VILLAGE OF WILLIAMS BAY

BIKE PATH PLANNING STUDY

PREPARED BY:

Baxter & Woodman, Inc.
Consulting Engineers

October 7, 2008
Project No. 081106.30

BAXTER & WOODMAN
Consulting Engineers

Village of Williams Bay
Bike Path Planning Study

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1.1 Purpose

The purpose of this report is to outline a concept plan that the Village can use as a starting point to apply for funding, to begin discussions with State agencies, to discuss alternate routes, and to use to obtain the necessary easements north of Geneva Street and east of Elkhorn Road. This plan should be updated when an alternate route is selected and when more areas are considered for the bike trail system.

1.2 Previous Studies

The Southeastern Wisconsin Regional Planning Commission (SEWRPC) published Planning Report No. 49, a Regional Transportation System Plan for Southeastern Wisconsin: 2035. Appendix B of this report is a regional bicycle and pedestrian plan element. The Appendix contains an excerpt from this report which shows a recommendation of bike lanes along Highway 67 and a future off-road bike trail north and west of the current Village boundaries.

Lake Geneva and Fontana appear to be doing bike path work that is consistent with the recommendations from SEWRPC 2035 Plan. The bike path network in Lake Geneva is on the east side, away from future connection any path from Williams Bay. A bike path extended west of Williams Bay could potentially connect with Fontana's path along STH 67.

1.3 Discussion

Exhibit A shows a proposed route and phasing for a bike path through the Village that connects several of the Village's recreational areas. This plan also shows alternate bike path connections to the elementary school and high school. Table 1 contains a description and cost of the individual segments illustrated in Exhibit A and also contains a recommended type of section and the potential obstructions within this segment. Table 2 contains a phasing schedule and cost for each phase based on the segments outlined in Table 1. The estimated segment cost in Table 1 is based on the phasing in Table 2.

The proposed path is divided into four phases, as shown on Exhibit A. All of the paths would be "on-road" paths except the path along the creek, which would be an individual path. An on-road path would consist of simply striping an existing street for a bike lane or constructing 4 feet of new asphalt along side the existing street and striping it. It is recommended to combine Phases 1 and 2 because it would complete the east-west portion of the path and because the cost of Phase 2 is relatively low. See the Appendix for a typical section.

The majority of the proposed paths (all but the path along the creek) may be funded via the Statewide Multi-modal Improvements Program (SMIP). The next available date for submitting funding applications is May 2010. The path along the creek may be funded through the DNR Stewardship Program, which accepts funding submittals annually. If the Village wishes, the path along the creek could be done separate from the other paths and an application could be submitted as soon as May 2009. See the Appendix for information on funding sources. The estimated cost of the path along the creek is $120,000, excluding

property/easement acquisition. Potential Stewardship funding could provide 50% of that amount. Therefore, since the Stewardship program is a reimbursable program, the Village would need to budget $120,000 for the work to be done in 2009.

There are also two alternate paths shown; one leads to the High School, which would be a simple path striped on the existing street; the other path is shown along Congress Road to the elementary school. The second path is not fully identified at this time, since there are planned traffic changes near the school; this path location should be studied when more information is available.

1.4 Recommendations

- Discuss this report at Committee and Board level and consider alternate routes that may not require parking restrictions and waterway crossings.
- Begin discussions with property owners and obtain the easements necessary to cross the creek.
- Apply for funding in 2009 for the portion of the bike path along the creek. Apply for funding for the remainder of the path in 2010.
- Begin discussions with the DOT about Highway 67 and their future plans for resurfacing this roadway.

TABLES

TABLE 1
BIKE PATH SEGMENT DESCRIPTION
VILLAGE OF WILLIAMS BAY

SEGMENT	FROM	TO	ESTIMATED COST	LENGTH (feet)	COMMENTS
E GENEVA ST	LAUREL ST	JOHNSON TERRACE	$104,000	1150	ADD 3' TO BOTH SIDES REQUIRES APPROX 400' OF SHORT RETAINING WALL
E GENEVA ST	JOHNSON	WILLABAY DR	$38,000	700	ADD 3' TO NORTH SIDE SOUTH SIDE VARIES, ADD 3' PARTIALLY, REMAINDER OK SOUTH SIDE HAS SOME EXISTING CURB & GUTTER
E GENEVA ST	WILLABAY	CEDAR POINT CONDOS	$35,000	450	BOTH SIDES HAVE EXISTING CURB & GUTTER SOUTH SIDE OK AS IS NORTH SIDE WILL NEED REPLACEMENT OF CURB AND GUTTER AND ADDITIONAL 3' OF PAVEMENT
E GENEVA ST	CONDOS	BRIDGE E. OF HARRIS RD	$35,000	500	ADD 3' TO BOTH SIDES ON ROAD AT BRIDGE
E GENEVA ST	BRIDGE E. OF HARRIS RD	EAST SIDE OF CREEK	$145,000	2150	ADD 3' TO BOTH SIDES
CREEK	E GENEVA ST	ELKHORN ROAD (AT OLIVE ST)	$115,000	1060	EAST SIDE OF CREEK CLEAR CUTTING NEEDED DNR WETLAND PERMITTING REQUIRED EASEMENT NEEDED FROM TWO PROPERTIES
ELKHORN ROAD	OLIVE ST	STARK ST	$8,000	1000	ON EXISTING PAVEMENT, BOTH SIDES
STARK ST	ELKHORN RD	WILLIAMS ST	$82,000	870	NORTH SIDE OF ROAD AND PARKING AREAS MAY NEED WALCOMET EASEMENT NARROW ROW AT ELKHORN RD POSSIBLE DRAINAGE CONCERNS
WILLIAMS ST	STARK ST	W GENEVA ST	$2,000	2000	NO PHYSICAL PATHS, SIGN DESIGNATION ONLY
W GENEVA ST	WILLIAMS ST	THEATRE ROAD	$26,000	4700	ON EXISTING PAVEMENT, BOTH SIDES NO PARKING

Costs shown include 20% for contingencies and engineering.

TABLE 1
BIKE PATH SEGMENT DESCRIPTION
VILLAGE OF WILLIAMS BAY

SEGMENT	FROM	TO	ESTIMATED COST	LENGTH (feet)	COMMENTS
CONGRESS ST	W GENEVA ST	SCHOOL	UNKNOWN		THIS ALTERNATE ROUTE CAN NOT BE CONSTRUCTED DUE TO EXISTING CONFLICTS AND SPACE LIMITATIONS. IT IS OUR UNDERSTANDING THAT THE SCHOOL PLANS TO RECONSTRUCT THIS AREA IN THE NEAR FUTURE AND THAT THIS ROUTE CAN SIMPLY BE ADDED TO THEIR PLANS AS THEY DEVELOP.
N LAKESHORE DR	W GENEVA ST	RAVINA RD	$275,000	2150	ADD 5' ON BOTH SIDES REMOVE ABOUT 10 TREES ALONG GOLF COURSE NEED STORM SEWER FROM CLUBHOUSE TO RAVINA
RAVINA RD	N LAKESHORE DR	GW COLLEGE ENTRANCE	$240,000	950	ADD 5' TO BOTH SIDES EXTENSIVE GRADING AND RETAINING WALL ON NORTH MAY NEED AURORA EAEMENT UTILITY POLE RELOCATION REQUIRED
W GENEVA ST	THEATRE RD	SCHOOL PATH	$2,000	270	ON EXISTING PAVEMENT
THEATRE RD	W GENEVA ST	SUNSET	$245,000	800	ADD 4' TO WEST SIDE, NEED STORM SEWER ADD 2' TO EAST SIDE, NEED STORM SEWER
THEATRE ROAD	SUNSET	LAKEWOOD	$202,000	1000	ADD 4' TO WEST SIDE, NEED STORM SEWER ADD 2' TO EAST SIDE, REGRADE DITCH
THEATRE ROAD	LAKEWOOD	WOODLAWN	$353,000	1150	ADD 4' TO WEST SIDE, NEED STORM SEWER ADD 2' TO EAST SIDE, NEED STORM SEWER
THEATRE ROAD	WOODLAWN	FOOTBALL FIELD	$180,000	1450	ADD 4' TO BOTH SIDES, REGRADE DITCH

Costs shown include 20% for contingencies and engineering.

TABLE 2
BIKE PATH PHASING AND COST DESCRIPTION
VILLAGE OF WILLIAMS BAY

PHASE	BASE CONSTRUCTION	CONTINGENCIES & ENGINEERING	GRAND TOTAL
1	$400,000	$80,000	$480,000
2	$92,000	$18,000	$110,000
3	$820,000	$160,000	$980,000
4	$430,000	$85,000	$515,000
TOTALS	**$1,742,000**	**$343,000**	**$2,085,000**

HS	$1,800	$200	$2,000
CONGRESS	see note below	see note below	see note below

PHASE SUMMARY

PHASE 1 E. Geneva Street from Laurel Drive to Creek
Path along Creek
Elkhorn Road

PHASE 2 Stark Street from Elkhorn Road to Williams Street
Williams Street from Stark Street to W. Geneva Street
W. Geneva Street from Williams Street to Theatre Road

PHASE 3 Theatre Road from W. Geneva Street to football field

PHASE 4 North Lakeshore Drive from W. Geneva Street to Ravina Drive
Ravina Drive from North Lakeshore Drive to College

HS W. Geneva Street from Theatre Road to High School

CONGRESS Congress Street from W. Geneva Street to School. The cost for this segment cannot be determined until the future plans for the school are determined.

EXHIBITS

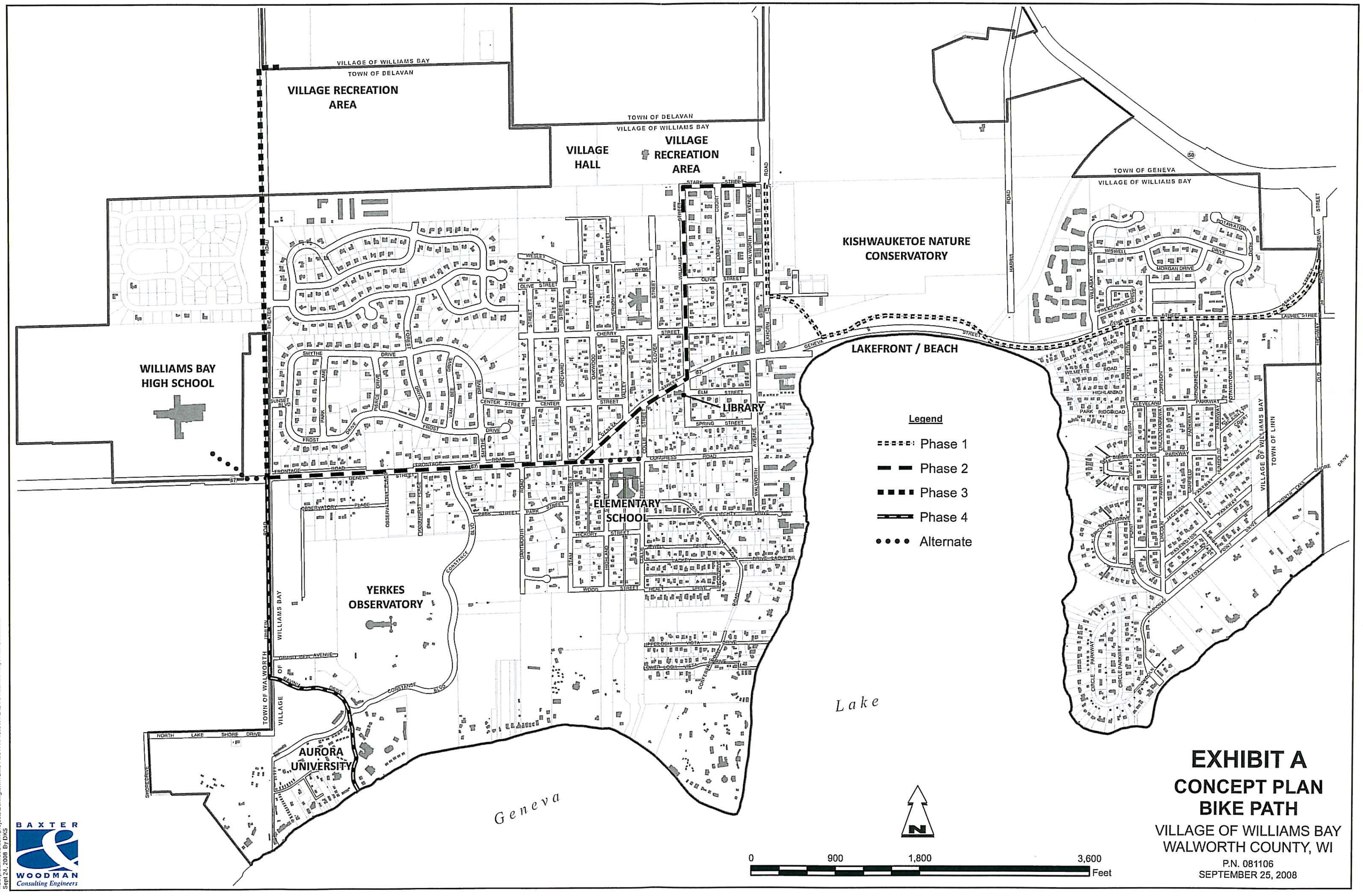


EXHIBIT A
CONCEPT PLAN
BIKE PATH

VILLAGE OF WILLIAMS BAY
WALWORTH COUNTY, WI

P.N. 081106
SEPTEMBER 25, 2008

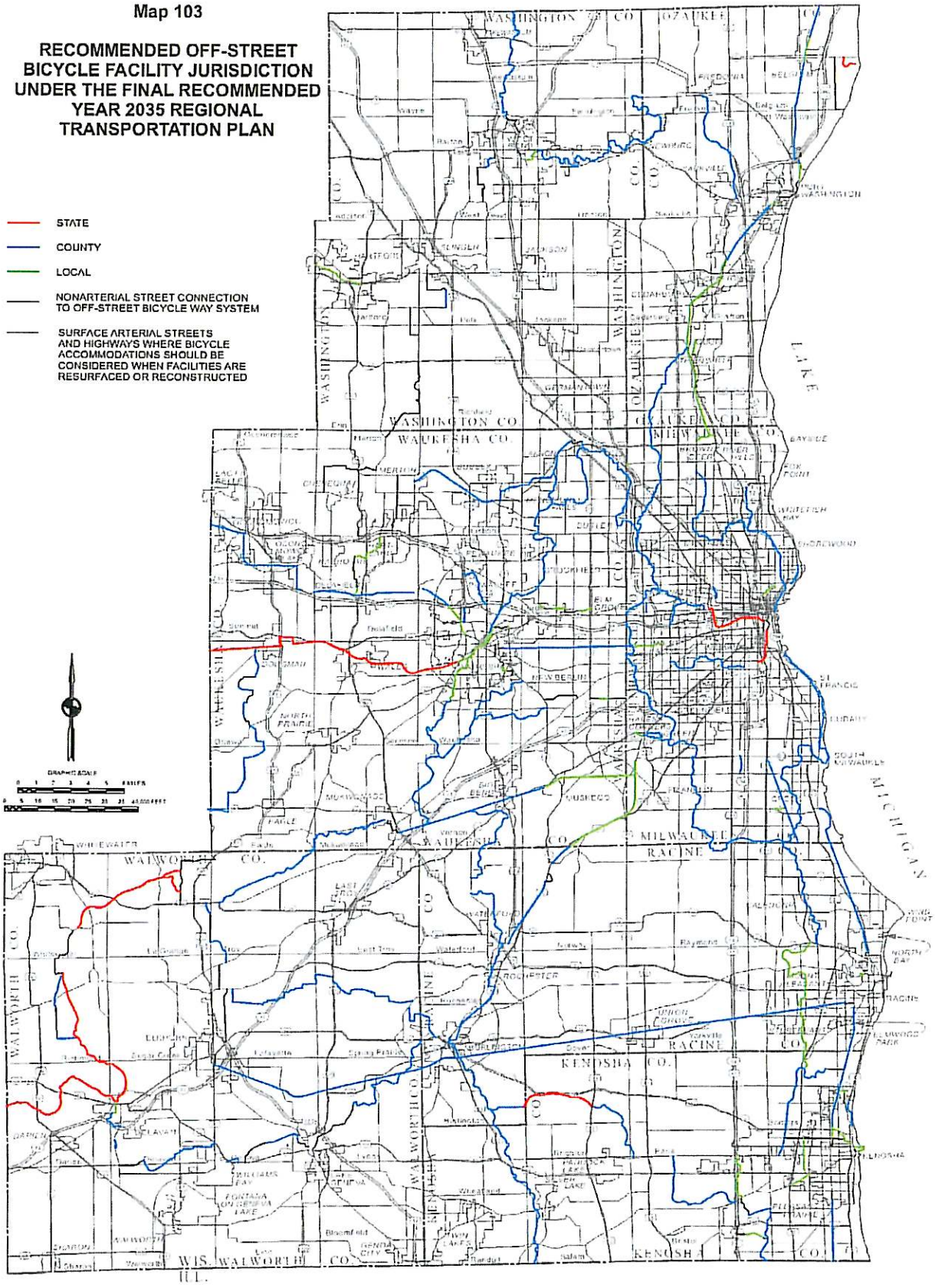
\\Corp.baxwood.com\projects\Burlington\WLMSV\081106\GIS\MXD\Bike Path Concept Plan 2008.mxd
Sept 24, 2008 By DKS

APPENDIX A

SEWRPC STUDY EXCERPT

Map 103

RECOMMENDED OFF-STREET BICYCLE FACILITY JURISDICTION UNDER THE FINAL RECOMMENDED YEAR 2035 REGIONAL TRANSPORTATION PLAN



Source: SEWRPC.

APPENDIX B

FUNDING INFORMATION AND RECOMMENDATION

VILLAGE OF WILLIAMS BAY

BIKE PATH PLANNING
FUNDING ALTERNATIVES

STATEWIDE MULTI-MODAL IMPROVEMENT PROGRAM (SMIP)

This program is broken into various funding programs including:

1. Transportation Enhancements Program (TE)
2. Bicycle and Pedestrian Facilities Program (BPFP)
3. Safe Routes to School (SRTS)

Basic Principles of the Program:

1. Projects must be at least $200,000
2. Federal funds will pay 80%, Village would pay 20%
3. Next available application would be in 2010, for design & construction in 2011 to 2013
4. Applications can be combined between TE and BPFP

CONGESTION MITIGATION AND AIR QUALITY PROGRAM (CMAQ)

This program does not fit very well with the proposed bike path. It is a possibility, but it is unlikely the Village could get funding from this program.

DNR – PROGRAMS (FOR CONSIDERATION FOR PATH ALONG CREEK)

Two programs apply:

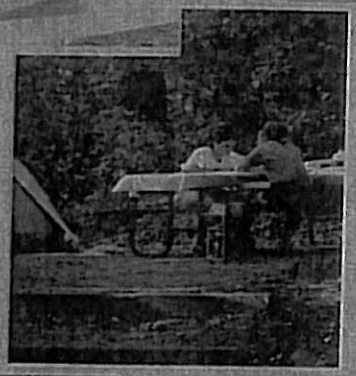
1. Stewardship Local Assistance Program
    a. 50% funds from DNR
    b. Can only be used for off road paths
    c. Can be combined with SMIP funding
    d. Next available application would be in 2009, for design & construction in 2010 through June 2011.
2. Federal Recreational Trail Program
    a. 50% funds from DNR
    b. Cannot be combined with SMIP funding (therefore poor choice)
    c. Next available application would be in 2009, for design & construction in 2010 through June 2011.

RECOMMENDATION

Apply for TE and BPFP (same application), SRTS, and the Stewardship Local Assistance Program funding in May of 2010

Application Deadline:
May 1, 2008

p. 227



2008 Grant Guidelines and Application

Stewardship Local Assistance Programs
Federal Land & Water Conservation Program
Federal Recreation Trails Program

PUBL. CF-003 12/07

Congestion Mitigation and Air Quality Program (CMAQ)

Statutory Reference: § 85.245; 23 USC 149 Admin. Rule: N/A

Program objective:

To provide federal funding for transportation projects to improve air quality and reduce traffic congestion in counties classified as air quality non-attainment and maintenance areas for the federal criteria pollutant ozone.

Program eligibility:

Under the CMAQ program, funds are available to counties, local units of government, transit operators and state agencies. Private entities interested in applying for funds must find a public sponsor with taxing authority to sponsor a project application. Applicants must provide at least a 20% match of the project's total cost. A project sponsor must pay for a project and then seek reimbursement for the project from the state. Projects costing $100,000 total or more that involve construction are eligible for funding, as are non-construction projects costing $25,000 or more federal share. Projects must meet federal and state requirements.

Examples of eligible CMAQ projects include:

- Capital and operating assistance for new transit services
- Rideshare promotion, vanpool purchases and park & ride lots
- Pedestrian and bicycle facilities
- Alternate/clean fuel vehicles and fueling facilities
- Diesel engine idling reduction and retrofit projects
- Marketing programs designed to increase the public's awareness of air quality and transportation issues

Program definition:

The CMAQ program was created by the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) and continued under SAFETEA-LU to provide funding for transportation projects that improve air quality and reduce traffic congestion. The funds are made available through a competitive application process in the 11 county area, taking place in odd numbered calendar years.

Local Transportation Enhancements (TE) Program

Statutory Authority: § 85.026, 23 USC 101 **Admin. Rule:** N/A

Program objective:

To promote activities that would "enhance" the surface transportation system. Program funds are intended to accomplish something "above and beyond" what is normally done on highway projects. The Transportation Enhancements (TE) Program is designed to fund projects that enhance traditional highway facilities and promote multi-modal activities. The TE program is intended to promote the development of a range of activities that complement -- or enhance -- a project or an area served by a transportation project

Program eligibility:

Projects must meet federal and state requirements. Local governments with taxing authority, state agencies and Indian tribes are eligible for funding. Projects costing $200,000 or more that involve construction are eligible for funding, as are non-construction projects costing $25,000 (federal share) or more. Additionally, the project must be usable when it is completed and not staged so that additional money is needed to make it a useful project. A project sponsor must pay for a project and then seek reimbursement for the project from the state. Federal funds will provide up to 80% of project costs, while the sponsor must provide at least the other 20%.

Under SAFETEA-LU, the Enhancements Program funds the following twelve categories of eligible activities:

- Provision of facilities for pedestrians and bicycles;
- Provision of safety and educational activities for pedestrians and bicyclists;
- Acquisition of scenic easements and scenic or historic sites;
- Scenic or historic highway programs, including the provision of tourist and welcome centers;
- Landscaping and other scenic beautification;
- Historic preservation;
- Rehabilitation and operation of historic transportation buildings, structures or facilities;
- Preservation of abandoned railway corridors;
- Control and removal of outdoor advertising;
- Archaeological planning and research;
- Mitigation of water pollution due to highway runoff or reduction of vehicle caused wildlife mortality; and
- Establishment of transportation museums.

Local Transportation Enhancements (TE) Program

Statutory Authority: § 85.026, 23 USC 101 **Admin. Rule:** N/A

Program objective:

To promote activities that would "enhance" the surface transportation system. Program funds are intended to accomplish something "above and beyond" what is normally done on highway projects. The Transportation Enhancements (TE) Program is designed to fund projects that enhance traditional highway facilities and promote multi-modal activities. The TE program is intended to promote the development of a range of activities that complement -- or enhance -- a project or an area served by a transportation project

Program eligibility:

Projects must meet federal and state requirements. Local governments with taxing authority, state agencies and Indian tribes are eligible for funding. Projects costing $200,000 or more that involve construction are eligible for funding, as are non-construction projects costing $25,000 (federal share) or more. Additionally, the project must be usable when it is completed and not staged so that additional money is needed to make it a useful project. A project sponsor must pay for a project and then seek reimbursement for the project from the state. Federal funds will provide up to 80% of project costs, while the sponsor must provide at least the other 20%.

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- Preservation of abandoned railway corridors;
- Control and removal of outdoor advertising;
- Archaeological planning and research;
- Mitigation of water pollution due to highway runoff or reduction of vehicle caused wildlife mortality; and
- Establishment of transportation museums.

Bicycle and Pedestrian Facilities Program (BPFP)

Statutory Authority: § 85.024 **Admin. Rule:** N/A

Program objective:

To construct or plan for bicycle or bicycle/pedestrian facility projects. The statutory language specifically excludes pedestrian-only facilities, such as sidewalks, and streetscaping type projects.

Program eligibility:

Projects must meet federal and state requirements. Local governments with taxing authority and Indian Tribal Nations are eligible for funding. State agencies are not eligible for this program. Projects costing $200,000 or more that involve construction are eligible for funding, as are bicycle and pedestrian planning projects costing $50,000 or more. Additionally, the project must be usable when it is completed and not staged so that additional money is needed to make it a useful project. A project sponsor must pay for a project and then seek reimbursement for the project from the state. Federal funds will provide up to 80% of project costs, while the sponsor must provide at least the other 20%.

Application cycle:

Projects are solicited in even numbered years with applications available in January and due in April. Two years of funding is made available to projects for the three fiscal years following the calendar year in which projects are selected. For example, in 2008, projects are developed for FY 2009-2011 funding. Funding for the BPFP program is on a competitive basis with a committee ranking projects and making funding recommendations to the Wisconsin Department of Transportation Secretary.

Note: Because of the similarities between the BPFP and the Transportation Enhancements (TE) program objectives and eligibility criteria, applications and funding for both programs are undertaken together.

Annual Federal Amount Appropriated:

Funding for the BPFP program begins in year 2 of the 2007-09 state budget and first available in conjunction with the 2008 Transportation Enhancements (TE) program. The $2.72 million in annual federal BPFP funding was moved from the former STP-Discretionary program that is now deleted from state statutes.

Wisconsin Department of Transportation
Statewide Multi-modal Improvement Program (SMIP) *includes*:
Transportation Enhancements (TE) Program
Bicycle and Pedestrian Facilities Program (BPFP)

Guidelines: Calendar Year 2008 Submittal for FYs 2009-2011 Funding

What is the program all about and how much money is available?

Please Note: This is not a grant program – the Public Sponsor is reimbursed for 80% of approved project costs incurred provided all federal project requirements are met.

Beginning with the federal Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 as re-authorized in 2005 under the Safe, Accountable, Flexible Efficient Transportation Equity Act: A Legacy for Users (**SAFETEA-LU**), the Wisconsin Department of Transportation (WisDOT) receives federal funds to provide a variety of improvement programs, including the local Transportation Enhancements (TE) program. The program is designed to fund projects that increase multi-modal transportation alternatives and enhance communities and the environment.

Funding for the former STP-Discretionary program was converted into the Bicycle and Pedestrian Facilities Program (BPFP) in the 2007-09 state biennial budget. This means that there will be greater funding available this cycle, particularly for bicycle and pedestrian facilities. Bicycle system planning projects will again be eligible. Per state statute, pedestrian-only projects such as sidewalks and ped-only bridges are not eligible under BPFP but remain TE eligible. Unlike the former STP-D program, non-bicycle/pedestrian projects to reduce single-occupant vehicle travel, such as public transit bus acquisitions, are not eligible.

As indicated in past applications, we make our projections under the assumption that the State Legislature will continue existing programs at the same funding level that existed at the time projects are requested. We undertake multi-year programming commitments to all types of transportation projects to make sure that projects are ready to use Wisconsin's federal funding resources when they become available and because of the long lead time needed to select and approve projects, obtain local funding commitments, undertake design, acquire real estate (if needed) and construct the projects. The 2007-2009 budget includes $6.25 million per year for the TE program and $2.72 million for BPFP starting in State Fiscal Year (SFY) 2009. We commit two years of funding per application cycle. Our best estimate is that $18 million in new federal funding will be available in 2008 for SFYs 2010 and 2011, assuming that no changes are made to the 2009-2011 state budget affecting TE or BPFP and no changes are made to the federal transportation act that replaces SAFETEA-LU.

SAFETEA-LU did not make major changes to the TE program guidelines. The federal transportation act added a new program called **Safe Routes to School** (SRTS). The program is to promote increased bicycle and walking to school by grades K-8. The program comes with federal funding that will cover 100% of a project's cost. The amount available will be modest compared to the TE program. Projects will be for education and promotion as well as infrastructure. WisDOT held its first SRTS program cycle in 2007 and is undertaking another cycle in close tandem with this program. If you anticipate having a bicycle and Pedestrian project that is within 2 miles of a K-8 school site and will promote biking and walking to school, consider applying for

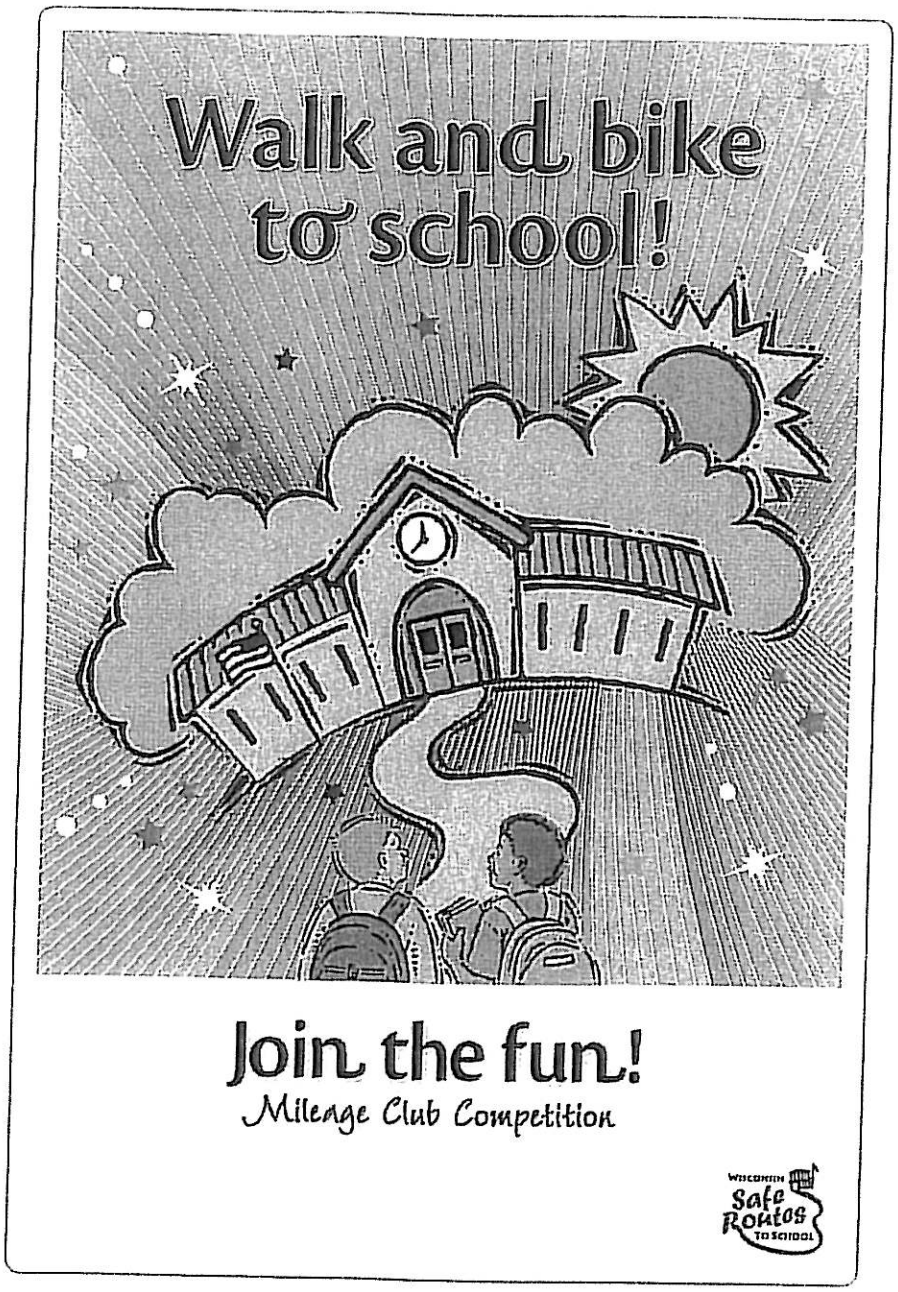
Coming Soon! Mileage Club Materials

WE ARE ON TRACK FOR the start of our new Mileage Club activity this May. Remember, mileage clubs and contests encourage children to begin walking and biking to school by making it fun and rewarding. We will provide you with frequent walking and biking punch cards, small rewards and administrative materials. You will find all the information you need to design and start a mileage club on our Web site at www.dot.wisconsin.gov/localgov/aid/saferoutes.htm. To be notified about the program, email us at srts@dot.state.wi.us

Safe Routes to School and Educational Performance

WHAT DOES EDUCATIONAL PERFORMANCE HAVE to do with Safe Routes to School? Several recent studies show a connection between physical activity and higher cognitive function.

- The *Journal of Sport and Exercise Physiology* published a study in 2007 showing that students with higher levels of physical fitness score higher on state reading and math tests.
- The December 2007 *Research Quarterly for Exercise and Sport* reported that overweight children who exercised for 40 minutes as opposed to 20 minutes a day showed twice the gains in cognitive function.
- In 2004, staff in the Naperville, Illinois School District implemented a new program called "learning readiness." Struggling students who participated in a "learning readiness" physical education class directly before specialized literacy and math classes showed significant improvements on standardized test scores compared to those who attended the literacy and math classes alone. However, if the exercise class was held six hours before the literacy and math classes academic gains were much smaller.



Providing greater opportunities for children to exercise clearly contributes to a healthy mind and body, thus building a strong foundation for a happy, successful life. Developing a Safe Routes to School program can help communities achieve this goal by supporting and encouraging biking and walking to school.

Source: Viadero, D. (2008). Exercise Seen as Priming Pump for Students' Academic Strides. Education Week. 27(23),14–15.

Funding & Grant Opportunities for the Williams Bay Bike Path
July 25, 2008

Funding Programs

CMAQ-Congestion Mitigation & Air Quality funding
TE-Transportation Enhancement; local
BPFP-Bicycle & Pedestrian Facilities Program
SRTS-Safe Routes to School

Contact at WIDOT

Scott Ahles, SE Region Contact
62-548-8789
scott.ahles@dot.state.wi.us

Funding Programs

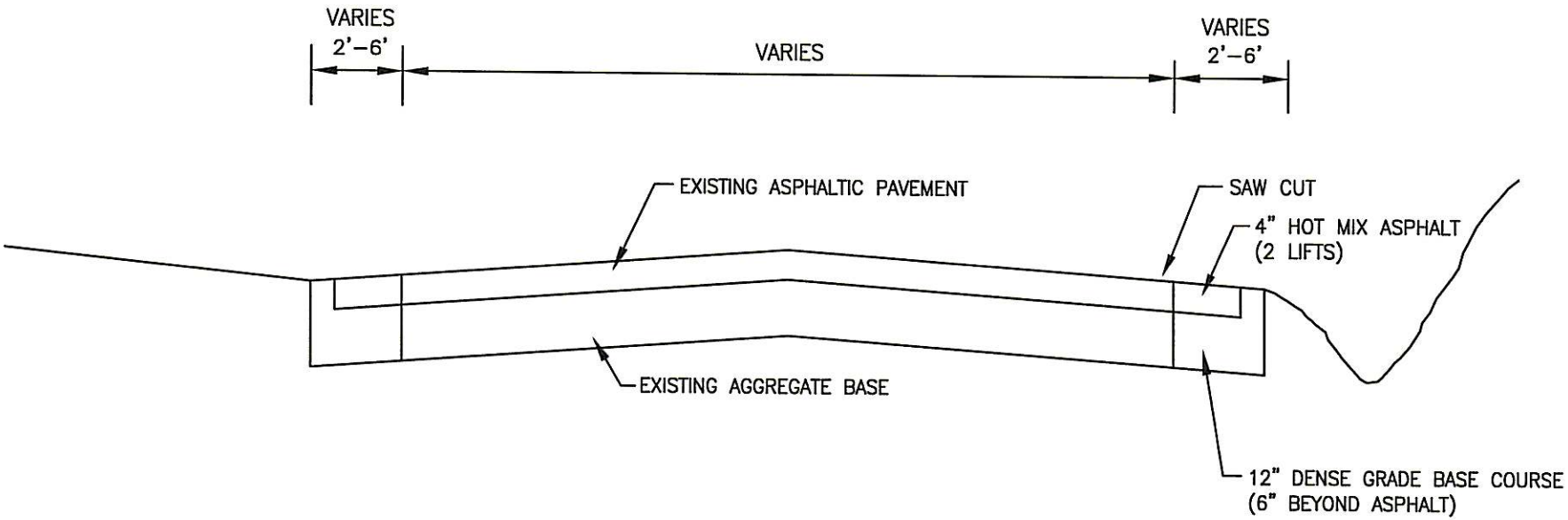
RTP-Recreational Trails Program (Grant)
River Management Grants (bike path @southwick creek location w/Kishwauketoe
River Planning Grants (bike path @southwick creek location w/Kishwauketoe

Contact at DNR

Tom Blotz, Outreach Team Leader
(414) 263-8610
Thomas.Blotz@Wisconsin.gov

APPENDIX C

TYPICAL SECTION



CONSTRUCTION NOTES:

1. EXCAVATE AREA TO SUBGRADE
2. REPAIR POOR SUBGRADE
3. PLACE AGGREGATE & ASPHALT
4. RESTORE PARKWAY AS NEEDED*

   *RESTORATION METHODS VARY THROUGHOUT PROJECT LENGTH

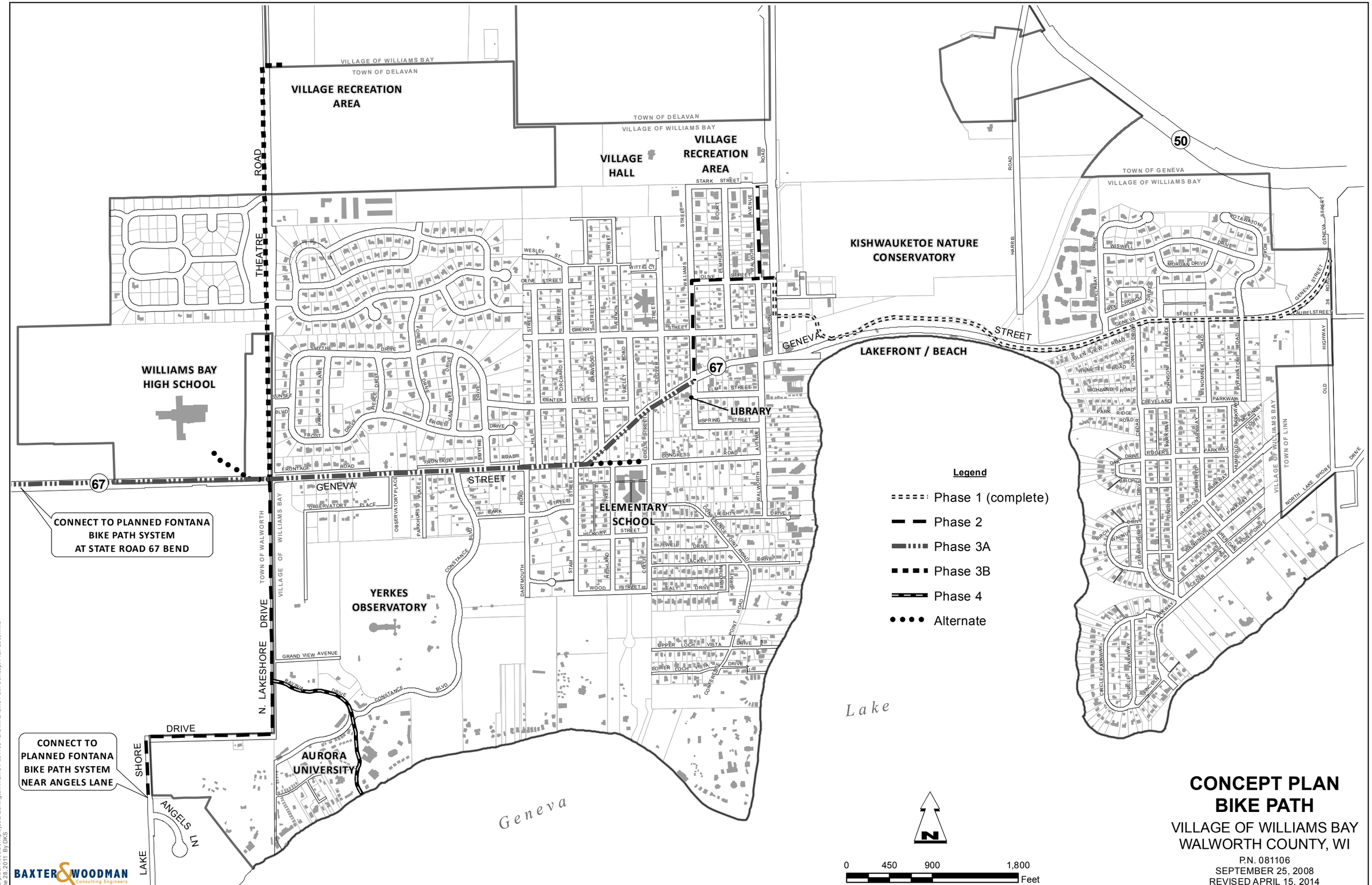
5. PAVEMENT MARKING AND SIGNAGE PER MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

BAXTER WOODMAN
Consulting Engineers

NO SCALE

TYPICAL SECTION
BIKE PATH
VILLAGE OF WILLIAMS BAY
WALWORTH COUNTY, WI

P.N. 081106
OCTOBER 2, 2008



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June 28, 2011 By: DKS