

WEST AREA PLANNING COMMITTEE

3 May 2016

Application Number: 15/03703/FUL

Decision Due by: 13 May 2016

Proposal: Construction of a culvert under the railway between Hinskey Drain and Hinskey Stream. (Amended Information)

Site Address: Railway, Didcot To Chester Line (Dcl) 61M 55Ch Off Abingdon Road **Appendix 1**

Ward: Hinksey Park

Agent: N/A

Applicant: Network Rail

Recommendation:

APPLICATION BE APPROVED

Reasons for Approval

1. It is acknowledged that the scheme fails part two of the NPPF exception test and for that reason is also contrary to the Core Strategy and Oxford Local Plan but on balance, it is considered that the wider sustainability benefits of this scheme outweigh the impacts of the modelled increased flood risk, and that any remaining adverse impacts can be mitigated by the conditions imposed. There are no other material reasons why planning permission should be withheld for this proposal.
2. Officers have considered carefully all objections to these proposals. Officers have come to the view, for the detailed reasons set out in the officers report, that the objections do not amount, individually or cumulatively, to a reason for refusal and that all the issues that have been raised have been adequately addressed and the relevant bodies consulted.

Conditions

- 1 Development begun within time limit
- 2 Development in accordance with plans and documents
- 3 Landscape plan required
- 4 Tree Protection Plan (TPP) 1
- 5 Arboricultural Method Statement (AMS) 1

- 6 Verification report
- 7 Watching brief
- 8 Archaeological WSI and MS
- 9 CTMP
- 10 Culvert maintenance plan
- 11 Ecology Management Plan
- 12 Vole survey
- 13 Otter survey
- 14 Invasive species
- 15 Fish

CIL requirements

CIL is not chargeable on this type of development.

Principal Planning Policies:

Oxford Local Plan 2001-2016

- CP1** - Development Proposals
- CP8** – Designing development to relate to its surroundings
- CP11** - Landscape Design
- CP22** - Contaminated Land
- NE15** - Loss of Trees and Hedgerows
- NE20** - Wildlife Corridors
- NE21** - Species Protection
- NE23** - Habitat Creation in New Developments
- HE2** - Archaeology

Core Strategy

- CS11** - Flooding
- CS12** - Biodiversity
- CS18** –Urban design, townscape character and the historic environment

Other Planning Documents

- National Planning Policy Framework
- National Planning Practice Guidance

Consultations

After the application was registered, additional information was submitted and two rounds of alterations to the submitted material were made, principally in relation to the Flood Risk Assessment. The applicant has met with objectors and the City Council, and has responded to the comments made. As a result, the third and final Flood Risk Assessment was submitted which, together with all other subsequent information, was formally advertised for a further 21 day consultation period. The comments summarised below are the latest versions in the rounds of consultation.

Representations of Consultees

Environment Agency (EA) Thames Region (final comments)

- the hydraulic modelling is technically sound and suitable to inform the site-specific FRA;
- the option of a culvert joining Hinskey Drain and Hinksey Stream has been identified as the best possible option for conveying water under the rail track and to mitigate any impact on flood risk;
- the FRA demonstrates that as a direct result of this proposal there will be:
 - no increase in the number of properties at flood risk as a result of the scheme;
 - an increase in flood depth at 21 residential properties and the Dairy Crest site up to and including 1 in 100 plus climate change flood events;
 - a hazard rating increase for one property but residents will not be at increased hazard risk because the property is located in a block of houses with a communal access and egress point which does not increase in hazard rating;
- if planning permission is granted the Council should ensure that and impacts on access and egress during a flood event for the surrounding properties can be managed by local emergency planners;
- additional investigation of groundwater could be an opportunity to determine groundwater quality;
- the submitted ecological appraisal is comprehensive and covers the main ecological risks;
- conditions recommended dealing with (i) Groundwater and Contaminated Land, and (ii) Biodiversity.

Oxford City Council, Flood Mitigation Officer (final comments) - the proposal results in an increase in flood depth to the surrounding area. The planning authority will need to decide if the accumulative impact of this increase in flood depth is acceptable against other material planning considerations, whether it passes Part B of the exceptions test of the NPPF and Core Strategy Policy CS11.

Oxfordshire County Council, Lead Flood Authority – agrees with comments of City Flood Mitigation Officer

South Oxfordshire District Council – no comment received

West Oxfordshire District Council – no comment received

Vale Of White Horse DC Planning & Engineering Dept. – no comment received

Cherwell District Council – no comment received

Thames Water Utilities Limited - the application does not affect TW so no comments on the application.

Oxford CC Land Quality Officer- Conditions should apply to the consent if given:

- reclamation strategy with verification recommendations
- submission of validation report prior to operation of the track
- watching brief for unexpected contamination and action plan in the event that unexpected contamination is found.

Oxford CC Ecology Officer - the proposal will not have a negative impact on protected species or habitats subject to conditions on otter and vole surveys.

Oxford CC Tree Officer - unavoidable tree removals will reduce the screening of the railway from east and west. Mitigation planting should be sought – this would be most effectively carried out off-site. Retained trees should be protected. Suggested conditions: landscape plan, tree protection plan, and Arboricultural Method Statement.

Oxfordshire County Highway - delivery management to avoid peak network hours to minimize impact on surrounding highway network. Loss of parking spaces at Redbridge P and R should be minimized – in consultation with Oxford City Council. Since no road closures are proposed, no objections to the application. Submitted CTMP acceptable.

Historic England - no objection subject to appropriate programme of investigation and mitigation (as set out in the D and A Statement para 6.9.7). With regard to the scheduled Old Abingdon Road culverts which lie downstream of the development, the applicant should be asked to confirm that there is no risk to the fabric of the culverts from increased water flow resulting from the new culvert. *[NR responded that the issue of the existing culverts adjacent to Old Abingdon Road Bridge has previously been discussed with the design engineers who have confirmed that their fabric would not be adversely affected as a result of the implementation of this project].*

Oxford City Council, Archaeologist - no objection subject to a programme of archaeological investigation

Third Party representations

BMW Group and DB (Cargo) UK Ltd - representations in support emphasising the importance of this line to their operations, the financial costs to them and the local and national economy of line closures, the way in which the line closures negate environmental benefits of rail freight, and the need to keep the line open during flood events.

South Oxford Flood Alleviation Group (SOFAG) - the applicant should be encouraged to withdraw the application and seek to synchronise the proposed track-raising with the OFAS because there is insufficient assurance as to clearance of watercourses to remove obstructions to water flow, and no assurance that the numerical model used for the FRA has been calibrated against a measured flood event.

Oxford Flood Alliance (OFA) – the revision is clearer and the inconsistencies appear to have been resolved. Need clarification of para 5.6 on groundwater. Queries whether the properties identified as having property level protection have adequate flood guards as opposed to external fixings. Owners of houses with increased flood levels should be offered a free inspection to ascertain the heights of their electric sockets. Concerned about effects on electrical goods such as washing machines. Should contact Insurance Companies to ascertain whether premiums will be affected. Needs more robust approach to culvert maintenance.

Significant concerns remain about: roughness of the existing watercourse not adequately accounted for in the model and may significantly affect flood level prediction; FRA assumes clear watercourses but this is a very serious problem here, have the loop culverts been assumed to be clear?; failure to maintain watercourses and their assets in this area has contributed to property flooding that would not otherwise have occurred: this unique opportunity should be used to impose a condition that a monitoring, maintenance and enforcement plan be agreed between the local planning authority, NR and the EA for all the railway culverts and the underbridges and their associated watercourses in the area.

24 Edith Road (up to date as at 15th April)

- the benefits of this £18m scheme are not proven: there are now good connections to London via Parkway and Marylebone; can run bus services in this area during floods; rail freight not such a problem as does not run to such a tight timetable and a few days delay on freight trains that are rarely fully loaded would not be serious; 16 days closure to implement the scheme is equivalent to 2 flood events; no need to spend £18m because floods that would be avoided would close the line for less than the construction works; inconvenience to travel arising from floods is less than that for the works; the scheme uses a predictive model but floods could happen more, or less often than predicted; doubt that this prediction will be valid for 20 years; overall it is not at all certain that the costs and disturbance to the line are beneficial; and the upset to people being out of their homes for many months due to flooding is more damaging than the inconvenience to rail travellers of a few days rail closure; the proposal does not seem to have any long term benefits and a lot of possible dis-benefits;
- sceptical about the EA's Flood Model: experience in the north has shown that EA predictions were overtopped by the amount of rainfall that fell in reality; according to scientists, climate change is going to be well over present accepted levels and increased flooding can be expected; this means there will be even less benefit in the scheme;
- the model has severe shortcomings: the predictions are based on a necessarily simplistic computer model enhanced by topographical and hydrological information; one of its major flaws is poor attention to

groundwater and assumes only fluvial flooding; it deals insufficiently with geo-environmental conditions (area is dominated by gravels); groundwater is difficult to model presumably more so when gravel present; gravel affects water flows and storage; little is known about what is happening with groundwater in this locality; water spout observed during last floods indicates groundwater pressure but reason for this is unexplained and not in the model;

- ineffective model: the inability of the model to handle groundwater makes it ineffective for identifying properties likely to be affected; the detailed property studies pile misleading information onto data that is already misleading; no borehole information taken so property information was guesswork; wonders whether the properties identified as being at risk have been given the opportunity to have a second opinion as to these findings; there could be more than 32 properties affected because of the inadequacies of the model;
- need to be clear about what permission is being given for: if it is only to protect the line from flooding the benefit does not outweigh the risk to people's properties; if it is to promote the OFAS it is premature as it is not possible to assess the full implications of the OFAS;
- archaeology: concerned that there will be inadequate time to assess any archaeological remains during the construction period;
- ecology: ecological information is not satisfactory and ecological implications not been assessed adequately;
- tree survey and report deficient: lacks a thorough and detailed on-the-ground survey; omission or inadequate description of some trees and tree groups; riverside trees form an important landscape feature and are instrumental in reducing the effects of flooding.

85 Sunningwell Road - concerned that the proposals will increase the already significant flooding risk to properties at the top of Sunningwell Road, all along the railway side of Wytham Street, and to properties in the roads between Wytham Street and Abingdon Road. Supports the comments of SOFAG. Worrying that clearing of blocked waterways identified in Sept 2015 hasn't been carried out. Strenuously oppose the proposal.

93 Sunningwell Road - endorse comments of SOFAG. Suspect the risk of flooding to properties east of the line has been underestimated. A small inaccuracy would lead to significantly different outcomes in reality. Object to the fundamental concept of directing floodwater towards a residential area thereby knowingly increasing flood risk for residents in order to protect a rail service.

The site

1. The site may be considered in two parts as shown on the site plan at **Appendix 1**:
 - i. A large linear area (shown shaded) of railway land extending south for 1.2km along the rail line from Hinksey Brook Bridge (approximately opposite Monmouth Road) to Munday's Bridge (just north of Kennington).

Within this area Network Rail (NR) intends to carry out track raising and other permanent rail-related work as permitted development, together with deck-raising and replacement works to a small under-bridge for which Prior Approval has already been granted by the Council;

- ii. A smaller area within and adjacent to the larger area and indicated by a solid outline. This is the planning application site for the proposed culvert. It encompasses railway land and land within the Dairy Crest (now Mullermilk Dairy) site, part the Hinksey Stream and the corresponding part of the east bank of the Hinksey Stream. It shows the site of the proposed culvert and the (existing) construction access road leading to it.

It is the construction of a culvert within this outlined area that requires planning permission and is the subject of this report.

2. The site is on low-lying land in the River Thames flood plain which is crossed by numerous watercourses including the Hinksey Stream and the Hinksey Drain, both classified as 'main watercourses', the Hinksey Ditch classified as an 'ordinary watercourse', and other minor watercourses. The River Thames is some 820m to the east of the site **Appendix 2**. There are open fields to the west bounded by field-edge trees; and the Oxford Camping and Caravanning ground to the east with residential development beyond. To the south-west is the Kendall Copse Nature Reserve, and to the south-east the Redbridge Waste reception centre and Park and Ride.
3. The site is predominantly in Flood Zone 3 as classified on the EA National Flood Map. Based on Appendix J of the Oxford Strategic Flood Risk Assessment (SFRA) 2011, the site is shown to be in flood zone 3b.

Background to the proposal

Flooding and closure of the rail track

4. This section of rail track is prone to journey delays because of frequent flooding from adjacent watercourses. The problem has increased in recent years and in the floods of 2007 this part of the line was closed for 7 days. 2D hydraulic modelling has shown that the railway corridor becomes inundated during fluvial flood events above and including a 1 in 5 year return period (20% chance of flooding in any 1 year). NR therefore proposes to raise this 1.2km length of tracks out of the flood level, up to a maximum of 430mm on the main lines, centred under Abingdon Road Bridge. This will improve the flood resilience of the railway up to a 1:20 year fluvial flood event (5% chance of flooding in any 1 year).
5. The raised track bed will however create a dam across the existing flood plain resulting in increased flood risk elsewhere. Flood modelling and a review of options to prevent or reduce the problems caused have been carried out. The mitigation options that were considered are summarised in the extract from the submitted Flood Risk Assessment reproduced as **Appendix 3**. The

preferred option, which the Environment Agency (EA) agrees is the optimal flood risk mitigation, is to construct twin culverts joining the Hinksey Drain (west side of the site) and the Hinksey Stream (east side of the site) running for approximately 85m under the raised track bed and under the adjacent northern part of the Dairy Crest site.

6. Although the proposed twin culvert is relatively small and is classified as minor development, the wider environmental impacts during the construction and operational phases of the development have been considered via an Environmental Impact Assessment which has been submitted as part of this application.

NR's fall back position

7. NR is carrying out the track-raising works as permitted development and could complete those works without the construction of a culvert. Aware of the increased flood risk that track-raising without a culvert would create, NR is taking a responsible course and proposing a culvert. If the culvert does not gain planning permission, NR could revert to track-raising without it.

Relationship to the Oxford Flood Alleviation Scheme (OFAS)

8. The installation of the twin culvert associated with the proposed rail track-raising scheme, is a stand-alone project undertaken to mitigate the increase in flood risk from the proposed track raising and is in advance of the OFAS currently being formulated by the EA which will address wider flooding issues west of Oxford.
9. The final size and design of the proposed culvert has however resulted from negotiation between NR and the EA. Two box culverts, side by side, each 2.1m wide by 1.5m deep, would have been necessary to accommodate the increased flows resulting from the rail track-raising project alone ($9\text{m}^3/\text{s}$). The size was increased at the request of the EA in order that the culvert could contribute to the OFAS in due course. The culvert is as large as it can be within the constraints of the site and can accommodate flows of $15.8\text{m}^3/\text{s}$. By increasing the culvert size and constructing it as part of the track-raising project, it may be possible to reduce the duration of or mitigate any further disruption to railway operations during implementation of the OFAS if and when it is approved.
10. Whilst sources of funding for the OFAS scheme have in the main been identified it has not reached the stage where the outline business case has been approved. Determination of this culvert application does not pre-determine the design or acceptability of the OFAS.

The Proposed Culvert

11. The proposed 85m long twin culvert is to comprise two concrete box culverts placed side by side, each box having internal dimensions of 3.6m wide by

1.8m deep (**Appendix 4**). Water will flow from west (Hinksey Drain) to east (Hinksey Stream) through the culvert.

12. The twin culvert crosses the railway corridor in a skewed alignment to control water velocities under flood conditions, and to help prevent the build-up of silt within the culvert barrel and at its entrance. Its location is restricted to a 30m stretch of track (between the bold (red) lines on the map extract in **Appendix 5**) because:

- i. it is constrained by the position of the National Supply Chain Depot Sidings to the north and the Dairy Crest site to the south; and,
- ii. the culvert outfall needs to be positioned north of Towles Mill Weir which controls the flow of water downstream under normal flow conditions.

13. The twin culvert will permanently change the flow of water between the Hinksey Drain and the Hinksey Stream. To control the flow of water into the twin culvert in advance of implementation of the OFAS, orifice plates will be fixed to the inlet of each box culvert restricting the flow to 9m³/s (**Appendix 6**). If the OFAS scheme becomes operational the EA will have the option of removing the orifice plates to utilize the full flood conveyance through the culvert. Should the OFAS not go ahead, the orifice plates will remain permanently fixed and will be inspected and maintained by NR during the lifetime of the structure.

14. Potential silting of the culvert has been modelled and assessed to be lower than the invert level of the orifice plates and will not therefore interrupt the conveyance of water necessary to meet the track raising requirements. A maintenance regime will be secured by condition.

15. The structural integrity of the culvert is to be checked each year by annual inspections with a detailed structural inspection every 6 years.

OFFICER ASSESSMENT

Issues

- Flood risk
- Culvert and Watercourse Maintenance
- Implications for ecology
- Implications for contaminated land
- Design, appearance and landscaping
- Archaeology

Flood Risk

Policies on development and flood risk

16. The National Planning Policy Framework (NPPF) requires planning authorities to help meet the challenge of climate change and flooding: minimizing vulnerability and providing resilience are central to sustainable development.

New development is to be located away from areas of highest flood risk using a sequential approach but “where development is necessary [*in areas at risk of flooding*], ... making it safe without increasing flood risk elsewhere.”

17. The existing railway is located within the functional flood plain (Flood Zone 3b) but if the culvert is to be considered to be acceptable as new development within the flood plain, it must pass both aspects of the NPPF Exception Test, namely (as relevant):
 - i. that the development provides wider sustainability benefits to the community that outweigh flood risk; and,
 - ii. that having regard a site-specific flood risk assessment, flood risk elsewhere must not be increased and where possible flood risk overall will be reduced.
18. The Council's adopted Core Strategy 2026, Policy CS11 allows the development of essential infrastructure (which includes railways) in the functional flood plain but states that development will not be permitted that will lead to increased flood risk elsewhere.

Outcomes of the flood risk studies for this proposal

19. The main fluvial risk to the site comes from the watercourses within and adjacent to the site. Groundwater levels are at surface level in some locations within the site and give rise principally to construction issues. The risk of flooding from sewer, artificial, and surface water sources is considered to be low. Surface water drainage features are to be adapted to the proposed scheme and should prevent surface water from presenting issues in the future.
20. A Flood Risk Assessment (FRA) and Development Study and Modelling Report (GRIP 3) have been submitted in relation to this proposal. After several reviews and the submission of new and updated information, the EA has confirmed that the hydraulic modelling is technically sound and includes the required allowance for climate change, and that the characteristics of site area are accurately represented in it.
21. The hydraulic modelling showed a difference in flood depths for flood events up to and including the ‘1 in 100 year event plus Climate Change Fluvial Event’ when comparing the existing scenario with the ‘raised track with culvert’ scenario.
22. In order to assess the impact on individual properties of the ‘raised track with culvert’ scenario, two further assessments were carried out:
 - i. a ‘property thresholds analysis’ (looks at property thresholds and other possible entry points such as air bricks); and,

- ii. a 'region assessment' (looks at entire building footprints and how flood levels and depths vary over space).
23. Following those studies, the findings of the FRA in relation to properties at risk, summarised in the table at **Appendix 7**, are that:
- i. up to a '1 in 100 year fluvial event':
 - a. no residents who do not already have property level protection will experience an increase in flood depth within their properties as a direct result of the proposed 'raised track with culvert scheme';
 - b. nine properties in the South Hinksey area benefit from 'betterment': under a 1 in 5 fluvial event a 3cm reduction in flood depths is modelled at eight properties; and during a 1 in 20 year event one property benefits from a 1cm reduction.
 - ii. during a '1 in 100 year fluvial event':
 - a. the proposals would not increase the number of properties at risk of flooding, but there would be an increase in flood depth for 21 residential properties all of which would currently flood during such an event, and for the Dairy Crest site (dealt with separately below). 2 properties would experience a 3cm increase; 1 property would experience a 2cm increase; and 16 properties would experience a 1cm increase. On the advice of the EA the 2 properties which already have property level protection are discounted from further analysis;
 - b. 7 of the 19 affected residential properties are located on the east side of the railway and are located in 3 separate streets. The existing flood depths at these properties currently vary between 5cm and 21cm. Only 2 of these 7 properties would experience, when flooded, the maximum flood depth increase of 3cm during a '1 in 100 year fluvial event'. The depth of flood water would be either below or above the skirting board level but in all cases will be below the underside of the electric sockets;
 - c. 12 of the 19 affected residential properties are on the west side of the railway corridor in the South Hinksey area (Vale of White Horse DC). The current flood depth in these properties is between 36cm and 62cm, and all, when flooded, would experience an increase in flood depth of 1cm during a '1 in 100 year fluvial event'. In 3 properties the modelled flood level would remain between the top of the skirting board and the bottom of the electric sockets; in one property of older construction the current flood level is 42cm and this may or may not be above the level of the electric sockets depending on the method of construction but the 1cm modelled increase in flood level will not materially change the flood level in relation to those sockets; the remaining 8 properties in this group all

currently experience flood levels of between 49cm and 62cm and thus unless electric sockets have been installed at higher levels the modelled 1cm increase in flood level would remain above the electric socket level.

- iii. during a '1 in 100 year plus climate change fluvial event' the 12 properties in (c) above will experience an increase in flood depth of 2cm but would also currently flood under that event.

24. A further Hazard Rating Study for the 19 residential properties at risk of increased depth of flooding was also carried out. The hazard rating for only 2 properties increased from 'Danger for Some' to 'Danger for Most'. On further analysis of those 2 properties the hazard rating increase at 1 of the properties affected only the back garden, not the front of the building where the main access and egress is located; and for the other, the main access and egress is via a communal access and egress point which did not increase in hazard rating. In practical terms the overall risk to occupants in terms of safe access and egress to their properties remain unchanged.

25. In respect of the Dairy Crest site the FRA concludes that flood depths increase marginally for the 1 in 5 fluvial event but are reduced in all other flood events. This increase is nominal compared to flood levels experienced in other flood events. A Hazard Rating assessment is not deemed applicable because access to the dairy site is from the Abingdon Road bridge which is higher than the modelled flood levels. The flood onset (warning time) for the Hinksey area is typically two days from flood events occurring further upstream and the flood management plan in place for the site is suitable to provide adequate pre-flood warning to staff and operations. There has been no objection from the owners or operators of the Dairy Crest site to the current proposal.

Conformity with the NPPF and local policy on flood risk

26. The key to determination of the flood risk aspects of this case is whether the proposal passes the Exception Test laid down in the NPPF and referred to in paragraph 17 above. The relevant aspects of the 2 elements of the test that must both be passed are:

- i. whether there are wider sustainability benefits to the community that outweigh flood risk; and,
- ii. whether flood risk elsewhere will be increased and whether flood risk overall will be reduced.

(i) Whether there are wider sustainability benefits to the community that outweigh flood risk

27. The wider sustainability benefits of the scheme are in the reduced rail disruption consequent upon the rail line being more resilient to flood events. In the years since 2000 there have been 11 flood events in the Hinksey area – in

all cases the proposed scheme would have reduced the depth and extent of flooding to the rail line, and thus reduced the disruptive period to rail services. The proposed scheme improves resilience from 'up to and including a 1 in 5 year return event' to 'a 1 in 20 year return event'.

28. This rail line, being a principal connection from Oxford to London and further afield, plays a key role in the local, regional and national movement of passengers and goods. It is part of the essential transport infrastructure for Oxford and is vital to the City's economy and that of the City-region. The proposed track-raising and associated culvert is part of NR's current strategic investment and electrification programme to improve services in the Oxford area and is much needed for the environmental, economic and social sustainability benefits that it will bring to the area. Disruptions to rail services due to line flooding have serious economic, environmental and social consequences.
29. This favourable analysis of the benefits of the scheme have been questioned by one resident in their representations (summarised under 24 Edith Road above). In their view the disruption to people's lives of the increase in flood risk is not outweighed by, what they regard to be, the questionable economic and environmental merits of making the line more resilient to flooding. NR responded to those representations and their response is reproduced in **Appendix 8**. It is the view of officers that the wider sustainability benefits of this scheme carry great weight in the determination of this case when balanced against the increased flood risk.

(ii) Whether flood risk elsewhere will be increased and whether flood risk overall will be reduced

30. The scheme does not increase the number of residential properties at risk of flooding. For 19 properties however, properties that are already subject to flooding during a '1 in 100 year plus climate change event' and do not have existing property level protection, modelling shows that flood depths will increase. In planning terms this means that flood risk will increase. The scheme fails to meet the second arm of the NPPF Exception Test and is therefore contrary to the NPPF, the Council's Core Strategy and the Oxford Local Plan.
31. The scheme itself does not contribute to future reduction in overall flood risk. The culvert has however been designed to accommodate more capacity than is required for the track-raising alone: it includes extra capacity for some of the floodwater conveyance required as part of the forthcoming OFAS. The scheme therefore has the 'passive' potential to contribute to future reduction in overall flood risk.

Officer assessment of flood risk

32. It has been assessed that the proposal does not conform to the NPPF and local policy. It is possible for a local planning authority in determining a planning application, not to follow the NPPF but there must be clear and

convincing reasons for doing so. Similarly a local planning authority may depart from development plan policies where material considerations indicate that the plan should not be followed. In respect of the latter, this application has been advertised as a departure from development plan policy in accordance with the relevant Regulations.

33. In this case there are clear and convincing reasons why this project should be permitted contrary to the NPPF, and there are material planning considerations to indicate that the development plan should not be followed. These are:

- a. making this line more flood resilient brings about significant wider sustainability benefits which are very important to the local and national economy and environment;
- b. NR has a fall back position in that it could carry out track-raising without flood risk mitigation;
- c. the EA considers the construction of the culvert to be the best possible option for mitigating the track-raising project;
- d. the EA has not recommended refusal;
- e. the EA is supporting the project through investment in increasing the size of the culvert to make passive provision for the OFAS;
- f. this is the only location for the culvert – this is an exceptional set of circumstances, it is unlikely to create a precedent that allows other development to increase flood risk because other development is unlikely to be so location-constrained;
- g. there is no increase in the number of residential properties at risk of flooding;
- h. the increased flood depth of between 1-3cm at 19 properties without property level protection is not predicted to have significantly increased impacts on property interiors, or access and egress; and,
- i. all of the properties are afforded some protection by the presence of temporary barriers providing they are available and erected. While not on their own justifying the grant of planning permission, there has been, and continues to be significant public investment in temporary flood barriers as additional mitigation for this part of Oxford and surroundings.

34. On balance and taking all material considerations into account, including the EA's view that this is the best possible solution, the view of officers is that this is a highly exceptional case, the strategic sustainability benefits of which outweigh the impacts of the modelled increase in flood risk. It is therefore recommended that there is no reason to withhold permission for this scheme on grounds of increased flood risk.

Culvert and Watercourse Maintenance

35. The question of culvert and watercourse maintenance has been raised in representations: obstructed watercourses are considered by local people to add to flood risk in this area. A planning condition is suggested requiring watercourse maintenance.

36. If granted, a condition will be imposed on the permission to secure a robust scheme of maintenance for the culvert that will ensure its proper operation. It reads as follows:

“Prior to commencement of the operation of the proposed culverts and ancillary works, a full detailed maintenance plan shall be submitted to and approved by the Local Planning Authority and Lead Local Flood Authority. The maintenance plan should include and provide the following information:

- *monitoring of silt levels within 10m of the entrance of the culverts;*
- *monitoring of silt levels within the culverts;*
- *monitoring of silt levels within 10m of the exit of the culverts;*
- *method of disposal of silt and silt pollution management;*
- *monitoring of the culvert after a flood event;*
- *monitoring of 'normal' water levels within the culvert;*
- *methodology of how the culvert and ancillary works will be maintained including details of the access to the culverts;*
- *how the culverts will be maintained and monitored if the orifice plates were to be removed in the future; and,*
- *monitoring of performance of the culverts during a flood event.*

Reason: to ensure the proposed culverts will operate and function as designed for their lifetime, and to ensure there will be no increase in flood risk to the site and the surrounding area in accordance with Policy CS11”.

37. In response to representations on watercourse clearance and management NR has written to confirm that significant watercourse clearance is currently in progress and will continue during the installation of the culverts to ensure that watercourses are operating in line with the modelling assumption.

38. The NPPF states that:

“Planning conditions should only be imposed where they are necessary, relevant to planning and to the development to be permitted, enforceable, precise and reasonable in all other respects”.

39. It is not possible to require by planning condition that NR engages in a scheme of watercourse management because such a condition would not meet the NPPF requirements set out above. The culvert will not in itself contribute to watercourse obstruction. The EA has agreed that the culvert is of the appropriate size and design to mitigate the flood risk created by the track-raising and has not suggested or required that any conditions be attached dealing with watercourse management. An informative will however be attached to the permission if given seeking progress on watercourse management in this area.

Implications for ecology

40. The site and its surroundings provide local ecological habitat. An ecological appraisal has been carried out, including surveys for bats, otters, voles, birds,

common reptiles, aquatic insects and fish, and an ecology management plan submitted. Subject to conditions, the Council's ecology officer has confirmed that the proposal will not have a negative impact on protected species or habitats.

Implications for contaminated land

41. Representative samples of soil, leachate, groundwater, and surface water were tested for a range of contaminants. A generic quantitative risk assessment was undertaken for each medium, which resulted in the risk of contamination at the site identified as being low. Ground gas was also tested which was identified as being low risk at this site. In the context of the construction and operation of the scheme the potential impacts associated with soils, groundwater and ground gas have been assessed as being of negligible to minor significance to receptors: future site users, construction workers, off-site receptors (surrounding human receptors), controlled waters, and development infrastructure. Mitigation measures designed to protect the identified receptors from contamination in soils, soil leachate and groundwater are proposed and will be secured by condition.
42. Subject to conditions relating to securing the verification report and a watching brief, the proposal is acceptable in terms of land quality issues.

Design, appearance and landscaping

43. The NPPF and local policy require good design in all new developments. The design of the openings of this twin culvert is functional and utilitarian; they are set low down in the banks of the two watercourses. The west side opening (Hinksey Drain) will not be prominent in views from the public footpath in the surroundings to the west of the site. Views from that direction are also partly obscured by trees and hedgerows. The east side opening (Hinksey Stream) will be visible from the camp site but because the camp site is generally at a higher level than the top of the riverbank, the view of the culvert is only from locations closer to the water – it will not be prominent or jarring in general views. The design and appearance of the culvert openings is therefore considered to be acceptable.
44. Five trees are to be lost in order to construct the culvert. At the time of the officer site visit in February two of these had blown down in recent storms. The loss of trees is regrettable but in this case considered to be unavoidable given the exceptional constraints to the location of the development. Existing riverside trees add value to this urban fringe location and so a landscape plan will be sought to secure replacement planting, and suitable protection of retained trees during construction.

Archaeology

45. An assessment has been made of the information in the Oxford Historic Environment Record and the archaeological desk based assessment submitted by AECOM (2015). The application is of interest because it has

the potential to impact on:

- i. palaeo-environmental and archaeological deposits dating potentially from the prehistoric to the post-medieval periods within the Thames floodplain;
- ii. the back-filled remains of a bypass channel associated with the nearby Towles Mill shown on 18th and early 19th-centuries historic maps; and,
- iii. remains of timber revetments or a sluice gate, of medieval or post-medieval date associated with this channel.

46. The NPPF states the effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset. Where appropriate local planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible.

47. In this case, bearing in mind the results of the desk based assessment and the significant access constraints, and because the development may have a damaging effect on known or suspected elements of the historic environment, a Written Scheme of Investigation and Method Statement have been agreed and the development will be carried out in accordance with them.

Conclusion:

48. It is acknowledged that the scheme fails part two of the NPPF exception test and for that reason is also contrary to the Core Strategy and Oxford Local Plan but on balance, it is considered that the wider sustainability benefits of this scheme outweigh the impacts of the modelled increased flood risk, and that any remaining adverse impacts can be mitigated by the conditions imposed. There are no other material reasons why planning permission should be withheld for this proposal.

Human Rights Act 1998

Officers have considered the Human Rights Act 1998 in reaching a recommendation to grant planning permission, subject to conditions. Officers have considered the potential interference with the rights of the owners/occupiers of surrounding properties under Article 8 and/or Article 1 of the First Protocol of the Act and consider that it is proportionate.

Officers have also considered the interference with the human rights of the applicant under Article 8 and/or Article 1 of the First Protocol caused by imposing

conditions. Officers consider that the conditions are necessary to protect the rights and freedoms of others and to control the use of property in accordance with the general interest. The interference is therefore justifiable and proportionate.

Section 17 of the Crime and Disorder Act 1998

Officers have considered, with due regard, the likely effect of the proposal on the need to reduce crime and disorder as part of the determination of this application, in accordance with section 17 of the Crime and Disorder Act 1998. In reaching a recommendation to grant planning permission subject to conditions, officers consider that the proposal will not undermine crime prevention or the promotion of community safety.

Background Papers:

Contact Officer: Fiona Bartholomew

Extension: 2774

Date: 22nd April 2016