

CONTEXT-SENSITIVE DESIGN CASE STUDY NO. 4

Route 3 – Port Ontario, New York

LOCATION:

Route 3 over the Salmon River – Port Ontario, New York

PROJECT DESCRIPTION:

U.S. Route 3 runs north/south between the shore of the east end of Lake Ontario and I-81 in New York State (See Figures 1 and 2). Route 3 is a two lane rural highway which passes through many old downtowns and small villages (See Figure 3). The route is part of the Seaway Trail, a national scenic byway and is also part of a state bicycle route. This particular project consisted of reconstruction and improvements along a 1.1 km section^a in the village of Port Ontario, Town of Richland, Oswego County.

Port Ontario has a population of only several hundred but increases in the summer with seasonal residents. Neighboring Pulaski has a permanent population of only 2400.

The project included the replacement of two bridges over the mouth of the Salmon River, intersection improvements, accommodation of bicycles/pedestrians and general improvements in geometric standards. The location where route 3 crosses the Salmon River in Port Ontario is

Figure 1: Project Location in New York State

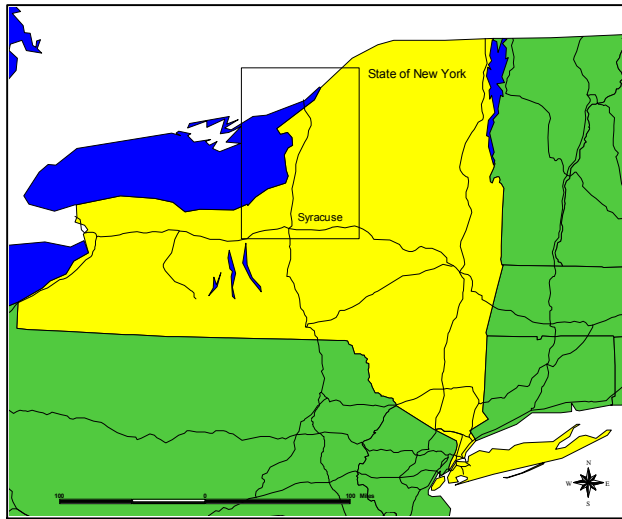


Figure 2: Location of Port Ontario, New York

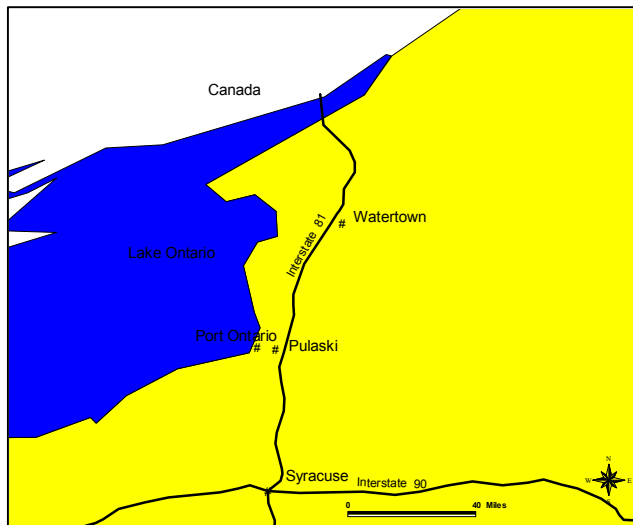


Figure 3: Route 3 South of Project



approximately 1 mile upstream of Lake Ontario and is approximately 1500 feet wide (see Figure 4, note the handicap accessible public fishing area built with this project is shown in the foreground). Therefore, this study section is comprised almost completely of river crossing.

Figure 4: The Wide Mouth of the Salmon River at Port Ontario



The main part of the village is on the southern bank of the river on Route 3. The area consists of several businesses, many of which are seasonal. The cottage-like setting of the area contains both permanent and seasonal homes on both sides of the river. On the north side of the river, the major land use is a 1450 site trailer park on Lake Ontario 0.25 miles from the Salmon River. As illustrated in Figure 5, the importance of the river and fishing to the local community and economy is evident immediately upon arrival in the area. Indeed, the area is well-known for its fishing and is the largest cold water tributary on Lake Ontario. The draw for the area's recreational amenities and fishing is great throughout the year (including ice fishing) but is greatest in the summer. These activities are central to the area's economy.

Figure 5: "Fish" at the Community Heart



^a The project runs from reference marker 3-3401-3232 to 3-3401-3239.

In the mid 1990s, the condition of the existing bridges over the Salmon River could not be ignored. Crash rates were three times the state average for similar roads. The highway condition, especially on the bridge crossing, was generally poor. The narrow crossing lacked shoulders and pedestrian access. Lack of good access to the river often resulted in parked cars along this section. Visitors and seasonal residents noted it was a difficult crossing with trailers particularly at the one location where a steel truss bridge was located. Pavement quality had deteriorated and the vertical curvature created sight distance problems and hidden areas from an intersection on the south shore.

Planning and design began in August 1995. The first major public involvement session was held in October 1996. Construction started in February 1999 and continued through three fishing/tourism seasons until October 2001. The contractor was Tuscarora Construction Company. Total project cost was \$8.5 million. In 2002, this project was selected as New York State's Context Sensitive Solutions Exemplary Project. As such, it was featured on the New York DOT CSS website along with other projects from various regions and general information for contractors and the public about how CSS works in New York.

HIGHWAY AGENCY INVOLVEMENT

The New York Department of Transportation started using a context sensitive design approach to this project from the beginning. They shared leadership on the project planning and design with other agencies. Several people interviewed for this case study noted that part of the success of the project was due to the personal attention of the NYDOT design project manager Mary Jane Meier. This points to the importance of personal connection when undertaking projects within communities.

The members of the community, as well as the DOT personnel, interviewed for this case study indicated that the context sensitive design process was used in this project in part because hard lessons had been learned during a project in 1994 about 1 mile south of Port Ontario where route 3 crosses Grindstone Creek. For the replacement of this much smaller bridge (see Figure 5) route 3 was completely closed for a significant period of time and traffic was detoured. Many businesses suffered and neither the community nor the DOT wished to repeat this unintended negative impact for the community when undertaking replacement of the Salmon River bridges.

Figure 5: Bridge over Grindstone Creek (south of Port Ontario)



RESOURCE AGENCIES INVOLVEMENT

Several resource agencies were involved in the project from the beginning stages including the following:

- U.S. Army Corps of Engineers
- NYS Department of Environmental Conservation
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- NYS Department of State
- Oswego County Planning Department
- Eastern Shore Salmon River Corridor Fisheries Committee
- Cornell Cooperative Extension
- Town of Richland
- Oswego County (Promotion and Tourism, Highway Department)

Of particular note in this project was the initial involvement of the Cooperative Extension Service. The DOT contacted them as a non-DOT agency to convene and lead a public involvement process including citizen roundtables. Together with local businesses, the Extension Service also actively publicized the upcoming bridge replacement project and advertised the time/location where citizens could become involved. The Cooperative Extension Service provided the DOT with a summary report of the public's concerns for the construction phase as well as project design. They also sought technical guidance and input on certain concerns from other Cooperative Extension groups in their nationwide network. The use of a community-based non-DOT agency as part of the public involvement process may be a factor that resulted in such good community satisfaction and involvement with this project.

COMMUNITY INVOLVEMENT

There was direct community involvement in the early stages of the project, but especially from business owners on both sides of the river in Port Ontario. Beyond private citizens and land owners the following community groups were represented:

- Seaway Trail Inc.
- Advocacy Resources Information Services Education (ARISE)
- Toothpick (Bethel) Community Center
- Brennan's Beach (1450 trailer sites – 1100 permanent year round)
- Restaurants
- Tackle Shops

Many meetings were held in one of the local restaurants and this community setting may have represented "common turf" which aided in discussions. The proximity of the meetings to landowners and residents eased the burden of attending.

CONTEXT-SENSITIVE FACTORS

A wide range of sensitive issues was addressed as part of the design of this project. It is particularly interesting to note that the prime issues of concern to the community were different from the prime issues for different resource agencies. Furthermore, the business owners had

unique issues from other residents. This points to the need to contact all stakeholders in order to address all concerns (many of which cannot be foreseen). The business owners in the community were concerned most with the construction phase of the project and ensuring continued ease of traffic flow particularly during the tourist season. They were concerned that timely access to their business driveways be maintained during construction. Both business and citizen community members wanted the old bridge to stay in place until the new bridge was ready. The community also raised a traffic safety issue regarding intersection sight distance that was not known to the DOT at the start of the project. This resulted in the scope of the project being extended to include the intersection south of the bridge and its eventual signalization. Landowners who were going to have land purchased were particularly concerned about how much land they would lose and their compensation. One such owner lost the gas pumps on his business property. Those interviewed suggested that although the whole process went relatively well, the process of compensation for acquired land could be further improved. The main environmental concerns were raised by the agencies involved, not the public and many of these concerns related to the fish habitat.

Scenery and Aesthetics

Concerns related to scenery and aesthetics were of interest to all stakeholders but not contentious. Discussions lead to solutions acceptable to all.

Historic

A cultural resource study was prepared for this project in 1997. No historic buildings or structures were found to be eligible for federal or state historic registers. A restored church, used as a community center, was not eligible for registry, however, the NYDOT purchased the whole land parcel and gave the church back to the community (only some of the land was needed for the expanded highway right of way). The church is to be moved to the opposite corner of the intersection just north of the river. Many in the community appreciated this gesture on the part of the DOT.

During construction, original roadbed consisting of submerged logs or corduroy road was unearthed. Archeologists investigated and removed some sections of roadbed while leaving others.

Environmental Concerns

The environmental concerns raised by many agencies related to fish habitat and wetland function. During construction, port-a-dams, wetland mitigation techniques and erosion control measures were used. The design option finally selected afforded wetland mitigation within the project limits.

Multimodalism

Given the tourism, trailer parks, state parks and state bicycle route within this area, pedestrian and bicycle demand was known to exist. The final project has sidewalks and good quality shoulder bikeways. During the planning phase the possibility of accommodating snowmobiles was also considered and ultimately not undertaken by agreement of all stakeholders.

Other Community Needs

The provision of a parking area and an accessible fishing area was very important to the community (see Figures 4, 6 and 8). A stakeholder group, ARISE, ultimately provided the technical guidance needed to properly design such a unique facility.

Figure 6: Public Fishing Access



Public Education and Involvement

Extensive public involvement was desired and sought from the beginning on this project. In addition to the usual public meetings, news releases and distribution of design documents, the stakeholders interviewed identified unique communication strategies that contributed to the success of this project. First, small group sessions were held on site making it easier to involve locals. Second, DOT representatives provided personal and timely follow-up, often in person. Third, a phone contact line was established. Finally, specialists were brought to the community of Port Ontario to provide direct information to residents.

PROJECT OUTCOME AND ACCOMPLISHMENTS

The final project is shown in Figures 7 and 8. Both the community and the project team are very satisfied with the project outcome. The product of this design process is very different from the draft options originally

Figure 7: Salmon River Bridge (looking South)



proposed. The NYDOT was willing to compromise and take new input from the beginning of the project design. In this case, a three instead of two-lane bridge was built (for the south bridge), a traffic signal was added to the project and sidewalks were provided on both sides of the bridge as well as into the community. An important turning point for the community was the elimination of the design alternative that would have replaced the bridges on the existing alignment using temporary structures and interfering with traffic and therefore the community economy. The physical facility itself is far superior to the old substandard river crossing and all community members interviewed were extremely pleased with the functioning transportation facility. This project has restored the confidence of the people of region in the DOT after the less successful bridge replacement in 1994 south of Port Ontario. This level of confidence was achieved by diligent attention to early and frequent communication. The circumstances of this project illustrate that it is not possible for design professionals to anticipate all of the needs and priorities for a community. For example, the focus on traffic management during construction and the provision of a handicap accessible fishing area are not large issues that would have necessarily been anticipated; but they were important community issues that made this project successful.

Figure 8: Completed Salmon River Bridges

