INDEPENDENT REVIEW PANEL MEETING

VDOT'S TECHNICAL FINDINGS PRESENTATION

DOWNTOWN TUNNEL/MIDTOWN TUNNEL/

MARTIN LUTHER KING FREEWAY EXTENSION

APRIL 21, 2009

5:OO P.M. - 6:00 P.M.

PORTSMOUTH CITY COUNCIL CHAMBERS

801 CRAWFORD STREET, 6TH FLOOR

PORTSMOUTH, VIRGINIA

REPORTING SERVICES PERFORMED BY: SHEILA L. LOWE

Downtown Tunnel/Midtown Tunnel/MLK Extension Project
Independent Review Panel (IRP) Meeting No.4
May 13, 2009, 6:00pm-9:00pm
Norfolk City Council Chambers, 11th Floor
Panel's Action on April 21, 2009 Meeting Minutes

Corrections to IRP Meeting No. 2, April 21, 2009 meeting minutes:

- Page 4, Line 11: should read " are directions, maps" not " are directions mapped"
- Page 7, Lines 3 and 5: "Alright." not "All right.
- Page 10, Line 8: "Key Personnel" not "key personnel"
- Page 13, Line 9: "focused" not "focussed"
- Page 15, Lines 3 and 13: "design-build" not "design and build"
- Page 17, Line 7: "innovative" not "innovation"
- Page 17, Line 25: "Bayshore" not "Bay Shore's"
- Page 18, Lines 1 and 2: "Bayshore" not "Bay Shore's"
- Page 20, Line 23: "focused" not "focussed"
- Page 22, Line 21: "development processes and design processes" not "development progresses and design progresses"
- Page 32, Line 25: replace "All right. Let's" with "Alright, let's "

MR. DICKENS: Good afternoon, ladies and gentlemen. I'd like to welcome you to this second of five meetings to consider the conceptual proposal submitted by Elizabeth River Crossings LLC under the Public-Private Partnership to finance, develop, design, construct, operate, and maintain the Downtown Tunnel/Midtown Tunnel/Martin Luther King Expressway project.

I'd like to start the meeting off by introducing the panel members. I'll start with Alan Witt, a CTB board member; Cord Sterling, who's also a CTB board member who was not able to be with us tonight; Michael Townes, CEO of Hampton Roads Transit; Dwight Farmer, executive director of Hampton Roads Planning District Commission; Ann Wright, Portsmouth attorney; Jeff Florin, deputy director of Virginia Port Authority; Mal Kerley, chief engineer for VDOT; Rita Busher, CFO for VDOT; Dennis Heuer, district administrator for the Hampton Roads District; Mike Robinson, Virginia Modeling and Simulation Center; and Mr. Ken Chandler, city manager of Portsmouth and our host.

ERC presented its conceptual proposal before the IRP at our first meeting in these council chambers on March 25th, 2009. This evening, VDOT will be presenting to the IRP its technical findings on ERC's conceptual proposal. Following VDOT's presentation and a

short break, the public will have an opportunity to offer comments. Citizens offering verbal comment must be registered, and if you haven't done so, Mr. Partridge and I think there are folks outside who can do that for you.

We have two stenographers available for tonight's public comment session. The first stenographer will be present in the council chambers and will be recording the technical presentation by VDOT and your comments when you come to the podium to speak. If you prefer not to speak publicly but would like your comments documented for the record, a second stenographer is available in the lobby to accept and record your statements. Alternatively, you may complete one of the comment forms available at the comment table also located in the lobby. During the break, the public will have an opportunity to visit the project information table in the lobby, and VDOT personnel will be available to discuss specific information at each one of those tables.

Now, before we begin tonight, I'd like to call on Mr. Partridge to review the contents of our notebook.

MR. PARTRIDGE: Thank you, Mr. Dickens. What I'd like to do -- good evening, panel members, and good evening, audience. What I would like to do for the IRP members is to direct you to your new notebook, Notebook

Number 2 this evening, and just go through what's in the notebook.

In your flap side, there's a location map and a fact sheet. The next sheet you'll find there is your "Table of Contents". Under Tab Number 1 that reads "IRP Schedule", you'll find several sheets. The first is tonight's agenda followed by tomorrow night's agenda. The next section is the remaining Meetings 3, 4, and 5 schedule. The next two sections present the directions to our next facility, which is the city chambers in Norfolk, and these are directions mapped and parking instructions for the City Hall South garage.

Under the second tab under "Meeting 1 Minutes", you'll find an e-mail submitting those minutes to you earlier this month and the final transcript of those meeting minutes followed by an index of those minutes.

Under Tab Number 3, it's labeled "IRP Q & A", there are responses to the Q & A section or session that was held in Meeting Number 1, and those responses are from ERC, and an e-mail containing a question that was raised by one of the members and a response from Hampton Roads Planning District.

Under Tab 4 is VDOT's presentation, which will be going on tonight, and the last tab represents the summary of the technical team's finding of ERC's

proposal. And with that, that finishes what's in this book here. Thank you, sir.

MR. DICKENS: Thank you, Mr. Partridge.

Now, the first order of business is to approve the minutes of Meeting Number 1, which are provided in your -- actually, been provided in advance and also in your notebook. Do I hear a motion for approval of the minutes?

MR. KERLEY: So moved.

MR. DICKENS: I have a motion and a second. Any discussion? All those in favor say "aye"; opposed "nay".

PANEL MEMBERS: Aye.

MR. DICKENS: The "ayes" have it. Minutes are approved with minor technical adjustments. With that complete, I now ask Mr. Kerley, VDOT's chief engineer, to begin his presentation.

Mr. Kerley.

MR. KERLEY: Thank you, Mr. Chairman, members of the panel. As you had indicated, tonight's presentation will focus on VDOT's principal findings and conclusions from its evaluation of ERC's conceptual proposal. VDOT's evaluation was based solely on the qualification criteria set out in the "Solicitation For Conceptual Proposal" to determine if ERC is qualified to

finance, design, construct, maintain, and operate this project.

The evaluation of ERC's conceptual proposal was undertaken by VDOT's technical team, which is composed of staff from relevant disciplines, from the Engineering and Construction, Planning and Environment, Operate and Maintenance, and Finance. Representatives of the directorates for these key disciplines, with the exception of Finance, which Ms. Busher will handle at our May 13 meeting, will be presenting to the IRP their principle findings and conclusions for our consideration.

The directorates are as follows: Dusty Holcombe, the assistant director for the Innovative Project Delivery Division will start off representing the chief engineer and Engineering discipline, to be followed by Chris Collins, project study manager for the Environmental Division at VDOT representing Rick Walton and the Planning and Environmental discipline at VDOT; and representing the Operations and Maintenance discipline on behalf of Connie Sorrell, chief of systems operations, is Larry Trachy, who's the operation planning engineer for the Operations Security Division. After, Dusty then will come back and make some closing comments, and then I have a couple things to say, then I'll turn it back to you, Mr. Chairman.

Dusty.

MR. HOLCOMBE: Thank you, Mr. Kerley. Good evening, Mr. Chairman and panel members. Let me go to the first slide, just get right into it. All right. Hitting the right button helps.

All right. The focus of our evaluation tonight, we'll go into a couple different areas. We're going to look at the evaluation objectives, which I think Mr. Kerley just talked about quickly. We're going to look at the key disciplines that we're going to discuss -- that are going to make presentations this evening. Then we're going to go into the principal findings and conclusions of each of the directorates that make presentations tonight, then I will come back with a summary of the findings.

This is a slide that you saw in the first IRP meeting at that presentation that was given by Danielle Kurze. It focuses on the qualifications that the department is going to be evaluating. These are qualifications associated with ERC's capabilities, with their financial standing, with their background and experience and key personnel, with the approach that they take in resolving the challenges of this unique project, and a general understanding of the scope as it is described in the SFP.

Mr. Kerley already told you that the disciplines that we're going to be talking about tonight are

in Engineering, Planning and Environment, Operations and Maintenance, and, of course, Ms. Busher is going to be providing you with an update on the financing in our May 13th meeting. The technical team that was identified for providing this evaluation was made up of representatives in both the district, Hampton Roads District, and the central office. Tonight's panel of presenters will discuss the strengths and weaknesses of the ERC team, focusing on the priorities that are identified in the "Solicitation For Proposal". Please note, the strengths and weaknesses identified by the technical team are found in detail in your first book from Meeting Number 1, and as Mr. Partridge said, a summary of those are in today's meeting book.

Starting off with the engineering overview, when we started developing the SFP for this project, we looked at some unique features that can be found through the elements of the project. The first one is, obviously, the tunnel, the Midtown Tunnel, and the development of the immersed tube tunnel. We identified that some unique features are associated with this alignment. The parallel alignment brings some unique challenges associated with putting a new tunnel next to an existing tunnel, especially one that's 43 years old. We looked at coordination that's necessary over the marine environment that surrounds the tunnel itself and the stakeholders that

are part of the maritime industry along the corridor. Our goal was to find a team with a strong tunnel design and construction background as part of our evaluation.

Under the second bullet, you'll see that it's "Urban Design and Context Sensitive Solutions". We know that the neighborhoods, both in Portsmouth and Norfolk, are going to be affected by the MLK and by the Midtown Tunnel construction, and we wanted to make sure the team that we're evaluating is and understands the issues associated with the impacts to those neighborhoods, whether it be the industrial community, the commercial community or residential community in those neighborhoods, including areas both in Norfolk and Portsmouth historic districts, Mount Calvary Church and other community stakeholders. They all need to be thought of as we go through this design and development for both the Midtown and MLK.

The final unique feature that we had thought about, from an engineering perspective, was the interface between the multiple disciplines. The scope of this project is to design, build, finance, operate, and maintain. Those disciplines have to work together throughout the development of this project. The people who are going to be doing the operations and maintenance need to be talking to the people that are doing the design and operations so that we have a facility that has a life cycle

that lasts the duration of the concession that we're looking for on this project. So those are some of the unique features that we saw as we started our evaluation.

Each of the presenters tonight are going to talk about the components of the criteria within each of the four priorities that you see in the SFP. I want to start out with Priority 1. The "Project Leaders" criteria or what we call in there the key personnel is focused on the direct and relevant experience of the proposer's project leaders. I focused my evaluation in on the engineering and design aspect of it.

Some of the key positions that we identified in the proposal were the design manager, the lead tunnel designer, the tunnel rehabilitation leader, and the design QA manager. Parsons Brinckerhoff will be the lead designer as identified in the proposal for this project. The design manager has over 24 years of experience, and he has worked locally on the conceptual studies for the third crossing and the restoration and inspection of the Midtown Tunnel during its flooding period.

The lead tunnel designer has over 42 years of experience. He has international tunnel experience on the Tuas Bay Tunnel, which is in Singapore. He has experience in the Western Harbor Tunnel in Hong Kong, and design of cut and cover installations for the Ted Williams

Tunnel in Boston.

The tunnel rehabilitation leader has 38 years of experience, and he has worked as a maintenance, rehabilitation, and facilities management on many of the tunnels in the Hampton Roads area, including the Midtown Tunnel and Monitor-Merrimac Tunnel.

And finally, the QA/QC manager has 46 years of experience, and his work includes work in the Port of Miami Tunnel and the access roadways in Florida, and was deputy project manager for the Central Artery Tunnel up in Boston.

Additionally, from a contractor perspective, ERC brings a wealth of experience, and as we know in Bullet Number 1, over 100 years of combined experience. Their construction manager has over 30 years experience. As background, has worked on the Fort McHenry Tunnel in Baltimore, and he was a PM on the Boston Harbor clean-up project, obviously, in Massachusetts.

Their design-build manager has over 20 years experience, has worked on WMATA's Washington Channel Tunnel and the Fort McHenry Tunnel in Baltimore.

And finally, their tunnel construction manager has over 32 years experience, and he both has worked on the Fort McHenry Tunnel as an engineer and maintenance superintendent, and on the Campostella Bridge here in

Norfolk.

Some of the weaknesses that we found were very few associated with their tunnelling team. Design and construction team was identified to be weak in listing some of their involvement in environmentally sensitive projects, and we feel that, obviously, the Midtown Tunnel is going to be an environmentally sensitive project. We need to take that into account as part of their experience.

Continuing with Priority 1, the tunnel construction, VDOT was looking at direct and relevant experience of the tunnel members related to the construction of this facility. Some of their identified strengths, ERC has identified a construction joint venture comprised of Virginia Beach based Skanska USA Civil, Kiewit Construction Company, and Weeks Marine, who collectively, have built nearly 52,000 lineal feet of immersed tube tunnels in the U.S. Additionally, out of that 52,000, 18,500 feet were built here in the Hampton Roads area including the second Hampton Roads Bridge Tunnel and the Chesapeake Bay Tunnel. The construction joint venture has exhibited a strong design, construction, and rehabilitation experience, and their design manager and construction manager have both cut and cover and immersed tube tunnel design experience.

The technical team from the construction -- tunnel construction perspective did not

identify any significant weaknesses in the team that was presented. Our conclusion under Priority 1 is that the ERC team project leaders and the tunnel construction team had demonstrated that they possess a comprehensive level of experience in all technical components of the tunnel project and exhibit a strong track record of success in delivering high quality projects.

For the criteria under Priority 2, we focussed on the design and construction work history of the team members and the background and project qualifications of the individual members of the team. The ERC team members have designed and constructed urban elevated structures, such as I-15 in Salt Lake City, I-25 in the Denver region, and I-125 and I-40 interchange in Albuquerque, New Mexico. Additionally, team members have designed and constructed the Pinners Point connector in Portsmouth and the I-95/Route 1 interchange in Alexandria, Virginia. They have designed and constructed more than two immersed tube tunnels greater than 4,000 feet, and the Midtown Tunnel is a little over 4,100 feet. For VDOT in both urban and -- excuse me, team members Volkert and Associates provided the preliminary design for the MLK and has worked with VDOT in both urban and rural infrastructure projects.

The construction joint venture has significant experience in the construction of tunnels in

navigable waterways, and they have demonstrated combined design and construction experience on six relevant national and international projects, four of which involve tunnel operations here in the U.S. Additionally, the ERC team members have a safety performance rating that is above average.

Some identified weaknesses that the team has, out of the projects provided, only two are ongoing. In other words, a lot of the projects have been done in the past and over ten years in the past, such as the Monitor-Merrimac and/or the Midtown Tunnel. So the relevant experience for existing and working projects is small, but in the field of tunnels, there aren't a lot of tunnels that are built in the United States. And additionally, they did not demonstrate that the members of the design and construction team have managed design of a Public-Private Partnership like we have here.

The conclusion for Priority 2 is that the entire ERC team brings a wealth of experience across multiple disciplines required for the design and construction of these projects.

On to Priority 3. As previously noted, the project involves an interface between the multiple disciplines and the design, construction, finance, maintenance, and operation of the facility. The first

criteria focussed on how and when the team members have worked together on previous projects. Some of the identified strengths include the design and build team members have a strong working history of working together with design lead Parsons Brinckerhoff on major projects of similar size and scope.

Skanska and Kiewit worked on the second Hampton Roads Bridge Tunnel and the Fort McHenry tunnel in Baltimore. Skanska, Kiewit, Weeks Marine, and Parsons Brinckerhoff worked on the Bay Area Rapid Transit tubes in San Francisco and the 63rd Street Tunnel in New York. Kiewit and PB have worked on 15 complex traffic projects including design and build projects such as the Brooklyn Tunnel in New York and the SR-91 express lanes in California.

Identified weaknesses under the "Prior Working Relationships" is that the contractors and designers have a prior working -- excuse me, the contractors and designers prior working relationships with Macquarie, which is the financial component of their team, is limited to the preparation of proposals for the P-3 projects. We didn't see any specific projects where they have gone into design and construction with Macquarie as a partner.

Under "Performance, Security, Insurance Coverage", VDOT as learned from previous P-3 projects that

no single solution works either for performance security or for insurance coverage. VDOT has utilized several different types of securities for PPP projects for Virginia including parent guarantees, performance and payment bond securities, and letters of credit. Insurance coverage on several of our projects includes general liability, environmental and marine liability, workers' compensation, professional liability, and umbrella coverage.

Some of the identified strengths of ERC team both of the -- or the construction joint venture have provided all of these types of security packages on projects in the past. Skanska has an aggregate surety line of $6.5 billion and a $250 million surety line per project. Consistent with Skanska, Kiewit also has an aggregate surety line of $6 billion and also $250 million per project. Insurance packages and coverages identified by ERC team for previous projects include VDOT's initial requirements that we put in the SFP, and the final packages will be tailored specific to the final scope that's decided for the project. So we feel they are and can provide the insurance and security necessary.

Again, in this area under the priority for the engineering evaluation, there weren't any significant weaknesses identified for the ERC team. VDOT found that the prior working relationships of the

construction and design teams and their ability to secure insurance and performance security packages provided assurances in the proposer's ability to have the proper safeguards in place for the design of this complex project.

Now, on to Priority 4. This one has four different criteria, starting with "Innovations". VDOT solicited innovation ideas in the SFP to try to focus in on the project objectives. We wanted the teams to come together, and we knew it's going to be at a conceptual level, but we wanted the teams to come together to see if they have any specific innovative ideas that VDOT didn't think of in the original SFP itself. I was going to focus in on a couple that were in the conceptual proposal.

ERC has identified that the alignment of the tunnel could be changed from a parallel tunnel to a curved tunnel so that it moves away from the existing tunnel. Some of the reasons for this is that the existing tunnel, obviously, has some age to it and any type of construction close to the tunnel, they want to try to reduce any instability that could be caused on the existing tunnel. So moving it on a curve slightly away from the tunnel will increase the ability and efficiency of their construction methods for the dredging and for the new tunnel itself.

Another area that they looked at was using Bay Shores' precasting yard for fabricating the tunnel

segments. Bay Shores is owned by Skanska, and to utilize Bay Shores, which is in the Hampton Roads area, will increase the efficiency of their construction methods and reduce the cost of any towing of the segments to the project location.

Some of the weaknesses that we identified in the innovations area, there was a suggested alternative ventilation system to promote cost and space savings and overall efficiency; however, this may inhibit the long-term bidirectional traffic of the project, though we will be working closely with ERC, if we are to move forward with ERC, we will be working closely to identify the risks associated with a type of ventilation system that they've identified.

Second area on Priority 4 is "Risk Allocation". The concept of balancing risk allocation is an important aspect of developing a P-3 project. Risk sharing is a requirement of our enabling legislation for a PPTA. Allocation of risk should be to the party that's best able to manage that risk, whether it be the private sector or whether it be the public sector. We need to look closely at the risk matrix that's been developed by both VDOT and the private sector and identify how we can move forward and mitigate and reduce the cost of -- overall cost of the project.

Some of the strengths that we found, ERC provided a comprehensive evaluation of the risk matrix that was identified through construction and design stages. Some of those include the dredging of the facility and moving the dredging material to Craney Island. We're going to be working closely as we advance this project with the Corps of Engineers and Virginia Port Authority to identify if Craney Island is a location where we can take some of the dredging instead of sending it out to alternative locations, whether it be deep sea or other locations along the James River. That risk has been identified in approximately the $20 million range. If we can work closely with the proposers to try to mitigate that risk, we think that would be a viable solution.

Right of away and utility relocation is another risk. Again, right of way and utilities may be best allocated to the department or the public entity because we have the facilities in place for right of way acquisition and utility relocation. Again, we would be working with ERC or the proposers to identify the best group, whether it be the private or the public entity to move forward with that.

Some of the weaknesses we found in the risk allocation, they did not prioritize or rank the risk based on the provided risk analysis. It did not conclude where the concessionaire will focus its resources on

mitigating the risk. Again, since this is a conceptual proposal, I think something like that would continue to be worked out as we continue through the procurement itself.

The next two areas are "Project Understanding and Approach" and "Organizational Structure". For project understanding, VDOT requested the offerer's understanding of the project's complexity, the project's challenges, and the project's scope, and their answers identified for VDOT to make a determination, have they really got it? Do they really understand the scope that we put out there? Do they have the background and experience to develop the scope that we want?

Some of the strengths that we identified, that they do have a clear understanding of the project scope, the tunnel design, and the application of context sensitive design solutions. Additionally, the QA/QC plans are detailed enough to provide you with the industry best practices for both the design and construction phase. We felt that they provided us some real good information associated with their QA/QC plan.

Some of the weaknesses were that they failed to show how ERC will successfully carry forward the public involvement process. They more focussed it on the history and importance, but not necessarily on the process that they were going to follow for public involvement. And

we feel that public involvement and transparency is an integral part of this project.

And finally, the "Organizational Structure". VDOT requested the offerers to provide an organizational structure of its team along with a narrative of the fundamental relationships that they have. Some of the strengths that we identified, the construction and design components of the organizational structure reflected more than 75 percent of their key personnel. So they put their key personnel in key parts of their organizational structure, and we find that that is a good way to make sure that the project is successful.

Additionally, they identified a robust risk management program as part of their core business practice; however, the key representative leading this area was not identified in the organizational structure and that would be identified as one of my weaknesses on there. Risk is going to be a significant component of this project, whether it be the private sector risk or public sector risk, and we need to make sure that one of their key personnel is one of the risk managers.

With that, I'll pass along to Chris for the Environmental and Planning section.

MR. COLLINS: Thanks, Dusty. I'm going to be brief. The environmental issues on this project are

clearly an important element, but may not rise to the same level as finance and design, some of the other issues you hear about as you make your decision.

By way of a short history on the project from an environmental standpoint, NEPA is complete. NEPA is complete for the Midtown Tunnel. NEPA is also complete for the Martin Luther King Freeway Extension. NEPA is underway for the Downtown Tunnel, and the good part about the Downtown Tunnel NEPA process is because there does not appear to be any change in the footprint or major construction, the needed improvements or suggested improvements are categorically excluded from NEPA, and it's really an administrative process to get those taken care of. That should be done rather quickly, which will allow us to move forward with all the NEPA approvals on the project. The project is also a concern in the long-range plan with the MPO from a planning standpoint. That's also taken care of.

Now, from an environmental standpoint, there are a number of issues that remain incomplete as far as project development progresses and design progresses that will need to be handled. They're principally permitting issues, water quality and natural resource permit issues, and those will require approvals from multiple agencies as project development progresses. It's our expectation that

those will be handled by the offerer as project work moves forward instead of by VDOT. Some of those permits you may be familiar with come from the Department of Environmental Quality; they come from the Corps of Engineers and other resource and regulatory agencies. Based on the offerer's materials, it does appear that they understand the implications of securing those permits. They put a team together that has the assets to do that.

With that in mind, I'll go through a number of priority slides. The first priority in the planning and environmental evaluation is the criteria put under "The project leaders demonstrate experience in oversight and administration", and the short answer is they do. We had a number of findings. The team does appear to have the assets necessary to obtain the permits and complete the outstanding environmental requirements. They do demonstrate experience in dealing with projects, large projects, in areas that are either environmentally or historically sensitive, not only the project area here. Based on that, we have a strong expectation that they have the resources and the team members that they need to secure the outstanding approvals.

Their "Work History and Project Qualifications" indicate that they have included design features to meet the environmental needs of complex projects

in the past, and frankly, from an environmental standpoint, that's probably the most important aspect of this particular project from here going forward is the environmental issues. With NEPA done and the project's in a long-range plan, much of the attention will be focussed on design issues as they relate to permitting and securing natural resource water quality permits.

So the team's ability to work as a team and integrate design and environmental issues into a broader project will be important. They do have experience in that on a tunnel project in Norway. If you read the materials, you'll see that. It's a good example of how they dealt with environmental and safety issues and reducing impact on the environment in developing the project.

We also looked at some of the -- the key members have experience with regulatory agencies which should help them secure permits as they move through the environmental processes.

The next slide -- there is no Priority 3. We didn't ask any for environmental experience related to Priority 3 so I'll skip to Priority 4. There's a rather long list here, similar to Dusty's slide, "Innovation and Ideas," "Risk Allocation," "Project Understanding and Approach," and "Organizational Structure." I'll deal with those individually.

First, the team appears to have some innovative ideas for permitting, which was one of the things we were looking for. Permitting, our expectation is that permitting will be their responsibility, so any innovation they can bring to the process will be welcome. In dealing with the agencies, the ultimate test is whether they can secure the permits or not, and the way they do that will be largely up to them. So innovation appears to be there and it looks like it would be helpful.

"Risk Allocation", it does appear that the team has an excellent understanding of the outstanding environmental issues and how they may play a role in finance, design, construction of the project. It does show that the risk for permitting will be shared. That's a potential weakness in our mind. That's something that we would expect the offerers to handle as the project advances.

The "Organizational Structure" appears to be there. They have an onsite environmental coordinator proposed for the project; an innovative idea that's probably a very good one. It may help to not only secure the permits, but make sure that the commitments that they make in these processes are carried out in accordance with those permits and approvals.

The offerer also has suggested that the environmental issues may cease at financial close or the

department will take over those environmental issues. That's something we'll want to revisit; a little bit of concern about that. As a result of some of these permitting processes, it's typical for environmental monitoring and implementation commitments to extend beyond that point. So that's something we have a little bit of concern about. It's certainly something that's easy to overcome.

The offerers also suggested some potential changes in the project; again, innovative ideas that may benefit the ultimate outcome. We just need to make sure we have an understanding that these things can have an impact on cost and schedule as the project is developed, although, the two particular ERC suggestions that I see, moving the tunnel slightly and some work at the Brambleton interchange, while it will require additional NEPA work, it doesn't appear to be major time or cost impediments to the project.

With that in mind, it appears that the team has put together -- that the team they need to secure the permits, they understand the risks associated with it, and frankly, it doesn't appear to be any kind of impediment to subsequent project funding, design or construction.

And with that, I'd like to turn it over to Larry Trachy. He's going to give you a very brief overview of systems operations.

MR. TRACHY: Good evening. I'm Larry Trachy with the Operations and Security Division. Let me get my bearings here. In our review of the proposal, we found four key areas of the project that we'd like to bring to your attention tonight, the first of which is traffic operations during construction.

This is a big project with a small amount of area. Project construction will follow VDOT's guidelines for large scale multiphase, multi-area construction projects on interstates, which means a lot of coordination with the surrounding environment. The existing number of travel lanes will be maintained on I-264, Brambleton Avenue, and Hampton Boulevard during peak periods. Portable message signs will be placed in advance of any construction zones and provide appropriate information to the travelling public. The number of travel lanes on I-264 will be maintained; however, the existing shoulders will sometimes be closed or lane widths will be reduced to facilitate construction of the adjacent collector and distributor lanes. Public awareness and motorist information strategies will be implemented on an ongoing basis until the project is completed.

In the area of open road tolling and value pricing, Macquarie has the responsibility of the team, and it's one of the world's largest developers and operators

of toll roads with 32 toll highway concessions in 11 countries. If you can make a venture to Northern Virginia, Dulles Greenway is one of the projects that they own in Virginia.

Due to limited space in this area, the fully electronic toll system will be used. E-ZPass transponders, which are very familiar to the travelling public in Virginia, are planned to be used. The all-electronic toll collection system will be the very first in Virginia. It will be maintained on a 24/7 basis. There'll be a significant marketing outreach for the military personnel in the area to minimize their experience with the electronic tolling collection process. Tolls will be collected at the designated tolling points at the tunnels and at the MLK extension.

From my background, one of the significant elements of this project is the ITS integration to the local system. The ERC will connect its traffic monitoring system to those used by VDOT in the Hampton Roads area to share information, which is important, rather than two separate entities. Hopefully, they'll work as one. A similar theme will be used in the area of incident management and emergency services response.

In recent years, road tunnel fires and subsequent international research projects have suggested

that vehicle fires within tunnels are likely to develop more rapidly than expected. In light of this, the National Fire Protection Association updated its provisions in 2008 with revisions to ventilation systems, structures, to fire suppression systems, and the importance of this is this allows the opportunity for the new tunnel, as well as the existing tunnel, as well as the Downtown Tunnel, to be upgraded and brought into compliance with fire protection regulations.

Similar to Dusty and Chris, we looked at the project leaders and the oversight administration criteria. From an operations and maintenance perspective, we believe we need some additional discussions with Macquarie regarding the personnel assigned to the operations and maintenance responsibilities. We just need more information, clarification, than what they gave us.

From a tunnel perspective, Macquarie's tunnel operations and maintenance experience includes the Detroit Windsor Tunnel, the Warnow Tunnel in Germany, two tunnels, two expressways in South Korea. Macquarie, as I said previously, is one of the world's largest developers and operators of highway toll concessions in 11 countries. U.S. projects include the Chicago Skyway, the Indiana Toll Road, Dulles Greenway, South Bay Expressway in San Diego. In conclusion on this issue, it is clear Macquarie has

substantial operations and maintenance experience, but again, we'd like to talk further about their assigned personnel behind the operations and maintenance responsibility.

"Work History", again, as I said previously, Macquarie owned the concession, the Detroit Windsor Tunnel, from 2001 to 2006. There was substantial investment in the ventilation system, which is similar to some of the work they'll be doing here. The new system meets and exceeds all fire suppression standards. Macquarie owns and operates the concession for the Indiana Toll Road, which is important because in this project, they successfully transferred 300 state employees to private employment on the Indiana Toll Road. Macquarie owns and operates the concession for the Chicago Skyway, which is a 99-year concession. They have projects in Canada, which is a 35-year concession includes electronic tolling with both transponders and video tolling, and a similar project in San Diego.

In conclusion, regarding the qualifications, they have demonstrated experience as provided in the conceptual proposal, but again, two areas that we found lacking is their experience in dealing with reversible flow tunnels, and it's just simply there are not that many of them in the country, and the other information

regarding the hand-back process. When they finished with the Detroit Windsor Tunnel project in 2006, obviously, they handed it off to someone, but the information just wasn't provided as far as that experience, and that's similar to what we'll have to deal with somewhere down the road at the end of this project.

"Prior Working Relationships", have the team members successfully demonstrated prior working relationships? Members of the ERC team have worked in numerous projects around the U.S. and in Hampton Roads area. Macquarie and Kiewit previously worked together on two projects in British Columbia. Macquarie was the lead developer and Kiewit was the lead contractor. Macquarie was the lead developer and Kiewit was a subcontractor on a Texas project, and Macquarie and Parsons Brinckerhoff worked together in San Diego with Macquarie being the lead developer and Parsons Brinckerhoff being the designer.

Last, regarding "Innovative Concepts and Ideas", ERC is prepared and willing to evaluate and hire VDOT employees most needed and most familiar with the ongoing operations in the existing tunnels. Current VDOT organizational structure will likely be used if ERC is required to assume responsibility for the tunnels immediately upon notice to proceed with a comprehensive agreement. Substantial evaluation is ongoing, as previously

mentioned, regarding tunnel ventilation systems to meet the traffic system needs. One of the advantages of a Public-Private Partnership project is a reliable revenue stream over the term that can be committed to maintenance. This allows the private company to take a life cycle view rather than a capital investment concept.

In the area of "Risk Allocation", the submitted information from ERC was very limited. They stated that they have the ability to assume major risks in areas including traffic and revenue, asset operations and maintenance, and to manage design, construction, and financing, but that's it.

ERC has a clear understanding of the complexity of the project.

Previous work experience of the team in Hampton Roads area, in my mind, breeds a level of confidence with the project.

Regarding the "Organizational Structure", we found it lacking in two areas, one of which Dusty previously mentioned regarding risk management, and the other was each of the teams has a head in charge of its area of responsibility, but there is no one single project manager to go to to resolve issues. And with that, thank you.

MR. HOLCOMBE: All right. Let's wrap

this up. We're going to do a summary -- we're going to do a summary. Is ERC qualified to develop and operate this project? And I have on the slide and on your booklet, you'll see that I have the four priorities in a listing. And the questions are, Does ERC project leaders have the relevant experience in the oversight and administration of complex infrastructure projects? Yes, they do.

Does ERC team have direct relevant experience in design, construction, operations, maintenance of complex tunnel infrastructures including existing and new facilities? We identified in the evaluation that yes, they do.

Does ERC have direct and relevant experience in undertaking toll operations for projects of similar size and complexity? Yes, they do, and while Larry indicated some weaknesses associated with that component of it, we'll work through those weaknesses.

Under Priority 2, has ERC played a significant role in similar projects and do the individual team members have relevant experience on similar projects? We believe that they do have that experience.

Under Priority 3, have ERC members demonstrated successful prior working relationships? We believe they have.

Does ERC's approach to performance

security and insurance coverage in a commercially appropriate manner? Yes, they do provide it in a commercially appropriate manner.

Under Priority 4, has ERC provided conceptual innovations that align with the project objectives to enhance and develop in the operation of this facility? We believe that they have given us some innovative ideas, though that aspect of it will blossom as we go through the process itself.

Are ERC's risk strategies appropriate for this type of project? In general, yes, they are appropriate for a P-3 project, but there will be continued discussion, certainly in that arena, as we go along also.

Does ERC have an overall understanding of the project? Yes, we believe that they do have an overall understanding.

Does ERC have an organizational structure to facilitate and deliver this project successfully? Yes, I believe that they do. Again, there are some areas where we're going to talk to them about organizational structure, but we believe they do.

Do they have some weakness? Yes, they also have some weaknesses. We've identified, through each of our presenters, of weaknesses in their proposal itself, but we also believe that we can work with the ERC team to

resolve any of those identified weaknesses.

VDOT's evaluation of the ERC team across the three disciplines discussed today finds that, collectively, the ERC team brings significant strengths to the development and operation of the project. And with that, I'll pass it back to Mr. Kerley.

MR. KERLEY: Thank you, Dusty.

Mr. Chairman, in closing, on behalf of the staff, from the engineering viewpoint, ERC is well qualified to move this project forward. However, since I'm sitting next to our chief financial officer, she always asks me, Well, they're qualified, but what are we going to have them build? And looking at the minutes of the last meeting, on Page 23, there was an issue about affordability issues. On Page 34, we talked about the higher of two estimates; 35, preventing scope creep; 35 also said, "Opportunities for cost savings"; Page 40 we talk about focus on reducing construction costs, improving the levels of the toll; on Page 44 it says, "The major cost input is the construction costs." So the question is, what are we going to have them build?

We have put out -- you also heard at the last meeting that they are responding to what VDOT put out. We don't think we put out a Cadillac tunnel. There are things that we can look at. When I asked Bill Allen the

question on how we could lower costs at the last meeting, he talked about the ventilation system that Larry mentioned. He talked about the height issue. He talked about the disposal of dredging material. VDOT is meeting with them April 23rd. If you look at the questions from our last meeting on Page 3, responding to a question that we -- "A definite price can be established once VDOT and ERC have jointly agreed to the scope and the assumptions related to the project." We are having a meeting on April 23rd to address that.

One thing that I did want to bring out from a question Mr. Chandler had at the last meeting had to do with light rail, and if you look on Page 72 of the conceptual proposal that was put in, under Section 10.4.4, you'll see a cross-section of the tunnel that they are proposing to build. It is not VDOT's intent to have light rail through the existing tunnel. Basically, it's two 12-foot lanes with 2-foot shoulders. It would be a combination, from a height viewpoint, and if you look at their Page Number 54, talking about innovation and ideas, you'll look down where it says, "16-6 clear height", "In the event that the tunnels must eventually accommodate light rail or other intermodal vehicles, the 16-6 provides sufficient clearance for light rail trains and overhead electric buses."

If you look at our solicitation, it states, "The design and construction of the proposed new Midtown Tunnel shall not preclude the development of future facilities dedicated to providing multimodal transportation alternatives. We would be looking and working with private sector partners to ensure whatever alignment this tunnel is on would not preclude, in the future, for studies if we were to put another tunnel to handle light rails or any other multimodal facility." So I wanted the panel to make sure that they had seen the cross-sectional view. We will be working to minimize the scope as much as possible, and with that, Mr. Chairman, I'll hand it back to you.

MR. DICKENS: Okay. Thank you, Mr. Kerley and team, for a very informative presentation. Recognizing that we're two minutes away from break time, I would ask the panel if there are any quick questions of VDOT staff that you'd like to ask. Mr. Townes.

MR. TOWNES: Mr. Kerley, as I understand it, you said that the shoulder width --

MR. DICKENS: Hit your switch.

MR. TOWNES: Okay. I understand that you said the shoulder width, that there's two 12-foot lanes and two 2-foot shoulders; is that correct?

MR. KERLEY: That is correct, sir. That's what's being proposed. It's on Page 73 of Section

10.4.4 of the conceptual proposal.

MR. TOWNES: So in light of the conversation we had earlier about the possibility --

MR. KERLEY: Correct.

MR. TOWNES: -- of some priorities for a high occupancy vehicle in a shoulder lane or emergency lane, that's precluded by the current drawings?

MR. KERLEY: That's precluded by the current, and if we were to look at that, I wanted to bring that up because any enlargement of the footprint that we have, there's a cost associated with that. So I wanted to make sure that the panel saw what was being proposed, and from our conversation, I just found that out after I talked to you. I wanted to make sure you knew that.

MR. TOWNES: Right. As a followup, we heard earlier about the gentle curving away from the existing tunnel to prevent any unforeseen damage to the older facility; however, you said that the RFP requires that it not conflict with the possibility of a future tunnel. Could you explain how that geometry might work?

MR. KERLEY: Well, I don't know that in detail, but what we would require of the private sector partner is to lay that out and show us how that would work in the future if they did want to shift the alignment.

MR. DICKENS: Any others? Okay. And if

I may take one minute and repeat some things that I said in the earlier meeting, this is a critical, critical project to Hampton Roads, and one that, in my humble opinion, is that we must have. We must have a project there to move traffic back and forth between the two sides of the Elizabeth River. We must be able to do it at an affordable rate. And keeping -- I trust the other members of the panel agree with that. Keeping that in mind, we'll go forward with these discussions.

The panel's going to take a 30-minute break, after which we will open the floor for citizens to give you the opportunity to make comment. I encourage you, during the break, to visit the VDOT tables and remind you that if you wish to address the panel, you do need to sign up at the comment table in the lobby. I declare a 30-minute recess.

(Whereupon, VDOT's technical findings presentation having been concluded, the Independent Review Panel took a 30-minute recess at 6:03 p.m.)

C E R T I F I C A T E

COMMONWEALTH OF VIRGINIA

CITY OF PORTSMOUTH, to wit:

I, Sheila L. Lowe, do hereby certify that the foregoing pages are a true and correct transcript of my Stenotype notes of the public hearing held at the time and place in the caption mentioned.

This 5th day of May, 2009.

Sheila L. Lowe
Notary Public

My term in office expires January 31, 2010.