

FRIENDS OF THE MITCHELL RIVER WOODEN DRAWBRIDGE
C/O 14 SUNSET LANE
CHATHAM, MA 02633

February 28, 2013

Ms. Pamela S. Stephenson
Division Administrator
Federal Highway Administration
55 Broadway, 10th Floor
Cambridge, MA 02142
Attn: Ms. Damaris Santiago

Thomas P. Donald, P.E.
Director of Bridge Project Development
MassDOT Highway Division
Ten Park Plaza, Suite 4160
Boston, MA 02116

Re: Mitchell River Bridge
Chatham, MA

Dear Ms. Stephenson and Mr. Donald:

With respect to the above matter and in accordance with the request of FHWA following the Consulting Parties' meeting of February 12, 2013, the Friends of the Mitchell River Wooden Drawbridge, a designated Consulting Party pursuant to Section 106 of the National Historic Preservation Act of 1966 (the "Act"), hereby submits the following comments.

Background.

1. On October 1, 2010, the Mitchell River Bridge ("Bridge") in Chatham was found by the Keeper of the National Register to be eligible for the National Register under the provisions of the Act. The Keeper's finding confirmed that the Bridge was the last remaining single-leaf wooden drawbridge in Massachusetts and perhaps in the entire United States; that it was one of a continuous line of wooden drawbridges that have spanned the Mitchell River at this site for over 150 years; that the Bridge is a "rare surviving example of a structure embodying the distinctive characteristics of a once-common method of construction"; that it is "of exceptional significance"; and that its "simple, yet distinctive, configuration....and its presence on the landscape form an exceptionally important part of the community's historic identity."

2. As a structure found to be eligible for the National Register, the proposed demolition of the Bridge and its rebuilding by FHWA and MassDOT would be required to follow the regulations contained in 36 CFR Part 800 (the "Section 106 Regulations"), whereby the parties involved would be expected to seek ways to avoid, minimize or mitigate any adverse effects to this historic protected property. Such ways call for a broad range of alternatives during the planning process; the designation of consulting parties and the use of objective consultations between them and MassDOT and FHWA; and the participation, on request, of the Advisory Council on Historic Preservation ("the Council"), a federal agency providing guidance and advice on the Section 106 Regulations and the designated process.

3. In addition to the requirements of the Section 106 Regulations, the provisions of Section 4(f) of the Department of Transportation Act ("Section 4(f)") give protection to historic properties

such as the Bridge by providing that transportation projects that require the use of historic sites may not be approved unless there is no feasible and prudent alternative to harming the site, and that the project includes all possible planning to minimize harm. The burden of proof is with the federal agency (FHWA).

4. From January, 2011, to February 12, 2013, FHWA convened a series of Consulting Parties' meetings to present and review reports and designs prepared by MassDOT and its agents and contractors regarding the status of the Bridge and to determine whether it could be rebuilt as a wooden drawbridge and thereby avoid, minimize or mitigate adverse effects to this exceptional historic property and to consider if the various alternatives being reviewed were feasible and prudent. In January, 2012, the Council urged MassDOT and FHWA to accept the recommendation of the Friends and six other "Preservation" Consulting Parties (the National Trust for Historic Preservation, the Indiana Historic Spans Task Force, the Historic Bridge Foundation, PreservationMass, Prof. James Cooper (historic bridge consultant) and the Chatham Historical Commission) to utilize more wood in the final design, including wooden pier caps, as contained in an alternative denominated as Alt. 1B. MassDOT and FHWA declined to do so and continued to insist on their "preferred alternative", Alt. 3, which was made up of an all concrete and steel substructure, including steel pilings, and a steel bascule and steel-framed roadway covered with a wooden veneer decking and wearing surface and wooden sidewalks and railings. MassDOT stated that it would continue to study the pier caps further. In May, 2012, a Memorandum of Agreement ("MOA") was signed by FHWA, the Massachusetts Historical Commission(???) and the Council, along with the Chatham Board of Selectman and MassDOT, essentially adopting Alt. 3 as the design for the replacement bridge. The Friends and the other named Preservation Consulting Parties refused to sign the MOA because of their belief that the consulting party process had not been followed as provided in the Sec. 106 Regulations and that Alt. 1B was a prudent and feasible alternative which should not have been rejected under the law. Notwithstanding their views, the MOA went into effect in May of 2012.

5. In order to comply with the provisions of the National Environmental Policy Act ("NEPA") MassDOT has also prepared a draft Environmental Assessment ("EA") regarding the Mitchell River Bridge project and its impacts and alternatives. The draft EA also included a separate part on Section 4(f) which contained the statement of FHWA that the Bridge project qualified for "de minimus" treatment under the Programmatic Agreement provisions of the Section 4(f) regulations, thereby avoiding further review under Section 4(f) by another federal agency such as the Department of the Interior which supervises the Keeper of the National Register. The draft EA was circulated to the Consulting Parties in November, 2012 and comments were returned to MassDOT and FHWA in December. The Preservation Consulting Parties expressed their strong objections to the content and conclusions of the draft EA and the Section 4(f) Statement and any final decision on the part of FHWA to issue a Finding of No Significant Impact (FONSI). As of the present date, MassDOT and FHWA have not prepared and circulated a revision of the draft EA.

6. On February 12, 2013, a Consulting Parties' Meeting was held pursuant to the MOA to review a series of reports prepared by URS, the contractor for MassDOT, with respect to the choice of pier caps, stone cladding of the piers and abutments, possible re-use of the top wooden railing on the bridge deck, and color of the steel pilings. This letter of comment is in response to your request for comments regarding that meeting.

Comments:

The items reviewed at the February 12th meeting were as follows:

A. Pier Caps.

1. The pier caps are part of the substructure of the bridge and fit above the pilings and directly underneath the deck beams. As acknowledged by URS in

its Report dated January 9, 2013, they could be structurally made of wood or even concrete with a wooden cladding (therefore, they would be “feasible” pursuant to Section 4(f)). However, by using the same flawed analysis previously used by URS in its recommendation of Alternative 3 (which included the concrete pier caps), it was concluded that wood would be more costly over the supposed 75 year life of the project; that MassDOT had not had long term experience with the use of wood as compared with that of concrete; that periodic replacement/repair of wooden pier caps would drive the need to replace the entire superstructure prematurely; and that concrete piers can be texturized and spray-stained to blend with the wooden surfacing of the bridge so as to meet aesthetic requirements. Included in the URS Report were renderings of the pier caps, along with the steel pilings below and the wood-covered superstructure above.

2. We hereby submit that the analysis used by URS to support the selection of concrete pier caps over either wooden caps or concrete caps with wooden cladding is flawed in the same manner as it was in URS’ earlier recommendation of Alt. 3 over Alt. 1B. In accordance with the decision of the Keeper, residents of Chatham have insisted over the years that when authorities proposed alterations to the Bridge that priority was to be given to in kind replacement of its materials and retention of its simple design, form and function as a wooden drawbridge. The Section 106 Regulations and Section 4(f) are intended to require that an alternative which is the least harmful to the needed replacement of a historic asset (here the Bridge) and which is feasible and prudent must prevail over any other alternative choice even if it is not the most feasible and most prudent of all the choices that are available. The reason for this requirement is simple: that Section 106 and Section 4(f) reflect a federal policy that (i) adverse effects to historic assets (such as the Bridge) are to be avoided, minimized or mitigated because (ii) they are of “paramount importance” and are to be protected to the extent possible even if to do so would be somewhat more costly than another alternative. (Overton Park v. Volpe, 401 U.S. 401 (1971)).

3. The claims made by URS that the use of wooden pier caps would be more costly is not supported by any concrete proof. (In the letter from MassDOT to Ms. Pamela Stephenson of FHWA, dated January 14, 2013, it is admitted that the alternatives analysis reports of URS do not specifically address the life-cycle costs for each option.) Under Section 4(f), an alternative is not prudent only if there were truly unusual factors present or if the cost or community disruption resulting from the alternative reached extraordinary magnitudes or presented unique problems. None of these factors are present here nor were they present in MassDOT’s earlier claims that the use of wood in Alt. 1B was not “prudent”.

4. The Friends do not believe that concrete pier caps are themselves “context-sensitive” or aesthetically in keeping with the existing Bridge. Their basic shape, size and color do not conform to a simple wooden drawbridge. This is confirmed by the recommendation of URS, supported by MassDOT, that the concrete caps be “texturized” and stained to try to make them look like wood. The Renderings included with the URS Report purport to show such texturization and staining which can only be described as artificial and ersatz. (The Project Manager of MassDOT, after requests from the Consulting Parties at the February 12th meeting, has stated that he will try to provide samples of portions of such caps for viewing by Chatham residents.) While this is appreciated, our belief is that the texturization and staining will not make the concrete caps any more aesthetically pleasing than lipstick on a pig.

B. Stone Cladding for Piers and Abutments:

1. The MOA provides for the concrete piers and the wingwalls of the concrete abutments to be “clad” with stone. Discussions of the stone cladding commenced during the earliest public information discussions in 2009-10 and then into the Section 106 hearings process, and it was agreed that the type of stone would be in character with the location and the Town and suitable and acceptable to the residents of Chatham.
2. The URS Report dated January 9, 2013 as provided to the Consulting Parties showed renderings of only single examples of both a rectangular stone cladding and a rounded stone cladding, both of which were available on the internet from a Massachusetts manufacturer, Stoneyard.com. URS recommended the rounded cladding shown in the Report, and that the contractor build a mock-up of the rounded cladding on site prior to building the affected structures.
3. The Friends have requested that a number of mock-ups, both of rectangular and of rounded cladding, be made available on site so the residents can view these alternatives and offer choices prior to construction. Vendors such as Stoneyard.com usually have stone boards available for customers to look at since renderings or pictures generally do not provide a realistic picture of this type of product. The recommendation of URS of a single example is not the type of choice that was contemplated in the earlier discussions and hearings. At the conclusion of the Consulting Parties’ meeting, the MassDOT Project Manager stated that he would see what could be done to accommodate this request.
4. The URS recommendation, for the first time, now seeks to limit the cladding of the abutments as follows:

“The piers would be clad on four sides. The abutment/wingwalls would be clad on the north and south elevations as viewed from the Mitchell River and Mill Pond. A veneer could be wrapped around the face below the bridge deck, but it may not make economic sense to do so because the face under the pier would not be very broad or highly exposed.”

This recommendation is a change from what has been discussed and contemplated from the earliest meetings and should be rejected for that reason alone. It is also incorrect to state that the “unclad area” would not be highly exposed: boaters and shellfishermen, along with people who fin fish from the shore, would see this exposed area. Lastly, the introduction of economic issues (especially where there has not been any actual economic analysis) is contrary to the overall concept of building a context-sensitive result replacement bridge in accordance with the requirements of the Section 106 Regulations.

C. Re-Use of the Existing Top Pedestrian Railing:

1. URS reviewed the possible re-use of the existing top pedestrian railing and recommended against such re-use. Their rationale was that (i) the existing railing could not be removed and refit properly; (ii) re-use would require supplementation with appropriate lengths of new rail which would be “noticeable”; (iii) the existing rail has deteriorated and would require drilling new bolt holes and plugging others with filler; and (iv) URS could not offer a professional judgment that the re-used rail would have the necessary structural capacity “for the intended purpose”.

2. The re-use of the existing top rail was requested by the Preservation Consulting Parties, including the representative of the Chatham Historical Commission, as a way of seeking to preserve the history of the last wooden drawbridge in Massachusetts and perhaps the entire United States, as found by the Keeper of the National Register. The Friends strongly support this request, and it is our belief that skilled woodworkers would be able to do the removal and refitting, as well as the drilling of any new bolt holes and plugging of old holes. (While this type of work may not be commonly done by URS, there are a considerable number of builders of timber bridges who are well able to accomplish this type of joinery. That the re-used railing would be noticeable should be more of a benefit than a problem, especially if one or more appropriate markers were placed on the railing confirming its origin, an approach which is often used in museums and projects to “separate” the old and original from the new.

3. URS’ inability to offer a professional judgment as to structural capacity could be dealt handled by using only a portion of the existing railing and placing it immediately adjoining the drawspan where fishing is not normally allowed. This would help preserve the history of the existing Bridge and not require URS to compromise its professional competence. (In its own Letter of Comment, the Chatham Board of Selectmen recommend this approach.)

D. Paint Color and Treatment of Steel Pilings:

1. The URS Report discusses the treatment and painting of the steel pilings which will be placed under the pier caps to support the superstructure of the replacement bridge. The Report states that such pilings are typically coated initially with a zinc primer followed by two coats of coal tar epoxy paint, both of which are to be applied in the shop. The Report goes on to say that:

“The coating is typically touched up in the field after construction to repair areas that may have been marred during erection.”

The Report concludes with a recommendation that the new piles be finished in black so that they would closely resemble the creosoted pilings which were originally installed under the existing bridge in 1923-25 and a majority of which are still in place.

2. The Friends and the other Preservation Consulting Parties strongly supported the use of wooden pilings on the replacement bridge and objected to the use of steel pilings both on an aesthetic basis and because of our concern, supported by evidence submitted during the Section 106 process, that steel pilings are subject to corrosion and rusting when immersed in salt water. (At the Consulting Parties meeting of February 12th, URS acknowledged for the first time what the Friends had commented on in writing earlier: that the town had experienced serious “corrosion issues” with steel pilings at the Fish Pier.) Unfortunately, MassDOT and FHWA refused to accept timber pilings, and the MOA called for the use of steel pilings,

3. On February 26, 2013, MassDOT invited all Consulting Parties to view steel pilings painted black under two bridges in Marshfield, Massachusetts which were erected o/a 2012. We attended such meeting, viewed the pilings in question, and discussed the treatment and coloration with the MassDOT engineers present. The conclusions which the Friends reached at that meeting were as follows:

- a. The black color of the pilings under one of the bridges was aesthetically acceptable after approximately 2-3 years, but the condition of the pilings under the other bridge included rusting. The steel supports under the other bridge had badly faded (and possibly rusted) to a mostly rusty brown color which may have been caused by sunlight or other unknown factors, including the improper application of the zinc coating and/or less than the proper number of paint coats and/or application of the coating and paint on site and not in the shop, or the marring of the pilings on installation. It is also possible that the rusting may be the result of other chemical reactions which need to be reviewed. In any event, the precise cause is not yet known.
- b. The rusting of the pilings and rusty brown coloration of the steel supports under the other bridge confirm the concerns of the Friends that steel pilings and steel supports have environmental, cost and aesthetic issues that were not properly considered when evaluating the respective alternatives, Alt. 1B and Alt. 3.
- c. Further review of the coloring and treatment of the steel pilings by MassDOT and URS are necessary before the use of these can be made on the replacement bridge. Such review should include consideration of the corrosion of the steel pilings which have taken place at the town Fish Pier and affirmation that coal tar epoxy paint and zinc primer are safe in shellfishing areas such as the Mitchell River Bridge. (The MassDOT engineers stated that there is shellfishing in the areas next to the Marshfield bridges.)

E. Other Matters Not Covered at the Meeting:

1. The meeting agenda, as prepared by MassDOT and FHWA, failed to include certain important matters which should have been reviewed by the Consulting Parties. (Stipulation II.D. of the MOA states as follows: “Aesthetic details of the proposed new bridge to be discussed at the public meeting in Chatham shall include, but shall not necessarily be limited to, the following: (Emphasis Added)):
 - a. The material and color of the bridge fenders. This matters was apparently discussed between MassDOT and/or town staff on or about November 16, 2012, as described in a memorandum prepared by town staff. The Friends were not aware of the meeting and as a designated Consulting Party should have been involved and hereby repeat its request with respect to any further such meetings.
 - b. Members of the public, near the conclusion of the meeting, questioned why safety and traffic issues were not being discussed and considered. These included designation of Bridge Street as an Urban Collector Road, the design speed of the replacement bridge, and possible reduction of speed both on Bridge Street and over the bridge itself. MassDOT responded that the Board of Selectmen had the authority to reduce the speed limits both on the road and on the bridge. The Friends believe, as previously stated, that the design speed of the bridge should not be 30 mph and that the present “dip” in the roadway approaching the bridge should not be eliminated in the design. (See town staff comments in its November 16, 2012 memo re the “dip” as increasing traffic speeds.)

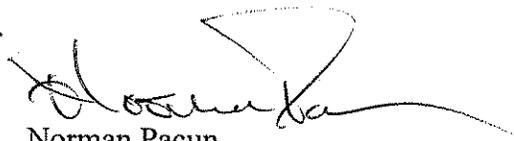
Both of these are aesthetically harmful to the context-sensitive nature and treatment of the bridge as a simple wooden drawbridge on a site and setting that is largely unchanged for two centuries.

Conclusions:

A. The meeting was held pursuant to the requirements of both the MOA and of Section 106. It is the Friends' belief that the reports and submissions made by URS and MassDOT failed to meet the Section 106 requirements which call for an analysis that considers throughout how best to avoid, minimize or mitigate adverse effects to the protected historic asset. Thus, the selection of concrete pier caps was flawed in its failure to give sufficient consideration to the detrimental effect and lack of context sensitivity of these caps when trying to protect the Bridge as a national register -eligible structure. The choices of stone cladding, re-use of the top railing and review of the treatment of the steel pilings equally require that context-sensitivity be considered fully when recommending the appropriate choice or solution.

B. The agenda and meeting also failed to consider the requirements of Section 4(f) in each of these items. Selection of the least harmful alternative in the light of the statute's overriding preservation purpose has simply not been made, nor have the recommendations included all possible planning to minimize harm.

Thank you for the opportunity to submit this letter.


Norman Pacun
For the Friends of the Mitchell
River Wooden Drawbridge

cc: Joseph Pavao, Jr.
Chatham Board of Selectmen
Jill Goldsmith
✓ Ted Keon
Preservation Consulting Parties