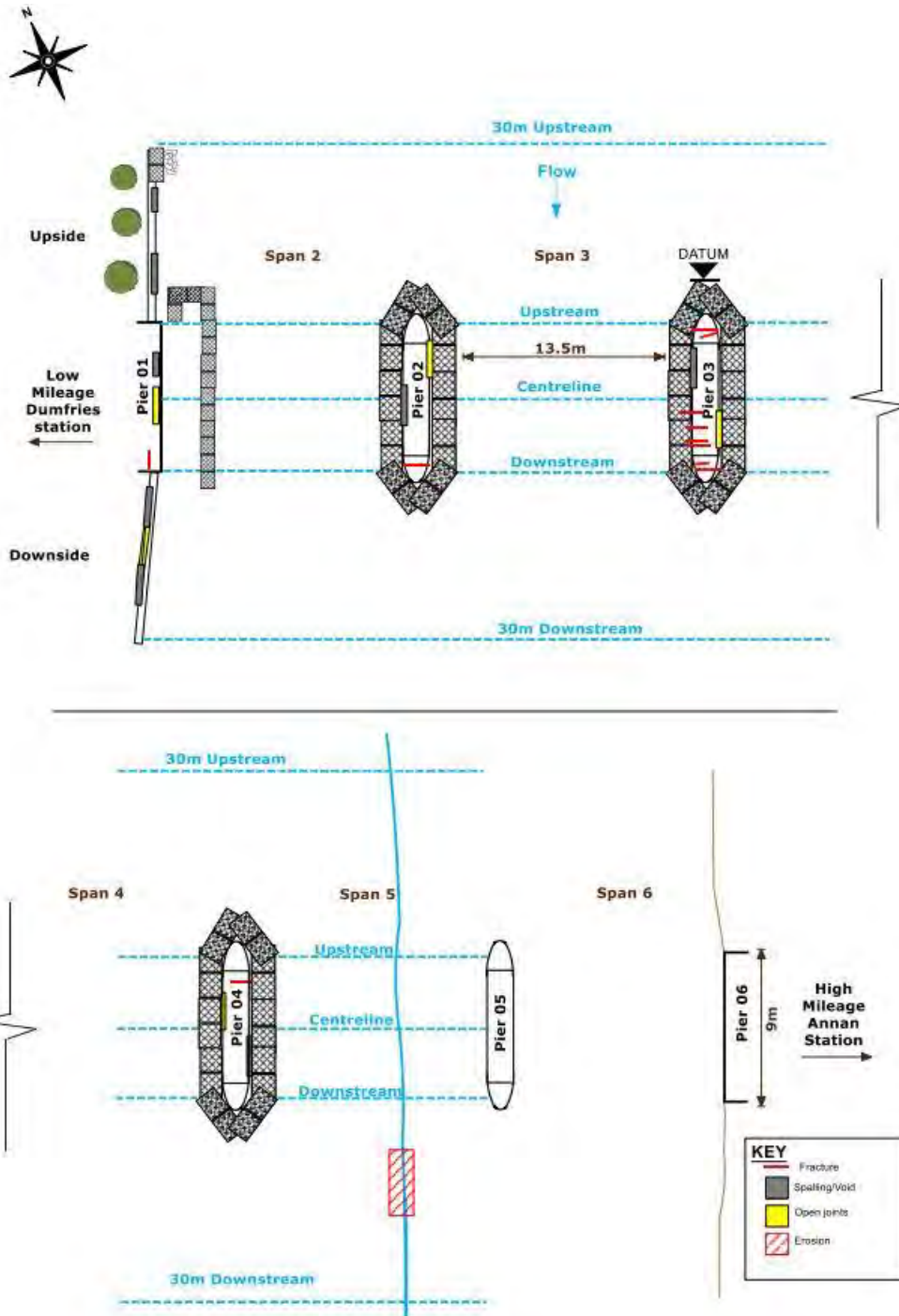


## NETWORK RAIL BRIDGE & STRUCTURE UNDERWATER EXAMINATION REPORT

ELR:	GSW	Structure No. 161/343	Mileage: 106 M	1481 YDS	67.32 CH
Exam Date:	14/09/20	Route:	Gretna - Glasgow Central (Via Beatock)		
Group:	BU	OS Ref:	NY1870 6632	N° of Spans:	7
Structure Name:	Annan Viaduct				

### APPENDIX A - SKETCH PLAN



All dimensions in mm

Not to scale

## NETWORK RAIL BRIDGE & STRUCTURE UNDERWATER EXAMINATION REPORT

ELR:	GSW	Structure No. 161/343	Mileage: 106 M	1481 YDS	67.32 CH
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Structure Name:	Annan Viaduct				



**PHOTO 1: VIEW FROM UPSTREAM 14/09/20**



**PHOTO 2: VIEW LOOKING UPSTREAM FROM STRUCTURE 14/09/20**



## NETWORK RAIL BRIDGE & STRUCTURE UNDERWATER EXAMINATION REPORT

ELR:	GSW	Structure No.	161/343	Mileage:	106 M	1481 YDS	67.32 CH
Exam Date:	14/09/20		Route:	Gretna - Glasgow Central (Via Beatoek)			
Group:	BU	OS Ref:	NY1870 6632	N° of Spans:	7		
Structure Name:	Annan Viaduct						



**PHOTO 3: VIEW FROM DOWNSTREAM 14/09/20**



**PHOTO 4: VIEW LOOKING DOWNSTREAM FROM STRUCTURE 14/09/20**



## NETWORK RAIL BRIDGE & STRUCTURE UNDERWATER EXAMINATION REPORT

ELR:	GSW	Structure No. 161/343	Mileage: 106 M	1481 YDS	67.32 CH
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Structure Name:	Annan Viaduct				



**PHOTO 5: P5 - DAMAGED GABIONS 14/09/20**



**PHOTO 6: P6- PIER 3 DAMAGED GABIONS 14/09/20**



## NETWORK RAIL BRIDGE & STRUCTURE UNDERWATER EXAMINATION REPORT

ELR:	GSW	Structure No. 161/343	Mileage: 106 M	1481 YDS	67.32 CH
Exam Date:	14/09/20	Route:	Gretna - Glasgow Central (Via Beatoch)		
Group:	BU	OS Ref:	NY1870 6632	N° of Spans:	7
Structure Name:	Annan Viaduct				



**PHOTO 7: P7- PIER 3 DAMAGED GABIONS 14/09/20**



**PHOTO 8: P8- PIER 3 DAMAGED GABIONS 14/09/20**



## NETWORK RAIL BRIDGE & STRUCTURE UNDERWATER EXAMINATION REPORT

ELR:	GSW	Structure No. 161/343	Mileage: 106 M	1481 YDS	67.32 CH
Exam Date:	14/09/20	Route:	Gretna - Glasgow Central (Via Beatock)		
Group:	BU	OS Ref:	NY1870 6632	N° of Spans:	7
Structure Name:	Annan Viaduct				



**PHOTO 9:** P9- PIER 3 DAMAGED GABIONS 14/09/20



**PHOTO 10:** P10- PIER 3 DAMAGED GABIONS 14/09/20



## NETWORK RAIL BRIDGE & STRUCTURE UNDERWATER EXAMINATION REPORT

ELR:	GSW	Structure No. 161/343	Mileage: 106 M	1481 YDS	67.32 CH
Exam Date:	14/09/20	Route:	Gretna - Glasgow Central (Via Beatock)		
Group:	BU	OS Ref:	NY1870 6632	N° of Spans:	7
Structure Name:	Annan Viaduct				



**PHOTO 11:** P11 - EROSION DOWNSTREAM HIGH MILEAGE 14/09/20

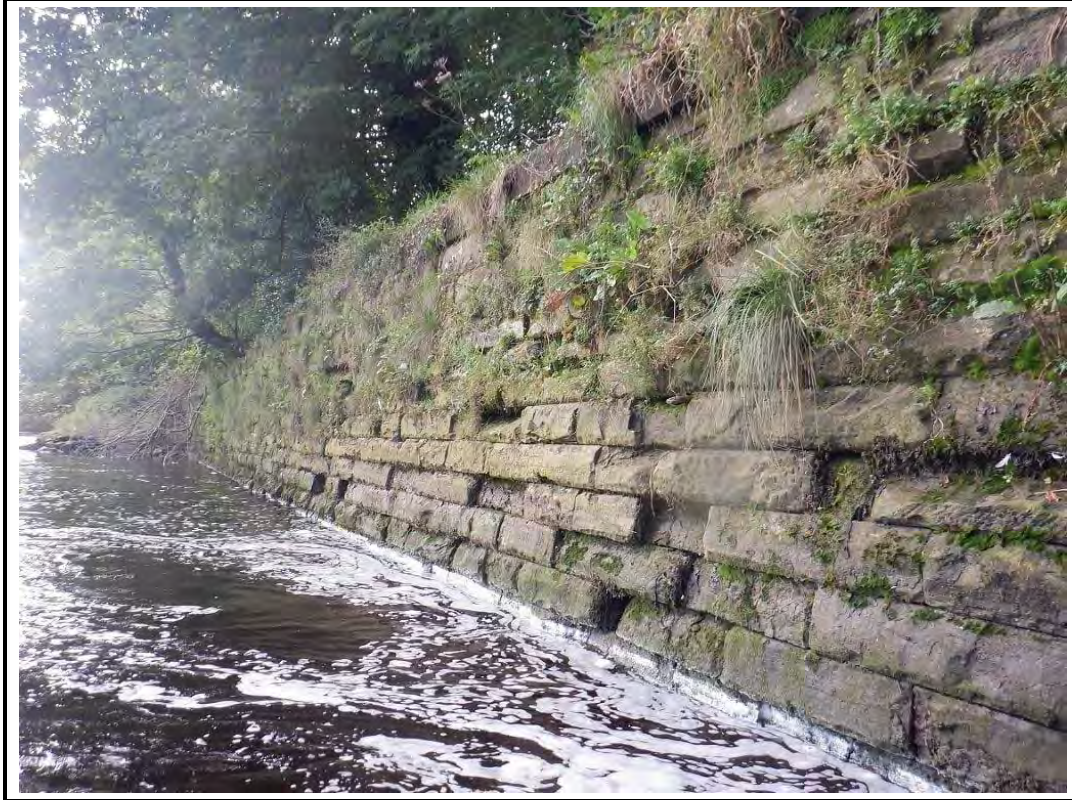


**PHOTO 12:** P12 - EROSION UPSTREAM LOW MILEAGE AFTER THE GABION BASKETS 14/09/20



## NETWORK RAIL BRIDGE & STRUCTURE UNDERWATER EXAMINATION REPORT

ELR:	GSW	Structure No. 161/343	Mileage: 106 M	1481 YDS	67.32 CH	
Exam Date:	14/09/20	Route:	Gretna - Glasgow Central (Via Beatock)			
Group:	BU	OS Ref:	NY1870 6632	N° of Spans:	7	
Structure Name:	Annan Viaduct					



**PHOTO 13:** P13 - DOWNSTREAM LM RETAINING WALL 14/09/20



**PHOTO 14:** P14 - AREAS OF VOIDING AND SPALLING LOCATED THROUGHOUT 14/09/20



## NETWORK RAIL BRIDGE & STRUCTURE UNDERWATER EXAMINATION REPORT

ELR:	GSW	Structure No. 161/343	Mileage: 106 M	1481 YDS	67.32 CH
Exam Date:	14/09/20	Route:	Gretna - Glasgow Central (Via Beatoek)		
Group:	BU	OS Ref:	NY1870 6632	N° of Spans:	7
Structure Name:	Annan Viaduct				



**PHOTO 15:** P15 - UPSTREAM LM RETAINING WALL 14/09/20

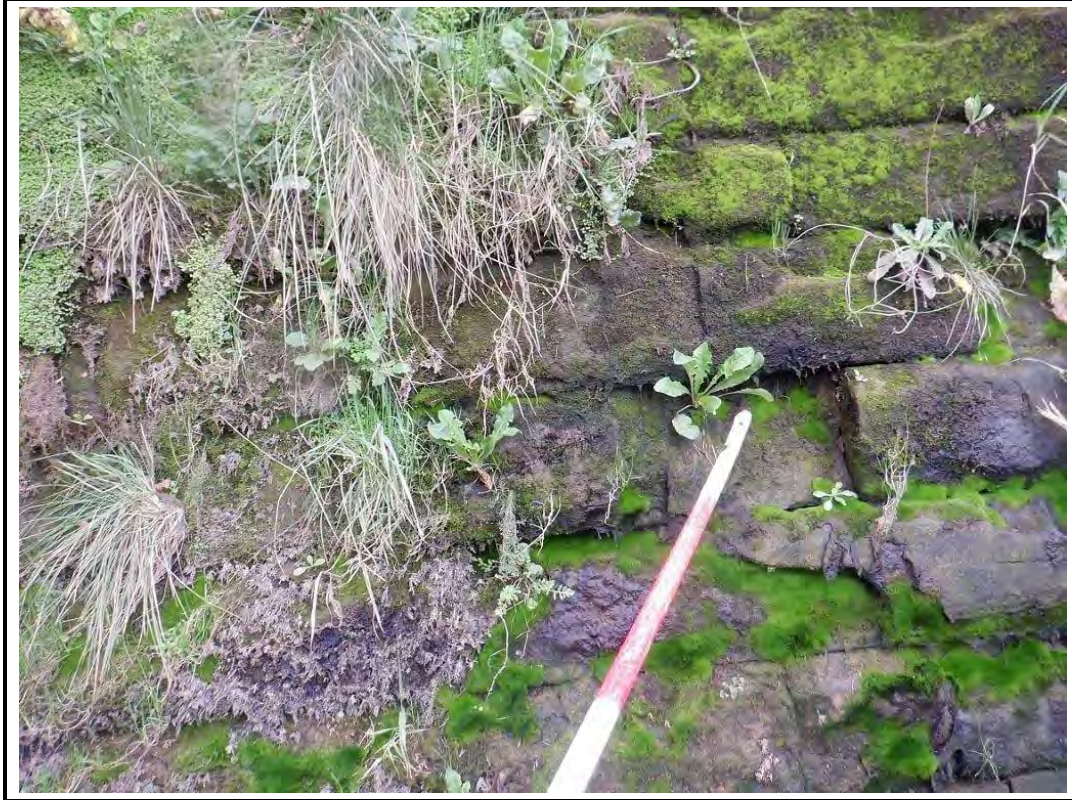


**PHOTO 16:** P16 - DOWN PIPES LOCATED ADJACENT TO THE ABUTMENT 14/09/20



## NETWORK RAIL BRIDGE & STRUCTURE UNDERWATER EXAMINATION REPORT

ELR:	GSW	Structure No. 161/343	Mileage: 106 M	1481 YDS	67.32 CH
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Structure Name:	Annan Viaduct				



**PHOTO 17:** P17 - 8M FROM THE ABUTMENT 4M2 SPALLING 14/09/20



**PHOTO 18:** P18 - AT 9M FROM THE ABUTMENT SPALLING AT WATER LEVEL, 14/09/20



## NETWORK RAIL BRIDGE & STRUCTURE UNDERWATER EXAMINATION REPORT

ELR:	GSW	Structure No. 161/343	Mileage: 106 M	1481 YDS	67.32 CH
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Structure Name:	Annan Viaduct				



**PHOTO 19:** P19 - UPSTREAM GABION BASKETS PROTECTED BY PITCHING STONE **14/09/20**



**PHOTO 20:** P20 - PIER 1 ANNAN STATION (HIGH MILEAGE) FACE **14/09/20**



## NETWORK RAIL BRIDGE & STRUCTURE UNDERWATER EXAMINATION REPORT

ELR:	GSW	Structure No. 161/343	Mileage: 106 M	1481 YDS	67.32 CH
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Structure Name:	Annan Viaduct				



**PHOTO 21:** P21 - DOWNSTREAM RETURN - FRACTURE 14/09/20



**PHOTO 22:** P22 - PIER 2 DOWNSTREAM NOSE 14/09/20



## NETWORK RAIL BRIDGE & STRUCTURE UNDERWATER EXAMINATION REPORT

ELR:	GSW	Structure No.:	161/343	Mileage:	106 M	1481 YDS	67.32 CH
Exam Date:	14/09/20		Route:	Gretna - Glasgow Central (Via Beatock)			
Group:	BU	OS Ref.:	NY1870 6632	N° of Spans:	7		
Structure Name:	Annan Viaduct						



**PHOTO 23:** P23 - PIER 2 UPSTREAM NOSE 14/09/20



**PHOTO 24:** P24 - PIER 2 LM FACE 14/09/20



## NETWORK RAIL BRIDGE & STRUCTURE UNDERWATER EXAMINATION REPORT

ELR:	GSW	Structure No. 161/343	Mileage: 106 M	1481 YDS	67.32 CH
Exam Date:	14/09/20	Route:	Gretna - Glasgow Central (Via Beatoek)		
Group:	BU	OS Ref:	NY1870 6632	N° of Spans:	7
Structure Name:	Annan Viaduct				



**PHOTO 25:** P25 - PIER 2 HM FACE 14/09/20



**PHOTO 26:** P26 - PIER 3 DOWNSTREAM NOSE 14/09/20

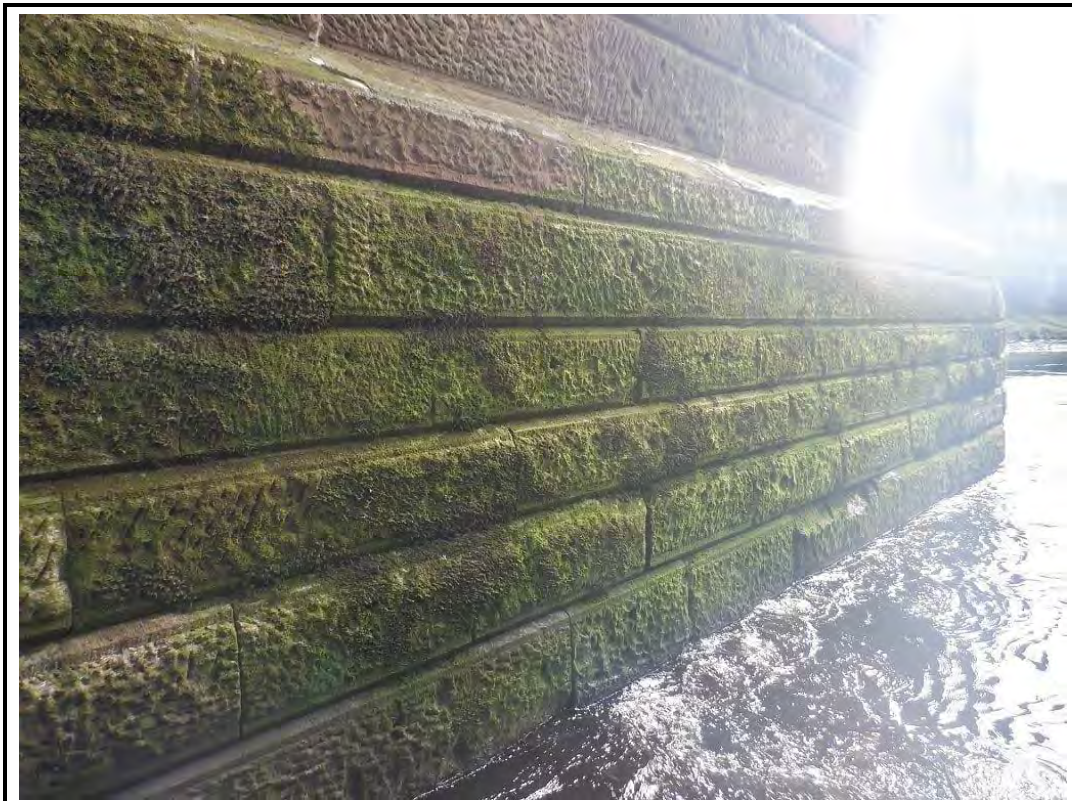


## NETWORK RAIL BRIDGE & STRUCTURE UNDERWATER EXAMINATION REPORT

ELR:	GSW	Structure No. 161/343	Mileage: 106 M	1481 YDS	67.32 CH
Exam Date:	14/09/20	Route:	Gretna - Glasgow Central (Via Beatoch)		
Group:	BU	OS Ref:	NY1870 6632	N° of Spans:	7
Structure Name:	Annan Viaduct				



**PHOTO 27:** P27 - PIER 3 UPSTREAM NOSE 14/09/20



**PHOTO 28:** P28 - PIER 3 LM FACE 14/09/20



## NETWORK RAIL BRIDGE & STRUCTURE UNDERWATER EXAMINATION REPORT

ELR:	GSW	Structure No. 161/343	Mileage: 106 M	1481 YDS	67.32 CH
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Structure Name:	Annan Viaduct				



**PHOTO 29:** P29 - 2NO VERTICAL FRACTURES 14/09/20



**PHOTO 30:** P30 - PIER 3 HM FACE 14/09/20



## NETWORK RAIL BRIDGE & STRUCTURE UNDERWATER EXAMINATION REPORT

ELR:	GSW	Structure No. 161/343	Mileage: 106 M	1481 YDS	67.32 CH
Exam Date:	14/09/20	Route:	Gretna - Glasgow Central (Via Beatock)		
Group:	BU	OS Ref:	NY1870 6632	N° of Spans:	7
Structure Name:	Annan Viaduct				



**PHOTO 31:** P31 - PIER 4 DOWNSTREAM NOSE 14/09/20



**PHOTO 32:** P32 - PIER 4 UPSTREAM NOSE 14/09/20



## NETWORK RAIL BRIDGE & STRUCTURE UNDERWATER EXAMINATION REPORT

ELR:	GSW	Structure No.:	161/343	Mileage:	106 M	1481 YDS	67.32 CH
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Group:	BU	OS Ref.:	NY1870 6632	N° of Spans:	7		
Structure Name:	Annan Viaduct						



**PHOTO 33:** P33 - PIER 4 LM FACE 14/09/20



**PHOTO 34:** P34 - PIER 4 HM FACE 14/09/20



## NETWORK RAIL BRIDGE & STRUCTURE UNDERWATER EXAMINATION REPORT

ELR:	GSW	Structure No. 161/343	Mileage: 106 M	1481 YDS	67.32 CH
Exam Date:	14/09/20	Route:	Gretna - Glasgow Central (Via Beatock)		
Group:	BU	OS Ref:	NY1870 6632	N° of Spans:	7
Structure Name:	Annan Viaduct				



**PHOTO 35:** P35 - PIER 514/09/20



**PHOTO 36:** P36 - DATUM - PIER 3 UPSTREAM NOSE 14/09/20