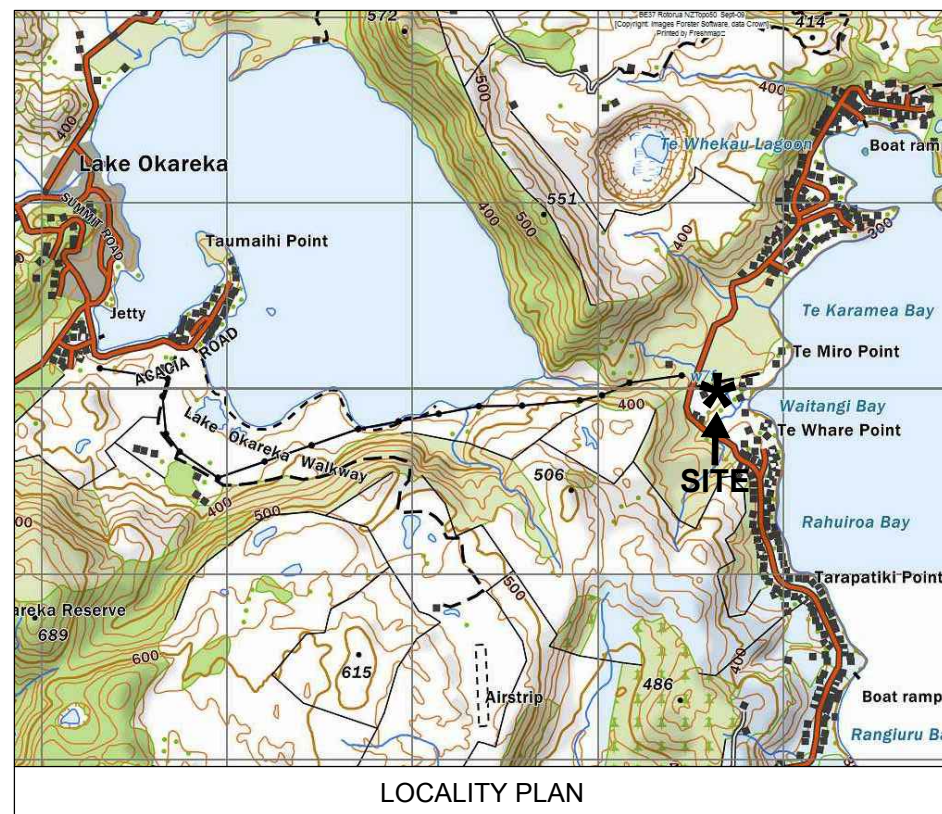


WAITANGI STREAM REMEDIATION AND EROSION PROTECTION

ISSUED FOR TENDER



DRAWING INDEX			
No.	TITLE	REV	ISSUE DATE
000			
000	SITE LOCATION AND DRAWING INDEX	0	MAR 18
100			
101	EXISTING SITE PLAN	0	MAR 18
102	STREAM WORKS PLAN	0	MAR 18
200			
201	CROSS SECTIONS 1	0	MAR 18
202	CROSS SECTIONS 2	0	MAR 18
203	CROSS SECTIONS 3	0	MAR 18
204	CROSS SECTIONS 4	0	MAR 18
205	DROP STRUCTURE SECTION	0	MAR 18
206	STANDARD DETAILS	0	MAR 18
207	LONG SECTION	0	MAR 18

REF. T01552501
MAR 2018





KEY :

- WORK SITE
- LIMIT OF CONTRACTORS SECONDARY ACCESS TO THE SITE THROUGH PRIVATE PROPERTY

NOTES :

1. ALL DIMENSIONS IN mm UNLESS OTHERWISE SPECIFIED.
2. CONTRACTOR TO PROVIDE TEMPORARY FENCING AT 341 SPENCER ROAD TO RESTRICT ALL VEHICLE ACCESS TO THE AREA SHOWN IN YELLOW AND A MINIMUM SEPARATION DISTANCE OF 0.5m FROM THE GARAGE & SLEEPOUT STRUCTURES.

SOURCE:
1. DRAWING BASED ON SURVEY ONE LTD. AS AT 13/11/2017

0	ISSUED FOR TENDER	MAR 18		
A	ISSUED FOR REVIEW	FEB 19		
NO.	REVISION	DATE	APP.	
		BY	CHECKED	DATE
DESIGNED		A.D.	D.G.G.	JAN 18
DRAWN		J.H.	A.D.	JAN 18
APPROVED ISSUE FOR :				MAR 18
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BAY OF PLENTY REGIONAL COUNCIL
TOI MOANA

PROJECT :

WAITANGI STREAM REMEDIATION AND EROSION PROTECTION

TITLE :

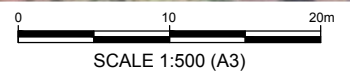
EXISTING SITE PLAN

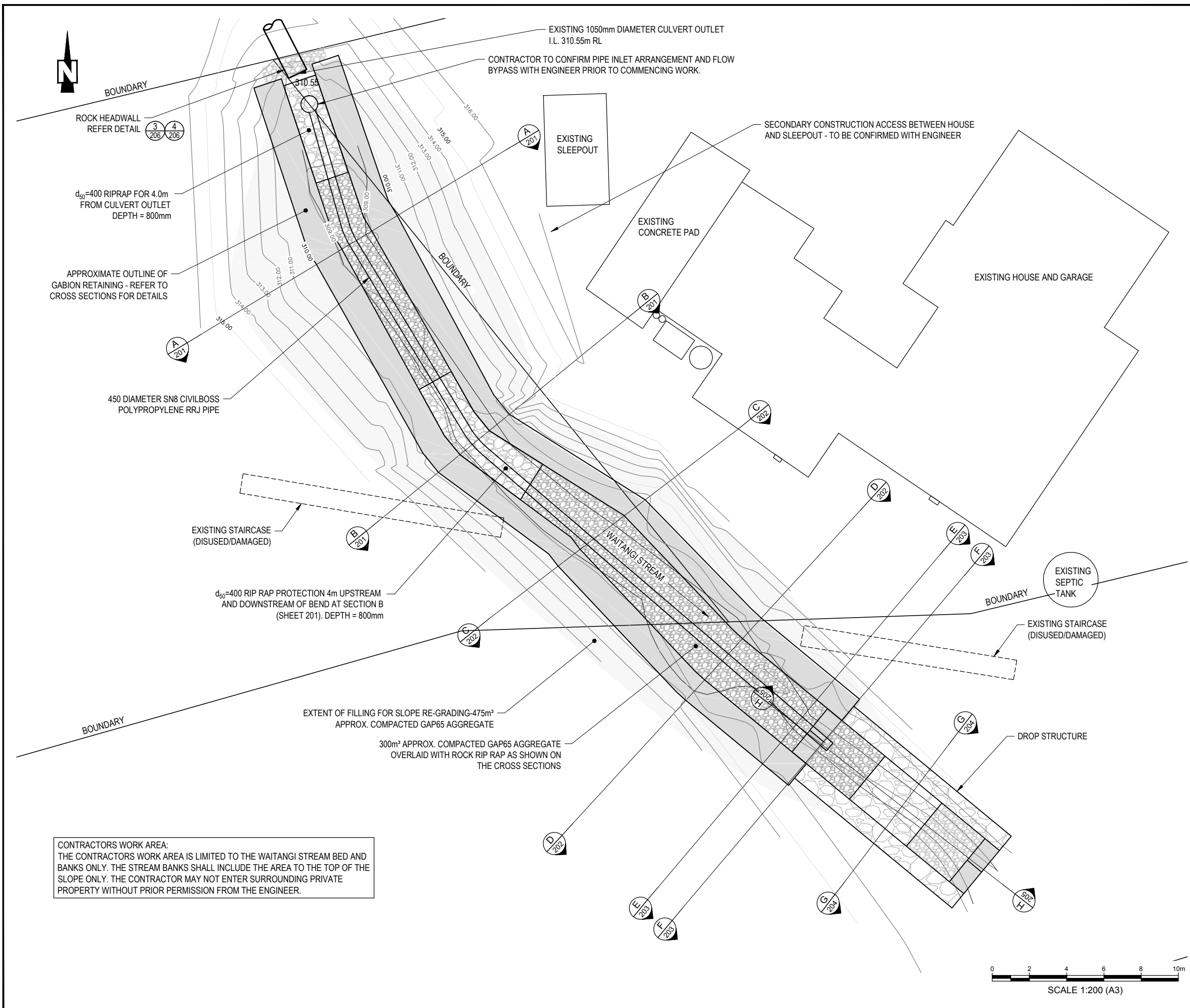


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SCALE 1:500	(A3)	SHEET : OF :
PROJECT NO. : T01552501	DRAWING NO. : 101	REVISION : 0
FILED : T01552501D100.dwg		





- NOTES:
1. ALL DIMENSIONS IN mm UNLESS OTHERWISE SPECIFIED.
 2. LEVEL DATA BASED ON TOPOGRAPHICAL SURVEY CARRIED OUT BY SURVEY ONE LIMITED ON 13th NOVEMBER 2017.
 3. COORDINATE SYSTEM: BAY OF PLENTY 2000
LEVEL DATUM: MOTURIKI 1953
ORIGIN: IS XIX SO 56680 (GEODETTIC DATABASE CODE: E8UF) RL 329.63M. MOTURIKI DATUM 1953 LEVEL CALCULATED FROM NZ VERTICAL DATUM 2016 LEVEL USING THE LINZ ONLINE CONVERSION.
 4. ORIGIN OF SURVEY: LINZ GEODETTIC DATABASE
 5. BOUNDARY DETAILS HAVE BEEN ADOPTED FROM UNDERLYING SURVEY PLANS.
 6. THE IDENTITY AND LOCATION OF ANY SERVICES SHOWN ON THIS DRAWING CANNOT BE GUARANTEED TO BE COMPLETE OR ACCURATE.
 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL SERVICES PRIOR TO UNDERTAKING ANY EXCAVATION.
 8. GABIONS TO BE INSTALLED ACCORDING TO MANUFACTURERS INSTRUCTIONS. ALL JOINING TO BE CARRIED OUT USING STAINLESS STEEL RINGS AT MINIMUM SPACING 150mm.
 9. ALL GABIONS TO BE GALFAN AND PVC COATED.
 10. CONTRACTOR TO CONFIRM LAYOUT OF STRUCTURES TO ACHIEVE THE SECTIONS SHOWN IN SHEET 201 TO SHEET 202.
 11. ALL RIP RAP TO MEET MINIMUM DENSITY & SIZING SPECIFICATION.

SOURCE:
1. DRAWING BASED ON SURVEY ONE LTD. AS AT 13/11/2017

0	ISSUED FOR TENDER	MAR 18		
A	ISSUED FOR REVIEW	FEB 20		
NO.	REVISION	DATE	APP.	
	DESIGNED	A.D.	D.G.G.	JAN 18
	DRAWN	J.H.	A.D.	JAN 18
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**BAY OF PLENTY
REGIONAL COUNCIL
TOI MOANA**

PROJECT :

**WAITANGI STREAM
REMEDICATION AND
EROSION PROTECTION**

TITLE :

**STREAM
WORKS PLAN**

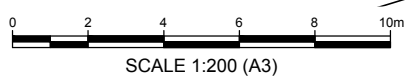


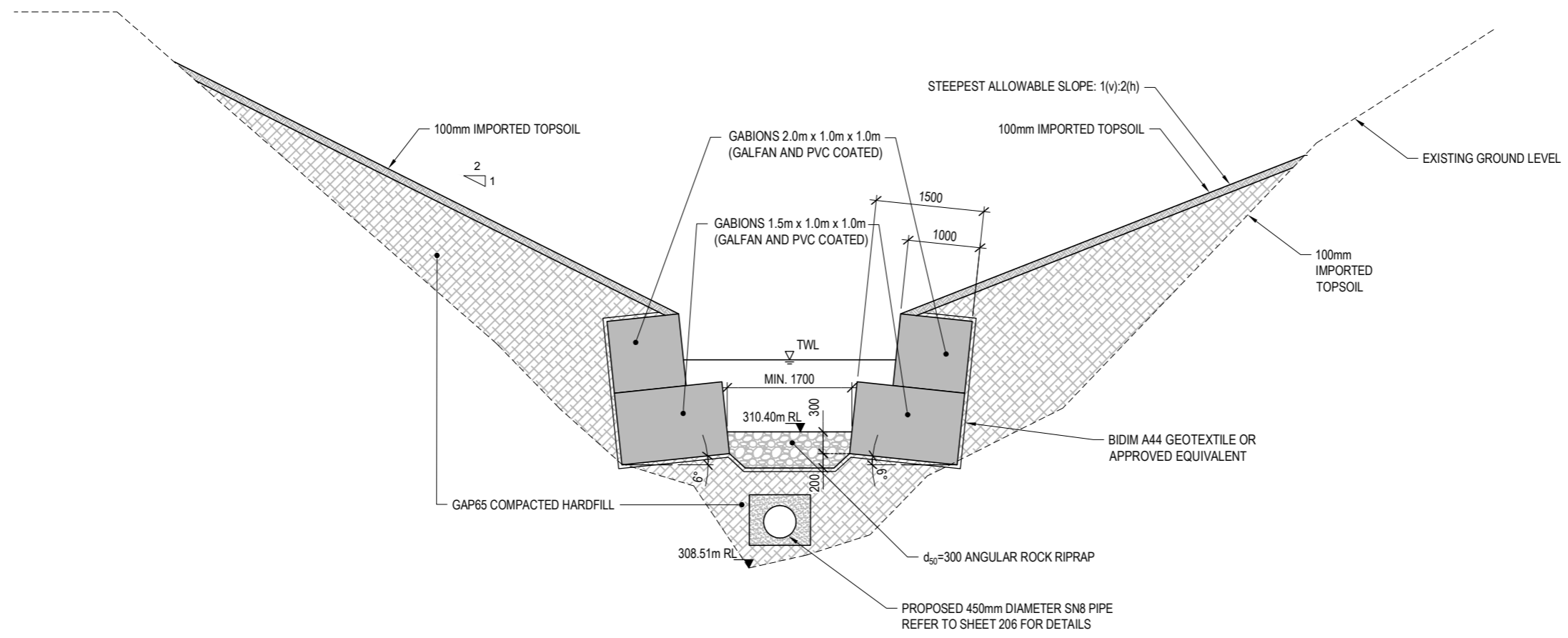
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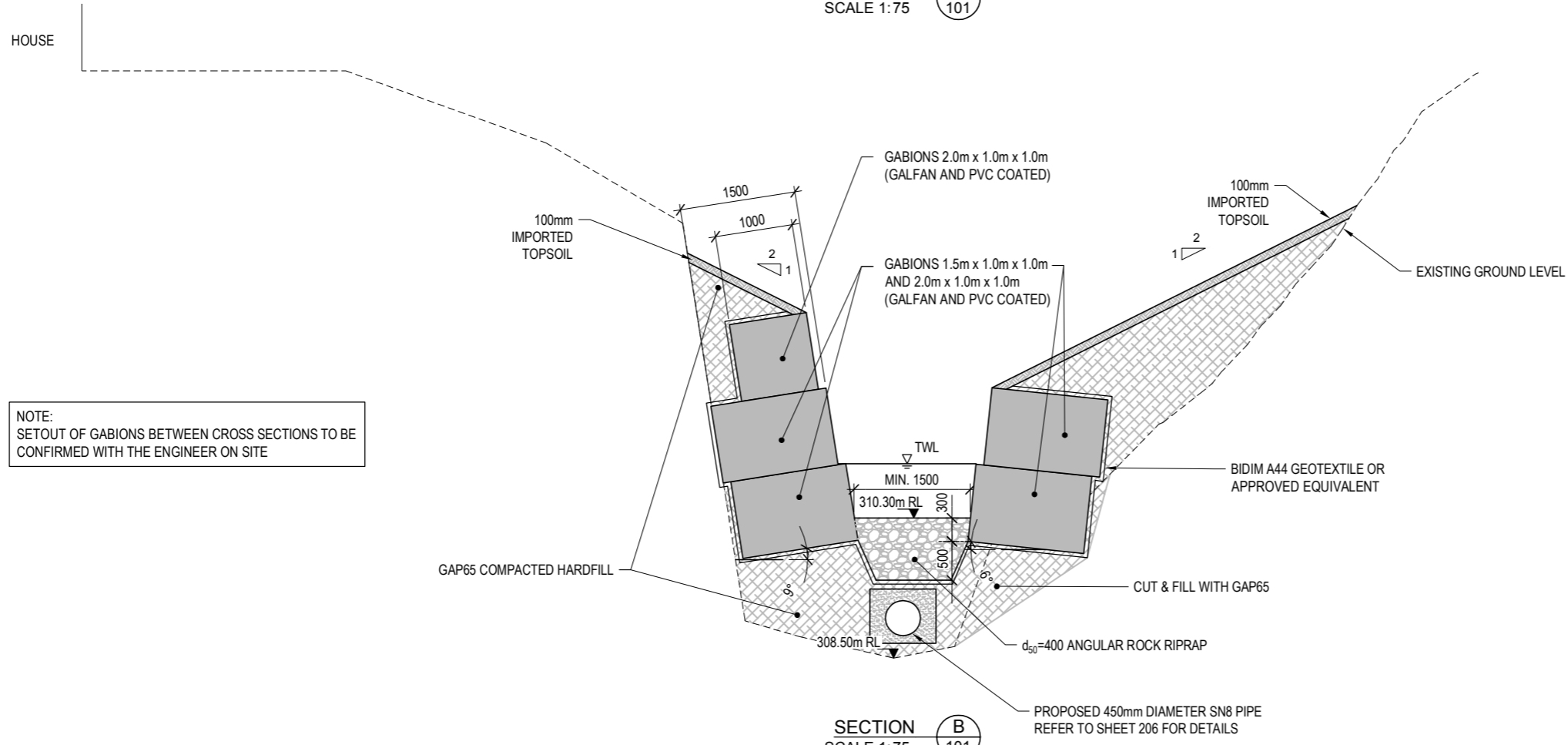
SCALE 1:200	(A3)	SHEET : OF :
PROJECT NO. :	DRAWING NO. :	REVISION :
T01552501	102	0
FILED : T01552501D100.dwg		

CONTRACTORS WORK AREA:
THE CONTRACTORS WORK AREA IS LIMITED TO THE WAITANGI STREAM BED AND BANKS ONLY. THE STREAM BANKS SHALL INCLUDE THE AREA TO THE TOP OF THE SLOPE ONLY. THE CONTRACTOR MAY NOT ENTER SURROUNDING PRIVATE PROPERTY WITHOUT PRIOR PERMISSION FROM THE ENGINEER.





SECTION A
SCALE 1:75




SECTION B
SCALE 1:75

NOTE:
SETOUT OF GABIONS BETWEEN CROSS SECTIONS TO BE CONFIRMED WITH THE ENGINEER ON SITE

- NOTES:
1. ALL DIMENSIONS IN mm UNLESS OTHERWISE SPECIFIED.
 2. LEVEL DATA BASED ON TOPOGRAPHICAL SURVEY CARRIED OUT BY SURVEY ONE LIMITED ON 13th NOVEMBER 2017.
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 7. ALL GABIONS TO BE GALFAN AND PVC COATED.
 8. ALL GABIONS TO BE WRAPPED IN BIDIM A44 GEOTEXTILE. ALL RIP RAP TO BE UNDERLAIN BY BIDIM A44 GEOTEXTILE.
 9. TWL IS INDICATIVE WATER LEVEL FOR A 20 YEAR ARI DESIGN FLOW INCLUDING ALLOWANCE FOR CLIMATE CHANGE EFFECTS.

0	ISSUED FOR TENDER	MAR 18	
A	ISSUED FOR REVIEW	FEB 21	
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	BY	CHECKED	DATE
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PROJECT :

WAITANGI STREAM
REMEDATION AND
EROSION PROTECTION

TITLE :

CROSS SECTIONS 1



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SCALE 1:75	(A3)	SHEET : OF :
PROJECT NO. :	DRAWING NO. :	REVISION :
T01552501	201	0

FILED : T01552501D200.dwg

- NOTES:
1. ALL DIMENSIONS IN mm UNLESS OTHERWISE SPECIFIED.
 2. LEVEL DATA BASED ON TOPOGRAPHICAL SURVEY CARRIED OUT BY SURVEY ONE LIMITED ON 13th NOVEMBER 2017.
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0	ISSUED FOR TENDER	MAR 18	
A	ISSUED FOR REVIEW	FEB 22	
NO.	REVISION	DATE	APP.
	BY	CHECKED	DATE
DESIGNED	A.D.	D.G.G.	JAN 18
DRAWN	J.H.	A.D.	JAN 18
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PROJECT :

WAITANGI STREAM REMEDIATION AND EROSION PROTECTION

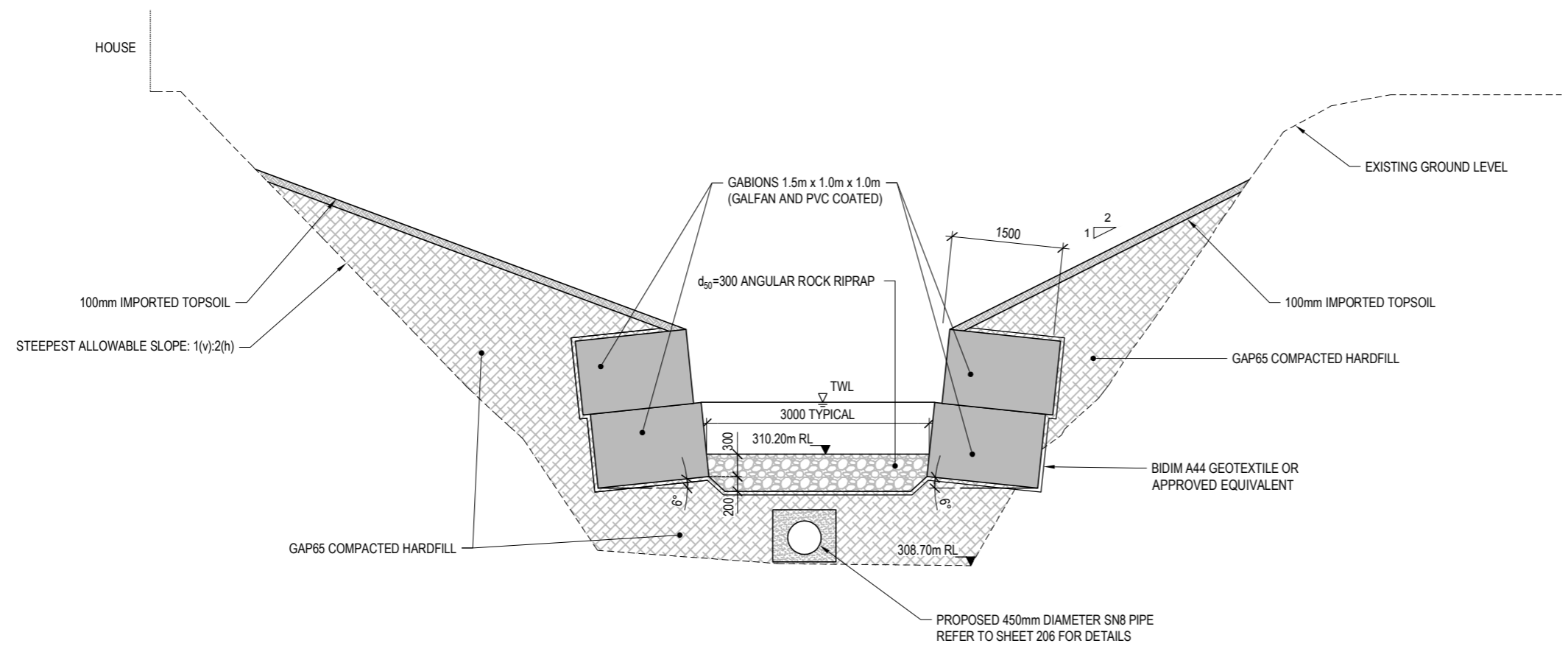
TITLE :

CROSS SECTIONS 2

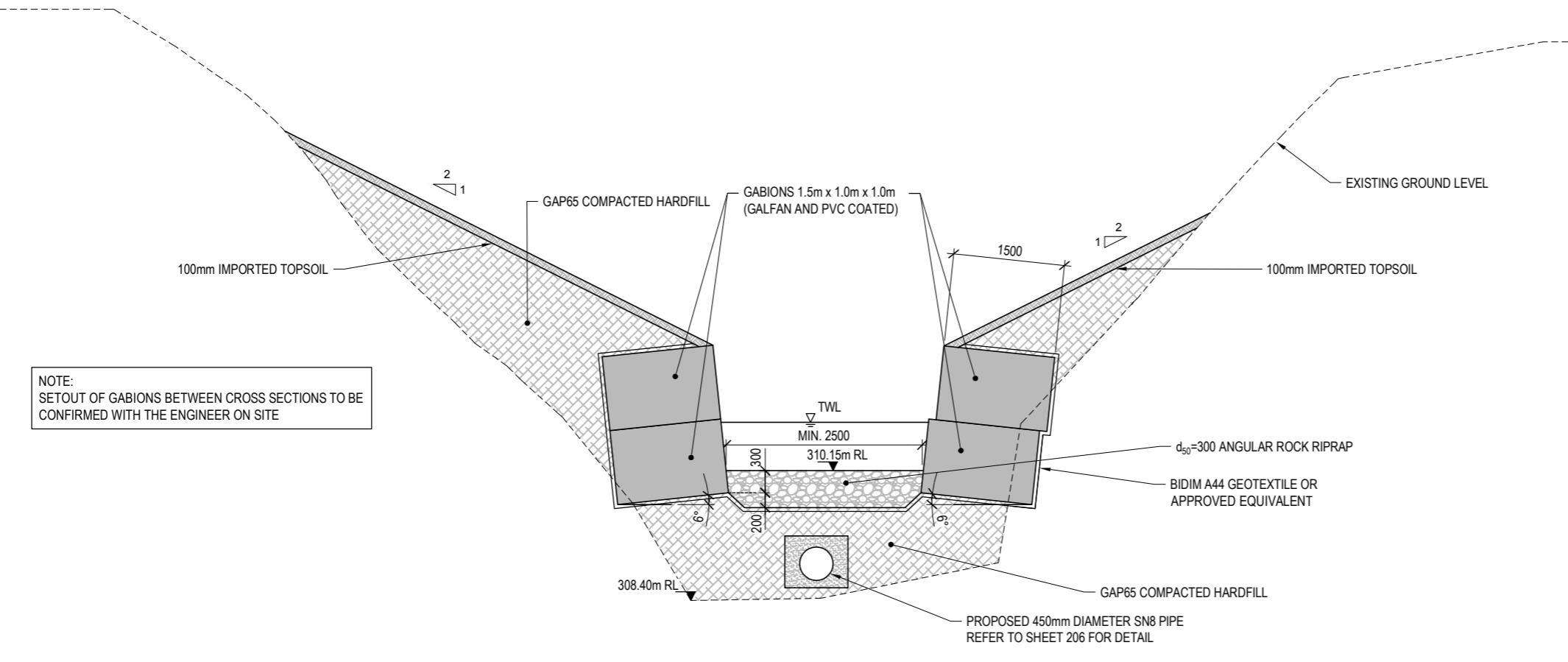


SCALE 1:75	(A3)	SHEET : OF :
PROJECT NO. :	DRAWING NO. :	REVISION :
T01552501	202	0

FILED : T01552501D200.dwg

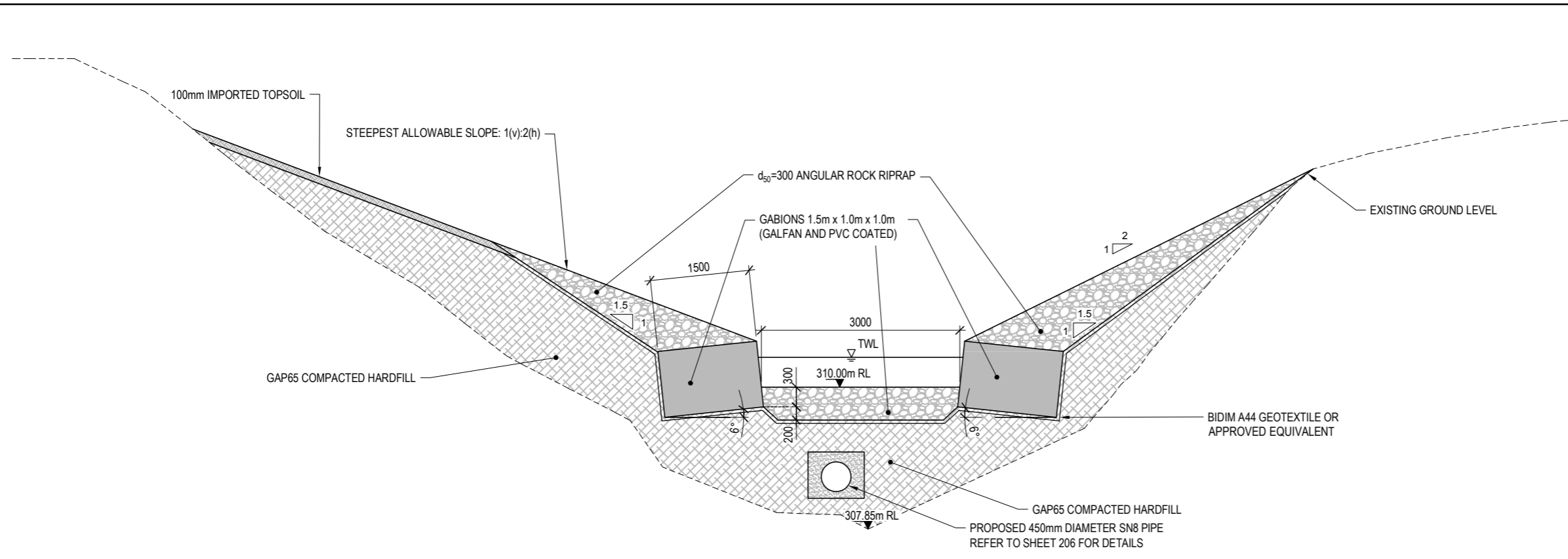


SECTION C
SCALE 1:75

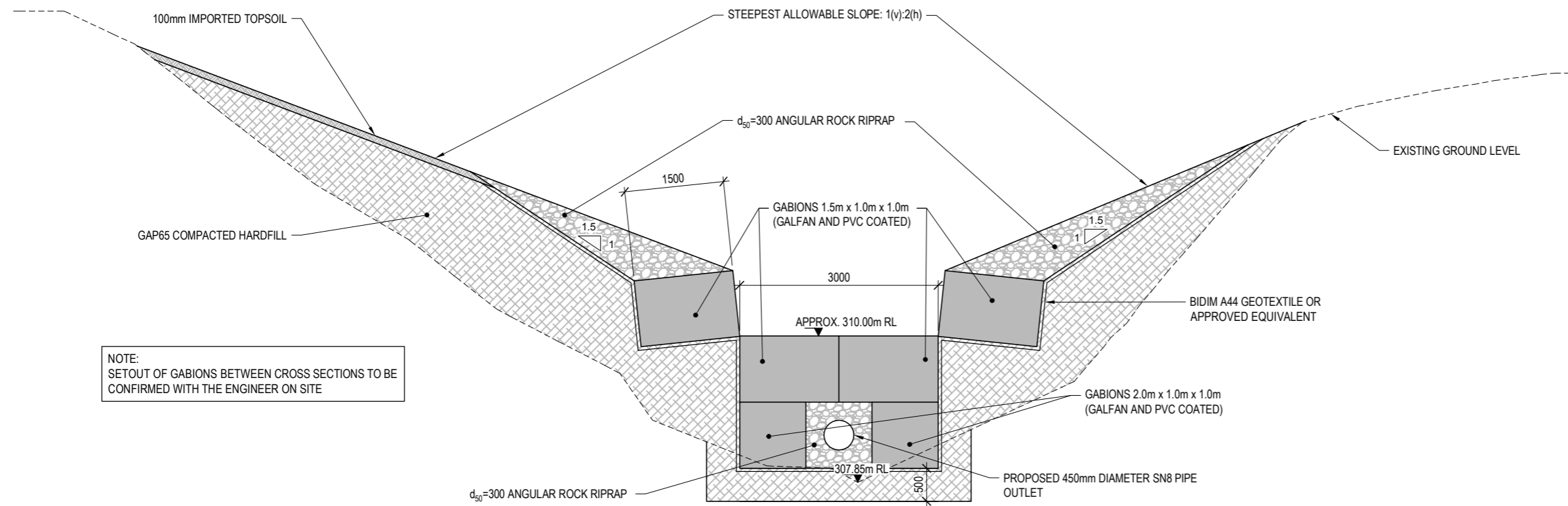


SECTION D
SCALE 1:75

NOTE:
SETOUT OF GABIONS BETWEEN CROSS SECTIONS TO BE CONFIRMED WITH THE ENGINEER ON SITE



SECTION E
SCALE 1:75



SECTION F
SCALE 1:75

NOTE:
SETOUT OF GABIONS BETWEEN CROSS SECTIONS TO BE
CONFIRMED WITH THE ENGINEER ON SITE


- NOTES:
1. ALL DIMENSIONS IN mm UNLESS OTHERWISE SPECIFIED.
 2. LEVEL DATA BASED ON TOPOGRAPHICAL SURVEY CARRIED OUT BY SURVEY ONE LIMITED ON 13th NOVEMBER 2017.
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 9. TWL IS INDICATIVE WATER LEVEL FOR A 20 YEAR ARI DESIGN FLOW INCLUDING ALLOWANCE FOR CLIMATE CHANGE EFFECTS.

NO.	REVISION	DATE	APP.
0	ISSUED FOR TENDER	MAR 18	
A	ISSUED FOR REVIEW	FEB 23	

	BY	CHECKED	DATE
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TOI MOANA

PROJECT :

WAITANGI STREAM
REMEDICATION AND
EROSION PROTECTION

TITLE :

CROSS SECTIONS 3

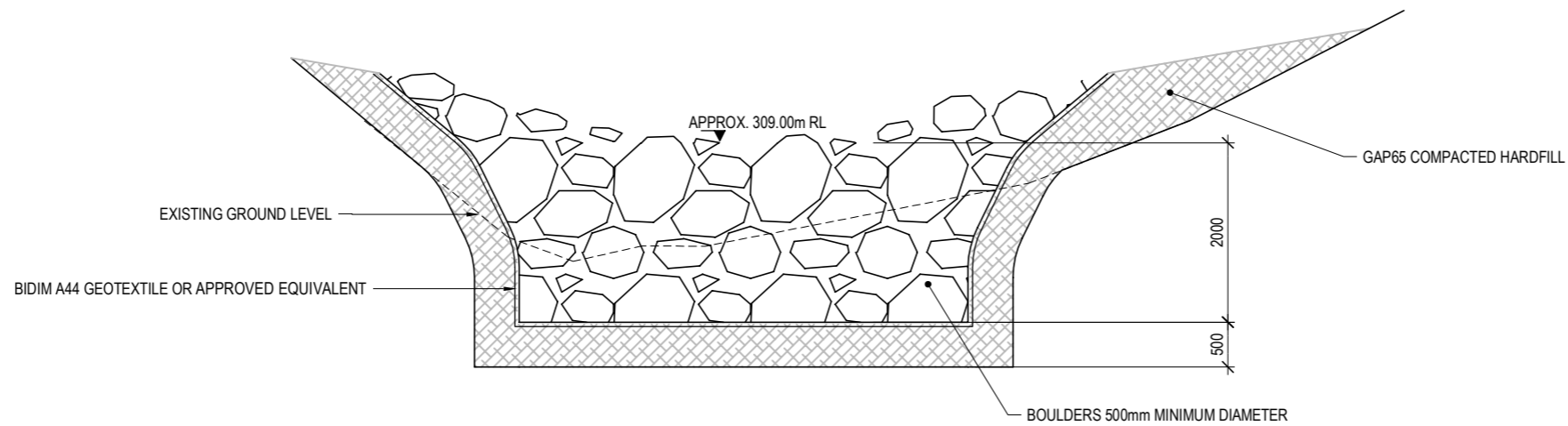


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SCALE 1:75	(A3)	SHEET : OF :
PROJECT NO. : T01552501	DRAWING NO. : 203	REVISION : 0

FILED : T01552501D200.dwg




SECTION **G**
SCALE 1:75 **101**

- NOTES :
1. ALL DIMENSIONS IN mm UNLESS OTHERWISE SPECIFIED.
 2. LEVEL DATA BASED ON TOPOGRAPHICAL SURVEY CARRIED OUT BY SURVEY ONE LIMITED ON 13th NOVEMBER 2017.
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0	ISSUED FOR TENDER	MAR 18	
A	ISSUED FOR REVIEW	FEB 24	
NO.	REVISION	DATE	APP.
	BY	CHECKED	DATE
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PROJECT :

**WAITANGI STREAM
REMEDICATION AND
EROSION PROTECTION**

TITLE :

CROSS SECTIONS 4

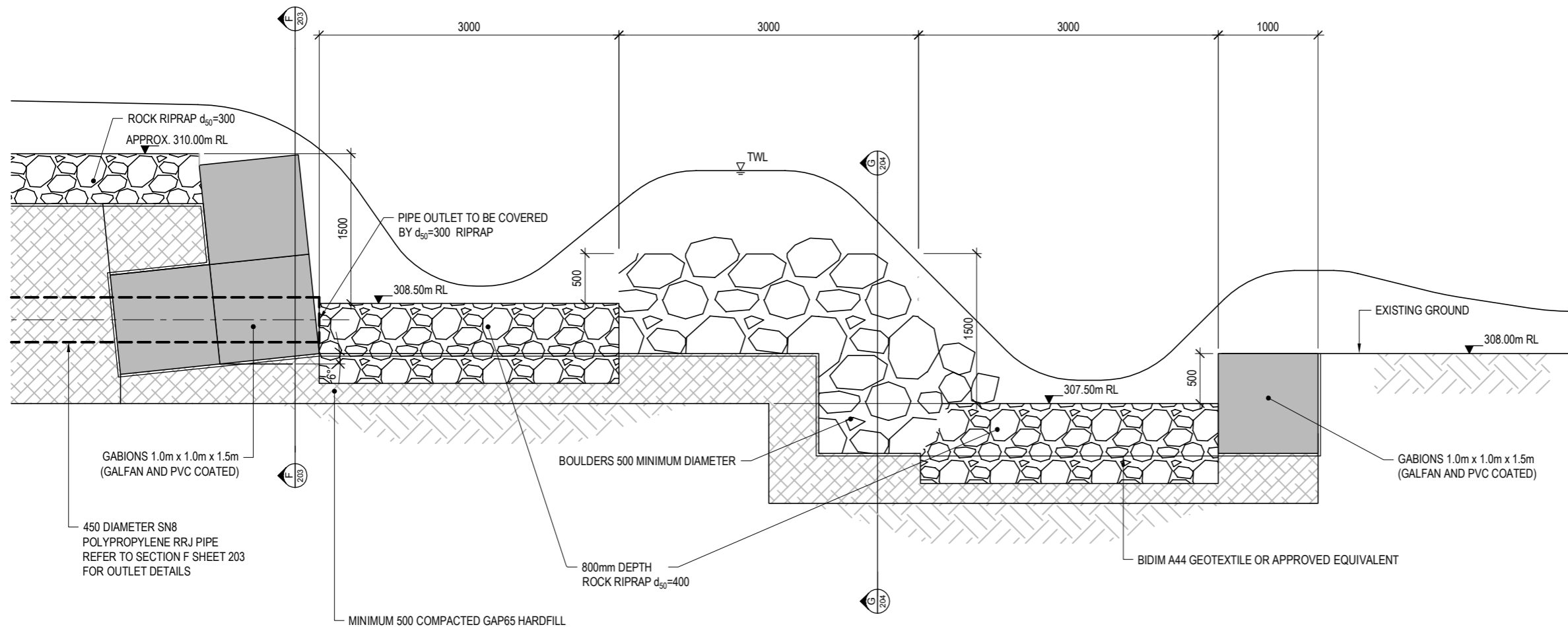


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SCALE 1:75	(A3)	SHEET : OF :
PROJECT NO. :	DRAWING NO. :	REVISION :
T01552501	204	0

FILED : T01552501D200.dwg



DROP STRUCTURE SECTION H
101
SCALE 1:75

- NOTES :
1. ALL DIMENSIONS IN mm UNLESS OTHERWISE SPECIFIED.
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 9. TWL IS INDICATIVE WATER LEVEL FOR A 20 YEAR ARI DESIGN FLOW INCLUDING ALLOWANCE FOR CLIMATE CHANGE EFFECTS.

0	ISSUED FOR TENDER	MAR 18	
A	ISSUED FOR REVIEW	FEB 25	
NO.	REVISION	DATE	APP.
	BY	CHECKED	DATE
DESIGNED	A.D.	D.G.G.	JAN 18
DRAWN	J.H.	A.D.	JAN 18
APPROVED ISSUE FOR :			MAR 18
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PROJECT :

**WAITANGI STREAM
REMEDATION AND
EROSION PROTECTION**

TITLE :

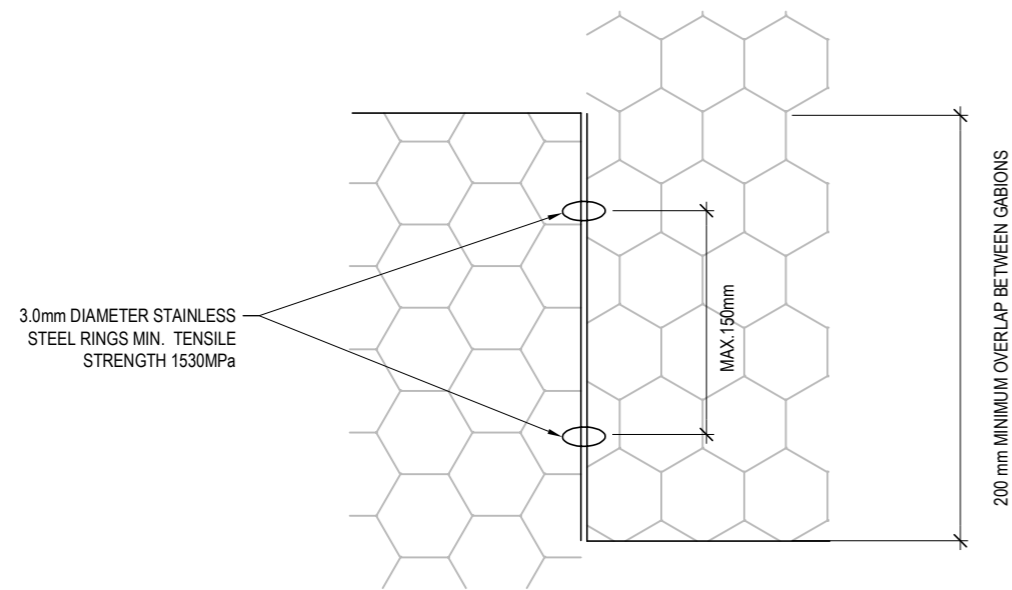
**DROP STRUCTURE
SECTION**



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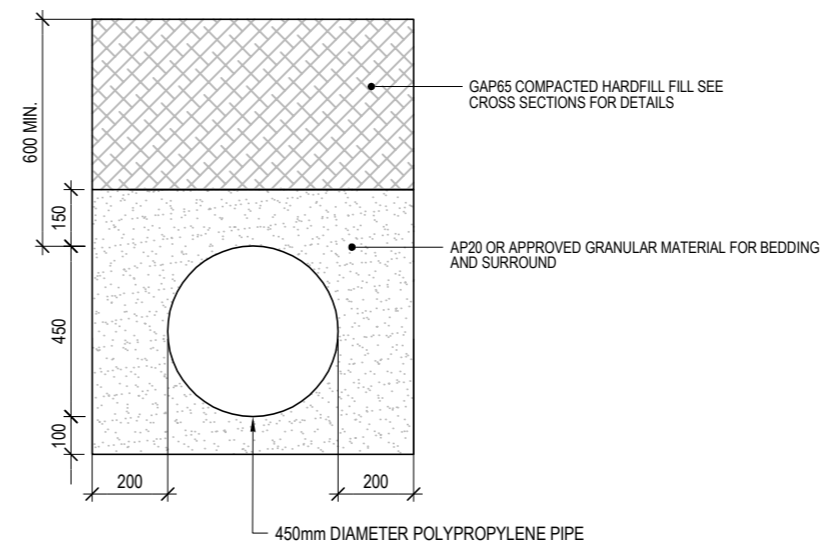
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SCALE 1:50	(A3)	SHEET : OF :
PROJECT NO. :	DRAWING NO. :	REVISION :
T01552501	205	0



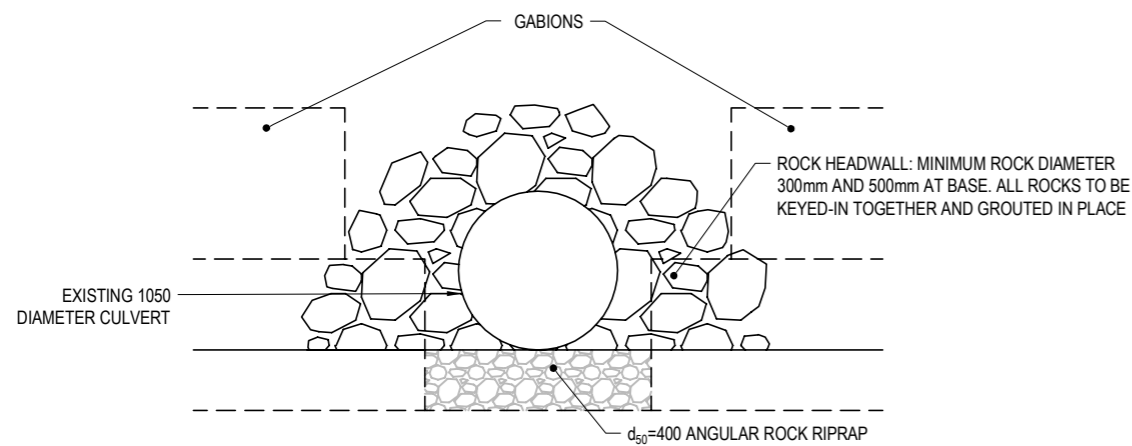
DETAIL 1

STANDARD GABION JOINING DETAIL
SCALE N.T.S



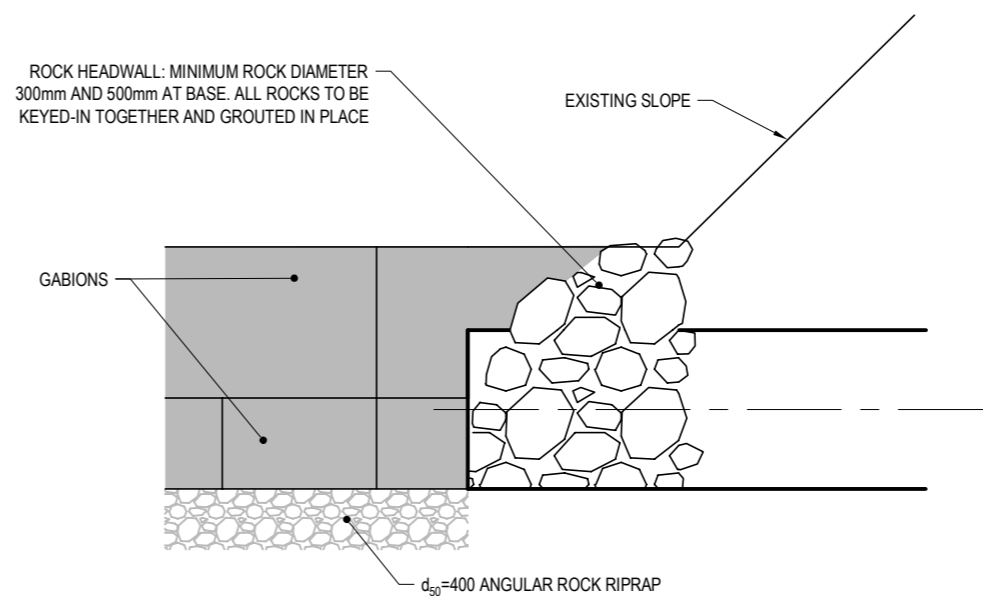
DETAIL 2

TYPICAL PIPE DETAIL
SCALE 1:20



DETAIL 3

CULVERT HEADWALL DETAIL
SCALE 1:50



DETAIL 4

CULVERT HEADWALL DETAIL
SCALE 1:50

- NOTES :
1. ALL DIMENSIONS IN mm UNLESS OTHERWISE SPECIFIED.
 2. LEVEL DATA BASED ON TOPOGRAPHICAL SURVEY CARRIED OUT BY SURVEY ONE LIMITED ON 13th NOVEMBER 2017.
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NO.	REVISION	DATE	APP.
0	ISSUED FOR TENDER	MAR 18	
A	ISSUED FOR REVIEW	FEB 26	

	BY	CHECKED	DATE
DESIGNED	A.D.	D.G.G.	JAN 18
DRAWN	J.H.	A.D.	JAN 18
APPROVED ISSUE FOR :			MAR 18

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PROJECT :

**WAITANGI STREAM
REMEDATION AND
EROSION PROTECTION**

TITLE :

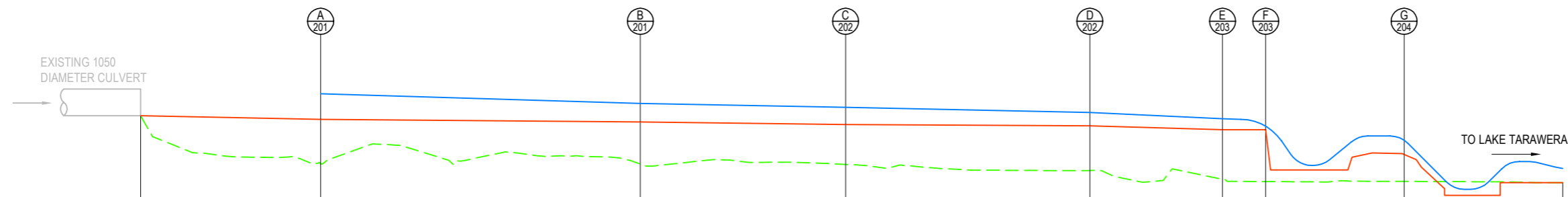
STANDARD DETAILS

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SCALE	AS SHOWN (A3)	SHEET OF :
PROJECT NO. :	DRAWING NO. :	REVISION :
T01552501	206	0

KEY :

- PROPOSED SURFACE
- - - EXISTING SURFACE
- INDICATIVE TOP WATER LEVEL



DATUM RL 300.00m RL	
CHAINAGE (m) - OFFSET FROM CULVERT OUTLET	0.00
EXISTING GROUND LEVEL (m RL)	310.55
PROPOSED GROUND LEVEL (m RL)	310.55
	7.09
	19.69
	27.78
	37.41
	42.64
	44.34
	49.79
	56.04

LONG SECTION
SCALE 1:200

- NOTES :
- ALL DIMENSIONS IN mm UNLESS OTHERWISE SPECIFIED.
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0	ISSUED FOR TENDER	MAR 18	
A	ISSUED FOR REVIEW	FEB 27	

	BY	CHECKED	DATE
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TOI MOANA**

PROJECT :

**WAITANGI STREAM
REMEDATION AND
EROSION PROTECTION**

TITLE :

LONG SECTION



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SCALE 1:200	(A3)	SHEET : OF :
PROJECT NO. : T01552501	DRAWING NO. : 207	REVISION : 0