

Leicester
City Council

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ALL

FORWARD TIMETABLE OF CONSULTATION AND MEETINGS:

Highways & Transportation Scrutiny Committee
Cabinet

29th October 2003
24th November 2003

LEICESTER WEST TRANSPORT SCHEME PROPOSAL

Report of the Corporate Director of Environment, Regeneration and Development

1. Purpose of Report

- 1.1 To present to Members the findings of the work undertaken by Officers to re-assess potential sites for a Park & Ride facility in the south of the City administrative area.

2. Summary

- 2.1 Since the Cabinet resolution of 21st July 2003 on the Leicester West Transport Scheme (LWTS) proposal, work has been undertaken on the evaluation of alternative sites for a Park & Ride (P&R) facility in the south of the City. This work has included assessing the following areas of work:
- Planning Policy
 - Highways
 - Park & Ride Design
 - Environmental Issues
 - Air Quality Issues
 - Environmental and Transport Assessments
 - Technical and Economical Appraisal
- 2.2 The structure of the study allowed each of the above disciplines/activities to assess the options available critically and make recommendations for taking the scheme forward.

3. Recommendations

- 3.1 It is recommended that:

- I. Within existing policy frameworks, site 29 remains the most appropriate site for P&R in the south of Leicester.
- II. Subject to a change in existing policy frameworks, site 33 is taken forward for further detailed analysis and appraisal.
- III. The proposed link road through site 29 is retained to facilitate site 33 to operate successfully and alleviate congestion at the Soar Valley Way/Lutterworth Road junction.
- IV. Subject to II and III above, a localised consultation exercise is undertaken in late 2003 on the site 33 proposal.

4. Headline Financial and Legal Implications

- 4.1 Funding for Major Scheme proposals are ring-fenced, outside the Single Capital Pot introduced in 2003/03. Under the existing local government financing system, central government funding will comprise a split of 50% grant and 50% credit approvals over the life of the scheme.
 - 4.2 However, Supplementary Credit Approvals (SCA's) will be the only form of credit approval available. For the 50% grant allocation, public transport schemes will receive Section 56 grant.
 - 4.3 All expenditure incurred as part of the preparation of the LWTS proposal is from the block capital allocation from the Local Transport Plan.
 - 4.4 Legal advice is being taken regarding the development of the scheme. This will become more significant as the scheme progresses and contracts are drawn up and let.
 - 4.5 A financial assessment of the scheme including the economic appraisal will be presented to Cabinet in the future.
 - 4.6 Detailed costings of the scheme are still being developed, and will be subject to a process of rigorous testing and challenge prior to the subsequent report. Members are asked to note, however, that the revenue implications of the scheme are not capable of being established with certainty given that they are based on estimates of patronage.
 - 4.7 It is presently assumed that all costs of the scheme are capable of being bid for – this will be tested further as apart of the subsequent report.
- Kate McGee, Head of Finance, E, R & D
- 4.8 There are no direct legal implications arising out of this report.

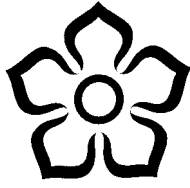
Anthony Cross, Asst Head of Legal Services, ext 6323

5. Report Author/Officer to contact:

5.1 Eddie Tyrer, Team Leader - Special Projects, Highways & Transportation Division, Ext 7272.

DECISION STATUS

Key Decision	Yes
Reason	Capital expenditure of over £1 Million
Appeared in Forward Plan	Yes
Executive or Council Decision	Executive (Cabinet)



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SUPPORTING INFORMATION

1 Introduction

- 1.1 This report sets out the findings of work undertaken to assess potential sites in the south of Leicester, within the City boundary, for a Park & Ride facility (P&R), as part of the Leicester West Transport Scheme (LWTS) proposal for funding to the Department for Transport (DfT).
- 1.2 This re-assessment of sites in the southern area of the City is a result of a resolution passed by the Leicester City Council Cabinet, 21st July 2003. At that meeting it was resolved:
- that a review of the current proposals should be undertaken
 - an investigation of further options for sites in the south of the City be carried out, and,
 - that a bid would be made, in partnership with the County Council, to the DfT no later than 31st July 2004.
- 1.3 In order to undertake this review in the limited time made available, officers of the City Council, and the consultants MVA, have assessed the following areas of work.
- Planning Policy
 - Highways
 - Park & Ride Design
 - Environmental Issues
 - Air Quality Issues
 - Environmental and Transport Assessments
 - Technical and Economical Appraisal

- 1.4 The report concludes with a set of recommendations and a work programme in order to take the scheme forward.

2 Background

- 2.1 Work on the LWTS proposal was started in 1999 as a joint proposal by the City and County Councils to develop a network of Park & Ride facilities and connecting bus priority measures. The scheme focused on the north, west and south of Central Leicestershire and formed the key element of the adopted Central Leicestershire Local Transport Plan (2001-2006). A major review of the proposal was undertaken in 2002, in order to ensure that sites identified were independently and robustly appraised, and those identified consulted upon.
- 2.2 In order to do this, the transport consultants MVA, who were appointed to co-ordinate the technical aspects of the proposal, undertook a major site evaluation exercise. This exercise assessed some 48 sites in the north-west and south/south-west of Central Leicestershire. Using a robust evaluation framework, such as planning policy, highway networks, environmental issues, the report recommended two sites to be taken forward. The work undertaken and results can be found in the MVA "Leicester Park & Ride Evaluation" Final Report May 2002.
- 2.3 The recommendations of that report stated that site 29, in Aylestone, should be taken forward as the preferred site for the southern area of the Central Leicestershire area.
- 2.4 A consultation programme on the proposed scheme of three sites at Birstall, Glenfield and Aylestone was undertaken over the period December 2002 and January 2003. Though there was wide spread support for the concept of P&R and the scheme, there were a number of objections, particularly from local residents regarding the Aylestone site and its impacts. As a result of these concerns the City Council Cabinet, 21st July 2003, resolved to review the proposed location of the site in the south of the City.

3 Site Evaluation

- 3.1 The review of sites in the south of the City, focused on three sites that could be realistically developed. These are identified as sites 29, 27 and 33 in the MVA Report. The location of these is shown on the attached map.
- 3.2 In order to evaluate the sites as robustly as possible in the timescale provided, work has been undertaken in the following areas;

- Planning Policy
 - Highways
 - Park & Ride Design
 - Environmental Issues
 - Air Quality Issues
 - Environmental and Transport Assessments
 - Technical and Economical Appraisal
- 3.3 The study focused on sites close to site 29 as previous appraisals identified that the greatest patronage was from the Aylestone area rather than close to the Junction 21 area.
- 3.4 Below are the reports and findings of the work undertaken by City Council Officers responsible for each work area.

4 Planning Policy

- 4.1.1 Site 33 and 27 are in Green Wedge. Green Wedges have been protected by Structure Plan policies since 1985 and were defined in the adopted Local Plan in 1994. Green Wedges provide a strategic open space and leisure resource, allowing for access to the countryside from the inner city.
- 4.1.2 Policies in the adopted Local Plan and in the Deposit Replacement Local Plan seek to prevent development which would affect the predominantly open and undeveloped character of the land, impair recreational and leisure access, prejudice agricultural operations and reduce the amenity value through the introduction of, or increase in noise, traffic, pollution and any other nuisance.
- 4.1.3 The Deposit Replacement Structure Plan states that park and ride facilities will only be acceptable in Green Wedges if no suitable site outside a Green Wedge is available and if appropriate measures are taken to minimise severance and adverse effects on the amenity of the Green Wedge.
- 4.1.4 The adopted Local Plan includes a reference to the possibility of Park & Ride car parks being acceptable in Green Wedges, if alternative sites are not available and subject to overriding policy position stated in the paragraph above. This acceptance of park and ride in exceptional circumstances could provide justification for the proposal for Site 33 if Members decide that site 29 is not acceptable and therefore no alternative site is available. However considerable mitigation measures will be required to comply with other Green Wedge policy objectives.
- 4.1.5 The Deposit Replacement Local Plan does not support the potential for park and ride sites to be located in a Green Wedge area within the City.

The explanation for this is given in the supporting text of the second Deposit Replacement Local Plan, published in July 2003. This explanation states that, "The City Council ... does not consider this (P&R in Green Wedges in exceptional circumstances) to be a favoured option within the City boundaries due to the scarcity of land and the lack of an appropriate site. And therefore has not included it within the City Local Plan policy." However the Structure Plan is also part of the City's Development Plan and provides the strategic framework for Local Plan policies.

- 4.1.6 A park and ride proposal on either of sites 33 and 29 would be a Departure from the adopted Local Plan. Because the City Council is landowner in both cases, if the Council was minded to approve a planning application, the Secretary of State would be notified and the application could be "called in" for a decision. The planning policies in the adopted Local Plan and the Deposit Replacement Local plan would be taken into account. The fact that the Deposit Replacement Local Plan safeguards site 29 for park and ride may be a material consideration for the Secretary of State.
- 4.1.7 There have been previous proposals for development in Green Wedges. The City Council proposed a gypsies & travellers site in Castle Hill Park. The application was "called in" by the Secretary of State and a Planning Inquiry was held in 1995. The Inspector was clear that the Local Plan's Green Wedge policies were consistent with national and Structure Plan policy and he saw the proposal as setting undesirable precedents for future exceptions. Proposals for development on the University Playing Fields, Welford Road and at Glen Frith also have been resisted on Green Wedge policy grounds.
- 4.1.8 The site is within the Riverside Policy Area as shown in the Deposit Replacement Local Plan. The relevant Riverside Policy, SPA13, does not discourage development unless it detracts from the quality of the Riverside environment. However it sets stringent criteria to ensure that development proposals enhance and regenerate the Riverside. Site 29 is also in this Policy Area but development there would have less impact on the Riverside environment.
- 4.1.9 The whole of site 33 is identified on the Biodiversity Proposals Map, which forms part of the Deposit Replacement Local Plan, as a Biodiversity Enhancement Site (BES). The relevant policy, GE03, allows for development if the strategic nature conservation value is maintained or enhanced. Part of site 29 is identified as a BES and the proposed design incorporated biodiversity enhancement measures.
- 4.1.10 As Members are aware there was a substantial number of objections to the proposal for site 29. However the number was inflated by the multiple

objections relating to the various components of the park and ride site. 847 people, including 523 who signed petitions, made a total of 2016 objections. Not all the objectors live in the Aylestone area. Although local residents would be affected less directly by park and ride on site 33, because of the separation from the Gilmorton estate, there are likely to be objections from a wider area to the loss of Green Wedge and access to open space.

4.1.11 In the second deposit stage there has been an objection from Glen Parva PC to the increased size of site 29 and they would be more affected by development on site 33.

4.1.12 Objections were made to the proposed link road and the bus priority measures, especially their effect on Aylestone local shopping centre. Both these aspects of the proposal would be included in a scheme for site 33. Also many of the objectors wanted site 29 to remain as open space but Members may wish the housing allocation to be reinstated as provision of public open space is unlikely to be considered as a priority in this location. Most objectors stated that a site should be found outside the city boundary e.g. at Fosse Park or Grove Park.

4.1.13 It should be noted that the majority of site 29 remaining for development (after the construction of the link road) is owned by the County Council and its value as a housing site has been taken into account in the calculation of the County Council's financial contribution to the LWTS. It can be assumed that the County Council would wish to realise the maximum capital receipts on this site if the park and ride scheme is located elsewhere and the site is a housing allocation in the adopted Local Plan. Therefore there is the potential scenario of housing development in Aylestone on site 29, plus the link road; and a park and ride on another site in the vicinity, in a location that residents consider to be protected from development by planning policies.

4.1.14 *The commitment to protecting the area of Site 33 was in evidence at the Inquiry into the Compulsory Purchase Order for the Glen Parva Bypass in 1995. The City Council objected to the impact of the proposed road on the Great Central Way and the land to the west, on environmental grounds.*

4.1.15 As the land is currently in agricultural use the views of the Department of Environment, Farming and Rural Affairs would have to be consulted.

4.2 Conclusion

4.2.1 It is unrealistic to expect that there would be no objections to site 33. The residents surrounding site 29 would not achieve their aim of the site remaining undeveloped and other city residents are likely to object to the

loss of strategic open space. Site 33 in itself has less direct impact on local residents but that does not take account of the cumulative aspects of the proposal such as housing on site 29, the link road and the bus priority measures.

4.2.2 A planning application on site 33 is more likely to be “called in” for decision because of the Green Wedge policies. If it can be demonstrated that:

- there is no alternative site (because of public opinion) and
- the site design plus a package of mitigation measures overcome the adopted Local Plan, Deposit Replacement Local Plan and Structure Plan policies for Green Wedges and
- nature conservation issues have been addressed and
- the highway implications overcome

then a Planning Inspector may be persuaded that the achievement of transport objectives outweigh the disadvantages of setting a possible precedent for development in Green wedges.

4.2.3 Unless a decision is made not to continue with site 29, it will be the subject of debate at the forthcoming Local Public Inquiry in to the Deposit Replacement Local Plan. In this case the chances of the planning application being “called in” are less. If it decided to proceed with site 33 then that would be considered at the Inquiry, after the proposal had been subject to public consultation. It is the considered opinion of Planning Officers that if there are objections to both sites from local residents then the Inspector may be influenced more by the planning policies, which favours site 29.

4.3 The Substance of Objections to the P&R Proposal in the Replacement Local Plan

4.3.1 The large majority of objectors live in the vicinity of the proposed site although a significant number reside well away from the site. However most objectors live to the north, in old Aylestone where the impact of P&R should be beneficial.

4.3.2 Main reasons for objection (responses in italics)

- Levels of congestion will increase. *Many objectors considered that the proposal would increase congestion in Aylestone village, presumably because of the bus lanes. However the same objection could be made to alternative P&R sites..*
- Increase in pollution from noise, fumes, litter and floodlighting and a decrease in air quality. *It is accepted that the impact on nearby residents from P&R will be greater from site 29 but the Link Road will*

- be retained for alternative schemes and housing on site 29 would add to the traffic. Lighting will be switched off at night.*
- Visually it will be an eyesore on the landscape. *The impact on the landscape quality of sites 33 and 27 would be greater*
 - Increase in the number of accidents and dangers for pedestrians. *The Link Road would be retained for alternative schemes*
 - Proposal will increase crime in the area. attract gangs of youths and there will be security risks to cars. *These views are partly based on a misunderstanding that the site was for use by LCFC*
 - Loss of amenities, community facilities, recreation areas, children's playing area and right of way *The site was allocated for housing in the adopted Local Plan, although play space would be created as part of a housing scheme. A footpath across the site can be incorporated into the scheme*
 - It is too close to houses, impacting on levels of privacy, devaluing property and isolating residents of Buckingham Drive. *The estate was built in the context of the approved Glen Parva Bypass*
 - Loss of a Greenfield site. *The site is allocated for development in the adopted Local Plan. However development would be subject to the Greenfield Regulations on housing and may not be accepted.*
 - It will have a negative impact on wildlife, flora and bio diversity of the area. *The proposal includes Biodiversity Enhancement Measures. The same objection can be made to alternative sites*
 - It will have a detrimental impact on Aylestone Conservation Area. *There would be no impact on the CA, unlike site 29.*
 - It will damage the reputation of local businesses and retailers will lose customers. *This was considered to be an effect of the bus lanes but they will be a part of any P&R scheme..*
 - Park and ride concept is out of date and is not required as there is already a good, under used bus service. *This objection could apply to any P&R site*
 - It should be located near a motorway junction, industrial estate or commercial area (for instance Fosse Park, Grove Triangle) instead of residential areas. *These sites are outside the city boundary*
 - It is a possible site where gypsies could situate. *This objection could apply to any P&R site*

5 Highway Design

5.1 This section considers the traffic impact on the local network for each of the 3 park and ride sites currently under investigation for the Aylestone Road corridor.

- Site 29 – Located off a new link road between Lutterworth Road and Soar Valley Way.

- Site 33 – Located to the south of Soar Valley Way.
- Site 27 – Located to the north of Soar Valley Way.

5.2 An external consultant, MVA Ltd, was appointed to determine the patronage data for the proposed site. From this analysis 500 vehicles have been considered to use the park and ride site during the morning peak hour (8.00 –9.00 a.m.). The vehicles have been assumed to arrive from the following directions.

	New Vehicles Attracted to Park & Ride	Existing Vehicles Diverted to Park & Ride
Glenhills Way	50	80
Lutterworth Road	75	120
Soar Valley Way	50	125

5.3 Traffic flow surveys and automatic count data was used to develop existing flow models for the Lutterworth Road / Soar Valley Way and Aylestone Road / Middleton Street junctions.

	Existing Traffic Am Peak Hour
Glenhills Way	1565
Lutterworth Road (County Bound)	618
Lutterworth Road (City Bound)	791
Soar Valley Way	2192

5.4 The existing Lutterworth Road / Soar Valley Way junction currently has no reserve capacity introducing major delay during the peak hours. In order to accommodate the vehicles generated by the Park and Ride site, and reduce delay, additional lanes would be necessary on Lutterworth Road. However due to the confined layout of the junction there is no highway land available for widening works on Lutterworth Road.

5.5 The proposed link road between Soar Valley Way and Lutterworth Road would allow diversion of traffic turning left from Soar Valley Way into Lutterworth Road and right turning traffic from Lutterworth Road into Soar Valley Way. The reduction of traffic at the existing Lutterworth Road / Soar Valley Way and banned manoeuvres allow the current 6 stage signal sequence to be reduced to 4 resulting in reduced delay and improved reserve capacity.

5.6 Summary of Practical Reserve Capacity and Mean Max Queues for Lutterworth Road / Soar Valley Way / Glenhills Way Junction

		Existing		P&R No Link Road		P&R Link Road	
		PRC	Queue	PRC	Queue	PRC	Queue
Lutterworth Rd County Bound	Ahead & L	68.8	8.9	73.2	9.4	87.3	11.8
	Right	98.6	14.8	97.8	14.7	Ban Turn	
Soar Valley Way	Left	67.7	9.2	59.5	8.2	Ban Turn	
	Ahead	97.4	42.2	93.4	35.4	84.8	28.8
	Right	76.1	7.5	76.1	7.5	76.1	7.5
Lutterworth Rd City Bound	Ahead & L	97.0	25.4	100.2	29.2	85.2	17.8
	Right	59.1	4.7	64.9	5.0	67.0	4.7
Glenhills Way	Ahead & L	99.1	24.0	98.5	23.6	87.3	15.2
	Ahead	75.4	21.8	77.6	22.7	72.9	21.0
	Right	42.7	2.1	22.7	1.0	22.7	1.0
Reserve Capacity PRC		-10.2%		-11.3%		3.1%	

5.7 The link road is necessary for all 3 site options as remaining with the existing junction will introduce further delays as traffic flows increase.

5.8 Transyt Network Analysis: Summary diagrams have been produced for the 3 sites considered and are attached. The junctions have been shown as follows;

- 1 Lutterworth Road / Soar Valley Way
- 2 Soar Valley Way / New Link Road
- 3 New Link Road / Lutterworth Road
- 4 Access to site 29 (or possible housing development)
- 5 Aylestone Road / Middleton Street
- 6 Soar Valley Way access to site 27 or 33.

5.9 The % figure indicates the reserve capacity and the figure below indicates the mean max queue for the section.

Site 29

The results obtained for site 29 indicate that the proposed Park and Ride site with link road reduce delay at the Lutterworth Road / Soar Valley Way junction. Reserve capacity is available on all link sections except the approach to Aylestone Road / Middleton Street. This junction will need further investigation and is not dependant on the selection of Park and Ride site.

Site 33

Site 33 produces marginally reduced delay at the Lutterworth Road / Soar Valley Way junction when compared to Site 29. Vehicles approaching site 33 from Glenhills Way will continue ahead reducing the right turning traffic. The additional junction on Soar Valley Way will increase delay during construction of the project. Increased lane closures will be necessary in

order to construct the additional carriageway reducing Soar Valley Way to one lane.

Site 33 with Housing development on Site 29

Analysis for site 33 was also undertaken for possible housing development on site 29. The additional vehicle flows generated by the housing development can be accommodated with minimal effects to the network capacity.

Site 27

The network analysis results were found to be similar to those for site 33. However an increased queue would occur on the Soar Valley Way approach from the Fosse Park direction as traffic would be delayed by traffic turning right into the Park and Ride site from the Lutterworth Road side.

5.10 Summary

- 5.11 The network analysis indicates all options can be accommodated with reserve capacity and delays reduced at the Soar Valley Way / Lutterworth Road junction by the introduction of the proposed new link road.
- 5.12 Consideration was given to making the link road bus only however this would not provide any improvements to the existing congested Soar Valley Way / Lutterworth Road junction.

Site 29 and 33 produce similar network capacity results.

Site 29 would produce the least delays during construction.

6 Park & Ride Site Design

6.1 The Sites

- 6.1.1 Site 27 lies to the north of Soar Valley Way between the Grand Union Canal and the Great Central Pedestrian Way. This forms part of the City Council's green wedge for this area and was previously rejected on the ground that it would be unlikely to achieve planning approval.
- 6.1.2 Site 33 lies to the south side of Soar Valley Way and has common boundaries to the east and west with site 27.
- 6.1.3 Both sites are leased for agriculture activities however while 27 appears to be used for grazing cattle and is closed to the public, 33 is far more open and accessed by the general public and used as a leisure amenity.

- 6.1.4 The sites have high points adjacent to the Great Central Way and slope gently to the Grand Union Canal. Site 27 has a level bank and appears to be subject to minor flooding in the south-west corner of the site.
- 6.1.5 The canal to the western boundary of site 33 tends to be an average of 3 metres lower than the adjacent bank and thus it can be assumed that there would be very little chance of flooding within this site.
- 6.1.6 Both sites can be accessed from Soar Valley Way however the level difference between the road and site 27 is almost twice that for site 33 and would require a longer ramped access with subsequent higher cost.
- 6.1.7 While site 33 has extensive mature boundaries to the Grand Union Canal and the Great Central Way, which effectively hides the site from both these traffic corridors, site 27 is fairly open to all boundaries.

6.2 Work Undertaken

- 6.2.1 Due to the limited time available to assess sites 27 and 33 it was decided to prioritise efforts and concentrate initially upon site 33 as officers felt this had a greater chance of being approved for development.

6.3 Work/Surveys Carried out

- Geotechnical survey of site 33 completed - report awaited.
- Topography survey of sites 27 and 33 completed.

6.4 Work/Surveys Required

- Sustainable drainage concept for the site commenced - to be completed by mid-October. Start of work delayed - awaiting results of the geotechnical survey.
- Desk top study of all service information required.
- Right of way survey required.

6.5 Scheme Concept

- 6.5.1 As previously noted because of the time constraints for this assessment the focus of the work has been on site 33.
- 6.5.2 The layout includes parking for 1000 cars, with space for future expansion adjacent to Soar Valley Way.
- 6.5.3 The scheme is surrounded by a high security fence to its boundaries and is only accessed via the main gate, which is adjacent to Soar Valley Way. It is intended that a series of cameras provide a high level of security for

users of the site. The cameras will be sited in order to provide full coverage of the site such that on site security staff providing a visible presence on the site will be able to react to any incidents that may arise. Experience shows that a high level of security is a main requirement of any successful park and ride site.

- 6.5.4 The parking bays radiate from the centrally located bus stop and encourages an even distribution of parking across the site as it reaches capacity. The radial pedestrian access ways provide a level access for people with physical disabilities together with a number of disabled parking bays located adjacent to the bus stop.
- 6.5.5 The access and road system relies on a designated bus access/exit road, alongside a separate access/exit for cars.
- 6.5.6 The layout includes a drop off/pick up area adjacent to the bus stop.
- 6.5.7 A security building, housed centrally, includes an information point, toilet and baby change facility. This facility provides accommodation for on site staff to monitor and assist users of the site.
- 6.5.8 It was decided during the feasibility study to include consideration of a cycle hire store on site with cycle lockers to promote use of the facility by cyclists. This facility would be subject to successful negotiations with a provider.
- 6.5.9 Because of the sensitive location of the site the design of the lighting will be modelled upon the design used at Meynell's Gorse. This relies on the use of enclosed down lighters which minimises glare to the boundary of the site and directs all light to the car park surface.
- 6.5.10 Noise, visual impact and pollution are concerns that are raised in all public consultations, when car park developments are being considered. It is apparent that concerns are greater the closer a facility is to housing developments indeed, these concerns were raised during the public consultation exercise for site 29
- 6.5.11 On site 33 the eastern boundary is sufficiently far away from the site to ensure that there is little impact from noise and pollution. As mentioned previously, the existing green boundaries to the east and western perimeters of the site are reasonably mature and can be developed to reduce the perceived visual impact, and affect of pollution and noise.

6.6 Summary

6.6.1 Site 33, on the evidence presently available could be developed to house a 1000 capacity park and ride facility. It has a number of advantages over site 27 and is the better option of the two. However it should be stressed that a development such as this within the green wedge may be deemed to be undesirable and may struggle to achieve planning approval.

7 Environment and Urban Design

7.1.1 The Urban Design Group, ER&D, fulfills various roles including guiding major development, facilitating public access and safeguarding and improving biodiversity and landscape character. It offers guidance to developers to secure improved standards and advises development control to inform the planning process.

7.1.2 The Urban Design Group makes the following observations and recommendations in response to proposals to develop part or the whole of either of the sites identified as *nos. 27 and 33* for the purposes of implementing a Park and Ride scheme. The comments cover a range of issues but particularly address:

- Riverside and countryside recreation, access and tourism
- Biodiversity and nature conservation
- Landscape visual character
- Major development impact

7.1.3 The comments are offered on the basis of known existing conditions and without the benefit of specific topographical information or intentions as to proposed ground modelling. The options below should be seen as representing first, second and third preferences in descending order of acceptability:

7.2.1 The sites numbered *33 and 27* are two parcels of land at the extreme of the City's southern boundary and abound green wedge land in Blaby District. They provide a continuity of open space and countryside from the County into the City. This is deemed to be valuable for its strong visual landscape benefit, opportunities for physical access and recreation between urban and rural areas and its present and potential biodiversity value. The sites form part of a patchwork of pastoral and arable fields and spaces in the Aylestone Valley, some with historic ridge and furrow and hedgerow features and vegetation reflecting the flood meadow conditions. Both the proposed sites have been under arable agriculture in recent years. Site 33 is more elevated and has more topographical variation, rising from the north west corner to the south east corner. Site 27 has less variation in landform and generally slopes to the west and the canal.

7.2.2 Immediately abutting to the east of sites 27 & 33 is the Great Central Way, a dedicated pedestrian, cycle route and horse riding route running north and south. The Great Central Way is also the Sustrans national cycle route 6. To the west, again abutting, is the Leicester branch of the Grand Union Canal. The River Soar meanders roughly parallel to the west of the canal, and both run north and south.

7.2.3 Sites 33 and 27 are important as part of the effective 'gateway' into the city when arriving on foot, by cycle or boat. Conversely, they form part of the scene when leaving the city.

7.2.4 Both the sites, and particularly site 33, would have been affected by the earlier proposal for the Glen Parva Bypass, which was refused consent after a planning public inquiry. Earlier still the building of the Soar Valley Way resulted in severance of the previously contiguous farmland that is now the green wedge land. In addition to the severance, the heavy volumes of traffic on Soar Valley Way produce both noise and visual intrusion which impact widely across the Aylestone valley.

7.3 Site Appraisals

7.3.1 An assessment has been undertaken of the potential sites, 29, 27 and 33 against policy frameworks. A number of scenarios have been looked at and can be summarised as follows:

7.4 Site 27 and 33 are not progressed

7.4.1 There is an alternative available that is in conformity with the Local Plan policies. On the basis that either proposal is contrary to Green Wedge policies (adopted Local Plan EN43-EN47 & the Deposit Replacement Local Plan GE06-GE08 & UD01), and would adversely affect the character of the Green Wedge. This would significantly devalue its visual landscape, recreational and ecological functions.

7.5 Site 27 is not progressed

7.5.1 There is an alternative available that is in conformity with the Local Plan policies. On the basis that either proposal is contrary to Green Wedge policies (adopted Local Plan EN43-EN47 & the Deposit Replacement Local Plan GE06-GE08 & UD01), and would adversely affect the character of the Green Wedge. This would significantly devalue its visual landscape, recreational and ecological functions for now and the future.

7.6 If site 29 is not progressed and 33 taken forward, then it is suggested that the following should be taken account of:

7.6.1 The site is within the Green Wedge and is subject to The Replacement Local Plan Second Deposit Draft environmental policies. Such development would constitute a major departure from Green Wedge policy and greatly diminish the contiguity and coherence of the Green Wedges, although such provision is allowed for in the Replacement Structure Plan. Supporting sites 33 in preference to site 29 may be difficult to justify in terms of these Plans, their policies and the objectives behind them. Mitigation may be possible by restricting the extent of the development site and preserving a corridor of undeveloped land.

7.7 Glen Parva Bypass Inquiry

7.7.1 The evidence given to the public inquiry for the Glen Parva Bypass should be examined for the principles of opposition to that scheme by the City Council, as this could become a tool used to oppose the development of site 33, in particular. The EIA carried out for this planning application may also provide useful information on landscape, ecology and hydrology issues.

7.8 Floodplane

7.8.1 Neither Sites 27& 33 fall within the floodplain as indicated on the 1994 Adopted Local Plan. A presently ongoing study to review the floodplain in various storm conditions indicates that a small part of site 27, to the south west corner, would be affected by a 100 year storm.

7.9 Drainage & SUDS

7.9.1 The sensitivity of the river basin to pollutant discharge, as well as EA standards on discharge from greenfield sites, are likely to require a comprehensive sustainable urban drainage (SUDS) element. Further assessment and design work would need to be carried out to supplement the study undertaken for site 29.

7.10 Visual exposure and mitigation.

7.10.1 Site 27 is below the level of the Soar Valley road corridor and will be visible to parts of the road corridor where good vegetation screening is not present. Where satisfactory peripheral amelioration cannot be achieved, such as at any access point, this may be addressed by planting within the site.

7.10.2 Because the Great Central Way is in a cutting at this location, direct visual impact is likely to be minimal from this important recreational and commuting corridor, with the probable exception of lighting columns, luminaires and CCTV masts. Light pollution may therefore be a more

significant factor. However, the rising ground will be exposed to short and long views from public access areas within Aylestone Meadows.

- 7.10.3 There is likely to be little, if any visibility from Lutterworth Road, Buckingham Drive and Gilmorton estate, again with the exception of lighting and masts, although mitigation of these views should be addressed . Site 33 slopes up to the south east and is, for the most part, higher than the Soar Valley Way and Aylestone Meadows. Views of the site to the south from the road corridor due to gaps in the hedgeline and through the immature vegetation would require mitigation. Access points would open up visibility. A robust planted tree screen would be recommended on the frontage of - approx 20 metres depth.
- 7.10.4 There is a high degree of visibility from the canal towpath, between Soar Valley Way and Bluebank Lock to the south and unmitigated would result in a high level of visual intrusion (see *Noise* also). A significant depth - approx 20 metres - of tree and shrub planting would be recommended within this site along the boundary .
- 7.10.5 Views from ground floor level of properties at Gilmorton Drive are occluded from late spring and to late summer, due to intervening structural vegetation. This will need to be considered for leafless months, especially on Gilmorton Drive from first floor level of facing dwellings, where there are presently direct lines of sight into the site. Providing for this mitigation, and to provide a buffer to the Great Central Way, tree and shrub planting should be undertaken to the eastern boundary. This should be of a depth of 20 metres at the northern end reducing to 7 metres at the southern end.
- 7.10.6 The visibility of parked vehicles is likely to be increased by the light reflection, both by day and during hours of darkness. The sweep of vehicle lighting is also likely to be particularly conspicuous at dusk and during hours of darkness.
- 7.10.7 Although a costly engineering operation, ground modelling in order to reduce the levels, particularly of the higher points may be desirable and should be assessed and costed. Site strip should be used to form sympathetic earth bunds to the vulnerable boundaries into which tree and shrub planting can take place. Drainage strategies will need to take account of these suggested changes to ground conditions and form.

7.11 Nature Conservation

- 7.11.1 Habitat assessment: Biodiversity Enhancement Sites no. 87 - Aylestone Farm North & no. 89 Aylestone Farm South on Site Alert Map. Each flanks a Site of Importance for Nature Conservation, nos. 30 & 31,

respectively. SINC 30 encloses P&R site 27, except for the Soar Valley Way frontage. There could be significant mitigation costs involved for these areas.

7.12 Main Access

7.12.1 Any access point(s) would need to be assessed for visual and other impacts and appropriate mitigation undertaken.

7.13 Lighting, CCTV & Security Fencing

7.13.1 Fencing lines are likely to add to the visual intrusion and may be difficult to screen. Lighting is very likely to be highly visible and particularly intrusive within the Green Wedge. CCTV clear scanning views can often militate against establishing satisfactory internal structural screen planting, which would be seen as highly desirable to reduce these impacts. Perimeter structural planting, i.e. tree and shrub planting, should form an essential part of mitigation of these impacts.

7.14 Noise

7.14.1 Noise mitigating measures are highly desirable to protect the recreational enjoyment and tourism in the corridor of the canal. Visual and acoustic defence may be combined in some cases by the earth bunding measures. Acoustic defence measures may also have an impact on landtake or parking capacity. The sloping landform may make effective noise mitigation difficult to achieve. Mitigation measures would need to reflect the urban fringe character and be by use of landform and robust vegetation screens, rather than fabricated structures.

7.15 Disabled Persons Access

7.15.1 The level of wide bay provision consistent with the City Councils adopted standard - Paving the Way - should be ensured within the proposed site footprint. The ratio is 5 bays for the first hundred spaces and 3 per hundred or part thereof for the remainder (ie. 32 spaces per 1000)

7.16 Conclusions

7.16.1 The development of either sites 33, or 27, would be contrary to current Green Wedge policy. It is considered that this would most likely be assessed at the Local Plan Inquiry

7.16.2 Mitigation measures for screening either of these two sites could be extensive and costly, both financially and in landtake terms.

- 7.16.3 In both cases, it is likely that a full EIA would be required. For reasons of independence, it is recommended that this should be undertaken by outside consultants.
- 7.16.4 Proposals for either of sites 27 or 33 are may produce objections. It also likely that the evidence presented in opposition to the Glen Parva bypass planning application by the City Council at the earlier public inquiry, may be revisited.
- 7.16.5 It is not possible at this time to obtain a cost for mitigation measures without more specific, detailed proposals. The costs of noise and visual earthworks defences would be integral to site engineering costs.
- 7.16.6 Proposals should be made and the costs covered by the scheme for future management of the residual land. Biodiversity planting and management with public access permitted to the area as informal open space are considered to be beneficial in this green wedge context.

8 Air Quality

- 8.1 Precision air quality monitoring and modelling have been used within Leicester since 1994 to build up a picture of air quality across the city. As part of a detailed Review & Assessment of air quality carried out during 2000, areas of the City were identified that were unlikely to meet statutory air quality objectives for nitrogen dioxide by 2005. The air quality objectives are health-based standards.
- 8.2 Work is currently underway to complete a further assessment of air quality, and this report will shortly be submitted to DEFRA. This work has confirmed that the objectives for nitrogen dioxide are very unlikely to be met within the timeframe of 2005; the Council has a statutory responsibility to take appropriate actions to make progress towards achieving these air quality objectives.
- 8.3 The key pollutant of concern is nitrogen dioxide (NO₂) the major source of which is road traffic.

8.4 Air Quality Management Area

- 8.4.1 Based on these findings, the Air Quality Management Area (AQMA) was declared in December 2000. The geographical area of the AQMA comprises the inner ring road and all major arterial routes into the City, including the A426 Aylestone Road. The boundary of the AQMA lies 10m from the carriageway of the roads, since pollution levels fall off dramatically with distance from the source.

8.4.2 The proposed P&R sites 29 and 33 both lie adjacent to the identified AQMA. Similarly residential properties on Buckingham Drive, Highgrove Crescent, Conaglen Rd and Franklyn Road are also located outside the AQMA, as they are more than 10m from Aylestone Road.

8.5 Air Quality Action Plan

8.5.1 Having identified an AQMA, the Council has a duty to formulate an action plan to address air quality exceedances, and to implement a timescale for actions to be taken. The key priority of the action plan is to achieve improvements in air quality within the AQMA, so that the statutory air quality objectives may be met by the compliance dates, and ultimately the AQMA can be revoked.

8.5.2 The main source of pollution affecting ambient air quality is road traffic, and therefore actions need to be targeted at reducing traffic flows, reducing congestion and encouraging the use of public transport. These objectives correspond with priorities within the Local Transport Plan.

8.5.3 The LWTS scheme would form a central part of the Action Plan that is currently being formulated. The predicted reductions in traffic flows into the City Centre, and additional benefits for air quality as a result of reduced congestion, will achieve an improvement in air quality along radial routes, resulting in a reduction in the size of the AQMA in the City Centre.

8.6 Park and Ride Proposal

8.6.1 A Park and Ride scheme would have an overall positive effect on air quality within the AQMA by reducing car journeys into the City Centre. This would improve air quality along the corridor where the site was located, as well as within the City Centre. The maximum benefit would be seen at peak hour morning and evening times, with reduced congestion and smoother traffic flows leading to reduced vehicle exhaust emissions.

8.7 Assessment of Impact of LWTS including site 29

8.7.1 Air quality modelling has been undertaken by Pollution Control Group to assess the impact of the LWTS package including the proposed site 29. This proposal includes a new link road to be constructed between Soar Valley Way and Lutterworth Road. The impact of traffic flows along this new link as well as the impact of the vehicles using the car park and 'cold start' emissions were considered within the modelling study. The results of this study are detailed in assessment report from the consultants. The conclusions of the study:

- This scheme would have a small improvement in air quality at some locations within the AQMA at the receptor points that were selected. This would be seen as a reduction in peak levels of nitrogen dioxide that were measured.
- Further benefits would be seen in reduced emissions from traffic as congestion was reduced and in conjunction with other corridor improvements.
- There would be a small negative impact on air quality at the closest sensitive receptors to the site, however this would not be sufficient for the air quality objectives to be exceeded.

8.8 Site 33

8.8.1 This proposed site also lies outside of the AQMA, and is situated on the western side of Soar Valley Way. At this stage a detailed assessment of air quality impact associated with site 33 have not been undertaken due to time constraints. However the key issues are very similar to those affecting site 29, and therefore conclusions on likely impacts for site 33 can be considered in relation to site 29. For ease these are presented in the following table.

Factor	Impact	Site29	Site 33
1. Proximity of P&R site to residential properties	Cold start emissions from car park	<p>Closest properties on Conaglen Road and Franklyn Road are within a short distance of site boundary: less than 20m.</p> <p>Negative impact seen at some locations, however no exceedances of air quality objective predicted as a result of scheme.</p>	<p>Properties on Gilmorton Avenue are approximately 70m from site boundary. Increased distance from the site means there will be a reduced impact at residential property.</p> <p>Cold start emissions very unlikely to have significant impact at residential properties because of distance. Risk of exceedances of air quality objective is very low.</p>
2. Proximity to new link road	Emissions from road traffic on link road	Closest properties on Buckingham Drive. Design and bunding may be used to provide barrier to	Proposal for link road remains the same. If site 29 were to then go for housing development this

		<p>reduce impact of noise and air quality.</p> <p>Small negative impact seen at some locations, however no exceedances of air quality objective as a result of scheme.</p>	<p>would also result in a small increase in traffic flows.</p> <p>Similar impact expected for this scheme, but detailed modelling required.</p>
3. Site capacity	Reduced car journeys	Size of site is limited by proximity of nearby housing.	<p>Larger site which allows for future expansion if demand increases.</p> <p>Additional features such as cycle parking and hire possible. Integration with cycle route into city via Great Central Way which also encourages motorists to cycle rather than use bus.</p> <p>Larger site would allow a greater reduction in car journeys into the city. This would provide a greater improvement in air quality along this corridor, as well as in the city centre.</p>
4. Site design	Circulation of vehicles on site to reduce unnecessary vehicle movements.	<p>Shape of site allows good visibility of spaces available for motorist</p> <p>Closer to residential properties so more risk of an impact from emissions.</p> <p>Nevertheless modelling shows no exceedances of air</p>	<p>Shape and layout of site allows greater visibility of spaces, encouraging spaces furthest from the residential to be filled first.</p> <p>Reduced emissions as a result of vehicle movements on the site. Distance from</p>

		quality objective as a result of scheme	housing means less risk of impact.
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8.9 Summary

- 8.9.1 Site 33 has benefits over site 29 and is preferable, in terms of air quality impact. This is mainly due to the increased distance from sensitive residential properties, so there is less risk of a negative air quality impact to these properties.
- 8.9.2 Other Environmental Issues - Impacts such as noise and dust during construction and operation of the site have been considered within the Enviros Environmental Impact Appraisal reports.

9 Environmental and Traffic Impact Analysis

- 9.1 A Traffic Impact assessment has been undertaken by the Consultants MVA. This is located in Appendix A.
- 9.2 An Environmental Appraisal was also undertaken by the Consultants Enviros for site 33. A copy of this is available for inspection.
- 9.3 Both MVA and Enviros undertook the Traffic and Environmental Impact Assessments for the original proposal, and as such have used the same evaluation framework. It must be stated however that these appraisals were completed in a restricted timescale, and if site 33 is to be taken forward, further appraisal is required.

10 Technical and Economical Appraisal

- 10.1 This section outlines the results of the modelling of the Leicester West Transport (LWT) Scheme with an alternative site to that previously promoted in the Aylestone area.
- 10.2 The output from the modelling is presented together with a comparison with the output from the previous site 29 location. The other two sites on the A6 at Birstall, and the A50 at Glenfield are constant in both scenarios.

10.3 Modelling Issues

- 10.3.1 The Greater Leicester Transport Model used for this modelling work is a strategic level model, designed for looking at traffic over the whole area of Greater Leicester, and was not intended to be used to differentiate between two such similar traffic schemes. It is a TRIPS link-based model and as such does not model junctions in any great detail. While the speed flow curves on links include junction delay at the end of the link, and there

is some allowance for junction delay in turn penalties applied, these cannot be used to accurately reflect future changes in junction delays. Therefore, changes in junction layout are difficult to model accurately.

10.3.2 It is also worth noting that modelling as a whole is looking to reproduce reality within 10% (for a successful model). Variations in the modelling output of this magnitude are not necessarily significant when comparing two separate schemes and may reflect more on how the model has been constructed than the relative merits of each scheme.

10.3.3 Site 33 Patronage

Table 3.1 shows patronage figures for Site 33 as well as those for site 29.

Site	2006 patronage (am peak hour)	2011 patronage (am peak hour)
Site 33	553	560
Site 29	557	560

Table 3.1 AM Peak Hour Patronage by Site

10.3.4 There is no significant difference in patronage between the two sites. This is to be expected as site 33 is accessed from a point around 300m west of site 29. The differences in access cannot be fully represented in the TRIPS model for the reasons discussed above, and so patronage levels predicted by the model are not significantly different.

10.4 Site 33 Benefits and Costs

10.4.1 With the similar patronage levels it would be expected that benefits would be broadly similar also. The benefits over the thirty year appraisal period as output by the DfT's Transport User Benefit Appraisal (TUBA) are summarised in table 4.1.

Scenario	Car user benefits	Bus user benefits	Freight user benefits	Bus Revenue	Parking Revenue	Total
With Site 33	86.279	35.319	11.278	38.190	-42.098	128.968
With Site 29	85.032	34.177	10.645	37.500	-41.938	125.416

Table 4.1 Summary of Benefits with Different Sites

10.4.2 The benefits shown in the table are those for the LWT scheme as a whole, including the other two sites at Birstall and Glenfield. However, from previous analysis, it is known that the vast majority of benefits occur due to the Aylestone site (at either site 29 or site 33).

10.4.3 On first inspection site 33 appears to produce a better economic result than site 29, but with the modelling issues raised in section 2 above, the

differences are not significant. The limitations of the model and the thirty year appraisal period mean that any slight noise (or variation for reasons other than network/matrix changes) within the model will be magnified at the overall benefits level.

10.5 Other Factors

10.5.1 New construction and operating costs for site 33 have not yet been produced, however it is expected that development costs are likely to increase. It is likely that the operating costs of buses will increase marginally due to the slightly increased route distance and two additional junctions from the site to the City Centre increasing overall journey time.

10.5.2 There are a number of other “soft” factors that would have to be examined to differentiate between the sites. These are things such as driver behaviour (whether a site inside the ring road is psychologically a more attractive site), detailed access arrangements, turning movements and delay. Additionally there are local policy considerations, land acquisition issues, and environmental issues which may be important for differentiating between the two sites.

10.6 Summary

10.6.1 The potential for a new P&R scheme on site 33 has been assessed, and the model and economic outputs compared to those previously prepared for a site 29 scheme. Due to the close proximity of the two sites, and the similarities between them, the strategic model is not able to differentiate accurately between the two proposals.

10.6.2 The development costs are expected to be higher at site 33 than site 29. The site evaluation study produced by ourselves in 2002 identified site 33 as having more planning and environmental issues than site 29 which we re-iterate.

10.6.3 In the light of the modelling output, and the above assessment, it is likely that “softer” issues, beyond simple scheme economics, are likely to be more important in choosing between the two identified potential P&R sites.

11 Conclusions

11.1 Detailed assessment and appraisals have been undertaken for site 29 as part of the original proposal. The recommendation that site 29 is the most appropriate site for LWTS within the framework existing at this time remains.

- 11.2 If those frameworks are changed, in particular the planning policy on Green wedge, and suitable alterations to the allocation for site 29, then both sites 27 and 33 are potential sites.
- 11.3 Early on in the evaluation of these alternative sites, it was agreed by officers that of these two sites, 27 and 33, site 33 would have less of an overall impact across the evaluation framework. As a result there has not been an in depth analysis of site 27, and work and resources have concentrated on site 33.
- 11.4 The conclusions from this evaluation study show that site 33 can be taken forward for further detailed design, analysis and appraisal. The success of the outcome of developing site 33 is dependant upon decisions regarding the current planning policies in the Deposit Replacement City of Leicester Local Plan.
- 11.5 A requirement of the successful development of site 33 is the retention of the link road through site 29 in order to alleviate traffic problems at the Soar Valley Way/Lutterworth Road junctions. Further analysis of the Middleton Street/Lutterworth Road junction is also required.
- 11.6 Appraisals undertaken so far regarding site 33 shows that there are no major negative traffic or environmental issues.
- 11.7 A summary of the key policy areas between sites 29 and 33 is contained in Appendix B.

12 Recommendations

- 12.1 From this evaluation study, it is recommended that:
- I. Within existing frameworks, site 29 remains the most appropriate site.
 - II. Subject to a change in frameworks, site 33 is taken forward for further detailed analysis and appraisal.
 - III. The link road is retained through site 29 to enable site 33 to operate successfully.
 - IV. Subject to II and III above, a localised consultation exercise is undertaken in late 2003 on the site 33 proposal.

13 Proposed Work Programme

- 13.1 There are two possible work programmes depending on which site is to be taken forward. These are
- Site 29

- Site 33

- 13.2 If site 29 is to be taken forward, then it is proposed that officers continue to review the technical and financial appraisal of the scheme, with a view of submitting a proposal to both the City and County Cabinets in March/April 2004.
- 13.3 If the alternative Site 33 is to be taken forward, this would require further consultation and detailed technical assessments and appraisals. A timetable of the work to be undertaken is set out below.
- 13.4 Details of when findings of the consultation and final bid proposal are to be reported to the Highways & Transportation Scrutiny Committee and Cabinet are currently being developed. This is because of the need to co-ordinate the reporting of the proposal with the programme of the Local Plan Inquiry in early 2004.

Activity	Date
H&T Scrutiny Committee	29 th October 2003
Cabinet	24 November 2003
Consultation	December 2003 – January 2004
Technical analysis	October 2003 - February 2004
Formal Submission to DfT	31 st July 2004

FINANCIAL, LEGAL AND OTHER IMPLICATIONS

14 Financial Implications

- 14.1 Funding for Major Scheme proposals are ring-fenced, outside the Single Capital Pot introduced in 2003/03. Under the existing local government financing system, central government funding will comprise a split of 50% grant and 50% credit approvals over the life of the scheme.
- 14.2 However, Supplementary Credit Approvals (SCA's) will be the only form of credit approval available. For the 50% grant allocation, public transport schemes will receive Section 56 grant.
- 14.3 All expenditure incurred as part of the preparation of the LWTS proposal is from the block capital allocation from the Local Transport Plan.
- 14.4 Legal advice is being taken regarding the development of the scheme. This will become more significant as the scheme progresses and contracts are drawn up and let.

- 14.5 A financial assessment of the scheme including the economic appraisal will be presented to Cabinet in the future.
- 14.6 Detailed costings of the scheme are still being developed, and will be subject to a process of rigorous testing and challenge prior to the subsequent report. Members are asked to note, however, that the revenue implications of the scheme are not capable of being established with certainty given that they are based on estimates of patronage.
- 14.7 It is presently assumed that all costs of the scheme are capable of being bid for – this will be tested further as apart of the subsequent report.
- 14.8 A key outstanding task is to negotiate with the County a methodology for attributing elements of cost and income attributable to each party, and for sharing any residual surplus. It is proposed that such negotiation takes place on the basis that the benefit of the scheme is of equal value to the City and County residents. The key reasons for this are:
- a. There is no simple way to quantify the benefits accruing separately to the city and county areas but it is clear that they are of similar magnitude. Almost all users of the scheme will be county residents who will benefit from a more convenient way of reaching central Leicester. On the other hand, most of the benefit from reduced traffic on radial roads will accrue to City residents living nearby, and the benefits to the central Leicester economy will likewise benefit the city.
 - b. The scheme is a full partnership between the two councils.
- 14.9 A final recommendation will be made in the report being presented in Spring 2003. The splitting of revenue and capital funding, as well as other aspects of managing the development and running of the scheme, will need to be specified in a formal agreement between the two Councils in due course.
- 14.10 The financial assessment of the scheme is being undertaken in close consultation with the Chief Financial Officer.
- 14.11 A Quantified Risk Analysis (QRA) is being undertaken to identify unresolved costs and ensure that all aspects of the scheme are suitably managed and financially assessed.

Kate McGee, Head of Finance, E, R, & D

15 Legal Implications

- 15.1 There are no direct legal implications arising out of this report.

16 Other Implications

OTHER IMPLICATIONS	YES/NO	Paragraph References With Supporting information
Equal Opportunities	No	
Policy	Yes	Section 4
Sustainable and Environmental	Yes	Sections 4, 7, 9
Crime and Disorder	No	
Human Rights Act	No	
Elderly / People on Low income	No	

17 Background Papers

- 17.1 DfT Appraisal of Major Local Transport Schemes: Detailed Guidance May 2002
- 17.2 Leicester Park & Ride Site Evaluation: MVA May 2002
- 17.3 Leicester West Park & Ride Consultation: MVA March 2003
- 17.4 DfT Appraisal of Major Local Transport Schemes: Detailed Guidance, April 2003

18 Details of Research & Consultation

- 18.1 Meeting of City and County Members, 27th November 2001.
- 18.2 Meeting of City and County Leaders and Chief Executives, 17th January 2002.
- 18.3 Leaders Briefing, 4th March 2002
- 18.4 Directors' Board, 9th April 2002.
- 18.5 Meeting of City and County Leaders and Chief Executives, 30th May 2002.
- 18.6 DfT meeting, 20th June 2002
- 18.7 Directors Board, 24th September 2002
- 18.8 H&T Members Working Group, 1st October 2002
- 18.9 Leaders' Briefing, 7th October 2002
- 18.10 Cabinet, 7th November 2002
- 18.11 H&T Scrutiny Committee, 11th November 2002
- 18.12 Public Consultation December 2002 – January 2003
- 18.13 DfT meeting, 19th February 2003
- 18.14 H&T Members Working Group, 25th February 2003
- 18.15 H&T Scrutiny Committee, 17th March 2003
- 18.16 Directors' Board, 18th March 2003
- 18.17 Leader's Briefing, 31st March 2003
- 18.18 Directors' Board, 8th April 2003
- 18.19 Cabinet, 22nd April 2003

- 18.20 Cabinet, 16th June 2003
- 18.21 H&T Scrutiny Committee 14th July 2003
- 18.22 Cabinet 21st July 2003
- 18.23 Enviro Aylestone (29) EIA, September 2003
- 18.24 MVA Draft Site 29 Transport Assessment, September 2003
- 18.25 Enviro Site 33 EIA, September 2003
- 18.26 Highways & Transportation Scrutiny Committee, 29th October 2003

19 Report Author

- 19.1 Eddie Tyrer, Team Leader - Special Projects, Highways and Transportation Division, Ext 7272

Transport Assessment for Site 33

1 Introduction

- 1.1 As part of the LWT Scheme, MVA are preparing Transport Assessments (TA's) for the two proposed Park and Ride (P&R) sites at Glenfield and Aylestone. The originally proposed site at Aylestone was site 29, a site to the north of the A563 Soar Valley Way for which a TA has been prepared. It is now proposed to consider a site known as site 33, also in Aylestone, located to the south of the A563 Soar Valley Way on a portion of land bordered by the Great central Way and Grand Union Canal.
- 1.2 The newly proposed site (site 33) is very close to the previously proposed site and so many points of the TA will be identical. This note has been prepared to draw out the points where the newly proposed site 33 differs from site 29 for which a TA has previously been prepared. This note will make reference to the site 29 TA where appropriate and should be read together with this document.
- 1.3 The major differences to be covered in this note are:
- Location;
 - Local Plan Policy;
 - Proposed Development;
 - Traffic Assignment;
 - Highway Impact; and
 - Conclusions and Recommendations.

2 Location

- 2.1 The proposed site is located to the south of the A563 Soar Valley Way, approximately 600m west of the A463/A426 junction. The site is located on land bordered by the A563 to the north, the Great Central Way to the east, and the Grand Union Canal to the west.
- 2.2 The site is a little further from the City Centre than site 29, at approximately 5km, and smaller at 4 hectares.

- The proposals for site 33 include the link road outlined in the site 29 assessment from the A426 to A563.

3 Local Plan Policy

- 3.1 The area is covered by the same Structure Plan, Local Plan, and Local Transport Plan as site 29. However, the proposed site 33 is located in Green Wedge land where site 29 is not. There are special policies relating to Green Wedge land in the Leicester City Local Plan 2nd Deposit Copy. The policies are GE06, GE07, and GE08 and are reproduced below:

GE06. PROTECTION OF GREEN WEDGES

Planning permission will not be granted for development which would:

- a) affect the predominantly open and undeveloped character of a green wedge; or*
- b) reduce the physical separation between existing settlements; or*
- c) prejudice agricultural and forestry operations; or*
- d) impair recreational and leisure access to and within green wedges; or*
- e) reduce the amenity value of land in a green wedge through the introduction of, or increase in, noise, traffic, pollution from light or other emissions, or any other nuisance*

GE07. UNACCEPTABLE LAND USES IN GREEN WEDGES

Subject to the provisions of GE06, the following uses will not be acceptable in Green Wedges:

- a) housing;*
- b) industry;*
- c) warehousing;*
- d) retail and commercial;*
- e) leisure complexes;*
- f) offices;*
- g) parking (other than well landscaped parking associated with existing or proposed open space uses);*
- h) hospitals;*
- i) educational establishments;*
- j) any structure over 5 metres in height; and*
- k) open storage of any materials or items.*

GE08. ACCEPTABLE LAND USES IN GREEN WEDGES

The following uses will be considered acceptable in Green Wedges, subject to the provisions of GE06 and provided that the operational requirements of any development does not harm the character of the Green Wedge:

- a) golf courses;*
- b) sports pitches;*
- c) nature and other open recreational areas;*
- d) burial grounds;*
- e) agriculture;*
- f) horticulture;*
- g) allotments;*
- h) forestry; and*
- i) footpaths, cycleways and bridleways.*

3.2 A further section discusses the detail of P&R within Green Wedge in the Leicester City Local Plan area. In terms of park and ride facilities within Green Wedges the City Council has agreed to the wording of Structure Plan Strategy Policy 6 which allows for park and ride facilities within Green Wedges if there are no suitable sites outside a Green wedge available. The City Council however does not consider this to be the favoured option within the City boundaries due to the scarcity of land and the lack of an appropriate site and therefore has not included it within the City policy.

3.3 Both site 33 and site 29 are in the Riverside Special Policy Area, the policy implications of which are outlined in the site 29 TA.

4 Proposed Development

4.1 The proposed development is essentially of the same type, bus –based P&R site, but with a different layout and a slightly reduced capacity. The site will contain 1000 spaces compared with 1142 for site 29.

- 4.2 Both bus and car access to the site is provided via a signalised junction with the A563 Soar Valley Way, located approximately 250m west of the southwestern end of the proposed new A563-A426 link road.
- 4.3 The bus entry and exit arrangements are via a segregated loop. The loop is not as clearly segregated as for site 29, and there is more potential for conflict around the entry/exit area. The arrangement at the exit for buses may prove problematic as buses exiting the site will then be in the wrong lane to turn left from Soar Valley Way into the new link road unless they had priority and were signalled separately. This would have capacity consequences for the junction of the P&R access with the A563 and may prove difficult to signal clearly.
- 4.4 The site 33 design has more queuing capacity internally than the site 29 design due to the long access road present. The layout also allows a more centrally located bus stop and a more regularly structured internal road layout.
- 4.5 The differences between the internal site layouts are largely a matter of design constrained by the limitations of the site boundary and access point location.

5 Traffic Assignment

- 5.1 The TRIPS model used to predict patronage is a strategic link-based model and so is not detailed enough to pick up the differences of shifting the site by some 300m. This leads to patronage predictions and trip distribution being identical for site 29 and site 33. The same assumptions were made for modal switch from Public Transport and for diversions of existing car trips to the site.
- 5.2 However, the routes that vehicles will take to access the P&R site will alter as the site is now in a different location.

6 Highway Impact

- 6.1 The critical junctions and links are the same as those identified for site 29:
- A563/A426 Signalised junction;
 - A426/Middleton Street/Wigston Lane junction;
 - A563 both sides of the A426 junction;
 - A426 both sides of the A563 junction; and

- Great Central Way footpath and cycleway.

- 6.2 Analysis was carried out in the same way, using a TRANSYT model supplied by Leicester City Council. The model flows were altered to reflect the changes produced by the different assumptions in trip distribution used to the initial Leicester City Council model. The analysis was again carried out for morning and evening peak hours. The results from the TRANSYT analyses are summarised in table 6.1, indicating degrees of saturation at stoplines in the network both with and without the P&R-generated traffic. As for site 29, the A426/Middleton Street/Wigston Lane junction has been omitted from the results table as this junction is relatively remote from the site and is currently heavily over-saturated at peak times.
- 6.3 The original TRANSYT model from Leicester City Council had a very short link length at the A563/A426 junction for right turning traffic from the A426 south. It was necessary to lengthen this link to produce traffic flows through the junction and into the network and so produce results comparable with those for site 29. However, this means that the southern approach of the A426 to this junction is in effect now operating with an extra lane in the site 33 scenario compared to that in the site 29 case. The “without” P&R traffic figures also include the extra lane and so are not consistent with the site 29 figures as might be expected.

Link	AM Peak 2006	2011	PM Peak 2006	2011
Link Road Junction (South)				
A563 Eastbound	69% (71)	73% (74)	76% (76)	78% (79)
A563 Westbound	52% (50)	54% (49)	35% (38)	36% (39)
Link Road Southbound	76% (61)	78% (63)	68% (48)	77% (51)
Link Road Junction (North)				
A426 Northbound	54% (55)	59% (61)	48% (44)	52% (47)
A426 Southbound	44% (45)	44% (45)	38% (35)	38% (35)
Link Road Eastbound	77% (75)	80% (76)	74% (63)	75% (66)
P&R Access				
P&R OUT	4% (N/A)	5% (N/A)	82% (N/A)	86% (N/A)
A563 Eastbound	77% (N/A)	77% (N/A)	72% (N/A)	76% (N/A)
A563 Westbound	69% (N/A)	74% (N/A)	56% (N/A)	58% (N/A)
A563/A426				
A563 Eastbound	71% (71)	77% (76)	85% (83)	90% (88)
A563 Westbound	67% (61)	72% (65)	56% (57)	59% (61)
A426 Northbound	81% (81)	83% (83)	85% (81)	86% (82)
A426 Southbound	96% (93)	95% (92)	114% (99)	122% (105)

Table 6.1 Degrees of Saturation at Signals with Development Traffic (without)

- 6.4 The TRANSYT output shows that, as with site 29, the link road is operating within capacity during both morning and evening peak hours. The P&R exit is approaching capacity by 2011 in the evening peak.
- 6.5 Even with the additional lane modelled in TRANSYT, the A563/A426 junction remains over capacity. As with site 29, if the P&R were constructed at site 33, the turning proportions at the A563/A426 junction will alter significantly, and subsequently a more detailed junction assessment would be necessary to examine ways of accommodating the projected turning flows.
- 6.6 The impacts on other links and junctions are broadly similar to those from site 29, as the assignment for the P&R traffic is identical further from the potential site than the above four junctions.

7 Conclusions and Recommendations

- 7.1 The conclusions and recommendations will be presented in full for site 33, even when they duplicate those for site 29.
Conclusions
- 7.2 The proposed P&R site is expected to generate traffic flows entering the site in the morning peak hour of around 430 cars (compared to 500 from City Council figures), and leaving the site in the evening peak hour of around 320 cars. These flows can be accommodated at the immediate access junction with the A563 Soar Valley Way, subject to arrangements at the site access point allowing bus and car movement simultaneously.
- 7.3 There will be more traffic passing through the A563/A426 junction, a junction that is already congested at peak times. As before the increases are of the order of 3-6% in the peak hours. Even with the extra lane modelled for left turning traffic from the southern approach of the A426, there are capacity problems at this junction due to the increase in traffic from both east and west.
- 7.4 The A426/Wigston Lane/Middleton Street junction is heavily congested at present. The effect of the P&R site should reduce this somewhat along the north-south A426, although any reduction in congestion may be short-lived due to traffic re-assignment effects.
- 7.5 Traffic on the A426 and A563 to the south, west and east of the proposed site will increase. These increases are expected to be in the range 2-6% of existing traffic flows, which is negligible on a network basis but may exacerbate local capacity issues at the A563/A426 junction.
- 7.6 The presentation of the scheme, both P&R site and link road together as part of LWTS, may prove more difficult as the link road is remote from the

P&R site in the case of site 33. The link road is not a necessary part of the P&R site development and so may prove difficult to present as an intrinsic part of the scheme.

8 Recommendations

- 8.1 This assessment has been prepared partly as a review of the proposed scheme and partly as an assessment of the proposals. The assessment process has been used to both quantify the impact of the proposed development on the neighbouring road network, and as an opportunity to review the design proposals in the light of the assessment criteria.
- 8.2 The preparation of a comprehensive transport assessment would initially require the removal of comments on possible design improvements, but it was decided that it would be useful to include these at this stage.
- 8.3 A further more robust and comprehensive transport assessment would require:
 - I. Internal layout and access details to be more clearly defined;
 - II. Up to date traffic surveys for neutral months, with all major links covered;
 - III. Analysis of situation on Saturdays, especially during peak seasons;
 - IV. Further analysis of options for the A563/A426 and A426/Wigston Lane/Middleton Street junctions; and
 - V. Further consultation with Leicester City Council regarding these two junctions and the congestion that is currently present.

9 Traffic Impact Assessment Comparison of Sites

Table 9.1 below summarises the comparison of the two sites.

Criteria	Site 29	Site 33	Notes
Local Plan Policy	In Riverside Special Policy Area	In Riverside Special Policy Area and Green Wedge	Site 29 has fewer negative policy implications
Highway Impact	A563/A426 junction becomes increasingly over-saturated. Two new signalised junctions and one priority junction	A563/A426 junction becomes increasingly over-saturated. Three new signalised junctions	Both sites would require further analysis of options for the A563/A426 junction. Site 33 would require more junction works elsewhere.
Access Arrangements	Fully segregated utilising priority junction	Partially segregated signalised junction	Site 29 offers better segregation, site 33 offers more chance for priority. (although this is fundamentally a design issue)
Internal Layout	Longer walk distances, more spaces, dispersed queuing capacity	Shorter walk distances, less spaces. Increased and less dispersed queuing capacity	Site 33 allows more accessible facilities for interchange, and better layout. (although this is fundamentally a design issue)
Link road	Required to access site	Not a necessary part of site, but required for overall scheme design and junction improvements	Easier to present "site 29 and link road" as a package compared to "site 33 and link road"
Car route to P&R	Some "doubling back" required for traffic from south and east.	No doubling back required. Further from A426, nearer to A5460.	Site 33 has easier routes to the site involving the same number or fewer turns.
P&R Bus Route to city centre	Shorter route to city centre	Longer route to city centre utilising two additional junctions	Site 29 offers quicker route to city centre

Summary Analysis of Sites 29 and 33

Issue	Site 29 (Aylestone)	Site 33 (South of Soar Valley Way)
Planning Policy	<p>Policy in the current adopted CLLP</p> <ul style="list-style-type: none"> • 4.3 hectares of residential development • A highway reservation for the A426 Glen Parva Bypass which had planning consent and was programmed to start in 1996/97. After achieving Unitary status the City Council as Highway Authority agreed that the scheme would not be implemented. <p>The Deposit RCLLP allocated the land for park and Ride with a reduced area for housing. However the proposal in the second Deposit Replacement City of Leicester Local Plan (RCLLP), which is also being presented to Cabinet, proposes the site allocation as being:</p> <ul style="list-style-type: none"> • A P&R site • Within a Biodiversity Enhancement Area (BES) on land to the west of the site. Policy GE03 of RCLLP states that development will be permitted in a BES if the nature conservation value is maintained or enhanced. Opportunities will be sought through the planning process to enhance the biodiversity of the site, of adjacent sites or of the green network to which it relates. • Remaining within the Riverside Policy Area where provision of SPA 13 apply. This policy states that development will not be permitted which detracts from 	<p>The whole site is within a Green Wedge and is shown on the Deposit Replacement Local Plan (RCLLP) within the Riverside Policy area. It is all a Biodiversity Enhancement site apart from the Great Central Way, which is a SINC.</p> <p>East of Great Central Way the site is public open space including a play area, adjoining well used allotments. The adopted Local Plan shows the site dissected diagonally by the line of the proposed Glen Parva Bypass, now abandoned.</p> <p>West of Great Central Way the land is agricultural, with public access. The Deposit Replacement Local Plan does not show the land within the Floodplain.</p> <p><u>Green Wedge</u></p> <ul style="list-style-type: none"> • The Deposit Replacement Structure Plan allows for park and ride facilities in Green Wedges, if no suitable site outside a Green Wedge is available and if appropriate measures are taken to minimise severance and adverse effects on the amenity of the Green Wedge. • However the RCLLP policy on Green Wedges in the City does not allow for park & ride sites to be developed. • The proposal would be clearly visible. It would include floodlighting. It would have an adverse effect on the amenity of Great Central Way. There would be noise and pollution from the increased traffic; all contrary to RCLLP policy. • The reference to park & ride was omitted because there did not appear to be any suitable site in a Green Wedge

	<p>the quality of the Riverside environment. It includes a range of criteria to be taken into account in the consideration of any development proposal.</p> <p>The policies in the RCLLP, relating to the P&R allocation, which have been agreed by full Council, are summarised as:</p> <ul style="list-style-type: none"> • AM06 sets out the criteria for identifying and assessing P&R sites as well as safeguarding the site in Aylestone. • AM04 identifies the routes where bus priority measures will be implemented and safeguards them from development that would prejudice implementation. This includes the A426. • AM23 safeguards transport schemes and highway improvement lines, including the Soar Valley Way/Lutterworth Road link. The schedule in Appendix 03 of the RCLLP states that this link may be required in connection with P&R and residential development. 	<p>in the city where it could meet the environmental criteria for development.</p> <ul style="list-style-type: none"> • The second deposit RCLLP includes an explanation for the omission. • While the RCLLP retains the P&R allocation it will be difficult to argue that there is no alternative site available. • Green Wedges provide a strategic open space and leisure resource, allowing for access to the countryside from the inner city. The towpath and other paths in this area provide a recreational facility for the whole city. • (if the land west of GCW includes a sports ground) Any loss of public open space in sporting use would have to be referred to Sport England for their views. <p><u>Effect on Riverside.</u></p> <ul style="list-style-type: none"> • Development in the Riverside Policy Area should sustain, enhance and regenerate the environment of Riverside in accordance with the provisions of Policy SPA13 in RCLLP. • the Environment Agency are likely to raise objections • The site could provide car parking for use by visitors to Riverside
Environmental	No adverse environmental impacts on proposed development	<p>Adopted CLLP</p> <ul style="list-style-type: none"> • Loss of designated Green Wedge and open space <p>Deposit RCLLP:</p> <ul style="list-style-type: none"> • No biodiversity concerns, though a Biodiversity Enhancement Site • Subject to Riverside Policy SPA 13 • Would require comprehensive landscaping and mitigation treatments • Require to mitigate any visual intrusion from the riverside and GCW

<p>P&R Development (Architects)</p>	<p>Capacity of 1,000 cars Proposed design takes into account comments from consultation. Comprehensive landscaping. Sustainable drainage system available for site which would enhance neighbouring Landscaping and bunding will mitigate any adverse impacts of noise and visual intrusion</p>	<p>Site West of GCW</p> <ul style="list-style-type: none"> • Capacity for 1,000 cars, with expansion option • Away from residential area • Issue of proximity to canal • Drainage issues • Movement and access within the site • Scope for high capacity • Lighting issues and shielding from residential area.
<p>Highways</p>	<ul style="list-style-type: none"> • Construction of link road would allow access from SVW and Lutterworth Road. • Changes to SVW and Lutterworth Rd junction would improve performance of junction. 	<p>Two options (dependant upon location)</p> <p>Option 1: Retain Link Road</p> <ul style="list-style-type: none"> • New junction required on SVW • Improvements as recommended in original proposal at SVW and Lutterworth Rd Junction • Access – issues/location with existing bridges • 3 to 2 lane merge on SVW • Would require additional lanes (widening) at access points • Levels (Civil Eng concerns) <p>Option 2: Existing infrastructure</p> <ul style="list-style-type: none"> • Buses would need to go through existing SVW and Lutterworth Rd junction, which is over capacity • Recommending additional lanes on approach to junction (land and utility issues) <p>Access</p> <ul style="list-style-type: none"> • Right turn required on SVW. May require additional lane. <p>Recommendation – link road retained</p>

Financial Assessment	P&R development and Highways works £13.5 million	<p>Economic appraisal not significantly different from Site 29</p> <p>There are additional costs with the development of site 33, these are in the region of £750,000 for additional junctions and P&R development. These are estimates at this time.</p> <p>No costs as yet on site acquisition, but owned by City Council</p> <p>Levels need to be assessed which will impact on construction costs of both access and the P&R facility.</p> <p>Drainage issues need to be costed.</p>
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