Transportation
Land Development
Environmental
Services

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Meeting Notes

Attendees: Leigh Levine – FHWA
Senator David Boutin, State Senate
Jay Minkarah – City of Manchester
Bruce Thomas – City of Manchester
Susan Huard – Manchester Community College
Carl Quiram – Town of Goffstown
Julie Chen – SNHPC
Tim White – SNHPC
Adam Hlasny – SNHPC
Keith Cota – NHDOT
David Smith – NHDOT
Mike Dugas – NHDOT
Nancy Spaulding – NHDOT
Marc Laurin – NHDOT
Marty Kennedy – VHB
Dale Abbott - VHB

Date/Time: September 26, 2012
1:00 – 2:50 PM

Project No.: 52196.00

Place: Manchester Community College

Re: I-293 Exits 6 and 7
Manchester #16099
Advisory Committee Meeting #3

Notes taken by: Dale Abbott

Mr. Marty Kennedy of Vanasse Hangen Brustlin, Inc. (VHB) opened the meeting by welcoming everyone and stated that today's discussion will be focused in two areas. First, we will review what we heard for input at the September 18th public workshop and second, we'll discuss some preliminary interchange reconfiguration ideas.

Mr. Kennedy cautioned the Committee that for the purpose of our discussion on potential solutions, we have drawn some very preliminary lines on plans; however these concepts are very preliminary and may or may not ultimately be considered in the evaluation. It is still much too early to draw any conclusions regarding potential impacts from the preliminary sketches. Mr. Kennedy asked TAC members to use extreme caution in sharing these "stick" figures and that if they do share the sketches to please emphasize the preliminary nature of these "lines on plans". Mr. Kennedy did not want the media, municipal officials, abutters, or the general public to misinterpret these sketches as engineered alternatives.

Mr. Kennedy then began his PowerPoint presentation (The PowerPoint presentation will posted on the project website) to review the public input from the September 18th workshop. Mr. Kennedy described the three work-stations that were setup: *Problems, Issues and Constraints, and Potential Solutions.* Mr. Kennedy noted that the format of the workshop was very informal, by allowing members of the public to browse various plans that were on display at each station, discuss the project with members of the Study Team, provide feedback directly to the Study Team or provide comments directly on the plans or on sticky notes placed on the plan.

Mr. Kennedy asked the TAC members who were at the September 18th public workshop if they had any thoughts regarding the format or other aspects of the meeting.

Mr. Tim White noted that he was at the *Solutions* table and commented that the feedback from the public could not be directly used as a solution. The public comments needed to be interpreted by engineering staff that were present at the table to create a potential solution.

Mr. Kennedy commented that it's not always easy for the general public to convey their thoughts in terms of specific solutions. It's the Study Team's job to listen to public input and from that, begin to formulate potential ideas.

Mr. White reiterated one of the comments he overheard and noted that the VHB engineer at the table was able to turn the comment into a potential solution for a single-point interchange.

Senator David Boutin commented that overall he thought the meeting was a success and that it will continue to be important to keep the public informed as the study progresses. Referring to the list of comments received from the public, Senator Boutin stated that he didn't see the concerns of the residents of the Riverfront Condominium Association specifically described on the list of issues. Senator Boutin requested that the comment list be amended to include issues relating to noise levels and the proximity of the highway at the Riverfront Condominiums.

Mr. White stated the comments received from residents of the Riverfront Condominium Association were represented in the comment list under the *Solutions* section.

Senator Boutin stated that he wanted to see "Riverfront Condominiums" specifically mentioned in the comment list.

Mr. Kennedy stated that the comment list will be revised as requested.

Mr. Keith Cota stated that he heard a comment regarding the condition of the Stark Way Bridge that was missing from the comment list under the *Problems* section.

Mr. Dave Smith noted that the Bridge at Stark Way is not Red-listed.

Mr. Carl Quiram asked how the DOT handles situations where an abutter moves into a residence abutting an existing highway and then raises issues relating to the highway such as high noise levels

Mr. Cota stated that yes there are times when people purchase a property adjacent to a highway and then turn to the DOT to address noise concerns. Mr. Cota explained that NHDOT has a Noise Abatement Policy, which can be found on the NHDOT website.

Mr. Cota noted that the Black Brook Bridge project, which was placed on hold pending the results of the current study, did not fall under the noise abatement policy because the project was not a Type I Project (Type I Projects are generally those that involve the construction of a new roadway or physical alteration of the existing roadway).

Mr. Cota then provided an overview of the state's Noise Abatement Policy and the criteria that are used to determine eligibility for noise abatement. Mr. Cota stated that there are three levels of criteria that must be met:

1. Decibel Level – Noise levels must exceed 66 decibels (dBA) for residential property and 72 for businesses.
2. Feasibility – How long does the wall need to be and how many homes would benefit from the construction of a noise wall. Also, is construction of the wall technically feasible?
3. Concurrence of property owners – Previously, the NHDOT would require 75% buy-in from the adjacent property owners. However, the current noise abatement policy provides greater flexibility by not defining an approval threshold.

Mr. Cota concluded by stating that some preliminary noise data has been collected for the current study and that more detailed noise analyses would be conducted in later phases of the project.

Returning to the presentation, Mr. Kennedy emphasized that "we are now at the end of the Data Collection/Problem Identification phase of our work and that it is important that we come to a consensus as to the problems that we're trying to solve". Mr. Kennedy asked the TAC members to please review the public comment list and provide any additional comments to him as soon as possible.

Senator Boutin stated that since the public workshop, he has traveled the corridor a couple of times during the afternoon peak period and observed two significant problems. Senator Boutin observed that if you're traveling south through the Amoskeag Traffic Circle to get to Elm Street, you can do that fairly easily. However, the problem occurs when trying to travel north through the Circle to get to Goffstown. Specifically, northbound traffic exiting at Exit 6 has difficulty being processed through the Circle, which results in traffic queuing on the ramp. Senator Boutin asked if given that such a large amount of traffic is currently passing through the Amoskeag Traffic Circle to Goffstown, will the future highway improvements at Exits 6 and 7 simply shift the traffic problems from the Turnpike to Goffstown Road?

Senator Boutin went on to describe his concerns relating to highway noise. In the afternoon (4-5PM) at Stark Lane (more so at the southern end of the street) is where a significant noise problem occurs. The bottom floors of the houses in this area of Stark Lane sit lower than the highway, causing high noise levels on the second floor of these homes.

Senator Boutin asked if there are different types of noise walls. Given the location of the houses along Stark Lane, maybe a smaller wall (referring to the height) could be used, which would reduce costs. Senator Boutin stated that he wasn't sure if the $35,000 threshold benefit per receptor would be achieved along this stretch of the highway.

Senator Boutin also discussed the noise issue at the Riverfront Condominiums. Senator Boutin stated that the noise was not as bad in this area and that the residents may prefer to see some additional plantings by the Black Brook Bridge rather than a noise wall, which could reduce costs and perhaps the cost savings could be used for a noise wall along Stark Lane.

Mr. Cota indicated that addressing noise issues is an engineering function in that noise walls are designed to be as cost effective as possible. Mr. Cota noted that noise levels are monitored at the ground level, not at the second floor level. Mr. Cota also stated that noise walls need to provide at least a 5 dBA reduction in noise levels to be considered effective.

Addressing plantings, Mr. Cota stated that if a project doesn't meet the DOT's Noise Abatement Policy, the Department generally tries to provide additional plantings as best they can to create a large buffer of trees.

Mr. Cota thanked Senator Boutin for taking the time to drive the corridor and for the feedback that he provided the TAC.

Mr. Quiram noted that Goffstown's location results in high volumes of through traffic from other neighboring communities (New Boston, Francestown, etc.) passing through Goffstown to get to and from the highway. Mr. Quiram also noted that the Town of Goffstown was working on providing corridors for communities from the west, as well as its own citizens, for safe passage thru town to the greater Manchester area.

Mr. Cota noted that the land use policies of the surrounding communities certainly have an influence on the surrounding highway system. He noted that the Regional Transportation Model will be used to identify the origins and destination patterns throughout the roadway system.

Ms. Nancy Spaulding commented that a couple, who lived in the Stark Lane area, identified the Drum Hill (traffic signal-controlled) Rotary in Chelmsford, MA as an example of a possible solution at Exit 6. Ms. Spaulding stated that she downloaded a Google Map image of the interchange, and passed the image around to the TAC to view.

Mr. Quiram stated that he used to drive through the Drum Hill interchange and that it can be a bit scary. The interchange handles a lot of traffic, but can be challenging to drive.

Returning to the PowerPoint Presentation

Mr. Kennedy provided an overview of six different types of interchanges that may be considered in the development of alternatives. They included: Tight Diamond Interchange, Single-Point Urban Interchange (SPUI), Roundabout Diamond Interchange, Diverging Diamond Interchange, Single Loop Partial Cloverleaf Interchange, and Partial Cloverleaf Interchange. For each interchange Mr. Kennedy provided a schematic drawing and described how each interchange functions, and listed some of the pros and cons of each.

Mr. Quiram asked about the traffic volumes used for evaluating the interchange improvements.

Mr. Cota replied that 20-year design volumes will be used.

Mr. Cota noted that the state's first SPUI was constructed at Exit 13 in Concord at Manchester Street. At the time, when the State was looking at intersection improvements there was some resistance to the use of the SPUI design, however the interchange has worked well and the DOT has experienced a reduced level of resistance to these types of interchanges. Mr. Cota also noted that SPUIs are very efficient and operate at a high capacity.

Ms. Spaulding noted that given the topography at Exit 6, the SPUI would likely be constructed on structure above I-293 as opposed to Exit 13 in Concord or the Granite Street interchange in Manchester, which are located beneath the highway.

Mr. Cota agreed with Ms. Spaulding and went on to state that the SPUI on structure above the highway would involve a larger bridge deck – resulting in higher costs. Additionally, other factors such as snow removal need to be considered.

Mr. Kennedy noted that there are differences between single-lane and multi-lane roundabouts. Single-lane roundabouts tend to provide good traffic calming and pedestrian safety enhancements, whereas multi-lane roundabouts tend to provide high vehicular capacity capabilities with somewhat less traffic calming and pedestrian-friendly characteristics. Mr. Cota added that as compared to traffic signals, roundabouts tend to slow or "calm" traffic, but that we would need to wait to see how receptive the community is to the idea of roundabouts at this location.

Mr. Smith added that roundabouts also tend to improve the overall level of service. He also noted the importance of maintaining public buy-in for the project.

Mr. Jay Minkarah felt that buy-in from the public for roundabout projects can be difficult due to traveler experiences from the old type rotaries in Massachusetts. Mr. Minkarah felt that it would be a hard sell to make to the public. Amoskeag Traffic Circle is already difficult to travel through.

Mr. Cota noted that making the Amoskeag Traffic Circle smaller by incorporating current roundabout design standards may be counterintuitive and might give the public the perspective that it's not going to work because it would be smaller than what is out there today. The public may ask why we're making it smaller when the larger one doesn't work. Mr. Cota went on to discuss the State's first roundabout in Keene. In Keene, the public wanted a roundabout. For the first six months there were actually more accidents at the roundabout than before, but the accidents were fender-bender type accidents. The number of serious injuries at the location dropped significantly. Over time the total number of accidents decreased and injury accidents are rare.

Mr. Quiram noted that the Town of Goffstown has constructed two roundabouts and that they have improved traffic conditions for local traffic at the expense of the thru traffic. Local traffic is able to get through roundabouts and not be stuck at a traffic light.

Mr. Kennedy noted that in addition to developing and evaluating various alternatives, the TAC's role is also to educate the public on how the alternatives would function in order for decision makers to have all the information needed to evaluate the alternatives. Mr. Kennedy also noted that, if needed, a public meeting could be scheduled to address/educate the public on roundabouts or other types of traffic control.

Mr. Cota stated that we also need to understand other modes of transportation. Pedestrian mobility at two-lane roundabouts is different than at single-lane roundabouts.

Mr. Quiram asked if a diverging diamond interchange is the same as a reverse flow interchange.

Mr. Kennedy stated that they are the same.

Mr. Kennedy then presented some preliminary solution ideas at Exits 6 and 7. Mr. Kennedy presented four ideas at Exit 6: Single-Point Urban Interchange, Diamond Interchange, Diverging Diamond Interchange, and a Roundabout Option. The graphics that Mr. Kennedy used to illustrate each interchange were hand drawn stick-figure concepts, not engineering concepts. Mr. Kennedy also provided a couple of possible short-term improvement options at Exit 6, which involved relocating existing on/off ramps and providing new traffic signal control on Eddy Road at the northbound off ramp at the Amoskeag Circle. At Exit 7, Mr. Kennedy presented two possible solution ideas: a Diamond Interchange option (one connecting to Goffstown Road), and a Single-Loop Partial Cloverleaf Interchange (*See PowerPoint presentation*).

Mr. Kennedy stated that the specific type of intersection traffic control (signal, roundabout, etc.) can be mixed and matched among each of the concepts.

Mr. Cota also reiterated that the illustrations are simple stick-figure diagrams and that the impacts associated with each solution are not yet known.

Mr. Smith commented on the roundabout solution at Exit 6, stating that there is only a single bridge with the three roundabouts. Mr. Smith noted that from an infrastructure standpoint this should result in lower cost associated with maintenance.

Mr. Kennedy asked if any the TAC members had any feedback on the preliminary ideas that were presented.

Mr. Minkarah asked if, at this time, any of the solutions have risen to the surface as being the best option.

Mr. Kennedy replied that it is too early yet and the Study Team does not want to prejudge any of the potential solutions. Once we get into the evaluation phase, it will become evident as to the benefits and impacts of each alternative.

Mr. Smith noted that there is a lot of risk in prejudging a solution if it cannot be supported. Mr. Smith further commented that as the study progresses and the options are vetted, the best solution will rise to the top.

Senator Boutin asked if three roundabouts are needed with the Roundabout Option at Exit 6.

Mr. Kennedy replied that some type of traffic control will be needed at Eddy Road, but that the traffic control doesn't need to be a roundabout.

Mr. Cota noted that we would generally want to be consistent as to the type of traffic control (roundabouts or signals) at the interchange. However, at intersections located away from the interchange, the use of different types of control could be used.

Senator Boutin thought that it would be easier for motorists if there were only two roundabouts and some other traffic control was used at Eddy Road.

Mr. Mike Dugas added that depending on the traffic volumes, the footprint of the roundabout at Eddy Road could be smaller than the other two roundabouts at the interchange.

Senator Boutin thought that was a good idea and noted that we should try to limit the amount of land taking.

Mr. Kennedy agreed that we need to minimize land impacts. However, it should be clear that all of these potential ideas would likely have some level of impact. Mr. Kennedy again reminded the Committee that these concepts are simply stick-figure diagrams at this point and it is not possible at this early stage to determine the level of potential impact.

Mr. Cota reminded the Committee members to share their thoughts on these preliminary ideas that were presented by Mr. Kennedy. Mr. Cota asked the TAC to think about the changes on the local street system based on each option. Mr. Cota stated that if additional ideas or comments come up, please share them with Mr. Kennedy.

Mr. Minkarah noted that he thought it would be important to know how the various options will affect traffic patterns.

Mr. Quiram noted that there are simulation videos on the web that demonstrate how different types of interchanges work. Mr. Quiram noted that a colleague of his in Colorado has a good simulation of a Diverging Diamond interchange.

Mr. Kennedy reminded the Committee that we have a very aggressive schedule. We expect to hold a Public Meeting sometime in November where we would present the alternatives that are to be evaluated. Once that is done, the Study Team will be focused through the winter on developing, evaluating and screening the various alternatives. Mr. Kennedy reminded the Committee that the Study Team could provide a training session to the public on interchanges if needed.

Mr. Dugas observed that both the Diamond Interchange and Diverging Diamond Interchange options show connecting Amoskeag Street to Front Street with Goffstown Road configured as the minor approach to a T intersection. He felt (and Marty Kennedy confirmed) that this intersection could also be configured with a direct connection between Amoskeag Street and Goffstown Road and with Front Street as the minor approach.

Mr. Kennedy stated that in addition to looking to relocate Exit 7, the Study Team will also need to consider the potential of providing a full access interchange at the existing location of Exit 7.

Mr. Kennedy asked the TAC if they had any concerns specific to the Millyard or potential impacts to the Merrimack River associated with the mainline roadway improvements. Mr. Kennedy noted that there is not a lot of room to work with in this area, but the Study Team would try to minimize impacts to the greatest degree possible.

Mr. Cota commented that the mainline improvements call for a six-lane section of roadway between Exits 6 and 7. Mr. Cota expected to see some competing interests between cultural and natural resource agencies given the resources in the area (Millyard and proximity to the Merrimack River). Mr. Cota further stated that it is important to be able to defend the design decisions that are made and the importance of the alternatives evaluation. Mr. Cota emphasized that it's not an easy process.

Mr. Minkarah asked if all alternatives assume widening the mainline to six lanes.

Mr. Cota responded that all alternatives assume that I-293 will be upgraded to a six-lane facility. Mr. Cota noted that Exit 5, which was recently reconstructed, was designed for a six-lane facility and the on-going design of the Exit 4 bridge replacements will accommodate a six-lane facility wherever it is feasible within the existing constraints.

Mr. Kennedy followed-up by stating that the Study Team will also need to evaluate a No Build option.

Mr. Minkarah asked if all alternatives assume improvements to both Exits 6 and 7.

Mr. Kennedy explained that we have been asked to develop and evaluate alternatives at both locations. However, whatever the ultimate preferred solution is, there will likely need to be consideration of the phasing of the project in that improvements to one of the interchanges may occur before the other.

Mr. Leigh Levine asked if the resource agencies are going to be involved in the current study.

Mr. Cota replied that the project is going to be presented multiple times at both the Cultural Resource Agency meeting and the Natural Resource Agency meeting. The first of these meetings will occur in November.

Mr. Bruce Thomas asked why the existing footprint at Exit 6 is so large.

Mr. Cota responded that at the time it was constructed, the size and configuration of the interchange was considered appropriate.

Mr. Cota noted that for all alternatives at Exit 7, the configuration and layout are critical as the terrain is going to be a real challenge. All alternatives will require substantial earthwork.

Mr. Cota also commented that a Dunbarton Road connection does not preclude a connection to Goffstown Road.

Mr. Minkarah stated that the Riverwalk and the Millyard contend with the highway right now, but expressed concern about an expanded highway impacting the scenic view within the area.

Mr. Cota stressed the importance of pedestrian access with any roadway improvement.

Mr. Quiram asked about the regional Bike Master Plan in the area.

Mr. Thomas noted that there are no bike path improvements planned for this area of the City.

Mr. Minkarah stated that because of the lack of access in the area, the City is not planning for any bike path projects.

Mr. White stated that there is a regional network of bike trails.

Ms. Susan Huard stated that a bike path connection to the College would be important. Ms. Huard stated that it takes over an hour using two buses to reach the Manchester Community College from downtown.

Mr. Cota commented that part of any solution should be for Front Street to become more of a local street. Mr. Cota stated that if Front Street served as a local road, pedestrian access in the corridor would likely open up. .

Mr. Quiram asked if the Manchester Community College had information on the rental student population.

Ms. Huard replied that the College does not have data on student rentals. The College knows where the student lives but not the status of renting or ownership.

Mr. Kennedy asked the TAC for suggestions on getting the word out for the November public meeting.

Mr. Cota stated that the Study Team would be making a presentation to the Manchester City Alderman and to the Town of Hooksett. Mr. Cota extended an invitation to present to the Town of Goffstown and reminded everyone that public outreach is a critical component to the project.

Ms Huard commented that she had a speaking engagement with the Cit y of Manchester Chamber of Commerce on October 16th.

Mr. Quiram noted that there are some significant public events in November and asked if getting the word out at these events (voting stations) is an option.

Mr. Cota replied the Town/City Moderator would likely restrict who can lobby outside voting stations.

Mr. Quiram noted the importance of using the various public television access channels and urged the Study Team to take advantage of posting meeting notices.

Mr. Kennedy asked if the TAC could provide the contacts for local television access so that meeting notices can be posted.

Mr. Minkarah noted that scheduling matters. Mr. Minkarah stated that the last public meeting conflicted with the Manchester Aldermen's meeting.

Mr. Cota asked Mr. Kennedy what the next steps are.

Mr. Kennedy replied that over the next few weeks the Study Team will be focused on defining the alternatives that are to be evaluated. The plan is to present the proposed alternatives to the public at a meeting in November. At this point, it is unclear whether the TAC will need to meet prior to that public meeting. It may be best that we meet after the meeting to discuss the public input received at the meeting.

Mr. Smith noted the cost implications associated with the project. Mr. Smith stated that the Turnpike Expanded Capital Program currently has $69 million dollars estimated for improvements in the area, and that he did not think this would be enough to cover the cost of the improvements. Mr. Smith also asked Mr. Kennedy to include cost in the evaluation matrix.

Mr. White stated that he thought the $69 million dollars was in the State's Unfunded Project List.

Mr. Kennedy thanked the TAC for attending today's meeting and ended the meeting at 2:50 PM.