

November 2022

Cooke & Kettyle Ltd survey – Rosebrook Grove

- 1. Any information you have in relation to the Cooke & Kettyle Ltd survey completed at the block of flats connected with 54 Rosebrook Grove, Carrickfergus BT38 8NS.”**

Housing Executive has now completed its search for the information and a copy of the information can be found below.

**AREA CLEARANCE REPORT
FOR
SPECIAL REVENUE WORKS AT
SUNNYLANDS, CARRICKFERGUS
PROJECT NO. 22 / 78 / 1001
FOR
NIHE NORTH REGION**



**COOKE & KETTYLE LLP
CHARTERED SURVEYORS
147 CREGAGH ROAD
BELFAST BT6 0LB
28 OCTOBER 2019**

SECTION 1
BRIEF AND POSTAL ADDRESSES

1.00 SCHEME OBJECTIVES

- 1.01** The Northern Ireland Housing Executive has identified the requirement for upgrade works to be carried out to defective balconies at 145 flats and shops in Bridewell Drive, Rosebrook Grove, Shaftsbury Cross and Sunnylands Grove in Carrickfergus, Co. Antrim, which are leading to water ingress and condensation throughout the blocks.

2.00 SCOPE OF COMMISSION

- 2.01** A Survey and Condition Report has been carried out on the instructions of the Executive to determine the condition of the elements identified in the brief and to identify problems that will establish: -

- (i) The sources of water ingress to the dwellings
- (ii) The factors permitting condensation within the dwellings
- (iii) The required level of works that will resolve and eliminate the sources of water ingress and condensation

3.00 LOCATION

- 3.01** The dwellings identified in this project are located in Bridewell Drive, Rosebrook Grove, Shaftsbury Cross and Sunnylands Grove within Sunnylands estate in Carrickfergus.

4.00 HISTORICAL CONTEXT

4.01 Previous Works

Dwellings were included in the following previous schemes:

MEI works carried out in 1993 to Bridewell Drive– Project No 22/84/035
ECM works carried out to dwellings in 2010 – Project No 22/78/026
Double glazing works carried out in 2013/14 – Project No 22/78/0050
Kitchen replacement works carried out in 2007 – Project No 22/70/0035

6.00 PROGRAMME

6.01 We estimate that the works will take approximately 54 weeks made up of the following:

Site Set up: 4 Weeks

Bridewell shops and flats: 12 weeks

Rosebrook Grove/Sunnylands Grove : 3 weeks per block x 12nr blocks = 36 weeks

2 weeks to tidy and clear site



Front elevation of Rosebrook Grove



Rear elevation of Rosebrook Grove



Front elevation of Rosebrook Grove



Rear Elevation of Rosebrook Grove

SECTION 2
CONDITION REPORT
AND
PROPOSALS

3.00 DRYING AREAS TO 1 – 42 ROSEBROOK GROVE

3.01 Existing Condition

Dwellings in Rosebrook Grove 1- 42 have recessed open drying areas to the rear elevation to first and second floors (see photographs 18 and 19). The floors to these areas are covered with asphalt and are generally approximately 200mm below the floor levels of the flats. The asphalt to these areas is cracked in places and with broken skirtings or with skirtings damaged with saw cuts from previous works. The asphalt skirting detail is incorrect in that the top edge is dressed to the wall rather than being turned into a chase cut into the wall. This is a possible source of water penetration to the dwellings below.

Drainage to these areas is inadequate with 50mm holes through walls from one drying area to another and a 32mm copper pipe outlet leading to a hopper head which is draining into a 100mm uPVC downpipe. The holes through the walls and the copper pipes are currently blocked. Falls in the asphalt are insufficient to remove rainwater in an efficient manner. A few of the drying areas have had flagging installed by the tenant or owner therefore any remedial work may be problematic.



1 Drying areas to Rosebrook Grove



2 Damaged asphalt drip Rosebrook Grove

3.02 Proposals

The existing asphalt surfacing will be recoated with a separating layer and 20mm asphalt. The skirtings to these areas will be re-asphalted and a glass reinforced plastic cover flashing will be fitted to the wall (see typical flashing detail at Drawing 003). The holes to the walls between the drying areas will be increased to 100mm and the outlet hole will have a Harmer type mini-balcony outlet (see Drawing 006 Internal Rainwater Outlet) with a 50mm vertical outlet which will be connected to the existing hopper through a 63mm downpipe. Defective asphalt drips (see photograph 19 above) will be reformed with an undercut drip as Drawing 005.

The top surface of the drying areas, which projects 450mm from the external wall, will be treated with two coats of water resistant bituminous black paint.

4.00 CAVITY WALLS INCLUDING INSULATION TO ALL DWELLINGS

4.01 Existing Condition

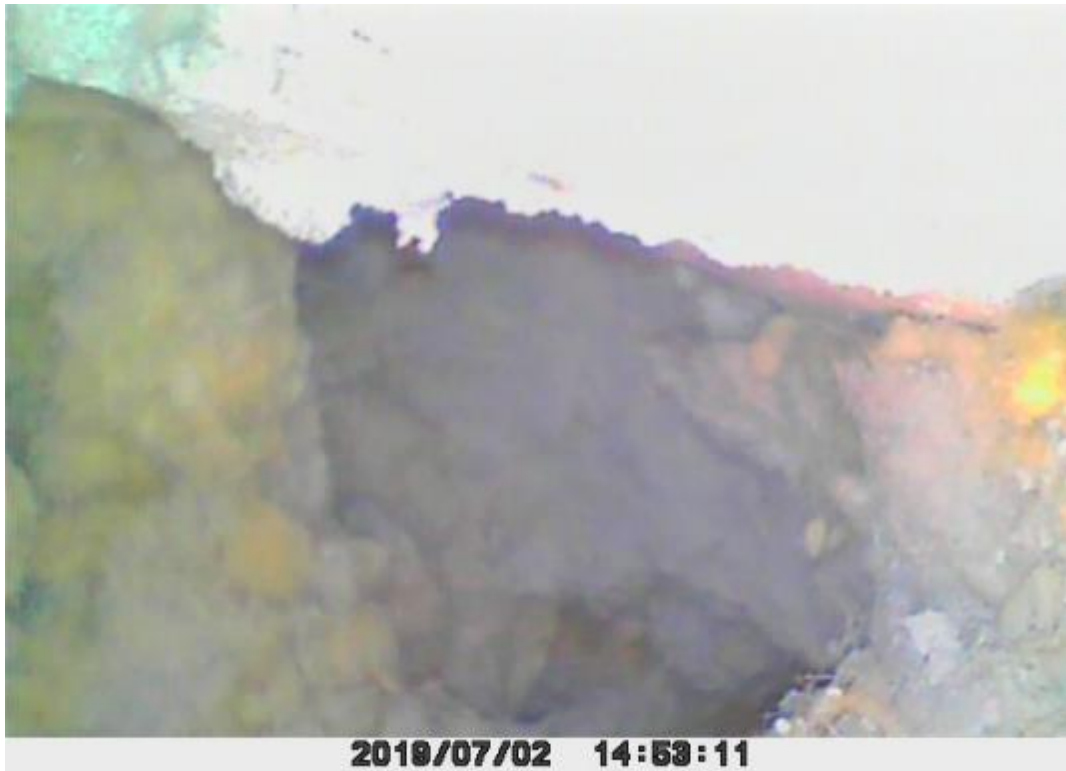
Walls to all blocks have been drilled at various levels to allow checking of the existing cavity insulation with a borescope. The findings are that, at the drill points, there was evidence of blown fibre insulation present within the cavities. In certain instances, significant voids were found in the insulation. Refer to typical photographs 20 to 23 which were taken within the wall cavity. This was the case at both high and low level in the wall elevations. Insulation appears to have settled at upper levels and borescope inspections indicate areas of the cavities that have no insulation present. For example, the extensive mould from condensation at low level internally in Bridewell Drive (photograph 22) appears to be a result of the absence of cavity wall insulation (among other factors).

It could also be the case that insulation may not have been installed correctly or that it was installed in the 1980's when industry standards were not as advanced as they are today. The mortar pointing to the existing brickwork is badly weathered, particularly around Bridewell Drive shops and flats, with areas of previously repaired pointing debonding (see photograph 25) and the softer more porous jointing bed being exposed.

Steel angle lintels over windows and doors have rusted particularly around Bridewell Drive shops and flats. These lintels are now affected by ferrous oxide which is causing the steel to expand and widen the joints within the surrounding brickwork.



3 [REDACTED] - insulation absent



4 Sunnylands Grove - void in insulation



5 Bridewell Drive - insulation absent



6 *Rosebrook Grove - void in insulation*



7 *Missing mortar to brickwork*



8 Previous repointing now debonding

4.02 Proposals

The remnants of the existing blown fibre insulation will be mechanically removed by a BBA accredited cavity clean specialist. Cavities will be allowed time to dry and refilled with an approved expanded polystyrene bonded bead cavity wall insulation by a registered installer (BBA accredited) and a Cavity Insulation Guarantee Agency (CIGA) guarantee obtained.

Brickwork and/or render, where covered in moss or water stained, will be cleaned to remove moss and staining (280m²) and treated with a biocide. Where needed, brickwork will be repointed (4994m²) in accordance with the NIHE Specification. A masonry water repellent will be applied (4994m²)

Steel lintels will be replaced where affected by rusting. This will entail cutting out the existing steel lintel together with the end brickwork and the brickwork courses carried by the lintel. It is proposed to use a stainless steel lintel together with a rigid plastic cavity damp proof course with end closers and weep holes fitted above the lintel, the brickwork above the lintels will be built up using the salvaged existing bricks to maintain the existing appearance as far as possible. (15Nr)

5.00 PRECAST CONCRETE WINDOW SURROUNDS TO ROSEBROOK GROVE, SUNNYLANDS GROVE, BRIDEWELL DRIVE

5.01 Existing Condition

Living room windows to flats generally have precast concrete surrounds which project forward from the external face of the wall. Most flats have recently installed uPVC windows. The precast concrete creates a cold bridge to the internal reveal of the living room. The uPVC windows have been positioned towards the outer edge of the concrete surround, which works to increase the action of the cold bridge. This tends to promote the formation of condensation on the reveal.

Rainwater running down the external face of the wall will run onto the top of the concrete window surround which creates a problem of water ingress as water can bridge the cavity at this point. This is causing plaster staining and debonding to window heads. Most of the surrounds have a lead flashing fitted to counteract this (see photograph below).

A few dwellings have had these precast concrete surrounds removed already (see photograph 27 below).

Where wall finish is fair faced brickwork a self-finished render band has been provided around the top and sides of the window opening.



9 Typical window surround

5.02 Proposals

Replace window surrounds to match those previously replaced. Install new lintels and sills, build up the jambs to incorporate new damp proof courses and insulation (128 Nr). It is proposed to renew the uPVC windows to match the existing windows.

Where wall finish is fair faced brickwork a self-finished render band will be provided around the top and sides of the window opening.



10 *Window with concrete surround removed*

It is proposed to replace concrete window surrounds to the following dwellings.

Rosebrook Grove flats: 66 number (fair faced brick external walls)

Sunnylands Grove flats: 52 number (rendered external walls)

Bridewell Drive flats: 10 number (fair faced brick external walls)

6.00 SUNDRY WORKS

6.00 Existing Condition and Proposals

Other defects which are possibly leading to water ingress are as follows (see estimate for quantities): -

6.01 Brush down pitched roofs and treat with biocide; in Bridewell Drive, Rosebrook Grove, Shaftesbury Cross and Sunnylands Grove

6.02 Hack off and replace render to drying area soffit of Sunnylands Grove



11 Damaged soffit to Rosebrook Grove

6.04 Replace front door to Rosebrook Grove [REDACTED] common hall

6.05 Clean gutters; Sunnylands Grove, Rosebrook Grove, Bridewell Drive and Shaftesbury Cross (refer to picture no.2)

6.06 Clean downpipes; Sunnylands Grove, Rosebrook Grove, Bridewell Drive and Shaftesbury Cross

6.07 Defects to rainwater goods, fascias, etc. in various locations in Sunnylands Grove and Rosebrook Grove to be repaired

6.08 Replace broken ridge tiles to Rosebrook Grove

6.09

6.10 Isolated spalling of concrete clothes drying balconies at Rosebrook Grove to be repaired (refer to picture no.18)

6.11 Chimney flashings and potential leaks at redundant chimney stacks; Sunnylands Grove, Rosebrook Grove, Bridewell Drive and Shaftesbury Cross. Stacks to be removed as follows.

Rosebrook Grove flats: 22 number

Sunnylands Grove flats: 16 number

Bridewell Drive flats and shops: 11 number

7.00 OTHER CONDENSATION ISSUES

7.01 Our surveyors observed a number of scenarios which are contributing to the condensation problems experienced by some tenants, but probably more so by tenants of sold flats. These include:

- a. misuse or lack of knowledge of the correct use of extract fans
- b. the absence of extract fans to bathrooms and/or kitchens in sold flats
- c. the lack of use of window ventilators
- d. the absence of window ventilators in sold flats
- e. inadequate heating and ventilation of flats generally
- f. lack of knowledge of how to minimise the build-up of moisture in flats
- g. general lifestyles
- h. unavoidable cold bridging due to the original building design



12 *Rosebrook Grove*

7.02 Proposals

To install a positive input ventilation system (PIV) in specific flats or maisonettes (7nr) where condensation issues are a particular problem. These systems are designed to take fresh air from outside, clean the air by means of a filter and discharge the air, via a duct, into the central hallway at high level (filters require to be removed and cleaned every 12 to 24 months). These systems provide a low energy ventilation system.



13 *Rosebrook Grove*

8.00 ASBESTOS SURVEY

8.01 Asbestos Survey reports are available to all dwellings except [REDACTED] Bridewell Drive; [REDACTED] Rosebrook Grove and [REDACTED] Sunnylands Grove.

The surveys indicate asbestos containing materials to external soffits of twelve dwellings in Rosebrook Grove and all blocks in Sunnylands Grove. Asbestos is recorded in the balcony ceiling of [REDACTED] and [REDACTED] Rosebrook Grove. We are proposing to repair render to the drying balcony soffit of [REDACTED] Sunnylands Grove. There is currently no asbestos report for this flat. When the report becomes available the findings will be included in the contract documents.

Any existing asbestos containing materials will be removed in accordance with the Housing Executive "Code of Practice for Asbestos Treatment/Removal to Housing Executive Stock"

9.00 DECANTING

9.01 It is proposed that no decanting will be provided.