NHR Joinery Ltd

1-2 LINCOLNS INN FIELDS

STAIRCASE CONDITIONS REPORT

(SURVEY DATE 6th MAY 2014)

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CONTENTS

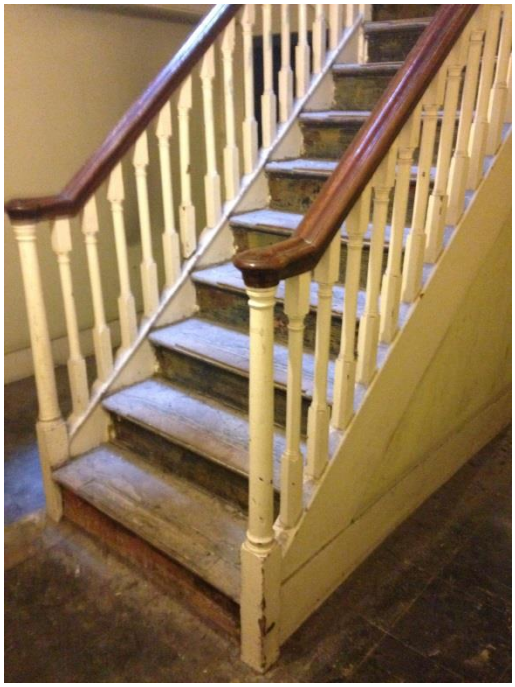
1. SURVEY

The survey of the staircase was undertaken on Tuesday 6th May 2014 and the following report is based upon the visual inspection and isolated exploratory access holes to ascertain an understanding of the construction of the staircase and help understand and develop a method of removing the staircase in order to make the proposed alterations before re-instatement.

NHR Joinery Ltd has produced the report to the best of their knowledge and experience but cannot guarantee the full extent until the staircase is fully exposed. Therefore further information may need to be provided during removal of the staircase and advised accordingly.

2.STAIRCASE CONDITION – BASEMENT TO GROUND FLOOR

The staircase from basement to ground floor is of traditional construction comprising of housed strings to accommodate treads and risers with turned newel posts, balusters, handrail & string capping/base rail with cupboard/panelling below.



All components are manufactured from softwood with newel posts, balusters & strings having a paint finish. The only exception is the handrail. This is mahogany with a polished finish.

It is assumed the treads and risers were carpeted at some point.

The basement staircase consists of 8no treads to the ¼ landing with a further 3no treads to ground floor. The handrail and balusters continue around the landing to abut the ground floor staircase. The basement staircase is independent to the main staircase commencing from Ground Floor.

The Handrail to the basement staircase is approximately 85mm x 80mm with 6no newel posts 75mm x 75mm at the square section. Total number of balusters is 63no at 42mm x 42mm including the landing up to the ground floor staircase.

The staircase is complete with no missing components. The staircase shows signs of wear and tear. This would be expected considering the age of the building but these defects are superficial and should not raise concern.

3.STAIRCASE CONDITION – GROUND TO SECOND FLOOR

General Construction

The staircase is constructed with the wall string housed to accept the treads and risers with 2no sawn softwood carriages (approx. 300mm x 65mm) positioned over the width of the staircase.

A third sawn softwood carriage is positioned to the inside of the inner cut string. The treads, risers and wall string are softwood with the inner cut string, carved brackets, nosing returns, barley twist balusters and handrail being mahogany with a polished finish.

To the wall side the staircase has softwood panelling up to dado height. It is assumed the dado is also softwood. The panelling has been painted over on numerous occasions and also received a wallpaper covering in the past.

Handrail section is 100mm x 95mm

Baluster section is 55mm x 55mm

The photograph (below left) shows the exposed underside of the staircase. The 2no sawn softwood carriages are visible. The photograph (below right) shows the wall string with the treads and risers housed into it. The soffit to the underside of the staircase is of a lathe and plaster construction.

4.STAIRCASE CONDITION – GROUND TO FIRST FLOOR

First Flight to ¼ Landing

The flight consists of a curtail step with 1no central newel post with rams horn handrail ramping up into straight handrail. Balusters are positioned on the curtail step following the line of the handrail. The flight has 6no treads leading onto the landing.

There are 6no carved brackets to the inner cut string including the tread nosing returns. The second bracket up has carved sections missing and would require attention (Figure 1)

Nosing return to the curtail step is missing and would require a replacement.

18no existing balusters in position with 1no baluster missing on the 5th Tread and would require a replacement (Figure 2)

Figure 1

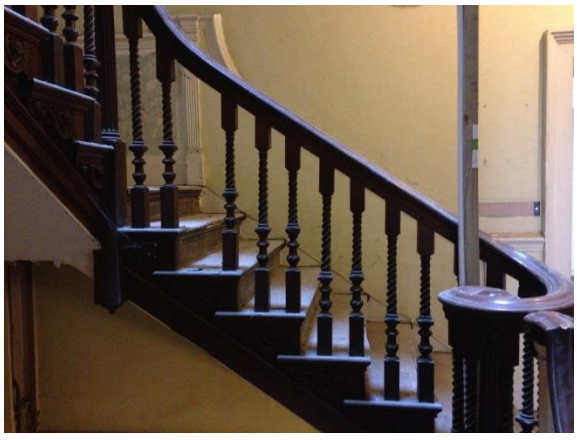
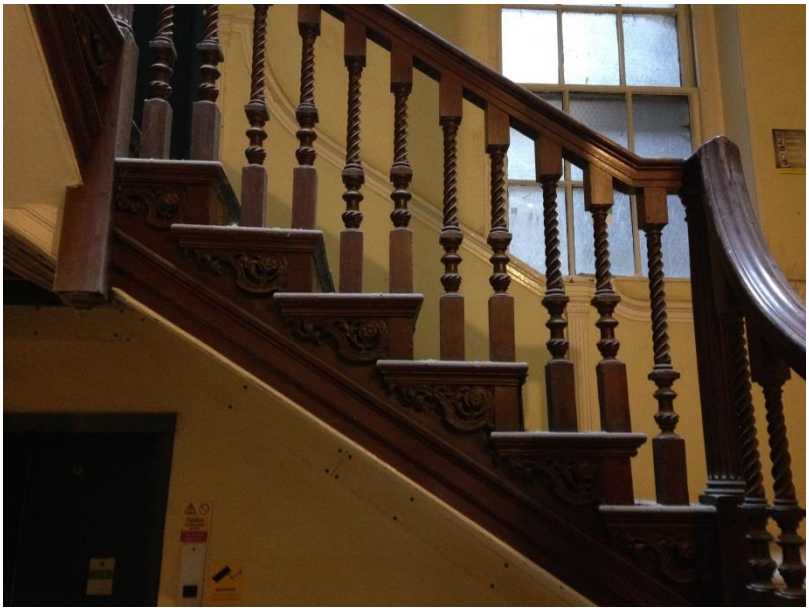


Figure 2

Second Flight to ¼ Landing



The flight consists of 6no treads leading onto the second ¼ landing.

There are 6no carved brackets to the inner cut string. The first bracket has sections missing and requires attention (Figure 3)

There are 11no balusters to this flight – all present.

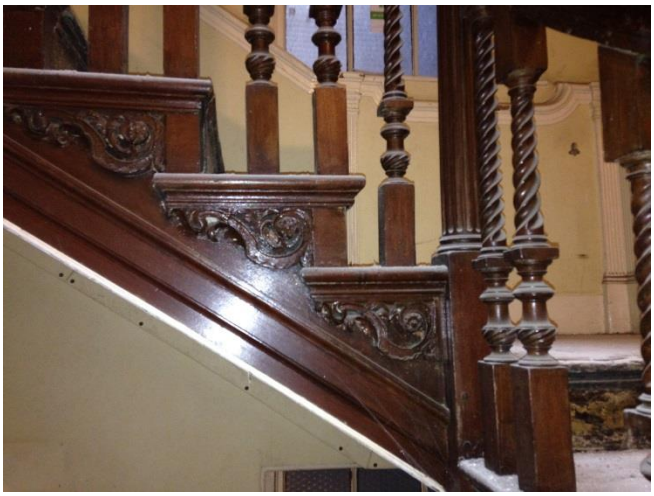


Figure 3

Third Flight to 1st Split Level First Floor Landing

The flight consists of 4no treads leading onto the first split level first floor landing. 13no baluster all present.

There are 4no carved brackets to the inner cut string. The first and second brackets have sections missing and require attention (Figures 4) The carved bracket to the landing also requires attention (Figure 5)

Figure 4

Figure 5

Fourth Flight to Second Split Level First Floor Landing

The flight consists of 2no treads leading onto the second split level first floor landing. 10no existing baluster with 1no baluster missing from 1st tread.

There are 2no carved brackets to the inner cut string and 2no landing brackets. The second bracket and both landing brackets require attention. Tread return nosing is missing on first tread and is loose on the second tread (Figure 6 & 7)

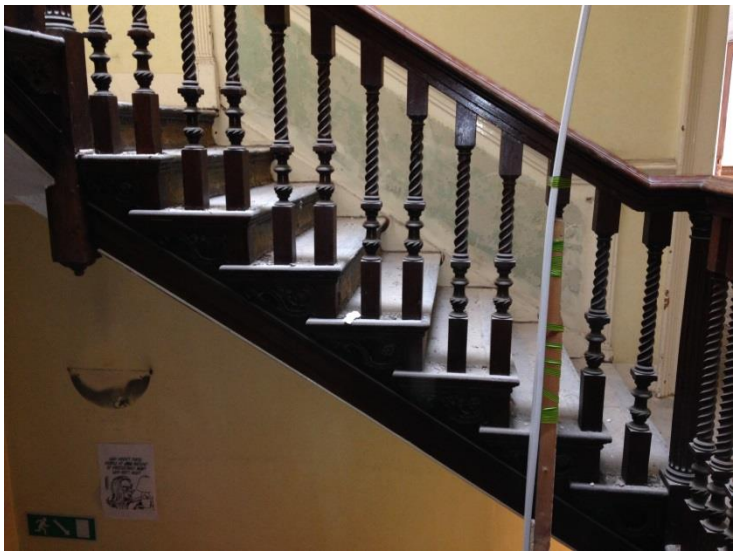
Figure 6

Figure 7

5.STAIRCASE CONDITION - FIRST TO SECOND FLOOR

General Construction

The staircase is constructed with the wall string housed to accept the treads and risers with 2no sawn softwood carriages (approx. 300mm x 65mm) positioned over the width of the staircase. A third sawn softwood carriage is positioned to the inside of the inner cut string. The treads, risers and wall string are softwood with the inner cut string, carved brackets, nosing returns, barley twist balusters and handrail being mahogany with a polished finish.



To the wall side the staircase has softwood panelling up to dado height. It is assumed the dado is also softwood. The panelling has been painted over on numerous occasions and also received a wallpaper covering in the past.

Handrail section is 100mm x 95mm

Baluster section is 55mm x 55mm

First Flight to ¼ Landing

The flight consists of 6no treads leading onto ¼ landing. 13no balusters are all present.

There are 7no carved brackets to the inner cut string with the first, second, fourth, fifth and sixth brackets all having sections missing and all requiring attention (figures 8 & 9)

Figure 8

Figure 9

Second Flight to ¼ Landing

The flight consists of 6no treads leading onto ¼ landing. 11no balusters are all present.

There are 6no carved brackets to the inner cut string with the second and third brackets all having sections missing and all requiring attention. Loose nosing return on tread no2 (figures 9& 10)

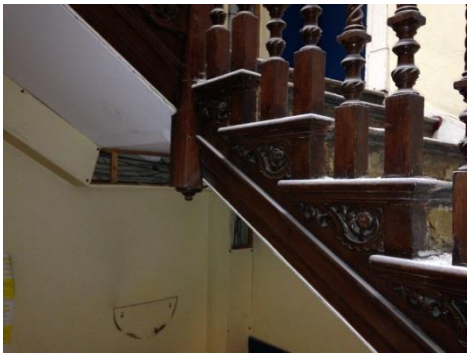


Figure 9

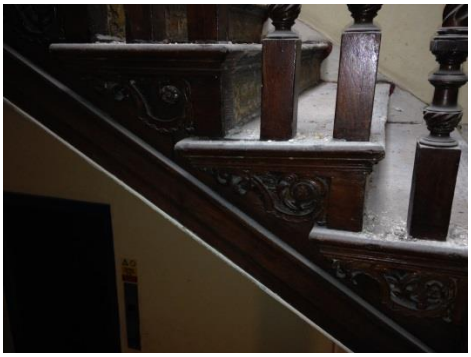


Figure 10

Third Flight to 1st Split Level First Floor Landing

The flight consists of 7no treads leading onto first split lever second floor landing. 13no balusters are all present.

There are 7no carved brackets to the inner cut string with the third,sixth and seventh brackets all having sections missing and all requiring attention (figures 11 & 12)

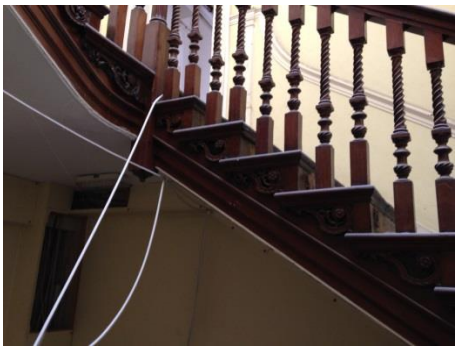


Figure 11

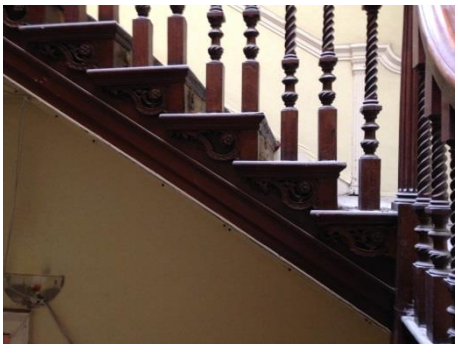


Figure 12

Fourth Flight to 2nd Split Level First Floor Landing

The flight consists of 3no treads leading onto second split lever second floor landing. 11no balusters are all present.

There are 3no carved brackets to the inner cut string and 2no landing brackets. The third bracket and both landing brackets having sections missing and all requiring attention (figures 13 & 14)

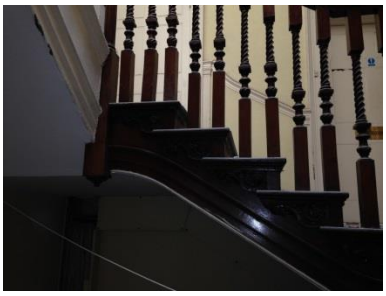


Figure 13

Figure 14

6.STAIRCASE CONDITION – SECOND TO THIRD FLOOR

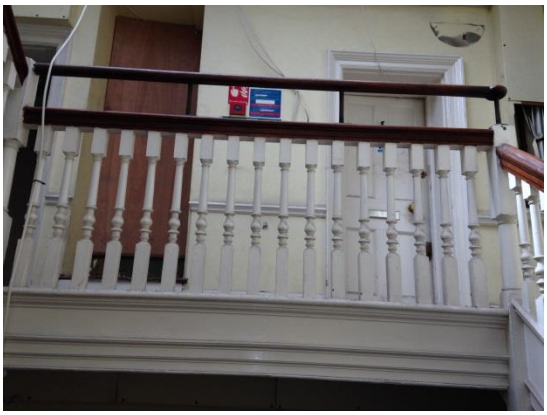
This staircase at the second/third floor junction changes in design appearance and reverts back to a traditional staircase construction with housed strings to accept treads and risers. The balusters are of a simpler design but remain the same section as the other balusters 55mm x 55mm. The staircase is a painted finish so assume the staircase would be made from softwood. However the handrail is mahogany with a polished finish that is the same section as on the flights from the ground through to the second floor. It is also assumed that there would be 2no sawn softwood carriages within the structure. However this has not been confirmed in the survey.

First Flight to ¼ Landing

The flight consists of 9no treads and 17no balusters all present (see photograph above)

Second Flight to Landing

The flight consists of 6no treads with 11no balusters all present leading onto a full landing consisting of 17no balusters all present (figure 15)



The full landing at the top of the second flight

Third Flight to Split Level Third Floor Landing

The flight consists of 4no treads with 7no balusters all present leading to the landing comprising of 13no balusters all present.

7.STAIRCASE COMPONENT PHOTOGRAPHS

Basement Staircase

Typical Bracket Detail – Ground to Second Floor

Ground to Second Floor Newel Post & Baluster Photographs

Detail to top of Newel Posts

Detail to bottom of Newel Posts

Baluster showing 'Barley Twist'

8. STAIRCASE CONDITION SUMMARY

The information obtained in the report highlights missing components, method of construction and photographic evidence.

The removal of the staircase to the basement should not pose too many problems and should be a relatively straight forward operation. Components will be set aside carefully for reuse as required.

The remaining flights from Ground Floor to Third Floor will be more difficult with the inclusion of the sawn softwood carriages. When installing a staircase of this design it is normal practice to have all landings structurally sound with the use of cantilevered joists penetrating the stair walls and running into the adjacent rooms. The sawn softwood carriages are then fitted to the landing points. This provides a structural skeleton for the staircase to sit on. The unknown element at this point is if the carriages have been fixed to the treads and risers. If this is to be the case the staircases will be difficult to remove and there will be a risk of damage. It is important to point out at this stage the treads and risers are in poor condition with the tread nosings suffering damage over the years. With the treads and risers already in a poor state it will increase the risk of further damage during removal.

Care must be taken when removing the staircases but there can be no guarantee that no damage will be caused. If damage is caused this would have to be assessed at the point of removal and a repair strategy will be put in place.

The important components such as the handrail and balusters can be carefully set aside prior to removal of the flights so that these can be relocated from the stair area and protected accordingly.

9.PROPOSAL FOR REMOVAL OF STAIRCASE

METHOD STATEMENT

The following information is provided as an initial proposal for the removal of the staircase and for discussion and subsequent approval with all relative parties. **The actual site procedure will always follow the photographic recording and labelling before any works commence.**

Removal Overview

1. Remove and clear plaster and any laths to the soffits. Remove basement staircase, carefully set aside the components. Note any asbestos previously identified will have been removed under controlled conditions after first establishing any impact on the heritage features
2. Carefully erect central access scaffold from basement floor to third floor
3. Scaffold to include ladder system and access/exit to each floor to comply with Health and Safety Regulations
4. Scaffold to incorporate a working platform/crash deck to the underside of each flight that requires removal. All to comply with current Health and Safety Regulations
5. Carefully remove handrail and balusters commencing from third floor working down to ground floor
6. Removal of flights to commence from the third floor working down to the ground floor using safe lifting techniques and mechanical lifting where possible. Operation to work in tandem with item 5 (see typical removal process below)
7. Clear and remove debris from work areas at regular intervals. Operation to work in tandem with items 5 & 6
8. Flights to be stored in designated areas previously agreed for assessment of repairs
9. When all necessary flights have been removed and stored scaffold is to be removed/modified to allow for access to all floors for remainder of the stair well to be remodelled including forming landing extensions

The stairs are to be stored/repaired off site as required whilst the remainder of the works to the property are carried out. The staircase will then be re-instated to the new configuration after the majority of the other works are completed. This will avoid any damage being caused to the staircase during the construction period. Final decorations and installation of the staircase within this area will be towards the end of the project.

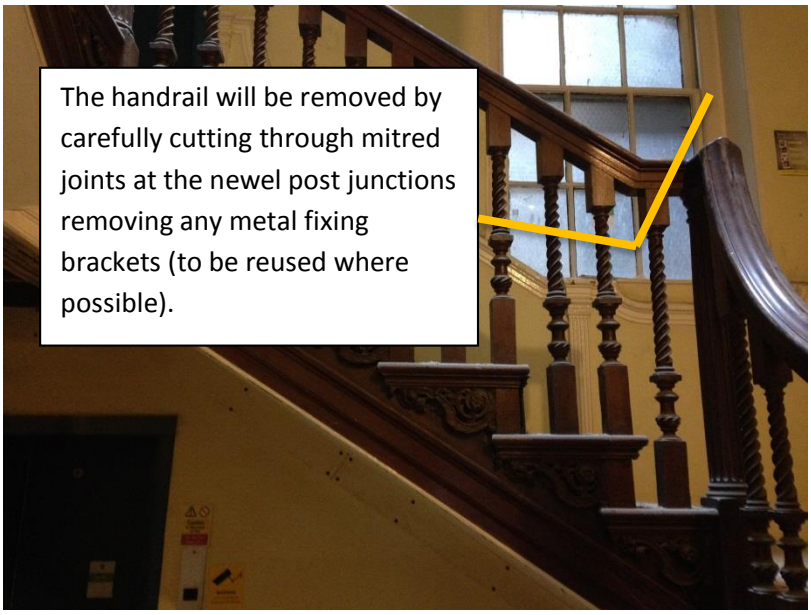
It is the responsibility of the main contractor to provide all scaffold requirements and be compliant to all Health and Safety Regulations

Typical Removal Process for the Staircase

Generally the removal of each flight will be undertaken to the following methodology:

1. Removing Balusters – carefully remove tread return nosings to gain access to the dovetailed bottom section of the balusters. These will need to be carefully tapped out of the dovetail recess within the tread. The balusters are nailed into the underside of the handrail. These will need to be carefully removed and de-nailed. All balusters to be labelled accordingly and packaged for onsite or offsite storage. Tread nosing returns will also be labelled and packaged for storage.

2. Handrails to be carefully removed. All to be labelled and packaged for storage



3. Panelling/Dado to wall side – this is to be removed from the wall side in order to free the string when the staircase is to be removed. All to be labelled and packaged.

4. Drill out draw dowels to newel post/cut string tenon junction in order to remove flight. As noted in the photograph below the tenon may have to be sacrificed for the flight removal.

Once flights are removed they will need to labelled and protected and removed from site for repair if required in workshop environment.

Documenting Staircase Components During Removal

During removal of staircase components notes are to be taken with reference to the labelling sequence with a document created highlighting the labelling of the staircase in its current configuration. This document will be referred to when re-installation takes place incorporating the revised configuration.

Stairwell Remodelling

On site the stair well is to be remodelled and the landings extended as required by the construction drawings. Site will liaise with the workshop to ensure that the new landings and the overhauled staircase are fully co-ordinated prior to the reinstatement process.

10.STORAGE ON SITE/STORAGE OFF SITE

An appraisal was carried out of the most appropriate location for the storage of the staircase during the on-site construction processes. Consideration was given to the nature of the repairs that will be necessary, which should be undertaken in a workshop environment. There are a number of repairs needed to the carved brackets to the inner cut strings and there is a high risk that these would be damaged further if removed from the staircase structure. It is better therefore for the flights to be repaired off site under workshop conditions.

After the repair process there is an option to store off site, or, return to site once repairs have been completed and store in a designated area until required.

If stored off site they will be stored in a secure facility being fully watertight. Adequate insurance policies will need to be put into place and the conditions of the insurance would need to be approved by the design team. A controlled environment can be provided during storage. All associated storage costs would be agreed for the duration of the period if required together with the cost of the controlled environment.

A section of handrail and baluster will be required in order to manufacture the new sections needed for the extended landings. Samples of replacement components will be sent to site for approval.

Further discussions will be required once more accurate information comes to light during removal of the staircase.