



- Advanced Works**
- Slew existing lineside cables clear of proposed hanger girder (including sufficient safe working space).
 - Install new padstones for hanger girder.
 - Set out hanger bolt positions and core existing jack arches ready to receive hanger bolts.
 - Utilising appropriate road closure and possession/isolations, install steel hanger girder, fixing it via hanger bolts through previously cored holes to hanger plates beneath the existing cross girders. Hanger bolts will not be tightened at this stage.
- Works during OROR possession and Canal Closure**
- Tighten hanger bolts to specified torque.
 - Remove existing track and ballast.
 - Locally de-wire OCS.
 - Sever existing cross girders between new hanger girder and existing centre girder. Temporary propping combined with a specific sequence of severing is anticipated, in order to avoid overloading individual cross girders.
 - Remove remainder of existing deck.
 - Break abutments down and install new cill beams.
 - Install new E-Type Deck (specific steelwork installation sequence for installing cross girders between main girders currently under development by Story Contracting, but bespoke splices to transverse deck elements included within F001/2 in case this provision is deemed necessary).
 - Re-instate ballast, trackform and OCS.
 - Reopen the canal beneath the bridge.

Approx lift weights:

Hanger Girder	- 19 tonnes
E-Type Girder A (East)	- 35 tonnes
E-Type Girder B (West)	- 33 tonnes

Cill units (*) :-

North Cill Beam N01	= 10,248 tonnes
North Cill Beam N02	= 10,938 tonnes
North Cill Beam N03	= 9,627 tonnes
North Cheek Wall N04	= 2,958 tonnes
North Hanger Pad N05	= 5,282 tonnes
South Cill Beam S01	= 14,087 tonnes
South Cill Beam S02	= 13,275 tonnes
South Cheek Wall S03	= 2,728 tonnes
South Hanger Beam Pad S04	= 6,150 tonnes
Mid-Deck Panel	= 5,063 tonnes
North Deck End Panels	= 25,450 tonnes
South Deck End Panel	= 21,352 tonnes

(*) Cill units subject to final crane lift plan, and number of elements to north and south cill may change.

Notes

1. All dimensions are in millimetres unless stated otherwise.
2. All levels in metres unless stated otherwise.
3. Do not scale from this drawing.
4. This drawing is based on the following documents provided by Story Contracting Ltd. Mott MacDonald accept no liability for the correctness of this information.
 - Topographical Survey and Point Cloud survey by Plowman Craven dated May 2019 2020, reference 4285;
 - Network Rail record drawings 12305WCRM210062 WCRM312235 WCRM312236
5. The abutments of LEC1 9E, Regents Canal Bridge, are considered to be in fair condition based on information from existing examinations and visual surveys. It is envisaged that these defects will be remedied with minor masonry repairs such as repointing and stitching.
6. Proposed E-Type is based on the Network Rail standard design TUM and 1500 series drawings.

0 1 2 3 4 5m
SCALE 1:50

Safety, Health and Environment Information

Notes below are additional to hazards/risks normally associated with this type of work. Numbers correspond to risk register references - 164941-MMD-00-XX-RA-C-LEC1-9E

164941-LEC1/9E-CIV-002	⚠	Stability of abutments to be checked and F003 stage and propping to be utilised where required.
164941-LEC1/9E-CIV-004	⚠	Hidden Critical Elements may be compromised during works. Construction sequence to consider stability of existing steelwork.
164941-LEC1/9E-CIV-010	⚠	Paint testing to be completed to confirm lead presence. Appropriate PPE to be worn during demolition and painting works.

Key to symbols

Reference drawings

164941-MMD-00-XX-DR-C-1001	- LEC1/9E Canal Bridge Existing General Arrangement
164941-MMD-00-XX-DR-C-1002	- Existing Steelwork Defects
164941-MMD-00-XX-DR-C-1003	- Proposed GA - Sheet 1 of 2
NR/CIVSD/1500 Series - E'	- E' Type Underbridge Standard Drawings.

Rev	Date	Drawn	Description	Ch'k'd	App'd
A01	29/10/21	DAE	Form F001/2 Submission	IJC	RES

Status Stamp

NOT FOR CONSTRUCTION

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Client

STORY NetworkRail

Title

LEC1/9E Canal Bridge Proposed GA Sheet 2 of 2

Designed	B. Standing	RES	Eng check	I. Crook	IJC
Drawn	D. Eyres	DAE	Coordination	B. Standing	RES
Dwg check	I. Crook	IJC	Approved	B. Standing	RES
MMD Project Number	410044	Scale at A1	AS SHOWN	Security	STD
Suitability Description	Work In Progress	Suit. Code	S0	Revision	A01
Drawing Number	164941-MMD-00-XX-DR-C-1004				