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00:02
Good morning. Welcome back, everybody.

00:06
Just before we start, can I just check with the case team, please, that you can see and hear me? recording started in the live stream and started again, please.

00:16
Hi, john. Yes, I can see and hear you.

00:20
Thank you very much.

00:23
So just before the break, we heard, we had we heard comments and observations from parties on agenda item two. So now I'll revert back to the applicants for any response to those points that they wish to make now.

00:36
Oh, just also draw attention to one point about why additional landscaping or biodiversity mitigation is would be required for one project delivery only. So if you could deal with that in your responses as well, that'd be useful. Thank you. So to the applicants,

00:55
course, above the applicants may 1 of all turn to submissions made by Mr. Tony. And I'm pleased to say on this front, we appear to be an agreement in the sense of that we agree that a difference between one and two schemes is relatively small. But there are marginal distance, marginal benefits in and around to north of restaurant parts of visibility of infrastructure, that is the primary places where there will be difference. So in that context, I think we agreed with Stacy's, on that particular point, obviously, on the wider points, we can make submission as to why I don't obviously don't agree with his point about the benefits, but I can address that and submission. In terms of the landscape framework, as illustrated in these various

01:48
scenarios.

01:49

One of the issues is that the essential framework doesn't really change. And there is a reason for that is that from the outset, we've looked at a landscape framework, it's never been about just mitigating an individual scheme. So therefore, we've looked at where the boundary of the landscaping should be taken to the northeast, or the west or the South. And the nine contacts, irrespective of whatever scheme came forward, we'd be looking to look to deliver that strategic element of landscaping, which we have identified a setting that framework to the cations, for example, just north of Friston, irrespective of whatever scheme came forward, we would look to deliver the reinforcements of the Hydros there for the benefits that that would give. So in that context, cluster, where we essentially that that the primary reason for the boundaries is the landscape framework. And the extent to which we've we've identified early in the scheme. And it's taken to those natural occasions where we, as a team collectively took the view that it would be most effective. And that's why the overall boundaries don't change within the within the design iterations where we only have one, depending on Final orientations and locations of equipment, there may be opportunities to put further enhanced landscaping in. But that would be a matter once of final design, once you've undertaken that. And that would be over on top of that strategic framework. So that that's the benefit you would get is more localised landscaping that we might fit in, because there is another infrastructure located immediately adjacent to it. That's so that would be potential justification for it. But equally in the larger scheme.

03:39
We've set the framework in a larger context. And that's really why the boundaries don't change.

03:45
So

03:47
essentially, between the two submissions, Mr. Tiny Tony, we're taking too much Mr. Bradford would take not got enough. We're sitting somewhere in the middle of which I think is probably potentially the right place to be in the context of that particular debate. And obviously, we'll come on and talk about flooding and the implications for for late at night. But apart from that I have nothing further to add at this stage. Thank you, sir. Thank you very much, Mr. Innes. And just a reminder for everybody else and listening or watching that if you wish to make any response to those points, then you're welcome to do so in writing by deadline 11. Okay, thank you. So that concludes agenda item two, and I'll now hand over to Mrs. Jones for the next agenda item.

04:25
Thank you very much, Mr. Hockley. We move on to agenda item three, which is flood risk and drainage for this agenda item. I would quite like to run it similarly to how we ran issues, specific hearings 11. And so I would be grateful if we could have a representative for the applicants, Suffolk County Council and Stacy's remaining on screen at all times, so that we can run the item with a little bit more interaction and facilitate discussion again.

04:56
I appreciate that depending on the nature of the question you may wish to bring

05:00
Other representatives, which is absolutely fine. And it's up to you who you feel is best placed to be on screen at that particular moment. Can I just check with East Suffolk council that they are deferring matters of fraud risk and the hearing to Suffolk County Council?

05:17
Yes, that's right, madam technical matters, we defer to the county council on okay. In that case, you don't have to remain on the screen if you don't wish to do so. But you can come in at any point. And also just to say that this does include anyone else who wishes to say anything on any of the points raised during this item, you can just raise your hand and let us know you would like to speak at the end of the item and the applicants will of course, retain the final right of reply before we progress. Does anyone have any matters they wish to raise about that before we move on?

05:50
Madam nearly put, I was going to raise given that it's more likely that this is a technical discussion. I think the representative you want to lead from us is more likely to be Mr. Williams the main so I was going to now invite Mr. Williams to join an owl as it were just sit on the sidelines and

06:09
raise my hand if I need to come in on anything specific. Stein. Good morning, Mr. Williams. I'll do the same madam on behalf of say so ask Mr. Carpenter to switch on your problem.

06:24
Yes, corner off the applicant. Our team for these agenda items is more than one person. But what I'll do is I'll just introduce those that are likely to be speaking, and they went into change depending on the topic matter that's being raised within the agenda. So Brian McGregor's Sue's the onshore consensus manager will be one party will be speaking.

06:47
He obviously is well known to you. in respect of the other members of Team who will eventually be seeking Vasa got Paul Davis, who's an Associate Director of arop, a chartered engineer with very extensive experience. He's our ups global stormwater skills leader and has extensive experience both in helping to develop policies in relation to sod sand their implementation, and also advising local authorities on guidance. He's got over 40 years experience in water engineering, the third party who may also participate as Petro facente, who's associate engineer with rover scanning, with over 13 years experience of highways and infrastructure designs across numerous sectors. His protector expertise is in drainage. And he has extensive experience in modelling software and networks and and has extensive experience of sustainable drainage systems both in rural and urban settings. So that's the team of three. And they'll interchange depending on the topic matter that's being raised. Absolutely fine. Thank you very much, Mr.

07:58
Okay, with the first item on this agenda is food risk and drainage during construction. And just before we begin this item, just a reminder that I don't intend on going over the points that were discussed at

issue specific hearings 11. But we will mainly focus on submissions made by parties at deadline eight, nine indepen. And that includes the latest outline code of construction practice.

08:23
Just to the applicants in the first instance, following issues specific hearing 11 an action point was set for the submission of an appendix to the outline code of construction practice, which was going to provide further information on managing flood risk during construction including a worst case assessment and analysis on the impact on water courses and drainage systems cross by impacted by the proposed development site. A deadline eight, you did submit an updated outline code of construction practice but you state that you didn't include that appendix because you didn't find it useful or accurate to undertake such an assessment at this stage. Could you just explain your reasoning for taking this view, please?

09:09
Ram Carla's napkins. Yes, the the measures that will be deployed during the actual construction period itself will be very much influenced by the construction technique that's adopted the precise micro siting of the onshore cable routes as an example. And until such time as those those contractors are in place on the detailed design is progressed.

09:35
Everything is really unlikely on stage at this point in time and those outline measures are included within the outline quote of construction practice, we have ensured that there is sufficient space within the yard limits to accommodate the measures that we're proposing. But until such time as we are

09:52
at a detailed design stage we can't possibly identify locate precise locations of set of sediment

10:00
ponds for instance, or infiltration ponds or sunspots are points of connection to other water courses. That is all detailed thing. Okay, and you say that you have ensured that there's sufficient space within the order limits to accommodate all those measures, can you? Can you expand on that a little bit and tell us how you know that there's enough space within the order limits for those measures,

10:24
prom girls for the applicants. So within the

10:27
outline code of construction practice, we've included a figure which shows the

10:35
home as an example, a sediment pond, for instance, could be incorporated within the onshore cabling routine, it shows quite quite an extensive area that would be available for other single project or to project construction. It also incidentally shows two

10:52
haul routes that are in reality, the door limits accommodate for both projects to haul roads because we need to have flexibility depending on which project proceeds at what time after not progressed and in parallel. So within within the cross section of the onshore cable route for either one or for two projects, we are showing that there's considerable space available for us to say sediment pawns are some some form of science and application. And that can be deployed as and when is required, along with the onshore cablecard are dependent on the local topography depending on the nature of the works that are undertaken at a particular other particular application.

11:34
So, yeah, that figures is key to understanding the the potential or illustrate of lay articles on short cable routes during construction. And what about where that where that narrows, for example, at the 100 River crossing into working with what about where that narrows? I think in in one of your documents, you referred to

11:55
the worst case scenario being assessed but actually, that's that's not just worst case mean, why don't just worst case me narrower in the environmental statement.

12:06
Brown Macross fork for napkins. So where we have pinch points, for instance, one example being been at hedgerows where I'm pointing titles that are identified within the draughty seal, where we commit to cross that hedgerow that that that prescribed Pedro what 16.1 metres we that they the entire configuration or the cross section for better word off the onshore carrier route changes to accommodate that that that ferry not crossing what we would do with surface water management. At that point, we would still have the the the the docks asteroid or we still have two drains alongside accessor would etc. We still have to drainage collection and conferencing infrastructure. But it would move to your point very, very nearby where on short cable routes expanded again to 32 metre corridor. And at that point, that's where we were done managed any sediment or any any sub element either upstream or downstream of the of the of the headroom question. And you're um, you're confident in the sections that you're you're going to work in that that would be near enough to be able to manage to be able to manage those those narrow working weeks.

13:16
parama grace but outcomes Absolutely. Again, the example of point tedros we're talking metres, where the reduced onshore cable route crossing is only to facilitate the the crossing of the hedgerow it's to minimise the amount of hydro that would be removed during the construction process. As soon as we're clear of that, that hands potentially one two metres either side of the age, then we refer back to the conventional 32 metre onshore cable.

13:46
Thank you for that.

13:48

Mr. Williams, would you like to respond to any of those those points Mr. regarless, has just made? Yeah, I'll just make some brief statements, I won't go into too much detail. Obviously, we've covered a lot of that previously.

14:00
The applicant what they're stating, regarding hedge rose completely agree with that there will be space, both upstream and downstream to deal with surface water. The 100 River crossing that may not be the case. If it doesn't, I don't think it widens again, until it has passed underneath the 100 River. So there wouldn't be any way downstream there before the 100 River for a wider section. For service water management purposes. Although we're focusing here on the cable corridor, we're not focusing on the substation areas where there will be significant stripping of topsoil, and there will be the need for significant management of surface water.

14:37
Other than that, we don't have a huge amount more to say we've seen or seen much more information compared to previous submissions. So our position remains unchanged. Okay. So is your as your main concern? Is it is it the whole the whole of the cable corridor on the substation site in terms of the lack of information that you've got or is it primarily the lack of information about construction and and managing surface water

15:00
At the substation site, the primary concern is the management of surface water at the substation site itself because of the significant potential risk for frister. However, that doesn't mean that the concern regarding the cable corridor doesn't remain outstanding due to the issues that were encountered with EIA, one construction with that specific problem. Okay. Mr. Carpenter, would you like to respond to anything that's been said that Thank you, Madam, I think we have our submissions that deadline nine addressed this issue. But

15:33
I'd like to reiterate that we agree with the FCC decision. These, the construction phase just does generate some particular challenges which are different to the operational phase, especially that right into turbidity. And the need for that water to be clarified. We don't accept that the construction method statements will dictate this and that they have to be left to to a later period of detailed design.

16:01
It is entirely possible for the applicant to work on a worst case basis, assume the widest level areas of the site are going to be vegetated, they're going to generate sediment and therefore those areas need to be those areas need to be suitably managed, the locations of the of the operational drainage are not going to receive water from the entire area that's defined as the the work working area in the construction plans. And, and these structures need to be sized. Otherwise, there will be runoff that will exceed mean for runoff rates, and there will be turbidity leaving the site which we know which is unacceptable. So it's entirely possible for the applicant to develop worst case scenarios for the widest series they may interfere with and demonstrate whether it's viable for them to get these temporary structures

16:54
constructed, you know what, what, whilst giving themselves enough footprint to undertake the construction

17:03
activities which which obviously, impact on the available area that they can use for for drainage. And if and if they can't do that, then it means that clearly that construction risk can't be mitigated.

17:18
Thank you, Mr. Copper, can I just return to the applicant to respond on some of those points in in particular, I would like

17:25
the applicants response to how it would be managed at the 100 River crossing. As Mr. Williams said it's it's a longest section and therefore, before it widens out again, you might not have the space that you would add important Hydros for example,

17:43
programmes spread out productions. So in terms of the 100 River in particular, so they are playing watercourse crossing method statements that were submitted as part of the examination process covers measures that we will adopt to to manage the flow of the 100 river itself. So in essence, there's a

18:02
diversion, a wet or dry diversion solution, which will take the existing flows on the river and essentially bypassed the construction area and really start water downstream. And there are various measures in place through to ensure the integrity offer bypass solution in terms of surface water overflow once again, we we are not constrained at the 100 River in terms of dealings for cable and grid itself, the DC all within 40 metres at the bank itself. We have a lighter onshore cable corridor on the approach to the 100 River on the east and west bank down the river on on the east, which is on the higher ground, we refer back to our conventional 32 metre cable corridor to the east side to the west of 200 River. We have committed beyond this 100 metre buffer, we are committed to your resist unsoaked get rid of 16.1 metres per project. And again in that scenario, we still have the ability to utilise that that the watercourse offer crossing buffered 14 metre buffer from the from the from the 200 River on the West Bank to manage any surface water systems that we need to drink during the construction period itself.

19:19
So any of the other points made that you would like to respond on

19:25
brand magaliesburg for napkins and in terms of the

19:30

experience on these two Angular one project diverse referred to previously. In the measures the lessons learned that as a responsible developer, we engage with local authorities to identify areas where both parties both out and both developers and local authorities can can can identify areas for improvement or indeed reinforce areas

19:52
that have worked particularly well and apply those spirit for future future projects. We have identified measures which

20:01
Will it be deployed at these Angular tuning standard? Well, North projects that weren't deployed at the standard one project that is the whole purpose of our lessons, lesson learned process.

20:10
One of those measures for instance, as we, as we just discussed, was the incorporation of the spawns within the onshore cable route itself where they did the sediment containment within the the within the onshore cable rip itself. And that was demonstrated within the i'd landquart of construction practice. So there's absolutely sufficient space, we have, we have demonstrated within the outline documents that there is sufficient space within within the order limits themselves. And going back to my very first point, it's at the detailed design stage that we will identify what is required for each particular area for each section of that onshore cable corridor and the substation depending on the nature of the construction works and enhance at that time, particularly at the substation location, for instance, where the substation may well be based may be be constructed in phases. So we may not we may we may not have the entirety of the substation footprint. As aware at any one time. We may or may not be constructed on all of the sections of the onshore substation location, we have the construction consolidation sites around the onshore substation, the landscape and areas around the substation area. There are multiple areas multiple opportunities first to deploy surface water management techniques during the construction period moreso. With the substation, more than enough areas are in the substation area, the onset of cable car to refer to for being in linear

21:43
quarter, we're monitoring within the conventional 32 metre wide corridor with adequate space because of the the arrangement we would apply with the spoil stockpiles, and the replacement of all stocks spoil soil stockpiles with sediment ponds as an example. But again, it's all detail designed to outline quarter construction practice identifies the measures that could be deployed, and the range of measures that could be applied at the detailed same stage, they will be identified for each specific location as required.

22:18
The also just to turn off the dcl also requires a surface water management plan to be submitted to the local authority for approval, dealing with the construction phase that's forms part of the code of construction practice. So there there are ferry sign tools there. In terms of the the measures that will be adopted, they do require approval from that development planning authority.

22:42
Thank you, Mr. Morales. Following on from that, this is mainly a question for Mr. Williams. And, Mr. Carpenter, I could just ask the question first, Mr. Carpenter, it might cover what you want to say anyway. And is in progress refers to

22:57
all of the measures that are in the outline good construction practice and the deadline date submitted version contain further information on sediment management and surface water management during construction.

23:11
Could you explain to me exactly what what it is that you would like to see what information that is that you feel is missing? What What would you normally expect to see up an application stage, for example?

23:25
And what's reasonable to do expect at this stage rather than at the detailed stage? Mr. Williams, please, first, Williams, Suffolk County Council certainly agree that the options in the outline code of construction practice are suitable. There's no discussion there. They are industry standard practices.

23:48
The point being that you could list a whole host of options there. But there's a distinct difference between listing the options and actually being able to deliver those options. Now, that's the key bit that we want to be able to see, we want to be able to see that there is sufficient space for those options to be delivered to a sufficient extent that it can be regarded as sufficient mitigation. Alongside the worst case scenario, which would be the substations being constructed at the same time is that this plan as well, this should be shown on a plan. With the construction consolidation sites. Now we're not asking for these locations to be fixed. You can put them wherever you want, quite frankly, we just need to be able to see that there is space for sufficient mitigation otherwise, theoretically, and I'm not saying this is the case, there would be nothing to stop the applicant from listing a whole host of mitigation that isn't deliverable. So we just want to see on a plan that sufficient mitigation can be delivered alongside everything else in the worst case scenario. Okay, that's the substation site and wouldn't in terms of the, the cable corridor what what further information would you expect to see? The minute they came across is going to be worked on in sections and then at each point, the

25:00
information submitted and approved. What would you expect to see at this this stage? Yes. So we'd be happy for the applicants take a short section of the cable corridor with an indicative size basin based off the impermeable area or not impermeable area, but the Greenfield area that has been constructed en, and we can then have a look to see, yes, that is a suitable size or no, it would need to be a little bit bigger. But based on what the applicant has said, I think we could agree that there is potentially a way forward there, but we just need to see the justification behind that. Okay, so what you're looking for is an example section and for the applicant to show and to demonstrate that a range of the measures that they're proposing could be accommodated within that. And the same for the substation site. Is that is

that correct? Correct. Mr. comdirect, just returned to the applicant on that that point, and then I'll come come to you, Mr. mcnellis. Is that something which the applicants could produce for us, please?

26:00
Bro, Macross, for napkins. It's our food that we have already provided that within the cross section of the control cables are provided within the outline code of construction practice. The the key influencer on the size of the Sun spawn is how frequently they're located. The and also the the the amount of area that we're actually managing

26:25
along the onshore cable trip itself. It isn't only a Hollywood for that, but it's opened up for not enough particular area. So so we have shown where we have shown across a cross section of the onshore cable route, where we can accommodate additional surface water management, we've shown that it's a drainage such as point me to that please.

26:48
The code of good construction on

26:51
page 53 of the outline code of construction practice.

27:03
Mr. Williams and Mr. Carpenter, have you got access to that at the moment?

27:09
I don't have it open. But I do know what is being referred to. Okay. And is that? Is that sufficient for what you'd like? Or Could you expand on? What more than that you would you would like to see? Yeah, I mean, as I say, in terms of a section, this section is agreeable. Now, if that section was applied along the whole cable corridor, I don't think there would be a discussion. But the point is, that's not feasible, and it's not reasonably practicable. Now, the impacts that would have on tops of stockpiles would obviously result in knock on impacts. But what is feasible is what we're trying to understand. So is it we're looking at a 2030 metre length? And if that is the case, just on an indicative basis, is that feasible? So we're just looking for indicative examples. We're not looking for a detailed design, we just want to see a basic example that shows it could work in a limited instance.

28:02
Mr. McGrath, this

28:04
is something that you could provide our brand girls for for napkins, again, going back to the detail of the same point, so much is dependent on the actual specific location of the these settlement points from one two letter word with a neon through cable quarter bilocation. Is it? Is it on relatively flat three? And is it on the upside of top side of a hill block bottom side of a hill? What are what are the infiltration rates at each specific location? What we have shown within the figure within our blanket of construction

practice is that as frequently as required, we will deploy these sedimentation points. They're not going to be across. We're not going to have a nine kilometre long sediment pond going from landfall all the way through to the substation site. What we will have is strategically placed appropriately designed, sediment ponds are

28:59
subspaces

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placed strategically along the onshore cable corridor where they are required. I'm not that is established during the detailed same stage. Okay, and you feel that the figure in the outline kobudo construction practice demonstrates that

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indicatively that that that can that that's viable, and you can fit that in

29:22
primer groundspeed Elkins, absolutely, we're not showing on the figure whether the sediment pond is two metres long or 20 metres long. Again, that is tying to the the detailed saying it will be as long as it needs to be and as frequently as they need to be in order to manage the surface water coming from that from the construction site.

29:41
And Mr. Williams, what is it about the cross section that's been provided? What is it that you would like more information would you like to see within that cross section that that's not there at the moment?

29:52
as Matt Williams level county council, as Mr. McGregor says it could be two metres long it could be 20 metres long. It's that unknown that remains unknown.

30:00
For us, obviously, as I say there will be knock on impacts in terms of topsoil storage. Now we need to try and understand and this is why I'm asking for an indicative design. And I appreciate Mr gratis, that there are different site constraints where we're talking about topography, we're talking about discharge locations, infiltration rates, etc. So, by all means we could have more than one indicative example, but we're just asking for one indicative example, which shows this could work. So then we can see and as examining authority, yourselves could see what knock on impacts that could have potentially for other mitigation options such as topsoil storage, etc. So we're not asking for a whole host of options. We're not asking for detailed design, we're just asking to see an indicative location that shows this methodology is sound in that specific example.

30:51
Mr. McGregor, would you like to respond to that, before I move to Mr. Carpenter,

30:56
brown Macross for the Deaf can speak we are somewhat circular on on this point. Unfortunately, we just like to reiterate, there are so many variables and play in terms of what will influence the final location, the final sizing of any surface water construction,

31:17
infrastructure deployed during construction, in terms of knock on effects, again, the quarter construction practice requires a soil monitoring plan to be established. And that requires approval by the relevant planning authority that will protect the soil integrity as we're handling the soil in order to to ensure that the stability replacement and reinstatement of that soil post post construction. So knock on effects are covered under our measures to protect those knock on effects such as soil soil integrity, are embedded within draft DC, all through the requirement that delivery state they the court of construction practices.

31:58
Thank you. Mr. Carpenter, would you like to come in at this point and respond to any of the

32:04
the conversation? That's just a good? Thank you, madam? Yes, I would. From our point of view, in what what we think the applicant needs to be demonstrating is that they understand where water will run off the site, and where that water needs to be collected, and how much storage they need. In order to put that turbid water through some kind of treatment process before it's released off site. They have a high resolution terrain model for the entire site. They they can readily use that to work out if you like water management zones, where they would understand where that water collects.

32:43
They know their construction period, they did know what activities are going to be occurring on the site.

32:49
They need to size these structures to an agreed return period with with the LFA, which I think has been previously discussed that in the previous hearing.

33:02
And they need to be able to demonstrate that those sizes will be available. If they can't, then they are not capable of demonstrating that they have viable surface water management options for this construction period. And they know they can worst case that based upon the areas that they are the largest areas that they're likely to disturb. And what we're looking for which is consistent with

33:27
Mr. Williams responses is for a conceptual design, meaning when a where they will put in drains to intercept that runoff to stop it leaving the site where under gravity those drains would obviously coalesce into some kind of low point which would need some quantity of storage at some kind of attenuation structure

33:46

from which they get hurt based upon an understanding of the room we have available, what kind of discharge rate they will be passing through that turbid water through some kind of clarification unit. So it's a conceptual breaking up of the site into runoff areas based upon the existing terrain and how they're going to disturb it.

34:06
return period that's been agreed with the LFA to reflect the construction period so that they can give confidence that those areas will be left and will be available to ensure that turbid water and the runoff doesn't leave the site. The cross section that Mr. McGinnis refers to is only a cross section, it's sitting on the side of the hill or it's perpendicular to the Hill, it's parallel to the Hill. And a cross section which looks like a trench is not going to stop any water it'll go down grade and down down the hill, and then it will need to be collected. So it's it's not that we're not asking for any detail design but an understanding by them of where they will have to collect where they will have to intercept water where they will have to collect water and a demonstration that they've done sufficient analysis that the areas they required to store that water will be available and none of that information is available. There is no

35:00
evidence that they have a viable approach to addressing the construction phase water management

35:09
to the applicants to respond to that please.

35:13
Brahma crossford applicants just to highlight in terms of available space. Work number 33 covers virtually the entirety of the substation development area. Work number 33 provides for landscaping works including bonding and planting together with drainage works sustainable drainage system ponds surface water management systems information for paths and access. So we have an essence of almost the entirety of the onshore substation and National Grid substation development area. The entirety of work number 3030 is available for surface water management. We also within the court of construction practice, within the requirement 22 of the draft dcl we require the detail of surface water and drainage management plans during construction to be approved by the relevant planning authority. This is an outline scheme, an outline code of construction practice, and by definition of that pipeline, where we have adequate space that outline measures are identified within the heartland quarter construction practice. And the detail can only follow post concern when the same is actually undertaken on the contractors have established their construction work sequence and that they need the detail of that will then be presented to the relevant planning authority for approval under the under the seal. Okay, so, if, as you say the whole of work number 33, did you just say that that is available for surface water management? Why is it not possible to provide an indicative plan or drawing showing that the measures that you're putting forward in the outline construction practice of viable within that area, for example,

37:00
brown grass, but options it relates to what are we trying to do manage? There's so much influenced by the nature of the construction itself by the construction technique that is that's adopted the surface

water management systems again, it's not just one thing in isolation. We go back right back to first principles to hyraxia construct the onshore substation as an example, we may well have cut off trenches within the onshore substation we may have we may well have settlement areas within that onshore onshore substation footprint, which again may or may also be dynamic during construction, there may be in place in one particular location for six months and then move to a different location every every as construction moves through through onshore

37:47
substations. So there's so much dependent on the actual detailed design of the of the project and the constructability assessments that would be undertaken under construction techniques that will be deployed, which can only be established around the deconstructing factor contractors are in place. And is that is that different to

38:11
the you know, we look at we've got an an outline operational drainage management plan, where you you have looked at worst case and we have done some work on that, but that's still to come at the detailed design stage you will still progress that further and you will still do further work which might change the outcome of that but you have actually

38:29
produced calculations Why is that not possible for construction? Why is it only possible for the operational drainage at this point, our grammar grasp or doubt counts. So the outline operational drainage function plan, we have the maximum footprint as an example if you're unsure substations and National Grid substations and so, we have the we have

38:51
the knowledge or the benefit of those parameters to feed into to the to the calculations

38:57
for the for the dub rational, strange, so they are they're more fixed, like they will not increase they will only reduce through by virtue of the works. We discussed earlier on the substation same principles. So we are able in that instance to take the maximum footprints of each of the substation developments for the operational life of the project and undertake the calculations at still at no plan stage. However, even that outline operational Greenspan's plan that remains outline the the detail will will again be established during the detailed same process.

39:40
Mr. Williams, would you like to respond to any of those points or any raise any further points in relation to the outline code of construction practice? Matt Williams, Suffolk County Council, I would just raised that the environmental statement, I believe does list indicative parameters for the construction phase. So it lists the size of the construction, consolidations.

40:00

sites alongside the substation sites, and the cable corridor. So what we'd be asking for whilst the detail around construction would come forward at a later stage, use those areas that are in the Yes, to demonstrate that there can be a feasible drainage strategy for the construction phase and indeed are pointing to the applicants submission, both issues specific hearing 11 and deadline eight rep 8096, where they say the assessment of flood risk during the construction phase is carried out in accordance with the same policy and best practice guidance as for the operational phase. So

40:38
there's literally no difference as per the applicants submission. But there is a difference in the applicant submission quite literally. So they are the points i'd raise and I'll I will leave it there. Thank you.

40:50
Thank you, Mr. Williams. Mr. Carpenter,

40:54
Thank you, Madam Clerk Carpenter facilities.

40:58
The applicant mentioned that they know the maximum area that they will be using, I mean, if nothing else is defined by the by the order limits itself. And this forms the basis of a worst case scenario for which they can then allow for as many facings as they like the 14 understand that the the construction sequencing,

41:20
but they still need to be able to demonstrate that they can manage their water. And he said that in it or otherwise, the applicant said that if if they know the maximum area, and they can define that by the maximum level limit of of the land available to them, then they can put together conceptual outline, drainage scheme to reflect that. And that is an entirely reasonable approach to demonstrating that there won't be increasing floods.

41:51
Thank you, Mr. Carpenter. And finally, just to the applicants, is there anything you wish to add to those points that have just been raised?

42:00
Brown grass fed outcomes, I will hand over to Mr. Paul Davis, shortly, but just to rerun reiterate, the difference between the construction and the operational phase is that at this stage, we do not have adequate detail from the from the from the contractors as to what surface water management's techniques specifically, they will deploy. As I mentioned, within within each of the work areas, there may be

42:28
surface water management systems deployed for for individual work areas for individual compounds, not all areas will be opened at one time not not all areas will require surface water management at all

times. It will vary depending on hardware, working hardware, constructing the programme of construction, but I can hand across to Paul Davis on behalf of capricans. Also to expand on that interest. One of the things that I would like to say sorry, was forgot us before before we go off, and Mr. Williams, correct me if I'm wrong, I think Suffolk County Council

43:03
do appreciate that.

43:06
You don't know the detail at this stage. And and I think, Mr. Williams, you appreciate that. And you know that, that that will come further down the line. But at this point, I think what they're asking for is, is just indicative, can you using the maximum Working Width, can you accommodate the measures, or some of the measures that you're putting forward in the outline code of construction project is is that is that what the council are asking for Mr. Williams? Matt Williams, Suffolk County Council? that's entirely correct. Yes.

43:37
Prime garlic, for napkins. So in terms of the substation,

43:42
as mentioned, they we have the entirety of work number 33. Available for surface water management, there is no conflict between the space to require for surface water management during construction, and the delivery of the of the, onto our substations, this is no different to the techniques and measures that we deployed on successfully on these things in one project. Where again, we went through a similar process whereby we have load line code of construction practice that identified the measures that could be deployed, and then post consent when all the parties are involved and the contractors etc. were engaged. We then establish the detail around the surface water management at the at the at the substation location. And that's no different to what we're proposing here for East Anglia training standard. Well, north. Okay, so the applicants can't, they can't provide that area, they can't look at the range of measures and just and show inductively that those measures would work in that location.

44:42
Albeit Yes, we would say that would be indicative and outline it wouldn't. It wouldn't mean that that would isn't going to happen at the end stage, but you can't show us indicatively that some of those measures could could fit within that area or it would be viable within that area.

45:02
Brahma growl support for delkin that the concern is what would it show it it would be based on on

45:12
information that is not not not relevant not applicable or subject to change during the detailed planning stage we have ensured within the order limits that we have more than sufficient space for for surface water management during during the construction period and it has done a question for the detailed saying we removed from the attain phase which is where we are currently through the detail the same

free as poss consent, where we have all the information and will be gathering all the information. For instance the the parent village you have to grind around substation, or lead along there until cablecard.

45:47
Ripley, they the frequency the sizing of sub sporrans or

45:54
subspaces. Until we get that information for for the entirety of drones for development area, we there's little value to your mind in producing hypothetical scenarios as to as to what a surface water management scheme may look like during construction, adequate spaces provided within the dark limits, and it is the detailed same point as as per the convention in such national significant infrastructure projects. When you say that you have demonstrated that you have enough space within the order limits to accommodate the range of measures. Are you just referring to the cost section within the outline good construction practices? Is that Is that how you feel? you've demonstrated that you've purchased sufficient space? Abram Kraus put out cancelin in terms of your cable routes? Yes, that's that's correct. we've demonstrated that we have flexibility within the onshore cable route to accommodate

46:47
sedimentation ponds or sub basins. However frequently we require on for whatever length that the required doors doors, just just from that figure, so that one cross section in the outline, you feel like that should that demonstrates that you've got sufficient space in the the order limits to to accommodate the measures put forward in the construction practice. primer grace for delicates absolutely, we're showing a significant width that is available within the answer killer of the length will be what it needs to be and the frequency will be what it needs to be cheering as established during the detailed design phase. But in terms of the the main constraints along down short cable route, which is the width, we are demonstrating that we have sufficient width for significant width within available within that onshore cable route to accommodate the surface water management. Okay. Before we go to Mr. Davis, I'm gonna let Mr. Williams and Mr. Cotton to just if they want to add to any final points to this matter.

47:52
Matt Williams, Suffolk County Council, the applicant. Last what value would that information have given the surface water flooding events experience in Friston? I think it will be of great value to both us to Suffolk County Council and the residents of Bristol to reassure them that during the construction phase, they will not be risk of increased surface water flooding. And this is as simple as that. And I think Mrs. Jones, you understand quite well what our concerns are. So I won't go into any further than that. But I think it is of great value.

48:23
Thank you Mr. Williams. Mr. Carpenter.

48:27
Thank you Madam Clerk Carpenter for cc's it's our it's argued that the applicant hasn't demonstrated any of the things that they've just been articulated there, they can take a maximum area, they they can

take a design Stormers agree with the LFA and they can work out the volumes that they required to store on the site exactly where they stored on site will be subject to the construction process and the phasing. But they need to be able to demonstrate that they can hold that water from the site and they can treat it to prevent the flood risk increasing to fit and village.

49:03
As, as Mr. Williams has,

49:06
has articulated, and that evidence that evidence base is not there at all.

49:14
I would send to the to the applicant if you want to respond to any of those points or just Mr. Davis like to come in at this point.

49:21
Brett brown girls for napkins the reassurance that Mr. Williams refers to is there within the fabric of the draughty seal it is within the requirements 2021 which is the outline the quarter construction practice, the fact that the final construction surface water management plan must be submitted to the relevant planning authority and must be approved before we can undertake that construction work. So so that reassurance is there, that the final detail the same will reflect the works that were actually undertaken and will be fit and appropriate for for for use during construction economics.

50:00
St. Paul is Paul Davis.

50:04
Thank you, Madam Paul Davies for the applicant. I just wanted to point out two issues I think have been overlooked and one is that the design scenario from an operational point of view is significantly different from a construction point of view, construction is regarded as temporary works. And there are no mandatory standards for flood risk or drainage conveyance that apply to temporary works. There are no mandatory requirements or standards for pollution from temporary works and planning doesn't take a cup of temporary work. So you're in a different area of

50:44
study, when you're talking about the operational conditions and the actual construction conditions. The primary goal with the construction service water management plan will be to ensure that the work can go ahead

50:59
with minimal interruptions. So that will be the primary reason for putting that plan together.

51:07

The other elements is with regards to several incidents have been made of worst case. And this manner, there are no design horizons, or construction techniques, there is good practice and the common practice. And common practice is to base the designs ratios on the operational life of the works being undertaken.

51:28
So it's an order of magnitude less than you would expect for an operational or permanent structure. So those are two elements in that the operational element is significantly different from the construction element, you're on a different

51:43
level of threshold. And the primary constant concern is to ensure that the construction can be undertaken. It's a different ballgame.

51:58
The only other element I would say with regards to

52:02
sediment control and the the capture of these treatments. Again, there are no mandatory standards is the only guidance document, there is a Syria guidance document that recommends

52:14
a level of standard. But that primarily says that you should base the size of the system on the event you expect to receive during the construction period, as none of these elements are probably going to be specially on the corridor going to be open for more than a two year period.

52:33
The applicant has suggested that you know starting and wanting five year period wouldn't be unreasonable. And that is a multiple of what you know the area that you would expect to be open for. If they found that there were areas that were more sensitive, then it would be prudent to increase that level of return period, you know, to a wanting 10 or whatever was thought to be suitable. But that will be dealt with during the actual surface water management plan. And to actually write the surface water management plan now would actually place the contractor under significant constraints and take away a lot of their flexibility and in their ability to come up with an optimum way of undertaking the construction. So in some respects to to actually fix that. Now I've in some ways, putting the cart before the horse, and it's restricting the contractors ability to apply their skill and knowledge to a more optimum solution on site.

53:32
Hopefully that helps to sort of widen the picture a little bit. Thank you, Miss Davis, some of the points that Mr. Davis just touched upon, that does lead me into into my next question. So before, you know, do you go to Mr. Williams and Mr. Carpenter, um, I asked that that question, because you might be able to answer that in your responses. It's mainly to Mr. Williams. It was just if you could clarify why you believe the Friston rainfall event in October 2019 to be closer to a one in five to a one in 10 year event rather

than the one in 40 a year event which I think the applicants use. So the one in 40 event the applicant had? Well they use that from a discussion we had previously in a workshop,

54:17
the return periods that is churned out by the computer software, it does come back as I think it's a one in 43 year return period. However, we believe that may be due to a lack of historic data, other rainfall events nearby registered on other rain gauges with far more historic data

54:38
on the same day, at the same time returned a return period of between one and five and one in 10.

54:44
And is there would you like to respond to any of the points that

54:48
Mr. Davis raised there.

54:51
I think there's a key point, which is evident now that we don't even agree on what return period should be used for the country.

55:00
Action phase, which is a key influence on the size of the construction phase drainage, which obviously then has an impact on the landscape required. If there's not agreement on such a simple basic principle at this stage, which could have such significant knock on effects come discharge requirements stage. While it's Yes, the discharge requirements will have the detail, we need to be able to see now that the basic principles are deliverable within the order limits. And if we don't agree on those at the moment at this moment in time, then obviously that is a significant outstanding issue from our perspective. Yeah. So that that's the construction drainage for one and five year rainfall. Is that what you're referring to? You believe that's entirely unsuitable? Correct? Yes, the applicant referred to a two year build out. I believe that's for a single project. If both projects were to be built consecutively. I think I'm right exam. I think I recall that that time period would then be significantly longer. And my question is that we're in a slightly a rhetorical question is, should the residents of Friston be required to accept that increase in flood risk for the lifetime of the construction compared to the lifetime of operation because arguably, construction is riskier than operation, you have the suspended sediments you have the watercourse and Friston that is susceptible to blockage from those suspended sediments is a greater period of risk for the residents of Reston.

56:27
Mr. Carpenter, would you like to respond to any of the points made? Yeah, thank you, Madam Clerk up until for for safeties, where we agree with with the applicant, that the construction phase is different from the oppression plays very much so not least of which, because the areas that are going to be disturbed, will be much larger, the risk of turbidity being generated will be much greater. And as Mr. Williams just referred to the problems with

56:57
with flood risk and FISMA, partly because of the amount of sediment that collects in the system.

57:05
The comment by applicant referred to the construction phase drainage essentially being there to

57:14
to enable the works to go ahead, well, we would, we would say that, that system also has a responsibility to protect the residents of Preston. So, so it is equally as important that it is rigorous. And that and that it will function for into the worst case scenario that that it has to deal with. You know, we recognise that, that the standards and procedures and practices for construction phase are much more poorly defined, which is why we have less, less confidence that the applicant is going to adhere to something which has the agreement of of the relevant parties, and which will provide a an equivalent level of flood risk to the survivors protection to the people of Friston.

58:05
Thank you, Mr. Carpenter. I would just say that further,

58:10
madam that the experience of AI, one is that the applicant didn't take this issue

58:18
in sufficient detail forward during their, during their planning, there were a raft of

58:26
problems during the construction phase, which the applicant is now referred to as being part of their lessons learned, but demonstrate quite clearly that the issue didn't get the attention it actually should have done. And when we refer to those particular items in our earlier submission, so I won't go through them again. But it does demonstrate that previously, the issue did not receive the attention or the the temporary engineering solutions required to ensure that the issue was dealt with adequately.

58:58
And just before I returned to the African city, Mr. Turney has his hand raised.

59:04
richtlinie for says it's just very briefly, in terms of the construction period. I know the examining authority will have this but it's an important point to note that there are three answers which may be constructed sequentially. And it follows that not only does the applicant have to show that they're going to have space and viable scheme for construction drainage, but also that it would be capable of interacting with operational drainage, which is put in place for an earlier stage of sequence. So it means potentially a very long construction period of six years or more, but also that permanent operational drainage may have to be put in for the first phase, and then temporary construction works for a second phase. And that's the further complexity of this particular project. Thank you. Thank you, Mr. Turney.

59:56
I think we probably break for for lunch tomorrow. Quite

1:00:00
like to finish

1:00:02
construction part of the agenda off with the occupants like to respond to anything that has been said that please.

1:00:11
Bram Krause for the applicants just to touch on the experience of East Anglia one, so the the diameters are far too relate to the onshore cable grid with a nice Angular one, where infrastructure, surface water management infrastructure was not deployed at early in the construction period. That is one of the lessons learned. But we established subsequent to the lessons learned workshop through discussions to see the stagnant one projecting, it did not apply to the onshore substation location itself. There are very different, very different

1:00:48
installations along linear dynamic onshore cable corridor versus a static substation location. I can hand across to Mr. Paul Davis to close out some of the other points.

1:01:07
Although the applicant just wanted to reiterate that there are no standards for temporary systems, it's not covered by planning. I on as far as I can see, we are proposing to put in measures that will be you know, in accordance with the wishes of the authorities. And, you know, these

1:01:32
that it's been said on numerous occasions, we're confident that we do have enough area within the site to be able to accommodate these measures.

1:01:42
At that stage, I'd wish to say that, you know,

1:01:47
we are intent on making sure that we adequately protect the area against the issues of flood risk and on sediment.

1:01:57
Thank you, Mr. Davis. Mr. Williams.

1:02:01

Matt Williams, Suffolk County Council, I'll just point out that sizewell C are proposing construction surface water drainage in deeds, the applicant refers to temporary works, the vast majority of the size of the project could be referred to as temporary works, because a lot of it will be moved post construction. They are working to a one and 100 year rainfall event for the duration of construction. And we are expecting new information as part of the decio.

1:02:28
Thank you, Mr. Williams.

1:02:31
I think we've got to a point now where

1:02:34
we understand everyone's positions on this matter. If I could just

1:02:40
make the point to the applicants, I think the examining authority would like to

1:02:45
give you an option to take away from this hearing to to consider the points that have been raised by Mr. Williams and Mr. Carter, and think

1:02:56
seriously about whether you can put in any of the indicative plans that they have asked for, whether that's along the cable corridor or whether that's on the substation site and take the points on board that have been raised in particular about Friston given the issues that we know exists in fursdon. So we would like to give you an action point to take that away. And and if that's something that you feel

1:03:19
you don't want to do, if you could provide a thorough justification as to why you are not providing that at this stage for us, please.

1:03:36
The applicants like to respond to that point.

1:03:41
primer primer goudsmit. Applicants? Yes. If there's a hearing action point, we will take that, take that forward. Okay. And will the council and the applicants, we'll be discussing the construction drainage under one and five year rainfall further before further submissions at deadline 11

1:04:04
bramah grounds for outcomes. I can hand back to Mr. Paul Davis to touch briefly on the the the storm event return period for for construction. Just one could also comment on the sizewell C and one and 100 year event for construction period as well please.

1:04:26
Thank you Madam folders for the applicant.

1:04:30
The proposal for a one in five is a baseline starting point for the conveyance system along the site.

1:04:39
As more information becomes available,

1:04:42
areas that may be sensitive will be identified and that figure will be revisited as the study may be increasing areas are sensitive.

1:04:52
And it's likely that we think the sediment transport is an issue or one in 10 year event could be accommodated within

1:05:00
sediment basins with regards to the size while beside, there are different regulations that cover the nuclear industry and they have a different set of standards. They still are not covered by planning and requirements for temporary works. But they do have a different set of onsite standards and onsite requirements.

1:05:24
I am aware of another site where standards of one in 1000 year have been applied.

1:05:31
That's because of the local requirements of the nuclear industry, not a general requirement, temporary work temporary works is not covered by any standards.

1:05:42
I think

1:05:44
that we are

1:05:48
aware based on the evidence that Mr. Williams has provided in with the service water management plan that, according to that study, the village of Freston is not at risk of flooding. On a wanting 200 year event, now we understand that it has suffered flooding on a smaller event. But the evidence has been put forward does not seem to substantiate the numerous claims of there being an extreme level of risking Freston. And we can only assume that they the flooding that has happened as as maybe been

generated by some local circumstances were not incorporated within the modelling work that was undertaken

1:06:33
for the surface water management plan. But the evidence before us is,

1:06:39
on that study, it says zero properties at risk on a one to 100 year event. So we have a little perplexed as to why we're constantly being told that there is a significant flood risk. In Preston, there is obviously flooding, there is obviously conveyance routes that flow through Preston. But I mean, some of those flow rooms are in the order of 30 or 50 millimetres deep, this is not what we would regard as being

1:07:09
a hazardous event that, you know, would constitute doing significant measures. So

1:07:19
coming back to the, you know, the, the figures will be revised that detailed design, and if there is, you know, do show to be sensitive, those levels will be increased. Okay. Thank you, Mr. Davis. I think actually what Mr. Williams is referring to was, besides, we'll see what was construction, nothing to do with the

1:07:42
nuclear regulators, as far as I'm aware as Mr. Williams? That's correct, yes, that relates to all sites. So that could be the park and ride sites, which are based in dartium. And we can market some way from the nuclear power station and the fleet management facility south of Ipswich, they're all applying that one in 100. And then, for construction, and they all will be removed, post the construction period. Okay, thank you. I think, given given the time, then what I'm going to ask the applicants on that matter as well as to take an action away.

1:08:14
And to look at that, that's the size we'll see construction, and the one and 100 year event and if they could provide something to us

1:08:23
comparison wise or to explain or to justify why that's that is different to the construction for these projects. That would be great. Thank you, Mr. Carpenter.

1:08:35
Thank you, Madam Clerk up into the cc's. I just wanted to highlight the fact that that the wealth of evidence has been presented in over the many deadlines and,

1:08:47
and the number of hearings that have already taken place, does point towards an elevated flood risk in in Freston, this is experienced routinely by by the residents

1:08:59
and that the return period that the temporary work should therefore, be designed to should be a function of the risk that they are currently exposed to. So, so, then may well be lower return periods used for for other construction sites, but there is a direct hydraulic link between the sites and fishing village every two years it suffers from flooding, that flooding does does reach into into properties.

1:09:29
And accordingly, you know, that that the the,

1:09:36
the rigour or the the severity of the storm that has to be accommodated for that construction period needs to reflect that that existing risk and the requirement to not increase that risk during the construction period. And that is something that we would expect the llsa to lead on in in discussions with the with the applicant.

1:09:56
So as to minimise that flood risk irrespective of what So,

1:10:00
standards or procedures may or may not exist.

1:10:03
Thank you. Mr. Condon. Okay, I think we we are coming to the end of that. Are there any final points

1:10:10
the applicant would like to make before we break for lunch

1:10:21
primakov spin up pants, no further comments make up the stage. Okay.

1:10:26
In which case, that seems a good place to break. It's 1250 I think we'll return at 150. So that's an hour after lunch. Okay, we will see you all at 150. Thank you very much.