

Tactile safety inspection of high-level fabric

REPORT Inchcolm Abbey PIC028



June 2022



HISTORIC
ENVIRONMENT
SCOTLAND

ÀRAINNEACHD
EACHDRAIDHEIL
ALBA

CONTROL SHEET

Document Control

Title:	Tactile safety inspection of high-level fabric Report PIC028 Inchcolm Abbey
Authors:	[REDACTED]
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Reviewed by:	
Date Reviewed:	
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Version Number:	V0200

Version Control

Version	Date	Status	Prepared by	Amendments
V0001	01/06/2022	Draft	[REDACTED]	First draft
V0100	08/06/2022	Approved	[REDACTED]	Slight amendments on wording generally - Removal of mention of site condition within key findings section- Approved by xxxxxx xxxxxx
V0101	13/06/2022	Draft	[REDACTED]	Zone 13 updated data by xxxxxx xxxxxxxxxx, Identified Risk drawings & data updated to match
V0200	13/06/2022	Approved	[REDACTED]	Approved

Template version: PICxxx-T1C-HLF-REP-YYYYMMDD-X-V0301-Report

High-Level Tactile Inspection: Report - Introduction



PIC ID # ↓	PIC028	Site name	Inchcolm Abbey		
Inspection start	23/05/2022	Inspection end	26/05/2022	Submission	08/06/2022
Lead assessor	[REDACTED]				
Other assessors	[REDACTED]				

Introduction:

The High-Level Fabric Inspection of Inchcolm Abbey (PIC028) was led by [REDACTED] (Inspection Team Leader) and carried out with [REDACTED] (Deputy Team Lead), and Inspectors [REDACTED] from 23/05/2022 - 26/05/2022.

The Inspection team assessed 24 zones covering the whole monument, using a range of high level access equipment including rope access, MEWP, alloy towers and ladders. MEWPs were lifted onto Inchcolm Island by use of Briggs Marine (Barge) using crane while ground mats were placed below MEWPs to protect ground and archaeologically sensitive areas throughout the site, for the duration of inspections and machinery movements.

HLF Inspection Risk Matrix:

HES-T1C-HLF-RAS-X-X-V0102-RiskMatrix

Consequence \ Probability		1	2	3	4	5
		No injury	Minor injury	Moderate injury	Major injury	Fatal or life-altering injury
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

Re-inspection frequency: (in years)

[REDACTED]



		Annual Visitor Numbers				
		up to 5 k	5-20 k	20 - 100 k	100k - 2m	over 2 m
Identified Risk Rating	Low	5 years	5 years	5 years	4 years	4 years
	Medium	3 years	3 years	2.5 years	2 years	2 years
	High	1 year	1 year	1 year	1 year	0.5 year

HL Zones:

Zone:	Colour:	Zone Name:
1		Abbot's residence - N and E external elevations
2		Abbot's residence - S external elevation
3		Abbot's residence - chambers West and 2nd bays
4		Abbot's residence - chambers 4th and East bay
5		Dormitory extension - external elevations
6		Dormitory extension - internal elevations
7		South walk/refectory - S elevation and roof pitch
8		South walk/refectory - N elevation and roof pitch
9		West walk/Guest Hall - W elevation and roof pitch
10		West walk/Guest Hall - E elevation and roof pitch
11		West gable latrine block
12		First church nave
13		Bell Tower
14		Study
15		East walk/Dormitory - E elevation and roof pitch
16		East walk/Dormitory - W elevation and roof pitch
17		Chapter House/Warming House - external elevations and roof
18		South transept
19		Residential block
20		N shore wall
21		S shore wall
22		S garden wall and porch
23		W garden wall
24		N garden wall and hermit cell

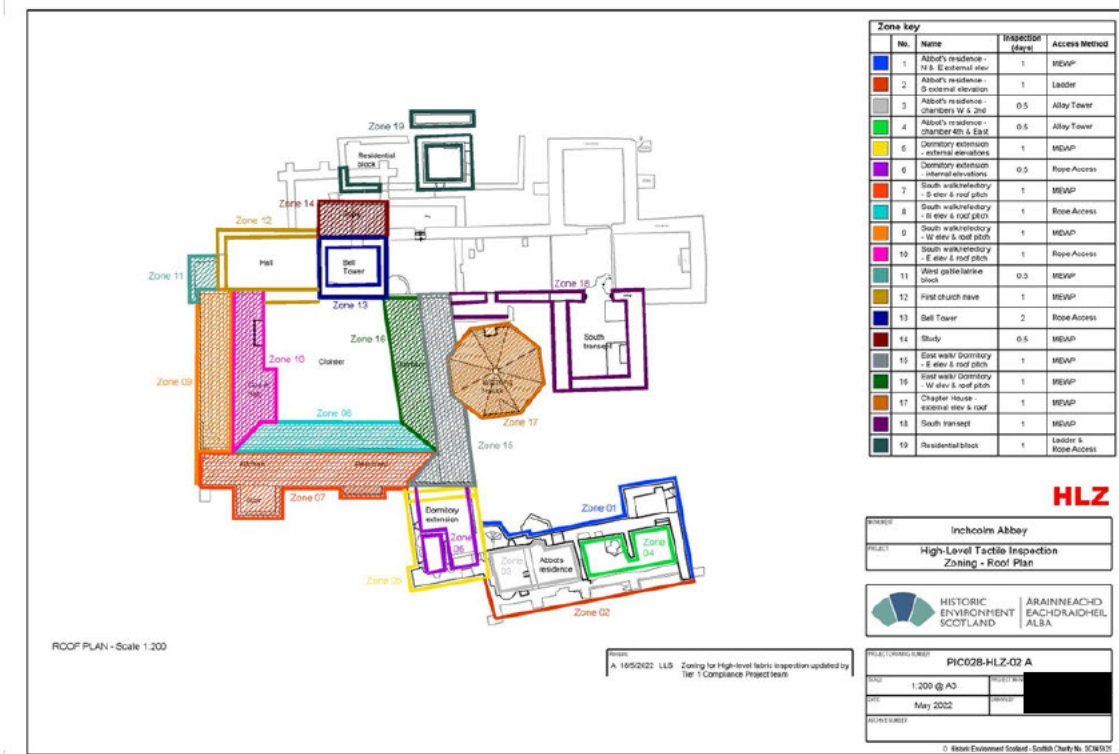
Link to 3D model:

<https://sketchfab.com/3d-models/inchcolm-abbey-e70d37f5e33941ea9b63ac1c5ad6a337>

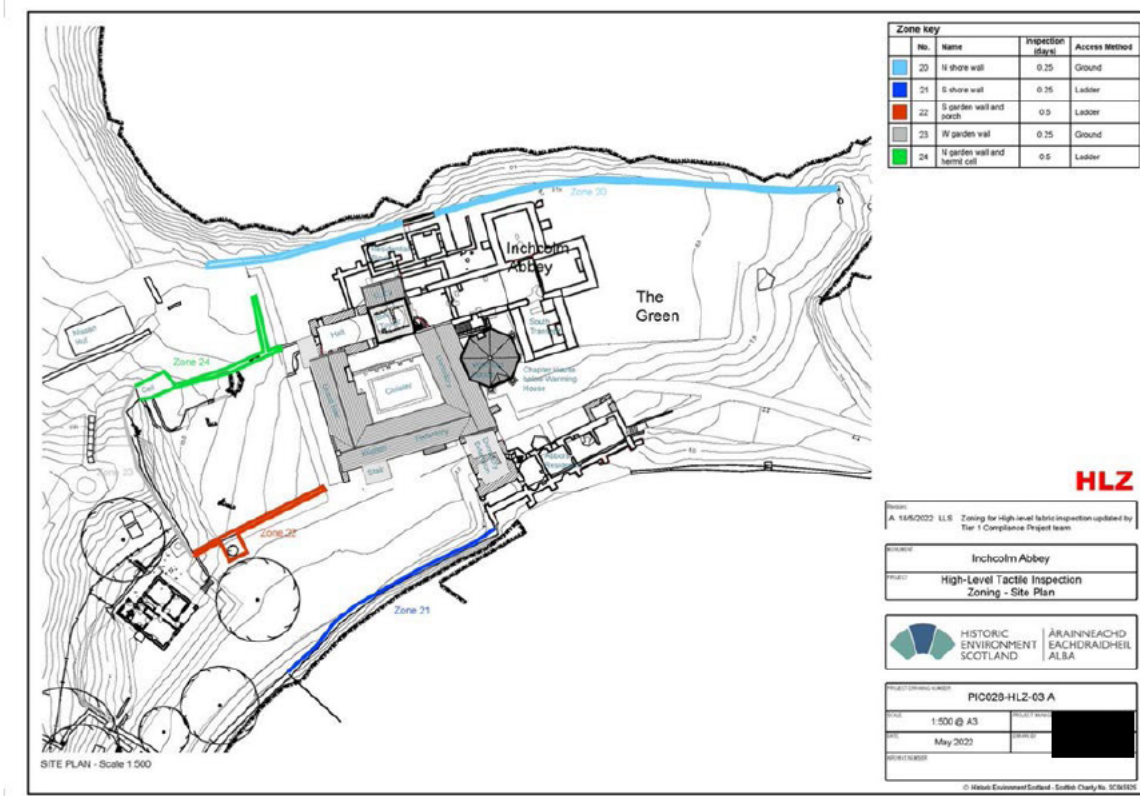
High-Level Tactile Inspection: Report - High-Level Zoning Drawings



Click on link below image to open drawing in PDF viewer:



[PIC028-HLZ-02A](#)



[PIC028-HLZ-03A](#)

High-Level Tactile Inspection: Report - Summary dashboard



PIC ID#	PIC028	Site name	Inchcolm Abbey	
Submission	08/06/2022	Number of zones	24	
Select zone of which data should be displayed ↓	All zones	Number of observations	88	

Identified Risk



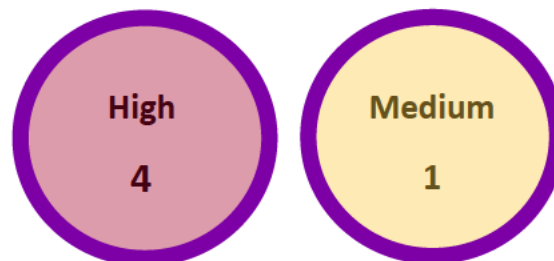
Residual Risk

After Inspection Action



Residual Risk

Mitigated with applied Access Restriction in place



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
	Full site, notifiable	Partial site, notifiable	Partial site, not notifiable	
34	0	2	3	49

Inspection types:	Tactile	87	Visual	1
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Key comments:

KEY FINDINGS

- Loose Slates / Replacement of slates - Warming House (Zone 17)
- Loose Masonry - East Alter
- Boundary Wall leading to cottage - Dry build - requires further attention



- South Nave - (Zone 12) Area shows signs of water ingress - mortar has decayed

PREDOMINANT RISKS:-

- Above as noted is the predominant identified risks which could be mitigated by installing Heras type Fencing with appropriate drop zones in the immediate term . Short term having MCU carry out repairs to the affected areas could negate the requirement for fencing.

High-Level Tactile Inspection: Report - Access Scope



PIC ID #	PIC028	Site name	Inchcolm Abbey
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Access methods: Select all methods used to conduction inspection ↓

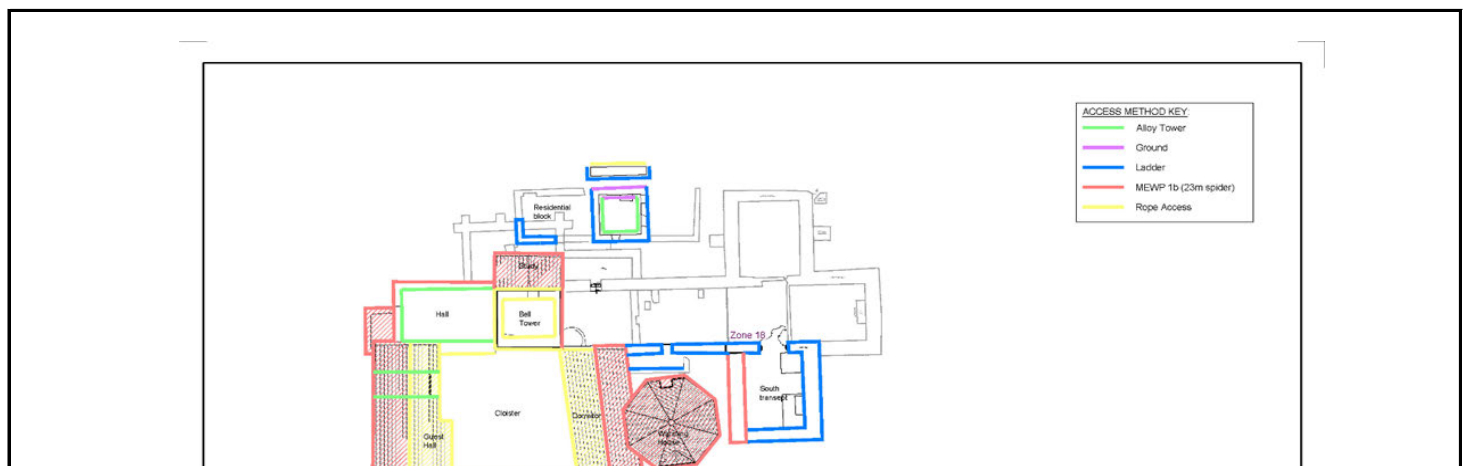
MEWP	Yes	Design Scaffold		Alloy Tower Scaffold	Yes
Rope Access		Steeplejack	Yes	Ladder	Yes
Ground	Yes	Binoculars / Photo	Yes	UAV	
Other method	No	If yes, details:			
Ground protection / tracking required:		Yes			
External Contractor appointed for access requirments:		Yes			

Inspection info:

Limitations of inspection:	All areas were inspected through methods noted above with no limitations during the inspections. Inclement weather caused 1 day delay on removal of the MEWPS from Inchcolm Island.
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Areas not inspected:	N/A
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Click on link below image to open drawing in PDF viewer:



High-Level Tactile Inspection: Report - Access Scope



ACCESS METHOD

DATE: A 15/05/2022 LLS Zoning for High-level tactile inspection updated by Tier 1 Compliance Project team

CLIENT: Inchcolm Abbey
PROJECT: High-Level Tactile Inspection
Access Method - Roof Plan

HISTORIC ENVIRONMENT SCOTLAND ARAINNEACHD EACHDRAIDHEIL ALBA

PROJECT NUMBER: PIC028-HLZ-04 A

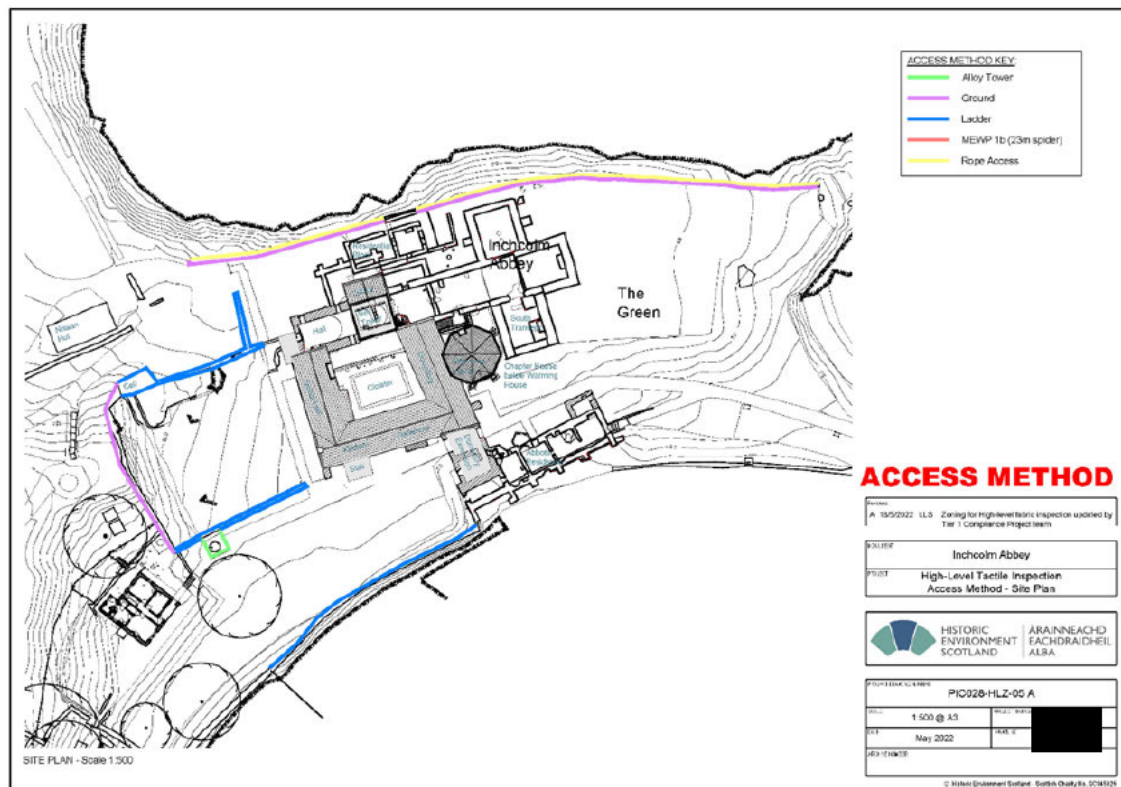
SCALE: 1:200 @ A5

DATE: May 2022

REVISIONS:

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PIC028-HLZ-04A



ACCESS METHOD KEY	
—	Alloy Tower
—	Ground
—	Ladder
—	MEWP 1b (23m spider)
—	Rope Access

ACCESS METHOD

DATE: A 15/05/2022 LLS Zoning for High-level tactile inspection updated by Tier 1 Compliance Project team

CLIENT: Inchcolm Abbey
PROJECT: High-Level Tactile Inspection
Access Method - Site Plan

HISTORIC ENVIRONMENT SCOTLAND ARAINNEACHD EACHDRAIDHEIL ALBA

PROJECT NUMBER: PIC028-HLZ-05 A

SCALE: 1:500 @ A5

DATE: May 2022

REVISIONS:

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INTERACTIVE PDF
Click on label to open linked Excel OBS form

KEY:

- Low level fabric (see also - see for condition of the fabric)
- Low level fabric (see also - see for condition of the fabric)
- High level fabric (see also - see for condition of the fabric)
- High level fabric (see also - see for condition of the fabric)
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- High level fabric (see also - see for condition of the fabric)
- High level fabric (see also - see for condition of the fabric)

202-01

Notes:

- High level fabric in Risk
- High level fabric in Risk for ground level up to 202-01 fabric
- Condition of CRD at bridge to main abbey flow
- High level fabric

High-Level Zone 01
Inchcolm Abbey - Abbot's residence - North external elevation

High-Level Zone 01
Inchcolm Abbey - Abbot's residence - East external elevation

IDENTIFIED RISK

PIC028 Inchcolm Abbey	
High-Level Fabric Tactile Inspection	
Identified Risk - High Level Zones 01	
<p>PIC028-HLR-201</p>	
<p>Area: 202-01</p>	<p>Area: 202-01</p>

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PIC028-HLR-Z01

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KEY:

- Low level fabric (see also - see for condition of the fabric)
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- High level fabric (see also - see for condition of the fabric)

202-01

Notes:

- High level fabric in Risk
- High level fabric in Risk for ground level up to 202-01 fabric
- Condition of CRD at bridge to main abbey flow
- High level fabric

High-Level Zone 02
Inchcolm Abbey - Abbot's residence - South external elevation

High-Level Zone 03
Inchcolm Abbey - Abbot's residence - Chambers View and 2nd bay

High-Level Zone 04
Inchcolm Abbey - Abbot's residence - Chambers 4th and East bay

IDENTIFIED RISK

PIC028 Inchcolm Abbey	
High-Level Fabric Tactile Inspection	
Identified Risk - High Level Zones 02, 03, 04	
<p>PIC028-HLR-201 to 204</p>	
<p>Area: 202-01</p>	<p>Area: 202-01</p>

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PIC028-HLR-Z02 03 04

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High-Level Zone 05
Inchcolm Abbey - Dumfriesshire - Northwest elevation

High-Level Zone 05
Inchcolm Abbey - Dumfriesshire - Southwest elevation

High-Level Zone 05
Inchcolm Abbey - Dumfriesshire - Southwest elevation

High-Level Zone 05
Inchcolm Abbey - Dumfriesshire - Internal elevations

KEY

- Low potential risk due to...
- Medium potential risk due to...
- High potential risk due to...
- Very high potential risk due to...

NOTE

- This is the location of the...
- This is the location of the...
- This is the location of the...

HIGH-LEVEL FABRIC TACTILE INSPECTION
2016/2016 to 2016/2022

SITE PLAN 1/100

IDENTIFIED RISK

PROJECT	High-Level Masonry - Fabric Inspection
IDENTIFIED RISK	High-Level Masonry - Fabric Inspection
DATE	2016/2016 to 2016/2022
CLIENT	Historic Environment Scotland
PROJECT NO.	High-Level Masonry - Fabric Inspection
DATE	2016/2016 to 2016/2022
CLIENT	Historic Environment Scotland

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INTERACTIVE PDF
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High-Level Zone 07
Inchcolm Abbey - Dumfriesshire - Southwest elevation and roof plan

High-Level Zone 11
Inchcolm Abbey - Dumfriesshire - West elevation

High-Level Zone 09
Inchcolm Abbey - Dumfriesshire - Northwest elevation

High-Level Zone 07
Inchcolm Abbey - Dumfriesshire - Southwest elevation and roof plan

High-Level Zone 07
Inchcolm Abbey - Dumfriesshire - Internal elevations

KEY

- Low potential risk due to...
- Medium potential risk due to...
- High potential risk due to...
- Very high potential risk due to...

NOTE

- This is the location of the...
- This is the location of the...
- This is the location of the...

HIGH-LEVEL FABRIC TACTILE INSPECTION
2016/2016 to 2016/2022

SITE PLAN 1/100

IDENTIFIED RISK

PROJECT	High-Level Masonry - Fabric Inspection
IDENTIFIED RISK	High-Level Masonry - Fabric Inspection
DATE	2016/2016 to 2016/2022
CLIENT	Historic Environment Scotland
PROJECT NO.	High-Level Masonry - Fabric Inspection
DATE	2016/2016 to 2016/2022
CLIENT	Historic Environment Scotland

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INTERACTIVE PDF
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KEY

- Low potential risk due to...
- Medium potential risk due to...
- High potential risk due to...
- Very high potential risk due to...

High-Level Tactile Inspection: Report - Risk Drawings



High-Level Zone 08
Tricholm Abbey - East Wall elevation - 1st floor level (top of steps)

High-Level Zone 10
Tricholm Abbey - East Wall (East of 1st floor level) (top of steps)

High-Level Fabric Tactile Inspection
25/05/2012 to 26/05/2012

SITE PLAN 1:100

IDENTIFIED RISK

PROJECT: Tricholm Abbey

High-Level Fabric Tactile Inspection
Identified Risk - High-Level Zones 08 & 10

HISTORIC ENVIRONMENT SCOTLAND | **ARAINNACHD ARCHIBUS-RI ALBA**

PROJECT REF: PG028-HER-2006-10

NO: 100 | **TYPE:** [REDACTED]

DATE: 14/01/2010 | **SCALE:** [REDACTED]

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Z12-04

High-Level Zone 12
Tricholm Abbey - First church nave - South, West & North internal elevations

Z12-05

High-Level Zone 12
Tricholm Abbey - First church nave - North, West & South external elevations

Z12-01

Z12-02

High-Level Fabric Tactile Inspection
25/05/2012 to 26/05/2012

SITE PLAN 1:100

IDENTIFIED RISK

PROJECT: Tricholm Abbey

High-Level Fabric Tactile Inspection
Identified Risk - High-Level Zone 12

HISTORIC ENVIRONMENT SCOTLAND | **ARAINNACHD ARCHIBUS-RI ALBA**

PROJECT REF: PG028-HER-210

NO: 100 | **TYPE:** [REDACTED]

DATE: 14/01/2010 | **SCALE:** [REDACTED]

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High-Level Fabric Tactile Inspection
25/05/2012 to 26/05/2012

SITE PLAN 1:100

IDENTIFIED RISK

PROJECT: Tricholm Abbey

High-Level Fabric Tactile Inspection
Identified Risk - High-Level Zone 12

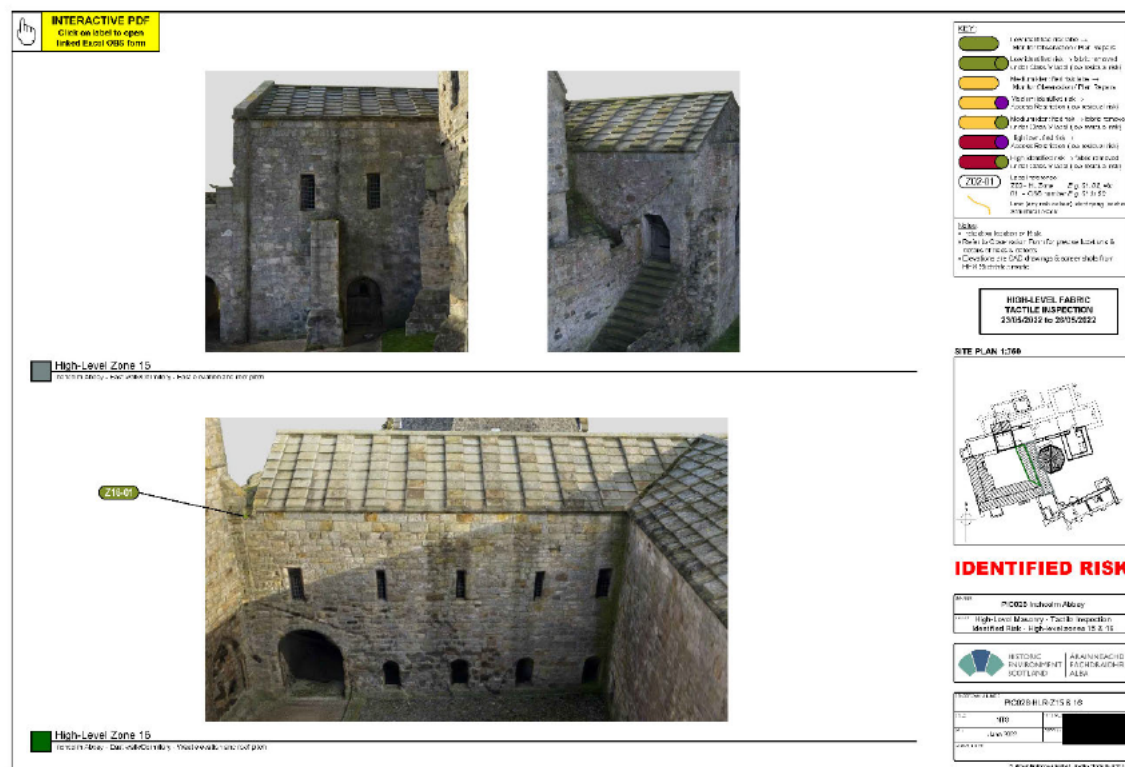
HISTORIC ENVIRONMENT SCOTLAND | **ARAINNACHD ARCHIBUS-RI ALBA**

PROJECT REF: PG028-HER-210

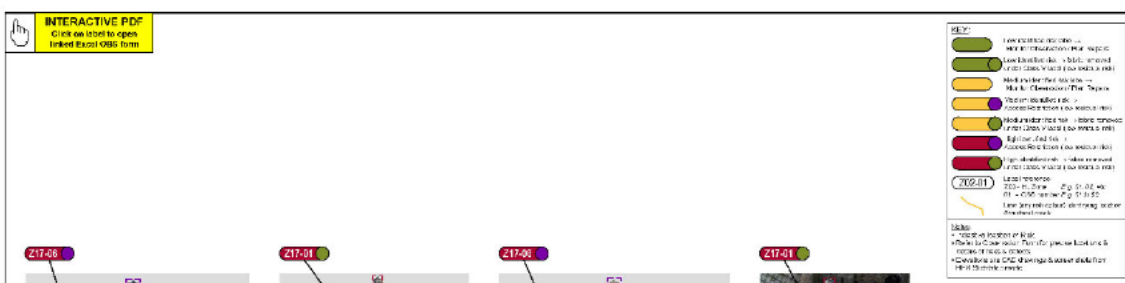
NO: 100 | **TYPE:** [REDACTED]

DATE: 14/01/2010 | **SCALE:** [REDACTED]

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High-Level Tactile Inspection: Report - Risk Drawings



High-Level Zone 17
Inchcolm Abbey - Chapel No. - North elevation & roof

High-Level Zone 17
Chapel No. - East elevation & roof

High-Level Zone 17
Chapel No. - South elevation & roof

High-Level Zone 17
Chapel No. - East elevation & roof

IDENTIFIED RISK

PROJECT	INCHOLM ABBEY
TYPE	High Level Masonry - Tactile Inspection Identified Risk - High Level zone 17
LOCATION	INCHOLM ABBEY
DATE	2022-05-17
SCALE	1:250
STATUS	Final

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INTERACTIVE PDF
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High-Level Zone 18
Inchcolm Abbey - North elevation

High-Level Zone 18
Inchcolm Abbey - South elevation - Area 4 section

IDENTIFIED RISK

PROJECT	INCHOLM ABBEY
TYPE	High Level Masonry - Tactile Inspection Identified Risk - High Level zone 18
LOCATION	INCHOLM ABBEY
DATE	2022-05-17
SCALE	1:250
STATUS	Final

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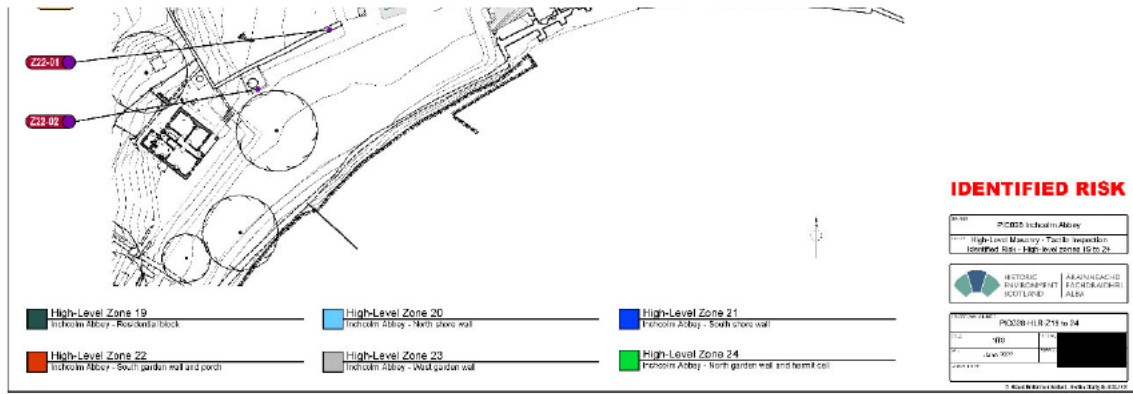
INTERACTIVE PDF
Click on label to open linked Excel OBS form

IDENTIFIED RISK

PROJECT	INCHOLM ABBEY
TYPE	High Level Masonry - Tactile Inspection Identified Risk - High Level zone 18
LOCATION	INCHOLM ABBEY
DATE	2022-05-17
SCALE	1:250
STATUS	Final

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High-Level Tactile Inspection: Report - Risk Drawings

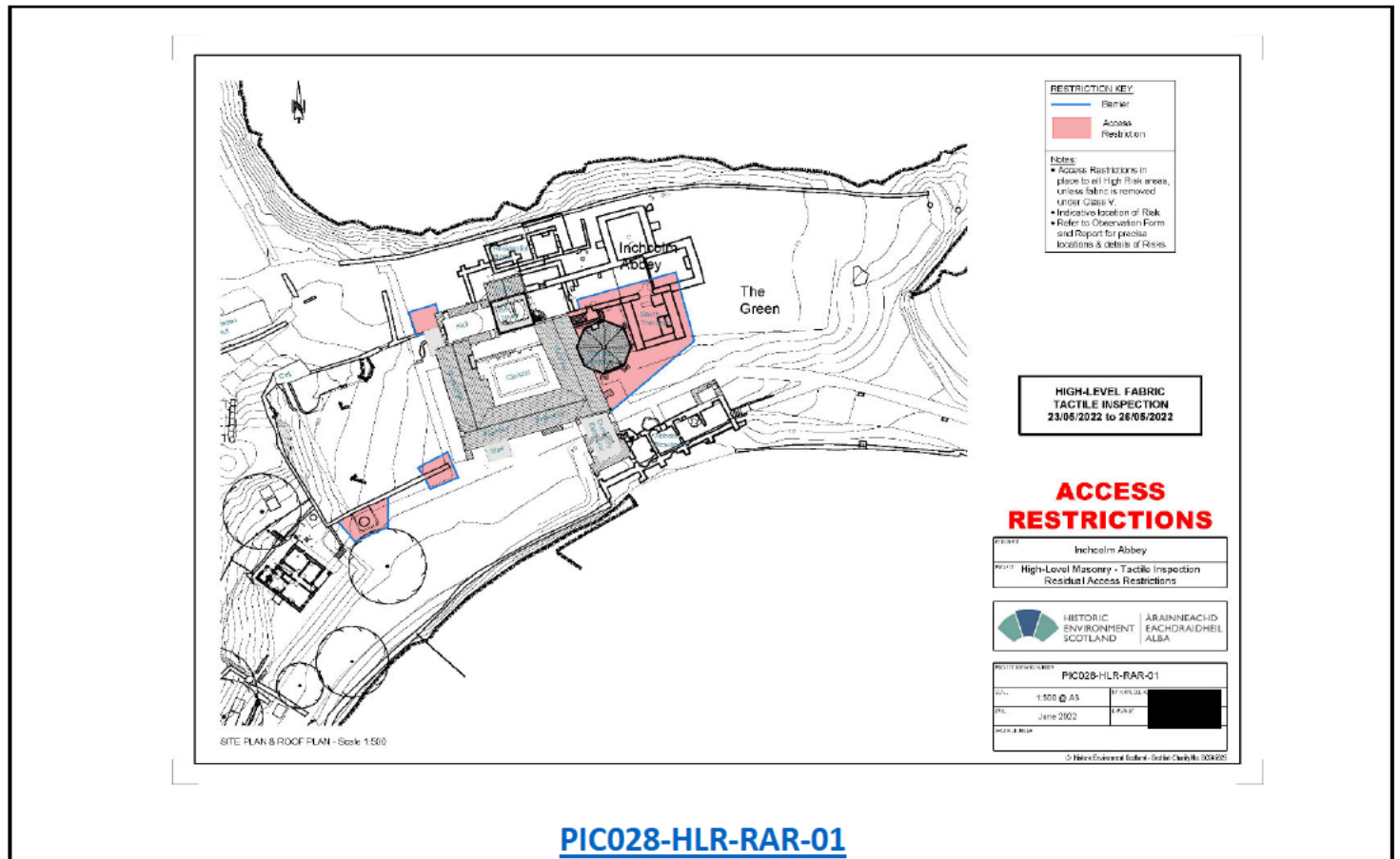


PIC028-HLR-219 20 21 22 23 24

High-Level Tactile Inspection: Report - Access Restrictions Plan



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[PIC028-HLR-RAR-01](#)