

HIGH-LEVEL TACTILE INSPECTIONS

SAMPLING PHASE 1
REPORT

Doune Castle and Roman Camp
PIC061



HISTORIC
ENVIRONMENT
SCOTLAND

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Document Control

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V0001	09/09/2021	Draft	[REDACTED]	First draft
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HLTI Sampling: Report - Introduction



PIC ID # ↓	PIC061	Site name	Doune Castle & Roman Camp		
Inspection start	30/08/2021	Inspection end	01/09/2021	Submission	28/09/2021
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. The Sample inspection for Doune Castle was carried out in accordance with HES Management of Risk Procedures as set out in High-level Fabric Policy and High level Tactile Inspection Procedures.

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.

Tactile inspections of 3 sample areas (North entrance, West facing internal courtyard wall, South facing internal courtyard wall - Eastern end) were initially agreed in advance by the T1 team and the Region and a two further areas were added (South facing internal courtyard wall - western end and East facing elevation of Kitchen tower) prior to commencing the inspection on site. The high level tactile inspections were completed using MEWPS and an existing design scaffold for the Kitchen tower elevation.

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

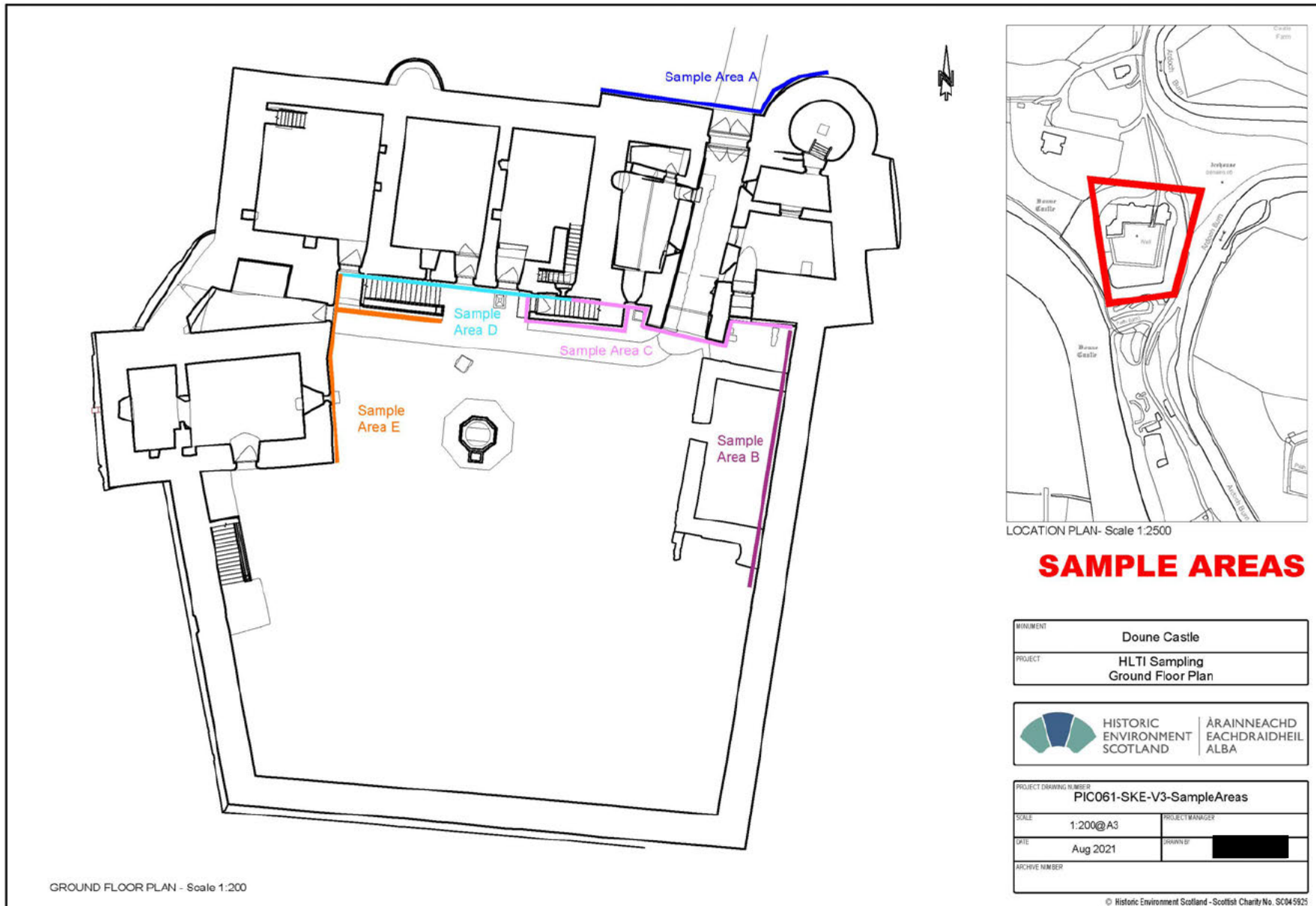


HLTI Sample Areas:

<i>Area:</i>	<i>Colour:</i>	<i>Sample Area Name:</i>
A	Blue	External North Elevation above main entrance and North West elevation of Tower
B	Red	West internal Elevation of Courtyard
C	Pink	East half of South facing Courtyard wall
D	Cyan	South facing external elevation of Great Hall
E	Orange	East facing external elevatin of Kitchen



Click on link to open drawing in PDF viewer: [PIC061-SKE-V3-SampleAreas](#)



HLTI Sampling: Report - Summary dashboard

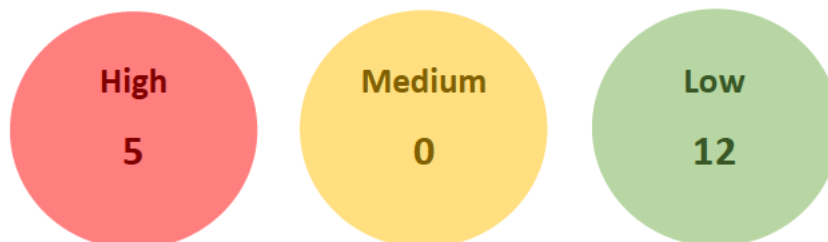


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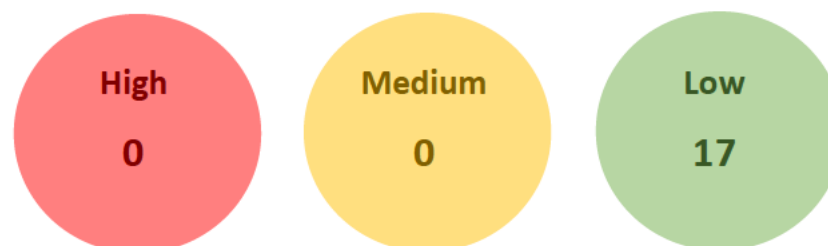
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Number of observations	17
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Identified Risk



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	
2	0	3	2	10

Inspection types:	Tactile	17	Visual	0
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Key comments:



Doune Castle was inspected using a 33m MEWP for the North (external) elevation and a 22m MEWP for the internal areas, except the Kitchen tower, which was inspected from an existing design scaffold.

The most significant observations were found on the North external elevation, which contains the only entrance into and out of the Castle. Here, large stones were found to be loose on the wall head, extensive areas of delaminating stone and a large area of several square meters of de-bonded outer skin of the wall face within the tower to the left of the main entrance. The loose stones on the wall head and delaminating stone were addressed promptly by the MCU by re-bedding and descaling, utilising the MEWP on site. The de-bonded outer skin of the wall is being managed by a risk assessment and controlled access until repairs can be made.

Elsewhere within the site, delaminating stone was prominent as well cracked and partially detached masonry. Defects that presented high level risk of falls were also found in new and recent repair work, where pinning stones had not been securely embedded and where repointing was not fully attached to the wall (bossed).

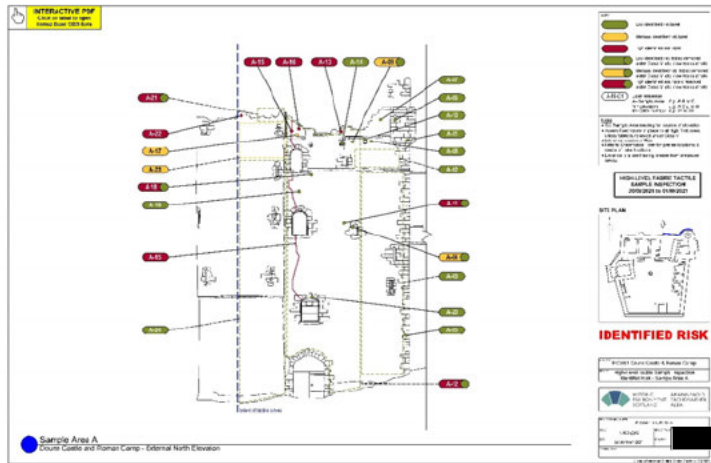
Where possible, Medium or High risk assessed issues were addressed by the MCU, utilising the MEWPS on site.

It is worth noting that High risks were found within all Sample Areas inspected except the Western end of the South facing courtyard wall and high risks found above the main entrance, both on the internal and external elevations.



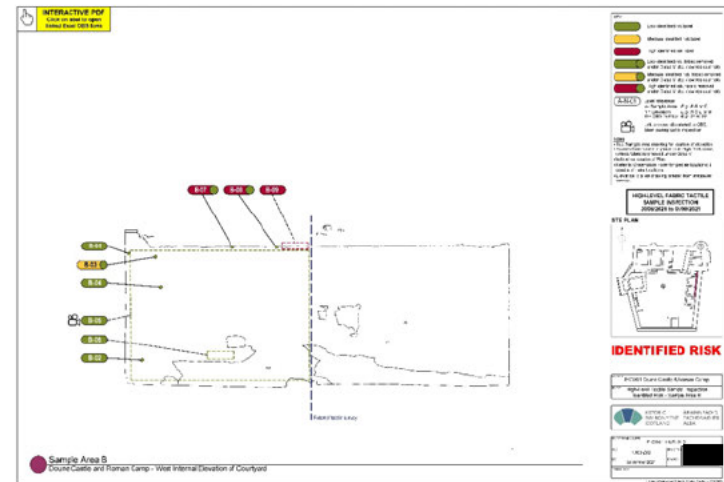
Click on link below image to open Interactive PDF in PDF viewer. In PDF viewer, the drawing is an interactive PDF, click on the labels to open the relevant OBS form for further information.

Sample Area A



[PIC061-HLR-SI-A](#)

Sample Area B



[PIC061-HLR-SI-B](#)

Sample Areas C & D

