TEXT_ISH1_Session2_A47Thickthorn_170112 021

00:12

Welcome back. The hearings resumed just picking up where we left off. Well, I just like to confirm Can Can anybody hear me? First of all?

00:30

Yes, I can confirm we can hear you,

00:31

and has the recording of the event recomends. I can confirm the recordings commenced, and the live stream is active too. Thank you very much. I just like to have a quick recap. So we we left off agenda item two, which was discussion on traffic and transport matters. I would like now to move to Agenda Item three, which covers design landscape and visual impact matters. In a broad sense, there are a few specific areas I'd like to explore in terms of finding out a little bit more about elements of the evidence that forms the examination. In order to again just to facilitate discussion for that, what I would like to do is for the applicant, just to explain and confirm the approach to design. And with that in mind, how the development meets good design principles. So again, Mr. Fry, if you would like to introduce one of your colleagues to deal with that, I'd be grateful.

01:58

So Michael Fry, the app can absolutely I'll hand you back over to Mr. Williams, he'll be addressing you on design. I'll also float now and introduce to the examination, Mr. Paul Bennett, who will address your own heritage. Mr. Philip Black will address your landscape in due course under this agenda item and I presume that the both of them will introduce themselves at the relevant times that do I hand over to Mr. Williams now?

02:23

Thank you. Yes, sir. Mr. Williams.

02:27

Thanks, Sir Ben Williams for the applicant. So the scheme was developed by professional independent engineering design consultancy, its experience in the delivery of major highway projects and employed by the applicant, the design applied industry approved standards and the good design principles. So, Chapter Three of the scheme design report, which is at one to seven describes how this scheme considers each of the principles and how each of the principles has been applied within the design of the scheme, along with the additional considerations of how the scheme sought to reduce carbon emissions. This chapter explains that there are 10 principles of good design, which should be implemented by the scheme as identified within the highways England strategic design panel progress report, good re design. In addition, a hierarchical approach to carbon management has been applied, which applies the principles of build nothing build less build clever build efficiently as described in

PNAS 2018 Carbon Management in infrastructure. Further information on how the good design principles are applied, are in Section 3.1 to Section 3.12 of the scheme design report. We therefore consider that the scheme has been developed in accordance with the 10 principles of good design, and the UK dmrb GG one a three good re design. These These cover the principal objectives identified in the NPS. Further information on the accordance with the MPs is contained within the national policy statement for national networks accordance tables, which is AP, one to six. So, are there any questions on on that specifically?

04:36

Yes, thank you for setting that out. Mr. Williams. I've got some specific questions relating to the new footbridge design over the 47 for discussion. There are currently Lane link road and also the carriageway and the new underpasses within the scheme. just with those in mind I just like you to explain or one of your colleagues to explain starting with the existing overbridge in the replacement overbridge proposed what what are the differences between those in terms of design differences?

05:25

Okay. Ben Williams for the applicant. So, as noted in the 2018 scheme assessment report, the existing footbridge across the A 47 accommodates a 1.8 metre wide footway with 1.1 metre high parapets, foot bridges stepped with a ramp provided on the right hand side of the footpath to allow cycles to be wheeled across isn't suitable for questions and is not compliant with the 2010 equalities act. WC H surveys confirmed that the existing footbridge whilst only being footpaths status is regularly used by cyclists and even the occasional equestrian so that's the that's the existing Footbridge. The new bridge being proposed will be located approximately 40 metres south of the existing footbridge. It's been cited to minimise the detour from the existing route. So that detour is approximately 70 metres. It's also been like a to keep the span of the structure to a minimum and to use the existing topography to reduce the visual impact. As detailed in the response to the first examiner's questions, specifically D 1.1. The bridge and its ramped approaches have been designed in accordance with CD 143, designing for walking cycling horse riding, and see the 353 design criteria for foot bridges, with maximum gradients of 5%. And the footway, with a 3.5 metre wide clear width to facilitate users in both directions. We've also been cognizant of the advice provided by the British Horse Society and its advice leaflet advice on bridges gradients and steps in England and Wales. In this respect, a 1.8 metre high parapet will be provided and the surfacing will be rubber compound or similar. The bridge will be a single span steel truss structure, which will allow it to be prefabricated off site and installed during a single road closure to minimise the impact on the on the road network.

08:06

So, in terms of the the bridge, the footbridge architecture itself could the applicant give any indication of how a local design or local considerations have been taken into account in in that design? Or is it is it a standard if you like footbridge design that that could be potentially put in any any location? I'm just trying to understand the line between where any design improvements or architecture changes could be made to meet local conditions or requirements if needed, if the applicant could just clarify on that.

Yes, thank you, Sir Ben Williams, the bridge has been designed to be functional and in terms of its local sighting, there is bonding provided to the to the east of the A 47 Which screens the bridge from the crinkle foot development and there aren't that many other visual receptors in the local area apart from the uses of the a 47. So the design is is functional. There hasn't been a local design review at this point

09:57

and if say circumstances, I'm not suggesting that this this would take place or not. But if the say that there was a request for a local Design Review Can you give any indication of how that would be dealt with in the in the development concern to order, or at least enable it if it did want to take place? If it was deemed at a local level, a design review was was something that they would like to be pursued? Or just like, just the applicants just views on that broadly? Or if a written submissions to meet on that, that that that's, that's equally fine.

10:51

Thank you for the question. We'll take that away. Make a written submission. So.

10:59

Okay, thank you. I can see. I think it's, well, there was 100 Raise, it's now gone down. Yes, Mr. Mr. Black? Do you like to raise something?

11:17

Yes, Phillip Black for the applicant, Landscape Architect. It was really just to speak to the former point, I think we've probably moved on since I put my hand up in the sense that seven, I just wanted to underline what Ben was saying regarding the assessment of the visual effects of the bridge. So the landscaping digital impact assessment that was undertaken by myself and my team did demonstrate that it wasn't widely visible. And that's the that's the reason why. Out of the landscape assessment, there wasn't a requirement identified where we needed to consider the design version in further detail. So that's the reason why it hasn't been taken in that direction at this stage, it was just to underline that point.

12:00

Yes, understood. Thank you, Mr. Black. Okay, I've got a few more questions on design and function issues. Just going through those. Again, just as a point of clarification, if there were to be any requests for perhaps any tweaks or changes in the design at a local level, or just like the response of the applicant of how those would be generally dealt with. I know that I know, that is a part of the response to the written questions, but I just like to just clarify that in a bit more detail, if possible.

12:57

So Michael Fry for the applicant. It's it's difficult to deal with that, in the DCO. There are provisions for detailed design to to proceed as the scheme goes forward. Once it hopefully gains consent. The applicant would obviously take into account any representations made throughout this process as design but just draw your attention, sir, to the criteria for what good design is in respect to motorway structures, ultimately, with the within the NN MPs, paragraphs 4.28 onwards, and there's an acceptance by a government that that, in essence, motorway structures and road structures or road

structures and it is quite hard to make them them pretty. We need to be sympathetic to the to the local area and ascetics as far as possible, but ultimately, they they need to serve a function and a purpose. And that's the most important aspect of their design as Mr. Williams has has set out. So the short answer is the applicant will of course, consider any particular design points and the structures are all detailed in the engineering drawings. And there is a detailed design stage, but the short answer is that functionality and fitness purpose in terms of design are trumping the aesthetic values of that design. But as Mr. Williams indicated, we're right to further sir and particularly there's a written question that comes in respect of good design will happily set that out in in writing to the examination.

14:33

Thank you, Mr. Fry. Yes, board welcome not just in relation to the issues of function. Yeah, I accept that design covers could cover a variety of issues. But the issue of function, I take it any lighting associated or any bespoke lighting to the function of the bridge would also be picked up in The monitor that you suggest the Mr. Fry.

15:03

So there is there is a lighting plan. I looked at Mr. Williams to see if he's adding itself and he will have something to say but but yes, lighting, of course has been considered sir.

15:13

Okay. Yeah, um, Mr. Williams, it just like to clarify the issue of of lighting just covering the bridge. I understand there is a there's a lot in assessment. But if you could just clarify what lighting would be present on the bridge, and whether or not it being an enhancement or not from the existing provision from the applicants perspective.

15:39

Yeah, Ben Williams for the applicant. We've consulted with Norfolk County Council who will be maintaining the footbridge and the realigned footpath. And there's there's currently no lighting proposed on the on the bridge or the approach ramps, which is in line with the fact that the footpath either side is not lit either. So that's that's a map that we've consulted with Norfolk County Council on.

16:17

So I take it there is still discussion to be had at the local level on that from the applicant side, or is that is that completed now in terms of the consultation side of things

16:31

that's completed in that we're not proposing to provide any lighting on the footbridge or the approach ramps?

16:47

Okay, and just bringing that back to the existing bridge perversion, as does the existing bridge provision provide any lighting at the entrance point and exit point? I have visited the local area and I was aware of seemingly some lighting. I just is there a comparison?

17:15

Oh, that's

17:16

by the by the applicant?

17:19

Ben Williams the applicant? Yeah, that that's something that we can take away. We're not aware of any lighting on the actual structure itself. Standing on the structure is so under standing, that the approaches aren't lit either and that's that's true, as I said consultation with with NCC Norfolk County Council.

17:41

And thank you, thank you for confirming that. I've got a question for the well, the local councils Norfolk County Council. First of all, Mr.Cumming just in terms of context. Just for my benefit review here in terms of understanding, does the county council have its own in house design expertise when they're assessing the components of the scheme? In conjunction with perhaps the local authority or it? You know, did? Is it ever the case that local Design Review takes place on on on schemes in terms of how you deal with them locally?

18:55

site, I'll repeat that for the the audio microphone in place. So David Cumming for Norfolk County Council, I can confirm that we do have our own in house design teams and expertise across a broad spectrum of areas, and hence why I'm having to take some of the things away from today to refer to those appropriate specialists. So yes, we do have that. In terms of the projects that we take forward. I think probably what you're referring to is beyond perhaps the simple design of a, you know, a functional footbridge. And yes, so if we were, you know, we're pursuing our own scheme in that respect, we, you know, might have to take outside advice on the design quality of it, but in terms of, you know, a as I say, a simple functional design of a bridge or other structure. Yes, we, you know, have some capability in house but we do They also have a term partnership with some specialists, consultants who be able to to undertake that.

20:08

Thank you, and just also bringing in the Norfolk Council. Would that be consistent with your approach locally? Norfolk Council?

20:24

says David Cumming from Norfolk County councillor, you direct that question me or one of the District Council, South Norfolk HIePRO.

20:31

I did mean the District Council. Apologies.

Thank you, sir. Claire Curtis to South Norfolk Council. We have our own in house specialists in terms of design, landscape architect, etc. And I would in terms of a local level, we've made that assessment in terms of the impact of national infrastructure, road road, bridges, etc, we would defer to the county council in that sense, and highways England. So we haven't made a specific design judgement on the on the road bridge, if that is what you're referring to?

21:14

Yeah, so I am referring to the road bridge. But I'm also just referring to the scheme. In general, it could be any element of the scheme. But I just yeah, that helps, just needed an understanding of what level of design advice the council would take locally and how that would work in terms of the overall development consent order being proposed. But I take it that there would be dialogue between South Norfolk Council and the county council in any, any design matters, or concerns that you have.

21:57

Indeed, we would do if it was at a local level? Yes. So we would. And we do as I say, we do have our own specialist, heritage and design officer. And, as I say, our landscape architects as well, which assess those design implications. So we had no matter to raise with regards to this particular project.

22:19

Thank you, thank you for confirming that. I'd like to move forward please, to some discussion on the environmental master plan. Unless any other party wishes to raise anything further, will sort of allow people to come in if they want to raise another point before I do that. Say that is a no. Okay. So in terms of the environmental master plan being proposed, I would like the applicants team, just to give an overview of those details. And just clarifying the relationship between the environmental Master Plan and the shedule. Monument to Tommy ally and big would just as a snapshot of any potential harm being referred to there is any harm in terms of the applicants views better and benefits, also covering some of the cultural heritage perspectives and saying that so if I could just ask the applicants team, is it Mr. Black, you're dealing with that Mr. Black, are you?

23:45

It is Yep. So Phillip Black for the applicant, and landscape architect, and was part of the team that undertook the landscaping visual impact assessment, but also coordinated the production of the environmental master plan. So to introduce the environmental master plan, I'll just run through a few points and then possibly involve Paul Bennett to expand a little bit on the cultural heritage issues in relation to the sheduled monument. So the environmental master plan has been produced by the applicant, it's document a PP. 123, as has been previously mentioned, as I've said, the master plans production was coordinated by a professional landscape architectural team. And that's the team same team that undertook the landscape and visual impact assessment within the environmental statement, which is document 44, I believe. The environmental master plan was therefore principally driven really by the findings of the landscape and visual impact assessment. And in particular, if you drill back down into the landscape visual impact assessment, you'll see that the the assessment of landscape character effects focuses on the tributary farmland farmland with Parkland character area. The entire scheme falls within that same character area. So that's that provides us with the baseline landscape character against which we develop the environmental master plan. If you wanted a bit more information

regarding that baseline understanding of that character, there's a useful table description at table 7.2. Paragraph 7.7 point 32 of chapter seven at the IES that's document 44. And we started with that landscape character area. And then the master plan clearly sought to achieve landscape integration, where necessary visual screening in terms of responding to the assessed effects, but also in reaction to local policy. There's a point worth emphasising the Master Plan was informed by the local policy context. And I'd refer you to paragraph 7.3, point two to 7.3. Point five of chapter seven of the IES again, document 44 that sets out in in a little bit more detail exactly what that planning policy context was. And in particular, the need for us through the environmental master plan to maintain some distinction between town and country. And that's one of the aspects of the local landscape character policy context. The master plan objectives, again, referring to a section of the landscape and visual impact assessment chapter of the IES so within paragraph 7.9, point two and seven, point 9.3. There's a summary document 44, which summarises the objectives of the master plan in response to the landscape and visual impact assessment, again, emphasising that maintaining the distinction between town and country and responding to the specific landscape character of the tributary farm with parkland. There was an iterative process to minimise adverse effects and to integrate great the scheme into its specific landscape context. And that focused quite heavily really on the rural character of county Lane south. And one of the main themes running through the landscape and visual impact assessment. And the environmental master plan really was to, to seek to maintain the rural character county Lane South, as distinct from the adjacent urban areas and trunk road. It's true to say that one of the main functions of the environmental master plan was to identify areas of proposed tree planting. So opportunities for tree planting have been considered across the whole scheme, subject to constraints and other considerations. And I'll refer you to a written answer by the applicant so within the applicants written response to the examining authorities questions, specifically, our response to bio big o 3.2. That's within our EP two w six and that sets in some detail the various constraints to us delivering tree planting within the within the environmental master plan.

28:31

Although driven principally by the landscaping, Vision impact assessment and the landscape character context, the environmental master plan also captures other environmental requirements in particular, taking account of ecology requirements, cultural heritage that you mentioned, and also flood attenuation. The ecological considerations included matters such as the combination of bats, there are some issues there, the design of the company stream which is redirected, realigned, sorry, and the creation of a reptile habitat enhancement area immediately to the to the south of the new connection in cutting, but also the environmental master plan, coordinated responses to the cultural heritage considerations and, in particular, the location adjacent the new link road between Katelyn sighs and Norwich road of the two tomb ally which are scheduled monuments within company would. Those tomb lie have been identified within the cultural heritage chapter of the IES as being subject to a significant effect and therefore, as part of the production of the environmental master plan. I liaised quite heavily with the cultural heritage team to understand how we should treat the setting of that Shadrick monument Within the master plan. Now this is where if, if you wish I can pass over to Mr. Bennett who can expand a little bit more on on exactly what our strategy was in terms of the setting of the schedule monument and how that's reflected in the environmental master plan.

By all means, do that, Mr. Black? Yes, that's fine. Okay.

30:25

Good afternoon, Sir Paul Bennett for the applicant.

30:27

Good afternoon.

30:30

So, briefly, I was not the person who actually did the assessment, I have been briefed by my colleagues who did, they're not available today. Our approach in this was based on discussions with Historic England, and the local authority, archaeologist historically, and do have the appropriate authority title in this one, but we kept the local authority in the loop for katzie sake. The things that we have in the master plan, there's only one thing that is actually noted as being specifically heritage base. And that is the the location of a interpretation board, and I'll get to that shortly. But there are things in there that are based on discussions with heritage and based on heritage considerations. And the first and the main measure that we took there was that in the excuse me, I'm looking this direction, this is where the master plan is on my screen. The the treatment of the embankment and verge in that area. So you'll note that on the South West, embankment the downslope environment, there is planting noted, but there is no planting on the northeast side, the closed side closest to the scheduled monument. I'll be referring here to the tumulus at the top, the north and north end, because that's the one that's that's closest to the scheme and isn't hidden behind other things. And thus, where the impact is greatest. So we've had much input now. So there's retained planting, existing punishments retained that is outside of the redline boundary. As that whole area has been excluded from the project, there was a discussion about whether that should be taken down or whether the red line should be changed there to enable a view from the road to the sorry, from the footpath where the interpretation board is towards the shedule monument. And what you'll see is that we've said that in our wording, we refer to potential views, or if a view is possible. And that's because the visibility of that monument isn't quite as important as its physical stability. And so if we were to grab up vegetation around there, then we might risk upsetting that physical stability and you want to do that

33:24

just take a drink.

33:29

The other thing is that the there's no plantings, there's no screening planting, and I appreciate that it is it is a thing that is seen as being the go to response to there being something a modern thing being put into the setting of a chatroom wanting more sensitive heritage assets, that the response is normally to screen it with trees. Because trees are somehow seen as better. In this case, that's that's not a valid thing to to put in as mitigation. Our impact assessment or the the effects that we're having is based on the shortening of views and notional views as well, not just actual physical views, but the foreshortening of that notion of view to the southwest downslope by putting an embankment in place. And if we were to place trees on that embankment, it would fall short in that even more. And so even though yes, there will be HGVs you know, high speed vehicles passing through that is transient, whereas the trees are

more or less permanent. I say more or less permanent, nothing's permanent in heritage terms, but that would be more of an impact on that notional view. And so by having as much open skies we can

34:57

retained we We're seeking to retain as much of that setting as we can. There is, you might know, a slight discrepancy between what's shown on the environmental Master Plan and the cross sections provided at

35:18

I'll just get the reference for you. Figure 6.4, which is a pp 057. And cross section two of that, you might know that there are retained existing trees, illustrated on that plan, right up to the base of the embankment. That's based on a slightly earlier version of the of the design before that was really bottomed out and provided to the console tees, for illustrative purposes, but it hasn't been updated. Since we didn't feel it was actually necessary to do that. Because it doesn't actually make any material difference to the setting assessment, essentially, because it doesn't add any more height, if those are shown, or constrained views any more than the existing vegetation that is being retained would show. But there is to be grassland between the base of slope of the embankment and the red line boundary, just to clarify that.

36:31

To get back to the interpretation board, you'll note as well that it is couched in terms of possibilities. And not a definite, this is a board it's going here and this is what it's going to say. And it will have a view etc. We're not going to guarantee that it will have a view of that because as I said, we're not taking down existing vegetation. Now, there are people on site at the moment doing some archaeological works, as we said in our previous representations, they were able to send me a photo from the site from the barrow, looking towards where that board would be. And it looks like vegetation does die back at it, the foliage does die back a bit. So there might be seasonal views. But there's a lot of evergreens there. So it's, it's not guaranteed and so we're not we're not going to guarantee it. But also the location of that board and the content of that board are to be agreed at stage five and detailed design. Mostly because the board is also a good place to put other information that might have come out with the trenching

37:45

and other heritage information. And that might be then more that did not necessarily to do with the trenching around the

37:53

the monument but you know, the trenching elsewhere. And so it might be better to place that somewhere else on kanilang. So we want we want to have our options open it is our is our firm intent to have a board but the exact content location will be decided later with the consultees.

38:15

You see, that's it design point five. Reference Did

you say? Oh, sorry, stage five that the detail design stage stage five. It will have to wait for the results of mitigation excavations and such like some.

38:38

Okay, thank you what I would. That's very helpful, by the way. Thank you for those contributions. What I would like to just touch upon is there are references being made to also to historic parkland. And I see that in relation to the County Council's local impact report. Just like to get some clarification from the applicants team. Were the boundary of any historical Parkland or historic Parkland associated to the thick Thorn Hall broadly furnishes its relationship with the environmental master plan. Possible.

39:44

I'll just see if I can get that information quickly. From from my side, and I'll defer to Mr. Black in the meantime.

39.53

I can help insofar as I immediately have a reference for a plan showing the boundary but just to Whirlpool perhapses is looking for that information. So sorry, fill fill it black for the applicant. Thick Don Hall, as you've mentioned, is located to the north of the a lab and the Parkland or what we've described in the landscaping visual impact assessment Chapter is the former Parkland of that hole. Because it's some his condition is much deteriorated in historic design terms, that the Parkland around thick Throne Hall is is locally recorded, I'm avoiding using the word registered, I need to defer to Paul in terms of the exact nature of the designation. But it's our call locally listed for the sake of discussion. The area affected is essentially the area to the north of the 11. And to the west of the the existing park and Road site site and services. So it's broadly speaking the area between Norwich road to the north and the 11th to the south. And, as I say, the proposed park and ride and existing and proposed park and ride services to the east.

41:16

That helps Mr. Black, you did refer to using the term registered. And I just just for the avoidance of doubt, I would like clarification on that from your colleague.

41:29

We can confirm that it's not a nationally registered parking garden and pour my beer to define exactly what the local status is.

41:40

Yeah, sorry, Paul Bennett for the applicant. Yes, it's not registered park and garden it is not locally listed it is a non designated heritage asset that is recorded on the Historic Environment record. The location is actually referred to in the heritage chapter as thick Thorn Park and reference number M and F 33732. Just finding that on the figures the extent is given in the Historic Environment record data and that is shown on figure

6.2 in the environmental statement, appreciate that figure is a little bit busy. There's lots of overlapping bits and pieces there.

42:54

So the examination reference for that document is ap 057.

43:04

Okay,

43:05

I have noted that thank you

43:12

it's probably worth me just adding one bit of additional information in that. In my introduction, I mentioned that the balance condition impact assessment is based on an assessment of a single character area which contains the whole scheme. And that character area is the tree of a tree farm and with parkland. So just to underline really the the local locally identified landscape character area acknowledges the presence of historic park lands within that broad area, as you say, not not necessarily registered. And therefore the the assessment within the landscape vision Impact Assessment captures that in terms of what the implications that has for the landscape value enhancement sensitivity, but also it's something that we were mindful of in preparing the environmental master plan. So although it's not a registered a nationally registered landscape or a locally listed landscape, we were aware through a master plan production, that it had some historic characteristics that we should be sensitive to.

44:15

Okay, thank you. That's very helpful. Okay, I got a question for the county council on local impact report. Could they just expand for me, if possible, on the basis for asking for a 30 year compensation strategy to compliment the environmental master plan.

44:59

It's David Cumming for Norfolk County Council, I will have to take that one away seven consult the relevant specialist.

45:10

Yes, that's fine. Again, I'll make notes of that that covers my mean queries and questions on the environmental masterplan side of things. And unless anybody has anything further to raise, I'm going to loot to move forward to agenda item for the tree and parks. If there is anybody in the background who wishes to raise anything further, now, now is your opportunity. So if if there are any hands raised that can bring you in, if not, I'm going to move forward to tree impacts. I'll take that as a Now I'll move forward to Agenda Item four is the C tree impacts.

In relation to those, again, just to set the scene, just so I can then ask questions based on that scene setting. I'd like the applicant to briefly outline what trees would be impacted upon the particular plots being referred to including those intended for removal and those intended for retention. Just as a brief snapshot, I realised this is actually contained within the evidence, the examination documents rather. In doing so, could the applicant just briefly explain the steps taken within the scheme designed to avoid tree loss if possible, and that would include any reference to currently would.

47:19

So Michael Fry for the applicant. If I could introduce Mr. Ian Braddock to the examination at this point. He'll assist you with your three questions.

47:28

Thank you. Yeah. Over to you, Mr. Braddock.

47:32

I sat Ian Braddock from the applicant. And I prepared a brief statement. Maybe that might be give some background and context for you on this, but like you said, it's contained in the report, but the applicants carried out a survey of the trees across the scheme to establish which trees might be impacted by the proposals, and the survey was carried out in accordance with British Standard 5837 2012 trees in relation to design, demolition and construction recommendations. The findings of the survey are contained in the Abro cultural impact assessment report, which is document reference a pp 085. The applicant carried out the preliminary tree survey of the proposed scheme area in August 2018. Additional areas were surveyed in July 2020. The preliminary survey collected data on 61 features so a feature being either an individual tree, group of trees or woodland or hedgerow, and the additional survey collected data on 99 features. So data is collected on a total of 160 features across both surveys. And these features consists of 67 individual trees 89 groups of trees to woodlands and to hedgerows. As part of that data collected for each feature there were categorised based on the cascade chart for tree quality assessment is contained in table one within the British standard 5837 2012. The quality assessment allows for the features to be categorised as either category you unsuitable for retention category, hey, high quality Category B moderate quality category C low quality and across all the features. One was considered unsuitable for retention, which was a category, you 24 were awarded a Category A 43, Category B and 92. Category C. And so I know in your agenda that you've highlighted plot numbers to be referred to the applicant hasn't linked trees to plot numbers, as this is not standard practice but can be completed if you want. However, the applicant has plotted these features on the agricultural impact assessment plans, which is in Appendix two of the report document reference a PP 085

50:00

To be made to those instead Yes, that's fine.

50:03

Good. Thank you very much so that those plans provide the unique reference numbers for the trees. So an individual tree is prefixed with a tea, a group of trees with a G and a woodland with a W and hedgerows for ah, and that those plans shall the extent of the canopies branches, root protection areas

and colour coded according to the quality assessment grade. These features are listed as well in shedule, in Appendix four of the same report, a pp 085. In addition to the survey, as part of this process, the applicants carried out a search of South Norfolk Council's interactive mapping facility, my South Norfolk, that revealed that the footprint of the current design does not fall within a conservation area. However, a tree preservation order reference s n 0539 is present at or close to 126 Gently lay and affects the trees at the edges of groups G at g 81 and woodland w two, the trees protected by this tree preservation order will not be affected by the current design. This information has been detailed in the report, document ap 085, section 2.51. That the multi agency geographic information for the countryside known as magic website is also referred to which is managed by Natural England and that doesn't show that any ancient woodland is present within the boundary of the proposed scheme design. So, the applicant has used all this survey data to design the proposed scheme to minimise the loss and impact of trees as much as possible and therefore mitigate the loss at the design stage. And the design has been through an iterative process and of the 160 features recorded 103 features will be unaffected by the proposals. So the applicants summarise the details of the impact assessment for each feature in table two of the Abode cultural impact assessment report document a PPS are eight five, the scheme will require the complete removal of 17 individual trees and 11 groups of trees consisting of five category A seven Category B 16, Category C and one category you feature, which are detailed in Table three of the same report. This also includes the unavoidable loss of two of six veteran trees that were identified across the scheme. Item B 10. Of table 3.1. The record of environmental actions and commitments contained in the environmental master plan, doctrine document, a PP. 123 also notes that any veteran trees removed as part of the works will be relocated to nearby suitable woodland parcels to provide suitable habitat for invertebrates. And as part of the scheme design and extensive landscaping plan is also proposed as shown in the environmental plan master plan. As we've said, document a pp 123. A further 27 groups of trees and two woodlands will be partially affected, consisting of 13, Category B and 16 category C features. Special construction methods will also need to be employed by the applicant to safeguard a further 28 features consisting of 14 individual trees and 13 groups of trees and one hedgerow to ensure these features are safeguarded during the construction phase. The applicants environmental master plan document AP p 123. states in item LV two of table 3.1 record of environmental actions and commitments, that in a borrower cultural methods statement will be produced prior to construction, which will include a detailed tree retention and removal plan. The total number of trees to be removed will be determined at that stage during the detailed design. At this stage, the applicant will also seek sorry, when I'm being this stage, the detailed design stage, the applicant will also seek to scope out the need for special construction methods around some of those trees during during that stage. All those trees that are to be retained will be protected by adequate tree protection barriers to prevent them being damaged during the construction phase. So as we've mentioned before, as part of the scheme design, the applicants also proposing an extensive landscaping plan to replace those lost trees as part of eight PP. 123. So there are no modifications or requirements proposed. So that concludes my statement, and I'm happy to answer any of your questions.

54:49

Thank you, Mr. Braddock. I do have a couple of questions based on the specific things you've mentioned. You mentioned the money RgQ website I believe that's the konsult inventory that's been you to utilise by the applicants. It does seem as though that only Pics or areas of land less than two

hectares in size. And I was just trying to gather the applicants. response to that in terms of is it definitely able to provide information that any of the trees concerns don't involve ancient woodland or wooded areas given given that less than two hectares is often not picked up. Just wondering, is there any other data sources or perhaps clarification, whether or not everything has been picked up.

56:09

So in bright for the applicant, so in addition to consulting the magic website, believe we've also consulted Natural England and the Forestry Commission, which is referred to in bio 3.1. And neither have raised any concerns about ancient woodland to date.

56:38

Yes, I know your response. It is mentioned in the environmental statement that the report its appendix 8.1 6.3 environmental statement appendix 8.1. It highlights in the survey report that grade B grade woodland w two, which is potentially ancient woodland being present since at least 1840. Just based on those consultation responses in the magic website to or consulting victory you've responded to, or just I'm just seeking clarification, that there's no other information source to suggest that these would be ancient wooded areas.

57:47

Unless, sir imbedded for the applicant, unless the team can help me out on any other sources. I believe, you know, consulting the magic website, consulting Natural England and the Forestry Commission, both all of which have not confirmed that it is ancient, then I'm not aware of any anywhere else that we can resort to, to to identify that.

58:15

And your response also has Crawford some kind of consultation with the local authority as well. Also not raising or not providing any evidence or proof that the area is ancient woodland. Is that right?

58:39

So in bright for the applicant, maybe Mr. Fry could help us out with that, but I'm not aware that any console tees have brought forward any evidence to suggest that it it is ancient woodland.

58:57

Some microphone for the app can just confirm my team had telling me that though nothing else has been raised and every reasonable source that could be used has been used in these circumstances to identify potential ancient woodland so that there is really nothing else the applicant could have done to try and identify particular trees or bits of woodland as set out by Mr. Braddock.

59:20

Thank you Mr. Fry. And thank you, Mr. Braddock. Mr. Braddock, I do have a further point or question to raise you mentioned about some of the trees might be relocated that are going to be removed rather that some of the trees that are to be removed are going to be relocated to suitable woodland parcels and that will provide a suitable or could survive visible habitat to invertebrates or existing species? What are the known risks? In doing that in terms of the tree health in terms of the experience of the

applicant? Is that generally a successful process in terms of reestablishing, could you just expand on that slightly for me, please.

1:00:27

So in broad it for the applicant and incur my colleague Phillip Black, got his hand up to maybe help on that point. But I think what we're referring to there is not the removal, translocation of the whole tree and resetting it for it to regrow. I believe it's the removal of parts of the tree as it is removed, and those parts and so branches or logs will be relocated to the woodlands. But maybe Mr. Black can just clarify on them.

1:01:03

Yes, over to Mr. Black.

1:01:05

I don't need to clarify really, the points already been made. It's not necessarily my particular specialism but yes, it's a it's the intention is to take the timber arising from the felling of certain trees and that timber to be relocated in the interest of the invertebrates. It's not not to actually retain the tree as a living thing.

1:01:27

I see. Understood, thank you. Again, just drawing on the responses, in terms of representations, and through the local impact reports. Like to just pick up on the direct loss of the veteran oak trees, these are trees, t 13. And t 14, on the AIA. Can I just confirm and just whether or not there is any design scope to retain those? Or is it really the case? It's there's no avoidable way of those being? Lost last through through the scheme? Could you just expand on that?

1:02:33

So in both for the applicant, I think my colleague, Ben Williams has joined it will be able to answer that for you.

1:02:40

Okay, yes, Mr. Williams.

1:02:44

I bend Williams for the applicant. No, unfortunately, there aren't any opportunities to retrain to veteran trees are identified by yourself, the one is affected by the alignment of the candidate link road, the other by the alignment of the A 11 a 47 connector road. And the payments are driven both by site constraints within the local area. And also the requirements of the relevant dmrb design and safety standards in terms of the alignment geometry, just to highlight the constraints within the area that would affect the alignments of these roads, as obviously that the sheduled monument that we've discussed, is also the park and ride and the proposed extension to the east of the category link road and to the north of the connector road. There's also significant utility infrastructure in the area, namely the the overhead power lines that run through the site on either side of the a 47. And then there's also the railway which runs where as to east through the three designs for this site. So they're they're the key constraints along with

existing resident properties, like candy lane and the b one 170. And also the existing services that are located to the west of the west of the fifth on junction would like to highlight that we are retaining other areas of trees we've committed to retaining the trees in the field to the north of the earth. 11 that's been identified for the site compound site storage. So they're being integrated into the the overall design and layout of those two facilities. And we're also looking to retain the mature trees and hedgerows that are situated in the area south of the A 11. A 47. Connect to read behind the candy Lane South properties answers your question.

1:05:37

It does matter, Mr. Williams. Yeah, thank you very much. I don't have any further matters to raise in relation to tree tree and parks. Again, I'm just throwing it open to any other party present in the meeting. Are there any other questions or comments that they want to raise before I move on?

1:06:10

I'll take that as a no. Thank you, Mr. Braddock, that's been very useful. And I'll now move forward to item number five on the agenda biodiversity. And setting this agenda, I do appreciate that deadline forward as a key deadline. And therefore I am mindful of further submissions from the applicants, which they've indicated. Don't want to spend too long on this in terms of discussing it given the wide ranging information there is already in the application and that to come in, but I'd like the applicant just to expand on a particular point in the no significant effects report, and that it refers to the special area of conservation and also a ramsau site of the applicant could just provide clarity of what what is being referred to by name proximity. Just for my benefit, really.

1:07:40

So Michael, Fry for the Applicant and if I could introduce Dr. Martin Brammah to the examination at this stage, he will deal with your points.

1:07:51

As a Martin Brammah applicant, I was wondering that might be useful to sort of kick this off to give an outline of the technical approach to environmental assessment. Just to cover that off before I talk about the the slides included in the next significant effect. Report. That'd be acceptable.

1:08:13

Yes, yes, that's acceptable. If you want to do that.

1:08:16

I'll do that then. So the technical approach to the environmental impact assessment is outlined in chapter four of the environmental statement. The reference for that is a double p 041. And further further detailed in Chapter Eight biodiversity reference aidable P. 045. And EIA Stapel. report written in accordance with the design manual for roads and bridges dmrb 1411 and the planning Inspectorate advice seven was submitted to the planning Inspectorate in February 2018, in order to request a scoping opinion with consulting responses being received from the planning Inspectorate in March 2018. responses received from the scoping opinion and statutory consultation but then taken into consideration and incorporated into the design and assessment process, where appropriate. Bia

reports the latest significance and environmental effects using the significance criteria presented within dmrb la 104. environmental assessment and monitoring. The significance of an effect is based on an assessment of each receptors environmental value or sensitivity, and the magnitude of change or scale of impact. Each effect is assigned to one of five significance categories are set out in table 4.1 of Chapter Four of it, yes, reference a double p 041. These range from very large meaning effects that are material in the decision making process to neutral meaning that there is no effect or the effect has beneath levels of perception within normal bounds of variation or within the margin of forecasting error. In terms of biodiversity as stated in a double p 045. The Assessment and Reporting of impacts on biodiversity was undertaken in line with most recent highways England standards, ecological survey and design measures were undertaken in line with the dmrb ld 118 biodiversity design, Assessment and Reporting and effects was undertaken in line with dmrb La 108 biodiversity and Assessment and Reporting of implications on European national site network sites was undertaken in line with dmrb la 115 habitats regulations assessment. The assessment has also been undertaken in reference to the Chartered Institute of ecology and environmental management ecological impact assessment guidance published in 2018. So having said that, I'll go on to talk about the national site network sites, as described in the no significant effect report and the NSE are referenced as 005. For the screening stage of the habitats regulations assessment, a study area of two kilometres from the proposed scheme was used to identify international sites to be affected, and a study area 30 kilometres from the proposed scheme was used to identify international sites designated for that specifically, these search areas for designated sites were in line with those defined in dmrb la 115 habitats regulations assessment. Three national site network sites were screened in they've been the broad special area conservation as they see the broader and special protection area, SBA, and broader and ramsau. There are no national site network sites, there's an expert that's within 30 kilometres of the proposed scheme for descriptions of all three sites are presented in the SAR referenced as 005 but they can be summarised as follows. So starting with the broad SAIC, and the SAIC lies 11 and a half kilometres east of the proposed scheme, but is hydrologically linked. The SAIC is a few site covering an area of 5885 hectares is made up of a number of components sites and special scientific interest, triple the size, some of which are in favourable condition for the qualifying features and some of which are classes unfavourable, but recovering. The SOC contains several nutrient naturally nutrient rich lakes that support relict vegetation of the original fenlon Flora, such that collectively the site contains one of the richest assemblages of rare and local aquatic species in the UK. The site is also the richest areas steelworks in Britain. The complex of sites contains large blocks of older woodland and exhibits complete successional sequences from open water to respond to older woodland on Fen Pete. The site also contains called carrier spends and transition Myers. In terms of annex two species which the site is designated. The SSA is a stronghold for the less of Whirlpool rams on snail Tablelands world snail and Fen orchid. Although their present otters are not a qualifying feature of Si Si.

1:12:36

Moving on to broaden SBA, broaden SBA is a web site made up of a number of triple si as many of which overlap with the bronze SFC. It covers an area of 5580 hectares and lies 11 and a half kilometres to the east of the proposed scheme to which it is hydrologically linked. The bras are a series of flooded mediaeval peat cuttings, and they lie within the floodplains of five principal river systems and broadland area includes the river valley systems of the viewer yeah and wave knee and their principal tributaries. The urban landscape comprises a complex and interlinked mosaic of wetland habitats, including open

water reedbeds car woodland grazing marsh and Fen meadow. The different types of management of the vegetation for read sedge and Marsh hay coupled with variations in hydrology and subsequent and substrate support a diverse range of plant communities. The site is designated for wintering populations of rough hen harrier wigeon, shoveler gadwall, Eric Swan and Whooper Swan, and is designated for breeding populations of bitten and marsh harrier. Moving on to the broadly rams are the rams are designation is coincident with the boundary of the SBA and as such supports a wetland habitats already discussed the SBA is located less than a half kilometres from the proposed scheme and is hydrologically linked. The site qualifies under ramside criterion two whereby supports a number of rare unexplored habitats and species including Cal carriers and alkaline Fenz eluvial. Forest similans. Well, snail otter and Fen orchid besides also qualifies on the Rams criteria and six as IT support species and populations occurring at levels of international importance. Birds with peat counts and winter include Barix, one wigeon, gadwall and shoveler. Populations identified subsequent to designation of the Rams our site for possible future consideration under Criterion six, include those are painful to goose and Grey Goose. Does that provide you with everything you need?

1:14:31

It does it that's an extremely helpful overview. Thank you for providing that. I just have a couple of questions. Just to touch you on the issue of bots in the context of what you've described the issue of bots and currently work that may be present in the area or travelling from the area to other areas. could could have some indication of the likelihood of that for for bats in relation to sacks or the rams are side?

1:15:15

Well, fundamentally, none of the sites that I've just discussed are designated for their follow bat interest. So, in effect, if you're if you're not affecting a qualifying feature of the of the national site network site, then the outcome of habitats regulations assessment would be no significant effects. That's that's really not the reason there, those those sites have designated so. So in terms of those sites, there's a there's how likely effect from the proposed scheme.

1:15:53

Okay, a wider question in relation to biodiversity net gain. There has been both the environment Act has now become law. There have been requests to provide biodiversity net gain in terms of representations. Is there any update from the applicant on its approach in relation to the passing of the environmental act? or can any further clarification be given on that issue?

1:16:34

I think I'll I'll defer to my colleague Michael Fry seems to be in town stack.

1:16:40

canes probably read Michael Fry for the applicant. I'll address you. Rescued rebuild this is obviously the environment actors come into force. But the scheme seeks to maximise biodiversity delivery in accordance with the current statutory and policy requirements. And this achieved it this is achieved through considered planting to create new or extend landscape and biodiversity elements. And that's all captured within the environmental Master Plan, which is an application reference 123. Appendix B six of the Environmental Management Plan app one to eight will contain a landscape and ecology

management plan or lamp, which is produced by the appointed landscape architect and ecologist prior to construction. The lamp will describe the proposed management and monitoring including durations of the landscape and ecological mitigation and compensation features of the scheme. And the commitment to deliver the lamp will be secured through DCO requirement for environmental management plan. Overall biodiversity net gain or or BMG, not considered by the applicant to be an appropriate metric by which to examine the scheme. Defra metric 2.0 was replaced by 3.0 when the environment Act came into force last Tuesday, but it remains subject to variation and is expected to be consulted upon in 2022. To satisfy the requirements of Defra metric 3.0 additional surveys would be necessary. But as that metric was only published on the seventh of July 2021, and postdates the ecological surveys carried out to inform the biodiversity assessment. The scope of those surveys did not extend to capturing recording the necessary condition information required to input data into the metric. Accordingly, it wouldn't be possible now for the applicant to present a meaningful, accurate and comparable calculation in the absence of this survey information. It's for this reason, the applicant cannot commit to providing overruled bng or indicate the extent of bng. Presently, so the the policy position is set out in the MPs national networks, particularly at paragraphs 5.20236. And that provides the scheme must show that it has taken advantage of opportunities to conserve and enhance biodiversity and should seek to mitigate any harms. As a last resort, the scheme must compensate for any harms, which cannot be mitigated. There's no requirement or method of calculation available within the NPS nn for the calculation of BMG, and so you'll be aware that the NPS nn is to be reviewed, and that works currently expect to be completed by spring of 2023. However, while that review is undertaken, the current NPS will remain the relevant government policy and will have effect for the purpose of the Planning Act 2008. And this examination, it's worth updating you so that the confirming that the applicant considers that the end PPF the national planning policy framework should also be considered as an important and relevant consideration in your assessment of the scheme and NPPF paragraph 174 includes more explicit support for providing bng as part of developing projects then MPs nn and it states that planning decisions should contribute to an enhanced local environment by minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures. And the environment 2021 contains provision to give the government the power to make a bng statement requiring bng to be achieved for all n sips that bng statement in any regulations remain subject to consultation. It follows that while the Government's intention is to have the ability to make bng mandatory for N sips in the future, those provisions are not currently applicable to this application. On that basis, while delivering overall bng is desirable, there's no requirement for an N sips, such as the scheme to deliver overall bng in the NPS Nn. This reduces the weight to be applied to policies in the NPPF as BMG as a relevant important matter in deciding then decision making on this application.

1:21:05

However, against that statutory and policy background serve the applicants nevertheless committed to minimising environmental impacts and protecting and enhancing the quality of the surrounding environment. And that accords with the statutory obligation in Section 40 of the natural environment and Rural Communities Act 2006. To have regard to the purpose of conserving biodiversity, and this is written into the terms of the highways, well, the national highways licence, which binds the applicant. The guidance section of the licence indicates that the applicant should where appropriate work with others to develop solutions that can provide increased environmental benefits over those that can be

delivered alone, where this delivers value for money. Furthermore, protecting biodiversity is entrenched within the government's read investment strategy. And there is one state's the company the applicant must achieve no net loss of biodiversity during the second road period, and deliver net gain in the long return. But obviously, that's not calculated, sir on a scheme basis, which is why I'm afraid the the short answer is we can't provide the calculations to the examination. That's all I've got to say on that. So unless there's anything else I can help you with in terms of the the policy position.

1:22:19

Ah, no, again, that's very helpful. Mr. Fry. Thank you for confirming that. I do have just a question before you you go off the screen. You mentioned the E L. L. E. P, I think it's aviation is so Yes. Any see if there are any unexpected expected or expected releases in secondary legislation? That it seems as though there may be flexibility in the DCA requirement for to pick those up? Would the applicant have any particular view on being able to do that if if there are any particular risks or improvements that need to be made in light of changing legislation? How much flexibility is there in the applicants view?

1:23:21

Well, sorry, Michael Fry for the applicant. If the if the statutory provision were to change, then I'm only presuming here, but the government would make in implementing that legislation, there would be trend transitional provisions provided as part of legislation. So if they were to apply to an handset structure, the scheme post consent, then the applicant would be required to comply with whatever the government puts forward. So if it were, for example, to bring forward a bng statements, and that would have retrospective effect, then it would be something that the applicant would need to take account on. But as I've set out, the current position is, as I understand it from the government is that the NP SNN has effect and is the current basis upon which the scheme is assessed. If that position changes over the course of examination, then we will have to route very fast, sir and update you on that. But we're not anticipating any changes during the course of the examination, then, in the course of the actual development of the scheme in due course, then, as I say, if there are legislative provisions, which the applicant must take account of, then it must take account of that absent the scheme and that would take priority over any clause in the DCO. If there is new primary legislation which which outranks or, or is or changes the position, but as I've said, I'm not anticipate or the applicant is not anticipating that there is anything coming forward that would have that effect on the scheme. I hope that answers the question sir. But if there's anything else we will write your I'm sure you will ask a follow up question.

1:25:00

It does help. Mr. Fry. Thank you for clarifying that. Grateful. That completes my questions on biodiversity matters, unless any other party wants to raise anything. Again, I'm just throwing it open to any other comments anybody wants to raise before I move forward to climate change topics, which is agenda item six. I see no hands raised. So I'm going to move forward. So, again, I am mindful that there is an update proposed deadline for by the applicants. And that's an update to vs. Chapter 14. With that in mind, I would still like the applicants, current views on any climate change issues that are being raised in the application itself, in terms of cumulative impacts, cumulative carbon assessments, and also the presence of other national infrastructure projects in mentioning that, so if I could just ask the applicant just to set out their current position of that or any updates.

1:26:25

So, of course, Michael Fry for the applicant. So if I could introduce Miss Sarah Holmes and Mr. David Jackson to the examination, please, I'm not sure who will go first, but they will be dealing with your questions on climate change.

1:26:40

Mr. Tax. Hi, good afternoon, David Jackson on behalf of the applicant. A yes you mentioned an update to the chapter that will be forthcoming. This is in line with the six carbon budget a better more than happy to start off by giving an overview of the climate chapter what what is in it and where it is at present as well as that verbal a update of what will be excuse me Bob will be put into the a debtor chapter when when you receive that at say, I thought it was deadline three but maybe deadline for a as he said, but coming to Jackson yeah a great problem. So, so, our approach has been taken in line with dem RB le one one for a climate and has been aligned to the infrastructure planning regulations 2017 and the national networks policy. So national networks NPS which has been alluded to previously in discussions our assessment on climate a concentrates on two main areas. Firstly, the effects of climate a sorry, the effects on climate. So that is the greenhouse gas emissions refer to short handedly as carbon emissions in the report the those emissions arising from the proposed scheme A through the construction operation and use of the present day of the proposed scheme. And secondly, the vulnerability of the proposed scheme to climate change. So those impacts that will a the climatic impacts that could have on the proposed scheme. As as it's a more straightforward area to talk about. I'll discuss that briefly first. So, with regard to the vulnerability of the skin to climate, our assessment has been done using the UK CP. So the UK climate projections from 2018 which are produced by the Met Office to take a quality qualitative approach to assess the impact of future climates on the proposed scheme. And then through that assessment, looking at areas such as say excuse me, a changes to temperatures precipitation and wind, there was no a significant impacts expected on the proposed scheme. A moving next to a the effects on climate from the proposed scheme A our assessment has a been done as I said looking at the construction, operation and use of the scheme. The Highways England carbon tool has been used to assess the emissions associated with construction. A more detail of that is in a or a PP 116 A which is the main annex or appendix two to go alongside the climate chapter a PP 051 A and this has been done by estimating the carbon assess or emissions associated with each material outlined in the bill of quantities from the proposed design and assessing the carbon associated with materials, transportation and construction. The operational emissions arising are looking or are taken from the operational energy from the sim for example through a street lighting once the skin is in operation and enter emissions have also been assessed using the traffic model described earlier by Mr. Patterson and his team, excuse me, and taking account of a the change in emissions associated from end user vehicles on the affected road network. The affected road network for the scheme is in line with dmrb le 114. And the traffic data used from the course scenario to assess this look at the fuel type speed, types of vehicle and fuel consumption to then assess for cars and heavy duty vehicles, the emissions associated are expected from those cars on the through the traffic modelling. So that provides an overview the chapter then follows the mrps la 1148 a guidelines and in that it compares the predicted excuse me the predicted increase in emissions with the government's published carbon budgets. So within the chapter 14 At present, that includes the fourth and fifth carbon budgets. As a scheme, we start construction until after the third carbon budget has a ended, a buy bought as well as that's a it does take a 60 year appraisal over the period 20 I think

day 2023 to 2087. And with that, as I said today, assessment currently is in line with the fourth and fifth carbon budgets. But we will be planning to submit an update that does take into account the safe carbon budget that would say enshrined in law over the summer.

1:31:44

That was an overview of the proposed methodology. Your next questions were with regard to cumulative impact. Do you have any questions on the methodology before I go on?

1:31:55

No, I have no questions on the methodology if you'd like to continue,

1:31:59

no problem. So the with regard to cumulative impacts, this has been assessed in two ways in accordance with DMS asking me a DM RB le 104 which provides a definition for cumulative assessments. Firstly, looking at the cumulative impact of a single project. So in numerous different effects on a single receptor, and then secondly, in combination with different projects together with the project being a particular excuse me being assessed. So, with regards to the first element there a on a single receptor, cumulative assessment has been carried out in that we are assessing the carbon emissions associated with construction operation and use of the project over a 60 year appraisal period. And then the second part of your question there was with regard to other infrastructure projects, and the assessment here has been done a through the affected road network and other projects that are within that. So earlier on David Battershill, I discussed the core scenario and the projects within that that have a new session or more than likely a to go ahead have been put within that to do minimum baseline to be assessed there for this project. I looks through injunction but also takes into other a takes into account other projects such as Bluefield, Tottenham, and the Norwich Western like how they work which are part of that in doing so, and having a carbon assessment across the whole affected road network a difference? Well with regard to to that part of Le 104 for different projects, that there is a inherent de cumulative assessment that has been done a through the inclusion inclusion of this project and other locally committed developments within the traffic model.

1:33:59

Could I could I just confirm with you when the scheme was submitted that there may have been court judgments or judgments on the road, the road investment strategy to itself. Could I just clarify is this going to form any part of the update being proposed in ies chapter 14?

1:34:30

That isn't present I expect to be within the chapter itself but I will defer to Miss Holmes to to answer questions on the as to

1:34:41

Okay, yeah. uplit please continue with you. Your responses just came to mind as you were just describing certain elements.

1:34:51

No, no problem. I excuse me, that is as far as I was going going to take it there with regard to cumulative carbon and other things. national infrastructure projects with her within the affected her network. Okay, thank

1:35:06

you. Sarah Holmes is on my screen. I don't know if we did you want to say anything or add anything further?

1:35:16

I'm not sure if you're able to see or hear me sir, I can't see I've got a notice on my screen saying that my

1:35:25

I can hear you very clearly. You're not, you're not on the video screen.

1:35:30

Okay, I have some network issues which are flashing up on my screen. So I do apologise, sir. I think it's best if we submit all our comments on the legal framework in writing, because I'm conscious of the fact that Dr. Boswell, who has made representations is not available today and has indicated that he will wish to submit further representations in writing in December. The The only point that we would be seeking to make in connection with there is two cases in connection with the approach to be taken in terms of the carbon budgets, but we'll obviously put that in writing. And I am also aware that we are likely to have representations further representations submitted to the effect that the environmental statement, climate assessment does not comply with the EIA regulations. But we are very clear that it does and happy to further elaborate in writing, if that would assist.

1:36:50

It would assist. I do understand that that those points might be better dealt with through written submissions in light of the additional submission that you've referred to, from other interested parties as well. I don't have any further specific questions on road investment strategy. climate change issues boards. I was just wondering whether or not the gentleman had finished just giving his presentation on the points he was making. Previously is going off my screen. Mr. Jackson?

1:37:45

Sorry, Sorry, that was a specific question.

1:37:50

Sorry. No, that wasn't a specific question. You were giving an overview and an update at the current situation. And like, there's going to be a chapter 14 update in the ies and I asked you initially to give an outline of the applicants responses to climate change issues to date, having regard to cumulative impacts, Q cumulative carbon assessments, and the other national infrastructure projects. And you did give quite a bit of information on now. I was just wondering, do you have anything further to add?

1:38:30

David Jackson, on behalf of the applicants? No, no, sir. I think rather than going going through and spelling out the numbers, the table a 14 point 10 within the updated chapter will will then provide the impact, sorry, will provide the updated figures with regard to the safe carbon budget. And as outlined previously, this will be a a This will include the cumulative assessment, so based on the do minimum and do something approach across the effective road network.

1:39:06

Okay, thank you. I have one final question before I move on, and that's in relation to the what would be the applicants approach to any changes or developments in innovation, perhaps that are beneficial on climate change matters? What I mean by that is what is the flexibility within the DCO to say, for example, if there's a better use of materials, what is the applicants approach to that? Would it be down to the principal contractor or is it dealt with at a higher level elsewhere and the DCO could could you just expand on that point, please?

1:39:58

Of course. So I'm just taking a look. Oh, yeah. So So within that, yes, chapter 14, a PAP 051. A, section 14.9. A outlines the mitigation options that have been taken to date a which have included looking at say structures and earthworks and how carbon could be reduced a through through the design of that in line with past 20 at the specification for carbon management and infrastructure and the methodology and process that are outlined within that. A, we don't see this as a finished article, we will still be planning to look at how carbon emissions can be reduced further through APCs, stage five, and then also into design and construction. With regard to your question around the principal, contractor, a we have carbon working groups set up across the 47 schemes, which is looking at opportunities to increase innovation and use a alternative low carbon materials where applicable and where appropriate. With regards to a where we are in design, we are still looking at design options. And rather than re revising a, the environmental statement chapter 14, for climates, what what I would propose as how that would go forward would be in line with past 2018, where we have our baseline and then from that are looking at how we can make improvements on that. So what I would imagine is that any design changes that do take place, we'll have a carbon assessment done to look at whether they will increase or or minimise, hopefully, the latter carbon emissions associated with that. And then an update made to show how that has been changed from the baseline rather than updating chapter 14 and reducing the number that is given there. So that we can in line with past 2080 on the carbon management process, set a baseline look to to reduce that and then monitor.

1:42:00

Thank you that's helpful.

1:42:02

So Michael Fry for that can just just to build on that if I may, very briefly, just to note the the examination really that obviously there is flexibility built into requirement three of the DCA requirement for which is the detailed design and environmental management plan requirements, and particularly the detailed design as that comes forward, as Mr. Jackson has set out in consultation with the LPA and with the Secretary of State amendments can be made to take account of any new technologies or benefits that that might come forward. And obviously, all the assessments that Mr Jackson has been referring to

have been done on the reasonable worst case scenario basis. So any improvements would be well within the parameters of the assessment that's already been carried out. So

1:42:47

thank you again, that helps mean that that concludes my questions on climate change, I do have the option of issuing further further round of written questions in a coordinate accordance with the examination timetable. But in light of submissions to be made are expected to be made. I don't have any further questions at this moment in time. I'd like to I'm conscious of the time it's quarter past one, but we're towards the end of the agenda in less parties. With like a refreshment break could push on and hopefully completing on those. Mr. Fry do you have any views

1:43:36

so much for that can my team may not thank me, but I'm very happy to push on sir and try and deal with the points in the the agenda. Now. If you think you can do that.

1:43:47

If the Ask the agenda item or noise I don't anticipate an awful lot of questions. It might be just a note from me. And then that brings us to the cloud. So yes, if I could like to proceed that I think that'd be the best option. So does anybody have any further questions on climate change matters just before I move forward to noise and any other matters?

1:44:18

I'll take that as a no thank you very much. So Agenda Item seven noise. I am aware that there's been some comment by way of written representations from the trustees of the Macintosh trusts response highlighting some noise impact concerns and not additional receptors be considered. Could I just turn to the applicants team and just ask for an update on that and in terms of whether or not they think adequate receptors have been accommodated in light of that submission. I could.

1:45:06

So I'm like proof of that. Can I think Mr. Doherty wants to introduce himself to the examination of this stage? His hand is up. So I'm presuming he's going to intervene now. Yes, sir,

1:45:15

to Mr. Doherty

1:45:18

Indeed. Thank you. Good afternoon, Dan Doherty on behalf of the applicant specialists in noise and vibration, apologies for the sunshine on my self at this moment. Yes, so, thank you for your query in relation to Macintosh trust submission, we have reviewed this and we will be preparing a written response for the next deadline. And in summary, our assessment looks at the receptors we deemed to be the most affected by by by the construction or operation of the proposed scheme. For construction, for example, we look at representative locations rather than every single dwelling. So we will be providing more detail on the specific receptors that have been identified. But in conclusion, it doesn't

change the conclusion of ies, chapter 11. A PP o four, eight, which is the noise and vibration chapter. So there's no significant effects expected at those two receptors identified by Mackintosh trust.

1:46:31

Right, I mean, I don't have any further questions on this. So yes, that that, that covers the SU. But again, I might make further written questions if I need to, on this. But yes, thank you providing for providing that to update and EIR no further questions on noise, or other matters. Thank you. Thank you. Would anybody else like to raise anything else on noise or other matters?

1:47:16

No, I'm not seeing any responses. Okay, I'm going to move to Well, there are some action points that were raised. If you're in discussion, Mr. Fry. Do you want to add something about that?

1:47:35

Apology? So I've just taking instructions? And I'm afraid you haven't moved on from any other business. But there was one that I did want to just canvass with you, sir. And before you move on, if that's right, and I'll do very briefly, the the applicant is considering for proposed non material minor amendments to the scheme. And obviously, I have to notify you of those as soon as possible. And I wondered if you wanted me to address you on them, deal with them tomorrow now that I flagged it up or to or to, or to write to you in respect to those amendments, but they are minor. And as they the current environmental assessment is that there is no material change at all to the environmental assessment, in which case, they would be, we would be saying that there are no material changes to the scheme.

1:48:28

Yes, my preference would be a written submission on that. But I do appreciate that it's raised now. But yeah, a written submission would be the best course of action.

1:48:41

Of course, we will do an update then at the next deadline with the with the issue, specifically hearing responses.

1:48:48

Okay, thank you. Is there any other business or matters you'd like to raise? Mr. Fry? Not from the

1:48:55

app concerning?

1:48:59

Okay, there were a number of action points. Again, some of those might be covered in further written questions or in submissions from parties. So there are deadlines coming up. So we may well have information coming forward in relation to some of the points that couldn't be answered today. That said, I do intend to further round written questions. So perhaps some of those elements may appear and that if submissions haven't been made, it particular points when those questions go out. I don't have any

further martyrs or any other business to raise. I'm going to now loop to the close of the hearing. Unless there are any objections to that.

1:49:54

I'll take that as a no. I'd like to thank all Hearing participants for their contributions. May I remind you that the digital digital recording and the transcript of today's proceedings will be made available as soon as possible on the project page of the national infrastructure website. There is a further separate individual issue specific hearing on the draft DCO sheduled. Tomorrow, which is Thursday the 18th of November starting at 10am. If you wish to view that the details will be available via the project page. The time is it's just gone 20 past one. And this issue specific hearing on environmental matters for the A 47 a 11 thick Thorn junction improvement scheme is now closed.

1:50:53

Thank you