HISTORY

PHASE 1: 1775-1821

A new stove, or glasshouse, was erected within the walled garden in 1807, and is believed to correspond to a long structure appearing on the site of the North Range Glasshouse on the 1839 plan.

Historic documents record elements of its fabric, including:

- Stove lights from Manchester;
- 15 frames with double doors, fitting and ironwork and 15 frames with single doors, fitting and ironwork from J & W Crawshaw of Wakefield;
- Stone and slate: ""the handsomest colour that comes into this country, £38 12s"; and a
- Wooden trellis

Further evidence of its arrangement is provided by a painter's bill of 1808 which listed a large quality of lights, the description corresponding to a building of three bays with 8 lights each end and 12 lights in the centre.

Hodgett suggests the combined documentary evidence indicates the roof of the structure comprised of sashes either arranged with an upright sash resting on the base wall, and the roof consisting of two sashes which could be slid past each other for ventilation; or three sashes continuing straight, right down to the base (2016, 92). The record of the trellis reveals the back wall was most likely heated, allowing trees to be held off the wall to prevent scorching (*ibid.*).

The cartographic depiction of the stove in 1839 is not detailed, and whilst it does suggest a longer, narrower building then the present structure it is difficult to determine whether this is accurate. Later mapping shows a shorter structure, with three clear parts to the glasshouse, the central bay of which projected forward. Examination of the extant structure shows it to be multi-phased with the base walls of the glasshouse all appearing to be hard red brick of mid-19th and early 20th Century date. The external walls of the heating chamber, however, are principally of one phase, consistently built from a softer machine pressed brick, suggesting it may survive from the 1807 structure. The internal walls of the heating chamber and rear

heated wall of the glasshouse abut the outer walls of heating chamber, and the brickwork appears to be of a higher quality, more consistent with that of the base walls of the glasshouse, suggesting these may be of a later phase.

PHASE 2: 1821-1873

The first edition Ordnance Survey map of 1854 (surveyed 1850-51;) shows a building within the footprint of the North Range Glasshouse, comprising a double-depth east-west range, with projecting central bay. A wall is shown bounding the north and west sides of the building. This structure is shorter and deeper than that of the 1839 map, and although some of the differences may be a result of simplification rather than a reflection of reality, the absence of the projecting bay is notable as similar features have been drawn where they existed elsewhere.

Whilst no direct historical evidence has been identified to suggest a substantial phase of construction; the structural evidence indicates the building was remodelled at this period, with the central heated wall and base of the walls supporting the glasshouse comprising a distinct phase separate from the heating chamber. The Phase 2 glasshouse structure survives at the base of the eastern and western thirds, comprising 11-14 courses of brickwork laid to stretcher bond and incorporating low brick segmental arches at ground level.

The interior of the stove house appears to have been rearranged at this date into three parts, a central heating chamber with smaller rooms at either end. Whilst the plant in the central room is of Phase 3c, arches in the wall preserve the location of the former fireplaces including a double fireplace in the centre and two smaller fireplaces at either end of the room. The rooms at either end encompass a room with a fire brick-built fireplace with cast iron stove to the east, possibly a head gardeners office; and a room to the west containing a mushroom house.

Hodgetts suggests that the hot water heating arrangements may have been added before 1900, with the technology developing from around 1820. This would be consistent with the cartographic and physical evidence which suggests the building was altered between 1839 and 1852.

PHASE 4: 1911-1944

The heating plant within the glasshouse was renewed with a Senior Boiler of the Robin Hood sectional boiler range from the Beeston Boiler Co. Ltd., the model likely dating the installation

to between 1900 and 1932 when the “New Senior” was in production (Ferris, 2018). Shortly after, the glasshouse structure appears to have been rebuilt: the previous arrangement still depicted in 1931 replaced with an inset central bay with low frames by the production of the 1960 OS map. The character of the joinery of the glasshouse, and its supporting brick structure is suggestive of a date within the latter half of this phase, whilst the doors could be of earlier 20th Century date.

PHASE 5: 1944 TO PRESENT

It is not known at what point the glasshouse fell into disuse, but the likelihood is that it was around the time that Cannon Hall passed into the ownership of Barnsley Council in 1951.

BUILDING DESCRIPTION

EXTERIOR

Building 5.3 comprises an east-west aligned glasshouse, comprising a linear brick-built heating chamber to the north and a lean-to timber framed glasshouse to the south divided by a heated wall.

The heating chamber is built from a low quality fired machine pressed red brick, measuring 22 x 10.5 x 6.5cm, laid to an irregular English garden wall bond and pointed in a cementitious mortar. The north elevation is divided into seven bays, with a single doorway in bay 5 (counting from the left) with low segmental arch of gauged brick, chamfered corners with run out stop at c.1.8 from base, and plain timber frame with five pane top light and 20th Century door with four upper flush panels with projecting ogee moulding. The other bays contain square windows with low segmental brick arches of gauged brick, projecting sandstone sills and recessed and rebated sash frames with vertically sliding lights each of 10 lights with narrow ovolo glazing bars and no sash horns. The full sash box is exposed internally, secured to the brick reveal by iron pins. The windows in bays one and seven have been blocked. An identical window is located in the centre of the east wall, whilst a similarly sized opening in the west wall is blocked but retains a frame for an outward opening shutter. The roof of the heating chamber is mono-pitched and clad (at time of survey) in felt. The roof is supported on eight half-span king-post trusses with raking struts and single purlin. Fire damage was present to the trusses six and seven (counting from the west).

The heated wall rises above the roofline and coped with stone flags. There are vertical structural joints between the east and west walls of the heating chamber and the southern wall, with the southern wall appearing to be later with a more consistent, harder red brick measuring 22 x 10.5 x 6.5 cm.

The glasshouse forms three bays, those to the east and west of equal depth and that towards the centre inset. A c. 1.5-2m high wall runs around the circumference of the glasshouse, within which several phases of construction are evident. The east and west walls, along with the lower half of the projecting bays and the inside return of the west bay are contemporary with the central heated wall. Above this level, and composing the south wall of the central bay, the walls are built from a hard machine-made brick of probable mid-20th Century date. The western bay has four low brick arches within the earlier fabric, comprising three wide arches and a narrow arch to the east. These have all been blocked. Above them, in the later fabric, are four low rectangular opening with projecting stone sills (most lost) and upper timber lintel. The eastern edge of the west bay is scarred from where an adjoining low wall has been removed, presumably the southern continuation of the central bay visible on historic mapping. The eastern bay has six blocked brick arches within the earlier fabric, roughly equal sized, with four low rectangular openings in the upper later fabric.

Above the low brick walls the glasshouse is fully glazed with glazed walls to the west and east consisting of vertical timber bars and incorporating doorways towards the north with of four panel design with chamfered edges and upper glazed lights. The roof of the glasshouse descends in a single pitch, resting directly on the southern walls of the east and west bays, and terminating in a low glazed wall across the central bay. Towards the centre of the southern elevation is a similar four-panelled door.

INTERIOR

General Arrangement

The building comprises a sunken heating chamber to the north, divided into three bays with a wide central room and two small rooms to either end. Stairs from central room lead up and into the glasshouse which comprises three bays divided by low walls with glazing above.

Heating Chamber

The central room of the heating chamber, measuring 23 x 3.5m has a stone flagged floor and ceiling open to the roof above. The floor contains a large concrete lined pit towards the centre of the room containing a large cast iron coal fired boiler clad in a galvanised steel jacket.

Heavily corroded writing on the flue doors appear to read “BEESTON ROBIN HOOD” and “SENIOR”. Low silos run from the pit beneath the floor to coal drops on the north side of the building. The pit was flooded at time of survey. Heating pipes from the boiler run along the southern wall, and loop around inside the west room. A large inserted chimney is present to the west of the pit. Stone treaded brick staircases rise towards either end of the room to high level arched doors in the south wall containing six panelled timber doors. The south wall has a number of recessed arches, including a wide blocked central arch, flanked by two taller arches which appear to have been built blind: and two smaller blocked arches at either end of the room. Whilst no form of fixtures now survive, it is considered likely that the central and outer arches constitute former fireplaces.

The western room contains deep stone shelves of three tiers along the north and south walls supported on fire brick-built piers with chamfered corners.

The eastern room contains a fire brick-built fireplace against its west wall, containing the remains of a former cast iron stove grate with integrated oven. The decorated oven door survives in situ.

STATEMENT OF SIGNIFICANCE

The North Range Glasshouse comprises a multi-phased purpose-built horticultural glasshouse dating, in its earliest phase, to 1807 with subsequent major alterations made in the early 19th and early 20th Centuries.

The initial structure was built for Walter Spencer Stanhope (1775-1821). Its original function within the gardens is not documented, although it would have held a trees for supporting trees against its heated wall, so use in growing fruit is not unlikely.

The heated wall, heating apparatus and glasshouse frame are all of later phases, corresponding to improvements and alterations during the time of John Spenser Stanhope (1821-1873) and John Montagu Spencer Stanhope (1911-1944). These changes included the creation of a mushroom house and gardener’s office within the heating chamber, and the installation of a coal fired water heating system. A Beeston Robin Hood “senior” boiler of the inter-war years survives from the latter alteration.

The building certainty retains historic interest in relation to its association with the development of the productive gardens at Cannon Hall, however the degree of change to its

fabric and apparatus form alterations in the 20th Century has reduced its architectural and technological interest.

Setting: Physical Surroundings and Experience

The North Range Glasshouse lies within the north of the walled garden at Cannon Hall. Its location set off from the walls of the garden is most likely a practical result of Richard Wood's original design for the garden from the 1760s which favoured the creation of curved walls. The glasshouse represents an expansion of the original glasshouse provision, which would come to dominate the garden by the end of the 19th Century. Due to the topography of the site, the glasshouse is located on the highest point of the walled garden, and forms a prominent structure within its northern half, being partially screened from further south by the other glasshouse range.

Summary of Significance

The Stables are considered to possess an intrinsic regional heritage significance, rising to national heritage significance when considered as a group with the wider walled garden complex. Its principal heritage interest are considered to derive from:

- Its architectural interest, which makes a moderate contribution to its significance, as a much-altered example of an earlier 19th Century high status glasshouse, of which the outer walls of the heating chamber remain. The later alterations of the mid 19th and early 20th Century are considered to be of lesser interest, making a low contribution to its significance.
- Its historical interest, which makes a high contribution to its significance in relation to its association with the Spenser Stanhopes, nationally important figures and prolific gardeners. The extensive documentary archive relating to Cannon Hall, including references to the development of this building, adds substantially to is social interest.
- Its archaeological interest, which makes a moderate contribution to its significance specifically in relation to the evident changes made to the building's original designs over time which reveal the technological innovations in glasshouse structures and their heating from the early 19th to mid 20th century.

The setting of the North Range Glasshouse is considered to make a high positive contribution towards its significance.

The contributions to significance made by the fabric of the site include:

High	▪ Fabric and structural elements relating to Phases 1-2.
	▪ The design of the building corresponding to its Phase 1-2 development, specifically in relation to its character, materials, architectural details, planform and arrangement of fenestration and access.
	▪ Surviving internal architectural details and fixtures and fittings relating to Phases 1-2, including:
	  ▪ Windows
	  ▪ Doors and door frames within the heating chamber
	  ▪ Fireplace and blocked arched fireplaces
	  ▪ Staircases
	  ▪ Mushroom house shelving

Low	▪ Hot water heating plant and Beeston Robin Hood Boiler ▪ Timber glasshouse structure ▪ Doors and door frames communicating with the glasshouse

RECOMMENDATIONS

The following recommendations are proposed to avoid harm and maximise enhancement to the North Range Glasshouse:

- The external fabric of the heating chamber should be retained and conserved, removing cementitious pointing with lime mortar which is compatible with the brickworks long-term preservation.
- The roof of the heating chamber should be repaired and clad in slate.
- The windows of the heating chamber should be repaired.
- The internal flagstone floor and staircases within the heating chamber should be preserved.
- The existing boiler, pit, and associated heating pipes are of lower significance, and whilst it would be preferable to retain them it is recognised that they form a considerable physical constraint to the reuse of the space. In consideration of the substantial benefits that providing a viable use for the heating chamber would have on its onward preservation, it is considered that the significance of the building could sustain the loss of these features. It is, however, recommended that their loss should be mitigated through retaining legibility of their former presence through design and/or retention of elements of the heating installation as artefacts within the building.