



U.S. Naval Academy Buildings 122 & 173

ANNAPOLIS, MD

At the request of CITADEL DBD, LLC, we performed analysis of mortar and paint samples collected from Buildings 122 and 173 – the watch houses at entrance 3 to the U.S. Naval Academy in Annapolis, MD. We were tasked with investigating paint and mortar samples from these late 19th century, load-bearing brick structures. The analysis was intended to help inform an upcoming rehabilitation of these historic structures.

A total of four mortar samples were collected by the architect and furnished to us. These samples were analyzed using acid digestion and examination under a microscope. A Leitz Orthoplan transmitted light "Widefield" model of microscope was used to determine the identifying characteristics of the various grain size fractions and pinpoint the components of each mortar sample.

Two paint samples were collected, and their location was documented on elevation drawings provided by the architect. Samples were brought to us's laboratory in Forestville, MD, where they were studied under a Leitz Orthoplan compound microscope in normal reflected light and under illumination conditions that simulate daylight (fibre optic illuminator) for the purpose of color corrected stratigraphy identification. Samples were observed under 25X and 40X magnification.

The earliest selected finish was matched to Munsell Color (a standardized universal color system) where possible and/or matched to a commercial paint color system (Benjamin Moore). A final report containing the results of the analyses, including paint sample chromochronologies, was submitted to the client.

MORE INFORMATION:

<https://evergreene.com/projects/us-naval-academy/>

SERVICES PERFORMED

Investigation, Testing & Analysis

