



Plot Date: 6/23/2026 8:08 AM G:\Shared drives\DNR LWB ENG Projects\49\_Jackson\25-06-49-02\_Maquoketa Caves Trail Realignment\5\_Design\25-06-49-02\_Maquoketa Caves Trail Realignment - Plans.dwg



Drawn by: xx	
Revision	Date

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## Estimated Quantities

Item	Description	Quantity	Unit
1	Mobilization	1	LS
2	Demolition - Stairs	1	LS
3	Demolition - Bridge	1	LS
4	Granular Subbase	32	Tons
5	Pig Slats	18	Each
6	Site Restoration	1	LS

## Estimate Reference Information

1. Mobilization - Paid per Iowa DOT Specifications
2. Demolition Stairs - Includes removal and disposal offsite of all wooden stairs and posts shown on sheet 5, including rail road ties that are partially embedded in the trail to be abandoned. Posts shall be pulled and if they can't be moved they shall be cut off below the surface. Also includes installing railing across the existing landing using 2x6 treated wood with galvanized hardware (existing railing may need to be modified to fit). Contractor responsible to close off area during construction.
3. Demolition Stairs - Includes removal and disposal offsite of all wooden stairs and posts shown on sheet 5, including rail road ties that are partially embedded in the trail to be abandoned. Posts shall be pulled and if they can't be moved they shall be cut off below the surface. Contractor responsible to close off area during construction.
4. Granular Subbase - To be used for under the pig slats.
5. Pig Slats - Shall be Hog Slat, Inc. Item # 1230 (4' wide x 10' long solid, no slot openings), or approved equal. Install per detail sheet 6.
6. Site Restoration - Includes moving excavated material from low water crossings to fill holes from bridge/steps demolition, wasting material over area approved by DNR staff, seeding with dense shade erosion control mix, and repairing any damage to trails for site access.

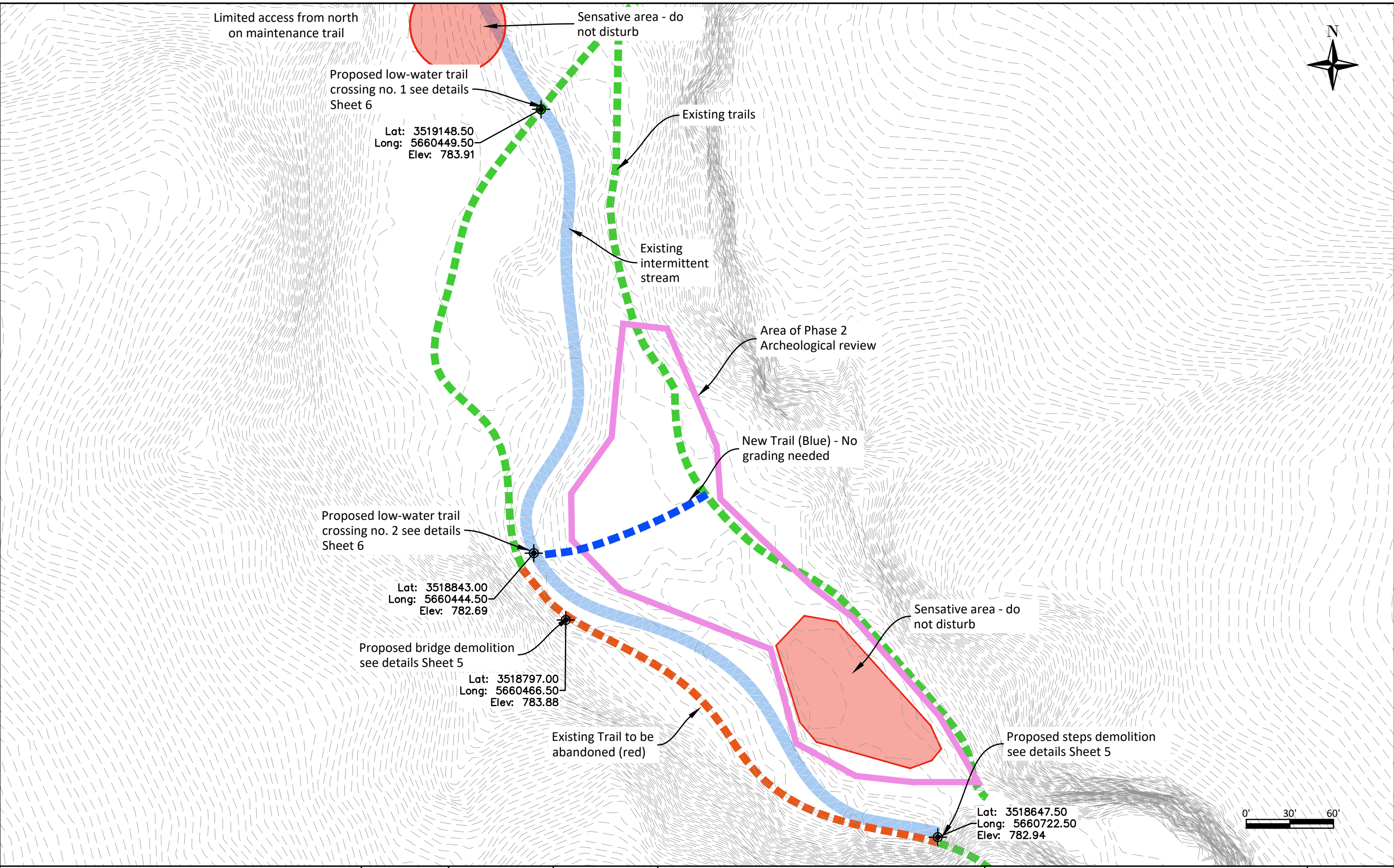
## General Information

1. Verify actual locations and elevations with DNR Engineer.
2. All work shall conform to and be performed in accordance with all applicable codes and ordinances.
3. The contractor shall visit the site and inspect the project area and thoroughly familiarize themselves with the actual job conditions prior to bidding and the start of work. Failure to visit the project site shall not relieve the contractor from performing the work in accordance to the plans, specification, special provisions and contract.
4. The contractor shall verify, at the site, all dimensions and conditions shown on the plans and shall notify the DNR Engineer of any discrepancies, omissions, and/or conflicts prior to proceeding with the work.
5. It shall be the contractor's responsibility to provide waste areas or disposal sites for excess material (excavated material or broken concrete) which is not desirable to be incorporated into the work involved on this project. No payment for overhaul will be allowed for material hauled to these sites. No material shall be placed within the right-of-way, unless specifically stated in the plans or approved by the DNR Engineer.
6. The contractor shall not disturb desirable grass areas and desirable trees outside the construction limits. The contractor will not be permitted to park or service vehicles and equipment or use these areas for storage of materials. Storage, parking and service areas will be subject to the approval of the DNR Engineer.
7. Where utilities and fixtures are shown as Existing on the plans or encountered within the construction area, it shall be the responsibility of the contractor to notify the DNR Engineer of those utilities prior to the beginning of any construction. The contractor shall be afforded access to these facilities for necessary modification of services. Underground facilities, structures and utilities have been plotted from available surveys and records and therefore their locations must be considered approximate only. It is possible there may be others, the existence of which is presently not known or shown. It is the contractor's responsibility to determine their existence and exact location and to avoid damage thereto. No claims for additional compensation will be allowed to the contractor for any interference or delay caused by such work.
8. The contractor shall shape graded area to maintain surface drainage. All elevations are to finish grade.
9. The contractor is expected to have materials, equipment, and labor available on a daily basis to install and maintain erosion control features on the project. This may involve seeding, silt fence, rock ditch checks, silt basins or silt dikes.



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Remove all railroad ties and dispose of offsite



Install 2"x6" exterior railing

Remove wooden steps and posts, dispose of offsite

Landing to remain

Steps Removal



Remove wooden bridge and pull posts, dispose of offsite



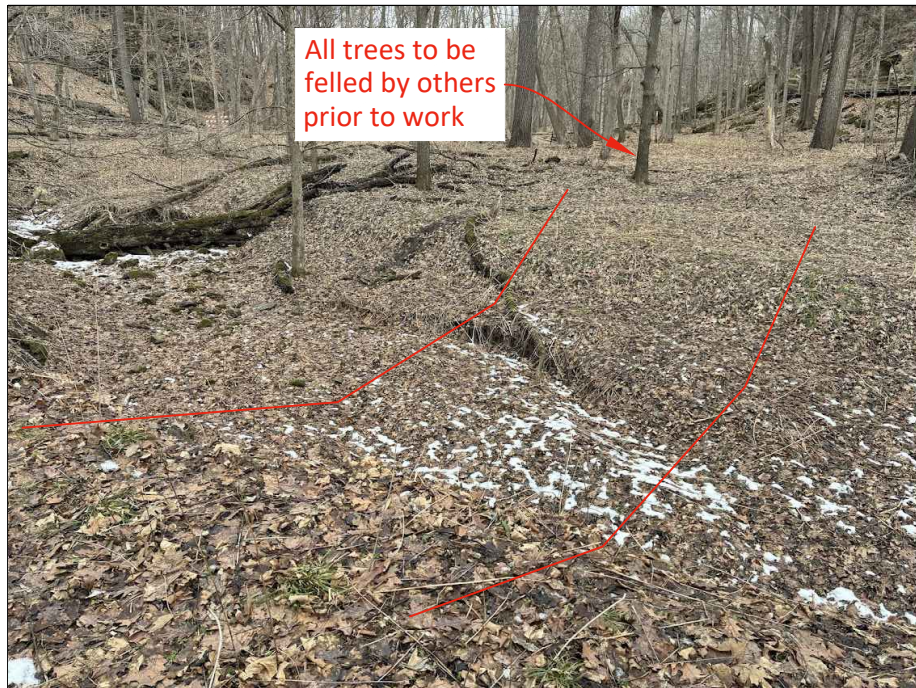
Remove all railroad ties and dispose of offsite

Bridge and Steps Removal

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Low Water Crossing No. 1

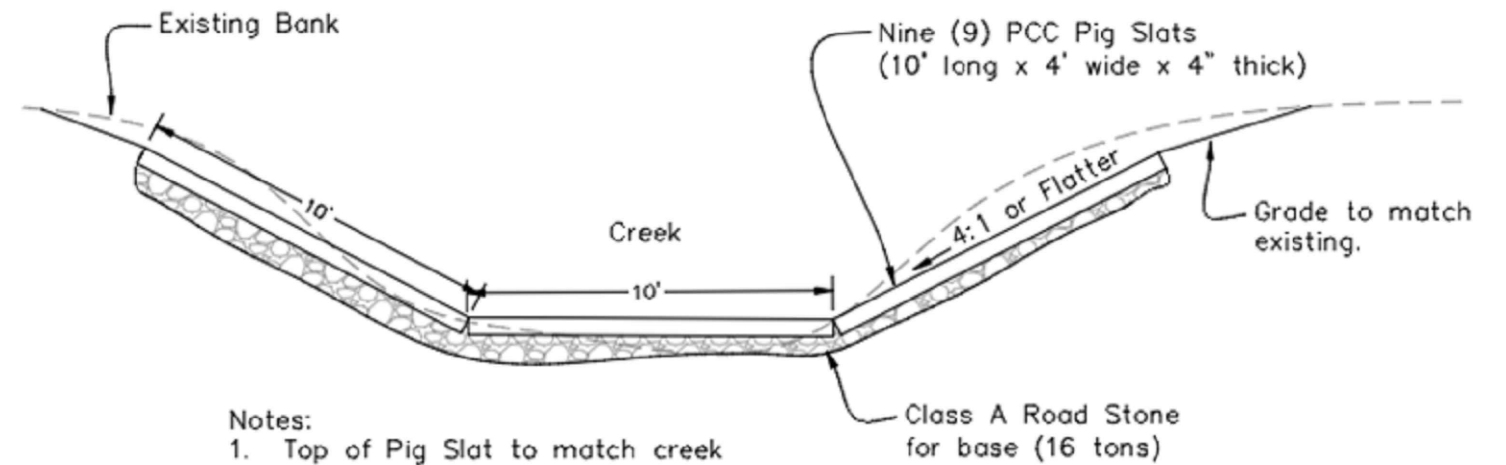


Low Water Crossing No. 2

Scope of Work:

The creek crossing improvement includes the following:

1. Grading back the slopes to a 4:1 (25% slope) on each side of the creek.
2. Placing one truckload (16 tons) of Class A road stone (or other as approved by Park staff) to provide a level base.
3. Place nine (9) 4' x 10' concrete hog slats (4" thick) per detail below.
4. Minor grading as needed to tie in slopes to existing grades. Any excess dirt to be spread and blended in around the area.
5. Repair any ruts/damage due to access or any areas disturbed.
6. Seed all disturbed areas with Iowa DOT rural mix.



Notes:

1. Top of Pig Slat to match creek bottom.
2. Contractor responsible for dealing with water flow during construction.
3. Pig slats to be placed side by side for a 12' wide crossing.

Low Water Crossing Detail