

THE ROYAL GUNPOWDER FACTORY

WALTHAM ABBEY


Aqueducts, Bridges,

Canals and Leats


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112


THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER	OLD SERIES	RCHME NUMBER 103	N.G.R. TL 37602 01884
NAME/FUNCTION Footbridge		START DATE 1904?	END DATE
			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME  1) 206/I/24 From West 206/T/15 From East  2) BB92/26170 From South East	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: 88			
CONDITION      Poor			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Angle iron  4)      DIMENSIONS i) L 9.4m ii) W 1.73m iii) HT 2.3m  5)      The footbridge is constructed from angles with a timber deck and steps. The bridge is also utilised to carry service pipes over the canal.			

## THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY


NUMBER	OLD SERIES	RCHME NUMBER 106	N.G.R. TL 37546 01935
NAME/FUNCTION Aqueduct		START DATE 1940	END DATE
			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES 1993 Roughton <u>Bridge Assessments</u> p98-105 Drg No13/1-2	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME  1)206/H/35 From South West 206/T/11 From South	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHM 107 OVERLIES: Old River Lee			
CONDITION      Good			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Cast concrete  4)      DIMENSIONS i) L 10.97m ii) W 15.55m  5)      The aqueduct carries the extended canal RCHM 107 over the Old River Lee. Cast into the concrete on the west side is the date 1940.			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 107	N.G.R. TL 37520 01965 37602 01884
NAME/FUNCTION Canal		START DATE 1904? + 1940	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH: E14, 88, 88b, RCHM 106 CUTS: 76 OVERLIES: Old River Lea			
CONDITION Fair			
<p>DESCRIPTION</p> <p>1) CONSTRUCTIONAL MATERIAL Earthwork</p> <p>4) DIMENSIONS i) L 111m ii) W 4.9m iii) depth 1.1m</p> <p>5) The canal forms part of the high level system. The eastern section was constructed around 1904 to serve the Cordite Paste Store [88]. This was extended in 1940 to link the basin near traverse 76 to the formerly dead end branch at the paste house 88.</p>			

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER	OLD SERIES	RCHME NUMBER	N.G.R.
		112	TL 37565 01800
NAME/FUNCTION		START DATE	END DATE
Aqueduct		1878-9	
			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
		1993 Roughton <u>Bridge Assessments</u> p105-111 Drg no14 April 1993 Built 1878	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
		1) 206/D/17 From south 206/D/18 From east along trough 206/H/23 From east  2) BB92/26105 Cast Iron Aqueduct view from East BB92/26168 Aqueduct built 1878-9 view from North East BB92/26169 Aqueduct built 1878-9 view from North along trough BB92/26461 Sketch of Aqueduct for proposed extension to Factory	
RELATIONSHIPS WITH OTHER MONUMENTS			
ASSOCIATED WITH:      OVERLIES: Old River Lee			
CONDITION      Good			
DESCRIPTION			
1)      CONSTRUCTIONAL MATERIAL Cast iron			
4)      DIMENSIONS i) L 9.32m ii) W 3.25m iii) trough depth 1.3m			
5)      The aqueduct carries a high level canal over the Old River Lee. The trough is constructed from two side plates each a solid casting. The trough base plates are bolted to an internal flange at the base of each of the plates. The bridge sits on brick piers at either side of the canal. The canal trough could be sealed by dropping boards into vertical slots within the brickwork. The aqueduct carried a timber walkway to either side. On the outside of each of the side plates is a cast device of a queens crown over a shield bearing the letters VR 1878.9.			

## THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER	OLD SERIES	RCHME NUMBER 113	N.G.R. TL 37548 01761
NAME/FUNCTION Bridge		START DATE 1878.9	END DATE
			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
		1993 Roughton <u>Bridge Assessments</u> p119-126 Drg No16/1-2 May 1993 Built 1878	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
		1)206/H/24 From South 206/Q/26 Brick lined channel beneath bridge	
		2)BB92/26104 View from South West built 1878 BB92/26459 Drawing showing various brick bridges 30.5.1878	
RELATIONSHIPS WITH OTHER MONUMENTS			
ASSOCIATED WITH: RCHME 112			
CONDITION      Good			
DESCRIPTION			
1)      CONSTRUCTIONAL MATERIAL Brick			
4)      DIMENSIONS i) L 7.3m ii) W 3.1m iii) HT parapet to canal base 4.75m			
5)      The bridge was built when the high level canal system was extended in 1878. The bridge is brick with earthen embankments to either side. On either side of the parapet is a stone plaque with the following inscription 'RGPF VR 1878'.			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 117	N.G.R. TL 37597 01800
NAME/FUNCTION Bridge		START DATE 1878.9	END DATE
NO r                      PHY			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES 1993 Roughton Bridge Assessments p78-84 Drg No 10/1-2 April 1993 Built 1878	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME  1)206/J/3 Bridge from West	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHME 112, RCHME 113 OVERLIES: Old River Lea			
CONDITION            Good			
DESCRIPTION 1)            CONSTRUCTIONAL MATERIAL Brick  4)            DIMENSIONS i) L 10.5m ii) W 3.8m iii) HT parapet to water 4.4m  5)            The bridge was built when the high level canal system was extended in 1878. The bridge is brick with earthen embankments to either side. On either side of the parapet is a stone plaque with the following inscription 'RGPF VR 1878'.			

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER	OLD SERIES	RCHME NUMBER 119	N.G.R. TL 37480 01487
NAME/FUNCTION Leat		START DATE	END DATE
			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH: RCHME 120, RCHME 133			
CONDITION      Poor			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Earthwork  4)      DIMENSIONS i) L 20.5m ii) W 7m iii) depth 1.2m  5)      Leat part water filled, the western end has been partially filled by dumping.			




**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 120	N.G.R. TL 37465 01487
NAME/FUNCTION Bridge	START DATE	END DATE	
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME		
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHME 119			
CONDITION: Poor			
DESCRIPTION 1) CONSTRUCTIONAL MATERIAL Brick and railway sleepers  4) DIMENSIONS i) L 7m ii) W 4.5m  5) Rough brick bridge constructed from unmortared bricks, a concrete pipe and railway sleepers. There is an earthwork causeway to either side.			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 122	N.G.R. TL37800 01095
NAME/FUNCTION Bridge		START DATE	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHME 300			
CONDITION      Fair			
<p>DESCRIPTION</p> <p>1)      CONSTRUCTIONAL MATERIAL          Timber and brick</p> <p>4)      DIMENSIONS i) L      ii) W 2.5m      iii) HT 1.95m</p> <p>5)      The present bridge is constructed from timber and was used to carry steam pipes over the canal. Immediately north of this bridge are the brick piers of a former footbridge, incorporated into these piers are a vertical slots into which boards could be placed to seal the channel. The bricks of the footbridge are similar to those used in the 1878 bridges.</p>			

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER	OLD SERIES	RCHME NUMBER 123	N.G.R. TL 37805 01065
NAME/FUNCTION Footbridge		START DATE 196?	END DATE
			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME  1) 206/E/7 From south	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHME 300			
CONDITION      Fair			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Brick, RSJ, timber  4)      DIMENSIONS i) L    ii) W 1.7m    iii) HT 2.65m  5)      The footbridge consists of a RSJ supported on a brick pier either side of the canal. This beam carries a timber deck with hand rails, there are wooden steps at either end.			


**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**


NUMBER	OLD SERIES	RCHME NUMBER 126	N.G.R. TL 37765 01017
NAME/FUNCTION Footbridge		START DATE	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME  1) 206/E/8 From west	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHME 300			
CONDITION      Good			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Angle iron  4)      DIMENSIONS i) L      ii) W 1.4m iii) HT 2m  5)      Footbridge north of the power house A210.			


**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 130	N.G.R. TL 37735 01000
NAME/FUNCTION Bailey type Bridge		START DATE 196?	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES 1993 Roughton Bridge Assessments p21-29 Drg No.02 May 1993 Built Late 1960's or Early 1970's.	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHME 300			
CONDITION      Good			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Steel  4)      DIMENSIONS i) L 12.37m ii) W 4.11m iii) HT 1.55m  5)      Bridge			

## THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER	OLD SERIES	RCHME NUMBER 132	N.G.R. TL 37725 00877
NAME/FUNCTION Cast iron bridge		START DATE 1832	END DATE
			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES 1993 <u>Roughton Bridge Assessments</u> p13-20 Drg No01 May 1993 Built 1832	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME  1) 206/E/22 From North East 2) BB92/26065 From East	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHME 278, RCHME 300			
CONDITION      Good			
<p>DESCRIPTION</p> <p>1)      CONSTRUCTIONAL MATERIAL          Cast iron</p> <p>4)      DIMENSIONS i) L 7m ii) W 3.9m</p> <p>5)      The bridge is supported on cast iron ribs set on brick abutments. The date 1832 is cast on the bridge's side. The bridge has also been used to carry service pipes that are slung along the eastern side. The eastern rib of the bridge is partly damaged.</p>			

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER	OLD SERIES	RCHME NUMBER 133	N.G.R. TL 37690 00992
NAME/FUNCTION Footbridge		START DATE	END DATE
			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES 1993 Roughton <u>Bridge Assessments</u> p30-36 Drg No03 May 1993 Built date unknown	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME  1) 206/E/24 From North	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHME 119			
CONDITION Good			
DESCRIPTION 1) CONSTRUCTIONAL MATERIAL RSJ and timber  4) DIMENSIONS i) L 6.85m ii) W 1.64m  5) Modern footbridge constructed from an RSJ with a timber deck fixed to it. The bridge is also used to carry services over the leat.			

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER	OLD SERIES	RCHME NUMBER 134	N.G.R. TL 37676 00931
NAME/FUNCTION Footbridge		START DATE	END DATE
			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
		1993 Roughton Bridge Assessments p127-136 Drg No.17 April 1993 Built Date Unknown	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
		1) 206/K/6 From South 206/S/33 From South 206/S/34 From West	
RELATIONSHIPS WITH OTHER MONUMENTS			
ASSOCIATED WITH: Millhead Steam RCHME 296			
CONDITION      Good			
DESCRIPTION			
1)      CONSTRUCTIONAL MATERIAL Angle iron and timber			
4)      DIMENSIONS i) L      ii) W 1.3m			
5)      Footbridge to west of lecture theatre A203			



**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 135	N.G.R. TL 37650 00994
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NAME/FUNCTION Sluice at south end of Millhead stream	START DATE	END DATE 195?
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NO PHOTOGRAPHY  
AVAILABLE

CARTOGRAPHIC DEPICTION	DOCUMENTARY REFERENCES
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PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME  1) 206/K/5 From South
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RELATIONSHIPS WITH OTHER MONUMENTS

PART OF: Millhead Stream RCHME 296

CONDITION Fair

DESCRIPTION

1) CONSTRUCTIONAL MATERIAL  
Brick

4) DIMENSIONS i) L 14.6m ii) W 8.8m iii) depth 2m

5) The sluices at the southern end of Millhead stream are brick built capped by sandstone blocks. The flow of water from Millhead stream was controlled by sluice boards slotted into diagonal slots in the brick work. There was no access between the upper and lower system for barges at this point.

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 151	N.G.R. TL 37726 01675
NAME/FUNCTION Footbridge	START DATE		END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: The Old River Lea			
CONDITION      Fair			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Angle irons  4)      DIMENSIONS i) L 11.9m ii) W 1.59m  5)      Footbridge constructed from angle irons with timber deck, carries services along north side.			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 155	N.G.R. TL 37680 01500
NAME/FUNCTION Pond	START DATE		END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME		
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH:			
CONDITION	Fair		
DESCRIPTION 1) CONSTRUCTIONAL MATERIAL Earthwork 4) DIMENSIONS i) L 31m ii) W 19m 5) The pond is rectangular in shape, in the centre of the pond is a low island 7.5m x7.5m. The pond is partly filled by rubbish.			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER

OLD SERIES

RCHME NUMBER

156

N.G.R.

TL 37583 01600

37645 01473

NAME/FUNCTION

Leat

START DATE

END DATE

NO PHOTOGRAPHY  
AVAILABLE

CARTOGRAPHIC DEPICTION

DOCUMENTARY REFERENCES

PHOTOGRAPHY  
HISTORIC

PHOTOGRAPHY  
RCHME

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH:

CONDITION Fair

DESCRIPTION

1) CONSTRUCTIONAL MATERIAL  
Earthwork

5) Remains of a low level leat to the east of L109, the northern end of the leat is dry while the southern end still retains some water.

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER	OLD SERIES	RCHME NUMBER 170	N.G.R. TL 37442 01640
NAME/FUNCTION Aqueduct		START DATE 1806-27?	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH:			
CONDITION      Good			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Brick  4)      DIMENSIONS i) L 6.4m ii) W 12.5 iii) HT 2.25m +  5)      The brick aqueduct carries the canal to press house 103 over a low level leat. The aqueduct has sandstone sills. Concrete bases on the tow path probably mark the site of a footbridge.			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 179	N.G.R. TL 37530 01635
NAME/FUNCTION Canal		START DATE 1878	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: L108, L109 OVERLIES: RCHME 181			
CONDITION      Poor			
<p>DESCRIPTION</p> <p>1)      CONSTRUCTIONAL MATERIAL          Earthwork</p> <p>5)      The canal was constructed during the extension of the higher level canal system in 1878. The canal was retained within an earthen embankment. The canal was revetted in timber along the western towpath was a narrow gauge railway serving L105 and L108. At the southern end of the canal lock RCHM 225 gave access into the lower water system. The canal is carried over leat RCHM 181 by a brick aqueduct RCHM180.</p> <p>         Most of the canal has been infilled by rubble and rubbish and a tarmac road laid over the top.</p>			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 180	N.G.R. TL 37552 01598
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NAME/FUNCTION Aqueduct	START DATE 1878	END DATE
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NO PHOTOGRAPHY  
AVAILABLE

CARTOGRAPHIC DEPICTION	DOCUMENTARY REFERENCES
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PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME
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RELATIONSHIPS WITH OTHER MONUMENTS  
PART OF: RCHM 179 OVERLIES: RCHM 181

CONDITION Fair

DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Brick
- 4) DIMENSIONS i) L north to south 2.8m ii) W 12.1m
- 5) The brick aqueduct carries canal RCHM 179 over leat RCHM 181. The aqueduct is brick faced on its west and eastern sides with tie rods running through.

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 181	N.G.R. TL 37456 01586 37670 01623 37691 01566
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NAME/FUNCTION Leat	START DATE	END DATE
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NO PHOTOGRAPHY  
AVAILABLE

CARTOGRAPHIC DEPICTION	DOCUMENTARY REFERENCES
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PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME
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RELATIONSHIPS WITH OTHER MONUMENTS

UNDERLIES: RCHM 181


CONDITION Fair


DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Earthwork
- 4) DIMENSIONS ii) W 6.2m
- 5) Low level earthwork leat.



## THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER	OLD SERIES	RCHME NUMBER 182	N.G.R. TL 37437 02290
NAME/FUNCTION Footbridge		START DATE 189?	END DATE
			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME  1)206/B/33 From North West	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: 27, RCHME 285			
CONDITION      Poor			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Angle irons and timber deck  4)      DIMENSIONS i) L 10.95m ii) W 1.59m  5)      The footbridge is constructed from angle irons with timber steps and deck, now rotten. It has been partly buried by gravel dredged from the river Lee.			

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER	OLD SERIES	RCHME NUMBER 184	N.G.R. TL 37654 01449
NAME/FUNCTION Footbridge		START DATE	END DATE
			
CARTOGRAPHIC DEPICTION		LITERARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME 1)206/C/16 From South	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: L133,L132,L136,L139			
CONDITION      Fair			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Angle iron and timber deck  4)      DIMENSIONS i) L      ii) W      iii) HT  5)			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 191	N.G.R. TL 37424 01922
NAME/FUNCTION Footbridge	START DATE		END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH: 83b, RCHME 119			
CONDITION      Bad			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Timber  4)      DIMENSIONS i) L 5.6m ii) W 1.4m  5)      Timber trestles survive on the west and east side of the leat.			


**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 202	N.G.R. TL 37643 02044
NAME/FUNCTION Footbridge	START DATE 189?		END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH: RCHME 209			
CONDITION Fair			
DESCRIPTION 1) CONSTRUCTIONAL MATERIAL Angle irons with timber deck 4) DIMENSIONS i) L 8.5m ii) W 1.3m iii) HT 2.25m 5) The footbridge is constructed from angle irons with a timber deck. The bridge was also used to carry steam pipes over the canal suspended on iron hoops suspended on either side of the bridge.			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 212	N.G.R. TL 37575 02116
NAME/FUNCTION Pipe bridge		START DATE	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH: RCHME 209			
CONDITION      Poor			
<p>DESCRIPTION</p> <p>1)      CONSTRUCTIONAL MATERIAL          Timber</p> <p>4)      DIMENSIONS i) L 13.2m ii) W 2.2m iii) HT 2.35m</p> <p>5)      This bridge supported on timber trestles on the north and south bank carried pipeline RCHM 209 over the old river Lee. It also carried a walk way along its eastern side.</p>			

## THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER	OLD SERIES	RCHME NUMBER 214	N.G.R. TL 37584 02131
NAME/FUNCTION Cast Iron Aqueduct Bridge		START DATE 1878-9 1940?	END DATE 1940? 197?
			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
		<p>1903 WASC 901/198 27.May.1903 Aqueduct No5 (corrected to No2)</p> <p>1903 WASC 901/199 3.June.1903 Aqueduct No5</p> <p>1993 Roughton <u>Bridge Assessments</u> p111-118 Drg No.15 April 1993 Built 1878</p>	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
		<p>1) 206/M/31 From west 206/M/32 Royal Cipher from west 206/M/34 From south</p> <p>2) BB92/26214 From south west BB92/26215 From south</p>	
RELATIONSHIPS WITH OTHER MONUMENTS			
ASSOCIATED WITH: Old River Lea			
CONDITION		Good	

DESCRIPTION

1) CONSTRUCTIONAL MATERIAL  
Cast Iron

4) DIMENSIONS i) L 9.8m ii) W 3.1m iii) Trough depth 1.45m

5) The cast iron trough carried a high level canal over the old river Lee. The trough is set on brick piers on the north and south bank of the Lee, the piers capped by granite templates on which the aqueduct rests. The aqueduct is formed from two side plates each a single casting. In the centre of each plate is a cast device consisting of a queens crown the letters VR and a date 1878-9. The bottom plate of the trough is bolted to an internal flange at the base of each of the side plates. Each side of the trough formerly carried a timber walkway.

Around 1940 the canal which the trough carried was filled and the aqueduct converted into a bridge. This conversion was effected by placing longitudinal RSJs at the top of the trough and laying a timber deck over. the former canal trough was then used to house a number of service pipes.

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 225	N.G.R. TL 37630 01475
NAME/FUNCTION Canal Lock		START DATE 1878	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME 2)BB92/26205 View from South East BB92/26206 View from South East	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHME 179			
CONDITION      Good			
<p>DESCRIPTION</p> <p>1)      CONSTRUCTIONAL MATERIAL          Grey engineering brick in English bond, granite, timber gates</p> <p>3)      POWER SOURCE          Muscle</p> <p>4)      DIMENSIONS i) L 21m ii) W 3.8m iii) depth 2.6m</p> <p>5)      The canal lock controls access between the upper and lower canal systems within the factory. It was built in 1878 when the upper system was enlarged. The lock consists of a chamber 9.4m in length with three rubbing posts on either side. Entry into the chamber was controlled by double gates at either end. Water was let into the lock through two valves at the northern end outside the chamber. The valves were controlled by screw threads either side of the gates, these were fixed to granite blocks inscribed 'IN'. By opening the valves it allowed water to discharge through a pipe into the chamber. The northern doors are 1.5m in height, the doors at the southern end are 2.5m in height. The discharge of water from the lower southern end was also controlled by valve mechanism. A pipe either side of the chamber connected to valves on the outside and by turning the wheel on top of the valve it could be opened. The wheel and thread was also mounted on a granite block in this case inscribed 'OUT'. The lock could be sealed by dropping boards into vertical slots at the northern end of the chamber.</p> <p>The bricks used in the construction of the lock were made by 'Joseph Hamble West Bromwich', in common with a number of 1878 dated bridges within the RGPF.</p>			



**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 227	N.G.R. TL 37698 01486
NAME/FUNCTION Pipebridge		START DATE	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHME 300			
CONDITION Fair			
DESCRIPTION 1) CONSTRUCTIONAL MATERIAL Concrete piers and L irons  3) POWER SOURCE  4) DIMENSIONS i) L      ii) W      iii) HT  5) Gantry bridge carrying steam pipes over canal RCHME 300, also used to carry electricity cables across the canal.			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 228	N.G.R. TL 37680 02106
NAME/FUNCTION Road bridge		START DATE	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES 1993 Roughton Bridge Assessments p63-71 Drg Nos 08/1-2 April 1993 Built Date unknown	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: Cornmill stream, RCHME 300			
CONDITION      Good			
<p>DESCRIPTION</p> <p>1)      CONSTRUCTIONAL MATERIAL          Concrete</p> <p>4)      DIMENSIONS i) L 7.5m ii) W 3.05m</p> <p>5)      The bridge is constructed from concrete slabs over RSJs supported on concrete piers. The bridge crosses a small leat from Cornmill stream, there is no sluice control into the RGPF site at this point. Carries eastern perimeter road over canal RCHME 300.</p>			

## THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER	OLD SERIES	RCHME NUMBER 230	N.G.R. TL 37516 01795
NAME/FUNCTION Road Bridge		START DATE 1806-27	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1827    MPH271;177 and 178 Brick bridge for carriages		DOCUMENTARY REFERENCES  1993 Roughton <u>Bridge Assessments</u> p140-142 Built Date Unknown	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: Old River Lea, RCHME 296			
CONDITION      Poor			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Brick in English bond and concrete  4)      DIMENSIONS i) L 4.8m ii) W 3.1m iii) HT 2.5  5)      Brick bridge to the west of Dining room 96. At the core of this bridge is a brick bridge with a sandstone keystone. The bridge has been widened by the addition of a concrete slab on the south side. The bridge carries the road over a leat joined to the Old River Lea, the flow of water into the leat could be closed by dropping of boards into slots on the north side of the bridge.			

## THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER	OLD SERIES	RCHME NUMBER 238	N.G.R. TL 37715 02041
NAME/FUNCTION Cattlegate bridge		START DATE 1971	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES  1993 Roughton <u>Bridge Assessments</u> p85-91 Drg No.11 May 1993 Built Aprox 1971  Drg No S-B.49	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: Cornmill Stream			
CONDITION      Good			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Steel  4)      DIMENSIONS i) L 15.41m ii) W 4.13m  5)      'Bailey' type bridge constructed from five segments each 3.02m in length set on brick abutments. MK II in welded letters appears at either end of the bridge.			

## THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY


NUMBER	OLD SERIES	RCHME NUMBER 250	N.G.R. TL 37610 02175
NAME/FUNCTION Cast Iron Aqueduct		START DATE ?1914	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION 1914 WASC 901/196 1923 WASC 900/84		DOCUMENTARY REFERENCES 1993 Roughton Bridge Assessments p143-149 Drg No.20 May 1993 Build Date Unknown	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME  1) 206/O/24 From West 206/O/25 Interior from South 206/O/29 Interior from North  2) BB92/26289 Cast Iron Aqueduct	
RELATIONSHIPS WITH OTHER MONUMENTS  Associated with: RCHME 290			
CONDITION Fair			
<p>DESCRIPTION</p> <p>1) CONSTRUCTIONAL MATERIAL Cast Iron</p> <p>4) DIMENSIONS i) L 14m ii) W 3.8m iii) HT 1.31m</p> <p>5) The cast iron aqueduct was constructed to carry a new canal cut over the Old River Lea to the west of Newton's Pool RCHME 276. The aqueduct was supported on brick piers in English bond either side of the Old River Lea. Vertical slots on the interior of the brick work mark the positions of blocking boards that would enable the aqueduct to be isolated for maintenance or in the event of a leak. Unlike the other two cast aqueducts within the factory this one was of a composite construction, the cast iron side plates resting on RSJs to either side of the bridge. Each side of the aqueduct was composed of six cast iron plates bolted together and to these were inturn bolted the cast iron base plates, now largely missing. These were of a two piece construction, with a lower upwardly curving plate with a flat bed plate laid on the top. Iron brackets bolted to the side plates formerly carried a wooden walkway linking to the tow paths either side of the aqueduct.</p> <p>The base of the trough is 0.9m above the surface of the Old River Lea, the estimated water level within the trough around 1.7m above the surface of the river.</p> <p>Historic artefacts: the missing base plates may survive beneath the aqueduct in the Old River Lea</p>			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 254	N.G.R. TL 37585 02200
NAME/FUNCTION Footbridge		START DATE 1914?	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME  1)206/O/30 From North West  2)BB92/26287 Footbridge from South	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHME 290			
CONDITION      Fair			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Iron and timber  4)      DIMENSIONS i) L 9.48m ii) W 0.97m iii) HT 3.6m (above canal base)  5)      The bridge is attached to its brick and cast concrete piers by vertical bolts set into a sandstone slab. The bridge is semi-circular in shape. The span is formed by a curved T iron, as is the hand rail joined by rivetted bracing irons. The deck of the bridge is timber. A boot scraper is provided by the south west corner of the bridge.			


**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**


NUMBER	OLD SERIES	RCHME NUMBER 255	N.G.R. TL 37782 02035 37870 01814
NAME/FUNCTION Iron Footbridge		START DATE	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME 1)206/O/31 From South 206/O/32 Detail beneath Bridge	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHME 283			
CONDITION			
DESCRIPTION 1) CONSTRUCTIONAL MATERIAL Cast Iron  4) DIMENSIONS i) L 9.48m ii) W 0.97m iii) HT 3.6m (above canal base)  5) The bridge is attached to its brick and cast concrete piers by vertical bolts set into a sandstone slab. The bridge is semi-circular in shape. The span is formed by a curved T iron, as is the hand rail joined by rivetted bracing irons. The deck of the bridge is timber. A boot scraper is provided by the south west corner of the bridge.			

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER	OLD SERIES	RCHME NUMBER 264	N.G.R. TL 37545 02367
NAME/FUNCTION Narrow Gauge Railway		START DATE	END DATE
			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME 1)206/Q/4 From North	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH			
CONDITION			
DESCRIPTION 1) CONSTRUCTIONAL MATERIAL  4) DIMENSIONS i) L    ii) W    iii) HT    iv)DIA  5)			



## THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER	OLD SERIES	RCHME NUMBER 269	N.G.R. TL 37675 01395
NAME/FUNCTION Road Bridge		START DATE	END DATE
			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
		1993 Roughton <u>Bridge Assessments</u> p50-57 Drg No.06 June 1993 Built Approx 1955 Drg No.XD1/2	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
		1)206/Q/20 From South	
RELATIONSHIPS WITH OTHER MONUMENTS			
ASSOCIATED WITH:RCHME 300			
CONDITION		Good	
DESCRIPTION			
1) CONSTRUCTIONAL MATERIAL Concrete			
4) DIMENSIONS i) L 12.53m ii) W 4.26m			
5) Modern road bridge constructed from reinforced concrete with metal handrails.			

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER	OLD SERIES	RCHME NUMBER 270	N.G.R. TL 37736 01256
NAME/FUNCTION Footbridge		START DATE	END DATE
			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
		1993 Roughton <u>Bridge Assessments</u> p45-49 Built approx 1957 1993 Roughton <u>Bridge Assessments</u> Drg No.L-B.10 Drawn 22/7/1957	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
		1)206/Q/21 From North	
RELATIONSHIPS WITH OTHER MONUMENTS			
ASSOCIATED WITH: RCHME 300			
CONDITION      Good			
DESCRIPTION			
1)      CONSTRUCTIONAL MATERIAL Steel with timber deck			
4)      DIMENSIONS i) L 9.78 ii) W 1.58			
5)      Footbridge resting on two RSJs with a timber deck and handrails to either side.			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 271	N.G.R. TL 37793 01115
NAME/FUNCTION Bailey type road bridge		START DATE 1940?	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES 1993 Roughton Bridge Assessments p37-44 Drg No.4 May 1993 Build date Unknown 1993 Roughton Bridge Assessments Drg No L-B.17 Drawn 10.9.1965	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME 1)206/Q/25 From South West	
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH: RCHME 300			
CONDITION      Good			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Steel with timber deck  4)      DIMENSIONS i) L 12.37 ii) W 5.43  5)      Bailey type road bridge with attached footbridge to the north. Also used to carry service pipes. The letters MKII are in welded letters on either end of the bridge.			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 276	N.G.R. TL 37640 02222
NAME/FUNCTION Newton's Pool		START DATE	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
<p>PHOTOGRAPHY HISTORIC WASC 1655/11 Newtons Pool Edmonsea 1897 PRO Supply 5/860 101-3 1897 RCHME Neg No. BB92/16721 (also PRO Supply 5/861 photo No. 385) Snow scene Newton's Pool 22.12.38 WASC 1126/7 Newtons pool ERDE WASC 1441 Newtons pool x2 WASC 1524/27-28 Mr Jeff Munns wiring up detonator for underwater charge WASC 1524/29 Button-pressed underwater explosion WASC 1524/30 Button-pressed underwater explosion Breaking surface WASC 1524/31 Button-pressed underwater explosion Plume beginning WASC 1524/32 Button pressed underwater explosion Plume growing WASC 1524/33 Button-pressed underwater explosion Plume at maximum height WASC 1524/34 Button-pressed underwater explosion Plume collapsing WASC 1524/35 Button-pressed underwater explosion Plume collapsing wave forming WASC 1524/36 Button-pressed underwater explosion Plume nearly collapsed, wave growing WASC 1524/37 Button-pressed underwater explosion Plume collapsed WASC 1524/38 Button-pressed underwater explosion End of test WASC 1524/39-40 Mr Brian Hammant processing the polaroid instant pictures of the oscilloscope traces from underwater explosion. WASC 1524/41 Mr Brian Hammant briefing visitors on underwater explosions WASC 1569 Newtons Pool taken 03.1972</p>		<p>PHOTOGRAPHY RCHME 2) BB92/26212 From South East BB92/26265 From South East (colour) 4) 4686/32 06.05.1993 4686/34 06.05.1993 4787/6 06.05.1993 4787/7 06.05.1993 4787/8 06.05.1993 4787/9 06.05.1993 4787/17 06.05.1993</p>	

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: RCHME 280 Cornmill Stream,RCHME 304, S34, S35, S36, S37, S38, S50

CONDITION Fair

DESCRIPTION

1)

5)

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER	OLD SERIES	RCHME NUMBER 278	N.G.R. TL 37810 01010 TL 37835 01150
NAME/FUNCTION Canal		START DATE	END DATE
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHME 300, RCHME 333, RCHME 132			
CONDITION      Filled re-excavated February 1993			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Timber revetted sides  4)      DIMENSIONS i) L      ii) W      iii) depth  5)			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 280	N.G.R. TL 37680 02616 37890 01688
NAME/FUNCTION Cornmill Stream	START DATE	END DATE	
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION	DOCUMENTARY REFERENCES		
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME		
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH:RCHME 276 PART OF: High Level System			
CONDITION			
DESCRIPTION 1) CONSTRUCTIONAL MATERIAL Earthwork 4) DIMENSIONS i) L ii) W iii) Depth 5)			

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER	OLD SERIES	RCHME NUMBER 281	N.G.R. TL 37558 02569 37626 02523
NAME/FUNCTION Canal		START DATE pre 1783	END DATE 1957-1960
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1783      WASC 900/01 + MR 593		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: Cornmill/Horsemill Streams RCHME 296, 1, 2a, 4, 8      PART OF: High Level System			
CONDITION Filled			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Earthwork  4)      DIMENSIONS i) L      ii) W      iii) Depth  5)			



**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 282	N.G.R. TL 37654 02630 37455 01372
NAME/FUNCTION Horsemill Stream	START DATE	END DATE	
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH:                      PART OF: High Level System			
CONDITION			
DESCRIPTION 1)        CONSTRUCTIONAL MATERIAL Earthwork  4)        DIMENSIONS i) L        ii) W        iii) Depth  5)        An artificial leat on the west side of the site formerly in a raised embankment between the Grand Magazine [1] and the sluices [RCHME 135] at its southern end.			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 283	N.G.R. TL 37622 02519
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NAME/FUNCTION Canal	START DATE 1903	END DATE 1960-1970
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NO PHOTOGRAPHY  
AVAILABLE

CARTOGRAPHIC DEPICTION  1923      WASC 900/84	DOCUMENTARY REFERENCES
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PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME
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RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: RCHM 281, RCHM 284, 8, 14, 18, 22, 23, 29, RCHM 255, RCHM 264 PART OF: High Level System

CONDITION Earthwork

DESCRIPTION

1) CONSTRUCTIONAL MATERIAL  
Earthwork

4) DIMENSIONS i) L      ii) W      iii) Depth

5)

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 284	N.G.R. TL 37582 02208 37412 02247
NAME/FUNCTION Canal		START DATE 1904	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH: 36, RCHM 283, RCHM 285, RCHM 287, PART OF: High Level System			
CONDITION Partially Filled/Earthwork			
DESCRIPTION 1) CONSTRUCTIONAL MATERIAL Earthwork 4) DIMENSIONS i) L ii) W iii) Depth 5)			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 285	N.G.R. TL 37484 02485 37450 02250
NAME/FUNCTION Canal		START DATE 1904?	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1923      WASC 900/84		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHM 182, RCHM 282, RCHM 284, 16a, 18a, 22a    PART OF: High Level System			
CONDITION Filled/Partial Earthwork			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Earthwork  4)      DIMENSIONS i) L      ii) W      iii) Depth  5)			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 286	N.G.R. TL 37400 02317 37404 02260
NAME/FUNCTION Canal		START DATE 1886-7	END DATE 1897-1923
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1897      WASC 900/53C		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: 24, 25, 26, 27, 28, RCHM 282      PART OF: High Level System			
CONDITION Filled			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Earthwork  4)      DIMENSIONS i) L      ii) W      iii) Depth  5)      Partially filled by 1923 appears still as access to Boat houses until late 1950s			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 287	N.G.R. TL 37614 02259 37500 02100
NAME/FUNCTION Canal		START DATE c1850	END DATE 1957-1960
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1865      WASC 900/38 + SUPP5 975		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: S34, E3, E2, E5, RCHM 284, RCHM 289, RCHM 290    PART OF: High Level System			
CONDITION Partly filled			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Earthwork  4)      DIMENSIONS    i) L          ii) W          iii) Depth  5)      The canal was probably built around 1850 to link the newly constructed Press House 76 to the Granulating House S34. The eastern end of the canal immediately north of S34 has been filled and covered by a tarmac and concrete surface. It may however be traced as an earthwork feature for 30m to the west of S34.			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 288	N.G.R. TL 27386 01972 37530 01956
NAME/FUNCTION Canal		START DATE by 1851	END DATE 1957-1960
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1865      WASC 900/38 + SUPP5 975		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: 76, E14, RCHM 107, RCHM 282, RCHM 291    PART OF: High Level System			
CONDITION Partially Filled/Earthwork			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Earthwork  4)      DIMENSIONS i) L      ii) W      iii) Depth  5)			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 289	N.G.R. TL 37548 02159 37665 01957 37517 01675
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NAME/FUNCTION Canal	START DATE 1878-9	END DATE 1957-1960
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NO PHOTOGRAPHY  
AVAILABLE

CARTOGRAPHIC DEPICTION  1865      WASC 900/38 + SUPP5 975	DOCUMENTARY REFERENCES
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PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME
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RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: RCHM 287, E3, RCHM 214, RCHM 215, RCHM 275, 63, RCHM 290, 74, 75, S28, S30, S29, 89, 90, 91, S31, RCHM 112, RCHM 113, L102, L103, RCHM 292, RCHM 293, RCHM 294      PART OF: High Level System

CONDITION Earthwork

DESCRIPTION

1)      CONSTRUCTIONAL MATERIAL  
         Earthwork

4)      DIMENSIONS i) L      ii) W      iii) Depth

5)



**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 290	N.G.R. TL 37584 02194 37633 02099
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NAME/FUNCTION Canal	START DATE June 1914	END DATE
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NO PHOTOGRAPHY  
AVAILABLE

CARTOGRAPHIC DEPICTION  1923      WASC 900/84	DOCUMENTARY REFERENCES  1914 WASC 901/196 23.June.1914 NGF Edmonsey new cut from No2 Mixing House to opposite No14 Guncotton Stove
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PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME
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RELATIONSHIPS WITH OTHER MONUMENTS  
  
ASSOCIATED WITH: RCHM 254, RCHM 250, 46, 46R, 46a    PART OF: High Level System

CONDITION Earthwork

DESCRIPTION

- 1)      CONSTRUCTIONAL MATERIAL  
        Earthwork
- 4)      DIMENSIONS i) L      ii) W      iii) Depth
- 5)

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 291	N.G.R. TL 37511 01984 37408 02161
NAME/FUNCTION Canal	START DATE 1801-1806		END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1827      WASC 900/04 + MPH 271		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHM 288, 62, RCHM 287, RCHM 282 PART OF: High Level System			
CONDITION Partially filled/Earthwork			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Earthwork  4)      DIMENSIONS i) L      ii) W      iii) Depth  5)			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 292	N.G.R. TL 37586 02071 37627 02088
NAME/FUNCTION Dusting House (RCHM 275) Leat		START DATE 1878	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1865      WASC 900/38 + SUPP5 975		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHM 275, RCHM 289, RCHM 212, RCHM 293      PART OF: High Level to Low Level System			
CONDITION			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Earthwork  4)      DIMENSIONS i) L      ii) W      iii) Depth  5)			

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER	OLD SERIES	RCHME NUMBER 293	N.G.R. TL 37636 02094 37680 02108
NAME/FUNCTION Leat		START DATE 1878	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION 1865 WASC 900/38 + SUPP5 975		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH: RCHM 280, S27, RCHM 289, RCHM 290 PART OF: High Level System			
CONDITION Earthwork			
DESCRIPTION 1) CONSTRUCTIONAL MATERIAL Earthwork 4) DIMENSIONS i) L ii) W iii) Depth 5)			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 294	N.G.R. TL 37420 01640 37679 01693
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NAME/FUNCTION Press House Cut-Canal	START DATE 1801-1806	END DATE
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NO PHOTOGRAPHY  
AVAILABLE

CARTOGRAPHIC DEPICTION  1827      WASC 900/04 + MPH 271	DOCUMENTARY REFERENCES
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PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME
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RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: 103, 104, 105, 106, L101, L100, RCHME 170, RCHME 289, RCHME 179, 107, 108, RCHM 282  
PART OF: High Level System

CONDITION Earthwork

DESCRIPTION

1) CONSTRUCTIONAL MATERIAL  
Earthwork

4) DIMENSIONS i) L      ii) W      iii) Depth

5)

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 295	N.G.R. TL 37490 01952 37513 01909
NAME/FUNCTION Canal		START DATE 1850-1886	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1865      WASC 900/38 + SUPP5 975	DOCUMENTARY REFERENCES		
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME		
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHME 288, RCHME 212      PART OF: Low Level System			
CONDITION Earthwork			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Earthwork  4)      DIMENSIONS i) L      ii) W      iii) Depth  5)			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 296	N.G.R. TL 37440 01770 37517 01796
NAME/FUNCTION Leat		START DATE 1806-1827	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1827      WASC 900/04 + MPH 271		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHM 230, RCHM 119, RCHM 212    PART OF: Low Level System			
CONDITION Earthwork			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Earthwork  4)      DIMENSIONS i) L      ii) W      iii) Depth  5)			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 297	N.G.R. TL 37406 01750 37438 01744
NAME/FUNCTION Mill Leat		START DATE 1806-1827	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION 1827 WASC 900/04 + MPHH 271		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH: RCHM 119, 97, 98, RCHM 282 PART OF: Low Level System			
CONDITION Earthwork			
DESCRIPTION 1) CONSTRUCTIONAL MATERIAL Earthwork 4) DIMENSIONS i) L ii) W iii) Depth 5)			



**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 298	N.G.R. TL 37445 01635 37456 01526
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NAME/FUNCTION Leat	START DATE 1957-1960	END DATE
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NO PHOTOGRAPHY  
AVAILABLE

CARTOGRAPHIC DEPICTION c1960 WASC 900/94	DOCUMENTARY REFERENCES
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PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME
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RELATIONSHIPS WITH OTHER MONUMENTS  
ASSOCIATED WITH: RCHM 119, RCHM 294, RCHM 170 PART OF: Low Level System

CONDITION Earthwork

DESCRIPTION  
1) CONSTRUCTIONAL MATERIAL  
Earthwork  
4) DIMENSIONS i) L ii) W iii) Depth  
5)

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 299	N.G.R. TL 37420 01961 37714 00978
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NAME/FUNCTION Leat	START DATE 1806-1827 (extend) 1850-1886	END DATE
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NO PHOTOGRAPHY  
AVAILABLE

CARTOGRAPHIC DEPICTION  1827      WASC 900/04 + MPH 271 1865      WASC 900/38 + SUPP5 975	DOCUMENTARY REFERENCES
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PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME
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RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: RCHM 296, RCHM 297, RCHM 170, RCHM 294, 116, 117, RCHM 298, 159, 157, 165, 181, 183, 190, 196, 197, 202, RCHM 133, RCHM 122    PART OF: Low Level System

CONDITION Earthwork

DESCRIPTION

1)      CONSTRUCTIONAL MATERIAL  
         Earthwork

4)      DIMENSIONS    i) L      ii) W      iii) Depth

5)

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 300	N.G.R. TL 37656 01460 37716 01506
NAME/FUNCTION Leat		START DATE 187?	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION 1865 WASC 900/38 + SUPP5 975		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHME 122, RCHME 123, RCHME 126, RCHME 130, RCHME 228, RCHME 156, RCHME 280, L130 PART OF: Low Level System			
CONDITION Water			
DESCRIPTION 1) CONSTRUCTIONAL MATERIAL Earthwork  4) DIMENSIONS i) L    ii) W    iii) Depth  5)			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 301	N.G.R. TL 37507 01200 37588 01213 37544 00988
NAME/FUNCTION Tail Race		START DATE pre 1783	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION 1783 WASC 900/01 + MR 593		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH: RCHME 222, RCHME 219, RCHME 218, RCHME 272, RCHME 296, 165a, 182, 191, 197, 211, RCHME 135 PART OF: Low Level System			
CONDITION Earthwork			
DESCRIPTION 1) CONSTRUCTIONAL MATERIAL Earthwork 4) DIMENSIONS i) L ii) W iii) Depth 5)			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 302	N.G.R. TL 37640 00614
NAME/FUNCTION Canal	START DATE		END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS			
ASSOCIATED WITH:		PART OF:	
CONDITION: Filled			
DESCRIPTION 1) CONSTRUCTIONAL MATERIAL Earthwork  4) DIMENSIONS i) L      ii) W      iii) Depth  5) This canal was situated to the south of the Hospitals [H25 & H26] and defined an area between it and High Bridge Street as the early Saltpetre Refinery. The canal has been filled, its eastern entrance sealed by sheet piling.			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 355	N.G.R. TL 37600 01205 TL 37710 01200
NAME/FUNCTION Canal	START DATE	END DATE	
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION	DOCUMENTARY REFERENCES		
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME		
RELATIONSHIPS WITH OTHER MONUMENTS  Underlies: L148			
CONDITION	Buried		
DESCRIPTION  5)			

## THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER	OLD SERIES	RCHME NUMBER 356	N.G.R. TL 37732 00882 TL 37818 00871
NAME/FUNCTION Canal	START DATE 1801-06	END DATE	
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1806 WO78/1352 1830 WO55/2694 1830 WASC 900/05 C1835 WASC 900/07 1865 WASC 900/38 1865 WASC 900/41A 1865 WASC900/42 1897 WASC 900/53C C1901 WASC 900/65 C1910 WASC 900/79 1917 WASC 900/70 1917 WASC 900/72 1919 WASC 900/74 C1920 WASC 900/80 1923 WASC 900/84		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: RCHME 357			
CONDITION      Buried			
DESCRIPTION  4)      DIMENSIONS i) L      ii) W      iii) HT  5)      Buried canal to the north and parallel to the administrative buildings A230-A234.			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 357	N.G.R. TL 37809 00864 TL 37829 01016
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NAME/FUNCTION Leat	START DATE 1806-27	END DATE c1908
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NO PHOTOGRAPHY  
AVAILABLE

<p>CARTOGRAPHIC DEPICTION</p> <p>1827 WASC 900/04 1830 WO55/2694 1830 WASC 900/05 C1835 WASC 900/07 1865 WASC 900/38 1865 WASC 900/41A 1865 WASC900/42 1897 WASC 900/53C</p>	<p>DOCUMENTARY REFERENCES</p>
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<p>PHOTOGRAPHY HISTORIC</p>	<p>PHOTOGRAPHY RCHME</p>
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RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: RCHME 356, A221

CONDITION Buried

DESCRIPTION

4) DIMENSIONS i) L ii) W iii) HT

5) Former leat around the perimeter of the Senior Officers House [A221]. Its course roughly followed the line of the modern perimeter fence.





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COMMISSION  
ON THE HISTORICAL  
MONUMENTS  
OF ENGLAND