|  |  |
| --- | --- |
| RECREATIONAL TRAILS | DESIGN REPORT |
| Click or tap to enter a date.  **OPRHP Project #: RTP Click or tap here to enter text.**  **Trail Project Name: Click or tap here to enter text.**  **Grant Recipient: Click or tap here to enter text.**  **County: Click or tap here to enter text.**  **Municipality: Click or tap here to enter text.**  **NYSOPRHP Region: Click or tap here to enter text.**  **NYSDOT Region: Click or tap here to enter text.**  **P.I.N.: Click or tap here to enter text.**  dad_ MAP_revised |





**PROJECT DESCRIPTION:** *Must be consistent with TIP/STIP, Federal Agreements, contract documents and describe the purpose of the project.*

**DETAILED DESCRIPTION OF PROPOSED WORK:** *This section should include details about the project components and what will be accomplished. If the project includes equipment purchase, provide a description of the equipment* (max. 1-2 paragraphs; be concise and specific).

**PROJECT LOCATION**

**MUNICIPALITY:** **COUNTY**:

**LENGTH OF TRAIL WORK TO BE COMPLETED**:

**LOCATION OF TRAIL SYSTEM:** *Identify crossroads or description of end points for linear trail*

*projects or describe the project area using identifiable features.*

Route number (*if applicable)*:

Route name (if applicable):

State Highway (SH) number and official highway description (*if applicable*):

From RM (*xxxx-xxxx-xxxx)* to RM (*xxxx-xxxx-xxxx)*

**INTENDED USE:**

*Check all that apply.*

Aquatic/Water Activity

Snowshoeing

Snowmobiling

Mountain Biking

Equestrian Activities

ATV - Off Road

Rollerblading

Jogging/Fitness

Off-Highway Motorcycle

Bicycling

Interpretive/Nature

4 Wheel Vehicle

Cross-Country Skiing

Long-Distance Backpacking

Day Hiking

Other:

**TYPE OF PROJECT:**

*Check all that apply.*

**UNIT OF MEASUREMENT:** *(acres, linear feet, miles or other unit of measure)*

Maintenance or restoration of existing trails

Construction of new trails

Development or rehabilitation of trailside or trailhead facilities or trail linkages

Acquisition of easements or fee simple title to property for trails or trail corridors

Click or tap here to enter text.

Click or tap here to enter text.

Click or tap here to enter text.

Click or tap here to enter text.

Purchase or lease of trail construction and/or maintenance equipment

Click or tap here to enter text.

PLANS: *Attach preliminary design plans as Appendix C. If Table B and/or C is included and attach existing and proposed typical sections.*

**PROPOSED SCHEDULE AND COST**

*Include possible agency review/ permit time frames*

|  |  |  |  |
| --- | --- | --- | --- |
| **Project**  **Phase** | **Estimated**  **Cost** | **Estimated Start Date** | **Activity**  **Duration** |
| Preliminary Design |  |  |  |
| Detailed Design |  |  |  |
| Right-of-Way |  |  |  |
| Construction |  |  |  |
| Construction Inspection |  |  |  |
| **Total Cost** |  | **Total Duration** |  |

**BASIS OF ESTIMATE**:  *Indicate how estimate was prepared, past experience, quotes received, etc.*

**SCHEDULE ISSUES**: *Describe any issues related to scheduling the project in a timely manner.*

**DESIRED LETTING DATE (if applicable)**: Click or tap to enter a date.

**STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM (STIP):**

Listed on the TIP/STIP:  Yes, *Enter PIN*: Click or tap here to enter text.

BUY AMERICA: OPRHP is responsible for coordinating project compliance with Buy America.

Project does *not* include permanently incorporated iron or steel components *or* will incorporate *only* iron or steel produced in the United States.

Manufacturer will provide a certification that the equipment complies with Buy America requirements.

**NOTES ON SPECIAL CIRCUMSTANCES**: *(e.g.: public sensitivity, political commitment, relation to other projects, etc.)*

MISCELLANEOUS: *Include any additional pertinent information that has not been documented above. If the project scope or budget has been modified from the original submitted application, you must identify the modified components and provide a reason for these modifications (attach a separate sheet if necessary).*

Design Standards: The design standards used should be based on the project work type.

Additional Design Guidance can be found at <https://www.fhwa.dot.gov/environment/recreational_trails/guidance/>

***Table A:*** *Edit the list to include* ***only*** *the appropriate project type and* ***only*** *the applicable Design Guidance Documents. Items that are not applicable to this project should be deleted.*

|  |  |
| --- | --- |
| **Table A: Applicable Design Guidance Documents** | |
| **Project Type**  *Include all that apply* | **Design Guidance**  *Include only applicable documents* |
| **Bicycle and Pedestrian Facilities – Shared-Use Paths – Biking Class I – Greenway Trails** | New York State Office of Parks, Recreation and Historic Preservation (OPRHP) Standards and Guidelines for Trails in NYS Parks (includes section on Accessibility)  Guide for the Development of Bicycle Facilities. American Association of State Highway and Transportation Officials (AASHTO). 2012 or most current version.  NYSDOT Highway Design Manual - Chapter 17 – Bicycle Facilities Design  NYSDOT Highway Design Manual – Chapter 18 – Pedestrian Facility Design  New York Statewide Trails Plan. 2010 or most current version.  Americans with Disabilities Act Accessibility Guidelines (ADAAG)  Public Right of Way Accessibility Guidelines (PROWAG)  Access Board Guidelines for Recreational Facilities [[1]](#footnote-1) |
| **Other Trail Construction, Maintenance, Restoration Projects** | *Standards and Guidelines for Trails in NYS Parks* (includes a listing of resource manuals). OPRHP. 2010.  New York Statewide Trails Plan. 2010 or most current version.  United Stated Access Board: Final Guidelines for Outdoor Developed Areas (AGODA)  National Center on Accessibility (ncaonline.org) - National Trail Surfaces Study |
| **Bridges for Shared Use Paths and Pedestrians including rail trail bridges** | Guide for the Development of Bicycle Facilities. AASHTO. 2012 (or most current version)  AASHTO LRFD Bridge Design Specifications (most current version)  AASHTO Guide Specifications for the Design of Pedestrian Bridges, 2nd Edition  NYSDOT Bridge Manual |
| **Trail Signage, Traffic Control and Pavement Markings** | Manual on Uniform Traffic Control Devices. FHWA. 2009 or most current version.  17 NYCRR Chapter V (NY State Supplement to the MUTCD  Guide for the Development of Bicycle Facilities. AASHTO. 2012 or most current version.  Trail Signage Guidelines for the NYS Park System. OPRHP. 2010. |
| **Trailside and Trailhead facilities (i.e. comfort stations, benches)** | Local and State Health Department regulations  New York Building Code |
| **Snowmobile Facilities and multi-use trails that allow snowmobiling** | NYS Snowmobile Trail Manual – Guidelines for Development. OPRHP. 1995.  NYS Snowmobile Trail Signing Handbook  Standards and Guidelines for Trails in NYS Parks. OPRHP. 2010.  Standard Snowmobile Trail Bridge Design and Use of Natural Materials for Design and Construction (NYSDEC)  Management Guidance: Snowmobile Trail Siting, Construction and Maintenance on Forest Preserve Lands in the Adirondack Park (NYSDEC) |
| **For projects on properties listed on or eligible for the State/National Register** | Secretary of the Interior’s Standards for the Treatment of Historic Properties  Secretary of the Interior’s Guidelines for the Treatment of Cultural Landscapes |

***Table B****: To be completed for shared-use paths* ***only****. If not applicable to the project, Table B should be deleted.*

| **Table B Primary Design Values for Paved Shared-Use Path** | | | |
| --- | --- | --- | --- |
| **Element** | **Standard Value** | **Source**1 | **Proposed Value5** |
| Design Speed2 | 20 mph | AASHTO |  |
| Shared Use Width 3 | 10 ft min. | AASHTO |  |
| Adjacent Graded Width | 2 ft min. width | AASHTO |  |
| 1:6 max. cross slope |  |
| Maximum Grade4 | 5% max. or match grade of adjacent roadway | AASHTO |  |
| Cross Slope | 2% max. | AASHTO |  |
| Horizontal Curvature | 74 ft min. | AASHTO |  |
| Stopping Sight Distance | 195 ft min. | AASHTO |  |
| Horizontal Sight Distance | 54 ft min. | AASHTO |  |
| Crest Vertical Curve | 423 ft min. | AASHTO |  |
| Horizontal Clearance | 2 ft min. | AASHTO |  |
| Vertical Clearance | 10 ft min. | AASHTO |  |
| Bridge Loading |  |  |  |

1 2012 American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities.

*2. 20 mph is typically used as a general maximum operating speed. A design speed of 18 mph may be used in relatively flat areas (grades less than 2%). However, a higher design speed up to 30 mph may be needed if the path has grades steeper than 5%. A design speed as low as 15 mph may also be used if conditions warrant. Such conditions could include flat topography or where frequent conflicts or constraints exist. It may be necessary to assign different design speeds to different segments of a shared-use path if conditions warrant. A separate Primary Design Values Table should be used for each segment with a different design speed.*

*3. 10 ft width is the minimum two-way width for typical path use and conditions. AASHTO recommends less than 10 ft (8 ft. min.) only when the following conditions exist:*

* *Bicycle traffic is expected to be low even on peak days or during peak hours;*
* *Pedestrian use is not expected to be more than occasional;*
* *There will be adequate horizontal and vertical alignment providing safe, frequent passing and resting opportunities;*
* *The path will not be subject to maintenance vehicle loadings that would cause pavement edge damage.*

*4.See AASHTO Guide for the Development of Bicycle Facilities for more information.*

*5. Where proposed values do not meet or exceed the standard values derived for the project, document the proposed values as non-conforming features in the table below.*

***Table C****: Any design parameters not identified above, should be listed here. Any non-conforming features (see description below) should be identified with an asterisk. If all necessary design parameters are listed above and there are no non-conforming features, Table C should be deleted.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Table C Other Design Parameters** | | | |
| **Element** | **Standard Value** | **Existing Conditions** | **Proposed Condition** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

NON-STANDARD & NON-CONFORMING FEATURES:

*A non-standard feature is created when the established design criteria for a critical design element is not met. A non-conforming feature is created when design elements other than critical design elements do not comply with normally accepted engineering policy or practice.*

*This section should include a listing of all existing non-standard or non-conforming features and any non-standard or non-conforming features to be retained or created. This section should describe and provide values and support for features that do not comply with normally accepted engineering policy or practice (“non-conforming features”). The degree of explanation for the non-conforming features should be proportionate to the amount of the variations from normal practice.*

There are no non-standard or non-conforming features within the project limits**.**

**BRIDGES:** *If any bridges are to be constructed, rehabilitated or replaced as part of the project, provide the Bridge Identification Number (BIN) and describe the length, width, materials, construction methods, and rating (as applicable).*

**BRIDGE IDENTIFICATION NUMBER (BIN)** *if applicable***:**

**Design Report Checklist:** *Check off each item (or mark N/A) to assure that the packet is*

*complete and ready for review.*

I. Design Report completed and signed by Grantee/Project Sponsor

II. Appendix A: Federal Environmental Assessment Worksheet (FEAW) for NEPA determination, Environmental Review Summary and Checklist, SEQR documentation and any additional required environmental documentation. Check as appropriate:

SEQRA Type:  Type II  Unlisted  Type I

NEPA Class:  Class II – C list  Class II – D list

III. Appendix B: Right of Way Certificate and documentation of property ownership interest

IV. Appendix C: Conceptual Design Documentation which identifies the project elements in relation to surrounding areas (adjoining property boundaries, roadways, water bodies, wetlands, public access, etc.).

IV. State Historic Preservation Office (SHPO) Section 106 Letter

V. Non-Standard Features have been identified and included in the appendices

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**Design Report Approval:**

**Project Sponsor:**

Name:

Title:

Organization:

Date:

Signature:

**OPRHP Grant Administrator:**

Name:

Date:

Signature:

**List of Preparers:**

**Responsible Local Official:**

Name:

Title (relationship to Project):

Municipality/Organization:

Phone(s):

E-mail:

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Project Manager (if different than above):**

Name:

Title:

Organization:

Phone(s):

E-mail:

**Consultant (if applicable):**

Name:

Title (relationship to Project):

Organization/Company:

Phone(s):

E-mail:

**Responsible for Production of the Project Design Document (if applicable):**

***Prior to construction, stamped plans must be submitted to OPRHP.***

|  |  |
| --- | --- |
| (Name)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, (P.E./L.A., Principal), \_\_\_\_\_\_\_\_(Municipality/Not-For-Profit/Consultant firm name) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Description of Work Performed: Directed the preparation of the Design Document in accordance with established standards, policies, regulations and procedures, except as otherwise explained in this document.  Not Applicable (i.e. Acquisition only) |  |

***Note:*** *It is a violation of law for any person, unless they are acting under the direction of a licensed professional engineer, architect, landscape architect, or land surveyor, to alter an item in any way. If an item bearing the stamp of a licensed professional is altered, the altering engineer, architect, landscape architect, or land surveyor shall stamp the document and include the notation "altered by" followed by their signature, the date of such alteration, and a specific description of the alteration.*

**Appendices:**

**Appendix A: Environmental Documentation**

* **Federal Environmental Assessment Worksheet (FEAW)**
* **National Environmental Policy Act (NEPA) documentation**:
  + Project Area Map,
  + Official Species List,
  + NYSDEC Environmental Resource Mapper State Wetlands Map,
  + USFWS National Wetlands Inventory.
* **State Environmental Quality Review Act (SEQRA) documentation**
* **State Historic Preservation Office (SHPO) Section 106 review documentation**

**Appendix B: Right of Way**

* **Right of Way Certificate**
  + Property ownership documentation

**Appendix C: Design Plans**

* **Conceptual Design Document** 
  + Identify the project elements in relation to property boundaries and existing features.

1. https://www.access-board.gov/guidelines-and-standards/recreation-facilities [↑](#footnote-ref-1)