



PLANNING COMMITTEE

Tuesday 8 December 2020 at 6.00 pm

Virtual Meeting

Agenda

8 Late Observations

(Pages 2 - 21)

Agenda Item 8

RYEDALE
DISTRICT
COUNCIL



Please Contact: Ellie Hardie

Extension 43342

Email: eleanor.hardie@ryedale.gov.uk

All Members of the Planning Committee
Council Solicitor
Head of Planning
Planning and Regulation Technical Support Manager

Ref: Agendas/Planning/20

04th December 2020

Dear Councillor

Meeting of the Planning Committee – 08th December 2020

With reference to the above meeting I enclose for your attention the late observations received since dispatch of the agenda.

All items for the late observations relate to:

Item 5 – Pages 3 - 14
Item 6 – Pages 15 - 21

Yours sincerely



Mrs Karen Hood
Planning and Regulation Technical Support Manager

Item 5 – 19/01263/MFULE - Land Adj to River Foss, Lilling Low Lane, West Lilling

This application is an engineering project. If having read the report, members have any questions that are of a detailed technical nature, please could you email these to jill.thompson@ryedale.gov.uk before Monday lunchtime in order for a considered response to technical questions to be provided.

From: James Copeland
Sent: 30 November 2020 08:57
To: Jill Thompson; Emily Mellalieu
Subject: 19/01263/MFULE Today's Planning Committee

Dear Jill,

Further to our earlier conversation, I have been asked to clarify and raise the below points for you, the committee and Emily's consideration.

1. Red Line Boundary – The Wadsworth Family raised concern (Doc. No. 2111363) that some of the flood risk area of the scheme falls outside the current red line boundary. The applicant responded (Doc. No. 2114409) stating that the area already floods, the area has been modelled, and is not at risk from the FAS scheme. We feel that this needs further consideration – specifically that the flooding on Eel Hole Dyke and Anchor Plain Dyke are not increased by the scheme (please also note the Point 2 below and the comments made in the attached report).
 - Report 2076068 '*Supplementary Statement River Foss Flood Storage Area Planning Application Applicant's Responses to Natural England Updated Representations*' – Figure 5 (1 in 100yrs plus climate change (winter storm, 47hr critical storm duration) and ALC grade):

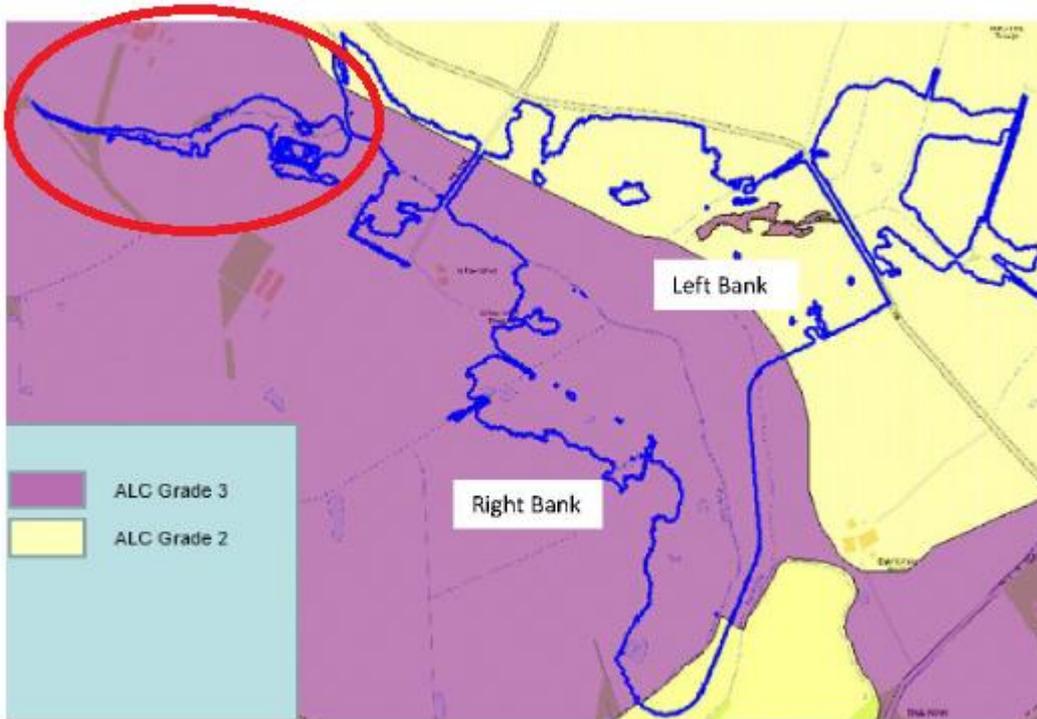


Figure 5: 1 in 100yr plus climate change (winter storm, 47hr critical storm duration) and ALC grades



2. The Wadsworth family have also commissioned an independent engineer (Owen Patterson) to review the information submitted to the Wadsworth's by the applicant and that submitted in the application – specifically looking at the flood model.
 - You will note that the report raises a number of important points and questions about the model and presented findings. Whilst some of the reports may not have been presented to the Planning Authority, we would welcome Emily's thoughts on

this and specifically the comments made about the model and Foss FSA Modelling Summary Note (Doc. No. 2025933).

Considering the above and response submitted by Edward Stephenson (Doc. No. 2116113 – although this now appears to have been removed) that other farmers outside the red line boundary also have concerns about the impact of the scheme. We feel that a detailed review of the flood model by an independent consultant should be undertaken to allow the planning committee and officers to make an informed decision.

Kind regards

James Copeland

Senior Environment & Land Use Adviser

NFU North East

207 Tadcaster Road

York

YO24 1UD

Mr S. Wadsworth
Bridge Farm
Sheriff Hutton Rd
Strensall
York
YO32 5TT

Subject: River Foss Flood Storage Area - Flood Modelling Review

Dear Mr Wadsworth,

Thank you for your recent correspondence regarding the River Foss Flood Storage Area (FSA) and the impact that may pose to your current property. I can confirm I have received and reviewed the following documents:

- z Landowner Engagement Pack - Wadsworth Impact - Final Submitted
- z Foss FSA Modelling Summary Note - 11/02/2020
- z Wadsworth November 2019 Feedback Response - 08/01/2020
- z 1 in 100 Year Flood Plan - ENV0000381C-CAA-00-00-MP-EN-C 0400:9 - 04/11/2019
- z Landscape Area A - ENV0000381C-CAA-00-00-DR-L-C 0700_37 - 11/02/2020
- z Existing Drainage Information - York 5 Year Plan - Cell 11 - 13/03/2019

Flood modelling as a discipline is a very complex and involved process with a variety of parameters to consider. Due to the nature of flood modelling, what one team or consultant may produce can be significantly different to another. Within the Foss FSA Modelling Summary Note Capita highlight that, statements made in the report may constitute estimates, projections and reasonable assumptions. Leading to risk, uncertainties and cause the actual results to differ from predicted.

Due to the vast number of variables Capita have stated that survey data has been collected and best practice implemented in creating the model. It would be relevant for stakeholders to view the standards or guidance that informs this best practice. Notwithstanding best practice it is recommended to request a schedule of data that informed the model parameters and what assumptions may have been made. Data and parameters such as;

- z Topographical Survey - (accuracy, resolution, source, date)
- z Land Use - (hard standing, arable, forested)
- z Soil/Ground Conditions - (soil parameters, ground saturation, infiltration rates)

- ¿ Rainfall (durations, intensities)
- ¿ Channel/ditch/pipe properties
- ¿ Etc.

Many of these variables have significant effects on the in-channel flood levels and the durations these levels are sustained.

Looking further into the detail of the model outputs and the reports produced there are still areas of concern and discrepancies. In the Landowner Engagement Pack ' Wadsworth Impact ' Final Submitted (figure 9) it states that nothing less than a 9-inch pipe has been modeled. Given the nature of the land use and the extensive implementation of the land drainage I believe this to be a significant simplification. This would be one explanation towards the model baseline predictions been more severe than physically observed on site. This simplification of the model to 9-inch pipe work also limits the true understanding of the impact caused by the installed FSA in storm events.

It should be noted that Capita have acknowledged and amended some of these areas based on information provided. Details of this can be found in Wadsworth November 2019 Feedback Response ' 08/01/2020.

Remaining on figure 9 the direct rainfall boundary does not cover the areas drained by Black Dyke or LHB Ditch. This means that the model water levels at node L-1, L-2, L-3 and BD-1 are a direct result of the River Foss flood levels. However, rainfall will still be falling in these areas and adding to the flood levels, especially the LHB ditch as this is a significant catchment area. Therefore, the corresponding levels within Figure 14 are inaccurate. (please note that drawings show LHB ditch draining into the FSA, whereas Black Dyke is diverted downstream).

The confluence of Black Dyke is downstream of the FSA, with in the documents it is not evident what conditions/water levels have been assumed within the model. The river levels downstream of the FSA will have a direct impact on the rate of drawdown within the FSA and how long it impounds water.

Reviewing the Foss FSA Modelling Summary Note ' 11/02/2020 raises further areas of concern that need addressing. The document describes the installation of a gauging station and data captured for 26th October 2019, a storm event between 1 in 10yr and 1 in 30yr. When reviewing Appendix C against Appendix A discrepancies are evident. Using node F2 as an example, Appendix C peak level with FSA is 18.1m, comparing to Appendix A Foss with FSA 1 in 30 gives a level of 18.15m - acceptable. When looking at the table for change in level between Foss FSA and baseline it states 97mm, returning to the graph in Appendix C the difference in level is closer to 300mm. For all four nodes the observed data from the gauging station shows a greater variance in

water level compared to the model predictions. In my professional opinion this indicates that the baseline model is overestimating the flood levels.

The summary note considers the effect of longer wet periods, stating that at the FSA, land drain locking will only increase by an additional 25hrs. Given the predicted drain locking already stands at 35hrs this is a 70% increase. Furthermore, the data presented for October 2019 showing a longer wet period highlights the sensitivity of the catchment. It is not apparent in the reports if the flood levels modeled are derived from a completely empty FSA. If not the realised flood levels could be significantly higher.

As the Environment Agency and Capita have stated that the findings of the model have been shared with landowners and stakeholders (such as the Foss IDB) it would be prudent to gain a copy of their comments and the understanding of the general level of agreement that is claimed to have been achieved.

In conclusion it is my professional opinion based on engineering knowledge and experience gained from a career working on similar schemes that the flood model requires further clarification and improvement. Given the size of the project and the social, economic and political impact it brings, it is my recommendation to request a detailed review of the flood model by an independent consultant. Within Civil Engineering an independent design verification or design check is common practice.

If you have any follow up questions or seek further clarification, please do not hesitate to contact me.

Yours sincerely,

Owen Panton BSC (Hons) IEng MICE



Supplementary Statement

River Foss Flood Storage Area Planning Application

Applicant's Responses to Further National Farmers' Union Representations

Ryedale District Council Ref: 19/01263/MFULE

3rd December 2020

1.1 Introduction

This document sets out the applicant's responses to the modelling points raised by the National Farmers' Union (NFU) representations submitted by James Copeland to Ryedale District Council by email on 30th November 2020, and the Independent Engineer Flood Modelling Review Report that was attached.

1.2 Applicant's Summary Position

A detailed response to the representations is outlined below, however, the following bullet points are a summary of the Environment Agency's position as applicant confirming that we stand by the works undertaken to date and the conclusions drawn from that work.

- The Environment Agency is a competent, national Government Flood Risk Management Authority with operational responsibility for managing the risk of flooding from main rivers. It acts as a promoter of flood management schemes and also as the principal statutory consultee to local planning authorities in relation to main river flood risk management.
 - As applicant the Environment Agency has presented a robust model of the baseline and post-development scenarios, the largest extent of which is based on an extreme event with additional allowance for the effects of climate change.
 - As regulator and the principal statutory consultee the Environment Agency has reviewed the whole application including the modelling and has raised no issues with the methodology or results.
- The Ryedale Council planning officers report on the submitted planning application states:

'The Environment Agency are the national, Government body for the management of water. They have undertaken detailed modelling of flooding events which represent robust, real-time data for an extreme event. This approach has then been assessed by the regulatory arm of the Environment Agency and is considered to be appropriate. Officers consider that in terms of modelling an event, it is appropriate to use data which shows extreme events to give robustness to the modelling. The scheme is, after all, expected to operate in extreme events.'
- As part of the River Foss Flood Storage Area study, industry leading mathematical hydraulic modelling software has been used and best practise applied.
- The modelling undertaken has gone through a rigorous quality assurance and review process by suitably Chartered flood risk specialists. This has included the

Environment Agency's own modelling team and an independent consultant, as would happen as part of an independent model review as statutory consultee.

- Where observed data exists, this has been used to validate the outputs of the hydraulic model to give confidence in how it represents what happens in the actual physical catchment.
- The modelling approach and level of detail is appropriate for the nature of this study and every effort, within reason, has been undertaken to represent flood risk within the study area for both the current 'baseline' and Foss Flood Storage Area (FSA) scenarios.
- As a competent Flood Risk Management Authority and given the robust way in which the model was developed and used, which included independent challenge, we do not feel that further model reviews or updates would change the current modelled outcomes. Furthermore, any review or additional delays would seriously jeopardise the applicant's ability to deliver the scheme to schedule and likely delay construction by 1 year preventing flood protection to 490 properties during this period.

1.3 Applicants Response to Representations

The Environment Agency's appointed design consultant have reviewed the modelling concerns raised in the Flood Modelling Review Report. Based on this review we are confident each point raised by the NFU/Independent Engineer can be easily clarified or responded and are not material concerns.

Detailed technical responses to each of the points raised are provided below, with relevant Modelling Review Report paragraphs included for ease of reference.

1.3.1 Para.3: "It would be relevant for stakeholders to view the standards or guidance that informs this best practice"

Best Practise is provided in an accumulation of scientific papers, software developer user guides and EA modelling best practise notes. The key guides are below:

- 379_05 Computational modelling to assess flood and coastal risk.
- NEC4 Minimum Technical Requirements for Modelling_v1_Ver1
- Flood Estimation Guidelines, Environment Agency, July 2020, Guidance LIT 11832
- FloodModeller Guide (1D modelling)
- Tuflow Guide (2D Modelling)

1.3.2 Para.3: Notwithstanding best practice it is recommended to request a schedule of data that informed the model parameters and what assumptions may have been made

The modelling reports and submitted 'Flood Modelling Summary Note' provide information on the modelling approach and assumptions. The assumptions made and parameters used are in line with those recommended in the aforementioned best practise and user guides.

1.3.3 Para.4: “Many of these variables have significant effects on the in-channel flood levels and the durations these levels are sustained.”

The assessment of the impact of land drain locking has primarily focussed on outfall locations, elevations and the impact the proposed scheme has on river levels within the River Foss, as this is where all land drains ultimately outfall. The in-channel water levels are primarily driven by hydraulics and hydrology and we have a high degree of confidence in these modelled water levels. River Foss hydraulics in this area are relatively simple in nature and the modelling assumptions (roughness, spill coefficients, structure parameters etc) applied are standard for this type of catchment and structures present. These parameters will be detailed in the guidance notes mentioned previously, but also require specialist hydraulic/engineering expertise to make an informed decision on parameter values based on site specific conditions. Design hydrology has been used is standard for any engineering project to drive hydrograph shape and this hydrology has involved statistical analysis to give greater confidence in peak flow estimates.

1.3.4 Para.5: “In the Landowner Engagement Pack – Wadsworth Impact – Final Submitted (figure 9) it states that nothing less than a 9-inch pipe has been modelled. Given the nature of the land use and the extensive implementation of the land drainage I believe this to be a significant simplification.”

It is appreciated that the modelling is a simplification of the actual physical system, as all modelling is. Software, Computational and Project Constraints prevent the resolution of modelling suggested by the NFU and the Independent Engineer. The simplification suggested, however does not constitute a significant simplification when considered within the context of the size of the study area, and the approach undertaken chosen by suitably qualified Chartered specialists with input from the Independent Land Drainage Consultancy Ltd.

The hydraulic assessment has not been done on a field by field level of detail as this would not have significantly altered the final study outputs or conclusions. The inclusion of the finer drains (9inch or less) would not have significantly altered final modelled flood levels or general pattern of surface water flooding across the site, especially for events greater than the 1 in 2year.

1.3.5 Para.7: “Remaining on figure 9 the direct rainfall boundary does not cover the areas drained by Black Dyke or LHB Ditch.”

Correct. These catchment areas are represented by hydrological inflows instead. This approach was taken due to topographic characteristics of this side of the river and lack of known issues of surface water flow paths. The flatter areas more prone to surface water ponding lie on the right bank (Mr Wadsworth’s land to west of Foss). Three separate approaches were used to calculate the left hand bank (eastern bank) land drain flows to ensure the peak flow estimates produced were consistent. For the much larger Black Dike catchment statistical analysis was undertaken to derive peak flow estimates and the inflow hydrograph scaled to match for each return period. Each of these approaches were reviewed by the Environment Agency’s Hydrology Technical Specialist and approved.

1.3.6 Para.8: “The confluence of Black Dyke is downstream of the FSA, with in the documents it is not evident what conditions/water levels have been assumed within the model. The river levels downstream of the FSA will have a direct impact on the rate of drawdown within the FSA and how long it impounds water.”

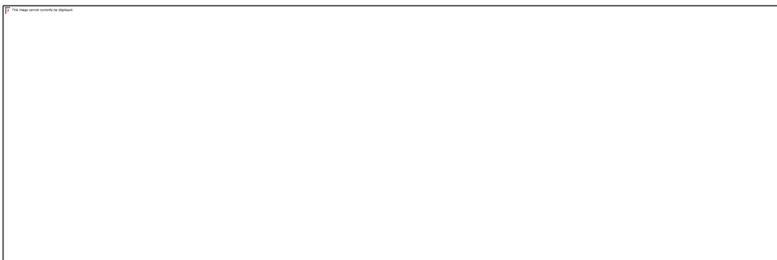
The downstream extent of the Foss FSA hydraulic model is sufficiently downstream so that downstream boundary assumptions do not influence water levels at the control structure. In fact, as correctly pointed out by the Independent Engineer, it is in fact the Black Dike tributary which has a significant influence on the peak water levels downstream of the control structure, and which would influence the rate of drawdown.

As this study's primary objective was the design of a reservoir it was essential that a conservative 'worst case' assumption was made in this downstream water level, that would reduce the pass-forward flow (that dictates rate of FSA drawdown) and therefore result in a greater amount being stored in the FSA. In reality this worst case is not the most probable scenario, and in fact the volume of water stored in the FSA for a given flood event may be less than that modelled.

1.3.7 Para.9: "Reviewing the Foss FSA Modelling Summary Note – 11/02/2020 raises further areas of concern that need addressing. For all four nodes the observed data from the gauging station shows a greater variance in water level compared to the model predictions."

This point relates to the differences in modelled levels (with and without scheme) for the design hydrology (Appendix A of the Summary Note) and when the October 26th 2019 event was modelled. The engineers report raises concerns which can be adequately clarified below:

The Summary Note stated that the October 26th event was between a 1 in 10yr and 1 in 30yr return period. Re-assessing the modelled Baseline (Oct 26th & design) peak water levels at model node F1 and F2, the levels are extremely close to the modelled current 'baseline' 1 in 10yr design event (see green highlighted cells in table below). It is therefore likely this event was closer to 1 in 10yr than 1 in 30yr.



The Independent Engineer report does correctly point out that that something does not quite tally, but incorrectly points to this being an issue with the current baseline model. The perceived discrepancy is not due to the baseline model rather a difference between hydrograph shape (between design and observed) and what impact this has on the Foss FSA levels.

As shown above, if the October 26th event and 1 in 10yr baseline model show very similar peak water levels then logic would initially think the modelled October 26th Foss FSA level and 1 in 10yr Foss FSA level would also correlate. This is not quite the case, with the modelled October 26th event levels being 140mm (for model node F1) and 200mm (for model node F2) higher than the 1 in 10yr event (see orange highlighted cells in above table). The modelled October 26th Foss FSA levels sitting between the modelled design water levels for the 1 in 10yr and 1 in 30yr. The design hydrograph results presented in the landowner report and referenced as Appendix A are based on a design hydrology with a 24hr storm duration (the 2015 and 2007 storms were 24hr durations or less). The October 26th event appears to have been a slightly longer storm duration generating a greater volume of flood water for this particular storm event. Because in the Foss FSA scenario we are actively attenuating flood water, this greater volume of water resulted in a peak water

level between the 1 in 10yr and the 1 in 30yr level. On another occasion an actual event with a 1 in 10yr peak flow **may** have a much shorter duration, smaller volume and **result in lower water levels** than what we have predicted.

The natural variability in storm duration, preceding conditions, single peak / double peaked events etc, create infinite storm conditions that cannot feasibly all be modelled. Standard Design hydrology based on Flood Estimation Handbook catchment descriptors have been used to define hydrograph shape, scaled to statistically derived peaks, and with critical storm durations chosen that are primarily that which we would expect in the 24hr storm (like 2015, 2007) and the less likely and conservative 47hr storm duration used for design of the reservoir and defining the redline boundary.

1.3.8 Para.10: "Furthermore, the data presented for October 2019 showing a longer wet period highlights the sensitivity of the catchment it is not apparent in the reports if the flood levels modelled are derived from a completely empty FSA. If not the realised flood levels could be significantly higher."

As mentioned, the storm patterns can result in an infinite number of combinations which we cannot realistically model all without introducing significant subjectivity. Furthermore, the probability of getting, say, a 1 in 5yr event 1-2 days prior to a large flood event that requires attenuation (e.g. a 1 in 30yr) is of a significantly lower probability than 1 in 30. This issue of joint probability and subjectivity is overcome in engineering through assuming single peaks.

As with all reservoir design studies we use design hydrology following industry standard approaches using a single peak event, which means that the FSA is empty at the start of the storm.

To understand further this potential impact of preceding storms, the October 26th 2019 event was ran for the whole month of October. As shown in Appendix C of the landowner report, there were multiple storms through that very wet month. Most were relatively small and would pass through the control structure without attenuation, with water levels dropping back down before the main storm event occurred on the 26th October. This was a very wet winter month and can be deemed representative or worse (in terms of number of storms) than the average winter month.

Item 6 - 20/00770/OUT - Land at Sutton Grange, Langton Road, Norton

Commencement time limit

- 1 Application for approval of reserved matters shall be made to the Local Planning Authority not later than five years from the date of this permission.

The development of each individual plot hereby permitted shall take place no later than 2 years from the date of approval of the last of the reserved matters to be approved for that plot.

Reason:- To ensure compliance with Section 51 of the Planning and Compulsory Purchase Act 2004.

Reserved Matter approval

- 2 Approval of the details of the Layout; Scale; Appearance; and Landscaping ('the reserved matters') shall be obtained from the Local Planning Authority prior to the construction of the dwelling on that particular plot is commenced. The development of each plot shall be carried out as approved.

Reason:- To safeguard the rights of control by the Local Planning Authority in respect of the reserved matters.

Design Code

- 3 The details to be submitted for approval of the matters reserved by condition 2 above shall be substantially in accordance with a Design Code for the entirety of the site which is to be first agreed in writing by the Local Planning Authority. The Design Code shall be based on the principles and criteria set out in the Design Intent Strategy dated 5 August 2020. The development shall thereafter be carried out in accordance with the agreed details.

Reason:- To safeguard the rights of control by the Local Planning Authority in respect of the reserved matters.

- 4 Approved drawings

The development hereby permitted shall be carried out in accordance with the following approved plan(s):

OS Location Map ref. EX10 04, dated 01.07.20
Proposed Landscape Plan ref. PL20, dated 03.08.2020

Reason: For the avoidance of doubt and in the interests of proper planning.

Housing numbers and type

- 5 The development hereby permitted shall comprise no more than 5 detached self-build dwellings as defined by the Self-build and Custom Housebuilding Act 2015 (as amended by the Housing and Planning Act 2016).

Reason:- To safeguard the rights of control by the Local Planning Authority.

Sustainable building standards

- 6 No reserved matters applications shall be submitted for individual plots until such time as a scheme which details sustainable building standards for the entirety of the site has been submitted to and agreed in writing by the Local Planning Authority. The scheme should identify and incorporate opportunities for the use of sustainable technologies including, but not limited to, energy efficiency; sources of energy supply; and water efficient design to minimise water

consumption. The development shall thereafter be carried out in accordance with the agreed scheme.

Reason:- To safeguard the rights of control by the Local Planning Authority in accordance with Policy SP18.

New and altered Private Access or Verge Crossing

7 The development must not be brought into use until the access to the site at Sutton Grange has been set out and constructed in accordance with the ‘Specification for Housing and Industrial Estate Roads and Private Street Works’ published by the Local Highway Authority and the following requirements:

The crossing of the highway verge and footway must be widened to a minimum of 7.3 metres at the narrowest point and must be constructed in accordance with the approved details and/or Standard Detail number E50 Rev A and the following requirements.

- Any gates or barriers must be erected a minimum distance of 5 metres back from the carriageway or footway and must not be able to swing over the existing or proposed highway.
- The final surfacing of any private access within 5 metres of the public highway must not contain any loose material that is capable of being drawn on to the existing or proposed public highway.
- Measures to enable vehicles to enter and leave the site in a forward gear.

All works must accord with the approved details.

Reason: To ensure a satisfactory means of access to the site from the public highway in the interests of highway safety and the convenience of all highway users in compliance with Policy SP20.

Provision of Approved Access, Turning and Parking Areas

8 No part of the development must be brought into use until the access, parking, manoeuvring and turning areas for all users at Land at Sutton Grange have been constructed in accordance with the details approved in writing by the Local Planning Authority. Once created these areas must be maintained clear of any obstruction and retained for their intended purpose at all times.

Reason: To provide for appropriate on-site vehicle facilities in the interests of highway safety and the general amenity of the development in compliance with Policy SP20.

Construction Phase Management Plan

9 No development must commence until a Construction Management Plan has been submitted to and approved in writing by the Local Planning Authority. Construction of the permitted development must be undertaken in accordance with the approved plan.

The Plan must include, but not be limited, to arrangements for the following in respect of each phase of the works:

1. wheel washing facilities on site to ensure that mud and debris is not spread onto the adjacent public highway;
2. the parking of contractors’ site operatives and visitor’s vehicles;
3. areas for storage of plant and materials used in constructing the development clear of the highway;
4. details of site working hours;
5. contact details for the responsible person (site manager/office) who can be contacted in the event of any issue.

Reason: In the interest of public safety and amenity in compliance with Policy SP20.

- Electric Vehicles Charging Points
- 10 No development shall commence until a scheme for the provision of one electric vehicle charging point per house has been submitted to and approved by the Local Planning Authority in writing. Thereafter the scheme shall be implemented as approved unless the Local Planning Authority gives its written consent to any variation.

Reason:- To promote sustainable transport in accordance with Policy SP18.

- Archaeological investigation
- 11 No development shall commence until a Written Scheme of Investigation has been submitted to and approved by the Local Planning Authority in writing. The scheme shall include an assessment of significance and research questions; and:

1. The programme and methodology of site investigation and recording
2. Community involvement and/or outreach proposals
3. The programme for post investigation assessment
4. Provision to be made for analysis of the site investigation and recording
5. Provision to be made for publication and dissemination of the analysis and records of the site investigation
6. Provision to be made for archive deposition of the analysis and records of the site investigation
7. Nomination of a competent person or persons/organisation to undertake the works set out within the Written Scheme of Investigation.

No development shall take place other than in accordance with the approved Written Scheme of Investigation.

Reason: The site is of archaeological significance and to satisfy the NPPF and Policy SP12.

- 12 The development shall not be occupied until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the Written Scheme of Investigation approved under Condition 11 and the provision made for analysis, publication and dissemination of results and archive deposition has been secured.

Reason: The site is of archaeological significance and to satisfy the NPPF and Policy SP12.

- Site levels
- 13 Prior to the commencement of the development hereby approved precise details of the existing ground levels and the proposed finished ground floor levels measured in relation to a fixed datum point shall be submitted to and approved in writing by the Local Planning Authority.

Reason: In order to ensure a satisfactory external appearance and satisfactory drainage in compliance with Policies SP17 and Policy SP20.

- Drainage
- 14 Unless otherwise agreed in writing with the Local Planning Authority the development shall be implemented in accordance with the mitigation measures set out in the Flood Risk Assessment prepared by EWE Associates Ltd, dated July 2020.

Reason: In the interest of satisfactory and sustainable drainage in compliance with Policy SP17.

- 15 The site shall be developed with separate systems of drainage for foul and surface water on and off site.

Reason: In the interest of satisfactory and sustainable drainage in compliance with Policy SP17.

- 16 Development shall not commence until a scheme detailing foul and surface water drainage has been submitted to and approved in writing by the Local Planning Authority. The scheme shall include results of percolation testing to determine soil infiltration rate are carried out in accordance with BRE 365 Soakaway Design (2003) and CIRIA Report 156 Infiltration drainage – manual of good practice (1996). The scheme shall detail phasing of the development and phasing of drainage provision, where appropriate. Principles of sustainable urban drainage shall be employed wherever possible. The works shall be implemented in accordance with the approved phasing. No part or phase of the development shall be brought into use until the drainage works approved for that part or phase has been completed.

Reason: To ensure the provision of adequate and sustainable means of drainage in the interests of amenity and flood risk.

- 17 No piped discharge of surface water from the application site shall take place until works to provide a satisfactory outfall, other than the existing local public sewerage, for surface water have been completed in accordance with details submitted to and approved by the Local Planning Authority.

Reason: To ensure that the site is properly drained and in order to prevent overloading, surface water is not discharged to the public sewer network in compliance with Policy SP17.

Boundary treatments

- 18 Before the commencement of development hereby permitted, or such longer period as may be agreed in writing with the Local Planning Authority, details of the proposed means of enclosure and boundary treatments, including a schedule of materials and details of the size and species of any hedging, shall be submitted to and approved in writing by the Local Planning Authority. The details so approved shall be implemented in full before the development is first brought into use, unless otherwise agreed in writing with the Local Planning Authority.

Reason:- To ensure that the development does not prejudice the enjoyment by the neighbouring occupiers of their properties or the appearance of the locality to ensure that the proposal satisfies Policy SP20.

Lighting

- 19 Prior to the installation of any external lighting associated with the development hereby approved details of the location, height, angle of lighting and level of illuminance shall be submitted to and approved in writing by the Local Planning Authority. The lighting shall therefore be installed on site only in accordance with the approved details unless otherwise approved in writing by the Local Planning Authority.

Reason: In the interests of amenity to ensure that the proposal satisfies Policy SP20.

Ecological mitigation, compensation and enhancement measures

- 20 No development shall take place until an ecological design strategy (EDS) based on an updated Ecological Impact Assessment confirming specific mitigation, compensation and enhancement measures has been submitted to and approved in writing by the Local Planning Authority. The EDS shall be implemented in accordance with the approved details and features shall be retained in that manner thereafter.

Reason: In the interests of biodiversity and protected species in compliance with Policy SP14.

Arboricultural Method Statement

- 21 No development shall take place until a full Arboricultural Method Statement shall be submitted to and approved in writing by the Local Planning Authority which shall include numbering and detailing trees, confirming root protection areas, routing of service trenches, overhead services and carriageway positions and any details of no dig techniques along with associated use of geotextiles and an indication of the methodology for necessary ground treatments to deal with compacted areas of soil. The works shall implemented in accordance with the approved details.

Reason: To preserve trees and hedges on the site in the interests of visual amenity and the character of the area in accordance with Policies SP16 and SP20.

Tree protection fencing

- 22 No development shall take place until details of the form and position of fencing, which shall comply in full with BS5837:2012 Trees in relation to design, demolition and construction - Recommendations, for the protection of those trees, shrubs and natural features not scheduled for removal has been submitted to and approved in writing by the Local Planning Authority. The approved fencing shall be erected in the positions approved before the development is commenced relating to the access road and individual plots and thereafter retained until such completion of the development. Hereafter, the fencing shall be referred to as the 'approved protection zone'.

Reason:- To ensure that existing landscape features are not damaged and to enhance the development hereby permitted in accordance with Policies SP16 and SP20.

Tree protection (approved protection zone)

- 23 The following work shall not be carried out within the approved protection zone of any tree or hedgerow, except with the prior consent of the Local Planning Authority:-
- (i) Levels shall not be raised or lowered in relation to the existing ground level within the approved protection zone of the tree or hedgerow
 - (ii) No roots shall be cut, trenches dug or soil removed within the approved protection zone of the tree or hedgerow.
 - (iii) No building, roads or other engineering operations shall be constructed or carried out with the approved protection zone of the tree or hedgerow
 - (iv) No fires shall be lit within the approved protection zone or in a position where the flames could extend to within 5m of the foliage, branches or trunk of the tree or hedgerow.
 - (v) No vehicle shall be driven over the area within the approved protection zone of the tree or hedgerow.
 - (vi) No materials or equipment shall be stored within the approved protection zone of the tree or hedgerow as per the requirements of BS5837-2012.

Reason: To preserve trees and hedges on the site in the interests of visual amenity and the character of the area in accordance with Policies SP16 and SP20.

Landscape scheme

- 24 No development of the site shall take place without the prior written approval by the Local Planning Authority of a landscape scheme for the site that indicates numbers, species, heights on planting, and positions of all trees and shrubs, specifications and schedules, phasing of planting, seeding or turfing, existing plants to be retained and showing how new landscaping relates to any underground services and existing landscape features. No trees, shrubs, or hedges within the site that are shown to be retained on the approved plan shall be felled, uprooted, wilfully damaged or destroyed, cut back in any way or removed without prior written agreement with the Local Planning Authority. Thereafter the scheme shall be implemented as approved unless the Local Planning Authority gives its written consent to any variation.

Reason: In the interests of visual amenity and to achieve a high standard of landscaping in accordance with Policies SP16 and SP20.

Commencement of planting

- 25 All planting, seeding or turfing set out in the details approved in Condition 24 shall be carried out in accordance with the approved phasing plan and beginning the first planting season following commencement of development or such longer period as may be agreed in writing with the Local Planning Authority. Any trees, plants or shrubs which within a period of 5 years from the completion of the development die, are removed or become seriously damaged or diseased shall be replaced in the next planting season with others of the same size and species, unless the Local Planning Authority gives its written consent to any variation.

Reason: In the interests of visual amenity and to achieve a high standard of landscaping in accordance with Policies SP16 and SP20.

Materials (surfaces)

- 26 Prior to the construction of each dwelling details of the ground surfacing materials within that plot shall be submitted to and approved in writing by the Local Planning Authority.

Reason:- To ensure a satisfactory external appearance and to satisfy the requirements of Policy SP16.

Materials (samples)

- 27 Prior to the construction of each dwelling details and samples of the materials to be used on the exterior of the building(s) within that plot shall be submitted to and approved in writing by the Local Planning Authority.

Reason: To ensure a satisfactory external appearance and to satisfy the requirements of Policy SP16.

Materials (panels)

- 28 Prior to the construction of each dwelling the developer shall construct on site for the written approval of the Local Planning Authority, a one metre square free standing panel(s) of the external walling to be used in the construction building(s) within that plot. The panel so constructed shall be retained only until the development has been completed.

Reason: To ensure a satisfactory external appearance and to satisfy the requirements of Policy SP16.

Windows and doors

- 29 Prior to the construction of each dwelling, details of all windows, doors and garage doors, including means of opening, depth of reveal and external finish shall be submitted to and approved in writing by the Local Planning Authority.

Reason: To ensure an appropriate appearance and to comply with the requirements of Policy SP16.

Hours of construction

- 30 During the period of construction, no power operated machinery shall be operated on the site and there shall be no construction related deliveries taken at or dispatched from the site, before 0800 hours and after 1800 hours on weekdays and before 0800 hours and after 1300 hours on Saturdays, nor at any time on Sundays and Bank Holidays, unless otherwise agreed in writing with the Local Planning Authority.

Reason: In the interest of amenity in compliance with Policy SP20.

- Removal of permitted development rights
- 31 Notwithstanding the provisions of Schedule 2, Part 1 of the Town & Country Planning (General Permitted Development) Order 2015 (or any Order revoking, re-enacting or amending that Order) development of the following classes shall not be undertaken other than as may be approved in writing by the Local Planning Authority following a specific application in that respect:

Class A: Enlargement, improvement or alteration of a dwellinghouse

Class B: Roof alteration to enlarge a dwellinghouse

Class C: Any other alteration to the roof of a dwellinghouse

Class D: Erection or construction of a domestic external porch

Class E: Provision within the curtilage of a dwellinghouse of any building or enclosure, swimming or other pool required for a purpose incidental to the enjoyment of a dwellinghouse or the maintenance, improvement or other alteration of such a building or enclosure; or a container used for domestic heating purposes for the storage of oil or liquid petroleum gas.

Class F: Provision of a hard surface for any purpose incidental to the enjoyment of the dwellinghouse as such or the replacement in whole or in part of such a surface

Class G: Installation, alteration or replacement of a chimney, flue or soil and vent pipe on a dwellinghouse

The erection or provision within the curtilage of a dwellinghouse of

Class H: Installation, alteration or replacement of a satellite antenna on a dwellinghouse or within its curtilage.

Reason:- To ensure that the appearance of the areas is not prejudiced by the introduction of unacceptable materials and/or structure(s).

INFORMATIVES

Condition 7- Notwithstanding any valid planning permission for works to amend the existing highway, you are advised that a separate licence will be required from North Yorkshire County Council as the Local Highway Authority in order to allow any works in the existing public highway to be carried out. The 'Specification for Housing and Industrial Estate Roads and Private Street Works' published by North Yorkshire County Council as the Local Highway Authority, is available to download from the County Council's web site:

https://www.northyorks.gov.uk/sites/default/files/fileroot/Transport%20and%20streets/Roads%2C%20highways%20and%20pavements/Specification_for_housing___ind_est_roads___street_works_2nd_edition.pdf .

The Local Highway Authority will also be pleased to provide the detailed constructional specifications referred to in this condition.

Nesting Birds

Any works to the buildings and any groundworks or vegetation removal is required to be undertaken without harming nesting birds or destroying their nests. The main nesting and breeding season runs from 1 March to 31 August. If this is unavoidable checks should be undertaken by a suitably qualified ecologist prior to any works. If nesting birds are found during the watching brief, disturbance and destructive works will need to stop until the young have fledged.