

June 12, 2023

| Project: | Historic Retaining Wall Rehabilitation |
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| | Minor Project Review |
| Address: | 36-38, 40 North High Street, Dublin OH 43017 |
| Owner: | Bob Lombardi & James Lapierre, DDS |
| Applicant: | Wes Davis, P.E. – Osborn Engineering |

Re: Historic Retaining Wall Rehabilitation - Minor Project Review

Project Narrative:

This project is located at 36-38 & 40 North High Street, two properties located in the Historic District – Historic Core. The proposed work consists of the rehabilitation of the existing historic retaining wall bordering and extending into both properties. The existing wall is a dry-laid stone retaining wall estimated to have been constructed in the late 1800s to early 1900s. Currently a section of this wall has bulged at mid-height caused by the displacement of stones. Additionally, the wall has become dislodged at the southeast corner. The current condition of the wall is not safe and will continue to deteriorate if left unchecked.

The proposed work includes disassembling the existing wall and reconstruction back to the original style to the maximum extent practicable. Vic Art Masonry has experience with restoration of historic walls and is on the team for this preservation effort. Their recommendations for the strategic demolition and replacement of the historic wall has been included in the Minor Project Review package for the boards review. The area behind the wall on 40 North High Street will be excavated to allow for the removal of the compromised wall, as well as to install underdrain to improve the drainage. Currently the wall has experienced much deterioration from stormwater runoff to drain through the existing structure. Re-grading and the installation of a two-tiered underdrain system will alleviate this current drainage issue. Currently most of the parking lot on 40 N. High drains to the southeast corner of the property, towards the existing compromised wall. The installation of the french drain 10' north of the existing wall will now allow for that water to be captured and to remove the current condition where stormwater is allowed to drain towards and through the wall. Due to the nature of the wall there's no other remedies to alleviate the current state of the structure. The Osborn structural team has analyzed the wall and have concluded the only solution is to rebuild the wall as described above. Construction fencing has been proposed adjacent to the existing wall and privy to protect these important historical structures in the district.

Feedback received from the informal review at the 3/15/2023 ARB meeting has been incorporated in the revised plan set. The Board supported a holistic approach in the wall rehabilitation, requiring the cooperation of both property owners at 36-38 & 40 N. High Street, the location of the deteriorated wall section. Action is now being performed by both owners to repair this section as well as to ensure the wall integrity to the north, which remains in good



condition. The downspouts for the 40 N High property, which currently sheet flow to the rear of the property towards the existing wall, are now being redirected to the proposed underdrain system to alleviate stormwater stress on the wall. Also, invasive ailanthus trees are proposed to be removed on top of and below the wall to control potential root damage.

The Board also indicated that the preferred reconstruction method would include using historic materials and techniques. The approach to repair the wall is consistent with this request as the wall is proposed to be removed in the deteriorated area, with stones to be re-laid in a dry stack method. The non-historic wall adjacent to the existing building on 36-38 N High, which has very similar stones, and is proposed to be demolished with the redevelopment, will be utilized to rebuild the wall if needed. Mortar will be used on the wall sparingly but was agreed that it could be used on the wall re-construction to improve integrity as long as the mortar is not seen. Modern methods will be used to alleviate drainage issues along this section of the wall. An underdrain is proposed along the re-built section of the wall to discourage sheet flow through the wall. Current sheet flow through this section of the wall is the primary cause for it's deterioration. Also, gravel will be installed behind the wall during the reconstruction that will reduce the load the wall is now experiencing.





Retaining Wall Buldge at Mid-Height





Disenlodgement at Southeast Corner

Sincerely,

OSBORN ENGINEERING

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Wes Davis, P.E. Manager of Civil Engineering | Columbus