I-91 Viaduct Study Working Group Meeting #7

June 23, 2016 – 4:00 PM

Sheraton Springfield Monarch Place Hotel, One Monarch Place, Springfield, MA

Summary

Purpose: The seventh meeting of the I-91 Viaduct Study Working Group presented conceptual engineering for three alternatives for the I-91 viaduct.

Handouts: Copies of the alternatives maps

Present: Ethan Britland and Michael Clark of the Massachusetts Department of Transportation (MassDOT) Office of Transportation Planning (OTP); Mark Arigoni, John Hoey, and Van Kacoyannakis of the project study team led by Milone & MacBroom (MMI); Sarah Paritsky of Regina Villa Associates; and the following members of the Working Group:

- Rana Al-Jammal, Pioneer Valley Planning Commission
- Jennifer Carrier, Capital Region Council of Governments
- Jenny Catuogno, Young Professional Networking Groups
- Greg Chiecko, Eastern States Expo
- Jeffrey Ciuffreda, Affiliated Chambers of Commerce of Greater Springfield
- Donna Feng, MassDOT District 2
- Laura Hanson, MassDOT District 2
- Sarita Hudson, Partners for a Healthy Community
- M. K. Kwatowski, Springfield Police
- Rich Masse, MassDOT District 2
- Douglas Mattoon, City of West Springfield, Director of Planning & Development
- Paul Nicolai, Nicolai Law Group, P.C.
- Patrick Paul, MassDOT District 2
- Gary M. Roux, Pioneer Valley Planning Commission
- Rick Sullivan, Western Massachusetts Economic Development Council
- Laura Walsh, Forest Park Civic Association

MassDOT Project Manager Ethan Britland opened the meeting and led a round of introductions. He reviewed the agenda for the meeting and explained that the purpose of this meeting is to share the team’s conceptual engineering for the long-term alternatives. At future alternatives analysis meetings, the team will fill out the evaluation criteria matrix developed at earlier meetings.

MMI Principal Mark Arigoni reviewed the previous Working Group meeting, during which the team reviewed four alternatives, including the West Side Alternative. Additional assessment of the West Side Alternative took place in the spring to better understand potential impacts. MassDOT distributed a
technical memo to the Working Group explaining why the West Side Alternative would not be carried forward.

Mr. Arigoni provided an overview of the three alternatives and noted largescale maps are available for closer examination after the presentation. Previously the team shared very conceptual line drawings, and now the alternatives include more details, such as number of lanes, ramps, and pedestrian connections.

Mr. Britland announced that the team will send out links to higher resolution maps so the Working Group can look more closely at the alternatives and provide written or emailed comments by July 8.

**Alternative #1 – Sunken Highway in Existing Alignment**

Mr. Arigoni described Alternative #1, which utilizes the same alignment of the existing Interstate 91 north to south and includes a section that is sunken below grade. There are three lanes in each direction on I-91 through the Longmeadow Curve. A full interchange is proposed where there is currently only a partial interchange connecting to Route 5.

New interchanges proposed at Route 5 and at the South End Bridge could be mid-term improvements. A two-lane frontage road is shown on the east and west sides of I-91, which eventually turns into East and West Columbus Avenue heading toward downtown Springfield. Fewer on- and off-ramps between I-91 and downtown would help reduce the merging and weaving experienced by I-91 drivers today. Traffic traveling on Route 5 would enter I-91 at the South End Bridge interchange. The sunken section of I-91 begins just north of Broad Street until just after the Memorial Bridge, where the highway continues to climb so that it is over the railroad tracks where the tracks cross the Connecticut River. East and West Columbus Avenues remain at grade and are elevated over I-91, with potential open space or redevelopment parcels between Broad Street and the Memorial Bridge.

Mr. Arigoni explained that the railroad bridge is a major constraint. The highway must be elevated above it, similar to the existing elevation of I-91 North. East and West Columbus Avenues pass beneath the railroad bridge. The intersection between the Memorial Bridge, East/West Columbus Avenue, and Boland Way is at grade, which offers a better gateway to the City of Springfield.

The interchange between I-91 and I-291 would stay elevated and the ramps would be reconstructed. The team looked into the possibility of burying the interchange but discovered there would be very far reaching impacts due to grade constraints. The area beneath the interchange could be improved as a plaza or offer pedestrian connections to the Connecticut River. Traffic from I-291 would be able to access I-91 South or the Memorial Bridge. An improved connection to I-291 is provided from Columbus Avenue by creating a ramp that goes over Main Street and touches down at Dwight Street, creating a new signalized intersection with the I-291 EB on-ramp in that vicinity. Traffic on I-91 South destined for downtown Springfield utilizes a ramp that surfaces at Union Street and West Columbus Avenue.

**Question:** Gary Roux, Pioneer Valley Planning Commission (PVPC), asked if the parking garages would be removed. Mr. Arigoni responded that they would need to be relocated.

**Question:** Greg Chiecko, Eastern States Expo, confirmed with Mr. Arigoni that traffic on I-91 South bound for Route 5 could exit to the frontage road at the South End Bridge, or directly exit to Route 5 further south.
**Question:** Jenny Catuogno, Young Professional Networking Groups, confirmed with Mr. Arigoni that traffic on I-91 South could access Route 83 by looping at the Route 5 interchange, and I-91 North traffic can access Route 83 directly, instead of taking local roads.

**Question:** Mr. Chiecko also confirmed that all highway traffic bound for downtown Springfield would need to use the existing Exit 5 for Broad Street. Mr. Arigoni clarified that Exit 5 would remain but Exit 6 would be removed. M. K. Kwatowski, Springfield Police, confirmed with Mr. Arigoni that if drivers miss Exit 5, the next exit would be to I-291 as Exit 5 is the only exit to downtown. Mr. Arigoni explained there would be significant signage indicating the frontage road could be used to access local destinations. Mr. Britland noted there would be a shift from using I-91 to using the frontage roads to access downtown Springfield.

Mr. Arigoni welcomed input from the Working Group on whether the parcel between Broad Street and Union Street should be covered and redeveloped with a greenway, bikeway, pedestrian improvements, or other type of development. A significant drawback would be cost. Mr. Arigoni reminded the Working Group that there would be no hazardous materials transport issues.

**Question:** Sarita Hudson, Partners for a Healthier Community, asked how the tunnel would handle air quality or pollution. Mr. Britland explained a ventilation with vertical stacks would treat pollutants. Mr. Arigoni explained the tunnel will be evaluated with the study’s public health criteria to see how its benefits compare to an uncovered highway. Ms. Hudson asked if a Health Impact Assessment (HIA) is being done, and Mr. Arigoni said public health considerations are being integrated into the study.

**Question:** Ms. Hudson asked if the project is considering climate change and resiliency. Mr. Arigoni said the project area is within an Army Corps of Engineers flood control zone. Mr. Britland added that a pump system would be used for a depressed roadway or tunnel.

**Question:** Mr. Kwatowski asked for clarification about accessing I-91 South from downtown. Mr. Arigoni said a ramp has been removed at Broad Street; traffic would need to take West Columbus Avenue to the frontage road to access I-91 South at the South End Bridge. He added that a mid-block U-turn could be added between Broad Street and Union Street.

**Comment:** Mr. Chiecko expressed concerns about creating a bottleneck between I-91 and downtown. Mr. Britland welcomed his and others’ suggestions on ramp additions. One challenge is to stay within the highway footprint to minimize impacts to abutters.

**Comment:** Paul Nicolai, Nicolai Law Group, P.C., suggested replacing the off-ramp with an on-ramp to I-91 between Hall of Fame Avenue and the South End Bridge connection. Mr. Chiecko suggested adding an additional on-ramp from downtown to I-91.

Mr. Arigoni described next steps for Alternative #1, which include sharing the design with TranSystems to model it regionally and locally in the TransCAD model. This will help the team identify any traffic flow problems.

Mr. Arigoni explained that the Connecticut River bike trail currently dead-ends at the South End Bridge, but a connection could be made over the bridge using existing sidewalks or a new structure. MMI will explore these options further.

Mr. Arigoni showed an illustrative section of Alternative #1 and reviewed the benefits and impacts table.
Alternative #2 – Sunken Highway in New Alignment

Mr. Arigoni highlighted the main differences between Alternative #2 – Sunken New Alignment and Alternative #1. Alternative #2 straightens the curve in the I-91 alignment in Springfield and brings the highway closer to the railroad corridor. This allows more open space on either side of the highway instead of in the middle.

Mr. Arigoni noted that instead of a signalized intersection, this alternative includes a two-lane roundabout in Springfield at the Memorial Bridge. An alternative loop alignment for the ramp from I-291 to I-91 South is shown, but does not offer a direct connection to the Memorial Bridge (like the ramp in Alternative #1) due to grade constraints.

Alternative #2 proposes the same mid-term improvements to the Route 5 and Route 83 interchanges, similar options to cover parcels over the highway for redevelopment, and the same ramp removals and use of frontage roads to connect I-91 and downtown Springfield.

Comment: Jeffrey Ciuffreda, Affiliated Chambers of Commerce of Greater Springfield, noted that covering parcels over the highway adds many options, including parking garages.

Comment: Mr. Chiecko described capacity concerns he has for vehicular and pedestrian traffic on the surface roads. He said additional ramps may help with this. Mr. Arigoni said his team will look into the potential for additional ramps to and from I-91.

Mr. Arigoni described an illustrative section for Alternative #2. New space is created closer to the city center. East and West Columbus Avenues can hang over the sunken section of I-91 to narrow the roadway area. A hilly park area could be created near the river for pedestrians. Mr. Arigoni showed an example of a walkway over a highway in Washington, D.C.

Alternative #3 – Elevated Highway

Mr. Arigoni explained how in Alternative #3 the viaduct would remain in its current alignment but be raised at a more elevated profile to activate street activity underneath and adjacent to the viaduct. Local access to and from the highway would be retained with the exception of an off-ramp removal at exit 6 northbound and an on-ramp removal from Hall of Fame Avenue to I-91 southbound near the South End Bridge.

Mr. Arigoni stated that the current spacing between viaduct piers is 70 to 100 feet. With modern construction techniques, Alternative #3 – Elevated Section could have wider spaced piers to increase light and air, and minimize intrusion below the viaduct. Vertical spacing could also be increased but is limited due to the on- and off-ramps.

Alternative #3 could feature a signature bridge section to eliminate any vertical structures below I-91. Mr. Arigoni explained the team will look into where the parking garages could be relocated. He shared examples of other elevated highways.

No Build Alternative / Short- and Mid-Term Alternatives

Mr. Arigoni showed examples of pedestrian ramps that could replace the staircase on the north side of the South End Bridge on the Agawam side of the river to create pedestrian and bicycle connections. MMI is looking into a connection to the Brightwood neighborhood between the Connecticut River and
the I-91/I-291 Interchange near Avocado Street. There is also potential for aesthetic improvements to the existing underpass near State Street.

Mid-term alternatives include a new connection at Sumner Avenue, which the team has shown at previous Working Group meetings and is planning to model. Mr. Arigoni mentioned that the Longmeadow Curve section, shown in all three long-term alternatives, can be a mid-term solution.

**Question:** Mr. Nicolai asked about the current breakdown of regional and local traffic that drive on I-91, and whether this will be affected by the new MGM Casino. Van Kacoyannakis, MMI, said that MGM’s traffic study focuses on peak periods on Friday and Saturday evenings, whereas this study looks at morning and afternoon weekday peak periods. Rich Masse, MassDOT District 2, believes the traffic is currently split into roughly one-third through-traffic, one-third traffic heading to/from downtown Springfield, and one-third traffic destined for I-291. The team expects the casino to increase downtown traffic, but more would be coming from the south than the north. Mr. Britland said the team will look at all the traffic data and run it through the TransCAD model.

**Question:** Ms. Catuogno asked how traffic will get from I-291 to downtown Springfield in these alternatives. Traffic would take a ramp to I-91 South and then exit for downtown.

**Comment:** Mr. Nicolai suggested adding a connection between I-91 and the Memorial Bridge rotary under Alternative #2.

**Question:** Laura Walsh, Forest Park Civic Association, asked if there are any park land impacts at the new Route 5/I-91 interchange. Mr. Arigoni said there is a potential for encroachments or sliver takings, but nothing significant as the rotary largely falls within the existing highway footprint.

**Schedule and Next Steps**

Mr. Arigoni explained that the project team will make some refinements to the alternatives, run them through the models, and evaluate them based on the evaluation criteria. The next Working Group and public meetings will be scheduled in September, followed by an additional Working Group meeting in October to review the final study recommendations, and a public meeting in November.

Mr. Arigoni thanked everyone for attending and closed the meeting.