5.4 Disruption Due To Construction

5.4.1 Introduction

An assessment of disruption or impacts due to construction covers the effects on people and the natural environment, which occur between the pre-construction works and the end of the contract defects correction period. Construction impacts are not confined to construction of the road itself, but can also arise from advance works by statutory authorities for example. Impacts may also occur outside the area directly affected by the scheme such as traffic diversions due to road works, causing associated air quality, traffic and noise impacts. Although construction effects are generally transient, they can be significant. To this end, it is important that nuisance and disturbance to the local community and vehicle travellers using this key transport corridor and the surrounding network are kept to a minimum.

5.4.2 Objectives

The objective is to undertake sufficient assessment to identify the possible disruption due to construction of the eight route options within the three route corridors. At this stage, only a broad assessment is possible and, to this end, the route options which could involve significant disruption due to their closeness to population centres, or the possible need for bridge construction works or other intrusive construction processes are identified. This disruption can take various forms ranging from the obvious noise, vibration and dust through to impacts on wildlife and ecology.

5.4.3 Discussion

Disruption from noise and vibration due to the presence of heavy construction traffic could have significant effects on nearby residents. To this end, noise and vibration monitoring may be necessary during the construction period. DMRB indicates that studies have shown at least half the people living within 50 metres of a construction site boundary are seriously bothered by construction nuisance in one form or another, but beyond 100, metres less than 20% of the people are seriously bothered. All options would introduce disturbance from noise and vibration due to construction within their respective areas, however the central route corridor would impact upon the greatest number of properties.

Undesirable impacts on air quality may arise from the creation of dust during earthworks and other operations such as jackhammering. Site fires are a potential nuisance and should be avoided where possible.

Each of the eight proposed route options would create some degree of disturbance to vehicle travellers during the construction period. Traffic diversions and delays would have implications on driver stress and travel costs due to increased journey times.

All route options would impact on local traffic movements and also the strategic traffic at the principal tie-ins. All route options would impact on access to community facilities, such as Moneynick Primary School, to varying degrees, though some more than others. The two options that are likely to cause the greatest amount of disruption are options 3 (online) and 5. Option 3 would require the demolition of the Primary School, however it is likely that demolition would take place in the latter stages of the construction period, thus restricting access as the work progresses around this facility. If this were the case then it would be particularly sensitive to noise, air quality changes and vibration. Option 5 would be in closest proximity to the school and would hinder access from the minor roads to the north. Although these routes will not be permanently closed, it is possible that they will experience temporary closure and traffic diversions during the construction period, lengthening journey times and possibly increased driver stress. Due to the closeness of this route to the community facilities, noise, air quality changes and vibration are likely to be a significant issue. It is probable that at some time, access to minor roads from all directions would be impeded thus regardless of what option is chosen, delays and diversions during construction are inevitable for both strategic and local vehicle traffic.

Although journeys by cyclists and pedestrians are very limited at present along the A6, any such users would find their journey more difficult during the construction period. Also, those pedestrians and cyclists that use the B and C class roads around the existing A6 are likely to find an increase of traffic on these roads as traffic may be diverted along them.

Other construction impacts include site-wide elements such as the location of storage areas and site huts. Stores of raw materials, borrow and fill, and site offices, for example, should not be placed in areas of ecological value or where loss of amenity is perceived. Site traffic entering and exiting the works have the potential to carry dust and dirt along the surrounding roads. It may therefore be necessary to provide wheel-washing facilities at site accesses.

Water pollution is another major threat during construction with a number of pathways available for pollutants to enter surface or groundwater from construction traffic and accidental spillage. Each of the route options would traverse four minor watercourses (albeit at slightly different locations). The largest of these is Ivy Burn, which is a tributary of the Lower Bann system. The Lower Bann itself is a designated Salmonid watercourse and protected under the EU Freshwater Fish Directive. Although none of the watercourses traversed are of a very significant size, there will still need to be some form of protection in place to ensure that the construction phase will not have a detrimental impact on them.

North Corridor
The north corridor route options would cause disruption to strategic traffic, as they both cross the existing A6 close to the Moneyrod Road junction. Of these, route option 2 would cause greater disturbance as there would be a substantial amount of online construction between the Gloverstown Road/Moneynick Road junction and the new roundabout east of Toome, resulting in traffic delays. Both north options would cause considerable disruption on the minor side roads adjoining the A6 with the ten such roads being crossed by the proposed options, including the Lismacloskey Road, Gloverstown Road, Artlone Road, Derryhollagh Lane, Derryhollagh Road, Moneyrod Road, Aghaloughan Road and Derrygowan Road.

Central Corridor
The central corridor route options vary in the degree of disruption they would create. The online option 3 would cause the greatest disruption, as it requires widening of most of the existing carriageway between the Derryhollagh Road/Moneynick Road junction and the new roundabout east of Toome. Route options 4 and 5 would cause less disruption as there is little online construction with the principal crossing of the existing A6 at the Gloverstown Road for option 4 and between the Gallagh Road and Ballynafey Road for route option 5. These crossings of the existing strategic route would cause the greatest disruption during construction. Option 3 would involve the crossing of six side roads whereas options 4 and 5 would involve crossing approximately 11 and 12 side roads respectively, bringing a considerable degree of disruption. With these route options traversing north and south of the existing A6, the roads that would be disrupted include the Gloverstown Road, Artlone Road, Derryhollagh Lane, Derryhollagh Road, Moneyrod Road, Aghaloughan Road, Derrygowan Road, Ballynafey Road and Gallagh Road.

South Corridor
Route option 6 would be the most disruptive of the south options due to the extent of online construction required between the Gallagh Road/Lismacloskey Road junction and the new roundabout east of Toome. Route options 7 and 8 would be almost entirely new offline alignments with no crossovers of the existing A6 and hence reduces the disruption caused to traffic. Route options 6, 7 and 8 would involve the crossing of 8, 9 and 10 side roads respectively causing considerable disruption to local vehicle movements, which include the Aghaloughan Road, Greenan Road, Ranaghan Road, Derrygowan Road, Ballynafey Road and Gallagh Road.