TWA/16/APP/02/OBJ/1

TRANSPORT AND WORKS ACT 1992: APPLICATION FOR THE PROPOSED LONDON OVERGROUND (BARKING RIVERSIDE EXTENSION) ORDER

PROOF OF EVIDENCE

OF

Philip Ridley, MSc (Spatial Planning), PGDip (Historic Conservation)
(Member of the general public)

July 2016

Introduction

My name is Philip Ridley. I have worked in the field of Town Planning, within Development Management since 2004.

I have a Masters Degree in Spatial Planning and am a Licentiate Member of the Royal Town Planning Institute. I also have a Post Graduate Diploma in Historic Buildings Conservation and am an Affiliate Member of the Institute of Historic Buildings Conservation.

I am a member of the Eastern Division of Rail Future and a member of the Enfield Transport Users Group but this Statement of Proof is independent of those voluntary memberships and do not necessarily reflect their positions.

My evidence asserts that whilst the Barking Riverside Extension delivers 10,800 homes, it would cause material harm to the delivery of housing elsewhere, in south London and along the northern Thames Estuary in light of it an approved cross Thames strategy that is nonetheless in an advance stage having been consulted upon. This is because it sequesters 4 trains per hour to an isolated railhead that cannot be extended south of the river, that could serve many more stations elsewhere and that may be required to make a rail tunnel under the Thames viable.

This report follows a recent meeting with the Barking Riverside Team on the 12th July, the minutes of which have been submitted to the Planning Inspector. Unfortunately the answers not only failed to satisfy my concerns, but also gave rise to additional concerns.

Planning Policy Context

Unfortunately the NPPF does not anticipate or provide strategic policy direction for national infrastructure projects and Local Plans are generally inadequate in terms of setting out long-term direction for the rail network. As a result there is need to rely upon the London Plan for the strategic planning policy context, which should form a greater material consideration even than the Local Plan when a major infrastructure project such as this could cause material harm to the achievement of more significant housing delivery elsewhere and could harm or even make unviable other plans for transport infrastructure.

Figure 1: Excerpt from London 2050 : A Tube Map for the future
http://www.londonreconnections.com/2014/london-2050-cartographical-interlude/

For this reason, the previous Mayor developed his 2050 vision for the metro rail network, which included a cross-river rail connection, called R25 that was to serve Barking Riverside. This has in part led to calls for a Barking Riverside extension. As a result of this strategic plan, many respondents to the BRE consultation were under the opinion that the rail link could be extended south of the river, including the then

Secretary of State for Transport, who objected to the proposal. Presumably not pulling funding from the scheme because he believed that the proposal retained passive provision for a later link to south London, but that is certainly not the case.

Policy 6.1 of the London Plan seeks a strategic approach to transportation within London, working "with all relevant partners to encourage the closer integration of transport". Whereas the Barking Riverside extension does form part of the London Plan, the London Plan also emphasises the crucial need for Thames crossings, particularly in the east of London, calling for a "programme of works under development to improve cross Thames links in east London".

Policy 6.2 states that land should be safeguarded for transport, stating that development proposals that do not provide adequate safeguarding for the schemes outlined in table 6.1, including cross river connections "should be refused". It states that there must be coordinated measures to ensure that the transport network, now and in the future increases the capacity of public transport in London over the Plan period, identifying and safeguarding route alignments to implement transport proposals that have a reasonable prospect of achievement.

It is my assertion that this BRE proposal fails on all counts.

Figure 2 : Potential river crossings recently considered by TFL

The Mayor's recent consultation on potential river Thames crossings[1] should be deemed a material consideration to the determination of this proposal in light of the London Plan's requirement that proposals, which do not safeguard schemes in table 6.1, that include cross-river connections, "should be refused".

Given that the nearest crossing to the west is an unreliable ferry and to the east is the congested, hard to reach M25, this could not be a more serious matter in terms of business activity and housing delivery. This is precisely why the London Plan could not be clearer in its intention that proposals harming such strategic objections should be refused.

The cross-river proposals, in particular between Belvedere and the new station at Beam Park, are interesting because it refers to potential rail crossings. In order to make a cross-river rail link viable, it must have a critical mass of train capacity to achieve a positive business case and indeed to satisfy projected demand.

It is quite possible that the Barking Riverside Extension, by sequestering four trains per hour to an isolated railhead that cannot be extended, could materially harm the operational and financial viability of a potential Belvedere rail crossing, because if London Overground trains do not terminate at Barking Riverside, they could potentially continue to Dagenham Dock and then Belvedere and beyond, in an alternative R25 outer orbital route. A Belvedere crossing could carry a Crossrail extension, but it is important to note that there will be conflicting demands to extend to Ebbsfleet International via Dartford, noting that this option is cited within Table 6.1 of the London Plan. A London Overground connection via the route could therefore be crucial.

Essentially therefore, it is considered premature to approve the link to Barking Riverside prior to a cross Thames strategy being approved by the new Mayor, because, should the new rail head at Barking Riverside render a new rail link across the Thames unviable, it would cause material harm to the London Plan, NPPF and National Infrastructure Commission's aim for an integrated transport system. The report below also aims to provide comfort that refusal of the Barking Riverside extension does not necessarily mean that its associated residential developments will not occur by noting alternative solutions without the BRE intervention.

Paragraph 014 of The National Planning Policy Framework[2] sets out the approach that should be taken regarding prematurity, where significant proposals are put forward for decision prior to a relevant emerging plan being developed. It states that proposals can be refused where prematurity would have clear adverse affects that would demonstrably outweigh the benefits.

---

[1] Have your say on options for new river crossings in east London (December 2015) https://consultations.tfl.gov.uk/roads/river-crossings

[2] NPPF "Determining a Planning Application" **http://planningguidance.communities.gov.uk/blog/guidance/determining-a-planning-application/how-must-decisions-on-applications-for-planning-permission-be-made/**

Situations where this is relevant include where the development proposed is so substantial or its cumulative effect would be so significant, that to grant permission would undermine the plan-making process by predetermining decisions. In this instance, the cross-river proposals by the Mayor that form a key part of the London Plan and that have recently undergone public consultation are considered to be material considerations and ones that lend significant weight due to them having been put through a rigorous public consultation. It will be up to the new Mayor to decide which proposals should be taken forward and safeguarded and it is my aim to object to this scheme on the grounds that this process would be prejudiced if the BRE scheme is approved.

Cross-river limitations of the Barking Riverside Extension

The Barking Riverside Public Consultation Report[3] included at the end a letter from the then Secretary of State for Transport, Rt Hon Patrick McLoughline, MP that should have formed the introduction to the report. The letter states that TFL was:

"missing out on a big opportunity by not considering a longer extension"

The Minister literally pleaded with the Mayor to invest in the future of Abbey Wood, Thamesmead and Barking Riverside by linking them by rail. He noted that whilst 10,800 homes are proposed at Barking Riverside, that 7,000 are proposed at Thamesmead and that neither will reach their full potential without appropriate cross-river public transport. The Minister also cited subsequent potential sustainable transport links to Bluewater, Lakeside, Southend Airport and the Olympic Park.

The Minister was not the only one concerned about a potential missed opportunity. Greenwich Council stated:

" The extension will also provide the opportunity for a further extension across the River Thames to Thamesmead and/or Abbey Wood""[4]

Unfortunately the Minister and Royal London Borough of Greenwich were poorly informed with no significant attempt by TFL to correct them, that this new alignment in some way safeguarded a future Thames River crossing.

Firstly, and most importantly, it was confirmed to me by TFL's engineers during a recent meeting that the proposed Barking Riverside Station is sited too low for a Thames Bridge, yet too high for a tunnel. It was confirmed to me that a tunnel would be the most likely alignment in this location.

As such, in order to extend Barking Riverside to Thamesmead and potentially beyond, most of the proposed viaduct alignment south of the existing C2C line would need to be demolished to achieve the appropriate depth beneath the Thames with a circa 2% gradient. I asked the engineer what proportion of the overall cost this would be and was advised, due to the track and station being on a viaduct, this potentially redundant section would account for up to half of the overall cost, putting the potentially redundant investment at £150m, effectively writing off the entire developer contribution and some of the Treasury's contribution.

---

[3] TFL (2015) "Barking Riverside Public Consultation Report" https://consultations.tfl.gov.uk/london-overground/gobe/user_uploads/barking-riverside-2014-consultation-report--v3-.pdf

[4] TFL (2015/16) p28 https://consultations.tfl.gov.uk/rail/barking-riverside-extension-consult/results/barking-riverside-winter-2015-2016-report.pdf

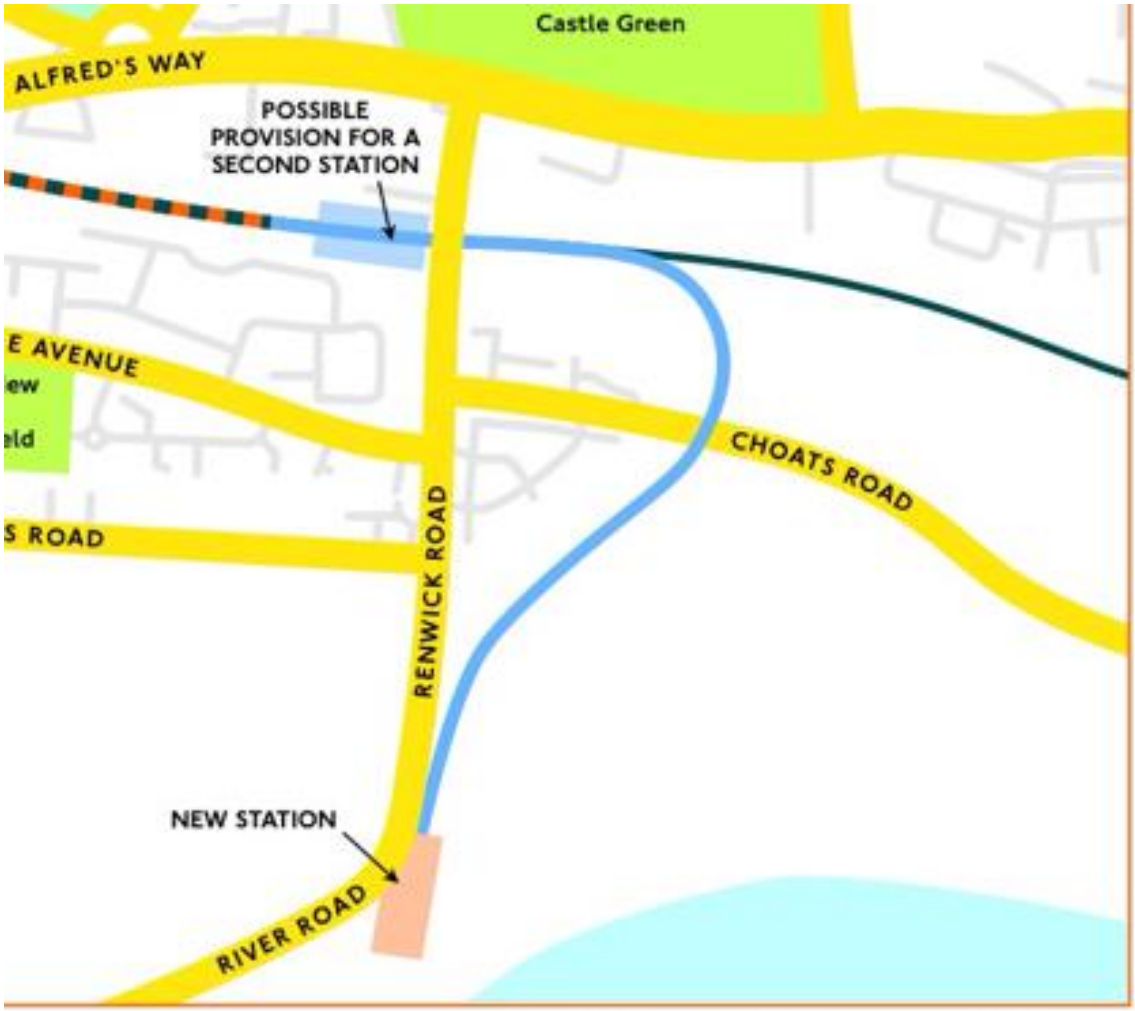
Furthermore, the existing Proposed Barking Riverside station would need to be demolished and built underground if replaced on an underground alignment. I note that new underground Crossrail stations cost circa £1bn. Whilst costs for a subterranean London Overground station are likely to be significantly lower, it would nonetheless make its replacement unviable along with a future rail link under the Thames. It is also very important to note that the existing Thames crossing consultations do not anticipate any future link in this location, preferring Belvedere due to a far less constrained site being available that would not conflict with the strategically important freight terminal.

In light of there being limited capacity for significant frequency enhancements to Fenchurch Street and Liverpool Street via Barking and to Gospel Oak, a new river crossing should likely deliver an extension to the Elizabeth Line or existing South Eastern services. Unfortunately that cannot be delivered with an extension of the Barking Riverside extension south of the river. This is because an eastern chord would conflict with obstructions that include overhead pylons, and TFL's engineer advised me that an eastern chord here would also be a non-starter because it would disrupt the existing, strategically important goods yard here that serves HS1. I have been reliably advised cannot be compromised under any circumstance.

Furthermore, routing 4 London Overground trains per hour to a rail head at Barking Riverside that cannot be extended, with little to no opportunity for frequency enhancements, this proposal ties up vital onwards rail capacity that could prejudice future rail crossings of the Thames, making them more dependent on road transport.

As a result, not only does the Barking Riverside Extension potentially make the potential planned rail connection at Belvedere unviable, it also delivers a spur that should but cannot viable cross the river itself. For this reason, due to the proposal failing to safeguard and likely causing material harm to planned river crossings, it should be refused for being contrary to London Plan Policy 6.2.

Existing Conditions and potential Without BRE intervention:



OVERGROUND TRANSPORT FOR LONDON
EVERY JOURNEY MATTERS

The Barking Riverside Extension has been altered in response to responses to make passive provision for a new railway station on the existing line, just 1.1km from the proposed Barking Riverside Extension, sited on the west side of Renwick Road.

This station, if served by C2C and London Overground services, would deliver 8 trains per hour during peak times on proposed timetables if the station were served by both operators. There is no reason to believe that a relatively clock face timetable could not be achieved with one train every 7.5mins. There is also no reason to believe that such frequencies cannot co-exist with existing and proposed freight paths.

In contrast, Barking Riverside will delivery just 4 trains per hour, providing 15 minute intervals.

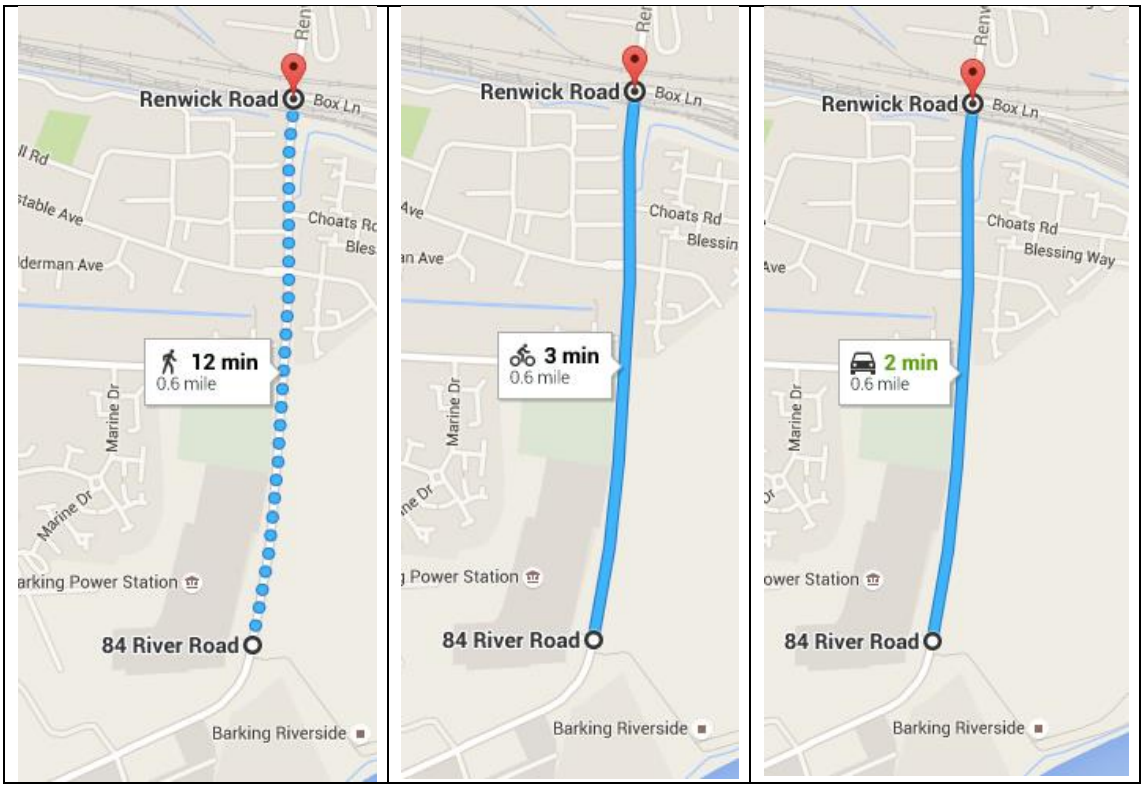


Figure 3: Journey times between the two proposed Barking Riverside stations

Above are the projected journey times from Barking Riverside Rail Station and the potential second station on the existing C2C Thames ide line. Walking is 12 minutes, cycling is 3 and car is 2. No buses presently run the route, but journeys would likely take 3 to 4 minutes and bus frequencies could be substantial and wholly funded by the developer in light of the developer contributions that are on the table. Note, the existing EL1 and 387 bus services could also be routed to the new station, providing excellent accessibility for the area.

In assessing the BRE proposal, TFL has not compared PTAL scores of a proposal comprising the second station only plus a high frequency bus link. It is likely that this could provide a higher PTAL in light of the second station providing eight trains per hour, four of which serve central London directly, unlike the existing proposal, which requires a change of trains and delivers no trains to central London.

The implications of this are, not only potentially improved PTALS if the BRE extension is ditched, but also that many people will find 8 trains per hour from the existing line more convenient than waiting potentially for 15 minutes at Barking Riverside Station for a train that does not go to central London, particularly if it is linked with a high frequency bus route.

Furthermore, it is likely that this arrangement would not hinder the 10,800 proposed homes due to similar PTALS being achievable alongside the developer

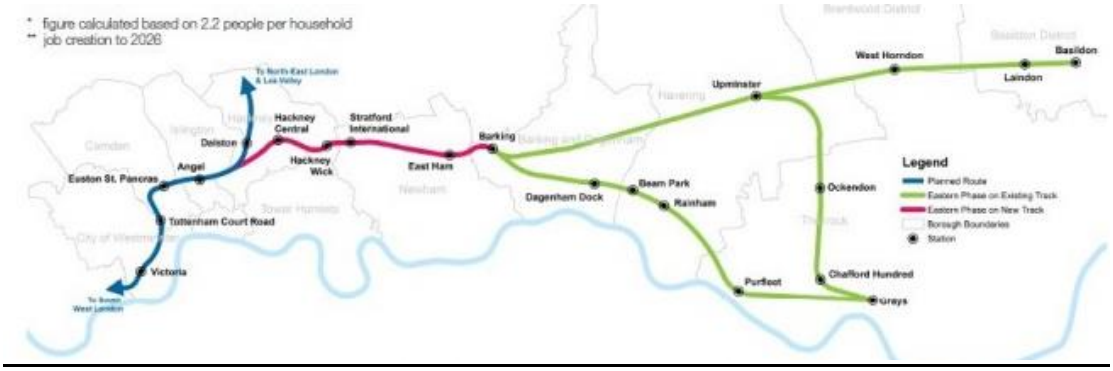
saving over £100m, and the Treasury could instead spend money supporting the Mayor to deliver new cross Thames links.

An implication of providing 4 additional London Overground trains per hour to a new station on the existing line without a £300m spur to Barking Riverside, is that these trains could continue towards Tilburg Town, serving Dagenham Dock, Rainham, Purfleet, Grays, Tilbury Town and the proposed new station at Beam Park, possibly utilising the freight branch to Tilbury Terminal as a convenient turn back facility with a potential new station there.

This proposal would double frequencies at five existing and one proposed Thames ide stations from 4 to 8 trains per hour, plus delivering a new station 10mins walk from the new Barking Riverside redevelopment, also with 8 trains per hour. Train frequencies at Grays would be boosted from 8 to 12 trains per hour, with no other solution on the table to boost frequencies in this location due to Fenchurch Street Station and Liverpool Street Station being at capacity.

These areas would not only benefit from doubled frequencies, they would also gain a place on the Central London Tube Map, enhancing development prospects in all these locations without compromising the viability of the Barking Riverside redevelopment.

Crossrail 2, Eastern Branch



The London Borough's of Hackney[5], Barking and Dagenham and Newham are so keen to deliver housing, constrained principally by a lack of rail capacity and no spare capacity at Fenchurch Street that they called for an eastern branch of Crossrail 2 to solve a problem that could be largely resolved by a more strategic approach to the Barking Riverside Extension at significantly lower cost.

These Council's propose a circa 14km tunnel from Angel to Barking that would deliver just 15 trains per hour. This is a very low frequency for such a long tunnel. As such it is questionable whether London could fund half of the scheme and even more questionable that a business case could be achieved.

15 trains per hour can be justified on the two eastern branches of Crossrail 1 because those underground sections are far shorter and achieve a significant amount of their journey on conventional tracks with a significant number of above ground stations. The Abbey Wood branch is a partial exception due to significant funding provided by Canary Wharf, the likes of which simply does not exist in Dagenham.

The proposed eastern Crossrail 2 branch is proposed to deliver 7.5 trains per hour to Grays and also to Basildon to deliver over 200,000 homes.

In terms of the route to Grays, routing the four London Overground trains per hour to Grays that are presently proposed for Barking Riverside would deliver half of the proposed frequency of this eastern branch, which could be delivered soon after 2018 with relatively minimal capital investment. The route would utilise the same Aventra stock being used by Crossrail, albeit with shorter formations, but platforms can be extended in time.

Furthermore, a cross-river alignment, essential for the regeneration of this area, could form an extension to Crossrail 1 from Abbey Wood to Grays, potentially via the proposed Belvedere crossing, alongside a grade separated junction at Beam

[5] Hackney Citizen (March 2016) "Crossrail 2 needs 'eastern phase' through Hackney, claims Mayor" http://hackneycitizen.co.uk/2016/03/22/crossrail-2-hackney-eastern-phase-mayor/

Park with an east and west chord. Such a Crossrail extension could deliver between six and 18 trains per hour.

I suggest six as a minimum, because Crossrail has been engineered for 30 trains per hour vs. the initial 24 trains per hour. There is therefore potential for an additional six trains per hour that could be routed via this alignment. They are unlikely to be routed via Stratford because that route is highly constrained between Stratford and Forest Gate, where it shares conventional tracks with six conventional trains per hour plus a number of freight paths. The future potential of 18 trains per hour is a fantasy level that combines these additional six trains per hour with the existing proposal of 12 trains per hour to Abbey Wood.

Meanwhile, at least 4 London Overground trains per hour can take an outer orbital, R25 route, with an eastern chord to Belvedere, heading to Erith and then looping back through south London, as per the 2050 transport plan published by the previous Mayor.

Off topic for this public enquiry, but the route to Basildon can be supplemented, again at far lower cost than the eastern Crossrail 2 branch, by dual tracking the London Overground and C2C alignment between Romford and Grays via Upminster, with grade separations at existing junctions. A 4 to 6 trains per hour shuttle to the existing Platform 3 at Romford could likely be achieved alongside an additional 4 trains per hour if the residual Crossrail 2 trains from Liverpool Street to Gidea Park were instead routed to Grays via Upminster.

Combined with the existing 4 C2C trains per hour from Grays to Fenchurch Street via Upminster with 4 trains per hour from Liverpool Street and up to 6 trains per hour shuttle from Romford, the route is capable of between 8 and 14 trains per hour vs. an existing provision of 4 trains per hour. Some of these trains could instead travel to Basildon to supplement that service.

It is likely that these two proposals, one to supplement the Upminster alignments and another to support the route through Barking and Dagenham would cost very little compared to the only other proposal on the table, which is an eastern branch to Crossrail 2 that would cost significantly more than £10bn, and yet the Barking Riverside extension could prejudice this proposal if it made a rail link on the proposed Belvedere crossing unviable by depriving it of a critical mass of rail traffic by sequestering 4 trains per hour to an isolated rail head at Barking Riverside, achieving 10,800 homes at the expense of not delivering the 230,000 homes that could be provided if adequate infrastructure investment were delivered.

Conclusion

In conclusion, I have attempted to demonstrate the proposal is contrary to Policies 6.1 and 6.2 of the London Plan due to it failing to safeguard a river crossing and potentially causing material harm to the potentially planned Belvedere rail crossing that was recently consulted upon. Furthermore, I hope I have demonstrated that the second proposed station plus a high frequency bus

link, delivered without the Barking Riverside Extension save circa £300m without necessarily prejudicing development in the area, but providing opportunity to double rail provision for six railway stations, all of which have high development potential. As a result, I believe that the proposal will cause material harm to housing delivery for the entire Thames estuary region, contrary to all the policies that the Barking Riverside Extension claims to satisfy in terms of housing delivery and economic growth.