BMC

BELL MUNRO CONSULTING LTD.

SUPPLEMENTARY INVESTIGATION OF THE RIVER IRK CULVERT WALKER'S CROFT MANCHESTER FOR STEPHENSON BELL LTD AUGUST 2006

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1.0 River Irk Culverts adjacent Walker's Croft

A Phase 1 Risk Assessment for the land at Walker's Croft, Manchester has been prepared by Bell Munro Consulting dated August 2006. The purpose of this report is to determine the extent of the existing culvert to the River Irk which is thought to pass under Walker's Croft. This report should be read in conjunction with the Phase 1 Risk Assessment referenced above.

An extract of the 1794 map of the area (Appendix A) shows the River Irk situated adjacent to the College (now Chetham's School of Music) and flowing into the River Irwell.

The extract from the 1845 drawing prepared by the Manchester, Leeds and Hull Railway Company (Appendix B) shows the section of the River Irk adjacent the River Irwell and under the road originally known as Hunts Bank has been culverted. It is thought this section of culvert is of brick arch construction and was built together with the adjacent embankment to the River Irwell. This was therefore built at some point in time between 1794 and 1845.

The extracts of the 1845 drawing show the proposals for extending the culvert to the Grammar School. The culvert is constructed of a brick arch approximately 2 feet thick supported on brick abutments 4 feet wide or existing stone walls. The new brick abutments had piers of 4 feet in thickness at approximately 8 feet centres. The clear span of the culvert arch is 30 feet and the rise 8.5 feet. The springing point of the arch is generally approximately 12 feet above the foundation of the abutment.

A development was undertaken circa 1890 to culvert the River Irk between Victoria Station and Manchester Grammar School. Extracts from drawings of this development are to be found in Appendix C and show the route of the River Irk adjacent the steps to Victoria Station Approach and also Walker's Croft extending under Victoria Station Approach which can still be seen today although is now Railway Property.

The approximate route of the external structural envelope of the culvert has been indicated on the current site plan (Appendix D). Any new development should be situated and the foundations designed to ensure the brick culvert construction is not compromised and the culvert is not surcharged by the new construction. If the new building is to be situated near the route of the culvert structure, the culvert should be surveyed by a specialist and the exact route plotted on plan.

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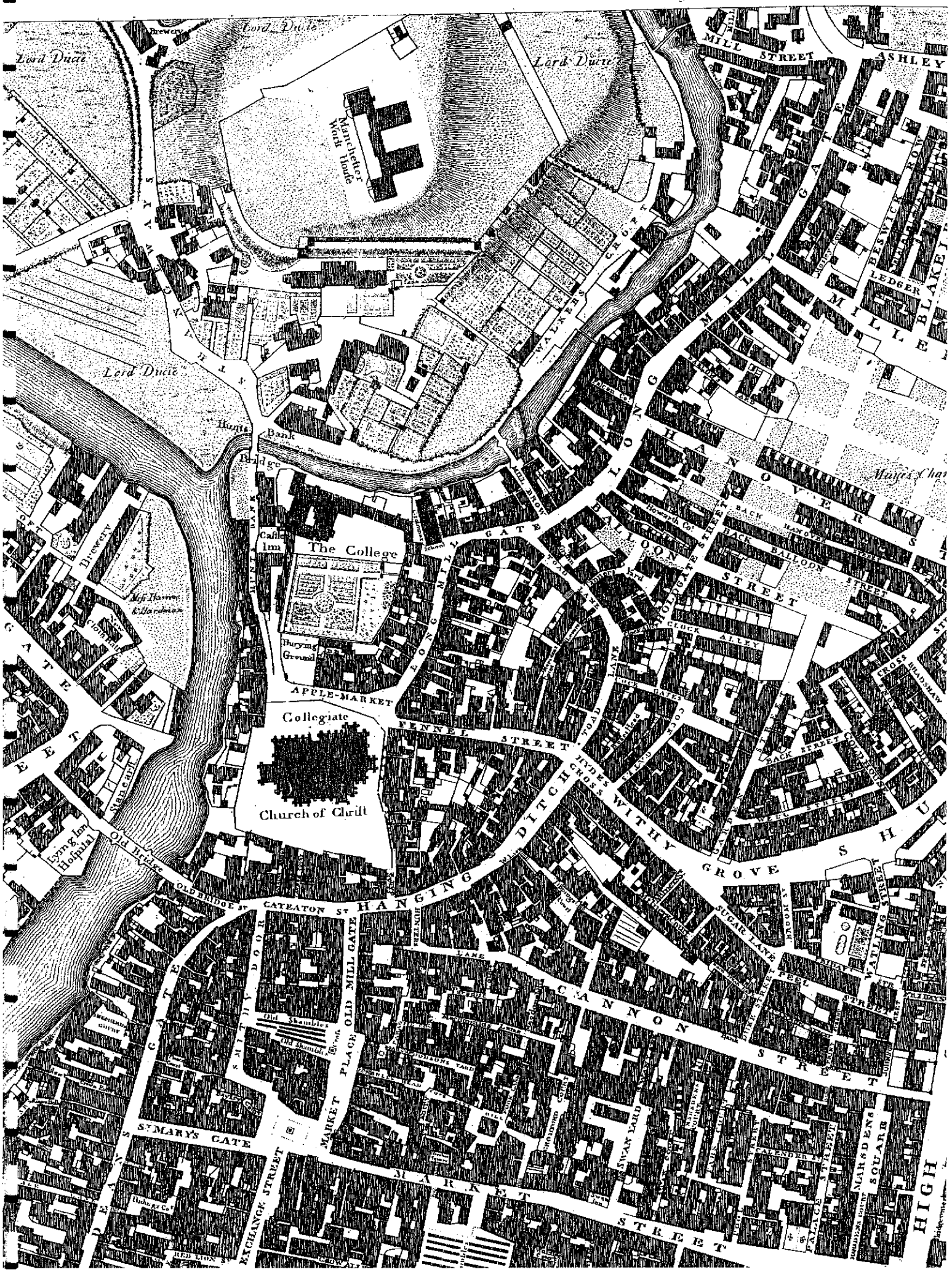
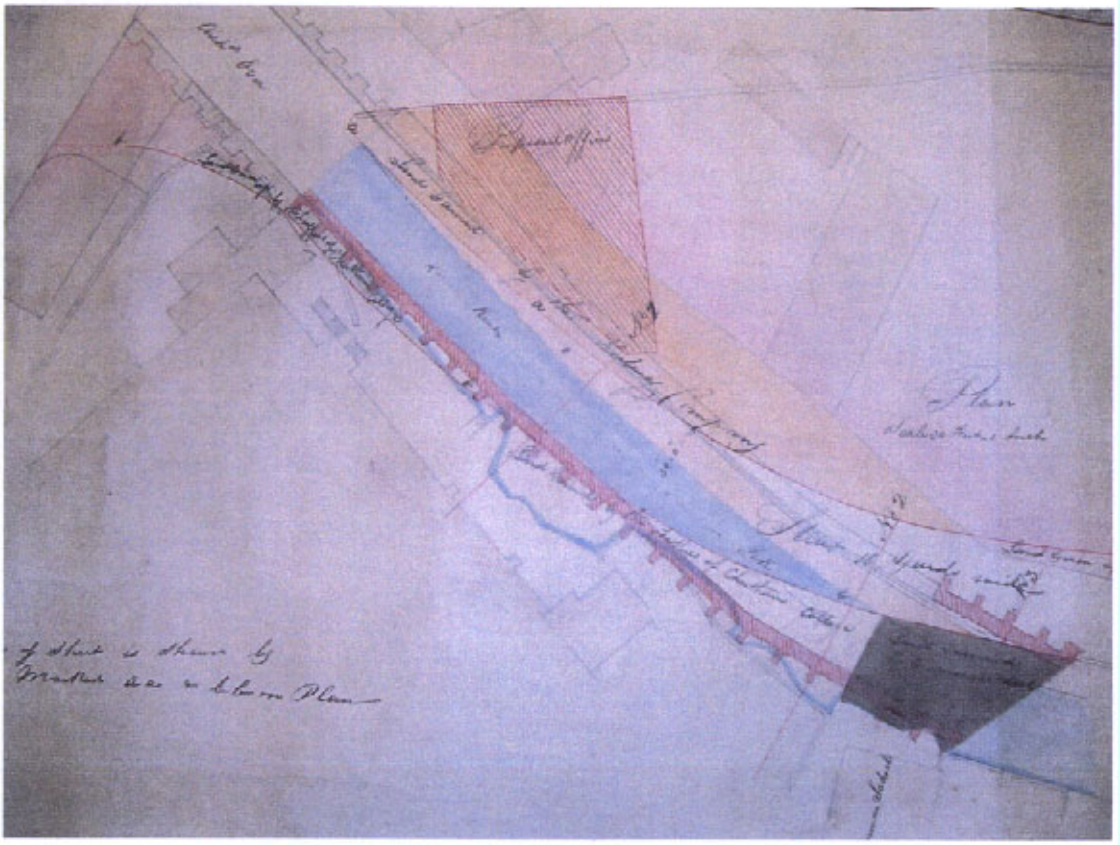
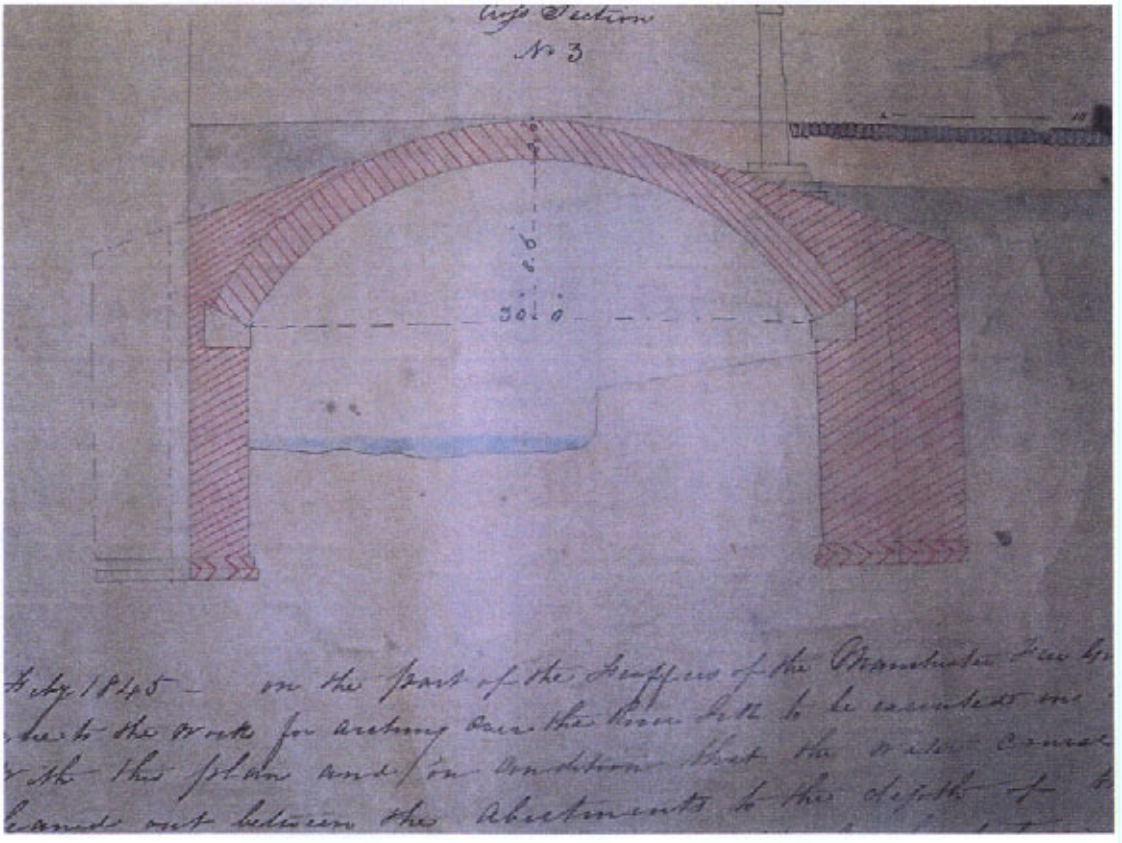
Appendix A


Published by W Green April 1 1794 MANCHES
Lord Ducie
Brewery
Manchester Work House
MILL STREET
ASHLEY
BESWICK ROW
LEDGER
BLAKEL
MILLE
WALKERS
Lord Ducie
Hunts Bank
Bridge
LONG MILL GATE
HANOVER
BACK HANOVER STREET
BALLOON STREET
Castle Inn
The College
Brewery
Mr Hamer's Garden
Burying Ground
APPLE-MARKET
CLOCK ALLEY
Collegiate
Church of Christ
FENNEL STREET
HYDES CROSS
DITCH
WITHY GROVE
Lyng Inn Hospital
Old Bridge
OLD BRIDGE
GATEATON
HANGING
SUGAR LANE
CANNON STREET
Old Shambles
MARKET PLACE
OLD MILL GATE
ST MARY'S GATE
EXCHANGE STREET
MARKET STREET
MARSDEN SQUARE
HIGH

Appendix B



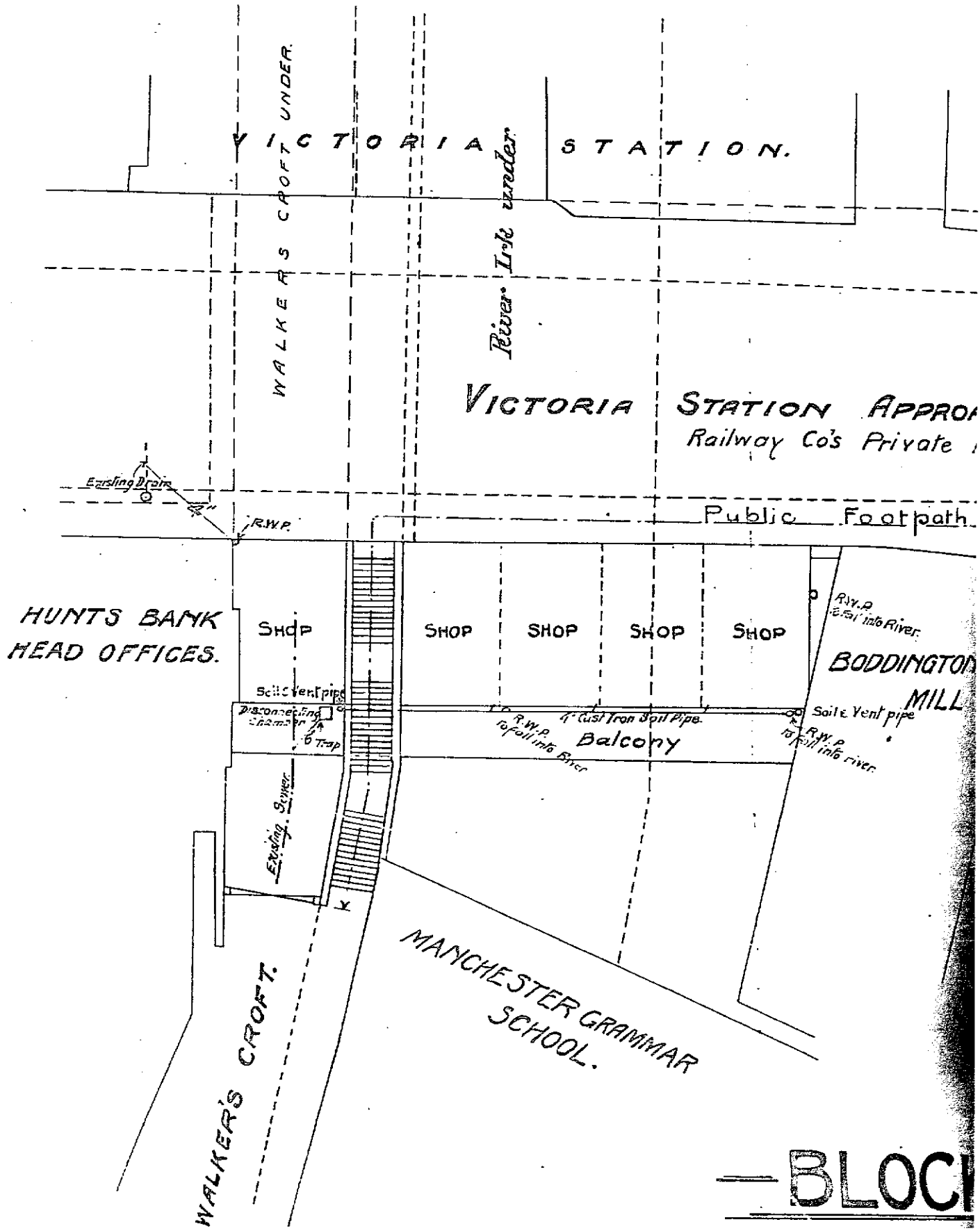
Extract of 1845 Drawing showing Existing and Proposed Culvert

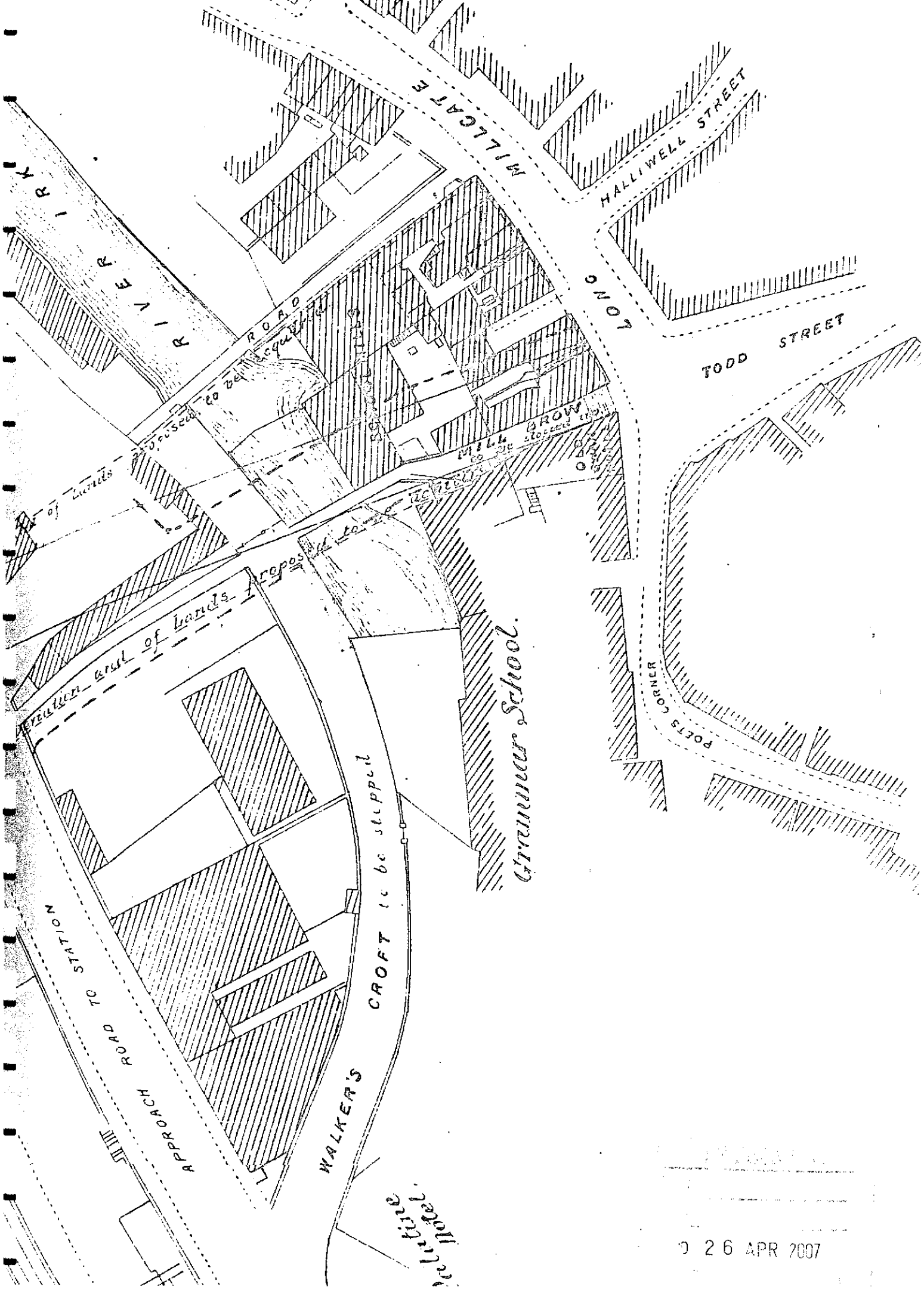


Extract of 1845 Drawing showing Typical Section through the Proposed Culvert

Appendix C

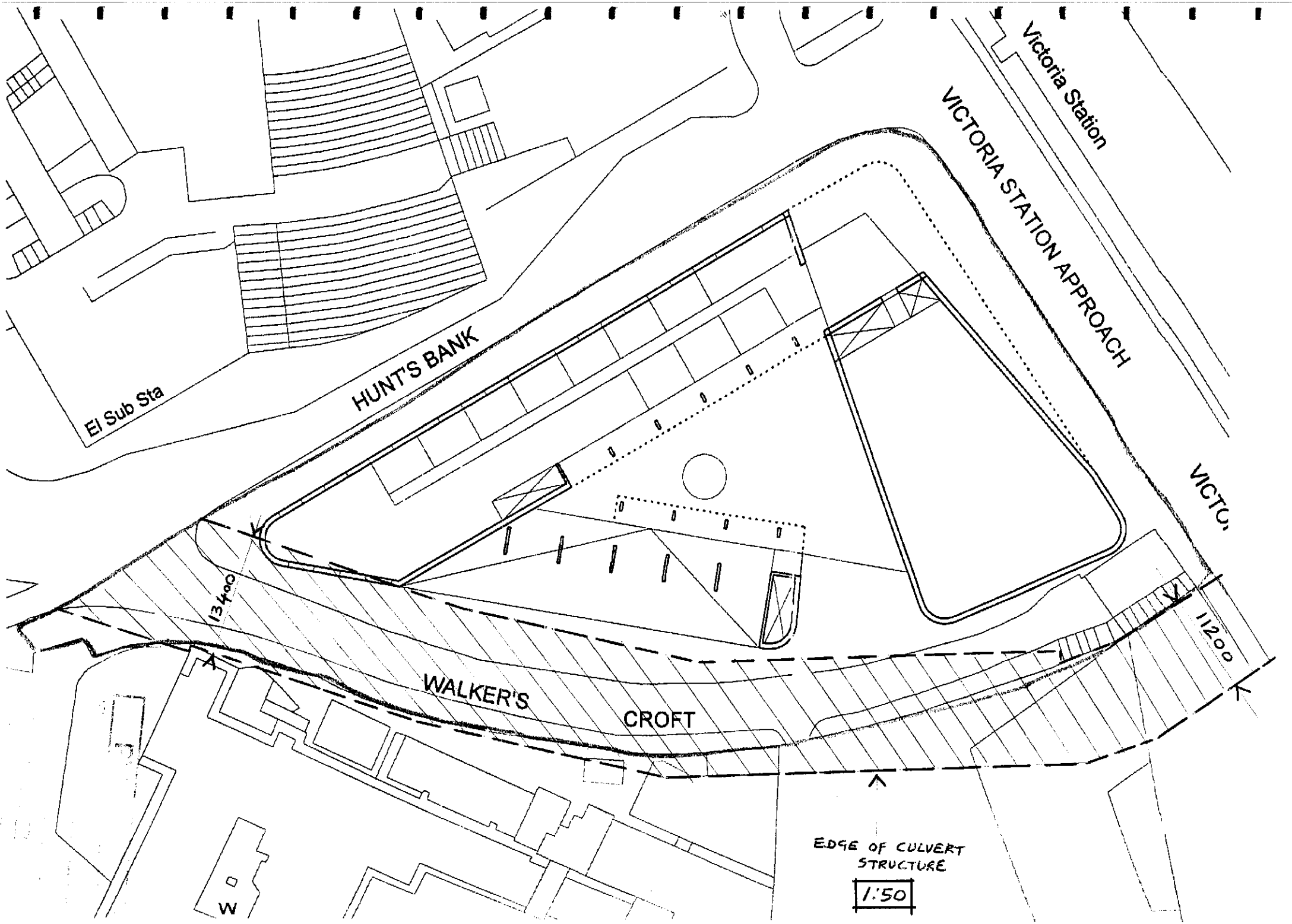
SHOPS OVER R


VICTORIA STATION.
WALKERS CROFT UNDER.
River Ire under
VICTORIA STATION APPROA
Railway Co's Private
Existing Drain
R.W.P.
Public Footpath
HUNTS BANK
HEAD OFFICES.
SHOP
SHOP
SHOP
SHOP
SHOP
R.W.P. to fall into River
BODDINGTON
MILL
Soil & Vent pipe
Disconnecting Chamber
6" Trap
4" Cast Iron Soil Pipe
Balcony
R.W.P. to fall into River
Soil & Vent pipe
R.W.P. to fall into river
Existing Sewer
MANCHESTER GRAMMAR SCHOOL.
WALKER'S CROFT.
BLOCK


RIVER IRK
MILLGATE
HALLIWELL STREET
LONG
TODD STREET
ROAD
MILL BROW
POETS CORNER
Grammar School.
WALKER'S CROFT to be stopped
APPROACH ROAD TO STATION

0 26 APR 2007

Appendix D


Victoria Station
VICTORIA STATION APPROACH
VICTO
HUNT'S BANK
El Sub Sta
13400
11200
WALKER'S
CROFT
W
EDGE OF CULVERT STRUCTURE
1:50