

I-5719 - CP 4C-20260715_130051-Meeting Recording

July 15, 2026, 5:00PM

1h 35m 39s

● **Jamison, John** started transcription

JJ **Jamison, John** 0:25

Oh, yeah.

Hey everybody. We're here in the room. I don't know if someone from alternative delivery wants to kick us off here or you want me to start either way.

MP **Michael Penney** 0:44

Hi, this is Michael Penney.

Appreciate everybody joining in. This is the 4C meeting for the I-57-19B project, U-5800. This is a section of I-85 widening west of Charlotte.

From McAdanville eastward to the Catawba River Ridge.

And with that, I will turn it over to the design build team to do introductions, et cetera.

JJ **Jamison, John** 1:26

Okay, I can start here in the room. I am James Rice with HDR.

I'm Faith Harten with DWR here to support Parisa and Chris who are online.

Will Moody with HDR. Casey Hurley with Lane. Keegan Jarvak with Lane. Nick Sallier with Lane. Matt Vilner, Lane.

That's all in person here. I don't know the best way to. I'll just go over each. Okay.

Yeah, can you cherry pick the HDR folks that are in attendance, James? You can just, you can introduce them if there's any. I think she's just going to go.

Thanks, Chris Sheldon.

SJ **Sheldon, Chris J** 2:18

Yep, Chris Sheldon here from DWR covering Division 12 of the dot.

JJ **Jamison, John** 2:29

He's with HDR.

Sure.

James Terrance.

HB Harris, James B 2:44

I'm Jim Harris, Jim Harris in the Rail Division, NCDOT Rail Division.

JJ Jamison, John 2:54

Sorry.

I don't know if there's not a microphone near you. I think there's someone just message they're having trouble hearing you. Tori.

DT Dellinger, Tori 3:06

Can you hear me?

MP Michael Penney 3:11

Yes.

DT Dellinger, Tori 3:12

This is Tori Delinger with the Gas in Cleveland Lincoln MPO. You said it.

JJ Jamison, John 3:18

Andrew.

NA Nottingham, Andrew 3:22

Andrew Nottingham with MI Engineering Hydraulics GESG.

JJ Jamison, John 3:30

Day.

MG McHenry, David G 3:33

Dave McHenry, Wildlife Resources.

JJ Jamison, John 3:38

Michael.

MP Michael Penney 3:42
Michael Penny, NCDOTADU consultant.

JJ Jamison, John 3:45
Okay.
Okay.

BA Bukowy (HNTB), Kat A 3:53
Capa Covey, HNTB, sometimes dot, who knows? And original project manager up through the environmental document and now managing I-5719C.

JJ Jamison, John 3:58
This.
****.
Risa.

SP Sarzaeim, Parisa 4:14
Paris Sazai with DWR.

JJ Jamison, John 4:18
Dial.

CT Carter, Taylor 4:25
Did you say Taylor?

JJ Jamison, John 4:27
Yes.
David.

CT Carter, Taylor 4:29
Sorry, there.

WD Wagner, David 4:34
Dave Wagner with HDR. I'm the erosion control lead.

JJ **Jamison, John** 4:39
Tom?

MT **Miller, Tom** 4:42
Don Miller with HDR.

JJ **Jamison, John** 4:45
Bill?

BA **Barrett, William A** 4:49
This is Bill Barrett with NCDOT Environmental Coordination and Permitting.

JJ **Jamison, John** 4:55
Joshua.

TJ **Thrower, Joshua** 5:01
I'm Josh and I'm an intern with LDG.

JJ **Jamison, John** 5:07
Shell.

BG **Berry, Michelle G** 5:11
This is Michelle Barry with NCDOT Hydraulics.

JJ **Jamison, John** 5:15
So.

CA **Crystal Amschler** 5:20
Hi, Crystal Anschler with the Corps of Engineers.

JJ **Jamison, John** 5:24
Olivia.

MP Michael Penney 5:24
I...

PL Pilkington, Olivia L 5:27
Olivia Pilkington, Project Management Unit, filling in for Nora McCann.

JJ Jamison, John 5:32
Holly.
Was that Riley Birmingham? Yeah, Riley Birmingham, Birmingham HDR.

BR Birmingham, Riley 5:48
Sorry, I thought you said Holly. Riley Birmingham, HDR track design lead.

JJ Jamison, John 5:54
Maybe.

HE Harville, Katie E 5:58
Katie Hartville, NCDOTEPU.

JJ Jamison, John 6:02
Alright, fun.
Okay.

CR Cox, Marissa R 6:07
Martha Cox, CPU.

JJ Jamison, John 6:10
Mary Lynn.

SL Smith, Mary Lynn 6:14
Mary Lynn Smith, HDR Traffic.

JJ Jamison, John 6:17
And we want to get two ladies that came in.

Vicky Miller, Environmental HDR, and Brady Robinson, Environmental HDR.

Take over and share it here, unless...

I think we had Kat say a few words before the last 4B. I want to give her the same opportunity to say anything that might be on her mind, kind of help us get caught back up to things. So turn the floor over to Kat.

Pat, you're still on mute. You're talking.

BA Bukowy (HNTB), Kat A 7:09

Of course I'm talking and on mute. So generally speaking, just wanting to update the team as to where I-5719 is kind of as a whole for the project and that I-5719B, the limits have not changed, the ones that you're going to talk about today along with U-5800.

JJ Jamison, John 7:11

That.

Yes.

So.

BA Bukowy (HNTB), Kat A 7:30

That is all shown here in Aqua. What has changed is that, you know, the limits for I-5719C, which that permit will come, mod will come after this one is established. That is shown here in the kind of pink

JJ Jamison, John 7:36

Yes.

BA Bukowy (HNTB), Kat A 7:50

purple color.

right here and right here. And it now includes portions of I-85 where it only included rail bridges and one Rd. bridge to begin with. It also includes the interchange at Ozark. So that is different from the last time we all met.

And then the A limits are sort of over here to the west and then in the middle of the C project.

So just wanted to make sure you're aware of that. And Bill will be supplying the impacts numbers for A&C as part of the permit application. And those impacts are

from the CE.

So, and will be updated once we have a design.

for all the rest of it.

CA Crystal Amschler 8:51

Hey, Cat, it's Crystal. So just to clarify, it's the same, I think I remember us talking before about how this was going to be phased. All the impacts would be sent together, preliminary versus final. So the only change is that the 5719C has just expanded a little bit. Is that

BA Bukowy (HNTB), Kat A 8:53

Yep.

Yep.

Yep.

Yep.

Yes, yep. And it was all like obviously included in the document and everything, but it's just who's doing what work and design at this point. Yep.

CA Crystal Amschler 9:13

what I heard you say, okay.

Alright.

Gotcha. So from a permitting standpoint, it won't change a whole lot for us. And is this supposed to be a GP? Have we talked about that or an IP?

BA Bukowy (HNTB), Kat A 9:29

The.

Mm.

Bill, I think you're using an RGP, aren't you?

CA Crystal Amschler 9:33

Okay.

JJ Jamison, John 9:34

Love.

BA **Barrett, William A** 9:37

Correct. We're looking at the 50, I believe. Could be the 31. I'd have to look back at it, but yeah.

CA **Crystal Amschler** 9:37

Right.
Disney.

JJ **Jamison, John** 9:42

I think it's thirty-one was in the four-bit thirty-one.

BA **Bukowy (HNTB), Kat A** 9:44

Yeah.

CA **Crystal Amschler** 9:45

31, and that's the best fit widening, or if I recall correctly. So this one would be a best fit widening.

BA **Bukowy (HNTB), Kat A** 9:46

But.
I believe so, yeah.
It is.

CA **Crystal Amschler** 9:57

I know.
Okay.
I guess it's just when we've got these little spurs coming up, it makes me...

BA **Bukowy (HNTB), Kat A** 10:08

Sure.

CA **Crystal Amschler** 10:08

A little, yeah, a little curious about that. So I can look at that a little closer too. I mean, obviously if we can use GPs, it's better a 50 or a 31. I don't know which.

would be more appropriate, but hopefully one of them would. So yeah, I mean, that was just kind of where I was going with that question, just to make sure there was nothing that would push it back, you know, into an IP impact wise.

BA Bukowy (HNTB), Kat A 10:30

No, honestly, I think we might impact 2 streams with I-5719C, both over here-ish. We did have the study area, but Norfolk Southern is adamantly opposed to us going under 279.

CA Crystal Amschler 10:41

Gotcha.

BA Bukowy (HNTB), Kat A 10:49

With their tracks, so that's out.

CA Crystal Amschler 10:52

Okay, well I will make sure I put some consideration in there because obviously we want to get that worked out as far as the best fit and everything. Like I said, those little spurs are a little, scratch my head.

BA Bukowy (HNTB), Kat A 11:00

Mhm.

Yeah, the spurs are mostly because of bridge realignment since by and large, in order to widen 85, you have to replace all the bridges because they're not wide enough to accommodate it.

JJ Jamison, John 11:11

Yeah.

CA Crystal Amschler 11:16

I had a little back with Bill on the rest of you guys.

BA Bukowy (HNTB), Kat A 11:21

So.

That is all I had, unless there are any other questions. I will.

JJ Jamison, John 11:25
Okay.

BA Barrett, William A 11:27
I'll do this is Bill. I'll just say that I'm looking at the 31 right now and it says

CA Crystal Amschler 11:32
Play the song.

BA Barrett, William A 11:35
Best fit widening may include small amount of new location roadway for components such as interchanges, intersections, and Rd. segments, etc.

CA Crystal Amschler 11:43
Okay. All right. Thanks, Bill. I appreciate that. And yeah, that's kind of where I just, it was getting me to scratch my head. So good to know that. And I'll

BA Barrett, William A 11:44
Yeah.
You're welcome.

CA Crystal Amschler 11:57
Hopefully, that'll cover those little areas.
It doesn't even look like it's fully like new.

BA Bukowy (HNTB), Kat A 12:05
It's not. It's more just like where things tie in. Yeah. It's mostly ties.

CA Crystal Amschler 12:05
Location necessarily in those areas, but it is interchanges.
Yeah, hopefully.
Yeah, hopefully it'll still fit clearly. But yeah.
In there.

BA

Bukowy (HNTB), Kat A 12:25

All right.

That's all I have. I'll let you get back to the actual purpose of your meeting, which is CP4C4I5719B and U5800. Thank you.

JJ

Jamison, John 12:40

Great transition, great transition. So yeah, thanks. Thanks for that, Cat. Yeah, so I've got, I've got the plans up here. I've also got

We have available our minutes from 4B and our plans from 4B. We've got a bunch of, we've got all of our field photos if we need to look further in any areas. And I've tried to kind of note in my kind of agenda notes here where we talked about at 4B. So most of these are fairly straightforward. We've got a couple of sites we need to kind of dig in on, but

I'll try to kind of get through some of these others that are pretty straightforward, but stop me, slow me down if we seem like we're going too fast. So

So like I said, this is I-85 from McAdendale Road to Betty Drive. There are buffers on the Catawba River, but currently we've avoided all the impacts. So all we have are the wetland stream impact sheets.

Oh.

In.

There's a...

See.

Got majority of the impacts are related to the replacement of cross pipes. So that's where, you know, we've got our existing pipes, we're having to replace those. So we're having to ship those over. So our impacts are mainly due to tying those new cross pipes in.

We have gone through a constructability review with the contractor. They've looked at all of our potential bore pits. So we feel good about the working room that we have so that we can make sure we're well within that permitted boundary.

So, looking at minimization, we've...

removed and plugged a lot of the existing deck drains over the South Fork Catawba River, provide river pads for erosion. We're trying to utilize sheet flow as much as possible. We've got a couple of areas that we talked about at 4B where we were trying to remove some

some pipe systems to get to get it in the channel flow and hopefully provide a little infiltration. We can get get to those areas.

And then see, so we have KMZ file. If there's other things we want to look at, then.

Yeah, and we're looking at the RGP 31 currently.

So we'll get started here. I've got the, in the first couple of sheets, I do have the stormwater management plan. If anybody wants to talk about that, maybe we can save that to the end.

Um...

We've got the ditch details, since those are referenced into the plans. So the first couple of sheets are the ditch details. And so starting here on site one.

Site one is stream St.

U2 just UT to South Fork Catawba River. During 4B, we did talk about this pipe being nowhere for fish to come, so no concern of fish passage, so we revise it for being buried to it'll be placed at grade.

And back to what Rob mentioned, just throwing out there again, that there is a blanket statement about burial in the permit, and that we'll have to put in a note about the specific exceptions like this. So we'll make sure we get that captured in our narrative. You're referring to Rob writing. Yes, Rob writing, sorry.

Ohh.

So here we are, we've got an existing, it's an existing 60, replacing with a 66. Here we're showing the impacts. This is a separate stream over here to the right. So I can zoom in a little closer.

Um...

We're taking total impacts all the way to the to the outlet of the storm system.

And then on the outlet end, we are taking impacts all the way to the end of the riprap. These are all permanent impacts. And then we're showing temporary impacts to the right of way.

And we've got site 1A, which is this little trip that's coming in. It's only jurisdictional for this length here. So we're showing that as a total tank there.

CA **Crystal Amschler** 18:01

Hey, this is Crystal. It looks like nothing's really changed since the 4B and we already kind of discussed the at grade condition like you suggested or like you mentioned. So I don't have any comments or concerns with this one today.

JJ **Jamison, John** 18:01

Mhm.

Nine.

OK, perfect. Anybody else before you move on?

Go through these, here's a got a profile view.

And we'll shoot into site 2, okay?

Site 2 is stream s s.

Again, fairly straightforward. We had an existing pipe and being covered over by the new ramp. So impacts to the end of the riprap that we're showing those are permanent stream impacts here. And then we're just, we're showing temporary impacts.

from the end of the riprap to the right of way line. I know we've got some stuff that's kind of close by in there, but

For, for what we're showing is, is we're not impacting it with with this outlet channel here.

I don't know if we want to talk about, I think there's some historic properties on this plan sheet as well. Or if there's anything that's changed, we didn't have a lot of discussion on the 4B about.

CA **Crystal Amschler** 19:39

Oh

JJ **Jamison, John** 19:40

Sarah, but did want to mention it.

CA **Crystal Amschler** 19:41

Yeah, hey, it's Crystal again. I don't have any, I don't think I have any comments. This stream starts at the outlet of this pipe on the side of the road, correct? I think that that's something that we, okay.

JJ **Jamison, John** 19:51

That's correct. Sorry, I didn't mention that. It's all storm water coming out, and so it starts at the outlet of the existing.

CA Crystal Amschler 19:59

Gotcha. And so not a whole lot of change again. And you mentioned the 106. This is a, again, I'm sorry, I should know this. Federal Highways is lead, right? Not me.

BA Bukowy (HNTB), Kat A 20:14

That's correct.

BA Barrett, William A 20:16

Yeah.

WS Wilcher, Seth (FHWA) 20:16

That's correct, yeah.

CA Crystal Amschler 20:16

Okay, that's what I thought. Yeah, so I don't know. I mean, as far as the 106 resources, I don't know if that's something we need to get into today, unless it would, you know, affect the impacts in this area, or any, you know, decisions you've made on the avoidance or whatever for the 106 property would affect the impacts. I think we're good.

JJ Jamison, John 20:39

Along those lines said they mailed us a few hours ago to be played about 30 minutes.
Evans.

WS Wilcher, Seth (FHWA) 20:47

Yeah, I'm here, Hannah. I was able to make it in. I was only about 10 minutes late as it stood, so thanks.

JJ Jamison, John 20:49

Ohh, OK. I'm sorry, Sam.

CA Crystal Amschler 20:52

No.

OK.

Hi, Seth.

JJ Jamison, John 21:00

Okay, well, if we're good, any other questions about site 2?

So I think some of these are fairly straightforward.

The contour sheet got a blow up here.

WS Wilcher, Seth (FHWA) 21:15

Crystal, if you want to talk about 106 later, I'm around for that, so...

Let me know. Sorry to interrupt.

CA Crystal Amschler 21:24

Oh, it's okay.

Yeah, I mean, I know the 106 is kind of a different topic for a different meeting. So I think that, you know, we're probably good for now. And yeah, if anything pops up, I'll reach out. Thanks, Seth.

JJ Jamison, John 21:41

Okay, so got a blow up for looking at these out and feel when you don't have a zoom in button.

Next, we've got Site 3. This is our bridge.

Our bridge site this year is the.

Stream rescue, South Port Catawba River. We've shown here.

kind of our peer layouts, how we've, how we're showing the impacts, showing temporary impacts for the causeway and the fingers for the causeway. We're not necessarily showing the

It's hard to see the actual shading or the hatching for the individual peers, but those were developed with math. And I think there's a note on the summary sheet about those. So there's no physical hatching on the plan for these.

These little tears on here, but I think we've tried to show those.

Down here in the pier layout.

But.

We've now incorporated this. I think we had a figure showing this in 4B, but we've got them now shown on here. These are showing the limits utilizing the grading of

what that causeway would be, showing our access Rd. where that would be, showing that we're outside of any features there. See, there was one addition while I was putting this together. There was a little finger here that didn't get hatched. So I think we'll Mobile.
Update that hatch in here.
And again, this is.
Yeah.
The causeway will be constructed so that no more than half of the rivers blocked any one time.

SJ **Sheldon, Chris J** 23:52

Chris from DWR here. I noticed that this South Fork of Catawba River is listed on the 303D list. Has that been taken into consideration for the storm water management plan?

CA **Crystal Amschler** 23:52

Thanks.

BA **Barrett, William A** 24:08

Listed for what?

SJ **Sheldon, Chris J** 24:11

Or on the 303D list for turbidity.

BA **Barrett, William A** 24:14

For bed today.

JJ **Jamison, John** 24:16

It's for it's a classification of impaired streams.

SJ **Sheldon, Chris J** 24:20

Yeah.

BA **Barrett, William A** 24:29

I'll make a comment. I think if that is the listing for it, then we'll probably need to use the design standards in sensitive watersheds for that site.

SJ Sheldon, Chris J 24:40
Okay.

JJ Jamison, John 24:41
Okay.
I think Chris and I were just curious, there had been discussion about it in the past, maybe.
Because when we looked at the storm water management plan, it didn't list it as a 303D.
Sorry, I didn't list it as the parents, so we were just curious if there was a reason it was excluded that we were unaware because.
predates us or if it just got missed? I don't know. Tom, do you have any input on that or?

MT Miller, Tom 25:15
I do not.

JJ Jamison, John 25:18
Okay, we'll check that and see if it's...
Double check that.

SJ Sheldon, Chris J 25:24
Okay, thank you.

SP Sarzaeim, Parisa 25:27
Hey, this is Paris. I have a follow-up question. Probably this has been discussed before. I'm just trying to double check. Could you please confirm that there is no direct discharge?

JJ Jamison, John 25:28
And.

SP Sarzaeim, Parisa 25:43

from bridge to the stream.

JJ Jamison, John 25:47

Yes, so that's a good question. So there are current deck drains that are on the existing bridge, and they will remain in place during construction. But at the end of construction on the new wide section, there will be no direct discharge from the bridge into the water.

SP Sarzaeim, Parisa 26:08

Perfect, thank you.

JJ Jamison, John 26:12

We're tying all of our all of our outfalls are going to be tying back to existing outfalls that are that are headed to the river, so we don't direct discharge any of our.

Ohh.

Our storm drainage directly into the river.

So I guess maybe one clarification there about the three or three impaired. Does that jeopardize anything with the actual causeway or what does what's the implication of that that we would look at?

I'm not sure. I think our first step was just to make sure that there was some reason it's excluded.

I don't know of any reason that it would be excluded. So it may have been missed or something. So I'd have to go in and look if to see if there's any particular impacts with the policyways. But essentially the idea is if it's already impaired with a certain set of standards that they have to keep it clean or compared.

for lack of a better word. And so looking at the report from the past almost decade, there was concerns about the copper level, there was concerns about PCB fish tissue, and then there was concerns about turbidity. So for this it would be concerns about turbidity. Yeah, I mean, we obviously looked at a lot of different options.

There's high rock in the area and also shallow water depths. So driving piles or working off of barges was not, it was all things that they investigated. So that's where we kind of ended up with the rock causeway. Okay. And it is planned to be rock, so it's not a soil causeway or anything like that, which would

You know, increase your potential for turbidity. In this case, it's rock. Do we just need to be clear about that whenever we're...

Yeah, there's I think we added a detail to the whole section. Yeah, yeah, and I know that control plans, there'll be turbidity curtain around our rock Causeway work areas, so they'll be they'll be completely surrounding the turbidity curtains where we're working on the rock Causeway and the.

So that's in the erosion control plans that's required. And we've got we've got several detailed pages here that are going to be in the permit, and then we've got our detailed depth and everything else.

So, these are all kind of part of business sheets, so of the package sheet, so I can, I can.

BA **Barrett, William A** 28:46

I'll also just mention again, if it is in fact listed for turbidity, we'll need to implement the design standards and sets of watersheds in the erosion control plan.

JJ **Jamison, John** 28:57

Google.

Yeah, get that number.

BA **Barrett, William A** 29:05

Thanks.

JJ **Jamison, John** 29:06

Mhm.

Any other questions on the sheet?

CA **Crystal Amschler** 29:18

Oh, sorry. Yeah. Hey, it's Crystal again. I don't I don't have any specific concerns.

Again, you know, typically our concern is the 50% and I noticed with the 4C plans, we've got some some some of the detail sheets showing the stage construction that just kind of

JJ **Jamison, John** 29:21

Okay.

Mhm.

CA **Crystal Amschler** 29:37

confirms the non, you know, that it's not going to block the 50%. So yep, I'm good to go with this design and I don't have any questions or concerns.

JJ **Jamison, John** 29:48

Thank you.

Go into...

BA **Barrett, William A** 29:54

This is Bill again. I'm looking at the 303 2022 integrated report. It looks like it's listed for fecal coliform.

I don't see anything else listed for it.

But...

We'll need to confirm that.

JJ **Jamison, John** 30:12

Thank you.

Yeah, and in 2018, that's when it was this or two building, and...

Yes, the 2022 is the most recent right launch.

BA **Barrett, William A** 30:23

Correct.

JJ **Jamison, John** 30:24

So, and I think we always got to go by the most recent, not going back in time, so I think that might be something.

BA **Barrett, William A** 30:31

That is correct.

JJ **Jamison, John** 30:34

Yeah, I think I think Chris and I were just curious.

If the addition in the 2022 meant the exclusion of the turbidity, if that makes sense, like just because of... Yeah, I think those reports get completely reissued. Okay. Every two years, like, well, it's a cycle, right? They go out as like a draft and then get approved and then go into effect.

So yeah, it's like a new version every time. OK, yeah.

BA **Barrett, William A** 31:03

Right.

JJ **Jamison, John** 31:05

No, that's awful. Sorry for the confusion on that, but we talked about it here. I'll talk about it.

Okay, we'll go into site 4. This is another one that we discussed during 4B about since there was no stream upstream, more and more about fork fish passage. So we are not burying this. So we have a replacing this existing 36 with a the 48. We've got our riprap and our outlets to tie everything back in together. We're showing permanent impacts to the stream to the end of the riprap, and then showing temporary impacts just to the end of the easements that would be for dewatering.

BA **Barrett, William A** 32:06

And it looks like we're making a distinction. We're calling this channel stabilization. So there's riprap in the stream itself, correct, as opposed to bank stabilization.

JJ **Jamison, John** 32:14

Correct.

BA **Barrett, William A** 32:15

Yeah, okay, good. Thank you.

JJ **Jamison, John** 32:17

Yeah, we've got a lot of different water coming in from different directions, and... It's just dog and be kind of noobs, so. Any questions here?

CA **Crystal Amschler** 32:32

I'm good on this one. Thanks.

JJ **Jamison, John** 32:34

Okay.

Stay.

Ohh, here we have...

Site 5.

Got a uh.

This was there was a discussion there in 4B about.

here, as opposed to the comment we just had about putting riprap in the bed, that we weren't putting riprap in the bed of the streams on these two. On the upstream side, we, this is just the inlet, we were able to maintain that existing inlet. And then we

Actually, we were able to maintain both sides. So therefore, we were just calling for bank stabilization on this pipe.

And then.

Yeah, so then we've just got, we're showing temporary impacts from the end of that bank stabilization to the easement.

One thing I did want to mention, currently we're showing temporary impacts, it's a pretty far distance. I don't know if that's

Too far.

I don't see her need to go up there, but...

Where we were starting was...

showing there could be some temporary impacts within the right of way. So I don't know if we want to discuss, you know, shorten that up to 10 or 15 feet to make sure we've got room for dewatering or anything we need to do for doing that bank stabilization.

CA **Crystal Amschler** 34:23

My preference would be to shorten it if possible. I know sometimes dot likes to kind of cover more just so they have that permission. But what I get concerned about is when the contractor gets out there, they see that they've got the ability to get in

there. And so they get in there whether they need it or not. So
Yeah, I mean, if it can be, if it can be shortened, let's shorten it.

JJ **Jamison, John** 34:47

Okay, we'll look at shorten that up and see what we could do. I mean, I think the impacts here are pretty minor since we're just doing bank stabilization versus a relocation. So.

CA **Crystal Amschler** 34:48

Yeah.

JJ **Jamison, John** 35:01

We'll look at...

As A follow-up after the meeting, shorten that up.

CA **Crystal Amschler** 35:09

Sounds good.

BA **Barrett, William A** 35:11

Could we also take a quick look at the detail for the bank stabilization since we're looking at that, just to make sure we've got that captured correct?

JJ **Jamison, John** 35:17

Sure.

See detail 9-8.

The.

BA **Barrett, William A** 35:34

Okay.

All right, thanks. Looks good to me.

JJ **Jamison, John** 35:43

OK, everybody else good with the detail.

CA **Crystal Amschler** 35:47

Yep.

MG **McHenry, David G** 35:48

Yep.

JJ **Jamison, John** 35:52

Good.

Okay, any other questions on Site 5?

CA **Crystal Amschler** 36:03

All good here.

JJ **Jamison, John** 36:05

Alright, the machine on in site 6 here.

Okay, got another one here.

During, let's see, I got here.

Okay, so there was discussion in 4B here. I've got that no concern with fish passage.

Good to move with not bearing the pipes. So we've shown this 60 inch pipe at grade.

So we've got, again, this one here, this is one of the areas where I think our friends in roadway adjusted the right of way after we drew our impacts. So we'll have to pull these in a little bit. We've got our impacts going to the old right of way bond. So We'll get that squared away for the final, but we are showing, we'll be showing permanent impacts to the limits of the riprap, and then we'll be showing a little bit of temporary to the right of way.

be doing the same thing on, basically on both ends. So we'll have on the outlet end, we'll have the permanent impacts to the limits of the riprap, and then temporary to the end of the exit.

CA **Crystal Amschler** 37:33

Okay, I'll I appreciate that and I'll make a note that.

Those temporary impacts could be shortened.

JJ **Jamison, John** 37:44

Yeah.

CA **Crystal Amschler** 37:44

Is that what? OK, but I also...

JJ **Jamison, John** 37:46

Yeah, there's a couple locations around here where I think they were they were tightening up some right away and it got updated after our plans got printed.

CA **Crystal Amschler** 37:57

Okay, gotcha.

JJ **Jamison, John** 37:58

After our impacts got burned, yeah.

CA **Crystal Amschler** 38:01

But I do have a question about this one. So looking at the detail, let's see, let me look at my notes. It says that it's a six foot wide base width at the opening of the pipe on the inlet and the outlet, I believe.

JJ **Jamison, John** 38:16

Okay.

CA **Crystal Amschler** 38:17

And the pipe itself is only about 5 feet. And obviously it's going to be much narrow at the entrance since I believe this one is set at grade as well. So I'm just wondering, I'm not sure those widths like add up in my mind.

So we've got a 6 foot opening that may seem like it's going to be a lot wider than the pipe opening is actually going to be. And I don't know how wide the stream is, but that's just something I was hoping to get a little bit more clarification on.

BA **Barrett, William A** 38:50

OK.

JJ Jamison, John 38:50

Okay.

See.

Tom, I'm assuming that the existing is around that. Do you have our red lines available?

And from our field notes.

MT Miller, Tom 39:05

Yeah, I'm trying to pull him up right now, which...

JJ Jamison, John 39:07

Or maybe some pictures of the existing, how that's all tied in.

So, this is the same size, so that would kind of give an idea of, you know, we're going from a 60 to a 60, so you...

MT Miller, Tom 39:22

So our field notes show the existing as a three-foot base.

I know we had that six-foot base in there because we did have a larger pipe.

I don't know if, I don't think it was changed when we reduced the pipe size for the burial.

So, we, I mean, we can adjust that.

if you'd like to see a smaller base with.

CA Crystal Amschler 39:50

Yeah, I think it'd be a good idea because otherwise I think you're going to have a real wide opening going into a narrow pipe and the stream is just going to like flatten out in that area and then cinch back in to go in the pipe. So yeah, I mean, probably 3 foot base, still might be a little wide for the opening of the pipe, but would certainly be better than 6 foot. So

Yeah, let's narrow that down.

JJ Jamison, John 40:13

Okay.

CA Crystal Amschler 40:19

And that's at the outlet in the inlet.

I'm just making notes here for myself, too.

JJ Jamison, John 40:22

OK.

Yeah, one note that.

All right, we'll move into...

Any other questions on site 6?

CA Crystal Amschler 40:39

That's all I got for that one.

JJ Jamison, John 40:41

We'll move over to site 7. Here's a little wetland here. We did talk in 4B, since there was no change in hydrology or the elevation of This.

This ***** and pipe here that.

we would show basically this remnant would stay the same. We are showing some hand clearing and then the permanent impact. But I know there's sometimes additional discussion about what happens to the small remnant. So

I don't know if everybody feels the same or if we need to look at taking that as a total tank.

BA Barrett, William A 41:26

Did we have something in the four B minutes? I think we discussed that.

JJ Jamison, John 41:28

S.

Yeah, that's what I was saying. We did talk about.

BA Barrett, William A 41:30

Previously.

JJ **Jamison, John** 41:38

****.

We talked about.

I guess the final was, I think Crystal said, keep an eye on it, make sure it isn't drained.
But

CA **Crystal Amschler** 42:02

Yeah, my notes say that I was told that it should not change the wetland hydrology, and so this thing shall remain. Yeah, it's still a little concerning for me, but, you know, I think we're going from a pipe to a ditch, so I don't know, it could.
possibly remain the way it is. So I think that's kind of where we landed is just, we'll keep an eye on it, you know, and if we go out there and it's completely drained, then we may have to kind of do it after the fact and address it. But if that little piece is still wet, then maybe we're good to go.

JJ **Jamison, John** 42:38

Yeah, it looks like, you know, everything's still draining towards it and there's kind of a, looks like maybe a start of a ditch or something here. I don't know if it's.
So, it's already a fairly low, low area there, according to the concepts.

CA **Crystal Amschler** 42:55

Okay.

JJ **Jamison, John** 42:59

The.

Good.

The next site 8 was the, I think this one was pretty straightforward. It's going to be a total take. I think it's all gone. So I don't know. You spend a lot of time on this one.
Sure.

CA **Crystal Amschler** 43:21

Yeah, that's what my notes say, and I am good with this impact.

JJ **Jamison, John** 43:25

Yeah.

Anybody else? We go to plant sheet 11.

Sheets here.

Here we got.

Site 9, this is stream SO. We've got an existing 8 by 8 box culvert that we're retaining.

Once again, since we're just maintaining those entrances and exits that we're just calling for bank stabilization utilizing that same detail we looked at.

Nothing fancy here.

Any questions here?

CA

Crystal Amschler 44:17

I'm all good.

BA

Barrett, William A 44:18

Yeah.

JJ

Jamison, John 44:21

Okay, next we get into...

Site 10.

And I'll, I did, we did go ahead and include that overview sheet. I think that kind of helps.

Kind of see everything together, and it's.

Yeah.

So this isn't an actual sheet that matches up with the plans. I thought it might be helpful to have this as opposed to that. So I don't know if anybody has any comments on that.

Um...

BA

Barrett, William A 45:02

This is Stream SL, is that correct?

JJ

Jamison, John 45:02

Since everything happened.

Yeah, the one that we're going to that we're going to talk about. No, yeah, this one

eventually gets into stream SL. So all this stuff kind of ties together. So I wanted to go ahead and get to that. So yeah, we're coming up on the infamous SL here.

BA **Barrett, William A** 45:16

Oh, it's site 11, okay.

Yeah.

Okay, thanks.

JJ **Jamison, John** 45:25

But we'll go ahead and start talking about, we'll get SN out of the way here first.

So with this one.

We discussed in four B about not burying. We've got an area up here that the tie in is just downstream from, there's a pond up here and a dam.

So we're taking permanent impacts to stream SN to the end of the riprap and temporary impacts to the right of way, similar to downstream, where we've got a pretty big washout down here. So we've got a pretty big area of

But.

stabilization. So we've got the permanent impacts to the end of the riprap and then the temporary to the...

to the right or to the permanent easement. And this area here was, we had talked about, we've got a little bit of a diversion in higher events. We went through all that discussion in 4B. We've got some undersized pipes down in this neighborhood area that the division is looking at doing.

but improving those through a separate maintenance contract. So we're trying to take as much pressure off of this system by utilizing this diversion for higher events.

All the, I think we discussed in the four B that it's up to like a 25 year event. So

All the daily flow and everything will continue to go like it's like it has been.

Which brings us to 2SL here. And this was a big discussion in 4B. We had, this was a rock line ditch. And then we were talking about how this would impair

fish passage and movement upstream, which would potentially bring an impact to all of this. One thing we looked at

Post 4B was trying to flatten this to get this back to no riprap, which we were able to do. I don't know if that changes anything on how we're looking at fish passage or

anything else, but I feel like it's certainly an improvement over the rock line ditch that we were showing at 4B.

And we were talking about...

So.

CA **Crystal Amschler** 48:11

So, I'm sorry, say again, for this relocation area, you redesigned it to get the riprap out of the stream. Is that what I heard you say? So it's a little bit more stream-like instead of ditch-like, would be the ultimate effect?

JJ **Jamison, John** 48:11

I guess.

Yeah, well, it it it can be, so I'll go back to what we're showing and then for B.

BA **Barrett, William A** 48:29

And Crystal, I think it was getting riprap out of the ditch, not the strain.

CA **Crystal Amschler** 48:36

Okay.

BA **Barrett, William A** 48:36

if I heard correctly.

So we had riprap all in that ditch and they've removed the...

JJ **Jamison, John** 48:43

Yes, so this is what it looked like in 4B. It had a, it was all, it was all rip rap. It was just one big glob of rip rap, you know, upstream of there. So then that continued up. So that's when the discussion became that if we were blocking fish passage from that pipe,

CA **Crystal Amschler** 48:46

I see, okay, okay.

JJ **Jamison, John** 49:02

onward, then we needed to consider looking at SN or S.

SL as a total take all the way up.

CA **Crystal Amschler** 49:15

Yep. Yeah, so, okay, go ahead. I'll let you finish and then I'll chime in.

JJ **Jamison, John** 49:15

So.

No, no, I think I've said everything. I'm just talking over myself again, so I'll stop and let you go.

CA **Crystal Amschler** 49:25

Okay, yeah, so this one is definitely the infamous one. And so part of the reason I think I'd requested for the riprap to come out of this is because this little segment here, you know, if it's going to count towards any sort of relocation, self-mitigation, then it would have to be more stream-like. I don't know that it's going to offset. Well, I know it's not going to offset the issue with the fish passage, fish passage, because the issue there is the fact that we're going from the smaller pipe to this longer crooked pipe. And that basically precludes aquatic passage, which is problematic for the GPs because the GPs have that requirement that there is aquatic passage.

HB **Harris, James B** 50:06

Okay.

CA **Crystal Amschler** 50:07

you know, which opens the door to either an IP, which nobody wants to do those because that's just so much more work. And it just doesn't seem like it's a great use of time for something that could qualify for a GP. But the IPs don't necessarily have that requirement as far as the aquatic passage. So yeah, I think we're still kind of stuck

on the loss upstream. But I am looking at this, and this is a little bit outside of what we would typically look for. But I think the other little possible alternative that occurred to me, and it may be completely impossible, I don't really know, because looking at this topography, it looks like

the ditch feature that basically takes that high flow down to site 10. Is that, that's correct, right? It takes the high flow only and then the low flow. Okay.

JJ **Jamison, John** 50:54

That's.

Yeah, that's correct.

CA **Crystal Amschler** 50:58

Potentially, if that could be redesigned into a relocation to take that full stream down and then drop it into that pipe, then I feel like maybe that could solve the passage problem. But I don't know if you can even do that because of the topography. But, you know, and that's still a pretty long pipe down there as well.

But yeah, the issue is like, you know, even though I think David said that fish necessarily aren't an issue for this one, our conditions for the GPs are pretty clear that aquatic passage, which is not necessarily fish, but it's anything, cannot be basically disrupted. And I think that the current design would still would still disrupt the aquatic passage and result in a take for everything upstream, unfortunately.

JJ **Jamison, John** 51:49

Is there anything else that could be looked at? I know you mentioned...

the crook in it, that was straight, is it to length or is there anything else that can be improved to reduce that or to encourage more?

CA **Crystal Amschler** 52:03

Yeah.

Well, yeah, I mean, I think what we would typically see in a scenario like this, if we wanted to try to maintain fish passage, is we would see larger pipes with sills, you know, so that it could maintain some substrate and then maybe straightened if possible, which I don't know, again, if that would be possible in this because you're retaining.

JJ **Jamison, John** 52:08

Yeah.

CA **Crystal Amschler** 52:25

the pipe under the road. And I'm assuming that means you want to avoid an open

cut at all costs. So I don't know that there's an opportunity to put in a larger pipe with seals. But if that was possible, then I think that that would help with the fish passage or the aquatic passage issue for sure. I don't know if you can directionally drill a bigger pipe and then

JJ **Jamison, John** 52:25

Yeah, it's...

Yeah.

Okay.

CA **Crystal Amschler** 52:44

retrofit some sills, that seems like that might be a constructability issue, but that is definitely not my expertise. So I will let y'all decide if that's possible.

JJ **Jamison, John** 52:51

Yeah.

Yeah, we're just trying to, we're doing a lot of juggling with the hydrology here, looking at flooding and how we're handling that. So I think adding additional flow to this area downstream, which is, we were trying to maintain and lessen if possible. So I think

CR **Cox, Marissa R** 53:08

Yeah.

CA **Crystal Amschler** 53:13

Yes.

JJ **Jamison, John** 53:15

If we start looking at increasing in here, I think we're looking at some pretty significant impacts downstream to the properties and roadways.

CA **Crystal Amschler** 53:25

I gotcha.

Yeah, so I mean, I guess that means too, because it does, you know, you are

replacing this pipe over at section or site 10. So I suppose that would mean that there's no, I'm sorry.

MG **McHenry, David G** 53:29
But...

JJ **Jamison, John** 53:35
Mm-hmm.

CR **Cox, Marissa R** 53:35
Search it.
So, I just go from like a start. I mean, 2% was just undercharged. We probably wouldn't want to stop anyway.

CA **Crystal Amschler** 53:41
Somebody's.
Okay, I don't, is someone trying to talk or is that just...

CR **Cox, Marissa R** 53:45
Tell me to call.

JJ **Jamison, John** 53:50
Ohh.

CA **Crystal Amschler** 53:50
Okay, I'm going to keep talking. Anyway, so if we could get a stream relocation and then a larger pipe maybe through this area, since you're going to have, oh, that's still trenchless. That's still trenchless. Okay, so maybe that wouldn't work. And it sounds like it wouldn't work anyway, just because you don't want to upsize that pipe because you don't want to bring that hydrology down.

JJ **Jamison, John** 53:52
OK.
I.
Yeah, we're kind of stuck there. Yeah.

CA **Crystal Amschler** 54:10

Below the red.

Yeah, I don't know what else we can do. You know, I took this to Scott because I hate to tell you that you've got to mitigate for all that upstream, but I feel like we're kind of stuck.

just because of the aquatic passage issue with the GPs.

So I mean, I'm not opposed to getting creative and open ideas, but as far as I can tell, that's kind of where we're landing.

JJ **Jamison, John** 54:43

Gotcha.

Yeah, there's a great. Dave, you got your hand raised.

MG **McHenry, David G** 54:54

Yeah, sorry, Jim.

I guess I could open. I don't have the plans open. What size pipe are you drilling over at site 10?

JJ **Jamison, John** 55:03

Is A seventy-eight.

MG **McHenry, David G** 55:05

Ooh, okay, pretty big.

JJ **Jamison, John** 55:08

So that one.

MG **McHenry, David G** 55:09

But so you probably couldn't handle all that flow. I think you probably said that then.

JJ **Jamison, John** 55:15

And then I think I think this area here is very steep getting down. There's a lot of elevation change there. We were we were kind of struggling to get this portion to

not have riprap in it. So I don't know that there would be a way that we could go flat enough to not require

MG **McHenry, David G** 55:15
Fail.

JJ **Jamison, John** 55:36
rip rap all the way down to the inlet of this pipe.
I believe that was the direction you were going, right, to allow that fish passage.

MG **McHenry, David G** 55:45
Yeah.
Yeah, yeah, yeah, and I'm sorry, I didn't look at this stream. I've never seen it, so it's...
I'm not sure what's in it, if anything.

JJ **Jamison, John** 56:00
Got it.

CA **Crystal Amschler** 56:03
Yeah, um, and...

MG **McHenry, David G** 56:03
Well, I do one last. I'm sorry, is there a pawn?

CA **Crystal Amschler** 56:06
Oh, that's okay. I always, you go ahead, Dave. I appreciate your input. Go ahead. I'll jump in afterwards.

MG **McHenry, David G** 56:11
Oh, I'm sorry. Is there still a pond up at the railroad crossing up there? It's hard to tell from aerials or...

JJ **Jamison, John** 56:18
There's a pond here.

MG **McHenry, David G** 56:21

No, on the other hunt.
Stream S, I guess.

JJ **Jamison, John** 56:26

Bye.
This, this right here.

MG **McHenry, David G** 56:28

No.
Okay.
That might be it. Never mind. I saw something on the on aerials or a topography maps and probably gone.

JJ **Jamison, John** 56:35

Not sure.

MG **McHenry, David G** 56:41

The.

CA **Crystal Amschler** 56:42

Well, and I'm just trying to brainstorm here. And I know we talked about this a little bit with in 4B. So forgive me if I'm asking a question that's been answered. But is there any substrate? Does anyone know? Is this pipe holding any substrate currently or is it all flushed out? Because I mean, I know it's very possible that there's nothing in there.

JJ **Jamison, John** 56:54

The.
And I guess just one more thing, you know, I think it all ends right here anyway. There would be only the part that we're talking about additional would, I think, just be this section here. You know, we're pretty impacted all the way back to here. And then I think the stream starts at the outlet of this.
Storm drainage.

CA Crystal Amschler 57:23

Right, so it's not too bad. Well, it would also include that little...

JJ Jamison, John 57:25

We're not talking about miles of stream or anything.

CA Crystal Amschler 57:28

Right. It would also include that little section between site 11 and 13, which I mean, that's pretty small. But, you know, we would add that to the linear footage. So I mean, if that's susceptible for dot from a, you know, cost standpoint, then that's that is certainly the most straightforward way to do to deal with it is just to keep the design you have and just mitigate for the entire length.

JJ Jamison, John 57:52

So the other question we had is there's a few other streams. So there's SBP here that comes off of this, it comes back up and around. And then there's stream SM.

So, there's a couple others with those.

Then require, I mean, would it be like the entire or we're talking about just SSL that would be the total tank?

CA Crystal Amschler 58:21

Yeah, my understanding would be the trips as well, because they all, you know, any aquatic passage goes through that central trim. And so if that's cut off, then anything else would also be cut off.

MT Miller, Tom 58:39

Crystal, to answer your question about the sediment in the pipes, we had a video pipe inspection done on that 660 inch. And it does have sediment in the bottom for most of its length, but towards the upstream end, it is completely clear.

BA Barrett, William A 58:41

Mm.

CA **Crystal Amschler** 58:46
Mhm.

JJ **Jamison, John** 59:00
You talking about this one, Tom?

CA **Crystal Amschler** 59:00
Okay.

MT **Miller, Tom** 59:02
Yes.
Yeah, I can share my screen if you want to see it.

CA **Crystal Amschler** 59:09
Yeah, that'd be good.

JJ **Jamison, John** 59:09
No.

MT **Miller, Tom** 59:15
So what you're looking at in the distance is the upstream, the upstream end. So there's.

CA **Crystal Amschler** 59:17
Yes, a little tiny bit, yeah.

MT **Miller, Tom** 59:23
really not much in that upstream end, but then as you get down towards the downstream end, you do start to see

JJ **Jamison, John** 59:23
Just.

CA **Crystal Amschler** 59:26
Agreed.

MT **Miller, Tom** 59:32
A lot more.

CA **Crystal Amschler** 59:34
Okay, yeah, so here's what I can do then.
I mean, if it's if it definitely has some there at the bottom, but if it doesn't go all the way through, then I think that there's an argument to be made that it's not currently fully passing, you know, doing aquatic passage. So that's something if you could send me that video or some screenshots of the of the upper end, I can take that back to Scott and him and I can look at that again.
Because again, you know, I'm not really trying to make this more difficult or cost more money to the taxpayer than necessary. So if we can get around mitigating for the entire reaches, then that's fine. I just want to make sure I'm crossing my T's and dotting my I's. So
Yeah, if you can send that to me, I can take that back to Scott. Me and him can look at that again and decide how we want to move forward. Because I think the fact that it's not carrying substrate all the way through does make a better case that it's not really going to be disrupting the current passage since it's not fully complete anyway. if that makes sense.

MT **Miller, Tom** 1:00:43
Yep, okay. Yeah, we can get to this video.

CA **Crystal Amschler** 1:00:47
Awesome.
Dave, you got something else to say? Or is that a remnant of your hand from before?

MG **McHenry, David G** 1:00:53
I just...
No, I got something else. If you don't mind, did somebody do like a stream quality sheet on this one, I'm guessing? Did they recall? Because if that...

CA **Crystal Amschler** 1:00:58
Alright, let's hear it.

JJ **Jamison, John** 1:01:09
Something.

BA **Barrett, William A** 1:01:09
Yes.
Ohh.

JJ **Jamison, John** 1:01:14
Yeah.

MG **McHenry, David G** 1:01:15
Or just default to medium quality or something, or did you do stream sheets?

JJ **Jamison, John** 1:01:22
Cheers on.

BA **Barrett, William A** 1:01:24
I'll try to take a look and see what I can find on my end for the NRTR, for the PJD actually.

JJ **Jamison, John** 1:01:25
What was?
Sure.
So I've gotten a 4B that Bill shared the stream form information. So you're busted.

BA **Barrett, William A** 1:01:31
Yeah.

MG **McHenry, David G** 1:01:31
Add it.
Yeah.

CA **Crystal Amschler** 1:01:40
Mmh.

BA **Barrett, William A** 1:01:43
See.

JJ **Jamison, John** 1:01:45
One for macrobenthos, 0 for fish, crayfish, and mussels for SL.

MG **McHenry, David G** 1:01:45
I, I...

BA **Barrett, William A** 1:01:46
Right, so I did, I did share that.
Right.

MG **McHenry, David G** 1:01:54
What was crayfish? I'm sorry.

JJ **Jamison, John** 1:01:54
I don't know anything that means.

CA **Crystal Amschler** 1:01:57
Yeah.

JJ **Jamison, John** 1:02:00
Thank you.

CA **Crystal Amschler** 1:02:05
Play.

MG **McHenry, David G** 1:02:06
I'm sorry, did somebody say crayfish?

JJ Jamison, John 1:02:09
I'm just reading the notes here. I don't know what any of it means, but it says one for macrobenthos, zero for fish, crayfish and mussels for SL.

CA Crystal Amschler 1:02:20
And that was done on the upstream end.

JJ Jamison, John 1:02:24
Talking, if I could reach that mute button, I would mute myself right now. Wait, that language?

CA Crystal Amschler 1:02:25
We don't know.

MG McHenry, David G 1:02:29
Yeah.

CA Crystal Amschler 1:02:30
Y'all are having a lot of fun there in the office. It looks like I should have come to the in-person meeting here.

JJ Jamison, John 1:02:36
And.

MG McHenry, David G 1:02:37
Well...

JJ Jamison, John 1:02:39
Yeah.

MG McHenry, David G 1:02:42
Well, anyway.

CA **Crystal Amschler** 1:02:42

So do we have an answer to that question? Was it upstream in or?

JJ **Jamison, John** 1:02:44

What is this?

MG **McHenry, David G** 1:02:48

Well, basically all I hear from that is somebody saw bugs in there, but, you know, bugs don't really move a lot in streams. That's just why I was curious if there's crayfish mainly and amphibians, which is highly unlikely in that urban area with all the pollutants.

JJ **Jamison, John** 1:02:50

So it can.

MG **McHenry, David G** 1:03:08

Um...

So, it's it just is hard to tell from the pipe video, but that's helpful, Tom, but it's like it looks pretty low quality, you know, just sediment-wise, it's gooey.

JJ **Jamison, John** 1:03:11

The.

CA **Crystal Amschler** 1:03:21

Mmh.

MG **McHenry, David G** 1:03:23

Anyways, that's all I was curious about. I don't have a whole lot of concerns about organism passage in here, but that's just my thoughts.

JJ **Jamison, John** 1:03:25

It was.

CA **Crystal Amschler** 1:03:30

Okay.

Can you guys hear me?

JJ **Jamison, John** 1:03:35
Yes.

CA **Crystal Amschler** 1:03:36
Okay, cool.
I'm sure that that...

JJ **Jamison, John** 1:03:40
16.

CA **Crystal Amschler** 1:03:41
form was in the package. But if someone, I don't have all the info, sadly, because I inherited this project. But if you guys could forward me not just the video, but also that form, then like I said, I can take that back to Scott and we can discuss.

JJ **Jamison, John** 1:03:50
See.
Position.
OK, thanks.

CA **Crystal Amschler** 1:03:58
And yeah, this is the area, too.
that, and Bill, this will probably be a question for you. So when we're talking about the best fit widening, this is the area that's going to be problematic for me as far as fitting into that 31 requirement. And I'm assuming that this discussion was had and

JJ **Jamison, John** 1:04:03
Um...
Okay.
Three.
Oh.

CA **Crystal Amschler** 1:04:22

It was already agreed on before my time with Nicole. But I don't, again, I don't have complete files for this project. So I don't know if you have any discussion or any documentation if that was discussed in one of the previous meetings that you could share with me. Because what I don't want to do is rehash out something that's already been hashed out.

JJ **Jamison, John** 1:04:28

But.

CA **Crystal Amschler** 1:04:42

But that would, if you have any information that you could share with me about the previous discussion, when it was decided to put this one in as a 31, that would be very helpful.

JJ **Jamison, John** 1:04:42

See.

And I just found the string form and the SAM form for the stream, SL, just so everybody knows. And SL on the SAM form rated low overall. And then on the string form, there just happened to be some notes down here at the bottom that says approximately 50 feet reach downstream.

So, my guess is that...

Those.

The crate, well, it says 0 for.

Preyfish, zero for fish, zero for mollusks.

Zero for amphibians and just a one for macrobenthos.

Says 50 foot stream. That's what it says, 50 feet downstream. So.

CA **Crystal Amschler** 1:05:35

Okay, thank you. Yeah.

Yeah.

I'd definitely like to be able to get a hold of that. So if you could forward that to me, I'd be very grateful.

JJ Jamison, John 1:05:42

Yeah.

Yeah, we'll forward it to you.

CA Crystal Amschler 1:05:47

Awesome. Thank you.

JJ Jamison, John 1:05:49

Okay, so we'll have a follow-up action item to get that stuff to you.

Yeah.

CA Crystal Amschler 1:05:55

Yeah, I'm feeling better about not having to mitigate for the whole upstream reaches with that info. So like I said, I just want to make sure that Scott's on the same page with me before I say for sure.

JJ Jamison, John 1:06:09

Very good.

CA Crystal Amschler 1:06:16

But back to my question for Bill. Bill, did you hear all that that I was talking about?
The best fit whiting in Nicole's documentation.

BA Barrett, William A 1:06:26

Yeah, I don't recall having any information for that. I'll see if I can find anything, but...
Yeah, it.

CA Crystal Amschler 1:06:37

Yeah, I'll dig through her files as well. I mean, obviously we're really late in the game and the project has moved forward under the schedule that it's going to be a GP31. And so again, I'm not trying to throw any wrenches in the process at this point, but I just want to make sure that I'm comfortable with what we've done.

BA Barrett, William A 1:06:38
Ah.

CA Crystal Amschler 1:06:56
got moving forward. So if you could look in your files, I'll look at mine, I'll pour over the GP a little bit more and you know, we'll just make sure that we all come to the same page.

JJ Jamison, John 1:07:02
The.

BA Bukowy (HNTB), Kat A 1:07:07
Crystal, can you tell me again what you're looking for exactly? And I'll dig through ours as well.

CA Crystal Amschler 1:07:14
Yeah, so I mean, just any discussion where it was the decision was made to move this one forward as a GP 31. And if there was any like discussion on these spurs that are coming off, because again, I mean, it's a best fit winding. It does say that some new relocation is allowed for interchanges, but

BA Bukowy (HNTB), Kat A 1:07:24
Okay.

BA Barrett, William A 1:07:28
Yes.

CA Crystal Amschler 1:07:36
This may go a little beyond what I would typically be comfortable with, but you know, I don't know what Nicole felt about it or if she made any notes or documentation about it that you guys were able to capture. So yeah, just to, okay, awesome. I'd like that to complete my file and like I said, just to

BA Bukowy (HNTB), Kat A 1:07:47

Sure.

Yep, I'll dig.

CA Crystal Amschler 1:07:55

I'll dig as well. Hopefully between your digging and my digging, we can come up with what we're looking for. Yeah.

BA Bukowy (HNTB), Kat A 1:07:57

Sure, the three of us.

JJ Jamison, John 1:08:06

Okay, sounds good.

Conversation here, so we'll get that stuff.

Shh.

Next, we got site 12 on sheet 15.

This is.

Back to our four discussions, we confirmed that this one will remain buried. So this pipe's buried. Very similar to the previous ones, we've got our relocation to the new pipe, permanent impacts to the riprap, temporary to the end of the easement.

Similar situation on both ends, so yeah.

Same, same thing here.

CA Crystal Amschler 1:09:13

Yeah, I don't think I had any specific concerns on this one, so.

JJ Jamison, John 1:09:19

Yeah.

So.

Back, I think.

Site 13.

CA Crystal Amschler 1:09:34

Ohh, I did have a question. I'm sorry.

JJ **Jamison, John** 1:09:37

Yeah.

CA **Crystal Amschler** 1:09:38

On 12th, looking back at my notes, it took me a second to catch up. I do have a note that we were going to, let's see, it's 6.5 for five. I think I had a note that this one was going to be buried and there will likely be seals from the 4B. Is that something that...

JJ **Jamison, John** 1:09:50

But.

Yes.

Sorry, I was going back to page 12.

CA **Crystal Amschler** 1:10:00

Up.

JJ **Jamison, John** 1:10:01

Yeah.

CA **Crystal Amschler** 1:10:02

Sorry.

JJ **Jamison, John** 1:10:03

No, no, yeah, we're good.

Um...

BA **Barrett, William A** 1:10:06

It.

CA **Crystal Amschler** 1:10:09

Okay, so from the profile, see that it is going to be Barry.

JJ **Jamison, John** 1:10:09

It's.

Yes, it is buried.

CA Crystal Amschler 1:10:17

I don't know that we really need sills, which, but was that was in my notes, but I think having it buried is is a is a good plan for this particular one, so.

JJ Jamison, John 1:10:28

OK.

CA Crystal Amschler 1:10:31

Okay. I think I kind of answered my own question on that one.

BA Barrett, William A 1:10:32

Two.

JJ Jamison, John 1:10:32

Yeah, so we'll...

So yeah, our note is showing sales. So do we, you want to remove the note to remove the sales?

CA Crystal Amschler 1:10:41

Where are you gonna put the sills?

JJ Jamison, John 1:10:45

I guess you'd have to fashion some sort of a plate on the front.

CA Crystal Amschler 1:10:51

Yeah, but if it's buried, I don't know that you need cells.

Because I don't think you need like alternating. Yeah, you don't need. Oh, or maybe I don't know. Dave, what do you think? Does this one?

JJ Jamison, John 1:10:59

Yeah, that would be baffled. Yeah, the baffles are the alternating ones. I think the sills

would just be to make sure that that material isn't lost and then create a head cut up the string. So it would be a...

CA **Crystal Amschler** 1:11:04

Right.

I got you, okay, yeah.

Okay, yeah, then in that case, it may need it. I don't know how steep this is, but it looks like it's 2%.

JJ **Jamison, John** 1:11:17

Yeah, it's on the verge of especially being a metal pipe in 2%. It was, you know, it just that's one of the ones that was kind of on the verge of burying and not burying. So I would I would think it was probably have the sills in there.

CA **Crystal Amschler** 1:11:31

Gotcha. Okay, yeah, I...

Agreed. I think that it looks good the way it is. Buried and then with sills. Let's keep that.

JJ **Jamison, John** 1:11:41

Okay.

back up to our big sheet here again.

So here we have site 13.

Ohh, you got a...

Put in a 60-inch pipe here.

The other thing here that's...

we're showing here is we're actually showing all this as one site, I guess maybe because it's very close together and basically everything's kind of, I don't know if there's any issues with having the two crossings as one site.

CA **Crystal Amschler** 1:12:13

Mm.

JJ **Jamison, John** 1:12:24

Um...

or if we want to break that up separately.

BA **Barrett, William A** 1:12:29

Um...

My, my comment.

CA **Crystal Amschler** 1:12:31

It might be. Go ahead, Bill.

BA **Barrett, William A** 1:12:33

But I would just say, since it's the same feature, have it the same site number. If you want to break it out further, have sub-site letters for it.

JJ **Jamison, John** 1:12:44

Go.

BA **Barrett, William A** 1:12:44

Does that make sense?

JJ **Jamison, John** 1:12:46

No, it does, like I said, I just...

Just looking through how it was broken up, it's all showing up site 13 from the connection of our tie-in channel all the way up to the end of the feature up here is all considered site 13, but it's conveyed in two different ways.

BA **Barrett, William A** 1:13:05

Rice.

JJ **Jamison, John** 1:13:09

Pipes.

BA **Barrett, William A** 1:13:09

Right, so Crystal, would you like or need to see those separate linear footages for the different sections of SL that are being impacted?

CA Crystal Amschler 1:13:19

I mean, yeah, I think that your idea is great, Bill. Site 13 is fine, but if we can, if we need to break it out into smaller areas just to kind of, because I do cross reference all my impacts with what I see on the plans. So whatever we do to make sure that that's clear. So if we need to break it into like letters.
for each crossing or whatever, that's fine.

BA Barrett, William A 1:13:41

Right, okay. That's how I, I've always thought you wanted to...
Have is.
broken down as you could to understand the impacts.

CA Crystal Amschler 1:13:50

Yes, absolutely.

JJ Jamison, John 1:13:53

Yeah, and you know, I guess there is a small little segment here, so you've got the PDE come in.
You got easement here and here, so they're almost touching.
Assuming that we don't call.
This stream a total take all the way up.
How do we want do we want to do anything special here that has no impacts?
We're currently showing this all as T.S. from.
from riprap to riprap.
Although technically, you know, they can't.

CA Crystal Amschler 1:14:34

How long is that?

JJ Jamison, John 1:14:37

S.

CA Crystal Amschler 1:14:39

Well, it doesn't look like it's long, maybe. I don't know.

JJ **Jamison, John** 1:14:45
16 feet, baby. Actually, no, I think it's she.

CA **Crystal Amschler** 1:14:50
I mean, I don't think that'll have much value, but if there's no permanent impacts in it, then, and if we don't take the whole thing, then I suppose...
We wouldn't necessarily call it a loss that requires mitigation.

JJ **Jamison, John** 1:15:11
So from easement to easement, looking 33 feet.

CA **Crystal Amschler** 1:15:11
Just.
Okay.
Yeah, I mean, and and it's only it should be even longer where there's no permanent impacts, 'cause you're just going easement to easement, but from from riprap to riprap, yeah.

JJ **Jamison, John** 1:15:26
I'm just going to easement to easement. Yeah, so if you look at, if you look at from...
Rip right here.
54 feet.

CA **Crystal Amschler** 1:15:43
Yeah. I mean, I'm fine with leaving that daylighted and not requiring mitigation for it, although, yeah, I'm sure it's not going to have a whole lot of value, but.

JJ **Jamison, John** 1:15:55
Okay.
Hey.
S.
Two.
Back.
On 14, 19.

So.

Cheat.

Site 14. Things get a little wonky around all these.

Match loss, we ended up on match.

So site 14 is back stream SBO.

We've got a, this is when we were having trouble daylighting this system. So we had to extend this, out fall down. This is the first point we get out with this whole feature here. So the stream begins at this point here. So it's going to be basically permanent impacts all the way back, basically starting at the riprap and then showing temporary to that.

He's temporary, or that he's going on.

Oh, and also we did talk about this area in.

I think there was some question about where, how that was shown and I think that was whoever came up with that was correct. It was some, I think we had to make some revisions to that.

To that site, so we did check that after 4B.

CA **Crystal Amschler** 1:18:21

Yeah, thank you for clarifying. I think it was a question of whether it went underground, maybe. I can't remember specifically. Yep, yep.

JJ **Jamison, John** 1:18:27

Yeah, there was a gap here for some reason that was showing up somewhere. So I think we look back into it. And so you look at it now, it's showing that JS all the way it ties into that web. So that was a good catch, whoever had that. And so we've looked at that and gotten that updated.

CA **Crystal Amschler** 1:18:31

Yeah.

JJ **Jamison, John** 1:18:48

Permits California.

BA **Barrett, William A** 1:18:52

Great, thanks.

CA Crystal Amschler 1:18:52

Yeah, I don't have any. I don't have any concerns. So the area above the above the inlet here.

that little stretch that looks like it'll, no, yeah, it's rip-rapped.

JJ Jamison, John 1:19:01

Here.

CA Crystal Amschler 1:19:07

So not, obviously the stuff under the road is going to be a take. Is this going to be considered a loss here?

JJ Jamison, John 1:19:07

Yeah.

Yeah, it's like, it's going to be that stream is going to be lowered several feet. The way that this, the way that the roadway was done here, it pushed everything down below existing grade. So it took this stream out. So this was

CA Crystal Amschler 1:19:13

That could be.

JJ Jamison, John 1:19:32

This point down here was the lowest point that we could drain this whole new roundabout area.

So that's going to be a total take there. So it's not, we're not tying in that grade. It's going to be below the existing stream grade.

CA Crystal Amschler 1:19:46

Gotcha. Okay. And that's what I was asking. So I appreciate that clarification. I'm going to make a note. And I don't have any.

BA Barrett, William A 1:19:52

Yes, one.

We'll mitigate for all that.

CA **Crystal Amschler** 1:19:56

Yep, perfect. Okay, cool.

JJ **Jamison, John** 1:20:03

OK.

Um...

Can we go to...

Slide 15.

Got it.

Thank you.

Here is one that we talked about during 4B. This is the one that had that weird sill that was running, that transfer sill that was running down the length of the culvert.

We did some investigations after 4B, talked to the maintenance folks in the division.

CA **Crystal Amschler** 1:20:34

Yeah.

JJ **Jamison, John** 1:20:46

And I think that the thought was, was that that still was just for low flow.

So as it stands now, you know, just due to...

potential debris, I think we want to maintain that same.

that same cross section with extending that 4 by 6 box cover and then extending that transverse sill along that extension.

That was one discussion. And then since we're tying back in, we're utilizing bank stabilization to the end of the riprap, showing temporaries to the end of the easements. And the same thing on the

I think that's the downstream side here. So bank stabilization and TS today.

CA **Crystal Amschler** 1:21:48

Yes.

JJ **Jamison, John** 1:21:50

To the private drain season.

SP Sarzaeim, Parisa 1:21:53

Hey, this is Parisa. I have a question about the downstream. So, given the moderately steep slope of the culvert, I understand that it's still in the range, but it's moderately steep, I guess. So, could you please confirm whether any kind of like...

CA Crystal Amschler 1:21:58

Yes.

SP Sarzaeim, Parisa 1:22:13

energy dissipation measures are needed at the outlet.

JJ Jamison, John 1:22:23

Tom, do you have any?

And you know that?

I think there was a note about sedimentation at the culvert outlet.

MT Miller, Tom 1:22:35

Yeah, I was actually going to bring that up.

I was looking for the pictures of it.

So, just based on the, like, the survey data we have, there's actually...

Like, I don't know what the best term for it is, but there's a hill, let's just say, right in the middle of the stream, just downstream of the culvert that blocks flow.

So I was actually going to ask if, yeah, I was going to ask if we need to, if we want to extend our improvements there and restore connection.

BA Barrett, William A 1:23:02

A little island.

MT Miller, Tom 1:23:17

And while we're doing that, we can...

Maybe.

JJ Jamison, John 1:23:20

It looks like the contours are showing something there.

MT **Miller, Tom** 1:23:21

Work.

Yeah.

JJ **Jamison, John** 1:23:26

Go wait on the picture, Tom.

MT **Miller, Tom** 1:23:28

Yeah, I was trying to find it. I thought we had a better picture. I know. Maybe Taylor knows where it is.

JJ **Jamison, John** 1:23:31

Rowway 95.

MT **Miller, Tom** 1:23:39

Um...

MG **McHenry, David G** 1:23:41

I think there's mud in the pipe outlet anyways.

MT **Miller, Tom** 1:23:45

This, ohh, here's the picture I found. It's not really very clear, but...

This right through here blocks flow.

I think this is, let's see, yeah, looking downstream.

So here is the low spot.

right outside of the culvert and then this comes up.

CA **Crystal Amschler** 1:24:10

Is it going underground there?

MT **Miller, Tom** 1:24:10

Hello.

JJ **Jamison, John** 1:24:14
I.

CA **Crystal Amschler** 1:24:14
I mean, because maybe it's the picture, like I see a mound, but it mostly looks like to me it's tree roots that have kind of grown in there and maybe the stream has gone underground.

MT **Miller, Tom** 1:24:14
Ahh.

JJ **Jamison, John** 1:24:20
But.

MT **Miller, Tom** 1:24:26
It may be, I honestly have not seen this in person. Taylor, do you have any insight?

CT **Carter, Taylor** 1:24:36
I was just hunting for some more pictures. Give me a second. I'll see if I can find something.

CA **Crystal Amschler** 1:24:45
Well, and while Taylor is looking for those pictures, can I go back and ask about the shelf? I saw it in my notes, but I think I kind of missed that conversation. from the 4B meeting somehow? What are we talking about here with the shelf in the...

JJ **Jamison, John** 1:25:02
Slot.

MT **Miller, Tom** 1:25:02
So this, this, this culvert has a bottom and then it has like a little...

CA **Crystal Amschler** 1:25:03
Son.

JJ **Jamison, John** 1:25:06
S.

CA **Crystal Amschler** 1:25:09
Guys, yeah.

MT **Miller, Tom** 1:25:09
Extra.
Something extra there.

CA **Crystal Amschler** 1:25:14
Like almost looks like it's trying to narrow the street. That is weird. So what are we going to do with that shelf? What was the discussion?

JJ **Jamison, John** 1:25:14
Swap.
So, James, I was looking back at the Larry Carpenter from Division responded, and he said, based on divisions, I guess their thought on it is the extension would not need to continue the slot. You would just match the flow line of the extension at the bottom of that slot, but not actually perform that.
OK, then that's what the. I was thinking of it the other way. I thought he was saying just extend it at the bottom. So yeah, you that would be one option. You could extend it from the bottom out. Yeah. You know, so. I don't know if that little slot's really doing anything.
Say, yeah.

CA **Crystal Amschler** 1:26:05
So the the new pipe which is basically attached on to.

JJ **Jamison, John** 1:26:08

It would just be an extension of that of that box forward, so if matching those those same dimensions.

CA **Crystal Amschler** 1:26:17

And so it looks like the flow is confined to that little slot. It's not getting up into the shelf.

JJ **Jamison, John** 1:26:17

Without the slots, it's.
Yes.

CA **Crystal Amschler** 1:26:24

S...

JJ **Jamison, John** 1:26:24

Yeah, like.
Yeah, me.

CA **Crystal Amschler** 1:26:25

But I mean, I guess what can we do? You can't, I mean, removing the shelf's not an option, and I don't know, I guess.
Yeah.

JJ **Jamison, John** 1:26:34

It does, from what that, you know, I saw the same picture you saw, didn't look like there's a whole lot of flow going through there, so it was just pointed right at all those.

MG **McHenry, David G** 1:26:35

It's.

JJ **Jamison, John** 1:26:45

trees and fruits and stuff.

CA **Crystal Amschler** 1:26:48

I, I, I guess that pipe is too big.

JJ **Jamison, John** 1:26:49

So, I remember slow.

CA **Crystal Amschler** 1:26:52

What's going on there? That's that is weird.

JJ **Jamison, John** 1:26:57

I mean, I'm looking here at the contours. I don't know if it's just this, but it looks like it's maybe just starting. We can look at it. You can see, I don't know if it's just a, maybe a spring or something, or something that starts.

MG **McHenry, David G** 1:26:57

Yeah.

CA **Crystal Amschler** 1:27:09

Yeah.

JJ **Jamison, John** 1:27:16

Down here. Yeah, maybe you share that. That's helpful.

I think that'll help Teresa.

So I'm looking here, zoomed out on the contoured version, and it looks like, I don't know if it's the start of maybe a spring or something. It's the top of a hill. Here, and it's kind of, yeah, it doesn't look like there's a whole lot, kind of, you know, a lot of concentrate.

CA **Crystal Amschler** 1:27:36

Go.

That's where it starts and then it flows.

JJ **Jamison, John** 1:27:54

It flows this way.

Down to...

So there's kind of a more zoomed out. It starts here, it comes across, and then ties back in. So, I mean, from the pictures, it doesn't appear that there's a whole lot of conveyance in there anyway.

CA Crystal Amschler 1:28:15

Yeah.

And then, okay, so did you guys find pictures of the mound?

So we can look at that one too.

CT Carter, Taylor 1:28:25

I'm not having success so far. I'm going to keep looking now.

CA Crystal Amschler 1:28:26

Oh, Dave, I'm sorry. Were you going to say something? Okay. I mean, as far as that mound goes, if the stream is going underground, I don't see any, and it's already doing its thing. I don't see any point in going in there and disturbing it. I figured probably, and I welcome Chris and

and Dave's and everybody else's opinions here too, but from where I'm sitting, if the streams, you know, I don't see any point disturbing the stream outside of the... construction area if it's already kind of doing its own thing. It seems to me like it might just be going underground right there.

JJ Jamison, John 1:29:09

In.

MG McHenry, David G 1:29:09

Yeah, I was just going to add, I looked at that site before, like the picture shows, it doesn't look like there's outlet scour going on. It's just such a dinky little stream, but the actually that shelf I asked about, I think it's kind of beneficial for the culvert, keeps the water depth low flow.

CA Crystal Amschler 1:29:19

Mhm.

MG **McHenry, David G** 1:29:28

It should be, if there's anything moving in that thing. But I know the raccoons love it. There's tracks all over that thing.

CA **Crystal Amschler** 1:29:32

Yeah.

JJ **Jamison, John** 1:29:36

Good question.

CA **Crystal Amschler** 1:29:38

Like a little sidewalk for the raccoons.

MG **McHenry, David G** 1:29:40

Yeah, yeah, that's exactly it, so...

BA **Barrett, William A** 1:29:43

I think we should put them in all the pipes.

JJ **Jamison, John** 1:29:45

Yes.

Send a message to John. OK, this is the last site, so I think, as we talk about this from now on start.

BA **Barrett, William A** 1:29:48

Is that my outside voice?

CA **Crystal Amschler** 1:29:51

Yeah.

JJ **Jamison, John** 1:30:03

I do have something else I need to pick up.

Okay.

So I guess to clarify here, we've got a little section here of extension. Is it?

from what we've seen, or is there any additional information we need to say whether or not to just maybe extend without the little dip? And then if the raccoons want to go in, they can go in like, 30 feet in and they can play in their little swimming pool. The next half, they can clean their balls off. Yeah, they can clean their balls off.

CA **Crystal Amschler** 1:30:41
Mhm.

JJ **Jamison, John** 1:30:44
Yeah.

CA **Crystal Amschler** 1:30:45
Yeah, I mean, I think it's fine. Like I agree with Dave that it's probably doing a good job of confining the low flow because the pipe is probably oversized for that stream. So, I mean, if anything, you could probably put something in there to narrow it up on that extension, but I don't think it's really necessary since it's just the stream is just starting right there and it's just a little dinky guy.
I think, yeah, as the plan stands now, it's fine and we'll let the raccoons go in there, do their thing and figure it out that first little extent where they don't have a sidewalk.

JJ **Jamison, John** 1:31:16
What's that?
OK, so we'll follow up on that as well, so...
That was the last of the sites here.
I did, as I was going through, I found a few little small changes to the impact table that will get updated. I don't know if anybody had any comments on.
On the impact summary.
Like to see anything differently?

CA **Crystal Amschler** 1:31:54
I'm good with it.

JJ **Jamison, John** 1:31:58

And this one.

Ohh, yeah, I guess I did miss slide 16.

Then.

CA **Crystal Amschler** 1:32:11

No.

JJ **Jamison, John** 1:32:11

Oh yeah, that's the one we talked about, the buffers.

Yeah, thank you.

Um...

So this is this is a site where.

an effort to stay out of these, the Lake Norman.

our Lake Wylie buffers here. We're abandoning this outfall, bringing everything back.

And then we'll have a little bit of impact here for discharging the new pipe. So again,

we'll have the permanent impacts and then

temporary, I think it was 10 feet beyond the permanent.

We did verify with contractor that they can.

they can do this fill without.

Machinery out here, they can do everything with working from the median on that

flow fill of that pipe.

Two.

BA **Barrett, William A** 1:33:18

Excellent.

JJ **Jamison, John** 1:33:26

And I think that really is the last slide.

Right, Reagan, thank you.

CA **Crystal Amschler** 1:33:32

Yeah, I don't have any concerns with that one.

JJ **Jamison, John** 1:33:33

It.

S.

If we have time, I'd like to revisit site 3, that through 3D. Yeah, we can go back. We're good there.

So, you've been on top, right? About 30 minutes, roughly.

So just for some context, Bill, Chris, and I were talking during the meeting, and it does seem like this is listed as compared on the 2022 report for Turbidity. Oh, it is. It is, yeah. There's three different ways you can look up this information, and it's displayed three different ways, so it's objectively confusing, but.

We've got the PDF of the report and the AGOL maps all saying that turbidity was triggered in 2022.

So, just something, yeah, we'll confirm that.

Okay.

Anybody else have anything?

Do you talk about?

CA Crystal Amschler 1:34:42

No, I'm good.

I have some homework I need to do. I'll dig in. I know Kat and Bill will dig in. We'll see if we can find the info for the permitting justification. And then I'll get back with you on that mitigation. But other than that, I think that's all I need to do. And I appreciate you guys walking us through this one.

and those changes that are, I don't think there was a lot of changes that need to be made from 4B, but anyway, I thank you for, you know, walking us through it.

Appreciate your time.

JJ Jamison, John 1:35:12

Okay.

Yeah, no problem. But yeah, if no other questions, we'll wrap it up for the day.

CA Crystal Amschler 1:35:24

Sounds good to me.

JJ Jamison, John 1:35:24

Right.

Thank you, everyone.

CA **Crystal Amschler** 1:35:28
Thanks, guys.

MP **Michael Penney** 1:35:28
Thank you.

MG **McHenry, David G** 1:35:29
Thanks, guys.

SJ **Sheldon, Chris J** 1:35:32
Thank you.

● **Jamison, John** stopped transcription