

MINIMUM REQUIREMENTS APPROACH GUIDE: Construction of Trail Bridges in Wild Forest Areas In the Adirondack Park

DECISION MAKING WORKBOOK

“If there is a unifying theme to the master plan, it is that the protection and preservation of the natural resources of the state lands within the Park must be paramount. Human use and enjoyment of those lands should be permitted and encouraged, so long as the resources in their physical and biological context as well as their social or psychological aspects are not degraded.”

-- The Adirondack Park State Land Master Plan
(page 14)

On March 11, 2016, the Adirondack Park Agency approved changes to the Adirondack Park State Land Master Plan (APSLMP) Wild Forest Guidelines that allow the construction of trail bridges using non-natural materials following a Minimum Requirements Approach (MRA). The Final Supplemental Environmental Impact Statement for the APSLMP amendment states that the Agency and the Department would develop the MRA and the MRA will be added as an appendix to the MOU between APA and DEC. This document is the fulfillment of that commitment.

The MRA is a structured process to evaluate multiple criteria (e.g. cost, efficiency, resource protection, wild character) as part of planning for trail bridges within areas classified as Wild Forest by the APSLMP. The MRA is similar to the Minimum Requirements Decision Guide (MRDG) used by managers on Federal public lands designated as Wilderness. This MRDG is a process for land managers to identify, analyze, and select management actions that are the minimum necessary for administration. Like the MRDG, the MRA is designed to assist Forest Preserve planners and managers in making appropriate decisions. The guiding principle—for both decision making models—is that only the minimum tools or force necessary to achieve established objectives are justified.

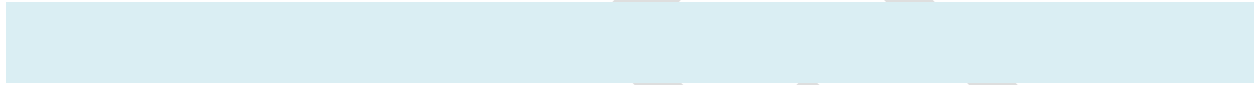
Project Title: _____

Determination

Determine the Administrative Action

Description of the Situation

Reference to the determination to place a bridge in an approved UMP and any descriptive maps or photos, as necessary.



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Description of Alternatives

Identify and describe the reasonable range of feasible, legal, and administratively sound alternatives. Five alternatives are a common benchmark that provides a range of feasible and appropriate alternatives. The range of alternatives must include a “Natural Materials”¹ option. Each alternative must be thoroughly described, including materials, dimensions, tools and construction methods. Include design drawing or images of similar existing bridges. Describe the project with respect to the following criteria:

Tree cutting

How many trees will be cut to complete the project?

Terrain alteration

What is the extent of terrain alteration?

Impacts to Habitat

Are there any instances of significant habitat impacts (e.g. bat roost trees cut, bird nesting, disturbance to mussel bed or spawning habitat.)

Site Restoration

What is the extent and time necessary to restore the site?

Construction Duration

How long will completion of the project take?

Bridge Raw Profile (aesthetics)

How much of an area will the profile of the bridge occupy (height, width, span)?

Bridge Profile Transparency (aesthetics)

How much of the bridge profile is transparent?

Bridge Lifespan

How long of a lifespan will this bridge alternative have?

¹ See Adirondack Park State Land Master Plan definition of Natural Materials

Maintenance

What is the normal lifetime of the bridge? Other than inspections and maintenance that are universal across all bridge types and styles, how many times in a bridge's lifespan is routine, or otherwise, maintenance required?

Cost

How much will the project cost across its lifespan (including construction and maintenance)? Estimate the cost of both labor and material.

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Alternative 1:



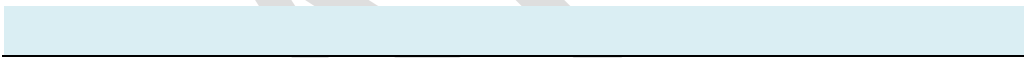
Description of the "Natural Materials" Alternative

Alternative 2:



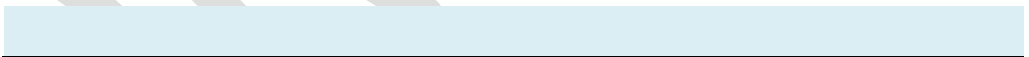
Description of the Alternative

Alternative 3:



Description of the Alternative

Alternative 4:



Description of the Alternative

Alternative 5:



Description of the Alternative

Alternative Comparison Criteria

As part of the alternative comparison, reviewers will work their way down the column and evaluate each alternative against the criteria listed in the corresponding row. Each option will be scored on a 10-point scale from 0 (very poor) to 10 (very good). Scores are based on impacts to the project site. If, for example, four alternatives have life spans of 20, 40, 60, and 80 years, the bridge with the shortest lifespan (20) will get the lowest score (0) and the bridge alternative with the longest lifespan (80) will get the highest score (10). The two bridge alternatives that have lifespans that fall between the highest and lowest will be scored proportionately in-between. In this manner, bridge alternatives will be scored among one another.

Tree cutting

How many trees will be cut to complete the project? Zero (0) trees gets a value of 10, the alternative with the highest number of trees gets a value of 0, and the other alternatives will get apportioned accordingly.

Terrain alteration

What is the extent of terrain alteration? The alternative with the least amount of acres gets a value of 10, the alternative with the highest acres of alteration gets a value of 0, and the other alternatives will get apportioned accordingly.

Impacts to Habitat

Are there any instances of significant habitat impacts (e.g. bat roost trees cut, bird nesting, mussel bed disturbance, or spawning habitat disturbance)? Zero (0) instances gets a value of 10, the alternative with the highest acres of alteration gets a value of 0, and the other alternatives will get apportioned accordingly.

Site Restoration

What is the extent and time necessary to restore the site? The alternative with the least amount of time gets a value of 10, the alternative with the longest extent of time gets a value of 0, and the other alternatives will get apportioned accordingly.

Construction Duration

How long will completion of the project take? The alternative with the least amount of time gets a value of 10, the alternative with the longest extent of time gets a value of 0, and the other alternatives will get apportioned accordingly.

Bridge Raw Profile (aesthetics)

How much of an area will the profile of the bridge occupy? The alternative with the smallest square footage of profile gets a value of 10, the alternative with the largest square footage of profile gets a value of 0, and the other alternatives will get apportioned accordingly.

Bridge Profile Transparency (aesthetics)

How much of the bridge profile is transparent? The alternative with the largest square footage of "see-through" transparency for its profile gets a value of 10, the alternative with the smallest square footage of "see-through" transparency for its profile gets a value of 0, and the other alternatives will get apportioned accordingly.

Bridge Lifespan

How long of a lifespan will this bridge alternative have? The alternative with the longest lifespan gets a value of 10, the alternative with the shortest lifespan gets a value of 0, and the other alternatives will get apportioned accordingly.

Maintenance

Other than inspections and maintenance that are universal across all bridge types and styles, how many times in a bridge's lifespan is routine, or otherwise, maintenance required? Zero (0) instances of maintenance gets a value of ten (10). The alternative with the most instances of maintenance gets a value of zero (0), and the other alternatives will get apportioned accordingly.

Cost

How much will the project cost across its lifespan? The alternative with the smallest cost gets a value of 10, the alternative with the largest cost gets a value of 0, and the other alternatives will get apportioned accordingly.

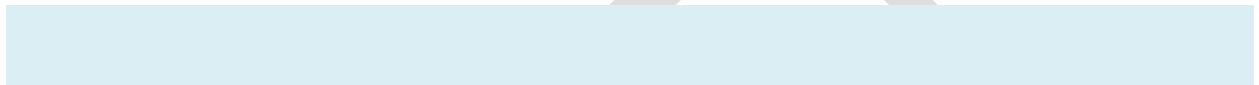
Criteria	Alternatives				
	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Tree cutting					
Terrain alteration					
Impacts to habitat					
Site restoration					
Construction duration					
Bridge raw profile					
Bridge profile transparency					
Bridge lifespan					
Maintenance					
Cost					
TOTAL					

Alternatives Not Analyzed

Alternatives that are not feasible or are otherwise not acceptable to implement should be identified and the reason for further consideration explained. For example, alternatives that would incur unacceptable negative impacts, or would not ensure the safety of users.

Alternatives Not Analyzed

What alternatives were considered but not analyzed, and why?



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Determination of Preferred Alternative

Explain Rationale for Selection

Selected Alternative

Explain why the selected alternative is the minimum necessary for the construction of a bridge in Wild Forest. The explanation should discuss why other alternatives do not meet the minimum requirements. Avoid selecting an alternative based primarily on cost of implementation.

Explain Rationale for Selection

Alternative 1:

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Alternative 2:

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Alternative 3:

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Alternative 4:

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Alternative 5:

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Approvals

Refer to agency policies for the following review and decision authorities:

Prepared	Name	Position	
	Signature		Date

Approved	Name	Position	
	Signature		Date

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