

Restoring New York City's Historical Ironwork



The sheer beauty and character found throughout New York City's architectural and ornamental structures are undeniable. One needs to look no further than the sidewalks of this iconic metropolis to experience its formative charm and historical significance. One of the greatest privileges we as craftspeople receive, is when we are given the opportunity to restore and preserve some of the city's historical ironwork. An example of such a project was the restoration of this 120-year-old exterior ironwork found outside a landmarked building Lenox Hill.

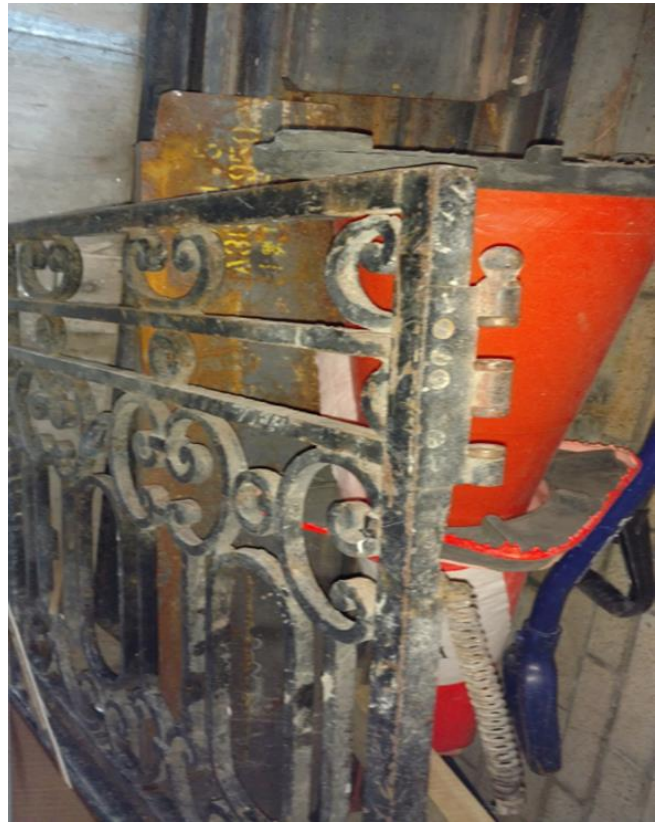


Here, you can see the original scope of work that was needed to restore the original ironwork. The plans were provided to us by the G.C. and required by the client and the New York City Landmarks Preservation Commission.

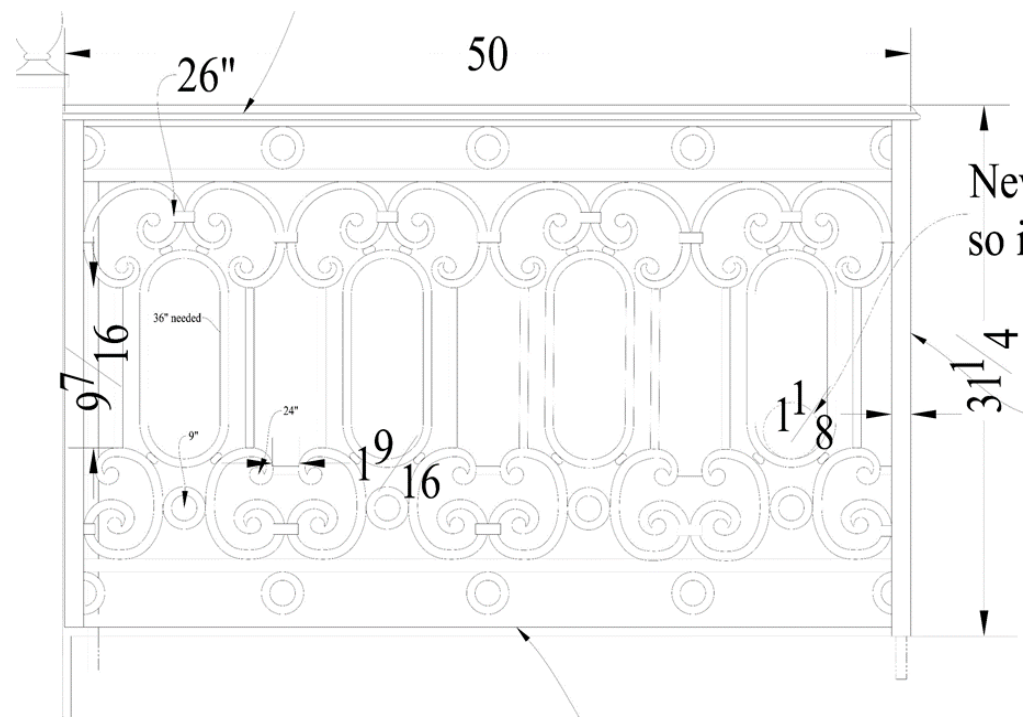




This project was multi-faceted. It involved recreating, restoring, and refinishing various parts of the ironwork. This included the exterior railings, gates, handrails, and decorative newel posts. Our first process was to carefully inspect and inventory all the parts that were to be removed and brought back to our studio for restoration.

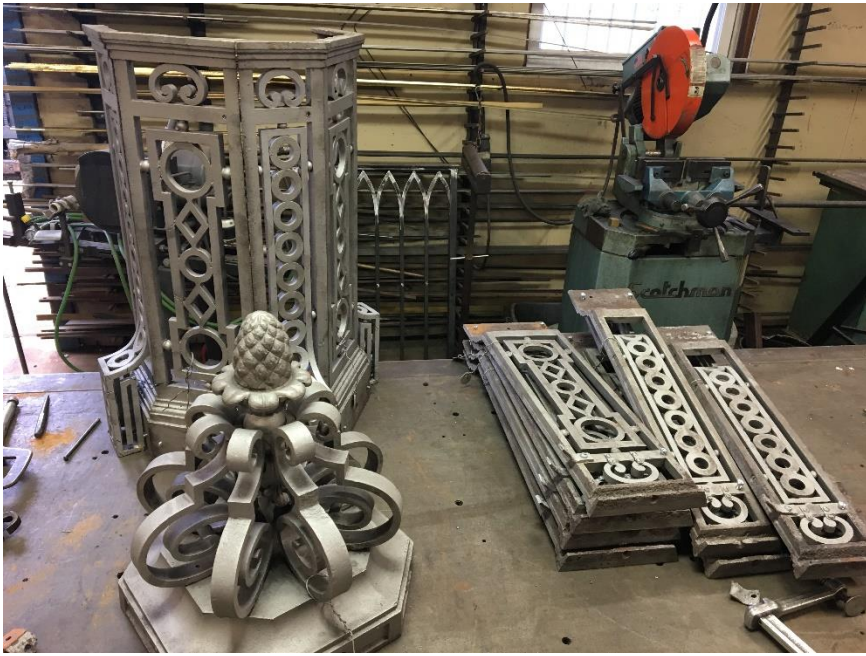


These images illustrate a portion of the corrosion and damage found throughout the ironwork. We also discovered marks of an earlier restoration which was poorly executed. We would have to redo the previous work to restore the ironwork to its previous glory.



One of the challenges we found when resizing the existing railing panel was that we had to completely disassemble the existing piece into individual pieces, resize some of the scrollwork, and make some new pieces. This process created hours of additional work as everything was held together mechanically using various screws and rivets. Like pieces of a puzzle, we carefully reassembled the panel using upgraded stainless-steel hardware that would withstand years of additional use.





At first glance, the assembly of the front entry posts looked to be simple. Upon closer examination, we realized that this was in fact, not the case. The body of the post consisted of 8 separate decorative panels attached together. The top of the post was also a separate piece with an additional 8 scrolls attached together to form its decorative cap. Luckily, much of the structure was fastened together mechanically. Although it was easily taken apart, it proved to be a time-consuming task. Each post would have to be completely disassembled to restore the deteriorated portions of each panel found within the octagonal structure. In addition to restoring the body and cap of the post, we added a new internal structure to the base. We finished by adding brackets to hold the 8 sides together. Each post took approximately 1 week to restore.



Here are a few images showing the ironwork in various states of repair. The top image shows pieces of additional cap moulding which were custom bent to fit the top of the railings. The gate section (seen on bottom left), was in bad shape. In addition to repairing its existing damaged areas, we re-made areas that were missing and/or too damaged for restoration. Finally, we replaced the original hinges and steel gate latch with custom ones made at our studio.



Prior to installation, all the restored ironwork received a molten zinc spray coating that permanently bonded to metal. This process, known as “metalizing” will prevent the metalwork from rusting for at least the next 20 years. They were then painted using a two-part epoxy primer and high quality two-part exterior grade urethane paint. Once the freshly finished pieces arrived back to their original location, our crew installed each section by carefully core drilling into the site’s existing masonry, placing them into position, and anchoring each post in place.



Here are 2 images showing the completed restoration. Although there were many challenges found in restoring this Neoclassical styled ironwork, its presence will certainly embellish the beauty of New York City's streets for another 120 years to come.