

**Attachment 1**  
**Narrative of Site Plan Revisions**



January 4, 2016

John Orfitelli, Chair  
Town of New Paltz Historic Preservation Commission  
Town Hall, Route 32  
New Paltz, NY 12561

Re: Mohonk Foothills Project and Town of New Paltz Historic Preservation Commission  
Letter dated October 14, 2015

File: 1610.001.001

Dear Mr. Orfitelli and Members of the Historic Preservation Commission:

We have reviewed the letter provided by the Town Historic Preservation Commission regarding the ‘Assessment of Potential Adverse Impacts to Historic Resources with Proposed Mitigation Measures’, dated September 12<sup>th</sup>, 2015, submitted by Neil Larson, of Larson Fisher Associates and revised the designs of the Testimonial Gateway and Hasbrouck House Site Plan areas. In direct response to Mr. Larson’s comments, we offer the following responses and specific mitigation measures proposed:

***1. Paving of the Allée: The paving of the pin oak allée should preserve the historic integrity of the feature. A pervious surface, preferably a gravel with bluestone content, was recommended in earlier discussions.***

The surface of Lenape Lane will be restored consistent with the historic surfacing along the Oak Allée. The Preserve intends to utilize the proposed gravel surfacing and routine maintenance recommended in the “Restoration and Maintenance Manual for the Shawangunk Carriage Road Systems” (Manual) as adopted by the Mohonk Mountain House, Mohonk Preserve, and Minnewaska State Park Preserve. Flexibility inherent in the design of the top course of the surface allows adjustments in the composition of the aggregates to comply with historic integrity of the surface. A wearing surface of crushed stone is proposed for the resurfacing of portions of Lenape Lane and that portion of the historic Wawarsing Turnpike that will continue to be used for auto travel. (See Response 3). (See attached details and specifications from the Manual)

***2. Location of Services: The potential adverse visual impacts the proposed parking area will have on the Testimonial Gateway are not adequately mitigated in the plans provided. The applicant should be requested to shift the congregating area and visitor services to one side or the other of the proposed site and out of direct view of the historic building.***

The Preserve will mitigate these identified impacts by shifting the facilities to the east side of the reception space including the vaulted toilet. In addition, to more effectively screen views of the reception area from the gatehouse, the Preserve has shifted the western trail connection south and added appropriate vegetative screening towards the north so as to direct visitors to the trail





entrances to Lenape Lane which provide more appropriate initial viewing vistas of the historic gatehouse. We believe the Preserve's revised site and planting design will ensure that any adverse visual impacts on the Testimonial Gateway are adequately mitigated. (See Revised Plan Sheet G 1.1)

***3. Location of access to the Hasbrouck House: The Wawarsing Turnpike is a significant historic feature that will be significantly altered by the proposed project. The section providing access to the Hasbrouck House appears to be essentially intact to its historic dimensions and features. Widening the road will have a potential adverse effect as will the proposal to construct a 10-ft.-wide "dry swale" along the easterly side of the roadway. Every effort should be made to preserve the historic road materials and roadside features to mitigate the potential adverse impacts of the road widening. An alternative to the proposed paving is needed, as well as more detailed plans for the preservation of the roadside. The portion of the roadway proposed to be bypassed by a new entry from Rt.299 should be preserved as-is rather than "reclaimed as upland meadow." The construction of a "new vehicle turnaround" at the northeasterly end of the Wawarsing Turnpike will also have a potential adverse impact on the integrity of the historic roadway. The need for the "turnaround" should be reconsidered. Removing it and preserving the scale, materials and roadside characteristics would eliminate the need to mitigate this potential adverse impact. An alternative that would remove any potential adverse impacts to the Wawarsing Turnpike would be to construct a new road along the tree-line on the easterly side of the meadow east of the turnpike. This impact would be mitigated by the preservation of the historic turnpike and the reduced visual impacts to the house.***

We believe the concerns for impacts along the historic New Paltz & Wawarsing Turnpike can be addressed in part by clarifying the design intent which is to minimally widen the existing roadway by 2-3'. Using historical aerial photographs, we were able to determine that the existing gravel surface limits approaching Hasbrouck House vary in width from about 17' to 18'. To provide for safe two-way passage of vehicles that will access the conservation educational facilities at Hasbrouck House, the drive is proposed to be restored to 20 feet in width, its width when it was a two-lane auto road until 1945. The surface of this section of the historic Turnpike will be restored consistent with the Shawangunk Carriage Road Systems Manual discussed in our response to the surfacing of the Oak Allée, above. The 10' wide dry swale is intended to address the stormwater pollution prevention needs of the project and once constructed will be planted with the appropriate meadow plantings, thus restoring a consistent agricultural meadow appearance to the new edge of the roadway. The Preserve is confident that the finished surface of the pavement and the plantings of the 'dry swale' will preserve the overall historic appearance of the restored New Paltz & Wawarsing Turnpike. In addition, as an additional mitigation measure the Preserve will preserve the remnant section of the New Paltz & Wawarsing Turnpike for pedestrians, bicyclists, and equestrians in as close to its current state as possible as a mowed agricultural foot trail. In addition, along this section, the Preserve will voluntarily add



John Orfitelli, Chair  
Town of New Paltz Historic Preservation Commission  
January 4, 2016  
Page 3

interpretive signage at this last remaining intact portion of the Turnpike at this trailhead which will provide historic information about the history of the New Paltz & Wawarsing Turnpike. As noted above, by retaining the remainder of the Turnpike preserved in its current state as a mowed agricultural foot trail, it will provide a more natural experience for visitors.

The Preserve recognizes the concerns of the HPC regarding the proposed turnaround, however, the need for this facility arose in response to meetings with neighboring residents who requested that Foothills parking be dispersed and not concentrated at the Testimonial Gateway site. The Preserve has revised the proposed design in response to the Historic Preservation Commission's concerns, including changes in surfacing, the inclusion of additional screening plant materials, reorientation of the facilities and other alternatives to help further mitigate the visual impact of the turnaround. The new vehicle turnaround discussed in the second part of this comment will be surfaced with a system that is compliant with the Shawangunk Carriage Road Systems Manual.

We have further revised the site plan to integrate the turnaround with the proposed parking area to be more respectful of the history of the New Paltz & Wawarsing Turnpike by creating a single entrance drive off the Turnpike (See Revised Plan Sheet G 2.2). Rather than appearing to be a termination or interruption of the Turnpike, the historic Turnpike alignment will be the visually dominant feature under this realignment and the thru-integrity of the Turnpike will be preserved. In addition, the Preserve will provide an interpretive panel along the Turnpike that will provide historical information about the origins of the old Turnpike. The surface of the turnaround and parking facilities will be in compliance with the same standards that will be used for the Turnpike restoration.

The alternative alignment suggested for the entrance drive to the northeast proposed by the HPC was evaluated by the Preserve. The resulting realignment and new roadway would necessitate a new intersection with Route 299 that would be located in a steep embankment along the shoulder of Route 299. Thus, creating a safe access point there would require regrading and tree removal to provide a clear sight triangle (30' x 30') for exiting traffic, and as a result could have an additional adverse visual impact. It is submitted that the current plans maintain the 'status quo' of the Wawarsing Turnpike and the house from a historical and aesthetic perspective.

***4. Ponds: The ponds on the property have returned to a natural state in recent decades and were used for nature education classes in the 1960s. The ponds should be maintained for their current ecological conditions. Pond-edge trails, as recommended in the Mohonk Preserve LAMP document (p. 103) are suggested.***

There are no improvements to the ponds proposed as part of the Foothills project. The phenology and nature discovery trail will be established with minimal disturbance and will be primarily a footpath through the upland wooded areas adjacent to the ponds. The majority of the associated trail improvement will be pruning of existing vegetation to create safe vertical clearances for the trail. In areas where wetlands will need to be crossed to provide continuity in the trail system, the



John Orfitelli, Chair  
Town of New Paltz Historic Preservation Commission  
January 4, 2016  
Page 4

'Phenology Trail' detail shown on sheet G 5.4 will be used. Restoration of the ponds for improvement of pond ecology or for other habitat conservation purposes could be considered in the future as a separate action.

A copy of this correspondence is being provided to the Planning Board and we look forward to continuing to work with the Historic Preservation Commission and the Planning Board with respect to Mohonk Preserve Foothills Project.

Very truly yours,  
**BARTON & LOGUIDICE, D.P.C.**

Thaddeus M. Kolankowski, R.L.A., LEED AP  
Sr. Project Landscape Architect

TMK/tms

Enclosure

cc: Glenn Hoagland, Director Mohonk Preserve  
Mike Moriello, Riseley & Moriello  
Mike Calimano, Chair, Town of New Paltz Planning Board

**FINAL**

**Restoration and Maintenance Manual for the  
Shawangunk Carriage Road Systems**

*for the*

Palisades Interstate Park Commission

and

New York State Office of Parks, Recreation, and Historic  
Preservation / Minnewaska State Park Preserve

and

Mohonk Preserve



June 2010

Palisades Interstate Park Commission  
Administration Building  
Bear Mountain, New York 10911-0427

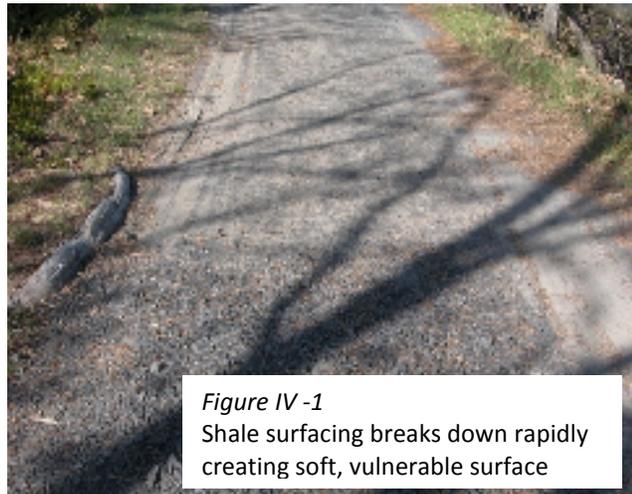
COPLON ASSOCIATES  
LANDSCAPE ARCHITECTURE  
AND PLANNING



## Chapter IV - Materials

The historic carriage road systems of the east employ relatively similar methods of construction. The roads at Mohonk Preserve (MP), Pocantico and Acadia are “broken stone roads” comprised of two to three distinct layers of stone with largest forming the foundation of the road and the finest at the surface. The foundation and base course materials are well defined for each system, consisting of angular, locking stone of a specified sized range. The surfacing course is comprised of finer screened aggregates or crushed stone that can be spread and shaped. At the Mohonk Preserve, locally quarried conglomerate mix was used for the foundation course and shale historically for surfacing. The shale offers a good initial surface when applied, but breaks down relatively quickly resulting in rutting, erosion and loss of surface material and road shape.

Historically, the local sourcing of shale from quarry sites in proximity to the carriage roads made it an easily available and cost effective surfacing material, despite its durability limitations. With the closure of these quarrying sites, the convenience and cost advantages of surfacing with shale has been reduced and use of other materials have been tested. MP has recently begun to use a locally sourced  $\frac{3}{4}$ ” bluestone product containing some bluestone dust as a binding agent for rehabilitation and surfacing repairs. Incorporating the experience of similar carriage road systems and use of locally available material, this mix can be further upgraded. The recommended mixes for MP and MSPPP are as follows:



*Figure IV -1*  
Shale surfacing breaks down rapidly creating soft, vulnerable surface

### A. Surface Course

To create a durable surface material that binds well and minimized migration of surface material a relationship of proper aggregate size and binding fines needs to be established. Testing and experience in other rehabilitated systems has determined that a mix consisting of the following gradations, in which the maximum aggregate size is  $\frac{1}{2}$ ” and up to 16% of the material are clay sized binding fines has proven to be durable and easily maintained.

Crushed Stone with the following gradation

<u>Sieve Designation</u>	<u>Percent Passing</u>
1/2"	100%
3/8"	90-100%
No. 4	60-81%
No. 8	44-60%
No. 40	20-33%
No. 200	10-16%

Since local shale has historically been used on the road system and it is economically available, it may become necessary to add shale to the proposed top course mix even though the addition of shale will likely reduce the durability of the road surface. A maximum volume of 10% shale to 90% top course is preferable.

It is recommended that the percentage of shale used in the mix be reduced along the roads that see the most frequent motor vehicle traffic.

## **B. Middle Course**

Mixes consisting of the following gradations shall be applied for the middle course.

Crushed Stone with the following gradation

<u>Sieve Designation</u>	<u>Percent Passing</u>
1"	100%
1/2"	30 - 100%
1/4"	0-30%
No. 10	0-15%
No. 20	0-5%

A more readily identifiable method to find the stone with the above gradation would be to assign a NYSDOT item number. This item number is recognizable to most stone quarries that supply products to NYSDOT projects. Quarries who supply aggregate to these types of projects have already been approved by the state to be acceptable suppliers.

**Can Use NYSDOT Item 605.0901 – Underdrain Filter Type 1**

### C. Foundation Course

Mixes consisting of the following gradations shall be applied for the foundation course.

Crushed Stone with the following gradation

<u>Sieve Designation</u>	<u>Percent Passing</u>
4"	100%
No. 40	0-70%
No. 200	0-15%

#### **Can Use NYSDOT Item 203.07 – Select Granular Fill**

#### Maintenance Quantities

A reasonable maintenance stockpile should be on-site at all times to avoid ordering material in smaller more expensive quantities. Based on observations along the road system it is estimated that approximately one (1) mile of surface course material should be on hand at all times with reduced quantities for the foundation courses.

Typically suppliers will sell materials based on weight and use the following equation:

$$\text{Cubic Yards} \times 1.25 = \text{Weight in Tons}$$

As densities of rock vary, this is a close approximation and is usually sufficient. However, it is recommended to purchase materials that are dry and without excess water weight.

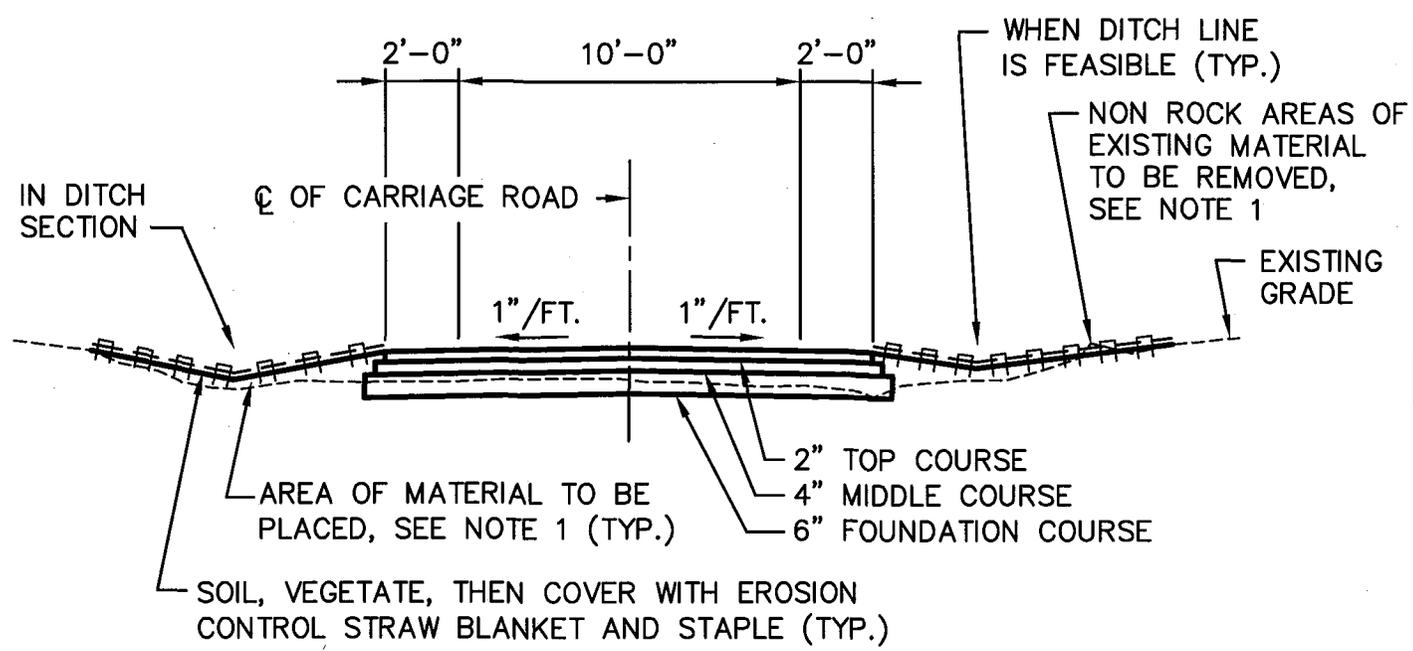
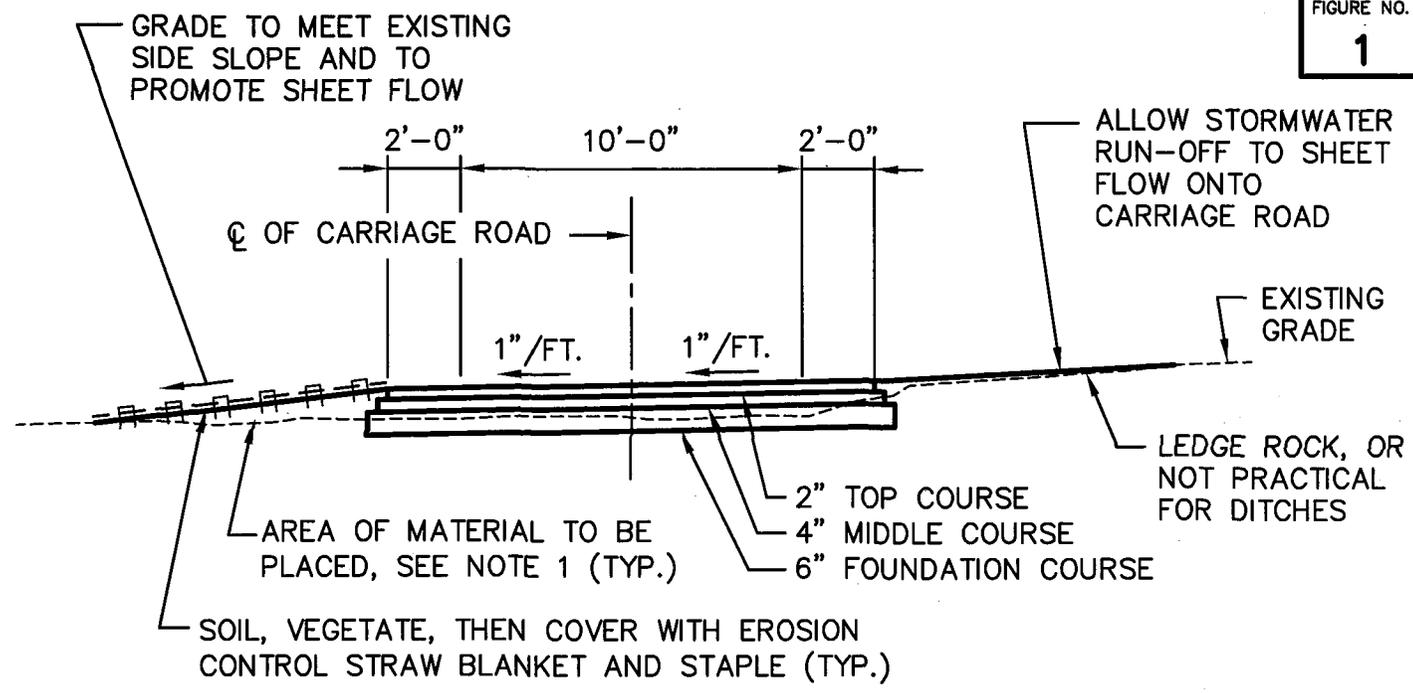
The quantities below represent sample maintenance stockpile requirements for a 10' wide road. Calculations are provided as a reference should the assumed stockpile quantities be modified to meet changing conditions.

#### **2" Surface Course – 1 mile of resurfacing material**

5280' long x 10' wide x 2/12' deep = 8800 Cubic Feet or **326 Cubic Yards, say 400 tons**

#### **4" Middle Course – 1/2 mile of material**

2640' long x 10' wide x 4/12' deep = 8800 Cubic Feet or **326 Cubic Yards, say 400 tons**



**NOTES:**

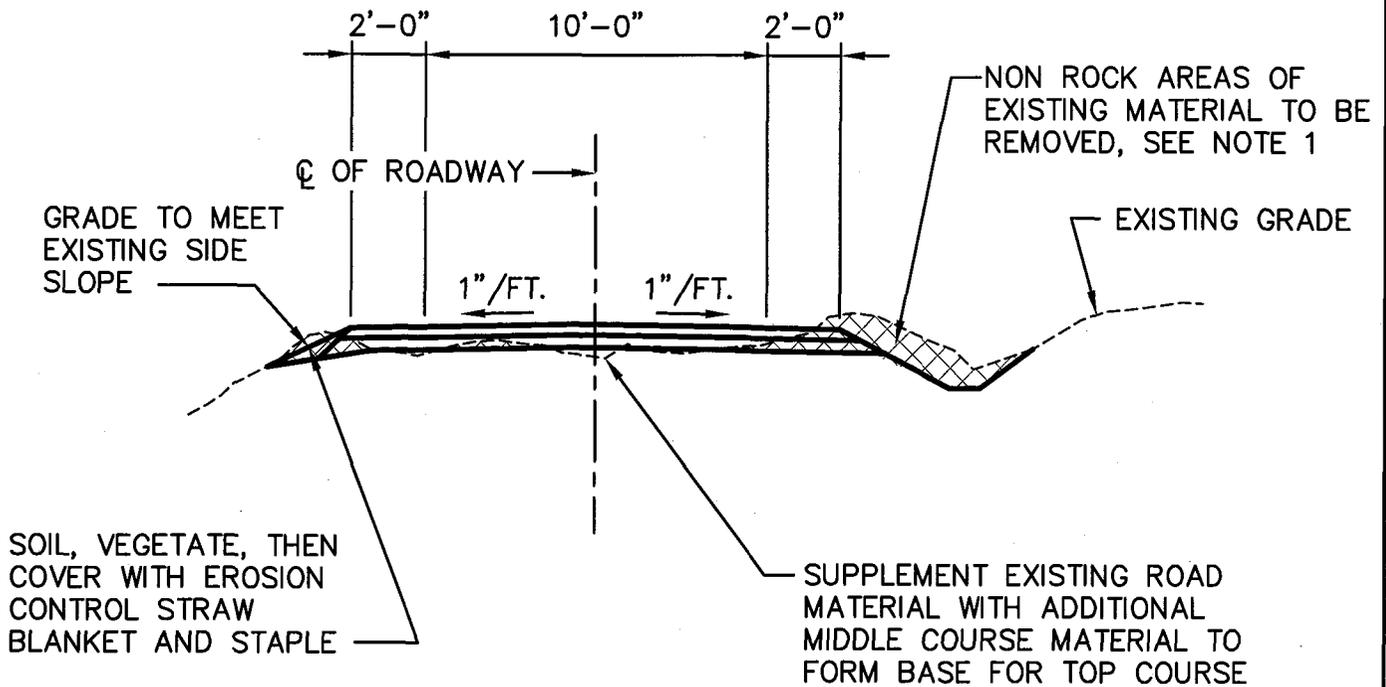
1. MATCH DITCH FORESLOPE AND DITCH BOTTOM WIDTH TO EXISTING UPSTREAM AND DOWNSTREAM CONFIGURATION.

**TYPICAL CARRIAGE ROAD RECONSTRUCTION CROSS SECTION**



RESTORATION & MAINTENANCE PROGRAM FOR THE MOHONK & MINNEWASKA CARRIAGE ROADS





**NOTES:**

1. MATCH DITCH FORESLOPE AND DITCH BOTTOM WIDTH TO EXISTING UPSTREAM AND DOWNSTREAM CONFIGURATION.

2. PLACE TOP COURSE MATERIAL, TYPICALLY, 2" TO MATCH EXISTING ROADWAY PROFILE EACH SIDE OF REPAIR AREA. ADDITIONAL LEVELING MATERIAL SHOULD BE MIDDLE COURSE MATERIAL.

**TYPICAL CARRIAGE ROAD  
RESURFACING CROSS SECTION**



PALISADES INTERSTATE  
PARK COMMISSION

RESTORATION & MAINTENANCE PROGRAM FOR  
THE MOHONK & MINNEWASKA CARRIAGE ROADS



TOWN OF NEW PALTZ

MARCH 2010

ULSTER COUNTY, NEW YORK

COPLON ASSOCIATES  
LANDSCAPE ARCHITECTURE  
AND PLANNING