

**STRIDE TREGLOWN**  
BUILDING SURVEYING

**HOARE LEA** 



**Isles of Scilly Condition Survey**  
Council of the Isles of Scilly  
St. Marys

**Condition Survey Report**

**St Agnes Fire and Emergency Station**  
Revision P02

## Revisions

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Rev.	Date	Description of change / purpose of issue	Prepared	Reviewed	Authorised
P01	09 Oct 2020	Preliminary Issue	NK/RH	SL	SL
P01	09 Oct 2020	Preliminary Issue	AS	AH	AH
P02	02 Nov 2020	Updated figures / IOS Uplift	AS	AH	AH

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## 1. Scope of Survey

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The condition survey of this property comprised an assessment of the building structure, fabric, finishes, fixed furniture and fittings, mechanical services, electrical services and external areas for the purpose of establishing current and future maintenance requirements for a period of 5 years from date of survey. The survey was a non-intrusive visual inspection. If the surveyor suspects defects which cannot be assessed with limited access, further tests or investigations will be suggested. Roof areas have been inspected from vantage points and with the use of a pole camera.

Stride Treglown are therefore unable to report on the condition, within voids, of items that are covered or unexposed, of items that are inaccessible, or confirm that such areas are free from defect.

It has been noted where structural elements could not be inspected without causing material damage to the building.

No testing was carried out to determine the presence of deleterious materials. Stride Treglown are aware of the asbestos register and asbestos management plan for the property and the presence of deleterious materials has been recorded only where visible.

No tests on the services or below ground drainage have been undertaken.

We have not undertaken any opening up, dismantling, testing, disconnection or reconnection of plant and systems.

The survey does not and is not intended to guarantee the present or future operational and/or safety status of any installation or equipment or that it necessarily complies with current standards.

Inadequate workmanship or failure to adhere to a specified maintenance schedule can lead to accelerated wear, overheating and corrosion. Plant items are highly dependent upon the effective design of the system in which they operate. Components, which are dynamic in nature, are dependent on timely and appropriate maintenance and the way in which they are used.

Economic Life Expectancy Factors have been developed by The Chartered Institution of Building Services Engineers (CIBSE) as a methodology to assist property owners establish a plant asset management programme whereby equipment and components are replaced at intervals based on a broadly-based survey of generic plant and equipment.

The standards developed by the CIBSE make a number of key assumptions including that the plant and equipment has been subjected to a good standard of maintenance. Plant operational hours are another key factor in establishing the benchmark life factors for the plan.

All costs are calculated estimates and not quoted prices and include an allowance for contractors' preliminaries. There is no allowance for VAT, professional fees or in-house management costs within the rates.

Programmed repairs are, in most instances, costed on a 'like for like' replacement basis with no allowance for improvement except where it is necessary to upgrade an element at time of replacement to comply with current regulations

## 2. Introduction

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- 2.1.1 Stride Treglown and Hoare Lea have been commissioned to carry out a non-intrusive survey, record and provide a commentary on the key considerations of the building fabric, fixed-furniture, Mechanical, Electrical and Public Health (MEP) infrastructure condition of St. Agnes Fire & Emergency Service Station in the Isles of Scilly.
- 2.1.2 The St Agnes Fire and Emergency Station was first commissioned in 1984.
- 2.1.3 The report utilises the CIBSE priority and condition of service/ equipment grading system to determine the condition of the item of plant at the time of survey and when any remedial work identified is required to be done.

### 2.2. Grading System

#### 2.2.1 Priority Codes

The following priority grades are recommended in the context of a 5-year planning period:

**Priority 1:** Urgent work that will:

Prevent immediate closure of premises; and/or address an immediate high risk to the health and safety of the occupants; and/or remedy a serious breach of legislation.

**Priority 2:** Essential work required with 2 years that will:

Prevent serious deterioration of the fabric or services; and/or address a medium risk to the health and safety of occupants; and/or remedy a less serious breach of legislation.

**Priority 3:** Desirable work required within 3 to 5 years that will:

Prevent deterioration of the fabric or services; and/or address a low risk to the health and safety of the occupants; and/or remedy a minor breach of legislation.

**Priority 4:** Long-term work required outside the 5-year planning period that will:

Prevent deterioration of the fabric or services.

#### 2.2.2 Condition Grading Codes

The condition of each element is assessed using the following grades.

**Grade A** - Good: Performing as intended and operating efficiently.

**Grade B** - Satisfactory: Performing as intended but exhibiting minor deterioration.

**Grade C** - Poor: Exhibits major defects and/or not operating as intended.

**Grade D** - Bad: Life expired and/or serious risk of imminent failure.

### 2.2.3 Abbreviations

BS	British Standards
EMI	Electromagnetic Interference
ELV	Extra Low Voltage
LV	Low Voltage
MCB	Miniature Circuit Breaker
MCCB	Moulded Case Miniature Circuit Breaker
PIR	Presence Infra-Red
PVC	Polymerizing Vinyl Chloride
RCBO	Residual Current Breaker with Overload
RCD	Residual Current Device
SWA	Steel Wire Armor
WPD	Western Power Distribution

## Executive Summary

### 3. Building Survey

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#### 3.1. General summary

- 3.1.1 The fire station building comprises a timber portal frame clad with vertical timber weatherboarding. Generally the frame and visible external finish is in fair condition.
- 3.1.2 The pitched roof covering consists of cement profile sheets fixed to the timber structural frame. Generally the roof appears in satisfactory condition.
- 3.1.3 Rainwater goods are black uPVC which are in fair condition.
- 3.1.4 Windows are timber framed double glazed units, which are in a functional condition, although in need of external decorations. The timber pedestrian main entrance door is in need of replacement ironmongery and timber repairs. The galvanised vehicular roller shutter doors appear in a functional condition, however it is suggested that the doors are subject to a periodic inspection, repair, servicing and maintenance regime.

#### 3.2. Internally

- 3.2.1 Internal areas are in a serviceable condition. Ceilings and partition walls consist of decorated plasterboard in the WC, with the exposed roof soffit and wall cladding being visible elsewhere. Redecorations should be undertaken both internally and externally as part of a cyclical redecoration programme.
- 3.2.2 Flooring comprises either plywood or exposed ground bearing concrete slab. It is recommended that non slip sheet vinyl is provided in the plywood areas, and the non-slip coating is reapplied to the concrete slab. Internal timber doors are in a functional condition, however a number are in need of replacement ironmongery. Fixtures/fittings are in a serviceable condition, however consideration should be given to their replacement to provide a more user friendly arrangement.

#### 3.3. External areas

- 3.3.1 An inspection of the existing underground drainage systems was not undertaken, therefore no comment is made regarding the existing drainage arrangement or their condition. The building is surrounded by a concrete hardstanding and pathway, which is in a fair condition, although moss should be removed to prevent a slip hazard. Vegetation adjacent to the building should be removed to prevent potential future damage to the fabric of the building.

#### 3.4. Outbuildings

- 3.4.1 The ambulance station building consists of a timber framed lean-to structure, which appears to be generally in sound structural condition. The exterior of the building should be treated with woodstain and repairs to the leaking roof undertaken. The ground level to the rear and side should be reduced, and vegetation adjacent to the building removed to prevent potential future damage to the fabric of the building.

## 4. Mechanical Survey

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### 4.1. Heating

- 4.1.1 No permanent fixed heating is provided to this building. Evidence of mould growth and building fabric can be seen within the building.
- 4.1.2 Consideration should be given to providing background heating for the staff and for the building fabric.

### 4.2. Ventilation

- 4.2.1 Local wall mounted extract fans are provided to the WC but is not operational. Replace.
- 4.2.2 No ventilation is provided to the galley, Install a small extract fan to comply with building regulations.
- 4.2.3 Make up air is by natural means to each space.

### 4.3. Hot Water Services

- 4.3.1 Hot water is provided by local electric storage heaters however they are all not working.
- 4.3.2 There appears to be no other hot water onsite. It is recommended these local electric heaters are fixed.

### 4.4. Cold Water Services

- 4.4.1 The water filtration system seem to be in a satisfactory condition, but the filter are dirty and require servicing.
- 4.4.2 The water main is distributed around the building via a blue MDPE pipe. The cold water main serves the galley, wc and a hose connection has been provided to fill the bowser. The hose connection has not been provide with a means of back flow prevention and could cause contamination to the drink water supply.
- 4.4.3 Blue MDPE pipework is suitable for underground mains and is not designed for above ground distribution due to the effects of ultra-violet sunlight degrading the pipework over time. Replace with insulated copper pipework.
- 4.4.4 Tapes to gally sink showing signs of corrosion. Replace

### 4.5. Incoming Mains Water Service

- 4.5.1 The St Agnes fire and emergency station is supplied from a local well and rainwater harvesting system.

### 4.6. Oil/Gas Services

- 4.6.1 There are no oil/gas services associated with this building.



## 5. Electrical Survey

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### 5.1. LV Distribution

- 5.1.1 The Fire and Emergency Station is served from a WPD electrical supply system. The supply terminates in a GRP enclosure external to the building.
- 5.1.2 Incoming services cable sheathing degraded/ cracking. Further investigation required by BT Openreach to determine extent of degradation to avoid loss of services.
- 5.1.3 Hot water heater tripping circuit protective device. The water heater and complete circuit should be checked and tested to BS7671.
- 5.1.4 Incoming SWA electrical cable exposed. Recommend boxing the cable to protect against mechanical damage.
- 5.1.5 Main distribution board in working condition. It is recommended that the board is changed to a metal fireproof board in line with the current regulations.
- 5.1.6 The electrical services are distributed throughout the rest of the building via a network of SWA cables and PVC cables. A combination of MCBs and RCBO protection devices are installed to provide protection to the final small power and lighting circuits.
- 5.1.7 Final circuit cables not supported. Cables to be supported using metal clips/ containment system.
- 5.1.8 Generally, the electrical installation is in a useable condition, however due redesign and upgrades to the latest BS7671 wiring regulations.
- 5.1.9 The distribution system should be tested regularly to BS7671.

### 5.2. Containment

- 5.2.1 Incoming electrical services clipped direct.
- 5.2.2 The majority of cable runs are clipped direct with no EMI segregation between fire alarm, ELV/ Data and LV cables.
- 5.2.3 PVC trunking has been used to protect the cables to some of the final circuits.
- 5.2.4 High level final circuit cables not supported. Cables to be supported using metal clips/ containment system.

### 5.3. Internal and External Lighting

- 5.3.1 General lighting in working but poor condition.
- 5.3.2 Internal lighting to the station is provided by surface and suspended linear florescent light fittings. Internal lighting to vehicle storage requires IK rated diffuser protection. Lighting past economic life; recommend replacing with energy efficient Led linear fittings.
- 5.3.3 Lighting within fire station stores and changing rooms not working – consider replacing.
- 5.3.4 Wall mounted external lighting is provided to the entrance and the building surrounds. External lighting diffusers are degraded with signs of water.

## **5.4. Fire Alarm and Detection System**

- 5.4.1 The fire alarm system panel is located in the vehicle store entrance. This supports all the detectors, break glasses and sounder beacons throughout the fire and ambulance buildings. The overall condition of the fire alarm system appears to be good.

## **5.5. Small Power**

- 5.5.1 Majority of socket outlets in the station appear to be past their economic life.
- 5.5.2 Ambulance station fed from an extension cable from the fire station. Consider redesign to provide adequate socket outlets.
- 5.5.3 Sockets in close proximity to water sources.
- 5.5.4 A Periodic Test & Inspection should be carried out in line with BS7671.

## **5.6. Lightning Protection System**

- 5.6.1 There appears to be no lightning or surge protection system to the building. Consideration may be given to completing a risk assessment to determine the need for surge protection and lightning protection system in-line with the BS EN 52306 and BS7671.

## **5.7. Data**

- 5.7.1 Incoming data via BT Openreach is terminated in a BT master socket within the main vehicle store.
- 5.7.2 Incoming data cable sheathing appears to be cracked.
- 5.7.3 Data sockets and cables appear old and past their economic life.

## **5.8. Security**

- 5.8.1 The security panel is located at the entrance of the vehicle storage area.
- 5.8.2 The security panel display unit appears to have malfunctioned and should be replaced. A test and inspection of the security system is required to determine cause of the malfunction.

## **6. Recommendations for further inspections and specialist surveys.**

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- 6.1.1 Lightning protection specialist to perform a risk assessment in line with BS EN 52306 and BS7671 to determine the need for a lightning protection system and surge protection.
- 6.1.2 BT Openreach engineer required to check BT incoming cable condition.

## 7. Appendices

### Appendix 1: Details of Prioritised Works and Cost schedule

# IOS Condition Survey Report.

## Detail of Prioritised Works Schedule.

### St.Agnes - Fire & Emergency Service Station

The tabulated priority costing figures have been derived from the SPON'S Mechanical and Electrical services price book, 51st edition 2020. The cost detailed in this schedule are indicative estimates based on the time of survey, Hoare Lea cannot be held accountable. The cost estimates are in most cases costed on a like to like replacement, with no allowance for improvement except where it is necessary to upgrade an element at a time of replacement to comply with current regulations. The cost estimates take into account the geographical location of the sites.									
IMAGE REFERENCE	LOCATION / ELEMENT	OBSERVATIONS	CONDITION GRADING	PRIORITY GRADING	STATUTORY COMPLIANCE	PRIORITY COSTINGS			
						P1	P2	P3	P4
BUILDING CONDITION									
B101	Roller Shutter Door	Corrosion to roller shutter laths - replace laths and overhaul door	C	2			£ 1,935.00		
B102	Timber skirt around perimeter of building	Heavily weathered / minor rot to timber skirting surround the building - replace	C	2			£ 1,050.00		
B103	Front External Timber door	Minor rot to timber door and frame - refurbish	C	2			£ 275.00		

B104	External Timber windows	External windows are showing signs of minor rot, water ingress and heavily weather externally - refurbish and redecorate all timber windows	C	2			£ 2,805.00		
B105	Timber Sills	Externally the timber sills and timber cladding below the sills are showing signs of damp and rot - Refurbish / re-decorate the sills and adjust so they are aiding the runoff of rainwater	C	2			£ 982.50		
B106	Main Floor	Concrete floor slab is scuffed and marked - reseal with a new surface finish	B	3				£ 2,002.50	
IMAGE REFERENCE	SERVICE TYPE & LOCATION	OBSERVATIONS	CONDITION GRADING	PRIORITY GRADING	STATUTORY COMPLIANCE	PRIORITY COSTINGS			
						P1	P2	P3	P4
ELECTRICAL ENGINEERING									
E201	Main Incoming Data	Incoming Data services cable sheathing degraded/ cracking. Utility Eng to investigate	C	1		£ -			
E202	Main distribution board	PVC Distribution board, recommend replacing with metal fireproof in line with BS7671	B	4					£ 600.00
E203	Internal Lighting	Internal lighting missing diffusers. No Emergency lighting.	C	1		£ 3,000.00			
E208, E209	External lighting	External lighting and photocell diffuser degradation, replace.	C	2			£ 1,800.00		
E204, E205, E206	Final circuit cable supports	Final circuit cables not supported. Conduit required.	C	1		£ 375.00			
E212, E214, E215	Socket outlets	Addition of socket outlets within ambulance station	C	4					£ 720.00

E216	Intruder alarm	Intrude alarm engineer to investigate the cause of fault.	C	1		£ 1,800.00			
-	Lightning protection risk assesment	Lightning protection specialist to perform a risk assessment in line with BS EN 52306 and BS7671 to determine the need for a lightning protection system and surge protection.	-	1	£ 1,800.00				
MECHANICAL ENGINEERING									
M101	Hot Water Services	Electric hot water heater not working. Replace.	D	1		£ 3,000.00			
M102	Cold Water Services	Blue MDPE pipework not suitable for above ground distribution. Replace with copper pipework.	C	3				£ 4,500.00	
M103	Cold Water Services	Provide suitable back flow protection to hose connection	D	1	£ 450.00				
M104	Cold Water Services	Service cold water filtration system	C	1	£ 300.00				
M105	Cold Water Services	Tap corroded, replace	D	1	£ 150.00				
M106	Heating	Replace electric Heaters	C	2			£ 3,000.00		
M107	Ventilation	Replace WC extract fan	D	1	£ 300.00				
M108	Ventilation	Install Gally extract fan	C	1	£ 300.00				
Total Costs					£ 3,300.00	£ 8,175.00	£ 11,847.50	£ 4,500.00	£1,320.00
Mean Professional Fees @ 8.7% (QS - 2.2%, Arch - 4.5%, M&E - 2.0%) (Not inclusive of Structural Engineers Fees 2.5%)					£ 287.10	£ 711.23	£ 1,030.73	£ 391.50	£ 114.84
Total Costs (Inc of Professional Fees)					£ 3,587.10	£ 8,886.23	£ 12,878.23	£ 4,891.50	£1,434.84
Key	Condition Grading		Priority Grading						
	A - Good Condition B - Satisfactory Condition C - Poor Condition D - Very Poor Condition		P1 - Urgent Work required P2 - Essential Work Within 2 Years P3 - Desirable Work 3 -5 Years P4 - Long Term Work Outside 5 Years						






## 8. Photographic Schedule

### 8.1. Mechanical Survey Photos

		
<p>M101: Hot water heaters not working</p>	<p>M102: MDPE pipework not suitable for above ground distribution</p>	<p>M103: Provide back flow protection</p>
		
<p>M104: Service water filtration system</p>	<p>M105: Taps corroded, Replace</p>	

### 8.2. Electrical Survey Photos

		
<p>E201: Incoming LV and data services terminating within GRP enclosure</p>	<p>E202: Incoming services cable sheathing degraded/ cracking.</p>	<p>E203: Distribution board, recommend changing to a metal fireproof board.</p>





E204: Final circuit cables not supported.



E205: Final circuit cables not supported.



E206: Final circuit cables not supported.



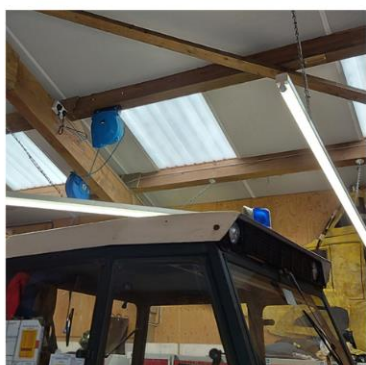
E207: Internal lighting missing diffuser and not working.



E208: External lighting degraded, replace.



E209: External lighting diffuser degraded.



E210: Internal lighting working. IK rated diffusers required.



E211: Internal lighting, past economic life



E212: Ambulance extension from fire station. Consider redesign



		
<p>E213: Socket outlets appear to be in satisfactory condition.</p>	<p>E214: Socket outlets in close proximity to water sources.</p>	<p>E215: Extension to ambulance station from fire station.</p>
		
<p>E216: Intruder alarm not working/ line fault.</p>	<p>E217: Fire alarm panel appear to be in satisfactory condition.</p>	<p>E218: fire detector heads appear to be in satisfactory condition.</p>

### 8.3. Building Survey Photos

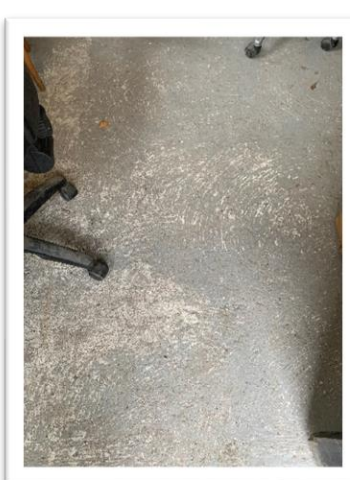
		
<p>B101: Corrosion to roller shutter laths</p>	<p>B102: Heavily weathered / minor rot to timber skirting surround the building - replace</p>	<p>B103: Minor rot to timber door and frame - refurbish</p>



B104: External windows are showing signs of minor rot, water ingress and heavily weather externally



B105: Externally the timber sills and timber cladding below the sills are showing signs of damp and rot



B106: Concrete floor slab is scuffed and marked - reseal with a new surface finish

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