

Item B.2 08/00475/LBC Permit (after referral to GONW)

Case Officer Mrs Helen Lowe

Ward Astley And Buckshaw

Proposal Listed Building Consent for removal of the 'Flying Arches' on Chorley - Preston railway line, in order to facilitate essential engineering works,

Location The Flying Arches Chorley - Preston Railway Line East Of Euxton Lane Euxton Lancashire

Applicant Network Rail (Infrastructure)

Proposal This application proposes the removal of a series of 16 masonry arches, known as the 'flying arches' which are located on the Chorley- Preston railway line just outside of the centre of Chorley, immediately west of Chorley Tunnel. They are designed to support the walls of the cutting and were built in 1841 as a replacement for a former tunnel which had collapsed.

Planning Policy PPG15

Planning History None

Consultees Responses *English Heritage:* have indicated that they will be unable to provide a response until the 20th of June.

Six amenity bodies: comments awaited.

Railway Heritage Trust: comments awaited.

Coal Authority: standing advice given

Conservation Officer: The proposal seeks to firstly record photographically the 'Flying Arches' in their current condition. I would suggest that a full programme of photogrammetry or similar system is utilised, using a specialist contractor to undertake the work prior to any on-site engineering works.

Removal of the arches will follow. Again I suggest using specialist contractors and if necessary recording and plotting every individual piece of masonry so that in the event of collapse they can be exactly reconstructed using the original materials in their original, relative positions.

I recommend introducing a unilateral legal agreement whereby Network Rail, or its successors, agree to the reinstatement of the arches within an agreed timescale, for example within 3 years of demolition (network Rail have stated that there will need to be a period of at least 2 years for the emergency works to bed down and be evaluated). The purpose of this is to safeguard the future of these listed structures and to ensure that they are not left to deteriorate in a warehouse or other storage facility, or worse still that they are lost forever.

Whilst the need for the works is, in my view, unquestionable I would simply like to include the aforementioned items as conditions to ensure the

structures are accurately recorded before removal and that reinstatement at a future date is guaranteed.

As a further point the consulting engineers suggest that further monitoring, in particular of Ground Water conditions using piezometers, be undertaken as a highly cost-effective way of reducing disturbing forces acting upon the walls and the arches. Such measures will be needed as mitigation during the excavation process to provide the requisite safety margins to both construction workers, the travelling public and TOC staff.

As stated previously this is a difficult site not least because of the great number of unknown factors involved – hidden dimensions of the retaining walls and buried buttresses, made-up ground constituents, ground-water pressure, the sequence of construction. Add to this the brittle nature of the masonry and the possibilities for catastrophic collapse are considerable. For these reasons the consulting engineers are allowing for a reasonable level of safety in their suggestions for the proposed works. I therefore consider the application to be acceptable, subject to the imposition of the aforementioned conditions.

Third Party Representations

None received to date

Applicant's Case

To summarise, the need for the proposal is multi faceted, and is based on the following:

- The need to provide additional strength to the structures within the cutting as signs of failure are evident in masonry cracks;
- The need to improve drainage within the locality to reduce ground-water pressures upon the masonry structures and hence reduce the risk of catastrophic collapse;
- The need to lower the formation (the track bed for the railway lines) in order to safely accommodate modern rolling stock (train units) and to allow for electrification of the Manchester to Preston line.

The problem with the requirement to lower the formation is that any further excavation is likely to undermine the foundations of the retaining walls, leading to complete collapse. The retaining wall foundations are 750mm below the current formation, however the formation level needs to be lowered by 500mm. It is considered unsafe to excavate whilst at the same time only leaving 250mm of foundation to the retaining walls, and the likelihood of catastrophic collapse is considerable. The formation has already been lowered to its maximum limit to accommodate Virgin® Pendolino Class 390 trains when diverted from the West Coast Main Line (WCML), which still only gives extremely limited clearance to the underside of the arches.

At present there is a temporary speed restriction (TSR) of 20 mph in place to reduce the possibility of further damage to the retaining walls which causes considerable delay to the 50 trains per day that use this section of line. As this is a crucial rail link, not only for Chorley but also for the northwest region as a whole, it appears reasonable to undertake remedial works as soon as possible. Due to the deterioration of the structure there is a strong possibility that the TSR will have to be reduced to 5 mph, which will cause major delays, timetabling difficulties and train pathing problems in the already congested Preston area.

In terms of engineering solutions the available options are extremely limited. To facilitate the consolidation and improvement of the cutting it is simply not

possible to retain the arches in their current position. To excavate to the required depth for the track formation to facilitate electrification and passage of the latest train vehicles would almost certainly undermine the retaining walls to such an extent that total collapse would be inevitable. The structural engineering consultants, Scott Wilson, indicate that the current structure is extremely brittle and fragile and that it possesses very little tensile or torsional strength. Any works, such as formation excavation, that produce any additional stresses to the structure could, in their view, induce total, catastrophic collapse. The consequences of this cannot be overstated not only for construction operatives but also for the train travelling public and train operating company (TOC) staff.

The applicant has also provided letters from Northern Rail and First Transpenine Express in support of the proposal.

Assessment

Paragraphs 3.16-3.18 of PPG15 gives guidance on the matters that Local Planning Authorities should consider when determining proposals for the demolition of listed buildings. Consent should not be granted for demolition unless there is clear and convincing evidence that all reasonable efforts have been made to retain the building or that redevelopment would produce substantial benefits for the community that outweigh the loss of the building.

This application proposes that the arches shall be carefully removed from the site and re-instated at some later date, so cannot strictly be considered to be demolition, however Network Rail have stated that the arches cannot be re-instated in their original position, nor at this stage are they able to give precise details as regards their re-instatement.

Conclusion

Given the importance of this stretch of railway line to both the economy of Chorley and the wider North West and the potential threat to passenger safety it is agreed that the works are required. Subject to the receipt of no further objections, the imposition of suitable conditions and Network Rail entering into a Unilateral undertaking it is considered that the proposal be forwarded to GONW with a recommendation for approval.

Recommendation: Permit (after referral to GONW) Conditions

1. The proposed development must be begun not later than three years from the date of this permission.

Reason: Required to be imposed by Section 51 of the Planning and Compulsory Purchase Act 2004.

2. No works shall take place on the site until the applicant, or their agent or successors in title, has secured the making of a photographic record of the building. This must be carried out by a professionally qualified, archaeological/building recording consultant or organisation in accordance with a written scheme of investigation which shall first have been submitted to and agreed in writing by the Local Planning Authority. Upon completion the photographic record of the building shall be submitted to the Local Planning Authority.

Reason: To ensure and safeguard the recording and inspection of matters of archaeological/historical importance associated with the building/site and in accordance with PPG15.

3. No works shall take place on the site until the applicant, or their agent or successors in title, has secured the making of a full record and catalogue of all pieces of masonry from all of the 16 original arches. This must be carried out by a professionally qualified archaeological/building recording consultant or organisation in accordance with a written scheme of investigation which shall first have been submitted to and approved in writing by the Local Planning Authority. Upon completion of the programme of recording and analysis it shall be submitted to the Local Planning authority.

Reason: To ensure and safeguard the recording and inspection of matters of archaeological/historical importance associated with the building/site; in the event of collapse the arches can be exactly reconstructed using the original materials in their original, relative positions and in accordance with PPG15.

4. In respect of the removal of the flying arches the local planning authority shall be given 14 days notice of the intention to carry out the works and an officer of the council shall be allowed access to the site to enable to take photographs of any fabric of historical interest before it is removed in continuance of the work or which consent has been given.

Reason: To ensure and safeguard the recording and inspection of matters of archaeological/historical importance associated with the building/site and in accordance with PPG15.

5. No development shall take place until English Heritage (Architectural Investigation Section) have been given at least one months notice of commencement of the works. Enclosed is form Stat(E) which you as an applicant (or agent) must complete and send to the address given. Free access to the development site, at all reasonable times, must be given English Heritage (or appointed person) in order that the record of the building can be undertaken.

Reason: The building/site is of historic and architectural interest which requires recording and in accordance with PPG15.

6. Notwithstanding the details already provided no work shall take place on the site until the applicant, or their agent or successors in title have submitted to and been approved in writing by the local planning authority a detailed methodology statement for the removal of the arches.

Reason: The building/site is of historic and architectural interest and to safeguard the integrity of the arches during their removal and in accordance with PPG15.
