TEXT_ISH16_EA1N&2_Session3_26052021

Wed, 5/26 3:33PM • 1:30:43

00:06
Good afternoon and welcome back to today's issues Pacific hearing 60. And for East Anglia, one North and East Anglia to offshore wind farms. Before we begin, Can I check with the case team that you can hear me and that the recording live streams and live captions have started?

00:27
Good afternoon, Miss Jones. I can confirm we can see in here you the recordings have started and says the live stream. That's great. Thank you, Caroline.

00:36
Okay, we we start where we left off, and we were up to operational flood risk, drainage. And just before we begin, could I ask everybody who was on screen before lunch? If they could turn their cameras back on again, please?

00:58
Do we have someone from the applicants? Great. Thank you, Mr. Ennis.

01:06
Okay, the first part of this agenda item relates to the results and implications of the infiltration testing, which we receive the results of in your response for rule 17 on the 21st of May. I appreciate that that hasn't left a lot of time for everybody to have a look at it. Can I just check with the the council and Mr. Carpenter as well? Have you had the opportunity to have a look at that information?

01:35
by William Stafford County Council? Yes, we have. Great, thank you.

01:40
Okay, and in that case, my first question is to

01:44
the applicants. Really, the guidance of undertaking infiltration testing, as you say, recommends three infiltration tests to be undertaken per location. And you undertook one test at five locations and two tests at two locations. Why Why not do it all of the locations,

02:08
prime groundspeed outcomes, that was a function of the time that was available to undertake tests. The infiltration tests were part of a very large onshore grant investigation campaign that covers the entirety

of the onshore cable corridor itself. And the decision was made that in order to ensure we had information available for this hearing, and indeed, for the deadline, 11 submissions, the priority was to get a distribution of test results around the sunspace in the areas to fit into these processes,

02:42
as opposed to undertaking a full full free course parent parent education. So we obtained that initial infiltration rates, we have fed that and we were able to feed that into the

02:55
real 17 submission.

02:58
For instance, submitted last on Friday. We are that in parallel with that as the grant investigation campaign has moved along the onshore development area, and now it has arrived at the substation site. Our contractor has the facilities there. They have the excavators dumped the accommodation, the welfare units, etc. They are now undertaking the bespoke testing at each location. And they are undertaking three pours at each location in line with the Bihari guidance itself.

03:30
The the the tests have been undertaken, as of the start of this week, we have completed four tests, three ports that each application is off course of business yesterday. And we're expecting further two tests to be undertaken today. And the seventh test is to to be undertaken next week, once we have arranged for clearance off clearance from potential services at the point of exploration. So

03:59
I guess it bears out the benefit of undertaking that more rapid suite of testing

04:07
during the initial infiltration testing, and now we have that information that we can now talk about, if we if we undertook the full suite of testing, there was a risk that we wouldn't have that that information that we could we could discuss today or indeed feed into our documentation. So deadline deadline level, okay. And the results of the tests that you're completing this week, they're not going to feed in at all to

04:31
the outline operational drainage management plan submitted to deadline 11

04:36
parameters for the outcomes. That's correct. The focus on using the results from the initial infiltration testing and the outline operation during sponsor planned reason flat as all the calculations need to do and that feeds into the pipeline operational Greenspan's plan it's not a quick process to to to update the the suite of of plans and documents associated with that.

05:00

What we have committed to do is submit the results of infiltration testing into examination with a commentary as to how its compliments are affects our

05:14
amends the information, we submit a deadline, and if needed, it made me may verify the results that we've we've adopted within the

05:23
deadline 11 submissions. Okay, so the commentary that you're talking about that that's going to be submitted deadline 11 on deadline 12 grammar grounds for alkynes. It's unlikely to be available for deadline 11. If it is legal, absolutely submitted, but there's a strong probability that a written wouldn't be available on that day. We don't expect them to be too far beyond that. So we could, with the panel's blessing, submit that outside a deadline, if that would assist?

05:55
Well, yeah, that was good. That was going to be your next question, actually, is at what point did you expect those results to be available? I think, the examining authorities, we would, we would ask that you at least

06:07
discuss those as also share those results with Suffolk County Council and with CCS. So that when you do

06:15
submit any commentary that it factors in engagement with those parties, so if it doesn't come in till deadline, 12, for example, it is getting quite close to the close of the examination. So I think that what we would ask is that you engage with and share those, those results.

06:33
So that that commentary can factor in that engagement when you do submit it to us.

06:40
Our brown Macross napkins, just to clarify.

06:44
So a note of deadlines submission off those results and the commentary. Would that be welcomed by a panel? Or would you prefer that to be submitted deadline? 12 with the benefit of public discussion and transparent? Well, we wouldn't set we won't set any deadlines today if it were to be submitted. And that would be something for the examining authority at that point in time to decide whether or not to accept

07:14
you do this Mr. Williams or Mr. Carpenter, have any points that they would like to add in relation to either the tests that have already been done or the tests that are currently being being completed at the moment? Mr. Williams?

07:32
let Mr. Bedford go first, I saw his hand was raised

07:38
microbead for Suffolk County Council, madam just on that the procedural point as opposed to the detail of the the tests, etc, which Mr. Williams would deal with? We would certainly welcome the applicants submitting the material as soon as they have it in a form that they submit it and certainly not waiting until deadline 12 on the 28th of June. And obviously we would therefore, very much welcome if if it were submitted out of sequence, we would very much welcome the examining order then exercising their discretion to receive it because clearly, if we're going to then meaningfully respond to it, the sooner we say, the better. And the sooner the examination sees I suspect the better. That's That's all I wanted to say at this stage. Yeah, that's that's noted. Thank you very much. Mr. Bedford. As I say if the if that is ready sooner than if that was submitted, then that would be something that the examining authority

08:41
could take a decision on at that point in time.

08:44
Mr. Williams,

08:47
Matt Williams, Suffolk County Council is just on the current infiltration testing results, which obviously is what we need to work off at the moment.

08:56
Dare digest 365 and the Syria suds manual are both very clear that infiltration testing, in accordance with br a 365 methodology should undertake three runs on each pit.

09:09
We as Suffolk County Council are also very clear on what our expectations are with regard to that is a red line for us. We will not accept infiltration testing on any development that does not have three test runs. The reason for that and this is to quote the serious that's manual, it is important that the test is carried out in accordance with the report and that the test pit is filled three times. Repeating the test in this way can reduce the measured infiltration rate by at least half an order of magnitude. Each time the test is repeated and is likely to reflect realistic conditions and quite an S from page 549 of the serious SATs manual. Now, based on those results, the infiltration results achieved by the applicant that they're using for design purposes of 57 and 63 mil an hour. If you reduce that by an order of magnitude of one as per

10:00
Followed by the serious data manual actually comes out at around six or seven mil an hour. Now, that's obviously less than the 10 we've been working to and would actually deem the infiltration is not realistic.

Now, that doesn't accord with what I saw on site, when I was on site with the applicant for one of their tests, it did look like a sandy material.

10:19
Unfortunately, the applicant hasn't got the soil logs to accompany the infiltration test at the moment. But that all just goes to add to the uncertainty that still remains. And on that basis, any outline operational drainage management plans submitted as part of deadline 11. Using these results, we still would not consider to really carry any weight, because there's still far too much uncertainty, unfortunately.

10:45
Mr. Carpenter

10:49
Thank you Miss Jones clay copies of CCS.

10:52
I agree with everything that Mr. Williams just said, these are points that I would have otherwise raised.

10:58
But above and beyond that,

11:01
there were I believe, 10, excuse me 10 tests undertaken at seven locations

11:08
of those tests, at least according to table one in the document provided by the applicant for have a na written next to them.

11:17
Now, these would appear for two of these there are graphical representation of these in the document. And what these are showing is that the infiltration rates are so low, that actually the

11:33
it is inappropriate to try and then analyse them for an infiltration rate or us or to design a soakaway because they do not meet the criteria to do that.

11:46
But the applicant has chosen to ignore the fact that these tests were undertaken and has been used and the minimum

11:55
infiltration rates that did meet the criteria for the test.

12:01

And as a result, even though the observation is clear from from the testing that on, according to table one,

12:10
four out of the 10 tests, so 40% of the tests that were undertaken, that she used,

12:16
and a level of percolation into the underlying soil that was so low, that you can't actually then undertake the design of an infiltration scheme from it.

12:27
Of those four, only two are actually provided in terms of the graphs. And as Mr. Williams refer to, you know, there's no geological information, there's no way of interpreting you know, why, why this occurred.

12:39
One of those basically flatlines. So in other words, that the water was never going to percolate into the ground. And this suggests that not only are the percolation respiration rates,

12:52
following Mr. Williams comments in the expected to be at least one order of magnitude lower, but in fact, there is clear evidence from the applicants own submission, that there's potentially four tests which produce results that suggest that infiltration is is viable in most locations. And we would suggest that four out of 10 causes present a significant

13:17
risk that infiltration will not be viable. notwithstanding the fact that these infiltration tests these,

13:26
these impermeable results occurred at both locations.

13:31
And for some reason, the applicant chose to test the edges of the

13:36
of the proposed infiltration areas rather than actually within them themselves. So so a combination of the tests not being a not adopting the the status standards. In doing so, failing to explore whether infiltration would reduce on subsequent tests. And then for tests actually demonstrating that infiltration is essentially a viable

13:59
moves us to conclude that the use of the information is both unreliable and inaccurate to you then use that for design purposes.

14:09
One last point, which is raised in both the serious subs document and the br ri document to which the client to which the applicant refers is that there is a need to assess the underlying groundwater table and its proximity to the infiltration basin. And the reason for that is that if groundwater is shallow, those basins will become ineffective if the groundwater rises. So although it's clearly stated within these guidance documents that the underlying groundwater table, the depth to it should be determined as part of demonstrating the efficacy of infiltration. This has not been undertaken, so it remains

14:47
an uncertainty which is intrinsic to demonstrating the viability of infiltration.

14:53
Thank you, Mr. copter.

14:56
Never tented the applicants, please

15:00
Brown grass for the applicants.

15:03
Just a few points before I hand over to my colleagues

15:08
in terms of Mr. carpenters statement a question about why they institution, Pittsburgh located at the edge of the sun's basins, we do not yet have an age or sons base and we have not the same two sons basis, they are an outline format at this moment in time, we have not undertaken the detail of the same off the surface water management systems,

15:30
that you're absolutely correct in that there are other matters that need to be taken into account and that has been recognised in previous submissions, then that the decline in water depth is a critical element to the the feasibility of infiltration and that that has yet to be established. I would also like to flag that there there's a real focus in the discussions to date or upon infiltration and whether infiltration works, there is no consequence of infiltration not working on the site, because the attenuation solution but it's presented with an outline operation and drainage management plan is demonstrated to work it is demonstrated to reduce the flood risk downstream in the village of Friston we are holding within that attenuation pond, they do one on 100 year plus four year climate change with within that 10 year ocean basin where we are applying infiltration will only benefit from that solution. So one star primary solution isn't the looking and investigating seeking to progress and infiltration only solution, the relative situation as the that it's most likely going to be a hybrid solution that would be adopted, but one which would maximise the use of infiltration to the extent that it is practical. And that is the key point is maximising infiltration to the extent that it is practical. And and whatever solution is adopted, we will improve the downstream flood risk within the village triston simply by definition by virtue of having nuisance

attenuation basins in place. I can and across to Mr. Davis, to take three point holder points forward. What Mr. McCall is just just before we do that, it would be jumping a little bit ahead. I have got, you know, questions

17:19
relating to the outline operational drainage management plan at the minute, we're just mainly concentrating on these, the tests that were done and submitted on it on the 21st of May, we will come to deal with the matters that you discussed in terms of the the scheme that's being put forward. And a little bit later on. So is Mr. Davis related to these tests? Or is it is it to do with

17:41
the outline operational drainage management plan for immigrants napkins? I guess, Mr. Davis, contribution will be on the tests themselves.

17:51
Please go ahead.

17:54
Thank you, Madam, although before the applicant with regard to the tests,

18:00
the values that were received on the interim test, and they are entering tests are not final tests, they are read from 15 years, seven millimetres an hour to 152 millimetres an hour,

18:13
which are significantly better than the assumed base level of 10 millimetres and our original design was undertaken on

18:23
we acknowledge that we still seek to confirm those results. But we took the position that having some results would be better than having no results and having to work on an assumed worst case scenario. So it gives us a an indication of the order of magnitude we should expect.

18:44
Within this area file is notoriously variable and the results are variable. And I acknowledge Mr. Williams comments about what you would expect subsequent tests to be lower. However, on the first round of tests. The second test on one of the tests was double the result on the first test. So

19:08
that raises questions for us. You know, this is why we're going to confirm these tests and what further tests have been undertaken, that will be repeated three times to make sure they do conform with those standards, so that we have a higher level of competence in the answers that are being given on site.

19:27

So yes, there, you know, with some poor results on site and some, you know collapses in the holes, but we at least have an indication now of what to expect in this location. And hopefully that will be confirmed with the subsequent tests that are now being undertaken.

19:48
Thank you, David. Mr. Carpenter.

19:56
Thank you Miss James Carpenter for cc's

20:00
with due respect, the comments about using the the range of values that were attributed to those tests is misleading. And there were there were four tests which which don't have any analysis provided at all. And of which the graphical representation of two is clear that they the the permeability, the permeability was insufficient to allow those in the analysis of those tests. One of those tests, the water level didn't drop at all after an hour or so. So it is completely misleading to suggest that the lowest values received or the lowest values determined,

20:36
have been utilised for the sake of taking forward into those design drawings. It is clear that there is a considerable heterogeneity on the site, it is clear that they the distribution of the heterogeneity of those underlying strata is poorly understood.

20:55
And that there is a very significant range in values, which the applicant has failed to get a proper understanding on. But if minimum values are going to be used, then the minimum results of those tests is that there is that in because the infiltration isn't possible.

21:12
Mr. Williams,

21:15
Matt Williams, Suffolk County Council, I'll keep our position quite simple. We don't accept the results of the current testing, if the applicant wishes to undertake further design will be a preliminary design based on the results of that testing, then that is entirely within their gift. Now, when the results of the full infiltration testing comes through, that may or may not support the assumptions made by the applicant, and we will make a decision based on that information at that time. But at the moment, we don't accept the current results.

21:49
Mr. Davis, is there any reason why that the tests were done previous to this? Or why why this? Why the they're only being done at this stage in the examination?

22:03

Or is it just because the examining authority to ask for them? parameterless for the applicants? We

22:10
I believe answered a similar question on one of the previous hearings. The infiltration testing tests themselves are part of a very extensive grunt investigation campaign, which takes us from landfall all the way through to the substation site. It is part of that wide, very wide and extensive grant investigation campaign. And the integration tests were always part of that of that campaign.

22:34
It is not as simple as simply digging a hole in the field and pouring water in we need yuexiu clearance we need dark logical clearance we need agreement with the kind souls with regard to

22:49
measures to to clear the areas for ecological interests. We need landowner permissions, these things all take time and they also cause disruption to the ongoing land and trusts

23:02
at each location. So so that was the reason that it's called the fair to large grant investigation campaign. When when we were notified on when the programme of that campaign was established, we then requested that we essentially have a team parachute in the substation area early enough programmed to undertake this initial suite of infiltration testing to get that

23:31
spatial representation and distribution of tests around the Sun space.

23:36
And I just mentioned earlier when the when the full site investigation campaign then mobilised to the onshore substation location, which has now happened, then the full suite of testing which is a longer period of time, because of the three tests that are up that are undertaken on requires additional support, logistics etc. noted that mobilisation has occurred to the substation site itself, the full suite of infiltration testing can be can be undertaken.

24:07
Okay, thank you. Thank you.

24:11
Just to Mr. Williams, actually, two cc's as well if

24:17
the Africans consider that a result of the preliminary infiltration testing that a factor of safety can now be reduced from 10 to either 1.5 or five. Do you agree with that?

24:29
Matt Williams, Suffolk County Council, in short, no.

24:33
Table 25.2 of the series suds manual outlines the safety factors. It's based on a consequence of failure.

24:43
It's quite a simple table. And the consequences of failure. In this instance, we believe could result in damage to buildings or structures or major inconvenience eg flooding of roads. I think it's safe to say the current Greenfield situation results in from

25:00
of roads. So indeed, if the SIS drainage system were to fail, the consequence of said failure, I think it's safe to say would be flooding of roads. Now, it's quite a simple table. As I say, I'm sure there can be lots of arguments put forward, that go above and beyond what that table dictates. But I would say, for the examining authority, have a look at the table and you can make your own judgments on what that table does say.

25:26
Thank you, Mr. Carpenter.

25:30
Thank you, Miss Jones, Clark, carpenter, Stacy's we weren't gonna make the same point as Mr. Williams, and in the documentation, not sure it's available in public, what is available in the public domain. What we would say, in addition is that the failure to repeat the three tests in each at each location and the observation of four tests failing to provide adequate infiltration confirms that the range of infiltration on the site is is more than one order of magnitude. And that therefore, for that reason, alone, the factor of safety of 10, which would essentially address that order of magnitude is required, in in addition to the, you know, the Syria guidance based upon the risk of the receptor. So it's It is, it is entirely inappropriate to reduce that vector of safety, but I tend

26:21
to talk

26:23
to the applicants, do you like to respond to those points me?

26:28
Thank you, Madam Paul Davis for the applicant online. Mr. Williams comments on table 25.2. And the suds manual. as you rightly said, it actually refers to the risk. And this is an important point, because safety factors are frequently brought into play because of uncertainty.

26:50
And you make an allowance for uncertainties in results. To have a 25.2 isn't dealing with uncertainty table 25.2 is dealing with damage,

27:00
the risk of damage from failure of the asset, these basins,

27:07
the mode of failure in the basin would be that the basin would be blinded, it couldn't continue to infiltrate. And then based on what fell up and overflow, it wouldn't fail, it wouldn't collapse like a dam, it would be overtopped, that would be the failure mechanism.

27:25
Even if it did that, it would have already have stored 100 year plus climate change of water. And if it overflowed, it would not form any significant risk of danger within the site.

27:41
I think Mr. Williams, and I'd probably differ on this point. With regards to the applicability of the damage, I would actually say that the damage is limited to within the development site itself, that even taking Mr. Williams viewers may be damaged downstream, that would be significantly reduced, because we would already have stored 100 year plus 40% climate change on site before the system even reached the overtop level and there is an additional

28:11
safety margin on top of that. So it would actually significantly reduce any liability of any flood risk downstream on that basis. That's why we said theoretically, you could apply the 1.5 safety factor because the risk of damage is low. But we've said because this is a sensitive site, we think it's not unreasonable for us to take that up and apply the safety factor of five, because of the risk. This is not due to uncertainty, this is due to risk of failure. And the consequences of that failure in this instance, will be virtually negligible.

28:50
Okay, Mr. Davis? So the the the current outline operational change management plan does include a factor of safety of 10. I believe that correct? Yes, yes. Okay. But the arguments that you've just put to me there, they don't necessarily relate to the results of the most recent testing. So what what's what's changed in that sense testing itself is to derive the infiltration factor that actually governs the size of the pond.

29:23
So the safety factor is applied to the infiltration rate, so it has a direct impact on the sizing of the pond.

29:32
So by doubling the safety factor, not quite but you you're effectively significantly increase the size of the basin. Okay. But honestly, we don't have the results of the full

29:46
theory tests yet and the council and uncertainties are still of the opinion that we should still be applying the factor safety of 10. In that case, what will you be applying in the updated outline

30:00
Operational drainage management plans do to be submitted at a deadline 11

30:14
parameterless for the outcome. So as per the submission and lead of drill 17 letter, we have majored on the factor of safety five, but we have also included details often factor of safety of 10 for for all three substation developments in three or north on the National Grid substation, so we would expect the updated outline operational journey transition plan to follow that same model. So we would, in fact, be presenting both. Again, that plan is to

30:44
show an indication at this conceptual stage as to the necessary footprints for each

30:52
basin size.

30:55
Mr. Williams, sorry, by this time, Mr. Ennis. Yeah, yeah, comments about the outcome, it was just one matter, I wanted to pick up in terms of you, we discussed the factors of safety and, and the table, and the background to the factors of safety are a very long running at general principle. And certainly, as far back as 1996, the Syria manuals, were applying the same safety factors in relation to infiltration systems, then, but what's quite interesting is just to understand the logic of the factors of safety being applied, and the tax hasn't changed around that very significantly, either. What the issue was, at that time was it didn't have long term data on the effectiveness of infiltration systems. And that's the basis on which these safety factors were introduced. And in particular, it's around essentially, concerns about maintenance, and other long term performance of infiltration. And that is clearly stated. And what they say, even back then was the factor of safety to be used depends upon the consequence of failure, and engineering judgement, and is therefore required as a factor to be used. And what they do is they say that, it's, there's very little information available about such a loss of performance. So I just wanted to put in context, the basis of those safety factors, which was effectively the loss of performance of infiltration over a long period of time. And that's what was being borne in mind at the time of producing those safety factors. So I thought that was an unimportant consequence, because we were almost moved to the end of just discussing this whole concept of safety factors. And you could have been led to the conclusion that it was all about a dramatic event. But actually, the logic behind the safety factors was effectively an unknown uncertainty regarding the performance of infiltration. And I think that's an important context in relation to that this particular discussion, which I think has really come out yet. So

33:10
I think Thank you, Mr. Janus, Mr. Williams,

33:15
Matt Williams, Suffolk County Council, as the applicant for today, I think he was referring

33:20
to the serious how to manual, and specifically section 25.6. So again, I would invite the examiner authority to have a look at that for themselves and enjoy their own judgments. But it is also as a factor of safety for the reduction of the infiltration rate over a period of time. As I said, when I was on site with the applicant for infiltration testing, the material did look quite Sandy. However, the infiltration rates don't necessarily exhibit the performance that we would expect for a sandy material which could indicate there is some silt in there as well. Now if you have a silty Sandy material, and then that silt can be washed down through the layers of sand and can inhibit the performance of infiltration over a longer period of time, and that's exactly the sort of thing that we're looking to try and guard against here. It's not something that can be negated through maintenance, because you'd have to dig the base and out to a deeper depth than what would be allowed in design guidance. And again, as I would say, the table 25.2 is based on consequences of failure, not risk.

34:26
Thank you, Mr. Williams. Mr. Carpenter.

34:34
Thank you, Miss Jones, chi carpenter, CCS. I note, miscellaneous, his comments with interest because the comments relating to performance and indeed infiltration rate, then lead us towards the conclusion that these infiltrate that these factors of safety do relate to likelihood and frequency and risk and not just the consequences.

35:00
In flood risk is, of course, a combination of these two, the likelihood of an event and the consequences of an event. And it's the flood risk that is of interest to us in terms of the the residents of Reston. So the factor of safety does relate to infiltration, it does relate to the consequences of failure.

35:20
But he also then has to be put into the context of, of the consequences of the overtopping of these structures. These structures, when they have a top they had, they have no, there's no design presented to demonstrate that they have engineered overflow structures. The consequence of that is that you get overflow water going over an embankment. The understanding is that these embankments are not being

35:48
purposefully engineered that they relate to the landscaping scheme. And the consequence of an uncontrolled overtopping is potentially a failure of the of the retained embankment. These structures, if when they overtop we're going to be holding water, far in excess of that, which would be covered by the reservoir act. And I mentioned that, because the reservoir act is in place to deal with risks of this magnitude. And that is the that is the concern to to the residents of Friesland that these large structures, which, which if they do not perform as intended, could overtop in an uncontrolled way, resulting in a catastrophic failure and release of these of these bodies of water down into down into frison village. So it is these factors of safety and freedom do relate back to to the consequence of their consequences to be put into the context of a failure and the failure mechanism that occurs.

36:46
And the avoidance of other overtopping is by using appropriate design and appropriately reliable

36:56
site investigation data to to guide that design. And that's not what we see in this case. Thank you, Mr. Carpenter. Mr. Bedford, I can see you have your hand raised.

37:09
Thank you, Mr. Jones, it was just a short point on effectively inviting the applicants to identify a consistent position on what they are saying is the approach to the factor of safety, not the numerical value. But why we have a factor of safety because with respect, from what we've heard this afternoon, if you start by what the applicant has said, I appreciate it and draft at paragraph 22 of their response to the rule 17 request on infiltration. Paragraph 22, certainly to my reading of it seems to assert that the reason for reducing the factor of safety in this case, from 10, to five or to 1.5, was because there was now a greater level of certainty in the information available. Now, that's more than as it were view, there was Mr. Davis's view, which was that that's got nothing to do with it. And it's purely about consequence. And then there was a third view for mystery notice that it was actually more complex, and there was a wider background that you need to understand. Now, in order for us to best respond to that point, it would certainly be extremely helpful. If the version of the rule 17 response on infiltration in Section four, that deals with factor of safety that does come in on the seventh of June, deadline 11. It would certainly be helpful if that text could set out the definitive position of the applicant, on what the factor of safety rationale is that we can then respond to because at the moment, I'd say it seems that we're getting slightly mixed messages from the applicants. Various comment.

39:03
Thank you very much. Mr. Mr. Bedford, I'll return

39:07
to the the applicants Is that something that you can you can add to the updated outline,

39:14
operational change management plan, call in some of the applicant, I, in response to matters, put the safety context for the justification that's put in the guidance. But all the tie was stating it's got a context. So I'm not making any statement other than I think it was important for you to understand as a panel, the actual context of what was why the safety factors were introduced, and the context and it's very explicit within the guidance that it's about uncertainty about future infiltration rates, American

39:51
factor safety of 10 in the deadline 11 version, anyway, is that correct?

39:58
Absolutely. do both.

40:00
So we're starting to cover that off. But I suppose, as we keep moving through this agenda, there will be, hopefully an opportunity to the end to put some of this in context, because there is inevitably here a process of for discussing what information we have. But we will not have the full information to be able to say to the panel, by the end of this examination, that one particular drainage option is the absolute position because we won't have all the results by then. So what we are teasing out through the results, is at best an understanding of the likelihood of the extent to which infiltration can play a part in the mitigation of the drainage. But that will equally not be finalised until we get the final water table information, which has to be taken over a period of time to be able to be robust. So as I say, we can go so far, but in terms of this process, in essence, it's an element of

41:03
what's more likely. And we're hoping from the infiltration testing that we'll get over the next week to 10 days. And the results from that will give a clear indication of the scope and nature of the infiltration that will be capable on site. If all other things being equal, it still remains are with other tests going the right way as well. So as I say what we are trying to do, because we've been asked to do this, and we've always said there were limitations for what we could achieve within the timescale and to have done our full grand investigations. And that's what we have been consistent about, but I just don't want it somehow being viewed that we are definitely trying to give you the best information available that we can within the time, but it's not going to be an absolute answer to the balance between the various options that might ultimately transpire. But I think Mr. Davis, Mr. McGregor's, wants to come back on one further map. I'll hand over to Mr. Gerson back.

42:02
Brammer Carlos Cody advocates just a small number of points to follow up on. So in terms of the embankment the same that was discussed previously. Again, detail the same maybe we would have environments perhaps the size of the of the Sun space and perhaps the location of the Sun space and it's actually a cut rather than a combination of a cut and embankment that's all detailed the same influenced by the matters such Mr. Renison has just discussed and the also the final design of the onshore substations, the footprints required for each substation, the surface water management infrastructure that we embed within the onshore substation occasion that all inferences the amount of water that we can pay to the subspace itself.

42:48
In terms of design standards itself, Mr. Carpenter is absolutely correct. There are there are design standards in place that we will adhere to, that will ensure the integrity of the sun's design no matter what what the solution is, at the end of the day.

43:05
In terms of the over top lien, or the failure mode, the failure mode, as Mr. Davis has pointed out, is the overtopping of the of the subspaces. And that I'm not a fan, that would be an engineered solution to that overtopping process. And again, that would be incorporated within the detailed same similar to relevant planning authority for for for approval, it would have engineering measures in place to control that overtopping and control the routing of that surface water.

43:35
If indeed it is, if indeed there is any overtopping during during operation.

43:42
Thank you. smugglers just I think, because we've talked about it quite a lot. During this hearing, would it be possible for the applicants to submit their serious since manual into the examination, please?

43:55
Yes. Thank you.

43:59
Mr. Carpenter.

44:02
Thank you, Miss Jones. I wanted to make a point, just about data availability. But first, if I just might respond to a comment that the applicant just made about the overtopping risk and how this would be this would this risk would be engineered out? This is the first time we've heard this. And this comes back to the point that we've been making all along is that there's this insufficient detail being provided by the applicant to provide confidence that the risk is being assessed properly and that it's being mitigated properly. And this is another example of

44:33
of of information being provided. Once once the applicant has been asked repeatedly to try and understand the the,

44:43
their approach to addressing this particular issue, which I suppose it goes back to the point that I was going to make which is one about data and data availability. That we are now being provided with the infiltration testing two or three days before this hearing. I do not know how long SPR had been

45:00
been pursuing this project, I know that I have been supporting CCS for at least two years. And this is more than ample time to undertake targeted ground investigations, it's more than enough time to start to instrument the catchment. So that they can understand the rainfall runoff relationships, and to get a better understanding of the of the cube are in the catchment and none of these things have been done. So, so

45:27
the fact that we are being told that the the infiltration testing has been limited by time availability, that additional information will be made available, and that this doesn't then become part of the of the submissions at this time. Seems to reflect

45:45

a lack of prioritisation of this issue over the over the last years that these progress projects has been in development.

45:52
Thank you, Mr. Carpenter. Mr. Attorney, I can see you have your hand raised.

45:58
Thank you, Madam average attorney for spaces just a supplementary point on the comments we've just had, in terms of there being an engineered solution as it was put for the base and sort of created, we need to be really clear that throughout the applicants have suggested soft engineering or soft landscaping as being the sub solution here. They show for instance, tree planting within the basins, tree planting up to the toe of any embankment on all of their plans. If there is an engineered embankment, that's a very different proposition, in terms of the landscape impacts in terms of the heritage impacts, it will need access roads, it may require fencing, and certainly it won't be planted with trees. So this goes to the heart of what the applicant is proposing this site and its impacts in the local community beyond the the limited issues and significant and important issues of flood risk. So it goes to the whole design principles of the site. And suddenly we hear at this hearing that there'll be an engineered solution in respect of overtopping which is different from what's been said before.

47:16
Thank you, Mr. Turney.

47:19
The applicant like to respond to any of the points made before we move on to indicative design

47:26
grammar girl has put out because it is not the first time that the an engineered solution for the sun's bass and stuff have been discussed. We were discussing it at the last issue specific hearings where we're discussing fun matters. The the engineering solution, whatever that may be, doesn't mean excessive amounts of concrete and and superstructures it means that the same of the subspace in itself is engineered such that it is fit for purpose, it meets the same criteria and meets the design guidance that is in place at the time. And that is the the engineered solution that would be a controlled managed area that is well thought out designed to the appropriate standards and guidance in place at the time.

48:18
Okay, thank you. Um, is there anything anyone else would like to raise on this item? Before we move on to indicative design? I've asked all the questions that I had.

48:32
Okay, um, just before we do move on it, I do want to just clarify

48:38

the position with regards to the updated results of the tests that you're doing this week, and next week, did you say as well?

48:47
The infiltration tests, yeah.

48:49
It's really important that those results feed feed into the examination, I think is as early as possible, or at least, that you engage with the parties on on those results, so that everyone can have can feed back into examination. We've already got deadline 1112 and 13. Left and really by 13, what we want as people's finals panel positions on that.

49:13
Just want to make sure that the applicants are aware that that's what the examining authorities would like you to do, obviously, that they all set deadlines. But if you were to submit something in between then obviously the examining authority Do you have the discretion to accept or the submissions at other points in the examination if we choose to do so.

49:32
Is that understood?

49:34
Our primary grasp of outcomes? Absolutely. We will submit those results as soon as they become available.

49:40
Thank you very much. Mr. mcgillis.

49:44
Okay, well, we move on to B which is indicative design to question to the applicant.

49:52
In the first instance, it's really just a clarification. So at issue specific hearings, 11. You said that the location of the space

50:00
Were indicative only and that the final detail design could look very different. We could end up with several smaller basins, for example.

50:07
But given the areas of the infiltration tests that you've done, and I presume the the infiltration test that you're doing this week and next week are in a similar or in similar locations,

50:17

can you now say with more certainty that the final detail design will be roughly in this location and consists of two large spaces,

50:29
brown cross party applicants,

50:34
I think there's danger and prejudicing the post consent consultation that we've committed to within the substation, same principle statements in terms of higher the overall master plan of the substation area could look and indeed, the overriding influence factor will of course be the final grant investigation works and insufficient results to establish whether infiltration is viable or indeed the extent to which infiltration can be can be used within within within the site, it is fair to say that it is not general area to where we are considering for the surface water drainage, it is it's eminently sensible location, it's downhill effectively from the from the substation infrastructure, it's helpful from the point of discharge to the first and watercourse and it's an it's an area where we consider that we have adequate adequate space within the work areas and our limits to accommodate both surface water drainage and landscaping. The sizing of the two sons basins, however, are very much subject to detail the same they may be very different in terms of state they may be very different in terms of the amount of water direction you need to store within those sub basins depending on where we arrive at at the detail the same stage for for for instance strand dine times, if grain time f3 and dine times are achieved when we remove a significant portion of capacity from those subspaces because we no longer need to accommodate the a follow on test which is the ability to store a one to 10 year storm event within 24 hours of a one on 100 year storm event. So, so all these measures will come into play at the detailed same stage which will influence the size of the salt ponds and also the consultation with members of the local community on the landscaping aspects will also influence the the the shape and configuration of that area.

52:35
Okay, and then leading on from that. Previously, you stated that

52:44
the indicative designs for infiltration

52:48
when viable because of other other constraints on land use such as landscaping and biodiversity for example, in your response to the rule 17 design and layout of the substations submitted on the 21st of May you conclude that none of this none of the proposals be that infiltration hybrid or attenuation would actually influence the proposed landscape strategy.

53:17
So are you now saying that because of those initial results, although we do appreciate that both the ACS and the council don't agree with all sorts, but is it your opinion now, because of those initial infiltration, infiltration test results, that

53:32
you can deliver an infiltration only scheme on the site without prejudicing any of the landscaping or biodiversity mitigation

53:43
parameterless toward applicants. So, that statement was made on the basis of the Sun spaces that were presented within that rule 17 submission. So, based on the infiltration rates that were adopted based on the factor of safety five that was adopted based on the the size of the substation, the footprint of the substation, and therefore the amount of water that we were receiving within the substations, the calculations generated the size of sunspace and route be required for an infiltration only solution and based on those calculations based on noise input parameters. The conclusion is that though that is not too dissimilar to the attenuation only solution, three are presented within the the artline operational response plan, where our position is that that is a practical solution in terms of footprint and integration with other components of the master plan landscape biodiversity, given that given the infiltration footprint that we presented as part of the real 17 letter is very comparable to that attenuation only scheme, then that scheme we were considered to be practical, but there again there are so many variables and the will can only come out during the detail of saying there will actually influence whether the infiltration pond reduces at the detailed science

55:00
r&d would need to be increased, in which case we then get into another discussion about what is practical and what is not. Okay, and just filed while talking about land and the order limits in your deadline 10 submission, you see that suffolk county councils view that an infiltration only scheme being given priority doesn't give any consideration of third party land and the need to justify such land through the CA process and

55:28
the availability of alternatives, for example.

55:32
But isn't it the case that when you're initially selecting the site when you're going through the site selection, that's the ability to drain the site site should have fed into the amount of land that you would have needed.

55:49
On prime grounds for the applicants? Absolutely, it takes into account the land required for landscaping which we identified.

55:57
Red from the outset, as part of the site selection process, we identified the need for landscape attenuation, landscape mitigation measures to be implemented at the Preston site.

56:09

And again, we stand by the obsession, the order limits that we have established are more than sufficient to accommodate a successful surface water drainage system. The question posed by Suffolk County Council is infiltration only about it that is the in summary data state the area of District between ourselves and stuff, the kind of council Council, lead Local Lead local authority are focused on focus then on an invitation only solution. Whereas from a master plan perspective, we need to take into account other matters such as landscaping, biodiversity access, public Raceway, etc. And so we must look at it from

56:51
an Integrated Master Plan perspective rather than a single

56:57
surface water management

56:59
consideration. Okay, I understand what you're saying. But the hierarchy of drainage in the National Planning practice guidance states that the aim should be to discharge surface water runoff as high as the drainage hierarchy as reasonably practicable, with infiltration being at the top of that hierarchy. And that's the point that Suffolk County Council have been been making

57:21
all along. So, in that case with the with the need for land to satisfy the policy requirements not have met the justification for the CA test and needing that London in the first instance. So, if if the policy test is that you start as high as the drainage hierarchy is possible and infiltration is at the top of that hierarchy, then in terms of the amount of land that you would need, would that not have justified that

57:49
call in some of the African in terms of the the the the approach, it is a hierarchy, and when phrased using terms like generally the aim of the discharge of the surface will obviously be higher up the hierarchy as reasonably practicable. reasonably practical, includes land, and the same document introduced the hierarchy, it went on. Similarly, a particular discharge route, which would not would not be reasonably practicable, when alternative would cost less to design and construct

58:24
insofar as that the phraseology generally reasonably practicable. And then the following text in the discussion of hierarchy, and cost,

58:37
is my submission, it's got to be reasonable. And one of the criticisms here is if we took even more land, is that justified, when there is actual alternative to the drainage potentially alternative drainage solution, there has to be a balance to this. And insofar as the the applicants amount of land that it's sought to acquire, it is sought to acquire

59:02

sufficient land to both master plan and area 33 has always been a drainage area, sufficient land to achieve those balances. And I think one of the key points about this is that even if we went for a hybrid scheme, infiltration can still be maximised. A hybrid scheme does not mean that you've immediately left to essentially a tear down within the hybrid scheme, you can seek to maximise the ground infiltration. And that's part of also the work that we're doing now in terms of the infiltration testing, because clearly how effective in terms of infiltration at the scheme will be will also be dependent on where you place it. So that's also one of the other reasons for understanding the various infiltration rates, in terms of sectors that in terms of that design, even if it's a hybrid

1:00:00

You can manage it. So I don't what I would, what I think's really important to understand is, is that hierarchy is not binary in the sense of you, if you move down slightly into tier two, it doesn't mean you have to go entirely to tier two. So you can have a system that is generally primarily driven towards infiltration, but has the backup for a essentially a discharge as well. And that is countenance within this guidance. It's not stated in terms that you have to go for an infiltration only scheme. That is not the policy, it's not the guidance. And there's a balance to be struck, in terms of the various options that are available. And that's the point that the applicants have been making all the wrong, that we've looked at, at large, we've looked at things, our ultimate position is that irrespective of whatever the results we get, and we'll come to this at the end, is that a hybrid solution is likely to be the one that the applicants favourite is going to be a number of reasons for that, but we'll get to that conclusion. But in terms of this process, that policy framework is not absolute. It's phrased in language, where it's got to be reasonably practicable. And we've already been through the amount of land that's required, and at various parties to this examination, on the one hand of leading entirely contradictory positions. One, we're taking too much, one we're taking too little. And the simple point about that is there is a balance that needs to be struck, particularly in national infrastructure projects, which have large scale and require larger areas of land that are balanced, has to be fairly struck. And it has to be necessary to acquire land. I can see in circumstances if we acquired the further fields north of Friston for further drainage infrastructure, people saying, well, what's the alternative to acquiring that further land? Well, yes, there was, there was a slightly different discharge system. And that is all this is all predicated ultimately on where we get to with these results. But as I say, in terms of a process of acquiring land, there has to be a balance, and it has to be one quiches struck appropriately. And I don't think in terms of where you have a policy that is phrased in these terms, that you could turn around and say that we're going to acquire significant areas of additional agricultural land. For the purposes of meeting this particular drainage requirement. I think you do have to look, you can't look at this in one single element, you'd have to look at this in the hall and in the round relative to the projects that have promoted in terms of the landscaping, that have physical requirements to apply for development, and the drainage and has the appropriate bounds, pinstriped in terms of the amount of land that's required. And we'll come on to look at, as I say, our ultimate position, but we are still very focused on our process on delivering as much infiltration within the scheme as possible. But equally there are fallback engineering solutions, that mean that we can deliver a perfectly acceptable drainage management system within the confines of the land, which we promoted in terms of the order limits. Thank you, Mr. Lewis, I think I think our point is that actually, was a suitable drainage management plan, part of the initial site selection,

1:03:25

or are we trying to fit? Or are you trying to fit a drainage strategy in the land that you find yourselves with? Because actually, the operation, the outline, operational drainage management plan wasn't actually submitted into the examination until deadline three. So it was some way, you know, after the submission of the application, I think that's our point is did the drainage feed into the initial site selection, are you now trying to fit the drainage scheme into the mandate that you've got

1:03:51
some of the outcome, the requirements for drainage rules known requirements to provide adequate surface drainage, it was part of the process of why the volume of land in 33 was identified, it is clear that not all that land

1:04:05
is required for landscaping, and we are looking at there was always intent, there was always going to need to be surface water attenuation are what we are through today is debating it to some extent, various options.

1:04:21
And what the leader for authority who are pushing for is as much infiltration as possible before, we're looking at secondary hybrids. And that is what we're hoping to get him for further information on and it'll help to define it. But in terms of our process, it was always open for there to be hybrid solutions and one switch would potentially require that and I say the policy situation, at site selection stage is one where it is what is reasonably practicable, and one has to form a judgement at that time what is reasonably practical in terms of footprint

1:05:00
And certainly, we've actually squeezed the footprint further since application in terms of managing to to narrow down the skies of the the substations, which in turn has offered even more land available for drainage. So, insofar as where we start with not have more land than we originally anticipated, there's more opportunity for infiltration. And if you look at the boundaries, which are set to the development area, they do form logical boundaries in terms of a development area. If you look to extensions into further size, it's in a different character, and will be in two different fields, just north of Friston, those are matters, which we certainly would not want to achieve. And that would have other consequences. And no doubt, we're going to come on and discuss those. But they start to bear and become much closer to other receptors and bows would all be perfectly just to take into account of what is reasonably practical and ultimately, in the design, and certainly, we'd support the

1:06:05
the council's local plan policy recognises that this is an important balance to be struck. The key issue is can we adequately and safely deal with the surface water that was performed by environment? And the answer is there are a number of solutions are that are available out what we're debating here is essentially the nuances between them, we're very comfortable that we can deliver that even if infiltration rates come back is very poor, because there are alternatives. And that's that's the point. And so I say we we and the company are fully aware at the time of developing the project that surface water drainage would be required. And we were certainly aware of the simple extent that they would be

acquired given the scope of development. And as I say, there are parties before this, this examination and now saying you should be bigger, but equally this this, this examination also said we should be smaller. And that's the balance. And as I say the policy position is very clear. It's what's practical. It's not an absolute.

1:07:10
Mr. Tony, I can see that. I've also got Mr. Bedford so I'll go to Mr. Mr. Bedford in the first instance, Lancome to you that's all right.

1:07:18
Mr. Bedford.

1:07:22
Thank you, Madam microbead for Suffolk County Council. Muller is there's an element of Groundhog Day in some of this discussion, because you we have gone over a certain amount of this ground during the previous issue specific hearing.

1:07:39
I would think it's just important that the county Council's position is not mischaracterized which there is perhaps a danger of it being seen in some of the comments that you've heard. We are not as it were,

1:07:56
sort of mano sighted on only one issue, looking only to one

1:08:04
drainage solution to the disregard of all other considerations. We obviously recognise that it is a hierarchy. And the hierarchy therefore implies that there is, first of all, a reason for looking at the top of the hierarchy. But there may be justifications for moving lower down on the hierarchy. But what is important is that you make an informed choice in terms of what is reasonably practicable. And that requires adequate information. And I think probably the best way I can put the point is just to remind refer you to what we said. And I'll just give you the reference in our submission. Rep. 9044, which obviously went in at deadline nine at section four of that was our comments on the applicant's flood risk and drainage clarification note, and we kind of particularly on table 2.1 of that which dealt with the approach. And I just would draw your attention to the comments we made in three paragraphs against that table. 2.1. I think they fully set out that position where we've recognised the reality we've recognised by hierarchy that we say there needs to be adequate information in order to justify the applicants approach. That's really the key point.

1:09:31
Thank you, Mr. Buffett. Mr. Attorney.

1:09:35
Thank you, Madam Ridge attorney for spaces that there's a lot that was wrong with Mr. Eunice's speech just now and I just want to pull out two points. The first one is that it risks giving the misleading

impression that surface water drainage and surface water flooding were any part of the site selection process? They were not. We've already established that in the course of the examination process.

1:10:00
That's absolutely clear. surface water flood risk Alfriston was not a factor, which was taken into account in considering site selection. And so when Mr. Ennis says, Well, we have to strike a balance, and we had to strike a balance between what was required for surface water drainage and all different solutions. It simply wasn't done. There was no account taken of that when the site was selected. And I have to say, frankly, his answer to your follow up question on that was not accurate, it was not accurate. It was not considered. There was no consideration of this issue. And what has then happened, it is precisely what you described, which is the retrofitting of a solution to a site that was selected. The second point, as we've made it, that gets to the heart of the suitability of risk, and it goes to the heart of the suitability of this site for us as proposed. The second point is that Mr. Ennis, sort of hints in, I think, on three occasions that my clients are being somehow inconsistent in terms of their approach to the frisking site, whether there needs to be more than four surface water drainage, or whether the site is too big. We're not being inconsistent. The simple proposition is that this site is unsuitable for the development proposed. One of the factors of that is that it is unable to accommodate sufficient surface water drainage provision to address the actual risks in this actual location. As well as addressing other issues such as landscape mitigation, it is unsuitable for that purpose. A bigger site might be suitable, but it's not this one. That is opposition. We've been consistent on it. So those two points, I do say, are really important in this examination. And Mr. Ennis, in suggesting that somehow a balanced has been struck consciously, is not being accurate. The true position is that the applicant has come to the site alized upon the site, and then thought about surface water drainage, and then looked at the issues surrounding it, and then is promoting an approach through the drainage management plan. Thank you.

1:12:13
Thank you, Mr. Attorney. Mr. For?

1:12:20
Thank you very much, Madam, I just set out

1:12:25
east Africa Council's position on this, the council is neutral, and has no comment to make on the issue of whether a larger sites should have been selected at the outset to ensure that an infiltration only solution could be adopted. What we will say is that within the confines of the order limits that are before you. We support the county Council's request for further information. And we note that that's going to be forthcoming. Hopefully it deadline 11 if not deadline 12 to inform the decision on whether infiltration only is going to be possible. But what we would say and have said before is that the drainage solution, obviously, is one aspect that has to be considered. But there are others such as landscaping, which have to be factored in. And we don't think and i don't think anyone's suggesting, but certainly we don't think that it should be an infiltration solution

1:13:26

at all costs. And so we're happy to consider the information that comes in. We note that at the moment, the applicant is saying that even with an infiltration only solution that wouldn't compromise the landscaping that they've previously promoted. And we wait and see if that remains the case when they have the additional information. But as you know, he suffered council consider that they should be the discharging authority on this topic, because they would like to factor in not only the drainage solution, but landscaping and be able to factor all of those in in order to discharge the relevant requirements in due course. And yeah, and I think I think those requirements are something that we will come back to on in Friday's hearing on the draft development consent order. Yes. Thank you.

1:14:17
Okay, with the the applicant like to respond to any of those points made there. Before we move on.

1:14:26
I'm curious about the African I just want to come back to a couple of points made by Mr. Turney in terms of the potential for flood risk to the to the development that was a matter of which was considered at site selection. We did obtain data, it was analysed. So Frederick was considered Furthermore, in relation around the country a clear sign that there's two issues, flood risk, and the question effectively, of what we how we propose to manage our surface water

1:15:00
And that is part of the project design. Through the environmental impact assessment, we did evaluate potential for

1:15:11
the whole question of management of that surface water. And you'll see that in a chapter, what, obviously, one matter that occurred subsequent to the application being submitted was the event and Friston and the subsequent report by BM t quarter, which was commissioned by the lead of local flood authority. And insofar as that at the previous hearing, we did discuss aspects of that report, and we have responded in detail to that. And insofar as it had relevance to the site, we've dealt with all those issues. And the fundamental issue in relation to the dog project is, we obviously fundamentally disagree with safeties about our ability within these other limits to produce an effective drainage solution that does not increase flood risk downstream is our opinion of our experts, that that can be achieved. And what we're debating, as I say, is the issue about which particular option might be utilised and the land use that may be arising from that. And the issue here is that that will be influenced by a series of factors, I don't want to go over the detailed design once we've been through it. But ultimately, we've got to decide how much mitigating and then it will be subject to detailed design. And we'll have the information about water tables. And from that, we'll be able to decide which of the options is the right one, and the council and others will be able to fit in to that process. So we will have because we have to discharge that condition, or requirement. So insofar as the position has been well, we have assessed an ability to mitigate the surface water. And our position is we can and it's a question about which option will be delivered. And we are seeking through the development of detailed survey work to decide which option is best. And I say, we'll come back perhaps the end of this to say why we say a hybrid report would be best. But insofar as we're working through it, we just don't accept that there isn't sufficient land within the order limits to actually mitigate it, because there are a range of surface water

management options that are available within the hierarchy to achieve that. And I don't think there's anything else I want to add at this stage. Thank you.

1:17:35
Mr. cop, did you have any final points you wanted to raise on this item? Before we move on? I didn't. Um, thank you very much. The first point I would like to make is kind of to respond to minister in his his comment, the the rag assessments that were done for the site selection, they they did look at flood risk. And that was a term that he used, but what they looked at was fluvial flood risk. They looked at river flows. They didn't look at pluvial flood risk, they never looked at surface water, they were included in the risk assessment as part of the of the weighting and criteria. If they had, it would have been blatantly obvious that the Friston side was going to be problematic, and that they could have considered other other locations for this for this infrastructure. And that, you know, that that's, that's material fact. That's that's in the documentation that has been provided.

1:18:24
The second point I wanted to make is to invite you to to be directed back to

1:18:33
ESC zone policies. Where s CLP 9.5. States clearly that developments must not increase flood risk elsewhere.

1:18:44
There are policy sclk 9.6 states that suds should be integrated into other activities, or into other drivers on the site. But there's a clear difference here between must and should. And there's a clear, it's clear that flood risk has to be prioritised.

1:19:05
Especially for the residents of Freston, when compared to other drivers on the land take on the side. And the biodiversity landscaping, I'm sure are of importance, importance to the village but not nearly as much as being as being flooded out. So this is an issue. So going back to their own policy. This This was obviously other issues had to be taken into account. Development must not increase flood risk. It's it's clear, it's currently black and white.

1:19:37
The role of infiltration is is fundamental to the schemes for controlling flood risk, not least of which getting water into the ground controls the total flows that leave the site. Total flows will increase because of the impermeable areas that will be that will be created. It's one of the primary methods The only mechanism actually to get to reduce the total

1:20:00
flow, otherwise, the total flows are held and retained, and then they are released at lower discharge rates, but it's the only mechanism available. So from our point of view, the the issue at stake here is whether it whether the applicant has actually proved the viability of the infiltration option. And if they

can't, are the other options viable. And I know that's a point for later on in the agenda, so I won't go there.

1:20:25
And the evidence produced by the applicant this afternoon, is that they do not have a good handle on infiltration rates, you know, 40% of the tests failed to actually provide a meaningful infiltration rate at all. There is enormous uncertainty over whether that will work. And he's getting down to this issue of whether it's an infiltration only whether it's a hybrid or whether it's, it's an attenuation only whichever schemes they put together, they have to be viable, and that and that viability has not been demonstrated, and therefore there will remain a flood risk to Friston village without the viability issue being put to bed.

1:21:05
Thank you for that, Mr. Carter.

1:21:08
I'll pretend to the opposite. They would like to make any final points before we move on to item C.

1:21:18
Firstly, with regards to the flood risk of B being only related to fluvial flood risk, the flood zoning that is applied or planning on a applies to fluvial and coastal flooding, it does not include surface water, flood risk, the surface water flood risk maps are separate. And although there are areas identified on those maps, I would point to the surface water management plan that was produced by the FAA, which basically says there are no properties at risk of flooding on a one in 200 year event. So based on their evidence, then is it seems very difficult to justify the statement that there is a surface water flood risk and Freston. There is obviously flow conveyance going through a restaurant. And we see evidence of that. But the evidence seems to be contradictory in that we have one party saying, one in five year storm has caused flooding, whereas the surface water management study, which in my opinion, I believe is quite a robust, you know, you know, significant study says there's no flood risk kind of wanting to 100 year event, so that there's contradictory evidence on that side of it.

1:22:41
With regards to the benefit of the scheme, the site is going to retain a 100 year plus 40% climate change,

1:22:52
plus a one in 10 year plus 40% climate change plus a 300 free bond plus a 200 freeboard. There are so many safety factors being applied on this site on top of each other. This is probably the most onerous requirement I've ever seen on any site anywhere in the UK.

1:23:11
And whilst that may be required in this part of the country, I have to sort of point out that this game will not increase flood risk at first, it will retain water, that means it will pass less water forward. And I cannot understand some of the statements that have been made.

1:23:36
Okay, thank you, Mr. Williams.

1:23:40
Matt Williams county council, I don't propose to respond to most of the comments the applicant is just made. We've already covered that ground. But I will just comment on the comment that has been repeated that there is no flood risk in Friston for the one in 200 year event. As per our modelling, that is incorrect. I think the applicant is referring to there not being any demonstrated flows that would present a flood risk from their proposed development sites, for one in 200. Not in frist. And indeed, the residents in Friston whose homes have flooded would completely disagree with that. Now, that does not mean they'll meet that surface water management plan shows what the Greenfield situation is as is now not with development. And a lot of the flows from Greenfield at the moment are retained within the channel. Now obviously, if there was development and those flows were to exceed the base and then there is a potential for that, that channel to exceed capacity. We could only understand that through detailed modelling which we understand is not for this stage, but I just want to highlight that the statement made by the applicant today on numerous occasions at first and is not addressed during one and 200 as a Greenfield situation is incorrect and with development. Well that has not been assessed.

1:24:53
Thank you Mr. Williams. Mr. Carpenter.

1:24:59
Thank you, Mr.

1:25:00
It's quite common to say C's, I think Mr. Williams has made made them the main point, you know, they've been stressed in a substantial body of of documentation made available a lot by the Council itself,

1:25:13
about the flood risk in Friston The village is is flooded approximately every two years.

1:25:21
The that it is, it is a nonsense to suggest otherwise.

1:25:27
The the use of flood zones in planning that the applicant refer to these flood zones are flooville their river

1:25:36
but the the LPS and the nfas have to take account of all flood risk in their planning decisions. And these are just one of the tools that are used. So, it's again, it's misleading to refer to refer to to just those just those zones.

1:25:52
You know, we have we have mentioned on numerous occasions that you know, there is a lack of monitoring in the catchment, despite the many years that the applicant has has obviously had interest in the area, there's no there's no rain gauges, there's no there's no flow gauging which means that the model that was developed

1:26:10
that has been mentioned, whilst it is clearly followed best endeavours, it remains an uncalibrated model.

1:26:18
And the residents have

1:26:22
stated that the the predicted flood levels that to dry from that model Dino do are not consistent with with what they observed in the village. So, you know, this model should not be seen to in to have an accurate

1:26:38
representation of of centimetres depth for flooding in the village. You know, it is it is part of a set of tools that are used to explore the issue. But at the simplest, simplest consideration it's uncalibrated against flows in the in the in the watercourse and therefore it remains it remains only an approximation and the there's ample photographic evidence which the applicant will have had access to, to demonstrate that houses and streets are flooded in, in Friston on a regular basis. Thank you. Thank you, Mr. Codd. Okay, I

1:27:16
think we will be to a break in a moment. Are there any final points that the applicant would like to make on this matter before before we break?

1:27:29
Mr. Davis?

1:27:31
Thank you, Mr. Paul Davis, for the applicant. With regards to the statements I made earlier on, I was simply quoting the table that is in the surface water management for these states that there was zero properties predicted to flood. And bear in mind, this is a prediction, not talking about a record of event, zero properties predicted to flood in the baseline event that was modelled, which was the 2019 event.

1:28:01
And that even there were other results. The result I was quoting was the fact that it states zero properties were predicted to flood on that baseline event. This is not a Greenfield, this is actually the whole first and it was covering. And this isn't just talking about flows from our site, it did actually

highlight potentially seven flow paths enter first of which our site owner represents one of those flow paths, and is probably a minority of the water that contributed to the event. So I apologise if I've misled anybody, but I'm simply quoting the results. It was stated in that report. And as I said, I think it was a fairly robust, comprehensive report, I am well aware of the limitations of modelling

1:28:49
and it will not take account of local

1:28:53
events or local things that the model will not picked up. So, you know, but I think it was a very robust study. But it does not seem to substantiate this statement of being a significant area of flood risk.

1:29:10
Thank you, Mr. Davis. Mr. conradie some final points, because I would like to move to a break so that because we've still got some, some way to go to get through.

1:29:21
Thank you, Miss Jones. So I just wanted to make the obvious point, that there are many residents whose houses are flooded in the system. So in the model, the model is only as accurate as it is, and clearly, it's not as accurate enough to to provide the level of granularity to represent the floods. So it's all models require calibration is not calibrated. It clearly moves at the understanding of how water flows through Friston you know, to another degree of accuracy, but it clearly short falls short of,

1:29:54
of accurately representing the, you know, the flood events that have been observed and

1:30:00
any reference to it should be you should reflect the fact that it's not it's not actually predicting or projecting the the flood that is observed by the verges

1:30:12
Thank you. Okay. Then just before we move to the break, as the apple got any final points they would like to make

1:30:21
no

1:30:23
mistake for napkins just to say No, thank you.

1:30:27
Okay. In that case, we'll take a short 1010 minute break and we will return up half past three.

1:30:36

Thank you, everyone.