

Proposal for reconstructing stone retaining wall at 36-38 N. High St. 20 linear ft. on south elevation and a 6ft. return on the east elevation.

As-built Conditions:

- The South wall appears to be built mostly with a dry work technique for stone construction, which consists of using random, mostly field limestone, locally quarried or basically picked out of a local ravine, even right off site when excavation was done for the structures on the property.

- The majority of the stones are undressed. They were installed in the wall without much shaping of the stone, which are generally referred to as random rubbles. The wall isn't however 100% random rubble as it has squared, dressed stones on the corner and some cut dressed stones on the top of the wall, which are set in mortar. The stones on top set in mortar but they are not struck.

- The corner looks like it was rebuilt and poorly executed with the repair work, poorly tied into the adjacent work. Lots of stacked vertical joints and a lot of the stones weren't set levelled.

- Approximately 30%-40% of the stones are delaminating or breaking apart between the sedimentary layers and will not be suitable for re-building this wall. They are too thin and too short.



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Reconstruction of this failing wall consists of the 20 linear ft. on the south side and 8 linear ft. return on the east side:

- A. Excavate the area behind the wall as we disassemble it and clean all salvageable stones of mortar and excess organic material. We plan to use low pressure to wash material, 150 PSI> wash with a 40 degree fan tip held no closer than 1 ft. away. The cleaned stones will be stocked for reuse. Spoils will be kept on site adjacent to wall on the area of higher elevation. Ohio utility protection service to be contacted before any digging.
- B. Reconstruct the wall with as much original materials as possible. Dressed corner pieces to be reused in original locations. We can only assume how the wall was originally built. Evidence of mortar work can be found all over the wall but this could have been done after the original wall was. Note that the main body of the wall looks to be dry laid.
- C. We will reconstruct in the original style as is reasonable. We will reference the rest of the wall, which is in better conditions, as we re-build this failing section.



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D. The wall was likely built on clay, generally assumed to be undisturbed soil with 1500 psi. in compression.

E. New work should be well fitting random rubbles, meaning minimal spaces between vertical and horizontal joints and material should fit in the wall so they sit generally level and plumb with no wobble.

F. In areas where mortar will be used, historic mortar should be used. See preservation brief published by the National Park Service Department of the Interior Preservation brief number two.

G. Backfill with pea gravels, install perforated drain pipes and day light at base of wall or below grade to mitigate water.



Proposal for protecting the stone wall made of large stone blocks on the south side of the current building.

The non-historic wall will be disassembled carefully and stones will be salvaged for the reconstruction of the historic wall. Layers of burlap and ³/₄" plywood will be laid on top of the canal blocks for protection.

























