

DESIGN & DELIVERY – A PARTNERING APPROACH

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The Problem Situation

As part of a strategic planning process, transport authorities would prepare a Local Transport Plan (LTP) bid for finance over a 5 year period following the Department for Transport (DfT) Local Transport Planning process. In recent years however, there has been a change in the way in which Central Government provides funding to Local Authorities. The DfT no longer formally evaluates LTP's, LTP funds are small and diminishing, and spending cuts have led to significantly reduced 'traditional' capital budgets.

However, new Government schemes and initiatives have been introduced aimed at stimulating economic growth and providing much needed investment in the UK's infrastructure; such initiatives include Pinch point funding, Local Sustainable Transport Fund (LSTF) and Major Transport Schemes. To gain access to the funds available from each initiative, local authorities must identify potential projects that would meet the objectives of the various initiatives and submit a bid for funding.

Whilst the funding available is significant there is no guarantee that the project will meet the required objectives and the bid will be successful. This unpredictability leads to very problematic resource planning and either an unreasonably high workload for a small department if successful, or a lack of work for a large department if unsuccessful. The days of LTP's gave much greater certainty of the resource requirements for the foreseeable future; under present arrangements there is much more uncertainty and consequently a reduced head count in many departments.

To help provide some certainty to funding Nottingham City Council (NCC) has a dedicated Transport Strategy Team who are constantly investigating new revenue and capital streams and have been very successful in terms of bidding for funding from different sources; success that can be recently measured by the award of over £175M in the Government D2N2 Growth Deal scheme through their Local Enterprise Partnership (LEP) and LSTF programme. However, like many other authorities NCC have not been immune to the age of austerity; a reduction in head count and consequently salary savings to help cope with deficit mean the Road Safety & Traffic Control Team now operate at core staffing levels which are unable to cope with the number of funding bids that have been successful.

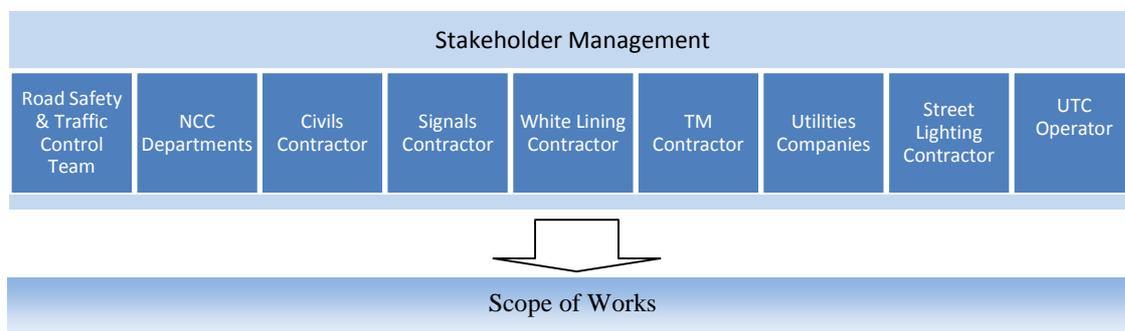
The Solution

Although capital budgets have been reduced and local authority departments operate from a core, or even skeleton staff level they often still have a responsibility to deliver much the same service; a statement particularly true of highway maintenance/traffic control departments. To ensure their commitments and responsibilities were met, NCC opted to outsource some the additional workload to external contractors

and consultants, one of which was Siemens. Siemens was in a unique position to deliver traffic signal related projects as the traffic signal maintenance contractor for NCC; the benefits included:

- An existing contractual arrangement which meant existing procurement routes were available without the need for lengthy and costly evaluation stages;
- Existing relationships and understanding could be developed to maximise outputs;
- Siemens was already familiar with NCC processes;
- Utilising Siemens' extensive in house design expertise could offer a turnkey approach taking the project from concept, through design to construction and commissioning;
- Siemens is familiar with high work load and short timescales working on over 700 design projects a year;
- Utilising Siemens' UTC/SCOOT expertise ;
- Communication channels and escalation routes are shorter;
- As the maintenance contractor, Siemens has a vested interest in ensuring the installation was fit for purpose;
- NCC involvement could be kept to a minimum, mainly centred on approvals.

Siemens was effectively seconded to NCC on a project by project basis which freed up NCC internal design staff to work on 2 major high profile projects - £570M NET Phase 2 Tram project and £18M Ring Road Major Transport Scheme. This allowed Siemens to design and manage each project as NCC, and allowed full access to all the relevant departments to gain approvals and process paperwork. Figure 1 below shows the scope of works and NCC/Siemens involvement.



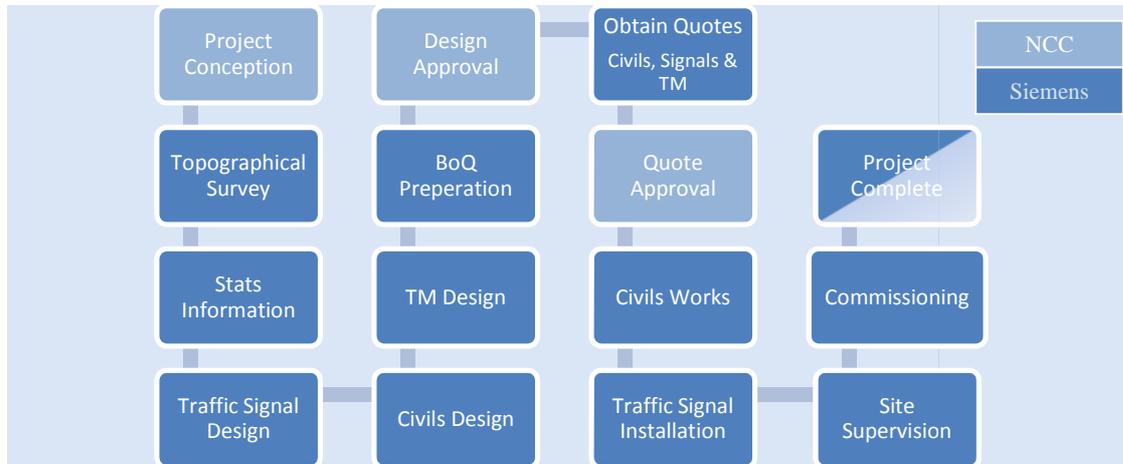


Figure 1 - Project Scope of Works

The Test Project – Dunkirk Roundabout

Background

As part of the cycle infrastructure programme to deliver on-road cycle improvements as detailed in the Cycle Action Plan, NCC identified a controlled dual crossing that was life expired on the A6005 and the installation of a new crossing on Abbey Street, either side of the A52. Minor civils works were required to realign the triangular island and upgrade from a standard pedestrian to Toucan arrangement. Liaison with the gas board was required due to the location of a gas main.



Figure 2 - Existing Site

The Project

NCC identified the project to be completed and produced a scope of works document, including project completion date. An initial meeting was set up with Siemens and all the relevant NCC teams to discuss and agree the scope of works and roles and responsibilities. Siemens then took the lead on the project ensuring NCC was kept up to date on progress.

NCC provided a topographical survey, Siemens then produced the traffic signal design, civils design, TM design and BoQ's and submitted to NCC for approval. Drawings and the BoQ's were used for the basis of obtaining quotes for the installation which were submitted to NCC for approval. To ensure the

approval process went as smoothly as possible, it was essential for Siemens to work closely with all the relevant NCC teams which involved spending a significant amount of time working from NCC offices, allowing quick/instantaneous resolution of issues.

Following design and quote approval Siemens booked road space for the construction of the site, subcontracting the TM works and civils construction, carrying out the traffic signal installation and acting as site supervisor throughout the construction and installation processes. With NCC authority, Siemens acted on their behalf to resolve issues with regards to the site works, and STATs locations.

Project Challenges

The informal secondment/partnership arrangement posed greater challenges than with a simple sub contract. Devolving responsibility for the project to Siemens meant NCC lost a lot of control, whilst Siemens took on a lot of the risk.

From NCC point of view the challenges were:

- Taking a step back from the project;
- Establishing confidence that Siemens could deliver in accordance with local standards and processes;
- Ensuring value for money is achieved – inevitably costs will be higher, but need to be controlled within limits;
- Establish good communication channels and develop good working relationships;
- Maintaining visibility of the project progress.

From Siemens point of view the challenges were:

- Project is priced to ensure it is commercially viable, but also acceptable to NCC;
- Establish efficient processes;
- Learn NCC standards and processes;
- Establish good communication channels and develop good working relationships;
- Manage internal resource to meet very tight delivery timescales (project was delivered from conception to completion and handover in 20 weeks);
- Managing the internal costs;
- Managing all the relevant stakeholders;

Figure 3 below shows the partnership fundamentals that were established between NCC and Siemens.

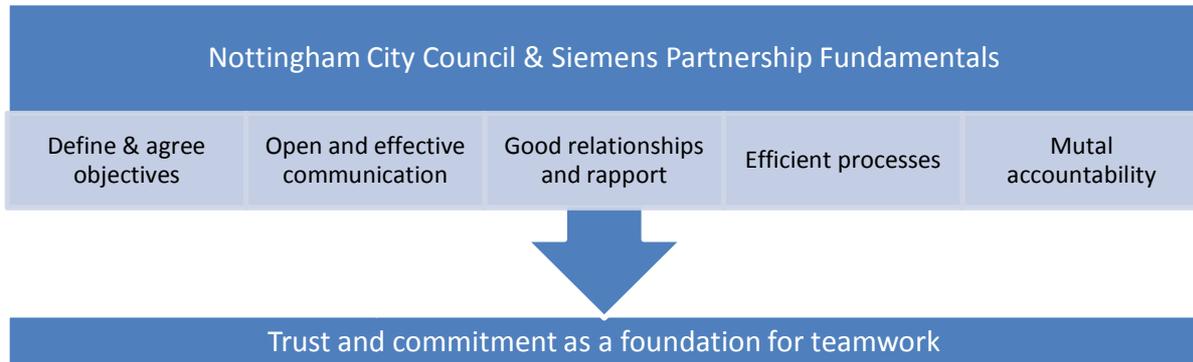


Figure 3 - Partnership Fundamentals

Project Success Factors

Finances

The Dunkirk Roundabout project was successfully completed on time and to budget. Although the overall value of the project was higher than could have been achieved if NCC had used its own internal design team, NCC recognise that value for money has been achieved through the speed at which the project was taken to completion and the DfT could easily see that the authority could meet the demands of its financial commitments and hence, be successful in further bids. The use of the Traffic Signals Maintenance and Inspection Contract to procure equipment achieved a collaborative discount saving of 6.1%.

Processes

As the traffic signal maintenance provider, Siemens knows the sites well and the idiosyncrasies that prevail. As designers, ongoing issues with the site were rectified whilst meeting the requirements of the clients work packages.

The close working relationship developed between NCC and Siemens meant few issues arose, but those that did were resolved quickly. Having the design engineer act as site supervisor ensured that the detail of the design was understood, which in turn helped resolve issues on site quickly.

Siemens engineers have entered onto NCC's project team well, showing the experience needed to integrate and deliver projects in accordance with NCC's corporate polices, practices and most importantly, specification. To this end, Siemens as the maintenance contractor can easily maintain the new installations as they have specified the parts and signals equipment fit for the job in the designs.