

Appendix 1 NET Phase 2 : Clifton via Wilford Route



Clifton via Wilford route. Alignment development

Parking at tramstops. In the public consultation there were general concerns about parking on residential roads close to tram stops. If NET Phase 2 does come into operation, parking will be carefully monitored and preventative action, such as residents parking schemes, will be introduced where appropriate and sought by residents.

A. Nottingham Station - Wilford Toll Bridge

Public consultation. Approximately 1200 booklets were distributed to the public for this section of the route. 19 responses were received and the majority of these were from residents near to Queens Walk and Robin Hoods Way. 4 stakeholder responses were received from a total of 200 consulted.

1. **Nottingham Station.** From the Line One terminus at Trent Street the Phase 2 alignment will cross over Station Street, Nottingham Station and Queens Road on a new bridge structure before descending to street level at Crocus Street.

The station is currently the subject of a Masterplan which proposes a radical transformation of the station into the key transport interchange in the City involving train, tram, bus, coach, taxi and private car, cyclists and pedestrians. The design of the NET alignment over the station will continue to be developed as a part of the Masterplan, although an option without the Masterplan proposals has also been developed to satisfy the requirements of the Transport and Works Act procedures.

It is proposed to locate the tramstop above Nottingham Station. Pedestrian links would be provided to the main station concourse, to street level at the south of the station and along the new structure to the site of the current Line One stop, where the lift/stair facility down to Trent Street will be retained. It is expected that trams would no longer stop at the current Line One stop at Trent Street although this will be further reviewed in the light of experience of Line One operations.

Nottingham Station is a grade 11 listed structure and the whole complex sits centrally within the Station Conservation area. Listed building consents will be required as well as the TWA Order. English Heritage have expressed strong concerns about the potential impacts of the NET and Station Masterplan proposals, stressing the need to maintain the quality and integrity of the listed buildings. As a consequence, a Conservation Plan is being developed for the station in conjunction with English Heritage. The Plan identifies the principal architectural features of the station and outlines policies to help ensure that the future development of the station buildings can be undertaken in a sensitive and sympathetic manner that respects the original fabric and architecture of the buildings. The NET stop and structure are likely to be of a high quality contemporary and lightweight design reflecting the policies within the Conservation Plan and the detailed design will be developed in consultation with English Heritage and approved by the City Council as local planning authority.

2. Southside Development area (Crocus Street, Arkwright Street and Meadows Way).

The Southside development area is identified in the Nottingham Local Plan and aims to provide a gateway to the City Centre by maximising the development opportunities around the station and to the south. An interim planning guidance has been published and a design framework is currently being established for the area which takes account of the tram proposals. English Heritage have requested to be consulted about the detailed design in the vicinity of Queens Road/Arkwright Walk. As part of the Southside proposals, Crocus Street would need to be closed at its junction with Arkwright Street and the link between Meadows Way and Sheriffs Way (north) will also be closed. Access to the north east Meadows area will continue to be provided via Summer Leys Road and Mabel Street.

The tram alignment will descend from Nottingham Station to street level at Crocus Street. Three of the Crocus Place industrial units, which are owned by the City Council, would need to be demolished to make space for the tramway and there will be a small impact on the Crown Inn. Significant noise impacts are predicted in the vicinity of Arkwright Street during construction and operation. It would not be appropriate to construct noise barriers in this location due to conflicts with other road users and general safety but sound insulation of building windows may be appropriate. The alignment and road layout would also impact on unoccupied land adjacent to Victor House which is in private ownership. The owners of the land have expressed strong concern about these impacts and discussion will continue with the affected party through the development of the NET project and Southside proposals.

The alignment in this area has taken account of providing a future link to Arkwright Walk in the Meadows. This would enable the possible development of tramlines towards West Bridgford and Gedling in the future.

The construction of the bridge will have a significant impact on a very small area of Tinkers Leen with water margin vegetation and a water vole habitat. General improvement works will be undertaken and agreed in advance with English Nature.

3 Queens Walk. Queens Walk is an important feature in Nottingham. It is currently a pedestrian and cycle link running from Wilford into the City Centre, framed by an attractive avenue of mainly lime trees. Currently there is a single avenue of trees along the northern section of Queens Walk, with a double avenue to the south. The aim of the design would be to retain as many of the existing trees as possible using careful construction methods, and replace any trees that would be lost. Locating the tramway down the centre of Queens Walk would enable the retention of as many trees as possible.

There was public concern the inner row of trees to the south will need to be removed, as the roots may be significantly damaged by the tram construction.

Obtaining accurate information on the root spread of individual trees is extremely difficult and ERM's advice is based on a visual assessment of the type, size and condition of the trees. It will however be a requirement of a future contractor to reassess the impact on the trees by obtaining arboricultural advice when the roots

are exposed at the construction stage with the aim of minimising the number of trees to be removed.

Where tree loss cannot be avoided, a replacement row of trees is proposed to retain the double row along the southern section. Replacement trees would be located away from the tramway in order to avoid any conflict. As part of the mitigation, ERM advise that an additional row of trees could also be planted on the northern section. Replacement trees are likely to be lime trees. Current estimates indicate approximately 85 trees (out of 265) will be lost with 180 new trees planted.

Concerns were expressed in the consultation mainly relating to personal security, about the proposal to locate the pedestrian footway at the edge of Queens Walk, rather than down the centre. It is therefore proposed to reinstate the central footpath alongside the tramway and cycleway. It is not considered that this will cause additional impacts on retained and proposed trees.

Two tramstops are proposed in Queens Walk. The Meadows Centre tramstop is located adjacent to Kirkewhite Walk providing direct access to the Bridgeway centre and much of the north Meadows area. The Queens Walk tramstop will serve the substantial residential population in the south of the area. Both tramstops will be developed with high quality urban designs to reflect the Queens Walk environment.

Where Queens Walk meets Robin Hoods Way, the tramway will be raised to cross the road at a new junction. As part of the policy to remove undesirable underpasses, the existing pedestrian facility beneath the road will be removed and replaced with signalised on-street crossings. ERM advise that noise is unlikely to be a significant problem with a straight alignment, an absorbant trackform and tracks at least 12metres from the nearest property.

Some respondents suggested avoiding Queens Walk altogether. The alternative route via Meadows Way and Robin Hoods Way is however very circuitous and on the periphery of the built up area, nearly 1 kilometre longer, and far more expensive. Building a single line along Queens Walk would create an unacceptably severe operating constraint.

ERM have advised that the introduction of the tram along Queens Walk will result in a high magnitude of change to the landscape. There will be substantial adverse impacts in the opening year reducing to a moderate impact as replacement trees mature. However, with significant tree planting and high quality urban designs, the above proposals will ensure that Queens Walk remains an attractive boulevard.

4. Riverside Walk. The roundabout at Riverside Walk/Victoria Embankment would be replaced by a signalised junction, removing the direct link to Robin Hoods Way. This link can however be recreated by the provision of a mini-roundabout further west between Riverside Way and Robin Hoods Way.

B. Wilford Toll Bridge - Farnborough Road, Clifton.

Public consultation. Approximately 2,200 booklets were distributed to the public and 198 responses were received. 13 stakeholder responses were received from 300 consulted.

1. Wilford Toll Bridge will be strengthened and widened to allow space for the tram, pedestrians and cyclists. The bridge, toll house, gateways, screens and kiosk are Grade II listed and there will be permanent impacts with the removal of approximately 0.5m width from four brick pilasters together with new bridge piers and changes to the setting of the listed features. This means that listed building consent will be required as well as the TWA Order. The historic features will however be largely retained with the detailed design reflecting their listed status, with mitigation measures required to recognise and preserve the character, setting and important views of the bridge. These measures and the detailed design will be developed in consultation with English Heritage and approved by the City Council as local planning authority. British Waterways will also be consulted in relation to any impacts on the navigation on the river.

Measures will be included at the detailed design stage to deter other vehicles from using the widened bridge.

The Victoria Embankment is listed in the site and monument records as an historic park and garden, although it does not have a statutory English Heritage designation. The setting will be affected by the scheme and mitigation measures will be required at the detailed design stage to minimise impacts.

2. Wilford Village. Main Road will be closed to traffic between the Toll Bridge and Coronation Avenue, although access will be provided to the Modems Rugby Club for maintenance, special events and emergency vehicles. This area is currently used for recreational and school parking and a small replacement car park (20 spaces) is proposed adjacent to the Ferry Inn. Measures will be taken at the operational stage to deter park and ride usage of the proposed car park and adjacent streets. The closed area of Main Road is likely to be used as a temporary construction site.

The tramstop on Main Road is located to serve passengers from the village, the adjacent schools and visitors to the riverside and other recreational activities. Some respondents requested an alternative stop near Bader Road. A stop here is unlikely to generate additional patronage, with a similar number of households within walking distance, and it would require significant further excavation of the embankment to provide an open environment. Security concerns on the footpath and at the stop would remain due to its remoteness.

The issue of flood protection in the Wilford area is extremely important. The existing floodbank to the north of Coronation Avenue will be replaced by a floodwall of the same height as the existing bank and which will provide at least the same amount of protection compared to what is there now. Small excavations from the end of the old railway will replace any loss of flood storage area. These excavations will have a small impact on the Trentside West Bridgford and the Wilford Disused Railway SINC's. Consultation with the Environment Agency (EA) has been very helpful in informing the design. The EA will have to approve the final designs and they have made it clear that approval will be forthcoming.

providing there is no detriment to the existing situation. The floodwall would have an attractive design reflecting the rural setting of the area.

The Ferry Inn is a Grade 2 listed and its setting will be affected. Mitigation measures at the detailed design stage will be required to minimise impacts.

A new hedgerow and new tree planting in addition to the retention of existing trees are proposed to create a natural barrier between Coronation Avenue and the tramway and there will be a moderate impact on visual amenity, reducing to slight as vegetation matures. The NET proposals will have a minor impact on the Wilford Conservation area on the corner of Main Road and Coronation Avenue and a sympathetic design will be developed at the detailed stage.

A number of options for alignments to avoid running alongside Coronation Avenue have been investigated but are not considered viable. These would involve considerable new expensive structures across the river and floodplain, and have significant nature conservation impacts.

3. **Former railway embankment.**

The alignment will run alongside the east of the former railway embankment for approximately 200 metres, to allow the embankment to form a barrier between the tramway and residential properties on Vernon Avenue. Some landtake is required from Nottingham Emmanuel School.

The alignment then follows the former railway embankment for approximately 2.5 kilometres to Ruddington Lane. Between Vernon Avenue and Wilford Lane, the tramway will operate on the embankment at a reduced height of approximately 4 metres to create the necessary width and falling to road level at Wilford Lane. The existing unsatisfactory and overgrown path on top of the embankment will be replaced with a new facility at ground level on the east side. South of Wilford Lane, the embankment would be removed completely and the tram would operate at the same level as adjacent land. While this will be more expensive due to the required earthworks and cause inconvenience to neighbouring properties during construction, it will be less intrusive to residents when the tram is operating.

Some members of the public, English Nature and Nottinghamshire Wildlife Trust all expressed a preference for running the tram to the east of the embankment between Vernon Avenue and Wilford Lane. This would have a reduced nature conservation impact by leaving the northern embankment intact and preventing the loss of the northern section of the SINC, which detailed surveys have indicated is of greater conservation value than the southern section. It would also be cheaper by avoiding a significant amount of earth excavation and disposal, and avoiding a bridge replacement, and have reduced townscape and visual impacts. Operating to the east would however affect playing fields and open space and have a greater impact on third parties, including the Emmanuel School playing fields, Glebe allotments and cricket and football pitches. Sport England have advised that any pitches lost as a result of the tram would need to be replaced. One junior football pitch would be lost and the route would also affect the playing field area used for cricket. Lost allotment land would also need replacing. It is therefore proposed to follow the line of the embankment to Wilford Lane, but to include land to the

eastern edge of the embankment between Vernon Avenue and Coronation Avenue within the limits of deviation for the project.

- 3.1 Biodiversity. Although the former railway has no statutory designation, it is recognised that there will be a major significant adverse environmental impact through the loss of all the vegetation and habitat on the former railway embankment, which is designated locally as a Site of Importance for Nature Conservation (SING). There will also be significant impacts on the Iremonger Pond and Trentside:West Bridgford SINC's at the northern end of the embankment and on the northern arm of Wilwell Cutting Nottinghamshire Wildlife Trust (NWT) Reserve to the south. Members of the public, English Nature and Nottinghamshire Wildlife Trust have expressed strong concerns about the loss of these important local biodiversity resources in the urban area.

The aim has been not to diminish the value of the loss, but to determine what mitigation is feasible and seek where possible to minimise impacts. ERM have undertaken a wide range of surveys in the area, including field surveys for bats, badgers, invertebrates and breeding birds and detailed flora surveys. The project environmental team has done much work to determine how best to deal with the impacts. Although there will be some permanent habitat loss for the footprint of the tram, it is intended that replacement planting, using native species, will help to restore vegetation coverage, much as happened when the railway was closed. The planting will to some extent render habitat loss as temporary and will recreate in part the linear landscape habitat value of the route. Replacement tree and shrub planting will re-establish the corridors for bat foraging and invertebrates in time and will be of benefit to breeding birds.

In addition, further compensation is proposed through the creation of an area of approximately 3.5 hectares of wildlife habitat on land currently in arable use between the embankment and Fairham Brook just south of Silverdale. This will have the added benefit of linking the SSSI, railway corridor and Fairham Brook nature conservation resources and by removal of topsoil in key areas, the fertility of the ground could be lowered to encourage the natural species and habitat diversity sought. The new area will be provided on high quality agricultural land. However ERM consider the benefits of enhanced open space and nature conservation habitat and the important contribution of NET to sustainable transport objectives outweighs the loss of the agricultural land.

Prior to its development, the area of habitat replacement is likely to be used as a temporary construction site.

It is accepted that along the former railway embankment and in the area of habitat replacement, the proposed planting will take time to become established and mature to the equivalent state of existing vegetation and the range of habitat will be reduced. The proposals will however ensure the continued provision of habitat within the urban area and the detail of the planting will be determined with English Nature, who have welcomed the area of habitat replacement, Nottinghamshire Wildlife Trust and the Local Authorities.

Access to the new area will be from Clifton and Wilford Road, thereby making the new area available to much of the local population. However, as the path would run

adjacent to Wilwell Cutting SSSI. consideration will be given in consultation with English Nature and Nottinghamshire Wildlife Trust to any management issues arising from this.

3.2 Wilwell Cutting SSSI. At the southern end of the old railway the alignment turns away from the railway at the earliest opportunity. It will not therefore impact on the Wilwell Cutting Site of Special Scientific Interest (SSSI) and only just cut a small slice from the extended arm (outside the boundary of the SSSI) of the Nature Reserve and SINC. Our environmental consultants, in discussion with English Nature, have carefully investigated the local hydrology, which is so important to the flora of the reserve, and have concluded that there should be no adverse impacts as the general pattern of hydrological flows is away from the SSSI in this area and the fact that there are no significant flows along the cutting in either direction in the area. The detailed engineering design will have to allow for the disposal of water that currently flows out of the SSSI through a suitable drainage system for the tram tracks. The SSSI will be well protected and disturbance from the construction and operation of NET is likely to be minimal. English Nature will be consulted on the detail of the proposed NET drainage in the vicinity of the SSSI.

English Nature and the Nottinghamshire Wildlife Trust have expressed concern about the possible hydrological impacts of siting a small park and ride site adjacent to the SSSI. In view of these representations and local access constraints, it is proposed to delete the park and ride site from the proposal.

3.3 Amenity, visual intrusion and noise. Considerable local concerns were expressed about the potential for loss of amenity, particularly south of Wilford Lane, where the route has been upgraded to provide a walkway. It is accepted that the quiet and secluded character of the immediate adjacent area will change if the tram is introduced. There is however, sufficient space to build the tram alignment and to retain a footpath and provide landscaping to minimise the impacts.

Many responses have commented on the amenity value of the existing walkway along the old railway. But some residents close to the alignment have questioned the need for the path, fearing it will affect the security of their properties and noting that its removal will give more space for planting to shield their properties.

The path is an existing feature and its replacement should have no impact on security over the existing situation; indeed, such footpaths are a common feature throughout the Compton Acres estate. It is proposed to include the path but, as now, not to have lighting, except at the approach to the tram stops. Separated from the tracks by a fence and hedge, the path will still be an important element in the network of paths in the area.

It is acknowledged that there will be significant adverse visual impacts during the early years of operation. This impact will however reduce to moderate/slight as planting matures. Most questions about visual impact have come from people living between Wilford Lane and Ruddington Lane. The proposal to remove the embankment, despite the high cost of excavations, will have a significant effect on reducing the prominence of the tramway, along with the proposed planting adjacent to the tramway. Details will be agreed with the appropriate Council's planning and arboricultural officers in conjunction with English Nature and

Nottinghamshire Wildlife Trust. In some locations the available width may be too little for substantial screen planting and residents may wish to see additional planting at the end of their gardens. Such arrangements can be agreed on an individual basis at a later stage. In addition to the planting it is proposed to enhance garden boundary fencing, where necessary, to ensure a minimum two metre high screen.

The proposed trackform along the former railway alignment will be ballast, which is good at absorbing any vibration and noise and is most suitable for off-street running. Initial noise predictions undertaken by ERM however indicate that construction and operational noise impacts are likely to be significant at some locations and that barriers would be of benefit along much of the embankment section between Wilford Lane and Ruddington Lane. These initial predictions indicate that approximately 50 properties may be affected and in excess of 700m of barriers recommended. The exact locations and final provision will be determined following the detailed design and in accordance with the noise threshold levels identified in the Phase 2 noise policy (see Appendix 3).

3.4 Speed and safety. Concern has been expressed about speed and safety along the embankment section. The tram is capable of speeds of 50mph on straight and level track but in practice, for most of the proposed alignment, trams will be travelling at speeds well below this as they pull away from or slow down for stops, bends, pedestrian crossings, etc. Between the Wilford Lane, Compton Acres and Ruddington Lane stops the top speed is only possible for about 100m and for more than half the distance the speeds will be at 30mph or below. Unlike trains, trams are driven by sight, like a road vehicle, and the driver has to drive at speeds that allow for all operating conditions and tram characteristics and adjust the speed accordingly to suit traffic, pedestrians and weather conditions. But unlike other road traffic, speed limits will be determined for each different stretch of track and will be strictly enforced through automatic recording of the tram movements.

The proposed fencing and hedges should ensure that pedestrians only cross the line where drivers expect them to do so, or at least will act to inform people of safe limits and make it difficult for them to cross these limits.

Concerns were expressed about visibility at the Coronation Avenue /Nottingham Emmanuel School corner. Tram speeds will be consistent with the available forward visibility and the needs of safety. Careful design of footpaths will provide safe crossing by pedestrians. As at all locations where children are likely to be about, the advice of the Councils' road safety officers has been sought, and information and education will be geared to the importance of respecting the track and separation barriers.

3.5 Tramstops. Tramstops are proposed at Wilford Lane, Compton Acres adjacent to Ascott Gardens, and at Ruddington Lane.

Some residents requested that the Wilford Lane tramstop be moved to the north side of the road, as they were concerned about the location on the south side due to its close proximity to adjacent property. This would require additional excavations from the former railway embankment and with appropriate landscaping it is not considered that the proposed tramstop to the south will significantly impact

on the adjacent property. Also, more users are expected to come to the tramstop from the south. However, the proposal will be kept under review in the light of emerging development proposals on the north side of Wilford Lane.

Following representations during the public consultation, the Compton Acres tramstop will be moved slightly to the south to minimise impacts on an adjacent property. This will necessitate the removal of some planting to retain an open environment around the tramstop. A footpath entrance into Kynance Gardens is proposed, improving access for local residents around St Austell Drive. This may require a small and take from residents gardens.

At the Ruddington Lane stop an area of private garden from an adjacent property will need to be acquired to improve access and create an open environment around the stop.

3.6 Highway interface. It is intended to cross Wilford Lane by a level, traffic signal controlled crossing rather than a bridge. To meet current standards, a bridge would necessitate constructing a higher embankment than is there. now which would not be practicable in the width available and would have some environmental impacts. Lowering the embankment will reduce the prominence of the tramway, maximise the area available for planting trees and shrubs, allow the existing footpath to be replaced and facilitate easy and convenient access to the adjacent stop. The Highway Authority (Nottinghamshire County Council) does not believe the Wilford Lane crossing will have any significant impact on traffic flows, and it will be linked with the nearby Compton Acres traffic lights.

A short roadway is proposed at Wilford Lane to provide very occasional access to the tracks for maintenance purposes. The points for this access are shown to the north of Wilford Lane, away from residential properties. The area will be gated, fenced and surfaced. An electricity substation will be located within the maintenance area.

It is proposed that the Ruddington Lane crossing would also be at the road level, with traffic signal control, and again any delay to cars would be slight. It is proposed to lower Ruddington Lane by about 2 - 2% metres and raise the tram track to the same level. This should improve the alignment of the road around this difficult bend, create an open environment for the tramstop and provide a better facility for pedestrians to cross. With the lowering of the road, a screen bund would continue to minimise views in the majority of the adjacent Barnfield properties.

The cycling group, PEDALS, have requested the provision of a cycleway alongside the tram between Wilford and Clifton. Between Coronation Avenue and Ruddington Lane it is proposed to provide a footway alongside the tram, replacing the existing provision. It is not proposed to include a cycleway, although this could be pursued separately through the Local Transport Plan. Beyond Ruddington Lane there are space constraints and safety/security concerns where the tram passes under the A52 and additional impacts on the Wilwell Cutting Nature Reserve. It is not therefore proposed to pursue a cycleway along this section.

An investigation of a possible tramstop to serve Silverdale has been undertaken following requests in the public consultation. It is considered that a stop to the

south of the Downs is feasible but would be isolated and difficult to access. As a result of introducing the stop the overall economic performance of the system is reduced and less overall benefits are achieved. However, the tramstop could be developed at a later stage and TWAO powers will be sought to enable a future provision and to allow access from the Downs as part of the walking route into the proposed new open space to the south of Silverdale.

4. Fairham Brook. South of Silverdale, a new bridge will be required to cross Fairham Brook. The surrounding area is floodplain, and the structure will be approximately 50 metres long to comply with Environment Agency requirements. The structure will have a low key design to fit with the surrounding environment.

C. Farnborough Road - Clifton park and ride site.

Public consultation. Approximately 1800 booklets were distributed to the public for this section of route and 45 responses were received. 8 stakeholder responses were received from a total of 205 consulted.

1. Farnborough Road entry into Clifton.

Further detailed work has been undertaken on the tram alignment approaching Clifton from the Silverdale area. Full investigations of the interface between the tramway and EME power lines and the receipt of detailed topographical information has identified that the previous alignment proposal adjacent to 189 and 191 Farnborough Road, cannot be practically achieved. Moving the power line would involve huge and unacceptable expense and lowering the tramway would not be practical at this location.

As a result, the corridor in which the tram alignment can enter Farnborough Road from Silverdale Walk has been significantly restricted but a revised and very direct alignment has been determined which will require the acquisition of 173 and 175 Farnborough Road.

At the earlier consultation, Farnborough School expressed concern about the close proximity of the tramline to the main school entrance. The revised alignment should satisfy the school management who have previously stated that they did not object to the tram in principle.

2. Clifton.

The tram alignment through Clifton will run on street along Farnborough Road north, Southchurch Drive and then Farnborough Road south before terminating at the proposed park and ride site adjacent to Nottingham Road. The tramway will require the removal of on-street parking along these sections of road and this will be replaced by a series of parking bays. A number of detailed responses were received in the consultation about the location of specific bays. There will be an ongoing process to assess the parking bay provision with the exact location determined at a later design stage.

Substantial tree planting is proposed, partly to replace trees lost within Clifton, but also to enhance the local streetscape. Opportunities for tree planting have been

taken at a number of locations. Although 70 trees may be lost it is proposed that approximately 200 can be planted.

The existing traffic calming measures will need to be removed along the sections of Southchurch Drive and Farnborough Road where the tram will operate and alternative arrangements to curb traffic speeds will be considered.

Cycle lanes are proposed along sections of road where the tram will operate through Clifton.

High quality surface improvements and additional tree planting is proposed in Clifton centre to raise the standard of the environment. The majority of the pedestrian area and trees in front of the shops will be retained and loading bays will be provided. To the south, the access roads to the library and Clifton Housing and Social Service Office would be closed to ease traffic flow in the area. Alternative access and parking would be provided via Lanthwaite Road. The proposals in this area have been developed following consultation with the promoters of the John Ryle Health Centre redevelopment and there are no conflicts between the proposals.

An electricity sub-station is proposed adjacent to Clifton Centre.

The alignment through Clifton comprises five tramstops all with wide catchment accessibility and good bus interchange opportunities as follows;

- Southchurch Drive/Farnborough Road north junction. Southchurch
- Drive at junction with Rivergreen.
- Clifton Centre
- Southchurch Drive/Farnborough Road south junction. Farnborough
- Road south at junction with Summerwood Lane.

The location of the Southchurch Drive north tramstop will remove the current access to the Clifton community centre. An alternative access off Farnborough Road has been identified which will require some small land acquisition from the strip of undeveloped land separating the Community Centre and Youth Club. Members of the Community Association expressed concern about the loss of access off Southchurch Drive and that the alternative arrangement was inconvenient and would prevent future development of the site. It is considered that the accessibility benefits of the tramstop, particularly for access to local facilities will be considerable, and with appropriate signing and lighting, the alternative access would be secure. However the undeveloped land between the Community Centre and Youth Club could present an opportunity for the redevelopment of the site and discussions have commenced with the Director of Leisure and Community Services about their future aspirations.

A tramstop had previously been located opposite the Corpus Christi church, but this is now proposed at the corner of Farnborough Road and Southchurch Drive. The alternative location will be in front of the small shopping centre and it provides good bus interchange potential and will improve accessibility from south east Clifton.

The Farnborough Road tramstop is to be located further west close to Summerwood Lane. The majority of properties along this section have driveways and an island platform has been proposed to maintain access on both sides of the road. As on-street parking will not be possible adjacent to the tramstop, the seven affected properties without driveways have been offered a drive as they have no alternative parking provision. One response has been received to date and this was positive.

Some properties are predicted to experience noticeable noise increase and may be eligible for sound insulation as outlined in the Phase 2 noise policy.

2.1 Clifton Park and Ride - Proposal

Following a thorough appraisal of possible options, the proposed location for the Park and Ride site is on Green Belt land adjacent to Nottingham Road within the boundary of Rushcliffe Borough. Based on the economic assessments, 1,000 spaces are proposed and at the detailed design stage considerable attention will be given to creating a secure environment, including liaison with the Police to ensure the site is fully secure. There will be provision for bus interchange which may be attractive for operators running services from outlying rural areas. There is a small land take from the adjacent Clifton South development site.

Direct road access will be provided from Nottingham Road, and from the A453 via a new link road. The link to the Park and Ride site will be via a new roundabout at Mill Hill approaching the Clifton built up area, in view of the proposals for dualling the A453 between Clifton and the M1. Discussions with the Highways Agency have confirmed that the roundabout would also act as a 'gateway' into the urban area, with a lower speed limit beyond it through to the Crusader Roundabout. Should NET Phase 2 be developed in advance of the dualling, an interim signalised junction would be installed on the A453. Traffic assessments have indicated that both options would have sufficient capacity and the Highways Agency have approved in principle the outline designs. The proposal for the dualling of the A453 is currently being considered by the Secretary of State for future inclusion in the Highways Agency Targeted Programme of Improvements (TPI).

To avoid significantly increasing traffic on Nottingham Road and within the Clifton Estate, the site will be designed to prevent the creation of a new through route from the A453.

Prior to its development, the Park and Ride will be used as a temporary construction site. An electricity sub-station is proposed on the south-east corner of the Park and Ride site.

The Park and Ride and access road will be located on grade 2 agricultural land. However, ERM consider the important contribution of NET to the development of a sustainable transport system in Nottingham outweighs the loss of this high quality agricultural land. There will be a loss of habitat for farmland birds, but landscape planting may enhance the area for other bird species.

2.2 Clifton Park and Ride - Consultation

There were strong concerns expressed about the choice of location for the Park and Ride, mainly from residents of Barton in Fabis, as well as the CPRE and Barton in Fabis Parish Council. Particular concerns were that:

- the use of Green Belt land for the Park and Ride site and its access road is inappropriate and it opens up the risk of further land for redevelopment
- the Park and Ride site and link road are visually intrusive, and that using Barton Lane would be a better alternative.
- additional traffic on Gotham Road and Barton Road will lead to safety hazards.
- an alternative 'heavy rail' proposal at Radcliffe On Soar would be sufficient for the area.

Each of these concerns is considered below.

Appropriateness of Park and Ride in Green Belt

Policy Background

The Government Planning Policy Guidance Note 2 (PPG2, January 1995) identifies that "there is... a general presumption against inappropriate development within [the Green Belt)".

PPG2 was amended by PPG13 (March 2001), which provides advice on the location of Park and Ride sites. It states that "in some circumstances, park and ride schemes may be permissible in the Green Belt, where assessment shows such locations to be the most sustainable of the available options, taking account of all relevant factors". This identifies that Park and Ride schemes are not inappropriate in the Green Belt provided that a number of criteria are satisfied, including the investigation first of non-Green Belt alternatives.

Appraisal of Non-Green Belt Site Locations

Annex A shows the location of the all sites chosen for appraisal, four within the Green Belt and one outside it on greenfield land.

The non-Greenbelt site is immediately adjacent to the Nobel Road Estate off Nottingham Road (site 5) and a full assessment of its suitability was undertaken. While it was considered an appropriate site with respect to reduction of urban sprawl (as two sides adjoin the built-up area), short track length and running time, and ease of screening to reduce its visual impact, on balance, it was considered to be inappropriate because of its status in the Nottingham Local Plan Review.

The site is a long standing housing allocation, included in the Nottingham Local Plan, adopted in 1997, and carried forward in the Nottingham Local Plan review, for which the public inquiry was held in 2003 and the inspectors report is expected in July. Although this housing allocation land is greenfield, it is located on the edge of the urban area with good existing and potential public transport access to

services and employment. The introduction of a tram service will further enhance its sustainability for housing. The site is also strategically important in terms of ensuring the balance of housing type and size in the City and a planning brief for the site adopted by the City Council in September 2003 calls for a range of dwelling types and styles but particularly bungalows and family homes. Key issues are:

- *Housing type* The City is significantly short of new sites for family housing: its stock is unbalanced, with a low proportion of family housing which is well below the national average. Clifton South is one of the few allocations in the City that is likely to be suitable for a large proportion of family housing, with characteristics in line with sustainable development.
- *Housing size.* Clifton itself has a low proportion of larger dwellings and the site is one of only two housing allocations in the area which can address this deficiency. Clifton has very few development sites and little immediately available previously developed land.

Given the lack of alternatives, the site is therefore important in providing more opportunity and choice for housing in Clifton, and it was therefore considered to be inappropriate for the Park and Ride because of its current status in the Nottingham Local Plan.

Appraisal of alternative Green Belt site locations.

An officer group, including Nottinghamshire County Council, the NET Project team and Rushcliffe Borough Council undertook a study of alternative locations for Park and Ride sites at the Clifton termini. In addition to the non-Green Belt site discussed above, four Green Belt sites were considered. A first 'sift' of sites reduced the number to be studied in greater detail from four to two; the proposed site (Site 3) and a site immediately adjacent to the A453 and the built-up area of Clifton (Site 4). The other options (Sites 1 and 2) were eliminated due to their lack of proximity to the built-up area, longer length of track required, and greater running time.

A more detailed assessment of the two identified sites (Sites 3 and 4) was undertaken based on the Department for Transport's New Approach to Appraisal (NATA), which sets out five criteria (Environment, Safety, Economic, Accessibility and Integration), broken down into a total of 17 sub-objectives. This process identified the preferred site for the following reasons:

- Capital costs. The proposed site is estimated to cost £4 to £5 million less than the other option, attributable to less significant earthworks and shorter track length.
- Access to public transport. The relatively good visibility of the proposed site from the A453 is expected to provide a higher degree of attractiveness to tram travel by car users and would be more convenient for bus interchange.
- Journey times. The tram journey time to the proposed site is better than to the other option considered.

When assessed against the criteria set out in PPG2 and PPG13, the proposed site was not considered as inappropriate development in the Green Belt. In particular,

the Park and Ride is an essential element of NET Phase 2 and building the site in this particular location does not seriously compromise the openness of the Green Belt or the purposes of the site's inclusion in the Green Belt, nor will it reduce the protection the adjacent Green Belt land has against residential and commercial development. The layout, design and landscaping of the Park and Ride site and link road will be designed sympathetically, preserving the openness and aesthetic qualities of the Green Belt land.

Visual intrusion.

The concerns about visual intrusion have stemmed in particular from the possible impact on the Gotham Hill ridgeline which has been designated a mature landscape area by the County Council. Consultants Mott MacDonald have undertaken considerable work to minimise the visual impacts of the Park and Ride site and the A453 access road. The park and ride site will be developed in a way to reduce its prominence being cut into the hillside with a 10 metre wide strip of native planting around the site. The access road will mostly be in cutting and only on a small raised embankment when approaching the A453. Some adverse visual impacts are likely for adjacent Clifton properties, although these impacts will reduce as the newly planted vegetation matures. Impact from further west along Gotham Road is likely to be minimal, with lighting making the new link road prominent only during hours of darkness. It will be important that the detailed design seeks to minimise visual impacts and this will be developed in consultation with Rushcliffe Borough Council.

Barton Lane has been proposed as an alternative access to the Park and Ride site to remove the need for a new link road from the A453. Although this option would be cheaper, Barton Lane would be longer and less direct for traffic coming from the A453 and the road would require upgrading. In order to maximise the attractiveness of the Park and Ride site it needs to be highly accessible. Building the link road to serve a Park and Ride will not reduce the Green Belt protection of adjacent land and it is therefore proposed to retain the new link road in the scheme.

Traffic on Gotham Road and Barton Lane.

It is considered unlikely that the Park and Ride site will result in increased traffic levels on Gotham Road and Barton Lane. The Project's Economic Consultants advise that the majority of tram users will already be making car journeys on local roads, but choose to divert to the Park and Ride facility instead of continuing their journey towards Nottingham by car. It is anticipated that a number of re-routed or new feeder bus service would access the site, where interchange facilities are proposed.

Heavv Rail Proposal at Ratcliffe On Soar.

There is a proposal by the Midland Mainline train operating company to build a 'parkway' station with a Park and Ride facility next to the main railway line near the Ratcliffe On Soar power station. Approval has been given in principle by Rushcliffe Borough Council to outline planning permission for the proposal, subject to satisfactory resolution of outstanding issues by Midland Mainline, and the outcome

of a TWAO Public Inquiry in June 2004. The Parkway Station may attract people travelling into Nottingham but the rail service would be less frequent, more expensive and some distance from the most congested areas approaching Nottingham. It is expected that most use of the parkway station would be for trips travelling away from the area, allowing passengers to travel to London or the north without having to travel into Nottingham first. The Clifton Park and Ride site, situated on the edge of the built up area, would be best placed to attract drivers before they enter the most congested roads and where they could connect with a frequent and reliable onward service into Nottingham.

APPENDICES

A. Map showing sites considered for Clifton Park and Ride.

NOTTINGHAM EXPRESS TRANSIT BEESTON AND CHILWELL EXTENSIONS DRAFT
NOISE AND VIBRATION POLICY

INTRODUCTION

Through public consultation and environmental assessment studies NET understands that there is concern in the community that the proposed tram extensions to Chilwell via QMC and Beeston and to Clifton via Wilford could create noise disturbance.

This Noise and Vibration Policy addresses noise from the operation of these extensions. It does not concern Line 1. Impacts during the construction phase are to be covered in a Code of Construction Practice.

STANDARDS AND GUIDELINES

NET commit to adopting:

- The Noise Insulation (Railways and other Guided Transport Systems) Regulations 1996; and
- other best guidance as seen 'fit for purpose'.

NET will adopt appropriate noise and vibration emission standards in their procurement of new tram vehicles and the design of tram tracks and associated facilities.

MITIGATION AT SOURCE

There is no statutory requirement for mitigation at levels below the Noise Insulation Regulations standards (see below). However, consideration will be given to developing mitigation measures at lower noise levels where significant impacts are predicted and where it is reasonably practical to do so having regard to its cost-effectiveness. Mitigation will be considered for noise sensitive receivers including all types of dwellings, schools, libraries, hospitals, and places of worship. Buildings housing particularly sensitive activities, such as those used for musical performances, may require special attention. Mitigation measures will be developed using the Best Practicable Means(1) to control noise and vibration levels in line with the following criteria.

The threshold above which noise mitigation will be considered is taken;

i.e.

LAeq 0700-2300 hours 55 dB;

LAeq 2300-0700 hours 45 dB.

In Line with current guidance, 3dB(A) is taken as the limit of the perception of change in environmental noise.

Where tram noise is perceptibly above these thresholds (ie by at least 3dB) mitigation measures to reduce the adverse impact of noise intrusion shall be considered depending on the extent to which pre-existing ambient (LAeq, 1 hour) noise levels are increased, under the following criteria:

(1) Best Practicable Means is defined in Section 72 of the Control of Pollution Act, 1974

Increase of less than 3dB	No mitigation required
Increase of more than 3dB	Mitigation considered on a case by case basis with increasing priority for greater noise Increase

Mitigation will usually take the form of trackside noise bunds, noise barriers or track treatments. Noise bunds and barriers will not always be suitable for various reasons such as conflicts with road traffic, concerns of track safety, driver sight lines, visual impact, security and crime considerations, and construction and maintenance issues. Therefore noise mitigation will be considered on the basis of a value judgement in each case with increasing emphasis on noise mitigation with increasing noise levels.

NOISE INSULATION

In accordance with the Noise Insulation Regulations, insulation shall be mandatory at the qualifying facade levels:

- 68 dB LAeq, 0600 - 0000 hours daytime; 63
- dB LAeq, 0000 - 0600 hours night.

A further qualifying free-field level of L_{max}, slow 82 dB several times an hour at night (2300 - 0700 hours) will apply for the purposes of avoiding sleep disturbance where at source mitigation measures are not practicable.

For insulation to be offered tram noise must increase the corresponding ambient noise level by at least 1dB(A).

VIBRATION

Trackforms will be designed adjacent to sensitive receptor buildings so as to endeavour to keep within the guideline levels of Vibration Dose Value (VDV) given in BS6472, 1992 below which the probability of adverse comments is low:

- Day (0700-2300 hours) 0-4 mjs1.75; and
- Night (2300-0700 hours) 0.13 mjs1.75.

MONITORING AND MAINTENANCE

The Concessionaire will maintain the system, and in particular the wheel and rail surfaces, so as to minimise noise and vibration at sensitive receptors. For each extension an appropriate noise and vibration monitoring scheme will be agreed with the relevant local authorities. The results will be used to inform wheel and track maintenance programmes in order to ensure unnecessary increases in noise or vibration are avoided.

The Concessionaire will give due notice to the relevant local authorities and potentially affected residents of plans to carry out potentially noisy maintenance activities such as rail grinding.

When telephoning, please ask for: Mr M A Harbron
Direct Dial 0115 9148457

Our Reference: MAH/WAS/504.4
Your Reference:
Date: 20 January 2004

Mr N Bates
Executive Director
Nottingham Express Transit
Lawrence House
Talbot Street
NOTTINGHAM
NG15NT

Dear Sir

Nottingham Express Transit: Phase 2 Consultation

On 8th January the Borough Cabinet considered a report by Executive Management Team concerning the NET phase 2 consultation. I attach a copy of the report and the minutes of the meeting.

As you can see there was considerable concern that non Green Belt sites had not been considered for the Park and Ride site, in accordance with Government guidance and that the proposed site is unnecessarily visually intrusive in terms of the site selected and the means of access proposed and could create the potential for further urban development in the Green Belt.

There was also concern that detailed environmental safeguards were needed before a preferred route and park and ride site be put forward in this way. Finally it was requested that appropriate assurances be given that the Borough would not incur any further financial costs as a consequence of any proposals.

Yours faithfully

M A Harbron
Local Plans Manager

Enclosed: Report and Minutes of Meeting

87. Nottingham Express Transit - Phase Two Development - Public Consultation

The Cabinet considered the report of the Executive Management Team outlining the details of the Nottingham Express Transit (NET) proposals for phase two and the impact these would have on the Borough.

RESOLVED that
that following comments be made on the Phase Two NET proposals:

- a) full consideration should be given to alternative park and ride sites located outside the Green Belt prior to any site in the Green Belt being proposed
- b) the access to the park and ride site currently proposed is inappropriate being visually intrusive and unnecessarily damaging to the Green Belt, creating the potential for further development between it and the edge of the urban area. Alternatives, including the use of Barton Lane as described in the report should be considered;
- c) a detailed Environmental Impact Assessment including the loss of wildlife corridors be carried out to ensure that noise, vibration and air quality levels are of acceptable standards, particularly with regard to the section alongside the Compton Acres development. The current proposals did not demonstrate that such standards had been achieved.
- d) recommendations with regard to screening, safety fencing and landscaping and the resiting of Lyme Park station be included in the proposals
- e) the Borough Development Officer be requested to investigate the cost of the Council appointing Consultants to look at the different proposed routes
- f) assurances be sought from the NET team that no further financial contributions will be required from the Borough Council

Councillors J. E. Fearon and Mrs D. J. Mason declared an interest in the following item at 8.16pm and left the meeting during the discussion.

