

**Fair-A-Far Weir, Cramond  
Edinburgh:  
Archaeological Mitigation**

Data Structure Report



by Liam McKinstry & Thomas Rees

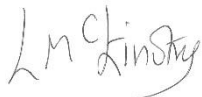
issued 5<sup>th</sup> March 2018

on behalf of Green Cat Contracting Ltd

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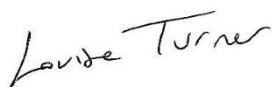
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In keeping with the procedure of Rathmell Archaeology Limited this document and its findings have been reviewed and agreed by an appropriate colleague:



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## Quality Assurance Data

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 Canmore IDs 90348 (Iron Works, Mill, Weir)

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## Introduction and Planning Context

1. This Data Structure Report (DSR) has been prepared for Green Cat Contracting Ltd in support of the consented works that impacted Fair-A-Far Weir, Cramond on the River Almond. These works replaced the fish pass and repaired crest blocks on the weir.
2. The archaeological works were designed to mitigate the unavoidable impact on the historic environment of these works to the agreement of City of Edinburgh Council Archaeology Service. The design of the works sought to minimise or remove impacts on the historic environment where this could be achieved.
3. Rathmell Archaeology Limited was appointed by Green Cat Contracting Ltd to undertake the development and implementation of the archaeological mitigation. This DSR provides the details of the mitigation of direct physical impact on buried sediments (monitoring and exclusion or excavation) and on historic building fabric (pre-impact historic building recording and monitoring during change to historic fabric).

### *Planning Context*

4. Fair-A-Far Weir is one element of a larger industrial complex that has been designated as a category B listed building (LB47281). Listed building consent (16/06277/LBC) and planning consent (16/06270/FUL) has been granted for these works by the City of Edinburgh Council (determined 17 February 2017).
5. On the basis of the recommendation of the City of Edinburgh Council Archaeology Service (CECAS) an archaeological condition was appended to the issued planning consent:
  2. *No development shall take place on the site until the applicant has secured the implementation of a programme of archaeological work (historic building recording, excavation, analysis & reporting, interpretation/public engagement) in accordance with a written scheme of investigation which has been submitted by the applicant and approved by the Planning Authority.*
6. CECAS within their consultation response provided guidance on the structure of archaeological works required on this site during development.
7. This guidance and the grant of planning and listed building consent is within the context of PAN 02/2011 and the Edinburgh Local Development Plan 2016, Policy Env 4 Listed Buildings – Alterations and Extensions (element b) and Policy Env 9 Development of Sites of Archaeological Significance (element c).

### *Historical and Archaeological Background*

8. A full desk-based assessment has been prepared:
  - Toop, N 2016 *Fair-A-Far Weir, Cramond, Edinburgh, Cultural Heritage Assessment*, unpublished commercial report for JBA Consulting by Field Archaeology Specialists Ltd (FAS Heritage)
9. Full cognisance and reference to the document detailed above is essential for the comprehension of this DSR.

## Project Works

10. The programme of works was undertaken between the 4<sup>th</sup> of August and 6<sup>th</sup> of September 2017 and included Level 2 building recording of the Fish Pass, the N end of the Weir and any earlier structural elements identified.
11. The programme of mitigation works was agreed to comprise the following key components:
  - a. the recording of the individual elements which make up the Fish Pass, the N end of the Weir and any earlier structural elements identified to Level 2 of the RCHME standards; and
  - b. the monitoring of the demolition of the Fish Pass and related structures as well

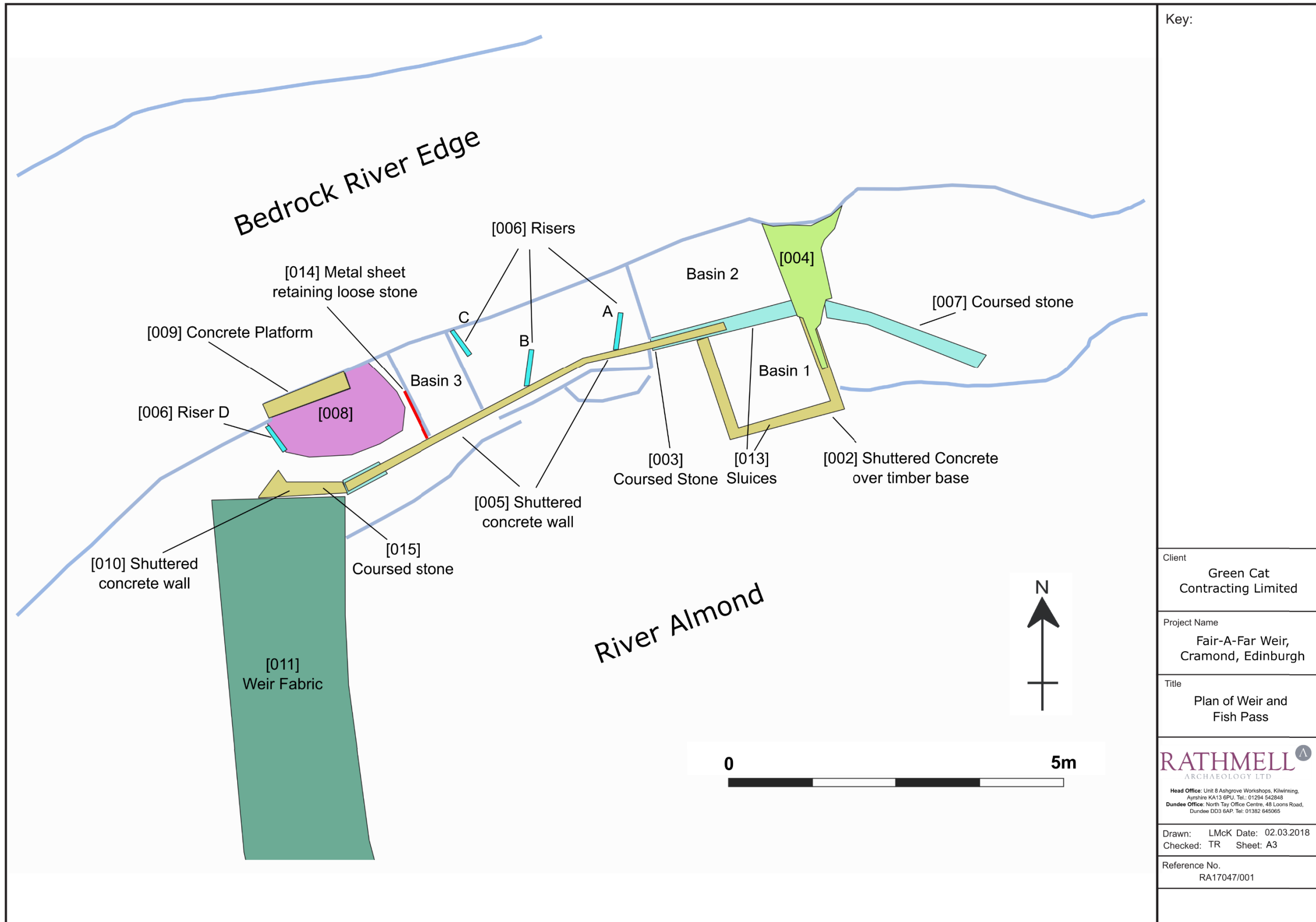


Figure 1: Layout of Fish Pass at Fair-A-Far Weir



Figure 2a: View of the Weir before works commence. From the W.



Figure 2b: View of the Fish Pass before works commence. From the ESE.



Figure 3a: View of shuttered concrete walls [010] & [005] and the sandstone wall [015] beneath. From the SSE.



Figure 3b: View of shuttered concrete wall [005] and the sandstone wall [003] beneath. From the S.



Figure 4a: Close up view of Riser A. From the ENE.



Figure 4b: View of Putlog Hole close to the ENE end of Basin 2. From the SSE.





Figure 5a: View of Basin 1 showing sluice hole [013] in action. From the SE.



Figure 5b: View of the Graffiti (001) within Basin 1. A possible reading of it could be "LEWIS....JOE...75..JACK..(or JECK)..COCHRANE'

as the repair of damaged sections of the Weir; and

- c. the production of an illustrated report which integrates the findings of the works through a Data Structure Report characterising the structures.

All works were conducted in accordance with Edinburgh City Council Archaeological Service Standard Conditions, the Institute for Archaeologist's Standards and Policy Statements and Code of Conduct and Historic Scotland Policy Statement.

## Findings

12. The purpose of the building recording was to investigate and record the surviving elements of the 20<sup>th</sup> century Fish Pass and the damaged Crest Blocks of the 19<sup>th</sup> century Weir. The aim of the exercise was to provide a baseline record of the extant structures prior to the demolition of the Fish Pass and the repair of the Crest Blocks at the Weir (Figures 1, 2a and 2b).

### *The Fish Pass*

13. The Fish Pass was constructed on a pre-existing, narrow, terrace cut into the naturally occurring bedrock which made up the N bank of the River Almond close to the town of Cramond. The Fish Pass was also constructed utilising earlier structural elements (see below) which consisted of stretches of sandstone block walls/foundations.
14. The Fish Pass consisted of several structural elements which consisted of an entrance at the northern end of the Weir which fed water from the river into a series of three rectangular shaped basins which emptied out into the river to the S, though there was evidence for an overflow channel to the ESE (Figures 1 and 2b). The overall dimensions of the Fish pass was 23-24m and it was orientated in an approximate SW-NE and then WSW to ENE direction. For fuller details of each of the component structures which made up the Fish Pass see Appendix 1.
15. The entrance of the Fish Pass consisted of several structural elements and deposits (Figure 1). The opening was formed by a shuttered concrete wall [010] and a riser (D) [006] (one of four in the Fish Pass, A-D) constructed of prefabricated concrete and metal staples. The water once through the Fish Pass entrance flowed over an inclined surface [008] and deposit [018] and was guided into the first basin (Basin 3) by a rectangular shaped concrete platform [009].
16. The main stretch of the Fish Pass ran in a SW-NE then WSW-ENE direction and its N side was formed by the sheer cut bedrock which formed the N bank of the river and a shuttered concrete wall [005], which was built upon existing sandstone walls [003] and [015] (see below). Between the two sides of the Fish pass lay two of the basins, Basins 3 and 2. Basin 1 projected out from the shuttered concrete wall [005] at its ENE end (Figures 1 and 5a).
17. Basin 3 (Figure 1) was located 4m to the NE of the entrance of the Fish Pass. It was rectangular in shape and measured 2.64m from NW-SE and 1.8m from NE-SW and had a height of 0.38m. Its NE and NW sides were formed through cutting into the naturally occurring bedrock, its SW side was formed by metal retaining [014] which held in place a compact deposit of stone [018]. The SE side was formed by the shuttered concrete wall [005].
18. A gap which consisted of the bare, but possibly shaped, bedrock surface lay between Basin's 3 and 2. This gap measured 5.4m from NE-SW and 2.4m from NW-SE. Set into the bedrock within this gap were three risers A-C [006] (Figures 1 and 4a). The risers, as with the one at the entrance (D), were of composite construction and made using prefabricated concrete sections which formed uprights held in place by metal staples. These uprights were set at angles off the NW bedrock and off the SE shuttered concrete sides of the Fish Pass.
19. Basin 2 (Figure 1) was rectangular in shape and measured 4.3m from ENE-WSW and 2.84m from NNW-SSE and had a maximum depth at its ENE end of 1.5m. It's NNW and WSW sides were formed through cutting into the naturally occurring bedrock, its ENE side was

formed by a roughly shaped concrete and stone mass [004] which also overlay or incorporated the wall of Basin 1 and the earlier sandstone walls [003] and [007]. The SSE side of the basin was formed by the shuttered concrete wall [005] and the earlier sandstone wall [003]. A gap measuring 1.2m wide and 0.38m deep between the shuttered concrete wall [005] and the roughly shaped concrete and stone mass [004] allowed water to flow into Basin 1.

20. Basin 3 (Figures 1 and 5a) was located to the immediate SSE of Basin 2 and measured 2.8m from ENE-WSW and 2.85m from NNW side was formed by the shuttered concrete wall [005] and the earlier sandstone wall [003]. It's SSE, ENE and WSW sides were formed by a shuttered concrete wall [002] which lay above a timber bedding layer. A gap measuring 0.85m wide and 0.38m deep was left in the upper part of this wall on its SSE side through which water was allowed to flow into the river.

#### *The Weir and Crest Blocks*

21. The Weir structure [011] (Figures 1, 2a, 6a and 6b) curved slightly across the river from the N to the SSE. The ENE facing main retaining wall was constructed with rectangular shaped sandstone blocks mortared into place. This wall was approximately 30m long (across the river), 2.9m wide at the top (N end) and had a height range of between 2.5m-3m. The upper most part of the Weir structure was formed with squared sandstone crest blocks (Figures 6a and 6b) [011] which measured 1.1m by 0.65m and had a thickness of 0.3m. These crest blocks (Figure 7a and 7b), which were damaged in several places at the N end of the Weir, had rounded edges where they formed a lip over the ENE side of the Weir. The N end of the Weir had been built up against the naturally occurring bedrock and was abutted by the SW end of the Fish Pass.

#### *Earlier Structural Elements*

22. The earliest structural elements noted were a series of related course sandstone walls [003, 007 and 015] and a number of square cut holes [012] (putlog holes and spigots) within the bedrock within and above the Fish Pass.
23. The walls were constructed at the edge of a terrace cut into the N side of the river. Wall [003] was orientated in an ENE to WSW direction and located close to the ENE end of the Fish Pass. The wall underlay a later shuttered concrete wall [005] which forms the outer edge of the Fish Pass. The wall had a length of 4.42m, a width of 0.4m and a height of 1m. The stones used in the walls construction were rectangular shaped 0.4m by 1m by 0.28m thick. Wall [007] was orientated in a WNW to ESE direction and located at the outside the Fish Passes ENE end. The wall underlay the roughly shaped concrete and stone mass [004] which marked the end of the Fish Pass. The wall had a length of 5.1m, a width of 0.4m and a height of between 0.6m to 1m. The stones used in the walls construction were rectangular shaped blocks measuring 0.4m by 1.25m by 0.7m thick. Wall [015] was orientated in a NE to SW direction close to the Weir and the entrance to the Fish Pass. The wall had a length of 2m and a width of 0.4m and a height of between 0.6m to 1m.
24. A series of square shaped holes, or putlogs, [012] cut horizontally into the southern face of bedrock were noted (Figure 4b). The southern face of the bedrock itself appeared to have been quarried to create a vertical face in which the putlog holes had been cut. The holes measured approximately 0.2m by 0.4m. They were located at an approximate height of 1m from the uppermost part of the fish pass and were spaced 2.5m to 3m apart. Two spigot holes were also noted within Basin 2, close to its sluice hole.

## Discussion

25. The earliest historic map evidence for the weir and mill at Fair-A-Far is within the 1<sup>st</sup> edition Ordnance Survey of 1856 (Figure 8a) which shows the weir and the associated millrace or channel on the S bank of the river but no structural elements are depicted. On the N bank at the weir there is a projection out which is most likely the artificial terrace cut into the bedrock but there are none of the structural elements visible which are discussed below. The 2<sup>nd</sup> edition Ordnance Survey of 1895 (Figure 8b) shows more of the buildings



Figure 6a: General view of the Weir and the Fish Pass at the start of site works. From the ENE.



Figure 6b: Close up view of the Weir structure from the NE.



Figure 7a: View of damaged crest blocks at N end of Weir. From the N.



Figure 7b: View of repairs at N end of Weir. From the N.

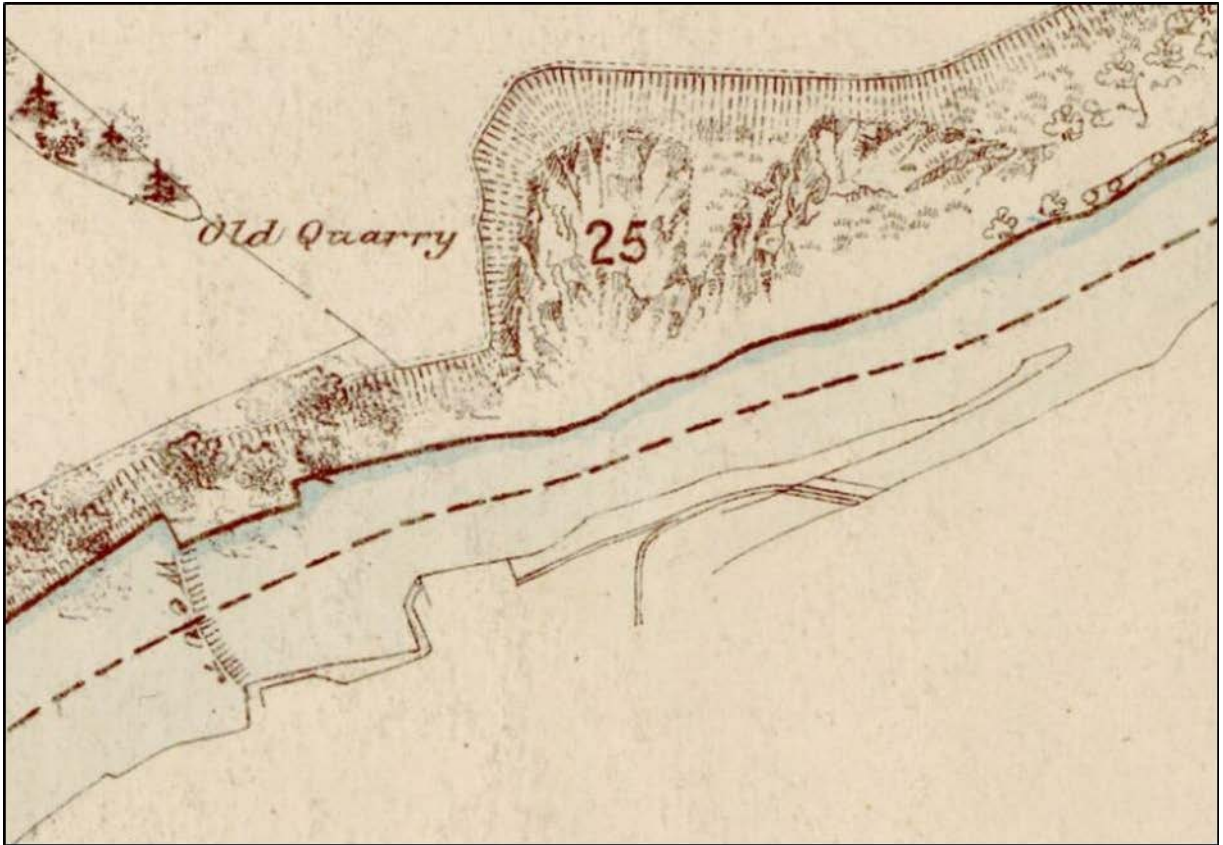


Figure 8a: Extract from 1<sup>st</sup> edition 25" Ordnance Survey (1856)

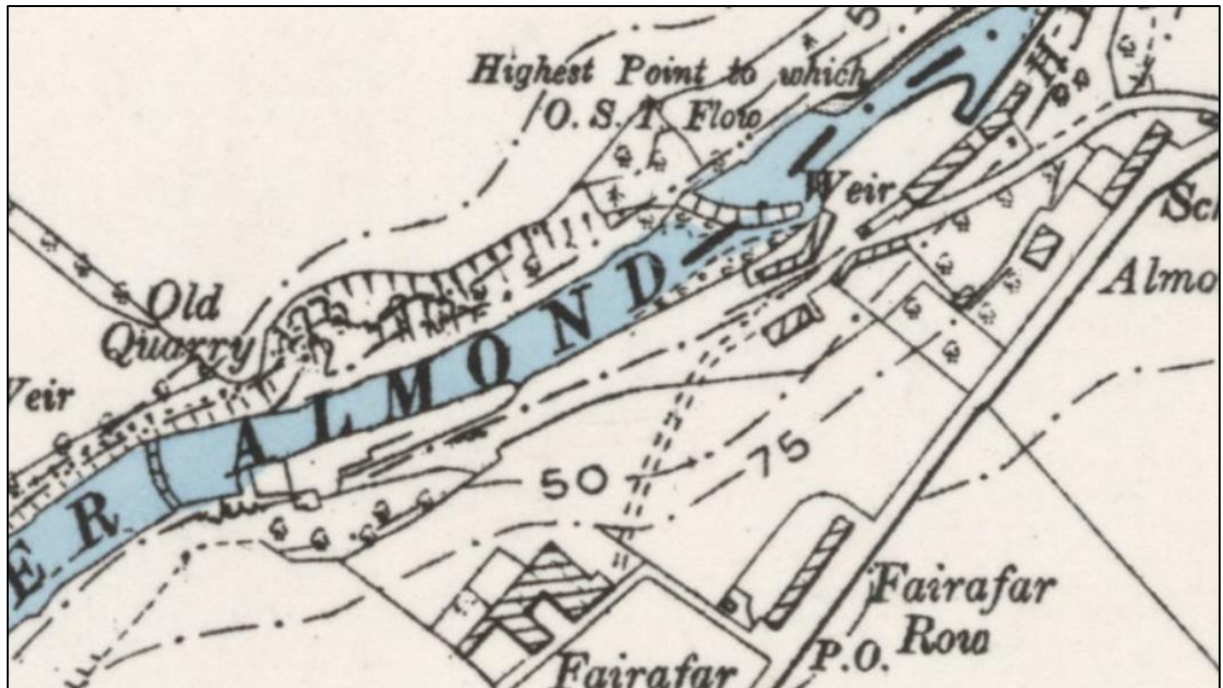


Figure 8b: Extract from 2<sup>nd</sup> edition 6" Ordnance Survey (1895)

associated with the mill on the S bank of the river but there is no indication as to what is happening at the N end of the Weir where the Fish Pass was eventually constructed.

### *1970s Fish Pass*

26. Fish Passes, which are also known as fish ladders, fishways or fish steps, are structures which are built around barriers within rivers such as locks, dams or weirs. They are put in place to facilitate fish migration upstream and usually consist of a series of low steps or platforms which the fish are able to leap.
27. The various shuttered concrete and metal structural components which made up the Fish Pass at Fair-A-Far were constructed in the 1970's in an attempt to encourage fish migration both up and downstream. Graffiti (001) identified within the inside face of Basin 1 gives the most likely year for the Fish Passes construction '75' as 1975 (Figure 5b). The 20<sup>th</sup> century structural elements of the Fish Pass were built over earlier course sandstone walls which in turn were built upon an artificial terrace cut into the exposed bedrock which formed the N bank of the River Almond.

### *Earlier Structural Elements*

28. These earlier structural elements, [003], [007] and [015], may have been associated with the Category B Listed Fair-A-Far Weir (Figures 1, 3a, 3b and 5b), possibly as an earlier version of a Fish Pass but it may also have served as a spillway or sluice for the Weir. It is unclear if the artificial terrace cut into the bedrock was part of the weirs original design or if it was an earlier feature. The series of putlog holes [012] (cut into the bedrock) which were most likely associated with the 19th century Craigie Quarry, which was used to supply stone for the construction of the Victoria Docks at Leith, located some 150m to the ENE of the weir and Fish Pass. These holes may have been used to accommodate an elevated, cantilevered track or carriageway from the quarry to the Craigie Quarry Docks further downstream (Cramond Association 2014). The bedrock terrace and the sections of sandstone walling may have been originally constructed to accommodate uprights supports for this cantilever carriageway. It is also possible that the carriageway, as well as supplying stone to Leith, may also have been used to convey stone from the quarry for the construction of the weir.

### *The Weir*

29. The Weir was one of the later additions to the mill which had been in existence in some form since the 17th century. The Weir was built sometime between 1787 and 1839 (when it was first depicted in a map by Carfrae) (Moloney 2017) to provide a new water source for the Cramond Iron Works at Fair-a-Far mill. The Ironworks had previously been supplied by a wooden dam located further upstream but the increasing needs of the ironworks required something more substantial. The Weir was almost destroyed in 1935 during severe floods and this may have caused some of the damage to the N end of the Weir, which over the years became progressively worse. This historic and ongoing damage was noted in many of the crest block stones (Figures 7a and 7b) which made up the N end of the weir [011] which was the reason for the current repair works.

## **Recommendations**

30. During the course of the works described in this report, detailed observations relating to the nature of the building fabric were made which allowed new insights into the structure's history and phasing.
31. While the results of the analysis are interesting, they do not significantly alter current levels of knowledge understanding of the monument. As a result, further analysis and publication is deemed unnecessary and hence Rathmell Archaeology Limited recommends that no further work be undertaken. The appropriateness and acceptability of our recommendations rest with City of Edinburgh Council.

## Conclusion

32. A programme of archaeological works was required by Green Cat Contracting Limited before the complete demolition of the 20<sup>th</sup> century Fish Pass associated with a 19<sup>th</sup> century Weir at Fair-A-Far, Cramond and its replacement with a new one. The works also involved the repair of the damaged N section of the Weir. During these works a detailed record was made of the all structural elements which were to be demolished or repaired. Beneath the Fish Pass earlier 18<sup>th</sup> or 19<sup>th</sup> century structural elements were identified which may relate to an elevated cantilevered carriageway associated with the nearby Craigie Quarry and may have been used to convey stone from the quarry for the construction of the Weir. The earlier elements may also have been part of the Weir, acting as an earlier Fish Pass, Spillway or sluice.

## Acknowledgements

33. Thanks to John Lawson of City of Edinburgh Council for his support throughout. The authors would also like to thank the staff of Green Cat Contracting Limited for their assistance in facilitating the archaeological works, with Cameron Gillespie providing regular and valuable updates on progress.

## References

### *Documentary*

Cramond Association. 2014, Walk the Cramond Old Mill Trail

Moloney, C. 2017, Written Scheme of Investigation for Archaeological Works at Fair-A-Far Weir, Cramond, Edinburgh (Rubicon Heritage)

Rees, T & Klemen, P. 2017, Fair-A-Far Weir, Cramond, Edinburgh: Archaeological Mitigation. Written Scheme of Investigation.

Toop, N. 2016, Fair-A-Far Weir, Cramond, Edinburgh, Cultural Heritage Assessment, unpublished commercial report for JBA Consulting by Field Archaeology Specialists Ltd (FAS Heritage)

### *Cartographic*

Ordnance Survey	1856	25-inch 1 <sup>st</sup> Edition Ordnance Survey Linlithgow Sheet VII.3 (Dalmeny, Cramond & Queensferry)
Ordnance Survey	1895	6-inch 2 <sup>nd</sup> Edition Ordnance Survey Edinburghshire Sheet II



## Appendix 1: Registers

### Context Register

Context No.	Area/ Trench	Type	Description	Interpretation
001	Basin 1	-	Graffiti markings within shuttered concrete of E wall head within, lower, Basin 1. The markings were only partially visible and read; 'LEWIS.....JOE...75 JACK..(or JECK)..COCHRANE'	Graffiti located within the shuttered concrete of Basin 1. Most likely dating to the fish passes construction during the 1970's.
002	Basin 1	Structure	Shuttered concrete wall which forms a square shaped structure up against the SSE side of walls [005 and wall foundation [007]. The wall rests upon a timber base/beam (50mm thick). The wall measures 0.87m to 1m high and had a width range of between 0.28m to 0.34m. The square shaped structure it forms measures 3.12m from NNW to SSE and 3.50m from ENE to WSW. It is unclear if the interior demarcated by the structure is naturally level or was subject to artificial levelling.	Shuttered concrete wall which forms three sides of Basin 1 within the ENE end of the fish pass.
003	Fish pass, Basin 1 and Basin 2.	Structure	Remnants of wall or foundation which runs along the outer side of the fish pass in an ENE to WSW direction. The wall underlies a later shuttered concrete wall [005] which forms the outer edge of the existing fish pass. The wall/foundation has a length of 4.42m, a width of 0.4m and a height of 0.6m. The stones used in the wall/foundations construction are of course sandstone blocks rectangular shaped (0.4m x 1.m x 0.28m thick) with a mortar bond. The wall may be a continuation of wall/foundation [007].	A course stone wall or foundation (associated with wall/foundation [007]) which underlies the current outer wall of the fish pass. May be an earlier foundation pad associated with the putlog holes [012] cut into a stretch of bedrock which forms the inside edge of the fish pass. Possibly part of a small elevated carriageway which ran from a 18 <sup>th</sup> or 19 <sup>th</sup> century quarry (which lies to the ENE of the fish pass) and towards the weir and possibly used in its construction. It is also possible that the walls were part of an earlier Fish Pass, spillway or sluice for the Weir.
004	Fish pass, Basin 1 and Basin 2.	Deposit	An amorphous shaped deposit of concrete and stone which lay at the ENE end of the fish pass. The deposits WSW edge was straight sided and formed the inside edge of Basin 2. The deposit also overlay part of the ENE side of shuttered concrete structure [002] and the course	A rough concrete and stone formwork which acts as a damn at the ENE end of the fish pass allowing the water to flow from Basin 2 into Basin 1 and from there

Context No.	Area/ Trench	Type	Description	Interpretation
			wall/foundation [007] where it changed direction from ENE to WSW and WNW to ESE. The deposit had a maximum NNW to SSE measurement of 4.7m and maximum ENE to WSW measurement of 2.4m. The deposit had a thickness range of between 0.18m to 0.5m.	back into the river.
005	Fish pass, Basin 1, Basin 2 and Basin 3.	Structure	Shuttered concrete wall which forms the outer edge of the fish pass in an SW to NE direction and then the direction changes downstream to a WSW to ENE orientation. The wall overlies stretches of an earlier course sandstone wall/foundation [007] and [015]. The wall was orientated in a SW to NE then WSW to ENE direction with an overall length of 13.5m. The wall has a width range of between 0.18m-0.28m and a height range of between 0.2m-0.5m.	Shuttered concrete wall forms the outer edge of the fish pass with its associated basins, 1 through to 3.
006	Fish pass, Basin 3.	Structure	Series of four small linear shaped structures of composite construction. The structures consist of rectangular shaped stone kerbs which were attached to the interior floor/surface of Basin 3 by steel staples (which were driven into the floor/surface. There were four in total (A-D). A was orientated in a NNW to SSE direction and abutted the inside edge of the fish pass. B and C were both orientated in a NNE to SSW direction and both abutted the outside edge of the fish pass (wall/foundation [005]). D was located to the WSW of Basin 3 and was associated with shuttered concrete wall [010] and inclined surface (008) and formed the entrance to the fish pass. The linear shaped structures measured 0.9m-1.1m long, 0.9m-1.2m wide and were 0.15m to 0.3m high.	Series of four risers which were partial stone kerb barriers within or adjacent to Basin 3 used to control the flow and direction of the water passing through the fish pass.
007	Fish pass, Basin 1 and Basin 2.	Structure	Remnants of wall or foundation which runs along the outer side of the fish pass in a WNW to ESE direction. The wall/foundation has a length of 5.1m, has a width of 0.4m and a height of between 0.6m to 1m. The stones used in the wall/foundations construction are of course sandstone rectangular shaped blocks (0.4m x 1.25m x 0.7m thick) with a mortar bond. The wall may be a continuation of wall/foundation [007].	A course stone wall or foundation (associated with wall/foundation [003]) which underlies the current outer wall of the fish pass. May be an earlier foundation pad associated with the putlog holes [012] cut into a stretch of bedrock which forms the inside edge of the fish pass. Possibly part of a small elevated carriageway which ran from a 18 <sup>th</sup> or 19 <sup>th</sup> century quarry (which lies to the ENE of the fish pass) and towards the weir and possibly used in its construction. It is also possible that the walls were part of an earlier Fish Pass,

Context No.	Area/ Trench	Type	Description	Interpretation
				spillway or sluice for the Weir.
008	Weir and Basin 3.	Structure	A sub-circular shaped, inclined, surface of regular laid blocks which lay at the WSW end of the fish pass. The surface was part of the entrance to the fish pass with Riser D and shuttered concrete wall [010] (and possibly concrete platform [010]) facilitating the flow of water over the surface and into Basin 3. The surface overlay the natural bedrock and Riser D and Concrete platform [010] were constructed onto it. The deposit had a maximum NNW to SSE measurement of 2.43m and maximum ENE to WSW measurement of 3.9m.	Inclined surface of regular laid blocks. The surface facilitates the flow of water through the gap left by Riser D and the WSW end [010] of the outer edge of the fish pass.
009	Weir and Basin 3.	Structure	Rectangular shaped concrete platform which is located close to Riser D and inclined surface [008]. The surface overlies and is partially formed with the natural bedrock. The ENE to WSW orientated platform had a length of 2m a width of 0.5m and a height of 0.24m.	Platform at the entrance to the fish pass which was formed from the natural bedrock and a layer of concrete. The platform is associated with inclined surface [008].
010	Weir and Fish Pass entrance	Structure	Shuttered concrete wall which forms part of the entrance to the Fish Pass along with Riser D. The wall overlies and/or abuts the N end of the Weir [011]. The E to W orientated wall had a length of 2.36m a width range of between 0.47m-1.45m and a height of 0.47m.	Shuttered concrete wall which forms the entrance to the Fish Pass along with Riser D [006].
011	Weir	Structure	Sandstone Weir structure [011] which curved slightly across the river from the N to the SSE. The ENE facing main retaining wall was constructed with rectangular shaped sandstone blocks mortared into place with the centre of the Weir using rolled blocks. The wall was approximately 30m long (across the river), 2.9m wide at the top (N end) and had a height range of between 2.5m-3m. The upper most part of the Weir structure was formed with squared sandstone crest blocks [011] which measured 1.1m by 0.65m and had a thickness of 0.3m.	Fair-A-Far Weir constructed in 1790.
012	N/A	Cut	A series of square shaped holes cut horizontally into the southern face of bedrock. The southern face of the bedrock itself appeared to have been quarried to create a vertical face in which the putlog holes had been cut. The remains of the courses stone underlying the shuttered concrete of the fish pass may well have been intended as a foundation pad for structural elements emanating from the putlog holes. The holes measured approximately 0.2m by 0.4m. They were located at an approximate height of 1m from the uppermost part of the fish pass and	Series of putlog holes which are most likely associated with the 19 <sup>th</sup> century quarry located some 150m to the ENE of the fish pass. The putlog holes may have been used to set a series of crossbeam supports for a small waggon or tram way which ran from the quarry and towards the weir. It was possibly utilised in the original

Context No.	Area/ Trench	Type	Description	Interpretation
			were spaced 2.5m to 3m apart.	construction of the weir.
013	Basins 1 and 2	Structure	Sluice holes located in the SSE sides of Basins 2 and 1.	Sluice holes which are part of the Fish Pass in Basins 2 and 3.
014	Basin 3	Structure	Metal sheet set vertically as a retaining face. Measured 1.2m and was 0.38m high. Formed the WSW end of Basin 3. Deposit (018) was banked up against its WSW side.	Metal retaining wall which formed the WSW end of Basin 3.
015	Weir and Fish Pass entrance	Structure	Remnants of wall or foundation which runs along the outer side of the fish pass in an ENE to WSW direction. The wall underlies a later shuttered concrete wall [005] which forms the outer edge of the existing fish pass. The wall/foundation has an approximate length of 2m and a width of 0.4m. The stones used in the wall/foundations construction are of course sandstone blocks rectangular shaped (0.4m x 1.m x 0.28m thick) with a mortar bond. The wall may be a continuation of wall/foundation [007].	A course stone wall or foundation (associated with wall/foundation [007]) which underlies the current outer wall of the fish pass. May be an earlier foundation pad associated with the putlog holes [012] cut into a stretch of bedrock which forms the inside edge of the fish pass. Possibly part of a small elevated carriageway which ran from a 18 <sup>th</sup> or 19 <sup>th</sup> century quarry (which lies to the ENE of the fish pass) and towards the weir and possibly used in its construction. It is also possible that the walls were part of an earlier Fish Pass, spillway or sluice for the Weir.
016			Not Used	
017			Not Used	
018	Fish Pass entrance	Deposit	Stoney deposit which lies between inclined stone surface and is kept in place by metal sheet [014]. Layer had a maximum thickness of 0.38m	Deposit which banked up against metal sheet [014]. Most likely material washed into the Fish Pass over the years.

*Photographic Register*

<b>Image No.</b>	<b>Digital</b>	<b>Description</b>	<b>From</b>	<b>Date</b>
001	8397	View of causeway	E	28/8/2017
002	8397	Laydown area adjacent to mill	E	28/8/2017
003	8398	Causeway	W	28/8/2017
004	8399	View of offset from laydown to mill	NE	28/8/2017
005	8401	View of fish pass	SE	28/8/2017
006	8402	View of fish pass	S	28/8/2017
007	8403	View of weir and temporary dam	S	28/8/2017
008	8408	Panorama (left) looking down stream	SW	28/8/2017
009	8409	Panorama (right) looking down stream	SW	28/8/2017
010	8410	Retaining wall of south side of river and crest blocks	W	28/8/2017
011	8412	View up river from north	E	28/8/2017
012	8416	View of mill building from causeway	N	28/8/2017
013	8417	View of retaining wall from causeway	NE	28/8/2017
014	8418	View of fish pass from causeway	E	28/8/2017
015	8419	Close shot of failed crest block	E	28/8/2017
016	8420	Sand shore blockwork to east of concrete basin	E	28/8/2017
017	8421	View up fish pass	E	28/8/2017
018	8422	Lower basin	NE	28/8/2017
019	8423	View up fish pass	SE	28/8/2017
020	8424	Mortared mass of stone at bottom	S	28/8/2017
021	8425	Shuttering on lower basin	SE	28/8/2017
022	8426	Chamfer, hook and bonded stone on lower basin	SE	28/8/2017
023	8427	Concrete in flank wall	SE	28/8/2017
024	8428	View up south side of fish pass	S	28/8/2017
025	8433	View across south end of weir	N	28/8/2017
026	8434	Detail of graffiti on basin (east end)	E	28/8/2017
027	8435	East side of basin	E	28/8/2017
028	8436	Flank wall [007] emerging from basin	NE	28/8/2017
029	8437	Flank wall [007]	N	28/8/2017
030	8438	Detail of riser on stair	E	28/8/2017
031	8439	Putlog hole relative to basin	SE	28/8/2017
032	8440	South edge of pass	E	28/8/2017
033	8441	Join of south edge of pass with basin	E	28/8/2017
034	8442	Basin	SE	28/8/2017
035	8443	West edge of mill	N	28/8/2017
036	8444	View downstream from causeway	E	28/8/2017

Image No.	Digital	Description	From	Date
037	8445	North edge of causeway	E	28/8/2017
038	8446	East side of causeway and bank	N	28/8/2017
039	8447	West side of causeway and bank	N	28/8/2017
040	8448	Exposed/ quarried bedrock on south bank	NE	28/8/2017
041	8468	Causeway being pushed forwards	SE	05/09/2017
042	8469	Causeway being pushed forwards	SE	05/09/2017
043	8470	Detail Panel (001) (Scale)	S	05/09/2017
044	8471	Detail E face (003) and (004) (Scale)	E	05/09/2017
045	8472	Detail SW corner Basin 1 (Scale)	NE	05/09/2017
046	8473	Detail channel out of Basin 1 (Scale)	NE	05/09/2017
047	8474	Detail E wall (interior) Basin 1 (Scale)	W	05/09/2017
048	8475	Detail E wall (interior) Basin 2 (Scale)	W	05/09/2017
049	8476	Detail N rock face Basin 2 (Scale)	S	05/09/2017
050	8477	Detail S wall (Interior) Basin 2 (Scale)	N	05/09/2017
051	8478	Detail S wall (Interior) (Scale)	N	05/09/2017
052	8479	Detail W rock face and riser A (Scale)	E	05/09/2017
053	8480	Detail W rock face and riser A (Scale)	E	05/09/2017
054	8481	Detail of spigots set into bedrock basin 2 (Scale)	W	05/09/2017
055	8482	Detail of spigots set into bedrock basin 2 (Scale)	N	05/09/2017
056	8483	Dry section of weir	NE	05/09/2017
057	8484	Detail of N wall (Interior) Basin 1 (Scale)	S	05/09/2017
058	8485	S face of climb of bedrock/fish pass	SE	05/09/2017
059	8486	S face of (003)	S	05/09/2017
060	8487	Panorama along putlog holes	S	05/09/2017
061	8488	Panorama along putlog holes	S	05/09/2017
062	8489	Panorama along putlog holes	S	05/09/2017
063	8525	General view of weir and fish pass	SE	07/09/2017
064	8526	General view of weir and fish pass	SE	07/09/2017
065	8527	General view of weir and fish pass	SE	07/09/2017
066	8528	Panorama of S edge of fish pass – detail showing fragment revetment [015] and adjacent [005]	SSE	07/09/2017
067	8529	Panorama of S edge of fish pass – detail showing [005] to left and [003] to the right	SSE	07/09/2017
068	8530	Panorama of S edge of fish pass – detail showing full extent [003] after removal of E edge of basin 1	SSE	07/09/2017
069	8531	Panorama of S edge of fish pass – detail showing full extent [003] after removal of E edge of basin 1	SSE	07/09/2017
070	8532	Detail of weir face, showing tooled? raggles for timber	E	07/09/2017
071	8533	Squared blocks [016] revealed in removal of [004]	WSW	07/09/2017

Image No.	Digital	Description	From	Date
072	8534	Squared blocks [016] in wider context	SW	07/09/2017
073	8535	Squared blocks [016] in wider context	SW	07/09/2017
074	8536	Squared blocks [016] in wider context, viewed from ENE	ENE	07/09/2017
075	8537	Squared blocks [016] in wider context, viewed from SSE	SSE	07/09/2017
076	8538	Removal of [016], [017] revealed	SSE	07/09/2017
077	8539	Cross-wall [017] revealed	SE	07/09/2017
078	8540	Cross-wall [017] revealed	SSE	07/09/2017
079	8541	View showing blocks of blond sandstone from [017]	SW	07/09/2017
080	8542	Squared blocks [016] and cross-wall [017] removed	SW	07/09/2017
081	8543	Removal of concrete wall, Basin 2	SE	07/09/2017
082	8544	Removal of concrete wall, Basin 2	ESE	07/09/2017
083	8545	Concrete fill (018) revealed during removal of [005]	ESE	07/09/2017
084	8546	Metal sheet [014] revealed in association with concrete fill (018)	ESE	07/09/2017
085	8547	Revetment (015), spillway [008] and concrete fill (018) to the rear of shutter [014]	SE	07/09/2017
086	8548	Working shot, in process of removal of [014]	SE	07/09/2017
087	8549	Working shot, in process of removal of [014]	SE	07/09/2017
088	8550	Working shot, in process of removal of [014]	SE	07/09/2017
089	8551	Possible block infill, bedrock between basins 2 and 3	SE	07/09/2017
090	8552	General view, works complete for day, spillway partly removed	ESE	07/09/2017

## Appendix 2: Discovery & Excavation in Scotland

<b>LOCAL AUTHORITY:</b>	City of Edinburgh
<b>PROJECT TITLE/SITE NAME:</b>	Fair-A-Far Weir
<b>PROJECT CODE:</b>	RA17047
<b>PARISH:</b>	City of Edinburgh
<b>NAME OF CONTRIBUTOR:</b>	Thomas Rees
<b>NAME OF ORGANISATION:</b>	Rathmell Archaeology Limited
<b>TYPE(S) OF PROJECT:</b>	Building Recording, Archaeological Monitoring
<b>NMRS NO(S):</b>	
<b>SITE/MONUMENT TYPE(S):</b>	Weir and Fish Pass
<b>SIGNIFICANT FINDS:</b>	None
<b>NGR</b> (2 letters, 8 or 10 figures)	NS 0323 3226
<b>START DATE</b> (this season)	August 2017
<b>END DATE</b> (this season)	October 2017
<b>PREVIOUS WORK</b> (incl. <i>DES</i> ref.)	No
<b>MAIN (NARRATIVE) DESCRIPTION:</b> (may include information from other fields)	A programme of archaeological works was required by Green Cat Contracting Limited before the complete demolition of the 20 <sup>th</sup> century Fish Pass associated with a 19 <sup>th</sup> century Weir at Fair-A-Far, Crammond and its replacement with a new one. The works also involved the repair of the damaged N section of the Weir. During these works a detailed record was made of the all structural elements which were to be demolished or repaired. Beneath the Fish Pass earlier 18 <sup>th</sup> or 19 <sup>th</sup> century structural elements were identified which may relate to an elevated cantilevered carriageway associated with the nearby Craigie Quarry and may have been used to convey stone from the quarry for the construction of the Weir. The earlier elements may also have been part of the Weir, acting as an earlier Fish Pass, Spillway or sluice.
<b>PROPOSED FUTURE WORK:</b>	No
<b>CAPTION(S) FOR ILLUSTRS:</b>	None
<b>SPONSOR OR FUNDING BODY:</b>	Green Cat Contracting Limited
<b>ADDRESS OF MAIN CONTRIBUTOR:</b>	Unit 8 Ashgrove Workshops, Kilwinning, Ayrshire KA13 6PU
<b>EMAIL ADDRESS:</b>	contact@rathmell-arch.co.uk
<b>ARCHIVE LOCATION</b> (intended/deposited)	Report to City of Edinburgh Archaeology Service and archive to the National Record of the Historic Environment



## Contact Details

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