

HIGH-LEVEL TACTILE INSPECTIONS

SAMPLING PHASE 1
REPORT
Caerlaverock Castle
PIC182



HISTORIC
ENVIRONMENT
SCOTLAND

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CONTROL SHEET

Document Control

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Version Control

Version	Date	Status	Prepared by	Amendments
V0001	18/08/2021	Draft	[REDACTED]	First draft
V0100	27/08/2021	Approved	[REDACTED]	Approved

HLTI Sampling: Report - Introduction



PIC ID # ↓	PIC182	Site name	Caerlaverock Castle		
Inspection start	02/08/2021	Inspection end	04/08/2021	Submission	30/08/2021
Lead HBFA	[REDACTED]				
Sample Inspectors	[REDACTED]				

Introduction:

As a result of findings on the first four full site High Level Tactile Inspections, SMT endorsed an accelerated programme that will see high-level tactile sample inspection carried out initially to 16 sites identified as having a high risk potential.

Sample inspection for Caerlaverock Castle was carried out in accordance with HES Management of Risk presented by High-level Fabric Policy and High level Tactile Inspection Procedures.

Tactile inspections of two sample areas, Gatehouse North & South elevation (agreed in advance by the T1 team and the Region) were carried out and completed using a Rope Access. Two additional sample areas were carried out within the allocation inspection time, using a Rope Access Contractor on the East Range facade to the courtyard.

The Sample Inspection Report only reports on high level fabric risks within pre-determined areas and does not provide any assessment of risk in other areas on site.

HLF Inspection Risk Matrix:

HES-T1C-HLF-RAS-X-X-V0200-RiskMatrix

Consequence		1	2	3	4	5
		No injury	Minor injury	Moderate injury	Major injury	Fatal or life-altering injury
Probability						
5	Fabric fall almost certain	5	10	15	20	25
4	Fabric fall highly likely	4	8	12	16	20
3	Fabric fall likely	3	6	9	12	15
2	Fabric fall unlikely	2	4	6	8	10
1	Fabric fall highly unlikely	1	2	3	4	5

RISK RATING	RISK SCORE RANGE
High	15-25
Medium	10- 14
Low	1-9

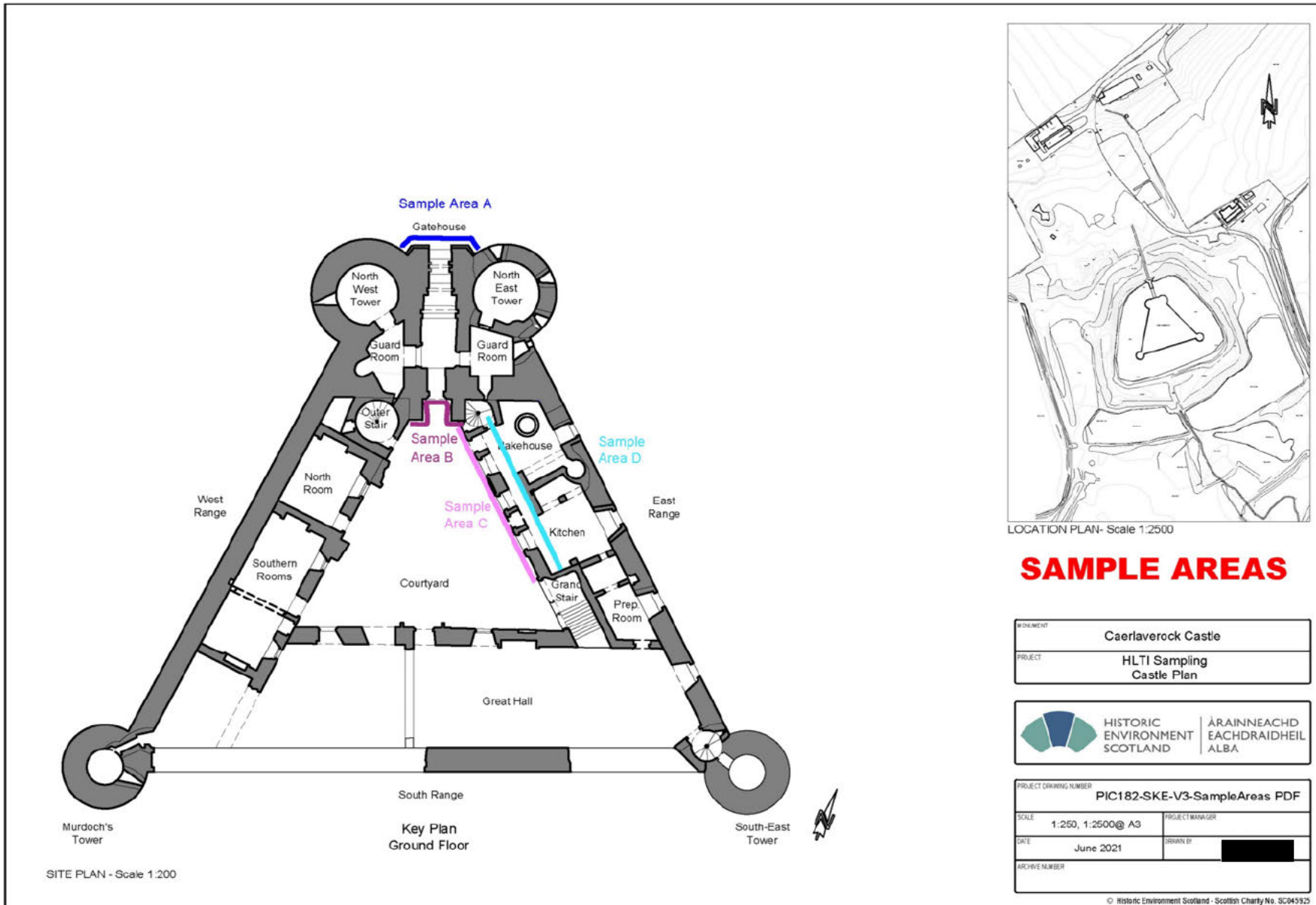


HLTI Sample Areas:

<i>Area:</i>	<i>Colour:</i>	<i>Sample Area Name:</i>
A	Blue	Gatehouse North Elevation
B	Red	Gatehouse South Elevation (to courtyard)
C	Pink	East Range Façade. External elevation to Courtyard
D	Cyan	East Range Façade. Internal



Click on link to open drawing in PDF viewer: [PIC182-SKE-V3-SampleAreas.pdf](https://www.historicenvironment.scot/asset/pic182-ske-v3-sampleareas.pdf)





HLTI Sampling: Report - Summary dashboard



PIC ID#	PIC182	Submission	30/08/2021
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Select Sample area of which data should be displayed ↓	All areas
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Number of observations	18
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Identified Risk



Residual Risk



Inspection Action:

Class V Report = Fabric detached during tactile inspection	Access Restriction = Risk of fabric falling and causing harm			Monitor Observation / Plan Repairs = No immediate action
	High = Full site closure	Medium = Partial site closure	Low = Minor access restriction	
0	0	0	0	18

Inspection types:	Tactile	18	Visual	0
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Key comments:



The High Level Tactile Inspection of the North and South elevations of the Gatehouse (the only entry route into and out of the Castle) was completed using rope access. These areas were identified as essential areas, as everyone accessing the Castle needs to pass through them. Only a few high level risks were found during the tactile inspection of these areas and these related to delaminating and weathering of masonry. The inspection of these areas was completed in good time, allowing the high level tactile inspection at Caerlaverock Castle to be extended, whilst rope access was available on site.

Internal faces of the East Range were also inspected at Caerlaverock Castle by rope access. These tactile inspections again found few areas of concern, again mostly relating to bossed or, cracked or delaminating masonry. The highest recorded observation in the areas inspected was of 'Medium' risk and related to areas around a upper floor fireplace on the inside of the East Range (Sample Area D. Observation 01).

It was noted that a rope inspection at Caerlaverock Castle had recently been arranged by the local works depot. Zenith rope access contractors commenced on Monday 26th April 2021 completing inspection on Friday 7th May 2021, which has checked and addressed any immediate concerns and this may account for the low level of observations found during the high level tactile inspection.

All rope access sample inspections were completed using the Tier 1 Compliance's developed tactile inspection procedure, with live, real time, interactive links provided by Go Pro cameras and radios between the Historic Fabric Building Assessor and Sample Inspectors to ensure consistency of approach and assessment.



Click on link below image to open Interactive PDF in PDF viewer. In PDF viewer, the drawing is an interactive PDF, click on the labels to open the relevant OBS form for further information.

Sample Area A

INTERACTIVE PDF
Click on label to open linked Excel OBS form

KEY

- A-01 Low identified risk label
- A-02 Medium identified risk label
- A-03 High identified risk label
- A-04 High identified risk, fabric removed under Class V label (see historical map)
- A-01 Label reference: An Sample Area E.g. A-B or C (In OBS number E.g. 01 to 99)

Notes

- 1. This Sample Area drawing for location of observation.
- 2. Access Restrictions in place for all High Risk areas, unless label is removed under Class V.
- 3. Indicate location of Risk.
- 4. Refer to Observation Form for precise location & details of risks & defects.
- 5. Elevation is from observation, model generated by the Digital Documentation team from laser scan data.

HIGH-LEVEL FABRIC TACTILE SAMPLE INSPECTION
02/08/2021 to 04/08/2021

IDENTIFIED RISK

PIC182 Caerlaverock Castle
High-Level Tactile Sample Inspection
Identified Risk - Sample Area A

HISTORIC ENVIRONMENT SCOTLAND | **ARAINNEACHD SACRAMHACH ALBA**

PROJECT: PIC182-HLR-SI-A
Site name: [REDACTED]
Age of ICP: [REDACTED]

[PIC182-HLR-SI-A.pdf](#)

Sample Area B

INTERACTIVE PDF
Click on label to open linked Excel OBS form

KEY

- A-01 Low identified risk label
- A-02 Medium identified risk label
- A-03 High identified risk label
- A-04 High identified risk, fabric removed under Class V label (see historical map)
- A-01 Label reference: An Sample Area E.g. A-B or C (In OBS number E.g. 01 to 99)

Notes

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HIGH-LEVEL FABRIC TACTILE SAMPLE INSPECTION
03/08/2021 to 04/08/2021

IDENTIFIED RISK

PIC182 Caerlaverock Castle
High-Level Tactile Sample Inspection
Identified Risk - Sample Area B

HISTORIC ENVIRONMENT SCOTLAND | **ARAINNEACHD SACRAMHACH ALBA**

PROJECT: PIC182-HLR-SI-B
Site name: [REDACTED]
Age of ICP: [REDACTED]

[PIC182-HLR-SI-B.pdf](#)

Sample Area C

INTERACTIVE PDF
Click on label to open linked Excel OBS form

KEY

- A-01 Low identified risk label
- A-02 Medium identified risk label
- A-03 High identified risk label
- A-04 High identified risk, fabric removed under Class V label (see historical map)
- A-01 Label reference: An Sample Area E.g. A-B or C (In OBS number E.g. 01 to 99)

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HIGH-LEVEL FABRIC TACTILE SAMPLE INSPECTION
02/08/2021 to 04/08/2021

IDENTIFIED RISK

PIC182 Caerlaverock Castle
High-Level Tactile Sample Inspection
Identified Risk - Sample Area C

HISTORIC ENVIRONMENT SCOTLAND | **ARAINNEACHD SACRAMHACH ALBA**

PROJECT: PIC182-HLR-SI-C
Site name: [REDACTED]
Age of ICP: [REDACTED]

[PIC182-HLR-SI-C.pdf](#)

Sample Area D

INTERACTIVE PDF
Click on label to open linked Excel OBS form

KEY

- A-01 Low identified risk label
- A-02 Medium identified risk label
- A-03 High identified risk label
- A-04 High identified risk, fabric removed under Class V label (see historical map)
- A-01 Label reference: An Sample Area E.g. A-B or C (In OBS number E.g. 01 to 99)

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02/08/2021 to 04/08/2021

IDENTIFIED RISK

PIC182 Caerlaverock Castle
High-Level Tactile Sample Inspection
Identified Risk - Sample Area D

HISTORIC ENVIRONMENT SCOTLAND | **ARAINNEACHD SACRAMHACH ALBA**

PROJECT: PIC182-HLR-SI-D
Site name: [REDACTED]
Age of ICP: [REDACTED]

[PIC182-HLR-SI-D.pdf](#)