

PROPOSAL FOR PROFESSIONAL SERVICES

TECHNICAL AND ECONOMIC ASSESSMENT OF THE PROSPECTS FOR THE RE-INTRODUCTION OF RAIL SERVICES BETWEEN BROWNHILLS AND WALSALL APPLYING 'LIGHTWEIGHT' METHODS

JPM PARRY & ASSOCIATES Ltd

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INTRODUCTION

The transport corridor that follows the route of the dismantled railway between the north end of Brownhills town and central Walsall provides a setting for an advance in suburban transport, which will be seen as having national significance. Whilst the new concept turns on its head the assumption that new fixed rail links are inevitably high in cost, the technical innovation element is no longer a source of uncertainty, having been extensively tested during a Centro-supported one-year public transport trial at Stourbridge on the short Network Rail branch line between the Junction and Town stations.

The experimental passenger service, which began in December 2005, has seen over 3,400 public services operated to date. It is now entering its eleventh month and has confirmed:

1. Capacity which meets the demands of peak passenger flows;
2. Ability to keep to schedule;
3. Achievement of 80% fuel saving compared with heavy rail;
4. Absolute acceptance by passengers, including those with special needs;
5. Service reliability at best industry standards (99%);
6. Punctuality at or above best industry standards (again 99%);
7. Very low external noise perceived by the neighbours of the line;
8. Perception of environmental impact equivalent to an electric vehicle;
9. Operating costs over 40% less than normal heavy rail.

This document responds to the request received from Cllr Barbara Cassidy, Councillor for Brownhills Ward, Walsall Metropolitan Borough Council, on 27th September 2006 inviting JPM Parry & Associates Ltd to investigate the scope of work, and then prepare a proposed practical plan of action for consideration by the Council, for the possible implementation of a lightweight suburban rail service based on the 'Stourbridge' model between Brownhills and Walsall.

In the first phase of work we will examine ways and means of establishing a lightweight suburban rail link including technical and commercial evaluation, consultation with interested parties, a review of planning and railway regulation issues, analysis of the likely impacts of the link, suggestions for public relations approaches and potential for involving local organisations in the project activities.

The outcome of the examination will inform the next phase of the work, which will investigate the issues in more detail with wider consultation, including recommendation of the most practical route into Walsall, extensions of the lightweight rail link towards Burntwood, and the park and ride potential arising from the proximity of the A5 and M6 (Toll) to the northern end of the route.

It is envisaged that these phases may constitute the start of a process of project management with the objective of developing and implementing the proposed lightweight suburban rail operation.

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1. LIGHTWEIGHT SUBURBAN RAIL – A PROVEN TECHNOLOGY

1.1 OVERVIEW

The principles behind this proposal to provide attractive, high-quality, rail-based public transport for the Brownhills-Walsall corridor have already been implemented successfully for passenger service in the West Midlands. Since December 2005, Sunday services between Stourbridge Junction and Stourbridge Town have been operated by a Parry People Movers light railcar, with support from Centro and the Strategic Rail Authority/Department for Transport and project management by JPM Parry & Associates Ltd.

The operation has also demonstrated the major benefits of lightweight rail compared to conventional trains (which currently operate services on the Stourbridge Town branch six days a week). The lightweight approach realises low operating costs, low environmental impact and low noise emissions, providing a way of providing attractive passenger transport affordably.

In environmental terms, a Parry People Movers lightweight railcar emits around one-fifth of a main line rail vehicle's carbon dioxide emissions, and one-half of a bus's. Both passengers and non-users perceive the railcars to be on a par with electric trams, because their use of propane gas for fuel and small engines (made possible by a flywheel energy storage system) result in no noticeable pollution and very low noise.

1.2 POSITION IN TRANSPORT POLICY

The concepts of lightweight rail have now been recognised by transport authorities and the transport industry. Both government and opposition transport policies, as well as passenger transport executives and other authorities, now see the benefits in providing attractive public transport with minimal impact on the environment. In the railway industry, Network Rail – the owner of the national network of rail infrastructure – has announced its intention to proceed with 'lightweighting' of trains on local routes, so that track maintenance costs are cut and the environmental damage caused by railway operation is reduced.

These developments in policy reflect the preferences of the public to use quality public transport systems. Numerous examples exist where electric tramway systems have been implemented (e.g. Manchester Metrolink, Croydon Tramlink, Midland Metro) and people have preferred using trams to their private cars. Lightweight rail technology, which does not require electrification, offers the same attractiveness for lower levels of investment, and is viable in situations where smaller passenger flows exist.

2. IMPROVED TRANSPORT FOR WALSALL METROPOLITAN BOROUGH

2.1 THE BROWNHILLS-WALSALL CORRIDOR

Transport between Brownhills and central Walsall is hampered by road congestion and by the falling attractiveness of the only public transport option - buses - compared to the private car, ownership of which has risen steadily in recent decades. It is to be noted, of course, that both of these modes use the same congested road infrastructure.

Meanwhile, the parallel but long-disused railway formation is unused, apart from a cycleway occupying part of its length, the function of which would not necessarily be compromised by the introduction of lightweight rail technology running alongside. It presents an opportunity for reducing congestion, reducing the environmental impact of transport and providing an attractive alternative to the car.

Although a recent study recommended a bus-based transit system (using part of the former railway), long-term policy remains to retain the future possibility of rail transport on the disused route, with eventual potential for reinstating the link northwards from Brownhills to Lichfield. The proposition of a lightweight railway between Brownhills and central Walsall therefore presents an opportunity to take the first step towards this significant goal and potential to bring back the rail connection many years earlier than would be possible otherwise.

2.2 BENEFITS FOR LOCAL PEOPLE AND LOCAL PLACES

The introduction of a lightweight rail link between Brownhills and central Walsall will transform travel convenience along what is today a congested commuter corridor with public transport limited to local buses. As well as bringing transport benefits, this project would enhance the attractiveness of both Walsall and Brownhills as places to visit and do business and, in the case of Brownhills, as a 'dormitory' for people working elsewhere in the West Midlands.

Modern light rail has brought huge improvements to the image of the locations where it has been implemented, and the same would be true of the Brownhills-Walsall corridor. However, the effects are real: lower road congestion; lower pollution; lower noise; lower carbon dioxide emissions; faster, more comfortable public transport on the route; and improved accessibility of public transport. By providing the setting for one of the first lightweight suburban railways, Walsall will confirm its position as an innovative and environmentally-aware public authority.

2.3 THE ROUTE TO IMPLEMENTATION

Elected members will be acutely aware of the fact that without an efficient and frequent rail-based public transport service, commuters and other frequent travellers will generally choose to use their cars rather than a road-based public transport option. The crucial issue in introducing a fixed track, rail-based solution is source funding. To cover the planning tendering and implementation of the permanent way, the access to funds run through public sector channels, including the Local Transport Plan process and the Transport Innovation Fund particularly if congestion charging is a possible factor.

However, with regard to the provision of rolling stock, measures are available or in preparation which can assist the supply of vehicles to operate the service through private sector channels. The rolling stock leasing market, which supplies trains for use on the national main line rail network, has already indicated its interest in investing in lightweight rolling stock provided its use can be guaranteed over a period of at least seven to ten years.

In addition, a new organisation is currently in the process of being created with the specific aim of making available lightweight rolling stock for the increased provision of rail-based public transport of the type proposed for the Brownhills-Walsall corridor. This organisation will be funded by investors and interested parties wishing to see this 'transport revolution' take hold, and so will be independent of the wider railway industry.

3. PROJECT MANAGEMENT WORK TO BE UNDERTAKEN DURING SCOPING PHASE

3.1 REVIEW OF PREVIOUS WORK AND BACKGROUND

The team will investigate further the potential corridor from Brownhills to Walsall and will evaluate the current situation relating to public transport services on this route. Information provided by Walsall Metropolitan Borough Council and Centro will be taken into account for the assessment, together with other background information gathered using internet and other sources. Previous information, including estimating work commissioned by Parry Associates in 2004 from Mowlem plc on the costs of installing the rail infrastructure along much of the route, will be assessed in the current context.

3.2 INVESTIGATIONS AND DEVELOPMENT OF OTHER CONTACTS AND RESOURCES

Contact will be made at this stage with:

- West Midlands Passenger Transport Authority;
- Centro;
- Network Rail;
- Department for Transport.

These consultations will explore the attitudes of the above bodies to the proposed lightweight rail link – both locally and within the wider context – and their level of support, including the potential for funding or contributions in kind. With the assistance of council officers we will undertake a wide trawl of potentially

interested and supportive organisations and prominent individuals in order to assess (a) the power of the 'constituency' which may back this proposal, (b) the scope for planning and other commercial gain from establishing a faster and more economical northern route into Walsall and (c) the 'intangibles', e.g. societal and environmental gains.

3.3 INTRODUCING A LIGHTWEIGHT SUBURBAN RAIL SYSTEM (REVIEW)

The broader aspects of installing a lightweight suburban rail service on the Brownhills-Walsall route will be fully assessed. The following aspects will be explored:

- Environmental impact;
- Integration with other transport modes;
- Changes in passenger usage from introduction of the new service;
- Capital investment requirements, including infrastructure works and depot provision;
- Operating methods and costs;
- Initial business case;
- Likely optimum eventual extent of system.

This part of the study will build on practical experience gained from the operation of a similar lightweight suburban rail service on Sundays at Stourbridge and other transport industry findings relative to the benefits and disbenefits of the various modes.

3.4 PLANNING ISSUES AND PATRONAGE DEVELOPMENT ISSUES

Initial study of planning issues will include:

- The regeneration benefits to Walsall, Brownhills, locations along the route (Rushall, Pelsall, etc.) and the surrounding area by introducing lightweight suburban rail compared to other transport modes;
- The relationship to sustainability of other developments in the area;
- The case for support from a planning perspective.

3.5 RAILWAY REGULATION ISSUES

The scoping investigation will include the requirements for acceptance and approval of the new lightweight suburban rail system, including the implications of the Railways & Other Guided Transport Systems (Safety) Regulations 2006 (ROGS) which come into force in April 2006. Where appropriate, lessons will be learned from the approval of the similar service at Stourbridge.

3.6 ANALYSIS OF IMPACTS AND BENEFITS

The likely effects of the introduction of a lightweight suburban rail service between Brownhills and central Walsall will be evaluated in a part-theoretical, part-consultative exercise covering:

- The impact on existing rail users and on the local communities;
- The potential for increasing rail use and reducing congestion;
- Planning effects on the area (as above);
- The effect on existing railway operation;
- Wider effects including its place in the national transport agenda and the view taken within the Department for Transport.

Negative effects will be reviewed and an assessment made of the desirability of proceeding with the proposal.

3.7 PUBLIC RELATIONS

As with any significant change, it will be necessary to explain and promote the benefits of the proposed lightweight suburban rail service if the initial study results are positive. Potential approaches to explaining the impact of implementation will be developed.

3.8 REPORTING

A first project management report will summarise the initial scoping exercise results and will include the following aspects based on investigations carried out during the commencing phase of the work:

- Effect on local communities, including assessment of net benefit or disbenefit;
- Impact on local congestion;
- Review of the suitability of lightweight suburban rail technology similar to that used at Stourbridge;
- Recommendations of the process for implementing a lightweight suburban rail link including vehicle type, infrastructure requirements, operational methods and approval processes;
- Indicative costings and revenues including requirement for subsidy (if any);
- Initial comments on feasibility of extensions;
- Effects on the existing railway operation for both train operators and Network Rail, and how the proposals fit with the views and aspirations of these organisations;
- Relationship with the national transport agenda including the view of the Department for Transport;
- The extent to which the findings appear to agree with the views and aspirations of Centro/WMPA;
- Draft promotional pamphlet intended to explain the proposals to the public;
- Recommendations for the work agenda to follow, including consideration of all issues involving potential conflict of interest and culminating with obtaining agreement in principle from key players, specifiers and regulators.

4. CONSIDERATION OF FURTHER WORK TO BE UNDERTAKEN

The extent and direction of further work will be reviewed in detail against the findings of the scoping exercise.

Measures proposed for accessing central Walsall will need to be specified, costed and the means for funding them assessed. This also applies to extensions of the lightweight suburban rail system to serve other areas beyond the basic Brownhills-Walsall route. A full description of the interaction of such a system with road traffic and pedestrians, if passing through areas accessible to the public, is likely to be required. This activity may be undertaken jointly with officers of the Council.

A wider consultation will be necessary at this stage, including (but not limited to) local residents and businesses, developers and public transport users' representatives. A stakeholders' workshop might form the basis of this wider consultation. The activity at this stage will need to become 'real' with agreements in principle sought from key organisations to contribute, collaborate or co-operate in the activities. In the case of regulatory bodies, obtaining from them indications of 'no objection' in principle will be required.

5. INDIVIDUAL SPECIALISTS TO BE ENGAGED

The work will be split between the proposed specialists as follows:

- Caspar Lucas will lead the study and draw the other participants' contributions together into the final report. His experience in rail transport will also contribute to the regulations and approvals aspects;
- John Parry will provide strategic direction based on his special understanding of transport and environment issues, and experience in the introduction of innovation to the public transport and other fields. He will make senior level contacts and chair meetings with key players;
- Major (Rtd) 'Kit' Holden will provide expert advice relating to safety, legal, engineering and approvals aspects of the proposed lightweight rail system;
- Phil Evans will contribute to the financial and operational assessments of the proposed rail system, including potential revenue generation, cost profiles and requirement (if any) for subsidy;
- Geoff Lusher will provide input to the assessments of rail system implementation, service introduction and operation, including training requirements;

- Professor Alan Wenban-Smith will provide planning advice and a commentary on the potential impacts of the proposed transport system on the wider communities in the vicinity.

CV summaries of the above team members are included in Attachment 1. Brief information on JPM Parry & Associates Ltd, including descriptions of previous project management work undertaken, is included in Attachment 2.

6. TIMESCALES

Work on the study may commence at the start of November 2006 (depending on instruction from Walsall Metropolitan Borough Council).

A start-up meeting with Walsall Metropolitan Borough Council will be held at the earliest opportunity.

It is intended to complete site visits and meetings with stakeholders (limited to those identified above for primary consultation) by early December 2006.

A further meeting with Walsall Metropolitan Borough Council will be held by mid-January 2007 to discuss the draft report.

The scoping report will be delivered to Walsall Metropolitan Borough Council by end of January 2007.

A stakeholders' workshop may be held at the start of the further phase of the work.

7. COSTS

Total cost: £27,300 (including travel, per diem expenses, office and communication costs).

Attachment 1: CV SUMMARIES

Philip R Evans, transport and finance consultant, CPFA, MCIT. Chief Executive of Pre Metro Operations Ltd (operators of lightweight rail services at Stourbridge), formerly Director of Finance, Centro (West Midlands Passenger Transport Executive). A qualified accountant who has spent over 30 years in public transport in both the public and private sectors. Actively engaged in the development, financing and implementation of public transport projects in bus, railway, tram and lightweight suburban rail modes. Specific experience in dealing with the needs of the mobility handicapped. Acted as project manager and acquired public sector grants awards to the Stourbridge service from the DTI and Centro.

Major (ret'd) CB 'Kit' Holden, OBE, transport safety consultant, BSc (Eng), FIRSE, MCIT. Formerly Assistant Chief Inspecting Officer of Railways at HM Railway Inspectorate. A director of Serco Docklands Ltd, Serco Metrolink Ltd and Parry People Movers Ltd. Appointed to Railway Safety Advisory Council (Irish Department of Transport) 2006. Whilst at HMRI, was responsible for safety assessments, leading to approval to open, of Docklands Light Railway, Manchester Metrolink, South Yorkshire Supertram and extension of Tyne & Wear Metro among other duties.

Caspar S Lucas, railway engineer and projects manager, MEng, CEng, MIMechE. Technical Services Director of JPM Parry & Associates Ltd, formerly with ALSTOM Transport and Connex South Central Ltd. A chartered mechanical engineer with experience in rail project management, engineering, operations and equipment supply. Working alongside Network Rail engineers, led work on engineering approval for operation of Parry People Movers light railcar at Stourbridge by Pre Metro Operations Ltd which included obtaining agreement of Rail Safety & Standards Board, Network Rail and HMRI.

Geoff J Lusher, transport consultant, FILT. Director of Parry People Movers Ltd and Pre Metro Operations Ltd. Formerly with Travel West Midlands (National Express Group) and, as General Manager, Travel Midland Metro, responsible for implementation and initial operation of West Midlands light rail system. Extensive management experience in bus and light rail public transport, including operating company and passenger transport executive posts.

John PM Parry, MBE, Chairman and Chief Executive of JPM Parry & Associates Ltd, BA, MICT, AMICE. Also chairman of Parry People Movers Ltd and Pre Metro Operations Ltd. An entrepreneur and businessman who has built up a reputation for innovation coupled with project management and practical engineering. Expert in application of appropriate technology practice to transport and construction in the UK and overseas. Served on the Technology Foresight Programme of the Office of Science & Technology and was Vice Chairman of its Transport Panel 1994-99 and Chair of the Clear Zones Working Group.

Professor Alan Wenban-Smith, economic and transport planner, BA, MA, MSc, MRTPI. Currently Associate/ Planning Adviser to MVA consultants. Formerly Assistant Director of Transportation of Birmingham City Council 1985-95, Chairman of Solihull & Birmingham Health Authorities 1998-2002, and adviser to Clare Short MP, Shadow Secretary of State for Transport, 1996-97. A planner with senior management and operational experience of integrated land use, transport and economic planning in both public and private sectors. Currently visiting professor in the Faculty of the Built Environment, University of Central England (UCE). Particular expertise in linking land use and transport policy to other aspects of urban and regional policy.

Attachment 2: JPM PARRY & ASSOCIATES Ltd

COMPANY OVERVIEW

JPM Parry & Associates Ltd is an engineering and technical services company founded by John Parry in 1974. Based in the Black Country of the West Midlands, the firm specialises in engineering solutions and concepts that are simple, logical, robust and affordable in their intended markets. JPM Parry & Associates Ltd is the originator of the Parry People Movers concept – it holds the intellectual property and organised the construction of the whole series of prototypes, since 1992 as subcontractor to PPM Ltd. The company has won a number of awards for its engineering designs, especially for its equipment for the manufacture of building materials, while the work on light rail has already won a Millennium Product award for PPM. JPM Parry & Associates Ltd works with a small technical services and design team, and a prototyping workshop in Cradley Heath, with support from a network of professional associates.

With whole new urban settlements, including public buildings, arising out of Parry concepts, in the 1990s the company began to look at the next great problem to solve: making the transport of people more affordable. As a result, the firm has developed the ability to provide professional services and advice on transport and urban planning, calling on the skills of highly experienced associate consultants.

EXAMPLES OF CURRENT AND PREVIOUS PROJECT MANAGEMENT & TECHNICAL SERVICES

Transport

Date	Client	Description
2006	Network Rail	Report on 'lessons learned' from project management of experimental lightweight suburban rail operation at Stourbridge, and potential for further expansion of mode
2005	Wensleydale Railway plc / North Yorkshire County Council	Preparation for demonstration operation of PPM light railcar
2003-06	Pre Metro Operations Ltd	Assistance in negotiations leading to approval obtained for lightweight suburban rail operation on Stourbridge Town branch (working alongside Network Rail engineers)
2003-04	Hampshire County Council	Rolling stock component in WS Atkins feasibility study of lightweight tram operation in Hythe (Hampshire)
2001	Government of Mauritius	Feasibility study of street tramway system in Port Louis, Mauritius, with Jacobs-Gibbs consultants
1997	Weymouth & Portland Borough Council	Feasibility study for lightweight tramway operation of Weymouth harbour tramway
1997-99	Bristol Electric Railbus Ltd	Technical support for public operation of lightweight tram service
1996-2006	Parry People Movers Ltd	Ten-year engagement as project managers during development of lightweight railcars and trams (technology and operating procedures)
1993-94	English and Welsh urban authorities	Arrangement of local authority-financed working demonstrations of light tramway technology in Birmingham, Barking, Brighton, Swansea
1993	Centro	Feasibility study of lightweight suburban rail operation of Stourbridge Town branch

Human Settlements & Education

Date	Client	Description
2003-05	Government of Malawi / UK Department for International Development	Support for education building programme, including provision of technical support, training and organisation for the establishment of ten local production centres supplying over 1,000 classrooms and associated accommodation
1993	Barclays Development Fund / Kenya Building Society	Creation of local industry based on women's co-operative enterprises providing roofing tiles for 3,000 estate houses

Transport Infrastructure

Date	Client	Description
2003-present	Eight-company industrial and service partnership	Private sector-led development of new form of shallow section modular tramway track system and 'lightweighting' techniques for platform and railway building construction