

CITY OF CAMBRIDGE
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EXECUTIVE DEPARTMENT
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November 23, 1992

Ms. Jacki Wilkins
MEPA Unit
Executive Office of Environmental Affairs
100 Cambridge Street, 10th Floor
Boston, MA 02202

RE: Notice of Project Change, Area North of Causeway Street
Central Artery/Tunnel Project FSEIR EOE #4325

Dear Ms. Wilkins:

The City of Cambridge strongly supports the revised Charles River Crossing (the Revised Crossing) described in the above referenced Notice of Project Change (NPC). The Revised Crossing represents enormous improvement in the responsiveness of the interchange design to the natural resources and environmental opportunities of the lower Charles River basin. Cambridge strenuously objected to the Proposed Action, the infamous Scheme Z, described in the 1990 CA/T FSEIR. These objections, articulated prior to and during the environmental review process, were based on the severe and unjustified burdens placed on the wetlands, waterways, recreational resources and development potentials in the project area.

Since issuance of the MEPA Certificate by the Secretary of Environmental Affairs in January of 1991, Cambridge has intensively promoted development and evaluation of alternative designs to the Proposed Action. Cambridge representatives actively participated in the Bridge Design Review Committee, a model of inter-community and agency planning and negotiation. With the assistance of independent experts and creative EOTC and CA/T staff, the BDRC vigorously pursued creative solutions to difficult design, traffic, and construction problems. These solutions are, in virtually every instance, more environmentally responsive than those of Scheme Z. At the inception of the BDRC, the only commonly held belief among the BDRC members was that Scheme Z was unacceptable. After months of intense work and a year of follow-on study, the BDRC unanimously and heartily endorsed the Revised Crossing.

The improvements achieved in the Revised Crossing are dramatic. The Revised Crossing eliminates five of Scheme Z's six loop ramps that stacked up more than ten stories tall. The remaining loop ramp is further from the North Point development area, further from the river's edge and at its highest point stands less than thirty feet tall. The Revised Crossing replaces the four massive, sprawling bridges of Scheme Z with a single, elegant bridge with the potential for architectural significance. The eleven bridge piers hindering safe navigation on the Charles River under the Scheme Z bridges have been reduced to a single pier near the river's edge and outside of the navigation channel. The Revised Crossing greatly enhances the potential for successful park development from the old Charles River Dam to the harbor. Achieving this long-held goal was doubtful at best with Scheme Z despite the proposed park mitigation. These mitigating measures, in combination with a more elegant interchange design, will allow completion of the most significant recreational resource in the region. All of this has been achieved with a simpler, safer, more efficient flow of traffic that reduces Vehicle Miles Traveled (VMT) and auto-generated air pollution.

Following the BDRC endorsement, Cambridge has continued to work in close cooperation with EOTC, CA/T, and the City of Boston to refine the Revised Crossing for further enhanced traffic performance, air quality results, urban design and environmental opportunities. Many of these design refinements will be elaborated through the scope and substance of the MEPA review of the Revised Crossing. To ensure full exploration of outstanding design and mitigation issues, Cambridge urges inclusion of the items identified below in the MEPA scope.

Traffic Performance

The CA/T Project will affect traffic patterns in much of the City of Cambridge. To allow for informed evaluation of the Revised Crossing, the traffic simulation network must be expanded to more precisely reflect traffic impacts in the eastern part of the City and beyond. The CA/T has begun expansion of the model to allow more detailed analysis of traffic distribution among highway and regional roadways from both the north and west. The more refined model will also reveal more about traffic impacts on Cambridge streets and at local intersections.

With the expanded network, the CA/T has agreed to analyze key intersections and link volumes in Cambridge. Analysis will be provided for the intersections at O'Brien Highway, the Gilmore Bridge and Land Boulevard; Lechmere Square; Binney and Third Streets; Third Street and Broadway; and Lafayette Square. As requested by the City, the CA/T will also provide link volumes at the following locations:

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Cordon along the Grand Junction R.R. (Memorial Dr., Mass. Ave., Main St., Broadway, Binney St., Cambridge St., Gore St. and O'Brien Hwy)

Cordon along the Charles River (BU, Harvard, Longfellow, Charles River Dam, and Gilmore Bridges)

Memorial Drive on each side of Mass. Ave.

Broadway between Third St. and the Midblock Connector

Land Boulevard between Charles St. and O'Brien Highway

Expansion of the network is expected to be completed by February of 1993. Informed decision making regarding refinements is not possible until output from the expanded model is available for each design refinement.

Using the expanded model, the CA/T has agreed to analyze the effect on traffic in Cambridge of the northbound exit at New Rutherford Avenue on Gilmore Bridge traffic volumes. The Project will also evaluate the potential mitigating measure of restricting the left turn from the Gilmore Bridge to the Charles River Dam to improve the level of service at the intersection. Cambridge is examining possible improvements to this intersection that the CA/T could make and will share the results with the CA/T for evaluation.

The Revised Crossing requires further study of intersection design at Leverett Circle and traffic performance at local intersections in the project area. Leverett Circle is a critical link between local streets in Cambridge and Boston, the Charles River arterial roadways and the regional highway system.

Since publication of the NPC, the CA/T has been trying to develop a Leverett Circle design that brings all traffic to an at-grade intersection with a two-phased light cycle. In pursuing this end, the CA/T is considering several Leverett Circle designs that, unlike the NPC design, restrict traffic movements from the regional highway system to the Charles River Dam. Unlike the NPC designs, these designs also prohibit the left turns from Storrow Drive to the Charles River Dam.

The City is working closely with the CA/T and the City of Boston to evaluate these Leverett Circle designs, but believes that an informed decision can not be made until the model can adequately illustrate the traffic conditions to the north and west. The impact of restricting the left turn from Storrow Drive to the Charles River Dam on the Museum of Science and on hotel and business interests along Land Boulevard must also be evaluated.

The CA/T has agreed to study traffic performance with changes at other intersections in Cambridge. The CA/T will also evaluate Leverett Circle refinements both with and without extension of First Street to O'Brien Highway with a traffic signal (without left turn prohibition at Gilmore) and with and without a signalized left turn allowed from Memorial Drive eastbound to Massachusetts Avenue northbound.

Construction Period Impacts

As provided for in the City's agreement with the EOTC and the MHD, the CA/T will work closely with Cambridge to anticipate and mitigate construction period impacts in the City. The CA/T and the City have identified certain roadway improvements to be implemented by the CA/T that will help to mitigate the effects of traffic diversions caused by CA/T construction in the downtown area. Through the environmental impact review process and coordinated planning, the CA/T and the City will identify other appropriate traffic mitigation measures to be undertaken by the CA/T in Cambridge. The City will work closely with the CA/T to identify and monitor construction vehicle and detour routes, plan for minimization of CA/T induced traffic diversions through residential areas, and provide noise mitigation during operations. Careful planning for construction period mitigation is necessary to ensure the viability of Cambridge residential neighborhoods throughout the construction period.

Pedestrian and Bicycle Connections

Traffic volumes in the vicinity of the project area result in particularly difficult pedestrian and bicycle access along and across the Charles River. Providing safe and attractive pedestrian and bicycle connections across the Charles River Dam and O'Brien Highway require special consideration. The availability of well-designed riverfront parkland though North Point to Charlestown and the North Station area will encourage this pedestrian and bicycle traffic. As pedestrian overpasses present a range of problems, the CA/T should also consider options for at-grade crossings from the Museum of Science to the North Point side of the O'Brien Highway. The CA/T should consult with the MDC and Cambridge about addition of a pedestrian actuated light to allow at-grade crossing.

Hazardous Cargo Routes

Although the revised route for hazardous cargoes across the Charles River appears adequate, we continue to be concerned with the movement of heavy commercial vehicles and hazardous cargo through Cambridge and the region. We are particularly concerned about diversions of these vehicles during the construction period. The CA/T should work in close cooperation with the City to arrange for construction period routing and enforcement for hazardous cargoes.

Air Quality

Cambridge has a strong interest in air quality issues and has been an active participant in the state's planning for air quality improvements under the Clean Air Act. Cambridge is thus particularly supportive of the air quality improvements achieved in the redesign of the CA/T's Charles River Crossing. Compared with Scheme Z, the Revised Crossing substantially improves air quality as a result of reduction of VMT, diversions from local streets to the highway system, and improved traffic flow at local intersections. Through elimination of the double-crossing of the Charles River, the Revised Crossing eliminates 32 million VMT annually from the FSEIR Proposed Action. The air quality benefits of the Revised Crossing alone demonstrate the enormous improvements achieved through redesign of the Charles River Crossing.

The Revised Crossing also encourages and provides facilities for High Occupancy Vehicle (HOV) transportation into the Metropolitan area from the north. Decreases in travel time through use of the HOV system will encourage more efficient commuting habits and help to achieve air quality benefits in Cambridge and Boston. The CA/T has agreed to study additional opportunities for HOV access from the north directly to business centers in Cambridge.

In the NPC, the Revised Crossing includes a single vent building south of the Charles River. Should further development of the tunnel ventilation systems indicate that additional facilities are required, the CA/T should work closely with the City of Cambridge and the MDC to consider the air quality and urban design impacts on the adjacent land areas.

Bridge and Ramp Design/Urban Design

The Revised Crossing reduces Scheme Z's numerous stacked loop ramps extending into North Point to a single loop ramp in Cambridge and replaces the three or more bridges of Scheme Z with a single cable-stay bridge. The reduction in the number of ramps, piers and bridges enhances opportunities for successful completion of the Charles River Basin park system to the harbor and continued recreational boating activities in this portion of the lower basin.

To achieve the planned land use enhancements in this area, integrated and architecturally well-conceived designs for the loop ramp, elevated roadways and the bridge are critical. The CA/T should prepare detailed sections, elevations and perspectives to illustrate the visual aspects of the interchange from important vantage points in the area. The success of the design of the roadway elements will directly affect the usability of the riverfront park system.

Cambridge continues to work with the CA/T and the MDC regarding park design and roadway design in North Point. As the location of the T-C loop ramp coincides with the location of the surface road east of the MWRA facility in North Point, Cambridge has requested that the CA/T evaluate the potential for modification of the loop ramp alignment to resolve this conflict.

Materials Processing Facility

The CA/T should provide a more detailed description of the materials processing facility under consideration for Cambridge. The CA/T should address required land area, facilities for barge access, other transport options, odor and dust control and impacts on the scheduling of park construction.

Noise and Vibration

While noise levels at the pedestrian level in the riverfront park areas are lessened with the Revised Crossing as compared with Scheme Z, the City still has concerns about noise levels that will affect new development. Evaluation of the noise impacts at the development sites adjacent to the ramp should be evaluated and appropriate mitigation measures incorporated in the design. The CA/T should work closely with Cambridge to resolve any conflicts between the aesthetics of the ramp design and noise attenuation requirements.

Utilities and Fire Protection

At present, no public ways exist in North Point and only a limited network of utilities serve the area. To provide for construction uses and as a mitigating measure, the CA/T will construct haul roads and other roadways and install utilities in North Point. The CA/T should work closely with the City in coordination of planning and implementation of all utility service in North Point to ensure conformity with standards throughout the City.

To provide adequate water supply for fire protection during and following construction and to support planned development in the district, new water service will have to be installed in North Point. Installation of new water service will require close coordination with the City as the water source for this new connection may be located as far away as Cambridge and Third Streets. The CA/T should consult with Cambridge and prepare utility construction scheduling plans to ensure availability of adequate water service and other utilities necessary during the construction period. The CA/T should work with Cambridge on design standards, materials and scheduling for installation of water service.

In order to provide fire protection both during and following construction, the Cambridge Fire Department has identified a

number of issues to be addressed. The Department is particularly concerned about inclusion in the design specifications of fire protective features (eg, drains that flow to safe containment areas, allowing for capture of hazardous materials spills); plans to prevent traffic impediments from denying access for emergency response; the impact of hazardous cargo routes on access by emergency vehicles responding to an accident; and development of a worst case incident study addressing bridge, loop ramp and tunnel roadways.

The Department also proposes that the Massachusetts Highway Department prepare and file with them a hazardous materials health and safety plan covering municipal employee emergency response during construction. The plan should include training, equipment and planning to be provided. It should also address local response to fires, storage, spills or release of hazardous materials, including materials brought on the site or encountered during excavation.

Cambridge also proposes that the CA/T evaluate the need, desirability and potential for relocation of the 84" sewer pipe crossing North Point. Should this appear necessary or desirable, the CA/T should work with Cambridge to consider the best alignment for both the project and for improvement of park and development parcels.

Temporary Ramp Structures

The state hopes to provide temporary connections from the CANA tunnel system to the Central Artery to allow for early removal of the overhead ramp in City Square. The CA/T should quickly identify the options under consideration and ensure that any temporary structures will not conflict with construction of the Revised Crossing.

The connection from the North Point parks to Paul Revere Landing Park in Charlestown is a critical link in the new park system. As this was one of the land areas most constrained by highway elements in Scheme Z, ensuring a successful park connection was a difficult challenge. The BDRC sought and achieved through the Revised Crossing the reclamation of the North bank of the Charles River from the numerous overhead loop ramps of Scheme Z. The Revised Crossing eliminates all but one loop ramp and requires removal of the existing C-T stub from the CANA project. The BDRC was particularly concerned about ensuring and scheduling the removal of this stub.

Although the NPC suggests the potential for temporary connections to the C-T ramp stub to facilitate early opening of the CANA system, Cambridge would strongly oppose this approach. Use of this structure during the construction period would not only

conflict with the construction of the north end of the river tunnel and the surface roads but would require yet another temporary relocation of the traffic service. Cambridge understands that the CA/T is reviewing the options for temporary connections, including the Cambridge proposal for use of the T-C ramp for connections between Route 1 and the Central Artery. Recognizing the importance of relieving the burden of the overhead ramp in Charlestown as a priority with an imminent delivery date, Cambridge urges the CA/T to expeditiously work with the cities of Cambridge and Boston and representatives of the affected neighborhoods to evaluate options for temporary connections that do not involve the use of the C-T ramp stub.

Historic Structures

Cambridge has special concern for consideration of historic structures in the project area that may be affected by the interchange design and the North Point open space improvements. The CANA loops and Scheme Z would have required the demolition of Tower A. Tower A contains the switch controls for the rail lines and houses the attendant who operates the bascule bridge. The Revised Crossing leaves Tower A intact, so that it may become a central feature in this area of the riverfront park development.

As the MDC proceeds with development of the master plan for the park facilities in the Charles River Crossing area, Cambridge urges special consideration of the historic significance of the Charles River Basin. This will require review by the Cambridge and Massachusetts Historical Commissions. Preservation agencies will focus on the integration of new parkland designs with the existing historic infrastructure of the basin. There is a particular concern about proposals to alter the granite block sea wall on the north bank of the river to bring pedestrians closer to the water's edge. The CA/T should also review with the commissions any anticipated alteration of the sea wall resulting from river tunnel construction. Cambridge will continue to work with the MDC and CA/T to address the future of the historic resources that may be affected by the project.

Wetlands and Waterways

The Revised Crossing will reduce wetlands and waterways impacts to the Charles River as compared with Scheme Z. Scheme Z's eighteen lanes on multiple bridges supported by numerous columns in and on the banks of the river will be replaced by a single, ten lane cable-stay bridge with only a single column in the river and one adjacent to the bank. These changes have reduced the wetlands impacts and minimized the hazards to navigation in this well used recreational boating area.

The Revised Crossing alters, but does not diminish impacts on the Millers River. The MEPA scope should include discussion of the

extent of fill proposed at the Millers River and wetlands and waterways mitigation to be implemented at the new water feature area upstream of the bascule bridge. The description of the new water feature should include discussion of its depth relative to the top of the river tunnel box, its hydrologic characteristics and its relation to the New Charles River Basin open space system.

Since the MDC convened the New Charles River Basin Citizens Advisory Committee in April, Cambridge has been actively participating in the master planning process for the riverfront parkland in the Area North of Causeway. The current proposal under consideration for the North Point parkland includes alteration of the granite block sea wall and changes in the extent and location of the shoreline. Cambridge supports the conceptual plan while acknowledging that such alteration requires significant environmental and permitting review. Cambridge is prepared to work closely with the MDC, MHD and the appropriate permitting agencies to evaluate the potential for shoreline changes that would enhance New Charles River Basin parkland.

Water Quality

The CA/T should implement best management practices to protect and enhance water quality of the receiving waters in the project area. Cambridge strongly supports the reference in the NPC to CA/T implementation of these measures to treat runoff from the MBTA rail lines and the Boston Sand and Gravel site, as well as that from the CA/T facilities. Implementation of these water quality protection measures should be required as part of the Revised Crossing.

The CA/T should include in both the drainage design and deicing management protocols measures to prevent intrusion of salt-laden runoff to the Charles and Millers Rivers. As described in the NPC, all drainage from the project roadways where salt deicing agents will be employed should be discharged downstream of the New Charles River Dam.

North of Causeway Mitigation

In the FSEIR and in various commitments following its publication, the CA/T presented a variety of Charles River Crossing mitigation measures for implementation. In working toward development of the Revised Crossing, the EOTC, MHD and the City of Cambridge agreed to a range of mitigation measures to be undertaken by EOTC and MHD as part of and in conjunction with the CA/T project. The mitigation measures include transit improvements and studies, utility and roadway construction in North Point, roadway improvements and studies to enhance traffic flow during the project, and environmental protection and enhancement measures. The EOTC and MHD also reaffirmed their

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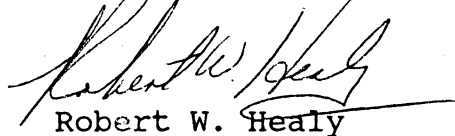
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commitment to implement park construction and improvements outlined in their agreement with the MDC. Continued commitment to these park improvement measures is critical to adequately mitigate the impacts of the Revised Crossing.

Conclusion

The City of Cambridge strongly supports the adoption of the Revised Crossing in place of Scheme Z. The Revised Crossing reduces the extensive environmental impacts of the FSEIR Proposed Action and presents an opportunity to achieve the CA/T's transportation goals while enhancing the project area. The City of Cambridge looks forward to continued cooperation in the planning, design and implementation of the Revised Crossing.

Sincerely,

A handwritten signature in dark ink, appearing to read "Robert W. Healy", is written over a horizontal line.

Robert W. Healy



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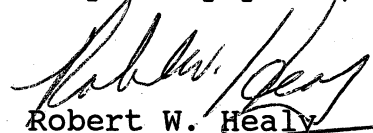
December 14, 1992

To The Honorable, The City Council:

Attached for your information are the City of Cambridge's comments on the Notice of Project Change for the Revised Charles River Crossing. As you know, the Revised Charles River Crossing is the State's current proposal for the replacement of Scheme Z.

The City's comprehensive response is the first such document coordinated and compiled by the Director of the Environmental Program. The group which reviewed the Notice of Project Change and proposed comments included representatives of the Departments of Public Works, Fire, Community Development, Traffic and Parking, and Water as well as representatives of the Conservation and Historical Commissions. I am very pleased with this coordinated effort and I expect it to represent the first of many successful collaborations.

Very truly yours,


Robert W. Healy
City Manager

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CONSENT AGENDA ITEM #4

Communication from Robert W. Healy, City Manager, relative to the City of Cambridge's comments on the Notice of Project Change for the Revised Charles River Crossing.

In City Council,

December 14, 1992

Placed on file