

Transportation Advisory Note

Project: **Transport Infrastructure Assessment, Land West of A30, Hayle, Cornwall**

Subject: **Highway Appraisal**

Date: **18th June 2015**

Overview

The Hayle Neighbourhood Plan Steering Group has requested a highway appraisal report in respect of a proposed new distributor road to serve residential development on land between St Georges Road and the A30 Trunk Road. This essential new road will form part of the final Hayle Neighbourhood Plan and hopefully become part of the final county Local Development Plan, putting in place the planning policies for the future development and growth of the neighbourhood. This Transportation Advisory Note provides an overview of the issues relating to the suitability of the proposed road, its route, its form and its possible future use.

Site Location and Local Highway Network

Currently the emerging Local Plan has identified that out of the 1,400 new homes required before 2030, accounting for committed development, an overall requirement for 426 houses. The available Brownfield land is at a premium in Hayle given existing planning consents and the constraints of the sea to the west and the A30 to the east. Identified Greenfield land for development is located between existing housing on St Georges Road and the A30 bypass – see Figure 1 overleaf.

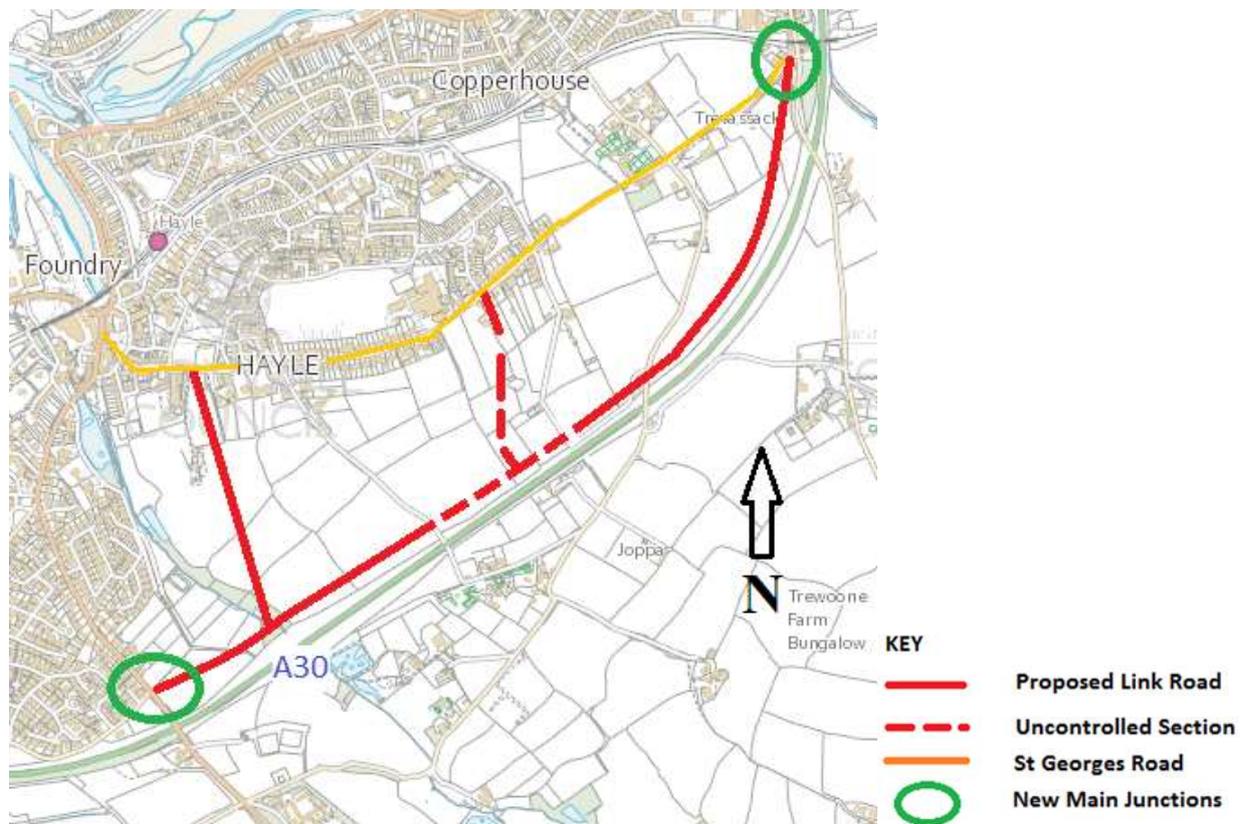
Since the opening of the A30 Hayle bypass, Hayle and Copperhouse have suffered from only having a single main thoroughfare from the St Erth Roundabout in the west to the Loggans Roundabout in the east. This route with a couple of secondary routes (Towans and Leedstown roads) carries high volumes of existing traffic whilst retained as the emergency route in the event of A30 closure and yet expected to accommodate 1,400 new homes and a regeneration area centred around tourism and the World Heritage site of South Quay.

A secondary main route is required not only to help serve the required new housing but also the existing high flows of traffic. During the early negotiations with ING regarding their planning application to regenerate the centre of Hayle, Cornwall Council (then County) investigated the provision of a third junction link onto the A30, proposing that ING's development help fund it. The junction at Tolroy was identified as the optimum location given the heavy articulated traffic to/from the vegetable packing stations in Leedstown which could be excluded from the centre of Hayle by a simple on and off slip system. It would also provide a quicker more effective route to the A30 for the general day to day traffic of the residents of Hayle. Unfortunately at that time and maintained up until to today the Highways

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England (formerly Highways Agency) refuse to consider an additional junction. Until a change of policy within Highways England or possibly de-trunking of the A30 the likelihood of a vital addition to the Hayle highway network is very small. However small the likelihood however the possibility and deliverability must be maintained and to that end the land required for the new junction(s). It is understood that Cornwall Council have 'safeguarded' land for future 'highway improvement'.

Delivery of a 'relief road' is a long term aspiration closely aligned to the delivery of the necessary housing and whilst the required shortfall of 426 new homes may be revised upwards, current applications, not related to the area including the new road, may actually address the immediate need.



Proposed Link Road

The most important aspect of future delivery is the ability to do so and that is tied to large new housing developments allowing sections of the new road within their initial estate road design. The part and final full design of the future road should be carefully planned and included within each planning application design brief, something that serves the proposed development but also enables future, long term delivery. Clearly the reduction in unnecessary car journeys is paramount and to do so relies on both existing and the new residents considering the various sustainable options. Cornwall Councils transport

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strategy is based around this premise (apart from the improvements to Loggans, Carwin Rise and St Erth junctions) whereby residents will be encouraged to utilise public transport, cycling and walking.

Road design has changed dramatically over the years and such innovative designs such as Kensington High Street and Exhibition Road in London and more recently the East West Distributor Road in Camborne. The former are both retrofit and the latter intended design. What each scheme demonstrate is that large volumes of traffic can be influenced to use the road space in a completely different way whereby the pedestrian and the cyclist share the road space with traffic and yet share the dominance. The proposed link road for Hayle would embrace this design concept and create a transportation corridor where the road would become a 'street' with all users aware of each other's presence.

The main thrust of the road design concept is that the identified road space, normally defined by roadside kerbs, segregated footways/cycle paths and street light columns is replaced by a shared area where all users interact and no single user has a dominating role. This leads to drivers being aware of all that is around them and traffic speeds are reduced as a direct result.

Dolcoath Avenue is a very good example where the distributor road, designed to carry high levels of traffic including HGV's enters an area where it becomes a 'street'. A 'street' is a highway that has interaction between both sides, normally retail and residential, where local residents cross and re-cross the carriageway either for social interaction or retail purposes ie visiting friends and neighbours or undertaking shopping trips. Plates 1 & 2 below and overleaf show the early stages of Dolcoath Road where the busy distributor Road meets the high street.



Plate 1 – Dolcoath Avenue 'Street' Meets Future Distributor Road

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Plate 2 – 'Street' Section (Incorrect Parking on Central Strip.)

It is proposed that using experience from early attempts in new 'street' design the new 'relief road' would incorporate a sufficiently wide carriageway to cater for the largest vehicles, pedestrian and cyclist needs.

Exhibition Road in London provides a very good example of innovative, retrospective design removing the dominance of the vehicle by blurring the zone of responsibility and introducing a workable shared surface catering with very high vehicle and pedestrian flows, for all road users – see Plate 3 overleaf.

As previously stated the new road for Hayle would be delivered piecemeal as and when new development was proposed and approved. The long term aspiration is that each development would deliver a phase of the road both to serve their likely traffic generation and that of Hayle whilst enabling future link to the A30. Each new development would of course need to demonstrate that it could 'stand-alone' in highway capacity terms as currently the links from each of the new junctions (green circles in Figure 1) or via links to St George's Road have highway capacity issues ie Foundry Square and Guilford Road.

Provision for pedestrians and cyclists is paramount and should precede that of the vehicle. Interested groups, cycling clubs, walk to school group's etc need to input to ensure their preferred approach is considered and hopefully incorporated in the final design. For example there are different types of cyclists, those who wish to cycle for pleasure and those who wish to cycle for a purpose ie to/from work. The former are happy to be segregated on perhaps a necessarily lengthier journey and those who wish to get from A-to B in the quickest time. On-road cycle lanes are fine for the committed assertive cyclist but not so appealing for the social and perhaps younger user. Pedestrians tend to prefer the more direct route and establish desire lines between points of origin and destination ie homes to shops, school, bus stops etc and whilst may not enjoy the presence of high traffic flows will accept short sections.

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■ Half mile stretch (820m) from South Kensington Station to Hyde Park.
 ■ All 'street clutter' removed.
 ■ No traditional pavements or kerbs.
 ■ Traffic signs, safety barriers, kerb markings removed.
 ■ Traffic expected to reduce by 30 per cent.

Cost: £29.2million

■ The 20mph speed limit signs will be posted at the top and bottom of the road, and intermittently on lampposts in between.

■ Surface comprises a chequered pattern created from a jigsaw of a million bricks of pink and black Chinese granite weighing 10,000 tonnes. Each granite 'brick' is a 6-inch cube weighing 10kg. Pink granite sourced in Fujian province, black 'bricks' from Fuding province in China.

AIM: To make cars and people co-exist harmoniously - without the need for hectoring signs and nannying protective steel barriers.

■ Pedestrian areas distinguished from vehicle areas by black iron drainage channel covers and raised and ribbed 'corduroy-effect' tactile strips. Helps warn blind and partially sighted people underfoot.

■ Tall, sleek street lighting masts have been designed to complement the grand buildings of Exhibition Road.

■ The design of the thoroughfare is such that car-parking bays, cycle racks, trees and bench seats will also help separate pedestrians from two-way traffic, without forming a permanent barrier.

■ Continuously flat surface improves access for people using wheelchairs, push chairs and motorised buggies.

Plate 3 – Exhibition Road Design Concept

The aspiration would be to design a highway corridor where all users could interact and not feel excluded, vehicle flows would travel in a respectful manner and there would be interaction between each side of the 'street'.

Deliverability of the Road

Whilst the need and desire for a new link road with ultimate desire being a new junction onto the A30 at Tolroy is accepted the land availability and topography/constraints must also be assessed.

Tolroy

As previously stated it would appear that Cornwall Council has safeguarded land on either side of Mellanear Road for future highway improvement. The land at this location is fairly level prior to falling

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gradually down to the lower valley before gradually rising again. It is not an adverse topography and a new road construction could be provided. Plate 4 below shows the land from Mellanear Road, Tolroy.



Plate 4 – View East From Tolroy

Viaduct Hill

The indicated eastern potential junction appears to have adequate available land and existing highway to provide for a future access. As stated previously however, prior to improvements to Carwin Rise and Loggans, there would be insufficient capacity. Plate 5 below shows the suggested location.



Plate 5 – Viaduct Hill Jct With Guildford Road

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Summary

This Transportation Advisory Note has been produced to provide a highway appraisal report in respect of a proposed new distributor road to serve residential development on land between St Georges Road and the A30 Trunk Road, Hayle. This essential new road will form part of the final Hayle Neighbourhood Plan and hopefully become part of the final county Local Development Plan.

Conclusion

The proposed road has the required land and local highway network to be successfully delivered. It has the ability to be delivered and financed in phases in conjunction with future housing development. A major consideration is to retain the future delivery of an additional A30 junction at Tolroy and this route ensures that aspiration.

Whilst the final form of the new road would be determined by the local highway authority (Cornwall Council) to ensure its future adoption as public highway, its purpose and appearance can be led by the findings of the Neighbourhood Plan. Pedestrians and cyclists will take primary consideration followed by bus operation and then the private car. A package of transportation measures for Hayle will also be progressed and hopefully delivered prior to the new road and these will help relieve the current and future traffic congestion.

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