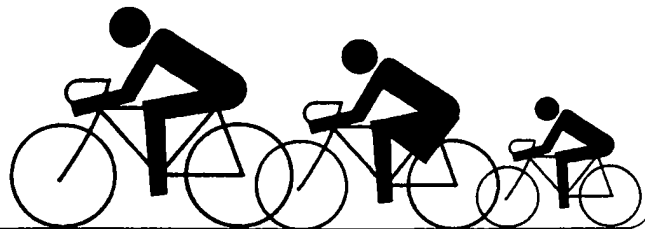
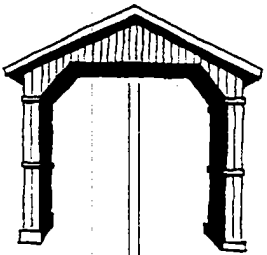


**Transportation Enhancement
Program Application**

**Black Covered Bridge
Rehabilitation Project**

Butler County Commissioners
February 1, 1994



Black Covered Bridge Rehabilitation Project

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Transportation Enhancement Program Application

INSTRUCTIONS: Complete form and submit five copies of the completed application to the appropriate Metropolitan Planning Organization or ODOT District Office.

Applicant		Date
Butler County Commisisoners		January 25, 1994
Mailing Address	City-State	Zip Code
Administrative Center 130 High St.	Hamilton!, OH	45011
Contact Person	Title	Telephone Number
Dean Foster	Chief Deputy Engineer	(513) 867-5744
Metropolitan Planning Organization (if applicable) or County		
Ohio/Kentucky/Indiana Regional Council of Governments		

Proposal Name
Black Covered Bridge Rehabilitation

Proposal Location (include COUNTY-ROUTE-SECTION Number, if applicable)
Butler County-Oxford Township-Corso Road-Section Number 14

Proposal Category - CHECK ONLY ONE CATEGORY:

- Scenic and Environmental Enhancements
- Acquisition of scenic easements and scenic sites
 - Scenic highway program
 - Landscaping and other scenic beautification
 - Control and removal of outdoor advertising
 - Mitigation of water pollution due to highway runoff
- Historic/Archaeological Enhancements
- Acquisition of historic sites
 - Historic highway program
 - Historic preservation
 - Archaeological planning and research
 - Rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals)
- Pedestrian and Bicycle Facilities
- Provision of facilities for pedestrians and bicycles
 - Preservation of abandoned railway corridors (including the conversion and use thereof for pedestrian or bicycle trails.

Enhancement Funds Requested:	\$ 226,800	= 80 % of Total	
Local Funds Committed to Project:	\$ 56,700	= 20 % of Total	
Total:	\$ 283,500	= 100%	

- Include all of the following as part of the application:**
- Complete and detailed description of the proposed project and its relation to the intermodal transportation system. Location maps, elevations, photographs included, as necessary, to fully illustrate the project.
 - Complete and detailed breakdown of the proposed construction/implementation costs -- certified by a professional engineer or architect -- and sources of funding.
 - Complete and detailed description of the project's characteristics and benefits.
 - Anticipated date for completion of project design.
 - A certified copy of a resolution from the applicant's governing body authorizing the submission of the application for Enhancement funds and agreeing to share in the project cost.

(For office use only)
ODOT District Number: _____

MPO and/or ODOT District Ranking: _____ out of _____ proposals received.

Description of the Project

OVERVIEW

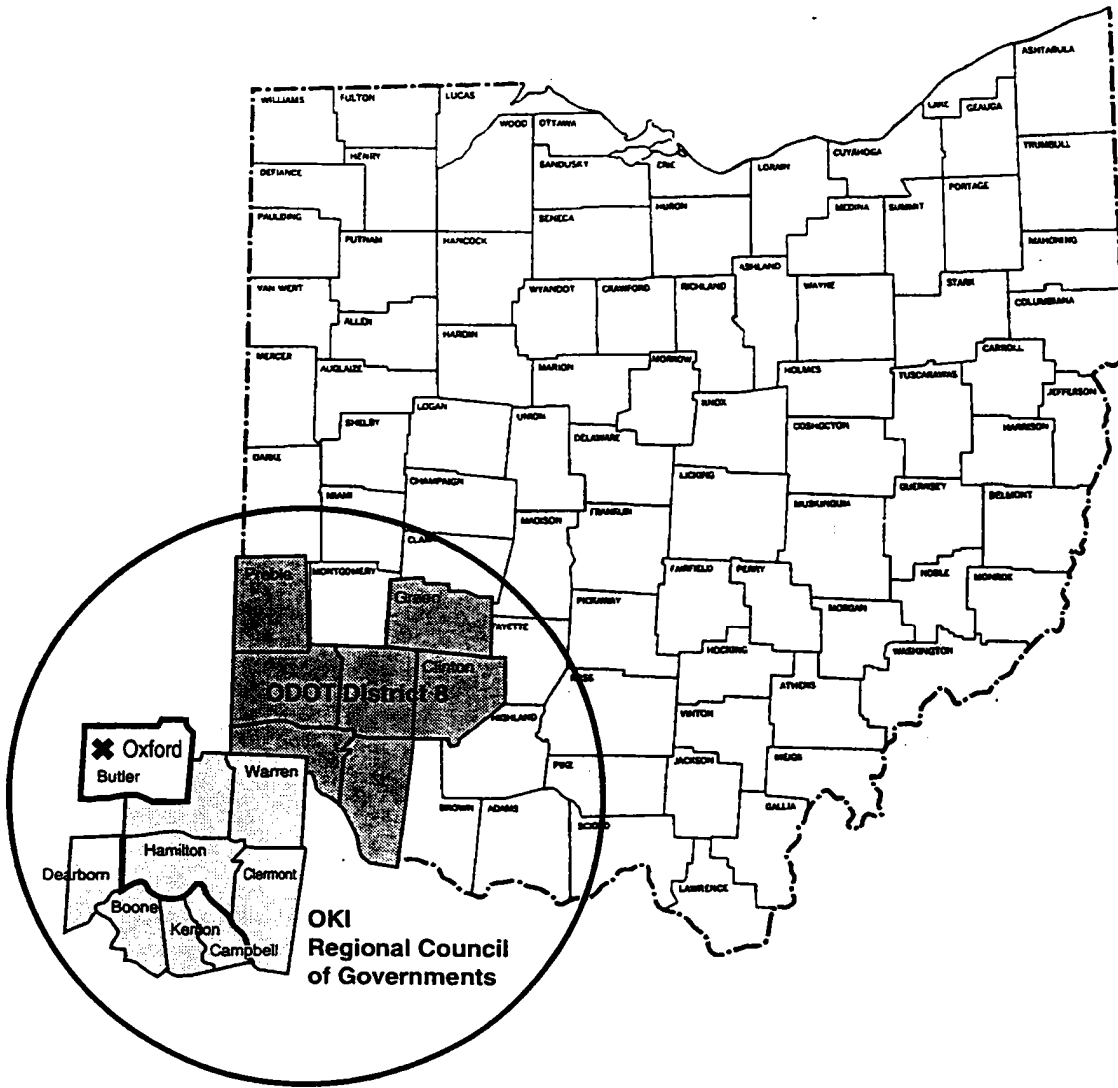
The goal of the Black Covered Bridge Rehabilitation Project is to renovate Butler County's only covered bridge remaining in its original location. The rehabilitation of the Black Covered Bridge is the culmination of many years of effort on the part of the community to retain and protect this valuable cultural resource. Inherent within the larger aim of saving the Black Covered Bridge from natural deterioration is the goal of maintaining the bridge and its scenic setting so that it may be enjoyed in the future by more community members and area visitors. Consistent with both aims is the long term goal of having a rehabilitated Black Covered Bridge within a local, regional, and state-wide bike and pedestrian network. (For a more detailed description of the proposed local bikeway system see Oxford/Hueston Woods Bike & Pedestrian Transportation Enhancement grant application or contact Jon Scharf, Oxford Museum Association Director, P.O. Box 184, Oxford, OH 45056, 513 523-5376.)

RELATION TO INTERMODAL TRANSPORTATION SYSTEM

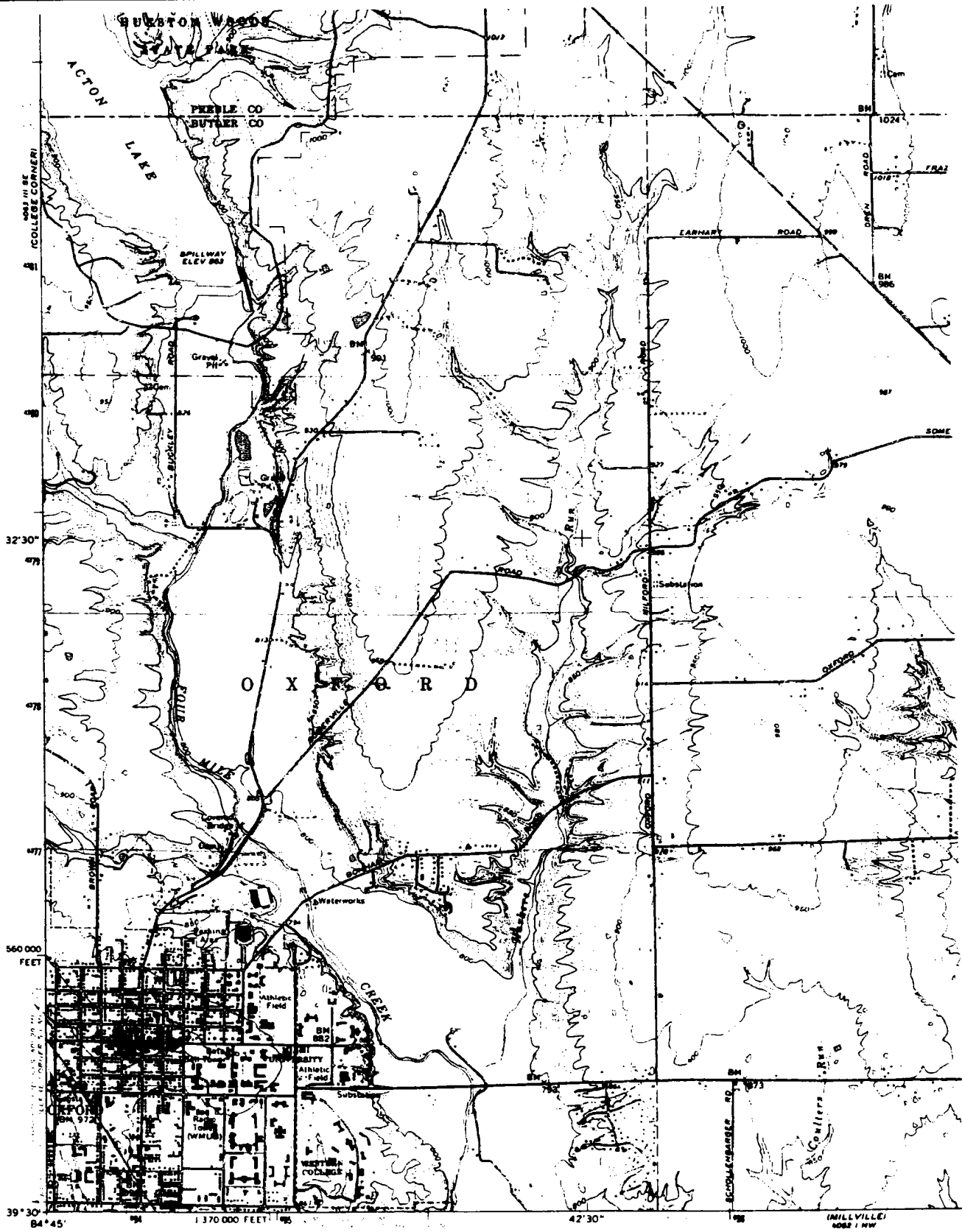
The Black Covered Bridge is located north of the city of Oxford in the northwest corner of Butler County in southwestern Ohio (see Map I on p. 4). The Black Covered Bridge was once the major crossing point of the Tallawanda (also Four Mile) Creek for anyone heading north of Oxford. In 1951, while Hueston Woods State Park was being built, the Ohio Department of Transportation constructed a concrete bridge to bypass the Black Bridge because of the anticipated increase in traffic to the completed park. Because of the efforts of the Oxford community, the Black Bridge was left in its original location near State Route 732 (see Map II, p. 5). The Black Bridge is visible to the northwest from the new bridge and is accessible via the old roadway that has been renamed Corso Road. Corso Road dead ends at the Black Bridge.

Again, the long-range goal is to reintegrate the Black Covered Bridge into the Intermodal Transportation System as part of a bike/pedestrian transportation network. Map IV (from the Ohio/Kentucky/Indiana Regional Council of Governments *Bike Route Guide for Butler County*) shows the existing bike transportation system for the Oxford area, p. 7. State Route 732 is indicated as a cautionary route for bike traffic. Despite this, S. R. 732 is a frequently-used bike route between Hueston Woods State Park and Oxford & Miami University. Construction of the first section of a bike/pedestrian transportation network adjacent to S. R. 732 would increase safety along this corridor. Rehabilitation of the Black Bridge would create a separate crossing of the Four Mile Creek for cyclists and walkers. In addition, this first section would provide a safer alternative than other routes currently provide. Both roads between Oxford and Hueston Woods Park (S. R. 732 & Brown Road, see p. 7) are curved and have limited sight distances, making the combination of bike/pedestrian and automotive traffic potentially dangerous. Current development north of Oxford will further increase both bike/pedestrian and car traffic, thereby reducing safety in the future. The Black Bridge rehabilitation in conjunction with a developing network of trails offers a chance to separate the two modes of transportation while at the same time enhancing an historically important component of the transportation system.

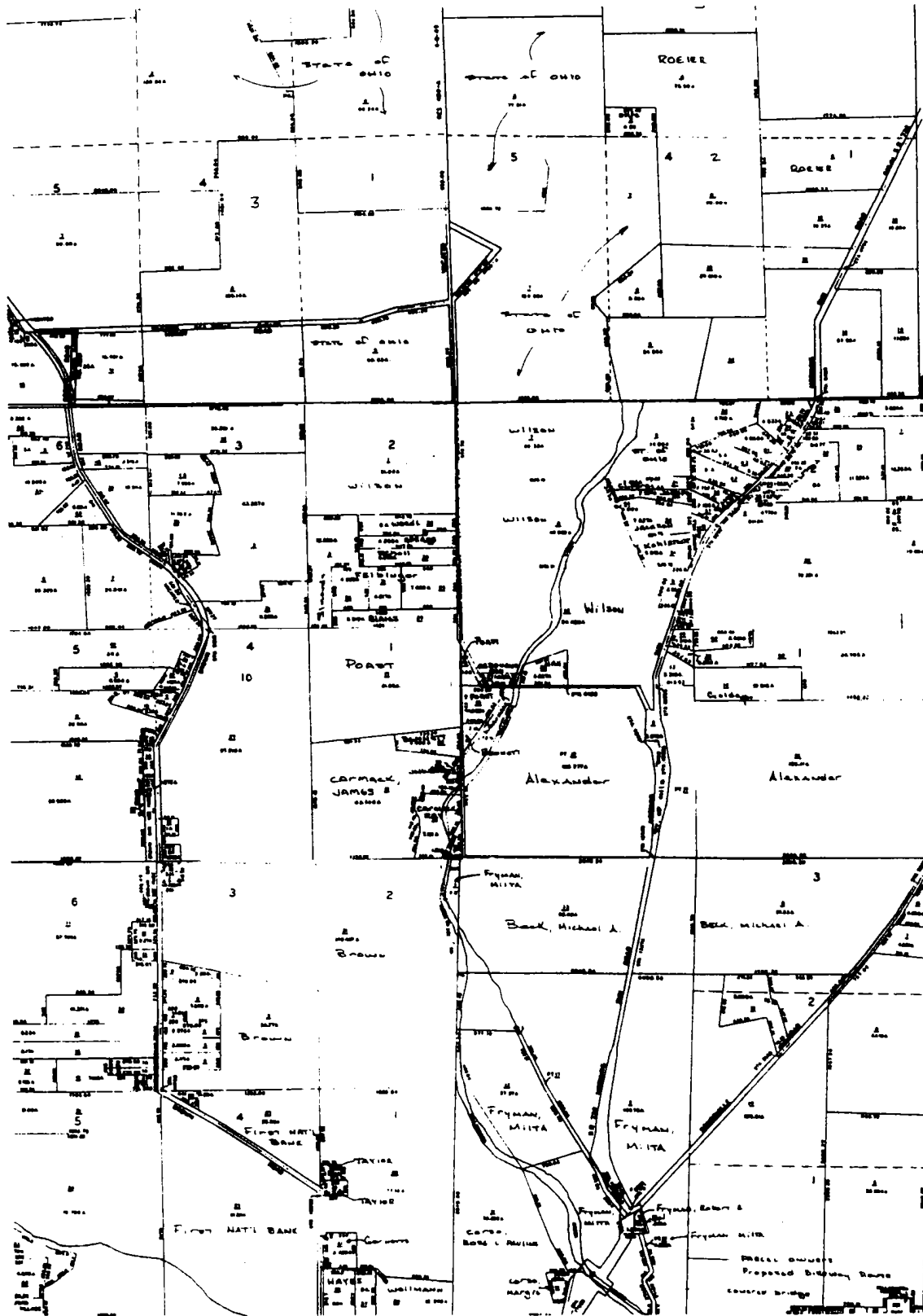
Map I: ODOT District 8 / OKI / Butler County / Oxford



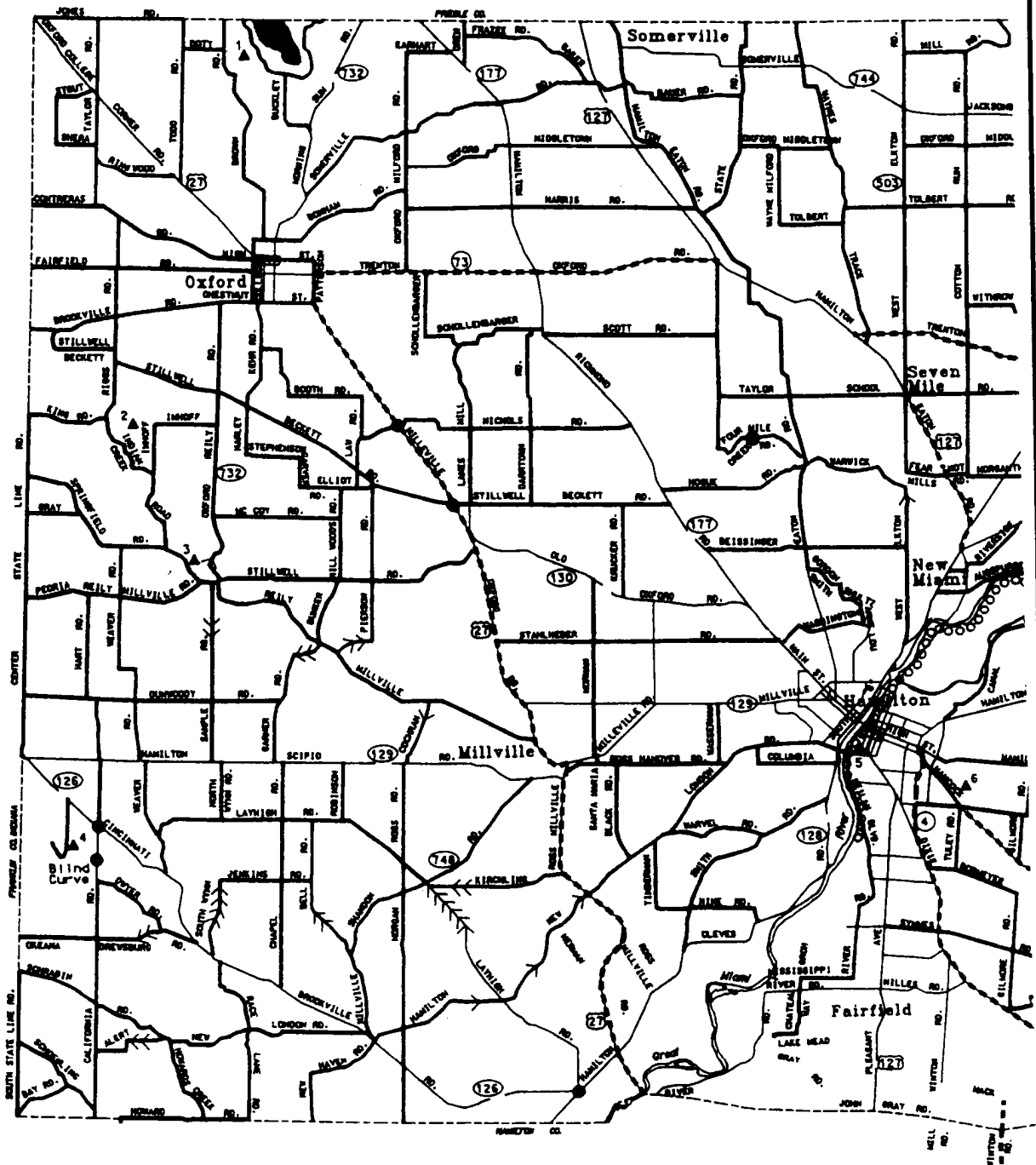
Map II: Topographic Map Showing Black Bridge and Roads



Map III: Plat Map Showing Ownership / Right-of-ways



Map IV: OKI Regional Bike Path Plan, Oxford Area



— RECOMMENDED BIKE ROUTE

- - - ALTERNATE BIKE ROUTE - USE WITH CAUTION BECAUSE OF TRAFFIC AND/OR TERRAIN

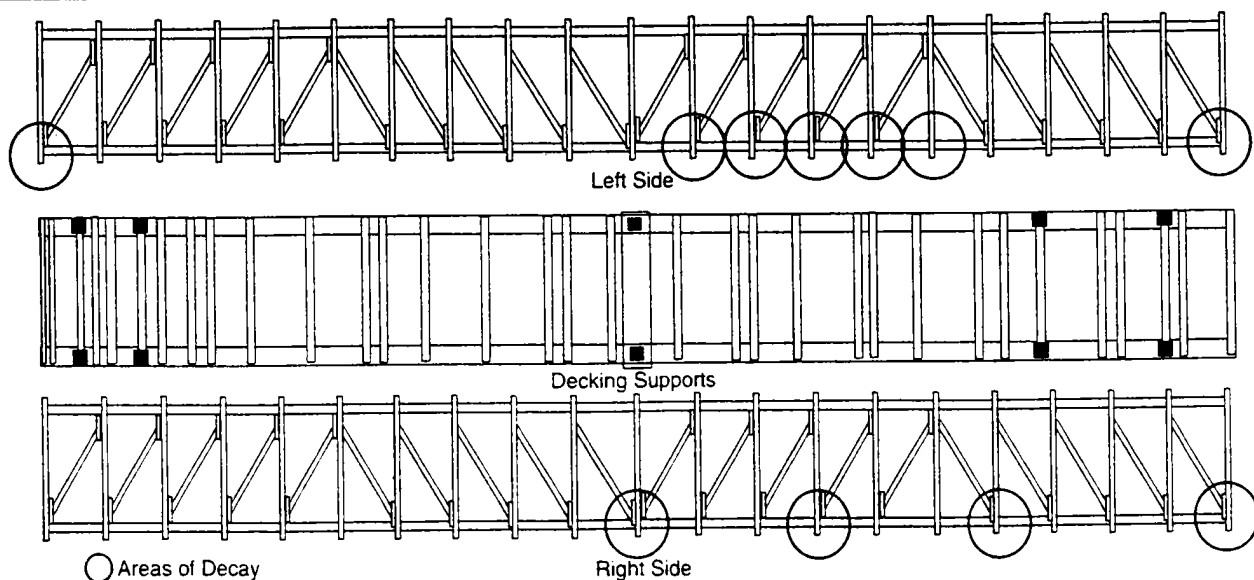
DESCRIPTION OF REHABILITATION PLANS

Since no known original construction plans or very early photographs exist of the Black Covered Bridge, a technical restoration to its original condition will not be possible. Instead, a rehabilitation that attempts to maintain the character of the structure, including subsequent alterations that have been made to the bridge, will be done. Research on the history of the bridge's construction and alterations based on the known historical records has been completed. Next, the evidence, including the current physical condition of the bridge, will be examined to make recommendations towards rehabilitation.

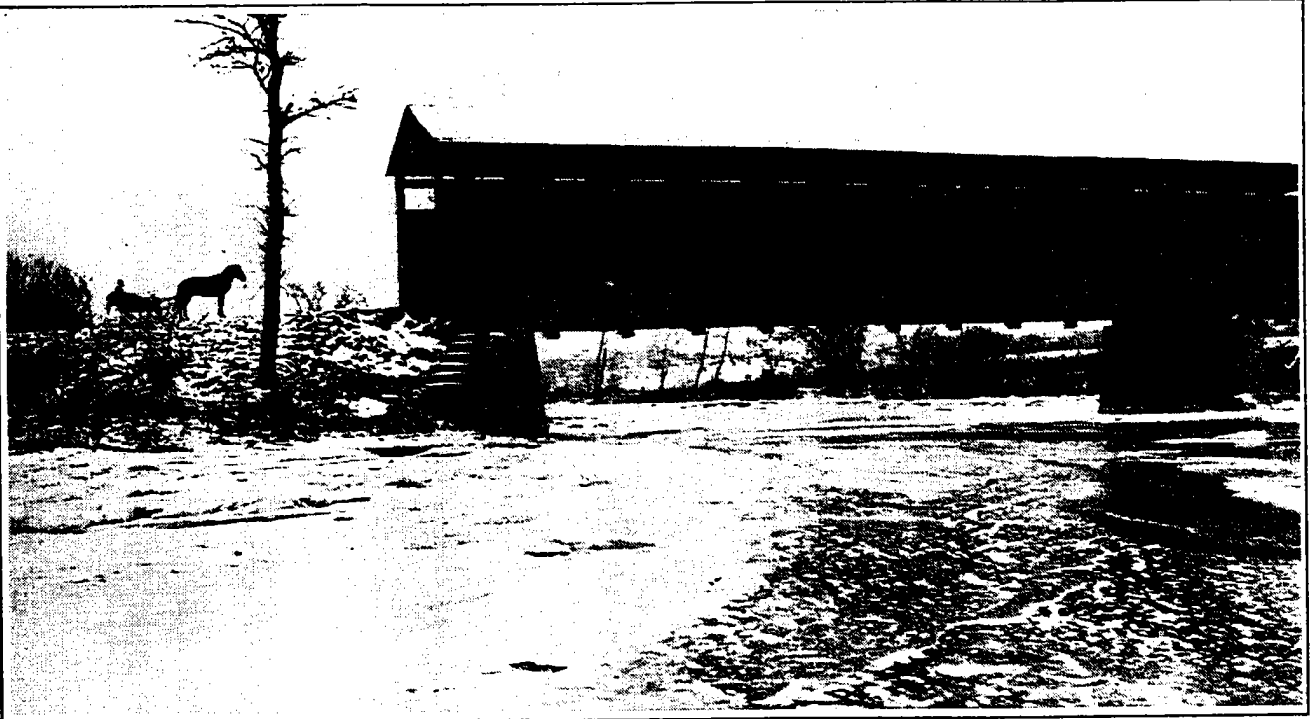
The oldest known photograph (*Frank McCord, circa 1893*) and a photo of a recent work-day are reproduced on page 9. In September, 1991 interns with the Butler County Engineer's Office made sketches and took measurements of the Black Covered Bridge. An adaptation of their sketches is presented below highlighting current areas of specific concern regarding aging and deterioration of the structure. In January, 1994 engineers of A. G. Liechtenstein, Inc., a company with specialization in wood-truss construction, will make further examinations of the Black Bridge with sounding and load-testing to follow. Results of this already-funded first phase of assessment engineering are expected around January 26, 1994. Although not completed in time to include with this proposal, copies can be obtained from the Butler County Engineer's Office, 1921 Fairgrove Avenue, Hamilton, OH 45013 (513) 867-5744. The historic evidence and current physical condition will be taken together to form initial construction plans. Because the Black Bridge is listed on the National Register of Historic Places and a desire exists to maintain the bridge's historic character, the Ohio Historic Preservation Office will be consulted.

Because the project rehabilitates a current structure with minimal new construction there is not expected to be any significant environmental impact. The Black Covered Bridge is owned by the Butler County Commissioners and rests on public property (see Map III, p. 6) so no permanent easements or right-of-way purchases are anticipated. We do not believe that temporary construction easements will be needed, but since the surrounding property owners are generally supportive of renovations to the bridge, we do not anticipate problems obtaining temporary easements if necessary. We do not anticipate problems with conformity to all federal, state, and local laws and regulations applicable to the rehabilitation project.

County Engineer Analysis of Black Covered Bridge Showing Physical Condition



McCord Cynatype of "Talawanda in Winter" c.a. 1893



October 2, 1993 Oxford Museum Association Workday



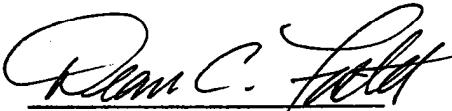
Construction / Implementation Costs

	<u>TOTAL COST</u>	<u>LOCAL FUNDS</u>	<u>ENHANCE. FUNDS</u>
Preliminary Engineering	\$ 20,000	\$20,000	
Right of Way			
Construction Contract	\$235,000	\$47,000	\$188,000
*Construction Engineering	\$ 25,000	\$ 5,000	\$ 20,000
Contingencies	<u>\$ 23,500</u>	<u>\$ 4,700</u>	<u>\$ 18,800</u>
	\$303,500	\$76,700	\$226,800

*Performed once construction has begun and the condition of the timber truss has been evaluated.

NOTE: The Oxford Museum Association will raise the local funds for this project.

The above cost estimate was made under the direction of and checked by:



Dean C. Foster, P.E., P.S.
Professional Engineer #54945 in Ohio
Professional Surveyor #7285 in Ohio

Description of Character / Benefits of Black Bridge Project

HISTORIC CHARACTER / CHRONOLOGY OF THE BLACK COVERED BRIDGE

The Black Covered Bridge was listed individually on the National Register of Historic Places in 1975. As the result of road and bridge taxes paid to county governments the Black Bridge reflects the commitment of nineteenth-century America to build infrastructure to support settlement and commerce. Covered bridges represent an attempt to spend that tax money wisely by combining an abundant material (wood) and common sense (enclosure protected the wood from weather and rot, increasing longevity), with evolving engineering techniques represented by the many wooden truss designs available. The Black Covered Bridge provides a material cultural artifact that shows how people coped with the simple everyday problem of moving people and goods from one side of a river to the other.

The Black Bridge sits near the center of the Four Mile Creek Valley in Oxford Township. At first, the Four Mile Creek itself and trails that led alongside it provided the path to European settlement in the Oxford area. Just south and east of the Black Bridge is the site of the log home of Zachariah DeWitt, one of Oxford's first settlers. Believed to have been built during the winter of 1804-5, it is one of the oldest log structures on its original site in Ohio. Among other accomplishments, Zachariah DeWitt served in the War of 1812, as supervisor of roads in Oxford Township, and built the first of many sawmills on the creek. The log house and nearby Bachelor Forest Reserve would be linked to the Black Bridge by another segment of the proposed bikeway network.

The Four Mile Creek Valley served as Oxford's industrial corridor in the 1800's. Several mills were located along its banks. Both a saw and grist mill stood about five hundred feet to the east of the Black Bridge. The first grist mill was built before 1815 by Aaron Austin and rebuilt after a fire by his son Franklin in 1845. About 1868, J.B. Pugh built a three-story 16-foot overshot water wheel that powered separate grist and saw mills. The mill race, will can still be traced today, extends east and north of the Black Bridge and is unusual for its length. The wide gentle slope of the Four Mile Creek Valley required the source of water for the mills to come from nearly a mile and a half to the north west. A Miami University yearbook from the 1890's recalls that the long race was used for ice skating.

Both the early road system and placement of the mills were determined by the location of the creek. The Black Bridge provided easy access to the growing village of Oxford for lumber and grains finished at the mills. Probably because the bridge and Mr. Pugh's improvements to the mills were made at the same time, the bridge was known as the Bridge at Pugh's Mills, or, as it is listed in the National Register, Pugh's Mill Bridge. As the importance of the mills diminished, the covered bridge gradually came to be referred to as the Black Bridge. Two possible reasons explain the new name: a family named Black supposedly lived near the bridge, and the White Covered Bridge (so called for its color) was about a mile down the creek, serving the east road into Oxford (now S. R. 73).

As an historic artifact, the Black Covered Bridge represents an engineering solution to utilitarian problems and can be studied for its architecture and location within the commercial and transportation infrastructure. As a cultural artifact, the Bridge represents a sense of place embodied by the people who used it, whether to simply to cross the creek, to enjoy Oxford's swimming hole, or as a scenic place to picnic or capture its beauty on canvas.

CONSTRUCTION, ALTERATIONS, SCARCITY, AND THREATS TO THE BLACK COVERED BRIDGE

In 1868 the Butler County Commissioners hired the firm of Banden, Butin & Bowman to construct an 18-foot wide, 200-foot long clear span bridge across the Four Mile Creek north of Oxford. Abutments were laid up by J. Calhower & Co. for \$7 per perch; three hundred perches of stone were required for the two terminal abutments. The commissioners accepted the bridge as completed on January 9, 1869 with a final cost of \$6,322.25 for a 209-foot bridge. However, on June 19, 1869, the Butler County Commissioners contracted with Banden, Butin & Bowman to have a middle pier built under the Oxford Bridge. They were to put in new braces, probably the metal ones that remain today, so that the bridge would have proper bearing on the new pier. The commissioner's accepted the additional work on December 15, 1869 adding another \$600 for the pier and brace construction.

During the almost 100 years the Black Bridge was in use, routine maintenance along with measures to strengthen it to carry heavier loads, were undertaken. In 1925, the Oxford firm of H.S. Coulter was hired to reinforce the abutments with concrete. This may also have been when the wooden supports at either end were added. Flooring, roof and siding wood has also been replaced as needed with this aspect continuing up to the present.

The Black Bridge was one of forty-one covered bridges known to have been built in Butler County. Today it is one of only two remaining and is the only one still in its original location. The *Second Ohio Historic Bridge Inventory, Evaluation & Preservation Plan* lists only 19 covered bridges currently existent in ODOT District Eight of southwestern Ohio (Butler 2; Clermont 1; Clinton 2; Greene 5; Hamilton 1; Preble 8; Warren 0). The design of its construction, a series of boxed X's, is a modified Long truss, introduced by Col. Stephen H. Long. The *Second Ohio Historic Bridge Inventory* numbers only four Long truss bridges in Ohio (Butler 1; Miami 1; Washington 2). If the Black Bridge had remained a single span as designed, it would be one of the longest single-span wooden bridges still standing in the United States.

Given the early addition of a middle pier and metal bracing the Black Bridge is truly a unique engineering project. Unfortunately mistakes made during this alteration have also contributed to its current problematic condition. The metal rods in the Black Bridge, which in later wood truss construction were designed to be tension members, show signs of compression stress. Missing siding has allowed water to rot portions of the lower chord, stressing whole members. Temporary light weight (1992) and afterwards plywood siding (1993) have been added to minimize further water damage. Neighbors and the Oxford Township police have always worked together to deter vandalism, but this remains a problem, especially if the bridge is seen as abandoned. With the permission of the Oxford Township Trustees, the Oxford Museum Association installed a security light on the pole near the bridge in 1993. Rehabilitation, the resulting increased visibility and use in the community, and a hidden dry sprinkler system for fire suppression are goals of this project that should reduce the threats to the Black Bridge posed by time and vandalism. The longer the project remains uncompleted, the higher the risk of damage or destruction of the Black Covered Bridge.

National Register of Historic Places Confirmation

Ohio Historic Preservation Office Southwest Regional Office

Wright State University
Department of History
Dayton, Ohio 45435
513/873-2815



OHIO
HISTORICAL
SOCIETY
SINCE 1885

January 11, 1994

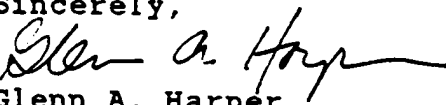
John Scharf
Oxford Museum Assoc.
P.O. Box 184
Oxford, OH 45056

Dear Mr. Scharf:

Please be informed that the Pugh's Mill Covered Bridge-Black Bridge, was listed on the National Register of Historic Places, June 5, 1975.

The National Register of Historic Places is the official list of historic properties recognized by the federal government as worthy of preservation for their local, state, or national significance in American history, architecture, archaeology, engineering or culture.

Sincerely,


Glenn A. Harper
Regional Coordinator

PUBLIC EXPOSURE, ECONOMIC BENEFITS, & COMMUNITY INVOLVEMENT:

The Black Covered Bridge is visible from the new bridge on State Route 732 along the posted route from Oxford to Hueston Woods State Park. Miami University students (especially those in art classes) and Oxford residents often gather near the bridge. Since the Black Bridge is not monitored continuously the level of community use or visits to the bridge are hard to quantify. Parking is available along the circle at the end of Corso Road and use is restricted to daylight hours through a posted sign. It is not uncommon to find someone fishing in the creek under the bridge, although access onto the bridge is restricted by an often-mended wire mesh fence.

Requests for field trips, bus tours, or inquiries from covered bridge enthusiasts are often handled by the Oxford Visitors & Convention Bureau and referred to the Oxford Museum Association. Such requests accounted for approximately eighty scheduled visitors in 1992. Although not reluctant to show case the bridge as evidence of Oxford's rustic charm, the Oxford Visitors Bureau does not promote the bridge in the ways that would be possible for a rehabilitated structure or tourist attraction. The visitors from nearby Hueston Woods State Park, especially during the summer, have an economic impact on Oxford that the Chamber of Commerce readily recognizes. The effects of a rehabilitated National Register Site in conjunction with a completed bike/pedestrian path from Hueston Woods would increase the economic benefits to Oxford. Dr. John Altman, Markley Executive Professor of Marketing, will be directing several Miami University students during the spring of 1994 in conducting a business plan for the project. The plan will outline strategies to leverage private/public partnerships to achieve the project's goals and attempt to better quantify the economic impact of the bridge rehabilitation and bike/pedestrian network.

Probably the best indication of support for the Black Bridge Rehabilitation Project is the level of community involvement with the bridge since it was by-passed. Suggestions in the late fifties that the bridge should be dismantled or moved led Oxford citizens to explore turning it into a park so that it could remain part of the community. Funding could not be obtained at that point because of a provision that forbade spending park monies in a flood prone area. In 1973 Russell Huston, then part-time director of the Oxford Museum Association, approached former Butler County Engineer Stanley Perin to make minor repairs on the bridge. Their efforts led to the current lease arrangement for care of the Black Bridge with the Oxford Museum Association, replacement of the roof and missing siding during 1976, and an all-day Bridge 'Festival', part of Oxford's Bicentennial celebration, in October of 1976 to raise money for the repairs. Ongoing temporary preservation efforts have continued with hope and plans for total rehabilitation progressing slowly.

One measure of the Oxford area's special relationship with the Black Covered Bridge can be taken from the numerous instances of graffiti left at the bridge. Instead of profanity or sports and rock band insignia, the messages on the bridge reflect the 'kissing bridge' nickname or simply leave the person's initials and date. Some of the graffiti were left in the early twentieth century, but most dates are from after the 'new' bridge was built reflecting the Black Covered Bridge's place and vitality in the Oxford community.

Completion Date and Black Covered Bridge Project Design Timetable

Project Approval:	July 1, 1994
Preliminary Design Approval:	January 1, 1995
Contract Plan Approval:	April 1, 1995
Bidding:	Advertise: August 1, 1995 Award: September 15, 1995
Construction:	Start: October, 1995 Complete: May, 1996

Total Project Length = approx. 1 year, 10 months

Government Resolution / Endorsement: Butler County Commissioners

RESOLUTION NO. 93-9-1536

Resolved By the Board of County Commissioners of Butler County, Ohio, That

WHEREAS, the Butler County Engineer in cooperation with The Oxford Museum Association is preparing an application for submission to the Ohio Department of Transportation for a grant in the amount of \$608,220.00* from the Transportation Enhancement Program for the rehabilitation of the Corso Road Covered Bridge and construction of a 2.4-mile bicycle path beginning at the east end of the covered bridge, then traveling north along S.R. 732 to Buckley Road, and along Buckley Road until it connects with the main loop road in Hueston Woods State Park.

THEREFORE BE IT RESOLVED that the Board of County Commissioners of Butler County, Ohio do support the Corso Road Covered Bridge/Bicycle Path Project.

Commissioner Southard moved for the adoption of the foregoing resolution. Commissioner Clemmons seconded the motion and upon call of the roll, the vote resulted as follows:

Commissioner Clemmons	Yea
Commissioner Southard	Yea
Commissioner Combs	Yea

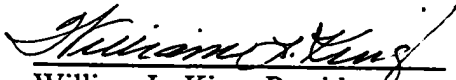
Adopted: September 16, 1993

Attest: Deana Bradford, Clerk

* reflects total project costs. Enhancement funds requested equal \$449,376.

Assurance of Maintenance

By agreement with the Butler County Commissioners, the right to possession and to the use of the Black Covered Bridge was extended to the Oxford Museum Association in June, 1976. Among conditions set forth, The Oxford Museum Association agreed to *"restore, preserve and maintain the bridge as a historical landmark making it available to the public for its enjoyment."* Given the opportunity to restore the structure as defined within this proposal, the Board of Trustees of the Oxford Museum Association has committed to the continuation of this responsibility and extend responsibilities to include maintenance of the associated bikepath. Additionally, the Association agrees to coordinate the local obligation for fund matching.



William L. King, President
Oxford Museum Association
January 27, 1994

Letters of Support

RESOLUTION NO. 3056

RESOLUTION OF SUPPORT FOR THE OXFORD MUSEUM ASSOCIATION, BLACK COVERED BRIDGE PROJECT.

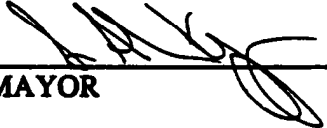
BE IT RESOLVED BY THE COUNCIL OF THE CITY OF OXFORD, BUTLER COUNTY, STATE OF OHIO, THAT:

SECTION 1: Council supports the efforts of the Oxford Museum Association to preserve the Black Covered Bridge

SECTION 2: Council further supports the Board of Butler County Commissioners' request for the ISTE A Grant.

SECTION 3: Council also supports the efforts to construct a bike path from the Black Covered Bridge to Hueston Woods State Park.

SECTION 4: This resolution shall take effect at the earliest date allowed by law.


MAYOR

ADOPTED: January 24, 1994

ATTEST: 
DEPUTY CLERK OF COUNCIL

PREPARED BY: LAW (STAFF)

INTRODUCED BY: ALAN KYGER

Letters of Support

Oxford Township Trustees
P. O. Box 712
Oxford, Ohio 45056

Sept. 15, 1993

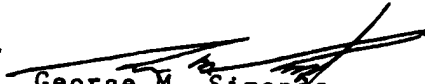
To Whom It May Concern:

Please be advised the Oxford Township Trustees, Butler County, Ohio discussed the preservation of The Black Bridge, historic covered bridge within our township, at our Monday, Sept. 13, 1993 meeting.

The trustees then passed a formal motion fully endorsing the efforts of the Oxford Museum Association and others to preserve The Black Bridge. Furthermore the trustees support efforts to receive ISTEA Grants for the project.

The trustees not only fully support the present efforts but also hope this project can be a catalyst to the development of a bikeway project in the area.

Sincerely yours,



George M. Simonds
Chairman

Letters of Support

Oxford Cycling Club
P.O. Box 774
Oxford, Ohio 45056
January 26, 1994

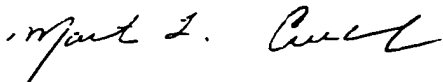
To whom it may concern:

The Oxford Cycling Club is dedicated to the enhancement of the Oxford community through the support of cycling and other outdoor recreation activities. Our Club has had a strong membership for nearly 12 years with active support on community rides and projects.

We support the efforts of the Butler County Commissioners and the Oxford Museum Association on the Black Covered Bridge rehabilitation project and the Oxford-Hueston Woods bike-pedestrian project. Our organization is prepared to support these projects financially as well as providing volunteers to help maintain the bicycle-pedestrian pathway. We would also support efforts to create a network of bicycle-pedestrian pathways throughout the Oxford area which would provide safe areas for outdoor family recreation as well as improve the Oxford community.

We thank-you for your consideration to become involved in backing of the Black Covered Bridge rehabilitation project and the Oxford-Hueston Woods bike-pedestrian project. If you have any further questions concerning the Oxford Cycling Club's support of these projects, please do not hesitate to contact our organization.

Sincerely,



Martin L. Creech
Oxford Cycling Club