

Tollgate – Business Rationale

WORKING DRAFT

This document has been prepared by BP Pulse relative to the business rationale behind its proposals for an Electric Vehicle (EV) Charging Hub at the Tollgate Hotel site in Gravesend, land which BP owns. The document has been drafted to support a planning application relative to these proposals, in particular:

- The Planning and Design & Access Statement (the Planning Statement), by Rapleys;
- The Development Needs Assessment (the Needs Assessment), by Graham and Sibbald, and
- The Transport Statement (the TS), by Markides.

BP Pulse is advised by its planning consultants, Rapleys LLP, that there is no general requirement, under national or local planning policy, to demonstrate a need for EV charging hubs, and that the viability and commercial risk associated are matters solely for the landowner/applicant. However, given the applicant/ landowner's evolving aspirations for the site since a planning application was last submitted (and the time that has elapsed since then), and more broadly the site's lengthy planning history (as reviewed in detail in the application Planning Statement), it is considered that it would be helpful to any decision-maker for BP Pulse's motives and rationale behind the planning application to be made clear. In this context, and drawing and cross-referring to other application submissions, this document:

- Explains the imperative, from BP Pulse's perspective, to promote EV charging;
- Confirms that the concept of EV charging is relatively new, and that a number of different models relative to charging infrastructure are being considered and trialed by BP Pulse and other businesses, and how that relates to the proposals at Tollgate;
- Identifies the type of site that is needed to deliver the model, and why Tollgate is suitable in these terms;
- Outlines why the various elements of the Tollgate proposal are being brought forward, in the context of the above, and
- Reviews how the layout of the proposals will operate.

The imperative for EV charging

The central imperative for EV charging, at this site and others nationwide, is part of the inevitable and essential move away from hydrocarbons into a world where net zero carbon transport is the norm.

In the wider context, Central Government has confirmed that the UK economic should become net-zero by 2050, and the 2021 “Net Zero Strategy: Build Back Greener” paper aims, inter alia, to “remove all road emissions at the tailpipe”.

Following this, in March 2022 the Government released “Taking Charge – the Electric Vehicle Infrastructure Strategy”. As the title suggests, this document is focused on the delivery of the maximum number of public charging points for EVs in the shortest possible time – stating a requirement for ~300,000 publicly accessible chargepoints by 2030. The Strategy underlines the criticality of Local Authorities to the rollout of chargepoints, acknowledging that *“planning permissions delays are often cited as a major brake on the speed of deployment”*. This document is reviewed in detail in Section 4 of the Needs Assessment, but in summary:

- Chargers should be rolled out where they are needed the most;
- Two crucial sectors are identified to make “range anxiety” (a factor identified as holding back adoption of electric vehicles) a thing of the past – high powered charges on the strategic road network, and local on-street charging, and
- The Government should not be involved in private provision of EV charging, except to remove existing barriers.

This policy support for EV vehicles and infrastructure also feeds through to County and Local Authority initiatives, as reviewed in Section 4 of the Needs Assessment.

Parallel to the Government’s initiatives, the UK ChargePoint market has matured beyond recognition in the last 10 years, and it is now one of the leading public charging networks in Europe. The number of public charge points has grown four-fold over the last five years. As of January 2022, there were around 29,600 public charge points across the country, including over 5,400 rapid chargers. On average, over 600 new chargers are being added to the UK’s roads each month, of which over 100 are rapid.

However, the UK Government estimate that around 300,000 public charge points will be needed as a minimum to support their commitment to phase out sales of new diesel and petrol cars and vans by 2030 and estimate that around 700,000 charge points are needed by 2035, to support the removal of hydrocarbon emitting vehicles from the road.

In this context, the pace of rollout is considered by BP Pulse to be too slow – even a recent surge in charge point deployment is not at a pace consistent with what is needed for a wholly zero emission new car fleet in 2035. In this context, BP Pulse, as a global brand in the car refuelling market, takes its responsibilities to assist in the transition to decarbonise transport very seriously.

BP's purpose is reimagining energy for the people and planet – aiming to help the world reach net zero. bp pulse is BP's electric-mobility business, and is energizing the future of transportation by developing fast and convenient charging solutions for consumer and commercial electric vehicles.

To lead the transition to EV in the UK, BP Pulse plans to invest around £1 billion in EV charging in the UK by 2030, and is committed to making EV charging 'extraordinarily helpful' by providing fast, reliable, and convenient charging to 'on the go' customers nationwide. As part of this commitment, BP Pulse is aiming to double the size of its network in the UK to 16,000 charge points by 2030 and install a number of rapid charging hubs across the UK. The proposals at Tollgate are part of this initiative.

The different models of EV charging infrastructure

In the first instance, whilst considering what might represent the final models of EV charging infrastructure, it must be recognised that the technology and patterns of behaviour are at a very early stage, and constantly evolving. In this context, and although for the reasons set out within the document BP consider the Tollgate proposals to be worthy of investment, it is not possible at this stage to arrive at a conventional appraisal of EV charging facilities.

As such, any proposals for EV charging hubs, by any operator, is based on anticipation of future business and a certain level of revenue cannot be guaranteed. This is far from unusual in development that is new and innovative, and the NPPF confirms that one of the objectives of the planning system is to support innovation.

However, at this stage, the government envisages that private EV car refuelling will be carried out by two broad methods:

1. Local, slower charging in the vicinity of dwellinghouses (for overnight charging, close to or at people's homes);
2. Commercial charging at selected commercial premises with significant levels of parking (for example out of town retail, for local people to top up as necessary), and
3. Commercial, higher speed charging on the strategic road network (for those undertaking longer journeys, who need to recharge en-route, and therefore not generally serving local residents).

Although BP are currently promoting facilities that would fall into both categories 2 and 3, the Tollgate proposal derives from the aspiration to deliver category 3 facilities on, inter alia, the major trunk network. BP Pulse intends the Tollgate site to be a 'flagship' for EV infrastructure, providing ultra-fast charging facilities and high-quality amenities to customers travelling on the strategic road network.

Locational Considerations

In considering appropriate locations for charging facilities on the strategic highway network, the following matters are key:

- A high level of traffic volume passing the site;
- A high degree of EV adoption within the wider region, and/or strong growth projects for EV adoption
- Comfort that this need is not already met by existing provision;
- A regular, developable site with good existing or potential access onto the public highway, and
- Unique to EV charging hubs Access to sufficient electrical infrastructure to facilitate ultrafast charging; few sites have the requisite infrastructure without costly (often commercially prohibitive) upgrade costs and grid reinforcement works that can be many years in development

In this context, the Tollgate Hotel site is ideal for such development, not least as:

Traffic Volume – as confirmed in Sections 6 and 7 of the Needs Assessment, the site is very well located on the highway network, and traffic flows on the A2 (where users are envisaged to originate from) are higher than many motorways in the UK. Levels are far higher than would normally support a petrol filling station. Following on from this, there is clearly a need for an EV charging hub to serve the A2 in this broad location.

EV Adoption – London and the South East has the highest percentage of EV registrations. In 2022, electric vehicle registrations were up 30% on the previous year and forecast to increase over coming years¹

Existing EV charging hub provision – Section 8 of the Needs Assessment addresses this matter, confirming that provision for EV charging on this part of the highway network is limited, and in particular the closest service stations to the site (Shell Tollgate and Cobham Service Station) currently have no EV charging provision. Indeed, provision of ultra-fast charging (>100kw) alongside the A2 is very

¹ [ArcadisEVStrategySouthEast | Arcadis](#)

limited throughout Kent. Within the context of a forecast requirement for c.30,000 charge points across the South East by 2030², the need for such facilities is both acute and clear.

Site conditions – as confirmed in Section 6 of the Needs Assessment, the shape of the site provides a regular developable plot. It is confirmed that the existing slopes in the main area of proposed construction will be adjusted, levelled, and lowered in places, and these adjustments do not present any operational difficulties for the proposed use of the site. The Site is not subject to any adverse rights or other matters that would prevent it from being used as a Service Area. Further, the site benefits from an existing access of the adjacent roundabout, which can readily be upgraded to serve the development.

Electricity infrastructure – As has been noted, ultra-fast charging hubs place an extensive demand on the electrical grid network. BP Pulse has been in discussions with the local distribution network operator, UK Power Networks, and has secured sufficient power for its proposed development. A degree of local reinforcement works are required and expected to be completed within H1 2025. The energy used to power the chargers will be ‘Renewable Energies Guarantee of Origin’ (REGO) backed.

In this context, the Tollgate Hotel site is not only appropriate to develop an EV charging hub, but also will serve a need for EV charging facilities which is currently not met in this area.

Development considerations

As confirmed above, the proposals at Tollgate would evidently fall into the category a commercial EV hub on the strategic road network, not least as given the locational considerations addressed above. At this stage BP Pulse logically envisages that these types of facilities will function in a similar manner to petrol filling stations. As confirmed in Section 6 of the Needs Assessment, would be strange if they did not, in that they are intended to carry out the same primary function; to support the safety and welfare of the road user. In this context, it is anticipated that motorists will seek the same facilities, including a retail area selling motorist-related and convenience goods for purchase in association with the sale of fuel (in this case, whilst the car is being recharged, rather than afterwards).

Further, it is envisaged that the model of EV charging hub will vary against whether it is in – for example – an urban area or a rural area. On a site such as Tollgate, it is envisaged that the development will be similar to a roadside service area, a format that will be familiar to motorists

² [ArcadisEVStrategySouthEast | Arcadis](#)

travelling along dual carriageways across the UK and are described in further detail in Section 2 of the Needs Assessment.

In terms of the type of charger that is required at roadside service area EV charging hubs, Section 5 of the Needs Assessment addresses the different type of EV charger available. Given the quick turnover charging times, evidently Ultra Fast Chargers are the most appropriate type of charger for public EV charging hubs. Such chargers ensure that the time that needs to be spent at the site, with the twin benefits of allowing the motorist to continue their journey with as little delay as possible.

In the context of the above, in terms of facilities the development proposed consists of:

- Electric Vehicle (EV) charging bays, each sharing an ultra-fast charger
- A sales/amenity building, akin to a petrol filling station forecourt shop, which will include a sales area to meet the needs of the motorist, a café area and customer toilets. In addition, there will be an amenity area for customers who are not using other facilities within the forecourt shop can relax whilst waiting for their car to charge, reflecting the slightly longer wait times.
- Customer and staff car parking spaces, and cycle parking.

In addition, and in recognition that the move from fossil fuels to electric vehicles is still very much a work in progress, it is necessary – in terms of commercial viability – to include a conventional refuelling offer, which is intended to be as “temporary” as possible, and removed in favour of additional electric vehicle charging in due course. BP considers that such facilities are necessary on a temporary basis to ensure that the safety and welfare of all motorists are provided for during the transition period – irrespective of their choice of energy. The Proposed Development is intended to be ‘EV first’ and thus petrol filling facilities are situated to the rear of the site. EV is positioned front and centre of both the site and motorists’ on-site experience.

In terms of omissions, the site does not include the following facilities, which might usually be found at a roadside service area:

Car wash – this is not essential, and has been removed from the proposals in order to ensure that the quantum of built development is minimised, in light of the site’s Green Belt location, and

HGV refuelling – for the reasons set out in Section 6 of the Needs Assessment (health and safety relative to proximity to high voltage cables, potential conflict between HGV and car usage and lack of supporting facilities for HGV drivers).

Concluding comments

- There is a clear and established need to additional Ultra-Fast Charging provision in the South East and alongside the A2
- The site's location, characteristics and supporting infrastructure it is an ideal candidate for development as an EV charging hub
- Amenities such as a convenience store and coffee shop are required to ensure motorist safety and welfare on the strategic road network
- Commercial viability is key – acknowledging the transition plays out over a long period of time, there's a sustained need for conventional refuelling and ancillary income (retail) to drive viability