

## METHOD STATEMENT

### Dismantlement & Reinstatement of Railings, Stone and Brickwork

#### Garden Railings to Gloucester Gate Lodge – Application for Listed Building Consent

##### Historic Context

Originally Victorian and Edwardian railings were made by casting iron in sand moulds, linked by wrought iron horizontals and were finished with a cast decorative finial. The railings that run around the perimeter of the park currently look to date from the early 20<sup>th</sup> century, seemingly confirming research which suggests the originals were removed as part of the war effort. The current railings are thought to be constructed from both cast iron and mild steel set into York sandstone coping stones on top of a brickwork base. In this case, each individual rail has a fleur des lis to the top and each stanchion post an orb.

The railings construction can be identified by (which corresponds with the mark-up below):

- Primary vertical rails
- Secondary vertical rails
- Top horizontal rail
- Middle horizontal rail
- Bottom horizontal rail
- Newell post
- Rear Stanchion



## Condition

The railings themselves are heavily painted and although not perfectly consistent, look in good order. Cast iron, although more brittle, seems more resistant to corrosion than both wrought iron and extruded steel, possibly because of its foundry skin and higher carbon content.

## Approach to dismantling works

In order to achieve sufficient working space for the introduction of both pipe and culvert (by others), the sequence of works should follow the following approach:

1. Before any intervention, undertake condition survey of railings as existing, include precondition survey of all adjacent elements.
2. Introduce numbered tags for each section of railing and identify orientation.
3. Introduce Hi-ab adjacent to the railings to be removed and lash each section in turn with lifting straps. Care should be taken not to apply any upward pressure to the rails at this stage, but to take up sufficient slack, that when they are cut free using an 9" grinder they will not move/fall.
4. Cutting the railings at the points shown below is the most economical place to cut them, for welding back together purposes. We think this is where they would have originally been joined together.



Point at which the railing will need to be cut to release them in manageable sections.



Point at which railing feet will need horizontally cutting off and possible replacing with new due to historical damage. 6no.

5. Excavate leadwork around base vertical of copings to free rails bases. Whilst the greatest care will be taken during deconstruction to retain as much masonry as possible, the wall and railings were not constructed to be demountable, therefore there may be some damage or attrition to the masonry copings. In addition, it may be necessary to cut stanchion feet if we are unable to free them from their current mortices.
6. Lift each section in turn vertically clear of working area and lower onto the flatbed truck for transportation away. The railings will be protected with softening during transportation.
7. Repeat items 2,3 and 4 described above to the x2 sections of railing to be removed.
8. Cover and cap all cut metal elements with softening to prevent any potential H&S hazard
9. Assess condition of all coping stones beneath removed railings and record condition with photographic record.
10. Remove each coping stone in turn marking the location and order of each unit on the reverse side. The number of Coping stone replacements needs to be agreed with the LB Camden Conservation officer.
11. Lift all stone using the Hiab onto a pallet on the back of the truck. Softening will be place around all edges of the stone to prevent the causing damage during transportation.
12. Record condition of uncovered brickwork photographically and assess the number of replacements required. The number of brick replacement needs to be agreed with the LB Camden Conservation Officer.
13. Dismantle brickwork and batter back to allow sufficient access in accordance with issued construction drawings.
14. Transport all material to PAYE secure storage warehouse in Gravesend and store in accordance with our schedule.
15. Leave area clean and clear for other trades to follow.

#### **Off-site works**

1. Establish number of replacement bricks required and source to match existing. Brick samples will be offered up for approval.
2. Establish number of replacement stone units required and re-carve. Stone samples will be offered up for approval.
3. Establish extent of repairs necessary to railings i.e. Redecoration, structural damage. Until the railings are removed from their mortices its difficult to tell if there is damage to the feet sections of the railings.
4. Make up mortar board of lime mixes for brick & stone pointing for approval.

#### **Approach to rebuilding works**

In order to achieve sufficient working space for the introduction of both pipe and culvert (by others), the sequence of works should follow the following approach:

1. Transport all material from offsite safe storage area via Hi-ab back to site

2. Rebuild brickwork using approved lime mortar mixes in accordance with issued construction drawing. The line and levels will be picked up from existing brickwork on the R/H & L/H sides.
3. The Hiab lorry will be parked up in the specified zone.
4. Using lifting straps & Hiab the 1st coping stone will be lifted into position onto an approved lime mortar bed, laid on the brickwork.
5. Lifting straps will be removed from the stone.
6. The stone will be lined and levelled by the mason.
7. The above processes will repeat themselves for the remaining 4no. copings.
8. Copings will be pointed and grouted with an approved mix.
9. Identify orientation of each section of railing to be reinstated and move Hi-ab adjacent to lifting position. Lash each section in turn with lifting straps and lift into position.
10. Position each section of railing and reinstate stanchion, fixing and welding as necessary to match original locations.
11. Repeat items 9 and 10 described above to x2 further section of railings.
12. The welds will be primed and painted to match existing.
13. On completion of all works, record condition of railings and adjacent elements.
14. Leave area clean and clear site.

#### **By Others**

- No allowance has been made for cleaning masonry or any repairs to the walling which has not been deconstructed.
- At this stage we have made no allowance for decoration of railings.