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Emergency Megaproject Case Study Protest: The Interstate Highway 35 West Bridge

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Abstract

When a disaster destroys a vital piece of infrastructure, such as an interstate highway or a large bridge, the procurement must be developed in a manner that expedites the restoration of services with the shortest schedule practical. Expediting an emergency restoration of services project event makes the selection of the appropriate procurement procedure complicated by the need to emphasize schedule over cost and quality. The need to waive or limit statutory rules for open competition increases the risk of protests. This paper presents the results of the case study of the emergency restoration of services award protest for the Interstate Highway 35 West in Minneapolis, Minnesota. The paper concludes that the Minnesota Department of Transportation (MnDOT) successfully defended itself against an award protest because it published the details of the project's proposal evaluation plan, making it transparent, and strictly followed the plan throughout the procurement and award process.

Keywords

emergency contract, expedited procurement, protest, best value, design-build

Disciplines

Civil Engineering | Construction Engineering and Management | Contracts

Comments

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30 INTRODUCTION

31 One major legal issue in emergency procurements is the need to waive or limit statutory rules for
32 open competition to expedite the contract award (Gransberg and Loulakis 2012). A delay in the
33 start of emergency restoration construction created by a protest of the award is potentially
34 devastating. This paper will discuss the details of that specific issue by presenting the case study
35 of the emergency restoration of services for the Interstate Highway 35 West (I-35W) bridge over
36 the Mississippi River in Minneapolis below the Saint Anthony Falls Lock and Dam. A stream-
37 lined best value selection process was developed by the Minnesota Department of Transportation
38 (MnDOT) to expedite the award of a design-build (DB) contract to replace the collapsed structure
39 (Warne 2008). The contract was not awarded to the lowest priced proposal, forcing MnDOT to
40 defend a protest of the award by the low bidder in court (Hietpas 2008). MnDOT was successful
41 largely due to past DB award protest experience, which led to the agency strictly disciplining the
42 proposal evaluation process in a manner that contributed to a logical defense of the award decision
43 (Shane et al. 2006).

44

45 When a disaster destroys a vital piece of infrastructure, like an interstate highway or a large bridge,
46 the procurement must be developed in a manner that expedites the restoration of services with the
47 shortest schedule practical. Here an emergency services restoration project is defined as “a project
48 initiated as the result of some unexpected circumstance that negatively affected or completely
49 diminished the capacity and/or level of service of a given transportation facility (road, bridge,
50 tunnel, etc.) to the point where the impact is great enough to warrant special treatment in the
51 procurement phase” (Gransberg and Loulakis 2012). Procurement is defined as “the combined
52 functions of purchasing, inventory control, traffic and transportation, receiving, inspection, store
53 keeping, and salvage and disposal operations” (State of Minnesota 2011).

54

55 Emergency procurement procedures are necessary because “during a construction crisis,
56 traditional contracts are inflexible, restrictive and counter-productive” (Loosemore and Hughes
57 1998). For example, the 2009 and 2010 earthquakes that devastated Christchurch, New Zealand,
58 forced the New Zealand Transport Agency to invent a new project delivery method called
59 “collaborative alliancing” (Gransberg and Scheepbouwer 2014). The earthquakes in Christchurch
60 caused major damage to the horizontal infrastructure across the city. Both the central and local
61 governments considered the challenges posed by the scale of the damage significant, and it was
62 determined that a purpose-built organization was required for the rebuild (Hurley 2013;
63 LeMasurier 2015). The situation asked for a new level of collaboration which posed several unique
64 features. First, the size of the disaster meant that it was too big to handle for any one company.
65 Secondly, with the political/media coverage expected, the risk was too great for a single company.
66 And thirdly, there was a need and political and social pressure to start work immediately, before
67 the scope was entirely clear or defined. By forming a collaborative alliance that included multiple
68 construction companies, engineering consulting firms, and members of involved each
69 governmental entity with jurisdiction in the disaster area, the necessary resources were made
70 immediately available and in a form that permitted both quick and efficient employment (Botha
71 and Scheepbouwer 2015).

72

73 Expediting an emergency restoration of services project makes the selection of the appropriate
74 procurement procedure complicated. Time is of the essence, requiring agencies to give schedule
75 priority over quality and cost until the disrupted service has been restored (Houston 2011).
76 Awarding an emergency contract is made more problematic by the high level of emotions and
77 media coverage that surrounds most emergencies. Each project delivery methods utilizes a unique

78 standard contract forms, which is then tailored to match the project’s characteristics. “Emergency
79 projects, because of their urgent nature, lend themselves well to time-based innovative bidding
80 techniques” (PennDOT 2011).

81

82 To expedite the replacement of a major transportation asset under emergency conditions often
83 requires specific authorization to waive the many procurement rules, permitting gates, and
84 sometimes restrictive contracting policies in a highly compressed period of time to restore lost
85 services (Gransberg 2013). Many public transportation agencies anticipate the need to rapidly react
86 to infrastructure emergencies and have expended significant resources on emergency management
87 plans that include a set of accelerated purchasing procedures (Perry and Hines 2007; Blakemore
88 and Konda 2010; Houston 2011). Routine procurements are rigorously regulated by both state and
89 federal legislation. Most state DOTs must obey both laws and regulations meant to ensure
90 maximum competition between interested contractors (Perry and Hines 2007). To deviate from
91 completely open competition runs the risk that an award protest will be lodged, delaying the swift
92 restoration of services (Bai et al. 2006). Issues ranging from public relations problems created by
93 unwanted media attention to a formal protest of award and subsequent litigation, all carry the threat
94 of delay to the restoration of service.

95 **Background**

96 The Interstate Highway 35 West (I-35W) bridge over the Mississippi River in Minneapolis,
97 Minnesota collapsed without warning on the evening of August 1, 2007, killing 13 travelers and
98 injuring many occupants of the 111 vehicles that were transiting the bridge when it failed. In
99 addition, it also closed the navigation channel below the St. Anthony Falls lock on the Mississippi

100 and of course removed 8 lanes of capacity from an urban freeway with an average daily traffic of
101 140,000 vehicles per day.

102

103 The I-35W bridge was originally erected in 1967 and consisted of a steel structure that incorporated
104 welded built-up steel beams for girders and truss members, with riveted and bolted connections
105 (NTSB 2008). The National Transportation Safety Board (NTSB) determined that “the probable
106 cause of the collapse of the I-35W bridge in Minneapolis, Minnesota, was the inadequate load
107 capacity, due to a design error...” (NTSB 2008). While there has been much written about the
108 engineering issues that may have led to the collapse, this paper will focus only on the procurement
109 issues that led to the eventual protest.

110

111 Immediately after the collapse, the wheels were set in motion to remove the wreckage from the
112 river, restore the navigation channel and replace the structure, reopening it to traffic as soon as
113 practical. MnDOT is an agency which implemented DB contracting in 1996, obtaining the
114 necessary enabling legislation to use best value award in 2001 (MnDOT 2008). According to
115 Warne (2008), “MnDOT’s extensive experience with design-build played an important role in its
116 ability to advance the St. Anthony Falls [I-35W] Bridge so quickly through the procurement
117 process”. MnDOT’s specifications contained templates that greatly expedited the development of
118 contract documents and furnished a “framework for the contractor’s quality management plans ...
119 established minimum expectations and provided an outline for the entire [quality management
120 plan] ultimately developed by the contractor” (Warne 2008).

121 **METHODOLOGY**

122 Case study research is appropriate when the researcher requires an in-depth look at alternative
123 business processes (Eisenhardt 1991). Kohn (1997) proposes that case studies are best used “to
124 describe a process or the effects of an event... especially when such events affect many different
125 parties.” The expedited award of a DB mega-project under emergency circumstances qualifies
126 under both authors’ propositions. Case studies are also quite useful for discovering the answers to
127 questions on the details and how circumstances influenced key decisions concerning the outcome
128 of the specific case (Yin 2009; Kohn 1997). As such, the use of case study research was essential
129 to capture the rationale behind the process that MnDOT developed to procure design and
130 construction of the I-35W Bridge, as well as the effect of those details that were cited in the
131 eventual protest.

132

133 The details of interest were collected via a structured interview protocol containing yes/no
134 questions, checklists and open ended questions. The interview questions were developed using the
135 process proposed by Oppenheim (1992) and coupled with a structured interview protocol adapted
136 from the one used by the Government Accountability Office (GAO 1991). The protocol focused
137 specifically on the capture of causal relationships that were unique to the emergency contract
138 award process. Interviewees were sent the case study report after the interviews to verify the
139 accuracy of the report’s information. The case study interview details were also augmented when
140 appropriate from information found both in the I-35W documentation and the literature.

141

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142 Interviews were conducted with Tom Ravn, PE, MnDOT’s Director of Construction, Jay Hietpas,
143 PE, MnDOT’s Director of Innovative Contracting and Amber Blanchard, PE, of the MnDOT
144 Bridge Office, who coordinated the design aspects of the procurement. The interview output from
145 both MnDOT engineers is incorporated in the details contained in subsequent sections of the paper
146 and are collectively cited as “MnDOT” when details from the interviews are provided.

147

148 **THE PROCUREMENT DETAILS**

149 According to Perry and Hines (2007), “In both federal and state law, the use of emergency
150 procurement procedures allows for limiting competition in selecting a contractor.” They go on to
151 provide this cautionary admonition: “however, this limitation must be carefully utilized and fully
152 documented.” Expediting the delivery of the I-35W emergency bridge replacement project
153 includes all the facets of emergency procurement procedures of a complex mega-project in a
154 heavily urbanized location (Shane et al. 2015). The emergency procurement process developed by
155 MnDOT was challenged by an award protest. MnDOT was ultimately successful in its defense.

156

157 **Stream-lined Design-Build Process**

158 The DB contract to rebuild the bridge was valued at \$234 million not including Right-of-Way, etc.
159 It contained major incentives and disincentives to encourage minimizing of construction time
160 (Hietpas 2008). The maximum amount of potential time bonuses was set at \$27 million, of which
161 the design-builder eventually was awarded a total of \$25 million (Warne 2008). A project-specific
162 risk management system was designed. The agency and the design-builder collaborated on the

163 assembly of a risk register and allocated each risk to the party that could best handle it. For
164 example, the removal of contaminated soils encountered was assigned to the design-builder who
165 then delivered them to MnDOT for disposal. Approaching risks in this manner enabled a shorter
166 procurement period by eliminating the need to complete a thorough subsurface investigation in
167 order to quantify the scope of contaminated soil processing. MnDOT also abbreviated the short-
168 listing process by limiting the Statement of Qualifications to only key information about the
169 proposed team members, which in turn reduced the level of effort necessary for competitors to
170 responsively submit their statements of qualifications for consideration to make the short-list.

171

172 MnDOT requested a “Categorical Exclusion” for the approval factors that were outside the
173 agency’s control in order to receive federal funding. “Categorical exclusion means a category of
174 actions which do not individually or cumulatively have a significant effect on the human
175 environment...and...for which, therefore, neither an environmental assessment nor an
176 environmental impact statement is required” (FHWA, n.d.). This forced MnDOT to tightly control
177 the final scope and guarantee that any betterments would not violate the exclusion agreement. For
178 instance, MnDOT decided that it would not entertain proposed design alternatives that required
179 substantial work on the undamaged interchanges on both ends of the bridge since that might defeat
180 the ability to obtain a much needed Categorical Exclusion from FHWA (Warne 2008). Since
181 betterments typically require additional funding, they are ineligible under the provisions of the
182 federal emergency relief funding program, which might further complicate the issue increasing the
183 potential of delays (MnDOT 2008). Table 1 shows the scope of the bridge replacement.

184 Table 1. I-35 W New Bridge Characteristics (MnDOT, n.d.)

Bridge Length	372.27 meters
---------------	---------------

Center River Span Length	159.71 meters
Bridge Deck Width	57.61 meters
Lanes	5 lanes of traffic running each direction
Life Span	100 years
Transit	Light Rail Transport-ready

185

186

187 **Right-of-Way**

188 The new bridge needed 3 complete and 10 partial real estate acquisitions. MnDOT executed an
189 expedited two-step process design to obtain expedited access to required parcels and preclude
190 potential right-of-way (ROW) process delays (Warne 2008). The process involved obtaining an
191 early “Right of Entry” easement from each landowner for a nominal payment of \$1,000, after
192 which, MnDOT guaranteed a specific time line to each property owner for concluding the financial
193 part of each acquisition. The two-step procedure provided MnDOT the ability to occupy specific
194 parcels to begin both demolition and reconstruction. The process was made easier by the fact that
195 the owners of those parcels were “generally more cooperative [than usual] given the nature of the
196 work and the emotional impact on the community of the failure of the 35W Bridge” (Warne 2008).

197

198 **Permitting**

199 Ten permits plus an emergency environmental impact analysis were required before reconstruction
200 could begin. The permitting process was driven by the following philosophy: “Build the largest
201 project possible with the smallest environmental process” (MnDOT 2008). NCHRP Synthesis 438
202 (2012) found that the following procedures were implemented to obtain the necessary permits as
203 quickly as practical:

204 • “Held a permitting kickoff meeting with the heads of local, state, and federal permitting
205 authorities to ‘ensure buy-in from the top down’. The meeting resulted in agreements or
206 understanding on permitting approvals, mitigation expectations, and submittal requirements,
207 barriers to overcome, and a single point of contact with decision-making authority in each
208 agency.”

209 • “Obtained an agreement from the resource agencies to ensure that each document was
210 immediately reviewed and comments were returned in a very timely manner.”

211 • “Delegated the authority to make project scope and design decisions to the individuals who
212 managed the project and prepared the permit applications.”

213 • “Took full advantage of existing programmatic agreements and categorical exclusions,
214 wherever appropriate.”

215 • “Ensured that any capacity additions were for less than the mandated 1.0 mile in length to
216 avoid the requirement for an Environmental Assessment which is triggered at that length.”

217 • “Convened a meeting with the competing proposers and the affected utility companies during
218 the procurement phase to furnish firsthand information on potential utility relocations rather
219 than rely on the request for information process.” (Gransberg and Loulakis 2012).

220

221 **DB Project Delivery Selection Rationale**

222 The MnDOT decision to use DB project delivery for the I-35W replacement bridge was made
223 based on the agency’s extensive DB experience and its belief that the delivery method would

224 attract a pool of highly experienced DB teams to the project. MnDOT also felt that DB project
225 delivery provided an equitable mechanism to divide the project’s total risk with the winning
226 design-builder. For instance, MnDOT decided to assume the risk of acquiring all but two of the
227 required permits, assigning the design-builder the responsibility for obtaining the National
228 Pollutant Discharge Elimination System and Coast Guard Navigation permits. This approach was
229 successful in that MnDOT obtained all required permits within two weeks of the emergency.

230

231 **Procurement**

232 Based on its past experience, MnDOT had found that the use of alternative technical concepts
233 (ATC) proposed by competing design-builders at confidential one-on-one meetings provided a
234 potential to unlock the benefit of early contractor involvement in the procurement process and
235 provide innovative solutions that were not contemplated in its RFP (Gransberg et al. 2013). ATCs
236 are a procedure in which competitors propose options to the baseline design found DB Request for
237 Proposals (RFP) (Carpenter 2010). The cornerstone of the MnDOT ATC process was termed
238 Preapproved Elements (PAE). The PAE procurement process allowed competing design-builders
239 to propose changes to the design found in the RFP via “private and confidential preproposal
240 meetings,” with the following purpose:

241 “Each Proposer is invited and encouraged to attend a private preproposal meeting at which the
242 Department will address and respond to the Proposer’s concerns and questions regarding details
243 of the project scope, administrative procedures, outstanding issues for the remainder of the bid
244 process, and any other related matters. Each meeting would be private in that only one Proposer

245 would meet with MnDOT representatives at a time. Proposers are not required to accept the
246 meeting invitation” (MnDOT 2010).

247

248 MnDOT capped the number of ATCs that each competing DB team could submit. MnDOT’s
249 purpose for limiting ATCs was driven by the desire to focus its process on high-value ATCs, as
250 well as to eliminate the need to review and approve/disapprove ATCs of inconsequential value.
251 After a design-builder had submitted an ATC, an expert panel, separate from the proposal
252 evaluation team, scheduled a meeting with the team that had made the ATC proposal. “If the ATC
253 was acceptable, it was approved and incorporated into the proposer’s scope of work as a PAE,
254 permitting the proposer to include the ATC-turned-PAE in both its technical package and its price
255 proposal” (Gransberg and Loulakis 2012). Flatiron-Manson (FM), the eventual winning DB team,
256 stated that “MnDOT did an excellent job in managing the procurement process. Of particular value
257 ...the one-on-one meetings [got] answers quickly, [and the] responsiveness saved time and effort
258 in putting their [FM’s] proposal together” (Warne 2008). FM proposed PAEs that included an
259 integral riding surface and novel method to demolish the existing foundation.

260

261 The contractual definition of “best value” was cited as being critical the selection process. The
262 competing design-builders indicated that the transparency of the evaluation plan with the details
263 of the scoring criteria was brilliant. According to Warne (2008), FM felt the scoring process “sent
264 a clear message that the state valued higher quality and not just price.” For instance, a 15-point
265 bonus was offered for proposed designs that removed as many as six design exceptions, portraying
266 MnDOT’s preference for building the project with no design exception approvals and the agency’s

267 willingness to compensate the competitors for demonstrating inventive design and construction
268 concepts in their proposals. MnDOT also required three 30-minute individual confidential
269 conference calls and two 2-hour face-to-face meetings per week with each competing team. The
270 bottom-line is that MnDOT invested 27.5 hours per week during the 3-week proposal preparation
271 period (Warne 2008). MnDOT also provided each of the five DB teams a weekly escorted site visit
272 (Hietpas 2008).

273

274 Because of the high level of interaction during proposal preparation, MnDOT was able to limit the
275 final proposal to a maximum of 20 pages plus a 20-page appendix as opposed to normal page limits
276 that run from 120 to 150 pages on routine DB proposals. The page limitation focused the
277 competitors on those components of the project’s scope that were critical to its success. This is
278 consistent with the latest complex mega-project management theory which requires agencies to
279 “define a complex project’s critical success factors early in project development and use those to
280 guide the remainder of the project development and delivery process” (Gransberg et al. 2013). The
281 proposals were evaluated by a Technical Review Committee (TRC) consisting of four MnDOT
282 engineers, representatives from the city of Minneapolis, a member of the Associated General
283 Contractors, as prescribed by Minnesota law and two FHWA members that oversaw the selection
284 process to make sure that it complied with federal requirements.

285

286 In line with a study on managing complex mega-projects advocates “incentivizing the key
287 elements of project success” (Shane et al. 2015), MnDOT offered two incentives for the critical
288 project success factor: timely completion. The first incentive was a \$7 million no-excuse bonus

289 for on-time completion provided the design-builder waived all future claims (Heitpas 2008). The
290 second incentive was an early completion bonus of \$2 million for every 10-day period the project
291 was finished ahead of the contract completion date, capped at \$20 million total maximum. MnDOT
292 also integrated a disincentive of \$200,000 per day for late completion. Both incentives were based
293 on MnDOT’s estimated daily user cost of \$400,000.

294

295 The urgency of the situation drove MnDOT to complete the award of the contact as rapidly as
296 practical, creating a short-term situation without sufficient “time to publish the results of the
297 evaluation before contract award or to debrief unsuccessful offerors.

298 **THE PROTEST**

299 An award protest was asserted, “based primarily on the fact that the winning team also submitted
300 the highest proposed price” (Gransberg and Loulakis 2012). MnDOT’s rich base of DB experience
301 had also provided it with a number of opportunities to defend the correctness and integrity of its
302 DB evaluation and award process in both state and federal district courts. In each previous case, it
303 relied on a defense described in a paper by Shane et al. (2006) as follows:

- 304 • “The evaluation plan was completely transparent.”
- 305 • “MnDOT followed it precisely.”
- 306 • “MnDOT could logically defend the final award decision.”

307 It is not unusual for emergency procurement procedures to lead to objections. These types of
308 objections range from mere public relations problems to the protest of an award and litigation. As

309 stated earlier in this paper, MnDOT procured a DB contractor using a best value selection process.
310 Minnesota Statutes Section 161.3410, et seq. provides MnDOT with legislative authorization to
311 use DB best value procurement if it publishes an RFP which includes a description of DB
312 evaluation and selection criteria with each criterion’s weight in the final formula. The MnDOT
313 award process calculates "best-value" scoring by dividing each offeror's price by its technical
314 score, resulting in an award metric of “dollars per technical point,” which according to Koch et al.
315 (2010) is termed an “adjusted price DB award algorithm.” MnDOT must award the contract to the
316 responsive and responsible bidder with the lowest best value score.

317 MnDOT’s first DB project, US 52 in Rochester, stimulated a protest of the method used to arrive
318 at a short-list in the first phase of the 2-phase procurement (Shane et al. 2006). That protest turned
319 on the issue of whether or not including a consideration of past DB experience was fair to local
320 contractors on the state’s first DB project. The courts, while finding that the evaluation plan was
321 not airtight, essentially ruled that MnDOT applied the same flawed criteria equally on all the
322 competitors and dismissed the protest as being without merit (Shane et al. 2006).

323 After the US 52 project and before the I-35W bridge project, MnDOT awarded 6 DB best value
324 contracts without a legal challenge to the procurement process. However, the outcome of the
325 process for the I-35W bridge forced MnDOT to once again defend itself against a protest of award
326 (Hietpas 2008). A lawsuit was filed in October 2007 in Ramsey County District Court to obtain an
327 injunction of all work and to rule the contract as illegal (Faegre et al. 2009). The suit made the
328 following arguments to prove the illegality of the contract:

- 329 • MnDOT used improper evaluation criteria.
- 330 • MnDOT orally misled some of the bidders regarding permitted construction techniques.

331 • The MnDOT TRC had abused its “discretion” by not awarding the contract to the proposal
332 with the lowest proposed price and shortest proposed completion date (Faegre et al. 2009).

333 The lawsuit was dismissed by the District Court and subsequently appealed to the Minnesota Court
334 of Appeals which upheld the lower court’s dismissal as correct. Rather than describe the original
335 court decision and the appellate court decision in chronological order, the facts and logic of each
336 court with regard to the above three allegations will be combined into a separate discussion of each
337 issue. It is hoped that this technique will allow the reader to better focus on the salient points of
338 the case.

339

340 **Improper Evaluation Criteria**

341 The allegation contested the TRC determination that FM’s winning proposal was indeed
342 responsive, thereby constituting improper evaluation criteria for two elements of the proposed
343 design. The first was that MnDOT accepted FM’s proposal which included ROW outside the RFP
344 project limits. The second involved a concrete-box design using two instead of the RFP-mandated
345 three webs. The lower court did not specifically rule on the criteria themselves but instead focused
346 on the timing of the suit itself.

347 First, it noted that the suit was brought at a time when the project was nearly complete thus making
348 it “no longer justiciable” and moot due to an inability to rectify the alleged injustice if the case was
349 found for the plaintiffs. Since the Minnesota DB best value award statute specifically gives the
350 TRC the authority to make responsiveness decisions, the court ruled that the plaintiffs failed to

351 establish any abuse of the express statutory discretion by the TRC, which was made moot by the
352 plaintiffs’ failure to press the suit in a timely manner.

353 The primary argument regarding the evaluation criteria made in the appeal was that
354 “responsiveness under the design/build best value statute must be determined exactly like
355 responsiveness is determined under traditional design-bid-build procurements” (Faegre et al.
356 2009). The appeals court interpreted that argument to mean that the plaintiffs were asserting a
357 “common-law definition of a responsive proposal” and alleging that the FM proposal “materially
358 deviated from specifications.” The two alleged deviations were as follows:

- 359 • “The proposed work for this project shall not include additional capacity or Right of Way.”
- 360 • “That concrete-box designs feature a minimum of three webs.” (Faegre et al. 2009).

361 The FM design proposal included two previously approved PAEs. The first provided for a
362 temporary easement to allow FM to extend its operations outside the project limits shown in the
363 RFP. FM agreed to obtain the necessary permission itself and did so. The easement was required
364 to permit FM to optimize its proposed means and methods by staging the machinery necessary to
365 erect the bridge on a parcel of land that was not included in the MnDOT ROW acquisition plan.
366 The RFP also included a statement that permitted the design-builder to submit a written request to
367 MnDOT “if additional ROW is required” The plaintiffs pointed out that the same section in the
368 RFP also includes a passage stating: “Proposed work for this project shall not include additional
369 capacity or Right of Way.” This is certainly a potential ambiguity.

370

371 The FHWA definition of an ATC is “a request by a proposer to modify a contract requirement,
372 specifically for that proposer’s use in gaining competitive benefit during the bidding or proposal
373 process... [and] must provide a solution that is equal to or better than the owner’s base design
374 requirements in the invitation for bid (IFB for DBB) or request for proposal (RFP for DB)
375 document.” (FHWA 2012). The essence of an ATC is to require “the agency to alter the baseline
376 design and/or the baseline design criteria because if no deviation is required, the concept would be
377 responsive if proposed as merely the given competitor’s preferred design approach” (Gransberg et
378 al. 2013). Thus, the fact was that ATCs/PAEs were allowable and to qualify as an ATC, the
379 proposed changes must literally be a deviation to the “baseline criteria”. The assertion that basing
380 a proposal on an approved PAE, in FM’s case added ROW and a concrete-box design with only
381 two webs, was ruled to be perfectly responsive despite the potential ambiguity.

382

383 **Misleading Oral Statements**

384 As previously noted, the MnDOT ATC process involves confidential one-on-one discussions with
385 each competing proposer to iron out the details of ATC concepts and advance them to biddable
386 PAEs. Thus, unlike DBB procurement where every communication between the agency and one
387 of the competing contractors is publicized, DB procurements with ATCs are conducted in
388 conditions of enforced secrecy to preserve each design-builder’s competitive edge (FHWA 2012).
389 The ATC process has been integral to the MnDOT DB procurement since its inception in 2001.
390 Therefore, the fact that MnDOT would convey different information to each contractor was well-
391 understood and known to be an established practice well before the 2007 I-35W bridge collapse
392 (MnDOT 2008). The appeals court affirmed the district court’s decision regarding the propriety of

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393 the MnDOT ATC/PAE process citing the fact that the RFP imposed an “equivalent design
394 requirement,” and a design analysis to show that any proposed concrete-box design meet or exceed
395 the three web standard. Since FM’s concrete-box design exceeded this minimum equivalent design
396 criterion, the appeal court rejected the “misleading oral statements” assertion.

397

398 **TRC Discretion to Determine Responsiveness**

399 The District Court determined that the statute invested the TRC with the responsibility to make
400 responsiveness determinations. The appeals court went on to cite the fact that the Minnesota state
401 best value statute (Minn. Stat §161.3426, subds. 1(a)) expressly grants authority to the TRC to
402 reject proposals that it finds to be nonresponsive. The court also opined that DB procurements, “by
403 definition, are not based on fully detailed specifications.” The court concluded that those two
404 factors defined the intent of the law "to permit the TRC, by applying its judgment based on the
405 advertised selection criteria, to evaluate proposals where no finished design exists to which the
406 proposals must conform" (Faegre et al. 2009). In a nutshell, the court determined that "the TRC
407 has discretion in deciding whether a proposal is responsive." It also noted that the TRC's discretion
408 is not unconstrained and responsiveness determinations must be supported by the weight of the
409 evidence. Hence, the appeal was unsuccessful, and the Court of Appeals determined that there was
410 “no error of law and that substantial evidence supported the TRC's determination that Flatiron's
411 proposal was responsive, leading the court to conclude that dismissal of the lawsuit was proper”
412 (Faegre et al. 2009).

413 **Summary of Protest Results**

414 As in the US 52 protest on its initial DB project, MnDOT relied on its alternative procurement
415 philosophy to keep every aspect of the procurement’s advertisement, evaluation, and award as
416 open to the competing design-builders as time and circumstances would allow. The intense amount
417 of one-on-one interaction associated with this project is unprecedented and amply demonstrates
418 the agency’s willingness to take risks that are commensurate with needs of the emergency
419 situation. The principles of complex project management demand that decisions be made as early
420 as possible in the project development process (Gransberg et al. 2013). To mitigate the risks
421 inherent with those decisions on emergency complex mega-projects like the I-35W Bridge,
422 demands early contractor involvement in the planning and design process. MnDOT achieved that
423 via the information rich communications it maintained throughout the proposal preparation phase.
424 Notwithstanding the confidentiality of the ATC/PAE process, MnDOT had a totally transparent
425 evaluation plan/award algorithm that allowed them to withstand the protest. More importantly, it
426 delivered a technically, environmentally, and politically complex mega-project in record time. The
427 I-35W Bridge collapsed on August 1st, 2007 and was reopened on September 18th, 2008, more
428 than three months early. Table 2 contains the timeline for the expedited procurement.

429 Table 2. I-35W Bridge Replacement Timeline (Gransberg and Loulakis 2013).

Date	Event	Remark
August 1, 2007	Bridge collapses	None
August 2, 2007	MnDOT decides to use DB project delivery	None
August 4, 2007	RFQ issued	None
August 8, 2007	Statement of qualifications received from competitors	None
August 8, 2007	Short list published	Same day as receipt
August 23, 2007	RFP released	None
September 15, 2007	Proposals submitted	None
September 19, 2007	Design-builder selected	49 days to select contractor
October 8, 2007	Notice to proceed	None
September 19, 2008	Project opened to traffic	339 days after start of construction

430
431

432

433 **SUMMARY AND RECOMMENDATIONS**

434 Completing the I-35W Bridge replacement project 339 days is a noteworthy achievement by both
435 the MnDOT and FM, its design-builder. The process developed to restore services amply
436 demonstrates the value for money to the public from those innovations used. That MnDOT had to
437 defend its process from a protest on this emergency mega-project further testifies to the efficacy
438 of its model for emergency procurement of major infrastructure projects.

439

440 MnDOT used the following tools to successfully expedite the emergency replacement of the I-
441 35W Bridge which may prove useful to others with a need to complete an emergency restoration
442 of services project.

443 • “Used two-step right-of-way acquisition with right of entry easements to provide immediate
444 access to the construction site followed by a guaranteed timeline for financial closure on each
445 parcel;”

446 • “Obtained single points of contact within each resource agency for all permit communication
447 and a commitment to expedite the issuance of project permits;”

448 • “Kept tight control of project scope to avoid unintentional delays as the result of exceeding
449 permit constraints;”

450 • “Encouraged a highly interactive preproposal period, including regularly scheduled one-on-
451 one meetings with each competitor, whose contents were kept confidential;”

- 452 • “Accepted confidential ATC/PAEs prior to proposal submission for review and decision;”
- 453 • “Created a completely transparent evaluation plan and award algorithm that withstood a
- 454 protest; and”
- 455 • “Developed incentives that were directly related to the preeminent project success factor,
- 456 timely completion.” (Gransberg and Loulakis 2012).

457

458 **Limitations**

459 The study reported in this paper has found that the MnDOT successfully defended itself against an

460 award protest. This conclusion is only applicable to this particular project and this particular

461 agency and cannot be generalized to other projects or agencies. However, it does provide a proven

462 model for emergency procurement of major infrastructure projects.

463

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468

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