

York Street Road Interchange

Alternative Design proposal 10th Nov 2015

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REPLY TO URS PAPER 9TH NOVEMBER 2015

1.1

Note:

City Reparó is recently set up as a consultancy with social aims. It's work on YSI and its involvement in the SAG group convened by DRD has been, **as the authors know**, been undertaken **pro bono**. We have decided to do this as run off for earlier commitment, and for the best interests of the wider civic good.

The intension of the alternative is to offer that, alternative ideas that NI government can consider and if it deems necessary can investigate further to check its merits and feasibility in detail. But this can only logically be done dispassionately and without vested interest by other engineers and economists.

We recommend the wisdom of some independent review and trust the Inquiry will begin to develop this process. We are offering this work freely in the interest of the city and public but we would ask that our ideas are elaborated in discussion so that our detailed intent is drawn out and understood.

URS have misinterpreted numerous issues in its 10th Nov paper.

It should be noted that TNI and URS have expended some millions of pounds on the current proposals, and have over the last two years decided not to engage with a detailed face to face design session with City Reparó or Forum for Alternative Belfast, nor with local residents. There have been repeated requests for such an **open** process. This is disappointing and appears to reflect not looking at all options with open mind.

We have noted the **NI Concordat** on a number of occasions, where the NI government and its departments accepts and agrees to work with and respect the non profit and voluntary sector for the benefit of all.

Reply - refer to the URS report corresponding points:

1.2

My objection letter relating to a small number of houses on Little Georges Street (the first six houses, to varying and different degrees) noted that a full architectural impact study was not undertaken before TNI and URS decided that the planting cover could be removed and the road and bank could impinge on the amenity and 'right to light' of the inhabitants.

The objection noted a range of factors, the sum of which should be considered **holistically** - as an architect's report would aim to do. Such a report would also need acoustic and specific Air Quality inputs but needs collated and judged by an architect, holistically:

amenity

dominance

acoustic impact (through windows, gaps and roof space)

vibration

light angle easements (Council response papers have noted the relevant legal point)

quality of life in private rear garden (the only private amenity these houses have)

Air Quality

We did **not** suggest a **daylight assessment** was undertaken, this was not the contended issue. The issue was direct south sunlight through solid barriers or encroachments and the change in this, an angle having been established by the residents over time. It was noted the case law in NI has not been tested, but could be by the residents. Daylight assessments and 'right to light' easements are two quite different things.

We note that TNI and URS have still not sought a ARB or RIBA chartered architect to write a report positively advocating their proposal - and in turn consulting us and residents on alternatives so that all the issues can be 'weighed'.

We note the legal case sent from ***Clean air in London*** - Robert McCracken QC

We note the comments of Dr Benjamin Barrett of Kings London - regarding the removal of existing planting and NOX.

2.2.2

We have omitted a merge for docks traffic onto the M2 to Westlink - however this can still be considered so long as it merges before the 127m radii and is considered not too slow or to endanger traffic. City Side and other users may wish this considered.

We note the current TNI scheme does not allow Docks traffic onto the Interchange at this point either. We have assumed this is carried out much as the TNI proposal at Duncrue and strategic shift of the bulk Dock traffic away from the inner city, there are routes to Fort William and Duncrue for heavy freight.

2.2.3

The southern footway is still there, clearly shown, but moved and has a safety barrier (that also deals with lights in opposing directions)

2.2.4

We have considered that 3 lanes may pass over the North Queen Street bridge but note that this means the Bangor /M3 traffic is effectively on a slip road to Clifton Street. Given that the Westlink beyond this point is two lanes, it would seem logical to merge traffic at some point. A lesser widening of NQS bridge would be better in our view.

In the current scheme M3 traffic has to merge into 2 lanes on a slip road approach near Clifton Street, given that the Westlink is two lanes, disruption will occur, it is a matter of merging in a manner to reduce this.

3.1

As noted - City Reparo is both a small recently formed organisation, working pro bono in this case. We have had only limited recourse to pro bono review from Road Engineers, given the compressed nature of the time scale we did not wish to impose too much on their good will. The engineers are based in a large London based consultancy.

As noted - URS, the Engineers Institute and TNI are welcome to connect us with engineers who will work with us pro bono.

Likewise we suggest TNI and URS/others are presumably empowered and resourced by NI government to consider all options and find the most cost effective solution - dispassionately. In this case URS has vested interests which seem evident in the tone of this report.

NI government and elected representatives may judge it worth providing a resource to investigate this proposal further - we offer it as an alternative in the public interest.

We are happy to hand the work over to fully independent engineers to develop and review, in conjunction with us, our role unpaid if deemed necessary.

3.1 cont.

Furthermore

We note that we are working with a scan of a URS CAD file - we have repeatedly asked for AutoCad files and for spot levels. Therefore we are forced to work on some broad relative levels and drawing limitations - we have to work over an underlay which is undesirable in CAD.

We note that URS have looked only at our option with a bus link - as we noted, we doubt this should be pursued since it throws the best alignment of the York Street bridge off. Therefore they should have first omitted it in their assumptions as per our first draft.

We would request some levels data given to us in the form we request it. We will forward two sections - that is broad terms illustrate levels - these can and will be worked up at a later point.

We note that URS could have contacted us to resolve issues before continuing with assumptions and assessments / drawings and approach the ideas in the manner offered, in the public interest.

The overly defensive nature of the text and tone seems not to be in the public interest.

3.3

Naturally horizontal alignments need applied - we note here that URS seem to accept that these could be worked through - given a cooperative and round table / in person approach we would be willing to work with URS or others.

Given that URS and TNI have spend 2 years and a number of £millions of public funds, and we have spend weeks and no funds - we note that all the issues noted in 3.3 and 3.4 need investigation with a team and engineer willing to dispassionately examine the proposal - in the public interest.

We note and are told in the Vector proposal that apparently TNI and URS have very many manual deviations, a similar approach must be applied - this is an urban scheme and should also seek to accept budget and urban constraints.

3.4

On levels, in the absence of the survey and spot heights we have been requesting for 3 years, we assume most levels relative at that point. We have assumed that 5.5 metres clearance was needed in simple terms and knowing that other geometries come into play had allowed 6 metres under the Dargan bridge M2 to Westlink. We assumed that the current 3 lanes north bound onto the M2 would be merged with as per existing, not knowing if there is any 'slack' in height at this point. Sections were available if requested.

On site we measure that 6.8m clearance in round terms under the Rail bridge when considering the M2 to West Link, therefore we suggested the 127 m curve is raised as much as possible under this link to make a smoother transition over York Street.

Given the narrower 13.5 m spans we intend on the overpass bridges, we are also assuming that an in situ structure of optimised depth is proposed, around 1 metre - much as the ratio URS have quoted for precast.

It is in the interests of any scheme that bridge depths are minimised since the 'knock on' effects extend for hundreds of metres of cut/fill or other structures. This is a place for any engineer to test ones 'mettle'.

Note that long and detailed sections were available and the coloured versions are in the report - we would have provided the answers to the questions poised - if asked

3.4 cont.

URS have not allowed that we have drawn and assumed that York Street carriage-way can depress, and there is more scope there to optimise the two governing factors for each bridge.

With regard to the Westlink to M2 connection - we did not have reliable levels but the logic would dictate that one works backwards to York Street within maximum regulation and drop York Street under as required. It seems quite clear on section this is possible as York Street has space to rise again.

We do not accept the notes made with regard to the houses at Little George Street - clearly our proposal is to merge between NQS and the maximum level permitted under the

Dargan Rail bridge, with York Street depressed below. As York Street in our scenario is an arterial route with alternative arterial routes, TNI can adopt the appropriate lower clearance on that route if this avoids York Street becoming too depressed. But we have assumed 5.4m

Also - we would propose that the footpath along the entire York Street is gently depressed to keep the relative impression of the carriageway to pavement relationship within limits. There is scope for this.

Clearly if so many assumptions had to be made by URS, they should have contacted and entered into dialogue - in the public interest.

3.6

The two bridges as they pass York Street, in our view should be minimised in width to better allow Pedestrian and Street design. The links are simple and straight - they should not need major ducts, signs or other reasons to make them wider. The bridges at North Queen Street do not have much extra width, and what there is, is a waste strip, a metal fence and rail. All of these issues should be optimised at the crossing point - this is our intent.

No such extra lane-ways exist on the Westlink - we propose that they are largely minimised on the sections where other important urban considerations come to the fore.

With regard to the points made about accidents - the same exists in parts of the current project and the existing Westlink.

We agree that widening could occur in many places where this does not impact on pedestrians and urban design - but our view is that in certain locations where the scheme can follow the logic of the Westlink.

3.7

URS have not noticed that we have included a wide and separated foot path under Dock Street, and omitted an entire bridge at Dock Street.

More than 4 metres width on this route can be achieved by accepting a local narrowing to 3 metres of other lanes. We maintain a 3m paving. We have checked this and 5.5m should be possible with some specialised / bespoke detailing of structure protection barrier, as per the Westlink and other observable locations nationwide.

We have improved the off slip Westlink to M3 with radii of approx 180m - not 100m - as we had indicated on earlier options - had URS sought clarification. We have increased the lanes, and note that the link to York Street could be omitted.

We have noted above Docks traffic could in theory join the Westlink and M2 - but this does not happen at this point in the TNI scheme. The Docks traffic can be routes via Duncrue Street much as per the TNI wider scheme - and moreover should be directed away from the city and Corporation street, making more use of the next junction, as we believe the current scheme aims to do.

3.8

As noted we do not advocate the bus route on York Street in particular as we believe Corporation Street should be rebuilt as a well designed and commercial street, Others may advocate for it and in theory it may be possible with a deep cut. URS have, without consultation misread our report that notes this - as an option - and not core to the Alternative proposal.

Thus - as noted, we would not envisage that York Street is depressed more than 2.5 - 3 metres even after detailed levels examination. The depression is 2 lanes of arterial route - not 3-4 tunnels of a regional motorway. Naturally some drainage provision on York Street may be required but this will not in our view require a building with an access road. The area of the depression in our alternative is perhaps 10% of the depressed catchment of the TNI - URS scheme at present.

We note that in our proposal only York Street as a city street and artery is at risk of flooding, given that the 50-100-200 year scenario envisage flooding elsewhere, we suggest this is hardly commensurate with the risk to regional roads or indeed nearby property. York Street would be 'knocked out' anyway in worst scenarios.

Our proposal raises most of the links, the M2 and Weslink connections - so they are naturally protected, and do not rely on pumping.

Therefore we still assert great savings in this regard will accrue.

3.8 NOTE

Regarding the comment at the end of **xiv** on multidisciplinary consultancy -

URS are being rather disingenuous here. As mentioned, URS well know, City Reparo and the people involved, Ken Sterrett and Mark Hackett (planning and architecture) have been working **pro bono**.

If they had checked our website they would realise we do not claim to have detailed road engineering knowledge. We approached three transport engineers for assistance, perhaps URS or their professional institute can suggest those who will assist with pro bono working? We have asked a large London based engineering firm - but given the timescales, we do not wish to impose on them too much, their input to date has been to check the most high level and first principle issues.

Our disciplines are noted on our website, they are more social and research basis, we aim to grow this shortly to include economics and international connections. We are not seeking to compete with the URS consultancy as they seem to presume - though as we have noted before, URS have architects and indeed urban design planners in their office, but seem very reticent to involve them to sign off and advocate enthusiastically the merits of the solution for the houses at Little George Street.

URS have resisted all attempts at bringing in urban design thinking and seem to forget that we have asked repeatedly to sit down 'at a table with drawings', using our knowledge and skill, and that of others, to help benefit the scheme and the overall public good. Talking, engaging in the 'others' point of view, balancing decisions collectively and openly is what interdisciplinary working requires.

3.9

Others have noted that TNI and URS have diverted from standards over 100 times on this project and this no doubt affects accident rates. Our scheme clearly assumes some lower speeds - intrinsically safer, and also offers more overall clarity in 3 dimensions. We understand that the URS cuttings are not tunnels - but this is what people will nonetheless call them - it is how they appear, narrow, curved, deep and cutting out one's natural orientation. (which uses peripheral buildings and landmarks)

On bespoke routes we propose proactive speed reduction is enacted (especially the Westlink - M3 link)

Many of the later safety points will have been addressed with these answers.

POINTS TABLE

We note that Sailortown will not have another Dock Street Bridge, it will not impact the hostel, and we have indeed provided a footpath, which we would propose is well designed in finished to compensate for the darkness of the bridge underpass (existing) We offer significant opportunity for a continuous Corporation Street repair.

We note the Port can connect as it would in the wider TNI scheme - it is possible to keep the existing connection on Nelson Street, but we assume this has other negative consequences.

By using roads to best advantage, we mean that we have avoided the need for the Dock Street Bridge and reduced the overall land take. Many of the new roads are realigned on older road bases. We use most of the already blighted lands in the middle of the scheme and prevent its negative physical impacts spreading.

On phasing - many of the roads and the two York Street bridges can be started on vacant land with no immediate impact. The phasing we project will be much simpler, this is apparent.

We would, in detail development, propose that much less service diversion is required.

The train line shows only the easement one side to line our road by - we are not suggesting an asymmetric structure.

If URS look at our hand drawn earlier layout - landscape is indicated and can be developed, key is the ability to screen nearby residents.

URS have omitted to mention the many urban and pedestrian advantages.

GREATER CONNECTIVITY AND REGENERATION

Here we note the misinterpretation of the word connectivity - we have, as URS know, always meant connectivity for walkers and cyclists - and the connectivity of spaces and streets. Aims for other connectivity is taken as a given in a roads scheme. Note that our proposals always include indicative buildings, place attention on pavements, street trees etc. certainly this is an area where we are qualified to judge.

One of the main problems with the current proposal is the height and nature of the York Street bridge. In 2011 one would have been led to believe that the York Street bridge would be perhaps 2 metres above grade. The failure to develop this bridge as a part of the city, with adjacent buildings and overall vision is one of the many areas we have been seeking to engage with URS and TNI on - they have never explained in detail (with spot levels) why their bridge has become so elevated so that this factor could be considered. Despite being a 'depressed' scheme the YSI ends up with a 6m high hump on York Street.
This is no Broadway.

Efforts to widen the pavement, introduced separations and cycle lanes away from traffic, have been rebuffed. We are told that this is 'mission creep' and costs do not justify wider pavements. (in a scheme of £130-150m)

This and many other aspects of the design have been disappointing in the last 2 years, we have sought to engage, but with limited success. TNI nonetheless accept that we have made some contributions, which only goes to prove our deeper design input would have helped the project had it been accepted.

In the final analysis a scheme sometimes fails by a thin edge of a wedge - we believe the treatment of the housing at Little George street says so much about the approach of the TNI scheme. We repeat, we do not believe that any other EU country would propose such a solution with houses dominated on their south side and set with a bowl to collect NOX emissions, especially in the midst of recent revelations about car emissions.

Another touchstone for local community workers was to be told, that despite the scale and expense of the Interchange, that the ramps and steps at North Queen Street had recently been improved enough (by that communities actions) and merited no further work. These ramps and steps only exist because of the Westlink project of the 1980's and have caused antisocial problems since. TNI did not contact the correct member of the PSNI who knows the area and the local policing engagement with the 'safer streets' initiative.

The project cost has risen year on year. We, along with many in society, begin to question if it will be any improvement for the urban spatial environment of Belfast.

We hope the Public Inquiry and commissioners will begin a high level review, and oversight by elected representatives ensures the best project is delivered in the overall public interest.

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