KUFIC

MASONRY REPAIR

13.03.23

SITE:
23-25 BRADFORD ROAD
DEWSBURY
WF13 2DU

DESCRIPTION:
CONVERSION AND ALTERATIONS TO EXISTING BUILDING TO CREATE 27 APARTMENTS (LISTED BUILDING)

REF: **22270-A**

Suite 24 Batley Business Park
Technology Drive
Batley WF17 6ER

t: 01924 694404
e: info@kufic.co.uk
w: www.kufic.co.uk

External Masonry Repairs

The stonework has continued to erode and much of the carved work is now decayed and losing detail, other facing stones are also losing detail. This is in part due to general weathering, but in places this has been compounded by saturation and freeze thaw action due to failed and blocked rainwater goods and other factors. Past cement pointing has also accentuated decay to the edges of stones, with salt migration and surface spalling.

Localised structural movement, likely to be of long-standing has also resulted in damage including stepped cracking, snapped lintels, cills and stones
In certain areas, particularly to the projecting drip moulds, the perpends and other joints have become washed out leaving voids.

In the courtyard some elevations have been painted.

The masonry is now in a poor condition, allowing water ingress and salt migration accelerating the decay of the external fabric. Carved detail is at risk of being lost and the eroding stones should be renewed and recorded whilst the original stonework remains legible.

Proposals
New stones are to be provided on a like for like basis, using stone from Johnson's Wellfield quarry.
All new stone heads and cills to match existing.
The mortar used for bedding of new stones and pointing will be an agreed lime mortar mix, designed to match the composition and texture of the existing mortars and stone colours.

Mix: 1:3:12 white cement:lime:sand.
Sand source/ type: Crushed stone fine pointing sand to approval.
• Joints profile/ finish: Recessed back from weathered arrises to retain original joint widths.
Brushed finish - After initial mortar set has taken place remove laitance and excess fines by brushing, to give a coarse texture. Do not compact mortar

Sand for Lime:Sand Masonry Mortars
• Type: Sharp, well graded.
- Quality, sampling and testing: To BS EN 13139.
- Grading/ Source: As specified elsewhere in relevant mortar mix items.

Storage of Lime:Sand Mortar Materials
• Sands and aggregates: Keep different types/ grades in separate stockpiles on hard, clean, free-draining bases.
• Ready prepared nonhydraulic lime putty: Prevent drying out and protect from frost.
• Nonhydraulic lime:sand mortar: Store on clean bases or in clean containers that allow free drainage. Prevent drying out or wetting and protect from frost.
• Bagged hydrated hydraulic lime: Store off the ground in dry conditions.

Making Lime:Sand Mortars Generally
• Batching: By volume. Use clean and accurate gauge boxes or buckets.

- Mixing: Mix materials thoroughly to uniform consistency, free from lumps.
- Contamination: Prevent intermixing with other materials