

# CUMBERLAND VALLEY TRAIL MASTER PLAN

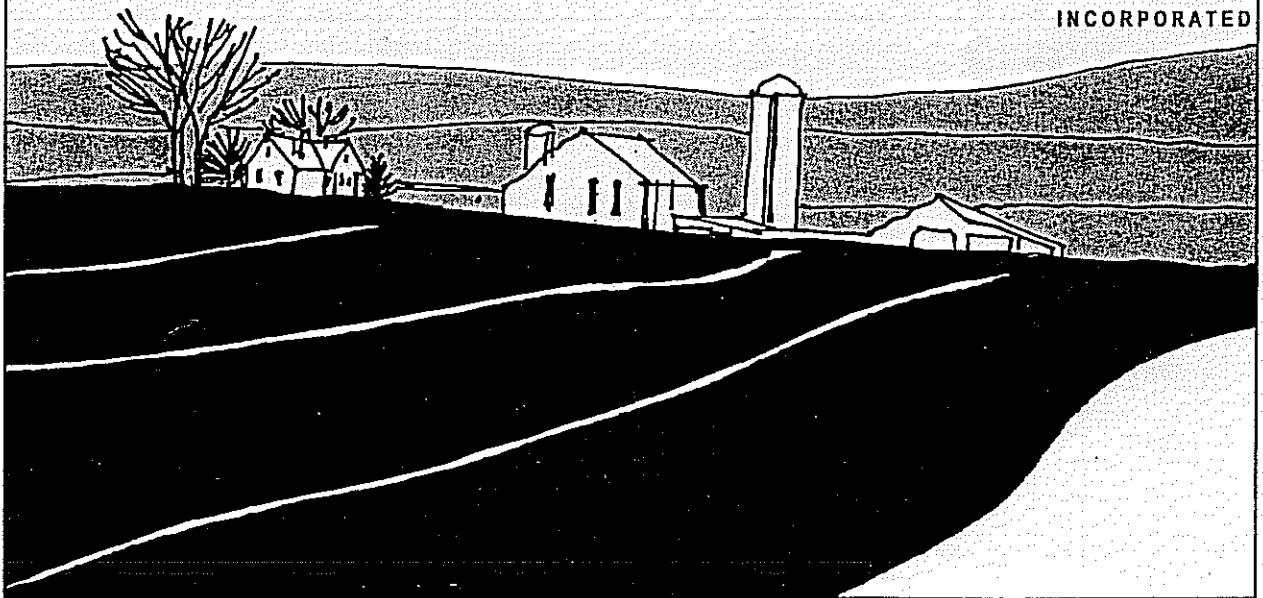
PREPARED FOR:  
CUMBERLAND VALLEY RAILS - TO -TRAILS COUNCIL, INC.

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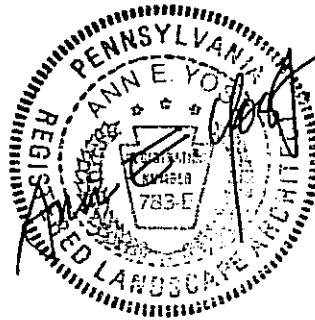
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# Cumberland Valley Trail Master Plan

September 1998

Prepared for:

Cumberland Valley Rails-to-Trails Council, Inc.



Submitted by:

RETTEW Associates, Inc.  
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# Cumberland Valley Trail Master Plan

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Chapter 1  
Introduction

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## Introduction

The Cumberland Valley Trail is a 10.75 mile rail-trail conversion project located between Shippensburg and Newville in Cumberland County. The purpose of the project is to convert the abandoned railway into a trail for both recreation and non-motorized transportation. The purpose of this master plan is to describe the existing conditions of the corridor, the landscape and natural resources, issues related to the trail including management financing, operation and management, and issues and opportunities that would influence the trail's development and success. The master plan provides recommendations for the development, operation, management and maintenance of the trail. It does not provide construction specifications from which the trail could be constructed. These would be developed following the adoption of this master plan.

## Cumberland Valley Rails-to-Trails Council

The Cumberland Valley Rail-to-Trails Council (CVRTC) is a private, non-profit, volunteer organization established to promote multi-use trails in south-central Pennsylvania and western Maryland. CVRTC takes the lead on the development and management of such trails where no government entity has taken the lead. CVRTC has a track record of great success in the development of this project including the following:

- ◆ Negotiated with Conrail to acquire the Shippensburg Secondary track and the Shippensburg Freight Station Parcel in Cumberland County which Conrail subsequently donated to CVRTC.
- ◆ Purchased additional property in Oakville from the former Penn Central Railroad
- ◆ Orchestrated a public participation process that included public meetings and outreach sessions with individual landowners adjacent to the track.
- ◆ Obtained ISTEPA and Keystone grant funds for trail planning, development and equipment.
- ◆ Developed the Cumberland Valley Trail Master Plan, the subject of this report.

## Importance of the Cumberland Valley Trail

The Cumberland Valley Trail occupies the former right-of-way of the historic Cumberland Valley Railroad and later the Pennsylvania Railroad. At one time, it extended from the Borough of Carlisle through Newville and Oakville to the junction of Conrail's main line at South Fayette Street, in Shippensburg. The trail is important for several reasons including recreation, economic development and tourism, wellness and fitness of the community and environmental protection.

### *Recreation*

It provides a safe off-road corridor for recreation and transportation for people within the corridor, as well as visitors from other areas. People can use it for hiking, biking, running, jogging, cross-country skiing, bird-watching, horseback riding, environmental education and enjoyment of natural features close to home. According to **Pennsylvania's Recreation Plan** (the Commonwealth's chief planning guide for recreation and parks), walking/jogging, bird watching and biking rank as the top three outdoor recreation activities in south central Pennsylvania. Bike paths emerged as the public's top priority for development out of forty different outdoor recreation facilities for south-central Pennsylvania as found in a state wide

recreation survey.<sup>1</sup> Compared with the state as a whole, the people in this part of the state indicated a greater need for natural areas and hiking trails than elsewhere in Pennsylvania. Pennsylvania's **Recreation Plan** also lists working with other interests in developing a public use agreement for the Cumberland Valley Trail as a priority.

The Cumberland Valley Trail is an important link within a regional and multi-state trail network now in the planning and development stages. Eventually, people will be able to travel to Carlisle and Chambersburg via the Cumberland Valley Trail. These points will link to areas beyond including Pittsburgh and Maryland.

Other regional recreation attractions include Pine Grove Furnace, Colonel Denning State Park, Kings Gap Environmental Center, Caledonia State Park, Michaux State Forest, Tuscarora State Forest, Huntsdale Fish Hatchery, Big Spring Fish Cultivation Station, the Appalachian Trail, Tuscarora Trail, State Game Lands #169, the Yellow Breeches (a world class trout stream), the Conodoguinet, U.S. Army War College, Cumberland County Historical Society, historic Carlisle with its museums, the amenities of the Borough and University of Shippensburg, Dickinson/PSU Law School, area golf courses and motor racing tracks. When viewed within the recreational context of this area, the trail is an important connector as well as a destination for a host of recreation opportunities in the region.

### ***Economic Development***

Many communities want to attract new or expanding businesses to increase employment and their tax base. Planning in Shippensburg Borough has been focused in this area. Quality of life is an important factor in attracting the private sector. Trails contribute to the quality of life and benefit those who live within the trail corridor. Next to access to domestic markets and availability of skilled labor, quality of life was more important than pure business related factors in locating a business.<sup>2</sup>

### ***Tourism***

Ecotourism is a new concept. It affords visitors the opportunity to enjoy the natural resources and environment of an area without destroying them. According to the Pennsylvania Office of Economic Development, tourism will be the chief industry of Pennsylvania by the turn of the century. The rail-trail can become part of the Cumberland Valley's plan for tourism. The trail is important as a significant element of the region's overall strategy for economic development. While each piece of Cumberland's economic pie may not by itself be a tasty morsel for tourists, taken collectively (as shown above in Recreation), the recreation area, historic resources, natural features and enterprises for the comfort of tourists such as restaurants, lodging and convenience and other shops attract visitors and their money. Themes can include transportation, the heart of Pennsylvania's farming, hiking and biking, and nature. The Cumberland Valley Trail can provide a common agenda for all of these groups. One of the most important aspects of the trail is that it can become part of a link, connecting other trails and destinations in the region and beyond. The Cumberland Valley can become a destination within a large network of trails. Small business, non-profit organizations and various governmental agencies are all exploring ecotourism themes in Cumberland County. The era of ecotourism depends, in fact, upon business, environmental groups, non-profits, government and citizens all working together. The CVRTC needs to play a

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<sup>1</sup> Pennsylvania Department of Conservation and Natural Resources. 1991. **Pennsylvania's Recreation Plan 1991-1997.** ( Harrisburg: PA DCNR) pp 93-103.

<sup>2</sup> National Park Service. 1989. **Economic Impacts of Protecting Rivers, trails and Greenway Corridors.** (Washington, D.C.: U.S. Department of the Interior) p 6-3.



leadership role in promoting aspects of the trail that tie into the agenda of other groups working on tourism, economic development, and parks and recreation issues. Making the case for the trail in terms of how it will help to improve the economy and quality of life in the Cumberland Valley is important. Promoting the value of the trail to local and regional organizations should be a primary focus of the marketing committee on CVRTC.

### ***Wellness and Fitness***

The Surgeon General of the United States issued a report in 1996 that stated that the number one public health issue in the United States is the lack of physical activity. When one pairs the walking-hiking-biking outdoor recreational interests of people in this region with the lack of trails and pathways, it is easy to make the connection of how important this trail is to public health. The conservative Rand Corporation found that for each mile walked or run by a sedentary person, that individual would add 21 minutes to his/her life and save U.S. society 34 cents in medical and other costs.<sup>3</sup> The Cumberland Valley Trail provides a trail within 15 minutes of the majority of the population within this area. The trail will help to promote fitness by providing a safe attractive place for people to walk, run, hike, bike or ride horses.

### ***Environmental***

Greenways which are predominantly open space and that have some recreational access and are maintained regularly yield the highest property value increases for adjacent residential development<sup>4</sup>. Outdoor recreation is also the best available method for fostering environmental sensitivity. Several studies have found environmental sensitivity to be a major predictor of environmentally literate individuals and environmentally responsible behavior. Long-term experience with the environment beginning at an early age has prompted active citizen conservationists to be involved and successful with environmental issues.<sup>5</sup> The Cumberland Valley Trail provides a linear corridor that is important for wildlife habitat. As the area develops, the corridor will become even more important for wildlife.

## **The Planning Process**

The CVRTC retained a planning team of RETTEW Associates, Toole Recreation Planning and Greenways Inc. to prepare the Master Plan as a collaborative process with the CVRTC Board. The team included individuals with a wide range of expertise including landscape architects; engineers; bridge engineers; traffic engineers; and greenway, community and recreation planners. The plan was based upon an extensive citizen participation process that included Key Person Interviews, Public Forums, work sessions with the CVRTC Board and meetings with organizations, individuals and jurisdictions within the corridor. The purpose of the public participation process was to gather information, identify issues, seek out opportunities, build stewardship and identify potential partnerships. The planning team conducted extensive field studies that focused on the corridor, road crossings, bridges, culverts, adjacent land use, a list of about 100 specific trail issues, recreation opportunities, partnerships and management approaches.

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<sup>3</sup> National Recreation and Park Association. 1997. *The Benefits of Parks & Recreation*. (Arlington, VA; National recreation and Park Association. p8:5.

<sup>4</sup> National Park Service 1989. *Economics of Parks and Recreation Resource Book*. Institute on the impact of Parks and recreation, Sacramento, California, May 10-11, 1989. (California: National Park Service).

<sup>5</sup> Roggenbuck, J.W., Loomis, R.J., & Dagostino, J.V. (1991). *The learning benefits of leisure* in the *Benefits of Leisure*. Pennsylvania: Venture Publishing) pp195-213.

## Uses of the Plan

The Plan provides a comprehensive source of information about the trail. It contains both the physical information about the corridor as well as information about the operation and management of the corridor. The plan serves as a guide on which to base the development operation, management and maintenance of the trail. Construction documents can be developed using the information from the plan. Actual trail construction cannot be done based upon this document alone.

### *Policy Guide*

As an all-volunteer organization, the plan serves as the official policy guide for the CVRTC. As the organization and people within the organization change, the plan provides the basis on which to make decisions regarding the trail. It represents a consensus-building process in which CVRTC came together with their consultants and the public to create a rational framework for the development and operation of the trail. The plan is meant to be a living document that facilitates discussion and implementation as needs change and opportunities emerge. As pressures come to bear on CVRTC from special interest groups, the public and a host of organizations in the future, the plan offers stability and a logical framework for decision-making that will be in the best interest of the community and protection and enhancement of the trail for all.

### *Funding Support*

By having a master plan in place, the CVRTC will be in a competitive position to pursue funding from other sources including grants and foundation support. It establishes priorities for funding that shows funding agencies the commitment and level of support for this project. ISTEA has been re-authorized as TEA 21. Pennsylvania has an allocation of about \$160 million. It is anticipated that PennDOT will hold two or three grant rounds with the first being held in the Fall of 1998. The Keystone Community Grant Program is also an important source of funding for CVRTC for which the Master Plan will be invaluable.

## Plan Recommendations

A summary of the recommendations of the Master Plan include the following:

1. Trail Development - Since this project requires significant funding, the trail should be developed with a phased approach. The trail should be developed as a multi-use recreation trail with two trail tread for use by pedestrians, bicyclists, persons with disabilities and equestrians. Trail facilities such as rest areas, parking, signs and rest rooms should be developed along the trail route. Facilities should be convenient to use, promote trail safety and easily maintained. Common design elements should be used throughout the trail to tie the segments together and unify the design.
2. Bridges and Crossings - The removal of the bridges in the corridor by the PUC was a significant loss. The plan recommends the following solutions to road crossing: Install new bridges at Fogelsonger Road and Big Spring Road and develop safe at-grade crossings at the other road/trail intersections.
3. Construction documents should be developed for the bridges, road crossings, trail grading and drainage and trail amenities. Documents will be required to obtain permits from PennDOT, Cumberland County and local municipalities as necessary and to bid the project for construction.

4. The Freight Station Parcel should be transferred to the Shippensburg Area Little League or Shippensburg Borough for community recreation use.
5. CVRTC should continue to manage the trail development and operations in the immediate and short range time frame until such time as another entity can assume the responsibility for operating and managing the trail. Because of limited operating funds, CVRTC volunteers would continue to do the work through committees organized around functional areas of management. Work load and finances should be monitored over the next year to determine if the Council has the demand and finances available to support paid part-time staff. The Council needs to create a plan for fundraising and recruitment of volunteers. CVRTC needs leaders with expertise to assume responsibility for specific functions in such areas as fundraising and marketing. At present, a few members have the responsibility for oversight of major operations such as volunteerism. There appears to be volunteers who are willing to perform tasks. However, few people seem to be waiting to step up to the plate to perform in a leadership capacity who could invest the time to organize such operations as volunteerism.
6. Because of the financial and human resource demands of the trail and the importance of the trail's success, the operation and management of this trail should be the responsibility of a governmental unity. Research shows that most trails of this nature are the responsibility of a county or regional authority. This plan recommends that the CVRTC pursue discussions with Cumberland County for the purpose of establishing a Parks and Recreation Department which would manage trails in the County. If negotiations are successful, the CVRTC would continue as a Friends Group for the trail and support the trail from this perspective. Another alternative for trail management is the establishment of a regional trail authority to establish and operate trails in Cumberland and Franklin Counties. Because of the complexity of establishing a bi-county authority in Pennsylvania, pursuing discussions with Cumberland County to establish a Parks and Recreation Department that would oversee trails appears to be a more likely option at the present time.
7. CVRTC should pursue negotiations with Shippensburg University regarding the 0.85 mile segment that traverses the university's campus. A potential agreement should be based upon keeping the trail open to the public forever and a legal agreement regarding the operation and management of the trail. The trail should have un-restricted use by all segments of the trail-using public and would not be closed to the public at any time.

Chapter 2  
Inventory & Analysis

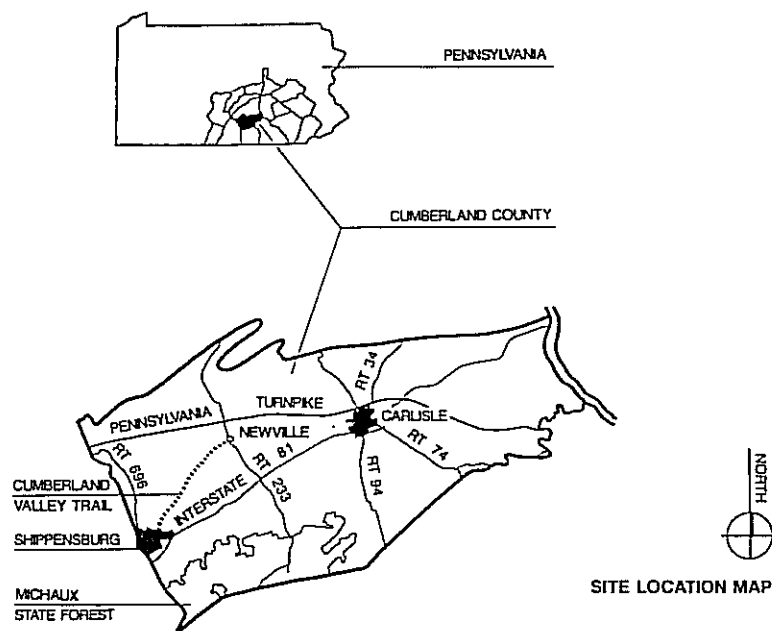
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## Project Area Inventory and Analysis

A comprehensive project-area inventory and analysis was completed at the outset of the project to evaluate the physical characteristics of the trail corridor and Freight Station Parcel (FSP). This analysis is critical for any development project. For the Cumberland Valley Trail a thorough inventory and analysis is critical for the following reasons:

- ◆ To ascertain development opportunities and concerns regarding the corridor and adjacent lands.
- ◆ To become familiar with the context of the region.
- ◆ To field view the project area in different seasons of the year. The trail corridor and FSP were viewed in three seasons; summer, fall and winter.
- ◆ Development costs are greatly influenced by the ease of construction and compatibility of the proposed development with the natural systems of the corridor.
- ◆ The corridor and FSP are located in seven municipalities in two counties with different zoning and development standards.

The Cumberland Valley Trail is located in Cumberland County, Pennsylvania between the Newville Borough and Shippensburg Borough. The trail corridor is 10.75 miles long. The Freight Station Parcel is located in Shippensburg Borough.



The analysis included field viewing the corridor, FSP and adjacent lands and reviewing available archival information. General analysis is documented on the Site Analysis Map and below:

### **Topography**

#### Information










Source – United States Geographic Survey (USGS), topographic quad; Shippensburg, Newville and Walnut Bottom and field investigation.

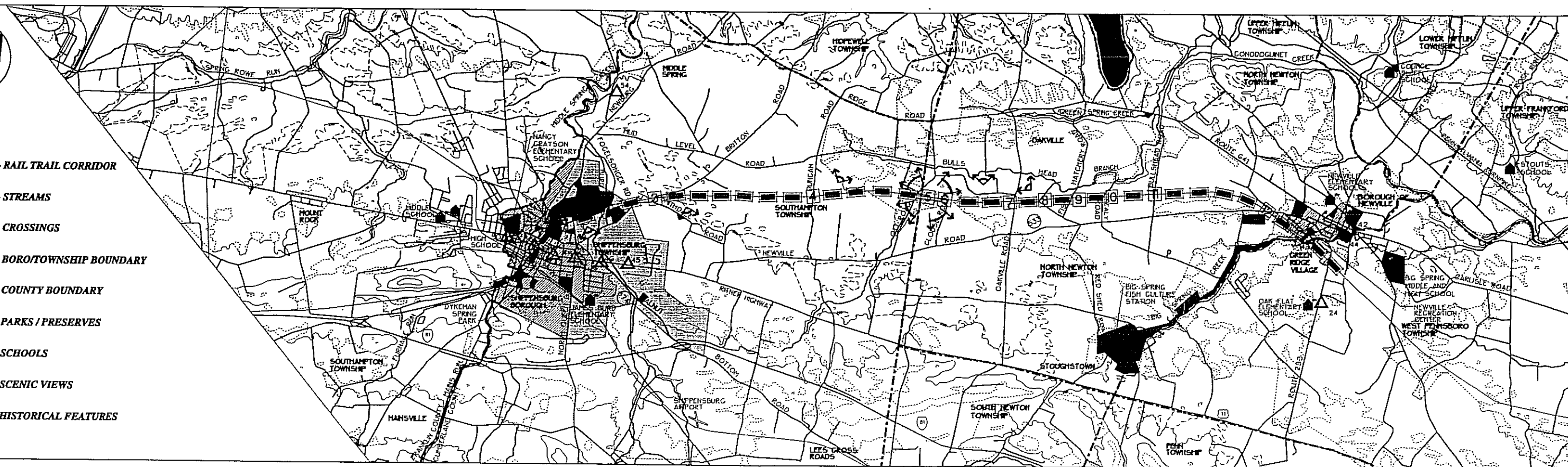
Design Intent – The American with Disabilities Act (ADA) regulates a maximum slope for public facilities. The trail slope should not exceed 5 percent slope (1:20), in

# Cumberland Valley Trail Master Plan



## LEGEND

-  - RAIL TRAIL CORRIDOR
-  - STREAMS
-  - CROSSINGS
-  - BORO/TOWNSHIP BOUNDARY
-  - COUNTY BOUNDARY
-  - PARKS / PRESERVES
-  - SCHOOLS
-  - SCENIC VIEWS
-  - HISTORICAL FEATURES



### CROSSINGS: EXISTING CONDITIONS

- |  |   |  |   |  |
|--|---|--|---|--|
| <p><b>1</b> PRINCE STREET (SR-4035)<br/>         *AT GRADE CROSSING<br/>         *MAJOR UNIVERSITY THOROUGHFARE<br/>         *MAJOR DRAINAGEWAY</p> <p><b>2</b> FOGELSONGER ROAD (T-307)<br/>         *27' WIDE W/10 SHOULDER<br/>         *MAJOR BRIDGE RECENTLY RENOVATED<br/>         *25' VERTICAL ELEVATION CHANGE<br/>         *ADJACENT TO SHIPPENSBURG TOWNSHIP PARK<br/>         *GRADE CONSTRUCTION<br/>         *MAY NEED TO RELOCATE UTILITY POLES</p> <p><b>3</b> BRITTON ROAD (SR-3001)<br/>         *23' WIDE W/4' SHOULDER<br/>         *ROAD IN FILL - APPROX. 10'<br/>         *SEVERE DRAINAGE - BOTH SIDES<br/>         *MAY REQUIRE FULL TO FEET ADA REQUIREMENTS</p> | <p><b>4</b> DUNCAN ROAD (SR-4003)<br/>         *AT GRADE CROSSING<br/>         *FOUR-SIGHT DISTANCES NORTH AND SOUTH</p> <p><b>5</b> OIT ROAD (T-328)<br/>         *21' WIDE W/ NO SHOULDER<br/>         *ROAD IN CUT - APPROX. 6'<br/>         *FOUR-SIGHT DISTANCE TO NORTH<br/>         *350' VIEWS</p> <p><b>6</b> ABANDONED ROAD (CAMP ROAD)<br/>         *ROAD IN CUT - APPROX. 10' GRADE CHANGE<br/>         *ABANDONED TOWNSHIP ROAD<br/>         *20' WIDE W/ NO SHOULDER<br/>         *350' VIEWS</p> | <p><b>7</b> OAKVILLE ROAD (SR-3005)<br/>         *AT GRADE CROSSING</p> <p><b>8</b> FARM LANE<br/>         *AT GRADE CROSSING<br/>         *17' WIDE STONE DRIVEWAY</p> <p><b>9</b> FISH HATCHERY ROAD (T-388)<br/>         *AT GRADE CROSSING<br/>         *FOUR-SIGHT DISTANCE<br/>         *21' WIDE W/ NO SHOULDER</p> | <p><b>10</b> NEALY ROAD (T-353)<br/>         *SINGLE ALIGNMENT<br/>         *ROAD IN CUT - APPROX. 15'<br/>         *GRADE CHANGE<br/>         *FOUR-SIGHT DISTANCE<br/>         *18' WIDE W/ 5' SHOULDER</p> <p><b>11</b> BALLSHEAD ROAD (SR-4015)<br/>         *AT GRADE CROSSING<br/>         *FOUR-SIGHT DISTANCE TO THE NORTH<br/>         *GOOD VIEWS TO ROLLING HILLS<br/>         *ORIGINAL TRAIL CORRIDOR IS CURRENTLY BEING FARMED</p> <p><b>12</b> NEWVILLE ROAD (SR-5333)<br/>         *UNDERPASS</p> | <p><b>13</b> BIG SPRING AVENUE (SR-3007)<br/>         *SEVERE GRADE CHANGE - APPROX. 25'</p> |
|--|---|--|---|--|



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## Site Analysis

transition areas the maximum slope should not exceed 8 percent (1:12) and handrails are required on both sides of the trail.

**Findings –** The rail trail corridor runs through the Cumberland Valley which is relatively flat, with a slope range of two percent to six percent. The rail bed was built up in many areas to maintain the 3 percent slope which created steep side slopes. Areas where bridges were removed have created steep embankments from the trail corridor to the road. The difference in elevation at the bridge removal areas is as much as 25 feet at Fogelsonger Road and 23-feet at Big Spring Road. Other road/trail crossing areas with significant grade differential include Ott Road at 7-feet, Camp Road at 13-feet and Nealy Road at 13-feet. Britton Road has a raised road condition that is approximately 16-feet above the trail corridor.

**Conclusions –** The topography of the trail corridor is compatible with the development of a recreation trail with the exception of the bridge removal areas. Guide rail will be required in some areas to protect users from steep slopes along the corridor's embankment. Bridge removal sites will require solutions to link the trail across the roadways. The grade differential at Fogelsonger Road and Big Spring Road is greater than can be mitigated by ramping to the roadway to meet accessibility standards. The typical ramping length would be in excess of 300 feet, creating a depressed trail with steep side slopes which transitions back to existing grade. This situation is also compounded in these two locations by the stream culverts, which are located close to the road crossing. Bridges will be required at Fogelsonger Road and Big Spring Road to develop the trail. Ott Road, Nealy Road and Britton Road crossings have a differential in grade that can be modified to meet accessibility standards. Camp Road is an abandoned roadway where the bridge was removed. The gap between the trail corridor area can be filled to provide a continuous trail.

## ***Drainage***

### **Information**

**Source –** Field investigation and survey of the FSP.

**Design Intent –** The existing drainage patterns should be maintained along the trail and the trail surface should be graded to provide positive drainage and eliminate ponding water and wet conditions. A 2-percent cross slope should be created along the trail treads.

**Findings –** The trail was field viewed during periods of prolonged wet weather and the trail corridor was dry even when the surrounding landscape was saturated and had standing water. This was true for the entire length of the corridor with the exception of the farmland east of Bullshead Road where an adjacent farmer had removed the railroad ballast and plowed the corridor into a farm field. The trail crosses two creeks; Burd Run and Big Spring Creek with existing culverts and a small swale in the area of Camp Road. The FSP has wetlands and two small streams.

**Conclusions –** Drainage modifications such as geotextile fabric and underdrain will not be necessary to construct a trail along the existing trail corridor. The portion of the trail, east of Bullshead Road, which has been disturbed, will require an

adequate base material and grading to assure positive drainage away from the trail. Drainage culverts and/or redirected drainage patterns will be required where bridges have been removed and regrading will be necessary.

## **Soils**

### Information

Source – United States Department of Agriculture, Soil Conservation Service, Soil Survey of Cumberland and Perry Counties, Pennsylvania.

Design Intent – Determine the compatibility of the soils with the proposed trail and ancillary facilities.

Findings – There are seven soil series found along the trail corridor; Berks (BeD), Duffield (DuB), Hagerstown (HaA, HaB, HaC, HcB, HcC, HcD, HdB, HdF), Huntington (HuA), Lindside (Ls), Melvin (Me) and Penlaw (Pe). Of these, the majority of the soils within the trail corridor are Hagerstown Series which are listed as *slight* limitation for trail development. Soils that have severe limitations for trail development include:

- ◆ HdF - severe limitation for slope and rock outcrop, limited to area near PA Route 233. The railroad bed has been raised above the native soils in this area.
- ◆ Me – severe limitation for wetness, limited to the area of Big Spring Creek. The railroad bed has been raised in this area over Big Spring culvert.
- ◆ Pe – severe limitation for wetness and erosion, limited to a portion of the area between Duncan Road and Ott Road. Severe wet conditions were viewed along this stretch of trail but the trail surface was dry and stable because it is raised above the elevation of the surrounding grade.

The soils of the trail corridor are listed as either *moderate* or *severe* limitations for on-lot septic systems. This limitation is due to high depth of bedrock and slow percolation rates.

Conclusions – Because the majority of the trail will be built on existing railroad ballast along the old rail bed, the soils are not a limiting factor in development of the trail. In many areas the rail bed has been raised above the level of the native soils. In the area where ballast has been removed, an adequate base course of stone will be required to develop the trail. Where public sewer is not available, a self-contained, composting toilet facility must be utilized because on-lot disposal is not an option.

## **Environmental Hazards**

### Information

Source – Phase I Environmental Site Assessment - Conrail Freight Station Site - Cumberland and Franklin Counties, Pennsylvania, as prepared by RETTEW Associates, Inc., February 1994.

Design Intent – Determine if environmental hazards exist within the Freight Station Parcel (FSP) which should be mitigated or separated from areas of public access.

Findings– Evidence of domestic debris and a small amount of asphalt was found on the



site (1994), which should be removed for proper disposal. No other surficial contamination was noted. No underground storage tanks, active aboveground storage tanks, or electric transformers were noted. No changes to the FSP since the 1994 investigations were indicated to the consultant during the project. A Phase I Environmental Site Assessment was not conducted on the trail corridor. Field observation of the trail corridor did not reveal surficial contamination, nor were areas or activities of concern indicated to the consultant during the project.

Conclusions – The investigation of the FSP and field observation of the trail corridor did not reveal any evidence of recognized environmental conditions which would limit its use.

### ***Plant Ecology***

#### Information

Source –

Field Investigation and Pennsylvania Natural Diversity Inventory.

Design Intent –

The vegetation within the corridor should be species that are compatible with public trail use. Native plant material should be preserved as possible. Plant material should be native species, non-invasive, low maintenance material that provides shade and interest along the trail.

Findings –

The trail predominately traverses areas of farm fields and is bordered by typical hedgerow plant material. There are small sections of woods along the corridor east of Fogelsonger Road, east of Bullshead Road, opposite McFarland Street in Newville parallel to the trail in the area of Clouse Road, and on both sides of the trail section between Big Spring Road and PA Route 233. There is evidence of encroachment by several invasive species; multiflora rose, Japanese honeysuckle and garlic mustard. The honeysuckle has aggressively taken over large portions of the existing ballast. The plant community is dominated by common species of woods and fields. Dominant species of native, non-invasive species include red, white and pin oak, american elm, white ash and shagbark hickory. Common shrubs included the non-native multiflora rose and European privet. Occasional clumps of spicebush and clones of staghorn sumac were found. Most of the wooded stands are long and narrow, and have a good deal of edge with almost no interior forest conditions. This situation makes the continued invasion of the corridor by non-native species very likely. There is no evidence of wetlands along the trail corridor. A wetlands area is documented within the FSP. There were no Pennsylvania Natural Diversity Inventory (PNDI) listed plant species noted within the project area.

Conclusions –

Because so much of the length of the trail is in open fields there is little shade. The existing vegetation should be maintained as possible with emphasis on preserving mature deciduous trees and native species. The invasive species must be controlled via herbicide application and selective removal. In order to function as a wildlife corridor, emphasis should be placed on expanding the width of the forested area along the trail through a native species planting program within the right-of-way or in cooperation with adjacent property owners. For most of its length, the trail corridor is far too narrow to function as an ecological corridor. Increasing the width would

provide a path for the movement of animals and plant propagules, and provide additional shading for human users of the trail.

### ***Water Features***

#### Information

Source – Field investigation, USGS mapping and National Wetland Inventory mapping.

Design Intent – To develop the trail in a manner that is compatible with the existing water features. Additionally, water feature may add interest to the trail corridor.

Findings – The trail crosses two creeks; Burd Run in Shippensburg Township and Big Spring Creek in Newville, with existing culverts. At each of the crossings the creek's elevation is much lower than the trail tread and users will be separated from the creek by guiderail. Big Spring Creek is designated as an Exceptional Value Waters (EV), as such it is afforded special protections because of its substantial recreational or ecological significance. Wetlands and two small watercourses exist on the Freight Station Parcel.

Conclusions – Burd Run and Big Spring Creek do not affect the development of the trail due to the elevation difference. The EV designation does not prohibit use of the Big Spring Creek for recreation uses such as fishing.

### ***Wildlife Habitat***

#### Information

Source – Field investigation and Pennsylvania Natural Diversity Inventory.

Design Intent – To preserve habitat for native wildlife along the trail that are compatible with trail use.

Findings – The hedgerow ecosystem is home to several small mammals and birds. There is evidence of ground hogs, rabbits and numerous passerine birds along the corridor. Common raptors such as red tailed hawks were also observed in the area. Groundhogs have dug holes along the corridor which are problematic with trail development. There are no PNDI listed species within the study area.

Conclusions – The trail corridor offers some habitat for common animals of fields and farm areas. In most cases the woods are far too narrow to offer interior forest habitat.

### ***Structures***

#### Information

Source – Field investigation

Design Intent – To assess the condition of the structures along the trail corridor and determine improvements necessary for use of the structures for trail traffic.

Findings – *Bridges* - Six bridges were removed along the length of the trail corridor, and two small bridges exist within the Freight Station Parcel. Each of the two small bridges is approximately 15-feet long. The main load-carrying

members are steel girders, which are spaced about 7-feet apart. Concrete abutments, which are only about 4-feet tall, support the girders. Timber railroad ties span the steel girders.

All the timber railroad ties should be discarded because of rot. Replacement is not recommended at this time as these bridges are not identified for use by CVRTC in this planning document. The steel girders have very thick members, and only a very light amount of rust was visible on the members. There was no indication of significant loss of steel from rust. The concrete abutments are in general good condition. A horizontal concrete shelf that is about 2 feet wide adequately supports the ends of the steel girder. There is no indication of undermining of the concrete at the streambed.

*Cattle Underpasses* - Two cattle underpasses exist along the trail; the Martin Farm culvert and the Yost Farm culvert.

*Martin Farm Culvert* - The concrete culvert is 12 feet wide between abutment wall faces, has a 10 foot height opening from ground surface to the underside of the concrete slab, and is 37 feet long. A concrete curb runs along the top of the slab, and concrete wingwalls retain the earth at each end of the culvert. The concrete slab on the top of the culvert is approximately 14 inches thick. It is unknown if steel beams are embedded within the slab. The slab has approximately 3 feet of soil on top of it.

The underside of the concrete slab has a large number of cracks and efflorescence (salts and minerals) hanging from the cracks. Moisture is passing through the cracks. There is no evidence that concrete is ready to fall from the underside of the slab. The concrete abutment walls are in good condition. There is some light surface deterioration, but it does not reduce the structural strength of the wall.

The ends of the concrete curbs at each end of the culvert have signs of concrete deterioration due to age and exposure to the weather. There are a number of cracks visible in the ends of the curbs, but the remainder of the curb over the width of the culvert is in reasonably good condition. The curbs can adequately support a handrail if installed on top of the curbs.

The tops of the wingwalls have deteriorated from age and exposure to the weather. The upper region of concrete on top of the walls, about 3 inches thick, has cracked from the top of the wall. A few concrete repairs have been made on the south walls, but that repair is also deteriorated.

*Yost Farm Culvert* - This concrete culvert is 10 feet wide between the abutment wall faces, has a 7'-10" height opening from ground surface to the underside of the concrete slab, and is 37 feet long. A concrete curb runs along the top of the slab, and concrete wingwalls retain the earth at each end of the culvert. The concrete slab on the top of the culvert is 9 inches thick. Steel beams are embedded within the slab. The northern one-half of the slab top surface is exposed at the trail surface. Approximately 2 feet of soil cover

the southern one-half.

The concrete of this culvert is in good condition. There are some areas of deterioration, but they are not excessive and they do not significantly affect the load carrying capacity. Concrete has spalled from the immediate area below the embedded steel beams. The top of all four concrete wingwalls has deteriorated for a length of approximately 4 feet. Cracks are evident and were caused by thermal expansion of the concrete deck. The walls were built directly against the face of the concrete slab without provisions for thermal movement of the deck slab. The expansion of the deck pushed on the top of the wall and resulted in a horizontal crack. Gradual deterioration at the crack was caused by the weather.

*Stream Culverts* - There are two major stream culverts which cross under the trail: the Burd Run culvert and the Big Spring Creek culvert.

**Burd Run Culvert** - This concrete arch culvert is approximately 16 feet wide, 10-feet high above the streambed, and 130-feet long. The concrete at the crown of the arch is about 2 feet-thick, as evidenced by a visible color change in the headwall at the upstream end of the culvert. The remainder of the arch barrel is thicker than 2 feet. Each end of the culvert has a concrete headwall and concrete wingwalls flanking each side of the stream. The date of 1918 is formed into the face of the headwalls. The depth of soil from the surface of the trail to the top of the arch is approximately 25 feet.

There are some areas of minor concrete deterioration, but the majority of the structure is in good condition. The culvert was built with longitudinal construction joints at the third points of the arch barrel and transverse construction joints at approximate 25-foot spacing. Moisture has leaked through these joints and deposited salts and minerals on the surface around the joints, but has not caused significant deterioration along the longitudinal joints and at the transverse joints.

Concrete has broken loose at two of the transverse construction joints, caused by the freeze/thaw cycles of moisture in the concrete around the joint. The maximum depth of concrete that has been lost is about 2 inches directly adjacent to the joints. The amount of concrete that has been removed does not significantly reduce the load carrying capacity of the arch.

The streambed consists of gravel. There was no indication of undermining of bases of the arch. The depth of water in the culvert was about 2.5 feet in March 1998. This depth extends over the length of the culvert except for the last 10 feet of the downstream barrel length, where the water depth changes to approximately 4 feet. This culvert will not need to be replaced for approximately 80 years.

**Big Spring Creek Culvert** - The culvert has two distinct types of arches. The southern half of the culvert is a concrete arch that has the same

characteristics as the Burd Run culvert, which was built in 1918. The northern half of the culvert is a brick arch. The brick arch carried the stream under an older line of the railroad. The concrete arch was built when new embankment was placed to the south for a newer track. The total length of the culvert is estimated at 200 feet.

Big Spring Creek is a very broad stream in the area upstream of the culvert. The approximately 100-foot-wide stream is constricted by the culvert to a width of approximately 12 feet. This concentrates the flow and raises the velocity. During flood stages in the Big Spring Creek watershed, this arch likely sees a depth of flow that fills most of the waterway opening of the arch.

**Concrete Arch** - The concrete headwall and the wingwalls at the upstream (south) end of the culvert are in good condition. There was no evidence of structural deterioration in any of the concrete members. The concrete at the top of the headwall and the wingwalls is 2-foot thick. This is a reasonable member thickness for the size of the walls. Rocks were located around the corner of the southeast wingwall. It appears that this rock may have been placed to limit streambed scour at the base of the wall.

Approximately 50 feet of the concrete arch barrel was visible from the upstream headwall. The arch in that area is in good condition. There were no signs of bulging and the shape of the barrel was uniform. There was no indication of excessive efflorescence at the construction joints, and there was no evidence of missing concrete from the surface.

**Brick Arch** - The northern, downstream one-half of the culvert is a brick arch with a thickness of 16 inches. Large field stones of approximate 16 inches thickness are visible on top of the brick arch at the downstream end of the culvert, but there is no way of knowing if such stones were placed for the entire length of the brick arch. There is the possibility that this pattern of the larger rough stone arch was used to carry the soil weight and the brick arch was used to provide a relatively smooth finish surface.

The exposed surface of the southern  $\frac{3}{4}$  length of the brick arch is heavily covered with efflorescence (salt and minerals deposited by moisture). The majority of this surface is white in color from the deposits. No signs of large bulges or large dark colored areas, which could indicate the loss of brick, were viewed from the upstream end of the culvert. The brick still has the original arch shape.

The last approximate 15 feet near the downstream end of the culvert does not have the same heavy efflorescence. The white color of the salt and minerals is present, but not to the extent of the rest of the culvert. This might be related to the reduced amount of soil cover over the downstream end, where the masonry headwall fell into the stream. The less amount of soil cover may allow moisture to more rapidly pass through the arch without depositing dissolved salts and minerals.

There are a few areas in the last northernmost 15 feet of the arch where bricks are missing and past repairs have been made. We estimate that less than 10% of the surface area has loss of bricks, and the loss is confined to the outer layer of bricks. Additional bricks were visible behind the void areas. One area on the left (looking upstream) side of the arch, 6 feet from the endwall, has an area of approximately 4 feet by 4 feet where the outer layer of bricks has fallen from the surface. There were no signs of bulging in this area. A few isolated areas of repair were visible where concrete had been installed to replace missing brick. The largest of these areas was approximately 2 feet by 2 foot.

**Downstream Masonry Headwall** - The eastern one-half of the headwall is gone. It likely fell into the creek and then was removed. Portions of the soil cover in this area have also fallen into the creek. There still is soil cover over the arch, which is being held in place by the larger fieldstones that extend over the brick arch. The remaining portion of the headwall consists of large stones that do not have mortar in the joints. The larger stones that are located farthest away from the arch appear stable, but the stones on the face of the headwall nearest the center of the arch are smaller and do not appear to have the same stability as the large stones.

**Conclusions -**

Each structure investigated is appropriate and compatible with development of a trail corridor for recreation use with improvement, modifications and maintenance as outlined later in this report. The structures, when modified, improved and maintained will be sufficient and safe to support trail traffic to include, pedestrians, bicyclists, equestrians, cross-country skiers, in-line skaters and vehicles for maintenance, emergencies and security.

**Views**

**Information**

- Source –
- Design Intent –
- Findings –

Field investigation.  
 To locate rest areas and trailheads in areas of scenic views.  
 Views along the trail corridor are dominated by large expanses of scenic, gently rolling farm fields and the hills to the north and south, which create the Cumberland Valley. Significant views are noted on the Site Analysis Map. The most interesting views occur in the area of Ott Road and Clouse Road, which is a high point along the trail and affords a 360-degree view of the surrounding countryside.

**Conclusions –**

Support facilities such as benches and rest areas should be located where trail users can enjoy the views to the surrounding countryside.

**Trail Encroachments**

**Information**

- Source –
- Design Intent –

Field investigation and boundary survey completed as part of the project.  
 To identify areas of encroachment to the corridor which may impact the

## Findings –

development of a public recreation trail.

There are numerous areas of encroachment on the trail corridor to include:

- ◆ A portion of the parking area at the Shippensburg University steam plant near Prince Street.
- ◆ Concrete stairs, bituminous walk and two electrical transformers in the area of North Queen Street. The walk and stairs are used to access the Shippensburg University campus after crossing the trail corridor.
- ◆ A portion of the Shippensburg University parking area and three light standards west of Fogelsonger Road.
- ◆ The Martin Farm has established an area of at-grade crossing for farm vehicles to the east of the Martin Farm Culvert.
- ◆ The Cramer Farm has an at-grade crossing for farm vehicles west of the Cramer house site which is permitted by easement. Additionally, vehicles access the farm crossing by traveling along the trail corridor west from Ott Road.
- ◆ An unoccupied brick warehouse is located partially within the trail right-of-way west of the Oakville Road intersection.
- ◆ The Showaker Farm has established, in coordination with CVRTC, an at-grade cattle crossing adjacent to the Fish Hatchery Road intersection, on the west side.
- ◆ A silo encroaches on the right-of-way at the Yost Farm, west of Bullshead Road.
- ◆ The corridor at the Yost Farm, east of Bullshead Road, has been encroached upon by the farmer. The ballast has been removed, the area graded and agricultural fields established.
- ◆ A portion of the parking area at the Pepsi plant.
- ◆ An above ground tank of the Pyramid Group west of Penn Street in Newville.

## Conclusions –

Most of these encroachments do not interfere with the intent of establishing a recreation trail, but several will require mitigation as outlined below.

- ◆ The parking lot at the Shippensburg University steam plant near Prince Street is the only parking area noted which will require major modifications to allow trail development. The trail right-of-way in this area is approximately 65 feet wide and the trail encroachment is 47.79 feet within the right-of-way. Additionally, a drainage swale is located within and parallel to the corridor limiting the trail development area. CVRTC must coordinate with Shippensburg University to reconfigure their parking area to allow development of the trail.
- ◆ The developed trail will cross the bituminous walkway at North Queen Street. A smooth transition between the trail surface and walk should be developed.
- ◆ CVRTC should work with the Martin Farm to formalize an agreement for the at-grade crossing at the area currently being utilized. This location should be stabilized as discussed later in this report.
- ◆ Access to the Cramer Farm crossing should be restricted from Ott Road. CVRTC should work with the farmers utilizing this length of trail to assure access without traveling along the trail corridor with farm

machinery.

- ◆ CVRTC should contact the owner of brick warehouse structure west of Oakville to assure that measures have been taken to structurally stabilize the warehouse and address safety concerns. Review by a structural engineer is recommended.
- ◆ The Yost Farm field encroachment is discussed later in this report.
- ◆ CVRTC should discuss the above ground tank with the Pyramid Group. The tank location is not prohibiting trail development, but depending upon the contents of the tank, it may be appropriate to request that the Pyramid Group remove it from CVRTC property.

## **Cultural and Regional Resources**

### ***Community Facilities***

**Schools –** Two school districts serve the project area: Shippensburg Area School District and Big Spring School District. There are numerous schools within close proximity but not easily accessible to the trail corridor.

In the Shippensburg Area School District, Shippensburg Area Middle School and High School are located west of the trail corridor outside of Shippensburg Borough and are not easily accessible from the trail corridor. Nancy Grayson Elementary School and James Burd Elementary School are located in Shippensburg Borough but are not easily accessible from the trail.

Big Spring School District serves the eastern end of the project area. Oak Flat Elementary School is located south of the trail on PA Route 233 and Big Spring Middle and High School are located north and east of the end of the trail at PA Route 233 trail. Trail linkage to Oak Flat Elementary School should be encouraged to provide a safe pedestrian route from Newville to the school. Access easements should be sought to provide for trail development. Links to the Middle School and High School should be sought when the trail is extended east beyond PA Route 233. Newville Elementary School is located west of Newville in North Newton Township. This school is not easily accessible from the trail.

The trail goes through and is adjacent to lands of Shippensburg University in Shippensburg Township. Shippensburg University is a regional state-supported institution. It is part of the State System of Higher Education of Pennsylvania. The University offers bachelor and master's degree programs in the colleges of arts and sciences, business, and education and human services. The University has a population of 6,000 students during the school year and over 2,000 students for the summer term. The University has taken great interest in the development of a trail as it relates to the safety of students, aesthetics, and impact on the campus. Also located within the campus is Roland Lab an experimental elementary school.

**Parks –** There are several parks in the vicinity of the trail corridor. In the western portion of the project area is Dykeman Spring Park and Veterans Memorial Park both in Shippensburg Borough. These parks are not easily linked to the trail corridor as they



are on the outskirts of the Borough. Dykeman Spring Park is just south of the FSP but separated by the elevated Conrail line which is an active railroad corridor. Shippensburg Township has one park, Shippensburg Township Park, which is under development. In the eastern area are the Newville Community Park and the Newville Community Center. Southampton and North Newton Townships do not have municipal parks. West Pennsboro Township has one municipal park but it is located beyond the project area and not easily accessible to trail users.

Shippensburg Township Park has been designed as a trailhead facility for the Cumberland Valley Trail. The park's northern boundary is the trail right-of-way.

Facilities proposed for the park that will facilitate trail use and benefit trail users include parking for cars and horse trailers, path connections to the trail, rest rooms, picnic pavilion, benches and drinking fountain.

Newville Community Park is located north of the trail on Shope Street. There is no convenient access to the park from the trail. Facilities offered at the park include ballfields, game courts and a playground. The Newville Community Center is located on the corner of South High Street (PA Route 233) and Chestnut Street. This location is north of the trail and linked by existing sidewalks.

**Preserves –** The Pennsylvania Fish and Boat Commission's Big Spring Fish Culture Station is located south of the trail corridor on Big Spring Avenue. This facility includes a fish hatchery and approximately two-and-three-quarter miles of land along Big Spring Creek. This greenway provides protection for the natural resource and recreation opportunities for fishing and picnicking. There are six vehicle pull-off areas provided along the road. A defined trail along the creek has not been developed, but fishermen typically walk along the creek or roadway. The northern limits of this greenway are within one-quarter mile of the trail corridor, and Green Ridge Village. Linkage to both of these facilities from the Cumberland Valley Trail should be explored through the existing shared access easement along Big Spring Road between lands of CVRTC and lands of Charles E. Caldwell.

### ***Zoning/Land Use***

Land use along the trail corridor varies from the Boroughs to the Townships. Agriculture is the dominant land use in the Townships. The Boroughs of Shippensburg and Newville have a variety of land uses in the area of the trail. Land use in Shippensburg includes residential and institutional uses. Land use in Newville includes residential and industrial uses.

The trail corridor passes through six municipalities in Cumberland County, and the FSP is located in three municipalities; two in Cumberland County and one in Franklin County. Four municipalities have Zoning Ordinances, and all have Land Development/Subdivision Ordinances. The development of the trail is permitted as a recreation area as defined by the zoning ordinances of Shippensburg Township, Newville Borough and West Pennsboro Township. Because the trail passes through several zoning districts in each municipality, CVRTC should work with each municipality to adopt ordinance language that allows trail use by rights throughout the municipality. Model zoning ordinance language is provided in Appendix A. Each of the municipalities was contacted regarding

requirements for submission and processing of Land Development Plans for the development of the Cumberland Valley Trail. Land Development Plan requirements vary depending upon the type and extent of improvements proposed in each municipality. Table 2-1 outlines the municipal ordinances and requirements for plan submission based on the proposed trail improvements proposed.

Table 2-1			
Municipality	Zoning Ordinance	Subdivision/Land Development Ordinance	Processing Requirements
Newville Borough	Yes	Yes	Request submission of an informal sketch showing the proposed development. No Land Development Plan submission.
North Newton Township	No	Yes	Require submission of Land Development Plan. Request submission of information regarding road improvements.
Shippensburg Borough	Yes	Yes	No Subdivision/Land Development Plans required unless there is a transfer of land.
Shippensburg Township	Yes	Yes	Request submission of an informal sketch showing the proposed development. No Land Development Plan submission.
Southampton Township, Cumberland County	No	Yes	Request submission of an informal sketch showing the proposed development. No Land Development Plan submission.
Southampton Township, Franklin County	No	Yes	NA
West Pennsboro Township	Yes	Yes	No Land Development Plan submission.

Future land use maps for the region provided by the Cumberland County Planning Commission show agriculture use being maintained in the rural Townships. Additionally, several large farms along the trail corridor or within the corridor viewshed have been voluntarily placed in the agriculture security program. This program places tracts on a prioritized list, for sale of development rights to Cumberland County. Cumberland County seeks to buy development rights to preserve farmland, and protects the parcels from development when funds are available. Currently there are no properties in the project area that have sold their development rights.

### **Utilities**

Location and proximity of utilities to the trail corridor influences the development of the trail and support facilities. Utilities such as water, sanitary and telephone are readily available in Shippensburg Borough and Newville Borough. The municipalities between the Boroughs are typically served by on-lot water and on-lot septic systems. Electric providers in the project corridor include Adams Electric, PP&L and GPU. Telephone service is provided by Sprint. Water and sewer

are provided in Newville by the Newville Borough Water and Sewer Authority. In Shippensburg Borough and Township, water is provided by Shippensburg Water Authority and sanitary sewer by the Cumberland Franklin Joint Municipal Authority. GPU has partnered with the CVRTC in the past to provide materials and labor to install utility pole bollards to control access to the trail corridor.

### ***Access and Circulation***

Along the length of the Cumberland Valley Trail there are numerous opportunities for access. The trail origins/terminus are located in communities within easy access of residential areas. In both Shippensburg and Newville there are sidewalks which lead to the trail corridor. Other access points, which occur along the trail includes the Shippensburg University vehicular and pedestrian routes and Shippensburg Township Park. At-grade crossings exist along the trail at the following roads:

- ◆ Fort Street
- ◆ Prince Street
- ◆ Britton Road
- ◆ Duncan Road
- ◆ Ott Road
- ◆ Oakville Road
- ◆ Fish Hatchery Road
- ◆ Nealy Road
- ◆ Bullshead Road

### ***Linkages/Trail Extensions***

Trail linkages are important to connect the trail with residential areas and community facilities such as schools, town centers, parks and other areas of interest. These connections provide safe, non-motorized routes between facilities and the trail corridor. The Cumberland Valley Trail has potential linkages to three significant community facilities: the Big Spring Fish Culture Station, a greenway along Big Spring Creek; Green Ridge Village retirement community; and Oak Flat Elementary School. Additionally, the trail origins/terminus are located in communities served by a fully developed sidewalk system. Routes from the trail to town centers of Shippensburg and Newville should be identified on maps at trailheads. Linkages to the three community facilities identified should be sought through access easements.

The 10.75-mile trail corridor is part of a regional rail network that extends west to Chambersburg and beyond, and east to Carlisle and Harrisburg. PP&L controls the right-of-way from PA Route 233 east to Carlisle. PP&L utilizes the right-of-way for utility lines which exist on poles along the corridor. PP&L has indicated its unwillingness to allow an extension of the trail from PA Route 233 east, to Carlisle. CVRTC should meet with PP&L to discuss the utility company's concerns and position regarding this trail extension.

### ***Segment Descriptions***

The lands of the CVRTC include the Freight Station Parcel and the rail corridor between Earl Street in Shippensburg and PA Route 233 south of Newville. The 10.75-mile length of the Cumberland Valley Trail was divided into nine segments. Following is a description of the Freight Station Parcel and nine segments.

### ***Freight Station Parcel***

- Location –** South of Garfield Street and north of the Conrail main rail line, between Seneca Street and the extension of South Earl Street in Shippensburg Borough and Shippensburg Township in Cumberland County and Southampton Township in Franklin County.
- Area –** 8.831 acres
- Overview –** The portion of the parcel in Shippensburg Township is zoned General Commercial (G-C). The parcel was formerly a rail freight transfer facility but has been vacant since the mid-1960's. The site is relatively flat with approximately 50 percent wooded and 50 percent open overgrown fields. There are two small watercourses and an area of wetlands on the site. The parcel is almost entirely within the mapped 100-year floodplain as delineated on the Flood Insurance Rate Map for Shippensburg Township, community-panel number 421585 0001 B, effective date: November 4, 1988. The site's main access is the extension of South Earl Street. South Earl Street parallels the tract. Local municipalities have expressed a desire to construct a connector road from South Fayette Street to South Earl Street. CVRTC has agreed to cooperate by providing the right-of-way for the connector road.
- Natural Features –** The woods, overgrown meadow, two small streams and wetlands are the dominant natural features of the site.
- Built Features –** Two small railroad bridge structures remain on the site which were previously discussed under Structures. A small shed on the site is in disrepair. The 100-year flood plain limits the use of the site. The higher portion of the site is in Shippensburg Borough and their floodplain regulations permit construction within a 100-year floodplain if appropriate flood proofing methods are utilized in construction. Refer to Appendix C for a survey of the Freight Station Parcel.

### ***Segment #1 – Shippensburg to Fogelsonger Road***

- Location –** From the east side of Earl Street in Shippensburg Borough to the west side of Fogelsonger Road.
- Length –** +/- 0.85 miles
- Overview –** This segment follows the old rail bed and is the most urbanized section of the trail project. The trail begins just south of Fort Street at North Earl Street. The trail is separated from North Earl Street by approximately 40 feet of open lawn of Shippensburg University. Except for a small triangle of land in the Borough south of Fort Street, the trail corridor is in Shippensburg Township adjacent to the Borough/Township line. The trail follows the rail bed east, with lands of Shippensburg University, on both sides of the right-of-way, crossing Prince Street and paralleling lands of Shippensburg University to Fogelsonger Road. The trail corridor bisects lands of the University, and students cross the corridor regularly to travel from residential areas to campus. A portion of the trail in this segment is lower than the surrounding grade. South of the corridor is a parcel targeted for a future University expansion which will include a vehicular and pedestrian crossing of the trail. The segment ends at the embankment created by the removal of

the Fogelsonger Road bridge. The corridor is approximately 25' higher than the road level.

Natural Features – The trail is in an open field condition immediately east of Earl Street. Where the trail is below surrounding grade, rock outcrops are visible on the north side of the trail. Two depressions were noted in the University area that may be sinkholes. Typical hedgerow vegetation exists along the trail in the area between Prince Street and Fogelsonger Road. The trail crosses Burd Run west of Fogelsonger Road.

Built Features – The trail passes the Shippensburg University steam plant just west of Prince Street. Parking for that building has encroached upon the trail right-of-way and must be removed to provide area for the development of the trail. Curb cuts exist as the trail crosses Prince Street. Stairs are located at the student crossing which connects the campus to the residential area on the south side of the trail. The Burd Run culvert is below the trail west of Fogelsonger Road.

### ***Segment #2 – Fogelsonger Road to Britton Road***

Location – From the east side of Fogelsonger Road to the west side of Britton Road.

Length – +/- 0.64 miles

Overview – This segment follows the old rail bed and is one of the most vegetated portions of the trail. On the south side of the trail at Fogelsonger Road is Shippensburg Township Park. Approximately mid-point along the length is the Shippensburg Township-Southampton Township border. Views to the south are of farm fields. The Fogelsonger Road bridge removed left a 25-foot embankment on the east side of the road. Britton Road previously crossed the rail corridor with a bridge, but the bridge was removed, the corridor area filled, and the road realigned. The embankment created intersects the trail corridor. The embankment is approximately 12 feet high.

Natural Features – Woods exist on the north side of the trail for the entire length of the segment, which provide shade and a sense of enclosure for the trail user. Dominant species are common trees and shrubs mentioned above.

Built Features – Shippensburg Township Park is 22 acres and has been designed as a possible trailhead for the trail. Facilities in the park that will serve trail users include vehicle parking for cars and horse trailers, rest rooms, picnic pavilion, drinking fountain and benches. An overhead electric line crosses the trail in the area of the park.

### ***Segment #3 – Britton Road to Duncan Road***

Location – From the east side of Britton Road to the west side of Duncan Road.

Length – +/- 2.10 miles

Overview – This segment follows the old rail bed and is very open in character. This segment is entirely within Southampton Township. The embankment created by the removal of the Britton Road bridge limits access to the trail corridor. The trail is approximately 16 feet below Britton Road. There is a small area of woods east of Britton Road and small areas of hedgerows along the

corridor. This segment has significant views of the farmland that dominates the Cumberland Valley. The hills that define the valley are visible from the trail. Approximately mid-point along the segment is the Martin Farm underpass. Rocks have been piled on the trail corridor in one area, and concrete debris is located adjacent to the trail within the trail right-of-way near Duncan Road. Duncan Road is an at-grade crossing.

**Natural Features –** The topography of the Cumberland Valley with the hills beyond is the dominant natural feature of the segment. The trail is enclosed in vegetation between Britton Road and the Martin Farm. Beyond the Martin Farm the trail is predominantly open with small amounts of hedgerow vegetation.

**Built Features –** There is a concrete underpass located on this section which originally functioned to allow cattle and farm machinery to pass under the railroad corridor. The underpass is currently used as a storage area for farm machinery, and farm machinery crosses the trail at grade level.

#### ***Segment #4 – Duncan Road to Ott Road***

**Location –** From the east side of Duncan Road to the west side of Ott Road

**Length –** +/- 1.36 miles

**Overview –** This segment follows the old rail bed and is entirely within Southampton Township. There is no vegetation along this segment of trail as it passes through farm fields. The topography is extremely flat on this segment. Ott Road has been realigned since the rail line was removed and now crosses the trail approximately six feet below the level of the corridor.

**Natural Features –** The topography of the Cumberland Valley is the dominant natural feature. This area of the trail is open without significant vegetation.

**Built Features –** The Cramer farmhouse, located directly adjacent to the trail corridor, is the dominant built feature along this segment of trail. The stone farmhouse is part of a farm building complex that includes the house, a barn and several other structures. There is an at-grade crossing west of the farmhouse which is used to take farm equipment across the trail.

#### ***Segment #5 – Ott Road to Oakville***

**Location –** From the east side of Ott Road to Oakville Road in Oakville.

**Length –** +/- 1.26 miles

**Overview –** This segment follows the old rail bed. There are two areas of embankment where Ott Road was realigned and where the Camp Road bridge was removed. The segment begins in Southampton Township and crosses to North Newton Township within 400 feet of Ott Road. The segment ends in the village of Oakville, a small-unincorporated hamlet, located at the intersection of Oakville Road and the trail corridor. The trail is located in an agricultural area with hedgerows typical on both sides of the corridor. When the corridor operated as a rail line, Ott Road was divided by the corridor and Camp Road ran parallel to the corridor and crossed the corridor at an eastern location, which provided a greater difference in grade. Since the removal of the rail line and bridges, Ott Road has been realigned to the west to cut

across the corridor, and the Camp Road crossing, to the east, has been abandoned.

**Natural Features –** Hedgerows are the dominant natural features. Species include common shrubs and herbs. A wooded side parcel owned by CVRTC is located east of Camp Road.

**Built Features –** Clouse Road runs parallel to the trail corridor and intersects with Ott Road at the western end of the segment. The only structures along the trail are in the area of Oakville. An unoccupied brick warehouse is located partially within the trail right-of-way just west of Oakville Road. Residential homes are located on either side of the trail at Oakville. The CVRTC has created a small rest area with a picnic table and sign on the southern side of the trail at Oakville Road.

### ***Segment #6 – Oakville to Fish Hatchery Road***

**Location –** From the east side of Oakville Road to the west side of Fish Hatchery Road.

**Length –** +/- 0.77 miles

**Overview –** This segment of trail follows the old rail bed and is entirely in North Newton Township. After leaving Oakville the corridor passes through open farm fields. The existing hills provide a picturesque background for a small white church located west of the trail.

**Natural Features –** The expansive farmland of the Cumberland Valley is the dominant natural feature.

**Built Features –** Two warehouse buildings are located on the south side of the trail in Oakville. The corridor crosses a private farm lane. There is a fenced cattle crossing west of Fish Hatchery Road which has been coordinated with CVRTC.

### ***Segment #7 – Fish Hatchery Road to Bullshead Road***

**Location –** From the east side of Fish Hatchery Road to the west side of Bullshead Road.

**Length –** +/- 1.18 miles

**Overview –** This segment of trail follows the old rail bed and is located entirely in North Newton Township. Hedgerows line the trail and distant views are limited. The trail crosses Nealy Road at-grade which was previously crossed by a bridge. The embankment at Nealy Road is approximately 13 feet on both sides. The farmer who owns adjacent lands has removed approximately 470±feet of ballast west of Bullshead Road.

**Natural Features –** Hedgerows exist along this section on the trail. Dominant species include the common shrubs and herbs found along corridors and trails.

**Built Features –** The corridor crosses Nealy Road and a cattle underpass (Yost Farm culvert). Cattle cross under the trail via the concrete underpass. A silo of the Yost farm on the west side of Bullshead Road encroaches onto the trail right-of-way.

### **Segment #8 – Bulls Head Road to Newville**

- Location –** From the east side of Bulls Head Road to Big Spring Road in Newville.
- Length –** +/- 2.16 miles
- Overview –** This is the longest segment of trail and is located in both North Newton Township and Newville Borough. The trail deviates from the old rail bed in the area from Bullshead Road east of approximately 2700 ± feet. The farmer has removed the ballast and plowed the corridor to expand the adjacent agricultural fields. East and west of this 2700± foot area the trail follows the old rail bed. West of Bullshead Road the corridor is below the grade of surrounding fields, vegetation lines the trail and rock outcrops are visible. There is a wooded side parcel north-west of the PA Route 533 underpass, and fronting on Fry Road owned by CVRTC.
- Natural Features –** Hedgerows exist for the majority of the segment. The surrounding landscape is agricultural fields. A mature stand of evergreen trees borders the trail from McFarland Street to the PA Route 533 underpass.
- Built Features –** There is a concrete structure with no defined drainage swale or use located west of the PA Route 533 underpass. The trail corridor crosses under a highway bridge for PA Route 533 just west on Newville. The trail passes the Pepsi plant east of PA Route 533 and other industrial uses. Access to the corridor is possible at McFarland Street. West of Big Spring Avenue is the site of the old train station and the station master's house. In the yard of the station master's house, excavation has uncovered evidence of additional rail lines. Looking south from the station master's house is an excellent view of Green Ridge Village, a retirement facility, and Big Spring Creek.

### **Segment #9 – Newville to PA Route 233**

- Location –** From Big Spring Road in Newville to PA Route 233 south of Newville.
- Length –** +/- 0.43 miles
- Overview –** This is the shortest segment of trail. It follows the old rail bed and is a raised embankment for most of the length of the segment. The raised embankment provides extensive views of the Big Spring Creek area. The trail ends at the raised embankment to PA Route 233.
- Natural Features –** The corridor is enclosed by vegetation on both sides of the trail for the entire length, which provides shade and a sense of enclosure. Big Spring Creek is located just east of Big Spring Road.
- Built Features –** The Big Spring Culvert is located east of Big Spring Road. A large concrete and brick culvert, approximately 200-feet long, carries Big Spring Creek under the trail. PA Route 233 is raised above the trail. The bridge abutments from the original Cumberland Valley Railroad bridge, remain at Big Spring Road, just north of the site of the 1994 removal of the Pennsylvania Railroad bridge.



Chapter 3  
**Citizen Participation**

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## **Citizen Participation**

Rail-trail projects by their linear nature, affect many people. A comprehensive understanding of the opportunities, benefits and concerns related to their development is important to communicate from the very outset. Ultimately a rail-trail will be a facility for public use and enjoyment. To assure the public's needs and concerns have been met, it is critical to include citizens in the decision making process. The public participation process included four segments: working with the Cumberland Valley Rails-to-Trails Council, interviewing key people and organizations, involving a Master Plan Advisory Committee and holding Public Forums.

### ***Cumberland Valley Rails-to-Trails Council, Inc.***

The Cumberland Valley Rail-to-Trail Council (CVRTC) is a non-profit, volunteer organization that was established in 1990 to promote the establishment of multi-use trails in south-central Pennsylvania and western Maryland. CVRTC owns and holds title to the trail. CVRTC is organized as a 501 C (3) corporation funded by membership dues, private contributions, and foundations and government grants. A volunteer board of directors elected by the membership manages CVRTC. The CVRTC played an instrumental role in the development of the Master Plan. The Council provided direction and guidance in the planning process, identified key contacts, served as a sounding board, participated in developing options and making decisions about management and operation, provided field study assistance and made presentations to organizations and jurisdictions within the corridor.

### ***Key Person Interviews***

Key person interviews were conducted throughout the planning process to provide critical insight into the concerns and issues surrounding the development of the Cumberland Valley Trail. Key person interviews were conducted in person and by telephone. Well over 100 individuals and organizations were interviewed throughout the planning process. They included:

- ◆ Representatives of the municipalities and their committees
- ◆ Adjacent landowners
- ◆ School officials
- ◆ User groups
- ◆ Private businesses
- ◆ Shippensburg University
- ◆ Law enforcement officials
- ◆ Operators of similar trails elsewhere
- ◆ CVRTC members
- ◆ General citizenry
- ◆ County and regional planners

### ***Master Plan Advisory Committee***

The Master Plan Advisory Committee (MPAC) was established as a smaller subcommittee of the CVRTC and citizen representatives to act as a sounding board, provide input and guidance and review the findings as the master plan was developed. The MPAC included the President, Vice President, and two CVRTC Board members and citizens representing the geographic areas of the trail.

## **Public Forums**

Three public forums were held to present progress on the master plan to the general citizenry and seek input to the planning process. The public forums were advertised and promoted locally. Members of the MPAC were invited to attend by mailed invitation or phone call. The public forums were well attended with over 35 attendees at the first forum and almost twenty at the second.

The forums were held in the communities along the trail; Shippensburg and Newville. The first forum was held in Shippensburg during project initiation to gain input into the planning process. The second forum was held in Newville midway through the planning process to review the preliminary findings and concept plan. The third forum was held at Green Ridge Village in Newville at the completion of the project to present the final master plan to the communities.

## **Findings**

The public forum and interview participation process revealed considerable support for the Cumberland Valley Trail. Interview highlights include the following:

### **General**

- ◆ Overall public support for the trail. Many people are already using the trail, even though it has not yet been developed.
- ◆ Shippensburg University will be a very important partner in the trail operation in terms of management, development and programming. Issues and an agreement need to be worked out between CVRTC and the University.
- ◆ The Borough of Shippensburg is willing to work with CVRTC in locating a trail head on Borough Hall property.
- ◆ Shippensburg Township is creating a trail head in their township park.
- ◆ Provide interpretive signage
- ◆ Need to have trail accessible to emergency and security vehicles
- ◆ Need to have rest stops and shady areas
- ◆ Should have signage for trees or other natural features
- ◆ Have water spots for both people and horses
- ◆ Have rest rooms
- ◆ Even though the trail is being used, there is virtually no litter and no trouble
- ◆ People want to get involved more but they don't know how and tasks have not been outlined that they could perform.
- ◆ Need to connect the trail beyond the proposed corridor
- ◆ Organizations interviewed expressed their support for the project, as well as the interest on an individual level among their people. This has implications for volunteer recruitment,( e.g., State Troopers are very interested in the trail as a safe place to run and bike). It may be possible to tap into this interest and create a volunteer courtesy patrol, have them help to set one up, or pursue other ways to recruit them as volunteers.

### **Concerns**

- ◆ Jurisdictions have extremely limited resources in terms of both funding and work forces. It is unlikely that CVRTC will receive any financial support or labor from the jurisdictions within the corridor.

- ◆ Some hard feelings exist between landowners and the CVRTC. This can be attributed to the normal process of change that trail development demands. The implications are that the CVRTC will need to cultivate good relationships with trail neighbors.
- ◆ Motor cycles, four wheelers, and ATV's were cited as the only negatives. There is concern about ATV use increasing once the trail is developed.
- ◆ Shippensburg University has major concerns about trail safety regarding the trail passing a women's dormitory.
- ◆ Trail crossings for farmers cause them extra work in operating the gates.
- ◆ Need to get people to clean up after their dogs
- ◆ Big Spring Culvert condition
- ◆ Crossings and the danger they represent
- ◆ Concern about tax money being used to build a facility that not everyone uses
- ◆ Where will people park?

## Conclusions

Citizens of western Cumberland County are generally in favor of the development of the Cumberland Valley Trail. Because the trail has been under the control of the CVRTC since 1995 it is accepted that the rail corridor will be developed into a recreation trail. Many citizens voiced their support for the project and excitement to have such a significant recreation resource in the area. An important job for CVRTC is to capitalize on the positive public sentiment and work on their outreach program in a collaborative fashion. It is important for the CVRTC to have effective working relationships with the community, especially adjacent landowners. It is important to note that trail projects normally come with opposition that requires a great deal of work to overcome. CVRTC is blessed with the fact that this opposition does not exist here. Once the trail undergoes development, it will be important for CVRTC to be vigilant in the outreach and relationships to insure that the positive reception of the trail in the community is sustained. Several opportunities exist for CVRTC to get major support. These include Shippensburg University in terms of trail development, operation, security and management, and Cumberland County in terms of overall trail management should the County establish a parks and recreation department.

Chapter 4  
Conceptual Trail Design

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The Cumberland Valley Rails-to-Trails Council did extensive discussion and planning of project goals preparing for the master site plan project. Such pre-planning enabled the Council to issue an RFP that contained a list of well over 100 issues related to trail planning, development and management. Using this information as the basis to launch planning efforts at two visioning workshops with the CVRTC Board and the Master Plan Advisory Committee, the planning team established the overall project goals and the issues. The team developed the conceptual designs based upon the overall project goals and investigated each one of the issues identified by the CVRTC during field reconnaissance and all work sessions with the Council and Advisory Committee. As the planning process progressed, additional issues emerged and were incorporated into the plan. Methods for achieving these goals and resolving identified issues formed the basis for the conceptual designs and the recommendations in the Master Plan.

The team worked towards consensus building on the resolution of difficult issues in light of the fact that many dedicated individuals with a host of different perspectives and interests were all part of this project. While unanimity on all issues was impossible to achieve, CVRTC, organizations and individuals within the corridor came together to decide how to develop the Cumberland Valley Trail in the best interest of the whole community with the resources available.

## **Project Goals**

The common themes that emerged as project goals are summarized as following:

- ◆ The development of a non-motorized, multi-use recreation trail for pedestrians, bicyclists, and equestrians on the 10.75-mile corridor as a local recreation resource as well as an important link in a regional trail network.
- ◆ Because of the demolition of the bridges on the trail by the PUC, designing safe, appropriate trail crossings was a major goal. Alternatives such as bridges and grading of slopes were to be considered.
- ◆ Connections with other destinations along the corridor needed to be incorporated such as the Shippensburg Township Park and Shippensburg University.
- ◆ Linking the Cumberland Valley Trail with other planning efforts in the arena of tourism, economic development and greenway planning was important to the future success of both the trail and community development efforts.
- ◆ Establishing, sustaining and enhancing partnerships for trail development, operation and maintenance was important.
- ◆ Conservation of the natural resources that exist within the trail corridor needed to play an important role in planning. Restoration of the natural features of the corridor could be achieved in part by developing a plan for the identification and removal of invasive species along the trail corridor.

- ◆ Determination of potential uses for the Freight Station Parcel located separate from the trail corridor in Shippensburg Borough.
- ◆ The exploration of interpretive themes including the rural, cultural and environmental features along the corridor needed to be done.
- ◆ Assessment of the management of the trail given the fact that CVRTC is an all-volunteer organization. Development of options to plan for future operation and management of the trail.

## Trail Users

The Cumberland Valley Trail is located in the western portion of Cumberland County and will primarily serve users from this area. Two Boroughs anchor the trail with rural municipalities in between. The populations of the municipalities in the project area are outlined in Table 4-1.

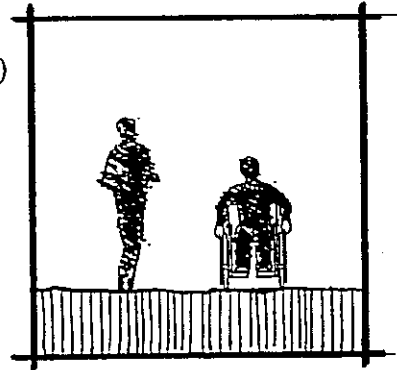
Municipality	1990 Population
Southampton Township (Franklin County)	5577
Shippensburg Borough	4328
Shippensburg Township	4606
Southampton Township (Cumberland County)	3552
North Newton Township	1779
West Pennsboro Township	4945
Newville Borough	1349

Total population of the municipalities in the project area is 26,136 according to the US 1990 Census. Additionally, Shippensburg University has a population of over 6,000 students during the school year. This population base will provide a ready audience for the trail. Recreation surveys consistently identify trail use as one of the most popular recreation activities in the Commonwealth and is enjoyed by a broad cross-section of the population.

It is anticipated that the Cumberland Valley Trail will be used during all four seasons of the year by a variety of users to include walkers, hikers, joggers, bicyclists, cross-country skiers and equestrians. The majority of the uses listed above will occur during non-winter months. Motorized vehicles will not be permitted on the trail except for maintenance and security purposes. Winter trail use will include cross-country skiing. The trail must meet the requirements of the Americans with Disabilities Act (ADA) and the American Association of State Highway Transportation Officials (AASHTO) for its entire length. Trail users and user criteria are identified below.

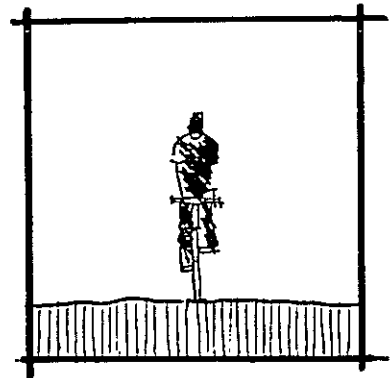
### ***Pedestrians/Persons w/ Disabilities***

Travel Speed -	3 to 7 miles per hour
Vertical Clearance -	7 feet
Sight and Stopping Distance –	50 feet
ADA Requirements –	Maximum 5% grade (1:20) w/o handrail, maximum 8% grade (1:12) w/ handrail
Trail Width –	5 feet minimum
Trail Surface Preference –	Compacted aggregate (pedestrians), bituminous (persons w/ disabilities)
Trail Support Facilities –	Rest rooms, benches, drinking fountains, picnic tables, telephones



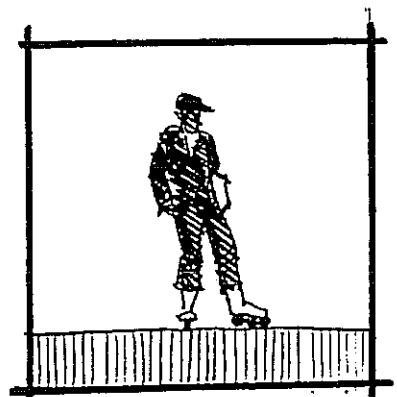
### ***Bicyclists***

Travel Speed -	20 miles per hour
Vertical Clearance -	8 feet
Sight and Stopping Distance –	150 feet
Trail Width –	10 feet w/ 2-foot shoulders (8 feet minimum)
Trail Surface Preference –	Compacted aggregate or bituminous
Trail Support Facilities –	Rest rooms, benches, drinking fountains, picnic tables, telephones, bike racks/lockers



### ***In-line Skaters***

Travel Speed -	10 to 17 miles per hour
Vertical Clearance -	8 feet
Sight and Stopping Distance –	100 feet
Trail Width –	12 feet w/2.5-foot shoulders, for two-way travel
Trail Surface Preference –	Bituminous
Trail Support Facilities –	Rest rooms, benches, drinking fountains, picnic tables, telephones





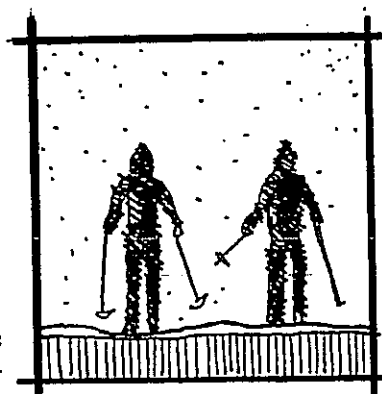
## ***Equestrians***

Travel Speed -	5 to 15 miles per hour
Vertical Clearance -	10 feet
Sight and Stopping Distance -	100 feet
Trail Width -	4 feet (tread) with 8 feet clear
Trail Surface Preference -	Grass
Trail Support Facilities -	Rest rooms, benches, drinking fountains, picnic tables, telephones, hitching posts, mounting blocks at bridge crossings



## ***Cross-Country Skiers***

Travel Speed -	2 to 8 miles per hour
Vertical Clearance -	7 feet
Sight and Stopping Distance -	50 feet
Trail Width -	7 feet
Trail Support Facilities -	Rest rooms, benches, drinking fountains, picnic tables, telephones, shelter



## **Buggies on the Trail: New and Complex Issue**

The question of buggies using the Cumberland Valley Trail emerged during the planning process. From the outset of the project, it was the goal of the planning team to try to accommodate all forms of non-motorized transportation on the pathway. Non-motorized transportation included pedestrian, bicycle and horseback. The concept of buggies emerged from two perspectives: Amish buggies and cross country horse racing carriages. There is a significant Amish community within the corridor as well as some interest in cross country horse racing near Newville .

With the understanding that both uses were possibilities on the Cumberland Valley Trail, the planning team conducted research about accommodating buggies through other rail trails in Pennsylvania, Indiana and Ohio where there are large Amish communities. We interviewed national trail planners, state contacts, rail trail planners and a national rail trail conservancy board member. All contacts indicated that there is very limited information about buggies using rail trails. In the mid-west, planners have developed information on how to accommodate buggies safely on rail trails. Several concerns were raised including the impact of the wheels on the pathway and safe passing of vehicles. In Indiana, the Amish community is so large, that trail planners wanted to have buggy trails for the Amish as a way of generating support for their trail. A substantial number of buggies use the highways in this area resulting in the asphalt highway surface being chewed up by buggy wheels; there was some thinking in the community that the

trails would be a better alternative for buggies than the highways. For the trail planners, the impact of the horses and buggies on the trail surface and the need to have two trail treads to allow buggies to pass made the cost prohibitive. They also expressed concern about the trail attracting motorized vehicles because the tread would essentially be perceived as a road with two wide treads. This presents a considerable danger to non-motorized users on the trail.

The following information was gathered regarding horse and buggy use on multi-use trails:

- ◆ Safety is a concern regarding travel speed.
- ◆ Horse and buggies can travel at a wide variety of speeds and the speed limit permitted on the trail would need to be posted.
- ◆ There is no full time presence for monitoring horse and buggy speed on the trail.
- ◆ Horse and buggies are incompatible with slower moving trail users such as pedestrians, children, persons with disabilities and bicyclists.
- ◆ The narrow buggy wheels are destructive to the stone pavement proposed for the trail resulting in increased maintenance.
- ◆ The trail is designed to be closed to vehicles except for authorized use. Traffic control bollards and gates are proposed at trail access points. Horse and buggies would require wider openings, similar to vehicles at trail access points, which would allow easier access by non-authorized motor vehicles.
- ◆ Separate treads are recommended for equestrians and other users. Horse and buggy users prefer the stone tread because of the buggy wheels, but horses are not compatible on the stone tread with other users.
- ◆ The proposed width of the grass tread will not adequately convey two-way horse and buggy traffic.
- ◆ The need for horse and buggy use on the trail has not been broad based from the community.

Based upon this research, the planning team concluded that the development of two wide treads on the Cumberland Valley Trail and the cost of maintenance in repairing tread damage from buggies and horses became too expensive for the CVRTC in development and operating costs. Additionally there are safety concerns regarding multiple users. This document does not seek to set policies for CVRTC regarding trail users, but rather to make recommendations based on the research conducted. Horse and buggy use is not recommended based on the research conducted.

## Other Trail Uses

Hunting has traditionally occurred along the hedgerows that line the trail. Hunters are prohibited from this activity based on the policies of CVRTC. Hunting and trapping must be prohibited within and across the right-of-way of the Cumberland Valley Trail.

## Cumberland Valley Trail Conceptual Plan

A conceptual plan was developed for the Cumberland Valley Trail, early in the planning process. The conceptual plan was developed to align to the opportunities and constraints identified in the inventory and analysis phase of the planning process. The design considered the project goals, public input and needs of the various user groups identified. The conceptual plan for the trail illustrated the preliminary design ideas. Trail origins/terminus locations were determined, access points were identified, rest areas, picnic areas and comfort stations were located, trail linkages and extensions were identified and solutions to the road crossings were provided. The Concept

Plan was reviewed at a MPAC/public meeting in Newville. Interested citizens and committee members provided their thoughts and comments regarding the concept plan as presented. The Cumberland Valley Trail Conceptual Plan (Map 2) is illustrated on the next page followed by a description of the proposed trail facilities.

### ***Trail Tread***

The trail corridor is 10.75 miles long with a western terminus at Earl Street in Shippensburg Borough and an eastern terminus of PA Route 233 in West Pennsboro Township. The trail will be developed for multiple users. Identified users include pedestrians and persons with disabilities, bicyclists, in-line skaters, equestrians and cross-country skiers. These multiple users have differing trail requirements as identified above. To meet the needs of multiple users a dual-tread trail is proposed for the Cumberland Valley Trail: a main tread with separate equestrian tread. The equestrian tread should be separate from the tread of other users because of the travel speed, different surface material, and general incompatibility of horses and other activities. The typical width of the trail corridor area is 25-35 feet and will accommodate separate treads. The entire length of trail will be developed to allow travel by emergency and security vehicles and will meet the regulations of the ADA.

The trail between Earl Street and Shippensburg Township Park (just west of Fogelsonger Road) will be developed with a 12-foot-wide bituminous tread and an 8-foot-wide grass tread. Walkers, joggers, bicyclists and in-line skaters will utilize this length of the trail. See Figure 4-1.

This area of the trail will not be available to equestrians initially but facilities such as the proposed Fogelsonger Road bridge should be constructed to accommodate horses. Equestrian use of this section of the trail will be provided on the grass shoulder of the trail at such time as the trail is extended to the west and/or other linkage destinations are provided outside the urban center. Development of the trail with a bituminous surface in this limited area is compatible with the urban and university setting and associated high use that is anticipated.

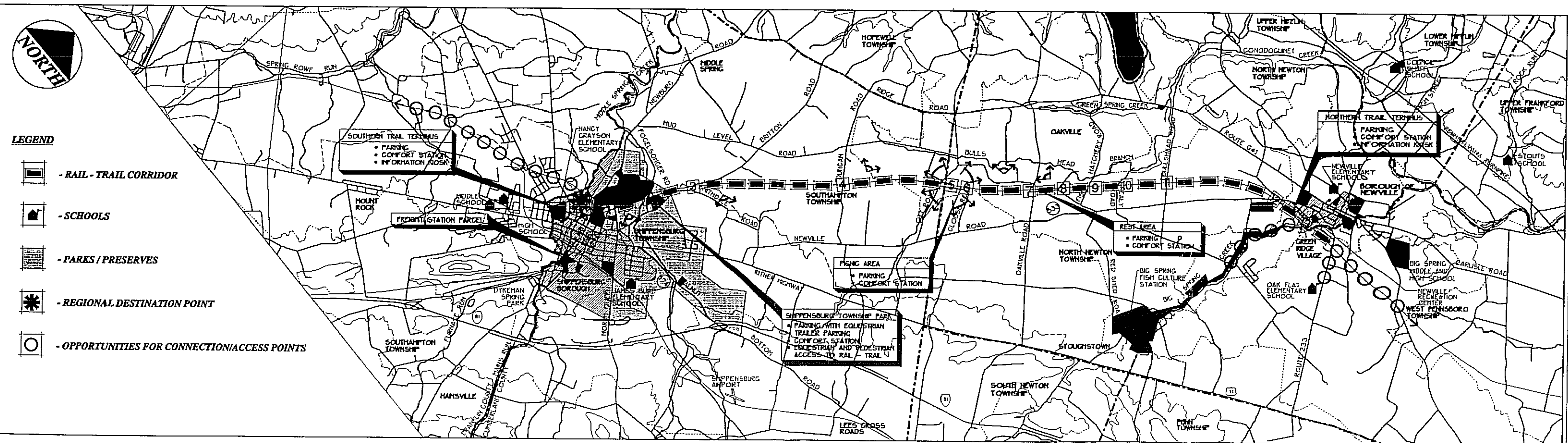
The trail between Shippensburg Township Park and PA Route 233 will be developed with a 10-foot-wide stone tread and a eight-foot wide grass tread/shoulder. Walkers, hikers, joggers, bicyclists, cross-country skiers and equestrians will utilize this length of trail. The equestrian trail may separate from the stone tread were there is sufficient width within the corridor area.

Both treads will be developed on top of the existing ballast material as much as possible with a parallel grass tread for equestrian use. The existing ballast will be graded to provide the base course. The ballast will be compacted to remove track tie memory; the impression of the wooden track ties on the ballast. The base course will be topped with either a bituminous surface course or a stone surface course as described above.

### ***Trailheads/Picnic Areas/Rest Areas***

Four trailheads are proposed for the Cumberland Valley Trail between Shippensburg and Newville. Two trailheads are located in the western portion of the trail; close to the southern trail terminus at the Shippensburg Borough municipal parking lot on Burd Street and at the Shippensburg Township Park. A centralized trailhead is proposed in Oakville. An eastern trailhead is proposed at McFarland Street in Newville.

# Cumberland Valley Trail Master Plan

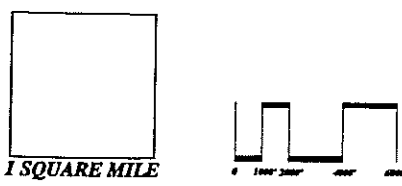


**LEGEND**

- RAIL - TRAIL CORRIDOR
- SCHOOLS
- PARKS / PRESERVES
- REGIONAL DESTINATION POINT
- OPPORTUNITIES FOR CONNECTION/ACCESS POINTS

**CROSSINGS: SUGGESTED IMPROVEMENTS**

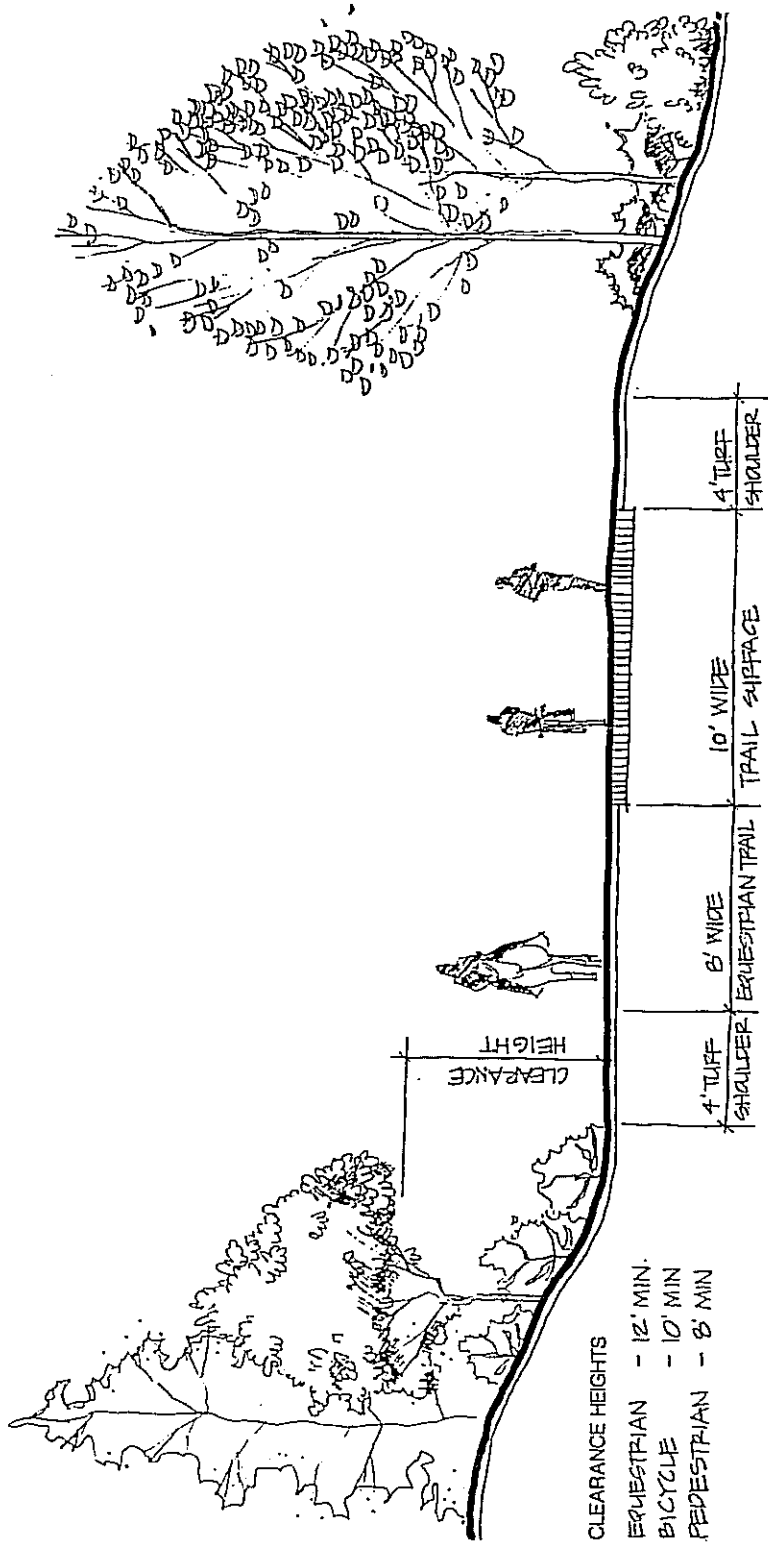
- |  |  |  |   |  |
|--|--|--|---|--|
| 1 BRIDGE STREET (SR-4035)<br>• INSTALL SIGNALS<br>• PAINT CROSSWALK  | 4 DUNCAN ROAD (SR-4003)<br>• INSTALL SIGNALS<br>• SIGNALS / PAVEMENT MARKINGS  | 7 OAKVILLE ROAD (SR-3005)<br>• INSTALL SIGNALS<br>• SIGNALS / PAVEMENT MARKINGS    | 10 NEALY ROAD (T-353)<br>• GRADE IMPROVEMENTS TO PROVIDE ACCESSIBLE TRAIL TO AT-GRADE CROSSING<br>• SIGNALS / PAVEMENT MARKINGS | 13 BIG SPRING AVENUE (SR-3007)<br>• CONSTRUCT BRIDGE |
| 2 FOGELSONGER ROAD (T-307)<br>• CONSTRUCT A BRIDGE   | 5 OTT ROAD (T-326)<br>• GRADE IMPROVEMENTS TO PROVIDE ACCESSIBLE TRAIL TO AT-GRADE CROSSING<br>• SIGNALS / PAVEMENT MARKINGS   | 8 FARM LANE<br>• INSTALL SIGNALS<br>• SIGNALS / PAVEMENT MARKINGS                  | 11 BALLSHEAD ROAD (SR-4015)<br>• SIGNALS / PAVEMENT MARKINGS  |  |
| 3 BRITTON ROAD (SR-3001)<br>• GRADE IMPROVEMENTS TO PROVIDE ACCESSIBLE TRAIL TO AT-GRADE CROSSING<br>• SIGNALS / PAVEMENT MARKINGS | 6 ABANDONED ROAD<br>• FILL AREA BETWEEN TRAIL IMPROVEMENTS WITH MATERIAL FROM DIRT ROAD EXCAVATION TO PROVIDE CONTINUOUS TRAIL | 9 FISH HATCHERY ROAD (T-388)<br>• INSTALL SIGNALS<br>• SIGNALS / PAVEMENT MARKINGS | 12 NEWVILLE ROAD (SR-533) (UNDERPASS)<br>• INSTALL GATES TO ENCLOSE UNDERPASS STRUCTURE   |  |



Prepared for:  
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## Concept Plan



**MULTI - USE TRAIL**  
NOT TO SCALE

FIGURE 4-1

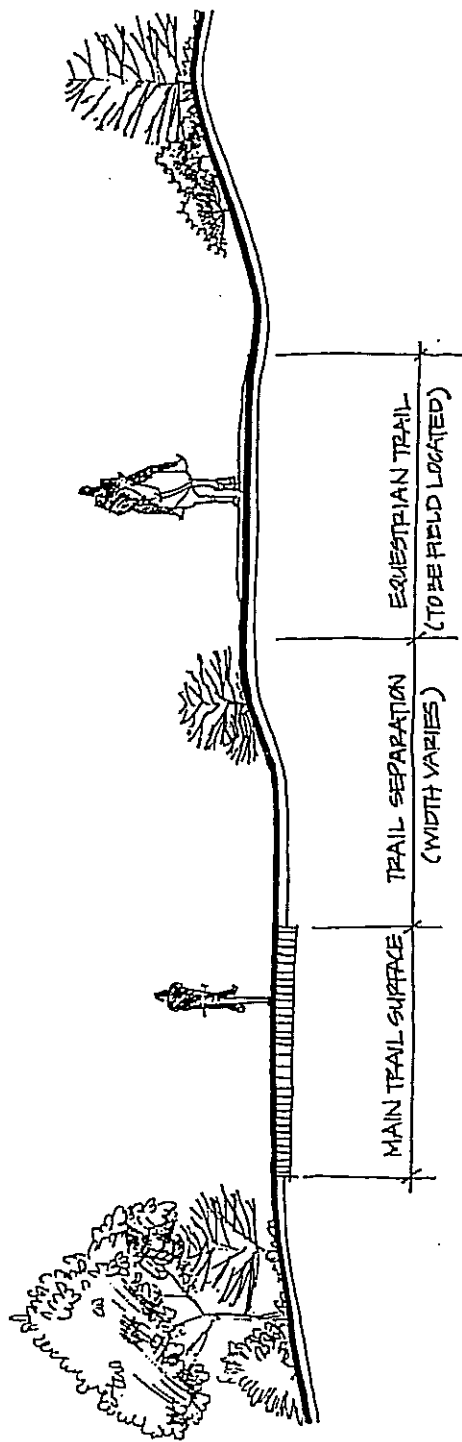
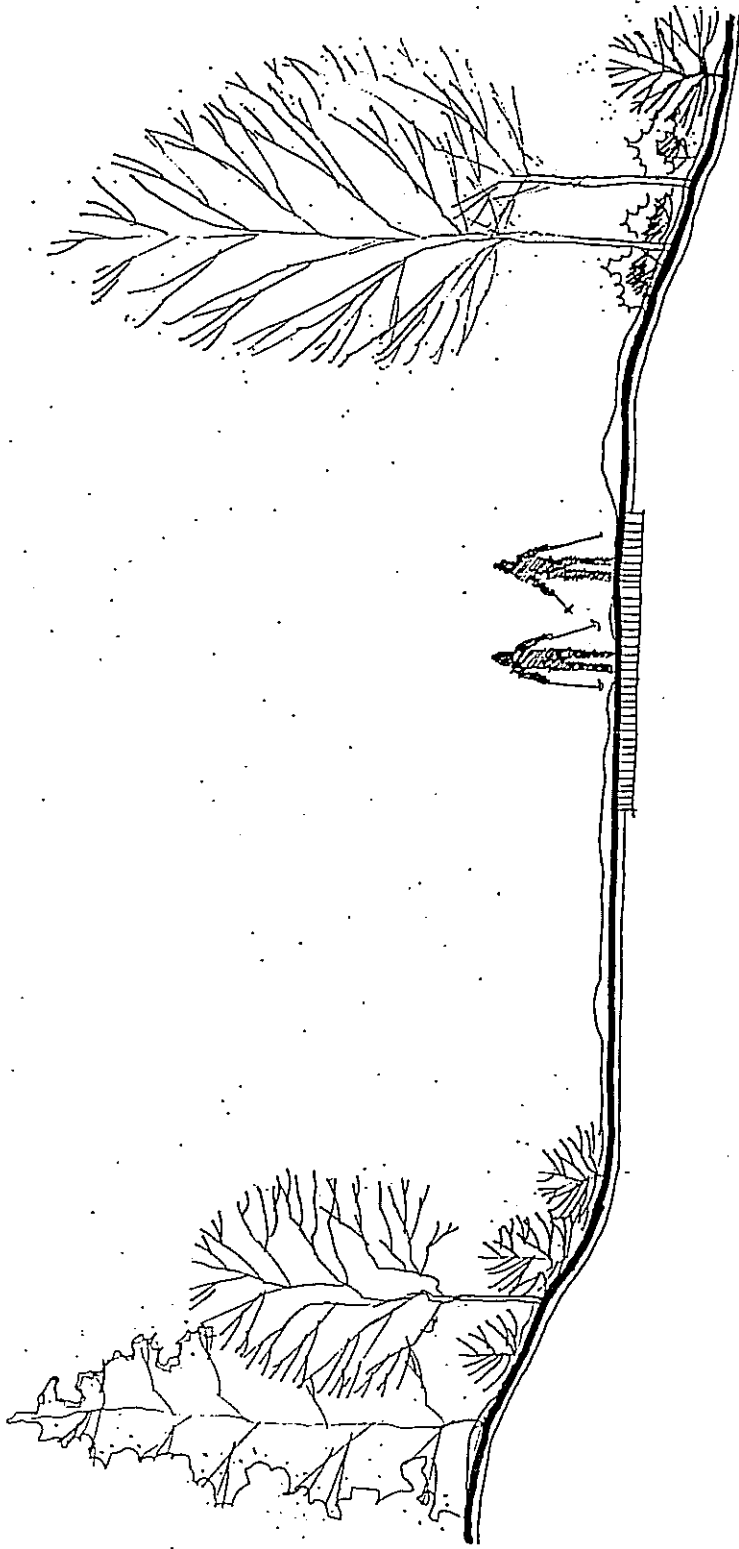


FIGURE 4-2

**SPLIT TRAIL**  
NOT TO SCALE



**SEASONAL TRAIL USE**  
NOT TO SCALE

FIGURE 4-3

The Shippensburg Township Park, Oakville, and McFarland Street trailheads will have similar facilities; vehicular parking for trail users and horse trailers, rest room facilities, bike racks, trash receptacles, information signage, mile markers, picnic pavilion, picnic tables, hitching post, telephones and benches. All parking areas will be developed with stone base course choked with fines for the standard, handicap and horse trailer parking spaces. Handicap accessible parking spaces will be available at all parking areas. Bollards will be placed on the trails connecting the parking areas to the trail. Bollards will be removable to control access while allowing emergency security and maintenance vehicle access. The Shippensburg Borough municipal parking lot trailhead will have information signage and parking for vehicles but not horse trailers. Development of public rest room facilities at this location should be explored with the Borough.

Three picnic areas are proposed along the trail; at the Oakville trailhead, at the McFarland Street trailhead and east of Ott Road in North Newton Township. Additionally, picnic facilities are proposed at Shippensburg Township Park which are available for trail users. Support facilities at picnic areas should consist of picnic tables, bike rack and horse hitching posts.

### **Road Crossings**

There are thirteen road crossings along the 10.75-mile length of the trail. Of the thirteen crossings, six are at bridge removal locations, six are at-grade crossings and one is an underpass. Seven crossings are at Pennsylvania Department of Transportation roads (SR designation) and six are at Township roads (T designation). Preliminary road crossing improvements follow:

Prince Street (SR-4035) –	Install signage and paint crosswalk.
Fogelsonger Road (T-307) –	Construct a bridge.
Britton Road (SR- 3001) –	Grade embankment to provide accessible trail to at-grade crossing, install signage and pavement markings.
Duncan Road (SR- 4003) –	Install signage and pavement markings.
Ott Road (T-328) –	Grade embankment to provide accessible trail to at-grade crossing, install signage and pavement markings.
Camp Road –	Abandoned -Fill area between trail embankments with material from Ott Road excavation to provide continuous trail.
Oakville Road (SR-3005) –	Install signage and pavement markings.
Farm Lane –	Install signage and pave the lane at the crossing.
Fish Hatchery Road (T-388) –	Install signage and pavement markings.
Nealy Road (T-353) –	Grade embankment to provide accessible trail to at-grade crossing, install signage and pavement markings.
Bullshead Road (SR-4015) –	Install signage and pavement markings.
Newville Road (SR-533)–	Underpass - Enhance visual access in area of bridge structure
Big Spring Avenue (SR-3007) –	Construct bridge.

See Figures 4-4/5 for road/trail crossing signs and sign placement along the trail.



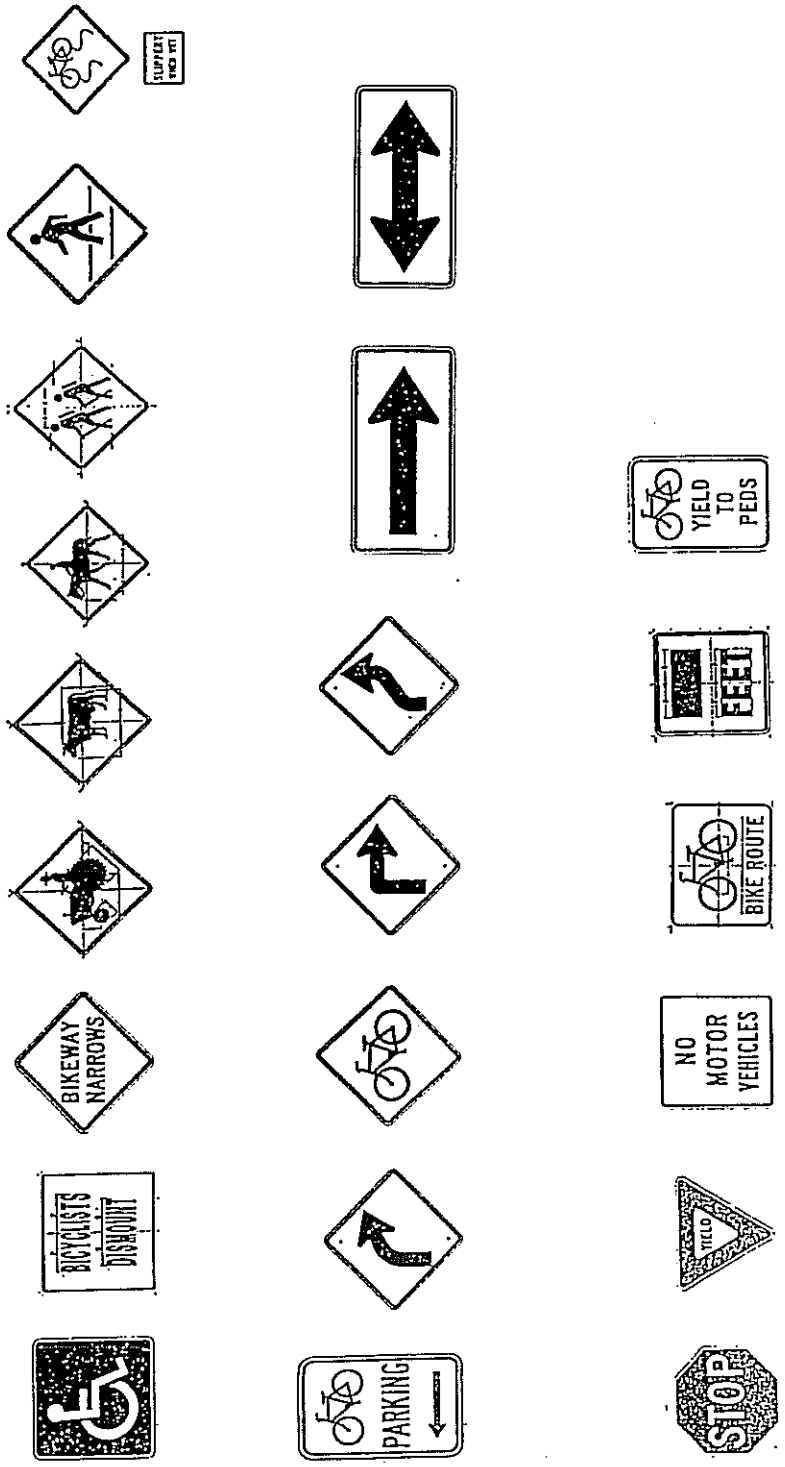
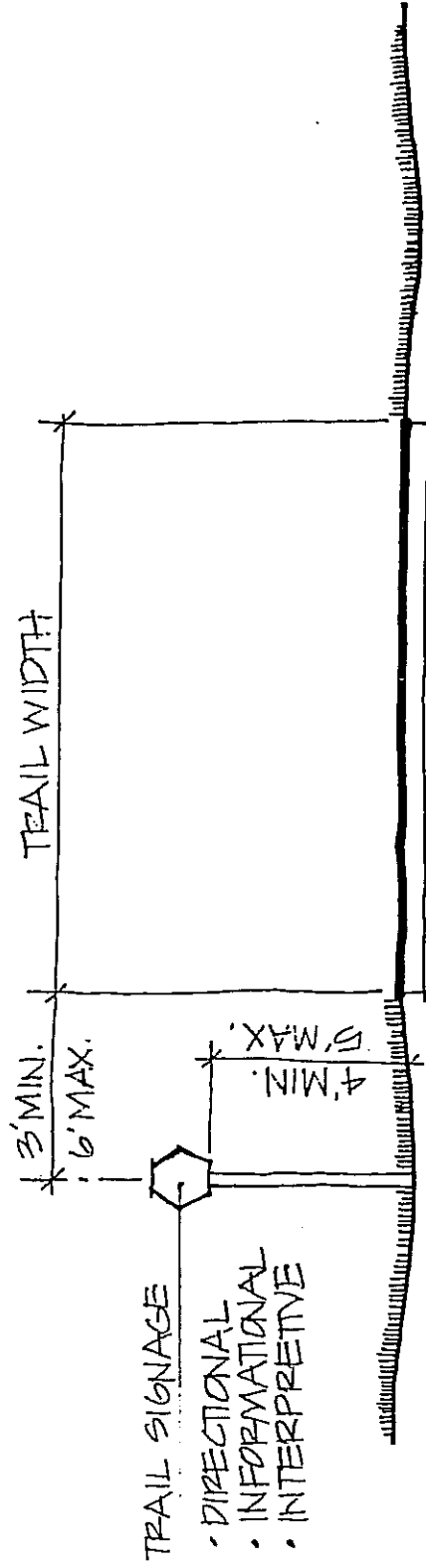


FIGURE 4-4

TRAIL SIGNAGE  
NOT TO SCALE

NOTE: TRAIL AND TRAFFIC SIGNAGE  
WITHIN PENNDOT AND MUNICIPAL  
R.O.W. SHALL HAVE A 7.5 FT  
MINIMUM CLEARANCE.



**SIGN PLACEMENT**  
NOT TO SCALE

FIGURE 4-5

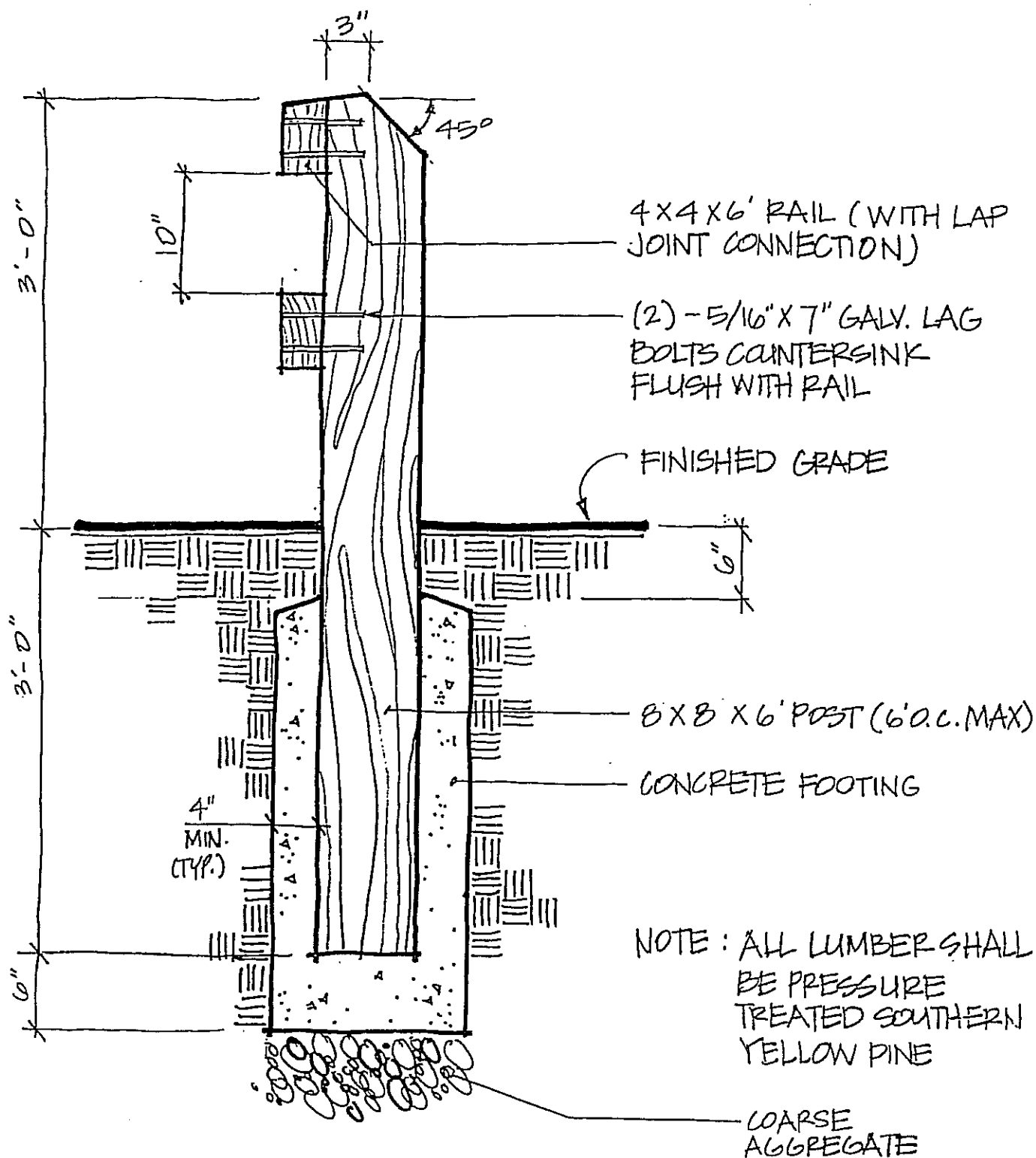
## ***Support Facilities***

Support facilities are critical components of a successful, enjoyable recreation trail. Trail users desire support facilities that make the trail convenient to use, such as benches placed in a shady location or hitching posts to tie a horse outside a rest room facility. Support facilities serve the additional purpose of connecting the trail through a vocabulary of elements with similar design characteristics. Benches and bollards and other facilities which are similar in design and detail unify the trail. Typical support facilities were identified with each user group. The Cumberland Valley Trail should have the following support facilities:

Rest rooms –	Rest rooms placed at all trailheads.
Benches –	Benches placed at each trailhead, rest stop and picnic area. Additional benches may be located along the trail for resting, and locations should be chosen for their interest or shade.
Drinking Fountains –	Drinking fountains placed at trailheads where public water is available.
Picnic Tables –	Picnic tables provided at rest areas and trailheads.
Bike Racks –	Bike racks placed at all trailhead areas and in the university area.
Trash Receptacles –	Trash receptacles should be provided at trail heads only. The trail corridor should be developed as a “carry in/carry out” facility.
Hitching Posts –	Hitching posts available at all trailheads and rest stops.
Telephones –	Telephones provided at trailheads.
Guide Rail –	Guide rail placed as necessary to control access and for user safety in areas of steep side slopes and road crossing. The proposed guiderail as shown in Fig. 4-6 is not intended for vehicular protection and should not be located within any PennDOT rights-of-way.
Lights –	Light may be installed along the trail if the trail is available for night use.
Traffic Control Bollards –	Traffic control bollards placed in access trails to prohibit unauthorized vehicles entering the trail corridor. Bollards to be removable type for access by emergency, security and maintenance vehicles.
Traffic Control Gates –	Traffic control gates placed at at-grade road crossings to stop trail users prior to crossing a road.
Maintenance Building –	Maintenance building located convenient to the trail to store equipment for ongoing maintenance activities.

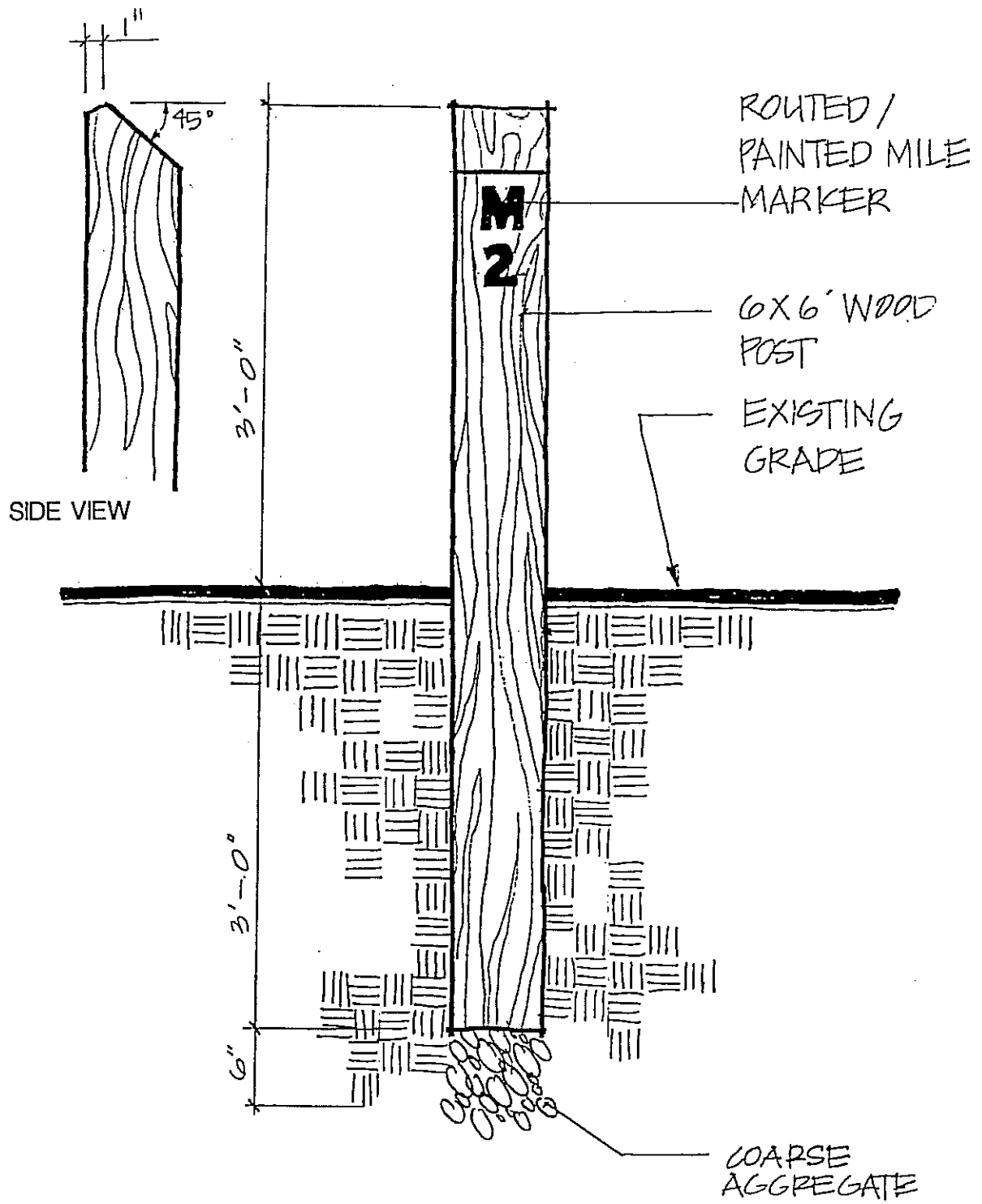
## ***Signage System***

A comprehensive signage system is important to trail design. Signs serve many functions along a trail; to provide information, to identify direction, to identify the trail miles, and to alert users of safety concerns. Just as with support facilities, signs should be developed with similar design details to create a vocabulary of signs. See Figures 4-7/8/9.



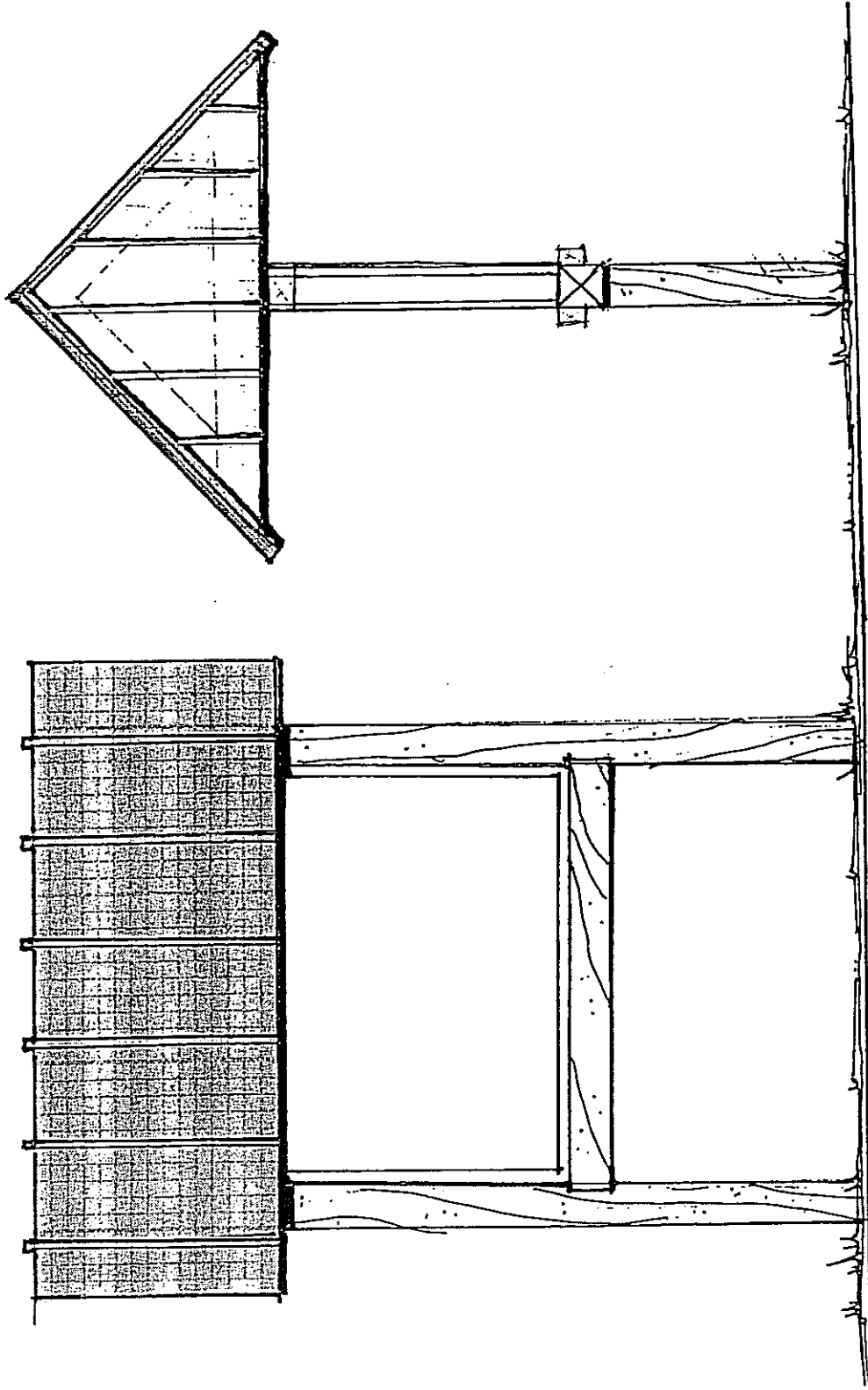
**TYPICAL TIMBER GUIDE RAIL**  
NOT TO SCALE

FIGURE 4-6



**TYPICAL MILE MARKER**  
NOT TO SCALE

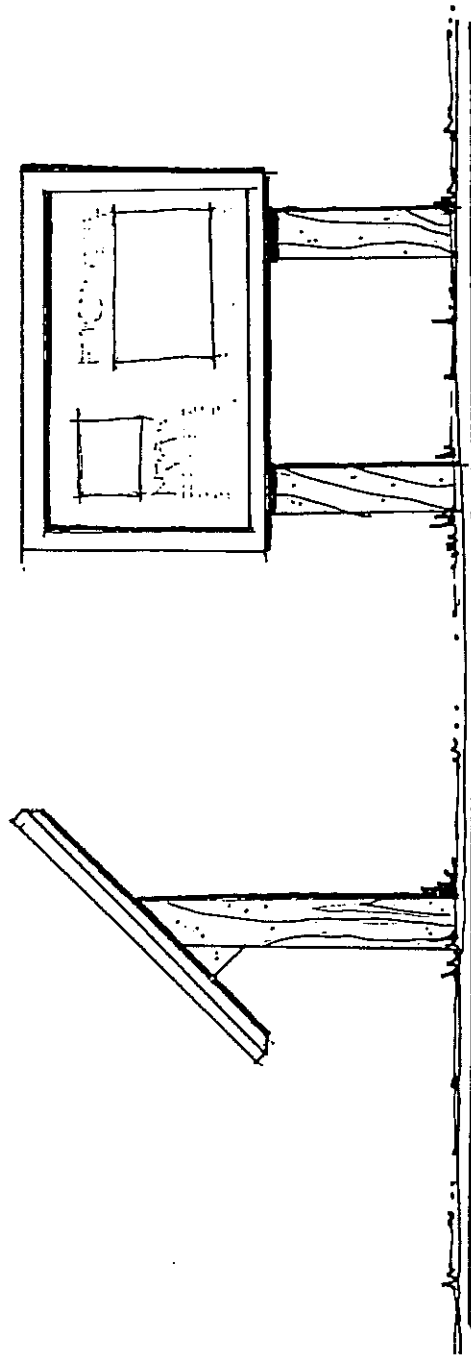
FIGURE 4-7



**INFORMATIONAL SIGNAGE - TRAILHEAD**

NOT TO SCALE

FIGURE 4-8



**INTERPRETIVE SIGNAGE**  
NOT TO SCALE

FIGURE 4-9

- Mile Markers* – Markers located at one-half mile intervals along the length of the corridor. Mile identification numbers should be visible for both east and west bound users.
- Informational Signs* – Information signs located at trailheads to provide information about the trail, such as trail use policies, trail map and other graphic displays.
- Interpretative Signs* – Interpretative signs placed at points of interest along the trail for educational and general interest purposes.
- Directional Signs* – Directional signs placed at trailheads and access points to identify distance and direction to points of interest.
- Traffic Signs* – Traffic signs placed on the trail and roads that cross the trail to warn trail users and vehicles of road crossings.

### ***Freight Station Parcel***

The freight station parcel has limited use relative to the trail development because of its environmental characteristics and its remote location separate from the trail corridor. Although the freight station parcel was originally on the same rail line as the trail corridor, west and south of Earl Street the tracks ran on Borough streets. Continuation of the Cumberland Valley Trail along Earl Street, south to the freight station corridor is possible, but practical only if there is a significant destination or trail extension in that area. Of course, downtown Shippensburg is a significant destination but the downtown area can readily be accessed via the existing sidewalk network. The freight station parcel is zoned General Commercial (C-G) in both Shippensburg Township and Shippensburg Borough.

Local municipalities have expressed the desire to extend South Earl Street to South Fayette Street and Route 81 to create a direct link to the Borough of Shippensburg. The CVRTC has agreed to provide the right-of-way for the extension to South Fayette Street. Due to the involvement of PennDOT and the environmental permits necessary, it would likely take many years until the extension is constructed. Without the road extension the parcel has limited potential as a developable site. Less than one-tenth of an acre is outside of the 100-year floodplain. The location, surrounding land uses and infrastructure and environmental characteristics of the site limit its current commercial viability.

The Shippensburg Area Little League has expressed an interest in developing a portion of the freight station parcel as a baseball field. The site could also be part of a green link between the Borough center and the Borough's Dykeman Spring Park. CVRTC may wish to explore transfer of the parcel to Shippensburg Area Little League or Shippensburg Borough for recreation purposes. Parks and recreation areas are often developed in floodplain areas and recreation use is compatible with the location and characteristic of the site.



Chapter 5

# Cumberland Valley Trail Master Plan

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## **Introduction**

This master plan documents the detailed design proposed for the Cumberland Valley Trail. The master plan is based on the conceptual plan for the trail and modified to its final form with consideration of public input received at the MPAC/public meeting held in Newville and the results of additional research and field investigation to field test the conceptual design. Description of the Cumberland Valley Trail master plan is organized by trail segments preceded by a discussion of common design issues and elements.

The master plan is a blueprint for a linear public recreation facility that will meet the needs of multiple users and provide opportunity for exercise, enjoying nature, spending time with family and friends, and exploring the Cumberland Valley.

## **Trail Theme**

Themes for the trail have been considered from the outset of the planning process. The trail is located within the greater Cumberland Valley region that has many interesting recreational, historical and cultural features. A theme for the trail should tie into what make the area special. Consideration has been given to transportation, the railroad history, nature, fitness and wellness and farming. As one walks the trail the farm landscape is the predominant feature. Farmsteads cover the landscape and expose the trail user to Pennsylvania's farming heritage. The theme for the trail should tie into the regional themes of the Cumberland Valley. Pennsylvania's farming heritage has been the focus and theme for development of facilities and accessories along the trail. This theme is suggested by the vernacular farm building architecture and fences along the Cumberland Valley Trail, and it is the theme of "Farm Heritage" that this Master Plan capitalizes upon and suggests as interpretative opportunities along the trail.

## **Common Design Issues and Elements**

There are design issues and elements of the Cumberland Valley Trail that are overriding and consistent for the entire length of the 10.75-mile corridor. These issues and elements are discussed below.

### ***Accessibility***

The trail, as a public recreation facility, must be fully accessible to persons with varying mobility and abilities as required by the Americans with Disabilities Act (ADA). The ADA requires that the development of the Cumberland Valley Trail provide a barrier free path of travel for all trail users. This accessible path must be provided from designated access points and along the entire length of the trail. Public trailheads must have designated accessible parking spaces that connect to an accessible route that leads to the trail corridor. Additionally, an accessible route must connect all public facilities located at the trailheads and along the corridor, to include, picnic areas, playground, rest rooms, etc. Rest rooms, picnic pavilions and playgrounds must comply with ADA regulations. The trail tread must be developed with a maximum graded slope of five percent.

The ADA also requires provisions at public facilities for persons with eyesight impairment. Braille lettering should be provided on all informational signs and maps. The design and location of all support facilities should be accessible to all persons. Picnic tables should accommodate persons in a wheel chair and height of telephones and drinking fountains should be compatible with ADA requirements.

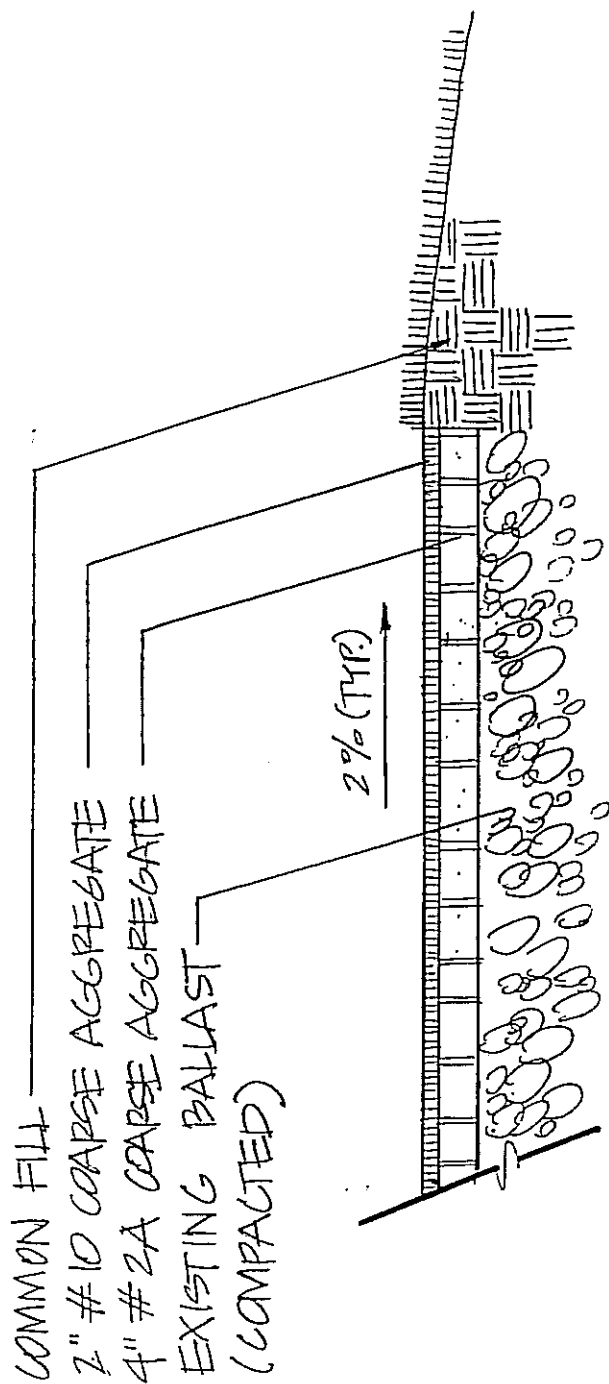
### ***Trail Tread***

The trail tread is proposed as two materials; bituminous and stone pavement. The trail corridor will be graded to have an adjacent grass tread for equestrian use. Between the Shippensburg Township Park access and PA Route 233 a compacted stone pavement surface at 10-foot width is proposed. See Figure 5-1 Typical Paving Section Type 1. Between North Earl Street and the access to Shippensburg Township Park a bituminous pavement surface at 12-foot width is proposed. See Figure 5-2, Typical Paving Section Type 2. Both trail surface materials are to be placed on top of compacted ballast that has been graded to a minimum 2 percent cross slope for surface drainage. The minimum depth of the existing ballast base course after grading shall be 10 inches. Field observations did not reveal areas of poor drainage along the trail with the exception of the area where the ballast has been removed. This master plan does not recommend extensive installation of drainage improvements, as the rail corridor has been constructed with adequate provisions for drainage. Drainage improvements will be required at trailhead and other areas to direct drainage away from improvements. Specific information on drainage requirements will be completed at the engineering and construction document stage of the project. Where the trail is proposed in areas without ballast, field investigation and testing should be undertaken to assure adequate subgrade compaction and drainage can be achieved prior to placing the stone base course.

The equestrian tread should be field located to provide an interesting, safe recreation experience for users. It may or may not be located adjacent to the graded stone tread. The grass tread must be cleared of all rocks, surface roots and other obstructions and improved to close any groundhog holes. The grass tread should have a cross slope of 2 percent. The grass tread adjacent to the stone tread provides a future location for transit system tracks if Capital Area Transit should they decide to establish a commuter rail line along the trail corridor. Equestrian use must be reevaluated if transit use is established. If transit use of the trail is introduced the bridges along the trail would need to be evaluated and the transition grade areas would require modification.

### ***Trailheads***

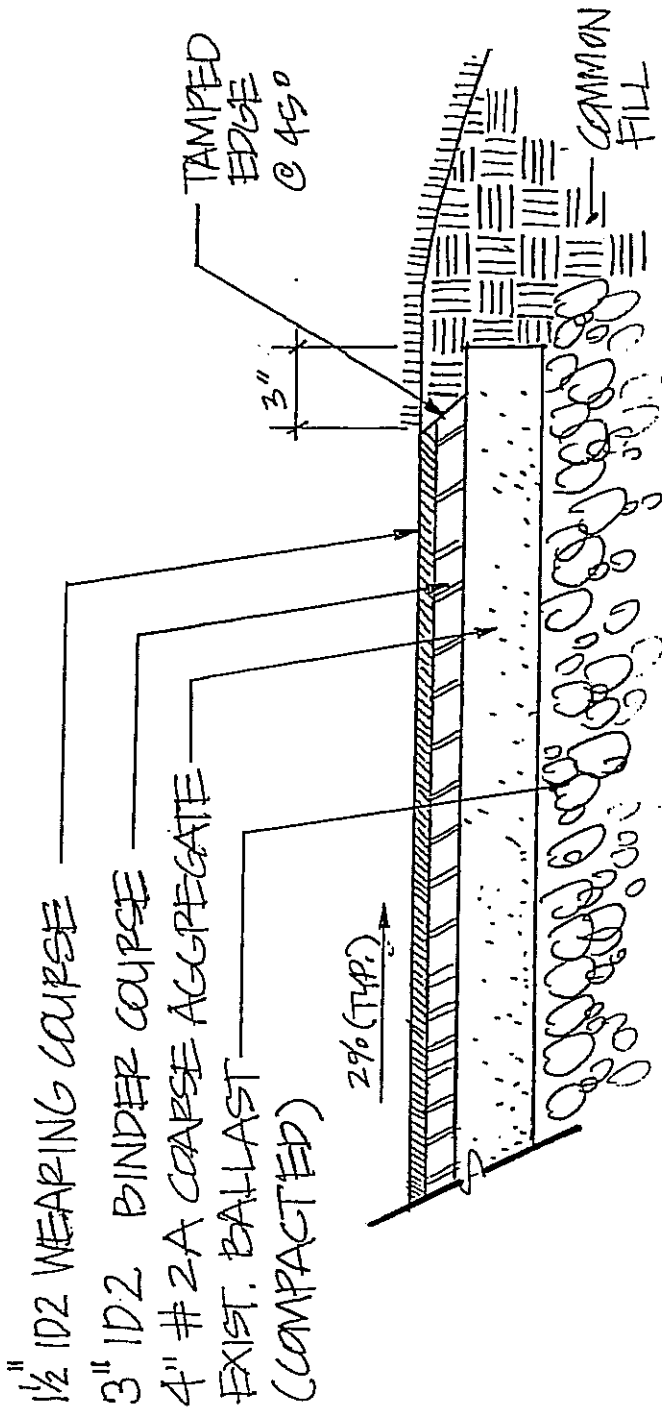
Trailheads are provided at four locations along the trail corridor. These facilities have features in common such as parking, signage, benches, bike racks and a designated path directing the trail user to the main trail corridor. Each trailhead is designated to have a rest room facility, telephone and drinking fountain if public water is available. Public water is not available in Oakville and a well would be required to install a drinking fountain. CVRTC should consider drilling a well at the Oakville trailhead once other trailhead facilities are in place. Hitching posts should be provided at trailheads to support equestrian users. The facilities within the trailhead should match and complement the other elements along the trail to unify the design. Structures are proposed to have a vernacular farm building theme with standing seam metal roofs and board and batten siding tying the local surroundings to the trail. Trailheads should orient the trail user, be convenient to use, readily accessible from the trail and designed with low maintenance in mind.



NOTE : EXIST. AND RELOCATED  
BALLAST SHALL BE A  
MIN. OF 10" COMPACTED

TYPICAL PAVING SECTION - TYPE 1  
NOT TO SCALE

FIGURE 5-1



TYPICAL PAVING SECTION TYPE - 2  
 NOT TO SCALE

FIGURE 5-2

NOTE : IN AREAS WHERE BALLAST DOES NOT EXIST, PROVIDE 6" DEPTH OF # 2A COURSE AGGREGATE.

## Road Crossings

The trail crosses thirteen roadways between Earl Street in Shippensburg and PA Route 233, south of Newville. Crossings include both Township and Pennsylvania Department of Transportation (PennDOT) roads. Trail users are required to stop at all at-grade intersections between a public road and the trail and yield to crossing traffic. Each at-grade road crossing will have design elements, which will warn trail users of the crossing and promote safe crossing. The trail at each side of an at-grade crossing will have a change of alignment that requires trail users to slow down and stop prior to crossing the road. All users will be funneled to a 4-foot opening between a bollard and gate. Both sides of the trail approach to the crossing will have wood guide rail to confine users to the designated crossing. A *stop ahead* sign will be placed prior to the crossing if the stop sign is obscured from view. A *stop sign* and road name sign will be placed on the gate. A minimum 150-foot clear sight triangle must be provided on both sides of the crossing. Table 5-1, on the following page outlines the anticipated road crossing signs anticipated for this project. PennDOT will make the final assessment and decision regarding the installation of roadway signs.

See Figure 5-3 on the following page, which illustrates a typical at-grade crossing. Crosswalk markings may be provided at the crossings as determined by PennDOT or the municipality having jurisdiction of the roadway. Typical crosswalk markings are shown on Figure 5-4. Horse traffic is destructive to the plastic crosswalk marking material so all pavement markings should be painted on the road surface. The crosswalk marking with diagonal lines for added visibility is the preferred option. The cost of undertaking road crossing improvements will be the responsibility of CVRTC. PennDOT or the Township having jurisdiction of the road will maintain the road crossing improvements

## Bridges

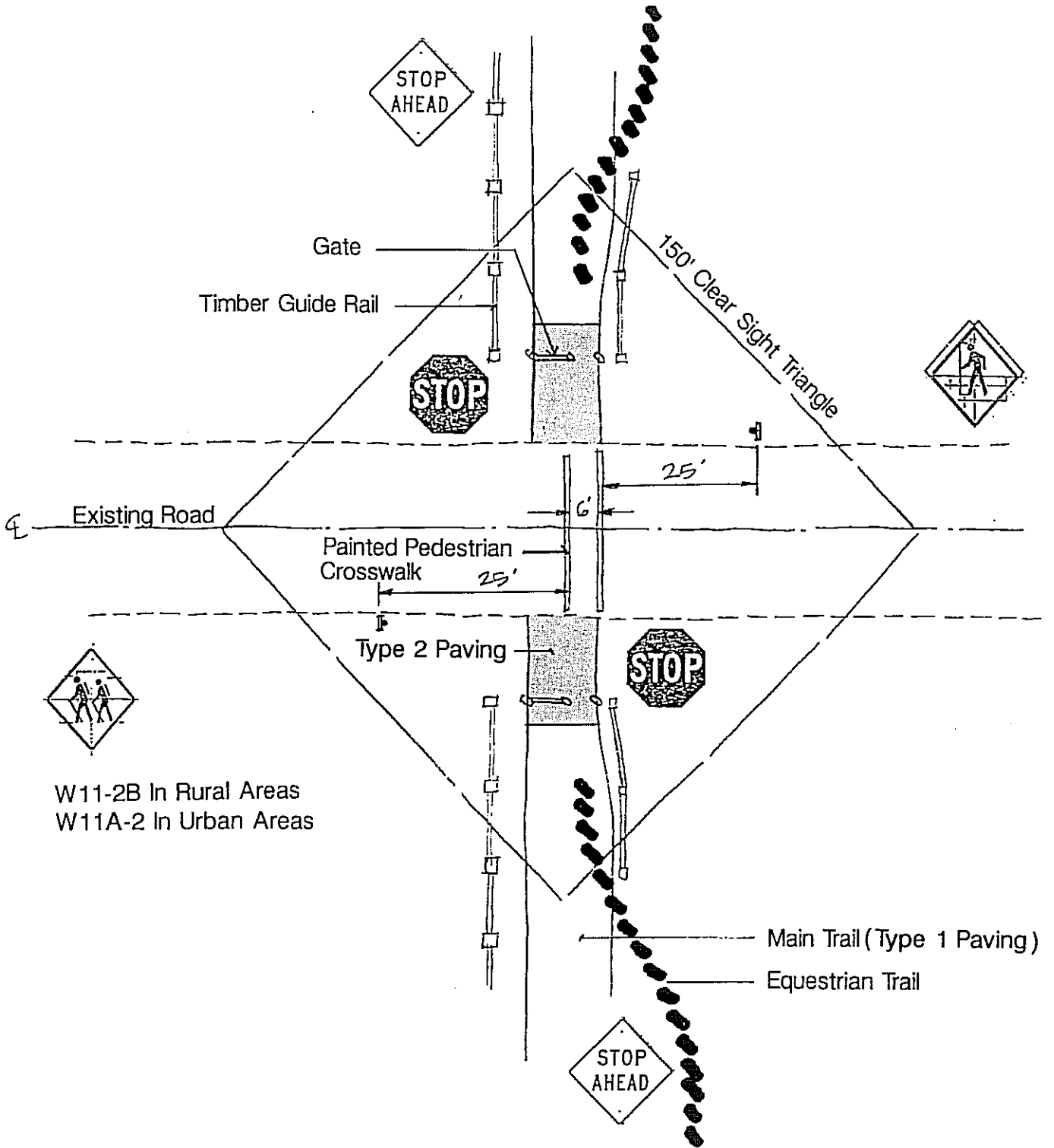
Fogelsonger Road and Big Spring Road are proposed to be crossed by new bridges. These two bridges will look very similar. The geometry of the embankments and the roadway at each location will require similar lengths of bridge and vertical clearance above the underpassing roadway. A complete superstructure package from a pedestrian bridge manufacturer is the best option for these crossings.

A bridge package can be purchased from a manufacturer that specializes in this type of pedestrian/light vehicle truss bridge. They have the capability to quickly generate a design, fabricate a bridge, ship it to the site in large segments, and quickly erect it onto concrete foundations. The concrete foundations will be built by a general contractor. This system has the advantage that the bid from the bridge manufacturer will include the cost of the engineering for the superstructure, and the manufacture and the installation of the superstructure. We estimate that the cost of the superstructure for these bridges will be approximately one-half of the total construction cost. Another engineer has to be involved to design the substructure and process approvals with Shippensburg Township (and PennDOT for Big Spring Avenue) and the utility companies.

## Number Of Spans

A three span bridge, versus one long span, will be more economical. Use of the bridge by



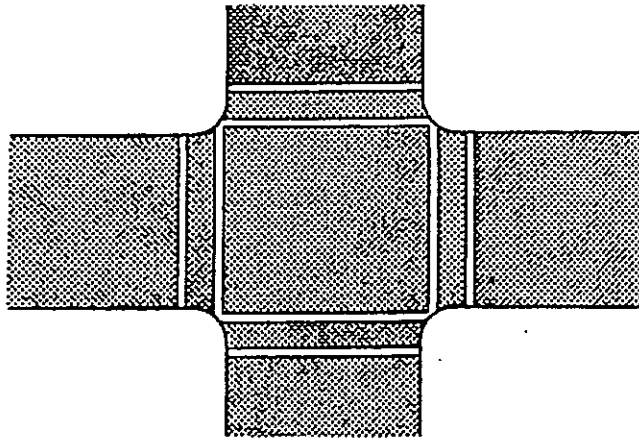


W11-2B In Rural Areas  
 W11A-2 In Urban Areas

**TYP. AT-GRADE CROSSING - ROAD/TRAIL INTERSECTION**  
 NOT TO SCALE FIGURE 5-3

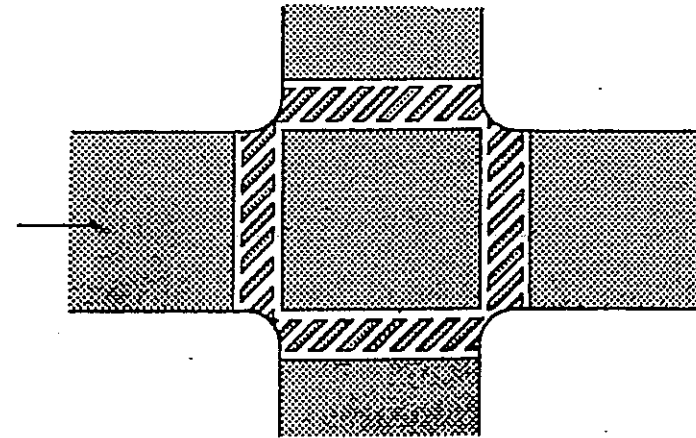


(a)- STANDARD CROSSWALK MARKING

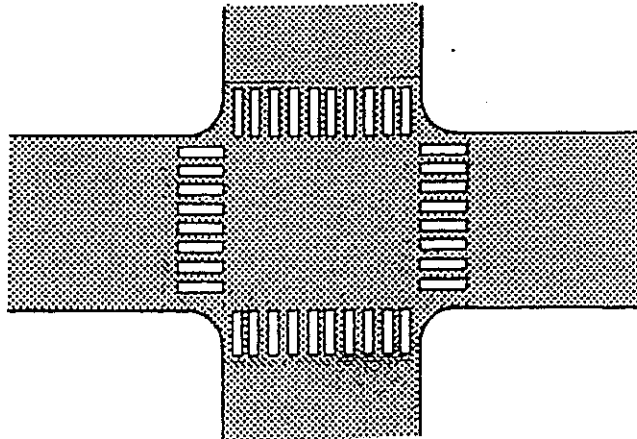


(b)- CROSSWALK MARKING WITH DIAGONAL LINES FOR ADDED VISIBILITY.

PREFERRED STANDARD



(c)- CROSSWALK MARKING WITH LONGITUDINAL LINES FOR ADDED VISIBILITY.



moderate weight vehicles will increase the cost of the bridge because the vehicle weight requires heavier structural members. See Figure 5-5.

### Vehicle Use

The schematic bridge shown on the sketches includes provision for the bridge being used by a 10 ton vehicle. Maintenance vehicles will weigh less than this. Medical emergency vehicles (paneled truck) weigh approximately 4 to 5 tons.

### Manufacturer Information

Bridges are typically manufactured from closed tube sections, therefore exposed surfaces have smooth lines. Recently, bridges developed in Pennsylvania had to be painted steel as required by the Department Of Transportation, which was participating in the funding and were required to be enclosed on each side and top by fencing to prevent vandalism on underpassing vehicles. The use of fencing along each face of the bridge is recommended. It helps to reduce the potential for vandalism and it serves as a deterrent to individuals climbing the sides of the truss bridge. See Figure 5-6.

### Public Utility Commission

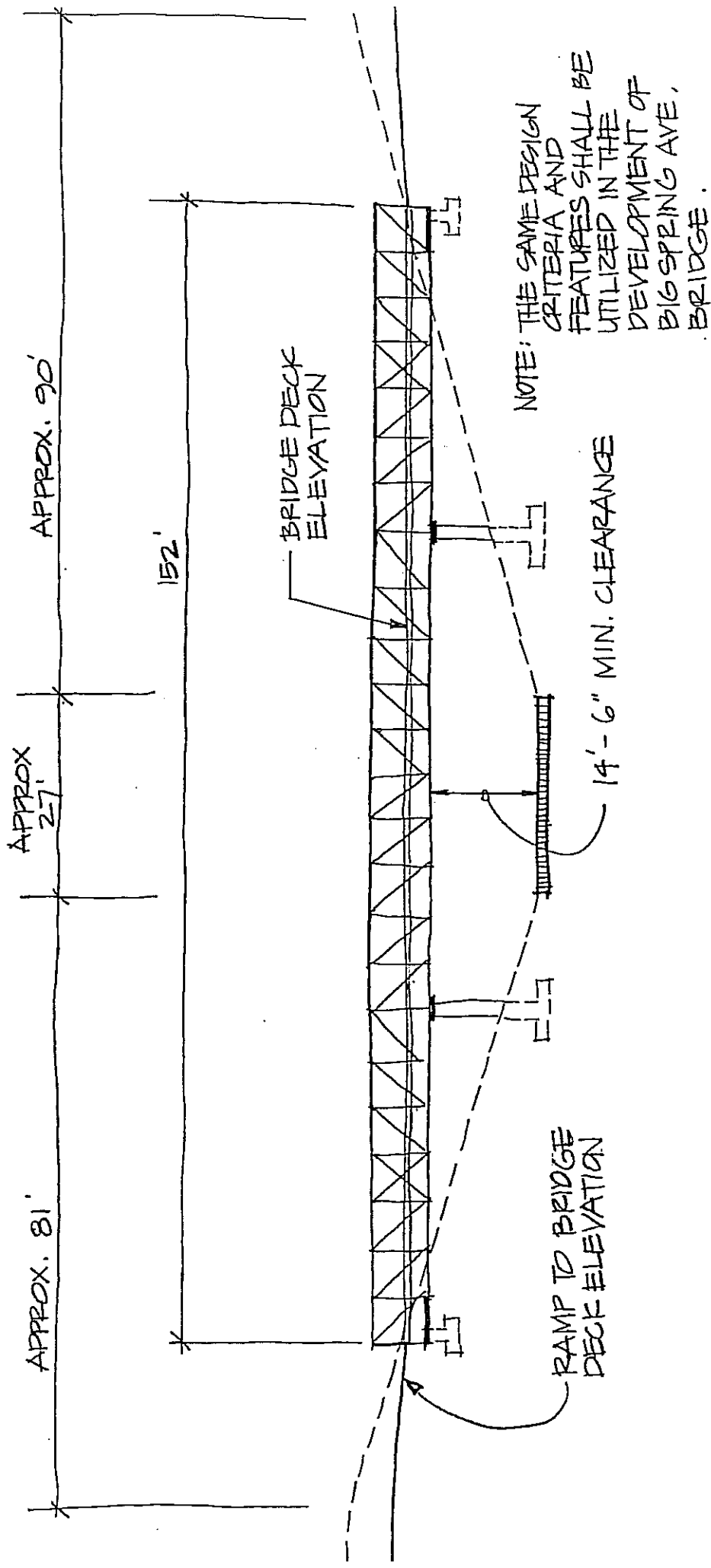
The Public Utility Commission does not have authority for this type of bridge over a roadway. The owner of the roadway must grant an aerial easement over the roadway and provide written acceptance of the horizontal and vertical clearances to the roadway. This approval would come from Shippensburg Township at Fogelsonger Road and PennDOT for Big Spring Road.

### ***Support Facilities***

Support facilities for the Cumberland Valley Trail include, rest rooms, benches, picnic tables, bike racks, hitching posts, bollards, drinking fountains and telephones. These elements should be similar in design and detail to unify the corridor and to lower on-going maintenance costs. These facilities should meet the regulations of the ADA in design, installation and location.

### ***Signage***

Signage should be located throughout the trail, at trailheads, and rest areas to orient the user and provide information and direction regarding the trail and trail use. Interpretative signage should also be incorporated to highlight significant cultural, historical or environmental areas. A logo for the Cumberland Valley Trail should be provided on each sign and the signs should be constructed of similar materials and have a similar design theme. By unifying the signs along the



**FOGELSONGER ROAD BRIDGE**  
 SCALE: 1" = 20'

FIGURE 5-5



trail, the facilities of the trail will be readily recognized and identified in the community.

## Acquisition and Side Parcel Recommendations

Several parcel have been identified by CVRTC for consideration for acquisition. Following is a listing of these parcels:

- ◆ Parcel adjacent to the triangular piece of right-of-way at Fort Street in Shippensburg Borough.
- ◆ Cramer farm west of Ott Road.
- ◆ Rockwell parcel in Oakville on the west side of Oakville Road and north of the trail.

Additionally, CVRTC owns several side parcel adjacent to the trail corridor. These side parcels include the following:

- ◆ Freight Station Parcel
- ◆ Wooded area west of Camp Road at Clouse Road.
- ◆ Wooded parcel northwest of the PA Route 533 underpass and fronting on Fry Road.

The primary objective of CVRTC, to develop a 10.75-mile recreation trail, does not require the acquisition or development of any of the parcels noted above. It is recommended that CVRTC concentrate its efforts on the development of the trail corridor. Additional parcel development or acquisition is not recommended until the trail corridor is established and maintenance is underway.

Possible future uses of the parcels identified above are listed below:

- ◆ A use has not been identified for the triangular piece of right-of-way at Fort Street in Shippensburg Borough.
- ◆ This report does not recommend the acquisition of the Cramer farm or house (if subdivided). The use as a bed and breakfast should be undertaken as a private enterprise. The use as CVRTC headquarters is not feasible at this time and other management structures for the organization such as a regional authority or County entity may not be compatible with the structure or its location.
- ◆ The Rockwell property in Oakville does not provide CVRTC opportunities beyond what its existing land holding provide. Additionally, this parcel has not met criteria for on-site sewage disposal and public sewer is not available in Oakville, ruling out the site as a location for rest rooms. The site may be attractive to an local entrepreneur to establish a farm produce stand or refreshment stand to serve trail users. These uses should be undertaken by a private enterprise, not CVRTC.
- ◆ The Freight Station Parcel should be sold to the Shippensburg Borough or leased to the Shippensburg Area Little League as discussed elsewhere in this report.
- ◆ The wooded parcel at Clouse Road is suggested as a picnic grove for trail users.
- ◆ The wooded parcel at the PA Route 533 underpass and Fry Road is suggested as a site for camping. This use is only feasible when extensions to the trail are completed beyond Shippensburg and Newville and the 10.75-mile trail is a link to a larger regional trail network. When the regional trail has the length to make a camping location feasible this site should be further explored for this use. Until such time as this is feasible, development is not recommended for the parcel.

## Segment Descriptions

The master plan designs for the Freight Station Parcel and each segment along the 10.75-mile corridor are described below, followed by corridor maps. The descriptions of road crossing solutions are described in the segment west of the crossing.

### *Freight Station Parcel*

Potential uses for the freight station parcel have been considered throughout the planning process. Consideration has been given to trail uses such as the a location for a maintenance building, interpretative uses such a building site for a historic/trail related tourism destination, commercial uses and other uses. The physical limitations of the site's wetlands, small streams, floodplain limits plus the location limits the viability of the parcel for these uses. The possible future extension of Earl Street to Route 81 may improve the site's viability as a commercial location but the development of this extension has a lengthy timeline. If the extension of Earl Street is undertaken the parcel should be appraised to determine its value as a commercial site. The Shippensburg Area Little League has expressed interest in utilizing a portion of the parcel for development of a Little League baseball field. This use is compatible with the site. A second possibility is transfer of the tract to Shippensburg Borough for road development, recreation use and greenway connection to Dykeman Spring Park. Transfer of the property to the Borough or Little League would relinquish future benefit of commercial viability, but would limit liability and ongoing maintenance requirements.

### *Segment #1 – Shippensburg to Fogelsonger Road*

**Trail Tread –** Bituminous pavement is proposed as the trail tread in this segment. Grading will be required at Fort Street and North Earl Street for an accessible transition form street level to the trail. Parking at the University steam plant has encroached on the trail corridor and must be removed to allow the tread to be constructed. A bituminous turn around should be provided west of the Fogelsonger Road bridge to permit University maintenance and security vehicles to turn around. The trail corridor should be modified in the area of the University to allow better visual access, enhance safety and provide an easy exit route where the tread is below surrounding grade. The embankment should be graded back to a maximum 2:1 slope. See Figure 5-7. The surface depressions noted within the University section near Queen Street should be investigated by a professional geologist and/or engineer to determine if they are sinkholes. Measures should be undertaken to mitigate the depressions and provide a continuous trail surface.

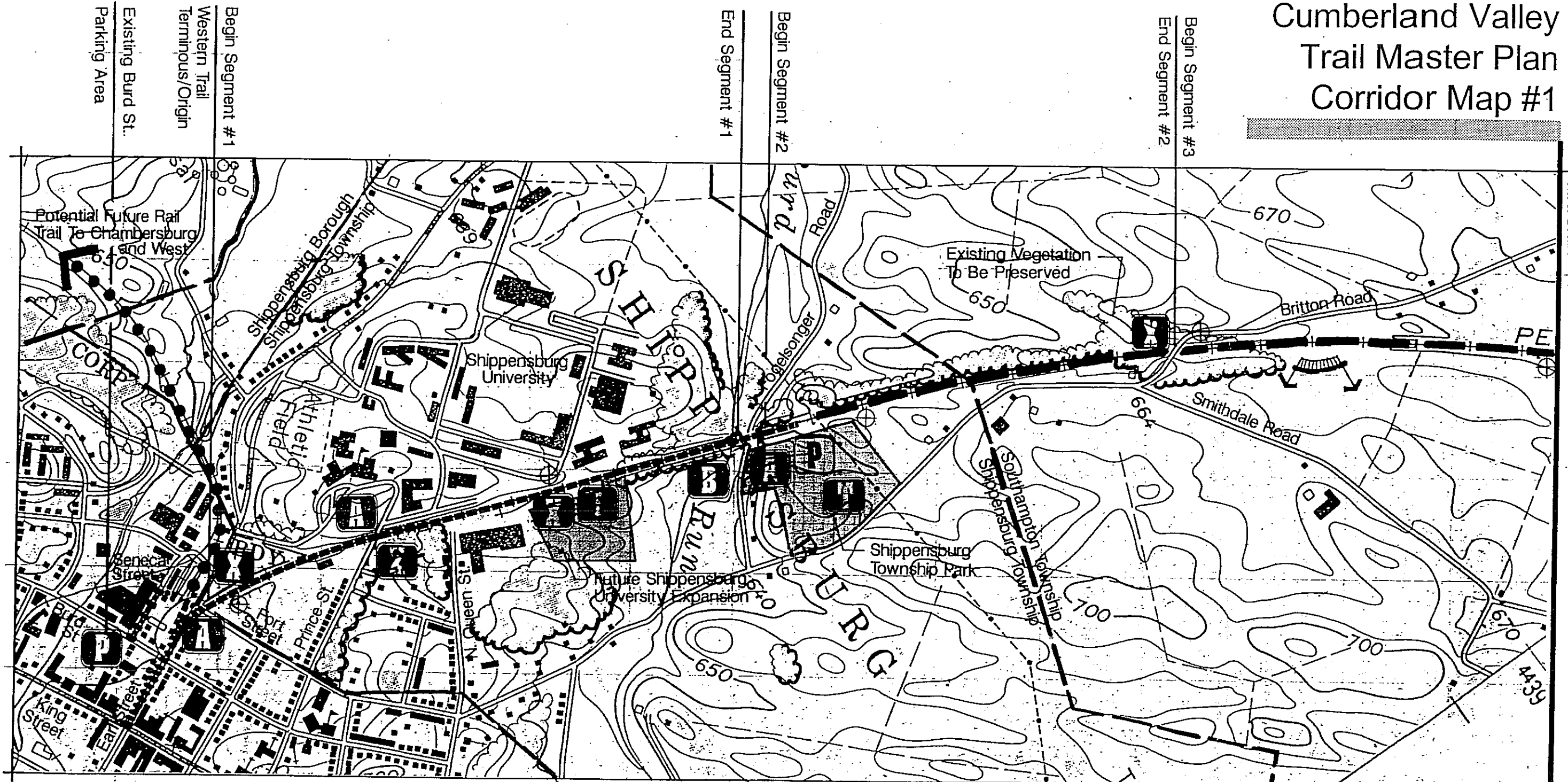
**Facilities –** Facilities in this segment include the following:

*Parking –* A use agreement should be pursued with Shippensburg Borough to allow trail users to park in the municipal parking lot located on Burd Street. The Hoffman Mills parking lot is directly across the Earl Street from the trail, but is utilized weekdays from 6:30 a.m. to 4:30 p.m., by employees. Weekend and evening use may be possible. The municipal parking lot should be pursued as the first alternative for parking at the western origin of the trail.

*Signage –* Signage should direct users to the Shippensburg Borough parking lot

# Cumberland Valley Trail Master Plan Corridor Map #1

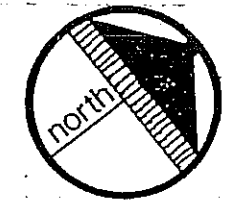
MATCHLINE SHT.

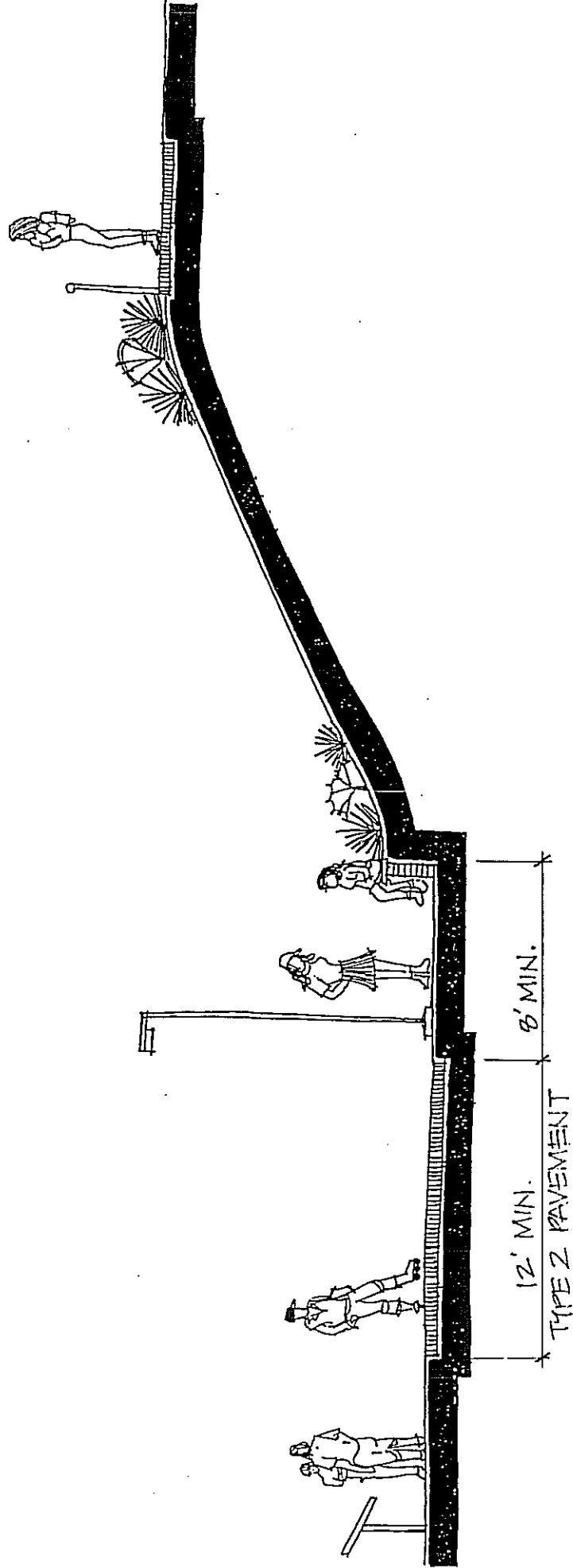


## LEGEND

Scale 1" = 800'±

- |                    |  |                        |                        |  |
|--------------------|--|------------------------|------------------------|--|
| Access Point       | Proposed Parking                             | Trail Surface (Type 1) | Trail Surface (Type 2) | Mile Marker (at 1/2 mile increments)     |
| Bridge Improvement | Proposed Parking (with horse trailer spaces) | Exist. Structures      | Trailhead              | Trail Extension To Downtown Shippensburg |
| Interpretive Area  | Rest Area                                    | Significant Views      | Proposed Crossing      | Trail Extension To Burd Street Parking   |





TYPICAL SECTION - SHIPPENSBURG UNIVERSITY AREA

FIGURE 5-7



if a use agreement is reached. Information signs should be placed at the intersection of the trail and North Earl Street and at the municipal parking lot. A sign should identify the beginning of the trail at North Earl Street.

*Rest rooms* – A rest room is designated for this area of the trail. CVRTC should work with Shippensburg Borough to determine if a permanent rest room could be built in the municipal parking lot.

*Support Facilities* – Support facilities such as benches and bike racks should be provided in the University area. Lights should be installed along the trail between North Earl Street and Fogelsonger Road.

#### Points of Interest/Linkages –

*Shippensburg Town Center* - The town center of Shippensburg should be linked by signage to the end of the trail at North Earl Street. Interpretative signs in this area could explore how the surrounding agrarian land impacted the development of the Borough and how the railroad in the Borough supported the farm economy.

*Shippensburg University* – The trail is adjacent to the University campus, and students are anticipated to be a significant user group for the trail. An interpretative sign should be placed in the University area of the trail, which describes the history, and mission of the University.

#### Crossings -

*North Earl Street* – CVRTC should work with Shippensburg University to acquire fee simple or as an access easement the approximately 40-foot of lawn separating the trail right-of-way from North Earl Street, just north of Fort Street. If this acquisition is not desirable by either party the trail should begin on the south side of Fort Street on the small triangle parcel owned by CVRTC with direct access to North Earl Street. The option of working with Shippensburg University is preferred because it avoids a crossing of Fort Street and would provide a better location for a trail sign. A curb cut, signage and crosswalk should be provided at North Earl Street to direct trail users across the street to and from the parking area located in the municipal parking lot. CVRTC should work with Shippensburg Borough to create a safe route of travel to the municipal parking lot on Burd Street. Consideration should be given to designating Fort Street (west of North Earl Street) and Seneca Street (between Burd Street and Fort Street) as one-way or no parking to all designated bike route to be delineated.

*Prince Street* - Prince Street is a proposed at-grade crossing. Typical signage and gate should be installed (Fig. 5-3).

*Fogelsonger Road* – A bridge is proposed to cross Fogelsonger Road. The bridge should be designed to accommodate pedestrians, bicycles, emergency vehicles and equestrians. Equestrian use is not proposed until trail extensions are made to the west. The bridge will have safety railing that extends along the trail corridor to enhance safety where the embankment is steep.

*Shippensburg University Chapel* – The Shippensburg University Foundation has proposed a chapel on lands it owns south of the trail. A pedestrian and vehicular crossing is proposed to access the chapel from the campus of the University. Plans for the chapel are incomplete and discussions during this planning process indicate that the chapel design can comply with the design criteria for the trail. The vehicular crossing should be developed as a typical at-

grade crossing. ADA slope requirements must be maintained and trail corridor dimensions and materials as outlined in this master plan should be consistent.

## **Segment #2 – Fogelsonger Road to Britton Road**

**Trail Tread** – Bituminous pavement is proposed for a short portion of this segment between Fogelsonger Road bridge to the trail connecting to Shippensburg Township Park. East of the connecting trail to Shippensburg Township Park the trail tread will be stone pavement. The grass tread for equestrian use also begins at the connecting path to the park and continues east.

**Facilities** – Facilities in this segment include the following:

*Trailhead* – Shippensburg Township has proposed trailhead facilities within their park to serve trail users. Facilities include rest rooms, drinking fountain, benches, parking for vehicles and horse trailers, picnic pavilion and picnic tables. See Figure 5-8, Fogelsonger Road Crossing/Shippensburg Township Park Trailhead.

*Signage* – Information and directional signs is proposed at the trail connection to Shippensburg Township Park.

*Support Facilities* – Support facilities such as benches, hitching post and bike racks are found in Shippensburg Township Park.

**Points of Interest/Linkages** –

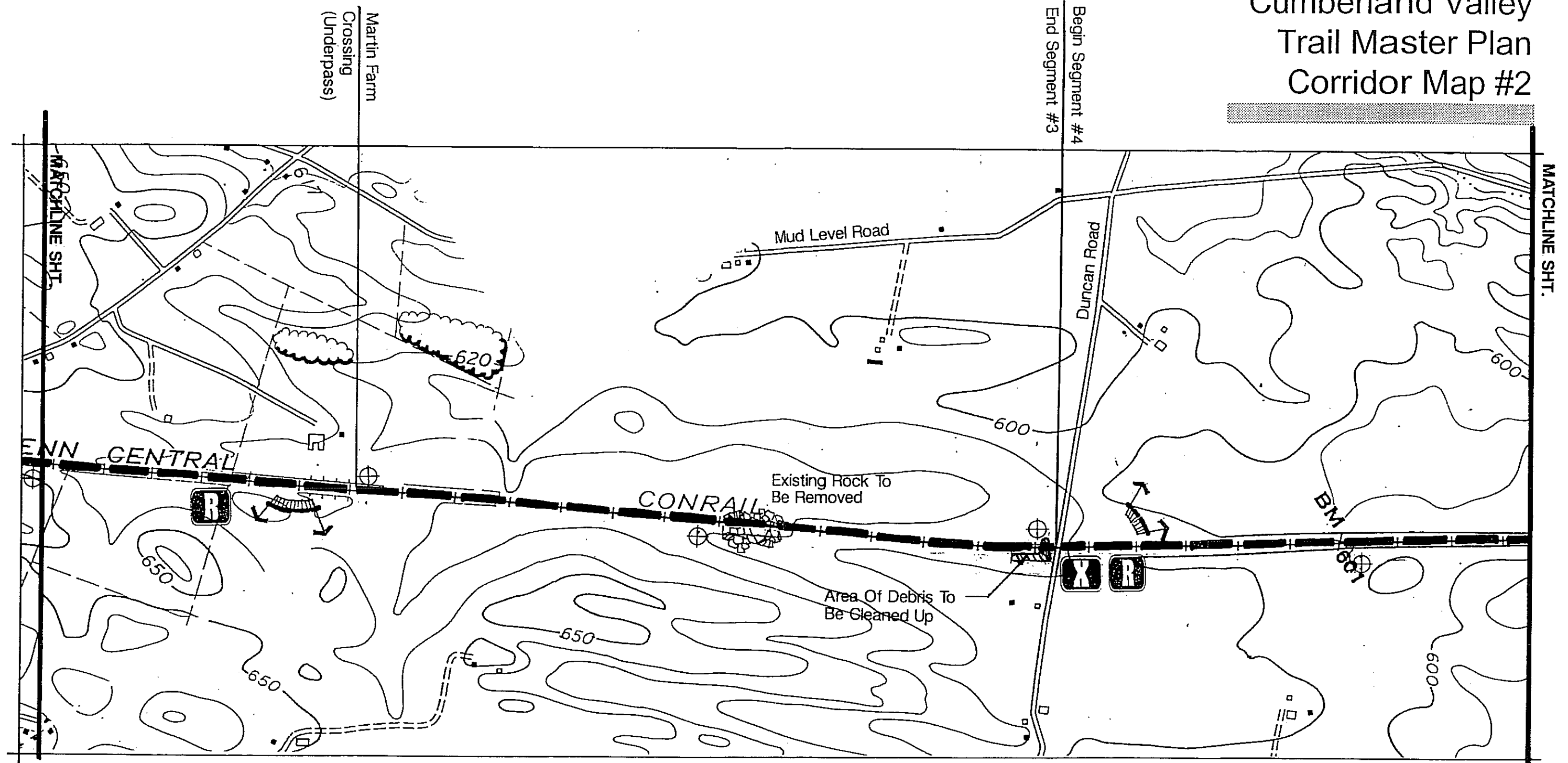
*Shippensburg Township Park* – A direct link to the park is proposed from the trail corridor. The park is a ‘drive to’ facility without the trail connection. The trail links the park to the Shippensburg Borough and other areas of Shippensburg Township. Parking for vehicles and horse trailers is provided in the park master plan.

*Native Vegetation* – The north side of the corridor from Fogelsonger Road to Britton Road has mature native vegetation, which forms a canopy over the trail. The vegetation offers a resource for environmental interpretation and should be preserved as possible during trail construction.

**Crossings** -

*Britton Road* – Britton Road crosses the trail approximately 12-feet (west side) to 16-feet (east side) above the trail surface. The trail must be graded to a maximum slope of 20:1 to provide an at-grade crossing. See Figure 5-9, Britton Road Crossing. The trail must ramp up approximately 240+- linear feet on the west side and 320+- linear feet on the east side to create an at-grade crossing. The embankment formed by raising the grade will be retained by a boulder retaining wall. A level (maximum 2 percent) staging area of approximately 20 feet by 20 feet should be provided at the road/trail intersection so that trail users can stop prior to crossing the road. Guide rail will be provided at the down side slope of the embankment and along the frontage of Britton Road to control the crossing location. Bituminous pavement is proposed as the trail tread in the ramped portion of the trail approaching the Britton Road crossing. Bituminous pavement will provide a stable surface, which is less likely to erode due to heavy use and stormwater runoff. Equestrian users would utilize the grass shoulder of the ramp at this crossing.

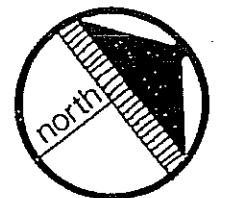
# Cumberland Valley Trail Master Plan Corridor Map #2

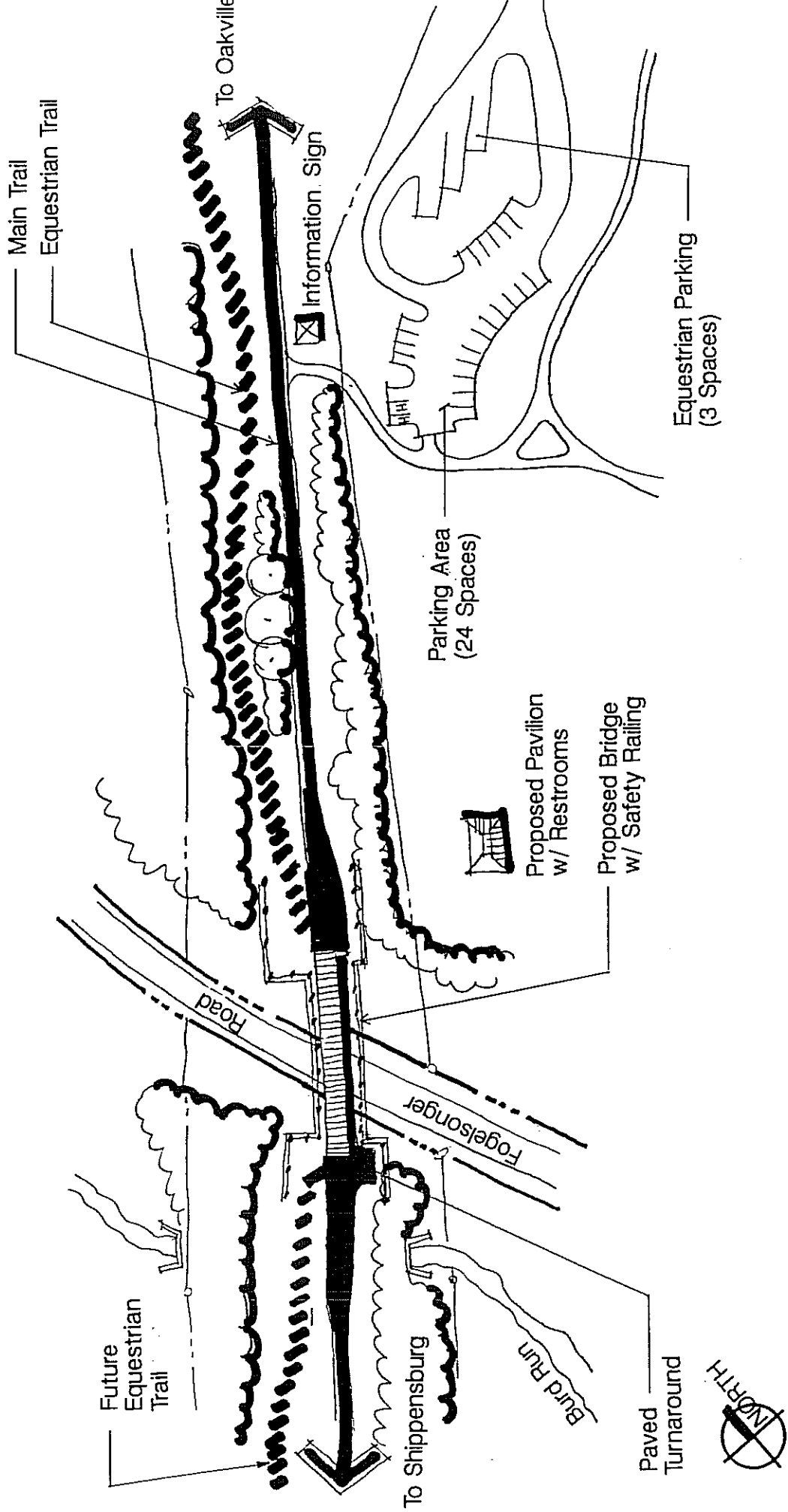


## LEGEND

Scale 1" = 800'±

- |                    |  |                        |                        |                                      |
|--------------------|--|------------------------|------------------------|--------------------------------------|
| Access Point       | Proposed Parking                             | Trail Surface (Type 1) | Trail Surface (Type 2) | Mile Marker (at 1/2 mile increments) |
| Bridge Improvement | Proposed Parking (with horse trailer spaces) | Exist. Structures      | Trailhead              |                                      |
| Interpretive Area  | Rest Area                                    | Significant Views      | Proposed Crossing      |                                      |





**FOGELSONGER ROAD CROSSING AT  
SHIPPENSBURG TOWNSHIP PARK TRAILHEAD**  
SCALE : 1" = 100'

FIGURE 5-8

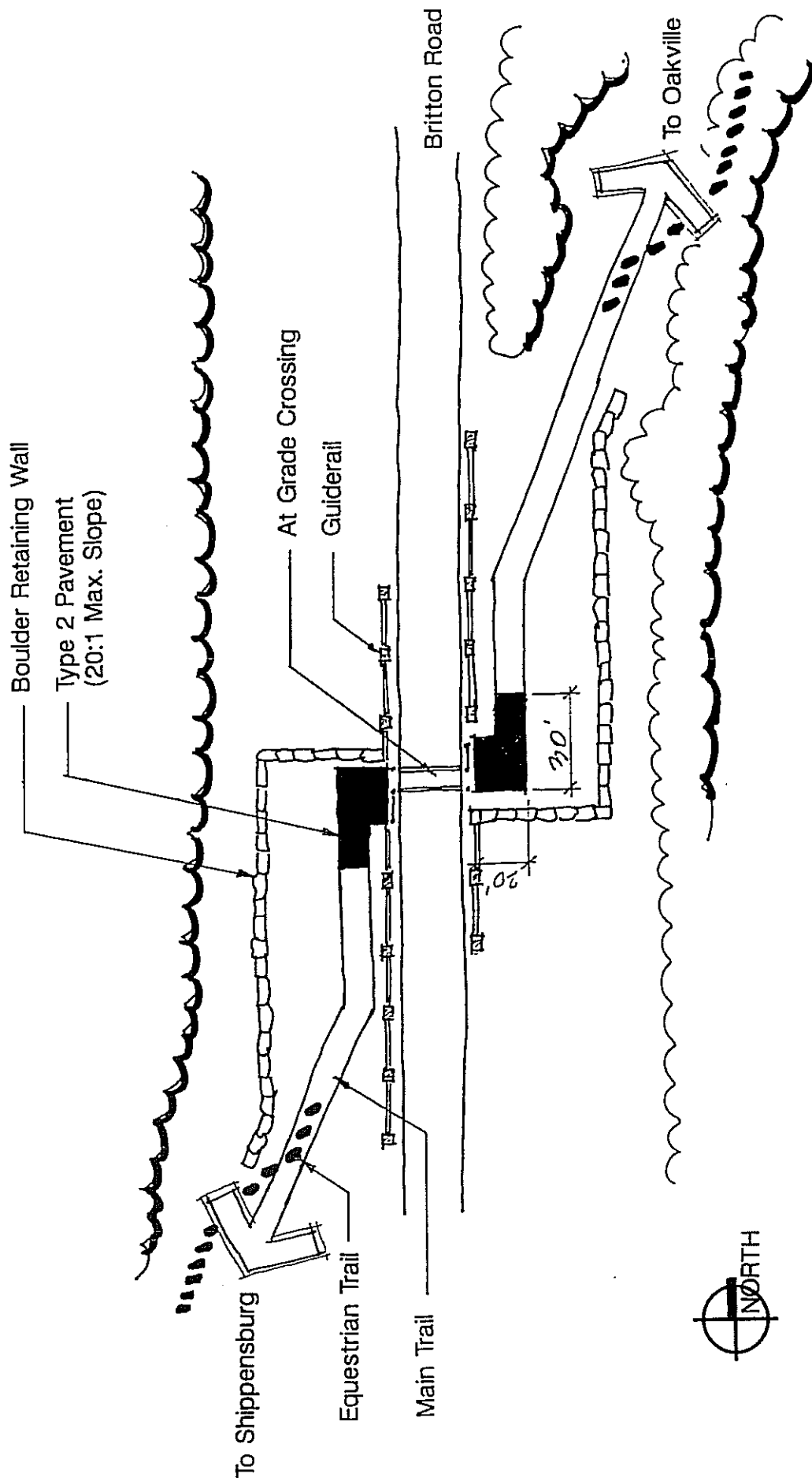


FIGURE 5-9

**BRITTON ROAD CROSSING**

SCALE: 1" = 50'

### **Segment #3 – Britton Road to Duncan Road**

**Trail Tread** – Stone pavement trail tread is proposed for this segment. There is an area of rock that has been placed on the trail and an area of construction rubble that is located adjacent to the trail, which must be removed.

**Facilities** – Facilities in this segment include the following:  
*Support Facilities* – Several benches should be located in this section. Hitching posts and bike racks should accompany the benches

**Points of Interest/Linkages** –

*Views* – Views of the farm landscape and Cumberland Valley are the most prominent points of interest on this segment. An interpretative sign should be placed looking south from the trail toward the farm landscape. The sign would discuss the farm heritage of the Cumberland Valley.

**Crossings** –

*Martin Farm Culvert* – The cattle underpass at the Martin Farm should be demolished. The concrete slab and walls should be removed and the void filled to create a continuous trail.

*Duncan Road Crossing* – Duncan Road is an existing at-grade crossing and the typical at-grade crossing improvements (Fig. 5-3) should be installed to enhance safety.

*Martin Farm Crossing* – The existing culvert is too narrow for today's farm machinery to use. Currently farm machinery is crossing the trail with an at-grade crossing just east of the farm culvert. Because this crossing area is not stabilized, vehicle tracks have developed from the activity. The trail is slightly elevated in the area of the crossing. The crossing should be stabilized with the stone pavement section on both sides of the trail. The stone should extend to the point where the crossing is at the same elevation as surrounding grade. CVRTC should work with the farmer to establish this crossing.

### **Segment #4 – Duncan Road to Ott Road**

**Trail Tread** – Stone pavement trail tread is proposed for this segment.

**Facilities** – There are no facilities proposed for this segment of trail.

**Points of Interest/Linkages** –

*Views* – Views of the surrounding farm landscape and Cumberland Valley are prominent throughout this segment.

*Adjacent Farm* – The Cramer farm house is located west of Ott Road, adjacent to the trail tread. Because of the closeness of the house to the trail, potential future uses for the structure were discussed to include a museum, CVRTC headquarters or a bed and breakfast establishment. This report does not recommend the acquisition of the farm house. A farm vehicle crossing is also located in this area. To create a sense of boundary to the trail and provide a barrier between the trail user and private property a fence is proposed along the trail's northern boundary in the area of this farm. The fence design should be stained opaque white to match the white board fence utilized near the existing barn. See Figure 5-10. The traditional farmstead with a stone house, bank barn and numerous outbuildings creates a point of interest along the trail.

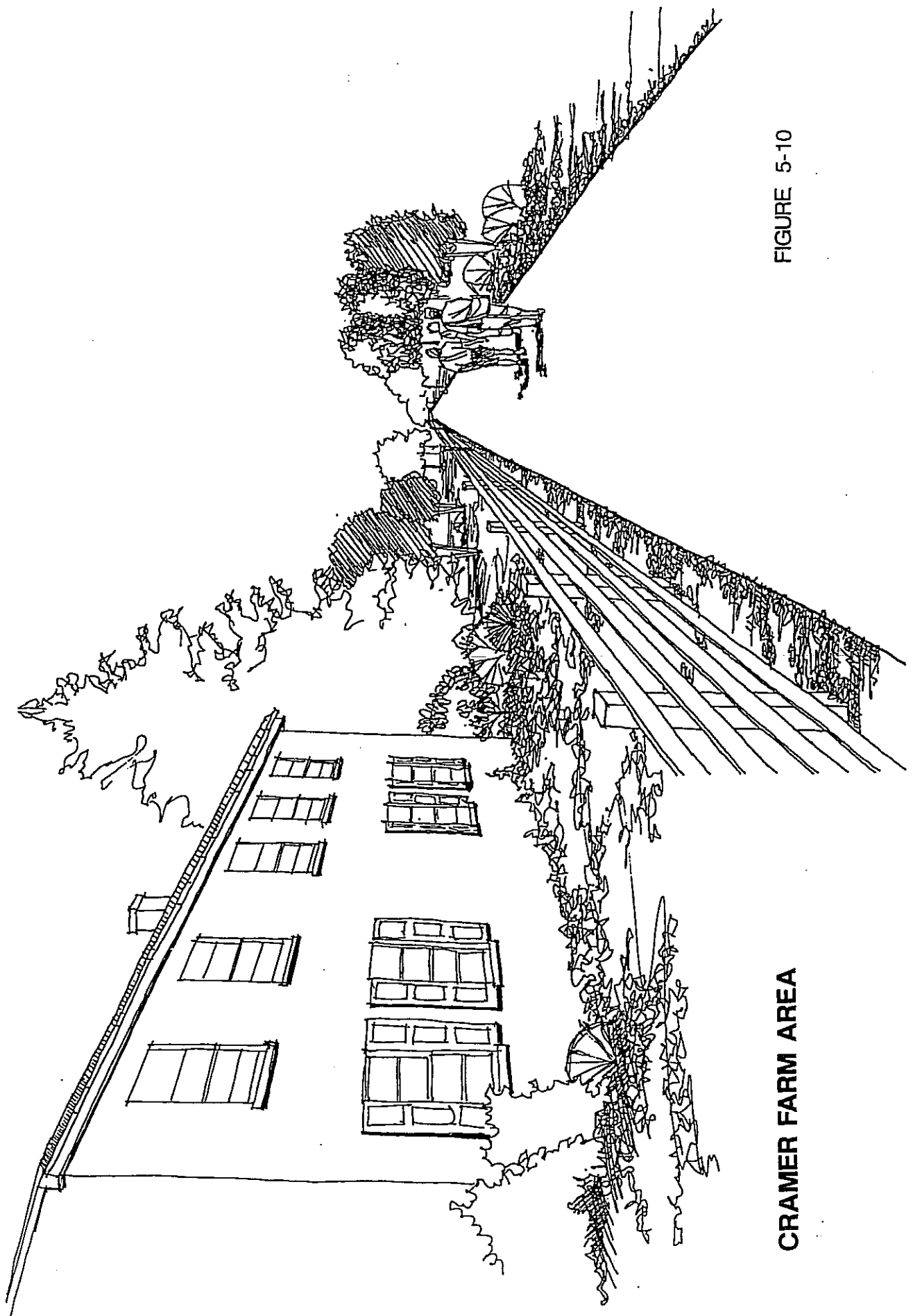
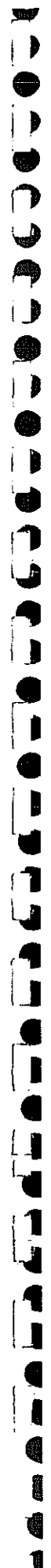
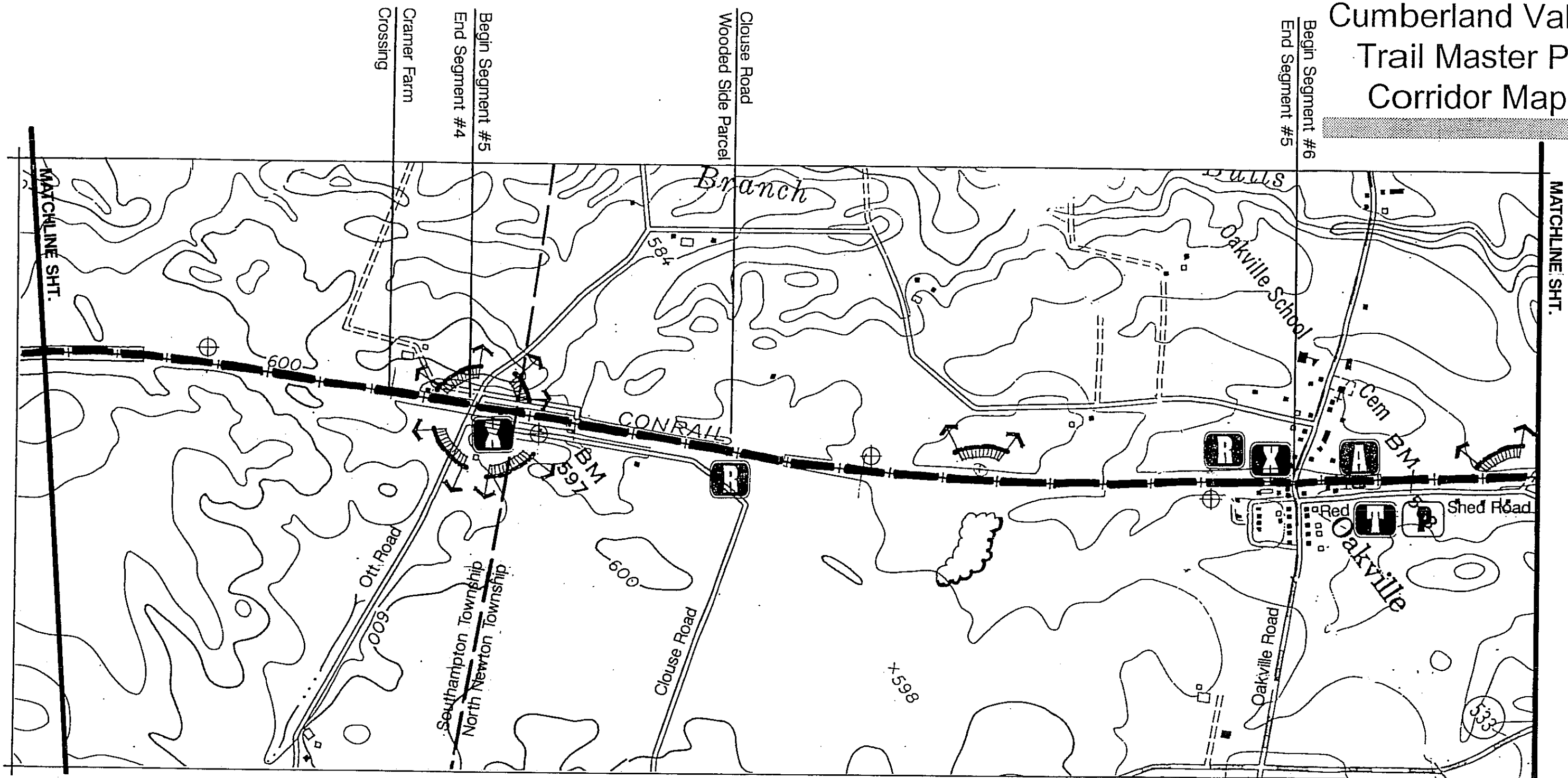


FIGURE 5-10

CRAMER FARM AREA



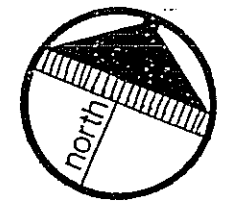
# Cumberland Valley Trail Master Plan Corridor Map #3



## LEGEND

- |                             |   |                        |                            |                                      |
|-----------------------------|---|------------------------|----------------------------|--------------------------------------|
| <b>A</b> Access Point       | <b>P</b> Proposed Parking                             | Trail Surface (Type 1) | Trail Surface (Type 2)     | Mile Marker (at 1/2 mile increments) |
| <b>B</b> Bridge Improvement | <b>P</b> Proposed Parking (with horse trailer spaces) | Exist. Structures      | <b>T</b> Trailhead         |                                      |
| <b>I</b> Interpretive Area  | <b>R</b> Rest Area                                    | Significant Views      | <b>X</b> Proposed Crossing |                                      |

Scale 1" = 800'±



CH 5-24



## Crossings -

*Cramer Farm* – The at-grade farm vehicle crossing at the Cramer farm can be maintained in its current location with minor modifications to create a transition to the trail tread. The trail surfacing material should be extended across the equestrian tread and grass shoulders on each side to create a stabilized crossing for farm equipment. This extended tread will protect the edges of the trail from perpendicular traffic movement.

*Ott Road* – The Ott Road crossing was constructed after the railroad was no longer in use. The road is approximately 6 feet below the level of the trail on the west side and 4 feet below on the east side. The trail should be graded down to meet the elevation of the road to create an at-grade crossing. A maximum slope of 5 percent would require a 130+foot ramp on the west and a 90+foot ramp on the east. A minimum 20-foot transition area of 2 percent maximum slope should be created adjacent to the roadway on each side before the transition up the graded ramp. Typical at-grade crossing improvements (Fig. 5-3) should be installed at this crossing.

## Segment #5 – Ott Road to Oakville

**Trail Tread** – Stone pavement trail tread is proposed for this segment.

**Facilities** – Facilities in this segment include the following:

*Rest Area* – Two rest areas are proposed along this segment. A rest area is proposed on the side parcel in the area north of Clouse Road where the road turns west toward Ott Road. This side parcel is forested with little understory and provides shade for the rest area. The second rest area is located in Oakville on the southwest corner of the Oakville/trail intersection. See Figure 5-11. This location has several trees, which provide shade. Picnic tables, bike rack and a hitching post are proposed for both rest areas.

*Signage* – Information/direction signage should be placed in the area of the Oakville Road/trail intersection to direct trail users to the trailhead on Red Shed Road.

**Points of Interest/Linkages** –

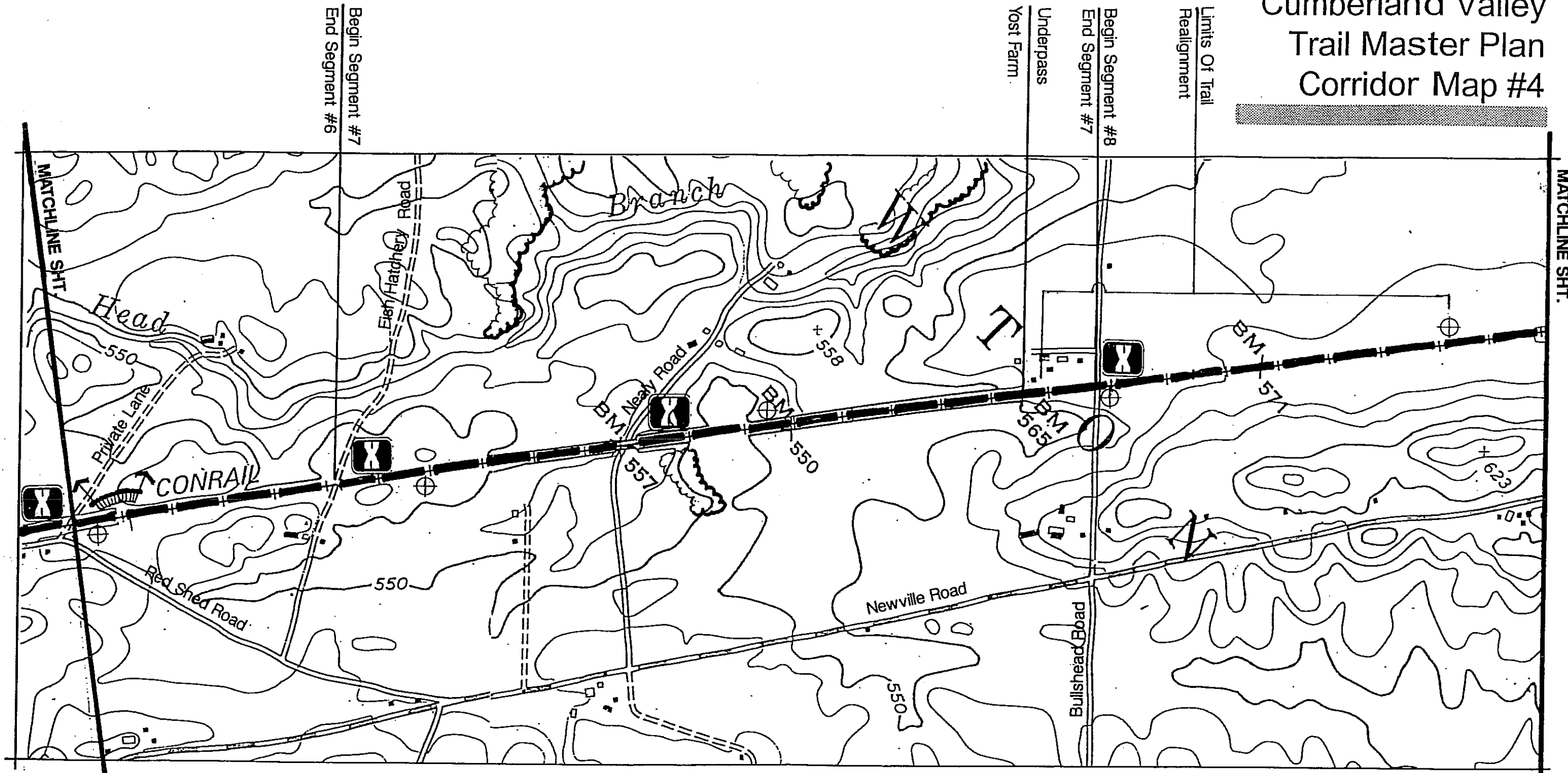
*Views* – A 360-degree view of the surrounding farm landscape and Cumberland Valley is provided at the Ott Road crossing.

*Oakville* – The village of Oakville provides interest along the trail and offers a variety of interpretative opportunities. Interpretative signs could explain the impact of the railroad on a small farm community. If a well is drilled at the trail head a hand pump could be installed as a farm feature trail users could use.

## Crossings -

*Camp Road* – Camp Road is an abandoned Township road located east of Ott Road. The railroad crossed over the road with a bridge. The trail is approximately 13 feet above the surface of the road. Because the road is abandoned, but still land of the municipality, CVRTC should seek permission from North Newton Township to fill the area between the two embankments created by the removal of the bridge. Fill from the Ott Road ramp excavation should be used to fill the area. The fill must accommodate the 28-foot wide trail corridor with 3:1 side slopes and guide rail on both sides. There is evidence of concrete debris in this area from the bridge removal. The debris should be

# Cumberland Valley Trail Master Plan Corridor Map #4



Begin Segment #7  
End Segment #6

Begin Segment #8  
End Segment #7

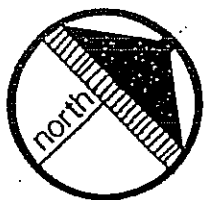
Underpass  
Yost Farm

Limits Of Trail  
Realignment

## LEGEND

Scale 1" = 800'±

- |                             |   |                        |                            |                                      |
|-----------------------------|---|------------------------|----------------------------|--------------------------------------|
| <b>A</b> Access Point       | <b>P</b> Proposed Parking                             | Trail Surface (Type 1) | Trail Surface (Type 2)     | Mile Marker (at 1/2 mile increments) |
| <b>B</b> Bridge Improvement | <b>P</b> Proposed Parking (with horse trailer spaces) | Exist. Structures      | <b>T</b> Trailhead         |                                      |
| <b>I</b> Interpretive Area  | <b>R</b> Rest Area                                    | Significant Views      | <b>X</b> Proposed Crossing |                                      |



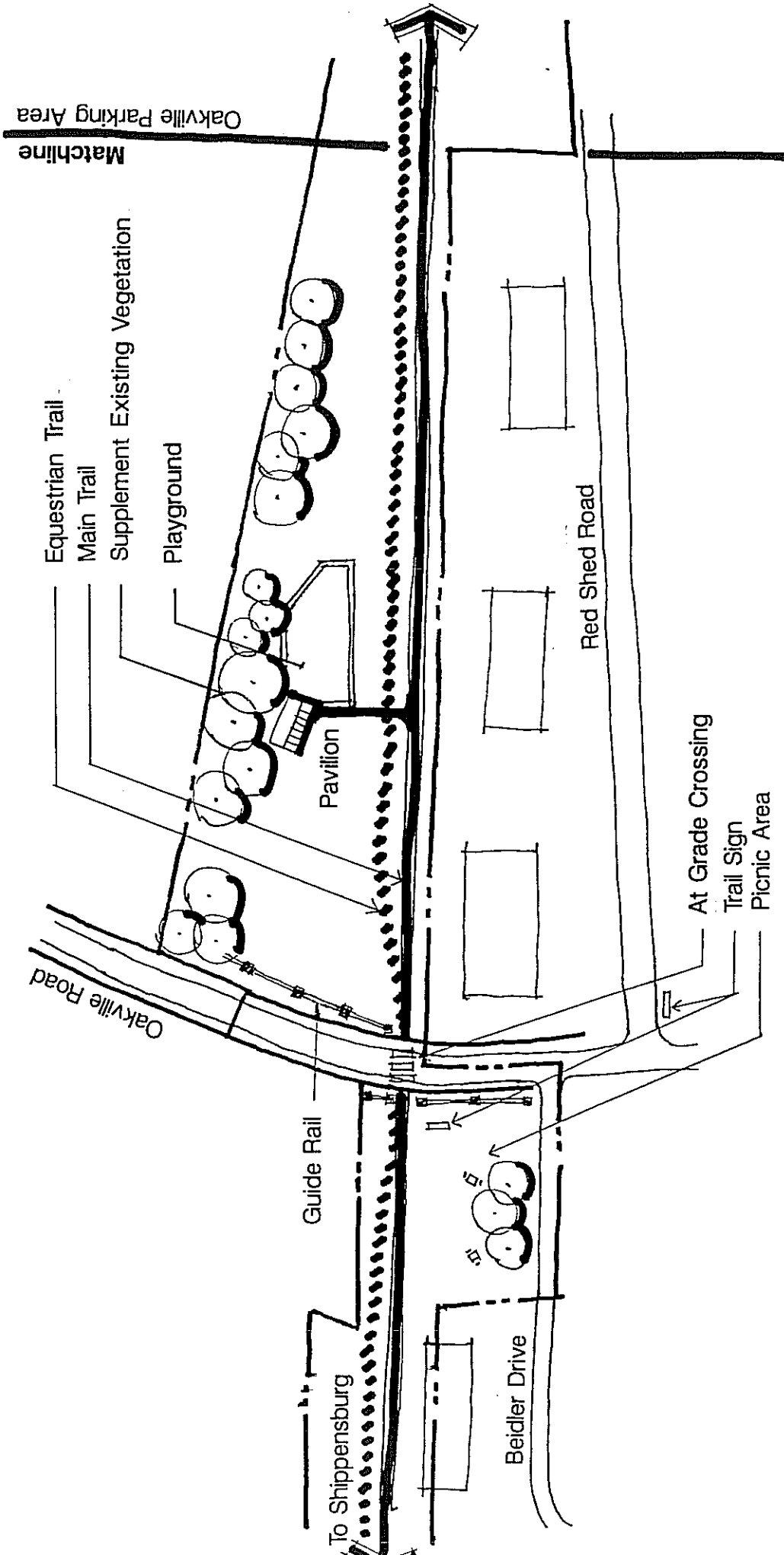


FIGURE 5-11

OAKVILLE TRAILHEAD  
SCALE : 1" = 100'



broken into small pieces and placed within the fill area. A culvert should be installed prior to placing the fill to carry stormwater north from the existing culvert under Clouse Road. The culvert type and size should be specified by a professional engineer.

*Oakville Road* – Oakville Road is an existing at-grade crossing and the typical at-grade crossing improvements should be installed to enhance safety. Guide rail should be installed along the Oakville Road frontage to control the point of crossing. See Figure 5-12. The crossing must be installed to achieve the best sight distance as the view north is limited for the west-bound trail user. Existing vegetation must be removed to enhance the sight distance to the north.

### **Segment #6 – Oakville to Fish Hatchery Road**

**Trail Tread** – Stone pavement trail tread is proposed in this segment.

**Facilities** – Facilities in this segment include the following:

*Trailhead* – A trailhead is proposed in Oakville as the mid-point access to the trail. The trailhead is accessed from Red Shed Road where a stone parking area is provided for vehicles and equestrian trailers. See Figure 5-13. Adjacent to the parking area is a large maintenance building for CVRTC maintenance equipment and a rest room. The rest room should be a self-contained composting type. To the west of the parking on the north side of the trail is a picnic pavilion and playground. A playground in this area would serve the village of Oakville as well as trail users. CVRTC should explore cooperation with North Newton Township for the funding and maintenance of the playground. Commercial uses for land of CVRTC in Oakville may be a viable option as a lease situation. CVRTC should consider opportunities as they emerge.

*Signage* – Signage should be placed at the Red Shed Road/Oakville Road intersection to direct users to the trailhead.

*Support Facilities* – Support facilities such as benches, bike racks and hitching posts should be provided at the trailhead.

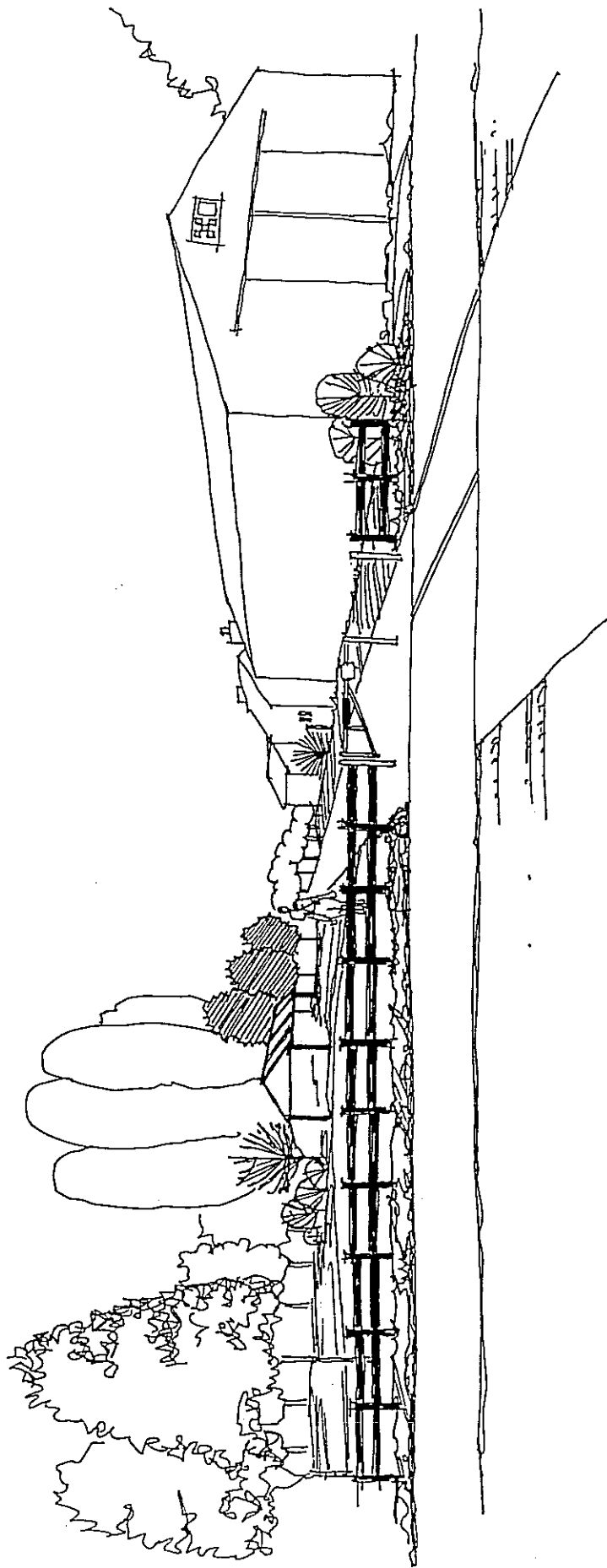
**Points of Interest/Linkages** –

*Views* – Views of the surrounding farm landscape and Cumberland Valley are very scenic on this portion of trail.

**Crossings** -

*Farm Lane* – An at-grade private farm lane exists east of Oakville. The lane is bituminous. Traffic control bollards and stop signs should be placed at this crossing.

*Fish Hatchery Road* – Fish Hatchery Road is a rural road without shoulders. The same farmer owns the land on both sides of the trail. Cattle cross the trail and are directed through a fenced corridor to a gated crossing. The gates are configured so that when they are open the trail is closed. This configuration of fence and gates is appropriate but must be relocated to provide the necessary setback and clear sight distance area from the edge of the roadway. The fence should be at least 20-feet from the edge of cartway and entirely out of the road right-of-way, to allow trail users a safe area to wait when the cattle are crossing and installation of the typical at-grade crossing improvements (Fig. 5-3).



OAKVILLE TRAILHEAD

FIGURE 5-12

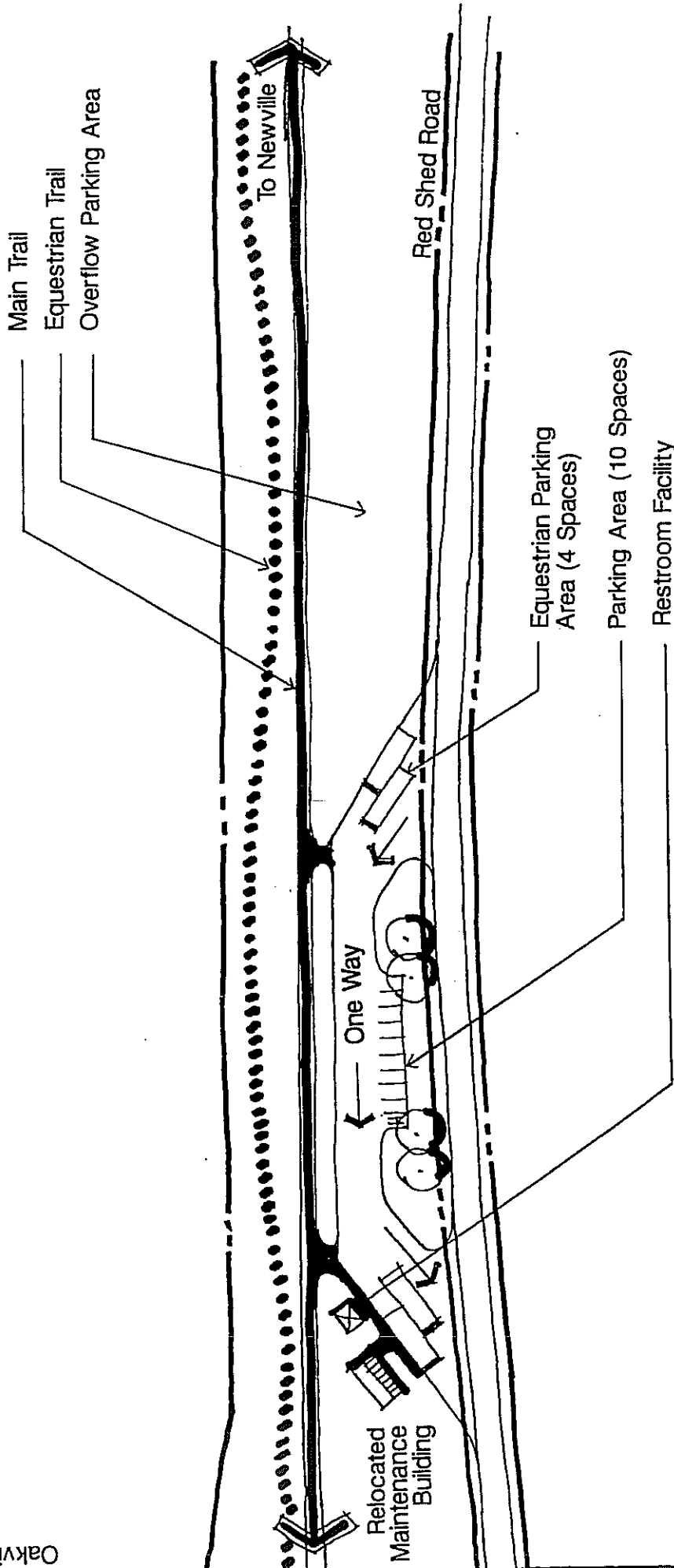
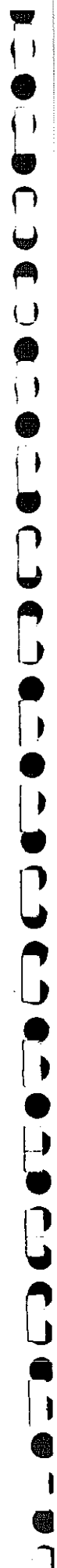


FIGURE 5-13

**OAKVILLE PARKING AREA**  
SCALE 1" = 100'



## **Segment #7 – Fish Hatchery Road to Bullshead Road**

**Trail Tread** – Stone pavement trail tread is proposed in this segment. The existing ballast has been removed for approximately 470± feet west of Bullshead Road.

**Facilities** – There are no facilities proposed in this segment.

**Points of Interest/Linkages** –

*Views* – Views of the surrounding farm landscape and Cumberland Valley are significant on this portion of trail.

**Crossings** -

*Nealy Road* – The railroad crossed over Nealy Road with a bridge elevated approximately 13 feet. The embankment must be graded at a maximum 5 percent slope to provide an accessible at-grade crossing. The existing trail corridor must be ramped 260± feet to achieve an accessible approach to the crossing. A leveling area of maximum 2 percent should be provided for 20 feet adjacent to the cartway. Typical at-grade intersection improvements are proposed (Fig. 5-3)

*Yost Farm Culvert* – The cattle underpass at the Yost Farm is proposed to be improved with railing installed on both sides of the top of the underpass to allow the trail user to cross the underpass safely. See Fig. 5-14/15.

*Bullshead Road* – Bullshead Road is an at-grade crossing with limited sight distance to the south. The trail should be moved to the north edge of the trail right-of-way to achieve improved sight distance and typical at-grade crossing improvements should be installed to enhance user safety. Typical at-grade intersection improvements are proposed (Fig. 5-3).

## **Segment #8 – Bullshead Road to Newville**

**Trail Tread** – Stone pavement is proposed as the trail tread in this segment. The trail tread has been removed east of Bullshead Road for approximately 2700± feet. The ballast has been removed and the corridor incorporated into a farm field. Adjacent to the previous corridor location is an older rail corridor owned by the adjacent farmer. This corridor is narrow, wet in areas and overgrown. The trail tread should be reestablished within the CVRTC right-of-way, but located to the south as possible to minimize disruption of the farm field. Guiderail and/or vegetation should be established between the farm field and trail tread to create a barrier between the areas.

**Facilities** – Facilities in this segment include the following:

*Trailhead* – A trailhead is proposed in Newville as the eastern access to the trail. The trailhead is accessed from McFarland Street where a stone parking area is provided for vehicles and horse trailers. A rest room and information signage is proposed adjacent to the parking area. The rest room should be connected to municipal sewer and water. See Figure 5-16/17.

*Signage* – Signage should be placed on PA Route 533 and PA Route 233 to direct users to the trailhead on McFarland Street.

*Support Facilities* – Support facilities such as benches, hitching post and bike racks should be provided at the trailhead. No facilities are proposed for the side parcel located north west of the PA Route 533 underpass at this time.

**Points of Interest/Linkages** –

NOTE:  
SEE FIGURE 5-6  
FOR RAIL HEIGHTS

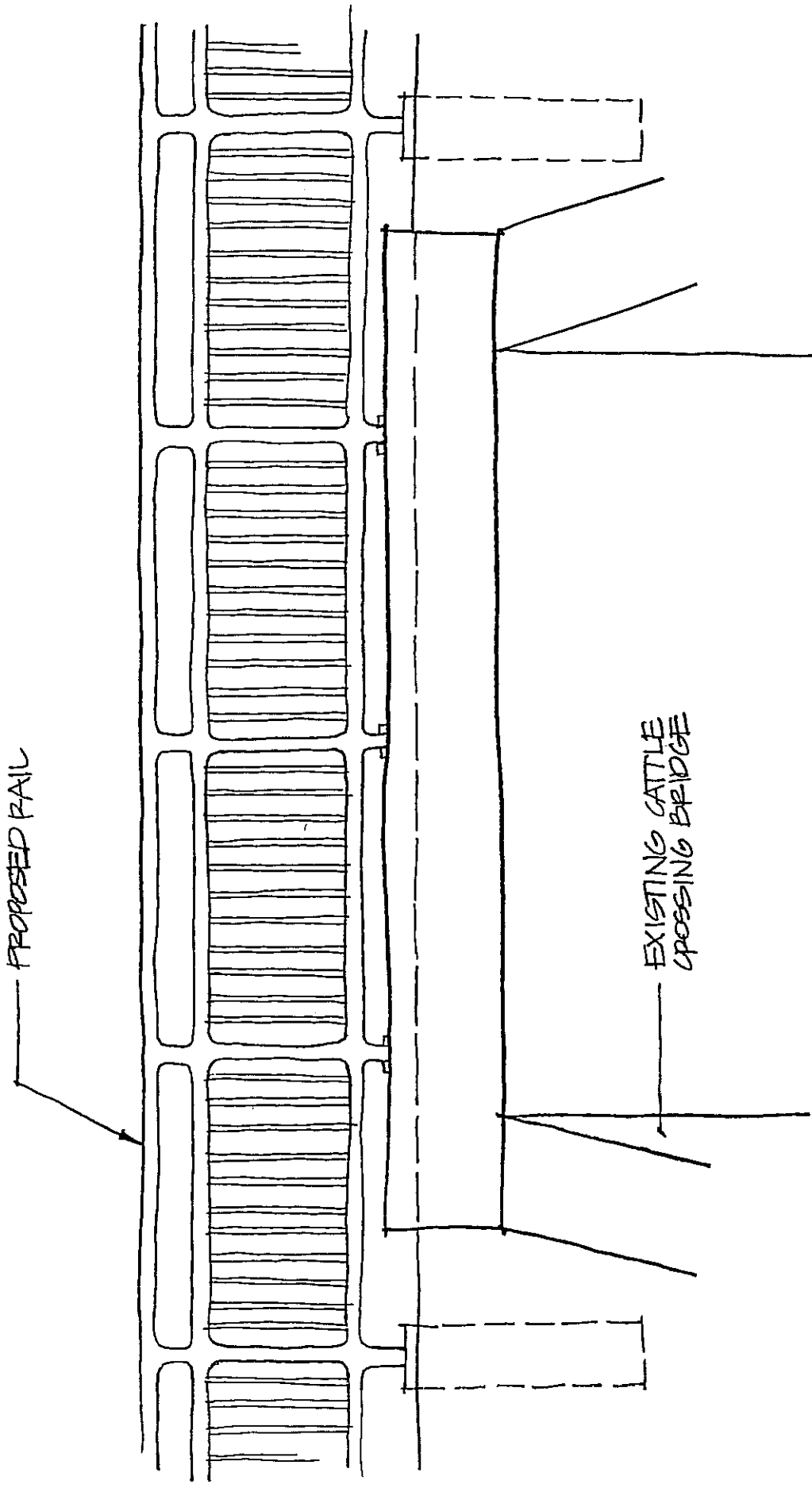


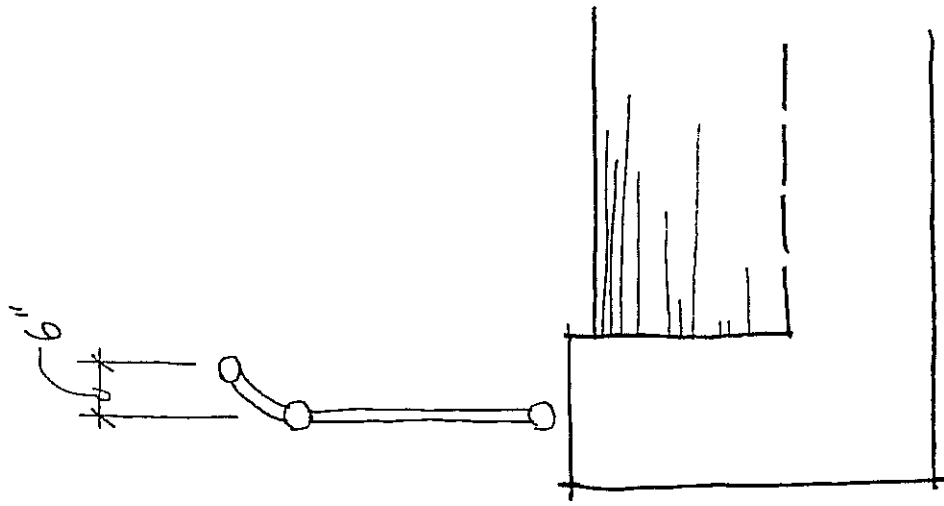
FIGURE 5-14

RAILING AT CATTLE CROSSING BRIDGE

SCALE : 1/2" = 1'-0"

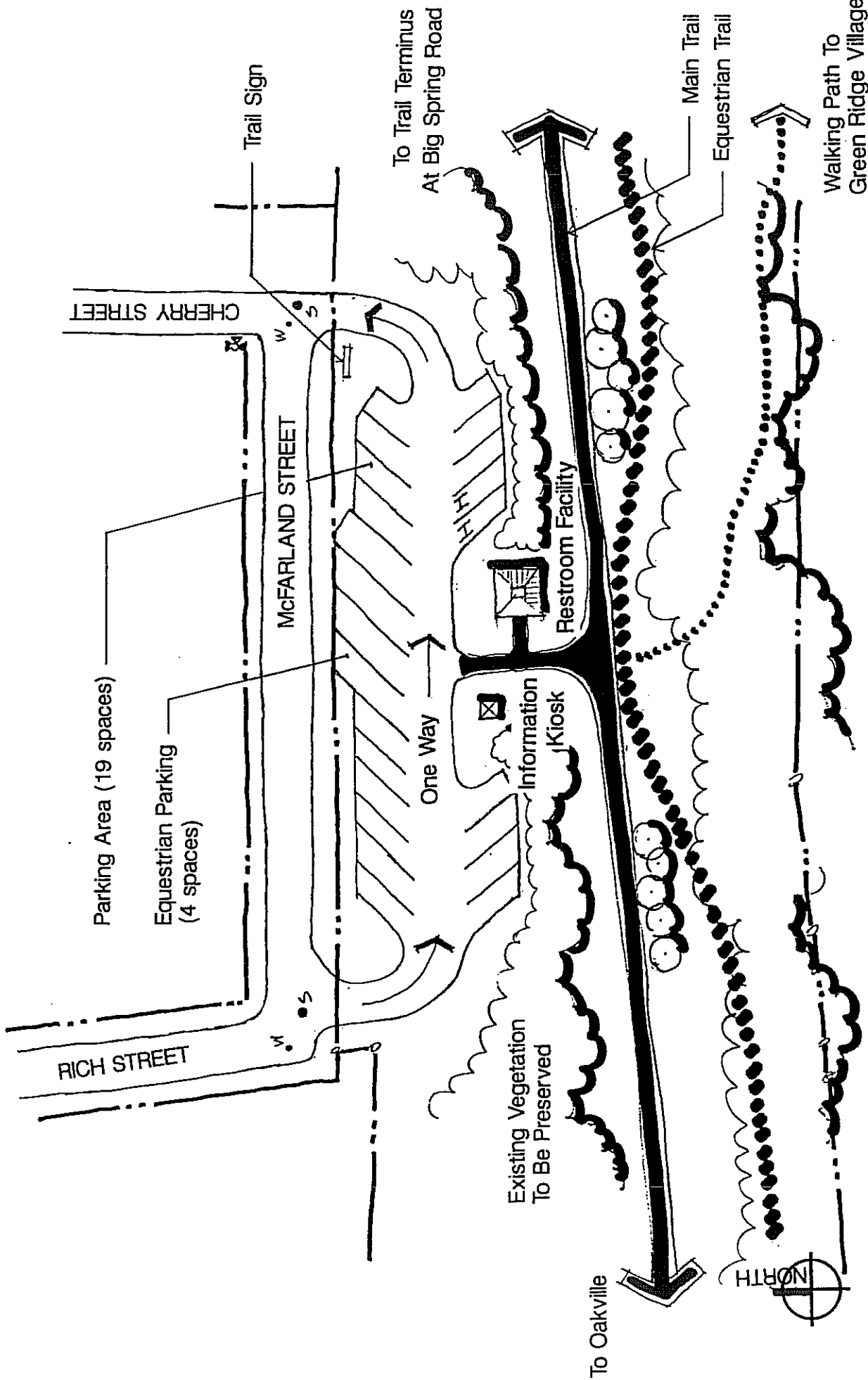






**VERTICAL RAIL OPTION**  
NOT TO SCALE

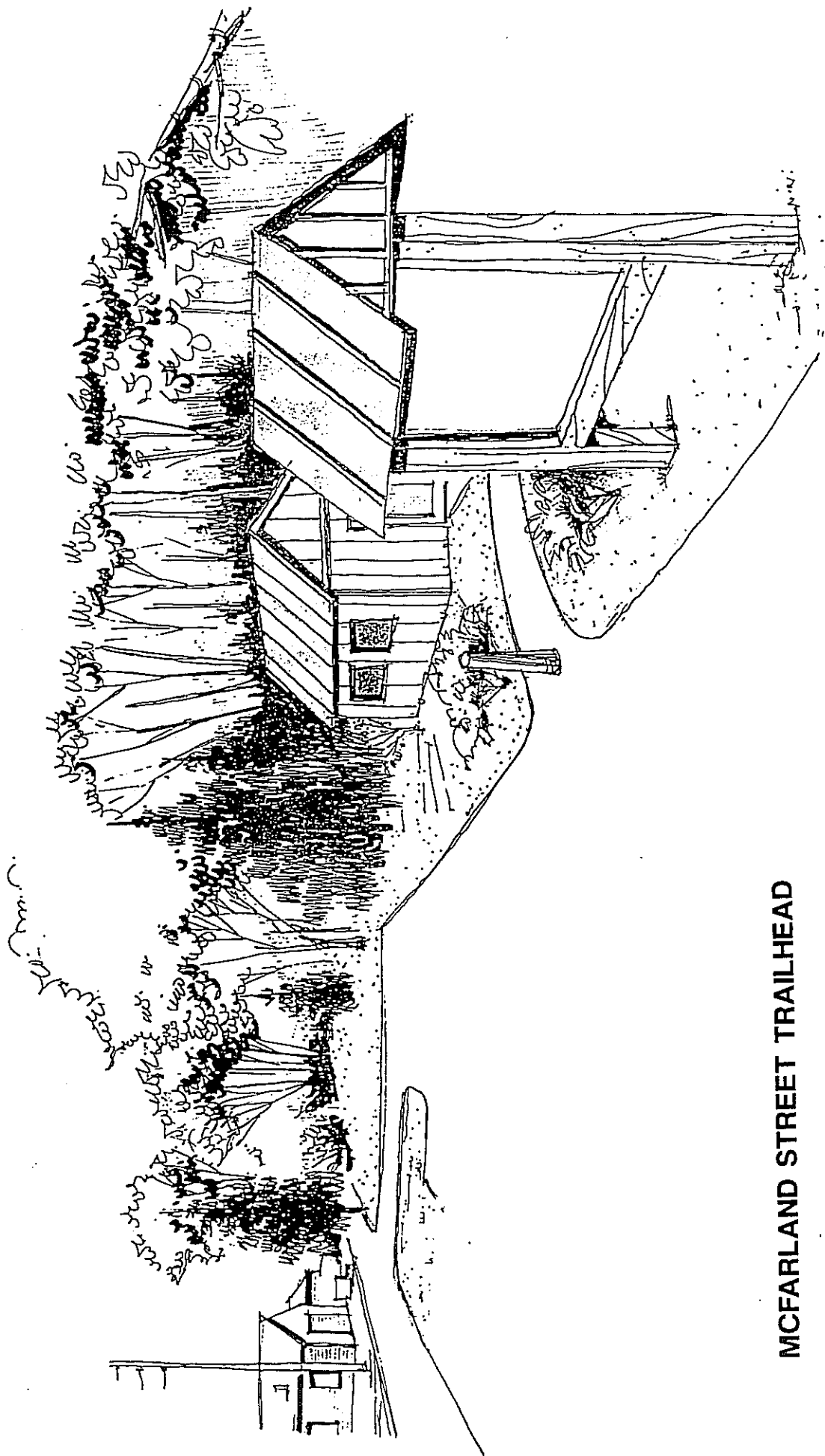
FIGURE, 5-15



**McFARLAND STREET TRAILHEAD**

SCALE 1" = 60'

FIGURE 5-16



**MCFARLAND STREET TRAILHEAD**

**FIGURE 5-17**

*Station Masters House* - The trail corridor is adjacent to this house which had former uses associated with the railroad. An interpretative sign should be located along the trail where users can view the location. The sign should describe the history of the railroad in Newville. This location also provides a prominent view of Big Spring Creek to the south.

*Green Ridge Village* - A trail linkage is proposed between the trailhead at McFarland Street and Green Ridge Village, a retirement community. The linkage would be on CVRTC land and along a shared access drive to the east and south of the trailhead. Trail users would be directed across Big Spring Road, which will require signage and improvements to enhance safety.

*Big Spring Fish Culture Station* - A trail linkage is proposed between the trailhead at McFarland Street and Big Spring Fish Culture Station via Green Ridge Village. Signage should direct trail users to this linkage opportunity.

*Newville Town Center* - The town center of Newville should be linked by signage at the McFarland Street trailhead.

#### **Crossings -**

*PA Route 533* – This crossing is an underpass. The trail corridor passes under the concrete bridge columns. The existing width accommodates both the grass and stone treads. Vegetation in the area of the underpass should be cleared, as possible, to create visual access in the underpass area and enhance safety.

*Big Spring Road* - A bridge is proposed to cross Big Spring Road. The bridge should be designed to accommodate pedestrians, bicycles and equestrians. The bridge will have safety railing that extends along the trail corridor to enhance safety where the embankment is steep.

*Big Spring Road at Green Ridge Village* - This crossing facilitates the linkage of Big Spring Fish Culture Station and Green Ridge Village. The road has limited sight distance in this area and additional roadway signage may be required to create an at-grade crossing. PennDOT should be involved from the outset of planning to determine if this crossing is feasible.

#### **Segment #9 – Newville to PA Route 233**

**Trail Tread** – Stone pavement is proposed as the trail tread in this segment. The trail tread is enclosed by vegetation on both sides of the corridor. The trail tread is raised and guide rail should be installed on both sides of the trail.

**Facilities** – Support facilities are proposed in this segment of the trail.

*Support Facilities* - Benches should be placed along the trail to take advantage of the view to Big Spring Creek. Guide rail is proposed along the raised embankment and at the trail end at PA Route 233.

**Points of Interest/Linkages** –

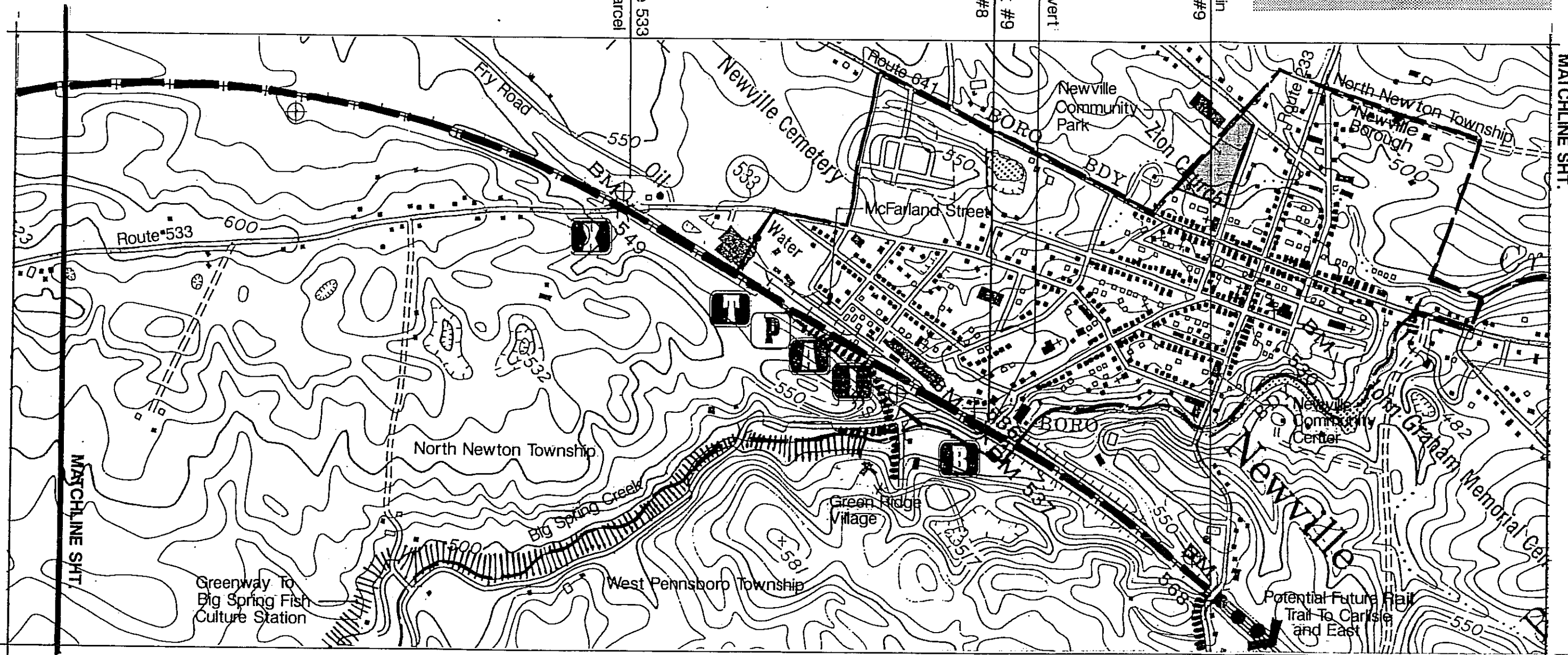
*Views* - East of Big Spring Road is a prominent view of Big Spring Creek and associated wetlands.

*Oak Flat Elementary School* – A trail linkage is proposed from the terminus of the trail at PA Route 233 to Oak Flat Elementary School. The school is located south of the trail, and an access easement should be sought to provide a safe area for development of a trail.

**Crossings -**

*PA Route 233* – PA Route 233 is a raised embankment above the corridor level.

# Cumberland Valley Trail Master Plan Corridor Map #5



## LEGEND

Scale 1" = 800'±

- |                    |  |                        |                        |   |
|--------------------|--|------------------------|------------------------|---|
| Access Point       | Proposed Parking                             | Trail Surface (Type 1) | Trail Surface (Type 2) | Mile Marker (at 1/2 mile increments)  |
| Bridge Improvement | Proposed Parking (with horse trailer spaces) | Exist. Structures      | Trailhead              | Linkages to:<br>Oak Flat Elem. School<br>Green Ridge Village<br>Big Spring Fish Culture Station |
| Interpretive Area  | Rest Area                                    | Significant Views      | Proposed Crossing      |   |

The trail will terminate west of the embankment until an extension to the east can be negotiated. Guide rail should be placed across the trail corridor end with signage notifying users that the public trail ends and that public access is not permitted beyond that point east. Bicycling along Route 233 should not be promoted by CVRTC by providing access to the trail until Route 233 is upgraded to a bike route.

*Big Spring Culvert* - The following recommendations are made for the culvert. Downstream Headwall - It is our opinion that the central area of the headwall over the center of the arch will eventually fall into the stream because of the smaller size of the stones and the absence of the other half of the headwall to stabilize them. The larger stones of the headwall that are located to the far right (looking upstream) of the wall will probably remain stable for a very long time because of their size and the way they were fit together. This headwall can be a liability to the trail. The water and the culvert attracts children. The downstream end of the culvert is very easily accessed by a nearby roadway. If the wall should fall and injure someone, independent of whether the individual contributes to this action, it is very likely that the controlling agency of the trail would be sued.

The headwall served to stabilize the sloped hillside above the culvert and provided some protection from the weather to the end of the arch. It also would provide protection to the end of the arch if very significant flood flows caused the end of the arch to be inundated by water.

We recommend that the headwall be removed for consideration of the liability. Only half a headwall does not provide the protection to the culvert as described in the above paragraph, and it would be very expensive to construct a new headwall. The adjacent roadway provides a very convenient means for heavy equipment to access the area. It should be possible to use a backhoe to remove the stones by pushing them backward away from the stream, and then pulling them down the slope behind the headwall area. The work can proceed from the corner farthest from the arch with a gradual progression towards the center of the arch. A new type of headwall should be considered for the end of the brick arch, such as cast-in-place concrete, a combination of precast concrete and cast-in-place concrete, gabions, gunite and soil stabilization. These additional measures must be installed to stabilize the end of the brick arch. The details of such measures must be developed as part of engineer/construction documents.

Brick Arch - An important consideration for the brick arch is keeping the interior surface intact. When bricks fall from the surface it creates space that allows other bricks to move. This movement can lead to bulging of the arch, which can produce instability of the arch if it becomes severe.

We recommend that the areas of the arch that are missing bricks be periodically filled with concrete patching material. The patching material can be mixed thick enough to trowel into the void areas. We suggest that this be done from a boat and during the driest time of the year when the flow through the culvert is low.

Chapter 6  
Trail Management

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## **Introduction**

Good trail management and operation is crucial to the success of the Cumberland Valley Trail. A safe, clean and attractive trail will bring users, generate public support and minimize risk. The best way to protect the investment of the financial and human resources in the trail is through effective management.

## **Cumberland Valley Rails-to Trails Council: A Volunteer Organization**

The Cumberland Valley Rails-to Trails Council (CVRTC) is a group of volunteers who worked toward the acquisition and development of the Cumberland Valley Trail. Organized in 1990, the Council has been incorporated as a private non-profit organization. The CVRTC Board is composed of a president, vice-president, treasurer, secretary and six members. The board has two committees: by-laws and publicity.

The purpose of the Council is to:

- ◆ Oversee the development and implementation of a master site plan for the trail
- ◆ Community outreach
- ◆ Maintain the trail
- ◆ Coordinate volunteer efforts
- ◆ Fundraising
- ◆ Council membership

Since the Council is comprised of volunteers, there is no paid staff. Members have created an admirable organization so reflective of our true American "can-do" spirit. They have done everything from negotiating the acquisition of the rail bed from Conrail to securing grants funds, overseeing the planning process and maintaining the trail.

### ***Financial Operations***

CVRTC has obtained about \$216,000 in grant funds from the Intermodal Surface Transportation Enhancement Act (ISTEA) and the Keystone Community Grant Program for the purposes of developing a trail master plan, trail development and the purchase of a tractor. The Council has also obtained foundation grants and business donations in the form of funding, equipment and materials. For operations, the Council has established a membership program with fees ranging from \$20 for individuals to \$100 for patrons and corporations. About 250 households belong. Since the membership fees have been increased this year from \$5, income projections for 1998 have not been made. In the past, the Council has had about \$1,700 to work with annually.

### ***Trail Volunteerism***

At present the Board members do the most work on the trail. Board members mow the grass, raise funds and write grants, coordinate planning efforts and respond to developing issues. Because the trail has been in the planning stages, tasks have not been defined that could be undertaken by volunteers. The Board has seen a great deal of interest in the community for volunteerism. The Secretary of CVRTC has been primarily responsible for coordinating



volunteer efforts; it has been a huge job. She coordinates the mowing, volunteer trail maintenance, coordinates the writing and distribution of the newsletter development and distribution and oversees special events. The Board has expressed the need for leadership in organizing and implementing a volunteer program.

### ***Organizational Issues***

The Board has done a yeoman's job of establishing the Cumberland Valley Trail. Thousands of hours of volunteer time have contributed to the development of the trail. For the most part, the volunteers involved have been the board members. Wherever they saw a need or opportunity, they did whatever it took to get the job done. With a master plan in hand, the potential exists to organize trail tasks and functions in an orderly fashion that will enable the Board to plan, direct, control and evaluate trail operation and management. An orderly documented approach to maintenance management will also help the CVRTC reduce its exposure to liability.

In a work session, Board members identified areas of concern which need to be addressed in the long-term operation and management of the trail. These include the following issues:

- ◆ Organizing and managing a volunteer program
- ◆ Establishing the leadership to get others involved so the same people aren't always doing the work. At present recruiting new volunteers has been difficult. Part of this difficulty is attributed to the fact that tasks have not been identified in which to channel volunteer efforts. While most board members know many people in the area who could be recruited, volunteers still need to be managed as an organizational function of CVRTC.
- ◆ Creating the marketing program for trail promotion; newsletter development and distribution; and membership development.
- ◆ Maintenance planning, directing and implementation.
- ◆ Community outreach for the purpose of establishing partnership with businesses, municipalities along corridor and in Cumberland County, and schools.
- ◆ Fundraising and special events

The overriding issue is that this is a volunteer committee. Most of the committee members are so busy doing the day-to-day tasks that no one is in a leadership position to develop and implement the kinds of programs that are needed as listed above.

### ***Organizational Options***

CVRTC has several organizational options:

#### **1. Continue As Volunteer Council**

Board members would continue to do the lion's share of the work. The board would organize by committee to address major issues. Maintenance; safety and security, fundraising, and volunteers and outreach would be the four most important. The heads of the committees would be responsible for recruiting assistance and implementing projects. The President would be responsible for the leadership function and looking into the long-term issues, not so much the day-to-day operations.

*Advantages:* No need to pay wages. Higher level of organization of committee around functions may result in more achievements. Council's can-do attitude stimulates success.

*Disadvantages* - Still relying on same group of people. Danger of burn-out. Risk inherent in relying on investing organizational foundation in a few people who may leave the Council. Lack of ability to plan ahead because people are consumed by daily operations. Volunteers go away because of lack of direction.

2. Add Trail Manager (part-time)

Continue volunteer council while adding a part-time person to work as the trail manager. The trail manager would perform an identified set of tasks as defined by the Council. Possible functions include administrative tasks, membership management, task coordination and outreach. It is possible that a Council member could continue to do administrative functions while CVRTC casts the Trail Manager in the role of out-reach, volunteer recruitment and management and fund-raising.

*Advantages:* Frees volunteers on Board to do other trail related work. Provides a consistent presence for the trail. Provides focus and dedicated staff time on a regular basis to attend to the trail.

*Disadvantages:* Requires funds for wages. Should pay more than comparable jobs in the area in order to attract the caliber of individual needed. Requires some supervision and direction, especially in the beginning.

3. Work with Cumberland County to establish a County Parks & Recreation Department with trails in the county as a functional responsibility.

Under this scenario, the County would be responsible for trail operations and management. CVRTC could function as a "Friends of the Trail" organization enabling their group to work on initiatives like fundraising, memberships, special projects and other topics of importance to the trail.

With a Greenway Feasibility Study underway, it is likely that the County will eventually have a network of greenways. Greenways are corridors of protected public and private land established along ridges, stream valleys, rivers, abandoned rail corridors, utility rights-of-way canals, scenic roads or other linear features. They link recreational, cultural and natural features, provide pathways for people and wildlife, protect forests, wetlands, grasslands and improve the quality of life for everyone. Since trails will be incorporated in portions of these greenways, overall management of trails in the County will become important. At one time Cumberland County had a Parks & Recreation Department. However, it was eliminated because there were no roles or functions associated with this department. The development of trails and greenways county-wide, provides an appropriate role for a County Parks & Recreation Department. CVRTC should undertake discussions with the County to promote this idea. There is precedence for this idea nationwide. The USDA Americorps and the Pennsylvania Rails to Trail Conservancy conducted a survey in 1996 and identified every rail trail in the country open before 1990. Ninety-two percent of those surveyed were in public ownership. That is, they are owned, operated and maintained by a governmental organization.

4. Consider pursuing the establishment of a regional trail authority with Cumberland and Franklin Counties.

The authority could manage the trails in a similar way as proposed for trail operation and management by a Cumberland County Parks and Recreation Department. CVRTC would

function as a Friends Group. Establishing a regional trail authority would be a more complex under-taking than would establishing a parks and recreation department in Cumberland County. CVRTC needs to consider time frames and likelihood of success in choosing to pursue establishment of a county or regional trail management organization.

### ***Recommendation for the Organizational Structure***

Based upon discussions in a work session with the CVRTC, the Council should consider organizing around committees for the following:

- ◆ Maintenance
- ◆ Safety and Security
- ◆ Trail Development
- ◆ Marketing and Public Outreach
- ◆ Fundraising and Special Events

**Maintenance Committee** - would be responsible for establishing the maintenance plan for the trail. This includes maintenance planning and scheduling, performing maintenance tasks, overseeing maintenance operations, evaluating trail care, obtaining volunteers, equipment management, responding to issues reported by the safety committee, tracking and reporting of maintenance work. Information on maintenance scheduling could be based upon the experience of the committee to date and the information presented in this report generated in part through discussions with CVRTC in the master plan work sessions.

**Safety and Security Committee** - would be responsible for overseeing trail safety and security. Creating a presence on the trail should be a primary goal of this committee. The more people using the trail, the safer the users will perceive the trail. Functions of the committee could include:

- ◆ Organizing and coordinating the security and patrol procedures with the State Police (Carlisle Barracks), Mid-Cumberland Valley Regional Police Department and the Newville Police Department.
- ◆ Distribution of keys to gates and/or bollards for access to the trail by emergency and law enforcement personnel.
- ◆ Producing the language for the signs and handouts informing people what to do in case of an emergency. This should be reviewed by the CVRTC solicitor.
- ◆ Establishing a volunteer bike patrol in which bicyclists would meet and greet trail users, give out handouts about the trail, trail etiquette and safety, and just be a presence on the trail would be an asset to the trail. The bike patrol should function as a courtesy unit and not for the purpose of enforcement. Since the Mid-Cumberland Valley Regional Police Department has four trained bicycle patrol officers, they could be involved in establishing and training a volunteer bike patrol for the Cumberland Valley Trail.
- ◆ Reviewing the established rules and regulations periodically and revising them as needed.
- ◆ Referring issues and complaints to the proper organization such as the maintenance committee or the appropriate police unit. Maintaining a written record of such actions and the follow-up.

- ◆ Conducting safety inspections on a regular basis and maintaining a written log of such inspections and follow-up actions. This should be coordinated with the Maintenance Committee so that maintenance and safety inspections may be combined.

Trail Development Committee - would oversee the construction of the trail. Moving the trail from the planning to development stage would be their primary goal. Their functions could include:

- ◆ Oversight of the development of construction documents and specifications.
- ◆ Supervision of trail construction.
- ◆ Generating ways of undertaking construction that could be a combination of contracted and volunteer work.
- ◆ Consideration should be given to hiring a construction manager with the expertise to inspect the construction work on a constant basis throughout the process and take the required steps to insure that the construction meets the specifications.
- ◆ Coordination and outreach to extend the trail and create connections regionally.
- ◆ Consideration and direction of CVRTC regarding the future of the Freight Station Parcel.

Marketing and Public Outreach - would be responsible for establishing, sustaining and enhancing partnerships with other groups including jurisdictions, community organizations, and the private sector. Key person interviews revealed that the trail already has a positive public image and that people are very excited about having it. The fact that complaints have been minimal shows that this committee already has a leg up on its mission. Functions could include:

- ◆ Enhancement of the current membership program for the CVRTC.
- ◆ Development and distribution of the newsletter on a regular basis.
- ◆ Management of citizen comments and complaints. This committee would be responsible for responding to all comments received by the public. They would also channel public comments in the proper direction for follow-up action and keep a log of such actions. The selection of a CVRTC person(s) to represent the committee to the public in presentations and requests will be important. Skills required include the knowledge and ability to make presentations, expertise in negotiation, and the ability to deal with conflict as a normal and productive process of all public projects. It is important that CVRTC designate someone who is able to speak for the organization in matters of important presentations and negotiations. A positive and united presence is crucial to both long-term success and immediate accomplishments.
- ◆ Maintaining positive relationship with adjacent landowners is an important function. The CVRTC has had meetings and discussions with them throughout the planning process. It will be important to continue this good start as the construction process begins.
- ◆ Creation of a logo and a trail identity system that would be used on all materials and equipment for the trail including signage, letterhead/envelopes, newsletter, promotional materials, volunteer emblems for clothing, equipment decals. The goal would be to create a **simple** logo that would be easily remembered and associated with CVRTC. If it is too complex it will be neither memorable nor easily reproduced. A good example is the Mercedes logo which is simple, has nothing to do with cars, but still stands for the automobile, quality, status and a host of desirable characteristics. To this end, the logo should be designed professionally and not through a contest. Shippensburg University or a graphics business in the corridor may be able to provide low cost or donated assistance.

- ◆ Coordination with tourism planning. Placing information about the trail in visitor centers/information packages, with Realtors, and other jurisdictions with potential trail connections to Cumberland Valley Trail.
- ◆ Conducting a regular trail users assessment. This could be done annually through the use of volunteers, perhaps university students in marketing or a related field, who would conduct interviews to find out how the trail is serving the public and how it could be enhanced. Getting close to the trail users will contribute to its success.
- ◆ Coordination with other committees in related efforts. An example includes the Cumberland County Greenway Study. Potential coordination with Carlisle should be explored.

**Fund-Raising and Special Events** - would be responsible for generating revenues for the operation and maintenance of the trail. Functions could include:

- ◆ Coordination with the Membership Committee regarding membership dues.
- ◆ Pursuit of grants from government and foundations.
- ◆ Development of fund-raising programs and events. Fundraising projects would include a range of elements from small contributions to the solicitation of major gifts from philanthropists.
- ◆ Developing revenue-producing uses for excess property.
- ◆ Development of special events to focus public attention on the trail.
- ◆ Coordination with the Treasurer who would be responsible to financial management
- ◆ Researching what other private-non-profit organizations and trail groups do for fund-raising to get ideas. Using the Internet is a good way to spot trends and get ideas.

### ***Roles and Responsibilities: A Time for Evaluation***

The adoption of the Master Plan marks a significant milestone in the CVRTC. It provides the opportunity to look at the organization and make the changes necessary to move the trail forward. Following is the suggested process for assessing and revising roles and responsibilities for CVRTC:

1. The first thing to do is to have a celebration of the group's success. The Master Plan is a major accomplishment for CVRTC. Those involved should celebrate this achievement. The group should plan something that can be as simple as snacks at a meeting to having a party in which CVRTC would invite their supporters to celebrate along with them. This would serve a marketing purpose as well. Perhaps it could be a picnic at a trail head. If people are going to give their time, they should have fun and celebrate success!
2. The Board needs to evaluate their roles and responsibilities and re-define them in terms of the new organizational structure. Too much work is vested in a few people while others seem not to have a defined role. It is important to cast the responsibilities. The Board should establish policies about how they want to work together as an organization. Through the planning process, the group has evolved into a more collaborative organization. This should continue as true collaboration and will advance the trail and enable the organization to be strong through changes.
3. The relationship of the committees to CVRTC should be defined. It is essential that the committees work towards the common vision of the trail and not take on a life of their own.

Coordination is important.

4. One of the roles of the President should be to oversee the committees and insure that work is coordinated. Since this is a volunteer organization, work plans must reflect this.
5. The Committees should develop a work plan for the year and designate responsibilities and time frames.

The role of the President would be to oversee the committees in a supportive fashion to ensure that the committees are functioning, have the assistance they need and are working towards the common goals of the CVRTC. The President should monitor the workload, tasks and opportunities to determine if a trail manager-type of position should be added the next year. Committee chairs would be responsible for organizing their own committees and getting volunteers to help them. CVRTC should develop the roles and responsibilities of the committees and formalize them in writing to ensure clear and consistent understanding of what everyone is doing.

### ***Trail Operation***

This Committee established public-use rules for the trail. The property is open to the public at no charge, for non-motorized use only. Based on the fact that the property was a primitive open space area without facilities or improvements or regular patrols, the CVRTC established the following rules:

1. Hours of permitted use: Dawn to Dusk
2. No motorized vehicles, except motorized wheelchairs.
3. No hunting or trapping.
4. No firearms or other weapons.
5. No alcoholic beverages or illegal drugs.
6. No littering or dumping. Pack out your own trash.
7. Soliciting and posting of signs prohibited.
8. Camping and fires prohibited.
9. Do not destroy, damage, or remove flora, fauna, artifacts, rocks or other CVRTC property.
10. Do not trespass on adjacent properties.
11. Bicyclists, including child passengers, must wear ANSI or Snell certified helmets.
12. Obey posted signs and traffic controls.
13. Stop at all roads. Yield to vehicular traffic. Use caution.
14. Stay to the right except to pass. Prior to passing, bicyclists must give audible warning (ring bell or say "passing on your left").
15. Horseback riders have right of way over all other users. Pedestrians have right of way over other users except horseback riders. Horseback riders must reduce their pace to a walk when approaching other users.
16. Upon reaching impassable areas, follow posted conditions (if any) or turn around.
17. Dogs must be under immediate and positive control and on a leash not exceeding six feet in length. Do not allow dogs to defecate on traveled portion of this property. Owners and handlers of all animals will be responsible for damage or injury.
18. Enter and exit at designated points only.
19. Stop and move to side when a patrol, maintenance or emergency vehicle is passing.

20. Obey all lawful instructions of CVRTC officials. Races and other speed competitions are prohibited without permits.
21. Permits are required for fund-raisers, special events, and groups exceeding 50 persons.

### ***Freight Station Parcel***

The CVRTC owns former railroad land at the Shippensburg Freight Station. It is currently a primitive open-space area only, without facilities or any improvements. There is an agreement under negotiation with the Little League to use this site for youth baseball. Restrictions for the site include the following:

1. Hours of permitted use: Dawn to Dusk
2. No motorized vehicles, except motorized wheelchairs.
3. No hunting or trapping
4. No firearms or other weapons.
5. No alcoholic beverages or illegal drugs.
6. No littering or dumping. Pack out your own trash.
7. Soliciting and posting of signs prohibited.
8. Camping and fires prohibited
9. Do not destroy, damage, or remove flora, fauna, artifacts, rocks or other CVRTC property.
10. Do not trespass on adjacent properties.
11. Bicyclists, including child passengers, must wear ANSI or Snell certified helmets.
12. Obey posted signs and traffic controls.
13. Use caution near roads and streams.
14. Dogs must be under immediate and positive control and on a leash not exceeding 6 feet in length. Do not allow dogs to defecate on traveled portion of the property. Owners and handlers of all dogs will be responsible for any damage and injury.
15. Stop and move to side when a patrol, maintenance or emergency vehicle is passing.
16. Obey all lawful instructions of CVRTC officials.
17. Races and other speed competitions are prohibited.
18. Permits are required for fund-raisers, special events, and groups exceeding 50 persons.

### **Security and Safety**

The goal of CVRTC is to provide a trail that both protects trail visitors and the trail property. Since the corridor runs through Shippensburg Borough, Shippensburg Township, Southampton Township, North Newton Township (including the Village of Oakville), Newville Borough and West Pennsboro Township, there are three police forces that cover this area including the State Police Barracks at Carlisle, the Mid-Cumberland Valley Regional Police Department and the Borough of Newville. Each police department commander expressed support and a willingness to patrol within their jurisdiction of the corridor. To establish the patrols and procedures for the trail, the following process should be followed:

1. Set up a meeting with the Commander of the State Police Headquarters in Carlisle. He will assemble the division chiefs who will be involved with setting up patrols and procedures to meet with CVRTC. The State Police have the same power as municipal police departments when they police local communities. It may be possible to involve the officers in a volunteer

capacity as well, because this barracks is made up of very health conscious officers who use the trail for cycling and running.

2. Contact the Mid-Cumberland Valley Regional Police Chief about two weeks before the trail officially opens to meet with him about setting up patrols. He has four trained bicycle police officers that would be very helpful in establishing a presence on the trail. He should also be contacted about possibly helping CVRTC organize a volunteer bicycle trail courtesy patrol
3. Contact the Borough of Newville Police Chief before the trail officially opens to establish patrol procedures.
4. The CVRTC Safety and Security Committee should document, in writing, all of the agreed upon procedures.
5. The committee should monitor changes in police administration to ensure that the trail is patrolled if jurisdictions and responsibilities change. This would apply if Mid-Cumberland Valley Regional Police had a territory change or if a municipality is added a police force.
6. The committee should refer all safety and security issues to the appropriate police unit and follow-up on any required actions.
7. Keys should be provided for emergency and security vehicles to access the trail.

Shippensburg University presented major concerns about trail safety regarding the passage of the trail near a women's dormitory and the potential threat that trail users may pose to the women in this dorm. Because this trail segment has an urban-type use in contrast to the predominantly rural trail, the University expressed the need to have a different design and management approach than the rest of the trail, which traverses mainly farmland. This would include clearing of brush understory, trail lighting, highly visible security, "escape" routes from the trail where it is below grade and paving. The University already has call boxes and is considering remote cameras where students leave the campus by the trail for off-campus parking. Because of these issues, CVRTC should continue negotiations with the University to develop a collaborative approach to this part of the trail that benefits trail users and meets both CVRTC and University goals.

### ***Emergency Management***

Cumberland County has a 911 Emergency response system. According to the Cumberland County Office of Emergency Preparedness, the 911 Center already has information for the trail should they receive an emergency call. The County is also developing a computer-aided dispatch system. Data on the trail will be added to the GIS(Geographic Information System). Data are just being entered now with one municipality at a time to be followed by a test period.

While the county emergency response appears to be well-organized to respond to trail emergencies, the challenge is for trail users to know what to do in the case of an emergency and to be able to identify where they are on the trail. The following steps should be taken:

1. A sign should be placed at all trailheads to tell trail visitors what do in the case of an emergency. This could include noting where they are on the trail, going to the nearest residence or business to use a phone, and calling 911.
2. Trail markers should be placed every half-mile along the trail noting what mile/half, mile it is. Information signs should explain that the purpose of the mile markers is to help trail visitors identify where they are on the trail should they need help.
3. At every road crossing, there should be a sign with the road name so that visitors will know where they are on the trail.
4. Signage should be placed to warn trail visitors of potentially hazardous conditions. Warning



- signs should be placed at any hazardous intersections with roadways to warn cyclists to dismount and cross on foot.
5. A telephone should be available at each trailhead.
  6. The Committee should coordinate with 911 to keep track of any emergencies on the trail for the purpose of making improvements for enhanced visitor safety. As stated in the security section, emergency and security vehicles should have keys to access the trail.
  7. CVRTC should always carry insurance.

### **Risk Management**

Security is important from three perspectives: protecting trail visitors, protecting the resources of the trail, and managing the revenues of the CVRTC by minimizing exposure to lawsuits. The goal is to make the trail a safe and enjoyable place.

Risk management is the practice of controlling the possibility and severity of foreseeable accidents and administering due care.

### **Pennsylvania Rails-to-Trails Act**

In Pennsylvania, state laws are in place to encourage property owners to make their land and water areas available to the public for recreational use by limiting the liability of the landowners. The Pennsylvania Rails to Trails Act of 1990 (included in Appendix A) provides a limitation on the liability of persons who provide property for public recreational trail use. Section 5621 extends this protection to landowners adjacent to the trail once the trail is developed.

Sound management practices can help to minimize risk while protecting people and property. CVRTC should ensure that the trail facilities and programs are safe and that their liability exposure is minimized by implementing effective risk management practices. Establishing a safety policy, instituting procedures for implementing the safety policy, and documenting the practices should enable CVRTC to “pass the liability test” should a lawsuit arise. The following section presents an approach to make the Cumberland Valley Trail a safe and enjoyable corridor for trail visitors as well as to minimize the risk of lawsuits. This approach is intended to be a guide and further work needs to be done by the CVRTC in establishing the complete program. It is not intended to cover legal issues and as such all policies and procedures dealing with risk management should be reviewed and addressed by the solicitor and the insurance carrier.

### **Safety Policy**

A safety policy is a broad policy that demonstrates that CVRTC is committed to safety. The policy should be adopted by the Council as an official policy. The following statement could be used as a model for the Council to use to demonstrate their commitment to a safe environment for park visitors and trail volunteers.

*It is the policy of the Cumberland Valley Rails-to-Trails Council that the Cumberland Valley Trail be operated and maintained in a safe, clean, and attractive manner. The Council is committed to implementing this policy through an on-going maintenance management program; compliance with national, state and industry standards for facility and equipment design; police protection; and enforcement of the rules and regulation within its means.*

## **Designation of Safety Officer and Committee**

The designation of a safety officer and safety committee. By establishing such a committee as part of CVRTC's organizational structure, the Council is ensuring that the responsibility for safety is an assigned function. The committee should be responsible for developing the safety plan for the trail. All emergency procedures should be written down. The committee could also have oversight responsibility for trail safety once the trail is developed. The safety committee needs to coordinate with the maintenance committee, the program committee, the 911 center and the police forces.

### **Pennsylvania Rails to Trails Act of 1990**

#### **Section 5621 - Limitation on liability of persons making land available for trail use.**

- a) "General Rule. - Except as specifically recognized or provided in subsection (d) an owner or lessee who provides the public with land for use as a trail under this act or who owns land adjoining a trail developed under this act owes no duty of care to keep the land safe for entry or use by others for recreational purposes, or to give any warning to persons entering or going on that trail of a dangerous condition, use, structure or activity thereon.
- b) Owner. - Any person, public agency or corporation owning an interest in land utilized for recreational trail purposes pursuant to this act shall be treated as an "owner" for purposes of the act of February 2, 1966 (1965 P.L.1860, No. 86), entitled "An act encouraging landowners to make land and water areas available to the public for recreational purposes by limiting the liability in connection therewith, and repealing certain acts.
- c) Specific limitations on liability - except as specifically recognized by or provided in subsection (d), an owner or lessee who provides the public with land under this act shall not, by providing that trail or land:
  - 1) be presumed to extend any assurance that the land is safe for any purpose;
  - 2) incur any duty of care to a person who goes on that land; or
  - 3) Become liable for any injury to persons or property caused by an act or an act or permission of a person who goes on that land.
- d) Exception -
  - 1) This section shall not apply to the owner or lessee of the land used as a trail if there is any charge made or usually made for entering or using the trail or land, or any part hereof.
  - 2) This section shall not apply to the owner of land adjoining a trail if there is any charge made or usually made by the owner of such adjoining land for using the trail or land, or any part thereof, or if any commercial or other activity relating to the use of the trail whereby profit is derived from the patronage of the general public is conducted on such adjoining land, or any part thereof, provided, however, that nothing in this section shall be construed to authorize an adjoining land owner claiming an interest in an available railroad right-of-way as a recreational trail.
  - 3) Nothing in this act limits in any way liability which otherwise exists for willful or malicious failure to guard or warn against a dangerous condition, use, structure or activity."

## **Trail Design and Equipment**

The trail and related facilities should be designed by an **appropriate** design consultant. For example, registered landscape architects should develop trail and support facility plans, architects

should develop building plans, and engineers should work on bridge projects.

1. Any equipment on trail property should conform to the guidelines established by the Consumer Product Safety Commission (CPSC), American Society for Testing Materials (ASTM) and be barrier free in accordance with the intent of the Americans with Disabilities (ADA) Act. Should an accident occur, any liability on the CVRTC's part would be evaluated against these standards.
2. Trail design should be reviewed by safety officials such as police and rescue to insure that there is adequate access for treating and removing injured people and protecting park property. The Cumberland Valley Trail has been designed in the master plan to accommodate emergency vehicles on both the trail and bridges.
3. Telephones should be placed at each of the three trail heads. The installation and operating charges for each phone is as follows:
  - ◆ \$57 per phone plus \$72/hour plus materials for bringing line beyond closest terminus.
  - ◆ Sprint monthly rental charge is now \$35/month per phone but this is going up to \$110 to \$140 by July 1998. CVRTC should consider having a business line installed which restricts toll calls to people with calling cards but callers could still make 911 and local calls. The monthly charge for this would be \$25-30, a considerable saving.
  - ◆ CVRTC has to provide the shed for the phone to be installed.

### ***Signage and Posting of Regulations***

Trail rules and regulations have been adopted by the CVRTC. The rules and regulations adopted should be posted at trail heads as well as in public information materials. Trail signage from a safety perspective should include three types:

1. Regulatory signs for traffic control. Provide operational guidance such as stop and yield, right-of-way and speed limit.
2. Warning - point out dangerous conditions (existing or potential) or changes in surface conditions such as bridges or road crossings.
3. Guidance signs - offer trail information, points of interest, interpretation, facilities, and trail location markers.

Signage provides a great opportunity for the CVRTC to show that the trail has been developed. The image of the trail as an important regional recreation facility can be conveyed through a well-designed, attractive, properly scaled sign system. There should be strict design guidelines for all trail signage and potential sponsorship identified on the signs. Design guidelines are discussed in the trail development section.

### ***Routine Inspection and Hazard Abatement***

CVRTC should establish a program of regular trail inspection. The inspections should be based on the trail design standards. All potential hazards should be identified, notation of their exact locations made, the level of risk to the public, and the degree of severity for the most likely injuries made. The inspections should be recorded and filed with CVRTC. Trail inspections

should be held on a regular basis. Consideration should be given to a weekly ride of the trail on a bicycle by a committee member(s). Buildings and trailheads should be inspected at least weekly.

### *Problem Correction*

Following the inspection or the reporting of hazards on the trail, CVRTC needs to correct the problem. Some problems need to be addressed immediately while others may be deferred until a later time. To determine how urgent the correction of the problem is, the following scale can be used to set priority. A scale was devised by the National Playground Safety Institute could serve as a model for a trail hazard guide:

Class A Hazards - conditions likely to cause fatality, permanent disability, or loss of body part

Class B Hazards - conditions likely to cause serious injury or illness, resulting in temporary disability.

Class C Hazards - conditions likely to cause minor, non-disabling injury.

If the problem cannot be corrected immediately, the CVRTC should clearly identify the hazard and prevent use of and/or access to the area. until it can be repaired. Whatever action is taken should be documented and filed with the Council.

### *Accident Reports and Use*

Accident reports should document the necessary facts about each accident, names and addresses of victim(s) and witnesses, documentation about the injury and treatment, property damage, and information for follow-up. The purpose of the report is determine the cause of the accident, not to find fault. Reports should be used to guide CVRTC in future planning and management improvements in the trail for enhanced visitor safety.

### *Use of Volunteers*

The Volunteer in Public Service Act of 1988 provides some immunity for volunteers if they cause an injury but it does not afford total protection against litigation for CVRTC. Volunteers could sue CVRTC if they are injured volunteering or someone else could sue CVRTC if a volunteer causes damage. Since CVRTC will be relying on volunteers for support, the Council should include coverage of board members and volunteers working on behalf of the trail in its insurance policy. Training should be given in projects that warrant training just as it would be required for paid staff.

### *Trail Etiquette*

Civility on the trail will contribute to its success. Both trail visitors and adjacent landowners will benefit from visitors using proper trail etiquette. It is in part a public education process. The outreach committee may want to consider programs related to this topic. The CVRTC has drafted courtesy recommendations as follows:

- ◆ For increased personal safety, take a friend along.
- ◆ Be polite to other users
- ◆ Keep noise levels to a minimum.

- ◆ Carry water. No water is available on the property.
- ◆ Be alert for severe weather. No shelters are provided.
- ◆ Plan ahead. No rest rooms are available.
- ◆ For extra safety during hunting season, high visibility clothing is recommended.
- ◆ Respect the privacy of adjacent landowners. Do not loiter near residences.

## **Maintenance**

Typically, the rule of thumb in estimating maintenance costs for a rail-trail corridor is about \$1 per linear foot for a total annual maintenance cost of \$5,280 per mile. For the Cumberland Valley Trail, this translates into an estimate of about \$56,500. However, because maintenance varies by trail according to local conditions and level of service, costs can range from \$4,000 to \$8,000 per mile. For the Cumberland Valley Trail, planners met in work sessions with CVRTC to determine trail management procedures, expectations for the future, alternatives and projected costs in order to project realistic estimates. Information from other sources such as the Rails-to-Trails Conservancy and the USDA Americorps Rail-Trail Maintenance Study were used to guide projections for maintenance.

The maintenance management projections are based upon the trail being under the jurisdiction of CVRTC for the whole length, including the Shippensburg University campus area. Should an agreement be reached with the University about the university maintaining this segment, maintenance costs would be reduced.

### ***Current Operations***

Trail maintenance management is the process by which the CVRTC plans, directs, conducts and evaluates maintenance of the trail. At present, as well as, in the near future, trail maintenance will be conducted by volunteers. With limited operating funds, the CVRTC does not have a budget for paid staff. The CVRTC has a maintenance shed at Oakville and a mower with a trailer. They use volunteer vehicles to pull the trailer. The Council also has a grant from DCNR for the purposes of purchasing a larger mower. Normally trails are part of bigger operations such as governmental park systems in which staff is available for maintenance.

### ***Maintenance Planning***

The CVRTC should establish a Maintenance Committee. Maintenance work is conducted on an as needed basis with mowing done most regularly. Once the trail is developed, the CVRTC should have a maintenance plan in place. The maintenance plan will help to keep the trail safe and attractive, assist the council in work scheduling and recruitment of volunteers and provide a tracking method for the purposes of risk management.

At present, two volunteers (CVRTC Board members) mow the trail from April through October with a goal of mowing twice per month. They tried to get volunteers who adopted segments of the trail to mow it once per month and CVRTC would mow the second time. However, the volunteerism dropped off and the responsibility reverted to the CVRTC. Since the trail is crude at present, mowing is difficult. Trail development will make this task easier and this may help the Council re-gain the volunteer support. The CVRTC has also discussed contracting with a private company to do the herbicide spraying for weed and invasive species control.

An important part of maintenance planning is setting standards for the quality of maintenance desired and within the attainable realm of the resources available. For example, the CVRTC may set as a goal that the trail should be maintained in the most natural manner possible. This would have implications for such tasks as tree pruning. A quick pruning job will provide functional trail maintenance but probably not result in an aesthetic appearance. If the Council sets a standard for a trail that is to be natural in appearance, then work quality standards and guidelines should follow. The California State Park System offers sample guidelines for trail pruning:

1. Do not toss debris. Randomly discarded branches are an eyesore.
2. Place debris out of view. Requires the extra effort of dragging branches under, around or behind shrubs.
3. Place cut end away from trail to help disguise the debris.
4. Each cut branch should be touching the ground to promote decomposition. This means that brush piles are to be discouraged.
5. Pruning should be done sensitively so that the trail appears natural and not as if a chain saw just blasted through. Trail users should not be aware that any maintenance work has recently been done.
6. Prune to the collar of any branch stem for the health of the tree and a more natural looking result.

By setting quality standards, the Maintenance Committee members will be able to decide among themselves how they want the trail to look as well as to provide guidance to volunteers on how the maintenance tasks should be performed. Should the Council determine that they wish to contract with a private business or enter into a partnership with another organization, the standards can provide a basis for discussion. By monitoring trail use and seeing the impact of the types of use on the trail, the Maintenance Committee can decide over time the nature and frequency of maintenance tasks as well as make recommendations for the rules and regulations affecting trail use and the types of vehicles that can use the trail with recognition of the limits of maintenance the CVRTC can provide.

### ***Maintenance Tasks and Scheduling***

The Cumberland Valley Trail has three different features requiring maintenance: the trail corridor, the three trail heads and the Freight Station Parcel. Table 6-1 presents routine and cyclic maintenance tasks and costs.

Table 6-1 Trail Maintenance Tasks		
Routine Maintenance Tasks	Frequency	Cost
Trail Inspection	Weekly	Volunteer time
Mowing	Twice pre month: April through October	Equipment Cost @ \$20/hour = \$320/month X 7 = \$2,240. Volunteer labor.
Freight Station Mowing/Trimming/Pick-up	Monthly	\$20/hr. X 8 hrs. X 10 = \$1,600
Herbicide Application	As needed	\$600
Trimming and Pruning	Twice per year	Volunteer labor
Trail dragging	Three times per year	\$20/hr. equipt. X 6 hrs. X 3 = \$360
Trailhead Maintenance	26 times per year	Volunteer labor
Rest room Maintenance	Weekly for 40 weeks	\$4,000
Equipment Maintenance	Per manufacturer's specs	\$1,400
Security Patrols	As determined with police	No cost to CVRTC
Trail furniture maintenance	Annual preventive maintenance and repairs	\$1,000
<b>Cyclic Maintenance</b>		
Bridge Inspections	Every 3 years	\$1,800
Trail resurfacing	Every 7 years	\$5,000/mile = \$55,000 or about \$8,000/yr. for planning purposes. For the paved section through Shippensburg University, the University could assume responsibility for this through a joint agreement.
<b>Non-Scheduled Maintenance</b>		
Equipment repair	As needed	\$500
Sign replacement	As required	\$500
Graffiti /vandalism repair	Within 24 hrs. if possible	\$500
Litter pick-up	Weekly at trail heads	Pack in, pack out rule; trash cans at trail heads.
Trail patching	As needed. Groundhog problem will require frequent patching	Volunteer time
<b>Total Estimated Task Cost</b>		<b>\$22,500</b>

### **Maintenance Alternatives**

Because the CVRTC is composed of volunteers, partnerships and outreach are particularly important. Creative alternatives will help the Council to keep the trail well-maintained, reduce the demands on the same people all of the time and help to build stewardship for the trail throughout the corridor. Based on key person interviews and discussions with the Council, the following possibilities could be explored:

#### **1. Collaboration with Shippensburg University**

The paved path through the Shippensburg University campus could be developed, operated, maintained, patrolled, lighted and managed by the University. In order for this work, the

CVRTC needs to have the following provisions:

- ◆ The trail must be open to the public in perpetuity for bicycles, equestrians, and pedestrians.
- ◆ Any trail crossings must be discussed and approved before the trail would come under the jurisdiction of the University. This especially concerns the access easement to the Shippensburg Chapel. Traffic to the chapel is the only traffic that should be accommodated. Because of traffic and safety concerns, there should be no traffic from Queen Street.
- ◆ The Council must have assurance that the agreement is solid and will not be changed in the future.
- ◆ Fogelsonger Road bridge should be in place prior to University operation and management of the trail.
- ◆ Approval by Cumberland County Transportation Authority.

## 2. Partnerships

Local governments would be important partners for the trail. As part of the planning process, the planning team met with and/or interviewed the municipalities along the trail corridor. For the most part, these are small rural communities with very limited services and small operating budgets. Each municipality was asked to send representatives to trail planning meetings. Board members and the consultants went to public meetings in the communities to present information about the trail, ask for support, and request the direction the community would like to take in discussing partnership options further. While all of the jurisdictions were in favor of the trail, only two came forward with specific offers of support. The Borough of Shippensburg offered the use of the Borough Hall parking lot as a trail head. The Council also assigned a council member to meet with CVRTC at an unspecified time in the future to discuss the trail and potential collaborative efforts. Shippensburg Township is constructing a parking lot in their new community park for use as a trail head. The Mid-Cumberland Valley Regional Police will meet with the CVRTC about security and trail patrols when the master plan is in place. As the trail is developed and successful trail operation is established, the municipalities may be more inclined to support trail efforts. CVRTC should continue to reach out to the municipalities in an effort to cultivate their support. New partnerships should be explored. Possibilities include:

- ◆ Scouts for special projects
- ◆ State Police Carlisle Barracks for creating a bicycle courtesy patrol
- ◆ Shippensburg University for environmental education, programming, marketing and a WEB site
- ◆ User groups such as equestrians, cyclists, walkers from neighborhoods, towns and housing complexes for trail maintenance, patrols, special work projects
- ◆ Businesses who will benefit from the trail such as restaurants, Realtors, cycle shops, hotel/bed & breakfasts and others
- ◆ School District environmental clubs
- ◆ Adjoining land owners - CVRTC members have expressed the ability to draw resources from adjoining landowners for use of equipment for trail development projects, mowing and other tasks. Such ideas should be explored and formalized.

## 3. Cumberland County

With the Greenway Feasibility Study underway for Cumberland County, a network of



greenways with trails will be established. CVRTC should work with the County in trying to establish a County Parks and Recreation Department which would oversee trails county-wide.

4. Use of Public Programs as Labor Sources

The use of public offenders, conservation corps and community service projects at the schools could provide labor to help the CVRTC with maintenance work. Consideration should be given to the requirements for supervision.

5. Adopt-A-Trail

CVRTC could develop an Adopt-A-Trail program in which businesses, neighborhoods and community organizations could adopt trail segments in a similar fashion as the PennDOT Adopt-A Highway program.

## Operating Budget

The CVRTC operates without office space and schedules meetings in public buildings and board members home. Therefore, overhead expenses are limited. It is suggested however that the CVRTC try to get a permanent address such as with the Chamber of Commerce or another organization just to retain consistency throughout changes in the Council. It would provide an established public image and save on costs of changing letterhead, brochures and so on.

It is totally a volunteer organization so the following budget, Table 6-2, is for materials, supplies and direct expenses. This comes to about \$2,467 per year per mile. Should the CVRTC add part-time paid staff, the trail maintenance cost per mile would come out to about \$4,000 per mile which is on the low end of the operating spectrum for rail-trails. Given the fact that Cumberland Valley Trail is in primarily a rural area, this cost per mile makes sense. Projections are based upon information provided by the CVRTC board members, law enforcement agencies, utility companies, and estimates developed for this master plan.

Administration: Telephone, office supplies, travel expenses (includes conference support), post office rental	\$1,000
Insurance: liability and errors and omissions	1,000
Printing and advertising: postage, brochures, materials, newsletters, trail user surveys	1,000
Security: telephones at trail heads, special event coverage (Phones \$50/month/each)	2,400
Trail Surface, Furniture & Equipment Repair	1,500
Mowing & Vegetation Control	4,640
Rest room maintenance	4,000
Equipment Operation & Repair	1,900
Miscellaneous/Contingency	1,700
<b>Total</b>	<b>\$19,140</b>
Cyclic Resurfacing Budget (annual cost of a seven year cycle)	\$8,000
<b>Total</b>	<b>\$27,140</b>

## Revenue Sources

Generating revenues for developing and operating the trail is a great challenge for CVRTC. While development funds are probably achievable to a large degree through the Keystone grant program and TEA 21, operating funds are much more difficult to obtain:

- ◆ As an all-volunteer organization, CVRTC does not have access to tax support as do most other trails that are run by a county or regional authority.
- ◆ The jurisdictions along the trail have extremely limited financial resources. Interviews and contacts revealed that there is little likelihood of receiving financial support from these communities.
- ◆ The membership base is generating a relatively low level of income: about \$1,700 per year.
- ◆ CVRTC may lose their protection against liability under the PA Rails-to-Trails Act and the Pennsylvania Recreational Use of Land Statute should they implement user fees.

### *Options for Revenue Generation and Support*

- ◆ Continue discussions with Shippensburg University about trail management.
- ◆ Work with Cumberland County to help establish a Parks & Recreation Department which could support the trail in part through a county allocation.
- ◆ Trail development and a stepped up membership campaign may generate more funds. With a population of 21,562 in about 4700 households in the corridor, potential target memberships could be:
  - ◆ 308 Households (5% of the households) at \$25 per year would generate \$7,700.
  - ◆ 616 Households (10% of the households) at \$25 per year would generate \$15,400.Comparisons with organized sports fees, the cost of going to a movie and research that documents the public's willingness to pay for recreation facilities and environmental causes indicate that these membership levels can be achieved. The challenge to the CVRTC is orchestrating a dedicated effort regarding membership development. People on the Council are influential and have contacts, so the Council has an advantage in fundraising.
- ◆ Sponsorships are another popular form of revenue generation. In contrast to a charitable donation, corporate sponsorships have a marketing value to businesses. Having their name associated with positive public event or project has an actual cash value to businesses. The special events committee could set up a few targeted events and recruit sponsorships within the region. This, again, requires an orchestrated effort by volunteers.

In summary about revenues for operating, while the CVRTC has done a magnificent job on the trail to date, research on trails elsewhere shows that this level of commitment is most difficult to maintain over the long term. Trails of this nature are usually supported by government entities. Because of the nature of the Cumberland Valley Trail, the limitations of the jurisdictions in the corridor, the County's interest in greenways, the Commonwealth's priority on trails and greenways, and the federal potential of ISTEA re-enactment, management of this trail may best be housed with a department of parks and recreation that could be established by Cumberland County. The County could provide a basic level of service for maintenance and the CVRTC could function as a Friends group to complement county management of the trail.

## ***Options for Development Funds***

There are four important sources of funds and direct assistance for trail development:

- ◆ Keystone Community Grant Program which is providing funding for the development of a major trail segment in the amount of \$48,000 which CVRTC is matching with their ISTEAA grant. CVRTC should pursue additional grant rounds for Keystone funds. The challenge is that the funds must be matched.
- ◆ TEA-21 has been authorized. Pennsylvania will have \$20 million over the next five years for trail projects. It is anticipated that there will be two to three grant rounds, with the first grant round scheduled for the fall of 1998.
- ◆ Collaboration with Shippensburg University could result in the University developing a particularly expensive portion of the trail covering the .85 mile stretch through the campus. This should be pursued.
- ◆ Committee members have a network of contacts in the corridor who could help with trail construction. This includes the use of heavy equipment.

Chapter 7  
Cost Analysis

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## Development Costs

The development of the Cumberland Valley Trail will be an investment in the recreation opportunities for residents of the project area as well as the region. These opportunities will require the investment of significant capital expenditures. To guide the development of the trail, cost estimates have been prepared to correspond to the trail segments referenced throughout the master plan document.

All costs provided in this plan are estimates based on the findings of this master plan and knowledge of trail and associated facility development. The estimates are based on field observations and library source map information. No topographic or planimetric surveys were completed of the project area and as such detailed grading studies were not completed. The development of the trail will occur in phases over several years. Not included in the cost estimates is an escalation cost between phases so that each phase can be compared and evaluated on an equal basis. As the trail is developed, consideration should be given to escalation costs over the base cost provided herein. Design and engineer fees have been estimated and are included in the cost breakdowns. Work that is feasible by volunteers is noted (V) in each cost estimate.

### ***Development Cost - Segment #1 - Shippensburg to Fogelsonger Road***

Demolition/Site Preparation	\$ 24,500
Erosion Control Measures	\$ 8,100
Site Grading	\$ 52,650
Trail Surface	\$ 92,275
Landscaping (V)	\$ 31,050
Site Amenities	\$ 84,375
Lighting	\$150,000
Utility Extension	\$ 1,750
Bond, Mobilization, and Layout	\$ 22,235
Traffic Protection	\$ 18,677
Design and Engineering Fee	\$ 72,842
Construction Management	\$ 72,842
<b>Total Segment #1 (0.85 miles)</b>	<b>\$631,296</b>

### ***Development Cost - Segment #2 - Fogelsonger Road to Britton Road***

Demolition/Site Preparation	\$ 13,945
Erosion Control Measures	\$ 6,030
Site Grading	\$ 15,080
Trail Surface	\$ 21,841
Landscaping (V)	\$ 3,992
Site Amenities (V)	\$ 1,575
Bond, Mobilization, and Layout	\$ 3,123
Traffic Protection	\$ 2,623
Design and Engineering Fee	\$ 10,231
Construction Management	\$ 10,232
<b>Total Segment #2 (0.64 miles)</b>	<b>\$ 88,672</b>

**Development Cost - Segment #3 - Britton Road to Duncan Road**

Demolition/Site Preparation	\$ 14,475
Erosion Control Measures	\$ 9,230
Site Grading	\$ 74,163
Trail Surface	\$ 46,503
Landscaping (V)	\$ 13,358
Site Amenities (V)	\$ 5,250
Bond, Mobilization, and Layout	\$ 8,149
Traffic Protection	\$ 6,845
Design and Engineering Fee	\$ 26,696
Construction Management	\$ 26,695
<b>Total Segment #3 (2.10 miles)</b>	<b>\$231,364</b>

**Development Cost - Segment #4 - Duncan Road to Ott Road**

Demolition/Site Preparation	\$ 16,500
Erosion Control Measures	\$ 6,630
Site Grading	\$ 35,296
Trail Surface	\$ 27,896
Landscaping (V)	\$ 8,255
Site Amenities (V)	\$ 4,525
Bond, Mobilization, and Layout	\$ 4,955
Traffic Protection	\$ 4,162
Design and Engineering Fee	\$ 16,233
Construction Management	\$ 16,232
<b>Total Segment #4 (1.36 miles)</b>	<b>\$140,684</b>

**Development Cost - Segment #5 - Ott Road to Oakville**

Demolition/Site Preparation	\$ 14,000
Erosion Control Measures	\$ 6,630
Site Grading	\$ 38,796
Trail Surface	\$ 27,896
Landscaping (V)	\$ 8,255
Site Amenities (V)	\$ 6,650
Bond, Mobilization, and Layout	\$ 5,111
Traffic Protection	\$ 4,294
Design and Engineering Fee	\$ 16,744
Construction Management	\$ 16,744
<b>Total Segment #5 (1.26 miles)</b>	<b>\$145,120</b>

### **Development Cost - Segment #6 - Oakville to Fish Hatchery Road**

Demolition/Site Preparation	\$ 12,775
Erosion Control Measures	\$ 10,380
Site Grading	\$ 18,258
Trail Surface	\$ 17,094
Landscaping (V)	\$ 5,978
Site Amenities (V)	\$ 1,100
Trailhead (Oakville)	\$ 93,750
Bond, Mobilization, and Layout	\$ 7,967
Traffic Protection	\$ 6,692
Design and Engineering Fee	\$ 26,099
Construction Management	\$ 26,099
<b>Total Segment #6 (0.77 miles)</b>	<b>\$226,192</b>

### **Development Cost - Segment #7 - Fish Hatchery Road to Bullshead Road**

Demolition/Site Preparation	\$ 10,137
Erosion Control Measures	\$ 6,920
Site Grading	\$ 24,880
Trail Surface	\$ 25,430
Trail Realignment	\$ 5,790
Landscaping (V)	\$ 7,283
Site Amenities (V)	\$ 1,325
Bond, Mobilization, and Layout	\$ 4,088
Traffic Protection	\$ 3,882
Design and Engineering Fee	\$ 13,461
Construction Management	\$ 13,461
<b>Total Segment #7 (1.18 miles)</b>	<b>\$116,659</b>

### **Development Cost - Segment #8 - Bullshead Road to Newville**

Demolition/Site Preparation	\$ 33,837
Erosion Control Measures	\$ 13,600
Site Grading	\$ 40,110
Trail Surface	\$ 45,365
Trail Realignment	\$ 27,330
Landscaping (V)	\$ 14,436
Site Amenities (V)	\$ 4,275
Trailhead (McFarland Street)	\$ 46,863
Bond, Mobilization, and Layout	\$ 11,291
Traffic Protection	\$ 9,484
Design and Engineering Fee	\$ 36,989
Construction Management	\$ 36,989
<b>Total Segment #8 (2.16 miles)</b>	<b>\$320,569</b>

**Development Cost - Segment #9 - Newville to PA Route 233**

Demolition/Site Preparation	\$ 4,630
Erosion Control Measures	\$13,720
Site Grading	\$11,452
Trail Surface	\$10,318
Landscaping (V)	\$ 2,799
Site Amenities (V)	\$18,420
Bond, Mobilization, and Layout	\$ 3,067
Traffic Protection	\$ 2,576
Design and Engineering Fee	\$10,047
Construction Management	\$10,048
<b>Total Segment #8 (0.43 miles)</b>	<b>\$87,077</b>

**Development Cost - Surveys**

Segment 1	\$ 3,365
Segment 2	\$ 2,800
Segment 3	\$ 8,200
Segment 4	\$ 6,000
Segment 5	\$ 5,215
Segment 6	\$ 3,225
Segment 7	\$ 4,360
Segment 8	\$ 9,315
Segment 9	\$ 2,260
Road and Bridge Crossings	\$24,290
<b>Total</b>	<b>\$69,030</b>

**Development Cost - Bridges**

Fogelsonger Road Bridge	\$180,000
Martin Farm Culvert Demolition	\$ 7,000
Yost Farm Culvert (V)	\$ 1,100
Big Spring Road Bridge	\$180,000
Big Spring Culvert	\$ 30,000
<b>Total</b>	<b>\$398,100</b>

**Bridge Design and Engineering Fees**

Fogelsonger Bridge	\$ 60,000
Design and Consultation During Construction	
Big Spring Avenue Bridge	\$ 60,000
Design and Consultation During Construction	
Martin Farm Culvert Demolition	\$ 1,500
Big Spring Culvert	\$ 9,800
Downstream End Stabilization	



Downstream End Stabilization

**Total** \$131,300

***Development Costs - Road Crossings (Grading and Fill Only)***

Britton Road	\$48,015
Ott Road	\$ 2,815
Camp Road	\$22,050
Nealy Road	\$11,805

Design and Engineering Fees \$ 8,100

**Total** \$92,785

***Development Costs - Road Crossings (Signing and Pavement Marking)***

Prince Street	\$ 2,150
Fogelsonger Road	\$ 1,700
Britton Road	\$ 2,625
Duncan Road	\$ 2,750
Ott Road	\$ 2,600
Oakville Road	\$ 2,475
Farm Lane	\$ 2,150
Fish Hatchery Road	\$ 2,750
Nealy Road	\$ 2,750
Bullshead Road	\$ 2,600
Big Springs Road	\$ 2,100

Design and Engineering Fees \$ 4,400

**Total** \$31,050

Note: The total cost reflects utilizing volunteer efforts to install signage associated with the crossings along the trail corridor. Signage to be installed by volunteers will be mounted to wood posts and include - stop signs, bicyclists dismount signs, and equestrian dismount signs.

***Development Cost Summary***

Development Cost - Segment #1 - #9	\$1,987,633
Survey Costs	\$ 69,030
Development Cost - Bridges	\$ 529,400
Development Costs - Road Crossings (Grading and Fill Only)	\$ 92,785
Development Costs - Road Crossings (Signing, gates and Pavement Marking)	\$ 31,050
<b>Total</b>	<b>\$2,709,898</b>

## Development Phasing

The development of the Cumberland Valley Trail is a multi-phase project that will be implemented over many years as funding and financial resources become available. This phase plan is presented as a possible scenario for development over eleven phases. Phases are based on consideration of how the trail will function, the desire to create momentum for the project, community need, funding opportunities and logical sequence of construction. These phases should be viewed as recommendations and not final determinations. As funding is available or opportunities change, the development sequence of the trail may change.

The participation level of Shippensburg University will determine the phasing for trail segment #1 and the construction of the Fogelsonger Road bridge. For the purposes of this phasing plan, segment #1 is implemented mid-course, followed by the development of the Fogelsonger Road bridge. The phasing plan does not address the development of the Earl Street bridges within the Freight Station Parcel, as the bridges would only be improved if a purpose is projected for the Freight Station Parcel in that area of the tract.

### **Phase 1**

Big Spring Culvert Design and Engineering	\$ 9,800
Big Spring Culvert	\$ 30,000
Trail Segment #2	\$ 88,672
Survey	\$ 4,535
<b>Total</b>	<b>\$133,007</b>

### **Phase 2**

Trail Segment # 8	\$320,569
Survey	\$ 11,050
<b>Total</b>	<b>\$331,619</b>

### **Phase 3**

Britton Road Design and Engineering	\$ 5,400
Britton Road Grading	\$ 48,015
Britton Road Crossing	\$ 2,625
Trail Segment #3	\$231,364
Survey	\$ 9,935
Martin Culvert Design and Engineering	\$ 1,500
Martin Culvert Demolition	\$ 7,000
<b>Total</b>	<b>\$305,839</b>

**Phase 4**

Prince Street Design and Engineering	\$ 400
Prince Street Crossing	\$ 2,150
Trail Segment #1	\$631,296
Survey	\$ 5,100
<b>Total</b>	<b>\$638,946</b>

**Phase 5**

Fogelsonger Bridge Design and Engineering	\$ 60,000
Fogelsonger Bridge	\$180,000
Fogelsonger Road Crossing	\$ 1,700
Survey	\$ 1,735
<b>Total</b>	<b>\$243,435</b>

**Phase 6**

Road Crossings Design and Engineering	\$ 1,800
Bullshead Road Crossing	\$ 2,600
Nealy Road Crossing	\$ 2,750
Nealy Road Fill	\$ 11,805
Trail Segment #7	\$116,659
Survey	\$ 7,830
Yost Farm Culvert	\$ 1,100
<b>Total</b>	<b>\$144,544</b>

**Phase 7**

Duncan Road Design and Engineering	\$ 400
Duncan Road Crossing	\$ 2,750
Trail Segment #4	\$140,684
Survey	\$ 7,735
<b>Total</b>	<b>\$151,569</b>

**Phase 8**

Ott Road Design and Engineering	\$ 1,400
Ott Road Grading	\$ 2,815
Ott Road Crossing	\$ 2,600
Camp Road Design and Engineering	\$ 1,900
Camp Road Fill	\$ 22,050
Trail Segment #5	\$145,120
Survey	\$ 10,420
<b>Total</b>	<b>\$186,305</b>

Fish Hatchery Road Crossing	\$ 2,750
Oakville Road Crossing	\$ 2,475
Farm Lane Crossing	\$ 2,150
Trail Segment #6	\$226,192
Survey	\$ 6,695
<b>Total</b>	<b>\$241,462</b>

**Phase 10**

Trail Segment #9	\$87,077
Survey	\$ 2,260
<b>Total</b>	<b>\$89,337</b>

**Phase 11**

Big Spring Bridge Design and Engineering	\$ 60,000
Big Spring Bridge	\$180,000
Big Spring Crossing	\$ 2,100
Survey	\$ 1,735
<b>Total</b>	<b>\$243,835</b>

Chapter 8  
Implementation Plan

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## Introduction

The Cumberland Valley Rails-to-Trails Council is at an exciting point in the planning process for the Cumberland Valley Trail. The CVRTC has secured the trail for public use, there is general support in the region about the trail and this master plan addresses the design and management issues associated with the development and operation of the trail.

There are many challenges defined by this plan and not everything can be accomplished at once. The implementation plan has been designed to provide CVRTC with a guide to move ahead with the development of the trail. Development of the Cumberland Valley Trail will require several permits and additional engineering based on the phase of development.

### Development Implementation Items

The following items must be undertaken as the implementation of the project proceeds. The sequence of implementation will be based on the phase of improvements undertaken.

Permit/Action Item	Approving Agency	Approval Timeframe	Engineering Review Fees	Comments
Work with municipalities along trail and trail extensions to adopt amendment to zoning ordinance to allow trail use by rights	Affected Municipality	-	-	
Work with adjacent property owners to resolve encroachments and issues/opportunities of mutual interest	CVRTC and Affected Property Owners			
Trail/Facility/Bridge Survey, Engineering, Construction Documents, Agency Review and Bidding	DCNR/PennDOT based on funding source	8-12 months	-	For bidding
Sketch Plan/ Land Development Plan Approvals	Affected Municipality	30-120 days	Submission Fees	Each municipality has different requirements for submission of plans as outlined in Chapter 2
NPDES Permit (Individual)	Cumberland County Conservation District	60-90 days	Engineering and Permit Fees	One permit will be required for the entire project.

Erosion and Sedimentation Control Plans	Cumberland County Conservation District	60-90 days	Engineering and Permit Fees	Requirement based on extent of activity and if Land Development Plans necessary
Highway Occupancy Permits	Cumberland County PennDOT Office	30-60 days review and acceptance	Permit Fees	Required for road crossing and right-of-way improvements
Fogelsonger Bridge Easement Aerial Clearance	Shippensburg Township	60 days 45-days	Engineering Design Fees	
Highway Occupancy Permit for Big Spring Bridge	Cumberland County PennDOT Office	60-90 days for review and acceptance	Engineering Design Fees	

**Table 8-2  
Management Action Plan**

Action Item	Responsibility	Timeframe	Cost	Comments
<b>Organizational Development</b>				
<ul style="list-style-type: none"> <li>Hold Board Retreat to determine organizational structure around committees, define roles and responsibilities</li> </ul>	President plans retreat in collaboration with board	Within 60 days	Volunteer time	Essential to attain consensus on how the organization will operate and the responsibilities of boards members
<ul style="list-style-type: none"> <li>Hold a celebration to celebrate the accomplishment of the master trail plan</li> </ul>	Determine who will be in charge in the retreat	Summer 1998	Depends on nature of celebration; try to get donations of food and beverages	Consider inviting stakeholders to share in the joy of this event
<ul style="list-style-type: none"> <li>Committees decide how they want to operate and plan their work</li> </ul>	Chair people will be re Organizational development responsible for oversight; President coordinates with committees	Summer 1998	Volunteer Time	Plans should focus on responsibilities and actions as well as in recruiting new participants
<ul style="list-style-type: none"> <li>Monitor workload to determine if trail manager is needed</li> </ul>	CVRTC Board Member (Secretary)	Spring 1998- Spring 1999	Pay more than going rate in service industry for quality	Decide if workload warrants staff
<b>Implementation: Year 1</b>				
<b>Maintenance Committee</b> <ul style="list-style-type: none"> <li>Develop a written maintenance plan</li> <li>Coordinate with safety committee regarding trail security</li> <li>Decide on routine</li> </ul>	Maintenance Chairperson is in charge overall and works collaboratively with committee.	Summer and Fall of 1998	Use DCNR funds to purchase tractor; determine contract costs and if funds are available in treasury.	Committee members expressed availability of people in the corridor who are willing to do maintenance. Committee needs to

<ul style="list-style-type: none"> <li>• maintenance schedule</li> <li>• Determine "work days" to recruit volunteers</li> <li>• Develop and implement an inspection system</li> <li>• Determine equipment purchases</li> <li>• Determine requirements for outside contracts for herbicide applications</li> <li>• devise method for workload tracking</li> </ul>				<p>exercise leadership and define tasks, schedule and outreach program to get them involved.</p>
Action Item	Responsibility	Timeframe	Cost	Comments
<p><b>Safety and Security Committee</b></p> <ul style="list-style-type: none"> <li>• Determine how the committee will be organized and what their role and tasks will be based upon the Master Plan.</li> <li>• Meet with the State Police, Newville, Police and the Mid-Cumberland Valley Police to set up operating plan for security</li> <li>• Consider organizing a courtesy patrol and recruiting the police to help with the organization and training of the patrol</li> <li>• Review trail rules and regulations; revise as needed</li> <li>• Organize a tracking system for complaints and calls about trail safety</li> <li>• Set up a safety inspection system</li> <li>• Coordinate with Development Committee to insure that safety features are addressed regarding signage, telephone and other</li> </ul>	<p>Safety Committee in coordination with State Police, Mid-Cumberland Valley Police, and Newville Police</p>	<p>Summer/Fall 1998</p>	<p>Volunteer time for committee development and safety monitoring; costs for signage and phones part of trail development; security part of police budgets</p>	



areas. <ul style="list-style-type: none"> <li>Follow-through with 911 to be sure that the trail is included in the Cumberland County GIS</li> </ul>				
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**Implementation: Years 2-5**

Action Item	Responsibility	Timeframe	Cost	Comments
<b>Maintenance Committee</b> <ul style="list-style-type: none"> <li>Implement scheduled maintenance system</li> <li>Conduct inspections</li> <li>Oversee volunteers</li> <li>Schedule work days</li> <li>Maintain equipment</li> <li>Track Maintenance and maintain written record</li> <li>Conduct maintenance evaluations and plan changes</li> </ul>	Assign to members	Years 2-5, evaluate and plan maintenance annually and make recommendations to CVRTC Board for budget	Base on projected cost of about \$27,000 annually including cyclic maintenance requirements adjusted for annual budget. If Shippensburg University assumes responsibility for their share of the trail, this cost would decrease	
<b>Safety and Security Committee</b> <ul style="list-style-type: none"> <li>Monitor trail safety and reporting</li> <li>Coordinate with police forces</li> <li>Coordinate with 911 to determine if trail changes are necessary based upon incidents</li> <li>Coordinate with CVRTC Board about trail policies</li> <li>Conduct regular safety inspections and maintain records</li> </ul>				
<b>Trail Development Committee</b> <ul style="list-style-type: none"> <li>Implement trail development</li> <li>Oversee construction</li> </ul> Continue coordination with regional trail committees	Consider a construction manager		To be determined/% of contract	



Action Item	Responsibility	Timeframe	Cost	Comments
<p><b>Trail Development Committee</b></p> <ul style="list-style-type: none"> <li>• Work on phasing as suggested in Table 8-1</li> <li>• Assign the responsibility to meet with the Borough of Shippensburg regarding use of the municipal lot and a trail head</li> <li>• Assign the responsibility of meeting with Shippensburg University to discuss and negotiate trail development and management through campus</li> <li>• Determine areas of trail development that could be accomplished through volunteers</li> <li>• Recruit and manage volunteers involved with trail development</li> <li>• Assign members to coordinate trail development with other linkages such as the Cumberland County Greenway, Carlisle and Chambersburg</li> <li>• Assign responsibility for future of freight station parcel including lease negotiation and potential development</li> </ul>	<p>Committee Members with Coordination and participation by President</p> <p>Should be President and collaborative members of the group who can skillfully negotiate a win-win outcome.</p> <p>Would be appropriate role for President and CVRTC members who are on other boards such as the Chambersburg Board.</p>	<p>In accordance with development schedule</p>	<p>Volunteer time on coordination</p>	

Action Item	Responsibility	Timeframe	Cost	Comments
<b>Marketing and Public Outreach Committee</b> <ul style="list-style-type: none"> <li>• Develop a membership campaign program with specific goals such as 3-5% of the households in the corridor</li> <li>• Recruit assistance in membership development from the University or a local hospital with expertise in volunteerism and membership support</li> <li>• Establish a regular schedule for newsletter distribution</li> <li>• Develop a tracking system for contacts with citizens</li> <li>• Develop a user trail assessment via on-site surveys annually</li> </ul>	<p>Marketing chair would have lead responsibility. Try to recruit people in the corridor with related businesses or job functions; use CVRTC Board member contacts.</p>	<p>Summer 1998</p> <p>Fall 1998</p> <p>Fall 1998</p> <p>Winter 1999</p>	<p>Revenue producer generated through volunteer time; Most significant revenue generator CVRTC has without any other fund-raising event.</p> <p>Costs should be offset by membership fees</p> <p>Recruit marketing student project from University</p>	
<b>Fundraising and Special Events</b> <ul style="list-style-type: none"> <li>• Coordinate with Membership Committee about dues</li> <li>• Assign a grant writing committee to pursue state and foundation grants</li> <li>• Identify a few targeted fundraising projects for the year. Should be small in scope to insure success within the realm of a volunteer group.</li> <li>• Coordinate work days with maintenance committee as trail special events</li> </ul>	<p>Use person who volunteered to assist CVRTC in grant writing</p> <p>Committee should have lead on planning Master Plan Celebration</p>	<p>Summer 1998</p> <p>For next round of Keystone and ISTEIA if re-authorized</p>	<p>Need to use computers of volunteers for grant writing</p>	

Appendix A  
Model Zoning Ordinance

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# Model Zoning Ordinance Language

The following text is provided for public use in the  
Brandywine Conservancy, Inc., *Community Trails Handbook*, 1997

*The following ordinance language is presented here as a model for municipalities. The intent is for municipalities to use only those parts that apply to their particular circumstance.*

## Zoning Ordinance Language

### 1. General Trail Language

Add the term "Comprehensive Trail System" into ordinance trail language and define as follows:

- a) Comprehensive Trail System: A system of interlinking trails throughout Township, designated for transportation and recreation purposes. The Township Trail System Map delineates existing and proposed trails and is available from the Township.

*Note: The trail system map can be free-standing and/or a part of the Township's Official Map, authorized under the MPC.*

Revise the definition of "Recreation, Passive" as follows:

- b) Recreation, Passive: Recreational activities that normally entail the enjoyment of the natural surroundings with minimal disturbance of same. Such activities include, for example, walking/hiking and horseback riding along established trails, bird watching, biking, and picnicking.

- c) Add the term "Trail" and define as follows: Trail: A corridor of at least ten (10) feet in width through which passes, or will pass, a trail as part of the Township Comprehensive Trail System or as otherwise authorized by the Township. A trail is to serve transportation and recreational functions for one or more of the following: walkers, runners, bicyclists, horseback riders, and cross-country skiers. Trails shall exclude all motorized vehicles except as authorized by the township for maintenance, management, and emergency purposes.

*Note: In addition to stating that a trail is "a corridor of at least ten (10) feet in width, the definition could be expanded to reflect township design standards or reference such standards. A trail ten feet in width should be located within a defined corridor and may need to be moved from time to time, such as where creeks exist.*

### 2. Mandatory Set-Asides-Cluster Development

*Revise Subsection on Cluster Development in Residential Districts to include the following provisions:*

- a) Trails accessible to the public shall be incorporated in the open space plan where such trails have been indicated on the adopted Trail Map. Trails for the exclusive use of cluster development residents and their invited guests shall be provided as a means of access to the public trails.

- b) The township's comprehensive trail system shall be continued through the development.

- c) All cluster developments under this section shall make provision for maintenance of existing trails or provision of trails linking up to the Comprehensive Trail System of Township.  
*Revise Subsection on Conditional Use Standards for Protection of Open Space in Cluster Developments Containing Attached and Detached Housing to include the following provisions:*

- d) Township priorities for the protection of open space shall include: Existing trails or trails with potential linkage to the township's comprehensive trail system, and trails which offer

access to important existing and/or future recreational, educational, natural and commercial features.

3. **Mandatory Set-Asides-Planned Residential Developments**

*Revise Subsection on Open Space Requirements for Planned Residential Development as follows:*

The total area reserved for open space shall include a minimum of thirty percent (30%) of the total tract area, exclusive of trails.

*In PRDs, trails are required in addition to the 30% minimum open space requirement.*

Appendix B  
Rails to Trails Act

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No. 1990-188

AN ACT

SB 640

Authorizing the Department of Environmental Resources to acquire and develop available railroad rights-of-way for public recreational trail use; requiring the Department of Transportation to coordinate certain acquisitions of rights-of-way with the Department of Environmental Resources and the Pennsylvania Public Utility Commission; and providing a limitation on the liability of persons who provide property for public recreational trail use.

The General Assembly of the Commonwealth of Pennsylvania hereby enacts as follows:

Section 1. Short title.

This act shall be known and may be cited as the Rails to Trails Act.

Section 2. Definitions.

The following words and phrases when used in this act shall have the meanings given to them in this section unless the context clearly indicates otherwise:

"Available railroad right-of-way." Any railroad right-of-way that is proposed or approved for abandonment before the Interstate Commerce Commission, the Pennsylvania Public Utility Commission, or other governing agency with jurisdiction in the matter.

"Department." The Department of Environmental Resources of the Commonwealth.

"Secretary." The Secretary of Environmental Resources of the Commonwealth.

Section 3. Rails to trails program.

There is established within the department the Pennsylvania Rails to Trails Program, the purpose of which is to acquire, operate, maintain and develop available railroad rights-of-way for public recreational trail use. The rights-of-way shall be acquired pursuant to this act.

Section 4. Acquisition of land.

(a) Acquisition.—The department is authorized to acquire pursuant to sections 1902-A and 1906-A of the act of April 9, 1929 (P.L.177, No.175), known as The Administrative Code of 1929, fee simple absolute title or any lesser interest in land, including easements and leaseholds, for the development purposes of the Pennsylvania Rails to Trails Program as provided in this section.

(b) Abandoned railroads.—The department is authorized to participate in abandonment proceedings with the Interstate Commerce Commission for the purposes of acquiring available railroad rights-of-way for use as interim trails or railbanking as set forth in section 8(d) of the National Trails System Act (Public Law 90-543, 16 U.S.C. § 1247(d)).

(c) Acceptance of title.—For purposes of the Pennsylvania Rails to Trails Program, the department, counties or municipalities may by gift or purchase:

(1) Accept title, including nonmarketable title, to available railroad rights-of-way and to any areas abutting the rights-of-way which are needed for the construction of trail-user support facilities.

(2) Accept title to available railroad rights-of-way conveyed by quitclaim deed or warranty deed.

(d) Easements over land acquired.—Easements and rights-of-way upon, over, under, across or along any land, the fee title of which has been acquired by the department, may be granted by the department so long as the use of the easement or right-of-way does not interfere with the purposes of this act.

(e) Transfer of trails to local governmental agencies.—The department may transfer its interest in any recreational trail or portion thereof to a local governmental agency or agencies having jurisdiction over the area in which the recreational trail is located for recreational purposes in a manner consistent with department rules and regulations.

#### Section 5. Powers and duties of Environmental Quality Board.

The Environmental Quality Board shall promulgate all rules and regulations necessary to effectively carry out the purposes of this act, including rules and regulations relating to acquisition, development and use of recreational trails.

#### Section 6. Powers and duties of department.

The department shall:

(1) Publish and distribute appropriate maps of recreational trails, including recommended extensions of recreational trails.

(2) Establish access routes and related public-use facilities, which will not substantially interfere with the nature and purposes of a trail, along recreational trails.

(3) Evaluate existing and potential available railroad rights-of-way to identify the corridors which are suitable for recreational trail use.

(4) Maintain updated lists of railroad rights-of-way authorized or proposed for abandonment by the Interstate Commerce Commission and request information on current and potential railroad abandonments from the Department of Transportation, the Interstate Commerce Commission and railroad companies operating within this Commonwealth. At a minimum, lists shall be updated on a quarterly basis.

#### Section 7. Advisory committee.

(a) Purpose.—The department shall not develop or operate any railroad right-of-way for recreational or historical purposes until an advisory committee, as provided by this section, has been appointed and has met with the secretary or his designee for the purpose of reviewing preliminary plans for the development and operation of the property.

(b) Appointment.—The secretary shall appoint this committee to be composed of the following persons, or their designees:

(1) The chairman of the county planning commission of the county or counties affected.

(2) The chairman of the board of commissioners or of supervisors, as the case may be, of each of the townships in the county or counties affected.

(3) The chairman of the county board of commissioners of the county or counties affected.

(c) Meetings.—The advisory committee shall meet with appropriate officials of the department at least four times a year for the first two years following the date the department acquires the right to develop any property for the Pennsylvania Rails to Trails Program under this act, and semiannually thereafter. During the first two years, at least one meeting of the advisory committee shall be held in each of the counties affected.

**Section 8. Review by General Assembly.**

Notwithstanding any provision of this act, the department shall not develop or operate any railroad right-of-way for recreational or historical purposes until the designated standing committees of the Senate and the House of Representatives have reviewed a department management plan, as it specifically relates to the maintenance and operation of any such project.

**Section 9. Coordination with Department of Transportation.**

(a) Method of coordination.—The Department of Transportation and the Department of Environmental Resources shall coordinate their evaluations of potential acquisitions and acquisition priorities with respect to available railroad rights-of-way in order to avoid competing for the same corridors. The Department of Transportation and the Department of Environmental Resources shall enter into a memorandum of understanding which shall contain a method by which the coordination of evaluations and acquisition priorities is to be accomplished.

(b) Interim lease of rights-of-way.—Should the Department of Transportation acquire or lease available rights-of-way for future transportation purposes, it shall lease or sublease such rights-of-way to a public agency or private organization for interim public recreational trail use if:

(1) The public agency or private organization has requested the right-of-way for interim public recreational trails use.

(2) The public agency or private organization agrees in writing to assume all liability and management responsibilities as prescribed by the Department of Transportation to the extent authorized by law.

(3) The use of the right-of-way as a recreational trail does not interfere with the ultimate transportation purposes of the property as determined by the Department of Transportation.

(c) Transportation use and trail use.—If the Department of Transportation determines that an available railroad right-of-way leased for interim recreational trail use is needed for transportation purposes, the Department of Transportation shall work with the leasing agency to accommodate, when feasible as determined by the department, the existing trail use in conjunction with the transportation use.

(d) Future disposal.—If the Department of Transportation determines that an available railroad right-of-way it owns is no longer needed by the Department of Transportation for present or future transportation uses, nothing in this act shall prevent the Department of Transportation from disposing of that property in accordance with its own procedures or applicable Commonwealth laws. Prior to disposing of the property, the Department of Transportation shall first notify the department.

Section 10. Coordination with the Pennsylvania Public Utility Commission.

(a) Method of coordination.—Whenever the Pennsylvania Public Utility Commission receives or considers any request for the abandonment or removal of a railroad grade crossing, bridge or tunnel, the commission shall notify the Department of Environmental Resources. The department shall evaluate the proposed abandonment or removal in order to determine the impact of such action upon the development, expansion and existing use of public recreational trails and may participate in proceeding before the commission concerning such matter.

(b) Actions by the commission.—Before taking final action on any request for the abandonment or removal of a railroad grade crossing, bridge or tunnel, the commission shall consider the impact of such action upon the development, expansion and existing use of recreational trails pursuant to this act and identify and evaluate alternatives which will minimize any adverse impacts of commission actions upon the development and use of recreational trails.

Section 11. Limitation on liability of persons making land available for trail use.

(a) General rule.—Except as specifically recognized or provided in subsection (d), an owner or lessee who provides the public with land for use as a trail under this act or who owns land adjoining any trail developed under this act owes no duty of care to keep the land safe for entry or use by others for recreational purposes, or to give any warning to persons entering or going on that trail land of a dangerous condition, use, structure or activity thereon.

(b) Owner.—Any person, public agency or corporation owning an interest in land utilized for recreational trail purposes pursuant to this act shall be treated as an "owner" for purposes of the act of February 2, 1966 (1965 P.L.1860, No.586), entitled "An act encouraging landowners to make land and water areas available to the public for recreational purposes by limiting liability in connection therewith, and repealing certain acts."

(c) Specific limitations on liability.—Except as specifically recognized by or provided in subsection (d), an owner or lessee who provides the public with land under this act shall not, by providing that trail or land:

(1) be presumed to extend any assurance that the land is safe for any purpose;

(2) incur any duty of care toward a person who goes on that land; or

(3) become liable for any injury to persons or property caused by an act or an act of omission of a person who goes on that land.

(d) Exception.—

(1) This section shall not apply to the owner or lessee of the land used as a trail if there is any charge made or usually made for entering or using the trail or land, or any part thereof.

(2) This section shall not apply to the owner of land adjoining a trail if there is any charge made or usually made by the owner of such adjoining land for using the trail or land, or any part thereof, or if any commercial or other activity relating to the use of the trail whereby profit is derived

from the patronage of the general public is conducted on such adjoining land, or on any part thereof, provided, however, that nothing in this section shall be construed to authorize an adjoining land owner claiming an interest in an available railroad right-of-way to charge for or inhibit the use of such a right-of-way as a recreational trail.

(3) Nothing in this act limits in any way any liability which otherwise exists for willful or malicious failure to guard or warn against a dangerous condition, use, structure or activity.

Section 12. Notices.

(a) Service of notice.—The railroad shall serve any notices as required by the Interstate Commerce Commission, the Pennsylvania Public Utility Commission and other governing agencies upon the Governor and the Department of Environmental Resources.

(b) Notification of jurisdiction.—If the department determines that jurisdictional control is not appropriate by the department or other State agencies, then the department shall have the responsibility to notify the county government and municipalities of the availability or potential availability of the railroad right-of-way.

Section 13. Effective date.

This act shall take effect in 90 days.

APPROVED—The 18th day of December, A. D. 1990.

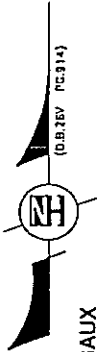
ROBERT P. CASEY

Appendix C  
Freight Station Parcel Survey

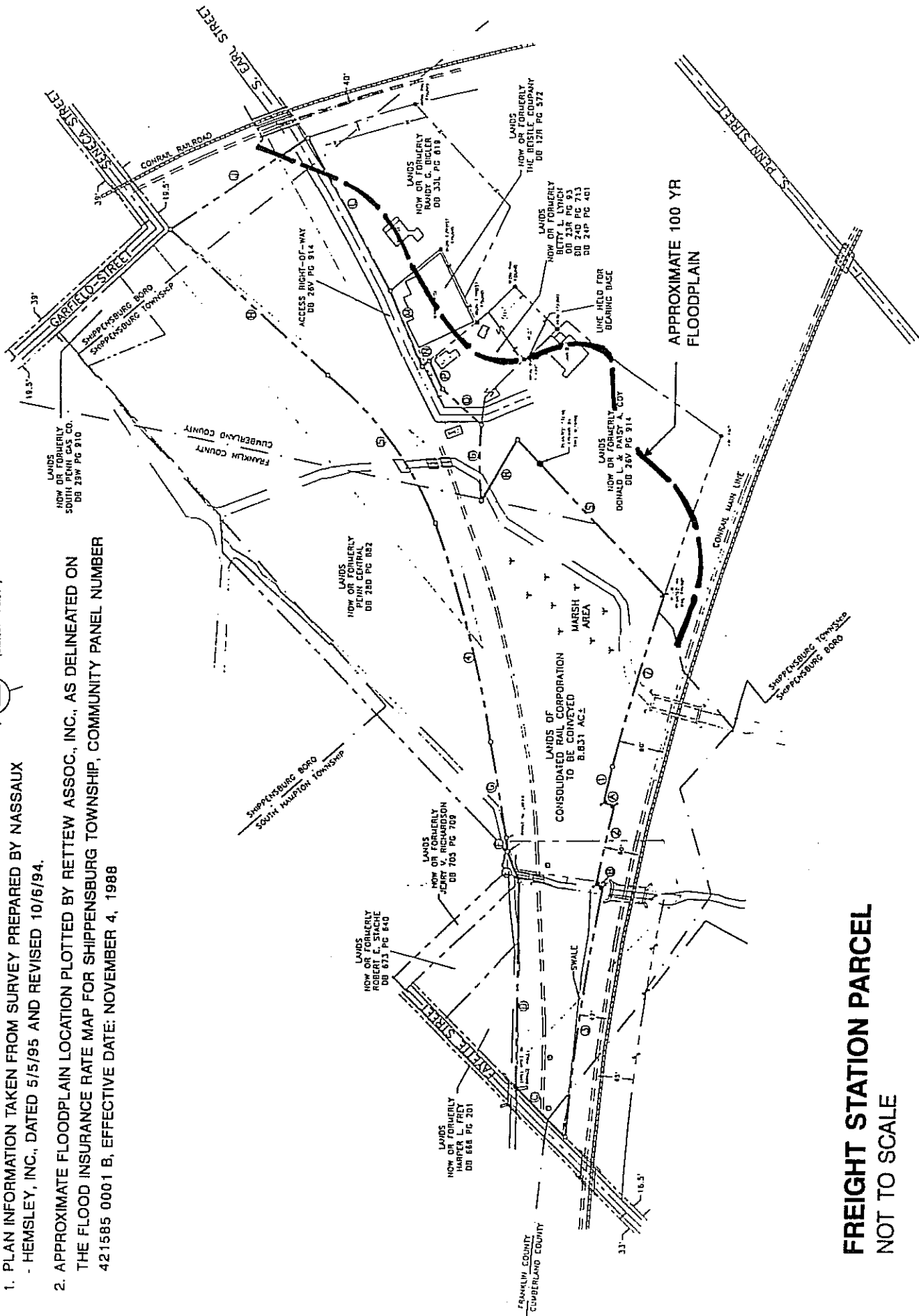
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**NOTE :**

1. PLAN INFORMATION TAKEN FROM SURVEY PREPARED BY NASSAUX - HEMSLEY, INC., DATED 5/5/95 AND REVISED 10/6/94.
2. APPROXIMATE FLOODPLAIN LOCATION PLOTTED BY RETTEW ASSOC., INC., AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR SHIPPENSBURG TOWNSHIP, COMMUNITY PANEL NUMBER 421585 0001 B, EFFECTIVE DATE: NOVEMBER 4, 1988



(D.B. 28V PG 914)



**FREIGHT STATION PARCEL  
NOT TO SCALE**

