June 2011

Volume 1: NOMA Regeneration -Highway Alterations Environmental Impact Assessment Non-Technical Summary



1. INTRODUCTION

This document is the Non-Technical Summary which forms Volume 1 of the Environmental Statement (ES). The ES summarises the findings of the Environmental Impact Assessment (EIA) which predicts the effects, both positive and negative, that the proposed road realignment will have on the environment and sets out measures to avoid, reduce or offset the negative impacts. This ES has been produced to accompany the planning application for the realignment of the existing road network on the northeast edge of Manchester City Centre as part of the implementation of the Co-operative's Manchester Estate: Delivering the Vision Regeneration Strategy.

The ES comprises three volumes:

- Volume 1: Non-Technical Summary provides a short, easy to read summary of the scheme and the key impacts.
- Volume 2: Main Text presents the significant environmental effects of the proposed scheme. The information is supported by the detailed information provided in Volume 3.
- Volume 3: Figures and Appendices this volume contains the maps, figures/other illustrations, and appendices (supporting technical reports) referred to in Volume 2.

The topics considered in the EIA were established following a scoping process. The following topics were identified as likely to be affected by the construction and operation of the proposed road realignment:

- Cultural Heritage;
- Noise and Vibration;
- Air Quality and Climate Change;
- Transportation:
- Ecology;
- Socio-economic; and
- Flood Risk.

2. BACKGROUND TO THE PROJECT

A new gyratory road system is to be constructed on the north-east edge of Manchester City Centre to replace the existing Inner Ring Road which runs along Miller Street. On the northbound section of the proposed gyratory road system, traffic will continue to run along Miller Street, whereas the southbound traffic will be redirected to Angel Street.

This proposed road realignment forms part of a wider regeneration strategy that is intended to develop the land surrounding the existing Cooperative Group's offices in Manchester City Centre.

The proposed changes to the road network have been identified as being necessary for the development of the refurbishment of the area lying between Angel Street and Miller Street.

2.1. THE CO-OPERATIVE'S MANCHESTER ESTATE: DELIVERING THE VISION (Regeneration Strategy)

The Co-operative Group is proposing to develop 20 acres of land centred on the Co-operative Group's existing Head Office in Manchester City Centre. The regeneration of the site will include the provision of residential, commercial, office, leisure, community and ancillary uses as well as refurbishing existing buildings, improving the road network, renewing existing utilities systems, increasing the production of green energy in the City Centre and improving public spaces.

The Regeneration Strategy will be delivered over the next 10 to 15 year period and will be one of the most important mixed use development projects in the United Kingdom. It will be split into four distinct areas:

- The Major New Office Zone: The area located north of Miller Street will be a mainly a commercial area. The early phases will deliver the new Co-operative Head Office, together with a new public square and multi storey car park.
- The Listed Estate: The Listed Estate comprises the western area south of Miller Street. This area includes City Buildings, which will be



developed for a new boutique hotel in 2012. The remaining Listed Buildings are suitable for a range of uses, with many most appropriate for retail and leisure uses on the ground floor and either offices or residential uses above.

- Shudehill North: The eastern area south of Miller Street could be ٠ ideal to deliver large new build offices.
- Angel Meadows: The area north of Angel Street is a public park that ٠ will be improved and connected to the Major New Office Zone. This will improve its leisure use and will become a link between residential properties and the City Centre.





The initial phase (2009-2012) of the Regeneration Strategy includes the development of different projects across the Major New Office Zone and the Listed Estate Zone together with some ancillary infrastructure.

The Co-operative Head Office: This is currently under construction ٠ in the area north of Miller Street which will become the Major New Office Zone. The new building is scheduled to be completed by September 2012 and will have its own Combined Heat and Power plant which will provide power to the building and also export power to the local network.



- New Public Realm: The new Public Realm will be located to the south of the new Co-operative Head Office. New public areas will overcome existing barriers to movement and transform the local environment into more pleasant public spaces
- New Road Network (Miller Street Realignment): The proposed road realignment will integrate the site into the City Centre. It includes the existing Miller Street, Aspin Lane, Dantzic Street, Angel Street, Corporation Street and Rochdale Road. The proposed alterations to the existing road network will integrate the site into the City Centre and link the centre to residential properties and communities in North Manchester
- **New Utilities Network**: A new utilities network will be designed and installed to meet the strategic objectives of the area.
- **City Buildings:** The Grade II Listed Building (Listed Estate Zone) will be refurbished to deliver a new, high quality boutique hotel, restaurant and delicatessen. A planning application will be submitted in due course, with work commencing on site in early 2012.
- **Hanover and E Block:** These two buildings will be refurbished to provide office and retail/leisure accommodation.
- Energy Centre: The plant will be located about 1 mile from regeneration area. This Energy Centre will host an education centre and will provide power (and potentially heat) to the local network.
- **Multi-Storey Car Park**: A new multi-storey car park will be constructed in New Office Zone for the office, residential and leisure developments.

The Regeneration Strategy also outlines the major projects to be undertaken from 2013 onwards as shown in Figure 1. These proposals include the Major New Office Zone, the Listed Estate, Shudehill North and Angel Meadows, and may be subject to changes as the strategy develops.

2.2. MILLER STREET AND ADJACENT ROAD NETWORK

The Regeneration Strategy highlights the need to deliver new transport solutions in the area by "reducing the barrier effect of Miller Street to improve connections between the City Centre and communities in North Manchester, while also creating an integrated site which is capable of delivering the transformation the area requires."

The road network to be realigned is located to the north of the existing Cooperative operations at the northern edge of Manchester City Centre. The road network to be realigned surrounds the proposed Major New Office Zone and includes the following roads: Aspin Lane, Angel Street, Rochdale Road, Miller Street, and Corporation Street.

Miller Street currently forms a key part of the Manchester and Salford inner ring road, connecting the north and south of the city and providing access to the City Centre from different approaches. It is a busy road with two lanes of traffic in each direction which runs in a north-westerly direction (see Photograph 1). Rochdale Road is a busy route into the City Centre with four lanes of traffic heading northeast and three lanes heading southwest from Miller Street. Both routes have a key role as traffic distributors for the city and hence experience congestion and delays in the peak hours.

There is also a smaller network of lower priority roads that provide access to the industrial and residential units to the north and east. These roads include Corporation Street, Aspin Lane, Angel Street (see Photograph 2) and Shudehill.

Manchester Victoria Station is located approximately 150 metres to the south-west of Miller Street and Shudehill Bus Interchange 200 metres to the south. Piccadilly Gardens is within 15 minutes walk and Manchester Piccadilly Rail Station is within 20 minutes. There are some large public car parks in the area including the Manchester Evening News Arena Car Park, Shudehill Car Park and the Arndale Shoppers Car Park. In addition, there are a number of temporary car parks located around the Addington Street area.



Photograph 1 Miller Street



Photograph 2 Angel Street



3. SCHEME DESCRIPTION

The proposed road realignment, as shown in Figure 2, includes the narrowing of Miller Street from two lanes in each direction to just two lanes in the northbound direction, between Shudehill and Dantzic Street. It will also provide a new clockwise route along Corporation Street north, Aspin Lane and Angel Street with widened carriageways. This will ensure that the NOMA scheme is better integrated across Miller Street and gives the opportunity to extend an area of public realm, connecting residential properties to the north with the City Centre with a safe pedestrian only route.

Prohibition of Traffic Orders will be introduced on a number of roads to allow the operation of the new road layout. These include prohibition of access to Red Bank/Aspin Lane from Corporation Street; access to Naples Street from Angel Street; and access to Crown Lane from Aspin Lane to discourage "rat running". Roads to be closed include Oswald Street from Miller Street; Kenwright Street from Rochdale Road; and southern section of Dantzic Street from Miller Street. A new section of Riga Street will be constructed to allow access to Miller Street. New access points to the new Co-operative Head Office will be constructed along Angel Street, where some street parking will be also provided.

The proposed road realignment will also incorporate adequate street lighting and signals, improved junctions, new and improved pedestrian crossings, footpaths and pavements. Additionally, a new eastbound cycle way will run along the northern side of Angel Street. Three areas will form public realm space with local plant species: one prohibiting traffic access to Red Bank/Aspin Lane; a second area at the entrance from Angel Street to Michael's Flags / Angel Meadow Park, and at Miller Street to create Riga Street bell-mouth exit.

An Environmental Improvement Scheme will be designed and put in place for the streets adjacent to the altered sections of road, including adjacent to Angel Street. It is expected that this will include a range of measures to prevent rat running through the area.

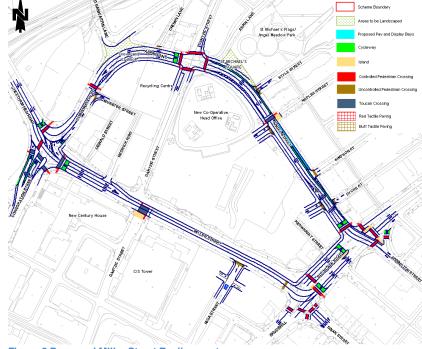


Figure 2 Proposed Miller Street Realignment

3.1 CONSTRUCTION PHASE

The construction phase will last approximately 12 months and will include service diversions service diversions along Corporation Street, corner of Crown and Cushion public house, Aspin Lane, St Michaels Square and along Angel Street.

The construction will occur section by section, rather than all at once, to minimise disruption. The new carriageway of Aspin Lane/St Michaels Square/Angel Street will be constructed first. On completion of this new



road the southbound traffic will be re-directed from Miller Street to this new road. This will allow the narrowing of Miller Street from two lanes in each direction to two lanes in the northbound direction. Temporary road closures or reduced capacity to allow construction works will occur. Temporary closures will affect Corporation Street, Aspin Lane, St. Michaels' Square and Angel Street, and are expected to last for approximately 2-3 months. However, diversion routes will be put in place during this time period.

During the construction phase working hours will be restricted to Monday to Friday, between 8:00 am and 6:00 pm. In traffic sensitive areas working hours will be restricted from 9:30 am to 3:30 pm. Night-time working, weekend and bank holiday work will be required at times for critical operations. However, a full consultation process will be undertaken and measures will be in place to minimise disruption and disturbance.

A construction compound will be located to the east of the new Co-Operative Head Office to the north of the study area and will be accessed from Angel Street

There will be a loss of two buildings as a result of the proposed road realignment, namely the Crown and Cushion public house (see Photograph 3) which is located at the corner of Aspin Lane and the Cooperative recycling centre which is located between Dantzic Street, Aspin Lane, Corporation Street and Munster Street. Demolition is expected to take place during summer 2011. The Co-operative Recycling Centre will be re-located.



Photograph 3 Crown and Cushion Pub

ALTERNATIVES

A two-way alternative was originally considered which included the reduction of Miller Street to one lane of traffic in each direction together with the redesign of the surrounding road network to offer alternative routes for traffic.

The implementation of the two-way alternative would generate greater



disruption during construction which would negatively affect the surrounding areas. This alternative would shift large volumes of traffic into the surrounding road network and the costs required to implement this alternative were also considered economically unfeasible.

A second option was developed which incorporated fewer changes to the existing network by allowing for a gyratory loop around the proposed Co-Operative Group development site.

The gyratory system was chosen as the preferred alternative of the two options presented. Although both options were designed to maintain an adequate level of service in the future years, the gyratory network alternative involved lower investment and less disruption during its implementation over a much smaller area.

5. SUMMARY OF ENVIRONMENTAL EFFECTS

This section provides a summary of the findings of the assessment of each of the topics covered in the ES. The assessment classifies the impacts arising from the proposed road realignment as negative or positive impacts, and according to the following scale:

- Very Significant (positive or negative): Impacts of major magnitude on a highly important receptor.
- **Highly Significant (positive or negative)**: Impacts of major/moderate magnitude on a very high/high importance receptor.
- **Significant (positive or negative)**: Impacts that result in considerable changes to the environment.
- Low Significant (positive or negative): Impacts that are noticeable but not significant.
- **Insignificant**: Impacts that result in no detectable change to the environment.

The impacts presented in this Non-Technical Summary take into account the implementation of mitigation measures which aim to avoid, reduce or offset negative impacts.

5.1. CULTURAL HERITAGE

The archaeological and cultural heritage assessment covered a study area surrounding the proposed road realignment of approximately 250 metres. Data was collected from the Greater Manchester Historic Environment Record, the National Monuments Record, cartographic data, relevant documentary sources and a site visit.

Fifty-two listed buildings and five Conservation Areas were identified. The assessment established that the area has been continuously populated from the medieval period. The archaeological sites identified are mainly post-medieval in date, including a mill and reservoirs, residential buildings and several public houses.

The assessment concluded that the proposed road realignment will have negative effects upon a number of archaeological and historic assets during the construction phase.

The impact of the proposed scheme is considered to be slight to moderate negative (low significant negative to significant negative).

5.2. NOISE AND VIBRATION

The noise and vibration assessment concluded that construction activities will generate temporary negative impacts. However, the proposed mitigation measures (e.g. agreed working methods) will help to reduce the construction noise impacts to significant/low significant negative.

The assessment predicted the noise effects of the proposed road realignment on sensitive receptors for two scenarios: short term (2013) and long term (2028) effects. The assessment concluded that, both in the short and long term scenarios, more residential properties will experience an increase in noise levels when compared to those that will benefit from reduced noise levels. The implementation of mitigation measures (i.e.

improved glazing and ventilation under noise insulation regulations) will reduce this impact to low significant negative.

It is also predicted that a low significant negative impact is expected at Angel Meadows, as 81% of this area will experience an increase in noise level whilst 3% will experience a decrease in noise level as a result of the scheme.

It is concluded that in terms of vibration nuisance the scheme will provide more benefits than dis-benefits when compared with the Do-Minimum scenario.

It also is anticipated that the proposed traffic calming measures in the Angel Meadows area will have a low significant positive effect at nearby residential properties.

5.3. AIR QUALITY AND CLIMATE CHANGE

The air quality and climate change assessment considered the impacts of construction and operational dust, vehicle emissions associated with construction traffic and redistribution of traffic during operation, and impacts on regional air quality.

A temporary deterioration in local air quality at sensitive receptors due to construction vehicle emissions and disruption to normal traffic flows is likely to occur. Additionally, dust deposition and particulate emissions are also expected during construction activities. Assuming that adequate mitigation measures are put in place, it is concluded that these construction impacts can be reduced to low significant negative.

In relation to the air quality impacts during operation, an assessment was made using a model to predict air quality concentrations at receptor locations, The impacts considered were those associated with local vehicle emissions from the redistribution of traffic flows, the increase in traffic due to the other committed development which forms part of the Regeneration Strategy and the estimated traffic growth.

It has been predicted that, with or without the scheme, nitrogen dioxide

concentrations will be well in excess of national objectives and European limit values. Small particle concentrations, however, will be within national objectives and European limit values.

The proposed road realignment will result in significant positive impacts at a number of sensitive receptors. However significant negative impacts were predicted at a greater proportion of receptors. Nitrogen dioxide concentration increases were predicted at flats on Angel Street, on Corporation Street (the corner of Aspin Street), Dantzic Street (between Angel Street and Corporation Street), Tib Street, Swan Street, and Oldham Road. However, where negative impacts are predicted it is likely that only the ground and first floor properties will be significantly affected. The impacts for those properties on higher floors will be considerably less as nitrogen dioxide concentrations are predicted to decrease with height.

Overall, taking into account the balance of positive and negative impacts, local air quality impacts are considered to be highly significant negative due to the large increases in nitrogen dioxide concentrations in an area of central Manchester where concentrations already exceed national annual mean objective and European limit values. However, by 2028 air quality across the study area was predicted (with a high degree of uncertainty) to be significantly improved due in the main to technological advances, thus impacts could be reduced to low significant negative.

In terms of regional air quality and greenhouse gas impacts, the proposed road realignment was predicted to have an insignificant effect, mainly due to the fact that it will not generate significant additional vehicle kilometres.

5.4. TRANSPORTATION

The potential transport issues in relation to the proposed road realignment have been assessed.

Assuming that a traffic management plan will be in place during construction, it is predicted that this phase will result in an insignificant impact on the modes of transport of the area.

The proposed design for the realignment of Miller Street and adjacent



roads have been modelled to accommodate the increase in traffic due the new trips generated by committed development which forms part of the Regeneration Strategy, estimated traffic growth and redistribution of traffic flows along the roads. Therefore, the Miller Street Realignment proposal is expected to result in insignificant impacts on the highway network, road safety and public transport once in operation. It is predicted that the proposed road realignment will result in significant positive impacts on pedestrians and cyclists across Miller Street and Angel Street due to the additional crossing points, new cycleways and traffic calming measures.

5.5. ECOLOGY

The effects of the proposed road realignment on the natural environment have been assessed. A desk-based study was carried out in order to identify key ecological features and this was followed up by a Phase 1 Habitat Survey and species specific surveys.

The assessment concluded that no designated sites will be affected by the proposed works and thus the impact is considered neutral (insignificant).

Existing habitats range from amenity grassland to scattered trees. Despite there being a minor loss of trees, scrub and grassland, planting schemes for screening purposes will include additional trees and scrub. Assuming that these will result in more trees and shrub compared to those removed, and that they will consist of local species, the impact on habitats is predicted to be neutral to minor positive (insignificant to low significant positive).

The majority of the impacts affecting animal species are predicted to be short term and will occur during construction. These can be mitigated by carrying out surveys prior construction, programming works or checks by ecologists during construction. Impacts will occur due to loss of habitat, in particular scattered trees, grassland and shrub. Whilst these will be replanted in other areas as part of the screening planting, it will be several years for them to fully replace existing habitats. This gap could be reduced by planting fast growing shrub species and larger trees, together with the installation of bat and bird boxes. The construction impacts on existing species have been assessed as being of minor negative to minor positive (low significant negative to low significant positive). The operation of the road is predicted to have an impact on the species present ranging from neutral to minor positive (insignificant to low significant positive).

5.6. SOCIO-ECONOMIC

A Socio-economic impact assessment of proposed road realignment has been prepared to support the application for planning consent.

It is predicted that impacts from construction activities can be effectively mitigated and will be insignificant.

The assessment concluded that the Miller Street Realignment proposal will result in low significant/significant positive impacts once the new road network is operational.

The proposed road realignment will encourage further economic development and the creation of jobs in the area. The proposal will also improve access for people across the area, and will improve connectivity of the City Centre and transport links with the residential area north of Miller Street.

5.7. FLOOD RISK

The flood risk assessment has determined that potential flood risks during construction can be reduced to a level at which they are insignificant and therefore acceptable, by the use of appropriate best-practice construction methods.

The proposed road realignment has the potential to increase flood risk by increased surface water runoff during operation (mainly due to the projected effects of climate change), blockage of drainage and overland flows. However, it is concluded that if mitigation measures are put in place (i.e. appropriate drainage and attenuation, regular inspection and maintenance) the flood risk level can be reduced to insignificant.

5.8. EFFECTS ON PEOPLE

During construction, the proposed Miller Street realignment may result in temporary negative effects on people. A temporary reduction in local air quality, dust deposition and nuisance due to construction activities is expected to occur. Additionally, noise and vibration impacts arising from some of the construction activities are also anticipated during this phase. However, assuming that adequate mitigation measures are put in place, these construction impacts can be reduced to low significant negative.

Other temporary impacts on traffic flows and pedestrians/cyclists can be reduced to insignificant by the implementation of a traffic management plan, traffic diversions and temporary crossings. The loss of jobs from the demolition of businesses, namely the Crown and Cushion pub and the Cooperative Recycling Centre is also predicted to be insignificant as the area will benefit from further development and hence creation of new jobs.

The operation of the proposed road realignment is likely to result in significant positive effects on people as a result of improved access for pedestrians and cyclists across the area, safer environment and improved connectivity of the City Centre and transport links with the residential area in the north of the study area. It is predicted that the increased perceived severance by increased traffic flows on Angel Street will be insignificant. Additionally, it is expected that the proposed road realignment will help to stimulate the local economy and the further development of the area.

The operation of road scheme will also result in negative impacts on people. Reduced local air quality and increased noise levels will occur at the flats close to Angel Street and the Angel Meadows area. Although nitrogen dioxide increases are predicted at these properties, it is probable that only the ground and first floor properties will be significantly affected. The impacts for those properties on higher floors will be considerably less as nitrogen dioxide concentrations have been predicted to decrease with height.

5.9. CUMULATIVE IMPACTS

In assessing the potential cumulative effects, consideration has been given to impacts in a number of topic areas on the same receptor, and the cumulative impact of the realignment work with other developments in the local area.

Cumulative effects resulting from development and the Regeneration Strategy have been assessed within the individual environmental topic Chapters as have cumulative effects between topic areas.

Cumulative impacts as a result of other developments have also been considered. This assessment concluded that cumulative effects were likely to occur as a result of increase traffic, increased noise and reduced air quality. As the traffic model used to predict the impacts of the road realignment include traffic growth factors to include for developments currently being constructed it can be concluded that the main assessment included these cumulative impacts.

