



Streets and Utilities Committee

MEETING AGENDA

Berryville-Clarke County Government Center
101 Chalmers Court, Second Floor
Main Meeting Room
Regular Session

October 22, 2024

3:30 PM

Item

Page

1. Call to Order

2. Approval of Agenda

3. Unfinished Business

Livery Stable

Prefabricated Restroom

Shielding of dumpsters, etc.

Park Master Plan- walkway surfaces

4. New Business

Exploration of additional parking options at intersection of Crow St and S. Church St.

5. Other

6. Adjourn

Community Development Committee Meeting
22 October 2024

Item Title: Livery Stable

Prepared By: Jean Petti

Background/History General Information

Continued discussion of stabilization and prospective use of Livery Stable

Attachments

Livery stable proposed floor plan

Livery stable evaluation report excerpt, short-term items

- e) NDS, "National Design Specification for Wood Construction," 2001 Edition

Materials

- a) Cast-in-place Concrete, NLWT, $F'_c = 4000$ psi
- b) Timber, Mixed Oak, NELMA No. 1, $F_b = 825$ psi

Loads

- a) Dead Load: self-weight +superimposed = actual+10 psf
- b) Floor Live Load: light storage = 50 psf
- c) Snow Load: ground snow load = 30 psf
- d) Wind Load: basic wind speed = 110 mph

Repair Recommendations

Typically, we place repairs in three categories, immediate, near term, and far term. Immediate repairs are those required to maintain structural stability and protect human life. Near term repairs can be categorized as routine maintenance items required to maintain the functional aspects of the facility. Far term repairs are those that would be required to change the occupancy or improve the visual aesthetics of the facility. Based on our observations we consider the Stable to be in stable condition and repairs required fall into the near or far term category as described in this section.

Near Term Repairs

Roof System

The primary concern with the roof system is to replace elements that have been in service beyond their useful life and to provide closure to the system. To accomplish this we recommend replacing the roof panels and providing new flashing and guttering to match the system. This will ensure protection from the elements and improve the prevention of pests from entering the building.

The replacement will involve removing the existing metal panels, flashing, and trim pieces and replacing them with a new standing seam roof system. Additionally, the eaves and end overhangs will be enhanced with soffit that matches the period. The existing gutters are assumed to be in usable condition, they will be removed and re-installed with hangers below the roof panels. While this study found no evidence of damaged roof purlins, the cost estimate and documents provide for an allowance of replacing 5% of the purlins.

Floor System

In order to carry minimum design loads required by code for the second floor we recommend replacing the flat 2-inch by 8-inch boards and columns with a traditional beam system. These beams would utilize rough sawn timbers, 8-inch by 12-in at the floor transition and 6-inch by 10-inch offset from the east wall. Each beam would be supported by solid sawn 6-inch square columns. The beams would be joined to the columns by mortice joints and be equipped with knee braces for lateral support. We propose that the columns be offset from each end to allow for economy of member sizing while maintaining as much open space as possible within the

room. The columns would bear on spread footings cast such that the top of footing would be flush with the top of the existing gravel floor.

For the beam with a section removed, we recommend attaching a member of similar size to the existing for support. This attached member would but cut so it extends 16-inches beyond each side of the section removed. It would be attached with twelve 16d nails, six on each face.

Walls Systems

The most challenging repairs required for the Stable involve the brick restoration of the east wall. This will require complete replacement of the interior wythe in some locations and reparging the entire interior surface once the repairs are completed. To accomplish the repairs it will be necessary to support the roof and floor gravity loads as well as providing lateral bracing of the exterior wythe to prevent out of plumb movement of the brick during repairs. We anticipate the contractor using scaffolding for the full height of the wall to accomplish this. Once the elements are shored, the contractor will remove bricks as necessary and replace loose bricks to the floor level. We do not anticipate removal of any brick above the floor level. Once this is completed the contractor will remove the parging on the upper level and any remaining on the at-grade level and provide a new ½" thick coating to the entire exposed surface of brick. It should be noted that for this repair the existing fuel tank will have to be relocated temporarily in order to complete the repairs.

Timber repairs to the south and west walls include the following. Replace the existing wood siding below the false roof line of the south gable end. Additionally, for the area on the west wall that is not covered by metal panels, we recommend the existing timbers be removed and replaced closing any gaps that would allow for pests to enter the building. Finally, along the west wall below the column supporting the second interior bent, the wood sill will be replaced in kind with like material. The column and girts will have to be shored to accomplish this task.

Foundations

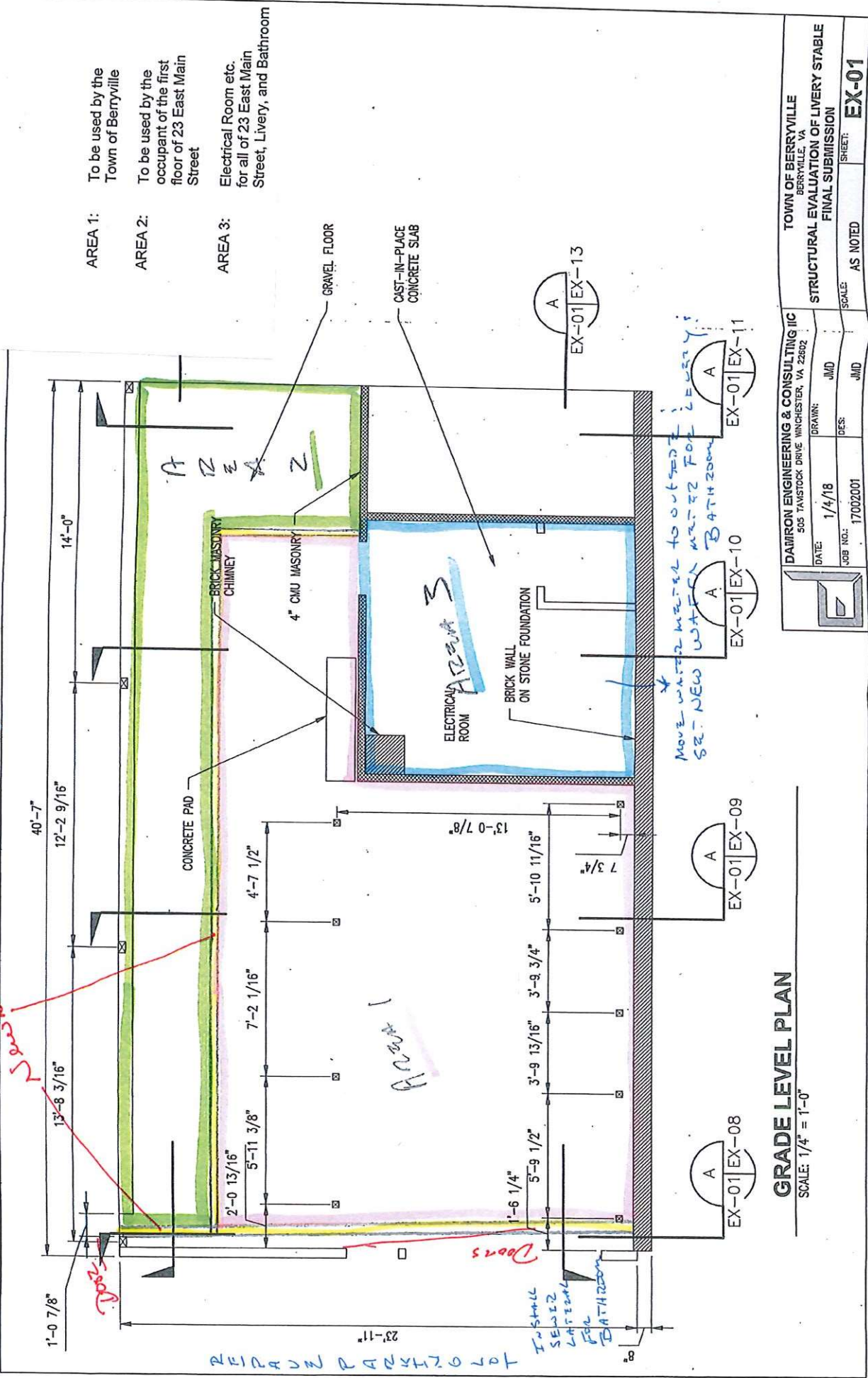
Prior to repairing the interior wythe of brick on the east wall, and after the wall has been shored, we recommend the foundation stones be cleaned of any debris from the brick wall, loose stones be repositioned and secured with mortar. While this is going on, any burrow holes found should be filled with soil and terminated.

We recommend the condensate drain on the west side of the building be extended to drain into the drain pipes carrying rainwater from the gutters away from the site.

Far Term Restorations

There is currently no plan for the future use of the Stable. Once a program has been established there are repairs to consider that bring the building more in line with its historic character. As these are more substantial restoration efforts, construction details have not been provided, but are reflected for budget purposes. First would be to remove the metal panel siding on the south and west walls and replace it with a more traditional board and batten system that would be typical of the period. At this point you would also restore the west and south wall framing to its original condition. This would entail removal of all the miscellaneous

OPTION 1



- AREA 1: To be used by the Town of Berryville
- AREA 2: To be used by the occupant of the first floor of 23 East Main Street
- AREA 3: Electrical Room etc. for all of 23 East Main Street, Livery, and Bathroom

DAMRON ENGINEERING & CONSULTING LLC 505 TAVISTOCK DRIVE WINCHESTER, VA 22602		TOWN OF BERRYVILLE BERRYVILLE, VA	
DATE: 1/4/18	DRAWN: JMD	STRUCTURAL EVALUATION OF LIVERY STABLE	
JOB NO: 17002001	DES: JMD	SCALE: AS NOTED	SHEET: EX-01
FINAL SUBMISSION			

GRADE LEVEL PLAN
SCALE: 1/4" = 1'-0"