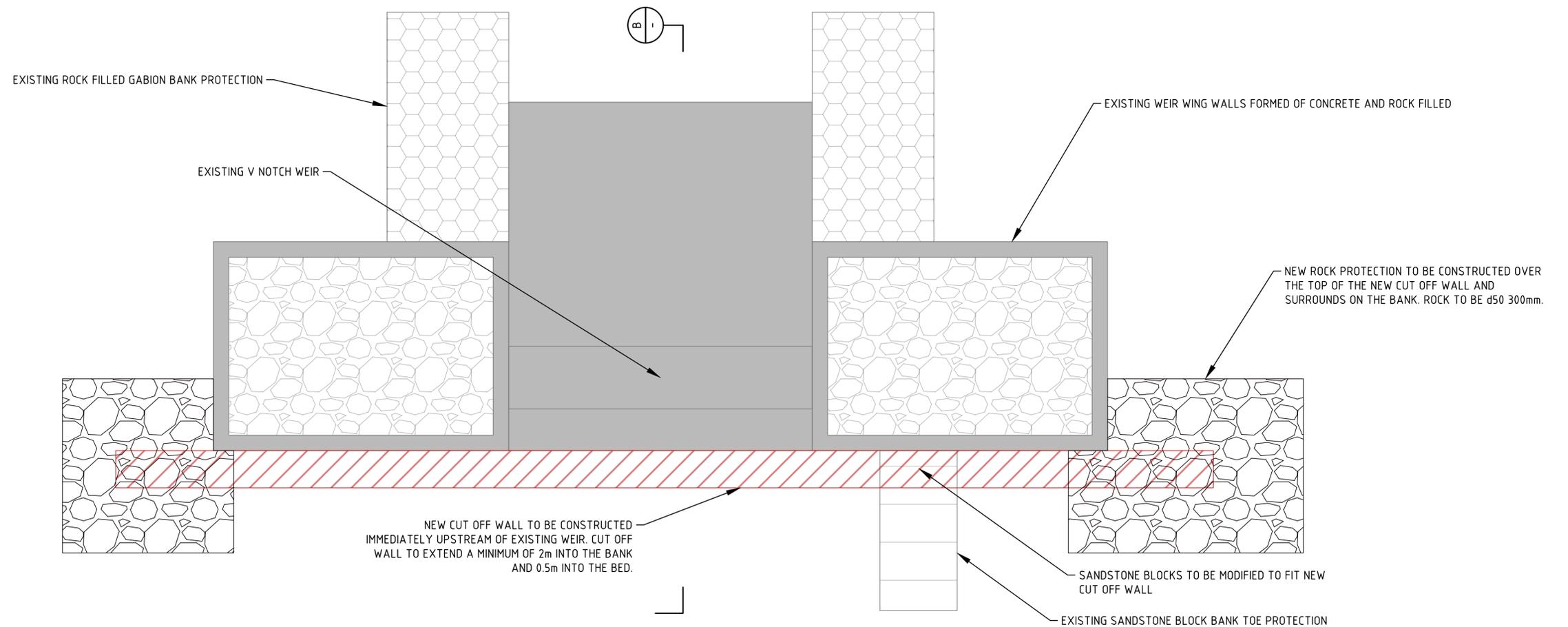
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DEPT OF LOCAL GOV, WATER & VOLUNTEERS STREAM GAUGE STABILISATION DESIGN GENERAL ARRANGEMENT SITE 3, 143229A - LAIDLEY CREEK AT WARREGO HIGHWAY			
REVISION: 0	SHEET No.: 3 of 5	ORIGINAL SIZE: A1	DWG NO:0424125_DWG_143229A_003
		DATUM: mAHD (GDA20 z56)	



TYPICAL DETAIL - CROSS SECTION OF NEW CUT OFF WALL
NOT TO SCALE



TYPICAL DETAIL - PLAN VIEW OF NEW CUT OFF WALL
NOT TO SCALE

ISSUED FOR TENDER

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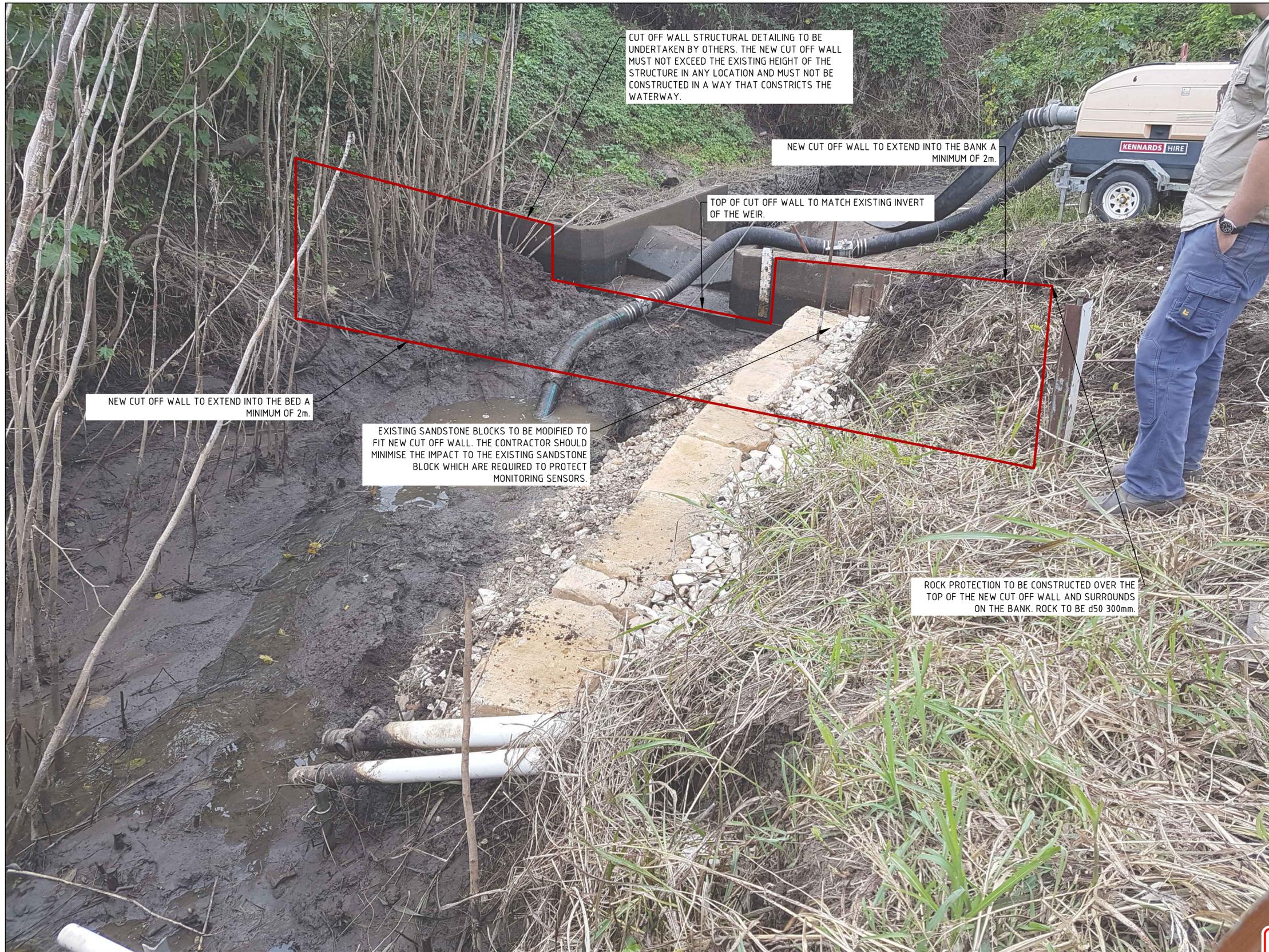


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DEPT OF LOCAL GOV, WATER & VOLUNTEERS
STREAM GAUGE STABILISATION DESIGN
DETAILS AND TABLES
SITE 3, 143229A - LAIDLIEY CREEK AT WARREGO HIGHWAY

REVISION: 0	SHEET No.: 4 of 5	ORIGINAL SIZE: A1	DWG NO: 0424125_DWG_143229A_004
		DATUM: mAHD (GDA20 z56)	



CUT OFF WALL STRUCTURAL DETAILING TO BE UNDERTAKEN BY OTHERS. THE NEW CUT OFF WALL MUST NOT EXCEED THE EXISTING HEIGHT OF THE STRUCTURE IN ANY LOCATION AND MUST NOT BE CONSTRUCTED IN A WAY THAT CONSTRICTS THE WATERWAY.

NEW CUT OFF WALL TO EXTEND INTO THE BANK A MINIMUM OF 2m.

TOP OF CUT OFF WALL TO MATCH EXISTING INVERT OF THE WEIR.

NEW CUT OFF WALL TO EXTEND INTO THE BED A MINIMUM OF 2m.

EXISTING SANDSTONE BLOCKS TO BE MODIFIED TO FIT NEW CUT OFF WALL. THE CONTRACTOR SHOULD MINIMISE THE IMPACT TO THE EXISTING SANDSTONE BLOCK WHICH ARE REQUIRED TO PROTECT MONITORING SENSORS.

ROCK PROTECTION TO BE CONSTRUCTED OVER THE TOP OF THE NEW CUT OFF WALL AND SURROUNDS ON THE BANK. ROCK TO BE d50 300mm.

ISSUED FOR TENDER

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DEPT OF LOCAL GOV, WATER & VOLUNTEERS
 STREAM GAUGE STABILISATION DESIGN
 SITE PHOTO DURING PREVIOUS REMEDIATION
 SITE 3, 143229A - LAIDLIEY CREEK AT WARREGO HIGHWAY

DESIGNED: S.FRISBY	DRAWN: S. FRISBY	CHECKED: M. IVEZICH	APPROVED: M. IVEZICH	PROJECT No: 0424125
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REVISION: 0	SHEET No.: 5 of 5	ORIGINAL SIZE: A1	DWG No: 0424125_DWG_143229A_005
		DATUM: mAHD (GDA20 z56)	