#### **Minnesota Department of Transportation**



**Transportation Building**395 John Ireland Boulevard
Saint Paul, Minnesota 55155-1899

December 10, 2007

The Honorable Joe Atkins, Chair House Commerce and Labor Committee 503 State Office Building St. Paul, MN 55155-1298

#### Dear Representative Atkins:

The Wakota Bridge Construction Project serves a vital transportation link in the southeast metro. Based on the improvements that have been completed to date, the project is already providing significant benefits to the region. I assure you, the members of the House Commerce and Labor Committee, and especially local residents and businesses, that Mn/DOT is committed to completing the Wakota Bridge Project.

The Minnesota Department of Transportation (Mn/DOT) is well aware of the burden that communities and citizens bear during construction. I regret that those adjacent to the Wakota Bridge project have had to bear more than their fair share of disruption and inconvenience brought on because of the extension of the construction schedule. I want to thank them for their patience, fortitude and understanding.

The Wakota Bridge Construction Project is a large, complex set of five state and four local projects totaling over \$250 million. As with any large project, construction engineers encounter many challenges. The construction of the new Wakota Bridge, which comprises separate eastbound and westbound bridges, is part of a \$120 million construction contract awarded to Lunda Construction Company to reconstruct 3.5 miles of I-494, 0.9 miles of Trunk Highway 61 and to build 13 non-river bridges, in addition to the two river bridges.

The design error that resulted in construction delays and the eventual impasse with Lunda over the price negotiations on the eastbound span of the Wakota Bridge are clearly unfortunate and troublesome. However, I reiterate what I presented to your committee: when protracted negotiations with Lunda Construction failed to produce a fair, sound and defensible settlement to build the eastbound bridge, I felt an open and competitive rebidding of this portion of the overall project was the only responsible action to protect the interests of Minnesota taxpayers and the propriety of the state's contracting processes.

I respectfully, but strongly, disagree with the findings in your committee's preliminary report. Addressed below are what Mn/DOT believes are the report's errors and misrepresentations.

### A. Preliminary Finding - "Mn/DOT selected and approved a bridge design that has failed half the time."

The problems encountered in construction of the Wakota Bridge were due to an error in the design; they were not due to the type of structure selected. Concrete segmental bridges have been built throughout the world for more than 50 years. (A segmental bridge is a concrete bridge that is erected by adding successive pieces, one after the other.) In 1950, the first segmental concrete bridge was built in Germany. Texas built the first U.S. segmental bridge in Corpus Christi in 1973. Since that time several hundred have been built in this country.

All bridge types, at one time or another, have experienced some type of problem due to design, construction, materials or in-service issues. Reinforced concrete bridges have developed shear cracks, steel bridges have developed fatigue cracks or corrosion issues, and timber bridges have rotted prematurely. Segmental bridges have performed as well as or better than other bridge types, while also proving to be price competitive.

Web cracking has occurred in a few segmental bridges for both single cell (two-web) and twin cell (three-web) designs. (The "web" is the side or center vertical wall of the concrete box.) Minor cracking of the web is not a safety issue, but may affect the longevity of a bridge.

The finding states that "Mn/DOT selected and approved a bridge design that has failed half the time" and further states "Mn/DOT was aware of this in 2003, but continued with its required use of the three-web design for the Wakota Bridge." This statement is factually incorrect in its general premise and regarding the sequence of events.

A segmental bridge was selected for the Wakota Bridge in 1999-2000 and the preliminary plan completed in early 2001. A two cell, three-web design was selected due to the width of the bridge, which varies from 86 to 110 feet. It is important to note that the selection was also based on the input of the Wakota Coalition, which favored the concrete box girder design for aesthetic reasons. Public involvement and community desires, in concert with engineering considerations, were key factors in the selection of the bridge type. Design of the Wakota Bridge by HNTB began in February, 2001 and was completed in August 2002. Bids for construction were opened on December 20, 2002, and construction began in early 2003.

Mn/DOT became aware of the web cracking in the Hathaway Bridge, a two-web design under construction in Florida, in October 2003. The Wakota Bridge was already under construction at that time and there was no option to change structure type. Therefore the

sentence in the finding that states that Mn/DOT was aware "but continued with its required use of the three-web design" is misleading and the inference incorrect.

Mn/DOT is aware of twelve concrete segmental bridges in the United States that utilized a three-web design. Those bridges are listed below with the year completed:

- I-390 Genessee River Bridge, Rochester, New York 1981
- Houston Ship Channel Bridge 1982
- Dodge Island Bridge, Miami, Florida 1991
- Bennett Bay Bridge, Idaho 1991
- Acosta Bridge, Jacksonville, Florida 1993
- Putnam Street Bridge, Ohio 1998
- I-895 Pocahontas Parkway, Virginia 1998
- Sagadahoc Bridge, Maine 2000
- East Boston Bridge, Massachusetts 2005
- Royal Park Bridge, Florida 2006
- Cape Fear River Bridge, Wilmington, North Carolina 2006
- IH 45 Galveston Causeway Bridge, Texas 2007

Mn/DOT contacted seven other state DOTs and several consultants to assemble this list. Two of the twelve bridges had minor cracking but neither required repair or retrofit similar to the Wakota Bridge. Based upon this information, it is clear segmental concrete bridges of three-web design have been designed and built successfully either prior to or during the same time period as the Wakota Bridge. The findings in footnote five also state that Florida's Grantham Bridge and the Houston Chronicle Bridge in Texas also had web issues. We contacted both the Florida DOT and the Texas DOT. Both states informed us there are no bridges with those names in their states.

Based upon the actual chronology of events on the Wakota Bridge project and the above information, this preliminary finding is clearly inconsistent with the facts.

## B. <u>Preliminary Finding - "At the same time, another HTNB three-web bridge in Florida was found to be failing, but Mn/DOT did nothing to reconsider the design for the Wakota Bridge."</u>

The preliminary finding includes several other misstatements of fact. The Hathaway Bridge did not fail; it is in fact open to traffic in Florida. The Florida DOT has confirmed that it is a two-web design and not a three-web design. In October of 2003, Mn/DOT became aware of cracks in the Hathaway Bridge in Florida. The statement in the finding "Mn/DOT knew this at the time the Wakota Bridge project was being designed, yet ordered HNTB to continue with the three-web design" is incorrect. Construction of the Wakota Bridge began in February 2003. Design for the Wakota Bridge was completed in August 2002, more than a year before Mn/DOT became aware of the Hathaway Bridge issues. Once under construction, there was no option to change the Wakota Bridge type. Therefore, the premise of the finding is incorrect.

Like most state departments of transportation, Mn/DOT retains consultants to design bridges, primarily to supplement the capacity of our in-house staff and, at times, to provide expertise in designs with which we have limited experience. Our in-house design personnel are experts in steel design, reinforced concrete, and prestressed concrete

design. These bridge types are the predominant types used in Minnesota. For the Wakota Bridge design, HNTB was retained as the state's design consultant.

Mn/DOT did request HNTB to review the Wakota Bridge design in October 2003 in light of the Hathaway Bridge issues. HNTB responded that the principal tension stresses were below the threshold limits and cracking would not be an issue. (Principal tension is the resulting stress at a point on the bridge due to the combination of all loads acting on the bridge.) HNTB was responsible for completing an accurate design and checking its design with independent staff in its organization. Mn/DOT relied upon HNTB as qualified designers to fulfill their contractual requirements.

### C. <u>Preliminary Finding - "Mn/DOT was also responsible for seven months of delay</u> in the Wakota Bridge project because of failure to account for a wastewater main."

Mn/DOT did not fail to account for the wastewater main. Mn/DOT knew the wastewater main was there and addressed it in the planning and design phases of the bridge. Lunda also knew it was there and included in its bid approximately \$685,000 to perform the wastewater main bypass work described in the plans.

Many kinds of utility installations, including telephone, gas, electricity, water and sewer and fiber-optic cable are located in the ground in trunk highway rights of way both parallel to and under roads and bridges across the state. Many Mn/DOT projects require that those utility installations be moved, either temporarily or permanently, in order to accommodate the construction or expansion of a road. There are specific sections of state law that regulate this activity. In the early stages of project design, Mn/DOT works with the owners of the utilities that are in proximity to the proposed project location to identify the location and condition of all utilities and to plan for their temporary or permanent relocation. Buried utilities can be particularly problematic because the condition of the pipe, wire or cable may not be known before relocation of the utility starts. In some cases, it is imperative that the utility service not be interrupted or that the utility not be moved to any significant degree. Mn/DOT always works with the utility owner to identify these issues and plan how to design and construct the project with the least impact to the utility and its customers. This was the case with the Wakota project.

Mn/DOT coordinated extensively with the Metropolitan Council Environmental Services (MCES) during the design phase of the project. MCES is the owner of the South St. Paul force main, which runs under the west end of the westbound bridge on a MCES easement. This 48 inch wastewater force main is a critical component of the MCES system in this area. The pipe carries approximately seven million gallons of wastewater per day and services the area of Inver Grove Heights, South St. Paul, Newport and St. Paul Park.

The westbound river bridge's Pier One footing was designed specifically to accommodate the location of the pipe. A temporary bypass plan was designed as part of the project in full coordination with MCES to insure the viability of the system. Construction of the temporary bypass had to be done with the pipe in continuous service

and no interruptions were allowed. The temporary bypasses required two connection points to the in-place pipe, a north connection and a south connection. The pipe involved in the north bypass connection was found to be sound and the bypass was successfully completed as designed. However, during construction of the south bypass connection, it was found that the pipe was in poorer condition than anticipated by MCES. In consultation with MCES and the contractor, it was decided that the bypass plans should be modified and additional materials installed to insure the integrity of the pipe. The extra worked needed on the temporary bypass added \$400,000 to the cost of the originally planned work on the pipe and delayed work in the immediate area of that pipe. It should be noted that the MCES pipe remained in continuous service throughout construction of the westbound bridge and no discharges or failures occurred with the pipe. Though the extra work changed the project schedule it did not halt work. The contractor continued construction of I-494 and the westbound bridge in areas not impacted by the extra pipe work. There was no way that Mn/DOT could have known in advance that the buried pipe would be in the poor condition in which it was found. This is typical of the kind of challenges that Mn/DOT and its contractors often face in construction projects and it was handled in a normal fashion. Work continued on other parts of the project and the contractor was fully compensated for the additional work.

# D. <u>Preliminary Finding - "Mn/DOT sought, then rejected re-bids from the general contractor to perform the newly designed, more costly eastbound span. Mn/DOT rejected these bids even though the bids were well within Mn/DOT's estimates of what the eastbound span would cost."</u>

The statement "Mn/DOT sought, then rejected re-bids from the general contractor to perform the newly designed, more costly eastbound span" is incorrect. Mn/DOT did not seek "bids" from Lunda; Mn/DOT had an ongoing contract with Lunda Construction Company. Mn/DOT followed state law, federal guidelines, its own "Standard Specifications for Construction" and the language in its contract with Lunda that specifically addressed alteration of work and/or change in conditions of the work being performed under the contract.

Minnesota Statutes, section 161.32, authorizes Mn/DOT to enter into contracts for the construction and maintenance of state trunk highways. It also allows those contracts to be amended to provide goods or services additional to those called for in the original contract. It authorizes the commissioner to pay for such additional work when the services are provided "...under an agreement 'supplemental' to a contract for work on a trunk highway...." Mn/DOT's "Standard Specifications for Construction," which are incorporated into all Mn/DOT construction contracts, provide the basis for determining what kind of additional work requires the negotiation of a supplemental agreement, and how the contractor will be paid for the additional work.

Mn/DOT added significant additional work to the Wakota Bridge contract in order to reinforce the existing construction of the westbound bridge, to correct design errors and also to provide redesigned plans for the eastbound bridge that was not yet under construction. Mn/DOT "Standard Specifications for Construction" provide two ways to

pay the contractor for additional work; either by negotiated agreement based on unit prices or a lump sum basis, or by what is called Force Account Work.

Because Mn/DOT and Lunda could not reach a negotiated agreement based on unit prices or a lump sum, Mn/DOT and Lunda entered into a Force Account Agreement for the extra work that was being performed on the westbound bridge. A Force Account Agreement provides payment for the all of the contractor's actual additional costs related to labor, employee benefits, travel and subsistence, materials, equipment and transportation. The Standard Specifications also provide for an additional payment equal to 62 percent of taxable wages to cover overhead, profit, insurance premiums, workers' compensation, unemployment insurance, Social Security taxes and other indirect labor force costs. The specifications provide an additional payment of 15 percent of materials costs to cover overhead and profit and one allowance to cover administration, general superintendence, profit, and other expenses.

Mn/DOT and Lunda entered into several Extra and Force Account Supplemental Agreements to pay for the altered and additional work on the westbound bridge in the winter of 2004/2005. Mn/DOT and the contractor agreed to a Supplemental Agreement Force Account estimate of \$10 million with no guarantee as to the competition date.

Although Mn/DOT and Lunda negotiated for more than a year and a half on the cost increases on the two Wakota Bridges and participated in 14 day-long mediation sessions, we were unable to reach agreement on the cost of the additional work to be done on the re-designed eastbound bridge. Mn/DOT and Lunda did reach agreement on "Supplemental Agreement 28," which was a lump sum agreement to settle all claims on the westbound I-494 roadway and westbound bridge in March 2006. The original bid for the westbound bridge was \$31 million. Because the westbound bridge was partially completed when the design error was found, Mn/DOT agreed to pay Lunda an additional \$19,075,000. This included \$10,820,046 for the retrofit work, \$4,104,960 for settlement of all claims and an additional \$4,824,994 million incentive. The westbound bridge was completed in the fall of 2006. The total price for the westbound bridge was \$50,750,000, a 64 percent increase over Lunda's original bid cost.

Mn/DOT kept records of the additional costs incurred as a result of the retrofit on the westbound bridge to correct the design error. Unlike the westbound bridge retrofit, which required the installation of a difficult internal post-tensioning system, the redesign of the eastbound bridge maintained the original outline of the box girder. A revised plan for the eastbound bridge was provided to Lunda in the fall of 2005.

The revised plan included the following changes in the quantities of materials and work that would be required:

- \* Approximately 9 percent more reinforcement bars were added to the segments;
- \* Only 7 percent of the plan set was revised to incorporate new work;
- \* The quantity of reinforcement increased 24 percent from the original plan;

- \* The quantity of concrete increased only 3.4 percent. The concrete increase is in portions of the walls of the box girder that are on false work, where the thickness was increased approximately 4 inches;
- \* Post-tensioning strands increased only 4.3 percent;
- \* The largest change was the addition of post-tensioning bars, which increased 670 percent. This increase is large because the original design had no post-tensioning bars in the webs.

It was Mn/DOT's position during negotiation that by adding these additional materials to work that had not yet begun, Lunda could efficiently adjust its construction process with a modest cost impact. Mn/DOT had Force Account records as to the actual cost of adding materials and work to retrofit the westbound bridge, and, as a result, had good information about cost increases that could be expected when the eastbound bridge was built.

In the winter of 2005, during the mediated negotiations, Lunda proposed a revised cost of \$62 million, a 153 percent increase from Lunda's original bid of \$24.5 million for the eastbound bridge. Lunda's proposal included increased expenses for materials and loss of expected reimbursements (which, by specification, Mn/DOT is not allowed to pay). Mn/DOT could not justify a 153 percent increase in the cost of the eastbound bridge when compared to the increase of only 64 percent that was paid to Lunda for the more difficult changes made to the westbound bridge under "Supplemental Agreement 28."

From March 2006 until November 2006, Mn/DOT held numerous meetings with Lunda to try to resolve the cost issues on the eastbound river bridge. Even though some agreements were reached on additional material costs on the eastbound river bridge and on the additional work necessary to complete the remaining I-494 roadway and three non-river bridges, an impasse existed with respect to an acceptable overall cost to complete the eastbound bridge.

It is not true that Mn/DOT refused to make a counter offer; in fact, Mn/DOT made several. In March 2006, Mn/DOT offered \$31.3 million and in September,2006, Mn/DOT raised the offer to \$44.28 million. Both offers were rejected by Lunda.

In the November 1, 2006, mediation session, Mn/DOT asked Lunda to submit a final proposal to the commissioner of transportation for the cost to construct the eastbound bridge. (The Wakota Bridge binder that was given to the Committee at the October 4, 2006, hearing has a copy of the November 1, 2006, meeting notes, tabbed under S.) Lunda responded with a two-part proposal dated November 20, 2006. The first part of the proposal was a lump sum bid (based on variable estimated quantities) of \$56.8 million, which was 132 percent above the original bid. (A portion of the proposal is in the binder, tabbed as V.) The second part of the proposal was for an Open Record Time and Material Proposal with a not-to-exceed value of \$58.9 million and a completion date with conditions, which was 140 percent over the original bid. Neither proposal met Mn/DOT's criteria for an acceptable proposal as set forth in the November 1, 2006, mediation session.

At the November 1, mediation session, Mn/DOT had asked Lunda to provide a final proposal that met the following criteria:

- 1. Lunda was to provide Mn/DOT with one Lunda-preferred option. (Lunda provided two.)
- 2. The option should not include any conditions or exclusions. (The lump sum proposal was based on estimated quantities, which can vary. The Open Record Time and Material Option contained Lunda's proposed mark-ups as well as the condition of getting started with JSE work immediately to meet completion dates.)
- 3. The proposal should indicate that it includes a settlement of all claims. (Neither proposal included the settlement of all claims.)
- 4. The proposal should include a completion date and a fixed cost (lump sum). (The lump sum offer had a fixed completion date; however, it did not have a fixed lump sum due to the variation in quantities. The Open Record Time and Material Option did contain a fixed lump sum and a completion date, but it included conditions.)
- 5. The proposal should contain necessary backup information to justify the amount. (Neither proposal contained adequate justification of costs.).
- 6. Format as an executive document. At the meeting, MNDOT requested that this document contain sufficient documentation to meet FHWA requirements for cost increases. (Lunda's proposal did not contain this information.)
- 7. If Force Account is the chosen option, it should include a price cap and a completion date. (Force Account was not chosen as an option by Lunda.)
- 8. The proposal should include unit prices that can be applied against plan quantities, resulting in a final price in the proposal. (Lunda did not provide unit prices.)
- 9. Two week timeline. (Lunda met this request.).
- 10. The proposal should reflect Lunda's "best and final offer" to resolve this issue.

Based on the unacceptable "best and final offer" from Lunda, on December 27, 2006, Mn/DOT eliminated \$26 million of work from Lunda Construction Company's original contract of \$120 million. The eliminated work consisted of the eastbound bridge and some of the approach roadway work.

All federal-aid transportation projects are subject to review by FHWA and its Inspector General. Office of Management and Budget Circular A-87 requires that costs for which federal aid reimbursement is sought must be "necessary and reasonable." Circular A-87 provides that reasonableness of a cost will be determined by considering, a number of

factors, including, restraints or requirements imposed by such factors as sound business practices; arms-length bargaining; federal, state and other laws and regulations; market prices for comparable goods and services; whether the individual concerned acted with prudence in the circumstances considering their responsibilities to the governmental unit, its employees, the public at large and the federal government; and significant deviations from the established practices of the governmental unit that might unjustifiably increase the federal award's cost (reimbursement).

The cost increase for the eastbound bridge proposed by Lunda was weighed against those factors and was determined to be too high. In addition, the commissioner of transportation is subject to Minnesota Statutes, section 16C.05, subdivision 2(d), which requires the commissioner, when approving an amendment to a contract, to determine that "...an amendment would serve the interest of the state better than a new contract and would cost no more."

Given the known costs to retrofit the westbound bridge, and the less complicated work of building the redesigned eastbound bridge, the commissioner was unable to determine that an amendment would serve the interest of the state better than a new contract. The cost that Lunda submitted for the eastbound bridge was a 132 percent increase over the original bid. The cost negotiated for the westbound bridge was 64 percent higher than the original bid. As a result of the difference in these figures and Lunda's failure to justify these costs, Mn/DOT and FHWA determined that a competitive bidding process for the eastbound bridge was in the best interest of the public.

### E. Preliminary Finding - The independent DRB found Mn/DOT wrongfully terminated the contract with Lunda.

The Finding from the DRB Recommendation on Dispute No. 2, part 6, C. clearly states "Mn/DOT had the contractual authority to eliminate Bridge 55 Work from the Contract."

The DRB was created in the contract between Mn/DOT and Lunda. The contract language, in S-4,1.0 B,1, states that the DRB "...will be established to assist in the resolution of disputes in connection with, or arising out of the performance of this Contract." Item B.3. states that "The Board will provide a nonbinding written recommendation for resolution of the Dispute to the Department and the Contractor." The recommendations are not binding on either party. The DRB Three-party Agreement also states that the purpose of the DRB is to provide written "recommendations" for the resolution of disputes. There is nothing in either the contract or the Three-Party Agreement that authorizes the DRB to review and pass judgment on Mn/DOT's contractual relationship with Lunda or to make any statements other than nonbinding recommendations. Although Lunda and Mn/DOT had a dispute, over the elimination of the eastbound bridge, it did not arise out of the performance of the work of the contract.

Decisions relating to entering into, amending or terminating contracts are the sole province of the state. State law sets the requirements for entering into, amending and terminating contracts. In addition, for federal-aid contracts, federal regulations must be

followed as well. Federal regulations require that all contracts "...contain suitable provisions for termination by the state."

Despite the limitations on its authority, the DRB did make a finding on the commissioner's right to terminate the contract and, in fact, stated "The DRB therefore concludes that SS 1809 grants Mn/DOT the authority to eliminate the Bridge 55 from the scope of the Contract by a convenience (or 'no-fault') termination....The Board's finding that SS 1809 grants Mn/DOT the right to terminate is buttressed by the fact that the Contract was funded in part by the Federal Highway Administration (FHWA), which requires a termination clause in such contracts:..."

There is not a single word in state law or in the standard specifications that requires the commissioner to expand on her determination that elimination of work is in the public interest. Neither is there anything that says that the written notice of termination of any portion of the contract must be accompanied by an explanation of the commissioner's rationale for deeming such termination to be in the best public, state or national interest. The idea that such explanation is required is a fiction created by the DRB.

As noted in the preliminary findings, Mn/DOT estimates the cost of the new eastbound bridge and settling claims with Lunda Construction Company will exceed \$50 million. By seeking bids on the eastbound bridge from multiple contractors and having competition in the bidding process, Mn/DOT is abiding by state statute and Federal Highway Administration guidelines on the low bid process. Re-bidding the work will also guarantee Minnesota taxpayers a fair and equitable price that is established by the open and competitive market. This open and transparent process is contrary to the suggestion in the preliminary findings that Mn/DOT should allow a single contractor the exclusive right to a contract in excess of \$50 million, or allow that contractor the opportunity to increase its original bid to the state by more than 104 percent without adequate justification.

## F. Preliminary Finding - "After terminating Lunda for the eastbound bridge Mn/DOT has inexplicably delayed the re-bidding of the eastbound span of the Wakota Bridge for 14 months."

There is nothing "inexplicable" about the process of preparing a project to be bid. In order to put the redesigned eastbound bridge out for bid, it was necessary to prepare a new set of plans and specifications. What seems like a simple process, since the design for the original bridge was already done, is in fact, one that has a multitude of issues that must be resolved to get the project ready to be re-bid. The eastbound bridge and some roadway approach work have been moved to the contract to be re-bid; however, much of the construction work is still being done under the current contract. All drainage, grading, paving, retaining walls and staging of the project require clearly defined work scopes as to what is or is not in the contract that will be re-bid. Permits and easements obtained for the first contract have been updated for the re-bid project. Utility changes that have occurred since the start of the project have been reviewed and updated to insure that all potential utility impacts are accounted for. The original grading construction plan set completed in 2002 contained 1,363 plan sheets. The new plan set has been redone to

reflect what has already been constructed and what will be done under the re-bid project. It now contains 240 sheets. Construction projects also go through a lengthy review process to insure compliance with all applicable laws and regulations. Bids for the eastbound bridge will be opened on January 25, 2008, and work on that bridge will start in spring 2008.

### G. <u>Preliminary Finding - "Now it is not even clear that Mn/DOT has the funding necessary to complete the Wakota Bridge project."</u>

Funding for this project is identified in FY2008 in the approved Minnesota State Transportation Improvement Program (STIP) 2008-2011. You were provided with copies of the relevant portions. If bids come in higher than the estimated cost, Mn/DOT and FHWA will review the bids to determine why they are higher and, if justified, what adjustments to Mn/DOT's construction program are needed to award the project.

Your letter dated November 16, 2007, asked additional questions and, unfortunately, contained additional misstatements that must be addressed.

#### Atkins' statement - "...project remains half done and at a complete standstill"

The project has never been at a standstill. MN/DOT's contract with Lunda Construction Company included roadway construction on I-494, Trunk Highway 61, the construction of 13 non-river bridges and the construction of the Wakota Bridges. That contract remains in effect and Lunda and its subcontractors have continued to work on bridges, roadways, retaining walls, and ponds along eastbound I-494 throughout 2007. The Lunda contract has a substantial completion date of July 15, 2008. The original contract was for \$120 million of work, \$26M of which was eliminated from the contract and will be re-bid. All other remaining work will be completed by Lunda or its subcontractors under the current contract.

## Atkins' statement - "By Mn/DOT's own estimates, Mn/DOT's failure to complete the Wakota bridge on time is costing Minnesotans \$36,500.00/ day, or \$13 million per year."

You have misinterpreted a report prepared by Mn/DOT's Office of Investment Management entitled "Road-User Cost for S.P. 8285-80: I-494 Wakota Bridge over Mississippi River – Addendum to Original Report, dated March 8, 2006." The report was developed during the negotiation process to gauge the potential impacts to commuters under various lane configurations across the river.

The report assumed there would be two eastbound lanes and three westbound lanes on the new river bridge. This assumed configuration predicted long eastbound traffic\_delays with congested operations of nearly six hours a day. This assumed configuration is not what exists today.

The actual lane configuration on the new bridge is three eastbound and three westbound lanes. This lane configuration results in much less congestion in the eastbound direction than existed with the original Wakota Bridge, and significantly less congestion than would have occurred if only two eastbound lanes had been provided as assumed in the report. On the westbound lanes in the morning, during peak traffic hours, the reoccurring congestion that had existed with the original bridge has been essentially eliminated. Therefore, the user costs anticipated in the report are not applicable to the lane configuration that exists today.

Atkins' question 2 - "If there are other errors that delayed the completion of the Wakota bridge project, please identify those errors and your basis for believing those errors took place. Describe the delays caused by those errors."

Mn/DOT builds between 150 and 200 projects each year. It is not uncommon for some things to change in the field. Despite the best efforts of Mn/DOT and contractors, things sometimes don't go as planned even on the best of projects. Sometimes utilities are not where they were expected to be, materials don't perform as expected, unusual soil problems may be encountered, and sometimes human beings make mistakes. Mn/DOT continually evaluates its design and construction processes, seeking ways to improve the usability of designs in the field, adopt automated, machine-controlled processes that reduce variability, provide financial incentives for innovation from contractors, and work with utilities, local units of government, and environmental regulatory agencies looking for ways to standardize, simplify and make more predictable the processes of planning, designing and constructing transportation projects. This is a constant and ongoing process.

With respect to the Wakota Bridge, apart from the need to correct the design of the bridge, several problems arose during the construction of the bridge. Due to the pile not behaving the way it was anticipated by the plan at Pier 2, FHWA suggested that Mn/DOT conduct load testing at Pier 1 and the west abutment. As a result, it was determined that the piling should be driven to bedrock. At Pier 3, the seal placed by the contractor was too high and not thick enough, resulting in Mn/DOT having to shorten the ice breaker. On Pier 4, the contractor failed to control the temperatures of the mass pour of the footing. The contractor failed to protect the radial post-tensioning tendons in Pier 4 causing them to rust. The contractor had to remove and replace the tendons.

The contractor poured the first segment with the form traveler off of Pier 4. The segment contained numerous voids and honey-combing. The contractor removed the segment and replaced it. It is difficult to determine the amount of delay attributable to each error. "Supplemental Agreement 28" with Lunda Construction Company resolved all claims, including delays, on westbound I-494 and the westbound bridge.

Atkins' question 3 - "Identify and describe the steps Mn/DOT has taken, if any, to address errors on the Wakota bridge project and prevent further delays on said project as well as other Mn/DOT projects."

Mn/DOT retained Parsons Transportation to perform an independent design review of the repair and retrofit plans for the westbound bridge. Similarly, Parsons performed a review of the eastbound bridge plan while HNTB was redesigning the plan.

Mn/DOT's practice has required bridge designs and drawings to be designed or drawn by one individual and checked by a second person. This practice is longstanding and applies to both in-house plans and those completed by consultants.

Since the Wakota Bridge project experience, Mn/DOT has employed a peer review process for major bridges designed by consultants. The I-35W Bridge design being completed by the Flatiron and Figg Engineering team is being reviewed by an independent consultant retained by Mn/DOT.

Atkins' question 4 - "If the cost of completing the Wakota Bridge comes in higher than the original bid, does Mn/DOT anticipate collecting these additional costs from someone other than taxpayers? Is so, from whom, to what degree, when, in what manner, and on what basis?"

Mn/DOT notified HNTB of our intent to recover the additional project costs attributable to the design error in May of 2005. At this time Mn/DOT knows the increased cost incurred to complete the westbound bridge. The increased cost of the eastbound bridge is not yet known. When Mn/DOT has those costs, we will pursue the claim with HNTB. The Office of the Attorney General is advising Mn/DOT regarding the approach the agency should take to recover those costs.

Atkins' question 5—"Please provide the estimated completion date of the remaining half of the Wakota Bridge. Since the bridge itself is already half done, it seems reasonable to expect completion of the remaining half no later than 2009. If that is not the case, please explain the further delay. Furthermore, if that is not the case, please state the basis for treating commuters and businesses in the southeast metro area differently than the commuters and businesses served by the 35W bridge, which is obviously a far more expensive and complex project expected to be completed in one year."

Bids for the eastbound Wakota Bridge will be opened on January 25, 2008, and construction will start in the spring. It will take about 30 months to complete the bridge; it will open in fall 2010. It should be reiterated that the east and westbound Wakota Bridges are two separate bridges, and therefore, it is incorrect to say the bridge is half done. One bridge was opened to traffic in the fall 2006; the second bridge will open in 2010.

The I-35W and Wakota Bridges are being constructed under totally different circumstances and, therefore, different approaches are warranted. The I-35W Bridge replacement is in response to a disaster of national proportions that created a complete void in the nation's interstate system. There is an existing Wakota Bridge, consisting of six lanes. The completion of the second Wakota Bridge, although an important

component of the interstate system, follows the construction of the first bridge, which currently has free-flowing traffic during most times of the day.

I appreciate your allowing Mn/DOT to better communicate the process and difficult issues Mn/DOT has had to address during this project. I look forward to the January letting and getting the second Wakota Bridge under construction.

Sincerely,

Carol Molnau

Lt. Governor/Commissioner

cc: House Commerce and Labor Committee members

Rep. Karla Bigham

Sen. Katie Sieben

Sen. Kathy Salzman

Rep. Julie Bunn

Rep. Marsha Swails

Sen. Jim Metzen

Rep. Rick Hansen

Speaker Margaret Kelliher

aral Molnau

Rep. Bernie Lieder

Rep. Frank Hornstein

Sen. Scott Dibble

Hon. Betty McCollum

Mayor Beth Bauman, City of South St Paul

South St Paul City Council

Mayor Kevin Chapdelaine, City of Newport

**Newport City Council** 

Mayor John Hunziker, City of St. Paul Park

St Paul Park City Council

Mayor George Tourville, City of Inver Grove Heights

Inver Grove Heights City Council

Mayor William Hargis, City of Woodbury

Woodbury City Council

Mayor Sandra Shiely, City of Cottage Grove

City of Cottage Grove City Council

Dakota County Board of Commissioners

Washington County Board of Commissioners

River Height Chamber of Commerce

Wakota Coalition