

David A. Giacalone
16 Washington Ave. #3
Schenectady, NY 12305
phone: (518) 377-9540
email: dgiacalone@nycap.rr.com

Joan McDonald, Commissioner
NYS Department of Transportation
50 Wolf Road
Albany, New York 12232

December 18, 2013

re: Protecting Safety and Beauty at Western Gateway Bridge

Dear Commissioner McDonald:

I am writing to ask that the Department act as soon as possible to make two very important design corrections to the Western Gateway Bridge [WGB] rehabilitation project. As designed and constructed, the WGB project creates a significant and avoidable reduction in safety for those using its sidewalks and loss of scenic beauty for those traversing the Bridge in vehicles.

Many members of the public are very concerned over both issues: (1) the lack of a separator fence and/or guardrails to protect pedestrians and bicyclists from falling into the dangerous travel lanes, with their quick-moving traffic, or from being struck by vehicles jumping or rolling over the curb; and (2) the loss of spectacular scenic views of the Mohawk River due to the erection of a cement parapet on the west-side of the Bridge, instead of the steel railings originally called for in the Department's Bridge Requirements. Attachment 1 is a photo-flier that shows and describes the Scenic and Safety issues.

Sidewalk Safety: For over 40 years, the roadways on the Bridge were separated from the sidewalks by both a shoulder and protective railing. Now, there is merely a curb 6" high between the sidewalks and the roadway, despite the fact that the wider pathway means there will be more bicycles traveling faster in the multi-use pathway. The NYSDOT Highway Design Manual, at 18-63, correctly notes that "simply providing wider sidewalks as a means of accommodating walkway users other than pedestrians will not normally contribute to their safety," as the wider pathway tends to encourage higher speed that "can increase the potential for conflicts" between sidewalk users. That "conflict" will surely mean pedestrians and bicyclists landing, jumping, or being pushed into the path of fast traffic.

Nonetheless, Regional Director Zhou wrote to me in a letter dated December 6, which was copied to you, that the new multi-use pathway would increase pedestrian safety and that having merely a curb between the roadway and the sidewalk "is no different than a curb along a street, which also functions without fencing between the sidewalk and roadway." It is surprising that a professional engineer would come to those conclusions.

The curb is no protection from rollover accidents or falls into the street (nor from rowdy pedestrians endangering cars by throwing things or stepping into the roadways). Moreover, as you and Director Zhou must know, pedestrians on a curb along a street are far safer than on WGB, because:

- traffic on the bridge is going much faster than on urban streets, where the speed limit is lower and vehicles need to be prepared to stop at any time;

- there is often a protective row of parked vehicles or a lane for parking on urban streets, as well as grass, trees, benches, or other buffers or obstructions between the sidewalk and the roadway; and,
- pedestrians usually have a place to step or run away from the road when on a sidewalk along a street.
- fast bicycles are more likely on WGB than on city sidewalks

Failing to provide a barrier between the sidewalks and the roadway fails the test of common sense and is contrary to widely-recommended and mandated standards. The Final Design Report for the WGB project shows that the Bridge is being rehabilitated to a "Design Speed" of 47 mph (its posted speed is 40 mph). The national consensus is that any design speed over 45 mph constitutes a "high speed" bridge, warranting extra protection for pedestrians and bicyclists. Whereas a barrier curb may suffice for low speed applications, Federal Highway Administration policy is that "A bridge with a design speed above 45 mph is considered a high-speed facility, and it must have a separator railing if pedestrians use it." FHA has also stated that "Sidewalks on bridges should be placed to eliminate the possibility of falling into the roadway or over the bridge itself." In addition, the ASSHTO guide for bicycle facilities calls for a "physical barrier or railing" when there is less than a distance of 5 feet between the bike path and a roadway.

In addition, Section 6.1 of the NYSDOT Bridge Manual (2011) states: "A good background reference that discusses bridge railing design issues is FHWA's October 1998 manual, *Improving Highway Safety at Bridges on Local Roads and Streets*." That FHA manual cogently explains in its section on bridge guardrails (at 31) that:

A major bridge may well be the only available crossing point for pedestrians - in which case, they will be forced to use the facility in an unsafe manner, it that is all that is made available for them. Keep in mind that a bridge project represents what may be the only opportunity to provide or upgrade pedestrian facilities on a bridge for a significant time period. As such, it is essential to provide the safest accommodation for pedestrians that can reasonably be made.

The young families and children that we hope will increase their use of the bridge to reach the amenities in Scotia, and the adults who may use the Bridge to reach the Stockade Historic District or SCCC, or to take advantage of the connected bicycle pathways, are more at risk because of the rail-less reconfiguration of the Bridge. Given the community outcry, it is surprising that barriers were not put back into the WGB design when the plans were changed in May to again use steel railings on the Scotia-bound side of the Bridge. If Director Zhou is right that "safety is the top priority" of the Department, sidewalk users must again be protected with sidewalk guardrails.

One more issue of sidewalk safety was demonstrated just this week at WGB. Snow plows pushed snow from the weekend storm up against the new cement parapet. As a result, at 3 PM on Monday, the usable part of the new 5'2" sidewalk was less than two feet wide, and slippery, when I saw a young man trying to reach Scotia on foot. Attachment 2 is a photograph that I took at 4 PM on Monday, as a plow had just completed its task of removing the piled snow from that sidewalk. As the photo shows, a significant part of the sidewalk was still obstructed by the snow piled along the parapet, and the "cleared" part has clumps and ridges of snow and ice that left the sidewalk treacherous. Of course, the roadway was also slippery. The 2008 NYDOT Bridge Manual notes (at page 6-6):

Snow Accumulation. In areas with heavy snowfall, Regions sometimes consider using open railing on bridges over waterways to mitigate the effect of snow accumulation on the shoulders. The intent is to push snow through an open railing during snow plowing operations . . .

Snow accumulation on the walkway is one more reason that the cement parapet makes little sense on this Bridge. Aesthetics is, of course, the other.

Less Beauty. As you know, many states promote preservation and amplification of scenic vistas from bridges. The new cement parapet on the west side of the Bridge deprives commuters, shoppers and other travelers in vehicles of a spectacular view of the Mohawk River and its shoreline, of the forested Isle of the Cayugas, which divides the River into two channels, and of a vista that stretches to distant hills. And, that loss will be felt for decades. Attachment 1 shows the view, which can be better viewed at my website, by going to: <http://tinyurl.com/WGBview>, or by actually taking a good look over the cement parapet. It is not enough to say, as Director Zhou did, those using the sidewalk can still see the view, when many more people will be in vehicles and deprived of the view. It is also not sufficient that the view east (downstream) has been preserved. While also attractive, it is universally considered to be inferior to the western view, which has been far less touched by development.

There is no indication that DOT staff gave any regard to the negative impact of losing a sensational river vista, as they made the myopic decision to redesign the Bridge with a "decorative" cement parapet (which they apparently believed was more aesthetically pleasing than steel railing that would have been acceptable to the community). DOT never considered, it seems, that the appearance of the steel railing could have been upgraded, rather than installing a costly decorative parapet that would be unwanted by the community even if it did not block the view.

When doing its Scoping and Final Design Report in March 2012, the Department staff was able to avoid doing a federal or state environmental report because it was able to answer that there would be no negative impact on "visual resources", as the design plan called for steel railing that would not block the view. That situation totally changed when a cement parapet was mandated in May 2012. At that point, an informal environmental review should have been performed, at a minimum. The loss of an important and treasured scenic view would then have been seen as having a significant negative impact that could easily be avoided by choosing from many kinds of see-through railings and barriers, or by simply staying with the original design. It is late in the progress of the Bridge to take down the parapet or install guardrails and fencing, but any additional cost or inconvenience seem small when compared to the damage done by two major mistakes in judgment made in designing this project. Thank you for your time and full consideration.

Respectfully submitted,

David A. Giacalone

Enclosures

cc: Sen. Hugh T. Farley
Assemblyman Angelo Santabarbara

FIX THE WESTERN GATEWAY BRIDGE: GIVE US BACK Our SCENIC VIEWS and SIDEWALK SAFETY GUARDRAILS



- Above: our "Lost" scenic vistas of the Mohawk River, and the two channels created by the Isle of the Cayugas -



Word & photos by David Greenstein (Oct. 2012)

- Above: cement wall parapet blocks scenic western views from the Bridge -

DOT threw away the scenic vistas that many states demand be preserved in their bridge projects. And, our local officials did nothing to prevent the loss for generations of a treasured scenic resource. Our "leaders" did not monitor this important \$18.1 million project nor even alert the public so that we could voice our concerns to DOT, which is often receptive to community requests. It is not true that the contractor has control of the design in a design-build project. DOT sets requirements and approves designs.

LOST BEAUTY

Months before it awarded the contract to rehabilitate the Western Gateway Bridge between Schenectady and Scotia, New York's Department of Transportation [DOT] substituted a cement wall for the see-through steel railing it had originally required in the project. That was May 2012. There were no traffic safety benefits.

PUT SAFETY & BEAUTY FIRST!



- the wall attracts graffiti & daredevils -



**PEDESTRIAN
HAZARD!**

After 40 years with guardrails and a shoulder along its sidewalks, the "improved" Bridge now has only a 6-inch curb between fast traffic and the pedestrians and bicyclists on the sidewalk and multi-use bike path. Many authorities, including FHA, would require 48" railing to keep bicyclists and pedestrians from falling onto the roadway.



Above: only a curb now for protection
Below: before the rehab, guardrails, guiderails, and bike safety fences



Without guardrails, the very people we hope will take advantage of the many amenities available on the Scotia side of the bridge (movies, a Library, Collins Park, tennis, restaurants, hot dogs and ice cream), and the attractions on the Schenectady side (like the Stockade and SCCC activities) will be the most at risk. Small children, students and bike path users will be crossing almost half a mile alongside rapid traffic and danger.

**- CONTACT YOUR LOCAL & STATE LEGISLATORS AND OFFICIALS:
tell them to demand that DOT put generations of beauty & safety above
any short-term costs and inconvenience from doing what is right -**

for more information see: tinyurl.com/WGBview

- larger version online at:
<http://tinyurl.com/WGB-view-safety>

Attachment 2



- larger version online at
<http://tinyurl.com/wgbslush>