

Appendix 4: Conditions survey of historic properties

The data from this survey was collected between 2013 and 2016, focusing on the exterior condition of every residential property built before 1950 in the Port Sunlight Conservation Area.

The area comprises more than 900 Grade II listed buildings, designated for their architectural, aesthetic and historic merit. The survey only included residential properties - commercial and community buildings could be surveyed in future. The purpose of the survey was to ascertain the exterior conditions of the houses and the extent of unsympathetic alterations. Survey work was scheduled and organised by superblock, which in Port Sunlight is defined as the area created by terraces encircling a central green space or courtyard. The superblocks are numbered from 1 to 19. A site plan annotated to show the locations of the superblocks is found in Appendix 16. Blocks 2, 15 and 19 were surveyed in 2013, along with the fronts of the perimeter properties on Bebington Road, New Chester Road and Wood Street. The 2016 survey further assessed blocks 1, 3-14 and 16-18, including the perimeter properties on Greendale Road and New Chester Road not included in the 2013 survey. The order in which the survey was completed will be a primary factor in scheduling future survey work. The goal is to align survey work with Port Sunlight Village Trust's (PSVT) cyclical maintenance programme.

The survey was an exterior visual assessment of conditions, completed by a volunteer taskforce alongside the Conservation Adviser and Survey Officer from PSVT. No hands-on, diagnostic, sampling, at height or interior assessments were made. Visibility was particularly restricted at the backs of houses where tall boundary walls, deep gardens or mature or overgrown gardens blocked views. For the same reasons, it was difficult to accurately assess the conditions of outhouses and other outbuildings. Roofs were particularly difficult to assess from ground level.

Priorities

Each deteriorated condition noted in the survey was assigned a treatment to address it and a priority level for repair. The priorities are split into three categories - high, medium and low.

Priorities were assigned for the following reasons:

Low: Conditions which impact on the aesthetic character of the properties.

Medium: Conditions which, if not addressed, may impact on the structural or water-tight aspects of the house within five years.

High: Conditions which, if not addressed, may impact on the structural or water-tight aspects of the house in the very near future (1-3 years).

Priority	Timescale (to be addressed within)
Low	5-10 years
Medium	3-5 years
High	1-3 years

Of the 918 properties surveyed, a total of 552 properties need some form of repair work, ranging from minor decoration works to major structural repairs. Below is a table summarising findings from the survey, highlighting the superblocs requiring the most work to address deteriorated conditions or enforcement issues:

Superblock	Properties affected	%	High	Medium	Low
1	8/45	17.8%	2	4	8
2	72/72	100%	62	72	72
3	47/112	42%	17	36	47
4	22/22	100%	5	17	22
5	31/41	75.6%	12	23	31
6	65/97	67%	19	51	65
7	34/85	40%	12	23	34
8	8/19	42.1%	2	8	2
9	5/43	11.6%	1	2	5
10	40/96	41.7%	15	24	40
11	41/55	74.5%	10	15	41
12	14/15	93.3%	4	11	14
13	16/26	61.5%	15	16	16
14	10/10	100%	5	9	10
15	44/44	100%	26	44	44
16	30/39	76.9%	10	23	30
17	27/37	73%	12	22	27
18	24/38	63.1%	9	19	24
19	22/22	100%	15	22	22
Total	552/918	60.1%	251	437	546

Proposed work ranges from low priority treatments, such as the replacement of inappropriate Unilever Merseyside Ltd (UML) windows, to high priority works such as major roofing repairs. The superblocs highlighted in red are those which are classed as particularly problematic, with the largest amount of high priority repair works needed. Although it may appear that a total of 251 properties need a high priority repair carried out, this does cover a completion period of 1-3 years and may not need immediate attention.

It is worth noting that subsidence has been an issue for certain properties in the village since shortly after they were built. Some of these houses, which have walls or door frames out of plumb, or extensive and deep diagonal cracks, have received structural reinforcement to address their subsidence. Others may have active movement and should be assessed as soon as possible. Further investigation and outreach to the owners of these properties is required.

Below is a breakdown of the high priority repairs that have been found:

Repair priority (from highest to lowest)	Blocks affected	Total instances
Structural cracks	2, 8, 15, 19, 3, 14, 4	13
Missing/heavily damaged roof tiles	2, 15, 19, 10	30
Erosion of brick and stone (walls)	2, 15, 19, 4, 18, 10, 13, 16, 14, 17, 6, 3	146
Porch and bay coverings needing repair	2, 15, 19, 6, 13	25
Cracked, distorted, blocked with vegetation or missing rainwater goods	2, 15, 19, 6, 5, 13, 16, 4, 10, 3, 7, 18	52
Eroded/missing mortar, vegetation growth, erosion of masonry in chimneys	2, 15, 19, 13, 5, 6, 10, 16, 18, 17, 3, 9	44
Rot to windows and/or doors	2, 15, 19, 4, 2, 14, 5, 6, 7, 10, 17, 3, 18	81
Roof tiles/stones need resetting	5, 10, 11, 2, 9, 6, 13	12
Oak erosion (due to exposure)	2	1
Rusted original rooflights	2	1
TOTAL		405

Risks identified

Structural defects and subsidence

In several houses, structural movement is evident in cracking, particularly at the corners of lintels and in the rendered panels between the first-floor window sill and the ground floor window lintel. In many cases this cracking is minor, historic and has signs of being repaired before. This is particularly true of the Duke of York cottages which have had significant movement in the post-war period and have been monitored, with tell-tale pieces of glass (dated 1969) attached to particularly large cracks. These properties in particular will need further specialist investigation to determine if the subsidence is ongoing.

Erosion of brick and stone

Aside from the natural forces of weathering, there is widespread deterioration to the brick and stonework in the village due to the inappropriate use of sand and cement mortar. Compared to traditional lime mortars or early hybrid mortars (comprised of sand, cement and lime) used when the houses were first built, modern sand and cement mortars used in subsequent repairs are extremely hard and non-porous. This incompatibility has irreversibly damaged brick and stonework in the village, and is particularly evident in the yard walls on Greendale Road, Bebington Road and New Chester Road. There are 32 properties deeply affected by this, with the need for significant repair in the next three years. Of these 32 properties, block 13 has been most affected with 20 properties requiring high priority repairs to resolve the issue.

Chimney repairs

Due to access issues and their exposure to weather conditions, chimneys in Port Sunlight are generally in a worse condition than the rest of the house. Access is costly because independent scaffolding - which needs no vertical support from the building - is required to prevent damage to the façade.

Common works include the removal of vegetation, repointing and rebuilding the top course corbelling, terracotta or stone detail. Of the 918 properties surveyed, 348 properties need some level of chimney repair. Of these, 20 properties require high priority works.

Chimney repairs are the best example of where cooperative maintenance is the most practical solution. A chimney is usually a shared feature in a terrace or semi-detached block. Often defects to one side may well result in ingress of water and consequent damage in the neighbouring property. For this reason, there are strong incentives for neighbours to carry out repairs jointly, including those that live next to a PSVT property.

Roofs

The most common roof defects found are poor or missing pointing in ridge tiles and slipped, missing or broken roof tiles. The survey found 381 properties needed repair to the front roof tiles; these repairs ranged from removing moss to the replacement of ten or more roof tiles. 209 rear roofs were also affected, and 126 properties needed repair to their ridge tiles, which either needed repointing or units replacing. There were twelve high priority roof repairs spotted, with six of these needed in block 10. These works mainly affect the York stone roofs found on Greendale Road, which are suffering from spalling, particularly around the eaves.

Repointing

Examples of intact, original pointing mortar in masonry walls at the houses, boundary walls and outbuildings remain, but they are few. Repointing is evident in the brickwork and sandstone masonry and at the ridge tiles in roofs throughout the village. Unfortunately, in many instances inappropriate and incompatible pointing materials were used. Sand and cement mortars, sometimes tinted red to blend with the surrounding masonry units, have been used to the detriment of the late nineteenth and early twentieth-century brick and sandstone. However, there are only nine properties identified that have been affected to the point where it is specified as a high priority work. Many of the examples classed as medium priority works cannot be repaired because the mortar has not recessed enough to be dug out. Any attempts to remove it prematurely would result in further damage to the brick/stonework.

A comprehensive specification for lime-based mortar is provided by PSVT, but has not been followed in many cases.

Non-conforming alterations

Conservatories

Inappropriately designed conservatories adversely affect the historic character of the listed houses and therefore the heritage integrity of the village. Conservatories built from uPVC, which is too brittle to support a live load, also restrict access to first floor wall and window surfaces and gutters. This limits necessary maintenance at these important features.

Examples of appropriate conservatory additions can be found in the village. These have received consent from Wirral Council and permission from PSVT. The non-conforming conservatories discovered in the survey are all located at the rear of properties and vary between timber and anodised aluminium. This table indicates which blocks are affected:

Block	No. of conservatories
1	0
2	1
3	2
4	1
5	2
6	6
7	3
8	0
9	1
10	8
11	1
12	2
13	0
14	1
15	0
16	2
17	2
18	3
19	0
TOTAL	35

Window replacements

Extensive replacement of ground floor rear, and in some instances first floor windows, occurred from c.1960-90 when UML modernised properties. Original multi-pane windows at the rear were replaced with a single pane 'picture' window. Although this work took place after the houses were listed by Historic England (then English Heritage) in 1965, heritage conservation regulations and controls at the time did not include the rear of the properties. However, philosophy and

regulations have evolved, and today alterations to a listed building are regulated for works proposed for the front, rear, sides, roof and interior of the property.

The survey further highlighted 32 properties with uPVC windows. Superblocks 4, 8, 9, 14, 15, 17 & 18 had no cases of uPVC windows.

Block	No. of properties with uPVC windows
1	2
2	4
3	1
5	1
6	2
7	1
10	3
11	6
12	1
13	1
16	2
19	6
TOTAL	32

Rooflights

Of the 164 properties surveyed with a rooflight in the principle building, there were just five examples found which were deemed inappropriate. These have been classed as inappropriate because of their unsympathetic design, including 26 Central Road which has introduced a modern Velux rooflight. There are a further six properties (originally built 1901-12) which have introduced new rooflights but have maintained the original designs.

Clutter

There are several instances where modern items have been added to the listed properties in Port Sunlight. Some of these are necessary for modern living standards, such as boiler flues, but there are examples which we would class as inappropriate alterations that have been poorly sited, affecting the building's special aesthetic quality. Examples of this include trailing cables, alarm boxes and security lights. Of the 918 properties surveyed, 366 properties have some form of exterior clutter. Below is a breakdown of the superblocks affected:

Superblock	No. of properties affected
1	6
2	1
3	48
4	16
5	36
6	61
7	27
8	6
9	9

10	25
11	36
12	14
13	15
14	9
15	0
16	21
17	17
18	18
19	0
TOTAL	366

Blocks 3, 5, 6 and 11 are the worst affected blocks, with clutter items such as alarm boxes, security lights and trailing cables being highlighted as the most common occurrences.

Satellite dishes

With the evolution of aerials required to receive radio and television signals, there has been an influx of satellite dish installations. Under the Local Listed Building Consent Order (LLBCO) there are restrictions on the location of these dishes, but many of the installations predate the introduction of this. According to LLBCO guidelines, there are a total of 141 inappropriately-sited satellite dishes in the village, with the majority (99 dishes) sited on the rear wall in a publicly visible location.

Plastic rainwater goods

Many rear gutters and down pipes have been replaced in plastic, but fortunately the majority are still cast iron and should be conserved. Plastic rainwater goods (RWGs) are much less common on the front elevations, but there are still some examples. In total, 417 properties have plastic RWGs, with 217 requiring a partial replacement, and 200 requiring a full reinstatement in cast iron. The original cast iron RWGs should be conserved, and where they are gone should be reinstated on the front elevations. A cast iron substitute, such as powder-coated aluminium, may be acceptable on the rears subject to conditions. These works are classed as low priority works - although the replacement of plastic with a more sympathetic material is required to preserve the aesthetic quality of the properties, the presence of plastic RWGs does not affect the overall condition or performance of the building.

Incorrect paint colour scheme

In 2008 English Heritage carried out an assessment of the village to assign appropriate paint colour schemes, including the colours for windows, doors, yard gates, render and other joinery (such as timber brackets). The results of the survey were consolidated into a list, with paint colours set for each property to which residents must adhere when redecorating the exterior of their homes, in line with the Restrictive Covenant. The colour schemes have been introduced to ensure consistency in the blocks.

The condition survey assessed how strictly this colour scheme was being followed. Of the 918 properties surveyed, 178 properties were found to be using the incorrect paint colour scheme. The blocks most affected are 2, 3, 6, 10 and 15, with Bath Street, Bolton Road, Central Road, Greendale Road and New Chester Road hosting the highest numbers.

Although many of the colour schemes are clear, there are some blocks where a contrary colour scheme has been applied for a number of years and is therefore believed by owners to be correct. Bath Street in Block 2 is an example of this; timber dormer windows and front doors should be white but metal frames in stone mullions should be black. However, some owners believe they should all be white or that doors should alternate black and white.

Summary

Overall condition

Many of the properties in the village are in a good condition, with just under 40% of properties needing no works at all. Of the works specified in the village, 44% are low priority repairs, requiring only minimal aesthetic works such as replacing plastic rainwater goods, painting to the correct colour scheme or replacing rear UML windows with the original design. These works only affect the aesthetics of the buildings and have no effect on their functional condition. However, it must be emphasised that the survey was an exterior assessment and does not take into consideration the interior condition of properties in the village. Also, there are 405 instances over 251 properties where a high priority repair is required, needing to be addressed in the next three years to prevent significant heritage loss.

Patterns emerging

Location

A link has been identified between the locations of properties and the level of repair required. Superblocks 2, 3, 10, 13 and 19 have all been identified as blocks which require large amounts of high priority works, including roof tile replacements, structural repairs, missing or severely damaged rainwater goods and rotten window sills. These properties are all found in the perimeter blocks of the village. The cost of repair is related to the quality of materials and the detail of the design; the more expensive materials, such as York stone roof tiles, occur most frequently on the perimeter. However, there are also cases of inner superblocks with large numbers of high priority works, such as Superblock 15. This block in particular houses a number of more elaborate designs, such as the terracotta finials found on Cross Street which could also be costly to maintain.

PSVT/Private-owned

	PSVT-owned	Privately-owned
Low Priority	31.4%	68.6%
Medium Priority	25.5%	74.5%
High Priority	19.8%	80.2%

From the results above it is clear to see there is a trend, with significantly more privately-owned properties suffering from disrepair than PSVT-owned properties. It is apparent from this data that cyclical maintenance plays a key role in the upkeep of historic properties, and this should be stressed to owner/occupiers and private landlords.

There are, however, still 19.8% of properties requiring high priority repairs under PSVT ownership, 25.5% with medium priority and 31.4% with low priority. PSVT needs to take account of these works and address them.

Date built

	Low priority	Medium priority	High priority
1890	10	0	4
1891	17	0	5
1894	95	0	6
1894-5	4	4	1
1895	19	0	6
1898	2	0	0
1899	80	0	18
1900	8	0	3
1901	87	0	16
1902	17	0	15
1905	25	0	5
1906	54	8	19
1907	27	18	7
1911	9	7	1
1912	8	1	2
1913	27	7	5
1925	1	1	5
1938	14	10	1
1947 (rebuilt)	3	2	2

From the results above we can determine that properties built at the turn of the century - when Port Sunlight underwent a period of rapid expansion to accommodate the ever-growing Lever Brothers workforce - are most vulnerable to high priority repair works.

Architect

There appears to be a link between repair works needed and the architect who has designed the property, but more research is required to discover why this pattern has emerged.

Proposed next steps

Further research

Research which will aid PSVT in keeping this Conservation Management Plan (CMP) up to date includes exploring:

- Relative costs for works needed.
- Any improvements/deteriorations from the previous survey carried out by Byrom Clark Roberts in the 2006 survey.
- Data to identify/locate areas with original masonry pointing.
- Data to identify 'special repairs' (i.e. repairs needed for carved wood, carved stone and pargetting) and areas where they are in very poor or excellent condition.

- Comparisons between conservatory consents (Listed Building Consent (LBC)) and those identified in the survey.
- Comparisons between satellite dish consents (LBC) and those identified in the survey.
- Properties owned by social housing provider, Family Housing, and present conditions/treatments.

Informing residents

The results of the survey will be made available to any resident who would like a copy for their particular property. These results will include illustrative photographs of the defects mentioned in the survey and an approved contractors list for the specific works detailed. Residents will be made aware that they can obtain a copy of the survey results via the residents' website, a letter posted with The Gazette and social media.

Cyclical survey plan

In line with the CMP, a cyclical survey plan will be introduced from March 2019. The plan will see properties surveyed every three years, with groups of four blocks surveyed together. As the results have indicated that perimeter houses are most at risk of heritage decay, the outer blocks will be surveyed first. Due to seasonal weather conditions, survey work will be restricted to between March and October.