



Lancashire Central – Model scenarios and re-routing assumptions

DATE	31 May 2023	CONFIDENTIALITY	Internal
SUBJECT	Lancashire Central – Model Scenarios and re-routing assumptions (70084465)		

PROPOSED MODEL SCENARIOS

2024 BASE YEAR

- **Layout:** Existing network
- **Traffic flows:** 2016 survey flows used as representative of 2023 base year traffic flows. The 2023 data then factored to 2024 using TEMPro growth rate.
- **Model type:** LinSig only for the following junctions:
 - Stanifield Lane/A582
 - A582/A6
 - A6/Cuerden Way / Craven Drive
 - A6 / A49 Wigan Road/ Station Rd
 - A6 / M6

2024 WITH DEVELOPMENT SCENARIO

- **Layout:** Includes all proposed mitigation associated with Lancashire Central
- **Traffic flows:** Base traffic flows factored up to 2024 using TEMPro growth rate + Lancashire Central development traffic + Future Phase land + re-routing of background traffic as per below
- **Model type:** LinSig and VISSIM

2037 WITH DEVELOPMENT SCENARIO

- **Layout:** Includes all proposed mitigation associated with Lancashire Central
- **Traffic flows:** 2016 survey flows factored up to 2037 using TEMPro growth rate (adjusted to avoid double counting) + Committed Developments + Farington Cricket + Lancashire Central development traffic + Future Phase land + re-routing of background traffic as per below
- **Model type:** LinSig and VISSIM

RE-ROUTING ASSUMPTIONS

The development proposals include a link between M65 terminus and A49 Wigan Road. A proportion of background traffic would re-route through the site making use of this new link. It is assumed that the following routes would experience re-routing:

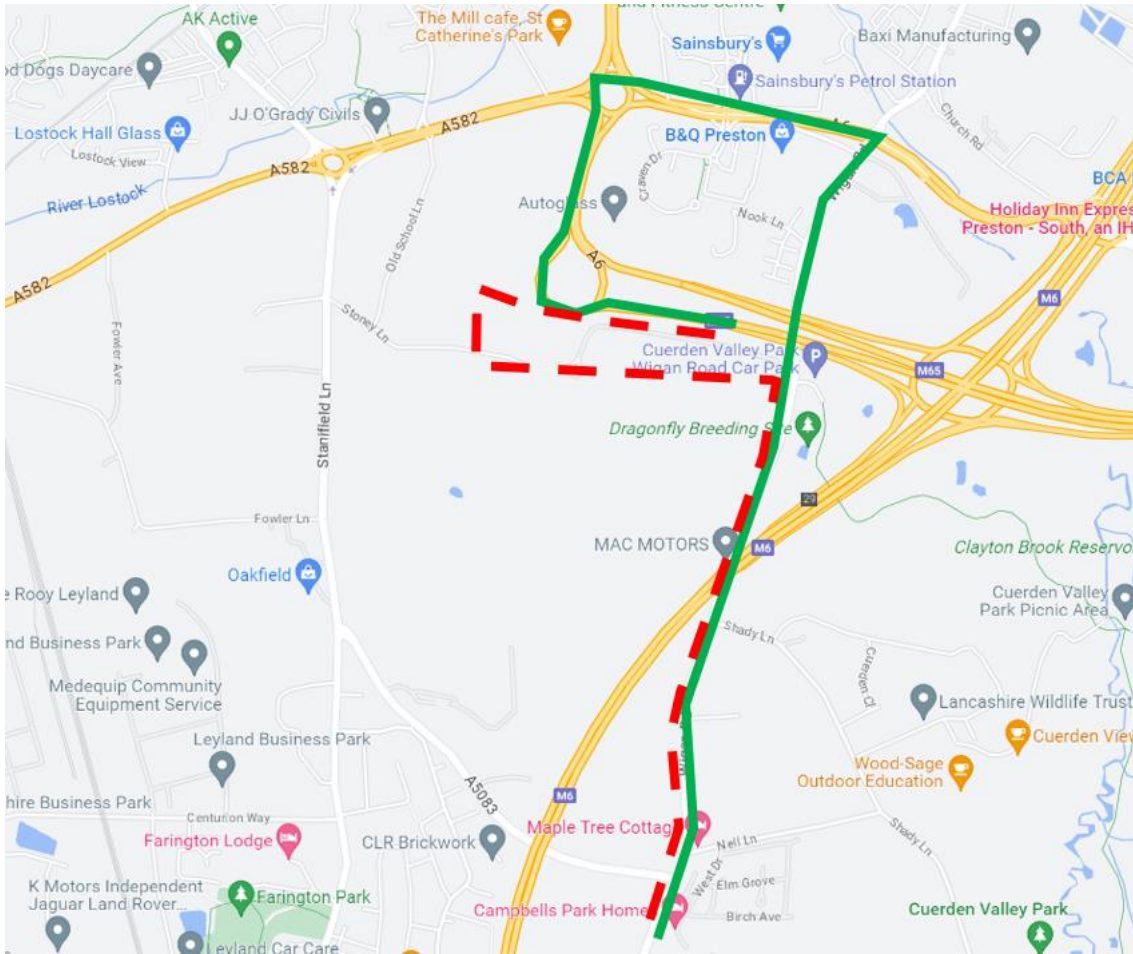
Route 1: M65 terminus to/from Wigan Road

Route 2: M65 terminus to/from Stanifield Lane

It is assumed that there is no through-route from M65 / A49 to Stanifield Lane.

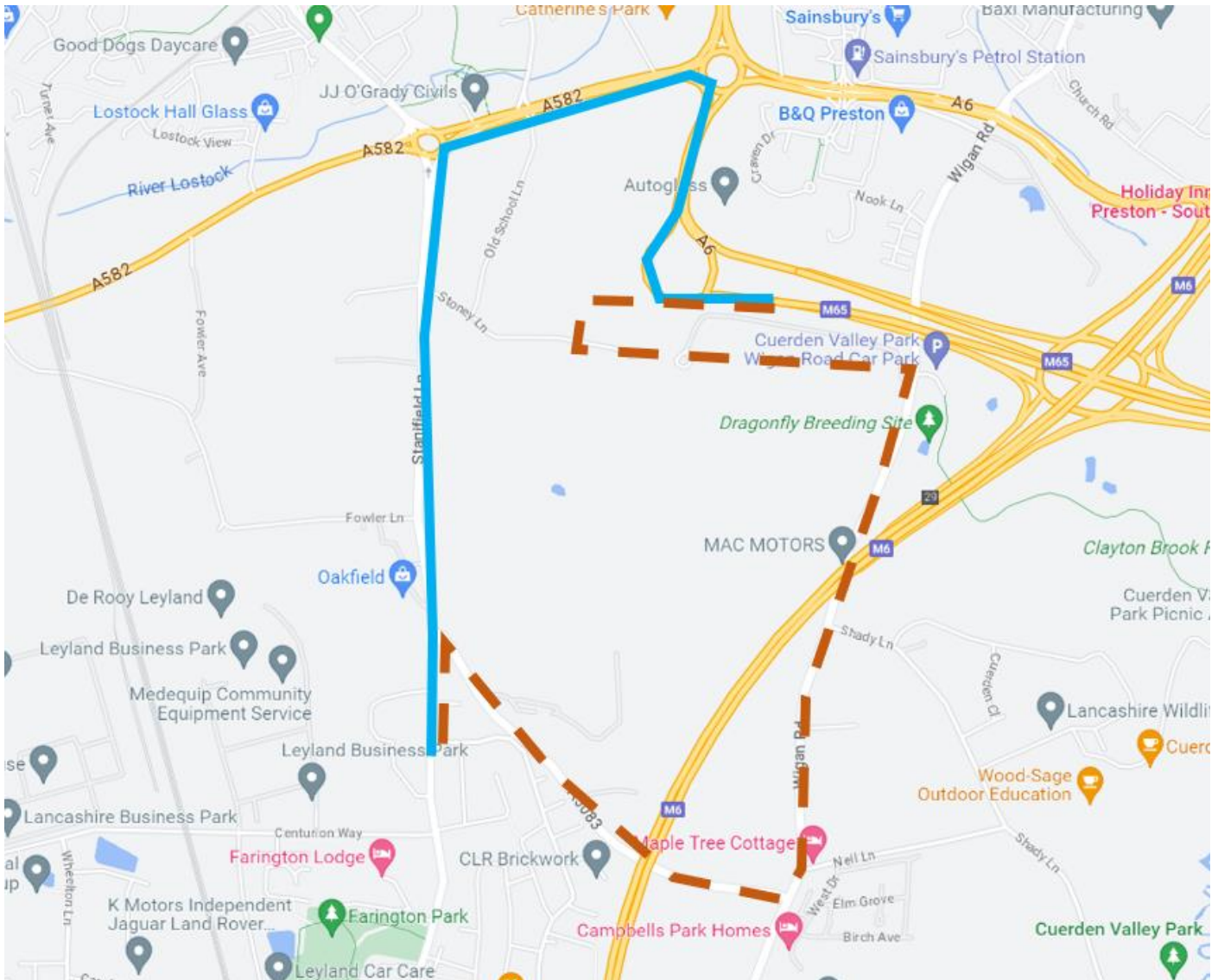
Solid lines on the below plans show existing routes, dashed lines show re-routing of these routes through the site.

Route 1 – Re-routing of traffic through site from M65 terminus to A49 Wigan Rd south



It is assumed that 100% of traffic currently travelling along the route indicated in green would re-route through the site using the red dashed route.

Route 2 – Re-routing of traffic through site from M65 terminus to Stanifield Lane



It is assumed that 33% of traffic currently travelling along the route indicated in blue would re-route through the site using the brown dashed route.

This 33% assumption takes into account both the length of the two routes and the likely congestion of the two routes.

The blue route is approximately 2km.
 The dashed brown route is approximately 3km.

Therefore, re-routing through the site is longer in terms of distance. However, due to the congested nature of the A582, journey times along the two routes may be comparable. Therefore, it is assumed that both routes have similar attractiveness. However, some satnavs would route the shorter route despite congestion, and therefore 33% of background traffic using the blue route is assumed to re-route through the site.



To determine the number of vehicles re-routing, the 2024 and 2037 peak hour background traffic flows have been used.

The turning proportions at junction along each route have been used to estimate how much background traffic is travelling along Route 1 and Route 2.

The following table summarises the number of vehicles assumed to re-route through the site on the two routes.

	2024 Future Year		2037 Future Year	
	AM Peak	PM Peak	AM Peak	PM Peak
Route 1 SB	15	23	16	25
Route 1 NB	19	17	21	18
Route 2 SB	79	68	86	74
Route 2 NB	65	66	71	71
Total Two-way	178	174	194	188

A total of 178 vehicles are assumed to re-route through site in AM peak 2024 and 174 vehicles in PM peak 2024.

A total of 194 vehicles are assumed to re-route through site in AM peak 2024 and 188 vehicles in PM peak 2024.