

Planning Department

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Submission by email:

Date: 2 February 2023

Network Rail Consultation Response

Reference: S62A/2022/0012
Location: Land East of Station Road, Elsenham
Recommendation: Approve

Dear Sir/Madam,

Thank you for consulting with Network Rail regarding the following application. Network Rail strongly recommends the developer complies with the following comments and requirements to maintain the safe operation of the railway and protect Network Rail's infrastructure.

Section A identifies the principal issues derived explicitly from the application. *Section B* are generic comments from our Asset Protection (ASPRO) team, aiming to ensure high standards of Network Rail's operation.

Section A:

Network rail would like to request from the developer the following;

- Calculations of how much traffic across Elsenham Station level crossing, including pedestrians and cyclists, will be generated by the development.
 - This will enable us to review the level of impact on our risk assessment.

- The proposals show that the only connection to the west is a footpath connection to the centre of the up platform at Elsenham station. Any connection of this nature will require the consent of Network Rail and Greater Anglia.
 - Even if it is agreed to create a new access to the station at this point, it not usual practice to dedicate any part of a station to the public so this route will only be suitable for access to and from the station, i.e. for people on railway

business. Separate provision to connect directly with the public highway independently of the station would be more appropriate.

- With a view to the future, Network Rail asks whether there is any scope to provide a through road from High Street/Henham Road, east of the railway line, to Old Mead Road near the station. Such a link could enable Elsenham Station level crossing to be closed or downgraded, thereby bringing significant safety and efficiency benefits to railway operations.

Finally, Network Rail asks the developer to note the impact of the Network Rail (Essex and Others Level Crossing Reduction) Order 2022 and intends to implement the consented works in respect of the Elsenham Emergency Hut level crossing in due course.

Section B:

Item 1. Issues - Attenuation basin next to the railway infrastructure.

Reasons/Mitigations:

The developer should relocate the attenuation basin away from the railway, rather than locating it on railway side. Water leaks, infiltration from the basin import a risk of water seepage towards the railway infrastructure and imports a risk of settlement of railway assets.

Item 2. Issues - Encroachment on the boundary fence, interference with sensitive equipment, space for inspection and maintenance of the railway infrastructure.

Reasons/Mitigations:

The developer / designer must ensure that the development line is set back from the Network Rail fence line to achieve sufficient gap / space to inspect and maintain Network Rail fence line and provide an access for inspection and maintenance of the proposed development or other assets in the future without imposing any risks to the operational railway. This would normally be 2-5m from the boundary fence depending on the adjacent NR assets or boundary fence.

Item 3. Issues - Stability of railway infrastructure and potential impact on the services.

Reasons/Mitigations:

Existing railway infrastructures including embankment should not be loaded with additional surcharge from the proposed development unless the agreement is reached with Network Rail. Increased surcharge on railway embankment imports a risk of instability of the ground which can cause the settlement on Network Rail infrastructure (Overhead Line Equipment / gantries, track, embankment etc.).

Item 4. Issues - Potential buried services crossing under the railway tracks. Some of the services may be owned by Network Rail or Statutory Utilities that may have entered into a contract with Network Rail.

Reasons/Mitigations:

The developer is responsible for a detailed services survey to locate the position, type of services, including buried services, in the vicinity of railway and development site. Any utility services identified shall be brought to the attention of Senior Asset Protection Engineer (SAPE) in Network Rail if they belong to railway assets. The SAPE will ascertain and specify

what measures, including possible re-location and cost, along with any other asset protection measures shall be implemented by the developer.

Item 5. Issues - Proximity of the development to the Network Rail infrastructure and boundary fence and adequate space for future maintenance of the development.

Reasons/Mitigations:

The developer must ensure any future maintenance does not import the risks to the operational railway. The applicant must ensure that the construction and subsequent maintenance of their development can be carried out without adversely affecting the safety of operational railway.

Item 6. Issues - Collapse of lifting equipment adjacent to the boundary fence/line.

Reasons/Mitigations:

Operation of mobile cranes should comply with CPA Good Practice Guide 'Requirements for Mobile Cranes Alongside Railways Controlled by Network Rail'. Operation of Tower Crane should also comply with CPA Good Practice Guide 'Requirements for Tower Cranes Alongside Railways Controlled by Network Rail'. Operation of Piling Rig should comply with Network Rail standard 'NR-L3-INI-CP0063 - Piling adjacent to the running line'. Collapse radius of the cranes should not fall within 4m from the railway boundary unless possession and isolation on NR lines have been arranged or agreed with Network Rail.

Item 7. Issues - Collapse of temporary structure near the railway boundary and infrastructure.

Reasons/Mitigations:

Any temporary structures which are to be constructed adjacent to the railway boundary fence (if required) must be erected in such a manner that at no time will any item fall within 3 metres from the live OHLE and running rail or other live assets. Suitable protection on temporary works (for example: Protective netting around scaffold) must be installed.

Item 8. Issues - Piling adjacent to the railway infrastructure if any. Issues with ground movement affecting the track geometry and surrounding ground and structure stability.

Reasons/Mitigations:

The developer must ensure that any piling work near or adjacent to the railway does not cause an operational hazard to Network Rail's infrastructure. Impact/Driven piling scheme for a development near or adjacent to Network Rail's operational infrastructure needs to be avoided, due to the risk of a major track fault occurring. No vibro-compaction/displacement piling plant shall be used in development.

Item 9. Issues - Trespasses and unauthorised access through an insecure or damaged boundary fence.

Reasons/Mitigations:

Where required, the developer should provide (at their own expense) and thereafter maintain a substantial, trespass proof fence along the development side of the existing boundary fence, to a minimum height of 1.8 metres. Network Rail's existing fencing / wall must not be removed until it is agreed with Network Rail.

Item 10. Issues - Interference with the Train Drivers' vision from artificial lighting and human factor effects from glare.

Reasons/Mitigations:

Any lighting associated with the development (including vehicle lights) must not interfere with the sighting of signalling apparatus and/or train drivers' vision on approaching trains.

The location and colour of lights must not give rise to the potential for confusion with the signalling arrangements on the railway. The developers should obtain Network Rail's Asset Protection Engineer's approval of their detailed proposals regarding lighting.

Item 11. Issues - Errant vehicle onto the railway land.

Reasons/Mitigations:

If there is hard standing area / parking of vehicles area near the property boundary with the operational railway, Network Rail would recommend the installation of vehicle incursion barrier or structure designed for vehicular impact to prevent vehicles accidentally driving or rolling onto the railway or damaging the railway lineside fencing.

Item 12. Issues - Potential impact on the adjacent railway infrastructure from the construction activities.

Reasons/Mitigations:

The applicant shall provide all construction methodologies relating to works that may import risks onto the operational railway and potential disruption to railway services, the assets and the infrastructure for acceptance prior to commencing the works. All works must also be risk assessed to avoid disruptions to the operational railway.

Item 13. Issues - Structural stability and movement of Network Rail Assets.

Reasons/Mitigations:

Network Rail's infrastructures should be monitored for movement, settlement, cant, twist, vibration etc if there are risks from the proposed development (if there the proposed development import these risks in the operational railway) to mitigate the risk of adverse impact to the operational railway in accordance with Network Rail standard 'NR/L2/CIV/177 - Monitoring track over or adjacent to building or civil engineering works'.

Item 14. Issues - Invasive or crawling plants near the railway.

Reasons/Mitigations:

The developer must ensure that the locations and extent of invasive plant (if any, for example: Japanese Knotweed) are identified and treated in accordance with the current code of practice and regulations if exists on site. Any asbestos identified on site should be dealt in accordance with current standard, Health and Safety Guideline and regulations by the developer.

Item 15. Issues - Interference with the Train Drivers' vision from sunlight and human factor effects from glare.

Reasons/Mitigations:

Glint and Sunlight glare assessment should be carried out (if there is a risk) to demonstrate the proposed development does not import risk of glare to the train drivers which can obstruct in the visibility of the signals.

Item 16. Issues - Effects due to electromagnetic compatibility on the users and the development located within proximity of a high voltage overhead electrification lines. Any Outside Party projects that will be within 20m and/or any transmitter within 100m of the operational railway will be required to undertake an Electromagnetic Compatibility assessment to be carried out in accordance with Network Rail standards 'NR/L1/RSE/30040 & 'NR/L1/RSE/30041' and NR/L2/TEL/30066'

Reasons/Mitigations:

The developer will be required to undertake a full Electro Magnetic Interference (EMC) risk assessment on the impact the project will have upon NR.

Item 17. Issues - Risk of electrocution and EMC interference to human health due to 25kV live OHLE on railway:

Reasons/Mitigations:

- Electrocution Clearance - within 3m of the overhead cable. Distance within which any works will require the overhead cable to be isolated.
- Electromagnetic interference – within 5.2m. Distance within which the effect on human health should be considered.
- Dewirement zone – within 5.2m. Distance within which the overhead cable could reach in the event of a failure.
- Electromagnetic compatibility – within 7m. Distance within which the affect of the building on the cable function needs to be considered in the design.

Item 18. Issues - Environmental pollution (Dust, noise etc.) on operational railway.

Reasons/Mitigations:

Contractors are expected to use the 'best practical means' for controlling pollution and environmental nuisance complying all current standards and regulations. The design and construction methodologies should consider mitigation measures to minimise the generation of airborne dust, noise and vibration in regard to the operational railway.

Item 19. Issues - Tree species alongside the railway boundary.

Reasons/Mitigations:

Contractors are expected to use Network Rail recommended tree species only if required alongside the railway boundary. List of recommended tree species can be made available when requested.

Item 20. Issues - Disruption of access to operational railway.

Reasons/Mitigations:

If there are any access points / gates to the railway, it's contractor's responsibility to maintain 24/7 unobstructed access to the railway for maintenance purposes.

Item 21. Issues - Flying objects on operational railway from the playground if any adjacent to the operational railway.

Reasons/Mitigations:

If there are playgrounds next to the operational railway, the developer shall consider a barrier / fence to hold the objects (for example: balls).

Item 22. Issues - Obstruction to the visibilities of railway signals due to the development, railway alignment is in a curve.

Reasons/Mitigations:

Project shall engage signal sighting chair and carry out full signal sighting assessment to confirm the railway signals are visible to the train drivers.

Item 23. Issues - Drainage.

Reasons/Mitigations:

Drainage from the shall be taken away from the railway infrastructure. There shall not be any attenuation tank or soakaways within 10-20m from the railway boundary.

Network Rail strongly recommends the developer contacts the Asset Protection Team AssetProtectionAnglia@networkrail.co.uk prior to any works commencing on site, and



also to agree an Asset Protection Agreement with us to enable approval of detailed works. More information can also be obtained from our website

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I trust the above clearly sets out Network Rail's position on the planning application. Should you require any more information from Network Rail, please do not hesitate to contact me.

Kind regards,



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