Waltham Abbey Royal Gunpowder Factory (Former RARDE North Site)

Bridge Report

February 1994

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ERRATUM

ALL WAP94 PHOTOGRAPH NUMBERS IN 'BRIDGE REPORT' ARE SUFFIXED WITH THE LETTER B FOR NEGATIVE LOCATION PURPOSES.

EXAMPLE:

WAP94 CP025

becomes

WAP94 CP025B

Waltham Abbey Royal Gunpowder Factory (Former RARDE North Site)

Introduction

The aim of this report was to produce a record of the known bridges and service crossings on the North site which would be flexible enough to be added to, corrected and expanded in the future. It should not be regarded as a structural survey and any comments on the condition or stability of the bridges should be regarded as superficial visual impressions only.

Until now none of the crossings had MoD numbers and only half had RCHM numbers generated during the survey in 1993. Roughton Construction Engineers were commissioned to carry out a detailed survey of twenty of the major bridges also in 1993, this report includes those structures and continues their numbering system. The Royal Commission numbering system has been continued and RCHM component cards have been generated to expand that particular archive.

The report is in table form rather than prose for the following reasons;

- information is more accessable rather than hidden in text
- each box is expandable to accomodate new information
- new boxes or tables can be added easily
- tables can be removed and inserted to other relevant texts

It will be noticed that some bridges have no accompanying photograph. This is because the remains of those crossings are so slight that a photo would be meaningless in the context of this report. Archive photographs have been taken of these examples.

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 01	132	Flagstaff Road Bridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION

Cast Iron ribbed bridge with 6 arched ribs set on brick abutments. The deck is concrete with hand rails on either side.

Original weight limit 2.5 tonne axle load reduced to 1.9 ton.

Refer to Roughton survey report for detail of condition and drawings.

The bridge also carries service pipes which are slung along eastern side.

PHOTO NO.	DIMENSIONS
(RCHME) WAP94 CP025 206/E/22 BB92/26065	L 7.00m W 3.90m

DOCUMENTARY SOURCES

1993 Roughton <u>Bridge Assessment</u> p13-20 Drg. No 1 May 1993 1993 RCHME <u>Royal Gunpowder Factory Waltham Abbey</u> Report (unpublished)

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 02	130	Road Bridge - Bailey Type
GONIGERNICETONI	 	
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION

Bailey type road bridge with 5 Tonne axle load limit. Steel structure with a timber deck with a footbridge on the eastern side, both set on concrete abutments. Refer to Roughtons survey for details of condition and drawings.

PHOTO NO.	DIMENSIONS
WAP94 CP039	L 12.37m W 4.11m Ht 1.55m

DOCUMENTARY SOURCES

1993 Roughtons <u>Bridge Assessment</u> p.21 - 29 Drg. No 02 May 1993 1993 RCHME <u>Royal Gunpowder Factory Waltham Abbey</u> Report (unpublished)

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 03	133	Footbridge
CONSTRUCTION	CDID DEE	TATIONAL
DATE	GRID REF.	INITIAL CONDITION

Modern footbridge constructed of two steel RSJs supporting a timber and asphalt deck and two tubular steel handrails.

The bridge is set upon brick and concrete abutments. The bridge is flanked on either side by a number of service pipes

Refer to Roughtons survey report for details of condition and drawings.

PH	IOTO NO.	DIMENSIONS
(RCHME) WA 206/E/24	AP94 CP040	L 6.85m W 1.64m

DOCUMENTARY SOURCES

1993 Roughtons Bridge Assessment p.30-36 Drg. No.03 May 1993

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 04	271	Road Bridge - Bailey Type
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
Mid 1950s Early 1960s	TL 37793 01115	Good

Bailey type road bridge with 5 tonne axle load limit. Similar to bridge 02. Steel structure with a timber deck and a footbridge on the north side. The abutments seem to be concrete with timber piles.

Refer to Roughtons survey report for details of condition and drawings. The bridge also carries a number of service pipes. The letters MKII are welded to either end of the bridge.

PHOTO NO.	DIMENSIONS
(RCHME) WAP94 CP023	L 12.37m
206/Q/25	W 5.43m

DOCUMENTARY SOURCES

1993 Roughtons Bridge Assessment p.37-44 Drg. No. 04 May 1993

1993 RCHME Royal Gunpowder Factory Waltham Abbey Report (unpublished)

1965 Drg. No. L-B.17 Plans and elevations of footbridge 10/9/1965

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 05	279	Footbridge
CONSTRUCTION	GRID REF.	INITIAL
DATE		CONDITION

The footbridge is constructed of a steel frame supporting a timber deck. All set on concrete abutments and has tubular steel handrails on either side.

Refer to Roughtons survey report for details of condition and drawings.

PHOTO NO.	DIMENSIONS
WAP94 CP022	L 9.85m W 1.95m

DOCUMENTARY SOURCES

1993 Roughtons Bridge Assessment Drg. No. 05 May 1993 1993 RCHME Royal Gunpowder Factory Waltham Abbey Report (unpublished)
1957 Drg. No. L-B.10 Plans and Elevations 22/7/1957

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 06	269	Road Bridge
CONSTRUCTION	GRID REF.	INITIAL
DATE		CONDITION

Reinforced concrete bridge with a concrete and asphalt deck. Bridge set on concrete abutments with rocker bearings between has tubular steel handrails on either side.

Refer to Roughtons survey report for details of condition and drawings.

PHOTO NO.	DIMENSIONS
(RCHME) WAP94 CP021	L 12.53m
206/Q/20	W 4.26m

DOCUMENTARY SOURCES

1993 Roughtons <u>Bridge Assessment</u> p.50-57 Drg. No. 06 June 1993 1993 RCHME <u>Royal Gunpowder Factory Waltham Abbey</u> Report (unpublished) 1954 Drg No. L- B.05 (XD1/2)

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 07	507	Footbridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
1960s	TL 37545 01345	Good

The bridge is constructed with a thick timber plank deck supported by two RSJ which in turn rest upon concrete abutments.

Refer to Roughtons survey report for details of condition and drawings.

Tubular steel handrails fitted are on either side.

РНОТО NO.	DIMENSIONS
WAP94 CP020	L 6.80m W 1.30m

DOCUMENTARY SOURCES

1993 Roughtons Bridge Assessment p.58-64 Drg No. 07 June 1993

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 08	228 Road Bridge	
CONSTRUCTION	GRID REF.	INITIAL
DATE		CONDITION

The bridge is constructed of concrete and steel. The deck, made up of concrete and asphalt is supported by RSJs which in turn lie on concrete abutments. Handrails are fitted to either side of the bridge with the outer security fence attached to the eastern side.

Refer to Roughtons survey report for details of condition and drawings.

PHOTO NO.	DIMENSIONS
WAP94 CP018	L 7.50m W 3.05m

DOCUMENTARY SOURCES

1993 Roughtons Bridge Assessment p.63-71 Drg. No. 08 April 1993

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 09	151	Footbridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
Late 1960s Early 1970s	TL 37725 01675	Fair/Poor

The footbridge is made of timber and steel similar in construction to 07. The timber plank deck is supported by two RSJs which rest on concrete abutments. Handrail present on the northern side with the outer security fence attached to the southern edge.

Refer to Roughtons survey report for details of condition and drawings.

PHOTO NO.	DIMENSIONS
WAP94 CP017	L 11.60m W 1.60m

DOCUMENTARY SOURCES

1993 Roughtons Bridge Assessment p.72-77 Drg. No. 09 April 1993

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 10	117	Brick Arch Bridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION

The bridge is a brick arch supported to concrete abutments. It is constructed of blue engineers bricks and red/yellow stocks. The parapets, also of brick, have stone plaques set in either side with RGPF VR 1878 inscribed.

Refer to Roughtons survey report for details of condition and drawings. 5 tonne axle load limit.

PHOTO NO.	DIMENSIONS
(RCHME) WAP94 CP016 206/J/3	L 10.50m W 3.80m Ht 4.40m (parapet to water)

DOCUMENTARY SOURCES

1993 Roughtons <u>Bridge Assessment</u> p.78-84 Drg. No. 10/1-2 April 1993 1993 RCHME <u>Royal Gunpowder Factory Waltham Abbey</u> Report (unpublished)

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 11	238	Road Bridge - Bailey Type
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
1971	TL 37715 02041	Good

Bailey type bridge constructed of five steel panels which support a timber plank deck. The bridge is set on brick and timber abutments.

Refer to Roughtons survey report for details of condition and drawings. "MKII" has been welded onto either end of the bridge.

PHOTO NO.	DIMENSIONS
WAP94 CP014	L 15.41m W 4.13m

DOCUMENTARY SOURCES

1993 Roughtons Bridge Assessment p.85-91 Drg. No. 11 May 1993

1993 RCHME Royal Gunpowder Factory Waltham Abbey Report (unpublished)

1971 Drg. No. S- B.49 22/6/1971

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 12 New BR 12	506	Steel Trough Road Bridge Concrete Box Culvert
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
1972 (demolished Oct 1993) Rebuilt Dec 1993	TL 37653 02251	Demolished

For Old Bridge refer to Roughtons survey report for details of condition and drawings.

The new crossing is a box section concrete culvert. See documentary sources for drawings.

PHOTO NO.	DIMENSIONS
WAP94 CP011	

DOCUMENTARY SOURCES

1993 Roughtons Bridge Assessment p.91-98 Drg. No. S- B.53

1971 Drg. No. S - B. 53 Plans and Elevations

1993 Drg. No. 2247/101/102 Control Structure

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 13	106	Aqueduct
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
1940	TL 37546 01935	Good/ Fair

Concrete aqueduct constructed of 5 concrete pipes overlain with poured concrete. At present no canal runs over the structure although the embankments and tow path still exist.

Refer to Roughtons survey report for details of condition and drawings.

PHOTO NO.	DIMENSIONS
(RCHME) WAP94 CP005 206/H/35 206/T/11	L 10.97m W 15.55m

DOCUMENTARY SOURCES

1993 Roughtons Bridge Assessment p.98-105 Drg. No. 13 1-2

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 14	112	Cast Iron Aqueduct
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION

The aqueduct is constructed of cast iron panels. Each side piece is a single panel and the trough base is of iron plates bolted to the side sections. The aqueduct sits on brick abutments, the remains of a timber walkway exists on either side. Refer to Roughtons survey report for details of condition and drawings.

PHOTO NO.	DIMENSIONS
(RCHME) WAP94 CP015 206/D/17, 206/D/18 206/H/23, BB92/26105 BB92/26168, BB92/26169 BB92/26491	L 9.32m W 3.25m Dp 1.3m

DOCUMENTARY SOURCES

1993 Roughtons <u>Bridge Assessment</u> p.105-111 Drg. No. 14 April 1993 1993 RCHME <u>Royal Gunpowder Factory Waltham Abbey</u> Report (unpublished)

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 15	214	Cast Iron Aqueduct/Bridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
1878/9 1944?(bridge)	TL 37584 02131	Good/ Fair

Originally a cast iron aqueduct similar to 14. Later adapted to become a footbridge. The structure was also used to suspend a pipe across the Old River Lea. Refer to Roughtons survey report for details of condition and drawings.

PHOTO NO.	DIMENSIONS
WAP94 CP008	L 9.80m W 3.10m Dp 1.45m

DOCUMENTARY SOURCES

1903 WASC 901/198 27/5/03 Aqueduct No.5 (corrected to No.2)

1903 WASC 901/199 3/6/03 Aqueduct No.5

1993 Roughtons Bridge Assessment p.111-118 Drg. No. 15 April 1993

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 16	113	Brick Arch Bridge
CONCEDITORIONI	CDID DEE	
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION

This brick arch bridge is similar in design to 10 with blue engineers bricks and red/yellow stocks.

Refer to Roughtons survey report for details of condition and drawings. A stone plaque inset into the parapet reads," RGPF VR 1878"

PHOTO NO.	DIMENSIONS
(RCHME) 206/H/24 206/Q/26 BB92/26104 BB92/26459 WAP94 CP003	L 7.30m W 3.10m Ht 4.75m (parapet to canal base)

DOCUMENTARY SOURCES

1993 Roughtons <u>Bridge Assessment</u> p.119-126 Drg. No. 16/ 1-2 May 1993 1993 RCHME <u>Royal Gunpowder Factory Waltham Abbey</u> Report (unpublished)

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 17	134	Footbridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
pre 1947	TL 37676 00931	Fair

The footbridge is constructed of steel trusses rivetted together supporting a timber deck. To the west the abutment is concrete, to the east the bridge is set upon a brick pier.

Refer to Roughtons survey report for details of condition and drawings. The bridge also supports a number of pipes and cables.

PHOTO NO.	DIMENSIONS
(RCHME) WAP94 CP024 206/K/6 206/S/33 206/S/34	L 12.60m W 1.30m

DOCUMENTARY SOURCES

1993 Roughton <u>Bridge Assessment</u> p.127-136 Drg. No. 17 April 1993 1993 RCHME <u>Royal Gunpowder Factory Waltham Abbey</u> Report (unpublished)

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 18	508	Culvert Bridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION

The structure consists of a single vitrified pipe running under Long Walk with brick head walls east and west.

Refer to Roughtons survey report for details of condition and drawings.

PHOTO NO.	DIMENSIONS
WAP94 CP004	L 6.60m W 0.45m

DOCUMENTARY SOURCES

1993 Roughton Bridge Assessment p.137-140 Drg. No. 18 April 1993

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 19	230	Road Bridge
CONCEDITOR	CDYD DEE	
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION

This bridge displays various phases of construction. It was originally a brick and masonary arch and was subsequently extensively repaired with concrete.

Refer to Roughtons survey report for details of condition and drawings.

PHOTO NO.	DIMENSIONS
WAP93 CP015	L 4.80m W 3.15m Ht 2.50m

DOCUMENTARY SOURCES

1993 Roughton Bridge Assessment p.140-142

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 20	250	Cast Iron Aqueduct
CONSTRUCTION	GRID REF.	INITIAL
DATE		CONDITION

This is a later example of a cast iron aqueduct. The sides of the trough are made up of smaller panels of cast iron which are bolted together, as was the trough base. Most of the base is missing and a number of the side panels are severely damaged. Refer to Roughtons survey report for details of condition and drawings.

PHOTO NO.	DIMENSIONS
(RCHME) 206/O/24 206/O/25 206/O/29 BB92/26289 WAP94 CP009	L 14.00m W 3.80m Ht 1.30m

DOCUMENTARY SOURCES

1993 Roughton <u>Bridge Assessment</u> p.143-149 Drg. No. 20 May 1993 1993 RCHME Royal Gunpowder Factory Waltham Abbey Report (unpublished)

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 21	264	Footbridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
1880s?	TL 37545 02370	Poor/Fair

The bridge is constructed of an angle iron frame forming a semi circular arch with timber steps and deck. The bridge is attached to brick and concrete abutments by means of vertical bolts set into sandstone blocks. A boot scraper is situated on the south west corner of the bridge. The steel frame although corroded appears sound as do the abutments. The main problem as in many cases is with vegetative damage caused by young trees.

	PHOTO NO.	DIMENSIONS
(RCHME) 206/Q/4	WAP94 CP007	L 9.45m W 0.97m

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 22	182	Footbridge
CONCEDITOR	CDID DEE	TA ITEMA A
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION

This footbridge is built from angle irons which once supported steps and a timber deck both have long since rotten away. A number of the iron members are severely corroded and extensive damage has been caused by the encroaching trees.

	PHOTO NO.	DIMENSIONS
(RCHME) 206/B/33	WAP93 CP033	L 10.95m W 1.59m

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 23	255	Footbridge
CONSTRUCTION	GRID REF.	INITIAL
DATE .		CONDITION

This bridge is very similar in construction to 21; semi circular arch built of angle irons and timber. The supporting piers are also similar. The timber has all but gone leaving a fairly stable frame.

	PHOTO NO.	DIMENSIONS
(RCHME) 206/O/31 206/O/32	WAP93 CPO46	L 9.48m W 0.97m Ht 3.60m(above canal base)

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 24	254	Footbridge
CONCERNICENON		
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION

This bridge is similar to 21 and 23 in construction and condition. Less affected by tree damage.

	PHOTO NO.	DIMENSIONS
(RCHME) 206/O/30 BB92/26287	WAP93 CP039	L 9.48m W 0.98m Ht 3.60m(above canal base)

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT			
SITE NO.	RCHME NO. BRIDGE TYPE		
BR 25	102	Pipebridge	
	GRID REF. INITIAL CONDITION		
CONSTRUCTION DATE	GRID REF.		

This bridge carried an acid pipe, compressed air pipe and a steam main from the acid factory to the new nitroglycerine plant on New Hill over the Cornmill Stream. It is believed that the acid pipe was never used. The bridge is constructed of angle irons forming a single span. Although corroded the main supporting member appear to be sound.

	PHOTO NO.	DIMENSIONS
(RCHME) 206/I/20 206/N/7	WAP93 CP038	L 14.00m W 1.80m

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT			
SITE NO.	RCHME NO. BRIDGE TYPE		
BR 26	103	Footbridge	
CONSTRUCTION DATE	GRID REF. INITIAL CONDITION		
1904? TL 37602 01884 Fair/Poor			

This Bridge is another example of the semi circular arched footbridges. As with the others the timber decking and steps have decayed but the angle iron frame appears to be intact.

PHOTO NO.	DIMENSIONS
(RCHME) WAP93 CP043 206/I/24 206/T/15 BB92/26170	L 9.40m W 1.73m Ht 2.3m(above Canal Base)

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT			
SITE NO.	RCHME NO. BRIDGE TYPE		
BR 27	180	Aqueduct	
CONSTRUCTION DATE	GRID REF. INITIAL CONDITION		
1878	TL 37552 01598 Poor/Fair		

The aqueduct is constructed of brick with brick head walls which have tie-rods running through its length.

The over lying canal has been completely filled in, the lower canal has silted up. The western head wall is collapsing outward.

PHOTO NO.	DIMENSIONS
WAP93 CP027	L 2.80m W 12.10m

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT			
SITE NO.	RCHME NO. BRIDGE TYPE		
BR 28	170	Aqueduct	
CONSTRUCTION DATE	GRID REF. INITIAL CONDITION		
1806-27			

This aqueduct is constructed of brick and has earth embankments to carry the main press house canal over a lower drain. Although both waterways are redundant the brick head walls and earth embankments are in reasonable condition. Concrete blocks on the tow path perhaps represent the position of a footbridge.

PHOTO NO.	DIMENSIONS
WAP93 CP008	L 6.40m W 12.55m Ht 2.25m

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT			
SITE NO.	RCHME NO. BRIDGE TYPE		
BR 29	184 Footbridge		
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION	

This span is another example of the semicircular bridges. As with the other cases the framework is complete but the timber is either missing or in an advanced stage of decay.

	PHOTO NO.	DIMENSIONS
(RCHME) 206/C/16	WAP93 CP037	L 9.50m W 0.96m Ht 3.50m(above canal fill)

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT			
SITE NO.	RCHME NO. BRIDGE TYPE		
BR 30	123 Footbridge		
CONSTRUCTION DATE	GRID REF. INITIAL CONDITION		
1950s /1960s? TL 37805 01065 Fair			

The footbridge is constructed of one large RSJ supported on tall brick piers. Wooden steps on either side access a timber deck which lies on the beam. Two timber hand rails are attached to this deck. Some of the timbers need replacing and perhaps the hand rails but the rest of the structure seems to be stable.

	PHOTO NO.	DIMENSIONS
(RCHME) 206/E/7	WAP93 CP022	L 17.50m W 1.70m Ht 2.65m

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT			
SITE NO.	RCHME NO.	BRIDGE TYPE	
BR 31	126	Footbridge/Pipe bridge	
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION	

Bridge constructed of angle irons braced with cross pieces. Most members are rivetted. The metal structure supports a timber deck, now mostly rotten. The steps on either end have been removed and the structure is leaning. It appears to have been a pipe bridge after the removal of the steps.

PHOTO NO.	DIMENSIONS
(RCHME) WAP93 CP019 206/E/8	L 14.00m W 1.40m Ht 2m

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT			
SITE NO.	RCHME NO.	BRIDGE TYPE	
BR 32	100	Swing Bridge	
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION	
unknown	TL 37700 00683	Demolished	

Remains of a narrow gauge railway swing bridge. Consist of a triangular concrete pier set in the middle of Millhead Stream. This pier is supported above the water level by three concrete piles. Surrounding this are a number of timber piles of unknown function. On the west bank is an iron pivot set into concrete 2.80m to the west of this stands the concrete mounting point for the bridge.

There are three steps to the south up to the level of the railway causeway. The concrete block has a curved face to the east to allow the end of the bridge to swing into place. There is no evidence of the rest of the structure.

PHOTO NO.	DIMENSIONS
WAP93 CP034	Not Available

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT			
SITE NO.	RCHME NO.	BRIDGE TYPE	
BR 33	120	Bridge	
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION	

Rough bridge constructed of unmortared bricks, a precast concrete pipe and railway sleepers. There are two earthwork causeways leading up to the bridge. Overgrown and not very stable.

PHOTO NO.	DIMENSIONS
WAP93 CP010	L 7.00m W 4.50m

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 34	122	Foot/Pipe Bridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
1878?/1940s?	TL 37800 01095	Fair

The present structure is built of timber and used to carry steam pipes across the canal. Immediately to the north are brick abutments of a former footbridge. Slots incorporated into the the brickwork appear to have allowed a board to be lowered into place to seal the channel. The bricks and style are similar to the 1878 bridges.

PHOTO NO.	DIMENSIONS
WAP93 CP023	L N/A W 2.50m Ht 1.95m

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 35	191	Footbridge
CONCEDITORION	CDID DEE	~~~~~
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION

Only two timber trestles remain of this crossing on the east and west banks of the disused canal.

PHOTO NO.	DIMENSIONS
WAP93 CP016	Est. L 5.60m W 1.40m

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 36	202	Footbridge
CONCEDITOR	CDID DEE	TA ITEM A T
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION

The footbridge consists of an angle iron frame supporting a timber deck. Serivce pipes were also carried by hoops attached to either side of the bridge.

PHOTO NO.	DIMENSIONS
WAP93 CP042	L 8.50m W 1.30m Ht 2.25m

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 37	212	Pipe Bridge
CONSTRUCTION	GRID REF.	INITIAL
DATE .		CONDITION

This bridge is constructed of timber for the most part and is supported by two timber trestles on the north and south banks. The bridge also supported a walkway on the eastern side. Carried wash water from the nitrator E2 to E4.

PHOTO NO.	DIMENSIONS
WAP93 CP041	L 13.20m W 2.20m Ht 2.35m

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 38	173	Pipebridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
1890s-1900?	TL 37523 01648	Fair

Steel framed bridge carrying two steam mains over the canal. appears to be sound with no serious corrosion.

PHOTO NO.	DIMENSIONS
WAP93 CP004	L 8.05m W 0.75m Ht 2.40m

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 39	174	Footbridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
1880s-1890s	TL 37523 01653	Fair

The footbridge is constructed of angle irons which support timber steps and decking similar in design to BR 22 but rising higher above the canal. Most of the timbers are rotten and some of the angle irons are badly corroded.

PHOTO NO.	DIMENSIONS
WAP93 CP003	L 9.30m W 1.05m Ht 2.25m

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 40	176	Pipe Bridge
CONSTRUCTION	GRID REF.	INITIAL
DATE		CONDITION

This is actually a large pipe probably carrying steam which has been shaped to cross the canal allowing access for barges underneath. The pipe is supported by two metal cables attached to the centre of the span and to two tall concrete posts set in either bank. The posts are damaged as are the cables the pipe is at present supported by a later timber pile in the center of the span.

PHOTO NO.	DIMENSIONS
WAP93 CP005	L 15.80m W 0.70m Ht 3.15m

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 41	177	Lifting Footbridge
CONSTRUCTION	GRID REF.	INITIAL
DATE	GRID REI.	CONDITION

Remains of a lifting footbridge constructed of a timber box on the north bank (2.5m by 2.15m) with an iron pivot bar. The bridge spaned the canal (4.25m). On the south bank is a concrete landing with two catch plates. Most of the timber is rotten.

PHOTO NO.	DIMENSIONS
WAP93 CP007	L 6.90m W 2.55m

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 42	223	Footbridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION

Only the two supporting timber trestles survive on either side of the canal. Originally carried the path between the dusting house 159 and the shoe room 157.

PHOTO NO.	DIMENSIONS
WAP94 CP019	L 9.00m W 1.80m

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 43	253	Bridge
CONSTRUCTION	GRID REF.	INITIAL
DATE	GRID REF.	CONDITION

Two brick piers survive on either site of the Old River Lea, capped by concrete slabs with vertical mounting bolts. The sawn off remains of the bridge supports are in the river. The bridge carried a nitroglycerine gutter and other services from E3 wash house to the mixing house 46a.

PHOTO NO.	DIMENSIONS
Not available	Not Available

DOCUMENTARY SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 44	505	Pipe/ Footbridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
2.112		001,0111011

Only one timber trestle survives on the west bank of the canal. Actual function unknown.

PHOTO NO.	DIMENSIONS
WAP94 CP006	W,- 2.20m

WALTHAM ABBEY RARDE SITE BRIDGE REPORT			
SITE NO.	RCHME NO.		BRIDGE TYPE
BR 45	509		Pipe/ Footbridge
CONSTRUCTION DATE	GRID REF.		INITIAL CONDITION
unknown	TL 37520 02280		Poor/demolished
DESCRIPTION and CONDITION			
Only one timber trestle survives of this bridge.			
PHOTO NO. DIMENSIONS			
Not available u		unknown	
DOC	CUMENTAR	Y SOURC	CES

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WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 46	510	Pipe Bridge
CONSTRUCTION	GRID REF.	INITIAL
DATE	GRID REF.	CONDITION

The bridge consists of a timber box surrounding the pipe(s). Roofing felt caps the structure over the span. The timber and felt is in reasonable condition.

PHOTO NO.	DIMENSIONS
WAP93 CP017	L 8.70m W 0.20m

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 47	511	Pipe Bridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
1890s	TL 37543 021163	Poor(demolished)

One timber support remains of this bridge which carried the guttering for nitroglycerine from the nitrator E2 to the washing house E3.

PHOTO NO.	DIMENSIONS
WAP93 CP040	Not Available

		,		
WALTHAM ABBEY RARDE SITE BRIDGE REPORT				
SITE NO.	RCHME	E NO.	BRIDGE TYPE	
BR 48	512		Footbridge	
CONSTRUCTION DATE	GRID REF.		INITIAL CONDITION	
c. 1850s	TL 37505 02116		Demolished	
DESCRIPTION and CONDITION		ΓΙΟΝ		
Four truncated timbers survive in the canal bed no bank suports can be seen.				
PHOTO NO.		DIMENSIONS		
No Photographs available	ographs available		Not Available	
DOCUMENTARY SOURCES			CES	

WALTHAM ABBEY RARDE SITE BRIDGE REPORT			
SITE NO.	RCHME NO. BRIDGE TYP		
BR 49	513	Aqueduct	
CONGEDITORIONI	CDID DEE	TA TYPEY A Y	
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION	

Subterranean aqueduct/culvert constructed of brick and concrete. Precise construction unknown.

PHOTO NO.	DIMENSIONS
WAP93 CP024	L unknown W 4.00m

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 50	514	Brick Road Bridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
1850-86	TL 37455 01976	Poor(partially demolished)

Yellow brick road bridge in English Bond. The spanning structure is missing but the embankment walls and abutments survive in good condition. Grooves can be observed in the brickwork where it is presumed boards could be fitted to dam up sections of the canal.

PHOTO NO.	DIMENSIONS
WAP93 CP044	L 3.30m W approx 3.00m

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 51	515	Footbridge/pipe Bridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
1940?	TL 37665 01976	Demolished

Only two brick piers remain on either side of a disused canal. Built of yellow stocks in Flemish Bond with concrete capping. Steel loop steps are set into the brickwork on both piers. Pipe supports have been bolted on at a later date.

PHOTO NO.	DIMENSIONS
WAP94 CP002	L 12.00m W 1.40m

WALTHAM ABBEY RARDE SITE BRIDGE REPORT			
SITE NO.	RCHME NO.		BRIDGE TYPE
BR 52	516		Pipe Bridge
CONSTRUCTION DATE	GRID REF.		INITIAL CONDITION
unknown	TL 37434		Demolished
DESCRIPTION and CONDITION			TION
Only concrete block abutments survive.			
PHOTO NO.		DIMENSIONS	
Not available		Dims of blocks 0.85m by 0.75m	
DOCUMENTARY SOURCES			CES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 53	517	Pipe culvert
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
unknown	TL 37435 01825	Fair

Very crude construction, one concrete pipe surrounded by unmortared brickwork. Seems to be in a stable condition.

PHOTO NO.	DIMENSIONS
WAP93 CP002	L 3.20m W 2.90m pipe dia. 0.60m

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 54	518	Pipe Bridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
pre 1940	TL 37497 01660	Fair

Constructed of an angle iron frame with flat cross pieces. This supports a narrow timber deck together with a large steam pipe to one side.

PHOTO NO.	DIMENSIONS
WAP93 CP006	L 15.70m W 0.80m

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 55	519	Pipe Culvert
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
unknown	TL 37472 01586	Good/Fair

Constructed of a large concrete pipe encased in concrete. Two side capping pieces either side of the road in which are set hand rails. The banks are retained by concrete sand bags.

PHOTO NO.	DIMENSIONS
WAP93 CP009	L 12.30m W 3.10m pipe dia 1.10m

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 56	520	Pipe Bridge
CONSTRUCTION	GRID REF.	INITIAL
DATE		CONDITION

Consists of a pipe clad in a timber box which is capped with roofing felt. Some of the timbers have rotten and portions of the roof felt are missing.

PHOTO NO.	DIMENSIONS
Not available	Est. L 5.00m W 0.40m

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 57	521	Pipe Bridge
CONSTRUCTION	GRID REF.	TATTOTAT
DATE	GRID REF.	INITIAL CONDITION

This bridge is constructed for at least four pipes. Built of two steel tube stanchions which support a metal pipe held on by "U" bolts. This pipe has four hooks suspended beneath it and has disused pipes attached to either side.

PHOTO NO.	DIMENSIONS
WAP93 CP011	L 7.15m W 0.85m

4				
	WALTHAM ABBEY RARDE SITE BRIDGE REPORT			IDGE REPORT
	SITE NO.	RCHME	E NO.	BRIDGE TYPE
	BR 58	522		Pipe Bridge
*	CONSTRUCTION DATE	GRID 1	REF.	INITIAL CONDITION
	unknown	TL 37580	01278	Demolished
	DESC	RIPTION and	d CONDIT	TION
	Two concrete block abutmen	nts are all that r	emains of th	is crossing.
	PHOTO NO.		I	DIMENSIONS
	Not available		dims of blo 0.95m by	
	DOC	CUMENTAR	Y SOURC	ES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 59	523	Pipe Culvert
CONSTRUCTION	GRID REF.	INITIAL
DATE		CONDITION

Constructed of six concrete pipes dia. 0.60m laid next to each other across the canal. Head walls are made of concrete. Although the canal has silted up the structure appears to be sound.

PHOTO NO.	DIMENSIONS
WAP93 CP012	L 19.80m W 7.50m pipe dia 0.60m
DOCKIN (EN IEL D	V. GOVID GEG

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 60	524	Pipe Culvert
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION

Similar in design to BR 59 with six pipes and concrete head walls, the pipe are slightly larger with a 0.90m diameter.

PHOTO NO.	DIMENSIONS
WAP93 CP014	L 16.00m W 6.00m pipe dia 0.90m

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 61	525	Pipe Bridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION

This structure is basically a timber and roofing felt cover for a pipe crossing the canal at low level. The timber of the box section cover is in fair condition, there are small portions of the felt missing.

РНОТО NO.	DIMENSIONS
WAP93 CP020	L 12.50m W 0.30m

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 62	526	Pipe Bridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
pre 1945	TL 37725 00858	Fair/Good

Pipe bridge constructed of an angle iron frame which supports the pipe. Structure appears sound with little corrosion.

PHOTO NO.	DIMENSIONS
WAP93 CP018	L 12.40m
WAP94 CP038	W 1.00m

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 63	527	Pipe Bridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION
1960s?	TL 37767 01022	Good
DESCRIPTION and CONDITION		
Modern steam carrier constructed of two box shaped steel tube stanchions. Pipe is suspended between, extra welded braces have been added to the pipe at the span.		

DOCUMENTARY SOURCES

DIMENSIONS

Dims of stanchions 0.65m by 0.95m

PHOTO NO.

WAP93 CP021

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 64	528	Footbridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION

A steel tube formed arch bridge with a timber deck which originally spaned the Horsemill Stream. It now rests on the eastern bank of the sme stream just outside the preimeter fence. The deck may need to be replaced but the frame appears undamaged.

РНОТО NO.	DIMENSIONS
WAP93 CP045	Not Available
DOCUMENTAR	Y SOURCES

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 65	530	Footbridge
CONSTRUCTION	GRID REF.	INITIAL
DATE		CONDITION

Footbridge built of 5 timber joists originally supporting a planked deck (now rotten away) which rests on two brick piers.

PHOTO NO.	DIMENSIONS
Not available	L 6.00m W 3.50m

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 66	531	Pipe Bridge
CONSTRUCTION	GRID REF.	INITIAL
DATE	GRID REA.	CONDITION

Built of an angle iron supporting frame with a box section, held up by concrete piers. The piers and the frame seem to be in good condition.

PHOTO NO.	DIMENSIONS
WAP93 CP026	L 15.00m W 0.45m

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 67	532	Pipe Bridge
CONSTRUCTION DATE	GRID REF.	INITIAL CONDITION

Two angle iron framed stanchions support a delapidated timber box housing. Carried one pipe and telegraph wires.

PHOTO NO.	DIMENSIONS
WAP93 CP025	L 6.80m W 0.75m

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 68	555	Footbridge
CONSTRUTION DATE	GRID REF.	INITIAL CONDITION
post 1947	TL 37658 02094	Demolished

This footbridge appears to be built after the canal had silted up and was constructed of sorted timbers, asbestos sheeting and hard board covered with gravel. There were no bank supports.

РНОТО NO.	DIMENSIONS
Not Available	L 4.00m W 2.20m
DOCUMENTARY SOURCES	

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 69	556	Pipe Bridge
CONSTRUTION DATE	GRID REF.	INITIAL CONDITION
1936	TL 37442 02314	Poor

The bridge consists of three supports carrying large steam and air pipes over the canal in front of the Quinan Stove. Supports are steel angles the pipes are galvanized steel. The complex was recently burnt out as part of the decontamination process.

PHOTO NO.	DIMENSIONS
WAP94 CP001	Approx L 11.00m W 2.20m

WALTHAM ABBEY RARDE SITE BRIDGE REPORT		
SITE NO.	RCHME NO.	BRIDGE TYPE
BR 70	557	Pipe Bridge
CONSTRUTION DATE	GRID REF.	INITIAL CONDITION
1940	TL 37575 01975	Poor/Fair

DESCRIPTION and CONDITION

Similar to bridge BR 51 this also carried the Steam, Acid and compressed air services to the New Hill Nitroglycerine Plant. Constructed of Brick piers in Flemish bond with concrete capping and steel loop steps up one side of each. The pipes and gantry are missing.

РНОТО NO.	DIMENSIONS
Not Available (refer to BR51)	Unknown
DOCUMENTARY SOURCES	

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR 01	132	FLAGSTAFF ROAD BRIDGE
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
1832	TL 37725 00877	GOOD (INUSE)
	DESCRIPTION +	CONDITION.
Cast Iron ribbed bridge with 6 arched ribs set on brick abutments. The deck is concrete with hand rails on either side. Original weight limit 2.5 Tonne axle load reduced to 1.9 ton axle load. Refer to Roughton Survey Report for condition and drawings. The bridge also carries service pipes which are slung along eastern side.		
РНОТО	PHOTO NO. DIMENSIONS	
206/E/22 BB92 /26065		Length 7m Width 3.9m
DOCUMENTARY SOURCES (DRAWINGS ETC)		
1993 Roughton Bridge Assessments p. 13-20 Dry Nº 01 May 1993. 1993 RCHME Royal Gunpowder Factory Walthem Aldeey report (unpublished).		

WALTHAM ABBEY RARDE SITE BRIDGE RECORD		
SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BLO2.	130	ROAD BRIDGE (BAILEY TYPE)
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
LATE 1960'S EARLY 1970'S	TL 37735 01000	GOOD. (IN USE)
	DESCRIPTION +	condition
Bailey type road bridge with 5 tonne axle load limit. Steel structure with a timber deck, together with footbridge on eastern side. Both are set on precast concrete abutments. Refer to Roughtons Survey Report for condition and drawings.		
РНОТ	o No.	DIMENSIONS
L. 12.37 m W. 4.11 m HT. 1.55 m.		W. 4.11m
DOCUMENTARY SOURCES (DRAWINGS ETC)		
1993 Roughton Bridge Assessments o 21-29 Dra		

1993 Roughton Bridge Assessments p 21-29 Drg. No 02 Hay 1993.

1993 RCHME Royal Gunpowder Fackry Waltham
Abbey report (unpublished)

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
Bl.03	133	FOOTBRIDGE
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
LATE 1960° EMILY 1970°	TL 37690 06992	GOOD (IN USE)
	DESCRIPTION +	careliton
Bridge set on brick and concrete aboutments. The bridge is planked on either side by a number of service pipes Refer to Roughtons Survey Report for condition and drawings		
Refer to R		
Refer to R	oughtons Survey l	
Refer to Ri and drawings	oughtons Survey l	Report for condition
Refer to Ref	onglitons Survey l	DIMENSIONS L. 6.85 m W. 1.64 m.

	R.C.H.M.E. NO.	BRIDGE TYPE
BR.04.	271	ROAD BRIDGE (BAILEY TYPE)
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
1940? Mid 1950s to Mid 1960s.	TL 37793 01115	GOOD.
	road bridge with milar ear to brid	
footlonder on North side. The abutments on either side are vertical timber piles. Refer to Roughtons Survey Report for condition and drawings Bridge also carries an unber of sterrice pipes. The Letters MKII. are welded to either end of the bridge.		
	nies an umber of soon welded to either en	
Bridge also car Letters MKII. are		rvice pipes. The nd of the bridge.
Bridge also care Letters MKII. care PHOTE	O NO.	rvice pipes. The and of the bridge. DIMENSIONS L. 12.37 m W. 5.43 m

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR.05	279	Footbridge
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
1957	TL 37735 02156	GOOD (IN USE)

DESCRIPTION

The bridge 1998 is made of a steel frame with timber planked deck. The bridge is set on concrete edautments and has havel rails on either side.

Refer to Roughtons Survey report Por condution and drawings.

РНОТО NO.	DIMENSIONS
	L. 9.85m
	W. 1.95 m

DOCUMENTARY SOURCES (DRAWINGS ETC...)

1993 Roughton Bridge Assessment & Dry N°05.
May 1993

Tay Dry. Nº2 L - B.10 plans and elevations

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B G *****		
R.C.H.M.E. NO.	BRIDGE TYPE	
269	ROAD BRIDGE	
N.G.R.	INITIAL CONDITION	
TZ 37675 01395	GOOD (IN USE)	
DESCRIPTION		
Deinforced concrete bridge. Concrete and asphalt deck set on concrete abutments with rocker bearings between thand raid on either side. Refer to Roughtons Survey Report for condition and drawings		
PHOTO NO. DIMENSIONS		
206/0/20		
206/Q/20	L. 12.33 m	
206/Q/20		
206/Q/20 FARY SOURCES (DRAWING) Mon Bridge Asse	L. 12.33 m W 4.26 m	
	N.G.R. TZ 37675 01395 DESCRIPTION Norete bridge. Coset on coneres beautings between beautings between discussings and discussings.	

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BK.07	258 507.	FOOT BUDGE
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
19603?	7L 37545 01345	500D. (IN USE)
	DESCRIPTION	
The bridge is constructed of thick timber planked deck supported by 2 PSJ which themselves rest on concrete abutanents Refer to Roughtons Survey Report for condition and Drawings. Handrails fitted on either side.		
PHOTO NO. DIMENSIONS		
DOCUMENTARY SOURCES (DRAWINGS ETC)		
1993 Roughton But Bridge Assessment PS8-64 Barre Bry. Nº 07 June 1993		

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR08	228	Road TRIDGE
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
?	TL 37680 02106	GOOD.
	DESCRIPTION	
deck is of concrete and exphalt with supported by 257s which are inturn supported on concrete abutments. Handrails situated on extler side of bridge with site perimeter fence attached to the eastern side. Refer to Roughtans Survey Report for andition and downings.		
РНОТ	PHOTO NO. DIMENSIONS	
L 7.5m W 3.05m		
DOCUMENTARY SOURCES (DRAWINGS ETC)		
1993 Roughtons Bridge Ussessments p. 63-7 Dry Nos 08 1/2 April 1995 1993 Rettriz Royal Gunpowder Fackry Waltham Molocy report (unpublished)		

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR 09	805	FOOTBRIDGE
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
?	TL 37725 01675	FAIR (IN USE).
	DESCRIPTION	
The footbordge is made of timber and steel similar in construction to 07. The timber planked decking is supported by 2 (8) is which rest on conserve abutuents. Hand out present on one side (nontern) the perimeter fence is attached to the other lefer to Roughtons Survey report for endition and Drawings.		
РНОТ	o no.	DIMENSIONS
-		L. 11.60m W. 1.6m
DOCUMENTARY SOURCES (DRAWINGS ETC)		
1993 Roughton Bridge Assessmente p 72- 77 Dry Nº 09 April 93		

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BRIO	117	BRICK ARCH
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
1878/9	TL 37597 01800	GOOD (in use)
	DESCRIPTION	
The bridge is a brick arch set on concrete abutments. It is constructed of blue engineers bricks and stocks. The parapets, of brick, have a stock strue plaques on either side with 'REPF VR 1878' enscribed. Refer to Raughtens Survey Report for anetition and Drawings. 5 tonne cute load limit.		
PHOTO NO. DIMENSIONS		
206/3/3		L 10.5m W. 3.8m HT 4.6m (parapet to waster)
DOCUMENTARY SOURCES (DRAWINGS ETC)		
1993 Roughton Bridge Assessments p. 78-84 Dry N° 10/1-2 April 1993. 1993 RCHME Royal Gungovder factory Waltham Mobey report (un published)		

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BF-11	238	ROAD BRIDGE (BMCEY TYPE)
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
1971	TL 37715 02041	GOOD (IN USE)
	DESCRIPTION	
Bailey type bridge constructed of 5 steel panels which support timber plank deck. The bridge is set if bride and timber aboutness. Refer to Roughton Survey report for condition and Drawings 'MKII' in welded letters appears at either end of the bridge.		
PHOTO NO. DIMENSIONS		
		L. 15.41m W 4.13m
DOCUMENTARY SOURCES (DRAWINGS ETC)		
22 7 1071	ton Bridge Asses 1 May 1993 Dry. No. S- E Bridge As Le altham Abbey	B. 49

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE	
BR12.	506	STEEL TROUGH ROAD BRIDGE	
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION	
1972 (demol. Oct 1993)	TL 37653 02251	DEMOL.	
	DESCRIPTION		
Refer to Roughstons Survey Report on old bridge. New crossing which will consist of a concrete orderent is yet to be erected.			
РНОТ	O NO.	DIMENSIONS	
DOCUMENT	TARY SOURCES (DRAWING) JUSTON Bridge F - 13.53.	IGS ETC)	

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR 13	106	Aqueduet
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
1940	TL 37546 01935	Good.
	DESCRIPTION	
Concrete Aqueduct constructed of S convete pipes overlain with cost concrete. At present no county runs over the emuture although the embantements and tow path shill exist. Refer to foughters Survey Report for condition and drawings.		
PHOTO NO. DIMENSIONS		
206/H/35 L 10.97m 206/T/11 W 15.55m		
DOCUMENTARY SOURCES (DRAWINGS ETC)		
1993 Roughton Bridge Assessment p 98-105 Dry No 13 1/2 1993 RCHME Royal Gunponder Factory Waltham Abbey, report (unpublished)		

		T
SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BL14.	112	Cost Iron. Aqueduct
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
1878/9	TL 37565 01800	Good, (disused).
	DESCRIPTION	
The aqueduct is constructed of cast iron each side piece is ear a single cost. The trough base is a of iron plates botted to the side sections. The aqueduct sits on brick aboutments. A timber walkway existed on either side Refer to longhton Survey report for constitution and drawings.		
PHOTO NO. DIMENSIONS		
206/D/17,206/D/18 L 9.32m 206/H/23,BB92/26105 W 3.25m BB92/26168,BB92/26169 Dp. 1.3m.		
DOCUMENTARY SOURCES (DRAWINGS ETC)		
1993 Roughton Bridges Assessments p. 105-111 Dry No 14 April 1993. 1993 RCHME Noyal Grunpowder Fackory Waltham Abbey report (unpublished)		

<u> </u>		
SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR 15.	214	CAST IRON / AGUEDUCT / BLIDGE
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
1878/9 19 66 ? (Bridge)	76 37584 02131	GOOD. (disused)
	DESCRIPTION	
Originally a cast IRM aqueduct very similar to 14, later was adapted to a foot bridge. The structure was also used to suspend a pripe across the Old River Lea. Survey Accord for Refer to Boughtons Survey Accord for details of condition and construction		
PHOTO NO. DIMENSIONS		
		L 9.8m W 3.1 m D. 1.45m
DOCUMENTARY SOURCES (DRAWINGS ETC)		
1903 WASC 901/198 27.5.03 Aquaduet No.5 (corrected to No.2) 1903 WASC 901/199 3.6.03 Aquaduet No.5 1993 Roughton Bridge Assessment pIII-118 Dry No. 15 April 1993 1993 RCHME Waltham Abbers. report Capablish. Pactury Waltham Abbers. report Capablish.		

		<u></u>
SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR16	113	BRICK ARCH BRIDGE
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
1878/9	TL 37548 01761	GOOD.
	DESCRIPTION	
A brick earch bridge similar in construction to 10 i.e. Blue engrueers bricks and stocks lefer to Roughtons Survey Report for details of condition and construction. Stone plaque incribed 1298 VR 1878'		
РНОТО		DIMENSIONS
206/H/24 206/Q/26 BB 92/26164 BB 92/26459. DOCUMENTARY SOURCES (DRAWINGS ETC) 1993 Roughton Bridge Assessments p 119-126 Dry Nº 16/1-2 May 1993 1993 NCHME Royal Gunpowder Factory Waltheum Aldrew report (unpublished)		

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR17	134	FOOTBRIDGE
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
?	TL 37676 00931	FAIR. (dirused)
	DESCRIPTION	
The footbridge is constructed of steel trusses rivetted together which supports a timber cleck to the west the abuttanent is concrete, to the east the bridge is set of an a borrele pier. Refer to longhtons Survey Report for construction and condution details. The londing also supports a number of pipes and caldes.		
PHOTO NO. DIMENSIONS		
206/K/6 206/S/33 206/S/34		L. 12.6 m U. 1.3 m.
DOCUMENTARY SOURCES (DRAWINGS ETC)		
1993 Roughton Bridge Assessment: p127 -136 Dry N° 17 April 93 1993 RCHME Loyal Gunpowder Factory Welthum Albery report (unpublished)		

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE	
BK18.	508	CULVERT BRIDGE	
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION	
?	72 37476 01783	POOR (in use).	
	DESCRIPTION		
Structure coasists of single vitrified ripe running under Long Walk with brich headwalls east and west. Refer to Roughtons Survey report for details and drawings.			
PHOTO NO. DIMENSIONS			
DOCUMENTARY SOURCES (DRAWINGS ETC) 1993 Roughten Bridge Assessments p 137-140 Dry No. 18 April 1993.			
1993 Rough			

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR 19.	230	ROAD BRIDGE
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
?	TL 37516 01795	POOR (disused)
	DESCRIPTION	
Vanous phases of construction can be seen. Probably a longh / masonary arch originally which was extensively damaged and was subsequently repaired with concrete Refer to Roughtons Survey report for condition detauts.		
PHOTO NO. DIMENSIONS		
L4.8m ω 3.1m HF 2.5m.		
DOCUMENTARY SOURCES (DRAWINGS ETC)		
1993 Roughtons Bridge Assessment p. 140-142 Dieg. 1993 RCHME Royal Grunpswaler Factory Walthan Albert report (upublished)		

R.C.H.M.E. NO. 250 N.G.R. 72 37610 02175 DESCRIPTION 1/2/1 agreduct. newler east pieces nigh deck. The	BRIDGE TYPE CAST IKON AQUEDUCT. INITIAL CONDITION FAIR (damaged/disused) The Side panels S latted together e cleck is ende panellels	
N.G.R. 72 37610 82175	INITIAL CONDITION FAIR (damaged/disused)	
TL 37610 02175	FAIR (damaged/disused)	
02175	(damaged/disused)	
DESCRIPTION 1/201 aqueduct: newer east pieces ough deck. The number of the	The side panels s bulted together e deck is e side panellels	
1200 aqueduct. newler cost pieces ough deck. The	The side panels S bulted together e deck is ende panellels	
A later cast 12M aqueduct. The side panels made up of smaller east pieces butted together as was the trough deck. The deck is missing and a number of the side panellels are severely damaged. Refer to Roughtons Survey Report for details of carelitan.		
PHOTO NO. DIMENSIONS		
206/0/24 206/0/25 206/0/29 BB92/26289		
DOCUMENTARY SOURCES (DRAWINGS ETC)		
1993 Roughton Bridge Assessment p 143-149 Dry No 20 May 1993 1993 KCHME Royal Composeder Factory Walthern Aldsey report (uputstocked)		
	206/0/24 206/0/25 206/0/29 3B92/26289 ARY SOURCES (DRAWIN M Bridge Assessing O May 1993	

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR 21	264	Footbridge
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TL 37545 02370	POOR./fair
	DESCRIPTION	
Similar in construction to BR 24 Timber dede notten. PHOTO NO. DIMENSIONS		
206/Q/4		L.9.45m W 0.97m
DOCUMENT	TARY SOURCES (DRAWIN	IGS ETC)
1993 Retter Royal Europerder Factory Weether Aldsey report (umprisolistical)		

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE	
BL 22	182	Footbondge.	
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION	
1890?	TL 37437 02290	POOR.	
	DESCRIPTION		
Footbridge constructed from angle Irons with timber steps and deck (now rotten). A number of the iron sections are severely arroaded also extensive damage coused by encrocking trees.			
РНОТ	O NO.	DIMENSIONS	
206/8/33		L 10.95m W 1.59m	
DOCUMENTARY SOURCES (DRAWINGS ETC)			
1993 RCHME Royal Grupowder Firebry Waltham Aldoey report (upublished)			

1	T	
SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR 23	255	FOOTBRIDGE
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TL 37782 02035	
	37870 01814	
	DESCRIPTION	
Sure as . Bl	24	
	O NO.	DIMENSIONS
206/0/31 AS BRZY 206/0/32		
20	6/0/32	
DOCUMENTARY SOURCES (DRAWINGS ETC)		
DOCUMEN'	ΓARY SOURCES (DRAWIN	IGS ETC)
DOCUMENT 1993 PCHN Waltham	TARY SOURCES (DRAWIN TE Royal Surp Ablocy report	Ocroder Factory (upublished)
DOCUMENT 1993 PCHP Waltham	TARY SOURCES (DRAWING TE Royal Gung Ablocy report	Oprider Factory (upublished)
DOCUMENT 1993 PCHP Waltham	TARY SOURCES (DRAWIN TE Royal Sung Abbuy report	order factory
DOCUMENT 1993 PCHP Waltham	TARY SOURCES (DRAWING	Ocrider Factory (upulalis Led)
DOCUMENT 1993 PCHP Waltham	TARY SOURCES (DRAWIN TE Royal Sung Abbuy report	Ocrder Fuctory
1993 PCHP Waltham	TARY SOURCES (DRAWING	Oorder Factory (upulslisted)

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR. 24	254	FOOTBRIDGE
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
189?	TL 37585 02200	FBIR.
		-

DESCRIPTION

The bridge is attached to brigh and concrete aboutments by vertical bolts set into sandstone blocks. Semi circular in shape formed with Tirons as is the heard vail. The deck is timber. A boost scraper is situated on the south nest corner of the bridge.

РНОТО NO.	DIMENSIONS
206/0/30 BB92/26287	L 9.48M W 0.97M HT 3.8M (above canal base)

DOCUMENTARY SOURCES (DRAWINGS ETC...)

1993 RCHME Loyal Composider Factory Wentham Aldrey report (unpublished)

	•		
SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE	
BR 25	102	PIPERRIDGE	
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION	
1940	TL 37575 01973	Poor	
	DESCRIPTION		
The bridge carried an acid pipe, compressed air pipe and steam pipe Ann the acid factory to the new notroglycenine hild. Believe I that the acid pipe was never used. Bridge constructed acid pipe was never used. Bridge constructed of angle irons in a single spain.			
PHOT	o no.	DIMENSIONS	
206/1/20 206/N/7			
1993 RCHME Royal Gunpawder Factory Wardham Aldrey report (unpublished).			

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE	
BL26	103	FOOTBRIDGE	
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION	
1904?	TL 37602 0884	POOK.	
	DESCRIPTION		
The bridge is constructed of Angle lons with finibur steps and deck. The bridge also carried pipes over the canod.			
PHOT	O NO.	DIMENSIONS	
PHOTO NO. DIMENSIONS 206/1/24 L 9.4m 206/T/15. W 1.73m BR92/26170 HT 2.3m DOCUMENTARY SOURCES (DRAWINGS ETC) 1993 RCHME Royal Gunpulater factory Waltham Abbley report (unpulated)			

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE	
	MOMMAN AND THE		
RL 27	180	Aqueduct.	
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION	
1878	TL. 37552 01598.	FAIR.	
	DESCRIPTION		
The aqueduct is made of brich with Brich facing walls on its west and eastern sides. These have tie rods running through.			
PHOT	o no.	DIMENSIONS	
L. (NtoS) 2.8		L. (NtoS) 2.8M	
W. 12.1m		L. (NtoS) 2.8M W. 12.1M	
DOCUMENTARY SOURCES (DRAWINGS ETC)			
1993 RCHME Royal Europowder Factory. Waltham Alober report (unpublished).			

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR 28	170	Agneduet.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
1806-27?	7237442	GOOD.
	DESCRIPTION	
The aqueduct in made of bride and carries a canal over a low level leat to press house 103. Concrete bases on the tow path perhaps represent memans of a footbordge.		
,		
PHOT	o no.	DIMENSIONS
PHOT	O NO.	DIMENSIONS L. 6.4 m W 12.5 m HT 2.25 m+
DOCUMENT	ΓARY SOURCES (DRAWIN	L. 6.4m W 12.5m HT 2.25m+
DOCUMENT		L. 6.4m W 12.5m HT 2.25m+

OVER NA	D. C. W. L. C. C.	BBID OF MANY
SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR. 29	184.	FOOTBRIDGE
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TL 37654 01449.	FAIR.
	DESCRIPTION	
Similar anstruction to other senicircular bridges on site wood deck, angle into + coss pieces mounted on york stone + bride abutments.		
PHOTO NO. DIMENSIONS		
206/C/16.		
	TARY SOURCES (DRAWIN	
1993 RCHME Royal Rupswder Facking Waltham Abbey report (unpublished).		

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE	
BL.30	123.	FOOTBRIDGE	
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION	
196?	7237805. 01065	FAIR.	
	DESCRIPTION		
The footbordge is constructed of and RBT supported on bords piers. On this beam sits a timber deck with hundrails. There are worden steps at either end.			
PHOT	O NO.	DIMENSIONS	
206/E/7		L. W 1.7m HT 2.68m.	
DOCUMENT	TARY SOURCES (DRAWIN	NGS ETC)	
1993 RCHTIE Royal Gunpowder Factory Waltham Abbey. report (unpublished)			

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE	
3031	126	Footbridge.	
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION	
	7237765	GOOD	
	DESCRIPTION		
Footbridge no	Ah of Power How	se A210.	
	· · · · ·		
PHOT	o No.	DIMENSIONS	
206/E/8			
ω		W 1.4m	
LAT		HT2m.	
DOCUMENT	FADV COUDCES / DDAWIN	ICS ETC \	
DOCUMENTARY SOURCES (DRAWINGS ETC)			
2 2014	VC 0 - 1 1	22 las 6 bas	
1993 RCHI Waltham	TE Ployal Gung Abbey report (unpublished).	
1993 RCH1 Waltham	TE Ployal Gung Abbey report (ander factory impublished).	
1993 RCHI Waltham	TE Ployal Gung Abbey report (ander factory impublished).	
1993 RCHI Waltham	TE Ployal Gung Abbey report (ander factory impublished).	
1993 RCHI Waltham	TE Ployal Gung Abbey report (ander factory unpublished).	
1993 RCHI Waltham	TE Ployal Guy	ander factory impublished).	

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BL 32	100.	Swingbridge.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
		Partially Danotished.
	DESCRIPTION	
Remains of a ranking (narrow gases sumabordes consist of triavacular concrete pier set in methods of trillhead stream. Supported on 3 concrete piles No. of timbers of unknown function or association also stand in the stream. as iron pivet set in on the west bank. is an iron pivet set in on the west bank. is the concrete encrete 23m to nest of this is the concrete mounting point that 3 steps to south the concrete mounting point that 3 steps to south the concrete mounting point that all devicting allowing has are curred face to the aust obviously allowing the bridge to swing into place Deck + superstmeter unsaying (vosses stream at anyle was unit		
PHOTO NO. DIMENSIONS		DIMENSIONS
		N/A .
DOCUMENT	TARY SOURCES (DRAWIN	NGS ETC)

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE		
B(33	120.	Bridge.		
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION		
	TL 37465	POOR.		
DESCRIPTION				
Rough bridge constructed of unimplaced landes a precost concrete pupe and railway sleepers. There are two eartwork causerays on either side.				
PHOTO NO.		DIMENSIONS		
		L. 7m W 4.5m		
DOCUMENTARY SOURCES (DRAWINGS ETC)				
1993 Rettre Royal Gunpowder Factory Waltham Abbery report (unpublished)				

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE		
Bh.34	122.	Bridge:		
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION		
	TL 37800 01095	fair.		
DESCRIPTION				
The present Structure is constructed of timber and used to carry the steam pipes steam pipes were loved mediately to the north of tru's the are loved about when the forther of a firmer fortherage. Stots incorporated about ments of a firmer fortherage. Stots incorporated into the brick with appear to allow about into place to seal the channel. It be stid with place to seal the channel. The brick are similar to those used in 1878. The brick are similar to those used in 1878.				
Wings				
PHOT	o no.	DIMENSIONS		
PHOT	TARY SOURCES (DRAWIN	DIMENSIONS L. W. 2.8m HT 1.98m IGS ETC)		
PHOT		DIMENSIONS L. W. 2.8m HT 1.98m IGS ETC)		
PHOT	TARY SOURCES (DRAWIN	DIMENSIONS L. W. 2.8m HT 1.98m IGS ETC)		

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE		
14 35	191	FOOTBRIDGE		
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION		
	TL 37424 01922	VERY POUR		
	DESCRIPTION			
All that remains of the protondige are two finiser prestoes which survive an the east and west state of the least.				
РНОТО NO.		DIMENSIONS		
		L. 5.6m W. 1.4m.		
DOCUMENTARY SOURCES (DRAWINGS ETC)				
1993 Reitte Royal funpavder Factory Walthour Albery Kireport (unpublished).				

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR3.6	202.	Footbordge.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
189?	TL 37643 02044	FAIR.
	DESCRIPTION	
pipes over, side al the	ge is built on thing a trimber of the used to car suspended on mondy	noops on woo
PHOT	o No.	DIMENSIONS
		L. 8.5m W.1.3m HT 2.25m.
DOCUMEN	TARY SOURCES (DRAWIN	NGS ETC)
1993 RCE Walthern	HIF Poyal a	improder Fackry + (unpublished)

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR 37	212.	Pape Bridge.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TL 37575, 02116.	Poon.
	DESCRIPTION	
most partisus is most partisus supported a	provoted on time south bank. The wallevery on the	timber for the ser trestles on the ne bondge also ne eastorn side.
РНОТ	O NO.	DIMENSIONS
		L. 13.2m W. 2.2m HT 2.35m
•	TARY SOURCES (DRAWIN	
1993 Pempe Walthe	DE Rergal Gu	npowderfictoro

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BL 38	173.	PIPERRIDEE
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TL 37517 01644 37530 01649	FORE.
	DESCRIPTION	
Specific	ed prope bondeje con	
РНОТ	O NO.	DIMENSIONS
PHOT		DIMENSIONS L. 8.0Sm ω. 0.7Sm ΗΤ 2.4m.
DOCUMEN'	TARY SOURCES (DRAWIN	L. 8.08m w. 6.78m HT 2.4m.
DOCUMEN'		L. 8.08m w. 6.78m HT 2.4m.

		7
SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BL39	174.	Footbordge.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	72 3752 3 016 53	FAIR.
	DESCRIPTION	
Footbridge is supporting a	constructed of timber deck.	angre inns
PHOT	O NO	DIMENSIONS
11101	0 110.	
		L. 9.3m W- 1.03m
		H. 2.25m about
DOCUMENT	TARY SOURCES (DRAWIN	NGS ETC)
1993 RCHM	E Royal Gun	anoder factory

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR. 40	176	Pipebridge
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	72 3749801667 37500 01652.	FAIR.
	DESCRIPTION	
Consists of a l candl. Nos 2 cable attached metal structu	ange service pipe concrete posts I he these holds on in plack.	ate effor ent.
РНОТ	O NO.	DIMENSIONS
		L. 15.8m W. 0.7m HT (piu) 3.15m
	TARY SOURCES (DRAWIN	· ·
1993 RCHT	15 Royal Gung Abbey report	unpublished.

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
B&41	177.	Lifting Footbondge.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TZ 37501 01661.	Poor
4	DESCRIPTION	
and (4.25m) concrete land	a lifting footonid x on North bank vot bar. The brid Buthe South is ling ith 2 co	age spanned the sank is a the plates.
PHOT		DIMENSIONS
		DIMENSIONS
		DIMENSIONS L. 6.9m
PHOT	O NO. FARY SOURCES (DRAWIN	DIMENSIONS L. 6.9m W. 2.5m,
PHOT	O NO.	DIMENSIONS L. 6.9m W. 2.5m,
PHOT	O NO. FARY SOURCES (DRAWIN	DIMENSIONS L. 6.9m W. 2.5m,
PHOT	O NO. FARY SOURCES (DRAWIN	DIMENSIONS L. 6.9m W. 2.5m,
PHOT	O NO. FARY SOURCES (DRAWIN	DIMENSIONS L. 6.9m W. 2.5m,
PHOT	O NO. FARY SOURCES (DRAWIN	DIMENSIONS L. 6.9 m W. 2.5 m,

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
Bl 42	223.	fællondge
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	7237586	Rook.
	DESCRIPTION	
Organally the dushing 187	two supporting earlier side of carried the parties 159 to	the shoeroom
PHOT	O NO.	DIMENSIONS
		L. 9m W. 1.8m.
DOCUMEN'	TARY SOURCES (DRAWIN	NGS ETC)
1993 RCHI Pactury 6	WE Ployal Gr existing Abla	er report limpul

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR. 43	253	Bridge.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
1940?	TL 37600 02180	Pour.
	DESCRIPTION	
the Old River with vertical is versus of the river. The bring of the gutter and Al of the mixing	Lear, capped by howhing bolts. bordge support degle carried a ner services from house 46a.	The sawn off to are in the Notroglycenne E3 wash horse
PHOT	o No.	DIMENSIONS
DOCUMENT	TARY SOURCES (DRAWIN	NGS ETC)
Factory Wal	20thre lergal than Ablacy r	bunpruder eport (unput)

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR 44	505	Pipe/fastloridge.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TL 37545. 02348.	POOR.
	DESCRIPTION	L
trossel.		
РНОТ	O NO.	DIMENSIONS
		W. 2.2 m.
DOCUMENT	TARY SOURCES (DRAWIN	NGS ETC)
		2

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
2		
\$45	509	Pipe/toot
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TL 37520 02280.	Pour Dennel,
	DESCRIPTION	
Structure opps	oden fressel ven	uns of this
РНОТ	O NO.	DIMENSIONS
	NA	N/A
	/	
DOCUMENT	TARY SOURCES (DRAWIN	NGS ETC)

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
13/46	510	Pipe Bridge.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TL 37452 02240	Fair
	DESCRIPTION	
Box construction pipe above cane	DESCRIPTION wood + felt c	apping paises
РНОТ	O NO.	DIMENSIONS
	,	L. 8.70 m 10.20 m
DOCUMEN'	TARY SOURCES (DRAWI	NGS ETC)

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
Q47	511	Pipelondge.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TL 37543 02163.	For (denotisted)
	DESCRIPTION	
bridge which	inder support of carried gutten	y for N& from
РНОТ	O NO.	DIMENSIONS
РНОТ	O NO.	DIMENSIONS
РНОТ	O NO.	
	TARY SOURCES (DRAWI	Unkerown

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR 48	512	Footbondge.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TL 37505, 02116	Denol.
	DESCRIPTION	
Only munch survine and	ated timbers i	n canal bed
PHOT	O NO.	DIMENSIONS
		Unkeronn.
DOCUMEN'	ΓARY SOURCES (DRAWI	NGS ETC)

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR 49	513.	Agreeduct
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TL 37418	
	01977	tair
	DESCRIPTION	
Subterranean agnestrat / culvert made of borde + canevete precise construction interior my top irisible		
PHOT	o no.	DIMENSIONS
		W. 4.00m L. interour
DOCUMEN'	TARY SOURCES (DRAWI	NGS ETC)

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
5L 50	514.	Brick. Roadbridge.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TL 37455 01976	Por (partially demolished)
	DESCRIPTION	
Jellow brick row	Has gree possible to be lowered	over t volvetront over on vesternand outs allow beard to to dam up cannot
РНОТ	o no.	DIMENSIONS
		L. 3.3om
DOCUMEN'	TARY SOURCES (DRAWI	NGS ETC)

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BC 51	515.	Bottondge (ateur pipe bridge
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TL 37665 01976.	Danol
-	DESCRIPTION	
looped steps u bothed on. M	iers survive. Jel . Concrete cap p one side. Ha & cossing structu	s pipe stanton re renains.
РНОТ	o no.	DIMENSIONS
		W. 1.4m.
		co . , (iii.,
DOCUMEN'	ΓARY SOURCES (DRAWII	

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BC 52	516	Pipe Bridge.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TC 37434 01833.	Denot.
	DESCRIPTION	
Only concret	e supports remain	. of proper various
PHOT	O NO.	DIMENSIONS
		Dims of concretersuppole 85m x 75m.
DOCUMENT	TARY SOURCES (DRAWIN	NGS ETC)

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR 53	517	Pipe Culvert
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TL 37435. 01825	fair
	DESCRIPTION m. concrete pipe (1	
PHOT	o no.	DIMENSIONS
		L. 3.20m W 2.9m. pipe din -60m
DOCUMENT	TARY SOURCES (DRAWI	NGS ETC)

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BC54	218	Pipe braged
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TL 37497 01660	fair.
	DESCRIPTION	
РНОТ	o no.	DIMENSIONS
РНОТ		DIMENSIONS L 15.70 m. W. 80 m.
		L 15.70 m.
		L 15.70 m.

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
SHE NO.	K.C.H.M.E. NO.	DKIDGE TITE
BC 55	819	Pipe culvert
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TR 37472 01586	Good/fair.
	DESCRIPTION	
Bad holding entouses by.	hand vaits. ban ancoute sand bay	pope enclosed in ees either side of his reneted near
PHOT	o No.	DIMENSIONS
		L. 12.30 m W 3 10 n pipe dra. 1.10 n
DOCUMEN	ΓARY SOURCES (DRAWIT	NGS ETC)

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
W 56	520.	Pipelondge.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	7237460. 01529.	Fair / poer
	DESCRIPTION	
how wood + 180,	felt eas box con	nstruction.
DILOT	o no.	DIMENSIONS
PHOT		
PHOT		L. 2 5. dim W40 x
	ΓARY SOURCES (DRAWIN	W 40 × . 40

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR 57	521.	Pipelandge.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TL 37550.	Fair. (disused)
	DESCRIPTION	
Constructed for at least to pipes. 2 concrete Standings blocks hold 2 privated pipe in shaped standings which in turn supports a metal pipe held on by it books. The pipe has 4 hooks suspended below it to and has disused pipes attached extlor side		
to and has dis	used pipes attae	hed eather side
En und hers dis		DIMENSIONS
PHOT		DIMENSIONS L. = 7.1m W85m

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
B 58	522	Pipe bondge
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TC 37580	Demotosheel
	01278	remoligheer
	DESCRIPTION	
O. I. H. Hon		(2)
no Super Struct	concrete block piers	s reven.
×		
РНОТ	O NO.	DIMENSIONS
		of carevete blocks L. 95m W. 85m
	÷	W. 85m
DOCUMEN'	TARY SOURCES (DRAWIN	NGS ETC)
		,

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BL 59	523.	Pipe culvert
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TL 37627.	Good Fair
	DESCRIPTION	
Set in concrete each end.	Stream clagged	6 pipes din Dan e coupping ato fair condition.
PHOT	O NO.	DIMENSIONS
		L. 19:80m W. 7:50m pipe dra 80on
DOCUMENT	TARY SOURCES (DRAWIN	NGS ETC)

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
SITE NO.	R.C.II.W.E. NO.	bridge life
JL 60	524	"Pipe culvert.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TL 37660 01051	Good / Fair.
	DESCRIPTION	
Constructed of & 6 concrete pipes dia. 90m laid next to each other with concrete capping on either end. Stream boutely morning clagged up good condition of visible pieses.		
РНОТ	o no.	DIMENSIONS
РНОТ		DIMENSIONS L. 16 m w 6 m pipe dia 90 cm
		L. 16m W 6m pipe dia 90cm

CVETT NO	D C W M E NO	PRINCE OF TAXABLE
SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR61	525	Pipelandye.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
,	TC 37710	
	00882	fair.
	DESCRIPTION	
01 15		The Ball
Sox seith ne	oden brideg u bridge	wh Jett
low over	bridge	
PHOT	o No.	DIMENSIONS
		w. =30m
DOCUMENTARY SOURCES (DRAWINGS ETC)		
1		

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BH62	526.	Pipe bridge.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	7237725 00889	Fair/good.
	DESCRIPTION	<u> </u>
Mighe 1800 frame bridge onere canal. Also has selectority box mounted on one sole		
PHOT	O NO.	DIMENSIONS
L.? W. Im.		L.? W. Im.
DOCUMEN	TARY SOURCES (DRAWII	NGS ETC)

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR 63	527	Pipelondge.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
,	TC 37767 01022	Good.
	DESCRIPTION	
Modern Steam Carrier constructed of two tall box construct metal tubed Starehom Pipe suspended between reinforced by additional melded members.		
РНОТ	o no.	DIMENSIONS
РНОТ	o no.	DIMENSIONS Stanchions. W.65xn95m
	O NO. TARY SOURCES (DRAWIN	Stanchions. W.65xr -95m

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
3R64	528	Fortbridge.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TL 37592	Fair.
	DESCRIPTION	
Notal fube firmed bridge slight earch. timber dock crig. crossed. Harsenill Stream now sitting on side of the (East) tof tream.		
PHOT	O NO.	DIMENSIONS
L. W.		
DOCUMENTARY SOURCES (DRAWINGS ETC)		
*		

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
1465	530	Fortbordeg
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	TL 37438. 01736	Pool.
	DESCRIPTION	
fostbridge constructed 5 timber jorsk supp. fank deck resting an bride priers oner drain.		
PHOT	O NO.	DIMENSIONS
L W.		
DOCUMENT	TARY SOURCES (DRAWIT	NGS ETC)

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR 66	531	Pipe bridge.
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	37705. 01490	Fair
	DESCRIPTION	
Box section, made of angle iron, containing on pipe supported on as concrete priers.		
РНОТ	O NO.	DIMENSIONS
L. W. 35m		
DOCUMENTARY SOURCES (DRAWINGS ETC)		

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR. 67	532.	Pipelandge
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	37700 01343.	Fair/poor.
	DESCRIPTION	
lox section wooden bridge supported by 2. angle iron from standhours carries one pipe + telegraph wires.		
PHOTO NO. DIMENSIONS		
11101	0 110.	DIMENSIONS
W. 75m.		
DOCUMENTARY SOURCES (DRAWINGS ETC)		
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SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
BR 68.	580	
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	DESCRIPTION	
РНОТ	O NO.	DIMENSIONS
DOCUMENT	TARY SOURCES (DRAWIN	NGS ETC)

SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	DESCRIPTION	
РНОТ	o no.	DIMENSIONS
DOCUMENT	TARY SOURCES (DRAWIT	NGS ETC)
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SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION
	DESCRIPTION	
РНОТ	O NO.	DIMENSIONS
DOCUMENT	TARY SOURCES (DRAWII	NGS ETC)
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SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE	
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION	
	DESCRIPTION	,	
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PHOT	O NO.	DIMENSIONS	
DOCUMENT	DOCUMENTARY SOURCES (DRAWINGS ETC)		
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SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE	
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION	
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	DESCRIPTION		
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РНОТО NO.		DIMENSIONS	
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DOCUMENTARY SOURCES (DRAWINGS ETC)			
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SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE		
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CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION		
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	DESCRIPTION			
	DESCRIPTION			
РНОТО NO.		DIMENSIONS		
DOCUMENTARY SOURCES (DRAWINGS ETC)				
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SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE	
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION	
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	DESCRIPTION		
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PHOTO NO.		DIMENSIONS	
THOTO NO.			
DOCUMENTARY SOURCES (DRAWINGS ETC)			

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SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE		
CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION		
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	DESCRIPTION			
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DOCUMENTARY SOURCES (DRAWINGS ETC)				
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SITE NO.	R.C.H.M.E. NO.	BRIDGE TYPE		
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CONSTRUCTION DATE	N.G.R.	INITIAL CONDITION		
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	DESCRIPTION	<u></u>		
	DESCRIPTION			
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PHOTO	NO.	DIMENSIONS		
DOCUMENTARY SOURCES (DRAWINGS ETC)				