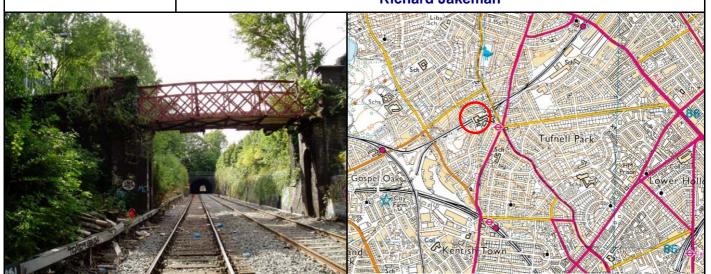
GRIP Stage 3 Single Option Development Report



ELR:	STR No:	Structure Name:	Structure Name:	
JRT2	5	Church Hill Road	Church Hill Road Footbridge	
Asset Type:	Work Type:	BP UID:	OP No.	
Footbridge	Replace	LNE - 002170	129588	
Mileage From:	Mileage To:	OS Grid:	Postcode:	
2m 0593yds	2m 0593yds	TQ289858	NW5 1DX	
Visited on: 19/11/2012	Richard Jakeman			



Description / Background (Problem Statement):

JRT2/5, Church Hill Rd/Ingestre Rd - Single span lattice footbridge on brick piers with brick approach arch spans. (joint ownership also see notes later). A second footbridge span

The bridge is jointly managed by LNE and Southern territory. LNE are repsonsible for the lattice span crossing the JRT2 lines, the southern brick approach arch and the central/northern three arches.

SME has discussed the Southern part of the structure (separate span) with the Asset Management team there and they have no problems with their spans (strengthened in 1999)

Discrepancy structure with an assessed capacity of 0 kN/m² and is generally in poor condition.

Metallic span (JRT2) has weak U-frame transoms. Substantial section loss to transoms and main girder bottom chords.

Severe fracturing and displacement of brickwork in upside arch (southernmost of three central arches) - between JRT2 and GOJ (northern/central arches). Ref 2010 Assessment Report. Brickwork defects to the downside southern approach arch. - SME to confirm

Also forms part of GOJ 5A structure adjacent and shares the central pier. Conservation Areas, Junction Road Camden and Gospel Oak.

Scope of Work:

Reconstruct footbridge using Standard design where possible, on existing (strengthened if necessary) substructures. Notwithstanding the above, GRP could be considered to ease construction should this be possible without excessive premium to cost. The new footbridge should be compliant for future electrification of the lines beneath.

Either demolish and provide a longer footbridge or Infill upside/central approach arch which is showing signs of distress. Consider LNE approaches to accommodate 2m width if not prohibitively expensive. Asset Manager to agree what is to be done with approaches prior to construction commencing.

Undertake minor brick work repairs and re-pointing to open joints and areas of missing mortar to the exposed areas of brickwork following the reconstruction of the footbridge.



Observed Defects / Assessed Deficient Elements

- Weak Footbridge Superstructure;
- Brickwork defects across the substructures;
- Southern masonry arch showing signs of distress;
- Vegetation growth on and around the structure;
- Insufficient electrification clearances under the structure;



Defective Brickwork, South East Arch Elevation

Defective Brickwork, South West Arch Elevation



Defective Arch Brickwork Profile.

View across footbridge looking north

Construction Site Appraisal

Further Investigations Required:

- Topographical Survey of the structure, trackside and non trackside;
- Tactile and condition survey to the brickwork elements;
- Geotechnical investigation / coring survey to prove foundation details;

Buildability Issues:

- Working within a residential area and adjacent to a school building,
- · Adjacent Service pipe bridge,
- Conservation areas to the north side of the Railway Alignment,
- Potential Gospel Oak to Barking Electrification to be considered,
- Large Tree growth around the structure,

Indicative Possession Plan:

Prep Works

3 x ROR's Reduce the level of the brickwork elements around the footbridge structure.

<u>CORE</u>

29hr OROR Replace the footbridge decks and

Follow-up

2 x ROR's Rebuild the brickwork Pilasters around the new footbridge and undertake any

snagging works.

Traffic Management / Highway Authority details:

Road / Footpath Closure required?

Traffic / Pedestrian Diversion Route Required?

Traffic / Pedestrian Management Interface Complexity

Public Rights of Way affected?

Any other features? (Bus Stops, Road Junctions etc)

Network Management Team.

Camden Council Engineering Services

Network Management Team: 020 7974 2410

Half / Full footpath closure, partial road closure.

Yes / No

High, Medium, Low (Dependant upon site conditions)

Yes / No Comments?

Adjacent School Property



Trackside view looking east



Roadside view looking north

Project Title: JRT2 5 Church Hill Road

Footbridge

	undertaken and likely consents required have	e been identified – see separate risk log.	
hese key risks were identified ite Specific Risk Impact Mitigation			
Working Adjacent to a School (Acland Burghley School)	Pupils entering the working area, conflict with school delivery vehicles.	Programme the implementation works around the school holidays if possible. Liaise with the school to ensure no works impact upon the running of the school.	
Buried and exposed services.	Cable strikes causing injury or death through electrocution.	Up to date Buried Service records to be on site and services marked out prior to work commencing. Exposed services to be protected in ducting and diverted if possible.	
Working on and within 3m of the railway	Operatives being struck by trains causing injury or death.	All work to the structure which require going on or near the line to be undertaken during safeguarded or fenced greenzone.	
Working at height	Operatives falling from height above the railway.	Scaffold to be erected adjacent to all areas requiring working at height, operatives to wear harnesses and be secured if no working platform is present.	
Working adjacent to a Conservation Area	Planning Authority may reject the proposal to reconstruct the structure resulting in delays to the project.	Early consultation with the planning authority to ensure the proposed structure works are acceptable.	

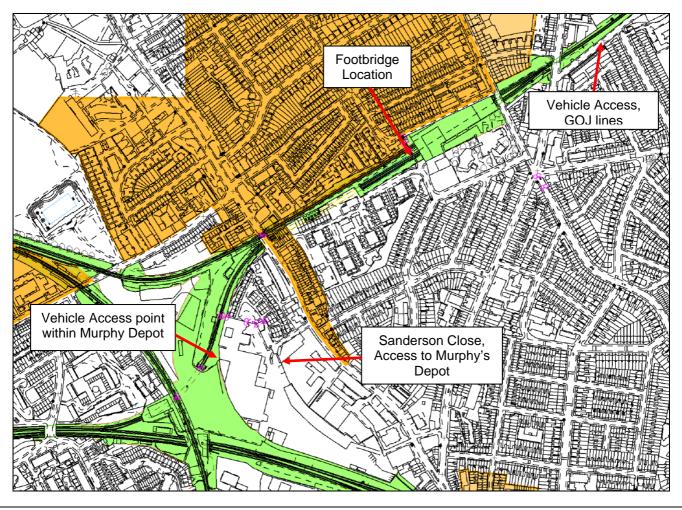
Unknowns / NR assumptions / Queries

A street lighting column is present within the footpath on the brick arch structure which will either need to be considered or removed from the structure as part of the works depending upon which option is chosen to be progressed.



Land Access Strategy







Project Title: JRT2 5 Church Hill Road

Footbridge

Land Access Strategy



Vehicle Access Point onto the JRT2 lines within the Murphy depot to the west of the footbridge.

Key Stakeholders

The following key stakeholders have been identified. Stakeholder consultation and management needed to enable the successful completion of the Project.

Key Stakeholder -	Name	Contact No	Interest in Project
Local Authority	Camden Council, Network Management Team.	020 7974 2410	Access to site, Road Closures.
Murphy Group	Plant and Transport Sanderson Close London NW5 1TN	020 7267 4366	Access required through their yard to the NR access point.