Auburn Line Rail-To-Trail Feasibility Study January 2005

Prepared for:
Town of Pittsford
Village of Pittsford
Town of Perinton
Town of Victor
Genesee Transportation Council

Prepared by:
Bergmann Associates
Rochester, New York 14614

GENESEE TRANSPORTATION COUNCIL
The Metropolitan Planning Organization for the Genesee-Finger Lakes Region

BERGMANN associates

Table of Contents

List of Figures

Appendices

I EXECUTIVE SUMMARY

The purpose of this study is to provide the Village of Pittsford and the Towns of Pittsford, Perinton and Victor, in cooperation with the Genesee Transportation Council (GTC), a feasibility study for a multi-use trail route that primarily utilizes the abandoned segment of the Auburn and Rochester railroad line, including a design and construction cost estimate.

The study involved an analysis of:

- the existing characteristics of the former rail corridor;
- the presentation of potential alignments and features to the Stakeholder Committee and public;
- the integration of feedback into the preliminary design; and,
- the creation of a comprehensive guide for future development of a multi-use trail.

The physical and environmental attributes of the project area and a preliminary conceptual design are outlined in this final report. Various feasible alternatives are presented for connections around developed portions of the corridor or across major barriers (the canal, roadways, etc.). Overall, the abandoned corridor provides a good opportunity for a non-motorized transportation link between the adjoining towns and village as well as to other trail systems and recreational and cultural facilities.

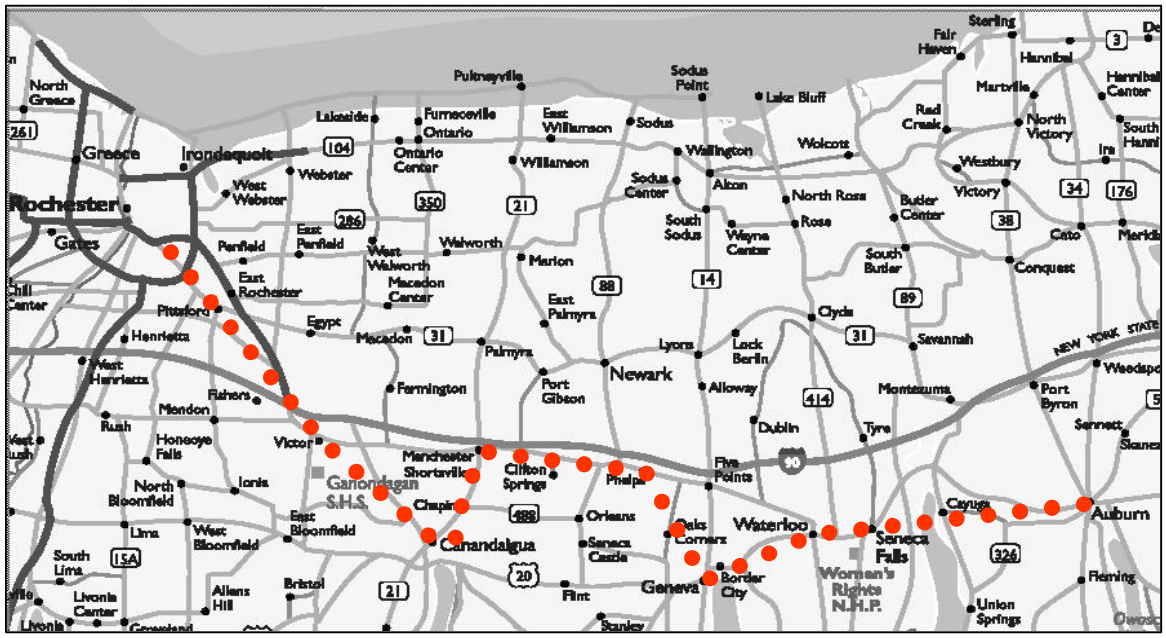
II INTRODUCTION

The Auburn and Rochester railroad was incorporated in 1836, running from Auburn, New York through Seneca Falls, Waterloo, Geneva, Vienna (now called Phelps), Manchester, Canandaigua, and Victor to Rochester (Figure 1)[1]. In 1850, the Auburn and Rochester consolidated with Auburn and Syracuse Railroad and became the Syracuse and Rochester Railroad. In 1853, all the railroads connecting Albany and Buffalo were consolidated into the New York Central Railroad.

The Finger Lakes Railway Corporation continues to use 118 miles of the Auburn and Rochester line for the shipment of paper, glass, steel, fertilizer, and other commodities between Solvay and Canandaigua and between Himrod Junction and Watkins Glen.

[1] Railroad & Trolley Lines of Geneva, NY. Text of a lecture by Bud Smith for The Geneva Historical Society, 2-17-89. http://fglk.railfan.net/history.html

Figure 1: Auburn and Rochester Railroad Line



Figures 2, 3, and 5 through 9 show the prospective trail route.

The length of the Auburn corridor within the study area is approximately 8 miles. 4.7 miles occur within the Town of Pittsford, approximately one mile lies within the Village of Pittsford, two-tenths of a mile occurs within the Town of Perinton, and approximately two miles fall within the Town of Victor.

The right-of-way (ROW) width varies throughout its length, from approximately 30 feet at its narrowest to approximately 200 or more feet at its widest. The table below indicates the approximate ROW widths within the study area:

Auburn Line Corridor Segment	ROW Width
French Rd. to North Main St./SR 31	50′ – 100′
North Main St./SR 31 to State St.	50′
State St./SR 31 to Erie Canal/Jefferson Rd.	50′ to 160′
Jefferson Rd. to Mill Rd.	30′ to 60′
Along Mill Rd.	50′ – 85′
Thornell Rd. to East St.	40′ to 100′
East St. to Railroad Mills Rd.	80′ to 100′
Railroad Mills Rd. to Woolston Rd.	36′ to 80′
Along Railroad Mills Rd.	100′ – 250′+
Probst Rd. to Main St. Fishers	100′±

The overall objectives of this study were to:

- Develop an inventory of existing physical conditions of the corridor;
- Conduct limited traffic assessment for all relevant roads and recommend accommodations for at-grade trail crossings, including sight line improvements, crosswalk markings, signage, lighting and other needed or suggested treatments;
- Develop and evaluate feasible bridge alternatives for crossing the Erie Canal;
- Evaluate the collapsed historic stone arch culvert over Irondequoit Creek and identify maintenance improvements and/or modifications necessary to ensure safe accommodation of the proposed trail over the culvert;
- Incorporate recommendations of the study Stakeholder Committee and others, as needed;
- Provide itemized cost estimates for recommended improvements and amenities; and
- Identify specific and achievable follow-up activities that are needed to advance the findings and recommendations of the feasibility study, including potential sources of funding and preferred strategies to conduct these follow-on activities.

III SITE ANALYSIS

A. Land Uses

Rochester Gas and Electric (RG&E) owns the former railway corridor, but currently occupies only portions of it with overhead transmission lines. The Monroe County Water Authority (MCWA) occupies a portion of the corridor within the Town of Pittsford with a 20" water main. The predominant land uses adjacent to and surrounding the rail corridor are presented in Figure 4, a land use map of the study area and Table 1 below. The majority of adjacent land uses are single family residential and agricultural/open space. Roadway crossings are summarized in Table 2.

Table 1: Land Uses Adjacent To and Surrounding the Rail Corridor

Municipality	Land Uses
Town of Pittsford	Residential, Agricultural, Parks/Open Space, Recreation & Commercial
Village of Pittsford	Commercial, Residential, Community Services, Parks
Town of Perinton	Residential and Parks
Town of Victor	Residential, Community Services, Parkland and Vacant

B. Physical Attributes

For purposes of this study, the trail has been divided into the following six segments irrespective of any municipal boundaries. The cost estimate in Section VI, however, is

organized by municipality. Refer to Figures 5 through 9 for more detailed information on the corridor and adjacent properties.

- Clover Street (Brighton Town Line) to French Road;
- French Road to Schoen Place/Village of Pittsford;
- Schoen Place to Erie Canal;
- Erie Canal to Mill Road;
- Mill Road to Woolston Road; and,
- Woolston Road to Main Street, Fishers

Clover Street (Brighton Town Line) to French Road

This section of the trail was broken out and studied in advance of the remainder of the corridor due to impending development pressures along Monroe Avenue. The Town of Pittsford is currently working with each property owner to rectify existing encroachments and to obtain any needed easements for the trail through any new or redevelopment proposals along the corridor.

French Road to Schoen Place/Village of Pittsford

This segment of the Auburn corridor is already designated and maintained as a trail by the Town of Pittsford. The ROW crossing of French Road is at a skew but visibility is good for the trail crossing. French Road, a two-lane roadway, is posted at 30 mph.


French Rd. looking SE

This segment of the corridor (south of French Road) has a 6'-8' wide cleared grass and cinder trail. An RG&E power line on wooden poles runs parallel to the trail on the north side. The ROW is bordered by single family residences to the northeast and multi-family and industrial lands to the southwest. Vegetative cover varies from dense shrub to semi-open wooded cover, a distinct contrast to the very developed nearby Monroe Avenue corridor. Heading south along the corridor, a signed trail spur occurs roughly at the Village of Pittsford boundary and heads southerly through Village of Pittsford lands and ultimately to the Canalway Trail. Beyond the spur, the trail passes the rear of masonry, 1-story storage rental facility structures and is delineated by a split rail fence as it terminates into a parking lot at the end of Grove Street. The ROW is undetectable until the other side of North Main Street. The only indication of the


Trail end @
Grove St. parking


Conrail overpass
@ Del Monte Lodge

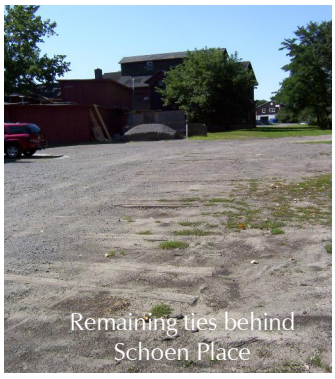
former railroad ROW is evidenced by the Conrail overpass above the Del Monte Lodge parking lot.


North Main St. ROW looking SE down

South of the Conrail overpass, the ROW is occupied by a recent addition to the Del Monte Lodge. Across North Main Street (State Route 31) the ROW corridor has been landscaped with turf and a planted berm. Beyond the berm, the railroad ROW is paved or graveled and utilized as a parking lot and service access for the businesses of Schoen Place and Northfield Commons. In some areas the wooden ties still exist.

Schoen Place to Erie Canal

Southeast of the Northfield Commons adjacent to Schoen Place, the railroad ROW passes between the rear of single family residences that front on State Street (State Route 31) and the Zornow farm, to its intersection with State Route 31. This segment of the ROW is hilly and generally slopes downward towards State Street/SR. 31. This two-lane with wide paved shoulders section of State Street just east of the Village/Town boundary is posted at 45 mph with an average daily traffic (ADT) of 16,000 cars. Good sight distance exists both east and west along State Street at this point. Across State Street/SR. 31, passing south of the Mitchell Road Open Space lands, a turf and cinder trail within the ROW corridor extends south to the Canalway Trail. This trail segment is narrow (one to two person wide in some sections) and tightly enclosed with shrub understory and mature hardwoods.


Remaining ties behind Schoen Place

The next at-grade roadway crossing occurs at Mitchell Road, a narrow, two-lane roadway with no shoulders or sidewalks. At Mitchell Road, trail access is controlled by signage and an access gate and bollards. The crossing is also delineated by a white stripe crosswalk. Visibility is excellent as Mitchell Road is straight and flat. The posted speed limit is 25 mph. South of Mitchell Road the turf and cinder trail passes by the rear yards of homes that front on Meadow Cove Road until its termination at the Canalway Trail. The Monroe County Water Authority (MCWA) occupies the ROW with a 20-inch water main (underground) from Mitchell Road south to Jefferson Road. The former railroad ROW continues south across the canal and is evidenced by the remaining abutment walls flanking both sides

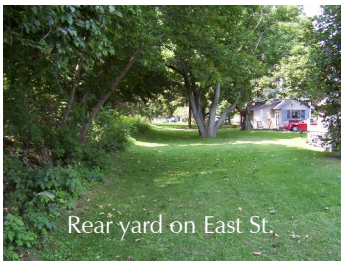

Central Stone Pier [illegible] Canal

of the canal and the central stone pier that once supported a railroad bridge spanning the canal.

Erie Canal to Mill Road


Rear yard on East St.

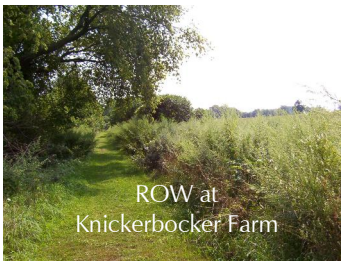
On the south side of the canal, the ROW continues from the abutment wall in a southeast direction across Jefferson Road. Where the ROW crosses, Jefferson Road is a two-lane roadway with paved shoulders. East of the ROW, the posted speed limit is 55 mph. West of the ROW, the posted speed limit is 40 mph as it heads into the village. The ADT for Jefferson Road in this area is 16,180. The traffic volumes are both steady and significant throughout the day from 7 a.m. to 8 p.m. averaging about 1,200 motor vehicles per hour.


Rear yard on East St.

South of Jefferson Road, the ROW runs parallel to and immediately east of Knickerbocker Road, then continues roughly parallel to East Street to its east and the Knickerbocker Farm immediately to its west. Just south of Jefferson Road the ROW rises in elevation rather steeply, then flattens as it parallels Knickerbocker Road. The ROW is vegetated with understory and immature forest, then transitions into cleared lawn area as it passes through the rear yards of houses fronting on the west side of East Street. Within this area, the ROW is located close to the homes and consists of lawn, swale, and a steep slope that rises to the west toward the Knickerbocker Farm.


Rear yard on East St.

The ROW continues south to its intersection with Mill Road. Ground cover varies from woods to planted field and meadow, offering very scenic views. The existing dirt and grass surfaced trail occupies the ROW from just south of Jefferson Road to Mill Road. The MCWA occupies the ROW with a 20-inch water main (underground). Mill Road is a narrow, two-lane roadway with minimal gravel shoulders. The ROW crossing at Mill Road occurs on a curved section of roadway that may limit visibility for northbound crossings.


ROW at Knickerbocker Farm

Mill Road to Woolston Road

South of the Mill Road crossing, the ROW continues and runs parallel to Mill Road along its eastern edge. The signed and designated grass-surfaced trail occurs within the ROW from the Mill Road crossing to a point just north of the Millwood Court


Trail merge @ Mill Rd. ROW

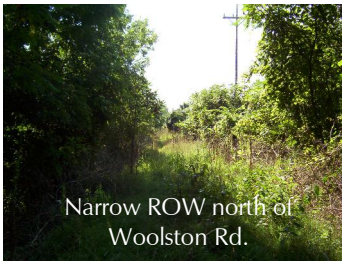
neighborhood, where it terminates at the eastern ROW of Mill Road. The ROW corridor then continues south along the eastern side of Mill Road to its intersection with Thornell Road. Along this section of ROW, some encroachment into the corridor with landscaping and fencing has occurred. The little-known existing trail meanders on and off the railroad/RG&E ROW into the road ROW. A 20-inch water main shares portions of the ROW corridor (underground) from Mill Road to approximately Cedarwood Circle.


ROW encroachment Mill Rd.

Thornell Road is a two-lane roadway with a minimal paved shoulder, and a posted speed limit of 35 mph. Thornell Road is relatively level and offers sufficient sight distance for an at-grade crossing. On the south side of Thornell Road, the railroad ROW continues south to LaDue Circle, a private drive that fronts directly onto East Street. The existing trail along this section of ROW corridor passes through a wooded and dense understory area. The existing signed trail terminates at the paved LaDue Circle private drive. The private drive follows the ROW corridor to its intersection with East Street. At this point, East Street is a two-lane roadway with paved shoulders. An existing at-grade striped and signed school crossing occurs in the vicinity of the corridor crossing. East Street is flat and level with good sight distance and has a 35 mph posted speed limit.


Widened ROW east of East Street

Across East Street (heading southwesterly) the corridor widens to approximately 70 feet and is partially occupied by RG&E overhead transmission lines along the western side and a transformer substation. A MCWA 12-inch water main is located on the eastern side of the ROW from East Street (underground) south to approximately Park Road. The widened corridor is cleared and primarily lawn/meadow with some cinder base. Trees and understory are limited to the east and west edges of the ROW. The widened ROW section terminates at Railroad Mills Road where it obliquely crosses the roadway. Railroad Mills Road is a flat, two-lane roadway with paved shoulders and good sight distance for a potential at-grade trail crossing. Its posted speed limit is 35 mph.


Narrow ROW north of Woolston Rd.

The overhead electric transmission lines continue south across Railroad Mills Road occupying the corridor, which is reduced to approximately 30 feet wide for most of its length to Woolston Road. Along this section of corridor, the rear yards of residences


East Side of RR Mills Rd.

fronting Railroad Mills Road border the west side, and the topography drops off significantly on the east side where a tributary to Irondequoit Creek crosses under the as it drains easterly into Power Mills Park. Continuing southerly, the corridor widens again to approximately 70 feet as it intersects Woolston Road.


ROW south of Probst Rd.

Woolston Road is a level, two-lane roadway with no shoulders and has a posted speed limit of 35 mph. Sight distance for crossing is good to the northwest, but somewhat limited to the southeast due to a bend in the road and roadside vegetation.

Woolston Road to Main Street Fishers

Continuing southerly, the corridor crosses Woolston Road and runs parallel and east of Railroad Mills Road. The ROW widens to approximately 100 feet wide and encompasses the roadway to its intersection with Probst Road. Overhead electric lines occupy the corridor on the east side of Railroad Mills Road. The corridor's topography varies from the roadway, rising in elevation heading southerly from Woolston Road. Sections of the ROW still have stone ballast but all tracks and ties have been removed. This segment of Railroad Mills Road is less developed, and most of the residential development occurs on the west side of the road. Between Woolston Road and Probst Road, the corridor crosses from the Town of Pittsford into the southwest corner of the Town of Perinton for a very short distance, and then into the Town of Victor. While in the Town of Perinton, the corridor is separated from Powder Mills Park by one lot (approximately 156 feet at its narrowest point). Just before the intersection with Probst Road, the corridor passes property of the Burroughs Audubon Nature Club. This property sits well below the corridor, with a steep drop-off occurring at the edge of the ROW where meandering Irondequoit Creek flows northerly.

At its intersection with Probst Road, the corridor continues south through undeveloped land. Probst Road is a level, narrow, two-lane roadway with no shoulders. Adequate sight distance exists at this intersection for a road crossing.


Collapsed stone arch culvert

South of Probst Road, the corridor is occupied by a turf and cinder footpath maintained by the Victor Hiking Trails as well as

an access road for RG&E. This section of ROW passes adjacent to wetlands and meandering portions of Irondequoit Creek. Ground cover varies from open meadow to scrub/shrub wetland, to forest. Generally, the ROW is elevated from the surrounding land along this section of corridor.


Trail end – Main St. Fishers

Irondequoit Creek, as it meanders north, passes under the ROW corridor in two areas north of I-90 via stone arch culverts. The northerly stone arch culvert has collapsed and is in need of repair if the corridor is to be utilized for a trail. The southerly stone arch culvert is in good condition and shows no sign of failure.

The corridor intersects Fisher Road just north of the I-90 overpass. Fisher Road is a two-lane roadway with no/minimal shoulders and a posted speed limit of 35 mph. In the vicinity of the ROW crossing, Fisher Road is relatively level with good sight distance. South of Fisher Road, the corridor continues and passes underneath I-90 via an existing tunnel. The condition of the tunnel appears to be good although no formal inspection was made. South of I-90, the existing turf and cinder trail continues on the ROW corridor to its termination at the intersection of Mill Street and Main Street Fishers (County Road 42). County Road 42 is a two-lane roadway with paved shoulders and a posted speed limit of 35 mph. In this area, County Road 42 is relatively flat and offers adequate sight distance for an at-grade crossing.

C. Environmental Attributes

All transportation projects must be planned and developed with careful consideration to possible environmental effects and in accordance with applicable State and Federal environmental laws and regulations. An initial cursory inventory was conducted to determine potentially significant environmental issues. The following section summarizes preliminary findings.

1. Wetlands

Figures 10 through 13 indicate mapped wetlands within the study area. The corridor passes through or adjacent to three mapped New York State Department of Environmental Conservation (NYSDEC) wetlands south of the Erie Canal: PT-15, PT-16, and PR-17. Various federally-regulated wetlands also occur adjacent to the corridor. During field visits, the presence of the mapped wetland areas were generally

confirmed. It should be noted, however, the actual former rail bed is elevated higher than surrounding adjacent lands and no wetland areas were observed to occur within or across the corridor.

2. Floodplains/Surface Drainage

The 100-year flood plain extends over or adjacent to the ROW corridor in approximately three areas (see Figure 14). The first is associated with a tributary to Allens Creek and occurs immediately north of French Road. As the mapping indicates, the former rail bed sits well above the tributary on embankment and the flood plain occurs on either side of the ROW.

A second area adjacent to the 100 year flood plain occurs south of Thornell Road and is associated with a tributary to Irondequoit Creek. The former rail bed is a on a raised embankment and the flood plain occurs adjacent to the ROW on its east and west sides. The third area occurs south of the Town of Perinton and is associated with Irondequoit Creek. Here again, the former rail bed is raised on embankment from the surrounding grades and creek bed such that the flood plain occurs adjacent to the ROW.

Surface drainage generally flows in a southerly direction north of the canal, and in a northerly direction of the canal. Any drainage improvements should be sensitive to the proposed trail alignment as well as the surrounding drainage patterns and flows. Any such work should be coordinated with the municipal agencies, Monroe County DOT, Ontario County DOT, and the New York State Department of Environmental Conservation.

3. Hazardous Waste

A review of the U.S. EPA On-Line Envirofacts Database, the NYSDEC Registry of Inactive Hazardous Waste Disposal Sites, and the NYSDEC Hazardous Substance Waste Disposal Site Study provided information about hazardous waste in the vicinity of the project. In addition, records of the Monroe County Environmental Management Council (MCEMC) and the Monroe County Health Department (MCHD) were also reviewed. Interviews were conducted with personnel from the Town of Pittsford and the MCHD.

A closed landfill is located near the corridor, known as the East Street landfill. This landfill, which contains primarily bush and yard waste, was capped in 1989. It is located adjacent to the ball fields on East Street.

No other sites appear to be located on or adjacent to the trail corridor.

IV PUBLIC INVOLVEMENT

The Transportation Equity Act for the 21st Century (TEA 21) requires that "the metropolitan transportation planning process ... include a proactive public involvement process that provides complete information, timely public notice, full public access to key decisions, and supports early and continuing involvement of the public in development plans" (Title 23 CFR 450.316) . The Genesee Transportation Council (GTC) has a long history of involving the public in its planning and programming activities, and the Long Range Transportation Plan sets it as a priority:

> *The transportation planning process shall be conducted in as open and visible a manner as possible, encouraging community participation and interaction between and among citizens, professional staff, and elected officials.*

The public involvement program provides an important link between the agencies, interest groups, the public and the planning team, insuring that the study is a collaborative effort and one where all have the opportunity to comment and provide input to technical decisions.

The community participation program for this study was conducted in accordance with the goals and priorities of the Town of Pittsford, the Village of Pittsford, the Town of Perinton, the Town of Victor, and the project funder, GTC.

A. Stakeholder Committee

A Stakeholder Committee guided this study. This group consisted of representations from the:

- Town of Perinton
- Town of Pittsford
- Village of Pittsford
- Town of Victor
- Rochester Gas & Electric (RG&E)
- NYS Department of Transportation (NYSDOT)
- Monroe County Department of Transportation
- Monroe County Planning Department
- Monroe County Department of Parks
- Ontario County Planning Department
- Genesee Transportation Council (GTC)

The Stakeholder Committee met several times throughout the conceptual design phase to provide input into the study, including the recommendations of specific planning activities. A record of Stakeholder Committee meeting agendas and minutes are included in Appendix A.

B. Citizen Involvement

The general public was involved in the study process through two public meetings held on December 11, 2003 (Perinton Community Center) and September 9, 2004 (Kings Bend Park, Pittsford).

A record of public meeting agendas and minutes are included in Appendix A.

V TRAIL DESIGN RECOMMENDATIONS

A. Stakeholder Committee and Public Input Recommendations

The following general list is based on comments from the Stakeholder Committee and the public at-large, and represents the common concerns, questions, and suggestions that were raised regarding the alignment, design, and construction of the proposed trail:

- Utilizing the Canalway Trail to bypass Schoen Place would take advantage of an existing route and not cost any more time and money to implement.
- The Auburn Trail should be kept along the former railroad bed in the Schoen Place area as much as possible.
- A new bridge across the Erie Canal should be constructed and should eventually extend across Jefferson Road, if possible.
- The trail bridge should be placed where the railroad bridge was over the Erie Canal. This location has parking, is close to the South East Branch YMCA, and has access to the Canalway Trail.
- A traffic signal and crosswalk should be provided for access across State Route 96 (Jefferson Road).
- A trail alignment along East Street is not desirable due to traffic volumes, high travel speeds, the lack of shoulder and sidewalks, and the high usage of East Street for (illegal) parking during Little League season.
- Adjacent East Street residents stated they would not like any sort of barrier placed between the trail and their backyards.
- The preferred option should be to shift the trail onto the Knickerbocker Farm.
- The trail along Mill Road should be taken off the road as much as possible. Several vocal property owners in this area forced the existing trail along the road when it was developed.
- There was support for connecting the trail with Powder Mills Park.

- There were some concerns about impacts the trail could have on animals and plants.
- The partially collapsed culvert over Irondequoit Creek in Victor should be rebuilt with as much historical accuracy as possible.
- The intact culvert should be inspected immediately to see if work is needed to prevent a similar collapse there.
- An 8′ trail instead of a 10′-12′ trail might be adequate. A narrower trail may help to control its intended bicycling and pedestrian *only* use.
- Who would police the trail?
- Try and keep the trail off the road, even if the trail needs to be narrowed for segments; on-road sections are not as conducive to families with children.
- Equestrian activities are not a desired use for the trail.
- Trailheads and parking areas for the trail need to be identified.
- Who will be accepting liability for the trail?
- Numerous meeting attendees expressed support for improving and extending the Auburn Trail Corridor, stating it would be a good use of taxpayer monies.

B. Conceptual Design

1) Alignment

Upon completion of the site analysis, a conceptual alignment was created and trail design recommendations were developed. The recommendations from the Stakeholder Committee and the public at-large were considered in the development of design alternatives.

The Stakeholder Committee agreed on the development of a minimum 14 feet wide trail corridor with an improved natural surface (i.e. stone dust). Per state and national trail design guidance, a minimum trail tread width of 10 feet plus 2 feet clear buffers on each side of the trail is the minimum desired width for a two-directional trail accommodating bicyclists and pedestrians. In constrained areas, a narrower trail (8 feet minimum plus 2 feet clear buffers on each side) would be acceptable but these sections should be minimized. If additional users are allowed (e.g. equestrians) and/or an asphalt surface is desired, a wider trail (12 feet minimum plus 2 feet clear buffers on each side) or separate trails are recommended. Some funding sources require the higher-level trail construction standards.

Handicapped and wheelchair accessibility should be provided where possible throughout the length of the proposed trail. It is recommended that handicapped parking be provided where possible at each parking lot along with an ADA accessible route to the trail. Access for the disabled should be provided for as much of the trail route as is practical, including accessible parking. Where accessibility is limited, the accessible route should be well signed.

Generally the recommended proposed trail route closely follows the original railroad alignment within the ROW corridor. During the site analysis/field investigation of the corridor, several challenge areas were identified that required further study. Those included:

- The Del Monte Lodge (Village of Pittsford)
- Schoen Place (Village of Pittsford)
- Erie Canal crossing (Town of Pittsford)
- East Street (Town of Pittsford)
- Mill Road (Town of Pittsford)
- Railroad Mills Road (Town of Pittsford)
- Irondequoit Creek crossing/stone arch culvert (Town of Victor)

The draft recommendations for the Auburn Line Corridor Rail-to-Trail from Clover Street, (Town of Pittsford) to Main Street Fishers (Town of Victor) are presented below. The trail has been organized into seven segments for presentation purposes.

Segment 1 - Clover Street (Brighton Town Line) to French Road

This segment of the corridor is partially an existing grass and cinder-surfaced multi-use trail maintained by the Town of Pittsford (French Road to the vicinity of the Pittsford Square shopping plaza). The remainder of the corridor up to the town line just east of Clover Street is used as rear access for the adjacent Monroe Avenue businesses or is undeveloped.

The recommendation for the existing trail portion of this segment is to upgrade it to an 8' to 10' wide stone dust surfaced trail. For the section between Pittsford Square and the town line just east of Clover Street, the Town has been working with adjacent property owners and tenants to reestablish the corridor through zoning and site plan review procedures. The recommendation for this segment is for the Town to continue those efforts, which would then provide a contiguous corridor to the town line just east of Clover Street on which a new section of stone dust-surfaced multi-use trail could be constructed. The short extension of the trail to Clover Street is recommended but would need to be reviewed by the Town of Brighton since it falls within their jurisdiction.

Segment 2 - French Road to The Del Monte Lodge, Village of Pittsford

This existing trail segment is grass and cinder-surfaced and is maintained by the Town of Pittsford. The recommendation is to widen the trail to 10' minimum and upgrade the surface of the trail to a stone dust surface.

Segment 3 - The Del Monte Lodge/Schoen Place

The Del Monte Lodge occupies the original ROW with building and parking just west of North Main Street in the Village of Pittsford. The portion of original ROW behind the Schoen Place and Northfield Commons businesses is occupied by parking and service access.

Three options for developing a trail through this area were assessed:

- Option 1 (recommended option) (Figure 15) utilizes Village of Pittsford land to the northwest of the Del Monte Lodge to bypass the Del Monte Lodge parking lot and connect to the existing Canalway Trail in the Village. South of the village, where the Canalway Trail intersects an existing overhead powerline easement, the trail would head north along this easement until it reconnects with the original rail corridor. This option would utilize existing Canalway Trail road underpasses and would bypass the abandoned corridor at the rear of Schoen Place (currently occupied by commercial parking).

- Option 2 (Figure 16) utilizes the existing roadway and sidewalk network in the Village of Pittsford. The trail would exit the Del Monte Lodge parking lot and follow State Route 96 (North Main Street) to its intersection with State Route 31 (State Street). The trail would then head southeast on State Route 31 (State Street) to the intersection with the rail corridor just beyond the village line.

- Option 3 (Figure 17) would follow the same route as Option 1, except it would reconnect with the Auburn Line corridor just south of the commercial area of Schoen Place behind Northfield Commons and the residents fronting State Route 31 (State Street).

Residents felt that the trail should not cross State Route 96 (North Main Street) at grade, because of the high volume of traffic on North Main Street

The recommendation for this segment is to develop a new 10' wide minimum trail on the Village-owned parcel adjacent to the existing Auburn Trail where it ends near Grove Street. This new trail segment would then connect with the existing Canalway Trail, which would be used to carry Auburn Trail traffic through the

Village of Pittsford and across and under both State Routes 96 (North Main Street) and 31 (State Street).

Segment 4 - Village of Pittsford East to the Erie Canal

The recommendation is to develop a connector trail on a short power line right-of-way between the Canalway Trail and the Auburn Line Corridor south of State Route 31 to connect back to the original Auburn corridor alignment. A new stone-dust surfaced multi-use trail would be developed between this connector trail and the Erie Canal and Canalway Trail south of Mitchell Road. This would also create a trail loop in this area for trail users.

The recommendation for crossing the Erie Canal is to install a new pre-fabricated trail bridge with a historic truss-style design similar to other Erie Canal bridges on the remaining railroad bridge abutments over the Erie Canal. The proposed trail bridge over the Erie Canal would be a 2-span (180 ft. and 150 ft.) structure utilizing the remaining railroad bridge abutments and central pier. The new trail bridge will need to be one foot higher than the minimum highway bridge vertical clearance of 15′-6″ over the Canal.

The proposed bridge and ramp construction would consist of the following:

- Prefabricated steel truss bridges providing a minimum 10-foot clear walkway;
- Abutment bridge seat modifications to accommodate the canal minimum vertical clearance. (Need to raise existing abutments approximately 4 feet.);
- Abutment and pier concrete surface repairs to the areas in the vicinity of the new bridge crossing; and,
- A ramp structure (164 feet long) including retaining walls, concrete walkway surface, concrete coping and steel pedestrian railing on the south side of the canal north of Jefferson Road.

See Figure 18.

Two options exist for crossing State Route 96 (Jefferson Road) on the south side of the Canal:

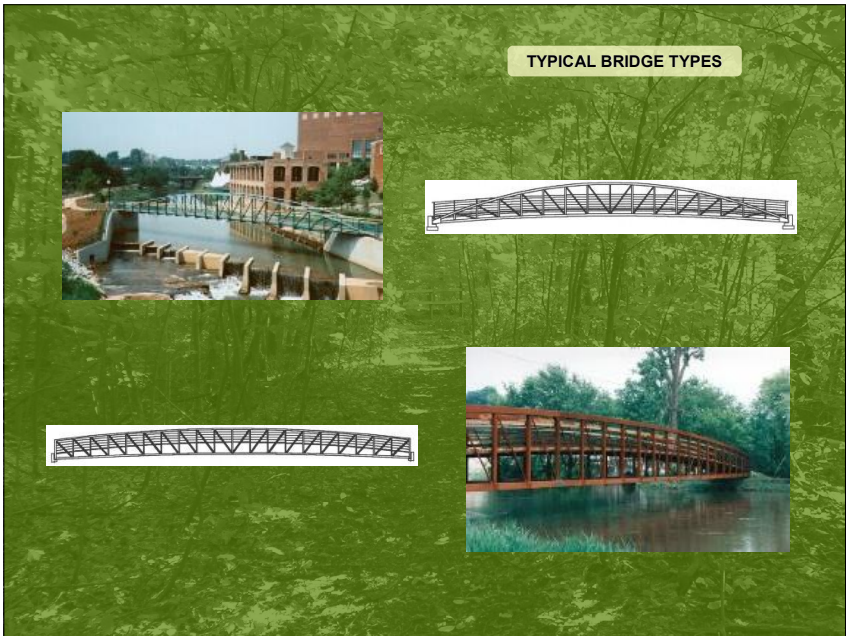
1. Construct a second bridge to cross Jefferson Road above grade with a ramp down to an existing parking/pull-off area along Jefferson Road. This would consist of a 250-feet long prefabricated truss superstructure supported on concrete abutments. The new pedestrian bridge will need to be one foot higher than the minimum highway bridge vertical clearance of 14′-6″ over the roadway.

The work required for the Jefferson Road crossing includes the following:

- Prefabricated steel truss bridges providing a minimum 10-foot clear walkway;
- Two reinforced concrete abutments; a tall abutment on the north side of Jefferson Road and a stub abutment on the south side;
- A 75-feet long connection segment between the canal crossing south abutment and the roadway crossing north abutment; and,
- A ramp structure (220 feet long) including retaining walls, concrete walkway surface, concrete coping and steel pedestrian railing.

2. Cross Jefferson Road at-grade between the proposed new trail bridge over the Erie Canal and East Street. Two trailhead parking areas are recommended for construction, one on the north side and one on the south side of Jefferson Road to allow trail users arriving by car to park on their desired side, which may lessen the number of trail users crossing Jefferson Road. Additional, per NYSDOT's initial analysis, the 55-mph speed limit on Jefferson Road could possibly be moved further east, thus lowering the posted speed limit at the suggested at-grade crossing location. Additional traffic analyses would be needed to determine if this would be feasible.

   South of the Canal, a direct connection can be made to the Cartersville Trail that runs parallel to the Erie Canal.



Segment 5 - East Street/Mill Road to Thornell Road

The recommendation for this segment is to rejoin the Auburn Line Corridor and continue south utilizing the corridor. Where the corridor is rejoined is dependent on the Jefferson Road crossing option selected (see Segment 4 above).

In summer 2004, the corridor between several East Street homes on the west side of East Street and the Knickerbocker Farm experienced severe erosion due to unusually heavy and frequent rains. Thus, the recommendation for this segment is being revisited by the Town and RG&E due to the recent change in the corridor's condition. The goal, however, is to locate the trail, upgraded with a stone dust surface and widened to at least 8', preferably 10', within the original Auburn Line Corridor as far away (west) as possible from the adjacent residences, while maintaining as much existing natural vegetation (screening) as is possible. Additional landscape buffering should be added to further screen the trail from the adjacent residences (Figures 19, 21).

The opportunity exists to direct trail users to the Town Park (current site for Little League baseball) located on the east side of East Street via on-street signage from Jefferson Road/Cartersville Trail or Mill Road or via the existing Monroe County Water Authority's easement to East Street.

Other routes to bypass this section of corridor adjacent to the East Street homes were assessed but were eliminated because they failed to meet the majority of goals and objectives for the study (Figure 20).

South of this area, it is recommended the existing grass-surfaced trail be widened to minimum 10' and upgraded to a stone dust surface. Existing sections of the trail immediately adjacent to the roadway should be moved back onto the corridor (Figure 22). When a two-directional multi-use trail is located adjacent to a roadway, wide separation between the trail and the adjacent roadway is desirable to demonstrate to both the bicyclist and the motorist that the trail functions as an independent facility for bicyclists and others. When the distance between the edge of the shoulder and the shared-use path is less than 5 feet, a suitable physical barrier is recommended (a minimum 42 inches high).

In 1994, the Town of Pittsford and neighbors agreed on the current trail alignment along Mill Road to Thornell Road. The signed and designated grass surface trail exists on the former railroad bed from Mill Road south approximately 800 feet. The trail then continues as a grass surface trail along the east edge of Mill Road past Cedarwood Court to a point where it is diverted back onto the railroad bed for a short distance, by-passing a guide rail and highway culvert. The grass surface trail then rejoins the east edge of Mill Road south to Thornell Road. Any deviation

from this current trail location would need to be worked out with the affected residents.

Segment 6 - Thornell Road to Railroad Mills Road

The recommendation for this segment is to upgrade the unimproved corridor to a minimum 10' wide stone dust surface. The trail would cross Railroad Mills Road, which actually utilizes a portion of the former railroad corridor for the road itself, and rise above the road (east side) on a gradual incline. A signed on-road connection to Powder Mills Park and an existing parking area via Woolston Road is also recommended.

Segment 7 - Railroad Mills Road to Main Street Fishers

The recommendation for the final segment of the study area is to continue a new minimum 10' wide stone dust-surfaced trail south into the Town of Victor to the corridor's intersection with Main Street Fishers. On the south side of Main Street Fishers, the Town and Village of Victor are currently upgrading an existing trail on the Auburn Line Corridor to the south with federal funds acquired separately.

The existing stone arch culvert crossing Irondequoit Creek is in a state of disrepair and collapse due to creek scour activity. The upstream two-thirds of the arch have collapsed into the creek and some of the stones have since washed away. Large portions of the embankments on both sides of the creek have eroded into the stream. Currently, the trail path dips downward several feet and only a 6-foot wide path is traversable over the remaining culvert portion. Significant repairs to this historic stone arch culvert are needed to carry the trail over the creek.

The recommendation is to reconstruct the culvert to its original geometry. Proposed rehabilitation measures include:

- Install a precast concrete arch in the collapsed area abutting to the existing arch;
- Reconstruct the upstream headwall in stone masonry to resemble the original headwall;
- Perform mortar joint repointing in the existing stone masonry arch and wingwalls, as needed;
- Backfill the culvert with embankment to an elevation 6 feet above the existing top of trail; and,
- Install stone slope protection at the ends of the upstream wingwalls.

Refer to Figure 24.

Reconstruction of the collapsed portion utilizing stone masonry construction was determined to be cost-prohibitive (approximately twice the cost of the precast concrete arch) and therefore not feasible.

Given that the State Historic Preservation Office (SHPO) has determined that the stone arch culvert is eligible for the National Register of Historic Places, any reconstruction plans must be coordinated with the SHPO during funding searches or early in the design process. This will ensure compliance with any funding source requirements and enable the project sponsor to determine the ultimate scope and cost of culvert repairs.

Coordination with the New York State Thruway Authority should occur as the project proceeds forward to determine the long-term condition of the I-90 tunnel and any necessary repairs or modifications required or desired to accommodate the trail.

Table 2 – Inventory of Corridor At-Grade Crossings

At-Grade Crossings	Roadway Jurisdiction	Posted Speed Limit	ADT*
French Road	Town (Pittsford)	30	N/A
North Main Street – SR 96	NYSDOT	30	N/A
State Street – SR 31 (Town, Village of Pittsford)	NYSDOT	45	16,000
Mitchell Road	Town (Pittsford)	25	3,922
East Jefferson Road – SR 96	NYSDOT	40-55	16,180
Mill Road	Town (Pittsford)	35	N/A
Millwood Court (cul-de-sac, 14 homes)	Town (Pittsford)	30	N/A
Cedarwood Circle (cul-de-sac – 23 homes)	Town (Pittsford)	30	N/A
Thornell Road – County Route 33	Monroe County	35	7,395
East Street – County Route 56	Monroe County	35	5,570
Railroad Mills Road – County Route 68	Monroe County	35	2,511
Woolston Road	Monroe County	35	882
Barony Woods – (cul-de-sac, 8 homes)	Town (Victor)	30	N/A
Probst Road	Town (Victor)	35	N/A
Fisher Road	Town (Victor)	35	N/A
Main St. Fishers – County Route 42	Ontario County	35	N/A

* Average Daily Traffic - *The ADT values were taken from existing sources. Some values may be old. Future analysis of the trail crossings should include updated values*.

Where new crosswalk markings are proposed for any roadway, gap studies should be performed prior to any such installation to ensure there are adequate gaps to facilitate the crossing.

2. Trail Right-of-Way

The utilization of some public funding sources for trail development, including most state and federal sources, typically expect public ownership of proposed trail corridors. Alternatively, a corridor easement or lease agreement may be acceptable but would need to be established in a manner that would limit any agreement conditions that could negatively impact the investment of public dollars in the trail. The former is most desirable because the landowner holds all rights to the property.

One of the most common methods of acquiring full rights and title to a parcel of land is *fee simple acquisition*, where the landowner holds all rights to the property without restriction or reservation. In this case, the Auburn Corridor communities and/or another public agency may want to consider acquiring the corridor but still permit the use of the corridor by RG & E for utility transmission that is compatible with the construction and operation of a trail, thus creating a win-win situation for all parties.

Another potential option is a *bargain sale*, in which the current landowner agrees to sell the property below the market value with the difference being treated as a charitable tax deduction. Similarly, a *full donation of all or part of the property* could be considered, which may make the donor eligible for some property tax relief and/or charitable donation tax deductions.

Eminent domain is another property acquisition strategy; however, it has not been used to develop trails in this region to date. Eminent domain allows public entities to acquire private land that is considered important to the public interest. A land owner is required to sell but is compensated based on the fair market value for his/her property. It is recommended other options be exhausted due to likely controversy that would arise with the use of eminent domain.

In lieu of full acquisition of the corridor, the Auburn Line Trail communities could consider establishing a long-term easement or lease with RG&E. Property easements or leases are acceptable when using public funding for trail development but generally should meet the following terms to protect the public's investment:

- An easement or license should be irrevocable;
- Facilities, installations, and improvements should not be required to be *automatically* removed at the end of the easement or lease agreement;
- Use or conveyance of the space above or below ground should be a term for negotiation. The intent here is not to restrict the corridor owner's rights to

allow other parallel uses but to ensure these uses do not negatively impact on the trail facility installed, including the use of the trail and the aesthetics of the trail corridor;

- The corridor owner should not expect the trail operator to remove or relocate all or part of the trail facility, installation, or improvement at the operator's expense within either a short timeframe and/or with no joint determination of the need to do so;
- An easement or lease agreement should be granted for a minimum of 15 to 20 years, which is considered by NYSDOT as a "reasonable duration of intended use and access" for a trail project funded with public dollars.

The premature removal of a publicly-funded trail or portion thereof may result not only in a local community having to remove or relocate the trail at its expense but also pay back some state and/or federal funding used for trail improvements. Both the NYSDOT and the Federal Highway Administration, another major funder of trail projects, find this situation unacceptable.

Thus, the local communities or another public agency should consider acquiring the former Auburn Line Corridor from RG & E or to agree to a long-term easement or lease with few, if any, conditions that would impact the public's investment.

Please note this feasibility study report does *not* include a cost estimate for property acquisition. Property appraisals would need to be completed to establish a current value for the right-of-way. It is recommended that the Auburn Trail communities and/or other partnering entities consult appropriate legal services and relevant agencies when seeking to obtain the corridor property either through purchase, donation, easement, or lease.

Note: Some public funding sources can be used for right-of-way acquisition costs in addition to trail design and construction costs, including several federal transportation funding sources.

For trail segments that deviate from the original Auburn Line corridor (e.g., through the Village of Pittsford lands, on the Canalway Trail, along the Lockport Ontario Power Corporation, etc.) similar long-term easements or agreements with the landowner(s) or easement holder(s) will need to be established.

3. Parking

Due to the linear nature of the Auburn Line Trail and its length (approximately 9 miles for this study segment), periodic parking areas are recommended for convenient access throughout the length of the trail system. Six (6) potential

parking areas are proposed within existing parking areas or within public rights-of-way. The locations were selected based on visibility (high visibility for security purposes), adjacent land use, safety (i.e., parking at Jefferson Road can eliminate some at-grade crossings), and adequate size. The average spacing for the six locations are approximately 1¼ to 1½ miles apart. The six locations (and suggested number of spaces) are:

- the existing parking area behind the Del Monte Lodge and Village DPW site (10+ spaces);
- the north and/or south side of Jefferson Road (5-10 spaces);
- the south side of Thornell Road (3-5 spaces);
- the small parking lot on Woolston Road in Powder Mills Park (5-10 spaces);
- the south side of Probst Road (3-5 spaces); and,
- the south side of Main Street Fishers (5-10 spaces).

4. Signage

It is recommended that a uniform standard (or logo) be developed and utilized for the identification of the Auburn Trail that is consistent throughout its length.

Informational signage that orients users to their position within the trail corridor and that provides an overview of the system should be provided at all trailheads/parking areas, intersections with other trail systems (i.e., the Canalway Trail), and at major roadway crossings which function as trail access points. Milepost (or half-mile) markers are also recommended throughout the trail's length to aid in emergency response as well as to inform trail users on distances traversed. Signage indicating accessible routes should also be included.

Regulatory signs describe the general rules and regulations that apply to the trail (permitted uses, hours of operation, etc.) and can differ between municipalities. It is recommended that, if possible, regulations be consistent among the municipalities. Area-specific signage should also be included, such as 'STAY ON TRAIL' signage for the segment behind the East Street residences, or 'RESPECT NATURE' signage for portions that pass through or adjacent to ecologically sensitive areas (Burroughs Audubon Nature Center).

Additionally, warning signs are recommended to caution about various hazards such as steep adjacent slopes, roadway crossings, blind intersections, merges, pedestrian crossing signs (for motorists), etc. Utilization of consistent barrier gates or bollards to control access to the trail will also identify the trail system and communicate a consistent application of rules and regulations for all portions of the trail.

Interpretive signage opportunities exist for the Auburn Line Trail from its origins as a railroad corridor connecting the City of Rochester with Auburn, as well as with the Erie Canal, the Cartersville settlement (East Street/Jefferson Road intersection) history, Native American history, and the Depot and other agricultural/rail history in the Village and Town of Pittsford. Additionally, the Irondequoit Creek drainage basin and other environmental/ecological opportunities associated with the more southern rural and natural areas exist.

5. Implementation Strategies

Due to the length of the study area, a single undertaking of trail development at one time may be cost prohibitive. Dividing the project into smaller segments may increase the likelihood of implementation as well as provide more flexibility for funding or utilization of Town or Village forces. Depending upon available resources, the Towns and Village forces could play a big role in the clearing and grubbing of the corridor and even installing the trail surfacing. The major components (the Canal bridge, stone arch culvert repairs) can be part of a larger trail project or treated as a standalone project. It is recommended that a signage program for the trail be coordinated with all the municipalities to ensure a consistent, standardized program be developed and utilized for the Auburn Line Trail.

VI Assumptions and Cost Estimate

The cost estimate is organized by municipality.

- Quantity take-offs are based upon site visits and conceptual sketches prepared by Bergman Associates in the summer/fall of 2004.
- General conditions, construction maintenance fees, permit fees, inspection fees, and insurances are not included.
- Site preparation quantity is based on clearing 2-feet beyond both sides of the trail for the portion along the existing railroad bed.

- Disturbance to site will be limited to an area approximately 15-feet wide for the portion of the trail along the existing railroad bed and include the trail and adjacent shoulder areas.
- A Stormwater Pollution Prevention Plan (SWPPP) will be required for any disturbance over one (1) acre.
- If half gates are used in lieu of bollards, some signs can be mounted directly onto them.
- A cost estimate for property acquisition is not included. Property appraisals would need to be completed to establish a current value for the right-of-way. It is recommended that the Auburn Trail communities and/or other partnering entities consult appropriate legal services and relevant agencies when seeking to obtain the corridor property either through purchase, donation, easement, or lease.
- Municipalities should budget anywhere from 15% to 25% or more of the total construction fee for design services depending on complexity of the project (easement/property acquisitions, bridges, etc.), and approximately an additional 5% to 10% of the total construction fee for construction phase inspection services.

Probable Construction Costs
for Auburn Line Corridor - Trail Study
Town of Pittsford

Trail work in Town of Pittsford includes:
- Approx. 25,000 LF New Stone Dust Trail on New Stone Subbase

Site Work	Quantity	Unit	Unit Cost	Total
A. SITE PREPARATION				
Site prep., clearing, and grubbing	8.6	AC	$6,500.00	$55,900.00
15' clearing for minimum 10' trail Erosion Control	1	LS	$15,000.00	$15,000.00
			Sub-total	$70,900.00
B. SITEWORK				
Trail Excavation (6" deep 12' wide)	5,555	CY	$34.00	$188,870.00
Trail Base Course 4" crushed stone, optional type)	3,086	CY	$34.00	$104,924.00
Trail Top Course (2" stone dust)	1,543	CY	$45.00	$69,435.00
Hydroseed (along trail, 2.5' each side) and all disturbed areas.	125,000	SF	$0.10	$12,500.00
Topsoil placed and fine graded (along both sides of sidewalk and trail, 4" deep 1' each side)	617	CY	$40.00	$24,680.00
Trailhead Parking Area (gravel surface)	2	EA	$5,000.00	$10,000.00
			Sub-total	$410,409.00
C. SIGNAGE				
Trail Identification Signs, and Posts Installed	20	EA	$425.00	$8,500.00
Trail Guidelines Signs, and Posts Installed	20	EA	$300.00	$6,000.00
Interpretive Sign, and Post Installed	6	EA	$750.00	$4,500.00
No Motor Vehicles Signs, and Posts Installed	20	EA	$300.00	$6,000.00
Ped Crossing Signs, and Posts Installed	17	EA	$300.00	$5,100.00
Ped Crossing Ahead Signs, and Posts Installed	14	EA	$300.00	$4,200.00
Stop Signs, and Posts Installed	17	EA	$300.00	$5,100.00
Stop Ahead Signs, and Posts Installed	14	EA	$300.00	$4,200.00
Milepost Markers	12	EA	$300.00	$3,600.00
			Sub-total	$47,200.00
D BRIDGE OVER CANAL				
Bridge Structure	1	LS	$650,000.00	$650,000.00
Abutment Repairs	1	LS	$200,000.00	$200,000.00
Ramp Structure	1	LS	$210,000.00	$210,000.00
			Sub-total	$1,060,000.00
E BRIDGE OVER JEFFERSON ROAD				
Bridge Structure	1	LS	$410,000.00	$410,000.00
Abutment Repairs	1	LS	$165,000.00	$165,000.00
Ramp Structure	1	LS	$325,000.00	$325,000.00
			Sub-total	$900,000.00
F MISCELLANEOUS				
Fixed Wood Bollard	20	EA	$200.00	$4,000.00
12" White Epoxy Reflectorized Pavement Stripes	1,520	LF	$6.00	$9,120.00
Half Gate	14	EA	$1,200.00	$16,800.00
Utility Adjustment (hydrants, CB's, MH's, Poles & Guys, etc.)	1	LS	$10,000.00	$10,000.00
			Sub-total	$39,920.00
			A.	**$70,900.00**
			B.	**$410,409.00**
			C.	**$47,200.00**
			D.	**$1,060,000.00**
			E.	**$900,000.00**
			F.	**$39,920.00**
			Subtotal	**$2,528,429.00**
			Contingency (20%)	**$505,685.80**
			TOTAL COST	**$3,034,114.80**

Probable Construction Costs
for Auburn Line Corridor - Trail Study
Village of Pittsford

Trail work in Village of Pittsford includes:
- Approx.1350 LF New Stone Dust Trail on New Stone Subbase

Site Work	Quantity	Unit	Unit Cost	Total
A. SITE PREPARATION				
Site prep., clearing, and grubbing	0.5	AC	$6,500.00	$3,250.00
15' clearing for minimum 10' trail Erosion Control	1	LS	$4,000.00	$4,000.00
			Sub-total	$7,250.00
B. SITEWORK				
Trail Excavation (6" deep 12' wide)	300	CY	$34.00	$10,200.00
Trail Base Course 4" crushed stone, optional type)	170	CY	$34.00	$5,780.00
Trail Top Course (2" stone dust)	85	CY	$45.00	$3,825.00
Hydroseed (along trail, 2.5' each side) and all disturbed areas.	6,750	SF	$0.10	$675.00
Topsoil placed and fine graded (along both sides of sidewalk and trail, 4" deep 1' each side)	35	CY	$40.00	$1,400.00
Trailhead Parking Area (gravel surface)	1	LS	$5,000.00	$5,000.00
			Sub-total	$26,880.00
C. SIGNAGE				
Trail Identification Signs, and Posts Installed	4	EA	$425.00	$1,700.00
Trail Guidelines Signs, and Posts Installed	1	EA	$300.00	$300.00
Interpretive Sign, and Post Installed	2	EA	$750.00	$1,500.00
No Motor Vehicles Signs, and Posts Installed	4	EA	$300.00	$1,200.00
Trail Crossing Signs, and Posts Installed	4	EA	$300.00	$1,200.00
Trail Crossing Ahead Signs, and Posts Installed	4	EA	$300.00	$1,200.00
Stop Signs, and Posts Installed	4	EA	$300.00	$1,200.00
Stop Ahead Signs, and Posts Installed	4	EA	$300.00	$1,200.00
Milepost Markers	12	EA	$300.00	$3,600.00
			Sub-total	$13,100.00
D. MISCELLANEOUS				
Fixed Wood Bollard	6	EA	$200.00	$1,200.00
12" White Epoxy Reflectorized Pavement Stripes	200	LF	$6.00	$1,200.00
Half Gate	3	EA	$1,200.00	$3,600.00
Utility Adjustments (hydrants, CB's, MH's poles & guys, etc.)	1	LS	$5,000.00	$5,000.00
			Sub-total	$11,000.00

A.	**$7,250.00**
B.	**$26,880.00**
C.	**$13,100.00**
D.	**$11,000.00**
Subtotal	**$58,230.00**
Contingency (20%)	**$11,646.00**
TOTAL COST	**$69,876.00**

Probable Construction Costs
for Auburn Line Corridor - Trail Study
Town of Perinton

Trail work in Town of Perinton includes:

- **Approx. 770 LF New Stone Dust Trail on New Stone Subbase**
- **Approx. 1,000 LF New Concrete Sidwalk (Connection to Powder Mill Park)**

Site Work	Quantity	Unit	Unit Cost	Total
A. SITE PREPARATION				
Site prep., clearing, and grubbing 15' clearing for minimum 10' trail	0.6	AC	$5,000.00	$3,000.00
Erosion Control	1	LS	$1,500.00	$1,500.00
			Sub-total	$4,500.00
B. SITEWORK				
Trail Excavation (6" deep 12' wide)	222	CY	$34.00	$7,548.00
Trail Base Course 4" crushed stone, optional type)	123	CY	$34.00	$4,182.00
Trail Top Course (2" stone dust)	62	CY	$45.00	$2,790.00
Concrete Sidewalk (Woolston Road) 5" deep 5' wide	60	CY	$200.00	$12,000.00
Subbase Course, #1 and #2 Crushed Stone (6")	72	CY	$25.00	$1,800.00
Hydroseed (along trail, 2.5' each side) and all disturbed areas.	8,850	SF	$0.10	$885.00
Topsoil placed and fine graded (along both sides of sidewalk and trail, 4" deep 1' each side)	44	CY	$40.00	$1,760.00
Trailhead Parking Area (gravel surface)	1	EA	$5,000.00	$5,000.00
			Sub-total	$35,965.00
C. SIGNAGE				
Trail Identification Signs, and Posts Installed	2	EA	$425.00	$850.00
Trail Guidelines Signs, and Posts Installed	1	EA	$300.00	$300.00
Interpretive Sign, and Post Installed	1	EA	$750.00	$750.00
No Motor Vehicles Signs, and Posts Installed	1	EA	$300.00	$300.00
Powder Mill Park Identification Sign	2	EA	$524.00	$1,048.00
Milepost Markers	12	EA	$300.00	$3,600.00
			Sub-total	$6,848.00
D MISCELLANEOUS				
Fixed Wood Bollard	6	EA	$200.00	$1,200.00
12" White Epoxy Reflectorized Pavement Stripes	500	LF	$6.00	$3,000.00
Sidewalk Curb Ramp Detectable Warning Fields (Stick-on)	2	EA	$200.00	$400.00
Utility Adjustments (hydrants, CB's, MH's, Poles & Guys, etc.)	1	LS	$10,000.00	$10,000.00
			Sub-total	$14,600.00

A.	**$4,500.00**
B.	**$35,965.00**
C.	**$6,848.00**
D.	**$14,600.00**
Subtotal	**$61,913.00**
Contingency (20%)	**$12,382.60**
TOTAL COST	**$74,295.60**

Probable Construction Costs
for Auburn Line Corridor - Trail Study
Town of Victor

Trail work in Town of Victor includes:
- Approx. 10,000 LF New Stone Dust Trail on New Stone Subbase

Site Work	Quantity	Unit	Unit Cost	Total
A. SITE PREPARATION				
Site prep., clearing, and grubbing	3.4	AC	$5,000.00	$17,000.00
15' clearing for minimum 10' trail Erosion Control	1	LS	$10,000.00	$10,000.00
			Sub-total	$27,000.00
B. SITEWORK				
Trail Excavation (6" deep 12' wide)	2,222	CY	$34.00	$75,548.00
Trail Base Course 4" crushed stone, optional type)	1,235	CY	$34.00	$41,990.00
Trail Top Course (2" stone dust)	617	CY	$45.00	$27,765.00
Hydroseed (along trail, 2.5' each side) and all disturbed areas.	50,000	SF	$0.10	$5,000.00
Topsoil placed and fine graded (along both sides of sidewalk and trail, 4" deep 1' each side)	246	CY	$40.00	$9,840.00
Trailhead Parking Area	2	EA	$5,000.00	$10,000.00
Milepost Markers	12	EA	$300.00	$3,600.00
			Sub-total	$173,743.00
C. SIGNAGE				
Trail Identification Signs, and Posts Installed	6	EA	$425.00	$2,550.00
Trail Guidelines Signs, and Posts Installed	7	EA	$300.00	$2,100.00
Interpretive Sign, and Post Installed	6	EA	$750.00	$4,500.00
No Motor Vehicles Signs, and Posts Installed	8	EA	$300.00	$2,400.00
Ped Crossing Signs, and Posts Installed	6	EA	$300.00	$1,800.00
Ped Crossing Ahead Signs, and Posts Installed	6	EA	$300.00	$1,800.00
Stop Signs, and Posts Installed	7	EA	$300.00	$2,100.00
Stop Ahead Signs, and Posts Installed	7	EA	$300.00	$2,100.00
			Sub-total	$19,350.00
D MISCELLANEOUS				
Fixed Wood Bollard	24	EA	$450.00	$10,800.00
12" White Epoxy Reflectorized Pavement Stripes	600	LF	$6.00	$3,600.00
Sidewalk Curb Ramp Detectable Warning Fields (Stick-on)	8	EA	$200.00	$1,600.00
Stone Arch Culvert Repair	1	LS	$200,000.00	$200,000.00
Half Gate	5	EA	$1,200.00	$6,000.00
			Sub-total	$222,000.00

A.	**$27,000.00**
B.	**$173,743.00**
C.	**$19,350.00**
D.	**$222,000.00**
Subtotal	**$442,093.00**
Contingency (20%)	**$88,418.60**
TOTAL COST	**$530,511.60**

VII FUNDING ALTERNATIVES

A. Federal Sources

The most likely means of implementing some or all of the trail improvement recommendations identified in this feasibility study is through the application of multiple funding sources. Many trails are developed using a combination of public funding from various governmental levels, a combination of public and private funding, and/or a combination of for-hire service providers (trail design, trail construction), local public forces, and volunteer assistance. The following information provides an overview of the potential funding sources for trail development:

The Federal Government provides funding for transportation projects through various funding programs contained within multi-year federal transportation legislation, currently referred to as TEA-21 or the **T**ransportation **E**quity **A**ct for the 21st Century . Presently, Congress is in the process of negotiating new federal transportation legislation, which is expected to be amended into law in mid-2005. The information provided below describes several existing federal transportation funding sources that provide funding for multi-use trail projects like the Auburn Line Trail. Note: federal funding program information is based on the current TEA-21 legislation. The federal funding programs included in the new federal legislation may be different from the information provided below. For current federal funding program information, please contact the administering agency listed or the Genesee Transportation Council.

Local officials may also be able to acquire some trail project funding assistance by working with their federal representatives to acquire special funding appropriations through appropriations bills, transportation and other related legislative actions, and other special appropriations.

1. Surface Transportation Program (STP) funds are allocated through the Genesee Transportation Council for all types of transportation projects. STP-funded projects must be selected for inclusion in the bi-annually created Transportation Improvement Program (TIP). The process for submitting and selecting projects for the 2005-2010 has already started as of this writing. The next TIP funding cycle will start in Fall 2006. Sources provide up to 80% federal funding and require a 20% local match. 'Soft' match provisions (e.g., force account labor) are allowed, including soft matches from public agencies.

2. Transportation Enhancement Program (TEP) funds are a ten percent set-aside from the STP funds[2]. The project selection process is administered by the New York State Department of Transportation (NYSDOT). In order to maximize the use of the available TEP funding, this program provides innovative financing alternatives for local matching requirements (20% match). The list of activities eligible for

[2] US Department of Transportation FHWA, http://www.fhwa.dot.gov/environment/te/index.htm

Transportation Enhancement Program has expanded, but all projects must relate to surface transportation. The proposed trail is potentially eligible for TEP funding under two categories:

a) Preservation of Abandoned Railway Corridors, including conversion and use for Pedestrian and Bridge Trails;
b) Provision of facilities for bicyclists and pedestrians.

As of this writing, the next cycle of the TEP is not expected until after Congress reauthorizes TEA-21 (expected in May 2005).

Under Section 61 of the State Finance Law, any project constructed with federal funds for NYSDOT requires:

- Funds used to construct/reconstruct highways, streets, and other transportation infrastructure projects require a 20-year project life;
- Funds used to acquire land for recreation projects require a 20-year easement/guarantee of ownership or permit to use.

3. Recreational Trails Program - A total of $25 million nationally in contract authority apportioned for fiscal year 2004 to provide and maintain recreational trails[3]. States must establish a State Recreational Trails Advisory Committee that represents both motorized and non-motorized recreational trail users. Of funds distributed to a State, 30 percent must be used for motorized trails, 30 percent must be used for non-motorized trails, and the remaining 40 percent can be used for either type of trail. A typical RTP award is $50,000 to $100,000.

   The Federal share is raised to 80 percent (from 50 percent) for the new fiscal years, and Federal agency project sponsors or other Federal programs may provide additional Federal share up to 95 percent. Soft match provisions are allowed, including soft matches from public agencies. New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) administers this program in New York State.

4. Congestion Mitigation and Air Quality (CMAQ) Program - The CMAQ program provides funding for surface transportation and other related projects that contribute to air quality improvements and reduce congestion in areas that are designated as non-attainment or in maintenance per the National Ambient Air Quality Standards. Selection of CMAQ projects is made at the State and local level but is subject to broad Federal project eligibility guidelines. Eligible project categories include:

[3] US Department of Transportation FHWA, http://www.fhwa.dot.gov/environment/rectrails/recfunds.htm

- Transit and public transportation programs
- Traffic flow improvements
- Travel Demand Management (TDM) strategies
- Ridesharing programs
- Bicycle and pedestrian projects
- Education and outreach programs
- Inspection and maintenance programs
- Alternative clean fuels

Upon passage of the new federal surface transportation bill, CMAQ funding may become available in this region for transportation projects that improve air quality and enhance mobility. Contact the Genesee Transportation Council for more information on the CMAQ program.

B. State Sources

Clean Air /Clean Water Bond Act and the Environmental Protection Fund: Grants are available for projects in several categories such as parks, historic preservation, and the American Heritage Areas System and land acquisition. These matching grants are available to local governments and not-for-profit organization. Additional information can be found at www.nysparks.state.ny.us/grants/.

State Multi-Modal Program

The State Multi-Modal Program provides funding for authorized port, airport and local highway and bridge projects. State Multi-Modal funds can be used to finance project costs for the construction, reconstruction, improvement, reconditioning and preservation of county, town, city and village roads, highways, parkways and bridges. All Multi-Modal projects must have a ten (10) year "bondable" service life and must be for public transportation or freight transportation purposes. Multi-Modal funding cannot be used for the mandated share of a federally funded project. Multi-Modal projects are identified and negotiated between the Legislature, Governor and local sponsors and signed into law in a Memorandum of Understanding (MOU). All allocations or reallocation of Multi-Modal funding must be approved by the President Pro Tempore and Majority Leader of the Senate and the Speaker of the Assembly. This program is a reimbursement program. While trails are not an eligible project type, related improvements in a highway right-of-way, such as new sidewalks, paved shoulders, and bicycle lanes, may be eligible for State Multi-Modal Program funding.

Another possible avenue for funding or other material support for trail projects may be state and county public health departments. Some public health officials and programs are targeting opportunities to provide active living environments – communities and neighborhoods that can support physical activity through its normal infrastructure of

sidewalks, bicycle-friendly streets, trails, easily accessible parks, etc. Public health departments may be good sources for assistance with programs or projects that encourage the use of trails through maps, signage, and promotions. Additionally, private foundations with health-oriented missions are also more receptive to supporting trails as a means of encouraging healthy lifestyles (e.g., the Robert Wood Johnson Foundation's Active Living Program).

C. Local Sources

Limited federal and state funding opportunities for trail development have led many communities to allocate more local funding for these types of projects. The most common sources of funds at the municipal level include allocations from specific departments (e.g., public works, parks) or a line item in a community's annual budget and /or Capital Improvement Program (CIP). Local revenues for trail development have also been raised in some communities through property tax, sales tax, or bond measures. Additionally, development impact fees levied by a municipality may also be allocated to capital trail improvements per local body.

Additionally, local communities have developed trails through the allocation of staff time, also known as force account work, to build trails or provide certain trail building or maintenance activities that are then augmented by paid services from private contractors and/or unpaid volunteers.

D. Private and Community Foundations

Community foundations provide charitable contributions which may be a potential source of funding. They operate much like a private foundation, but their funds are derived from many donors rather than a single source. Furthermore, community foundations are usually classified under the tax code as public charities and therefore are subject to different rules and regulations than those which govern private foundations. Several potential foundations include:

1. The Rochester Area Community Foundation is the local community foundation in Monroe County. The Rochester Area Community Foundation (RACF) manages more than 500 funds that provide grants for a wide variety of arts, education, social services, and other civic purposes in the Genesee Valley region of upstate New York. More information can be found at RACF's web site at www.racf.org.

2. The Genesee Region Trails Coalition (GRTC), an organization whose mission is to help local communities develop and maintain a regional system of multi-use trails in the ten-county Rochester-Genesee-Finger Lakes region, has a small annual grant program to support small trail development and improvement projects within thei region. More

information about this program can be obtained from GRTC's web site at www.grtcinc.org.

3. The Eastman Kodak Company, The Conservation Fund, and the National Geographic Society, provide small grants to stimulate the planning and design of greenways in communities throughout America through the Kodak American Greenways Awards Program. The annual grants program was instituted in response to the President's Commission on Americans Outdoors recommendation to establish a national network of greenways. Made possible by a generous grant from Eastman Kodak, the program also honors groups and individuals whose ingenuity and creativity foster the creation of greenways. For more information about the American Greenways program, please refer to its web site at www.conservationfund.org.

4. Bikes Belong Coalition is a membership organization founded by bicycle industry leaders with the mission of "putting more people on bikes more often." Bikes Belong Coalition aims to put more people on bicycles more often by distributing grants for bicycle facility, education, and capacity projects. More information on this organization can be found at their website at www.bikebelong.org.

E. Private Funding

Some trails have been partially or substantially developed utilizing private funds from private donations by individuals and businesses, corporate sponsorships, and various fundraising efforts. Examples of fundraising efforts range from trail-related events, merchandise sales, and even the sale of trail sections or trail amenities like benches, information kiosks, etc. An excellent New York State example of local private fundraising efforts is the Cayuga Waterfront Trail in Ithaca. For more information about the trail, please visit http://cayugawaterfronttrail.com.

Finally, a significant number of trails have been developed and maintained, particularly in the Rochester-Genesee-Finger Lakes Region, through significant volunteer efforts, including private individuals, Friends of the Trails groups, local civic organizations (Chamber of Commerce, Scout groups), and corporate volunteerism. Likewise, in some cases, specialized services (materials and equipment donation, trail construction work, trail design) have been donated by generous businesses and professionals.

VIII CONCLUSIONS

The former Auburn and Rochester Rail Line provides an opportunity for alternative transportation and recreation. With the cooperation of the GTC, construction of this trail could offer many assets for the community. It can provide non-motorized community and regional access, an area for recreation and exercise, and ultimately provide southern Monroe County residents a connection to and from the areas other regional trail systems including the

Town of Perinton's RS&E Hikeway/Bikeway Trail, the City of Rochester's Riverway Trail, the Lehigh Valley Multi-Use Trail North Branch, and the Cartersville Trail via its critical connection with the Canalway Trail on the north side of the Erie Canal. This trail will also provide Monroe County residents direct access to the Auburn Trail currently under construction south of Main Street Fishers in the Town of Victor (this study's southern terminus). The proposed trail route is viable, however, with or without the canal crossing. Use of the abandoned rail corridor provides excellent opportunities for a multi-use trail with the least amount of environmental impacts and costs.

Appendix A:
Meeting Minutes & Agendas from Stakeholder Committee and Public Meetings

Auburn Line Corridor Rails-to-Trails Study
Stakeholder Meeting Summary

Mile Post Schoolhouse, Pittsford
August 28, 2003

In Attendance
Steve Beauvais, Project Manager, NYS Department of Transportation
Kristin Bennett, Genesee Transportation Council [GTC Project Manager]
Martin Brewster, Director, Town of Pittsford Planning & Zoning
Ron Cass, Assistant Public Works Director, Town of Perinton
Robert Corby, Mayor, Village of Pittsford
Tom Goodwin, Senior Environmental Planner, Monroe County Planning Department
Mark Johns, Bergmann Associates [Consultant Project Manager]
Scott Leathersich, Senior Planner, Monroe County DOT
Ted Liddell, Landscape Architect, Bergmann Associates
Jane Luce, Director, Town of Victor Planning & Development
Dave Schaeffer, Trail Master, Crescent Trail Association
Dave Wright, Board Member, Town of Victor and President, Victor Hiking Trails
Sandra Zutes, Board Member, Town of Pittsford

Unable to Attend
Kristen Mark Hughes, Director, Ontario County Planning Department
Debra Wegman, Real Estate Officer, Rochester Gas & Electric

Following introductions, Kristin Bennett of GTC provided a brief overview of the study and reviewed the meeting agenda.

Mark Johns, project manager for Bergmann Associates, walked through the corridor from north to south using numerous photos and maps to detail the existing conditions along the corridor.

Roundtable Discussion of Issues Related to the Corridor

Marty Brewster stated the Town of Pittsford has purchased or conserved development rights to substantial portions of land to the west of the corridor along East Street.

Sandy Zutes added that some farmers may have concerns about a trail adjacent to or along the perimeter of their farms because of trespass issues, pesticide use, and use of larger machinery. Kristin Bennett noted that many trails, including some in this area, pass directly through actively farmed parcels with minor accommodations to protect both the farms and trail users (fencing/gates, warning signs). Opportunities to minimize conflicts between agricultural uses and a trail can be investigated as part of the project.

Dave Schaeffer suggested the Woolston Creek corridor as an opportunity to create an *off-street* trail connection between the Auburn corridor and Powder Mills Park.

Dave Wright noted the Auburn corridor is maintained as a rustic trail by Victor Hiking Trails south of Probst Road. He added that the Town of Victor recently received over $1 million in federal Transportation Enhancements (TEP) funding to upgrade the existing Auburn Line Corridor trail from Main Street Fishers south to the Farmington/Victor townline to a 10-foot wide, stone dust multi-use trail. The Town supports extending this trail into Monroe County.

The corridor is wholly owned by RG & E in the Town of Victor except for adjacent to the firehouse in the hamlet of Fishers. Jane Luce noted this firehouse is to be expanded, and Town fire officials have agreed to maintain trail access on the corridor, which runs directly adjacent and parallel to the existing fire hall. Steve Beauvais recommended that RG & E's right-of-way and licenses along the corridor be confirmed.

Dave Wright suggested there might be numerous interpretive opportunities along the Auburn corridor, including the old fieldstone pump house at Main Street Fishers, which is one of the oldest railroad structures in northeastern United States.

Steve Beauvais recommended the NYS Thruway Authority be contacted and kept in the loop since an existing Thruway underpass must be used to allow trail passage under the Thruway.

Steve Beauvais informed the group that the stone arch culvert over Irondequoit Creek has been determined to be eligible for the National Historic Register, which may limit options to rehabilitate or replace this stream crossing. He noted the Genesee Valley Greenway is undergoing a similar issue with a collapsing stone arch culvert in the Town of York, Livingston County. A steel pipe is being inserted into this historic culvert (a "sleeve") to keep it from collapsing even more and to provide a trail crossing for the Genesee Valley Greenway, a repair option approved by the State Historic Preservation Office (SHPO).

Jane Luce wanted to confirm what kinds of trail uses would be allowed. The Town of Victor is *not* interested in accommodating motorized trail uses (like snowmobiling and ATV) but does allow equestrian on some of its trails, noting that equestrian trails may be added to the nearby Fishers Park. Sandy Zutes did not think there are many equestrians near the corridor in Pittsford. The Village of Pittsford and Town of Perinton concurred with non-motorized only.

Kristin Bennett recommended the public be queried on how they would like to use the corridor at the public meeting to be scheduled this fall. She added that equestrian use necessitates different trail construction and maintenance standards as well as greater parking capacity due to large vehicles and horse trailers. Mark Johns stated that he did not see much, if any, evidence of use of the corridor by motorized vehicles or by horses when conducting fieldwork.

Sandy Zutes stated she would like the trail to be topped with a natural surface as opposed to asphalt because of the speed bicyclists can travel on asphalt. Kristin Bennett added that asphalt also allows in-line skaters and necessitates different design standards and maintenance practices.

Asphalt is also more expensive than a natural surface trail like stone dust. She suggested that the public also be queried about the type of surface they would prefer.

Kristin Bennett and Steve Beauvais provided some information on recommended trail design and construction standards, including accommodating the disabled. Steve noted that there are *not* specific standards for trail construction established by The Access Board. However, accessibility standards would apply to sidewalks, parking lots, signage, and restrooms (if provided). Steve added that a natural trail surface can be accessible but must be "stable, firm, and slip-resistant, similar to the infield of a baseball field. Mark Johns noted it might be difficult to achieve ADA-compliant grades at some of the road crossings.

Mayor Corby inquired about how the trail could be routed through the Schoen Place area. He noted existing concerns about limited parking around Schoen Place and the cramped location of the corridor. He added that the vacant mill buildings on Schoen Place will be redeveloped in the near term, adding to the parking crunch. Mayor Corby noted there is an existing but hard-to-find footpath connecting the existing Auburn Trail to the Canalway Trail through the back of the Village's Public Works facility, which could be improved to create a connection.

Mark Johns noted the Auburn corridor was sold to the Del Monte Lodge west of North Main Street in the Village and is very constrained behind the businesses along Schoen Place east of North Main. Kristin Bennett added that Debra Wegman of RG & E stated in a phone conversation that RG & E would prefer to see the trail connection be made via the existing Canalway Trail in the Village and then reconnect with the Auburn Corridor east of Route 31.

Mark Johns noted that the Canalway Trail is already heavily used in the Village, which may stretch its capacity to handle more trail users. Mayor Corby noted the Village's waterfront revitalization plan recommends improving Schoen Place (the street), now being examined by a consultant to the Village.

Mayor Corby informed the group that there is a conservation easement adjacent to Schoen Place that should be considered for trail routing alternatives within the Village. He noted, however, that the topography is steeply sloped on parts of this property.

David Wright and Dave Schaeffer stressed the importance of creating connections between the Auburn Corridor and nearby destinations like schools, parks, other trails, neighborhoods, business districts, and employment centers, so the trail can be used to get to and from these locations. Marty Brewster inquired about the possibility of looking at connecting the Auburn to the old trolley bed near Route 31 and even to Mendon Ponds Park.

The Town of Pittsford inquired about the status of the corridor north of Clover Street in the Town of Brighton. Kristin Bennett noted that that section of the corridor (between Clover Street and Highland Avenue) was identified in GTC's Regional Trails Initiative as a Near-Term Project Recommendation. The Town of Brighton also included the corridor in its recent master plan update as a future trail corridor. Brighton's segment was considered for GTC Priority Trails Advancement planning funds, but the Town declined due to other staff priorities for this year.

Bergmann Associates will contact the Town of Pittsford's GIS specialist to obtain files for existing trails, open spaces, and parks. They will also obtain traffic counts for Mitchell Road.

Mayor Corby requested the treatment of the at-grade crossings of roadways be handled carefully, including State Routes 96 and 31 in the Village of Pittsford. He wanted ensure the appropriate agencies were involved and that they would support enhanced crossing features like pavement markings and signs at trail/street crossings. He added that crossings need to be convenient and easy to use for trail users or they will simply cross wherever is easiest if designated crossings are not well implemented.

Marty Brewster inquired about RG & E's plans for any utility upgrades along the corridor in the near future. Kristin Bennett noted that Debra Wegman of RG & E did *not* specifically mention any upcoming projects in a recent telephone conversation. Bergmann Associates will follow up with RG & E to confirm its needs and interests along corridor. Ms. Wegman did state that RG & E is interested in participating in the project.

The group agreed that Bergmann Associates should move forward with developing some options for the challenging sections of the Auburn corridor, present these to the stakeholders' group at a future meeting, and then schedule an the initial public meeting. Sandy Zutes requested the public meeting be scheduled to avoid both the Town of Pittsford's library vote on October 7th and the general election on November 4th.

The group also agreed that Bergmann should focus on the development of a minimum 14' trail corridor with an improved natural surface (like stone dust). Per state and national trail design guidance, a minimum trail tread width of 10' plus 2' clear buffers on each side of the trail is the minimum desired width for a trail accommodating bicyclists and pedestrians. In constrained areas, a slightly narrowed trail would be acceptable but these sections should be minimized. If additional users are allowed (e.g. equestrian) and/or an asphalt surface is desired, a wider trail or separate trails are recommended. Steve Beauvais reminded the group that some funding sources require the higher-level trail construction standards.

Dave Schaeffer felt the group's goal should be toward a fully developed multi-use trail; however, he suggested that some attention be focused on how the corridor could, at a minimum, be preserved as well as low-cost trail development options that could be applied until the desired trail can be constructed. Kristin Bennett noted that recommendations for project phasing and interim trail development measures would be included in the final report.

www.bergmannpc.com

Priority Trails Advancement
Auburn Line Corridor Rail-to-Trail Study
Stakeholder Committee Meeting Summary

November 21, 2003 (REVISED)

Attendees:

Skip Bailey	Village of Pittsford (representing Mayor Corby)
Steve Beauvais	NYS Department of Transportation - Region 4
Kristin Bennett	Genesee Transportation Council [GTC Project Manager]
Martin Brewster	Town of Pittsford Planning & Zoning
Ron Cass	Town of Perinton Public Works
Brian Emelson	Town of Victor Parks and Recreation
Tom Goodwin	Monroe County Planning
Kristen Mark Hughes	Ontario County Planning
Mark Johns	Bergmann Associates [Consultant Project Manager]
Ted Liddell	Bergmann Associates
Jane Luce	Town of Victor Planning & Development
Dave Rinaldo	Monroe County Parks
Dave Schaeffer	Crescent Trail Association
Debra Wegman	Rochester Gas & Electric
Dave Wright	Victor Town Board / Victor Hiking Trails
Sandra Zutes	Pittsford Town Board

---

1. Project Recap

Mark Johns, project manager for Bergmann Associates, outlined the various alternatives for trail development for the seven challenge areas identified at the August 2003 Stakeholder Committee meeting. The seven challenge areas are:

- Depot/Del Monte Lodge area
- Schoen Place
- Erie Canal / Jefferson Road (Route 96) Crossings
- East Street
- Mill Road
- Railroad Mills Road
- Irondequoit Creek Crossing

www.bergmannpc.com

Priority Trails Advancement
Auburn Line Corridor Rail-to-Trail Study
Stakeholder Committee Meeting Summary

November 21, 2003 (REVISED)

2. **Alternatives for Addressing the Seven Challenge Areas**

Depot/Del Monte Lodge Area and Schoen Place (Village of Pittsford)

Bergmann Associates recommended several alternatives to connect the trail from its existing terminus at a parking lot near Del Monte Lodge and Grove Street to the east side of the village, including:

- Village streets and sidewalks
- The original Auburn corridor alignment through the Village (now used primarily for parking)
- A possible route behind part of Schoen Place along the preserved Zornow farm property. It was noted that the land topography on the Zornow farm property may render a trail inaccessible to the disabled
- Merging with the Canalway Trail near the Village DPW building via a connector trail on Village-owned land
- Using the Canalway Trail through the Village but crossing to the south side of the Canal on the Route 31 Bridge and developing a trail along the southern bank of the Erie Canal

Erie Canal / Jefferson Road (Route 96) Crossings

Bergmann Associates presented a concept for installing a new prefabricated bridge over the Erie Canal and Jefferson Road using the existing abutments (area south of Mitchell Road). Bergmann noted they did look at using the Mitchell Road bridge to cross the Canal, but do not recommend using the bridge as a trail crossing given its size, condition, traffic volumes, and the lack of pedestrian and bicycle accommodations on Mitchell Road. Some people expressed concern about the cost of new bridge construction, so alternatives to bridging the Canal were discussed

- Skip Bailey noted there is a traffic signal at the intersection of South Avenue and State Route 96 (Jefferson Road). Canal Corporation owns the ball field property

near this intersection, so it may be available to create a connection from the Canalway Trail south along the power line corridor to Jefferson Road. A trail bridge over Jefferson Road could be constructed, which would likely be shorter than crossing the Canal and Jefferson Road on a skew

- Steve Beauvais noted that overhead clearance over the Canal and Jefferson Road needs to be maintained for passage of oversized vehicles

East Street Area (Town of Pittsford)

Bergmann Associates reported they met with four East Street residents whose homes closely abut the corridor. Debra Wegman, RG & E, and Sandra Zutes and Mary Brewster, Town of Pittsford, also participated in this meeting. These residents have "lawn licenses" from RG & E, which allows them to maintain the corridor as part of their lawn area (i.e. backyard).

The residents stated their support for the trail but suggested looking to the adjacent agricultural land to bring the trail through given the close proximity of the corridor to their homes. One resident verbally offered a strip of his property to facilitate trail development. Bergmann noted an embankment between the rail corridor and the farm property could be used to carry the trail, but it would require significant clearing of vegetation and construction of retaining walls to develop the trail on it.

- Sandra Zutes noted the agricultural land west of the corridor is actively farmed and is also one of the Town's Greenprint properties (i.e. the development rights were purchased through the Greenprint initiative). The PDR agreement may restrict bringing a trail through the Knickerbocker Farm property

- Dave Schaeffer suggested the Town of Pittsford look into whether there are restrictions on the Knickerbocker property because of the Purchase of Development Rights (PDR). Someone noted the adjacent farm properties are used for equestrian activities

- Sandra Zutes said the owner of the Knickerbocker farm property may not give permission for the trail since the property is actively farmed, noting this was of concern to several farmers the Town negotiated PDRs with

- Bergmann stated East Street is not a desirable alternative trail route due to high peak hour traffic volumes, frequent speeding traffic, and the lack of road shoulders and sidewalks. Sandra Zutes added the Little League fields on East Street in this area generate a lot of traffic and result in illegal roadside parking on East Street

Mill Road Area (Town of Pittsford)

The primary trail routing issues in this area relate to unapproved landscaping and other unauthorized manmade barriers that have been placed in the right-of-way, typically at the entrances of residential subdivision streets

- Sandra Zutes stated the unapproved landscaping is typically entry-type landscaping, not personal landscaping, and that it may simply require the Town to require its removal for the passage of the trail

Railroad Mills Road Area, Towns of Pittsford/Perinton/Victor

Bergmann Associates recommends the trail be kept to the east of Railroad Mills Road following the original corridor alignment. Note: Railroad Mills Road does use some of the railroad right-of-way for the road. The consultant recommended using Woolston Road to connect the Auburn Trail to Powder Mills Park. Much of the original ballast remains between the county line and Probst Road in the Town of Victor, which could serve as a good base for trail development.

- The Town of Perinton representative stated that connecting the trail to Powder Mills Park is a goal for the Town

Priority Trails Advancement
Auburn Line Corridor Rail-to-Trail Study
Stakeholder Committee Meeting Summary

November 21, 2003 (REVISED)

Irondequoit Creek Crossing, Town of Victor

The disrepair of the Irondequoit Creek Bridge was discussed, and several rehabilitation, restoration and reconstruction options were discussed. The consultant noted the bridge is eligible for historic structure status, which means options may be limited.

3. Roundtable Discussion - Issues and Opportunities

Marty Brewster reported on the Town of Pittsford's concurrent study of the Auburn Line corridor from French Road to Clover Street. The Town is taking a detailed look at this section of the corridor, which is heavily developed with commercial businesses, and will be establishing a policy on how to retain corridor access and trail continuity. They are working closely with adjacent commercial property owners.

Bergmann Associates inquired about ideas for possible trailhead locations. The consultant suggested trailheads at the following locations:

- Railroad Mills Road (at an existing flat, cleared area)
- An existing parking lot in Powder Mills Park off Woolston Road
- Several gated areas at the corridor's intersection with Mitchell, Thornell, and Mill Roads (space for approximately 2-4 cars)
- Little League field parking lot on East Street

Marty Brewster suggested a piece of town-owned land along Jefferson Road that is used for yard waste recycling as a potential trailhead. David Wright noted Victor's Auburn Trail construction project (now in design) includes a trailhead and parking lot at the historic Pumphouse off Main Street Fishers. Skip Bailey suggested the Little League fields off South Avenue near the Village could also a possible trailhead.

4. Public Meeting

Kristin Bennett stated the first public meeting has been scheduled for Thursday, December 11 at 7:00 p.m. at the Perinton Community Center. GTC will send a

media release to the Democrat & Chronicle but is looking to the Towns and Village to contact residents, interested groups, and local media outlets. GTC can provide a sample letter to residents and sample media release via email to those interested.

The following items were raised as issues to be mentioned at the public meeting:

- Use the corridor photos to provide a walking tour to familiarize everyone with the corridor and its current conditions
- Show the disrepair to the Irondequoit Creek bridge in the presentation
- Show an option of crossing the North Main Street bridge and utilizing the south side of the Canal in the Village as an alternative to building a new bridge over the Canal further south

This constitutes our understanding of the events of this meeting. Please provide all comments or questions concerning this summary to the writer within one week of receipt.

Respectfully submitted,

BERGMANN ASSOCIATES

Mark R. Johns, ASLA
Project Manager
200 First Federal Plaza
28 East Main Street
Rochester, NY 14614
585-232-5137 x 434
E-mail: mjohns@bergmannpc.com

www.bergmannpc.com

Auburn Line Corridor Rail-to-Trail Study
Public Meeting Summary

Perinton Community Center
December 11, 2003

The first public input meeting for the Auburn Rail-to-Trail Study was held on December 11, 2003. Approximately 40 persons attended the meeting.

Kristin Bennett from the Genesee Transportation Council (GTC) kicked off the meeting by explaining its role as the project sponsor. Funding for this study comes from GTC's Priority Trails Advancement planning program and matching funds from each community.

Mark Johns of Bergmann Associates (project consultant) gave meeting attendees a photo tour to familiarize them with the study area and the existing conditions of the corridor.

The consultant identified seven challenge areas along the corridor that will require more detailed study. These areas are:

- The Depot (Village of Pittsford)
- Schoen Place (Village of Pittsford)
- Erie Canal Crossing (Town of Pittsford)
- East Street (Town of Pittsford)
- Mill Road (Town of Pittsford)
- Railroad Mills Road (Towns of Pittsford/Victor)
- Irondequoit Creek Crossing / Main Street Fishers (Town of Victor)

The Depot / Schoen Place (Village of Pittsford)

The consultant presented three options for the trail in the Depot / Schoen Place area:

- **Option 1** utilizes Village of Pittsford land to the northwest of the Depot to bypass the Depot parking lot and connect to the existing Canalway Trail in the Village. South of the village, where the Canalway Trail intersects with an existing overhead powerline easement, the trail would head north along the easement until it reconnects with the original rail corridor. This option would utilize existing Canalway Trail road underpasses and would bypass the abandoned corridor at the rear of Schoen Place (currently occupied by commercial parking).

- **Option 2** utilizes the existing roadway and sidewalk network in the Village of Pittsford. The trail would exit the Depot parking lot and follow North Main Street to its intersection with State Street. The trail would then head southeast on State Street to the intersection with the rail corridor just beyond the village line.

- **Option 3** would follow a very similar route to Option 1, except it would reconnect with the Auburn Line corridor just south of the commercial area of Schoen Place (behind Northfield Commons and the residents fronting State Street).

Public Comments about the Depot / Schoen Place Segment

- Several meeting attendees supported utilizing the existing Canalway Trail to connect the Auburn Trail through the Village of Pittsford (Option 1). They noted this option brings trail users into the Schoen Place business district, saves money by not constructing another trail, and utilizes existing crossings and trail underpasses for State Routes 96 and 31

- One Village resident expressed concern about Option 3. He noted this area is poorly drained, very steep near the intersection with State Route 31, and would require another difficult at-grade crossing of Route 31

- One participant, an avid bicyclist, said he would not object to using the Canalway Trail, even though bicyclists are required to dismount and walk their bicycles through Schoen Place (per Canal Corporation trail regulations)

<u>Erie Canal Crossing (Town of Pittsford)</u>

The consultant presented two options were presented for crossing the Erie Canal:

- **Option 1** would utilize a new trail bridge constructed on top of the existing concrete pier and abutments that carried the original Auburn Line railroad bridge over the Erie Canal. It is recommended the new bridge span both the Canal and State Route 96 (Jefferson Road) because of grade changes and the volume and

speed of the traffic on Jefferson Road. Note: any crossing of the Canal will need Canal Corporation and State Historic Preservation Office (SHPO) approval.

- **Option 2** would cross the Canal east of the original crossing near the intersection of Jefferson Road and East Avenue. The span of this bridge would be shorter than the Option 1 bridge because it could be constructed at a 90-degree angle with the Canal. The bridge would terminate on the south side of the Canal at East Street. It is recommended an at-grade signalized crossing at East Street and Jefferson Road be investigated. Note: this option does have a historical precedence - Marsh Road once spanned the Canal and intersected with East Street

Public Comments about the Erie Canal Crossing Segment

- The question was raised about whether a trail bridge could be attached to the existing floodgates that cross the Canal in this area. The consultant stated this option had not been looked at but would be discussed with the Canal Corporation

- There was a lot of interest from residents on the south side of Jefferson Road to connect with the Canalway Trail via a new bridge (Option 1). Several people suggested this new connection would generate a lot more trail traffic

- Several residents commented that crossing at the existing single-lane Marsh Road bridge several miles east was not practical because it was too far away Presently, residents south of Jefferson Road have to travel several miles and cross the Canal via one-lane bridges at Mitchell or Marsh Roads

- Some residents felt if the Canal was to be bridged using the existing abutments (Option 1), then Jefferson Road should also be bridged or a traffic light should be installed at Knickerbocker Road to help trail users cross Jefferson Road

- Residents also supported Option 2 but only if a traffic light was installed at the intersection of East Street and Jefferson Road. Several East Street residents

noted that vehicles queue several hundred feet along East Street waiting to make turns onto Jefferson Road during peak travel times

East Street Segment (Town of Pittsford)

The consultant presented two options for dealing with the trail that abuts residential properties along East Street:

- **Option 1** would utilize the former rail corridor on its original alignment with the addition of vegetation to create a buffer between the trail and adjacent homes

- **Option 2** would route trail users onto East Street to bypass the portion of the original corridor alignment that closely abuts several residences

Public Comments about the East Street Segment

- The East Street residents that abut the corridor expressed their desire to have the trail re-routed from the original corridor alignment, which is very close to the rear of their homes. They added they currently have problems with trail users walking between their properties to access East Street

- The East Street residents that abut the corridor expressed concern about damage done to their lawns located in the ROW by trail users. They have lawn lease agreements with RG&E, which allows them to maintain this area as grass

- Several people commented they felt awkward using this section of the trail because of its close proximity to several homes

- A Pittsford resident suggested moving the trail westward onto the border of the Knickerbocker Farm property to enhance the separation between the East Street residences and the trail. Town Board member Sandra Zutes stated this might not be an option because the Town purchased the development rights to this farm, and trail use may not be an allowed use under the terms of that agreement. She

noted when the purchase agreement was made, the land owner was opposed to having a trail on the land because it is still actively farmed

- The East Street residents that abut the corridor do not like the proposed buffer (Option 1); they would like their views of the Knickerbocker Farm unobstructed

- One resident, while supportive of the trail, did complain about use of the trail by large groups like the track and cross country teams from the nearby high school

- Several residents expressed concern about trail users' safety on East Street given increasing traffic volumes and high travel speed and the on-going problems with illegal roadside parking during Little League games

- There is additional parking behind the Little League ball fields that is not well used. The Town should enforce the parking restrictions along East Street and redirect people attending the games to the existing underused off-street parking

- Several Pittsford residents requested the Town establish hours of operation for trail use (e.g. dawn till dusk) to discourage late night activity on the trail

<u>Mill Road Segment (Town of Pittsford)</u>

The primary trail routing issues in this area relate to unapproved landscaping and other manmade barriers located in the corridor, typically at the entrances of residential streets. RG & E confirmed that landscaping planted within the corridor is technically an encroachment onto their private property. The consultant recommends removing these encroachments and constructing the trail along the original corridor alignment.

Public Comments about the Mill Road Segment

- One attendee noted that several vocal property owners in this area forced the existing trail along the road (by installing barriers) when it was developed

www.bergmannpc.com

Auburn Line Corridor Rail-to-Trail Study
Public Meeting Summary

Perinton Community Center
December 11, 2003

Railroad Mills Road Segment (Towns of Pittsford/Victor)

The consultant recommends the trail be kept to the east of Railroad Mills Road following the original corridor alignment. The consultant also recommended using Woolston Road to connect the Auburn Trail to Powder Mills Park, noting that some informal footpaths currently exist between the Auburn Line corridor and a Powder Mills Park parking area off Woolston Road.

Public Comments about the Railroad Mills Segment

- There was support for connecting the trail with Powder Mills Park
- It was noted that much of the original ballast remains between the county line and Probst Road in Victor, which could serve as a good trail base
- One Railroad Mills Road resident expressed concern about impacts the trail would have on natural habitat, noting the area is diverse in bird and butterfly species. The consultant stated the trail could potentially have some impact on bird and butterfly habitats, but it is expected to be minor. Signage could be used to educate the public about sensitive habitat to help minimize impacts
- Another Railroad Mills Road resident inquired about whom would police the trail and what techniques could be used minimize undesired activities on the trail. This resident also inquired about trail maintenance needs and responsibilities

Irondequoit Creek Crossing / Main Street Fishers Segment

Due to erosion, one side of the stone arch bridge over Irondequoit Creek has weakened and collapsed. The bridge could either be restored, rehabilitated, or reconstructed, all of which are being investigated as part of this study. The bridge is an eligible historic structure, thus, any option will need to be reviewed by SHPO.

Auburn Line Corridor Rail-to-Trail Study
Public Meeting Summary

Perinton Community Center
December 11, 2003

Public Comments on the Irondequoit Creek Crossing/Main Street Fishers Segment

- A Victor resident inquired about who will be accepting liability for the trail

Other Comments

- Someone asked if horseback riding would be allowed. Kristin Bennett, GTC, stated the project Stakeholder Committee discussed equestrian use. Their recommendation is for pedestrian and bicycle use only but a formal decision was deferred until the public had an opportunity to comment

- Someone inquired whether the trail would be accessible to the disabled. Kristin Bennett, GTC, stated much of the trail could be accessible because of the corridor's gentle grades. If federal funding is used for trail development, the trail would need to meet standards for trails, parking lots, and other related amenities as defined in the Americans with Disabilities Act (ADA). Any areas of the trail not able to be made accessible due to environmental or extreme cost constraints would needed to be clearly identified

- Someone inquired if the trail would allow dog walking. Kristin Bennett, GTC, stated allowing dogs on the trail is a municipal-level decision

- A Perinton resident recommended keeping the trail off-road as much as possible to support families and children using the trail

- Trailheads and parking areas for the trail need to be identified

- Dave Schaeffer, Crescent Trail Association, noted improvement of this segment of the Auburn Trail would greatly enhance regional trail connectivity and also allow for opportunities to hold major trail events in the area

- Numerous meeting attendees expressed support for improving and extending the Auburn Trail corridor, stating it would be a good use of taxpayer monies

www.bergmannpc.com

Auburn Line Corridor Rail-to-Trail Study
Public Meeting Summary

Perinton Community Center
December 11, 2003

- Mayor Corby, Village of Pittsford, concurred with trail supporters, noting that trails have many benefits such as providing places for people to exercise and recreate, including kids and teens. Trails also provide transportation options. He added that trails can be a huge selling point for a community

- Brian Emelson, Victor Parks and Recreation Director, relayed the Town of Victor's support for this project. The Town is currently improving the Auburn Trail corridor south of Main Street Fishers funded with federal transportation dollars the Town received last year. More information about this project can be obtained by visiting www.auburntrail.com.

- A representative from a private organization, the Rochester Trolley Corporation, stated his support for the project and relayed their interest in utilizing the corridor for electric trolley service to connect Lake Ontario with the Finger Lakes

This constitutes our understanding of the events of this meeting. Please provide all comments or questions about this summary to the writer within one week of receipt.

Respectfully submitted,

BERGMANN ASSOCIATES

Mark R. Johns, ASLA
Bergmann Associates
200 First Federal Plaza
28 East Main Street
Rochester, NY 14614

585-232-5137 x 434
E-mail: mjohns@bergmannpc.com

GENESEE TRANSPORTATION COUNCIL

Kristin Bennett, AICP
Genesee Transportation Council
50 West Main Street, Suite 8112
Rochester, NY 14614

585-232-6243 x 14
E-mail: kbennett@gtcmpo.org

www.bergmannpc.com

Priority Trails Advancement
Auburn Line Corridor Rail-to-Trail Study
Stakeholder Committee Meeting Summary

January 23, 2004

Attendees:

Kristin Bennett	Genesee Transportation Council [GTC Project Manager]
Martin Brewster	Town of Pittsford Planning & Zoning
Ron Cass	Town of Perinton Public Works
Brian Emelson	Town of Victor Parks and Recreation
Tom Goodwin	Monroe County Planning
Kristen Mark Hughes	Ontario County Planning
Mark Johns	Bergmann Associates [Consultant Project Manager]
Scott Leathersich	Monroe County DOT
Dave Schaeffer	Crescent Trail Association
Dave Wright	Victor Town Board / Victor Hiking Trails

---

1. Project Recap

Kristin Bennett distributed a revised meeting summary for the November 21, 2003 Stakeholder Committee meeting. (Committee members not in attendance will receive the revised meeting summary via email.)

The goal of the meeting is to make decisions about what specific direction Bergmann Associates should take to address the seven challenge areas along the corridor when developing the draft alternatives. The challenge areas are:

- Depot/Del Monte Lodge area (Village of Pittsford)
- Schoen Place (Village of Pittsford)
- Erie Canal / Jefferson Road (State Route 96) crossings (Town of Pittsford)
- East Street Area (Town of Pittsford)
- Mill Road Area (Town of Pittsford)
- Railroad Mills Road (Towns of Pittsford, Perinton, and Victor)
- Irondequoit Creek Crossing (Town of Victor)

www.bergmannpc.com

Priority Trails Advancement
Auburn Line Corridor Rail-to-Trail Study
Stakeholder Committee Meeting Summary

January 23, 2004

2. **Consensus on Trail Development Alternatives**

Depot/Del Monte Lodge Area and Schoen Place (Village of Pittsford)

Mark informed the Committee that the overriding opinion at the December public meeting was to connect the Auburn Trail to the Canalway Trail via the Village public works land and then utilize the Canalway Trail through the Village to the power line corridor where the trail could be reconnected with the Auburn corridor.

There was a question about whether the Zornow farm property behind Schoen Place and Northfield Commons could be used for the trail in this section. While it is feasible from a design standpoint, Marty Brewster noted this farm's development rights have been purchased, which may make approvals for a trail difficult.

Bergmann will proceed with finalizing a draft alternative and cost estimates for Option 1 - using the DPW property to connect to the Canalway Trail and then reconnecting the trail with the Auburn corridor via the power line corridor.

Erie Canal / Jefferson Road (State Route 96) Crossings

Bergmann Associates reviewed the two options for crossing the Erie Canal:

1. Installing a new prefabricated bridge over the Erie Canal using the existing abutments (south of Mitchell Road). An at-grade crossing or a second bridge structure could be used to cross Jefferson Road (State Route 96).

2. Install a new prefabricated bridge over the Erie Canal at the location where Marsh Road historically crossed the Canal and connected with East Street (further south on the Canal).

Kristen Hughes felt a grade-separated crossing at Jefferson Road was preferable to an unsignalized at-grade crossing.

Priority Trails Advancement
Auburn Line Corridor Rail-to-Trail Study
Stakeholder Committee Meeting Summary

January 23, 2004

The Public's preference was to span the canal and Jefferson Road. There was no strong preference regarding crossing location; both alternatives presented were acceptable.

The Committee suggested that an at-grade crossing at East Street would be acceptable if the intersection was signalized. The bridge over the Canal on the existing bridge abutments could still be used but touch down in the parking area on the south side of the Canal. Then a short trail segment could be constructed along the south side of the Canal to bring trail users to the East Street intersection.

The Committee concurred they would like NYSDOT to investigate signalization of the East Street / Jefferson Road intersection. Kristin Bennett will contact NYSDOT to inquire about a signal warrant study as well as examine the area for a trail crossing.

East Street Area (Town of Pittsford)

The Committee discussed how it could address bringing the trail through this area given the corridor's cramped location between the Knickerbocker Farm and several homes along East Street. The Committee concurred that Bergmann should develop a cost design and cost estimates for bringing the trail through this constrained area, including the provision of vegetation screening. However, they wanted to come up with an eastern alternative that would better connect if the trail crossed the Canal at East Street (Option 2 for Erie Canal crossing listed above).

The Committee discussed utilizing public lands on the south side of Jefferson Road east of East Street. The tax parcel map prepared by Bergmann shows Canal Corporation and Town of Pittsford ownership of these properties. The trail could possibly be routed from the East Street/Jefferson Road intersection through Canal Corporation land and then through or around the perimeter of the capped Town landfill behind the Little League ball fields on East Street. The trail then could be

reconnected with the Auburn corridor further south. The Committee felt this was a superior option to utilizing East Street shoulders for the bypass around the residences.

It was suggested the former landfill property could also serve as additional overflow parking for the ball fields, where parking problems exist now. The ball fields are a destination to which the trail should be linked. Likewise, the trail and fields could share amenities like parking and port-a-johns. Dave Schaeffer added that interpretive information about the rail corridor, the Great Embankment, and the former Cartersville settlement could be included as well.

Kristin Bennett and Mark Johns will make the necessary inquiries about the Canal Corporation land and if there are any limitations on the use of the landfill property. An alternative utilizing this route will be developed.

The preferred option from the public was to remain on the ROW or utilize the Knickerbocker Farm property to bypass the short segment behind the adjacent residences. Marty Brewster will obtain an official response from the Town of Pittsford regarding the feasibility of utilizing part of the Knickerbocker Farm given the recent purchase of development rights of the farm.

Mill Road Area (Town of Pittsford)

The primary trail routing issues in this area relate to unapproved landscaping and other unauthorized manmade barriers that have been placed in the right-of-way, typically at the entrances of residential subdivision streets.

The public's preference was to keep the trail off-road as much as possible.

Priority Trails Advancement
Auburn Line Corridor Rail-to-Trail Study
Stakeholder Committee Meeting Summary

January 23, 2004

Marty Brewster noted that the corridor is not very close to homes in this area so placing the trail within the original rail corridor would not significantly affect privacy. Vegetation screening can mitigate view issues for homes closest to the corridor.

RG & E, as the owner of the corridor, could possibly act to remove the encroachments on their property. In a meeting in Fall 2003, Debra Wegman of RG & E offered to have the corridor resurveyed by their staff to determine where the encroachments were along the corridor. Kristen Hughes inquired whether the residential driveways that cross the corridor in this section have easements with RG & E. (Note: Bergmann Associates will contact RGE regarding these issues.)

Railroad Mills Road Area (Towns of Pittsford, Perinton, and Victor)

There were a few public comments on this segment of the corridor, mostly related to maintaining the natural character of the area and mitigating the trail's impact on plants and birds/insects.

The Committee concurred with Bergmann's recommendation to place the trail to the east of Railroad Mills Road following the original corridor alignment and using Woolston Road to connect the Auburn Trail to Powder Mills Park. Bergmann will investigate accommodating small parking areas on Miles Cutting and Probst Roads.

Dave Schaeffer reiterated Perinton's interest in developing a trail connection between the Auburn Trail and Powder Mills Park. Dave stated he would contact the Perinton landowner whose property is adjacent to both the trail ROW and Powder Mill Park about the possibility of allowing a connection.

Priority Trails Advancement
Auburn Line Corridor Rail-to-Trail Study
Stakeholder Committee Meeting Summary

January 23, 2004

Irondequoit Creek Crossing, Town of Victor

Public comments on this section of the challenge stressed just making the culvert repair happen while being sensitive to the historic nature of the structure. Bergmann will move forward with developing a recommended alternative for repair of the culvert, including obtaining State Historic Preservation Office reviews.

3. Clover Street to French Road Segment

Marty Brewster reviewed the Town of Pittsford's progress on its' companion study, which is examining the corridor in greater detail from Clover Street to French Road. The Town Board will be considering a Draft Policy Guide for future land use actions that would impact the corridor. The recommendation is to not let any additional commercial uses impact the corridor between Clover Street and Cornell Jewelers. Several improvements to the corridor are also included.

Marty noted there are several challenge areas in this segment of the corridor, including the section between McDonald's and Clover Street, buffering issues with Oak Hill Country Club, and the Town's own access management interests. He added that a trailhead for the Erie Canal Trail on the other side of Monroe Avenue has been included as part of the Spring House renovations and new plaza construction adjacent to the Spring House. The Town would like to establish a midblock crossing with median for pedestrians at this location; however, NYSDOT is reluctant to allow the crossing.

www.bergmannpc.com

Priority Trails Advancement
Auburn Line Corridor Rail-to-Trail Study
Stakeholder Committee Meeting Summary

January 23, 2004

4. Other Comments

The Committee discussed trail maintenance and enforcement issues. All communities in attendance noted that maintenance would be done through a combination of municipal services and volunteer assistance. It was suggested the corridor not be designated as parkland because, if the corridor use needs to change in the future, it would require alienation of the property if it were dedicated parkland.

This constitutes our understanding of the events of this meeting. Please provide all comments or questions concerning this summary to the writer within one week of receipt.

Respectfully submitted,

BERGMANN ASSOCIATES

Mark R. Johns, ASLA
Project Manager
200 First Federal Plaza
28 East Main Street
Rochester, NY 14614
(585) 232-5137, ext. 434
E-mail: mjohns@bergmannpc.com

GENESEE TRANSPORTATION COUNCIL

Kristin Bennett, AICP
Bicycle/Pedestrian Program Manager
50 West Main Street
Suite 8112
Rochester, NY 14614
(585) 232-6243, ext. 14
E-mail: kbennett@gtcmpo.org

www.bergmannpc.com

Priority Trails Advancement
Auburn Line Corridor Rail-to-Trail Study
Stakeholder Committee Meeting Summary

June 28, 2004

Attendees:	
Mike Garland	Town of Pittsford Comm. DPW
Scott Leathersich	Monroe County DOT
Steve Beauvais	NYS Department of Transportation – Region 4
Kristin Bennett	Genesee Transportation Council
Martin Brewster	Town of Pittsford Planning & Zoning
Sandra Zutes	Pittsford Town Board
Mark Johns	Bergmann Associates

---

1. Jefferson Road (Route 96)/East Street Crossings

Mark Johns reviewed the results of a meeting held on site on May 7 2004 with representatives of the DOT (Steve Beauvais, Matt Oravec, and Paul Spitzer) and Sandy Zutes, Town of Pittsford:

- DOT said they recently looked at need for signal at East Street and it was not warranted.
- They felt there are sufficient gaps for an at-grade crossing – can locate bridge and/or trail to optimize sight distance for best crossing.
- One technique identified to reduce the number of pedestrian crossings across Jefferson Road would be to locate trail parking on either side of Jefferson Road (theory is that most people will drive to the site, park, and go north or south, thereby reducing potential number of crossings).
- Best option appears to be – utilize existing piers, cross canal at former rail ROW, touch down on canal side, cross Jefferson somewhere between Knickerbocker and East Street (utilize DOT or Canal Corp. lands to re-access ROW) and stay on original ROW. Can provide link to park/ball fields from MCWA easement. Can stripe crossing of Jefferson Road with high visibility crosswalks.
- DOT said they don't anticipate a major increase in ADT (currently ≈ 16K) over the next several years – Jefferson Road will not be widened. (Kristin Bennett offered to have GTC's traffic modeler provide the expected traffic growth on Route 96 and East Street over the next 10 and 20 years from the region's traffic model to confirm this assumption).

Sandy Z. noted that at the intersection of Jefferson and East Street, motorists are waiting for a gap to turn left and may not be as aware of bikes/peds. Given that, a mid-block crossing may be marginally safer.

Steve B. will check on how close the signal warrant came for the intersection.

www.bergmannpc.com

Priority Trails Advancement
Auburn Line Corridor Rail-to-Trail Study
Stakeholder Committee Meeting Summary

June 28, 2004

It was determined that the preferred alternative will be to follow the existing ROW alignment and cross the canal at the original crossing and span Jefferson Road too. A sub-alternative will be an at-grade crossing of Jefferson in the vicinity.

Steve Beauvais noted that overhead clearance over the Canal and Jefferson Road (15' minimum) needs to be maintained for passage of oversized vehicles

Mark Johns was asked to research the lawn license agreements coverage and to see if it included the provision for a trail or the ability to install retaining walls on RGE property and confirm with RGE. He also should find out if RGE has any immediate or long-term plans for infrastructure improvements along the corridor.

2. Public Meeting

It was decided to hold the next public meeting in the Town of Pittsford during the month of August (avoid Mondays or Tuesdays). The Town would like to review the final presentation prior to the meeting. GTC will suggest possible dates and contact the full Stakeholder Committee.

This constitutes our understanding of the events of this meeting. Please provide all comments or questions concerning this summary to the writer within one week of receipt.

Respectfully submitted,

BERGMANN ASSOCIATES

Mark R. Johns, ASLA
Project Manager
200 First Federal Plaza
28 East Main Street
Rochester, NY 14614
585-232-5137 x 434
E-mail: mjohns@bergmannpc.com

www.bergmannpc.com

Priority Trails Advancement
Auburn Line Corridor Rail-to-Trail Study
Public Meeting Summary

King's Bend Park, Pittsford
September 9, 2004

PROJECT COMMITTEE MEMBERS IN ATTENDANCE

Steve Beauvais, NYSDOT
Kristin Bennett, Genesee Transportation Council
Marty Brewster, Town of Pittsford
Mayor Bob Corby, Village of Pittsford
Brian Emelson, Town of Victor
Mark Johns, Bergmann Associates (consultant)
Scott Leathersich, Monroe County DOT
Ted Liddell, Bergmann Associates (consultant)
Jane Luce, Town of Victor
Dave Schaeffer, Town of Perinton
David Wright, Town of Victor
Sandra Zutes, Town of Pittsford

Sandra Zutes, Town of Pittsford, welcomed everyone to the meeting. She introduced members of the trails project's steering committee in attendance as well as staff from the Genesee Transportation Council (GTC), which provided funding for the planning study, and staff from Bergmann Associates, the local consulting firm providing planning and design assistance on the project.

Kristin Bennett, GTC, explained the source of the funding for this planning study, GTC's Priority Trails Advancement program. The goal of the PTA program is to help local communities advance concept–level planning and design for high priority trail projects in the region, which may help communities be more successful in seeking funding and/or implementing these projects.

Mark Johns, Bergmann Associates, presented the draft recommendations. The goal of the study is to develop concept plans and cost estimates for upgrading existing sections of trail to a stone-dust multi-use trail and completing undeveloped segments in the same fashion for non-motorized users. Recommendations for adding a crossing of the Erie Canal and an above grade or at-grade crossing of Jefferson Road are included as is the repair of the historic stone arch culvert over Irondequoit Creek.

PUBLIC COMMENTS ON THE DRAFT RECOMMENDATIONS

To facilitate the public input portion of the meeting given the large number of persons in attendance, questions and comments were taken by study segment:

Clover Street to French Road

- Will the trail be completed all the way to Clover Street given the existing encroachments on the corridor in that section? It seems like some of the corridor is now parking lot for some of the businesses. Is the trail on the golf course? Could it be built there?

Priority Trails Advancement
Auburn Line Corridor Rail-to-Trail Study
Public Meeting Summary

King's Bend Park, Pittsford
September 9, 2004

Marty Brewster, Town of Pittsford Planning and Zoning director explained that the Town is currently working with each property owner to rectify existing encroachments and to obtain easements for the trail through any new or redevelopment of properties along the corridor. He added that actually a portion of the golf course is on the right-of-way (ROW) but there has been no discussion to put the trail on the golf course.

- The trail would be an asset to those businesses along Monroe Avenue.
- Has the Town of Brighton expressed interest in extending the trail north of Clover Street?

Kristin Bennett, GTC, explained the Town has included the corridor as a proposed trail in its recent master plan update. Like the Town of Pittsford, Brighton is also retaining easements for trail access as properties are developed or redeveloped.

French Road to Schoen Place/Village of Pittsford

- The trail could afford excellent opportunities to view some of the farmland protected under the Town of Pittsford's GreenPrint Initiative.
- There is a steep slope within the Village's public works property where the trail connection between the Auburn corridor and the Canalway Trail is proposed. Will this be able to be made accessible to persons with disabilities? Is this a requirement for trails?

This segment of the trail may not be able to meet accessibility guidelines for slope. The goal is to make as much of the trail accessible as possible but some existing environmental conditions may not allow for a reasonable accommodation. Any segment not meeting Americans with Disabilities Act (ADA) guidelines would be marked and signed so that persons with mobility challenges are aware of the situation. It is expected the vast majority of the trail would be accessible as it is on a flat railroad grade.

- Using existing Canalway Trail through Schoen Place is beneficial because it already deals with the road crossings and does not impact the businesses that use it for parking

Currently the corridor is used for parking for the adjacent businesses (e.g. Towpath Bike Shop, Coal Tower Restaurant), which is already in short supply in the Village. It is recommended the trail route follow the existing Canalway Trail through the Village, utilizing its existing at-grade and below grade crossings of State Route 96 and 31 as opposed to trying to create new at-grade crossings of these busy roads. This option is also more cost effective as it utilizes the existing Canal-owned and maintained trail.

Priority Trails Advancement
Auburn Line Corridor Rail-to-Trail Study
Public Meeting Summary

King's Bend Park, Pittsford
September 9, 2004

- Could the trail go along the Zornow farm property to the west of the original corridor?

  Sandra Zutes, Pittsford Town Board, explained this farmland was preserved under the Greenprint program, which does not allow new development on the property.

- What is the reason for using the power line easement to connect back to the Auburn corridor? Why not just use the Canalway Trail all the way to the Erie Canal crossing?

  It routes the proposed trail back onto the original railroad alignment and also creates a trail loop in that area, which was suggested during the first public input period. The corridor also has a dense tree canopy, offering an additional pleasant experience to trail users.

Erie Canal /Jefferson Road (State Route 96) Crossings

- Is a traffic signal totally out of the question at the East Street/Jefferson Road intersection?

  Steve Beauvais, NYSDOT, explained that NYSDOT staff completed recent traffic analysis for this intersection to support this project, and it did not meet the necessary warrants for a traffic signal now. Kristin Bennett added that GTC reviewed its regional traffic forecasting model for this area, which suggested there will be limited growth in traffic at this intersection and along Route 96 and East Street over the next 20 years.

- Would a tunnel under Jefferson Road be a better option, perhaps less expensive?

  Mark Johns explained tunnels have been used for trails in this area, but the grade differential from crossing over the Erie Canal and then getting down underground would be too great in such a small area. In this situation, a tunnel would not likely be less expensive and some people may have security concerns with a tunnel.

- What is the bridge height requirement over the Canal? How tall would a bridge over Jefferson be?

  The bridge over the Erie Canal would need to be a minimum of 14 – 14½ feet above the water surface. A bridge over Jefferson Road would need to be a minimum of 15 feet over the road.

  Mark Johns added that ADA accessible ramps are included in the concept design and cost estimates, which would get trail users down to access parking and Jefferson Road. The preferred option is to cross both the Canal and Jefferson Road above grade, but cost is a factor. One

Priority Trails Advancement
Auburn Line Corridor Rail-to-Trail Study
Public Meeting Summary

King's Bend Park, Pittsford
September 9, 2004

recommendation is to create parking areas on both sides of Jefferson Road so users wishing to travel north on the trail could park along the Canal and trail users wishing to go south on the trail could park on the south side of Jefferson Road to minimize crossings.

- Would a traffic signal at Jefferson Road and East Street be cheaper than the bridge?

  Yes, it would be less expensive but a traffic signal must be warranted before it can be installed. At this time, the intersection does not meet warrants for a signal. The at-grade crossing at Jefferson Road and East Street would present the problem of reconnecting the trail to the ROW corridor behind the East Street residences.

- Several people commented that they would not feel comfortable crossing Jefferson Road at grade because of the speed and volume of traffic and preferred the bridge option across Jefferson.

  NYSDOT noted the speed limit of Jefferson Road, which currently transitions from 55 mph to 35 mph in the vicinity of the crossing, could be shifted eastward so the at-grade, mid-block crossing occurs at the 35 mph zone.

- Any indication of number of trail users? Could the number of users justify a signal at the East Street/Jefferson Road intersection?

  Kristin Bennett explained there is no real trail traffic model to forecast the expected number of trail users, but noted Canalway Trail traffic between Brighton and Fairport is moderate to heavy per manual trail traffic counts taken outside this study. Steve Beauvais, NYSDOT, noted that conditions can be investigated after the trail is installed to see if a signal warrant is met due to crossing pedestrian and bicycle traffic. The Town would need to request a new study in writing.

- Could the flood gate be a possible option for crossing?

  Mark Johns responded that the flood gate is not a crossing option due to its design and function.

- Would a perpendicular bridge over the Erie Canal be better?

  This option was investigated but is more costly than crossing the Canal using the original existing abutments.

- Adding a crossing over the Canal will likely increase trail use on the southern portion of the Auburn Trail because people would be able to connect directly to and from the Canalway Trail

Priority Trails Advancement
Auburn Line Corridor Rail-to-Trail Study
Public Meeting Summary

King's Bend Park, Pittsford
September 9, 2004

East Street Section

- How would the trail go from right-of-way behind the houses and then up the steep grade that exists?

  Mark Johns explained this section may be difficult to make accessible to the disabled and that more detailed options would need to be looked at if the trail project is progressed.

- Could the trail cross Jefferson Road further south and come up through the Little League field parking area and then across East Street back onto the railroad corridor?

  Mark Johns explained this was investigated but may not be possible due to restrictions placed on land use of former landfills – the area behind the fields is a former landfill. Additionally, crossing East Street and reconnecting with the original rail corridor is also problematic. A goal expressed during the first public input period was to keep the trail on the original corridor. This alternative deviates substantially from the ROW corridor.

- Could trail be put on the Knickerbocker farm, possibly by purchasing a strip of the property?

  Sandra Zutes explained that the terms of the Purchase of Development Rights for the Knickerbocker Farm do not allow for new development. Additionally, the Knickerbocker Farm is still private property and an active farm.

- What is being done about the drainage problem between the farm and the East Street houses?

  Marty Brewster explained the Town, RG & E, and the Knickerbocker family is currently working on a solution to the existing drainage problem, but it was too soon to provide any details on a likely solution. The trail is being considered in these discussions.

Mill Road Section

- Cars travel at high speeds on Mill Road mixing with trail users. It was noted that Mill Road is also heavily used by motorcyclists.

- There are some trespassing problems on the Auburn Corridor by snowmobilers in the winter.

- The blind curve near a sheep farm may be a problem for trail users in terms of visibility when crossing Mill Road.

Priority Trails Advancement
Auburn Line Corridor Rail-to-Trail Study
Public Meeting Summary

King's Bend Park, Pittsford
September 9, 2004

- High visibility crosswalk markings should be added to the trail's intersection with Thornell Road

- The corridor should just be cleared and better marked but not upgraded to a stone dust surface, recommending that trail use should be assessed before investing more money.

- How far away will the trail be from the houses in the Auburndale Road subdivision?

  Mark Johns stated the corridor is very wide in this area – around 100 feet wide – so the trail would be a good distance away from the houses in terms of privacy. He added that the area is heavily wooded/landscaped and has a lot of native vegetative growth, which can help screen the trail from neighboring houses.

- How will the trail connect with Powder Mills Park?

  Mark Johns described an on-street option using Woolston Road. David Schaeffer, Town of Perinton, noted there may be an opportunity to use a foreclosed farm property or other off-street route through property yet to be acquired, however, the connection may involve steep grades.

Railroad Mills Road Segment

- Concern was expressed about the trail providing easier access to people's property for criminals. One family noted they had been the victims of two burglaries and that they also have problems currently with underage drinking in Powder Mills Park, which is adjacent to their property.

- Some residents expressed concern about potential impacts on wildlife if the trail is widened and more people start using it

- The trail would be a great option for the children in the area as well as runners, bicyclists, and parents with strollers – there is a large number of pedestrians that use the roadway and the trail would be a much safer alternative.

Victor Trail Segment Including Irondequoit Creek Crossing

- The wildlife adds to the quality of life in this area. Why weren't nature groups/science groups involved in the trail project?

Priority Trails Advancement
Auburn Line Corridor Rail-to-Trail Study
Public Meeting Summary

King's Bend Park, Pittsford
September 9, 2004

- A representative from an Ontario County-based snowmobile club requested that the trail be open to snowmobiling, noting statistics in the growing demand for snowmobiling. Snowmobile use would only be between December 15 and March 1 every year, and funding from the State Snowmobile funds may be available to help fund trail development. He referred to a petition signed by dozens of snowmobilers in Ontario County that was submitted to GTC during its Regional Trails Initiative plan development.

- Several people commented that it would be a good thing to reestablish the crossing at Irondequoit Creek and preserve the historic appearance of the stone arch culvert.

OTHER GENERAL COMMENTS

- One resident stated she felt the whole trail concept is excellent, is worth the money that would be spent, and is a long time coming for many residents.

- Where is money to develop this trail going to come from?

  The final report that will be produced from this study will serve as a tool to help the local communities seek funding. The report will include cost estimates for developing the trail as well as estimates for on-going maintenance. It will also include suggested strategies for implementation. There are competitive federal and state sources of funding. Additionally, local communities can consider allocating funds and/or town forces to develop the trail in part or in whole.

- Pedestrians and bicyclists using this corridor is a very benign use considering its original use as a rail corridor.

This constitutes our understanding of the events of this meeting. Please provide all comments or questions concerning this summary to the writer within one week of receipt.

Respectfully submitted,

Bergmann Associates and Genesee Transportation Council

Appendix B:
Canal Crossing Supplemental Information

BRIDGE OVER ERIE CANAL

The proposed pedestrian bridge over the Erie Canal is a 2-span (180 ft- 150 ft) structure utilizing the existing abutments and pier from an abandoned railroad bridge. The new bridge will need to satisfy the 15'-6" minimum vertical clearance over the canal.

A site visit was performed on August 23, 2004. Visual observations indicate the existing concrete substructure elements to be in relatively good condition; exhibiting areas of concrete scaling and isolated spalls.

The proposed bridge and ramp construction consists of the following:

- Prefabricated steel truss bridges providing a 10-foot clear walkway.
- Abutment bridge seat modifications to accommodate the canal minimum vertical clearance. Need to raise existing abutments approximately 3 feet.
- Abutment and pier concrete surface repairs to the areas in the vicinity of the new bridge crossing.
- Ramp structure (164 feet long) comprised of segmental block retaining walls, concrete walkway surface, concrete coping and steel pedestrian railing.

Opinion of Probable Construction Cost:

Bridge Structure	$650,000
Abutment Repairs	$200,000
Ramp Structure	$210,000
Total Cost	$1,025,000 ... say $1.1 million

060

ADDITIONAL BRIDGE SPAN OVER JEFFERSON ROAD

As an option, one additional 250-foot long span over Jefferson Road was investigated. This would be a prefabricated truss superstructure supported on concrete abutments founded in drilled shafts. The new bridge will need to satisfy a 14'-6" minimum vertical clearance over the roadway.

The bridge and abutment work associated the 2-span structure crossing the canal will be the same for this option. The additional work required for the Jefferson Road crossing includes the following:

- Prefabricated steel truss bridges providing a 10-foot clear walkway.
- Two reinforced concrete abutments; tall abutment on north side of road and stub abutment on south side of road.

RETAINED FILL SECTION?

Memorandum

- A 75-foot long connection segment between the canal crossing south abutment and the roadway crossing north abutment. Segment to be constructed utilizing segmental blocks.
- Ramp structure (207 feet long) comprised of segmental block retaining walls, concrete walkway surface, concrete coping and steel pedestrian railing.

Opinion of Probable Construction Cost: (TOTAL FOR 3 SPANS)

Bridge Structure	$1,525,000
Abutment Repairs	$ 165,000 200,000
Ramp Structure	$ 325,000
Total Cost	$2,~~015~~050,000 … say $2.0 million

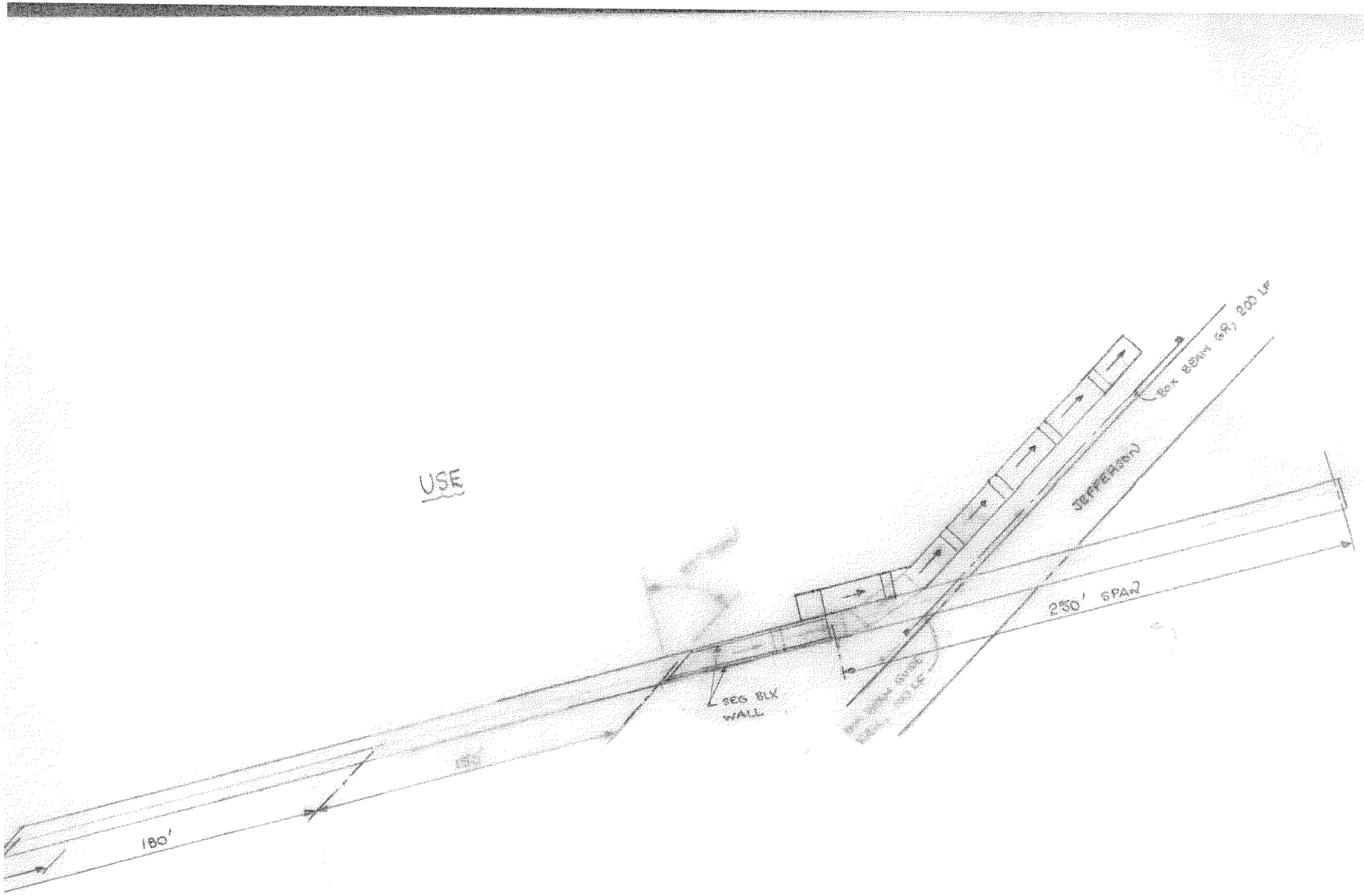
Therefore, the additional span over Jefferson Road is $0.9 million more costly than providing a 2-span bridge over the Erie Canal.

Δ FOR ADDITIONAL SPAN o/ JEFFERSON

BRIDGE	$1,525,000 -	650,000	= $875,000
ABUT REP	$200,000 -	200,000	= 0
RAMP	$325,000 -	210,000	= 115,000
			$990,000

B E R G M A N N
associates
Engineers/ Architects/ Surveyors
200 First Federal Plaza, 28 East Main Street, Rochester, NY 14614
585.232.5135/585.325.8306 fax

Hoboken, NJ / Philadelphia, PA / Pittsburgh, PA / Buffalo, NY / Jacksonville, FL / Toledo, OH / Lansing, MI


USE
180'
SEG BLK WALL
250' SPAN

180'
150'
57° SKEW
BAR BEAM GUIDE
RAIL, 100 LF
TEFLON SLIDE

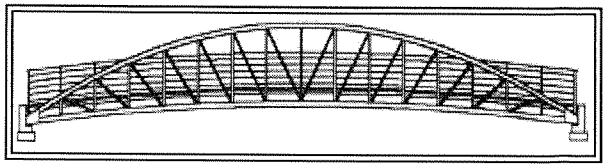
MEADOW COVE
ROAD
CANAL
ERIE
JEFFERSON ROAD

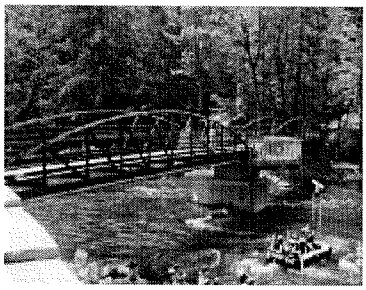
MEADOW COVE
ROAD
CANAL
ERIE
JEFFERSON ROAD

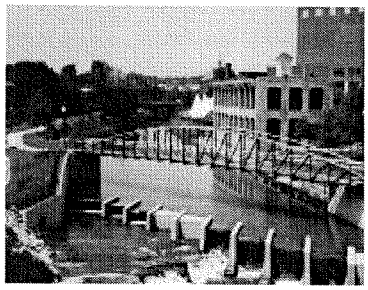
STEADFAST BRIDGE COMPANY

Bridge Styles

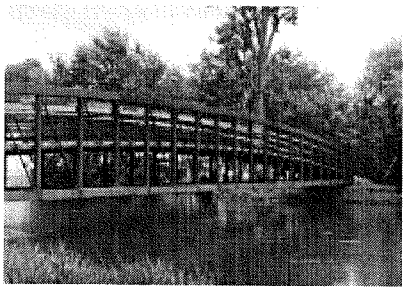
The **KEYSTONE**
-Bow Truss-



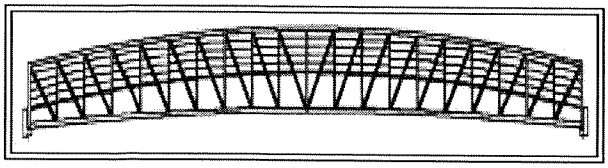




Steadfast Bridges is responsible for bringing this old favorite back to the market place.Standard designs go to 120' clear span. The **Keystone** can be furnished for spans to 250'. The properties of the ageless parabolic curve still offer one of the most efficient structural designs. The nostalgic appearance of the popular bow truss is still in high demand. The depth at the center is usually 10% of the clear span. With longer spans, the center depth may be reduced to 7% of the span.



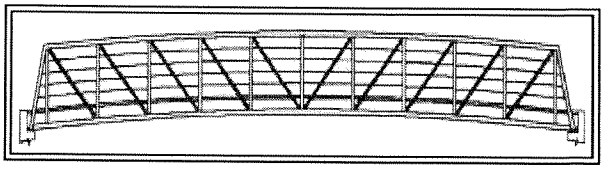
The **CAPSTONE**
-Modified Bow-

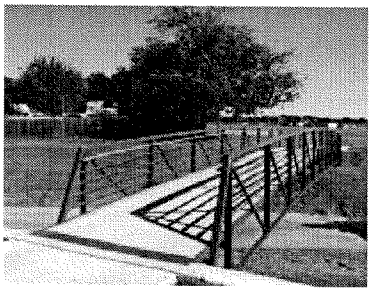


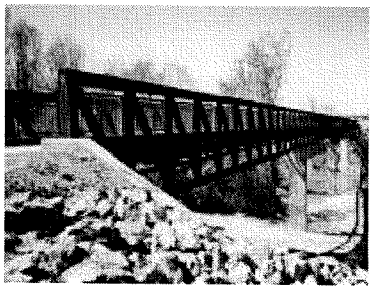
Steadfast Bridges introduces the **Capstone Series** for projects requiring a long span bridge with limited approach space. The truss height of the **Capstone** varies to allow a low abutment backwall while still maintaining maximum truss depth at the center. This modified bow truss design also allo a constant rail height for an unobstructed view over the top chord. The **Capstone** is perfect for longer spans up to 250'.

The **CONNECTOR**

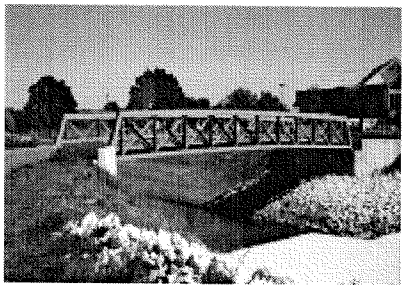
-Pratt Truss-





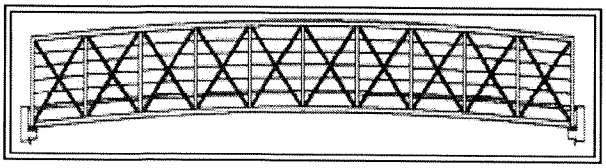


The **Connector** is the most familiar truss design. Our standard designs go up to the 120' clear span range. By increasing the truss depth and raising the floor to form an "H", these spans can be increased to 220' for an efficient design.



The **LINK**

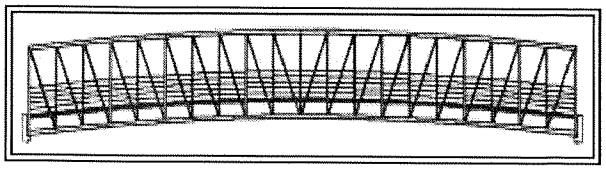
-X Brace Truss-

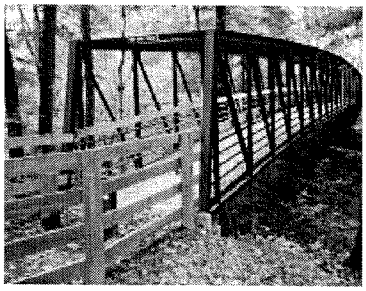


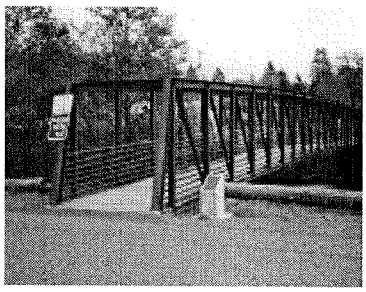
This attractive companion to the **Connector** design is only slightly more expensive. The X brace panels add to the symmetry and beauty of the **Link** series. The **Link** is also available in spans to 220' similar to the **Connector**.

The **GATEWAY**

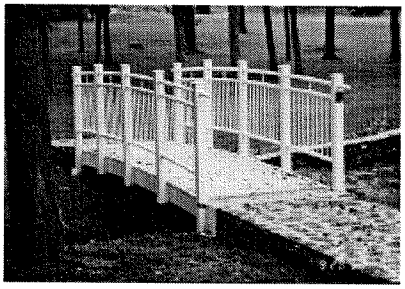
-Portal Bridge-

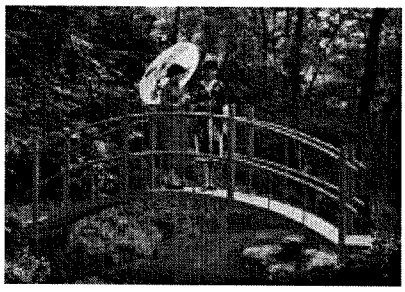






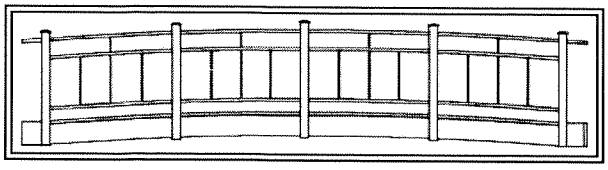
The box, or portal bridge is the most common truss design for vehicular bridges. We rely on the stability of the box girder for the longer spans of up to 240' and in the instances where heavier loading conditions may be required. Even these longer, heavier spans can usually be erected in less than one day! This design is particularly useful in highway and railroad overpasses where a security chain link fence is factory installed.





The **EDO**

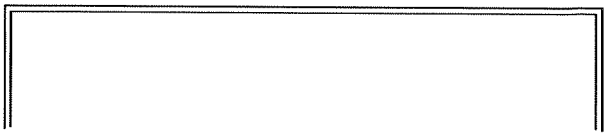
-Oriental Style-

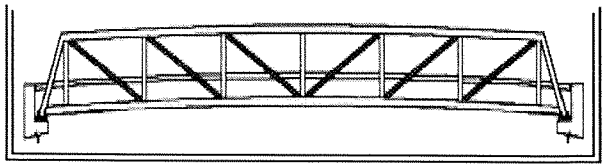


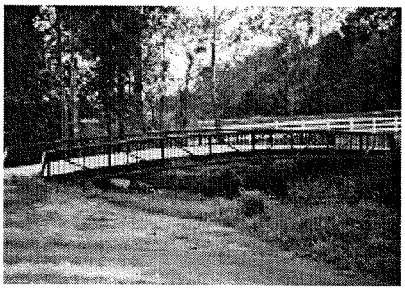
Although our original thought was to provide an attractive bridge for the landscape architect, the Oriental look has been applied to many other uses, even vehicular bridges. **Edo** is the ancient name for Tokyo and this style bric has been popular all over the United States. The **Edo** has been particularly useful on golf courses and as an architectural feature for buildings and gardens.

The **EXPRESSWAY**

-Low Rail Height-







Golf course bridges are one of our specialties at **Steadfast**. The variety of designs is the main reason for our leadership in this field. We attach every plank of our wood floors with a least two plated fasteners at each crossing support and thru-bolting a high-strength steel bar along each edge. This method prevents noisy slapping of boards for golf cart use and inhibits warping of the wood. Our rugged design also provides the needed capacity for maintenance vehicles and pick-up trucks.

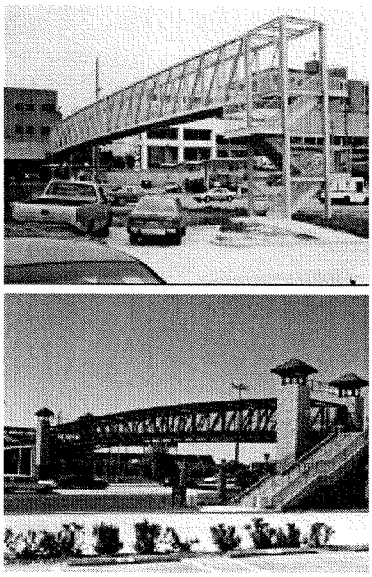
The **CABLE STAYED**
-Long Clear Spans-

The **Steadfast Cable Stayed** design is an economical solution to long clear span pedestrian and light vehicular bridges. The Cable Stayed Bridge has been a popular design option since **Steadfast** made it available. Quite often is the best answer to staying completely out of flood plains and environmentally sensitive wetland areas. The cost is low and the beauty and aesthetics are invaluable on the Cable Stayed Bridges spanning 180' to 400

OVERPASSES

The saturation of our highways and the requirement for safety has steadily increased the demand for this product. The **Gateway** box girder design has been the natural style for the overpass due to the ability to attach a security

fence to the steel framework. Federal guidelines require this protective fence which we normally install at our plant before shipment. This is a safety requirement for schools, hospitals and shopping centers. Overpasses can be provided with stairs and ramps. These ramps meet the requirements of the **Americans with Disabilities Act.**



Home

Appendix C:
Stone Arch Culvert Supplemental Information

Memorandum

To: Mark Johns

From: Jim Kaniecki

Date: 9/01/04

Re: Victor Trail

C:

The purpose of this memorandum is to summarize the results of a preliminary cost analysis for the rehabilitation of the existing stone arch culvert and the construction of a new Erie Canal crossing.

STONE ARCH CULVERT

A site visit was performed on August 23, 2004. The existing stone arch culvert crossing Irondequoit Creek is in a state of disrepair. The condition of the culvert is the same as noted in the October 18, 2001 Memorandum prepared by Rick Howard (see attached). Basically, the upstream 2/3 of the arch has collapsed into the creek and the stones have since washed away. Large portions of the embankments on both sides of the creek have eroded into the stream. Currently, the trail path dips downward several feet and only a 6-foot wide path is traversable over the remaining culvert portion.

It is proposed to reconstruct the culvert to its original geometry. Proposed rehabilitation measures include:

- Install a precast concrete arch on concrete footings in the collapsed area … abut to the existing arch and provide a cast-in-place concrete closure pour.
- Reconstruct the upstream headwall in stone masonry to resemble the original headwall.
- Perform mortar joint repointing in the existing stone masonry arch and wingwalls, as needed.
- Backfill the culvert to an elevation 6 feet above the existing top of trail.
- Install stone slope protection at the ends of the upstream wingwalls.

Opinion of Probable Construction Cost: $200,000

Reconstruction of the collapsed portion utilizing stone masonry construction is assumed to cost twice as much as that for a precast concrete arch.

B E R G M A N N
associates
Engineers/ Architects/ Surveyors
200 First Federal Plaza, 28 East Main Street, Rochester, NY 14614
585.232.5135/585.325.8306 fax

Hoboken, NJ / Philadelphia, PA / Pittsburgh, PA / Buffalo, NY / Jacksonville, FL / Toledo, OH / Lansing, MI

Stuart I. Brown Associates, Inc.
Planning and Management Consultants

640 CrossKeys Office Park
Fairport, New York 14450
Phone (716) 223-3430
Fax (716) 223-0468
e-mail: sibrown@frontiernet.net

Proj. No. 5330
Original Victor
Enclosures
Copies to RME
BMD

October 17, 2001

Ruth Pierpont, Director
NYS Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services
Pebbles Island, P.O. Box 189
Waterford, New York 12188-0189

RE: Auburn Trail Improvements, Town of Victor

Dear Ms. Pierpont:

The Town of Victor is in the process of developing plans for the construction of improvements to the Auburn Trail which extends approximately nine miles across the Town in a northwest/southeast direction. This trail is currently an un-improved footpath located along abandoned railroad rights-of way. The Town, together with The Village of Victor, Victor Hiking Trails Inc., and the Victor Local Development Corporation, will be seeking federal grant assistance under the Transportation Enhancement Program to improve the trail.

The northern-most segment of the trail is located along Irondequoit Creek. At a point west of Fishers Road and north of Interstate 90, the trail crosses over Irondequoit Creek via a stone arch bridge (see attached location map). This bridge, which is believed to date from the 1850's, is significantly deteriorated and is falling into the creek below. As described in a memo from the engineer who evaluated the bridge, two-thirds of the existing bridge structure has collapsed into the creek and many of the stones have washed away (see attached memo). Photographs of the remaining portions of the bridge are included with this correspondence.

As part of the trail improvement project, the Town of Victor and its co-applicants, are considering options to replace or repair the bridge. The option currently favored by the Town is to repair the bridge. The repair option would retain the portion of the stone arch that is still standing and replace the collapsed portion with a pre-cast concrete arch of the same dimensions. The replacement option would consist of removing the stone arch bridge and replacing it with a precast concrete arch with dimensions similar to the existing bridge.

On behalf of the Town, we are requesting you review the enclosed information and photographs and provide us with guidance on how the Town might best proceed with the project in order to meet applicable historic preservation standards. Specifically, we would appreciate your comments and suggestions regarding the repair or replacement options described above, or other actions that would be considered acceptable from a historic preservation standpoint. Do not hesitate to call me if you have any questions.

Sincerely,

Stuart I. Brown
Grants Consultant
Town of Victor

SIB/kss
Enclosures

c: J. Richter, Supervisor (w/o enc)
R. Howard, Bergmann Associates (w/o enc)

BERGMANN associates

Engineers / Architects / Planners / Surveyors

Memorandum

DATE: October 18, 2001

TO: Stuart I. Brown, Stuart I. Brown Associates
Kathy Spencer, Stuart I. Brown Associates

FROM: Rick Howard, Bergmann Associates

RE: Town of Victor, Auburn Trail Grant Application

As requested, I performed a cursory review of the existing stone arch bridge condition on October 9, 2001. The stone arch condition is as follows:

The upstream 2/3 of the arch has collapsed into the creek. Most of the stones have washed away, but some do remain in the collapse area. In the collapse area the northern wall of the arch is completely gone and all that remains is a pile of stones. The northwest wingwall of the arch is still standing, but has settled unevenly into the creek. The southwest wingwall is still standing. Only the lower portion of the south wall in the collapse area remains.

The collapse may have been caused by stream scour and undermining of the arch foundations. The upstream creek approaches the arch at an angle such that flow is directed into the northern wall of the arch.

The arch collapse has caused a large portion of the northern embankment to erode into the stream. Portions of the southern embankment have also eroded into the stream. This erosion is not a static condition and threatens the portion of the structure that is still standing. During periods of high flow the stream scours behind the north wall of the arch that is still standing. This scour may cause additional sections of the arch to collapse as it advances. Comparison of the present conditions with photos from the summer of 1999 indicates that some additional sections of the arch have collapsed in the last two years.

The downstream 1/3 of the arch that remains is in fair condition. At the base of both downstream wingwalls there is mortar loss around some of the stones. A couple of the stones are missing at the northeast wingwall and some settlement of individual stones is evident at both wingwalls. This is also not a static condition and will continue to worsen unless corrected.

AUBURN TRAIL IMPROVEMENTS AND CONNECTIONS

PROPOSAL STAGE OCTOBER 15, 2001

STONE ARCH BRIDGE

NOTES:
1. Two-thirds of the existing bridge has collapsed into the creek. Most of the stones have washed away.
2. Two options were considered - repair of the existing bridge and complete replacement.
3. The repair option would retain the portion of the stone arch that is still standing - necessary repairs would be made to it. The collapsed portion would be replaced with a precast concrete arch of the same dimensions. Reconstruction of the collapsed portion with stone masonry would likely be cost prohibitive.
4. The replacement option would consist of a precast concrete arch with dimensions similar to the existing arch.
5. Costs for each option were calculated and found to be the same.

	UNIT PRICE	PAY UNIT	QUANTITY	TOTAL COST
* Repair or Replacement of Stone Arch Bridge	$8,333	Linear Foot	30	$249,990
SUBTOTAL:				$249,990
15% CONTINGENCY				$37,500
5% LUMP SUM CONTRACT ITEMS:				$12,500
SUBTOTAL:				$300,000
10% ENGINEERING & DESIGN FEES:				$30,000
STONE ARCH BRIDGE TOTAL:				**$330,000**

TRESTLE BRIDGE

NOTES:
1. Costs do not include existing bridge substructure repairs, steel repairs or painting of the structure.
2. Approximate size of the new deck would be 16 feet wide x 150 foot length.

* Remove Existing Timber Railroad Ties	$12	Square Foot	2,400	$28,800
* Install New Laminated Wood Panel Decking	$22	Square Foot	2,400	$52,800
* Install New Railings	$60	Linear Foot	400	$24,000
SUBTOTAL:				$105,600
15% CONTINGENCY				$15,800
5% LUMP SUM CONTRACT ITEMS:				$5,300
SUBTOTAL:				$126,700
10% ENGINEERING & DESIGN FEES:				$12,700
TRESTLE BRIDGE TOTAL:				**$139,400**

10/10/01

(1.) Stone arch replacement cost:

NYSDOT slide: break sheet - 5/95 → Con-Span, 20' span, 7' rise

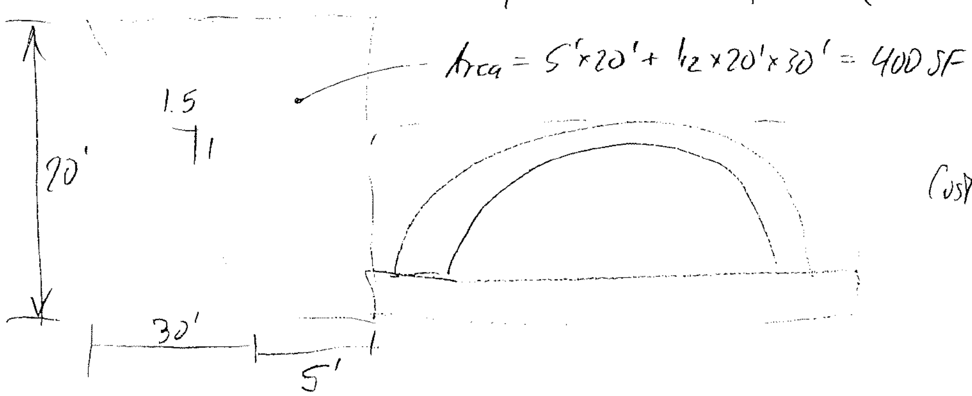
Cost = $3367/LF w/o piles or highway section (includes concrete invert)

Assume complete replacement → 1.2 inflation × 30 length × $3367
= $121,212 ← 10' wide trail + 10' each side

(FYI-
Hy-span → ($3839+866)(1.2 inflation)(30') = $169,380)

Not sure if wingwalls included → add from Rte 78: 794 SF × $38/SF × 1.2 infl.
= $36,207

Add for extra excavation/backfill @ $50/CY: ($25 exc., $25 backfill)



Cost = ($50/CY)(1/27)(400SF)(60')
= $44,445

Stream channel protection: 30' wide × 30' long × 2' thick × 1/27 × 2 ends × $100/CY
= $13,334

Railings: 100' × $50/LF = $5,000

TOTAL = $220,198

(2) Keep exist. arch in good cond. (10'± length), replace collapsed 20'± width with precast conc. arch and wingwalls:

1.2 infl. × 20' length × $3367 × 1.3 cost premium for non-std. arch = $105,051

Wingwalls → $18,100

Extra exc./backfill → $44,445 × 2/3 = $29,630

Stream channel plot → $13,334 × 1.5 for area around exist culvert
= $20,001

Railings = $5000

TOTAL = $177,782 w/o repairs to exist. culvert or CIP closure pour

Stuart I. Brown Associates, Inc.
Planning and Management Consultants

640 CrossKeys Office Park
Fairport, New York 14450
Phone (716) 223-3430
Fax (716) 223-0468

FAX COVER SHEET

TO: Rick Howard FAX# 325-8446

FROM: Kathy Spencer FAX# (716) 223-0468

DATE: 12/12/01

NO. OF PAGES (INCLUDING COVER SHEET) 3

COMMENTS

Here is the response we received from SHPO regarding the stone arch bridge on the Auburn Trail, FYI!

New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island, PO Box 189, Waterford, New York 12188-0189 518-237-8643

Bernadette Castro
Commissioner

RESOURCE EVALUATION

DATE: November 29, 2001 **STAFF:** Nancy L. Todd
PROPERTY: Auburn Trail Improvement, Stone Arch Bridge
MCD: T/Victor (06915)
ADDRESS: Over Irondequoit Creek **COUNTY:** Ontario
PROJECT REF: 01 PR 4931 **USN:** 06915.000026

I. ___ Property is individually listed on SR/NR:
name of listing:
___ Property is a contributing component of a SR/NR district:
name of district:

II. X Properties meet eligibility criteria.
___ Property contributes to a district which appears to meet eligibility criteria.
Pre SRB: X **Post SRB:** ___ _____ SRB date

Criteria for Inclusion in the National Register:
A. ___ Associated with events that have made a significant contribution to the broad patterns of our history;
B. ___ Associated with the lives of persons significant in our past;
C. X Embodies the distinctive characteristics of a type, period or method of construction; or represents the work of a master; or possesses high artistic values; or represents a significant and distinguishable entity whose components may lack individual distinction;
D. ___ Have yielded, or may be likely to yield information important in prehistory or history.

III. ___ Property does not meet eligibility criteria.

STATEMENT OF SIGNIFICANCE:

Believed to date from the 1850s, the stone arch bridge over the Irondequoit Creek along the abandoned rail road right-of-way is architecturally significant as an intact, representative example of mid nineteenth century masonry construction techniques. Despite some loss of integrity of materials, the bridge remains substantially intact with its radiating stone voussoirs and random course stone retaining walls.

DEC 10 2001

OFFICE OF PARKS · RECREATION · HISTORIC PRESERVATION
NEW YORK STATE
Bernadette Castro
Commissioner

New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island, PO Box 189, Waterford, New York 12188-0189
518-237-8643

December 3, 2001

Mr. Stuart I. Brown
Stuart I. Brown Associates
640 Crosskeys Office Park
Fairport, New York 14450

Dear Mr. Brown:

Re: **TEA-21**
Auburn Trail Improvements
T/Victor, Ontario County
01PR4931

Thank you for requesting the comments of the State Historic Preservation Office (SHPO) for the project noted above. This information has been reviewed under Section 106 of the National Historic Preservation Act of 1966 and the relevant implementing regulations since you will be seeking grant assistance from the Federal Highway Administration (FHWA). Based on this review, the SHPO is pleased to provide the comments below.

1. The Stone Arch Bridge in your project area is eligible for listing in the National Register of Historic Places (see attached eligibility comments). This historic status means that FHWA and the New York State Department of Transportation (DOT) must continue to consult to assess project impacts to historic properties.

2. Repair of the bridge---which is one of the options under consideration and currently favored by the Town---could meet the Secretary of the Interior's Standards for the Treatment of Historic Properties and have No Adverse Effect on significant historic and cultural resources if the drawings are prepared in consultation with our office and submitted for our review.

3. Removal of the bridge---the other option being considered---would require consultation with the Advisory Council on Historic Preservation under their regulations 36 CFR 800.6.

4. The SHPO will be able to issue a formal determination of effect once the community has selected a final option and begins plan development.

The SHPO appreciates the opportunity to comment on this proposed undertaking, and looks forward to working with you to complete all required reviews. Please telephone me at 518/237-8643, ext. 3276 with any questions you may have. Please use the PR# above to expedite the processing of future submissions for this project.

Sincerely,

Richard M. Lord
Historic Sites Restoration Coordinator
(Richard.Lord@OPRHP.state.ny.us)

enc: eligibility comments (1 pg.)

cc: Douglas Conlan, FHWA Albany
Mary Ivey, DOT Albany
Steven Beauvais, DOT Rochester
Kevin Miller, DOT Rochester

Appendix D:
Trail Information Resources

Trail Information Resources

1. **American Trails** is the only national, nonprofit organization working on behalf of all trail interests, including hiking, bicycling, mountain biking, horseback riding, water trails, snowshoeing, cross-country skiing, trail motorcycling, ATVs, snowmobiling and four-wheeling. American Trails members want to create and protect America's network of interconnected trails. We support local, regional, and long-distance trails and greenways, whether they be in backcountry, rural or urban areas. Our goal is to support America's trails by finding common ground and promoting cooperation among all trail interests. We're involved in everything from training trails advocates to providing increased trail opportunities for individuals with disabilities. For more information, visit www.americantrails.org.

2. **Genesee Regional Trails Coalition** is an organization whose mission is to help local communities develop and maintain a regional system of multi-use trails and promote responsible trail usage as a healthy and inexpensive recreational opportunity for all seasons. The geographic area covered by the Coalition includes the counties of Allegany, Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming and Yates. For more information visit www.grtcinc.org.

3. **National Center for Walking and Biking (NCBW)** is the major program of the Bicycle Federation of America, Inc. (BFA), a national, nonprofit [501(c)(3)] corporation established in 1977. Our mission is to create bicycle-friendly and walkable communities. The NCBW is governed by a volunteer board of directors and operates from offices located in Washington, DC (headquarters), Middlebury, Vermont, and Missoula, Montana. Ongoing NCBW activities include:
   - Providing specialized consulting services in the areas of long-range planning, policy development, public involvement, route selection, planning and design guidelines for bicycle and pedestrian facilities;
   - Training programs for public health and transportation agencies;
   - Economic development and tourism planning and analysis;
   - Organizing and managing workshops and conferences, including the biennial Pro Bike / Pro Walk conference.

   For more information, visit www.bikewalk.org.

4. **National Transportation Enhancements Clearinghouse (NTEC)** can help you learn how to use TE funds to revitalize the transportation experience in your community. In addition to the information offered on this Web site, we offer free technical support and documents on TE. Visit www.enhancements.org.

5. **New York Parks and Conservation Association (NYPCA)** is a non-governmental, not-for profit, statewide membership organization. Our mission is to protect and advocate for existing parks and the state's natural and historic resources, and to promote the creation of new kinds of parks such as greenways, rail trails, and heritage corridors. For more information, visit www.nypca.org.

6. **Rails-to-Trails Conservancy** is a 501(c)(3) nonprofit organization with the mission to enrich America's communities and countryside by creating a nationwide network of public trails from former rail lines and connecting corridors. RTC has more than 100,000 members and supporters. Founded in 1986, Rails-to-Trails Conservancy is located in Washington, D.C. and has offices in California, Florida, Massachusetts, Michigan, Ohio and Pennsylvania. For more information, visit www.railtrails.org.

7. **The Pedestrian and Bicycle Information Center (PBIC)** is a clearinghouse for information about health and safety, engineering, advocacy, education, enforcement and access and mobility. The PBIC serves anyone interested in pedestrian and bicycle issues, including planners, engineers, private citizens, advocates, educators, police enforcement and the health community. For more information, visit www.bicyclinginfo.org and www.walkinginfo.org.

8. **Trails and Greenways Clearinghouse** provides technical assistance, information resources and referrals to trail and greenway advocates and developers across the nation. Services are free and available to individuals, government agencies, communities, grassroots organizations and anyone else who is seeking to create or manage trails and greenways.

   The Clearinghouse is a project of Rails-to-Trails Conservancy, with support from the National Park Service's Rivers, Trails and Conservation Assistance Program and countless greenway advocates and trail builders who have provided much of the information and expertise reflected on this site. For more information, visit www.trailsandgreenways.org.

9. **U.S. Department of Transportation, Federal Highway Administration** web site provides many useful resources for state and local government program managers and practitioners. For more information, visit www.fhwa.dot.gov/environment/bikeped/index.htm.

Appendix E:
Bibliography

Annotated Bibliography

1. Della Penna, Craig and Tom Sexton. Official RTC New York Guidebook. The Globe Pequot Press, 2002.

2. Flink, Charles A., Kristine Olka and Robert M. Searns. Trails for the 21st Century, Second Edition. Island Press, 2001.

3. McMillen, Barbara. Designing Sidewalks and Trails for Access: Part I of II Review of Existing Guidelines and Practices. July 1999. Accessible at www.fhwa.dot.gov/environment/bikeped/access-1.htm

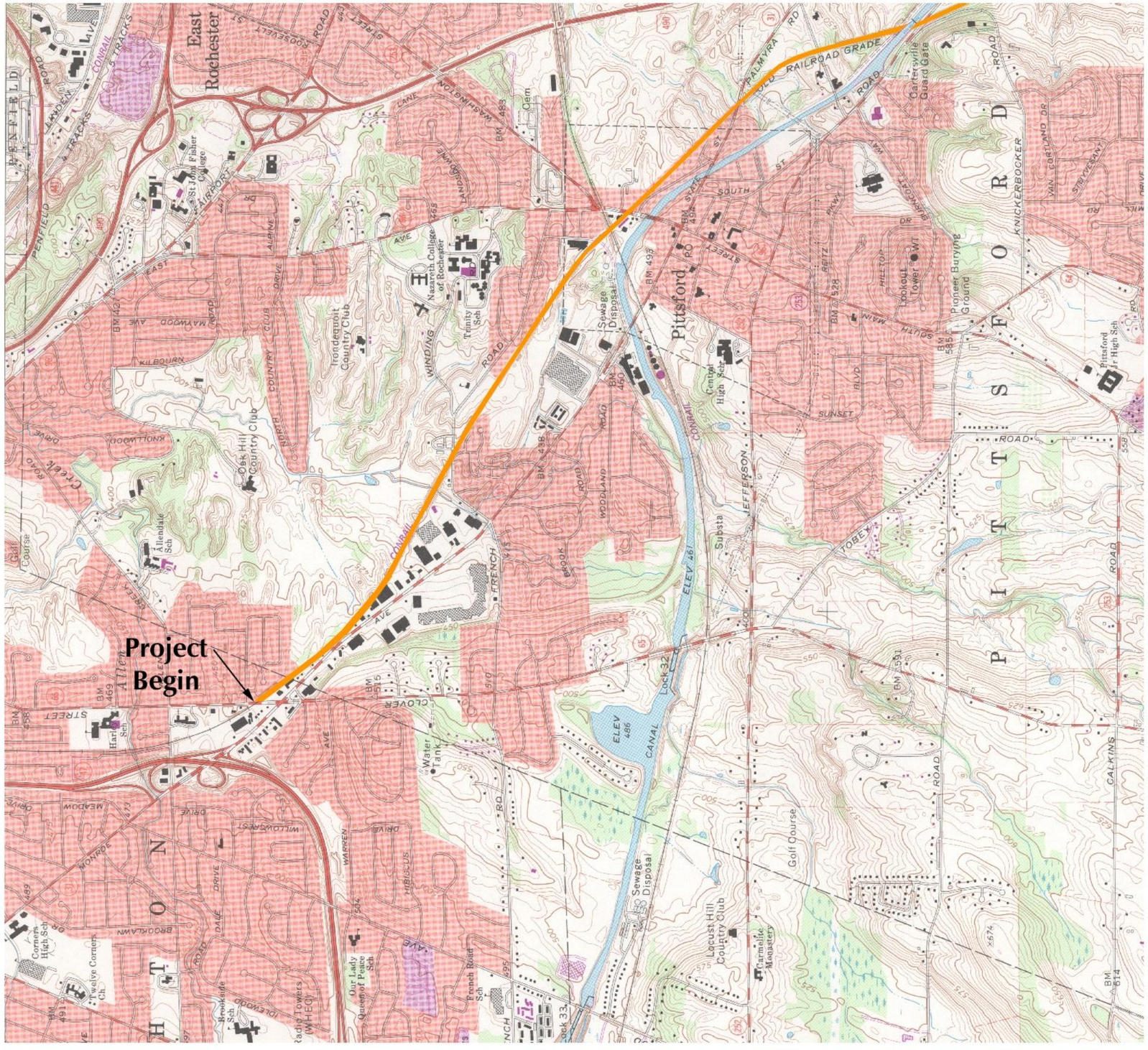
4. McMillen, Barbara. Designing Sidewalks and Trails for Access: Part II of II Best Practices Design Guide. September 2001. Accessible at www.fhwa.dot.gov/environment/sidewalk2/index.htm

5. Ryan, Karen-Lee and Julie A. Winterich. Secrets of Successful Rail Trails: An Acquisition and Organizing Manual for Converting Rails into Trails. Rail-To-Trails Conservancy, 1993.

6. U.S. Department of Transportation. Rail-with-Trails: Lessons Learned - Literature Review, Current Practices, Conclusions. August 2002. A draft report is available at www.altaplanning.com/focus/rails_lessons.html.

7. American Association of State Highway and Transportation Officials, Guide for the Development of Bicycle Facilities. Prepared by the AASHTO Task Force of Geometric Design, 1999.

Auburn Line Rail-to-Trail Feasibility Study



N

Scale - 1 : 2400

Auburn Line Right-of-Way

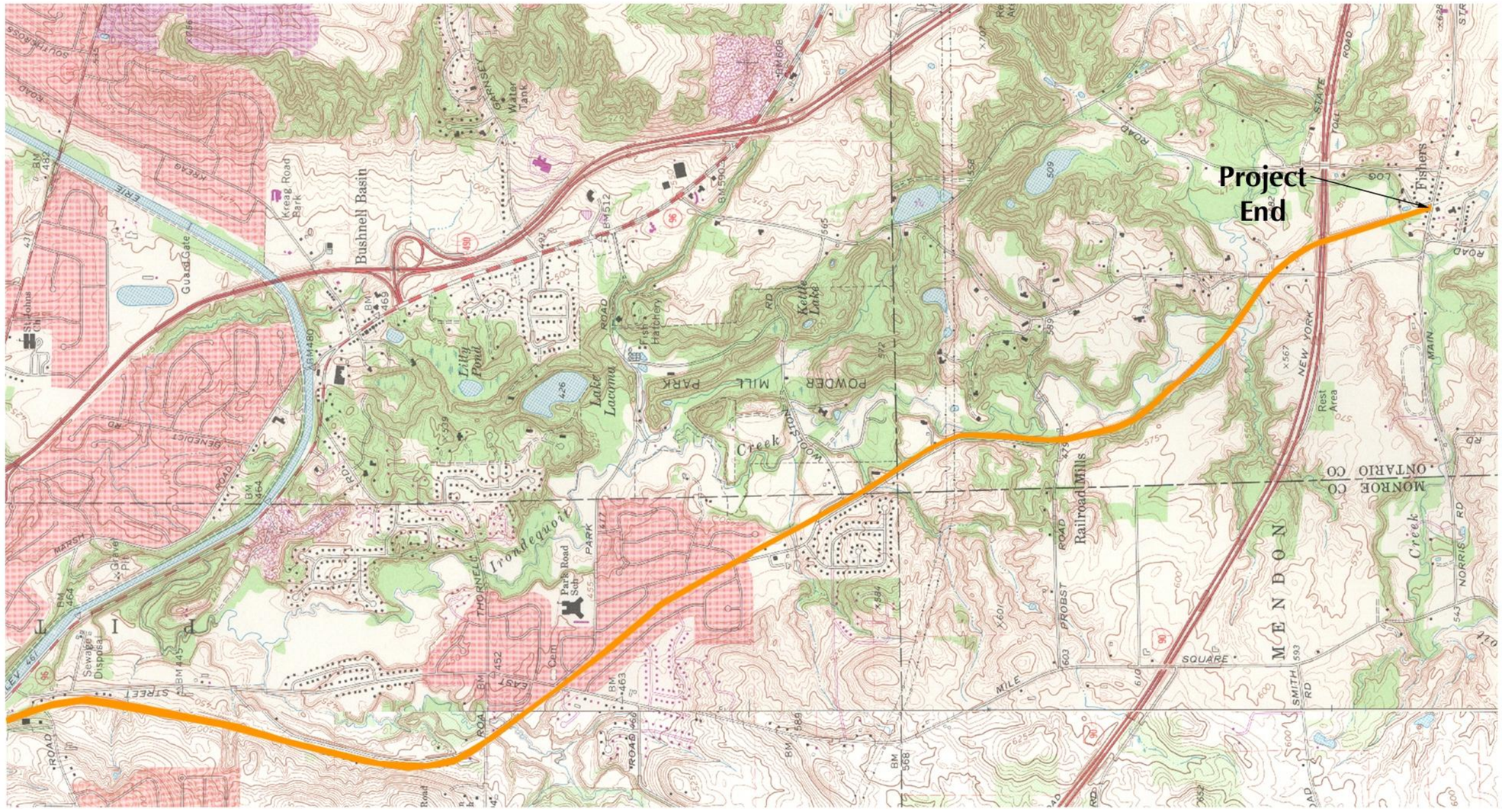
Location Map - 1

Source: USGS
Pittsford Quadrangle - 1978

BERGMANN associates

Figure 2

Auburn Line Rail-to-Trail Feasibility Study



N

Scale - 1 : 2400

Auburn Line Right-of-Way

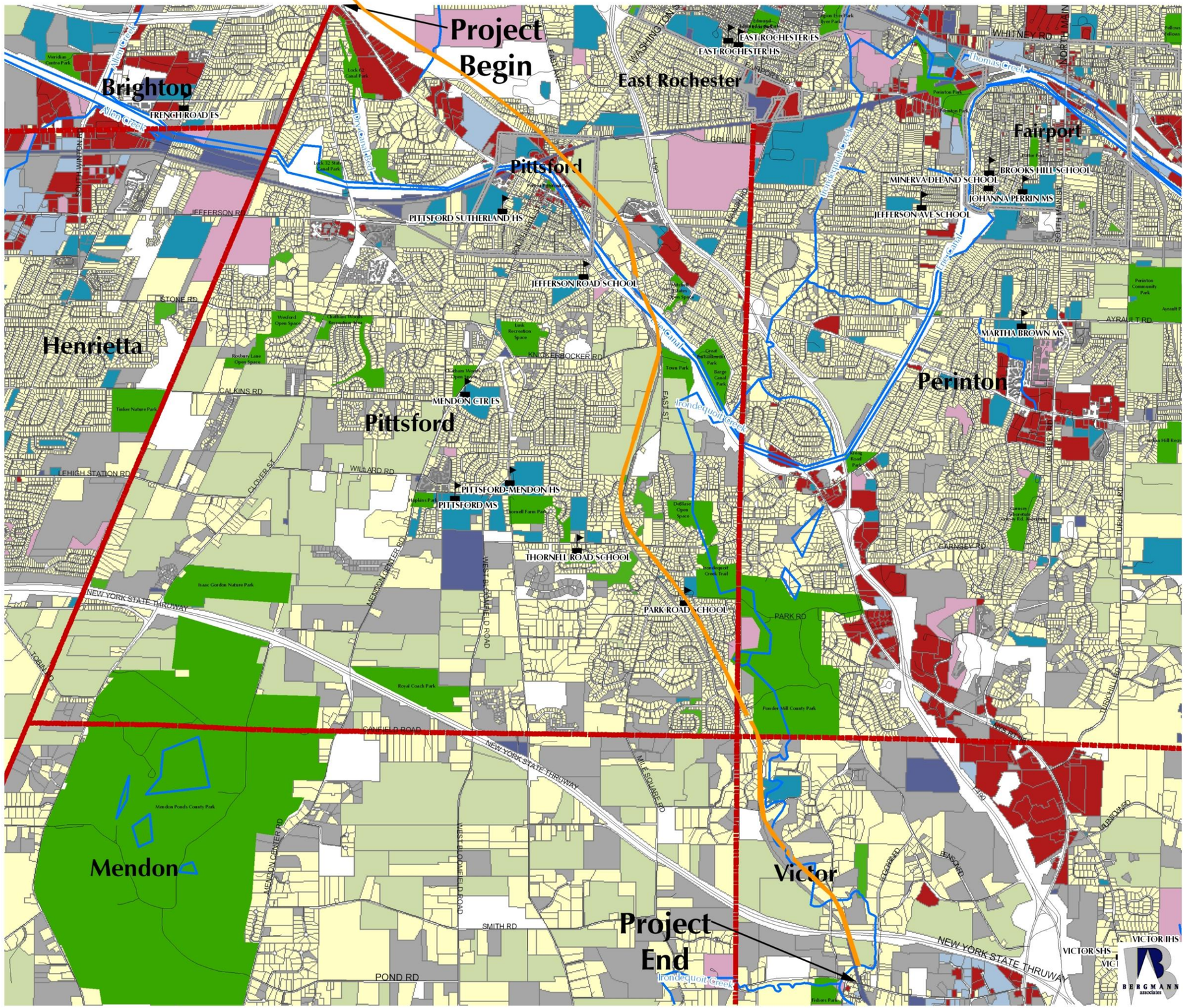
Location Map - 2

Source: USGS
Fairport & Pittsford
Quadrangle - 1978

BERGMANN associates

Figure 3

Auburn Line Rail-To-Trail Feasibility Study



Legend

- SCHOOLS
- ROADS
- AUBURN LINE RIGHT-OF-WAY
- TRIBUTARY / CREEK
- PARCEL BOUNDARIES
- VILLAGE LIMITS
- TOWN BOUNDARY
- RAILROAD ROW

LAND USE **

- AGRICULTURAL
- RESIDENTIAL
- VACANT
- COMMERCIAL
- RECREATION AND ENTERTAINMENT
- COMMUNITY SERVICES
- INDUSTRIAL
- PUBLIC SERVICE
- WILD, FORESTED, CONSERVATION LANDS AND PARKS

** NOTE: LAND USE BASED ON NYS OFFICE OF REAL PROPERTY CLASSIFICATION CODES. WHITE PARCELS HAVE NO DATA.

Land Use Map

N

1:45,000

Miles

0 1 2

BERGMANN associates

Figure 4

Auburn Line Rail-to-Trail Feasibility Study

Project Begin
(French Road)

N

Not To Scale

Auburn Line Right-of-Way

Proposed Trail Route

Right-of-Way Corridor Map - 1

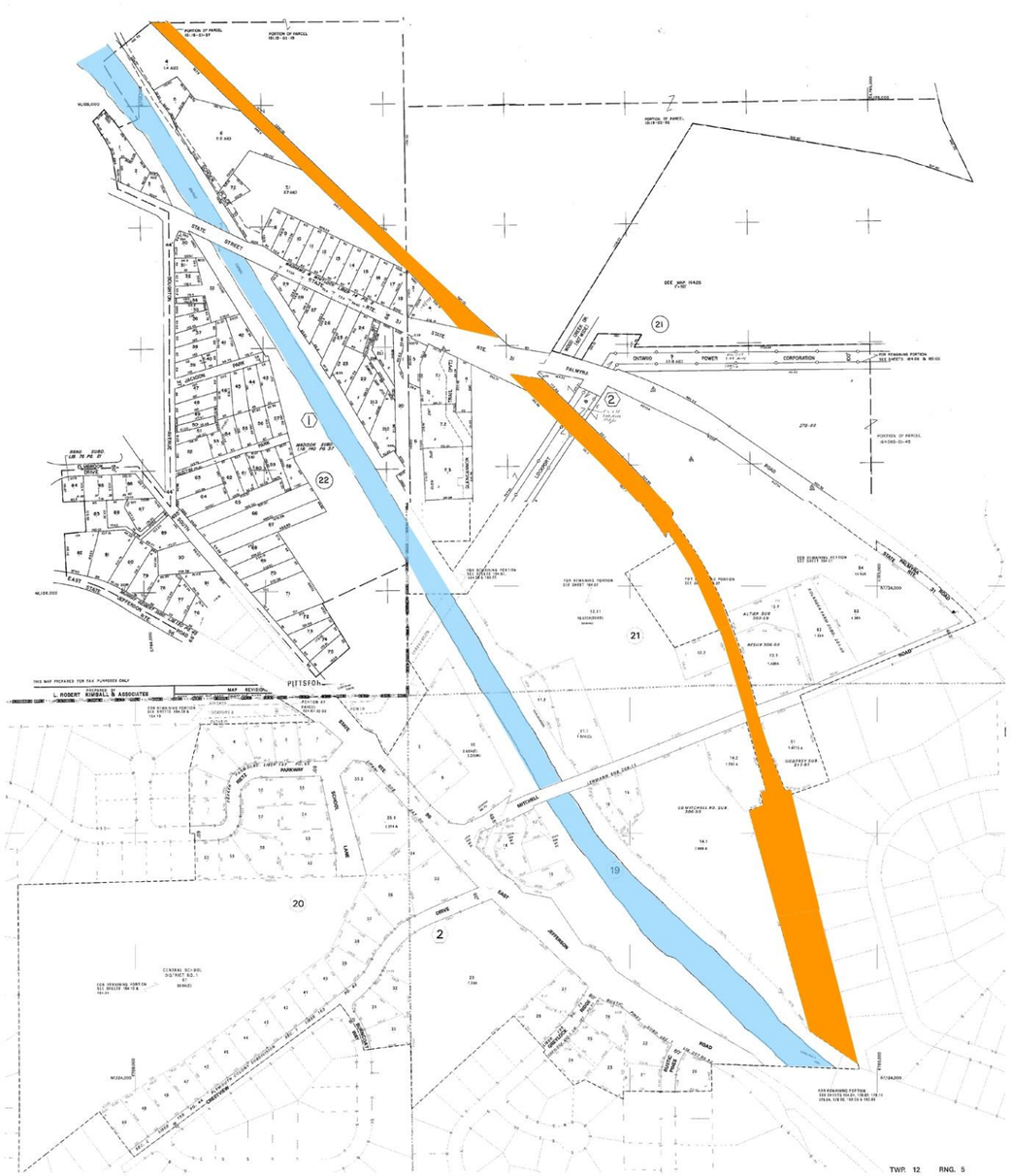
Town of Pittsford
Tax Map Numbers
151.09, 151.13, 151.14

Village of Pittsford
Tax Map Numbers
151.19

BERGMANN associates

Figure 5

Auburn Line Rail-to-Trail Feasibility Study



N

Not To Scale

Auburn Line Right-of-Way

Proposed Trail Route

Right-of-Way Corridor Map - 2

Town of Pittsford
Tax Map Numbers
164.07 & 164.11

Village of Pittsford
Tax Map Numbers
164.07

BERGMANN associates

Figure 6

Auburn Line Rail-to-Trail Feasibility Study

N

Not To Scale

Auburn Line Right-of-way

Proposed Trail Route

Right-of-Way Corridor Map - 3

Town of Pittsford
Tax Map Numbers
164.04, 178.02, 178.04 & 178.11

BERGMANN associates

Figure 7

Auburn Line Rail-to-Trail Feasibility Study

N

Not To Scale

Auburn Line Right-of-Way

Proposed Trail Route

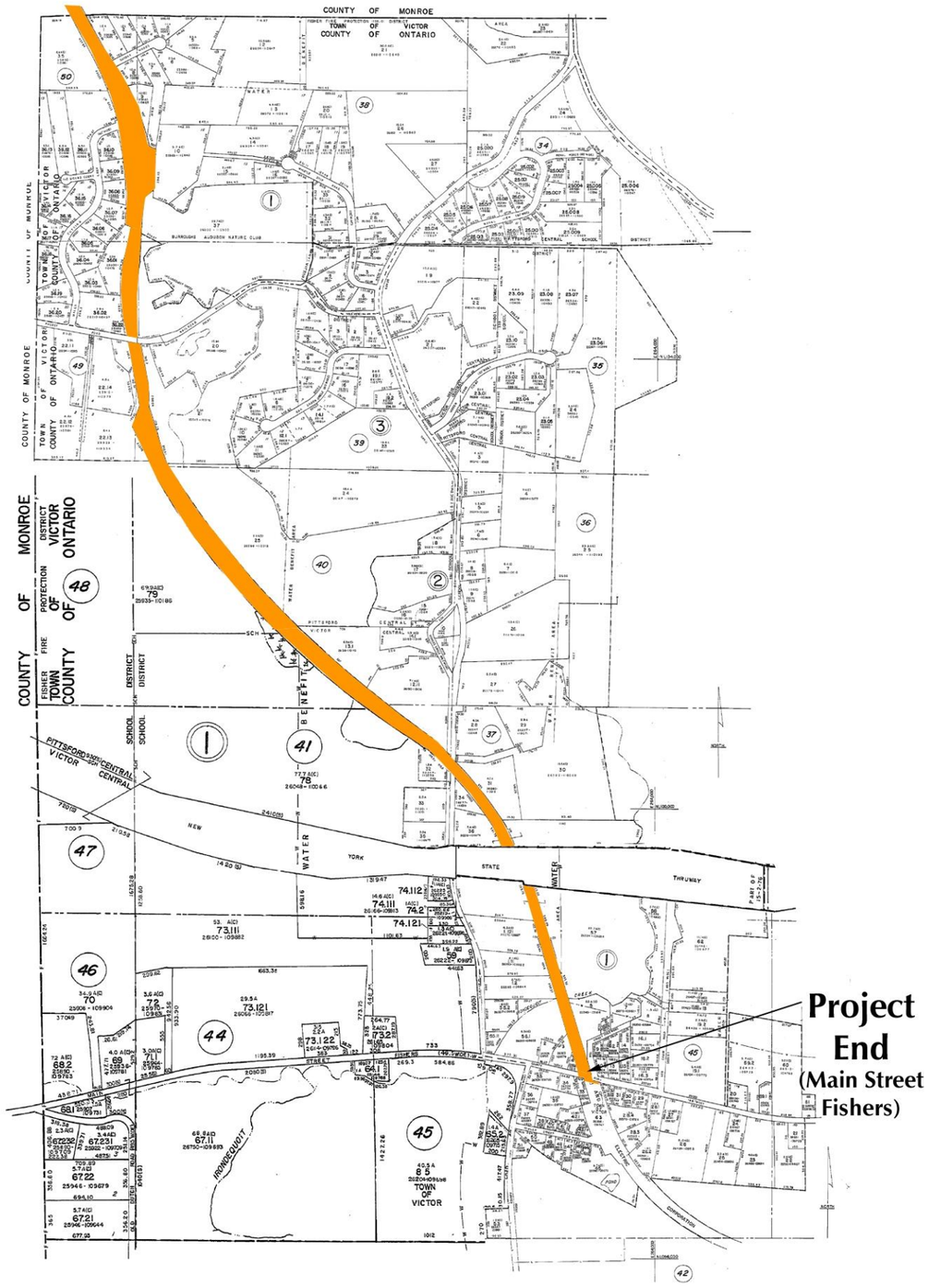
Right-of-Way Corridor Map - 4

Town of Pittsford
Tax Map Numbers
178.20, 192.08 &193.09

BERGMANN associates

Figure 8

Auburn Line Rail-to-Trail Feasibility Study



N

Not To Scale

Auburn Line Right-of-Way

Proposed Trail Route

Right-of-Way Corridor Map - 5

Town of Victor
Tax Map Numbers
005.01, 005.02 &005.04

BERGMANN associates

Figure 9

Auburn Line Rail-to-Trail Feasibility Study

N

Scale - 1 : 24000

HR - 5

Auburn Line Right-of-Way

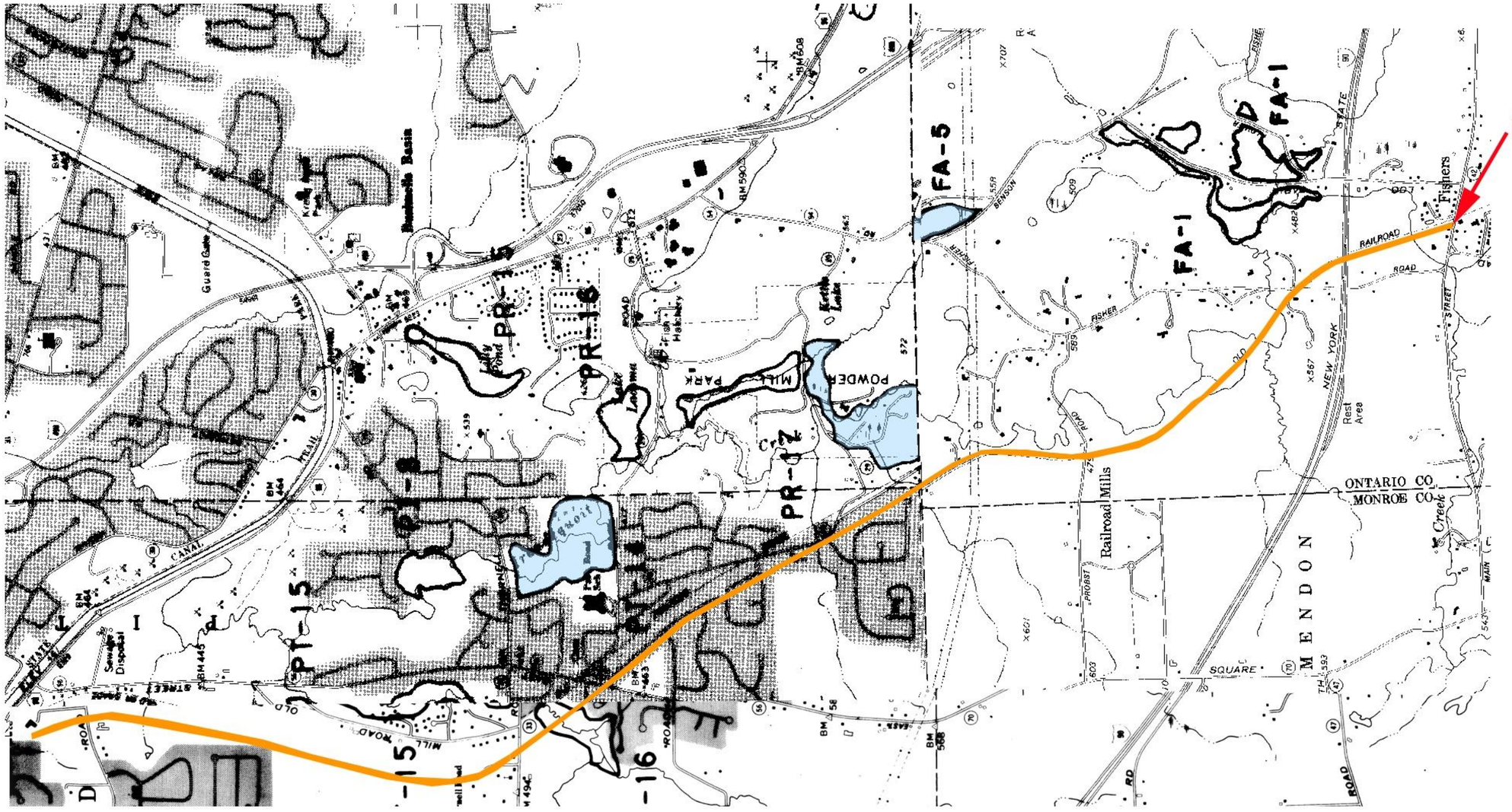
State Wetland Map - 1

Pittsford Quadrangle - 1980

BERGMANN associates

Figure 10

Auburn Line Rail-to-Trail Feasibility Study



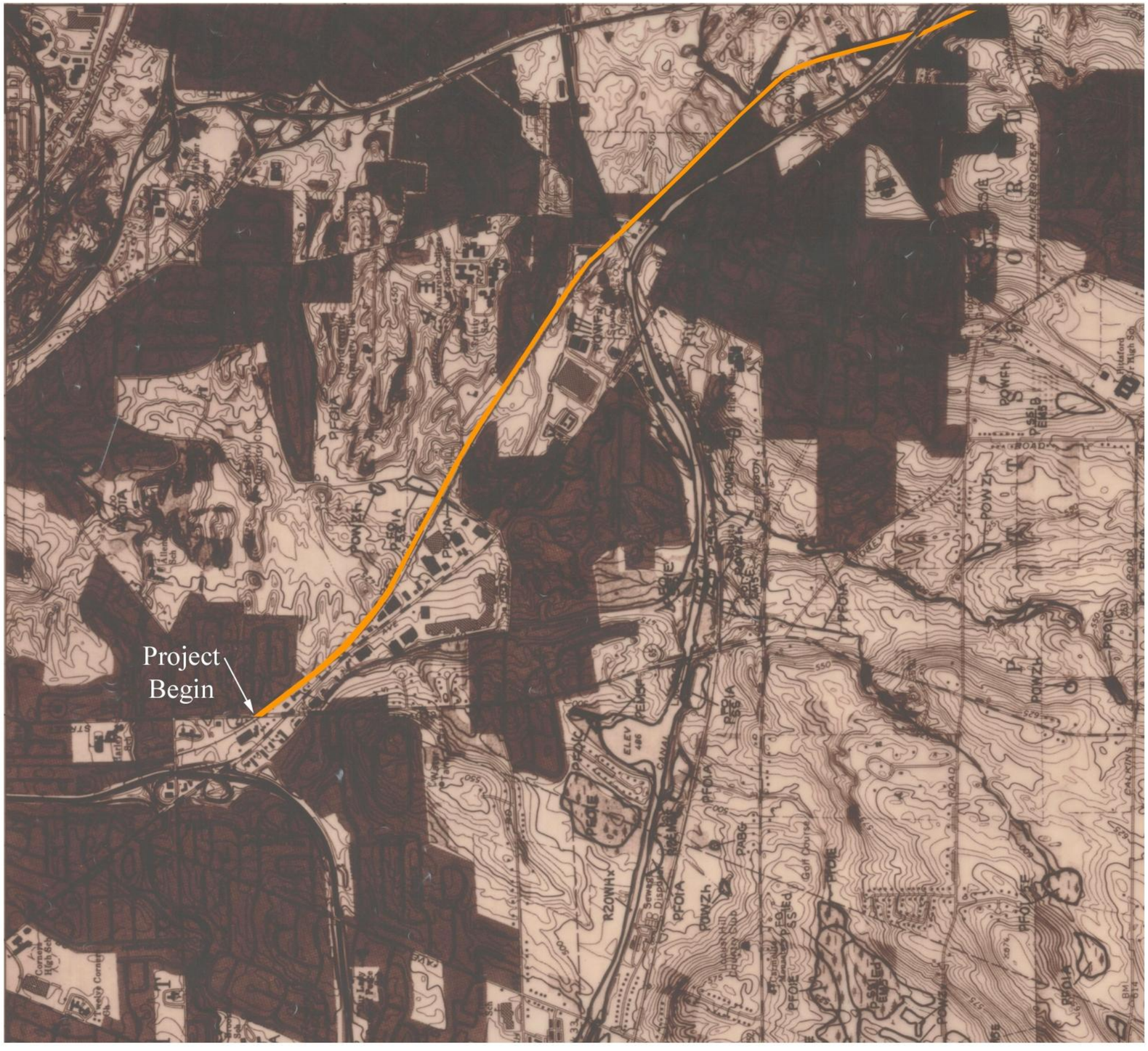
State Wetland Map - 2

Source: Fairport & Pittsford Quadrangle - 1980

BERGMANN associates

Figure 11

Auburn Line Rail-to-Trail Feasibility Study



N

Scale - 1 : 24000

Auburn Line Right-of-Way

Federal Wetland Map - 1

Source :Pittsford Quadrangle - 1978

BERGMANN associates

Figure 12

Auburn Line Rail-to-Trail Feasibility Study

N

Scale - 1 : 24000

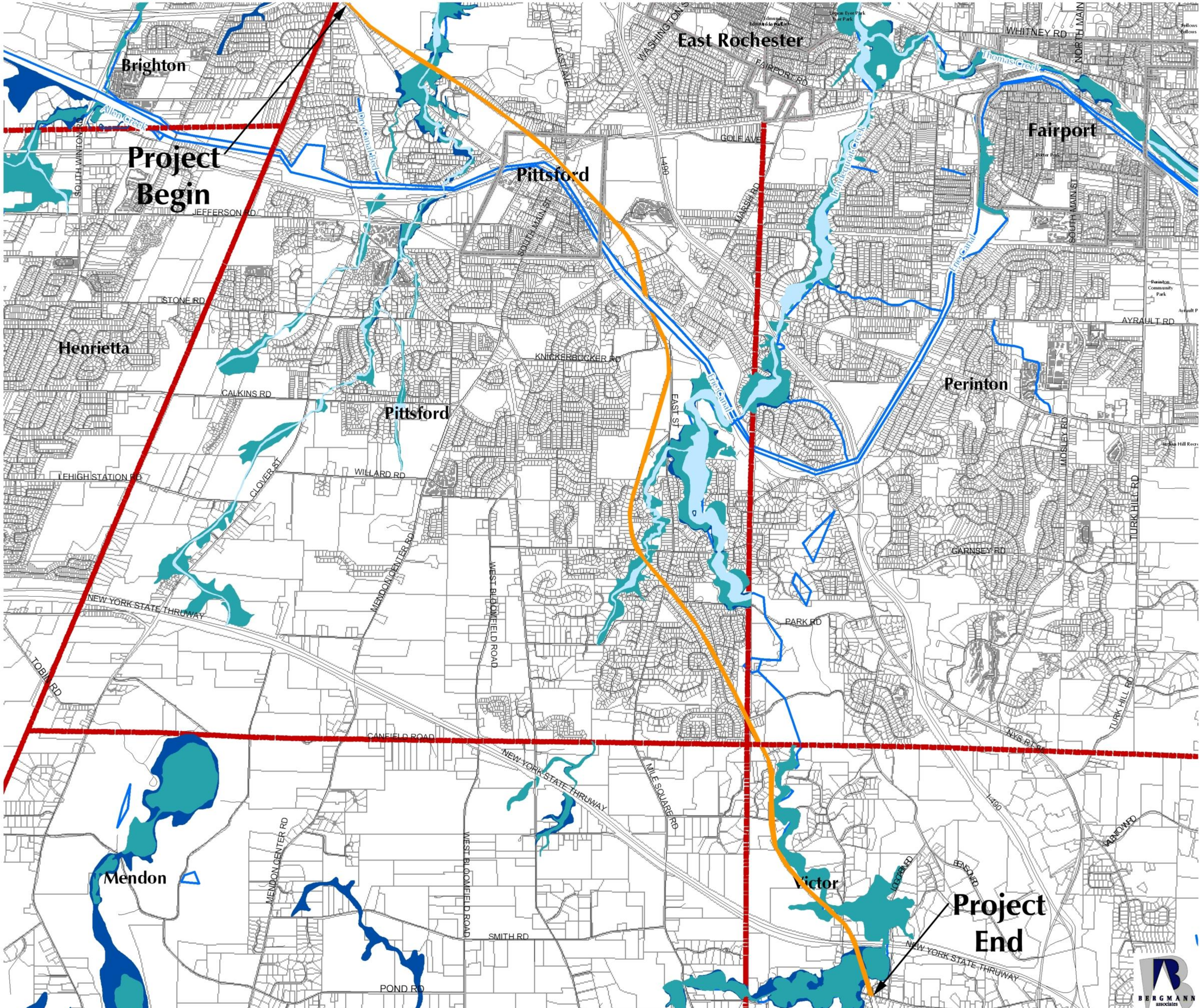
Federal Wetland Map - 2

Source: Fairport & Pittsford Quadrangle

BERGMANN associates

Figure 13

Auburn Line Rail-to-Trail Feasibility Study



Project Begin
Project End
Brighton
East Rochester
Fairport
Pittsford
Henrietta
Perinton
Mendon
Victor
Allen Creek
Dry Canal Bed
Irondequoit Creek
Thomas Creek
Erie Canal
WHITNEY RD
NORTH MAIN
WASHINGTON ST
EAST AVE
FAIRPORT RD
GOLF AVE
I-490
MARSH RD
SOUTH WINTON RD
JEFFERSON RD
SOUTH MAIN ST
STONE RD
KNICKERBOCKER RD
AYRAULT RD
CALKINS RD
EAST ST
MOSLEY RD
LEHIGH STATION RD
WILLARD RD
CLOVER ST
TURK HILL RD
GARNSEY RD
MENDON CENTER RD
NEW YORK STATE THRUWAY
WEST BLOOMFIELD ROAD
PARK RD
TOBIN RD
CANFIELD ROAD
NYS RT 96
MILE SQUARE RD
SMITH RD
POND RD
BENSON RD
Fishers Park
Potter Park
Perinton Community Park

Legend

- ROADS
- AUBURN LINE RIGHT-OF-WAY
- TRIBUTARY / CREEK
- PARCEL BOUNDARIES
- VILLAGE LIMITS
- TOWN BOUNDARY
- FLOODWAY
- 100-YEAR FLOOD BOUNDARY
- 500-YEAR FLOOD BOUNDARY

Data based on Q3 Flood Data. This is a digital representation of certain features of FEMA's Flood Insurance Rate Map (FIRM) product.

Floodplains Map

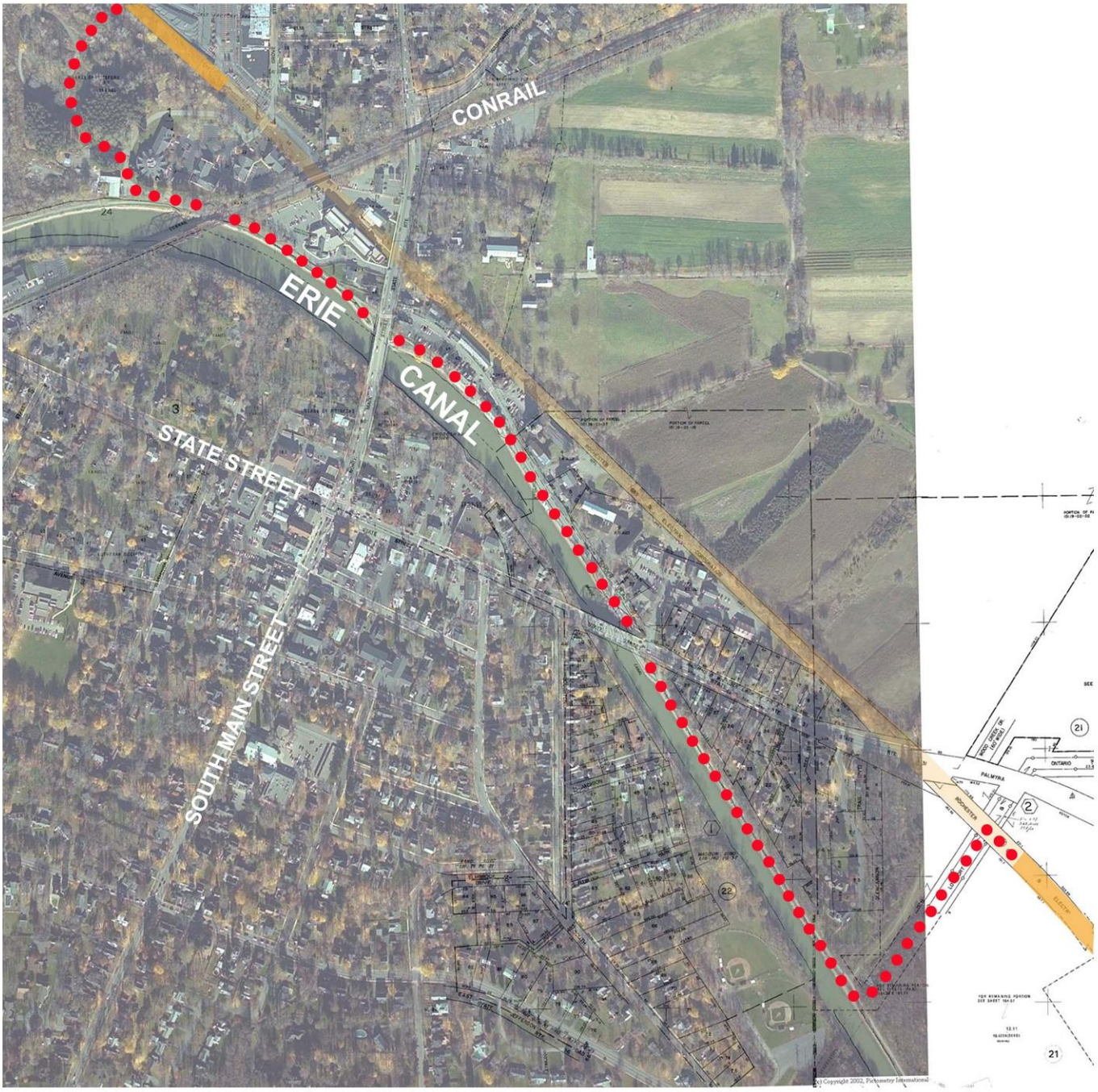
N

1:45,000

Miles
0 1 2

BERGMANN associates

Figure 14



Option 1 - Recommended Alternative

Segment 3 Del Monte Lodge / Schoen Place

Auburn Line Rail-to-Trail Feasibility Study

BERGMANN associates

Figure 15

Option 2

Segment 3 - Del Monte Lodge / Schoen Place

Auburn Line Rail-to-Trail
Feasibility Study

BERGMANN associates

Figure 16

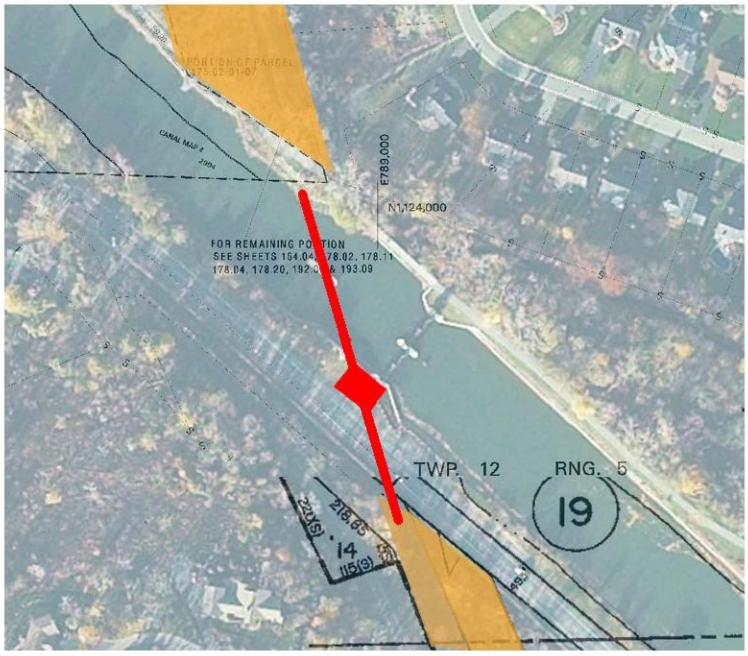
Option 3

Segment 3 - Del Monte Lodge / Schoen Place

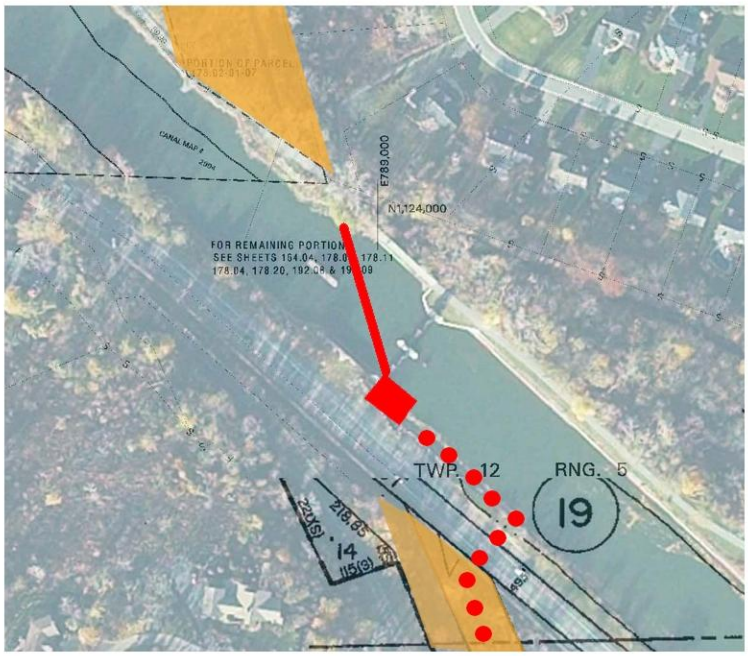
Auburn Line Rail-to-Trail
Feasibility Study

BERGMANN associates

Figure 17



Option 1 - Bridge Over Canal & Jefferson Road



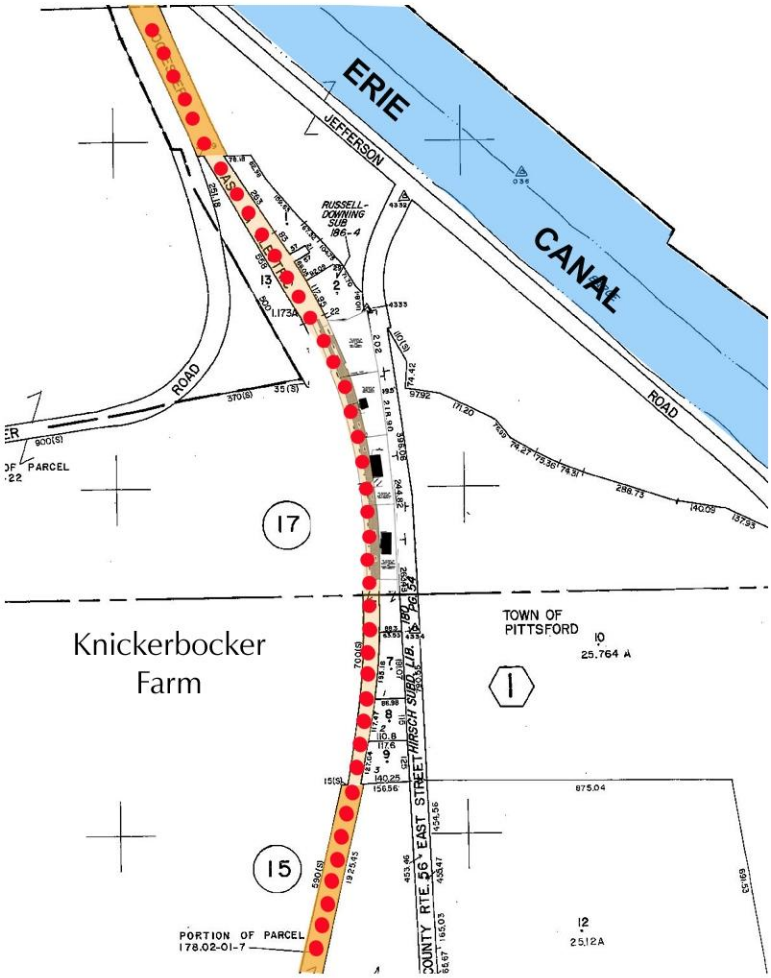
Option 2 - Canal Bridge with At-Grade Crossing of Jefferson Road

Segment 4 - Erie Canal Crossing

Auburn Line Rail-to-Trail Feasibility Study

BERGMANN associates

Figure 18



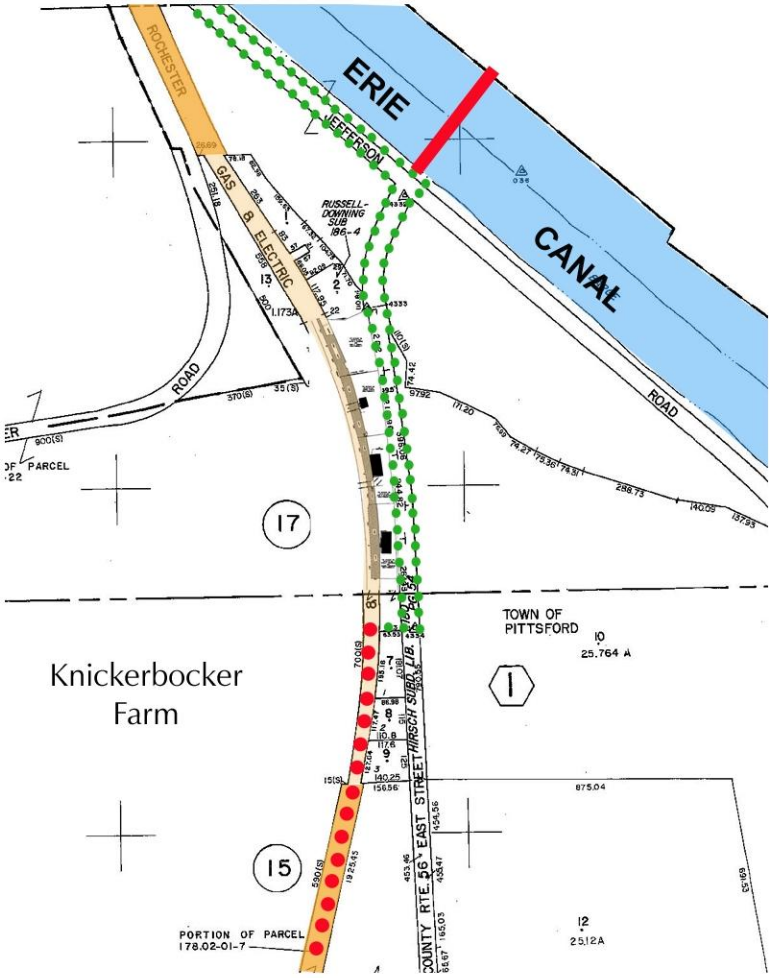
Option 1

Segment 5 - East Street

Auburn Line Rail-to-Trail Feasibility Study

BERGMANN associates

Figure 19



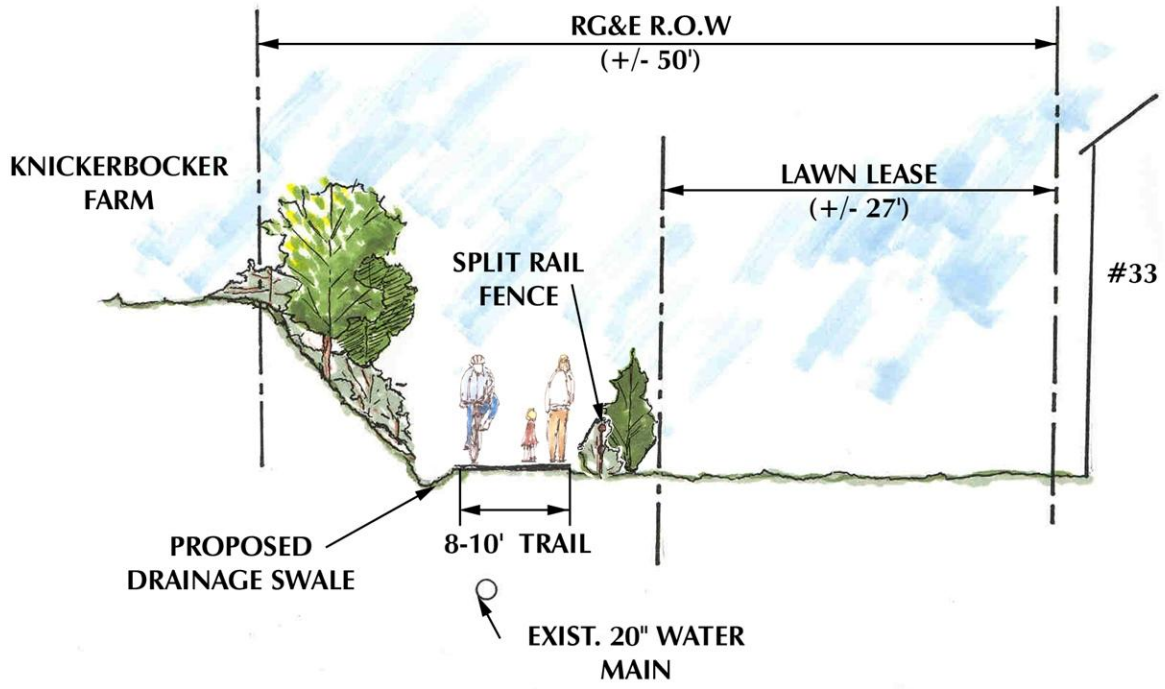
Option 2

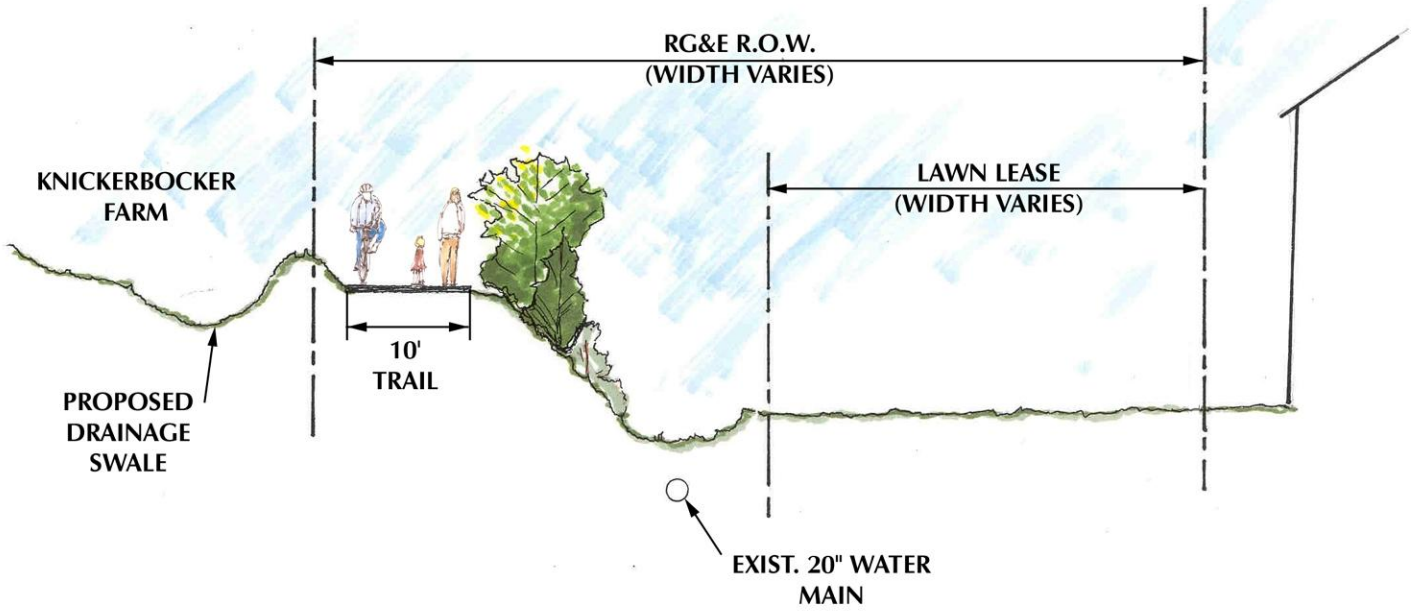
Segment 5 - East Street

Auburn Line Rail-to-Trail Feasibility Study

BERGMANN associates

Figure 20





Segment 5 - East Street
Typical Trail Sections
Auburn Line Rail-to-Trail
Feasibility Study

BERGMANN associates

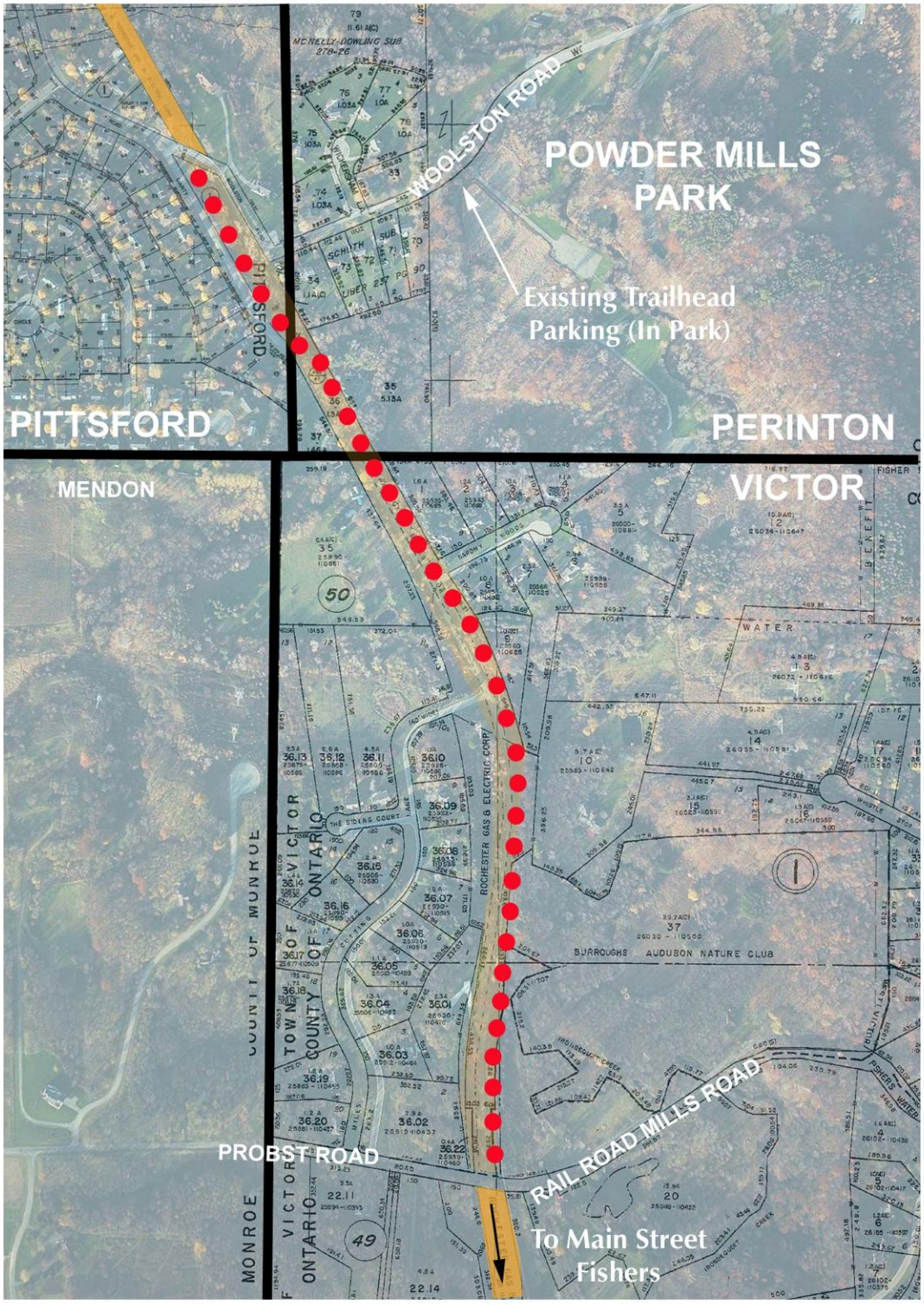
Figure 21

Segment 5 - Mill Road

Auburn Line Rail-to-Trail
Feasibility Study

BERGMANN associates

Figure 22

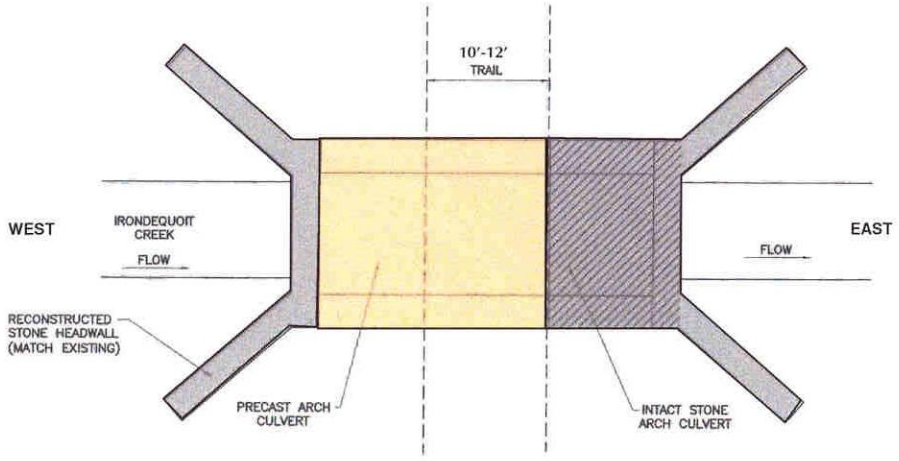


Segment 6 - Railroad Mills Road

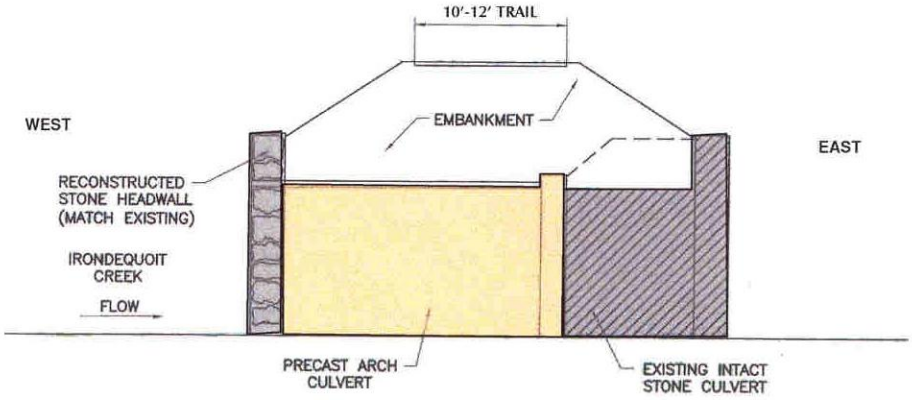
Auburn Line Rail-to-Trail
Feasibility Study

BERGMANN associates

Figure 23



Plan View



Section View

Segment 7 - Irondequoit Creek Stone Arch Culvert

Auburn Line Rail-to-Trail Feasibility Study

BERGMANN associates

Figure 24