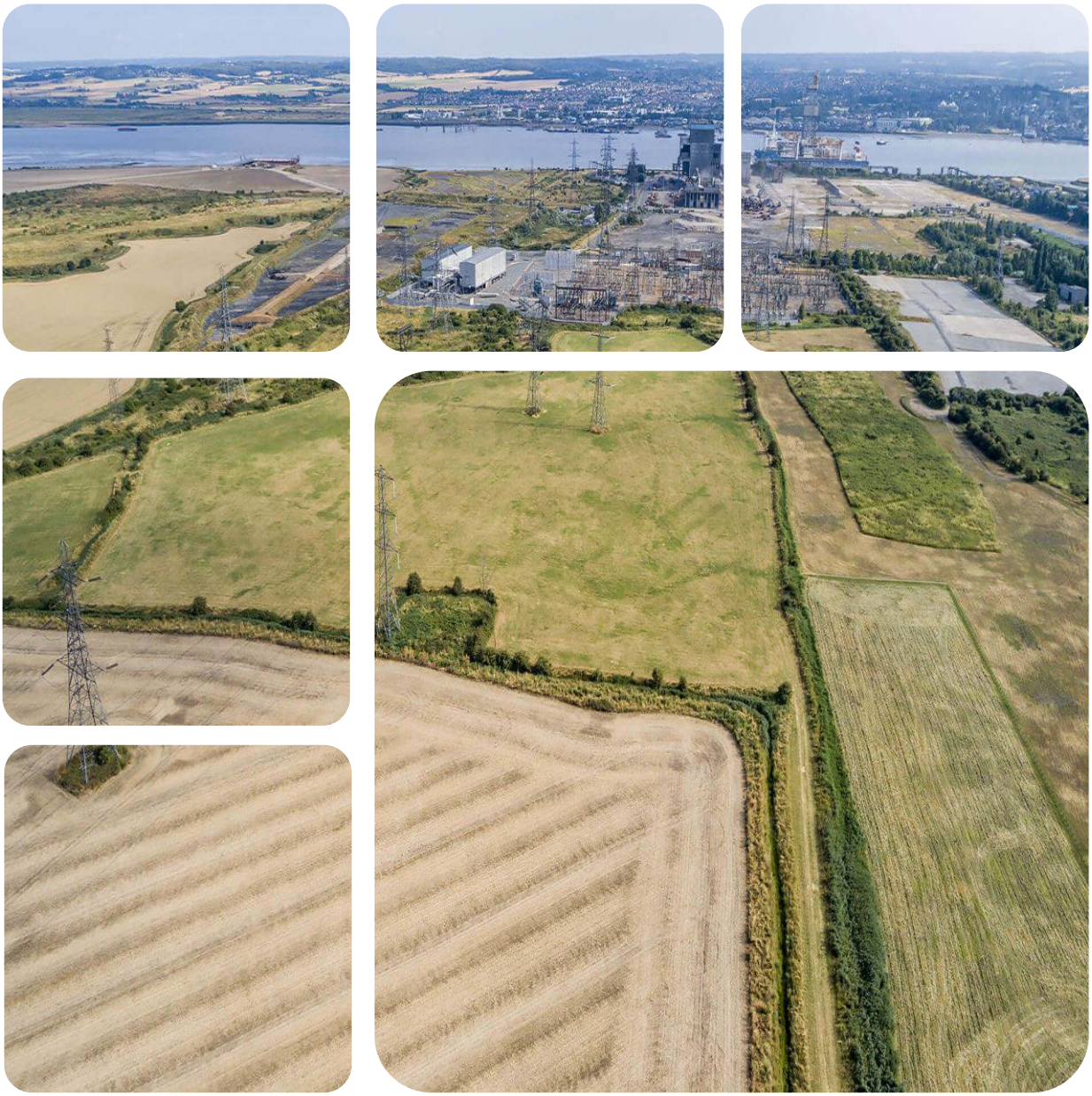
Thurrock Power Ltd Comments on Network Rail Deadline 2 Submission

Deadline 3



1 INTRODUCTION

1.1 In its Deadline 2 Written Representation (REP2-089) (WR) Network Rail Infrastructure Limited (NR) has raised concerns about the impacts of the proposed development on four level crossings, the location and construction methods of the access road and junction, gas pipeline and water pipeline, the railway line itself and access to it.

2 HGVS USING THE LOW STREET AND EAST TILBURY LEVEL CROSSINGS

2.1 NR considers that it is necessary to ensure the number of Heavy Goods Vehicles (HGVs) using the Low Street and the East Tilbury level crossings does not increase to a level which would have an unacceptable impact on safety.

2.2 Paragraph 2.3 of NR's WR asserts that the Applicant's assessment of the current HGV usage of Station Road is not accurate. This assertion is refuted.

2.3 NR set out that a census survey from January 2020 recorded a daily average of 239 two-way daily HGV movements and compared this to Table 2.2 of the Transport Assessment [Document Reference APP-095] which sets out 190 daily two-way HGV movements.

2.4 It should be noted that Table 2.2 of the Transport Assessment [Document Reference APP-095] sets out 2017 observed traffic flows. A comprehensive traffic growth process was undertaken within the Transport Assessment [Document Reference APP-095] and Table 5.5 sets out an estimate of 269 daily two-way HGV movements for a 2022 base future year.

2.5 These HGV movements all validate against one-another by showing a natural growth from 2017 (190 HGV movements) to 2020 (239 HGV movements) and projected to 2022 (269 HGV movements). Comparing the 2020 traffic flow only to the 2017 traffic flow has therefore drawn an incorrect conclusion and the Applicant considers that the HGV movements along Station Road have been considered accurately.

2.6 Paragraph 2.3 of NR's WR also asserts that the recent closure of Low Street Lane has resulted in increased movements of HGVs over the Low Street crossing since their census survey from January 2020. NR provide no evidence to substantiate this. Rather, it is noted that there are 7.5 Tonne weight restrictions along Station Road and Love Lane to the east of the Low Street crossing. This results in there being no permitted access for HGVs to this local area from Princess Margaret Road in East Tilbury and no permitted through-route for HGVs between the Low Street crossing and Princess Margaret Road in East Tilbury. The only permitted HGV access to this local area is via the Low Street crossing. Therefore, closing Low Street Lane has no effect on the number of daily HGV movements over the Low Street crossing.

2.7 Paragraph 2.4 of NRs WR quotes estimated percentage increase in traffic flows over the Low Street crossing as extracted from Tables 4.1 and 4.2 of the ES [Document Reference APP-059]. There are two points to note with these percentages:

- The Station Road access would only be used in exceptional circumstances if the Fort Road access were unavailable for any reason and in any such instances it would be for a temporary period only; and
- the percentage increases should be viewed in the context of the absolute numbers forming the percentages because, in this instance, low base traffic flows result in higher percentage increases.

2.8 To demonstrate this, the traffic flow increases set out in Tables 4.1 and 4.2 of the ES [Document Reference APP-059] have been considered in a different format and have been re-calculated in terms of the average number of vehicle movements per minute as set out in Table 1 below. These rates are shown for two scenarios, one being a true average over the 24 hour period in a day and the other assuming all traffic flows (including baseline traffic

flows) are generated during a 12 hour daytime period to reflect lower night time traffic flows and thus generate a worst case scenario.

Table 1: Change in Vehicle Rates over Low Street Crossing (exceptional circumstances only)

	2022 Baseline		2022 Baseline plus Average Construction Traffic		2022 Baseline plus Peak Construction Traffic	
	AADT	HV AADT	AADT	HV AADT	AADT	HV AADT
Coopers Shaw Road / Church Road / Station Road, between Gun Hill Road and EMR East Tilbury junction	1138	269	1308	352	1424	434
Average vehicle movements per minute (24 hour period)	0.8	0.2	0.9	0.2	1.0	0.3
Average vehicle movements per minute (12 hour period)	1.6	0.4	1.8	0.5	2.0	0.6

2.9 As can be seen, during an exceptional circumstance, if the Fort Road access were unavailable and the Low Street crossing needed to be used for access, traffic flow rates over a 24 hour day would change from an average of 0.8 vehicle movements per minute to 0.9 vehicle movements per minute during the average construction period. During the peak construction period, traffic flow rates over a 24 hour day would change from an average of 0.8 vehicle movements per minute to 1.0 vehicle movements per minute.

2.10 To consider these on a worst case basis (all traffic flows being generated over a 12 hour daytime period) during an exceptional circumstance, traffic flow rates would change from an average of 1.6 vehicle movements per minute to 1.8 vehicle movements per minute during the average construction period. During the peak construction period, traffic flow rates would change from an average of 1.6 vehicle movements per minute to 2.0 vehicle movements per minute.

2.11 Although the percentage increases set out in Tables 4.1 and 4.2 of the ES [Document Reference APP-059] and as quoted by NR may appear high, that is because of the relatively low baseline traffic flows. Hence, considering the traffic flow changes during an exceptional circumstance in a different format helps to show the absolute increases in a simple and more informative format.

2.12 Paragraph 2.5 of NR's WR raises a concern with the change in traffic flows over the East Tilbury crossing as a result of the temporary closure to Station Road to construct the gas pipeline and the resultant local diversion of traffic.

2.13 As set out in paragraph 3.6.12 of the Transport Assessment [Document Reference APP-095], this would be for a matter of days and could in fact be undertaken during night time periods resulting in traffic being diverted when their volume is low.

2.14 The Applicant is aware that Thurrock Council enacted a Temporary Traffic Regulation Order to prohibit all traffic along Station Road between its junction with Low Street Lane and a point 900m east of this (i.e. including the Low Street crossing) in October 2020. The Order was for a four week period to enable survey utility works to be carried out. The local diversion route was via Church Road, Coopers Shaw Road, Fort Road, A1089, Marshfoot Road, Chadwell Hill, Linford Road, Muckingford Road, the East Tilbury crossing and Princess Margaret Road.

2.15 It is expected that this would be the local diversion route that would be utilised when the gas pipeline is constructed if such a diversion were required. That diversion was in place for four weeks whereas the gas pipeline construction would last only a matter of days.

2.16 The Temporary Traffic Regulation Order sets a good precedent for which the Applicant is not aware of any adverse effects that resulted from its enactment or the local diversion over the East Tilbury crossing.

2.17 Paragraph 2.6 of NR's WR sets out that the Outline Construction Traffic Management Plan [Document Reference APP-144] and the Construction Worker Travel Plan [Document Reference APP-145] do not limit the number of HGVs using the Low Street and East Tilbury level crossings and do not provide a mechanism to re-evaluate the safety.

2.18 Section 7 of the Outline Construction Traffic Management Plan [Document Reference APP-144] details that access will be taken from Fort Road via the former Tilbury Power Station and Tilbury 2 access and that the Station Road access would be used only in exceptional circumstances in the event that the Fort Road access was unavailable for any reason. The Outline Construction Traffic Management Plan [Document Reference APP-144] is therefore very clear that the Station Road access is only for exceptional circumstances during the construction phase, for which there is no requirement to limit vehicle movements over it or undertake any reassessment.

2.19 In terms of the East Tilbury crossing, any changes over this would result from the temporary diversion (a matter of days or over night time periods) of other users on the public highway which the Applicant has no control over, therefore it is inappropriate to limit HGV movements over the crossing.

3 ROAD IMPROVEMENT WORKS TO ROADS APPROACHING LOW STREET LEVEL CROSSING

3.1 NR state that the additional vehicle movements resulting from the proposed development would increase the risk to users of the Low Street level crossing unless sufficient improvement works to the roads approaching the level crossing are carried out.

3.2 The Applicant does not consider that these improvement works are necessary as the proposed development has only a negligible effect on the Low Street level crossing.

3.3 Paragraph 2.7 of NRs WR provides a commentary on the highway network at the Low Street crossing and concludes that any increase in traffic should be mitigated. It is again noted that the Station Road access would only be used in exceptional circumstances in the event that the Fort Road access was not available for any reason.

3.4 The Applicant notes that the points raised by NR are all related to highway safety on the public highway, for which Thurrock Council is the Local Highway Authority and responsible for its management and maintenance. This is recognised by NR in their last sentence of paragraph 2.7 which states '….mitigation to the approaches which are outside the control of Network Rail'. Thurrock Council, as the Local Highway Authority and responsible for the management and maintenance of the approaches to the Low Street crossing, have not raised any transport or highway related objections to the proposals. This includes highway safety.

3.5 Paragraphs 2.8 to 2.12 of NRs WR set out details of an 'all level crossing risk model' (ALCRM) assessment NR has undertaken for the Low Street level crossing and identified that risk at the crossing could be reduced by 15% following the incorporation of mitigation proposals. However, this assessment simply considers the effect of mitigation measures on risk at the Low Street crossing. It does not provide any justification for NR seeking any such mitigation measures. Thurrock Council, as the Local Highway Authority and responsible for the management and maintenance of the approaches to the Low Street crossing, have not raised any transport or highway related objections to the proposals. Furthermore, the

Station Road access would only be used in exceptional circumstances in the event that the Fort Road access was not available for any reason. There is accordingly no justification to seek any works to or mitigation for the use of the Low Street level crossing.

4 WALTON COMMON LEVEL CROSSING

4.1 NR specify that Walton Common level crossing is at risk of trespass without upgrades to fencing and gates. The Applicant does not consider that the requested upgrades should form part of the proposed development and such measures are not considered necessary for the development. The risk of trespass will be reduced as a result of the proposed development, as the majority of the common land currently accessed via the level crossing will be deregistered, which will reduce the likelihood of the public wishing to access the area. The Applicant is not proposing any works to this crossing and it is not within the red line. The Applicant does not accept that there is any element of the scheme which could justify it seeking to stop up this crossing as to do so would sever the connection to remaining common land and is not justified by the development actually proposed. Where NR wish to stop up this crossing they have the ability to seek such an order, it is not part of the Applicant's scheme.

4.2 NR also seek to have permanent access rights to the Walton Common level crossing in order to inspect and maintain the level crossing. The Applicant is not the landowner of the new access road so will not be able to grant permanent access rights to NR. Any existing access rights will be unaffected by the scheme.

5 CLOSURE OF NO. 168 LEVEL CROSSING

5.1 NR assert that the safety of the railway line would be improved by the closure of No. 168 level crossing. This may be correct but that that improvement is not required for or justified by this scheme.

5.2 The Applicant does not agree that additional powers need to be included within the proposed DCO to close this level crossing. The inclusion of powers for the removal of existing gates and upgrading the fencing along the railway line does not form part of the proposed development and the Applicant does not consider that it is necessary to mitigate the proposed development or on any safety grounds as a result of the proposed development.

6 LOCATION AND CONSTRUCTION METHODS OF THE ACCESS ROAD AND JUNCTION, GAS PIPELINE AND WATER PIPELINE

6.1 NR considers that the proposed location of the access road and junction (Work no. 6) and gas and water pipelines (Work nos. 4 and 7) should be installed further away from the railway line. NR also state that the Applicant should consider appropriate mitigation measures, such as fencing to screen the railway and vehicle incursion barriers.

6.2 The construction methods for the gas pipeline, water pipeline and access road are not considered to risk altering the profile of the railway line by increasing vibration and shifting the position of the track. The proposed construction methods are not unusual and these will be located at an appropriate distance to minimise any potential impacts on the railway.

6.3 The gas pipeline will be laid either in a trench or using horizontal directional drilling (HDD). The trench depth would be typically 1.5 – 2 metres with a maximum depth of 4 metres. The HDD depth would be up to a maximum depth of 5 metres where crossing features (e.g. ditches) although typically this will be less. The access road will use standard road construction techniques and the water pipe is likely to follow the access road and be buried in its verge.

6.4 The Applicant is in discussions with NR in relation to the distance of the access road and junction and gas and water pipelines from the railway line, with a view to entering into an Asset Protection Agreement. NR have not yet provided information on the required set-off distances, with the exception of paragraph 3.1 of NR's WR which seeks a 90m separation between the access onto Station Road and the Low Street crossing.

6.5 The text and the table above in relation to traffic flows (which itself was extracted from Tables 4.1 and 4.2 of the ES [Document Reference APP-059]) shows that in a worst case scenario during the peak construction phase in an exceptional circumstance when the Fort Road access was unavailable, there would be two two-way (combination of both eastbound and westbound) vehicle movements per minute over the Low Street crossing. This equates to one vehicle movement per direction every one minute. Construction vehicles arriving to turn right into the Station Road access in an exceptional circumstance when the Fort Road access was unavailable would therefore have to give way to oncoming vehicles with gaps of one minute between them. Such a vehicle rate is low and would not result in any congestion that could block back or affect the Low Street crossing.

6.6 The Applicant considers there is no justification for seeking a 90m separation between the access onto Station Road and the Low Street crossing.

6.7 The Applicant considered highway safety, highway design standards, the operation of the access junction and its interaction with the Low Street crossing when proposing a 45m separation. The proposed geometries and layout are shown at Appendix E of the Transport Assessment [Document Reference APP-095]. A 45m separation provides sufficient distance for two queuing HGVs between the access and the Low Street crossing without adversely affecting either (an articulated HGV is 16.5m long).

6.8 Paragraph 3.2 of NR's WR sets out their concern of the proximity of the Station Road access road to the railway line. The access road has been designed with an approximate 5m separation from the railway line plus a further 5m separation allowance as a 'working area' which sought to minimise severance of the field and the proximity of the railway line. Notwithstanding, the access road will be subject to a detailed design and the limits of deviation within the Works Plan [Document Reference APP-008] is wide enough to allow for these separation distances to be increased if the detailed design requires this. The detailed design will also confirm the specifications of the access road including its finishings which will have due regard to its environs, including the railway lines.

6.9 Paragraph 3.3 of NR's WR considers the construction of the Station Road access road. This is dependent upon the detailed design, however, notwithstanding, all construction requirements and activities with the potential to impact upon the surrounding infrastructure (not only the railway line) will be fully considered as part of that detailed design.

6.10 Paragraph 3.4 of NR's WR considers the effects of vehicle lights from the Station Road access road affecting trains. There are many examples of roads and railway lines being adjacent to one-another. A local example of this is adjacent to Tilbury Town Railway Station where the A1089 St Andrews Road and the railway lines both travel in an approximate northwest to southeast alignment with separation of approximately 20m without solid fencing and only minimal screening in between. The above describes that there would not be any highway capacity issues at the Station Road access, therefore vehicles would be moving and thus their lights would also be moving, from which a competent train driver should be able to identify.

6.11 There would be no stationary plant or equipment along the access road, other than the construction of the access road and the gas pipeline, all of which would be subject to the Code of Construction Practice.

7 PROCEDURE FOR ABNORMAL INDIVISIBLE LOADS

7.1 NR state that they wish to agree a procedure for abnormal indivisible loads (AILs) crossing the railway.

7.2 AILs are proposed to be transported to the site via the River Thames and will not be transported over the level crossings.

7.3 Paragraph 2.6 of NRs WR sets out that the draft DCO does not contain a notification procedure through which the Applicant requests to cross the Low Street level crossing with Abnormal Indivisible Loads (AILs). Paragraph 3.2 of NRs WR also suggests AILs would utilise the Station Road access road. Section 6.3 of the Outline Construction Traffic Management Plan [Document Reference APP-144] details AILs. There are no planned AILs over the Low Street crossing and through the Station Road access road.

8 PROTECTIVE PROVISIONS

8.1 NR have requested bespoke protective provisions to replace the protective provisions included in the draft DCO. These are in the process of being negotiated between the Applicant and NR.

9 REQUIREMENTS

9.1 NR have suggested some amendments to certain requirements contained in Schedule 2 to the draft DCO (Appendix 3 of NR's written representation – REP2-089). The Applicant will discuss the suggested amendments with NR and is willing to make the following amendments:

- Requirement 4 – the Applicant agrees that NR will be consulted on and will be able to approve the detailed design of any works to be constructed within the agreed set-off distance from the railway, but not outside of it.

- Requirement 6 – AILs will not affect the railway as it is proposed that they will use the causeway and so the Applicant does not propose to add NR as an approving body in this requirement, although the Applicant is willing to add Network Rail as a consultee.

- Requirement 7 – the impact upon the railway from construction worker travel will be minimal and so the Applicant is of the view that Thurrock Council should remain the approving body for this requirement, although the Applicant is willing to add Network Rail as a consultee.