Environment Agency

York Flood Alleviation Scheme – Foss Flood Storage Area

Planning Application:

Planning Statement and Application Summary

iema EIA

We are the Environment Agency. We protect and improve the environment and make it a better place for people and wildlife. We operate at the place where environmental change has its greatest impact on people's lives. We reduce the risks to people and properties from flooding; make sure there is enough water for people and wildlife; protect and improve air, land and water quality and apply the environmental standards within which industry can operate.

Acting to reduce climate change and helping people and wildlife adapt to its consequences are at the heart of all that we do. We cannot do this alone. We work closely with a wide range of partners including government, business, local authorities, other agencies, civil society groups and the communities we serve.

Version

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Project name	Foss Flood Storage Area
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1 Summary of Application

1.1 Purpose

1.1.1 This statement has been prepared by Capita Property and Infrastructure Ltd (Capita), acting on behalf of the Environment Agency (EA). It forms part of a planning application submitted for the creation of the Foss Flood Storage Area (FSA), an integral part of the wider York Flood Alleviation Scheme (FAS).

1.1.2 The purpose of this document is to provide a commentary on the design process undertaken and explain the guiding principles that have underpinned and resulted in the final proposal.

1.2 Need for the Scheme

1.2.1 Storm Desmond in December 2015 brought flooding to many areas of North Yorkshire. The City of York saw some of the highest river levels on record, with significant impacts on local communities.

1.2.2 York has a long history of damaging flooding dating back to 1263. The most recent significant flood events in York have occurred in 1947, 1978, 1982, 2000 and 2015.

1.2.3 Defences across much of the city were installed, or greatly expanded, following the 1978 floods, including the Foss Flood Barrier being installed in 1987. This followed from the observation that greater flooding arose under certain conditions due to waters from the River Foss rather than the River Ouse.

1.2.4 Since the construction of the Foss Barrier in 1987, the flood risk and frequency of flooding along the Foss corridor has dropped dramatically. Between its completion and the December 2015 flood event, the Foss Barrier had successfully operated and mitigated flooding within the Foss corridor during every major flood event to impact York. However the scale of the 2015 floods overwhelmed the barrier's defences and despite subsequent installation of new pumps and monitoring equipment it cannot be relied on alone to protect the vulnerable properties in the Foss corridor.

1.2.5 National flood risk modelling, developed for general planning purposes, indicates most land adjacent to the River Foss in York is located in Flood Zone 3 – this is land which has a greater than 1-in-100 chance of flooding from river sources in a given year. Areas within a small buffer around most of the Flood Zone 3 extent are located within Flood Zone 2 - this is land which has a greater than 1-in-1,000 chance of flooding from river sources in a given year.

1.2.6 Without any further interventions it is calculated that a total of 465 residential and 25 non-residential properties are at risk of flooding downstream along the Foss corridor from Strensall to York's urban area. The project outlined in this application will restrict the maximum flow of the Foss meaning that during flood conditions excess water will back up and be temporarily stored behind an embankment thereby preventing this water flowing downstream. This will protect not only the vulnerable properties in the Foss corridor but also contribute to protecting other areas in York liable to flooding by not adding to the flow.

1.3 Evolution of the Proposal

1.3.1 The accompanying Design, Access and Sustainability Statement provides a detailed description of the development of the preferred option and the specific elements that make up the final submitted design. This includes a summary of the public consultation and stakeholder engagement work undertaken during the process. A

full description of the consultation is contained in the accompanying Statement of Community Involvement.

1.3.2 In summary, a series of solutions were examined to provide additional flood resilience which included building defences (walls, gates etc.) further downstream in York in multiple locations. Once assessed in detail the potential solutions were found to perform differently in terms of the level of flood protection they would provide; they also exhibited variations in both their costs and potential environmental impacts. Whilst not the cheapest, the chosen option was the one that provided the highest level of flood protection and at the same time had lower environmental impacts than most of the other options.

1.4 Description of the Proposed Scheme

General Description

1.4.1 The proposal, as submitted in this application, is to create a flood storage area that would, in the event of flood conditions, essentially hold back water that would normally flow downstream. The total area of the planning red line boundary is 151.88ha. The proposed storage area has been designed to store up to approximately 1million m3 of excess flood water occupying an area of approximately 111ha. The design accommodates flood water resulting from a 1-in-100 year event with extra capacity added to cope with the additional predicted effects of climate change in these instances to the year 2080. This will protect the 490 properties calculated to be at risk of flooding downstream during such an event with the exception of 3 properties in York. Two of these are residential which will be offered additional property-level protection bringing them up to the full level of protection. An additional single commercial property will remain below the standard, albeit benefitting from a lower risk as a result of the works.

1.4.2 Water will be retained by a 1.65 km long earth embankment which would vary in height and width. The average height of the embankment would be approximately 2.5m extending to a maximum of 3.85m along parts of the central section. It has been designed to have a shallow 1-in-4 slope across its width; this will result in a total width varying along the main sections from 27m to 32m. The flat crest section of the embankment generally varies from 4m to 5m wide. At either end, the embankment falls shallowly and narrows to reach the existing ground level.

1.4.3 Spanning the river itself, the scheme incorporates a structure designed to control the flow of the river. Essentially, this supports a concrete wall containing an opening which allows the forward flow of the river to flow at its 'normal' flow rate up to a maximum 10m3 per second. Under flood conditions the flow rate will not exceed this limit leading to excess water building up behind the flow structure and the embankment.

1.4.4 Whilst the flow control structure will be constructed from concrete, the embankment will be predominantly built from earth. It will incorporate an impermeable clay core along its entire length and run from a track just west of the River Foss, over the river and parallel to (but mainly set back from) the west bank of Black Dike before changing direction towards the northeast, and ending just before, Lilling Low Lane.

1.4.5 Although overtopping of the embankment is not anticipated, protection called a spillway, consisting of voided concrete blocks, will be incorporated into a section of the southern side of the embankment allowing overtopping to take place without damaging the slope through wash-out.

1.4.6 The vast majority of the clay material required to construct the proposed embankment will be sourced from excavations called 'borrow pits' within the

application site area itself. These will be located on either both sides of the River Foss.

1.4.7 A total of four borrow pits, two permanent and two temporary, will be excavated in order to source the 112,000 m3 of clay required to construct the embankment and create wetland and other habitat to provide environmental mitigation:

1.4.8 Two temporary borrow pits (T1 to the west of the Foss and T2 to the east) will be excavated, with the voids subsequently being backfilled with material that does not meet the required safety standards for use in the embankment. The land will then be fully reinstated to its previous level and land use.

1.4.9 Borrow pit P1 on the west bank of the Foss will be excavated the fill from which will be used within the embankment core. This borrow pit will be retained permanently and connected to the Foss.

1.4.10 Borrow pit P2 on the east bank of the Foss will be excavated, with some of this material used for fill material within the shoulders of the embankment and some material used as donor material to backfill borrow pits T1 and T2, in order to reinstate them. This pit will thereafter be retained permanently and connected to the Foss.

1.4.11 The whole embankment, including the spillway, will be covered with top soil and sown with grass seed.

1.4.12 After construction, the retained borrow pits will be allowed to fill with ground and surface water and wetland and other wildlife habitats will be created in and around the excavated hollows, providing ecological mitigation to the area such as reed-beds and marshland habitat.

1.4.13 A drainage ditch currently flowing into the Black Dike will be diverted to flow into the river, via these wetland areas on the eastern bank of the Foss. A siltation pond will be constructed at the inlet of the drainage ditch to the wetland area and vegetated with reed-beds to encourage the deposition of silt and the uptake of nitrates and phosphates from agricultural run-off.

Other key elements of the scheme

1.4.14 Road-raising is proposed at Ings Lane to maintain access and egress to/from Lilling Green during the inundation of the flood storage area. The road will be raised to a point above the 1-in-100 year flood level over a length of 200m, with culverts to be integrated below the road, allowing for flood water to pass through.

1.4.15 In order to mitigate against the effects, such as increasing sediment, from more frequent backing up and slowing down of the River Foss channel, sections totalling 225m of the river channel will be converted into a 2-stage channel consisting of a narrow central section with lower and higher berms. Changes to Black Dike will involve its diversion along a 119m reach in order to move this section further away from the footprint of the embankment. This section will be profiled as a 2-staged channel as well, providing additional opportunities for biodiversity mitigation.

1.4.16 Buried scour protection will be placed along stretches of both the dry side and the wet side of the embankment where is most closely interacts with the River Foss and the Black Dike. They will span 75m along the wet side of the embankment and 50m along the dry side.

1.4.17 New asphalt-surfaced access tracks extending to the western side of the control structure will be created along the crest and northern toe of the embankment connecting to the existing farm track to the west of the control structure. These will provide access for maintenance of the structure. There will also be improvements to the initial 350m length of the existing farm track connecting to these new tracks.

1.4.18 In order to be able to gain access to the control structure during a flood event a new 560m section of access track will be created and another section improved to the west of the existing track thereby facilitating access from Sheriff Hutton Road above the maximum flood level.

1.4.19 A ramp capable of accommodating a combine harvester will be integrated into the design of the embankment at the eastern end, allowing access to the fields on both sides of the embankment. An area of hardstanding and parking will also be created off Lilling Low Lane to be used by EA and Internal Drainage Board staff and vehicles.

1.4.20 Edge reinforcement will be provided along Lilling Low Lane, north of the embankment, to minimise the impact of flood water on the integrity of the lane. The design of the edge protection has been provided by North Yorkshire County Council and will consist of a trench filled with concrete inserted below the road edge.

1.4.21 A small area of hardstanding with access from Lilling Low Lane will be created at the eastern end of the embankment in order to provide a loading/unloading and parking area for grass cutting and other maintenance vehicles.

Associated Works

1.4.22 A section of overhead electricity power cables supplying East Lilling House from Lilling Green which passes over the proposed embankment will be removed. East Lilling House will be reconnected to the network via a new direct supply from Smith's Lane. These works will be undertaken by the responsible statutory undertaker, Northern Powergrid (NPG), before the works to the main scheme begins. The design of the works has not been included in the application as they will be undertaken by NPG under permitted development powers.

1.5 Scheme Impacts

1.5.1 It is considered that all the potential environmental impacts of the scheme have been identified and either the scheme has been designed to avoid any damage or their effects have been mitigated to acceptable levels.

1.5.2 A summary and commentary of these issues is contained in the accompanying Environmental Statement (ES) and its Non-Technical Summary contained within the application pack.

1.5.3 The site lies within an area of open countryside part of which lies within the York Green Belt. The policy appraisal of the proposal is subject to green belt and a number of other local, regional and national planning policies and guidance. These have been assessed and there is considered to be broad and specific policy support for the proposal and no fundamental conflicts remain that would outweigh this support.

1.5.4 Outside those potential impacts considered in the ES other issues that have been assessed are those of visual amenity, loss of agricultural land, flood risk, access and traffic and heritage impacts.

1.5.5 Although some negative visual and amenity impacts will be experienced during construction the operational impact of the scheme is judged to be slight. This is primarily due to the passive nature of the structure requiring no permanent staff and only occasional maintenance and inspections. Also the embankment has been designed to blend into the landscape as much as possible.

1.5.6 Given the size of the scheme the permanent loss of agricultural land is modest and totals 18.87ha. and it is considered that the other benefits accruing from the scheme

in terms of downstream flood resilience and biodiversity gains clearly outweigh the removal of this area from production.

1.5.7 In terms of flood risk, the scheme will increase the extent of flooding in the immediate area behind the embankment, however, the effects are minimised by the design, limiting the maximum extent of the flooding ensuring no adverse impacts on property.

1.5.8 Whilst the vast majority of the earth required to build the embankment will be sourced on-site there will still be heavy vehicle movements required to the site. These will involve transporting personnel, plant and some quantities of bulk materials including a contingency amount of fill for the embankment. The main access will be via a lane/track off Sheriff Hutton Road with a second access along Ings Lane used exclusively for the works there.

1.5.9 The impact of these movements has been assessed and the maximum impact would occur during the 'set up' stage prior to the start of construction proper. The highest level of vehicle movements would be a maximum of 96 two-way trips per day over a 3-week period. In terms of vehicles this would consist of 30 HGVs and 18 cars. As described the impact during the operation phase of vehicular traffic will be minimal.

1.5.10 A public right of way will be affected and a temporary diversion along Ings Lane will be required for a short period.

1.5.11 No important heritage assets have been identified on site and there will be no impact on any off-site assets. A geo-archaeological survey and assessment is proposed to help understand the former land uses and the extent of previous human activity.

Conclusion

1.5.12 The background and context to the application is considered to demonstrate that there is a clear and substantial need for scheme.

1.5.13 Furthermore, all relevant design, access and other environmental issues have been assessed and potential impacts avoided or mitigated as part of the design process. No fundamental issues have arisen that could not be satisfactorily addressed or that would prevent approval.

1.6 Structure and Contents of Application

1.6.1 The application seeks full planning permission for the scheme and the application form is supported by the following list of documents and drawings.

- Planning Statement and Application Summary (this document);
- Design, Access and Sustainability Statement (including Energy Statement);
- Environmental Statement incorporating:
    - Screening and Scoping Response,
    - Landscape Scoping Statement,
    - Minerals application correspondence,
    - Water Framework Directive Report,
    - Preliminary Ecological Appraisal,
    - Phase 1 Habitat Survey,
    - Bird survey report,
    - Otter and Water Vole survey report,
    - River Habitat Survey report,

    - Habitats Regulation Assessment Screening report,
    - Biodiversity Impact assessment Calculator, and
    - Outline Construction Environmental Management Plan.
- Environmental Statement – Non-Technical Summary;
- Tree Survey;
- Geomorphology Assessment;
- Flood Risk Assessment;
- Statement of Community Involvement;
- Ground Investigation Report;
- Transport Statement;
- Heritage Statement; and
- Landscape Environmental Management Plan.

1.6.2 The table overleaf contains the application's drawings package.

Table 1: Application Drawing Package

Drawing Title	Drawing Number
Location Plan	ENV0000381C-CAA-00-00-MP-EN-C0400:9
General Arrangement (Site) Plan	ENV0000381C-CAA-00-00-DR-C-I0500_23
Site Access, Compound Area and Temporary Works	ENV0000381C-CAA-00-00-DR-C-I0500_24
Services and Boreholes	ENV0000381C-CAA-00-00-DR-C-I0500_25
Access Tracks	ENV0000381C-CAA-00-00-DR-C-I0500_26
Black Dike River Diversion - Plan and Section	ENV0000381C-CAA-00-00-DR-C-I0500_27
Ings Lane Raising – Plan and Sections	ENV0000381C-CAA-00-00-DR-C-I0500_28
Spillway – General Arrangement	ENV0000381C-CAA-00-00-DR-C-I0500_29
Embankment – Long Section	ENV0000381C-CAA-00-00-DR-C-I0500_30
Embankment – Cross Sections	ENV0000381C-CAA-00-00-DR-C-I0500_31
Landowner Access Ramp	ENV0000381C-CAA-00-00-DR-C-I0500_32
Flow Control Structure – Plan and Sections	ENV0000381C-CAA-00-00-DR-C-I0500_33
Flow Control Structure Inlet Channel – Plan and Section	ENV0000381C-CAA-00-00-DR-C-I0500_34
Flow Control Structure Outlet Channel – Plan and Sections	ENV0000381C-CAA-00-00-DR-C-I0500_35
Flow Control Structure - Sections	ENV0000381C-CAA-00-00-DR-C-I0500_36
River Foss Re-profiling – North Locations	ENV0000381C-CAA-00-00-DR-C-I0500_40
River Foss Re-profiling – South Locations	ENV0000381C-CAA-00-00-DR-C-I0500_41
Lilling Low Lane –Insitu Concrete Overrun Edge Repair	LAxxxxxx/Patch/01
Landscape Masterplan	ENV0000381C-CAA-00-00-DR-L-C0700_36
Landscape Area A	ENV0000381C-CAA-00-00-DR-L-C0700_37
Landscape Area D	ENV0000381C-CAA-00-00-DR-L-C0700_40
Landscape Area E	ENV0000381C-CAA-00-00-DR-L-C0700_41
Landscape Cross Sections	ENV0000381C-CAA-00-00-DR-L-C0700_42
Landscape – Planting Schedule	ENV0000381C-CAA-00-00-DR-L-C0700_43

2 Planning History

2.1 Ryedale District Council

2.1.1 Within the application's red line boundary during the last 10 years the following permissions were granted by Ryedale District Council.

Location: Lilling Green Farm

Proposal: Erection of building to form cattery, domestic double garage, store/workshop and first floor office/gym/rest room.

Permission: Approved with conditions

Date of Approval: 23/08/2011

Location: Lilling Green Farm Cottage

Proposal: Erection of two storey side and rear extension with integral garage and ercection of porch to front elevation.

Permission: Approved with conditions

Date of Approval: 15/07/2019

2.2 City of York Council

2.2.1 Within the application's red line boundary during the last 10 years no planning permissions have been granted by the City of York Council.

3 Planning Policy Review

3.1 Introduction

3.1.1 The Planning and Compulsory Purchase Act 2004 - Section 38(6) requires that decisions on planning applications are be taken in accordance with the development plan unless there are material considerations that indicate otherwise.

3.1.2 The National Planning Policy Framework is a material consideration that must be taken into account where it is relevant to a planning application.

3.1.3 The following provides a review of the planning policy and guidance at central government level plus a review of the development plan policies within Ryedale District and City of York Council local authority areas. Additional commentary is provided concerning the Minerals and Waste Joint Plan (Publication Draft, 2016) a policy document covering both authority areas and considered to be a material consideration in the determination of the application.

3.2 National Planning Policy

3.2.1 The National Planning Policy Framework (NPPF) published by the Department of Communities and Local Government, 2019 sets out the Government's policy in relation to promoting the delivery of sustainable development through the planning system. It states that the "*purpose of the planning system is to contribute to the achievement of sustainable development.*" (Para. 7).

3.2.2 It makes it clear that the planning system has three objectives to achieve in order to deliver sustainable development - the economic, social and environmental and that these should not be exclusive but rather pursued in a complementary way.

3.2.3 In Chapter 11 'Making Effective Use of Land' the Framework suggests that planning decisions should:

"*recognise that some undeveloped land can perform many functions, such as for… flood risk mitigation…*" (Para. 118b).

3.2.4 Green Belt policy is outlined in Chapter 13 which states that the fundamental aim of a green belt is to "*prevent urban sprawl*" and to protect the "*open*" nature of the countryside. (Para. 133).

3.2.5 When considering the approach to development proposals in the Green Belt para.146 states that:

"*Certain other forms of development are also not inappropriate in the Green Belt provided they preserve its openness and do not conflict with the purposes of including land within it. These are* [amongst others]:

b) engineering operations;"

3.2.6 The challenges of climate change and increased risk of flooding are addressed in Chapter 14 where it states that "*the planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk …in ways that…minimise vulnerability and improve resilience…*" (Para. 148).

3.2.7 Chapter 15 addresses Conserving and Enhancing the Natural Environment and states:

"Planning… decisions should contribute to and enhance the natural and local environment by:

- *recognising the intrinsic character and beauty of the countryside…*
- *minimising impacts on and providing net gains for biodiversity…"* (Para. 170 b&d).

3.2.8 Supporting the implementation of the NPPF are a series of National Planning Practice Guidance notes including one on Flood Risk and Coastal Change which suggests that reducing flood risk is an issue where solutions should be sought both within and beyond their own local boundaries; it states:

"Local authorities…should seek opportunities to reduce the overall level of flood risk in the area and beyond. This can be achieved, for instance, through… safeguarding land for flood risk management, or where appropriate, through designing off-site works required to protect and support development in ways that benefit the area more generally." (Para. 50).

3.2.9 The above is the national policy context surrounding the scheme and these key issues are all reflected in the existing local planning policies detailed below. The local policy analysis is divided into the two authority areas, however, given the national policy guidance outlined above it is considered that the respective policies of the neighbouring authority should be considered as material considerations in the determination of the application.

3.3 Ryedale District Council – Development Plan

3.3.1 The relevant part of the Development Plan for Ryedale against which the proposal stands to be judged is The Ryedale Plan – Local Plan Strategy (2013) which is fully adopted. The most relevant text and policies contained in the local plan are considered below.

Vision, Aims and Objectives and Strategy Objectives

3.3.2 The spatial vision for Ryedale includes in its description the following aspiration that clearly recognises the role that the countryside could play in tackling flood risks:

"*Our countryside will be an attractive, productive and multi-functional resource. Traditional activities such as food production, tourism, recreation and leisure will be accompanied by wider roles for flood storage and prevention and appropriate new forms of energy production.*" (Page 17).

3.3.3 This is reflected in strategic aim number three which seeks to minimise "*the risk of flooding and increasing resilience to climate change*" (Page 18) and strategic objective twelve which promotes adaptation "*…to the impacts of climate change through flood risk minimisation…*" (Page 19).

SP1 General Location of Development and Settlement Hierarchy

3.3.4 Policy SP1 states that development in "*open countryside…will be restricted to that… which is necessary to support a sustainable, vibrant and healthy rural economy and communities*,"

3.3.5 Para. 3.35 places emphasis on the role of the wider countryside can play in providing a range of '*services*'. These services are seen as complementing the role of the towns and smaller settlements and include the role of "*flood management*".

3.3.6 Para. 3.37 recognises that the role and use of the countryside will develop particularly to "*mitigate the effects of climate change*." Examples of new land uses are given including "*flood storage* [and] *reducing flood flow rates*".

SP9 The Land-Based and Rural Economy

3.3.7 The commentary on the land-based economy in para. 5.35 confirms the authority will be flexible in its support for appropriate new land uses. This is confirmed in the policy wording which states that "*Ryedale's land-based economy will be sustained and diversified with support for…appropriate new uses for land including flood management.*"

SP12 Heritage

3.3.8 This policy, within the preamble in relation to landscape states that "*Encouraging an awareness of the value of the District's historic landscapes will also be an important way in which they are protected and this is something that this Strategy seeks to support.*" (Para. 7.7)

SP13 Landscapes

3.3.9 The site falls within the Vale of York landscape character area described in para. 7.12 as "*a flatter and arable landscape of a patchwork of fields with hedgerows.*"

3.3.10 Policy SP13 seeks to protect the distinctive landscape character areas in the district by "*Encouraging new development and land management practises which reinforce the distinctive elements of landscape character within the District's broad landscape character areas.*"

3.3.11 These elements include:

- "*The pattern and presence of distinctive landscape features and natural elements (including field boundaries, woodland, habitat types, landforms, topography and watercourses),*
- *Visually sensitive skylines, hill and valley sides,*
- *The ambience of the area, including nocturnal character, level and type of activity and tranquillity, sense of enclosure/exposure.*"

SP14 Biodiversity

3.3.12 The authority seeks to promote biodiversity in Ryedale by seeking "*Opportunities to enhance biodiversity and to improve the connectivity of habitats by creating and protecting wildlife corridors to allow species to naturally change their range in order to adapt to climatic changes or to strengthen populations and genetic diversity can be secured as part of new development schemes.*" (Para. 7.16)

3.3.13 The policy wording supports this objective by requiring, amongst other things, the following:

- *"Supporting, in principle, proposals for development that aim to conserve or enhance biodiversity and geodiversity through the prevention of loss of habitat or species and the incorporation of beneficial biodiversity features;*
- *Requiring a net gain in biodiversity to be provided as part of new development schemes;*
- *Encouraging the use of native and locally characteristic species in landscaping schemes."*

SP15 Green Infrastructure Networks

3.3.14 The policy seeks to protect and enhance public rights of way and encourage access to "*land along river corridors.*" It also encourages the creation of "*New habitats which reflect the locally distinctive habitat types included in Policy SP14*"

SP16 Design

3.3.15 Some of the key features of the policy relevant to the application are the requirements for development proposals to be "*well integrated with their surroundings*", "*protect amenity and promote well-being*" and "*respect the context provided by its surroundings including…topography and landform.*"

SP17 Managing Air Quality, Land and Water Resources

3.3.16 One of the key issues covered by this policy is the impact of development on the best and most versatile agricultural land. Para. 7.27 suggests that "*the loss of productive land, particularly the loss of the Best and Most Versatile Land is carefully managed and avoided, when balanced against other sustainability considerations which will need to be taken into account in guiding new development.*" The paragraph further suggests that Grade 2 land is considered to be generally what forms the best and most versatile category within the district.

3.3.17 The policy wording states that land resources will be protected where "*proposals for major development coming forward on sites that are not allocated for development which would result in the loss of the Best and Most Versatile Agricultural Land will be resisted unless it can be demonstrated that the use proposed cannot be located elsewhere and that the need for the development outweighs the loss of the resource.*"

3.3.18 The policy also seeks to protect air quality by "*only permitting development if the individual or cumulative impact on air quality is acceptable and appropriate mitigation measures are secured*"

3.4 City of York Council – Development Plan

3.4.1 The City of York Council does not currently have an adopted Local Plan. The Development Plan for York consists of the saved policies of The Yorkshire and Humber Plan - Regional Spatial Strategy to 2026 (RSS) and adopted neighbourhood plans. The saved policies of the RSS relate to the York Green Belt and therefore are relevant to this application. However, none of the adopted neighbourhood plans cover the application site.

3.4.2 In order to provide a framework for decision making in determining applications the assessment will principally have to be based on the NPPF policies and those saved from the RSS.

3.4.3 Whilst an unadopted Local Plan is currently in use as the reference document against which development management decisions on individual applications are being judged significant progress has been made towards the adoption of a new Local Plan which has reached the final plan-making 'examination' stage.

Yorkshire and Humber Regional Spatial Strategy to 2026

3.4.4 Published in 2008, the RSS has been substantially revoked save for specific sections of two policies (YH9: Green Belts and Y1: York Sub Area Policy). The saved sections both have the effect of requiring the definition of the York Green Belt boundary and implementation of the policy in order to:

"*Protect and enhance the nationally significant historical and environmental character of York, including its historic setting, views of the Minster and important open areas which both relate to York.*" (Policy Y1- C2).

Draft Local Plan Incorporating the 4th set of changes, 2005

3.4.5 The unadopted local plan currently in use is the 'Draft Local Plan Incorporating the 4th set of changes, 2005'.

3.4.6 Whilst not having the weight of an adopted Local Plan it is a material consideration in the determination of this planning application. The weight afforded to it, however, will have to be considered in the context of the length of time since its original publication date and the up-to-date emerging policies of the new plan.

3.4.7 The most relevant policies for this application from the 2005 Plan are as follows:

- SP2: The York Green Belt
- GP1: Design
- GP4a: Sustainability
- GP9: Landscaping
- GP15a: Development and Flood Risk
- NE1: Trees, Woodlands and Hedgerows
- NE2: River and Steam Corridors, Ponds and Wetland Habitats
- NE4a: International and National Nature conservation Sites
- NE6: Species Protection by Law
- NE7: Habitat Protection and Creation
- NE8: Green Corridors
- HE10: Archaeology
- GB1: Development in the Green Belt
- T2a: Existing Pedestrian/Cycle Networks
- L4: Development Adjacent to Rivers

City of York Local Plan (Publication Draft) - 2018

3.4.8 The new City of York Local Plan (Publication Draft) was submitted on 25th May 2018 to the Secretary of State requesting the Planning Inspectorate to undertake an examination. Subsequently there has been proposed changes that have necessitated a further round of public consultation. Some of the key issues emerging from this process have been housing allocations, overall growth numbers and the approach to the proposed green belt. The additional public consultation period closed on 22nd July 2019 following publication of the proposed modifications to the draft plan.

3.4.9 Although the examination process still has some way to go the policies set out in the Plan can be considered to reflect the settled view of the local authority. The new plan and its underlying evidence base can therefore be given weight as material considerations.

3.4.10 The most relevant policies for this application from the Plan are as follows:

SS2: The Role of York's Green Belt and GB1: Development in the Green Belt

3.4.11 These policies reflect the purposes of the Green Belt expressed in Chapter 13 of the NPPF and the retained RSS polices in terms of the overriding aims being to prevent sprawl and protect the openness of the countryside. Policy GB1 of the emerging Local Plan provides detailed criteria against which any proposal needs to be judged. These, in part, mirror the regional and national guidance and state that consent will only be granted where:

I. "the scale, location and design of development would not detract from the openness of the Green Belt;

II. *it would not conflict with the purposes of including land within the Green Belt; and*

III. *it would not prejudice or harm those elements which contribute to the special character and setting of York."*

3.4.12 In addition it lists the purposes for which consent will be granted if the above criteria are met. Included in the list of appropriate forms of development are "*essential engineering operations*".

GI2: Biodiversity and Access to Nature

3.4.13 This policy provides a local reflection of the national requirements set out in Chapter 15 of the NPPF and seeks to encourage biodiversity and will, amongst other objectives, require developments to:

"ii. ensure the retention, enhancement and appropriate management of features of geological, or biological interest;

iv. result in net gain to, and help to improve, biodiversity;

vi. maintain and enhance the rivers, banks...;

vii. maintain water quality in the ...River Foss...."

GI3: Green Infrastructure Networks

3.4.14 Paragraph 98 of the NPPF requires that decisions "*should protect and enhance public rights of way*". Policy G13 encourages the protection and enhancement of "*the amenity, experience and surrounding biodiversity value of existing rights of way*".

GI4: Trees and Hedgerows

3.4.15 Paragraph 170(b) of the NPPF encourages the recognition of the "*intrinsic character and beauty of the countryside, and the wider benefits from natural capital*" such as trees. The emerging Local Plan policy also recognises the contribution that established hedgerows as well as trees can make to the environment and seeks to protect the most prominent and valuable examples within development sites.

ENV4: Flood Risk and ENV5: Sustainable Drainage

3.4.16 Managing flood risk is a key theme of Chapter 14 of the NPPF which is reflected in policy G14 which states that "*flood risk within the catchment will be successfully managed*". Policy ENV5 also reflects the NPPF advice by encouraging the incorporation of sustainable drainage and minimisation of surface run-off in developments.

3.5 Waste and Minerals Authorities – Development Plan

Minerals and Waste Joint Plan (Publication Draft, 2016)

3.5.1 The Minerals and Waste Joint Plan (MWJP) is currently a draft document co-authored by the local waste and minerals authorities – North Yorkshire County Council, City of York Council and the North York Moors National Park Authority.

3.5.2 It seeks to provide guidance to developers, local communities and other interested parties on where and when minerals and waste development may be expected over the next 15 years in North Yorkshire. It also outlines how minerals will be managed to reduce any adverse impacts and maximise benefits to mineral resources and local economic growth.

3.5.3 The MWJP is currently at examination stage for compliance and soundness. It has been subject to further proposed changes and upon which the associated consultation has been completed.

3.5.4 The Plan, once adopted, will form part of the statutory development plan and the three aforementioned authorities will use it as a basis for decision making on planning applications for development relating to these activities. In its current stage and form it is considered to be a material consideration in the determination of this application.

3.5.5 Where the MWJP contains relevant policies, decisions will be made in accordance with the plan, unless there are other material considerations, related to planning, which indicate otherwise. The policies relevant to the development site are listed below:

S01: Safeguarding mineral resources

3.5.6 This policy outlines the types of surface and deep mineral resources that are identified within Minerals Safeguarding Areas, development within which is subject to Policy S02. The surface minerals resources safeguarded under the policy are identified on policy maps, including clay and sand and gravel.

Policy S02: Developments proposed within Minerals Safeguarding Areas

3.5.7 This policy sets out how proposed developments within mineral safeguard areas will be assessed. The policy states that:

"*Within Surface Minerals Safeguarding Areas shown on the Policies Map, permission for development other than minerals extraction will be granted where:*

i) It would not sterilise the mineral or prejudice future extraction; or

ii) The mineral will be extracted prior to the development (where this can be achieved without unacceptable impact on the environment or local communities), or

iii) The need for the non-mineral development can be demonstrated to outweigh the need to safeguard the mineral; or

iv) It can be demonstrated that the mineral in the location concerned is no longer of any potential value as it does not represent an economically viable and therefore exploitable resource; or

v) The non-mineral development is of a temporary nature that does not inhibit extraction within the timescale that the mineral is likely to be needed; or

vi) It constitutes 'exempt' development (as defined in the Safeguarding Exemption Criteria list)."

M13: Continuity of supply of clay

3.5.8 This policy ensures the provision of sufficient reserves of clay to provide a 25 year supply for existing manufacturing operations in the County. It identifies specific areas for future extraction to provide this supply, none of which are part of the application site.

4 Planning Appraisal

4.1 Introduction

4.1.1 Following the review of the policy framework surrounding the application the following key appraisal themes are considered to be the most relevant in assessing the proposal.

- Principle of Development and Green Belt Policy;
- Design and Amenity;
- Trees and Hedgerows;
- Agricultural Land;
- Flood Risk and Water Issues;
- Mineral Resources;
- Access and Traffic;
- Ecology and Nature Conservation;
- Heritage and Archaeology; and
- Ground Conditions.

4.2 Appraisal

Principle of Development and Green Belt Policy

4.2.1 The principal aim of the development as clearly set out in the application is to make a significant contribution towards the alleviation and reduction of flood risk, thereby improving the ability of communities in York and Strensall to cope with increasingly frequent and significant flood events.

4.2.2 There is considered to be strong support for the role of the countryside to contribute towards flood resilience in The Ryedale Plan which makes specific mention of this role in its spatial vision. The need to take positive action against flooding and the impact of climate change is further reinforced within strategic aims 3 and 12 respectively along with general support with Policy SP1.

4.2.3 No conflict exists in The Ryedale Plan between the proposed development and the traditional role of the countryside as it recognises that flood management is an acceptable new use within the open countryside (Policy SP9). Overall it is considered that this aim is strongly supported by current national and local planning policy.

4.2.4 At a national level NPPF, Chapter 14 emphasises the central role that the planning system can play in delivering greater flood resilience.

4.2.5 A section of the application site falls within designated green belt. This area is wholly contained within the City of York Council boundary. The York Development Plan is supported by the saved policies of the RSS that define the purpose of the York Green Belt. The proposal is considered not to be in conflict with the key objectives of the Green Belt as outlined in the RSS which in turn reflect national policy wording and guidance in the NPPF. Furthermore, within the context of the RSS policy wording the proposal, by improving flood resilience downstream, makes a positive contribution towards the protection of York's unique historic character by reducing flood risk in the city.

4.2.6 Policy GB1 of the emerging City of York Local Plan lists specific types of new development that are appropriate in the Green Belt providing that they satisfy three criteria. These criteria are set out para 3.5.11 above and it is considered that the first two reflect the NPPF objectives of preventing urban sprawl and protecting the openness of the countryside whilst the third criterion mirrors the specific objectives of the RSS in seeking to protect the unique character of York as a historic city.

4.2.7 The commentary below describes how the development is considered not to cause harm to the openness, visual amenity or intrinsic value of the countryside. It also does not encourage, provide any future opportunities for, or demonstrate any attributes of, urban 'sprawl'; it is therefore not considered to be in conflict with the overarching objectives of the Green Belt.

4.2.8 The third criterion relating to protecting historic York is clearly satisfied by the proposal as described above.

4.2.9 In satisfying these criteria the proposal is also considered to fall within the category of acceptable types of development as an 'essential engineering operation'. Therefore, the development is considered to be fully consistent with the national, regional and emerging local plan policies concerned with the Green Belt relating to the principle of this development.

Ground Conditions

4.2.10 Ground conditions have been investigated to establish the suitability of the site to accommodate the proposed development, whether the material to be sourced from the borrow pits is suitable for the construction of the embankment and the likely presence of any contaminated land (no risks from contaminated land were identified).

4.2.11 The proposed borrow pit locations have been placed in locations where there are thick deposits of plastic clay. Indications from investigations shows that this clay is worked as brick clay locally (e.g. Newton upon Derwent clay pit) and the stratum (geological known as the Alne Formation) is commonly around 4m thick. The current pit positioning follows the findings of two ground investigations, a primary investigation in Summer/Autumn 2018 and a supplementary secondary ground investigation in Autumn 2019. The primary study is included in the application pack (a summary is provided here) and this commentary contains the findings of the supplementary investigation.

4.2.12 The primary ground investigation for the flood storage area comprised of 26 exploratory holes and geophysical electro-magnetic surveying. The exploratory holes were arranged on the basis of a 300m x 300m grid and water wells were installed in around half of the holes. When the findings were assessed, it was seen that a small proportion of the points on this grid fell along a linear feature comprising a sand channel belonging to an ancient route of the River Foss. It was appreciated that the sand was a localised geological phenomenon and that in order to complete an assessment of the geology a number of additional holes were required. Subsequently in Autumn 2019 an additional six boreholes were drilled to between 5m and 7m depths on a central aligned north-south traverse situated away from the channel feature.

4.2.13 Now that this work is complete, a better understanding has been obtained on the sheet of lacustrine clay sediments which are present at the site. The lacustrine clays have been tested as part of the main phase ground investigation and found to be of firm or stiff nature beneath all the farmland with the exception of the central corridor of lowest lying boggy farmland. In the low lying strip of land there is a tendency for lens-shaped bodies of sand to occur along with softening of soils in the middle and lower parts of the lacustrine deposit is present, possibly resulting from the presence of the sand.

4.2.14 The primary and secondary ground investigations have provided a sound understanding of the geological conditions and has identified the extent of this poor strength zone (ancient sand channel). The borrow pits have been positioned on higher ground and in positions where the geology has been identified by triangulation providing greater confidence. A geophysical survey was also undertaken which shows no paleo-channel or ferrous anomaly (e.g. iron-rich sand) in the chosen pit sites.

4.2.15 The following excavation areas have been proposed, two of which are permanent pits and two of which will be reinstated to ground level and existing land use to minimise visual and landowner impacts. The reference numbers refer to the identifiers on the application drawings.

4.2.16 Borrow Pit P1 – This area is located within the higher topography where the primary and secondary ground investigation shows a thick layer of Alne Formation. This area will be excavated and the fill will be used within the embankment core. The borrow pit will be retained permanently and landscaped.

4.2.17 Borrow Pit T1 – This area is located away from the river where the primary and secondary ground investigation concludes there is a thick layer of Alne formation. This area will be excavated but will not exceed the maximum area indicated. The void will subsequently be backfilled with material that does not meet the required material safety standards (i.e. material with a higher permeability). The land will be fully reinstated to its original level and land use.

4.2.18 Borrow Pit P2 – This area is situated in low quality arable land which is known to flood frequently. This permanent pit will provide a wetland habitat, improve water quality and improve the river corridor. Some of this material will be used for fill material within the shoulders of the embankment and some material will be used as donor material to backfill Borrow Pit T1 and T2 to reinstate these to existing land use to minimise visual and landowner impact.

4.2.19 Borrow Pit T2 – Located in an area where the Ground Investigation shows a thick layer of the Alne formation. This area will be backfilled to minimise the loss of high quality agricultural land and to minimise impacts to the landowner. This area will be excavated up to the maximum area indicated. The void will then be backfilled with material that does not meet dam safety standards (i.e. material with a higher permeability). The land will be fully reinstated to its original level and land use.

4.2.20 Cut-fill calculations have been undertaken to ensure these borrow pits provide enough fill for the embankment and the embankment's impermeable core. The present borrow pit sizes account for a proportion of the material that is expected to be unsuitable following excavation which is inevitable in excavations of such a size. The final landscaped pits have been carefully sized to ensure the total permanent void equates to the supplementary material required to raise the embankment above ground level. This provides certainty that the permanent borrow pit areas will not change or increase in size when commencing site activities.

4.2.21 It was originally anticipated that all the clay material could be wholly sourced from the borrow pits identified on site. However, a 'contingency' amount of imported clay is now proposed, if required. This has arisen from the need to remove uncertainty from the construction schedule. The establishment of the clay recovery process from the borrow pits and the associated dewatering mechanism could potentially delay the programme; therefore it was considered prudent to have available an initial contingency amount of clay to enable construction to commence, without having to wait for the borrow pits to produce material.

4.2.22 In terms of quantities the total amount of material required to construct the embankment and undertake other engineering operations on site amounts to 112,000m3 of which up to 2,300m3 is intended to be imported. The traffic

implications of this are discussed in the accompanying Transport Statement and summarised further in this report.

Design and Amenity

4.2.23 The application site is located within an area of open arable farmland of large fields, with few undulations or boundary features such as trees and hedgerows. Residential properties are located within and close to the application site; those at Lilling Green are within the site and East Lilling House is just outside to the south east. Walbutts and The Bungalow are to the south, Bridge Farm to the northwest and there are also nearby properties at East Lilling Grange and East Lilling Farm to the northeast. A portion of Lilling Low Lane is within the application site as are public rights of way (PRoW) and tracks along the western boundary and along Ings Lane.

4.2.24 The River Foss dominates as a visual reference with its tributary the Black Dike; a number of other water features such as streams, ditches and temporary ponds are also present. A line of National Grid electricity cables supported on high-level steel pylons provide another prominent visual feature traversing the site from southeast to northwest.

4.2.25 Visual and residential amenity is likely to be affected during the construction phase of the project due mainly to impacts from noise and visual disturbance arising from the works themselves and associated vehicular movements. This will be most pronounced at the closest residential properties to the development and the users of the PRoW. The application seeks to minimise these impacts mainly through the implementation of the mitigation measures outlined in the scheme's Construction Environmental Management Plan (CEMP) appended to the ES including the application pack. Prior to development beginning the applicant will require the contractor to produce a Construction Traffic Management Plan (CTMP) detailing how the traffic travelling to, entering and leaving the site will be effectively managed safely and in order to minimise disruption and potential conflict.

4.2.26 It is considered that once operational the development will not to have any significant negative impacts on either the landscape or visual/residential amenity. A fuller description of the potential impacts is included in the Landscape and Visual Effects Scoping Statement included as Appendix A2 in the accompanying ES. The embankment, due to its length and height, will be a prominent feature in the local, generally flat, landscape. However, it has been designed to minimise this impact restricting the maximum height of the feature to 3.95m with the average height being much lower at 2.5m. The height at either end falls gradually towards the PRoW at the west end and Lilling Low Lane at the eastern extent thereby significantly reducing its visual impact from these key public viewpoints. The visual impact of the embankment is further reduced by the proposed top soiling and grass seeding of the feature along its entire length. This includes the length of the spillway which will incorporate voided, reinforced protection on the southern and western slopes through which grass will grow.

4.2.27 The width of the embankment will also reduce the visual impact; this varies but the central section will be around 30m wide allowing a 1-in-4 slope to be created which will provide a gentler more natural and less engineered appearance, encouraging the perception of views across and beyond the feature akin to an undulation within the landscape.

4.2.28 The residential properties nearest the embankment at Walbutts, The Bungalow and East Lilling House are further protected from views of the feature by; in the case of Walbutts and The Bungalow, by trees. Views from East Lilling House are restricted by the presence of other farm buildings within the grouping. Properties further away

will have long views across to the feature but the design mitigation is considered to substantially reduce any intrusion likely to be experienced.

4.2.29 The closet and most prominent views of the feature are likely to be experienced by users of the PRoW running parallel to the section of the embankment west of the Foss. However, the design of the embankment at this point provides for a significant decrease in the height and consequent tapering of its width from the river's western bank to existing ground level.

4.2.30 Users of the PRoW will also be exposed to near views of the flow control structure. This is a hard engineered structure the visual impact of which, close up, will be to some degree negative. However, from the footpath there is only a very short section which is exposed to an end-on view and clearly seen when crossing the Foss footbridge. The headwall of the structure is relatively narrow at 7.7m wide; it is contained either side by the embankment and the associated wingwalls. The flow control structure is not considered to visually impact any other receptors.

4.2.31 The other major engineered features of the scheme are the raising of Ings Lane and the excavation of the borrow pits.

4.2.32 In terms of Ings Lane this change will be viewed from Lilling Green and by PRoW users. Both impacts are considered to be minor given the proposed landscaping mitigation proposed which will have the effect of breaking the view across the raised track for both receptors.

4.2.33 The borrow pits, whilst clearly a substantial change in the landscape have been carefully designed to exhibit a natural appearance and, along with the proposed mitigation planting, are not considered to be visually detrimental, particularly to the closest receptors along the PRoW and Lilling Green.

4.2.34 The facility has been designed as a passive operational structure requiring very little maintenance. Infrequent inspection visits will be required from EA staff and the embankment in particular will be grass-cut approximately six times per year. The impact on residential amenity and the enjoyment of the PRoW of these activities is considered to be minimal.

4.2.35 Overall careful design of the development is considered to have minimised its impact on the landscape, residential and footpath user's amenity. As such it is considered not to be in conflict with the appropriate planning policies outlined in section 3.

Trees and Hedgerows

4.2.36 There will be some impact on both trees and hedgerows as a result of the proposed development within the site. These are fully outlined in the accompanying Tree Survey included as an appendix to the ES.

4.2.37 Impacts along the line of the embankment and creation of the borrow pits have been avoided. However, the works to raise Ings Lane will result in the loss of 9 trees and a section of hedgerow along the length of the works. Seven of these trees are Ash, and whilst most of them are currently categorised as being in 'fair' condition, they are unlikely to survive in the long term due to Ash Dieback Disease.

4.2.38 Following the works to Ings Lane a new length of native-species hedgerow will be planted to replace the section removed in order to reinstate this strong boundary feature.

4.2.39 The accompanying landscaping plans provide details of all the proposed new tree and hedgerow planting in various areas throughout the site including immediately adjacent to the borrow pits and along Ings Lane.

4.2.40 The mitigation planting proposed provides for a total of 298 trees and 277 linear metres of hedgerow. This is considered to provide sufficient mitigation for the 9 trees and approximately 200 linear meters of hedgerow to be lost. As described in the accompanying Environmental Statement this planting also provides mitigation for other ecological impacts of the scheme.

Agricultural Land

4.2.41 The development will result in the loss of some Grade 2 agricultural land from production within the area of permanent works. Information from the regional agricultural land classification maps (*Regional Agricultural Land Classification Map, Yorkshire and The Humber Region*, Natural England, 2010) suggests, very broadly, that the site's Grade 2 land lies to the east of the Foss beyond the area of the river's corridor subject to frequent flooding. The remaining land to be removed from active production is likely to be Grade 3 a large proportion of which will be degraded by frequent flooding.

4.2.42 The total area of agricultural land (all grades) to be taken permanently out of production is 18.87ha. of which only a proportion will be Grade 2. As required by Policy SP17 of The Ryedale Plan this loss has to be balanced against "*other sustainability considerations*", the most important of which are the substantial benefits accruing from the development in preventing flooding downstream. In addition, the development, as part of the proposed mitigation measures, will also create biodiversity gains. The main areas will primarily be within land to be taken out of production i.e. from the borrow pits and the poor quality marginal land immediately west of the embankment between it and the Foss to be turned over to species-rich grassland, wetlands etc. as described elsewhere in the application.

Flood Risk and Water Issues

4.2.43 The Water Environment and Flood Risk chapter of the ES includes consideration of the issues identified from the Flood Risk Assessment and Water Framework Directive assessment.

4.2.44 The issues identified are split between construction and operational impacts. The construction risks are focussed around the potential for pollution of the watercourses, whilst during the operation of the scheme the impact of increased or reduced flood risk and loss of a section of natural river bed are the principal concerns. None of these issues are considered to prevent the scheme proceeding as appropriate mitigation has been incorporated into the design or other measures are in place to minimise the impact.

4.2.45 For example, the River Foss will be temporarily diverted to allow the construction of the flow control structure across the river which will remove habitats along the channel and banks of the river. Black Dike will be straightened to take it further away from the base of the proposed embankment.

4.2.46 Mitigation is proposed for both of these impacts; along the Foss a total of 225m of the channel and banks upstream of the flow control structure will be re-profiled to provide compensatory habitats. Similarly, the length of Black Dike to be altered will also be re-profiled in a similar manner.

4.2.47 The prevention of pollution during construction will be strictly controlled through the implementation of a comprehensive CEMP. The plan will be finalised with the appointed contractor but a draft is included as an appendix to the ES.

4.2.48 Operationally, the negative impacts of the increased flooding upstream of the embankment have been mitigated through the design, ensuring that the retained water has a maximum footprint so it will not adversely affect existing residential or other buildings. Improving access from Ings Lane during a large flood event by

raising its level and the potential harm to crops from more frequent flooding has been addressed through compensation arrangements with those affected.

Mineral Resources

4.2.49 One of the main conclusions of the ES minerals chapter is that the 'slight adverse' impact associated with the sterilisation of some of the resources below the footprint of the embankment and the borrow pits cannot be directly mitigated for, but that this impact is offset by the excavation and use of the mineral clay within the borrow pits and directly below the footprint of the embankment.

4.2.50 The most appropriate policy assessment for the proposed development, including the use of borrow pits on site to source the material required for the construction of the embankment, is considered to be the conditions listed in Policy S02 of the MWJP, discussed above in sub-section 3.5. This policy outlines that permission for non-mineral development can be given if a proposal meets one or more of six conditions. It is considered that the proposal satisfies the following three.

4.2.51 Not sterilising the mineral or prejudicing future extraction - only relatively small areas below the footprint of the embankment and the borrow pits would be inaccessible post-development. The remainder of the resource within the application site is still available for future extraction.

4.2.52 Extract mineral prior to the development - the mineral below the footprint of the embankment and within the borrow pits will be extracted up to a certain depth and utilised during the construction of the development.

4.2.53 Need for the non-mineral development can be demonstrated to outweigh the need to safeguard the mineral – it is considered that the benefits of the scheme to the wider communities outlined in the application clearly outweigh the need to safeguard the area of mineral. This view in particular is reinforced by the net loss and sterilisation of resource being comparatively small.

4.2.54 In meeting these criteria the development minimises its impact on the objectives of the draft plan and is considered to satisfy policy.

Access and Traffic

Construction Phase Impacts

4.2.55 The proposed access route for the construction plant, equipment and material is fully described in the accompanying Transport Statement. In summary, a single access to the site will be used for the majority of the development. This will be via a lane and track which runs past Bridge Farm to the site of the proposed embankment by the Foss where the main contractor's works compound will be sited. The track will be accessed from Sheriff Hutton Road.

4.2.56 Ings Lane will also be used to directly access the works area associated with the raising of this lane. Temporary mitigation measures to ensure safe access to the site will be fully set out in the CTMP which will form part of the site works information which will form part of the site's works information for the appointed contractor.

4.2.57 Access within the site itself across the Foss will be enabled by the construction of a temporary 11m long bridge just downstream of the location of the proposed control structure. This bridge will take the heavier vehicles, lighter vehicles will be able to use alternative river crossing points. Across the Foss these will be 'pipe bridges' which will be created by installing three 1.2m diameter culverts within the Foss channel topped with clay/stone fill within which a wooden deck would be installed to distribute the load. The river bank sides would also be engineered to enable a gentle slope to be created down to the pipe bridge. Two pipe bridges are required to cross the Foss plus a similarly constructed one across Black Dike.

4.2.58 These crossings will be in position for the duration of the works, then fully removed and ground levels reinstated to either their pre-existing state or that described in any associated landscaping/mitigation works.

4.2.59 To provide access within the site during construction a temporary access track, consisting of clean crushed stone atop a geotextile membrane, will be laid from the unclassified access track and along the southern side of the proposed embankment, utilising the temporary bridge to cross the river.

4.2.60 The works not using the main access will be those concerned with the carriageway edge protection to be provided to Lilling Low Lane which will be accessed directly from the highway. Similarly, as discussed above, the works to raise Ings Lane will be directly accessed from Lilling Low Lane and Ings Lane. The scale and therefore potential impact of these works will be relatively moderate.

4.2.61 During the proposed works to raise the section of Ings Lane a temporary diversion of the lane and associated PRoW will be necessary whilst the works take place. The temporary diversion proposed is adjacent to the existing line of the lane and involves moving the line of the footpath and track approximately 35m west into the adjacent agricultural land. The diversion will be constructed from suitable plastic or aluminium matting with built up access ramps at either end. Throughout the works access will be maintained at all times for all users.

4.2.62 An application for the temporary diversion of the path will be submitted in good time for the required works which are likely to begin in 2020. At the time of writing the length of time required for the temporary PRoW diversion is not known, however, it will be sought for a period not exceeding 6 months.

4.2.63 Following the completion of the works the temporary diversion will be removed and all the associated land returned to its original condition. Landscaping will also be provided along the western boundary to compensate for the removal of a length of hedgerow and trees.

4.2.64 Construction impacts will be managed by the appointed contractor through the completion of a CTMP.

4.2.65 The completed scheme is considered to comply with the relevant local plan and NPPF policies that encourage the creation of new habitats along footpaths and this section of the PRoW receives the benefit of no longer being subject to inundation during 1-in-100 year flood events.

Operation

4.2.66 The passive nature of the structure means that no permanent staff are required on site and only occasional maintenance and inspection visits are needed. It is considered that there are no adverse traffic effects post-development.

4.2.67 In terms of the impact on the PRoW there are positive benefits on the section along Ings Lane as described above. Additional landscaping mitigation works will also be carried out adjacent to the section of the PRoW running along the western boundary of the site further contributing to the ambitions of the relevant planning policies relating to footpath corridors and mitigating visual impacts of the development.

4.2.68 In terms of other impacts parts of the footpath are currently subject to flooding during 1-in-100 year events, for example, during that last flood of 2015, the bridge over Black Dike as washed away, making the PRoW impassable until it was reinstated. Post-development, the scheme would affect an additional section along the western site boundary making this length subject to flooding where previously it was not.

4.2.69 The applicant is not able to justify raising the level of these sections above the maximum design flood height on either cost or environmental impact grounds. This

is particularly so given that these areas are at the margins of the flood profile and will drain relatively quickly and furthermore that, under baseline conditions, sections of the PRoW would already be subject to flooding.

Ecology and Nature Conservation

4.2.70 In order to assess the likely effects that the proposed development might have on the Strensall Common Special Area of Conservation (SAC) a Habitats Regulations Assessment (HRA) screening exercise was undertaken. This identified a number of potential impacts on the SAC (which is also designated as a Site of Special Scientific Interest), namely:

- potential changes to groundwater levels below Strensall Common;
- potential changes to water levels in the Black Dike, which runs along the boundary of Strensall Common; and
- potential air quality impacts of construction emissions on qualifying features.

4.2.71 All of the above have the potential to affect the plant community, structure and function, and the supporting processes within the SAC.

4.2.72 The HRA concluded that no significant effects were likely to be experienced by the SAC. A full copy of the report and supporting evidence is reproduced in the application pack. In summary, the SAC's distance from the development, the construction traffic being routed away from the SAC and the conclusions of the water modelling of the effects on groundwater and on Black Dike of the works showed at most only minimal impacts.

4.2.73 However, in order to confirm this analysis, the ES further recommended additional post-development monitoring within SAC of groundwater levels in order to ensure there is no adverse effect.

4.2.74 In addition, the extensive commentary within the ES on the potential effects of the development found that the application site provides some valuable habitats for ecology and nature conservation interests particularly along the watercourse corridors.

4.2.75 There were no species or habitats identified that were so adversely affected that any potential effects could not be mitigated.

4.2.76 The relevant planning policies seek to protect biodiversity and achieve a 'net gain' as part of developments. It is considered that the scheme supports these objectives in providing the proposed mitigation landscaping and other compensatory works.

4.2.77 In particular, compensation for the loss of some trees and sections of hedgerows will be provided around the borrow pits and elsewhere through additional tree planting and creation of a new habitat-rich environment including species rich grasslands and marshland, wetland areas (borrow pits and smaller pond). In addition, mitigation for the partial loss of the trees and part of the hedge line along Ings Lane is also proposed along the lane itself. Habitat creation is also proposed as an integral part of the proposed realignment of a section of Black Dike.

4.2.78 It is considered that all reasonable opportunities have been taken to meet the ambitions of local policy in connection with the biodiversity on the site. The following is the proposed mitigation measures for each of the protected habitats and species. In terms of specific species, assessments were made of the presence of all protected species on the site and the scheme assessed to determine if any mitigation measures or design changes were required.

4.2.79 The artificial channel created by the Foss flow control structure was considered a potential threat to fish and eels which resulted in loose and fixed rocks on the invert to create a 'fish pass', and 'eel tiles' installed to ease the passage of both. During

flood events it is also possible that fish will be swept into the borrow pits and smaller ponds. To ensure that fish are no trapped in the ponds appropriately designed outfalls will be provided back into main channel of the River Foss.

4.2.80 Once established the number of trees on site plus compensatory replacement of hedgerows will provide additional nesting opportunities for birds.

4.2.81 The bat survey revealed only one tree being used as a roost. This tree is not within the main works area but will be identified and protected for the duration of construction.

4.2.82 Great Crested Newts were also found on site and will be protected during the works; the creation of the small pool will provide compensatory habitat for any lost.

4.2.83 Of the remaining species, field surveys have identified the presence of both otter and water voles on site. In order to confirm the level of any impact additional pre-construction surveys will be carried out no more than 2 months prior to the start of works to ensure that any animals or habitats affected are dealt with to minimise disturbance.

4.2.84 Mitigation for these impacts will be provided through creating potential habitats, for example the Black Dike will be realigned to the east of the embankment. This will include a 45 degree profile and suitable native vegetation to provide foraging and sheltering resources. Vegetation planted around the smaller pond to be retained will be linked into woodland to the south of the embankment to create habitat linkages. Reedbeds created within the borrow pit area will provide good refuge for water voles. The ongoing management regime in line with good practice will be observed by site managers and the Internal Drainage Board which will also benefit otters and water voles. This habitat creation will increase the biodiversity of habitats which will in turn benefit otter and water voles using the site. The seasonal wetting of fields will also provide suitable habitat for water voles.

4.2.85 A pre-construction survey will also be undertaken to assess the presence of badger on or near the site. The scheme includes mitigation for any potential impacts through the creation of small stands of trees for example.

4.2.86 Non-native invasive species Himalayan Balsam and Giant Hogweed were recorded on-site. An eradication programme for their partial removal from sections of the site will be required as they occur in the area of the works. The programme will form part of the scheme's finalised CEMP.

4.2.87 There is a strong emphasis in national and local planning policy towards trying to achieve a 'net gain' in biodiversity in development proposals. The application is considered to meets this threshold which is confirmed by an analysis within the ES showing that there is a net gain in biodiversity of 11.34%. The flood alleviation scheme is therefore considered to be compliant with the NPFF, which stipulates development should avoid net loss of biodiversity, and that sustainable development should move towards achieving net gains.

Heritage and Archaeology

4.2.88 As required by local and national planning policy the site and surrounding area have been assessed for the presence of built heritage assets and archaeological interest, the process and results being described in the accompanying Heritage Statement.

4.2.89 In terms of the built heritage a desk-based study examined assets within and a reasonable distance from the application site. The nearest listed buildings on the National Heritage List for England (NHLE) are 700m to the northeast of the site and cannot be viewed from the site. There are no Conservation Areas, Registered Battlefields or Registered Parks and Gardens within the study area.

4.2.90 The nearby listed buildings are:

- East Lilling Grange (NHLE 1173388) Grade II – mid 19th century house;
- East Lilling Farmhouse (NHLE 1149619) Grade II – late 18th century house;
- Gennell Farmhouse (NHLE 1315751) Grade II – early 18th century farmhouse.

4.2.91 An initial assessment suggested there is a low potential for remains dating to the prehistoric and Saxon periods; there is medium potential for Roman and medieval remains and a high potential for post-medieval remains relating to the construction of the man-made Black Dike.

4.2.92 Monitoring of the geotechnical test pits indicated potential for preserved organic remains at approximately 1.2m deep. These are likely to indicate former channels of the River Foss.

4.2.93 Following the above findings further investigation works are proposed as part of the application which are proportionate and appropriate to the site. They consist of a geo-archaeological coring assessment which will seek to identify, characterise and record the former line of the Foss identifying if any material relating to human activity is present. Data gathered from the assessment will also aid in the understanding of former landscapes and associated human interaction.

4.2.94 Within the area of the borrow pits, traditional trial trenching is also proposed to identify, characterise and record features identified by a geophysics survey as well as examining the 'blank' areas.

4.2.95 The proposed further investigations will be captured in a Written Scheme of Investigation with the work intended to be undertaken prior to the determination of the planning application.

5 Conclusions

5.1.1 The discussion of the background and context to the application is considered to demonstrate that there is a clear and substantial need and support for implementation of the scheme.

5.1.2 All relevant design, access and other issues have been assessed and potential impacts addressed or mitigated as part of the design process. No fundamental issues have arisen that could not be overcome or that would prevent approval.

5.1.3 There is considered to be general and specific planning policy support for the scheme within the development plan and development management frameworks of both Ryedale District Council and City of York Council.

5.1.4 It is therefore considered that the applicant has taken account of all the key issues raised by the scheme, that the submitted proposal complies with planning policy and that environmental and other impacts have been addressed and/or mitigated to acceptable levels.

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