**Transcript of Interview with Fracture Critical Member Inspection Plan Engineer**

**Pittsburgh, PA**

**HWY22MH003**

(55 pages)

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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| Investigation of: | * | |
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| COLLAPSE OF THE FERN HOLLOW BRIDGE | * | |
| IN PITTSBURGH, PENNSYLVANIA | * | Accident No.: HWY22MH003 |
| ON JANUARY 28, 2022 | * | |
| | * | |

Interview of: TIM PINTAR, Bridge Inspection Project Manager
CDM Smith

Tuesday,
August 23, 2022

APPEARANCES:

STEVE PROUTY, Senior Structural Engineer
National Transportation Safety Board

DAN WALSH, Senior Structural Engineer
National Transportation Safety Board

DENNIS O'SHEA, Office of Bridges and Structures
Federal Highway Administration

JON BUCK, Pennsylvania Division Office
Federal Highway Administration

ERIN MARGOLIUS, In-House Counsel
CDM Smith

JUSTIN OCEL, Senior Structural Engineer
Federal Highway Administration Resource Center

DENNIS COLLINS, Investigator in Charge
National Transportation Safety Board

I N D E X

I N T E R V I E W

(August 23, 2022)

MR. PROUTY: Today is Tuesday, August 23, 2022. This is Steve Prouty, P-R-O-U-T-Y, with the NTSB, senior structural engineer. And?

MR. WALSH: Dan Walsh, W-A-L-S-H, senior structural engineer with the NTSB.

MR. O'SHEA: Dennis O'Shea, O-S-H-E-A. I'm with the Federal Highway Administration, Office of Bridges and Structures.

MR. BUCK: I'm Jon Buck, B-U-C-K, with the Federal Highway Administration, Pennsylvania Division Office.

MR. PINTAR: Tim Pintar, P-I-N-T-A-R, with CDM Smith. I'm the bridge inspection project manager.

MR. PROUTY: And Erin?

MR. PINTAR: Erin?

MS. MARGOLIUS: Erin Margolius, CDM Smith, in-house counsel. I think it's the 23rd.

MR. PROUTY: It is.

MR. PINTAR: Yes.

MR. PROUTY: I was looking at my paper, not my watch.

MR. PINTAR: Justin?

MR. OCEL: I'm Justin Ocel. I'm with the Federal Highway Administration's Resource Center. I'm a senior structural engineer. Last name is O-C-E-L.

MR. COLLINS: And I'm Dennis Collins, the investigator in

charge for the NTSB on this case, C-O-L-L-I-N-S.

INTERVIEW OF TIM PINTAR

BY MR. PROUTY:

Q. Tim, can you give us a general description of your duties and responsibilities?

A. I can lead inspections. I, you know, (indiscernible) for the contracts, overseeing everything, lining -- having the guys line everything up, such as rigging, you know, railroad coordination, scheduling the inspections. Like I said, I can go out and lead the inspections locally. We have other team leaders. They will write the report, I'll review the reports --

Q. Okay.

A. -- and then submit them to PennDOT.

Q. Okay.

A. So, that's basically a quick summary of what I do, and proposals, things like that.

Q. Okay. Can you give us just a general like educational background and work history?

A. Pitt-Johnstown. Engineering technology degree back in '81. Started with electrical engineering inspecting steel mills until they laid everybody off and (indiscernible). That's when I started in bridges --

Q. Okay.

A. -- with Kimball. Worked there for a while, inspected all types of structures. From there, I went to Ober Smith (ph.),

which is now CDM Smith. But from there, I went to Baker for about 15 years, inspected all types of bridges, (indiscernible) Peace Bridge, nationwide for about 15 years. Now, I'm back at CDM Smith. I've been there for 15 years, so --

Q. All right. Thank you. Have you successfully completed the DMHA (indiscernible) fracture critical inspection --

A. Yes.

Q. -- course?

MR. BUCK: Do you recall when?

MR. PINTAR: Oh, like 2008. I mean, I think I sent Dennis all that.

MR. BUCK: Okay.

MR. PINTAR: It's been a little while, but --

BY MR. PROUTY:

Q. And then, you obviously have a lot of experience there inspecting all sorts of things. Any idea about how much experience you have inspecting bridges, how many years of, years --

A. Oh, at least 35. It's basically what I've been doing since -- I did design for about 10 years; then, I've done inspection, kind of like getting out, and seeing things, and all, you know.

Q. Sure.

A. So --

Q. And then, how many years of experience would you say for

fracture critical bridges, bridges with fracture critical?
A. Oh, gees.
Q. Well, that's --
A. Probably close to the same. I mean, probably 30. I mean, whenever we -- when did we -- you know, the start of all that fracture critical, it's, you know --
MR. BUCK: And, yeah, you're right, --
MR. PINTAR: It's (indiscernible) tension members, but yeah.
BY MR. PROUTY:
Q. All right. Yeah.
A. I started up in the startup, you know, '85, '86, when you actually had the big catchup effort of inspecting all the bridges. I was involved in that with Ober Smith. And I think that's when I took the original course with PennDOT, as well, a two-and-a-half-week course.
MR. BUCK: That'd be about right, yeah. We got started in the '80's, too.
MR. PINTAR: Yeah.
BY MR. PROUTY:
Q. Can you tell us the definition of a fractured critical member?
A. It's a member when tension is -- failure could cause partial collapse or collapse of the entire structure. Steel member in tension.
Q. Looking back through the inspections, it looks like you

inspected the front Fern Hall Bridge (ph.) on multiple occasions. Approximate idea of about how many field hours it would take to -- for that bridge, the inspection?

A. Well, we -- what we had was two days. On a, on a routine inspection, we had two basically six-hour days, because we were limited for traffic control from 9:00 to 3:00. So, on a routine, we had the two days. On an interim, which is a yearly, we had one day, and that's basically just the bents, you know, that we looked at. So, you know, it was -- we didn't have a whole lot of time to get through, because we had to go down each side, as well, to get to the bottom of the bents, you know, the lower parts, with a snooper. You couldn't reach it, you know what I'm saying, from one side. You had to get down the other side, as well --

Q. Right.

A. -- to get to the other side of the connections.

Q. Okay.

A. So --

MR. OCEL: Steve, can I follow up?

MR. PROUTY: Yeah, absolutely.

BY MR. OCEL:

Q. You made it seem -- well, the way you just answered that made it seem like the inspection may have been rushed. Were there some other things dictating the two-day closure for a routine -- or the lane closures for two six-hour shifts for a routine -- like, why couldn't it be three or four?

A. Well, that's what we were given from PennDOT. I mean, they had certain -- they have what they call units they wanted to -- depending -- they have so many hours they allow you to, and that's what we had. I mean, we do the best we can.
Q. Okay.
A. So, we looked --
Q. So, there was a --
A. -- we looked at the main components. I'm not saying we didn't. I mean, we did. But like I said, we didn't have a whole, you know, time to get like a detailed, you know, in-depth inspection. We couldn't do that.
Q. So, it was kind of a contract requirement? It was like a firm, fixed price unit cost --
A. Correct.
Q. -- and --
A. Exactly right.
Q. -- they said, you have two days to do this bridge. Okay. Thank you.
A. That is correct.
BY MR. PROUTY:
Q. So, referring back to, what was it, the 2019 inspection, I think, is the last one --
A. The last time --
Q. -- you did?
A. -- we looked at it, correct.

Q. Why were the frame legs given a rating of poor to critical, yet the superstructure condition rating never went below a four?
A. We were always told not to base the overall rating on one condition. I mean -- and then, the fact that the analysis took bracing off, which was the worst part of the whole thing, was the bracing members. Analysis said it was good for 26 tons without the bracing members. So, considering all that, we didn't think it was critical, you know, at the time. I didn't think there was that much loss in the main members, which were the legs, and the flanges did not have a lot of loss. There was some loss of the web at the bottoms. But that's the reason.
Q. So, if the frame legs were in poor to critical condition, why were they not deemed a critical finding per the NBIS or --
A. Well, they were --
Q. -- given what their priorities are
A. -- several times. I mean, we did flag those. We had zeros and ones. I've a list here somewhere.
UNIDENTIFIED SPEAKER #1: For the bracing, correct?
MR. PINTAR: The bracing and -- well, the thing was, we -- the priority, too, in my opinion, is the high priority repair. That means the repair should be done before the next inspection, which that does as a priority, too, since 2011, and nothing was ever done. You know, so that -- to me, that's a high, a reasonably high priority. The repairs were supposed to be done before the next inspection, per definition.

MR. PROUTY: Right.

UNIDENTIFIED SPEAKER #1: Well, would you consider that a critical finding if it was something that needed to be done by the next --

MR. PINTAR: Well --

UNIDENTIFIED SPEAKER #1: -- inspection?

MR. PINTAR: -- we thought it should be done, even though, like I said, the analysis said it was good for 26 tons, and, you know -- we thought it should have been done before the next inspection. But nothing was ever done, so, I mean --

BY MR. PROUTY:

Q. So, and this is just kind of thinking off the cuff, here, so if nothing was getting done with it, did it cross your mind to maybe, you know, elevate the priority of that?

A. We sent -- like I said, we had zeros and ones; and then, they did finally remove the bracing at the bottom, because they were going to fall down onto the trail.

Q. Right. Okay.

A. And then, the cables were put in, not by us, but by Baker in the city. We knew nothing about it. You know, we got there and said, oh, there's cables here. Where do those come from? You know, it's like -- nobody ever told us.

Q. Okay.

A. And then, we had to look into that, and --

Q. Okay.

A. That was kind of a retrofit for the bracing, the way I looked at it. I mean, it was a stability retrofit.

UNIDENTIFIED SPEAKER #2: Was it the 2014 load rating, is where you're getting the fact that the bridge was rated for 26 tons without bracing?

MR. PINTAR: Correct. That is correct.

MR. COLLINS: Steve, I have a quick question.

BY MR. COLLINS:

Q. Again, I apologize. I'm the most bridge-ignorant person on this conversation, probably. But if, as an inspector, you saw a pattern of issues not being addressed, does the inspection process give you any mechanism to try and get action taken other than, you know, zero and one ratings? Is there any additional steps you could take as an inspector if you see that the bridge is consistently in -- for example, you give it a rating that it's supposed to be fixed before the next one, you come back, and that's still an issue. Does the process give you anything else you can do other than continue to give it a bad rating?

A. We could send, well, it would have to be a priority letter. I mean, which would be a zero or a one. Like I said, we've sent --

Q. Okay.

A. -- we've sent a few of those. I mean, we've been recommending, well, since I had started there in 2007. And the number one problem was the clog scuppers and downspouts on almost

all their bridges. And I tried to preach that that whole time, and nothing ever got done. I mean, just simply clean the stuff, you know? The Greenfield break was because of the clogged scuppers and downspouts. I don't know if you know anything about that, that was over the parkway, but it's all the same story, and almost all their -- this bridge had the clogged scuppers the whole time that I can remember. And we kept telling them to clean the thing, clean the thing. Nothing was done.

MR. PROUTY: Right.

MR. PINTAR: And it's so frustrating.

MR. PROUTY: Oh, I can imagine. And we've seen that, you know, it was -- they were told, so we're not saying it's your fault that nothing was done, by any means.

MR. PINTAR: I'm just trying to give you a little bit of the history of --

MR. PROUTY: Yeah.

MR. PINTAR: -- my experience all the way through. I mean, there's so many other things, you know, that -- you know, real priority zeros that they did nothing on, I mean, per the manual.

BY MR. PROUTY:

Q. So, I'll read the question; but then, if you need clarification, we'll have to ask somebody else. The reports from 2005 to 2011 indicate that the legs were fracture critical members. Why did this change in later reports?

A. I think, when they looked at it, they considered them to be

in compression only when they did the analysis, and a pressure critical member isn't a compression members. It's a tension member.

Q. Right.

A. I mean, that's a tough question. You know, I still kind of wrestle with that myself. But yeah, it's not called out currently as a fracture critical member. But I'm saying it's -- the way it's looked at as compression is the pin at the bottom. I guess the members were recessed into slots that were about three-quarters deep, and so, it's like --

Q. Right.

A. -- it's acting like a pin kind of thing that you rotate.

Q. So, did you think it was odd that this bridge didn't have -- you know, the legs weren't considered fracture critical members?

A. Like I said, I still wrestle with that. I mean, the current (indiscernible), they are, but like I said, if it's compression, right? It's not in the definition, correct? If it's a compression. If it's a tension lever, it's considered fracture critical.

Q. Right.

BY MR. COLLINS:

Q. You mentioned an analysis. What analysis do you refer to --

A. The 2014 --

Q. -- that said that they were in compression?

A. The 2014 analysis. The one that said 26 tons.

BY UNIDENTIFIED SPEAKER #3:

Q. So, Tim, just as a follow-up, in your experience, when you're looking at inspection of bridges, do you rely on a fracture critical member plan that's in the file to identify fracture critical members?

A. Well, that's what we're told to do currently, yes. I think I have a good handle, anyway, but yes, as a reference, correct.

Q. Okay. Do you go back and refine those through every inspection? Do you look at them --

A. Yeah, if they're --

Q. -- to verify that they're correct?

A. Yes, we do, yes.

Q. Is -- how do --

A. There's actually -- PennDOT has a page that says that you (indiscernible) there's any change. So, yes, we do.

MR. O'SHEA: So, is that your responsibility as part of the inspection, to view the FCM plan, make sure that it's correct?

MR. PINTAR: Yes. Yeah, we look at it.

BY UNIDENTIFIED SPEAKER #3:

Q. So, in this particular case, the last, the latest inspection, you did verify the fracture critical members, and you did go through that process?

A. That's what we look at, correct. In this case, it was the girders and floor beams. Like I said, there are legs -- to be honest with you, I do have -- and it's not called out, but it's --

if it's compression, it's -- I mean, per definition, it's not fracture critical, right? I mean, that's where my hang-up was.

BY MR. O'SHEA:

Q. Were there other projects that you worked on where they were similar to this where the legs were considered fracture critical, and yet, this one wasn't?

A. We've had -- I've had bents that are fracture critical with the bent cap.

MR. BUCK: The bent cap, yeah.

MR. PINTAR: Yeah, that they're --

BY MR. O'SHEA:

Q. Yeah, but as far as --

A. -- fracture critical.

Q. -- like a K frame, would it be the legs that --

A. You know, there's not a whole lot of these around. I mean, I did something similar to this, but I can't say --

Q. Okay.

A. I think, in the state, there's only maybe three of these types of bridges, from when I -- when they were looking into it, PennDOT was, I think they said there's only three across the whole state that these bridges even exist, these K frames.

MR. BUCK: But the city has several, right? They have two or three, right? (Indiscernible) one, this one, and Murray were fracture critical?

MR. PINTAR: Murray, yeah, correct.

BY MR. PROUTY:

Q. So, element 202, steel columns was used for the frame legs. Was there direction to select that element number for the rigid frame legs, or where was that determination? Where did that come from?

A. Are you talking about the analysis, or --

MR. BUCK: The element inventory. You don't know about that?

BY MR. O'SHEA:

Q. Did you do the inventory of the elements for the bridge back in --

A. Sheez.

MR. BUCK: 2018, maybe, or 2017? It may have been --

MR. PINTAR: I'm not sure if I did, but --

BY MR. O'SHEA:

Q. Yeah, the thought behind the question is, is, if it's considered a rigid frame, those legs may not necessarily be columns. They might be part of the girder. So, the question is, is, you know, in this case, it looked like it was defined as a column, so whether it was determined that they felt they were columns or they felt they were part of the girder.

A. I think they were just trying to do that for picking an element. I mean, if we consider it part of the girder, then how are you going to -- you know, a condition state might be different than that of a girder. How are you going to determine the difference? That might have been why they picked that, you know,

just to define --

Q. Right.

A. -- condition states and define the element. I'm not sure how you'd do that if it was part of the girder, because you'd go by height and go by foot length, correct?

MR. BUCK: Yeah, you'd go by lineal feet --

MR. PINTAR: Yeah, lineal feet.

(Crosstalk)

MR. BUCK: -- yeah.

BY MR. O'SHEA:

Q. So, the elements were defined previously. Do you guys get involved that?

A. You know, I'd have to -- to be honest, I don't know for sure. We may have done it. I can't say we didn't. I'd have to look into that. I don't know for sure if we did it.

BY MR. PROUTY:

Q. So, then, element 202, or essentially the legs here, were in condition state four, and priorities in condition state for require structural review to determine the effect on the strength and the serviceability of the elements. Do you know if a structural review was performed?

A. Well, that would have been the analysis, right? I mean, that -- we did the analysis. So, four requires an analysis per definition.

MR. O'SHEA: Can I --

MR. PINTAR: I'm trying to remember if we -- it seems like we should have, but again, I can't say for sure, you know.

MR. O'SHEA: Can I have some follow-up --

MR. PROUTY: Okay.

MR. O'SHEA: -- if you --

MR. PINTAR: Yeah.

BY MR. O'SHEA:

Q. Were there -- the 2014 analysis was based on a 2013 inspection; is that --

A. Yes.

Q. -- reasonable? Okay. Were there increases in the section loss on the legs in between 2013 and later years when you were inspecting the bridge; and if so, how did you determine that the 2014 analysis was still valid? What was kind of your process for determining that?

A. (Indiscernible). Like, we took pictures, measured, and most of the loss was right in the bracing, which was discounted, so --

Q. So, you didn't --

A. The losses in the columns didn't seem to be a whole lot worse. I mean, there was plenty -- the flanges were pretty thick of the legs. I don't think -- well, they might have considered a 16th. I mean, I don't think there was more than that. There were some losses in -- localized in the web at the bottom, and I think they took like a foot of it out in the analysis, I'm pretty sure. And so, I didn't think it was any worse than that.

Q. So, when you looked at the analysis in later years after '20, you felt that it enveloped the current condition of the bridge --
A. Right.
Q. -- essentially? Okay.
BY MR. PROUTY:
Q. I know we touched on this a little bit, but just to clarify maybe a little better, if you thought the fracture critical plan and procedures were not sufficient, what would be the process to amend them?
A. We'd have to revise it and send it to PennDOT for approval.
Q. Okay. And did you ever do that?
A. Well, they approved them to begin with. Like, the plans that we did were approved by PennDOT. Everything that we do, reports, anything, gets submitted to PennDOT for review and approval, and they actually have to accept it, the report itself, for it to even send it to the city or the client. You know, it has to be accepted by PennDOT. And they'll --
MR. OCEL: Okay. Is that --
MR. PINTAR: -- get (indiscernible) comments.
MR. O'SHEA: Can I follow up on that, Steve?
MR. PROUTY: Yeah.
BY MR. O'SHEA:
Q. So, did you guys update the FCM procedures in -- we were a little confused about the FCM procedures, but it appeared there was an update in like 2016ish. Was that performed by you guys?

A. We inspected. It probably was. I mean, that may not have been on it, but I don't know. I guess. I can't remember every single thing.
Q. Right, yeah. I know.
A. When you've done like 1,000 bridges, I can't remember --
Q. So, if you'd gone out, and you thought, holy cow, these FCM procedures are factually incorrect, or they don't have enough information, or they have old information, would you -- you would get -- you would discuss that with PennDOT and get -- they would assign you a task order to update those procedures, or is that --
A. Right.
Q. -- considered part of the inspection task in general?
A. It depends. You know, if it's a whole different procedure -- if it's updating the FCM plan, it might be something extra.
Q. Okay.
MR. PROUTY: Did you have anything, Justin? I know you were --
MR. OCEL: Well --
MR. PROUTY: -- trying to say something a few minutes ago.
BY MR. OCEL:
Q. I mean, it's in BMS. It's signed and sealed by you, called the fatigue and fracture bridge inspection plan from January 2016. And so, that's what we're wondering, is, where did this come from? It's not in an inspection report. It's like a new document that developed the fracture critical plans and procedures. So, it just

seemed to be in there, and it appears that this was looked at in 2016. So, this is where the questions are coming from.

A. Okay.

Q. So, did CDM Smith go and ask for additional work by PennDOT to be authorized in order to do this, or did CDM Smith go to PennDOT and request that this be done, and then they authorized it, then you did it? That's kind of where this is. It has nothing to with like an inspection. This appears to be an own, stand-alone document.

A. I think we had a contract back in, I think it was '15, that we might have been doing a bunch of their pressure critical plans. You know, not just this one. I think we did like a lot of the city bridges. That might be what you're referring to, is that plan.

MR. BUCK: Yeah.

MR. PINTAR: It's like a separate document?

MR. BUCK: I think it was approved in January of '16, so --

MR. PINTAR: Okay.

MR. BUCK: -- it's probably the -- if you tracked it back, it would make sense --

MR. PINTAR: Okay. Now --

(Crosstalk)

MR. PINTAR: -- now, I'm remembering. Yeah, I think that was the case.

MR. PROUTY: Think I have a copy of it here somewhere.

MR. O'SHEA: (Indiscernible).

MR. PROUTY: That's it. That helps.

MR. O'SHEA: So, you think that contract was for the City of Pittsburg bridges, or was it just --

MR. PINTAR: I think so, yeah. I think -- the ones we had, anyway, yeah.

MR. O'SHEA: Do you recall what led the city to develop that contract? That somebody told them their FNF (ph.) plans were insufficient or something, or --

MR. PINTAR: I'm not sure if that was the city or PennDOT. I mean, yeah, I don't know. Yeah, if it's --

BY MR. OCEL:

Q. As you look at that, and --

A. Yeah.

Q. -- that was probably from seven years ago, I mean, how were the (indiscernible) tension determined in that report?

A. Looking at the analysis, I would -- or, the design, the bridge design plans.

Q. All right. So, you didn't run a new analysis to double --

A. I don't --

Q. -- to confirm the design plans and what was done prior?

A. I don't think so. No. (Indiscernible). That's what I thought. Yeah.

MR. PROUTY: So, I think, on page 16, I think.

MR. OCEL: No, I think he answered that question, Steve.

MR. O'SHEA: (Indiscernible).

MR. PROUTY: Yeah. I'm just taking a look for myself, here. Just trying to keep it straight in my mind, too.

BY MR. PROUTY:

Q. Do you know if that would have been peer reviewed or internally QC'd?

A. Yes. Yes, it was. (Indiscernible) reviewed it.

Q. Okay. Do you know who would have done that?

A. Steve Koscuta, at the time, correct.

Q. Do you know how to spell his last name?

A. K-O-C-S-U-T-A. He's no longer with us, is he?

Q. K-O-C- --

A. K-O-C-S-U-T-A, I believe, Koscuta.

Q. Okay. Thank you.

MR. O'SHEA: Maybe a general follow-up on that.

BY MR. O'SHEA:

Q. Can you describe the QC, internal QC process that an inspection report goes through at CSM Smith?

A. Yes. Okay. So, two inspectors go out. Typically, it's a team of two. One guy writes the report, then the other guy will review it first, then I'll review it. And if I wasn't there, I'll review it separately. And then, if I was there, then someone else in the office, like Steve or -- you know, likewise, will review it, as well. Then, it goes, of course, it goes to PennDOT for their review.

Q. So, if you or Steve were one of the two on the team, you would not be the final reviewer; is that --
A. Well --
Q. -- what you're saying?
A. -- I mean, I'll have somebody else review it.
Q. Have somebody else review it --
A. Yeah.
Q. -- who wasn't there? Yeah.
A. Correct.
Q. And with the two-inspector team, do you designate a team leader, or are both inspectors qualified as team leaders, and it's sort of a toss-up?
A. They're -- no, both -- yeah. All our guys are team leaders, but typically, they would, yeah.
Q. Okay. And does the person who writes the report, is that typically the team leader or the assistant, so to speak?
A. It's usually the team leader. Yeah. Like I said, now, it doesn't matter, because they're all qualified, so it's whosever available kind of thing, you know.
MR. PROUTY: Sure.
MR. PINTAR: Take turns or whatever, you know, something like that.
MR. PROUTY: Again, this, I know we've talked about this to some degree, but how did you deem that the frame legs were not fracture critical members? Just --

MR. PINTAR: The compression aspect.

BY MR. O'SHEA:

Q. Okay, back on the other question about the QC, did you have a formal process for how you would actually view the QC in the reports?

A. Yeah. We had -- we have a (indiscernible) that we sign off on, whoever writes it; then, the guy who reviews it it signs off and dates, you know, dates and signs off, and it goes back and forth until all the corrections are made. Then, it goes to the QA guy; and then, he does the same thing.

Q. What are they actually looking for as the independent reviewer? Are they just looking at the data, or are they looking at how the photos match up with the notes, or --

A. Yeah, the whole thing. Yeah, definitely.

Q. Okay.

A. We like to use photo references, photo numbers. Some firms don't. We don't like that. We like to have the photo (indiscernible) so you can go up right there and look at it. You don't have to hunt through everything to find it. So, yeah.

Q. So, in your QC process, just to maybe restate what that assessed, you're looking at everything in the report, then?

A. I do, yeah.

Q. Yeah.

A. Yep.

Q. I mean, inventory items, yeah. Okay.

A. Correct.
Q. When you send it to PennDOT, is it for their review, and now you provide a copy maybe to the city, also, for their review prior to filing --
A. No, we send it to PennDOT for their --
Q. Send it to PennDOT/
A. -- review first, unless there's something critical. Then, we'll say this is a draft, you know what I Mean? But --
Q. Do you typically --
A. We'll send a draft.
Q. Okay. Do you typically receive comments from PennDOT on your drafter reports?
A. Sometimes. Not a whole lot, but sometimes.
Q. Okay. Do they -- what are the typical types of comments you might expect from PennDOT? Would they be sending you, we disagree with the condition rating of this component, are they more -- are they looking at inventory items, or what kind of stuff are they usually commenting on?
A. I've sometimes got that, I mean, but usually, it's one of their BMS2 items that we might -- they might have changed, and that needs to be (indiscernible) to this and corrected to that.
Q. So, like --
A. They scour things. There are so many things constantly changing that --
Q. Yeah, hot --

A. -- that's more --
Q. Like more hot topics for them versus --
A. Yeah. That's more the case than, I think, it's, you know, not technically correct or, you know, (indiscernible).
MR. PROUTY: Okay.
BY MR. PROUTY:
Q. So, looking at the -- this, the fracture critical plan, do you know why the tables here and there on the -- this is pages 11 and 12 of the report, which should be 13 and 14 of the PDS version.
A. Okay.
Q. Do you know why those would have been omitted from the future inspection reports, the 2017, 18, 19 reports?
A. You mean the whole plan itself, or --
Q. Those tables, yeah. The -- it has the diagrams, you know, and the drawings of --
A. Correct.
Q. -- of them in there.
A. Probably because --
Q. But those are a little more descriptive.
A. We just figured they were on file. I mean, these are all in BMS2, and they're all accessible, so rather than having, you know, a report that's like this thick, we try to keep it reasonable, you know, and straightforward, and you figure that this is there for reference. So --

BY MR. O'SHEA:

Q. When you say they're in BMS2, just for their sake, they're not -- you know, you're talking about form F, fracture critical?

A. Well, the reports are all -- this is in there, too. It's a separate document.

Q. Oh, you're saying --

A. So, you just go into their --

Q. -- that the document is in the EDMS --

A. Correct.

Q. -- file --

A. Yeah, you know.

Q. -- you know?

A. Yep. It's in the document --

Q. Okay.

A. Yep. We used to also include the whole analysis, and that was like this many pages. I'm like, why do you guys want this every time? You don't want a report that's this thick. Because we're sending them hard copies. Now, it's all online, you know, electronic. But again, that's in the file.

Q. Yeah.

A. You know?

MR. OCEL: If your company got the contract to do the bridge inspection, then would you go through all the files in BMS2 before you did your first inspection?

MR. PINTAR: Certainly, the current, and the documents that are in reference to it, you know, the current -- the latest report and the, all the reference documents, like this.

MR. PROUTY: And after the bridge was posted in 2014, the weight of the under-bridge inspection truck was higher than that posted limit, were there any posted bridge permits obtained for any inspections?

MR. PINTAR: We talked about that --

MR. PROUTY: Yeah, but --

MR. PINTAR: -- with PennDOT. It's considered like a temporary load, so they kind of let it go at that, like a temporary condition.

MR. BUCK: So, they didn't run it through -- oh, it wouldn't be in (indiscernible), right, because it's a city bridge?

MR. PINTAR: Right.

BY MR. O'SHEA:

Q. So, they did -- did they perform analysis of any type to provide backup for that decision?

A. Yeah, I don't think so, but I think they just considered it a temporary --

Q. So, you actually requested from PennDOT, you know, whether it was okay to put the truck on the bridge (indiscernible)?

A. We've done it before. I mean, I don't know that we requested that, but --

Q. Well, in general, when you have a situation where you have a posted bridge, and you need to use a bridge truck or a bridge crane, do you normally go through a process to verify that it's okay to put that on the bridge?
A. Yeah, typically try to stay away from the area that's controlling, you know, try to keep the weight away from.
Q. But you -- so, the bent was controlling here? You wouldn't probably be able to do that, right?
A. Yeah, well, I -- yeah, whatever you can reach.
Q. Whatever you can reach? So, this was -- you were using like a UB-60, right?
A. Um-hum.
Q. From what we can tell, the gross vehicle weighs about 32 tons, give or take, maybe 33. But would there be a point where -- you know, this is a 26-ton bridge, and it was a 33-ton piece of equipment. I would assume, if you have a 3-ton bridge, you're not taking 33 -- like, is there a point where that becomes --
A. Yeah. I mean, you've got to consider --
Q. -- less comfortable?
A. -- that the 26 ton's a safe load capacity, too. It's a .8 reduction factor.
Q. Well, I mean, that, yeah, that's correct.
A. So, you might be -- I think it probably weighed 32 tons, so better operate, right.
MR. PROUTY: Do you know if anyone --

MR. OCEL: Wait, I --

MR. PROUTY: Go ahead, Justin.

MR. OCEL: Go ahead, Steve.

MR. PROUTY: Go ahead, Justin. I won't forget mine.

BY MR. OCEL:

Q. I guess maybe I didn't hear. I mean, if -- who do you think is the responsible party to check this, the company that's renting the crane, the owner? I mean, PennDOT didn't own the bridge. You mentioned PennDOT. I mean, who does have to make the call to take an overweight vehicle on a posted bridge?

A. I suppose it's us, but like I said, we, you know, we talked about it with PennDOT. It was considered a temporary load. So --

Q. And again, PennDOT didn't own the bridge in this case, so that's why -- why are you talking with them, not the city; or is the city deferring to PennDOT?

A. Well, our contract's with PennDOT, so -- it's not with the city.

MR. OCEL: Go ahead, Steve.

BY MR. PROUTY:

Q. Do you know what NDT methods, if any, were used in the 2019 inspection?

A. I don't think we used any, just the typical tripping hammers and rollers, calipers. It's tough to get a (indiscernible) it'll take you -- you need a grinder. You need more time (indiscernible). We, you know, we did the best we could.

Q. I see.
A. Yeah.
Q. Yeah. So, some in the bid room?
A. Correct. Chipping wood, chipping hammers, or brushes, scrapers.
BY MR. O'SHEA:
Q. Were you able to determine what the section was, (indiscernible) section?
A. Well, that's what's what I said. You had --
Q. You said calipers.
A. -- you had those calipers, yeah.
Q. You used like the big (indiscernible) screw-ons for the legs, or, I mean, you know, those flanges were pretty big.
A. Yeah, the -- but the other ones, you could get in the side. If there's a hole there, obviously, you can get in, you know.
Q. Well, yeah, that's true. You get it --
A. Yeah.
Q. -- through the hole, I guess, yeah. How far below the lead to a hole were section loss measurements being considered? Was it primarily the area immediately around, or, you know, do you go a couple of feet up from that, or -- like, to get that group out --
A. Yeah. I mean, you can tell by --
Q. -- solution was --
A. -- kind of tell by sawing it.
Q. Okay.

A. Yeah.

BY MR. OCEL:

Q. And you try to report your section loss. Do you -- I mean, in an ideal world, can you present -- or, do you try to present it in terms of contours of thickness that's left, or do you just try to stay -- there's generally this broad area that has this thickness? I mean, to what level of granularity do you try to report section-wise or holes?

A. Again, it depends on how much time you have. I mean, you know, in this case, we have sketches that we recorded on this (indiscernible) sketches of the bents, and we basically just used that in order of the measures you put on there. I mean -- yeah, we didn't go through -- like I said, we didn't have time to go to the D-Meter and measure, and take all these measurements. We just --

MR. PROUTY: Right.

MR. PINTAR: -- took a general conservative approach to it.

BY MR. O'SHEA:

Q. So, just to go back over what you said and maybe what you also discussed previously about the number -- the time that you had for the inspection. Do you guys do a proposal for how long it's going to take to do the inspection, or do you just -- or does PennDOT just assign that, or how --

A. Well, we do, but we're assigned -- literally have a negotiation session where they end up with their units and their

hours that they feel is reasonable, and you can try to negotiate it, but, I mean -- which, I was not involved in this. I can't really tell you. This was Steve DeSoto (ph.). I mean, I've been just lately getting into negotiations, but -- so, I don't know how -- what was determined, but I know what hours we had. I'll put it to you that way.

Q. When --

A. Yeah, they basically tell us, yes, the hours that they'll accept.

Q. So, they classify bridges A1, you know, A1, A2 --

A. Depending on the --

Q. -- and that's --

A. -- type of structure and --

Q. -- depending on the length --

A. -- the length and the span length, correct.

Q. And did they give you additional hours for fracture critical --

A. Yeah.

Q. -- announcing an additional price? Okay.

A. Yeah. It's like another 16 hours or something like that, correct.

Q. Okay. And do they -- they pay for equipment separately? That's a separate --

A. That's separate of the direct cost --

Q. Okay.

A. -- correct, yep.
Q. And that'd be (indiscernible) coordination? That's all a direct cost kind of thing?
A. It's -- yes, yep.
Q. So, when you put in your proposal, you'll say that A1 is X number of hours? Is that --
A. I'll try to say that, yeah, but that doesn't mean --
Q. And then --
A. -- I'm (indiscernible) with it.
Q. -- then, they'll --
A. Right.
Q. -- then, they'll --
A. They'll usually cut it.
(Crosstalk)
Q. -- right.
A. It usually gets cut.
MR. PROUTY: So, with the section loss measurements, how would those results that you got be compared back to previous years?
MR. PINTAR: I'm just looking -- like I said, we'd update the sketches, and they're all the sketches, the holes, the measurements, and the thicknesses. So, we basically update these, if you can see here, the years updated? Well, there's no changes or updates. That's how we do it.
MR. PROUTY: Okay.

BY MR OCEL:

Q. So, I mean, I'm in Pittsburg right now. So, what you're looking at, does it show a change of -- was the corrosion increasing with time, I guess?

A. Yeah. I mean, like I said, it's in red. Anything that's updated is in red on the current year. So, that's what --

Q. All right. So, then --

A. -- that's a highlight.

Q. -- my question would be, then, why not ask for a load rating? If there's a change of condition evolving, why not ask for a load rating? The last load rating was done in 2014.

A. Right.

MR. O'SHEA: Justin, when you say, ask for a load rating, you're saying ask PennDOT to do a load rating or ask for a task to be --

MR. OCEL: Yeah, okay.

MR. O'SHEA: -- do a load rating?

MR. OCEL: It wouldn't be under their contract.

BY MR. OCEL:

Q. But as the inspector, you do make recommendations to the owner, so why not recommend a load rating if you've seen a change of condition?

A. Probably, because they felt like it wasn't enough of a change in condition to affect it.

Q. Is that up to the team leader to decide? I mean, you said, I think, in this case, you weren't the actual team leader. You were kind of more on the back end of the report. So, is it -- under the construct you worked at under CDM Smith when you had this contract, who is the one to evaluate, the person who is doing it or, I guess, the next person in line on the review?

A. Yeah. Either myself or the reviewer, correct.

Q. Do you recall discussions with them about this? I mean, okay, so, the load rating in 2014 was controlled -- it was somewhere in the bent, I think, at the mid-height of the leg. So, there was a discussion, at least, to say, all right, yes, we're getting more corrosion at the bottom, but it's not elevating to the point where it appears to be controlling any?

A. Right, right, yes.

MR. PROUTY: How would you typically determine or verify the wearing surface thickness on a bridge deck?

MR. PINTAR: The best we can do is to get a scupper, try to measure the thickness somewhere where you can see it, you know what I mean? We don't usually core, try to core it or anything, but --

BY MR. O'SHEA:

Q. Like, if you'd (indiscernible) the grade, you're saying, you might be able to see the --

A. Correct. That's what we --

Q. -- level going on?

A. -- typically do.
Q. Okay. Okay. I hadn't thought of that one.
A. In this case, they did something strange. They milled half of it. They milled half of the wearing, the original wearing surface there and just -- why, I don't know. They did the approaches, and they did half of the -- obviously milled it out, because it's the same elevation. They put an -- I don't know.
MR. BUCK: Do you want to give him the context for that, Steve?
MR. PROUTY: Yeah, we can. Basically, one of the things we found is that the, you know, the design plans originally called for 3 inches of asphalt, and there was closer to 6. So, we're just trying to figure out how, you know, in the future, can we -- you know, whether we had to do inspections or some other process, try and keep better track of how much asphalt overlaying, or, you know, wearing surfaces on the bridge, because that's obviously going to affect the load rating --
MR. PINTAR: Right.
MR. PROUTY: -- that type thing.
MR. PINTAR: Right.
MR. PROUTY: So --
MR. BUCK: Did we --
MR. PINTAR: What would you recommend, though? Like I say --
BY MR. O'SHEA:
Q. So, then --

A. -- outside of coring --

MR. PROUTY: We're soliciting suggestions, basically.

MR. O'SHEA: Well, Penda inventories wearing surface thickness, 6A-33 --

MR. PINTAR: Right.

MR. O'SHEA: -- maybe.

MR. PINTAR: Right.

BY MR. O'SHEA:

Q. There's a date associated with that. That date kind of falls in the time frame you guys were, so it's like 2013, I think, most recently. And so, we're trying to figure, you know, maybe what procedure did you follow with coding that, and maybe, you know, if you have any thoughts about how you would typically do it aside from coring, you know, that would be helpful.

A. That's what we did with -- that's the hardest thing, actually. I mean, you know, because you can't do something (indiscernible) it. I mean --

Q. Yeah.

A. -- you're stuck with the scuppers to be able to try to see. Yeah, that's a tough one. That is a tough one.

UNIDENTIFIED SPEAKER #3:

Q. Okay. Well, just, I mean, just for -- based on your experience, have you ever found the asphalt wearing thickness to be thicker than assumed in the design of a bridge?

A. So, it depends if they're milled or -- you know, sometimes,

they mill it, like I think they had to do in this case, because it's the same as the old. I mean, it would have been higher, correct, thicker, on the one side.

Q. Would that be of concern to you if the asphalt were --

A. Yes.

Q. -- thickness? You could see --

A. Yep.

Q. -- what was assumed in the design. Do you have any -- in your experience, do you have any thresholds as to, when that thickness reaches a certain limit, that it would initiate a load rating?

A. That's -- like, you'd want to if it's thicker at all, right? I mean, it's always assumed.

MR. PROUTY: When would you verify or try and verify (indiscernible) during an inspection the thickness of a wearing surface? Would you do that every time, or would there be something that would prompt you to on a --

MR. PINTAR: If there's a new -- like, yeah, if there's a new -- definitely, if there's a new wearing surface, obviously. If it's changed since the last inspection.

MR. PROUTY: Now, do you recall --

MR. OCEL: Just to be clear, you -- I'm --

MR. PROUTY: Go ahead.

MR. OCEL: Sorry. All right.

BY MR. OCEL:

Q. Just to be clear, you saw no indications on the inspections you were involved with where the wearing surface may have been growing in thickness? Everything, to you, suggested -- like, they may have put on new pavement, but it always went back at the same thickness?

A. Well, like I said, this is the only case (indiscernible) was a half, where someone does have the roadway. So, like I said, all I can figure is, they milled it and they put in. Why, I don't know, but --

MR. O'SHEA: Because otherwise, the one end would be higher than the other, might be --

MR. PINTAR: You'd sure think so. It would have to be.

MR. O'SHEA: -- the physical reasonableness.

MR. PROUTY: Yeah. Yeah, we know that they were doing some repairs to basically just the things -- just the ends or areas that were needed, you know, throughout kind of its history, so that's probably -- you know, it'd be my guess that's part of what you saw there, so, you know --

MR. O'SHEA: It's probably the (indiscernible), if I had to guess on it, but it's just my thought.

MR. BECK: Also, the scuppers were still at the right level with the pavement or the wearing surface, so, I mean, when they did a wearing surface, they had to either adjust the scuppers or they had a more severe slope coming from, you know, the bridge onto the scuppers, so --

MR. O'SHEA: Right.

MR. BECK: -- I guess there was no -- I don't know if there was a more severe or more of a (indiscernible) than was typically in there, but would you have noticed that if you were out on an inspection where you --

MR. PINTAR: Yeah. Like I said --

MR. O'SHEA: Because you didn't see the scuppers. You didn't see, you know, a contract come through. You just assumed it was the same thing.

MR. PINTAR: Right. Yep. The scuppers are usually all clogged up, anyway, solid, so that's another problem.

MR. PROUTY: Right.

MR. WALSH: Let me ask a Dan Walsh question. Are you familiar with any NDT techniques that you determine the wearing surface thickness?

MR. PINTAR: I'd say, core it, but, I don't know, does it radar (indiscernible) deck? GPR can --

MR. WALSH: Well, part of the question was to see, does anyone else have ideas that we don't know about?

MR. PINTAR: Would GPR do that? I'm -- that's -- I mean, that's a good question.

MR. BUCK: We're not 100 percent sure.

MR. PINTAR: Well, I don't know. I mean --

MR. BUCK: There's been some debate about it.

MR. PINTAR: I know an ultrasound does, but that's not metal.

I mean, it's asphalt. Concrete, it's not concrete, either. I don't know if you can get some kind of handheld something that would core through that. I don't know. A drill or something like that, possibly. I don't know if you have a better idea.

MR. WALSH: Again, I'm not trying to trap you, thinking I have the answer. We're asking the question --

MR. PROUTY: Right.

MR. WALSH: -- to make sure that we are aware of what others may know.

MR. PINTAR: Well, I think that's a good --

MR. PROUTY: Yeah.

MR. PINTAR: -- question. It's a good thought.

MR. PROUTY: Yeah. Like I said, we're soliciting ideas for some of this, as well. And what would work from an inspector's point of view. So, should we make recommendations down the line --

MR. PINTAR: Well, like I said --

MR. PROUTY: -- you know --

MR. PINTAR: -- a cordless drill with some kind of bit that's decent. I don't know. I haven't tried it. But you could try. You can get a pretty powerful drill these days with those lithium batteries.

MR. O'SHEA: Get something big enough you can see when you're hitting the deck, I guess.

MR. PINTAR: That's what I'm, yeah, that's what I'm saying.

It'd have to be something (indiscernible), too, you know, get something to measure it in there, as well. It's a though. Got me thinking now.

MR. O'SHEA: (Indiscernible).

MR. PINTAR: You guys may have to try it.

MR. PROUTY: I'm writing it down, so --

MR. O'SHEA: I immediately thought of GPR, too, but there's been some -- you know, they say, if it's not debonded, you may not see the difference between the asphalt and the concrete until you get to the rebar; and then, you're assuming what's the cover of that rebar, you know, and the wearing surface thickness, so -- but --

MR. PROUTY: Anything else? (Indiscernible).

UNIDENTIFIED SPEAKER #5: Just, yeah, just a hypothetical question on the wearing surface just to follow up.

BY UNIDENTIFIED SPEAKER #4:

Q. I mean, you mentioned the evidence of new surface would initiate you looking at the asphalt wearing thickness. If that's the case, then how can you ensure that previous inspection reports have checked the asphalt wearing thickness if you're only relying on evidence of a new wearing surface?

A. Right. Then, we should probably check it, right.

Q. Yeah.

A. But again, it's not always easy. That's the problem.

MR. PROUTY: Right.

MR. PINTAR: It's still like an estimate, because you're limited to where you can check it.

BY UNIDENTIFIED SPEAKER #4:

Q. So, really, it's very difficult to determine whether the asphalt wearing thickness has exceeded or not exceeded the thickness assumed in design?

A. I think it is, yeah, yeah.

MR. COLLINS: Anyone else have anything?

BY UNIDENTIFIED SPEAKER #4:

Q. If you were to core a deck, like you said, you're limited with a core to determine the thickness at the location you're taking the core out. What -- how -- where would you think about coring the deck, I guess? Like --

A. Probably a couple of spots, right?

Q. Couple of spots, maybe? Okay.

A. To get an average.

Q. Like, a lot --

(Crosstalk)

Q. -- the same --

A. -- maybe in the middle, then in the center, something like that, to get an average.

Q. Like center in relation to (indiscernible), not to the span?

A. (No audible response.)

UNIDENTIFIED SPEAKER #4: Okay.

MR. OCEL: Dennis Collins, can I ask of a request of

Ms. Margolius?

MR. COLLINS: (Indiscernible)? She --

MR. OCEL: Well, I --

MR. COLLINS: -- she can tell you no.

MR. OCEL. All right. Well, you tell me if I'm overstepping my bounds. When Tim had -- he had a recollection, during that 2015 time period, that there was a work order/task order contract to do fatigue and fracture plans for the city. Is it possible for you to look in to see what the scope of work of that was?

MR. OCEL: And, Mr. Collins, is this an appropriate thing to ask for?

MR. COLLINS: I do think we would be interested in documenting that having occurred, so I think that the scope of work would be realistic. Steve or Dan, do you have any additional thoughts?

MR. PROUTY: I'm good with that, and I'd like to see it if it's available.

MR. OCEL: You're muted.

MR. COLLINS: Oh, you're still muted. Okay.

MS. MARGOLIUS: Just so I understand what you're looking for, and, Tim, you can help me along, we had a contract with PennDOT 2015 time frame --

MR. PINTAR: Correct.

MS. MARGOLIUS: -- under which work orders were issued, and we think that one of the work orders requested an update for FCM

procedures? Was that it?

MR. PINTAR: Plan, right? FCM plans?

MS. MARGOLIUS: A plan?

MR. COLLINS: Right.

MS. MARGOLIUS: I see. And was that --

(Crosstalk)

MS. MARGOLIUS: -- fracture critical method plan?

MR. PINTAR: Member. Fracture critical member.

MR. OCEL: I think, pressure critical member plans and procedures. That's how we refer to them. I don't know what's going to appear in them.

MR. COLLINS: Yeah. PennDOT --

MS. MARGOLIUS: And they were the -- okay.

MR. PINTAR: At PennDOT, they call it a fatigue and fracture plan. That's another term --

MR. COLLINS: What was on the --

MR. PINTAR: -- that they almost --

(Crosstalk)

MR. PINTAR: -- use synonymously.

MR. COLLINS: Fatigue and fracture, correct.

MR. PINTAR: Yep.

MS. MARGOLIUS: Oh, okay. So, we'll be looking for a work order under a particular contract to update?

MR. PROUTY: Yeah.

MR. PINTAR: I can look it up.

MS. MARGOLIUS: Is that the plan?
MR. PINTAR: If I'm -- if you allow it, I can look it up.
MS. MARGOLIUS: I'm sorry, I didn't catch that last bit.
MR. PINTAR: I can look it up if --
MS. MARGOLIUS: Okay.
MR. PINTAR: If you want, I can look it up.
MS. MARGOLIUS: Thanks.
MR. PINTAR: But if --
MR. OCEL: I guess the interest is that --
MS. MARGOLIUS: He said he's looking it up.
MR. OCEL: -- was it just this, was it just this bridge, or was it citywide? What did they specifically ask from you?
MR. PINTAR: I'm pretty sure it was more than this bridge. I think it was the city bridges that are fracture critical, I think. But like I said, I'm just going off of my memory, so --
MR. OCEL: Okay.
MR. PINTAR: It's not a redundant tension member. You can't call it fracture critical or nothing. At least, that's what I was told.
UNIDENTIFIED SPEAKER #3: We are --
MR. PINTAR: Fracture is scary. Now --
UNIDENTIFIED SPEAKER #3: That is --
MR. PINTAR: -- come on.
UNIDENTIFIED SPEAKER #3: That is correct. We're using the old terminology because that was the reg that was in at the time

of the collapse. But you're -- we talked about that, as well, so --

MR. PINTAR: Well, it was -- who was it? The guy from Purdue, I seen his lecture. He said --

UNIDENTIFIED SPEAKER #3: No, you're fine.

MR. PINTAR: -- you know, an airplane is -- could be considered fracture critical. He went on an said the wing on an airplane is fracture critical. You don't want to say that, do you?

MR. PROUTY: No.

MR. PINTAR: I thought that was pretty good.

MS. MARGOLIUS: And now, it's called a tension member?

MR. PINTAR: Nonredundant tension member, which mean that there's no other --

MS. MARGOLIUS: Means it's critical?

MR. PINTAR: -- there's not several of them (indiscernible).

MR. PROUTY: It means it's fracture critical. We're just not --

MR. PINTAR: Yeah.

MR. PROUTY: -- saying that anymore.

MR. COLLINS: But people that don't know what it means, don't like the term, fracture critical, or they like it too much, maybe, running around and --

MR. BECK: Alarming.

MR. COLLINS: -- and misconstruing what it actually means.

We've run into that a few times.

MR. O'SHEA: Kind of like structurally deficient. We don't like to use that term, either.

UNIDENTIFIED SPEAKER #3: That's correct. That's going on --

MR. COLLINS: Yeah, that -- on previous bridge cases, we've had to go to great lengths to explain, that doesn't mean what you think it means. It has a very specific meaning. It doesn't mean, you know, we're seconds away from disaster, which is what people just reading the term or trying to explain it sometimes day, so --

MR. PINTAR: Any other questions?

MR. COLLINS: Anything else?

MR. PINTAR: Okay. All right.

(Whereupon, the interview was concluded.)

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

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|---|---|
| IN THE MATTER OF: | COLLAPSE OF THE FERN HOLLOW BRIDGE<br>IN PITTSBURGH, PENNSYLVANIA<br>ON JANUARY 28, 2022<br>Interview of Tim Pintar |
| ACCIDENT NO.: | HWY22MH003 |
| DATE: | August 23, 2022 |

was held according to the record, and that this is the original, complete, true and accurate transcript which has been transcribed to the best of my skill and ability.

Lisa D. Severino
Transcriber

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**To:**
**Subject:** RE: Transcript of Pintar Interview
**Date:** Wednesday, October 5, 2022 8:47:55 AM
**Attachments:** HWY22MH003_Pintar.08-23-22_TP REV.pdf

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Hello Dennis;

Attached is Tim's review of his transcript with corrections.

The list below is a list of things indicated as "indiscernible" that he picked up while listening to the recording. He noted these separately from this read-through since he wasn't sure what was said until he heard it.

- Pg 5, Line 6, am responsible.
- Pg 5, Line 21, steel mills went away.
- Pg 7, Line 8, non-redundant.
- Pg 11, Line 19, Baker "and" the city.
- Pg 19, Line 16, measuring everything.
- Pg. 23, Line 22, girders and floor beams.
- Pg. 28, Line 4, ratings wise.
- Pg. 36, Line 9, "I'm (indiscernable)" should be "they'll agree."
- Pg. 40, Line 17, to sound.
- Pg. 42, Line 6, we had new pavement.
- Pg 51, Lines 10, 12 not Mr. Pintar speaking.

Regards,

Erin Margolius
Senior Legal Counsel
CDM Smith
75 State Street
Boston, MA 02109
Direct: [redacted]

**From:** Collins Dennis [redacted]
**Sent:** Wednesday, September 14, 2022 8:54 AM
**To:** Margolius, Erin [redacted]
**Subject:** Transcript of Pintar Interview

Erin –

I hope you're doing well.  I've attached the transcript of the interview with Tim Pintar for review.  Is two weeks a reasonable turnaround time?

Dennis