

Lincoln–Woodstock
Riverfront Park and Trail System
Project Description



Rev: 6
Dated: May 16, 2008

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I. Executive Summary

A network of trails will be developed throughout the towns of Lincoln and Woodstock, New Hampshire along with a new Riverfront Park in the town of Lincoln. A primary objective of this trail system is to maintain public access to land on the banks of the Pemigewasset River for local residents, visitors and tourists. The system of trails will include 1. trails for pedestrians to walk, snow shoe, cross country ski, or bicycle on, 2. trails for snow mobiles and 3. trails for equestrian usage. Many of these trails, or sections thereof, already exist. However several of the proposed trails or sections are new and must be constructed. It is intended that the new trails, along with the existing trails, will be extensive enough between the towns of Lincoln and Woodstock so as to provide a trail system “hub” for local residents, visitors and tourists in northern New Hampshire by which to enjoy the area during all four seasons and increase the flow of tourist dollars into the region.

The development of the trail system will intentionally maintain separation of non-motorized from motorized vehicular traffic. However, access to the Riverfront Park will be made available to both modes of traffic. The trail system and Riverfront Park will integrate focus on the historical heritage of the Lincoln-Woodstock area as well as present an environmental perspective of the region by the use of posters/kiosks, signage, etc. Trails will be maintained pet friendly. Street furniture such as benches, lights, etc., will be positioned appropriately.

A phased approach will be used over a five to ten year period to construct the Riverfront Park and Trail system starting with the initial phase, to obtain the easements and right of ways for the Riverfront Park Trail, and the second phase which will include construction of the Riverfront Park Trail and clearing a limited portion of an 18 acre parcel of land owned by the Town, which will eventually be used for the Park. The Riverfront Park Trail, which runs through the Park, will initially be developed from the Cooper Memorial Bridge to the Route 112 Visitor Center near exit 32 off I-93 north bound. (See VIII. Development Phases, page 11 for more details on these and other future phases).



II. The Riverfront Park

The park will be located along the northern bank of the East Branch of the Pemigewasset River on a portion of the 18 acre parcel of land owned by the Town of Lincoln located south of Linwood Plaza. It is the intent to include a historical and environmental perspective to the park, focusing on the paper mill and logging industry that remained active from the turn of the century in the late 1800's till the 1960's. A similar historical/environmental perspective will be associated with the trail system wherever applicable.

The Riverfront Park will include a parking lot located behind the Linwood Plaza within the 18 acres owned by the town. This parking lot will primarily be utilized by visitors traveling to the park by automobile, but during snow mobile season it will also provide a means of access to the existing snowmobile trail at the rear of the Linwood Plaza.

In addition, a roadway with a sidewalk along side will lead from the Route 112 (Kancamagus Highway) to this parking lot and beyond, south to the river's edge where a handicap lot will be constructed. In addition to providing the general public access to the Riverfront Park, the sidewalk will provide access to residents living at the Lincoln Green housing complex. Some sidewalks will lead from the handicap lot to areas within the Park.

Also included in the park will be restroom facilities for men, women and handicapped.

One of the pedestrian/bicycle trails, the Riverfront Park Trail, will pass through the southern edge of the Park immediately adjacent to the Pemigewasset River. The Park will include some type of a pavilion which will permit the display of historical and environmental posters/kiosks focusing on the paper mill and logging industries that dominated the area for 75-100 years. In addition an amphitheater will be included for the presentation of summertime concerts and shows. A "Shea Engine" housed in a three sided shed will be appropriately displayed. An area for playing with dogs unleashed shall be provided. Several benches and picnic facilities will be placed along this path overlooking the river and appropriate lighting will be provided.

A kayak/canoe put-in/take-out is envisioned to be located in the Park directly south of the paved road leading from the main parking lot to the handicap lot.

Public tennis courts, a gazebo, an ice skating rink, and a skate boarding area are considered potential additions to the Park as well and should be considered in the design of the park even if incorporated at a later date.

III. The Trail System

Three types of trails are envisioned, e.g., trails for pedestrian and bicycle usage, trails for use by snow mobiles, and trails for equestrian usage. Trails for pedestrian and bicycle usage, and for equestrian usage will be for non-motorized vehicle usage only.

The range of these trails is anticipated to eventually extend east to connect to the existing Lincoln Woods National Forest trails, and West to the town of Woodstock where a system of trails is also planned to be constructed. In addition, the trail system will extend north to the Flume parking lot where it will connect into the existing Franconia Notch State Park bicycle trail (Corridor 11 snowmobile trail in the winter) and south to Route 175 or the southern border of North Woodstock.

It is planned that most of the pedestrian and bicycle trails will be at least eight feet in width and surfaced using “3/4 inch hardpack”, the same surface used at the Flume Gorge in Franconia Notch State Park, without excavating the existing soil. Where the natural surface of certain sections of the trail provides a safe walking/riding surface “as is” the surface may be left in its’ natural state or covered with a minimal amount of “3/4 inch hardpack”. Where trails are best provided by utilizing local existing roadways, striping and/or signage may be used to provide trail definition, e.g., roads in the areas of South Mountain, Loon Mountain, and The Landing at Loon Mountain.

Posters/kiosks describing historic and ecological sites in the immediate area of certain trail locations will be constructed to promote interest of the users traversing the trails.

Initially only the western section of the Riverfront Park Trail, from the Cooper Memorial Bridge to the Visitor Center, will be constructed. The eastern section from Cooper Memorial Bridge to the Penstock Trail primarily exists as existing roadways and paths and could be placed into service as soon as easements are defined, agreed to and recorded.

IV. Pedestrian and Bicycle Trails

Existing as well as new pedestrian and bicycle trails are envisioned. This system of trails will be detailed on a map/pamphlet that will be provided to tourists, visitors and other guests visiting the area.

A. Riverfront Park Trail

The Riverfront Park Trail will extend approximately 2.0 miles when fully developed and will be comprised of two sections, e.g. an easterly section of approximately 1.0 mile in length and a westerly section which will run through the Riverfront Park that is also approximately 1.0 mile in length. Parts of the eastern section exist as natural dirt but none of the western section exists. Right of ways and/or easements will be necessary to be acquired for both sections.

This trail is new and will connect on its eastern most extension to the existing Penstock Trail at the corner of Forest Ridge Road and Route 112. It will proceed west on the north side of Route 112 to a point where it crosses to the south side of

Route 112 in front of the Depot Plaza. From there it will extend west to Lodge Road, where it will turn south to an existing trail that proceeds further south around the Lodge down to the Pemigewasset River (location of the “Old Hole”). From here, the trail will extend west along the river south of the Rapids Development, then north at the eastern edge of the Fairways complex to Bunker Lane where it will proceed further west on Bunker Lane until it intersects with Cooper Memorial Drive.

As an alternate route the trail may extend along the levi on the north bank of the Pemigewasset River from the Rapids property, then continuing along the river past the Fairways, some private residences, and the Links where it intersects with Cooper Memorial Drive and the western section of the Trail.

Extending westward from the Cooper Memorial Bridge the trail will meander south of the Rivergreen Hotel and the InnSeasons Resort Hotel along the riverbank into the Riverfront Park. From the Riverfront Park, the trail will extend west to the western most edge of the Lincoln Treatment Ponds, where it will continue west onto NH DRED property and continue along the riverbank up to the western most boundary line of this NH DRED property where it will turn north along this property line than turn back east for a short distance and than north again into the parking lot of the Visitor Center located opposite exit 32 from I-93 north bound. It is anticipated that most sections of the trail west of the Cooper Memorial Bridge will surfaced using “¾ inch hardpack”.



B. Landing-Loon Mountain Trail System

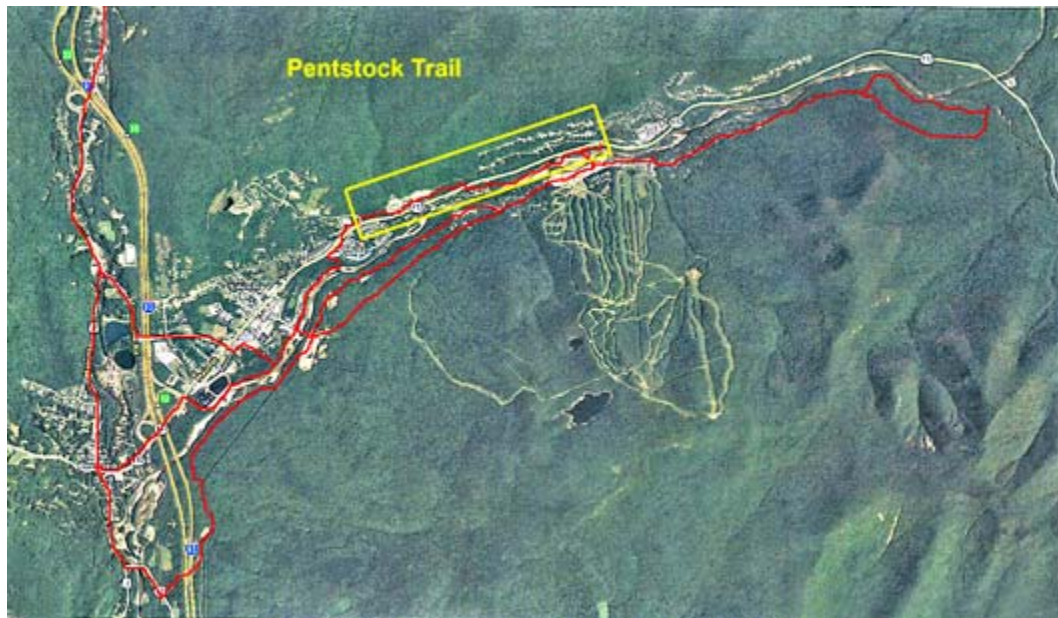
This trail system exists, extending approximately 2 miles in an east to west orientation. No right of ways and/or easements will be necessary to develop this system. It starts at the East Branch of the Pemigewasset River at the eastern extreme of the existing Loon Mountain cross country ski trails. Two of these trails will be included as part of this trail system, the one along the south side of the river,

Serendipity, and the other that parallels it but is further inland, known as the Black Mountain trail. Both of these trails are presently used for mountain biking and walking in the summer months and for cross country skiing in the winter. They will remain naturally surfaced as they are now. At their western extreme, the trails will continue as striping on the edge of the new asphalt road constructed by The Landing, known as Landing Road. This will then connect into the existing Beechwood Road down to the Loon Mountain Club and International Bridge, via roadway striping. From here the pedestrian/bicyclist can travel further west using either the Penstock Trail on the north side of the Pemigewasset River or the South Mountain-Loon Mountain Trail on the south side of the River. An option to extend this trail system further to the east may be considered in the future by adding a foot bridge over the East branch of the Pemigewasset River and extending the trail east to the Lincoln Woods trail system.



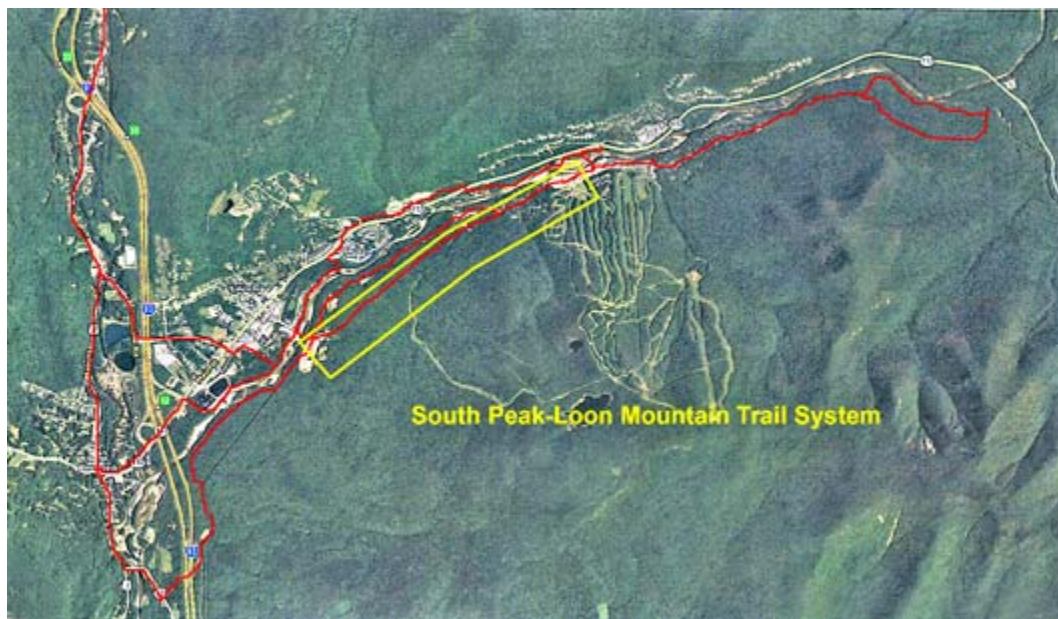
C. Penstock Trail

This is an existing 1.3 mile paved trail that starts at the north end of the International Bridge at the entrance to the Loon Mountain Ski Resort. No right of ways or easements are required. From here the trail extends either east of the entrance of the Village of Loon or west along the south side of Route 112 for several hundred feet and then southwest along the north bank of the Pemegewasset River, then heads northwest to just east of Pollard Brook where it crosses to the north side of Route 112, runs along the north side of the road until it ends at Forest Ridge Road. From here the pedestrian/biker can continue traveling west by crossing Forest Ridge Road and taking the new Riverfront Park Trail. An option to add a tunnel where this trail crosses Route 112 just east of Pollard Brook should be considered in the future to improve the safety of this crossing location which is in a 45 mph zone.



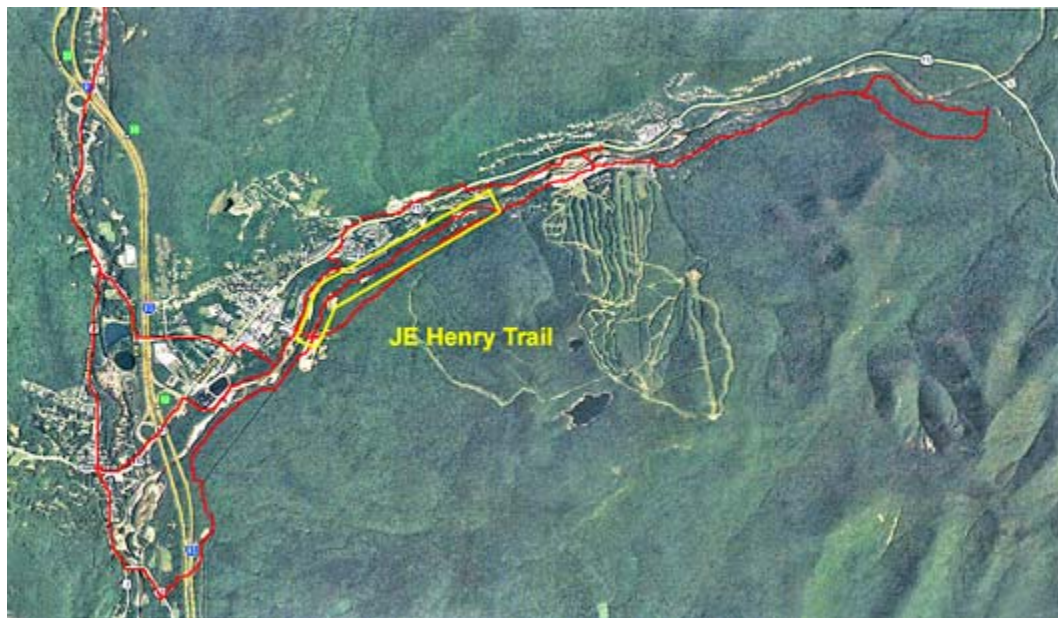
D. South Peak-Loon Mountain Trail System

This 1.5 mile trail will extend via existing roadways from the International Bridge, on the south side of the Pemigewasset River, west along Loon Brook Road to the crossing of Loon Brook under Loon Brook Road (approximately $\frac{3}{4}$'s of a mile). No easements or right of ways are considered necessary. The trail will be marked using roadway striping. From here the walker/rider can choose to continue traveling west using either this trail or the J.E. Henry Trail. The South Peak-Loon Mountain trail will continue west using Loon Brook Road to the Cooper Memorial Bridge. Striping of the road will be used to mark the trail. At the Cooper Memorial Bridge the walker/rider may choose to proceed west using either the South Mountain-Loon Mountain trail on the south side of the river or the Riverfront Park trail on the north side of the River.



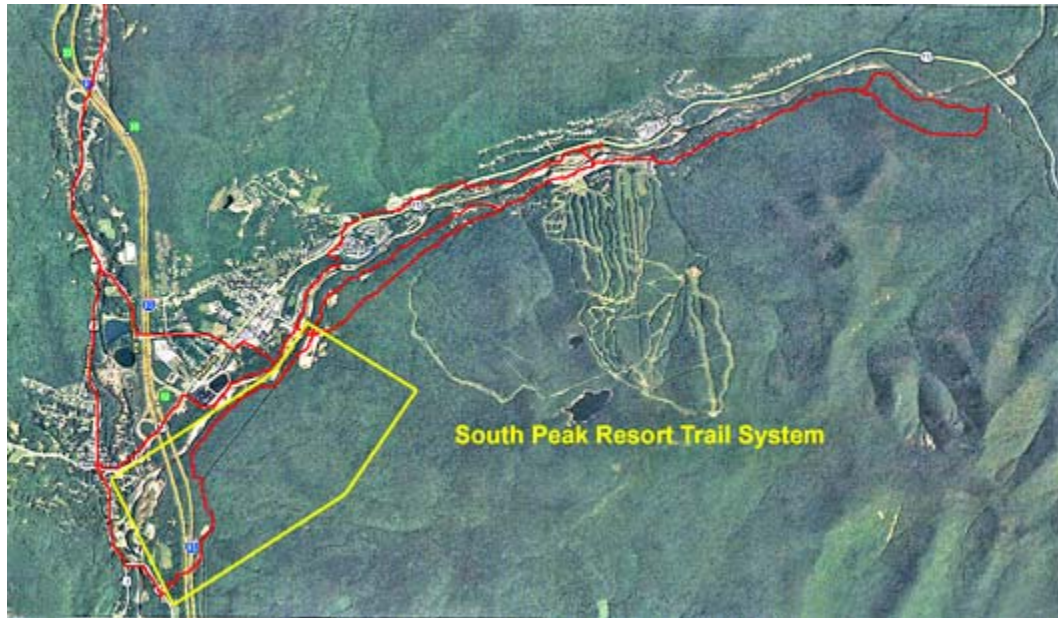
E. J.E. Henry Trail

This trail is approximately 1.0 mile long beginning at the point where the Loon Brook passes under Loon Brook Road and follows the existing J.E. Henry Trail along the south bank of the Pemigewasset River providing great woods and water views. A right of way or easement will be required from the Centex Corporation to ensure public access. It is naturally surfaced and ends at its western most point at the Cooper Memorial Bridge. From here the walker/rider has access to the Riverfront Park Trail on the north side of the Bridge or the South Peak Resort Trail System on the south side of the Bridge.



F. South Peak Resort Trail System

This trail system is approximately 1.5 miles long. Easements and or right of ways from the Centex Corporation and some private residences will be required. The eastern most section of this trail exists and begins on the south side of the Cooper Memorial Bridge and extends west along the south bank of the Pemigewasset River to a point where the trail intersects an abandoned power line clearing. From here the trail has become overgrown with brush which will have to be cleared to make it useful. It breaks right towards I-93 until reaching an old dirt road, which passes under the highway and terminates at its intersection with Route 175 in Woodstock. Some of this trail system may also serve for equestrian usage. Extension of this trail along the River's edge should be evaluated.



V. Snow Mobile Trails

It is anticipated that the snow mobile trail system will remain as they are now, but with minor modification. Corridor 11 will enter the Town from the west under the I-93/Route 112 overpass. It will extend east to Munce's Shell Station, where it will branch north via the Hobo Rail Road to Franconia Notch or east to the south side of the Linwood Plaza and the new Riverfront Park parking lot (Snowmobiles will be restricted from entering the Park itself or the Riverfront Park Trail). Snowmobile access to the Town and the main parking lot of the Riverfront Park from the west side of Connector Road to Linwood Plaza will be maintained. An attempt will be made to allow snow mobiles to travel from the Riverfront Park main parking lot along the south side of Route 112 to the restaurants in the Depot Plaza.

VI. Equestrian Trails

Equestrian trails are anticipated to be part of the walking/biking trail system located on the south side of the Pemigewasset River west of the Cooper Memorial Bridge, however further definition of equestrian usage must be provided by Loon Mountain and South Peaks Resorts. Where equestrian trails and pedestrian trails use common routes an attempt will be made to maintain equestrian trails off to the side of the pedestrian trails.

VII. Development Phases

The priority and order of the phases described below are subject to change based on the results of funding, surveys, design parameters, and acquisition of right of ways/easements.

First Phase

Easements and right of ways will be acquired for the eastern and western sections of the Riverfront Park Trail.

Second Phase

The second phase for the development of the Riverfront Park and Trail system will include constructing the western section of the Riverfront Park Trail which meanders from the Cooper Memorial Bridge through property owned by InnSeasons, the Town of Lincoln, and NH DRED, terminating at the Route 112 Visitor Center at exit 32 of I-93 north bound. Some bike racks and picnic benches may be provided for walkers and bicyclists to rest and enjoy the natural beauty of the area at least until the Park is developed. A kayak put-in and adjacent parking lot will be available for use in this phase. Depending on available funding the Riverfront Park Trail will initially be left natural or surfaced with “3/4 inch hardpack” similar to that used for the trails in the Flume Gorge at Franconia Notch State park.



Phase Three

The eastern section of the Riverfront Park Trail will be developed.

Phase Four

Brush will be cleared to initially expand the Riverfront Park to allow for the addition of historical/heritage kiosks and several picnic tables and benches.

Phase Five

A parking lot, road and walkways will be constructed to provide safer access to the Riverfront Park.

Phase Six

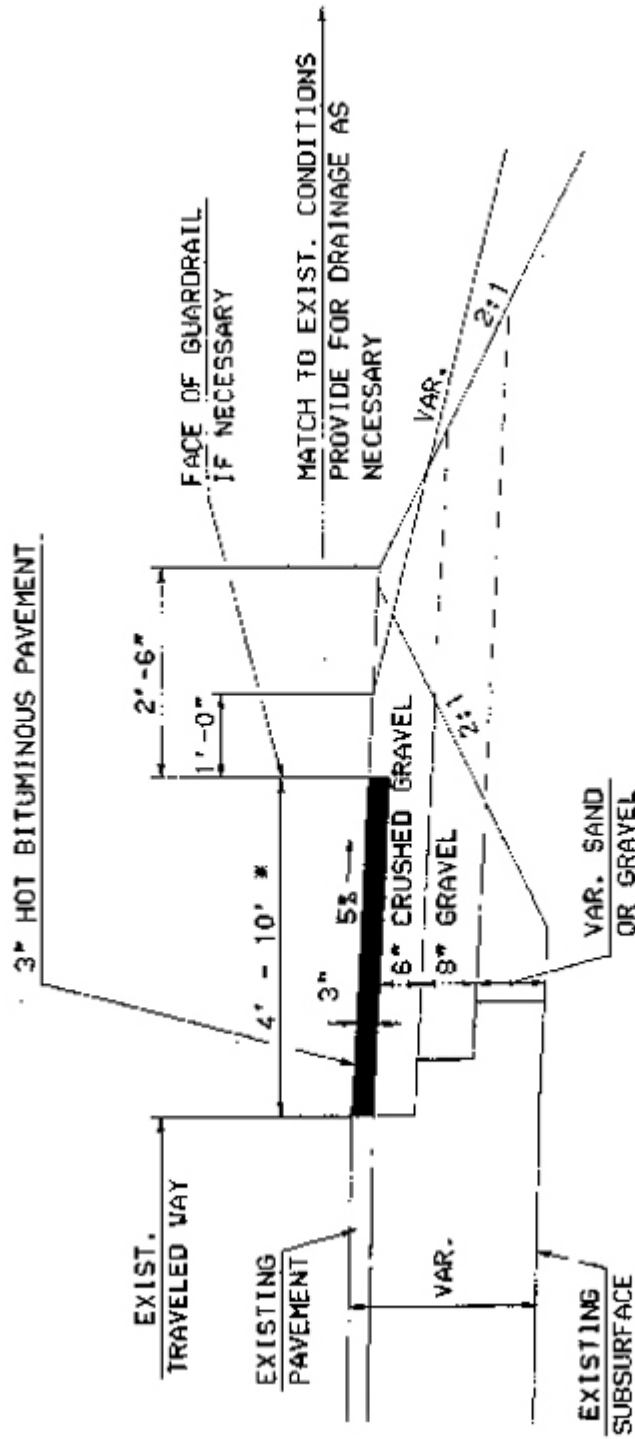
A restroom facility for men, women and handicapped will be constructed in the Park.

Other Future Phases

Striping of existing roadways to define bike routes, including additional items such as an amphitheater, pavilion, Shea Engine and shed, dog park, etc. to the Park, and completion of the South Peak Resort Trail System and trails in Woodstock are envisioned as plans and financing become available.

Shared Roadway Bikeway Typical Section

SHARED ROADWAY BIKEWAY TYPICAL SECTION



- * VARIES, DEPENDS ON AADT (SEE "SELECTING ROADWAY DESIGN TREATMENTS TO ACCOMMODATE BICYCLES" FHWA, JAN. 1994)

**Lincoln-Woodstock
Riverfront Park and Trail System
Preliminary Cost Estimate
November 1, 2007**

Riverfront Park

| | |
|---|-----------------------|
| Remove Brush, Level Land & Plant Grass 9 acres @ \$30,000 = | \$270,000 |
| Main Parking Lot 50' x 250' = 12,500 Ft Striping | \$178,063 \$500 |
| Handicap Parking Lot 50' x 60' = 3,000 Ft Striping | \$42,735 \$200 |
| Connecting Roadway 22' x 1,200' = 26,400 Ft | \$376,068 |
| Sidewalks 3 x 300' = 900 Ft | \$12,821 |
| Restroom Facility 1 @ \$60,000 Installation | \$60,000 \$120,000 |
| Amphitheater Covered concert stage w/stage lights, house lights | \$150,000 |
| Kiosk w/3 Themes in 1 Structure 3 signs @ \$3,000 = | \$9,000 |
| Trail Signs 30 signs @ \$150 = | \$4,500 |
| Picnic Tables 12 @ \$100 = | \$1,200 |
| Benches 6 @ \$100 = | \$600 |
| Outdoor Light Fixture Every 500 Feet (western RFPT) 19 @ \$500 = Installation | \$9,500 \$10,000 |
| Subtotal | \$1,245,187 |

Trail System

| | | |
|--|--|-----------|
| A. Riverfront Park Trail (1.0 mile on existing bed; 0.8 miles new through woods). | | |
| 1.0 miles @ \$160,000 per mile = | | \$160,000 |
| 1.0 miles @ \$372,000 per mile = | | \$372,000 |
| B. Landing-Loon Mountain Trail System (only 1.5 miles of paved road striping/markings required). | | |
| 1.5 miles @ \$5,000 per mile = | | \$7,500 |
| C. Penstock Trail (1.3 miles of existing paved trail, nothing required) | | |
| 1.3 miles @ \$0 per mile = | | \$0 |
| D. South Peak-Loon Mountain Trail System (only 1.2 miles of paved road striping marking required). | | |
| 1.2 miles @ \$5,000 per mile = | | \$6,000 |
| E. JE Henry Trail (only 1.2 miles of existing unpaved/new gravel; nothing required). | | |
| 1.2 miles @ \$0 per mile = | | \$0 |
| F. South Peak Resort Trail System (approximately 0.3 miles of new dirt trail through woods req'd). | | |
| 0.3 miles @ \$317,000 per mile = | | \$95,100 |

Snow Mobile Trails

Existing: virtually nothing required except signage \$0

Equestrian Trails

To be defined \$0

Subtotal **\$1,885,707**

Design and Engineering \$188,579

10% Contingency \$207,437

Total **\$2,281,802**

Notes:

1. Est'd cost of paved trail using old highway grade w/existing drainage: \$160,000 per mile
2. Est'd cost of totally new paved trail through woods: \$372,000 per mile
3. Est'd cost of totally new gravel trail through woods: \$317,000 per mile
4. Est'd cost to stripe/mark paved road with bike trail: \$5,000 per mile
5. Est'd cost for asphalt: \$14.25 per Ft²

**Lincoln-Woodstock
Riverfront Park and Trail System
Second Phase Preliminary Cost Estimate
November 20, 2007**

Partial Riverfront Park

| | |
|--|----------|
| Remove Brush, Level Land & Plant Grass 3 acres @ \$30,000 = | \$90,000 |
| Kiosk w/3 Themes in 1 Structure 3 signs @ \$3,000 = | \$9,000 |
| Benches 6 @ \$100 = | \$600 |

Subtotal **\$99,600**

Partial Riverfront Trail (Western Section Only)

| | |
|---|-----------|
| Riverfront Park Trail (1.0 miles new gravel trail through woods). 1.0 miles @ \$317,000 per mile = | \$317,000 |
|---|-----------|

Subtotal **\$416,600**

| | |
|------------------------|----------|
| Design and Engineering | \$41,660 |
|------------------------|----------|

| | |
|-----------------|----------|
| 10% Contingency | \$45,826 |
|-----------------|----------|

Total **\$504,086**

Note: 1. Est'd cost of totally new gravel trail through woods: \$317,000 per mile

Village Core Planning Group

Heritage Tourism/Interpretative Center Sub-Committee

Initial Meeting Notes, September 6, 2007

Present: Jay Polimeno, Rick Russack

Focus: Definition of Desired Scope of Core Area Plans

- Heritage tourism focus with Core Interpretive Center featuring historic and cultural significant structures with trails emanating from the core site, extending into the Lincoln-Woodstock historic areas . . . and beyond.
 - informational kiosks depicting the heritage and history of the area
 - maps of hiking, biking, horseback riding, snowmobile trails and driving destinations with a heritage/recreational focus geared towards families
 - destinations will have descriptive information centers which tie in to the core kiosks
 - all trails will be emanating from the hub Interpretive Center and will be named to represent the heritage depicted in the core kiosks
 - may want to consider expanding the focus of the center to extend:
 - East to the town of Livermore, Bear Notch Road
 - West to bath
 - North to Littleton
 - South to Beebe River
- Focus of the facility to be on three historical/cultural factors of Lincoln-Woodstock
 - Logging/Mills
 - Railroad (steam engines, Flying Yankee)
 - Tourism
- Envision a central informational kiosk, with three large kiosks or open-air structures at triangular points surrounding the central kiosk
 - Structure 1.) Sawmill replica or logging bunkhouse replica
 - Structure 2.) Steam train or train depot replica
 - Structure 3.) Sugar house replica
 - all structures will be open so that personnel would not be needed to open or close structures
 - within the structures historic information and artifacts will be displayed

Potential Partners

- Forest Service
- Upper Pemigewasset Historical Society
- Towns of Lincoln and Woodstock
- Towns, Chambers, and interested Parties from Campton to Mount Washington