

Subject **H AREA (WESTERN FLANK)**  
**REMEDIATION**

To **Graham Vincent**

Date 20th June 1995

From **Bob Watts**  
Ref **E5275/05/1/02**

Graham,

Following visit by EHO on Friday 16th June 1995 please carry out the following:-

1) Highbridge Street Scheduled Monument.

- a) Cut down remaining 2 No. trees.
- b) Scrape up temporary road. Fill open pit.
- c) Apply Terram 1000 excluding permanent road and services chambers.
- d) Reinstate temporary road.
- e) Apply 200 - 300mm all in ballast over remaining area.

2) H Area/Western Flank Tree Belt.

- a) Construct clay ramps on terram to cut face.
- b) Cut fence.
- c) Excavate 6 No. trial pits, I will log.
- d) Samples to be taken as advised.
- e) Backfill trial pits and refix fence.

3) Hoppit Pool Sluice Peninsula.

- a) Cut down remaining trees, grind all stumps to ground level. Before grinding most southern stump, pre-excavate to remove asbestos and ensure Fitzjohn operatives wear masks. Additional Fitzjohn resources for this task.
- b) Scrape surface area to remove vegetation.
- c) Remove all scrap and cut timber.
- d) Apply Terram 1000 and cover with 200 - 300mm all in ballast.
- e) Apply Terram, clay and all in ballast cover to areas where tail race wall has been destroyed by excavation (for sewer) and trees.
- f) When convenient excavate cover to sewer, buried asbestos and water shoot under former temporary road.

Regards  
**BOB WATTS.**

Copy:- **Steve Chaddock**

Subject H Area.

To Graham Vincent.

→ Copy Adam Ford.

Date

7 February 94

From

Bob Watts

Ref

E5275

Graham,

Further to memo on Clean Dirty operation it is necessary to prepare for H Area remediation which will be dictated by the outcome of the planning application.

- 1) Prepare for demolition by RO of H13 and H8. Adam Ford to mark items for removal. Trusses in H8 are to be tagged, craned to ground level, disassembled and transported to boilerhouse. Rails to be lifted with crane. H13 recover slates. Timber for burnout.
- 2) Remove remaining building slabs and dead services related.
- 3) Remove 3rd barriers complete to L16E.
- 4) H8 mound for T Area refill / reinstatement.
- 5) Remove lampposts and poles (but not in SM Area).
- 6) Scrape site of H12 and muckaway (with PMLH wet material?).
- 7) When power cut off to H8 recover dist. board (for A200), radiators, cable etc.
- 8) Backfill to excavated canal. Seal surface to prevent ingress of contamination and stabilise. Dry mix? Bob





# Epping Forest District Council

Planning & Technical Services Department, Civic Offices, Epping, Essex. CM16 4BZ

Telephone : Epping ( 0992 ) 564000

Head of Planning & Technical Services Department K. Sharman, C. Eng., M.I.C.E., M.I.H.T.

**J Shingler**

**Direct Line: (0992) 564106**

Your ref : E5275/05/1/01

If telephoning please ask for

Our ref : PL/7000/JS/GD/EPF/2/94.SM

W S Atkins Environment  
Woodcote Grove  
Epsom  
Surrey  
KT18 5BW  
**MR R E WATTS**

6 July 1994

Dear Sir

**WALTHAM ABBEY RARDE NORTH SITE  
CONSULTATION UNDER CIRCULAR 18/84  
DEMOLITION OF 5 BUILDINGS**

I write to inform you that this Council has considered the above application and on 27 June 1994 determined to raise no objection to the proposal subject to compliance with approved procedures regarding contaminated buildings.

Yours faithfully

**J Shingler BA.(Hons.) MRTPI  
Senior Planning Officer**



**BRITISH AEROSPACE**  
**DEFENCE**  
**ROYAL ORDNANCE**

British Aerospace Defence Limited  
Royal Ordnance Division  
Sewardstone Road, Waltham Abbey  
Essex EN9 1AY, England  
Telephone (0992) 788634  
Fax (0992) 788635

MEMORANDUM

**TO:** R. Watts  
A. Ford

**FROM:** G.G. Vincent

**DATE:** 12th July 1994

**SUBJECT:** SEMINAR/ENGLISH HERITAGE SATURDAY 6TH AUGUST 1994

**CC:** G. Bulloch, P. Mayell, Team, D. Bone

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I believe, from Dan Bone, there could be as many as 100 people present for the whole day.

Can you please advise what arrangements are required to be organised by R.O., in advance and on the day.

For safety reasons alone we will require two staff personnel to be present on the day, their time will be applied mostly to Saturday working on site anyway.


Please advise the route and other details of the 'Site Tour'.

I believe catering arrangements will be by English Heritage.

Thank you.

Regards,

Graham Vincent

A British Aerospace Company 

Registered in England & Wales N° 2653637  
Registered Office: Lancaster House, PO Box 87, Farnborough Aerospace Centre  
Farnborough, Hampshire. GU14 6YU



Subject

H31 Sump

To

Graham Vincent

From

Bob Watts

Date

24/2/94

Ref

ES275

Graham, 1) It would not be acceptable to leave such underground structures in a residential development site.

Slab level = 19.50

Depth of Sump =  $\frac{14.87}{4.63}$  m deep

say 5m with base.

- 2) Excavate (using a breaker) to remove concrete which is probably reinforced. Disc cutter for reinforcement. Batter faces.
- 3) Complete excavation at undisturbed level. Backfill with imported material, compacted.
- 4) Remove redundant services.
- 5) Dewater as necessary.
- 6) Record stages with photographs and dimensioned sketch.
- 7) Arisings to be stored awaiting classification.

Bob Watts

PS / Similar approach required for H24.

copy AF

Subject

H8 .

To

Adam Ford .

From

B. Bowditch

Date

31/12/93.

Ref

ES275

Adam,

Impending Demolition  
of H8 .

It is anticipated the Mound of H8 will be removed and H8 demolished within this financial year. You may wish to mark items for retention.

B. Bowditch



**THE ROYAL GUNPOWDER FACTORY,  
WALTHAM ABBEY, ESSEX  
AN RCHME SURVEY, 1993**

**Area H**

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# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H1	OLD SERIES	RCHME NUMBER	N.G.R. TL 37638 00938
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NAME/FUNCTION Store	START DATE	END DATE 1992.
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NO PHOTOGRAPHY  
AVAILABLE

CARTOGRAPHIC DEPICTION	DOCUMENTARY REFERENCES 1972 ERDE List ; Store 1992 RARDE List ; Store 1992 FBRC Store
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PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME
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## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H2,H3,H5,H6,H10,H11,H32,H66,H72

CONDITION	Demolished
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## DESCRIPTION

- 4) DIMENSIONS i) L 6.6m ii) W 2.92m
- 5) This modern building was demolished in 1992, a concrete floor slab remains.

Floor slab removed in summer 1994

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER H2	OLD SERIES	RCHME NUMBER	N.G.R. TL 37625 00923
NAME/FUNCTION Store		START DATE	END DATE 1992.
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES 1972 ERDE List ; Store 1992 RARDE List ; Store 1992 FBRC Flammable Gas Store	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: H1,H3,H6,H10,H11,H32,H66,H71			
CONDITION      Demolished			
DESCRIPTION  4)      DIMENSIONS i) L 6.1m ii) W 3m  5)      Modern building demolished in 1992, concrete floor slab remains.  <i>Floor Slab removed in summer 1994</i>			



# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER  
H3

OLD SERIES

RCHME NUMBER

N.G.R.  
TL 37629 00925

NAME/FUNCTION  
Solvent store

START DATE

END DATE  
1992

NO PHOTOGRAPHY  
AVAILABLE

CARTOGRAPHIC DEPICTION

DOCUMENTARY REFERENCES

1) RARDE list 1992 - Solvent store

PHOTOGRAPHY  
HISTORIC

PHOTOGRAPHY  
RCHME  
1) 206/S/30 17 Mar 1993 Floor slab from East

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH:

CONDITION      Demolished

DESCRIPTION

4)      DIMENSIONS i) L 5.4m ii) W 3m

5)      Modern building demolished in 1992, concrete floor slab remains.

floor slab removed in summer of 1994

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H5	OLD SERIES	RCHME NUMBER	N.G.R. TL 37628 00936
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NAME/FUNCTION Store	START DATE	END DATE 1994
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NO PHOTOGRAPHY  
AVAILABLE

CARTOGRAPHIC DEPICTION

DOCUMENTARY REFERENCES

1972	ERDE List ; Store
1992	RARDE List ; Store
1992	FBRC Radiation

PHOTOGRAPHY  
HISTORIC

PHOTOGRAPHY  
RCHME  
1) 206/S/36 17 Mar 1993 From East

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H1,H2,H3,H6,H11,H32,H66,H71

CONDITION      Good

DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Pre-cast concrete slabs
- 2) ROOF MATERIALS AND STRUCTURE  
Corrugated asbestos
- 3) POWER SOURCE  
Electricity
- 4) DIMENSIONS i) L      ii) W      iii) HT
- 5) Modern garage.

Roof + superstructure dismantled and stored.  
floor slab removed summer 1994

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H6	OLD SERIES	RCHME NUMBER	N.G.R. TL 37620 00933
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NAME/FUNCTION Store	START DATE	END DATE 1994
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NO PHOTOGRAPHY  
AVAILABLE

CARTOGRAPHIC DEPICTION

DOCUMENTARY REFERENCES

1972	ERDE List ; Store
1992	RARDE List ; Store
1992	FBRC Radiation

PHOTOGRAPHY  
HISTORIC

PHOTOGRAPHY  
RCHME  
1) 206/S/36 17 Mar 1993 From East

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H1,H2,H3,H5,H10,H11,H32,H66,H71

CONDITION      Good

DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Pre-cast concrete slabs
- 2) ROOF MATERIALS AND STRUCTURE  
Corrugated asbestos
- 3) POWER SOURCE  
Electricity
- 4) DIMENSIONS i) L      ii) W      iii) HT

- 5) Modern garage.

Roof + superstructure removed (dismantled)  
and shored floor slabs removed summer 1994

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H7	OLD SERIES 186	RCHME NUMBER	N.G.R. TL 37560 01100
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NAME/FUNCTION Cordite Reel drying stove Laundry Magazine	START DATE 1904 1916?	END DATE 1916?
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NO PHOTOGRAPHY  
AVAILABLE

## CARTOGRAPHIC DEPICTION

c1910 WASC 900/65 ; Reel Drying Stove No.1  
c1910 WASC 900/79 ; Reel Drying Stove No.1  
1917 WASC 900/70 ; Reel Drying Stove No.1  
1917 WASC 900/72 ; 186  
1919 WASC 900/74 ; 186  
c1920 WASC 900/80 ; 186  
1923 WASC 900/84 ; 186  
1932 WASC 900/87 ; 186  
> 1940 WASC 900/91A ; 186  
1954 A - B.34 ; H7  
c1960 WASC 900/94 ; H7  
c1963 WASC 900/97 ; H7  
1972 WASC 900/102 ; H7  
1972 WASC 900/104 ; H7  
1976 WASC 900/113 ; H7

## DOCUMENTARY REFERENCES

1908 RGPF Ledger WASC 1509 + WASC 1764 ; Reel Drying Stove, Truck Porch, Traverse. built 1904 p20  
c1925 RGPF Ledger WASC 1680 ; Reel Drying Stove, Truck Porch, Traverse H7  
c1945 RGPF Ledger WASC 1508 ; Reel Drying Stove, Truck Porch, Traverse H7  
  
Plan:  
H07 B01 - B08 ; Plans and Elevations ? to 1961  
  
1972 ERDE List ; Magazine and Store 1916  
1992 RARDE List ; Magazine  
1992 FBRC Class 1 Explosives  
1993 RCHME NBR No 91448

## PHOTOGRAPHY HISTORIC

## PHOTOGRAPHY RCHME

1) 206/H/12 02 Feb 1993 From South East  
206/T/6 17 Mar 1993 From South West  
206/T/7 17 Mar 1993 Cordite Reel drying stove in traverse  
206/T/32 17 Mar 1993 Expense Magazine from South East  
2) BB92/26052 H7 Cordite Reel Magazine view from South East  
BB92/26248 H7 Entrance view from West showing Toe Board between Dirty and Clean Area  
BB92/26343 H7 RGPF Drawing H7 B.06 Proposed Reel Stove

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H8, H10, H12

CONDITION Good

DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Brick in English bond
- 2) ROOF MATERIALS AND STRUCTURE  
Roofing felt over timber boards and single aisle Fink truss
- 3) POWER SOURCE  
Electricity formerly also steam heat
- 4) DIMENSIONS i) L 26.65m ii) W 9.57m iii) HT eave 3.4m
- 5) See attached RCHME Threatened Buildings Section Report



ROYAL COMMISSION ON THE HISTORICAL MONUMENTS OF ENGLAND

MOD Building Nos H7 and H8  
Reel Drying Stoves  
The Royal Gunpowder Factory  
Waltham Abbey  
Essex

NBR No: 91448  
NGR: TL 37560 001100

These buildings are a matching pair of Reel Drying Stoves which were built in 1904 on the Great Hoppit site of the Royal Gunpowder Factory. They each contained a single large room with racks for drying cordite. Cordite reels were brought here for drying before reeling in a separate building (H10).

Of one storey, they each have a rectangular plan of eight bays and are constructed of yellow brick laid in English bond, with "truck porches" at the north and south ends.

-oo0oo-

Situated on the Great Hoppit part of the site of the Royal Gunpowder Factory at Waltham Abbey, these buildings were built in 1904 as a pair of Reel Drying Stoves. Building No. H7 and Building no. H8 to its south were almost identical and were known as Reel Drying Stove 1 and Reel Drying Stove 2 respectively.<sup>1</sup> Cordite would have been pressed in other building such as the former gunpowder mill buildings, then dried in one of these Stoves before it was taken to a Reeling House for winding.

Surrounded by earth traverses on the Great Hoppit site of the Royal Gunpowder Factory, both buildings have overall dimensions of 26.65 x 9.57 metres, with a height to the eaves of 3.4 metres. They have a rectangular plan of eight bays, with "truck porches" at the north and south ends.<sup>2</sup>

The porches, to which tramways originally ran, each contain the remains of a "barrier board" approximately 200 mm high. As a safety precaution to prevent grit and dust entering the building, the 2 workers had to stand on a special "shoe board" and don leather over-boots before stepping over the barrier board into the building.<sup>3</sup> From the porch, each building was entered on the north and south sides through a wide doorway which had a cambered head of brick.

Each building was a single large room containing racks for drying the cordite reels.<sup>4</sup> When the buildings were first built in 1904, acetone was used in the cordite mixing process. The drying process was to remove the acetone from the cordite. Steam pipes, associated with the drying, entered the building at the north and south ends of the building, as witnessed by blocked round openings at the east and west sides of the north and south elevations.

The buildings are constructed of yellow brick laid in English bond and have plinths of chamfered brick which respect the

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Although the buildings are aligned north-north-west to south-south-east, for clarity in this report they are described as if they were aligned north to south.

Ledger c1908, cat. WASC 1509 (PRO, Hayes Repository) and drawings of "Proposed Reel Stove, Great Hoppit, RGPF", undated, cat. H7.B.06 (MOD Central Disposals Unit, Chessington).

Although describing safety precautions on the site some four years before these Reel Drying Stoves were built, the function of shoe boards and barrier boards is outlined in an article "The Deadliest Spot near London" by Alfred Arkas in The Penny Pictorial Magazine, No. 35, Vol. 3, 3 February 1900, cat. WASC 412.

Drawings of "Proposed Reel Stove, Great Hoppit, RGPF", undated, cat. H7.B.06 (MOD Central Disposals Unit, Chessington).

porches. The porches were of corrugated iron.<sup>5</sup> The roof trusses were of iron. The main roof of each building is hipped and has a zinc covering, and the porch roofs are almost flat.<sup>6</sup>

There were windows at approximately every second bay on the east and west elevations of both buildings. The windows have red-brick arched heads and brick closers and were part of the original phase of construction.<sup>7</sup> On the outside of each window was an electric light.<sup>8</sup>

Alterations made to Building No. H8 include the replacement of the corrugated iron fabric of the porches with timber fabric, the insertion of a small window with a flat head and closers on the east elevation, the subsequent blocking of all the windows, and the insertion of a partition wall in stretcher-bond brick. A new timber porch on the west elevation.<sup>9</sup> The doors from the porch are in the position of an earlier window. Interrupting the plinth on both the east and west elevations is a small addition with a lead-lined floor and a lean-to roof.<sup>10</sup>

In Building No. H7 double doors with cambered heads at the north and south sides have been replaced by square-headed double doors of steel. A steel door was also added on the east elevation. All the windows were blocked. New roofing was added to both buildings in c1940, following bomb damage.<sup>11</sup>

At least latterly the buildings have been used as stores. The interiors were not inspected at the time of this survey.

Surveyed March 1993  
Report by R L Burgess

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Ledger c1908, cat. WASC 1509 (PRO, Hayes Repository) and drawings of "Proposed Reel Stove, Great Hoppit, RGPF", undated, cat. H7.B.06 (MOD Central Disposals Unit, Chessington).

Ledger c1908, cat. WASC 1509 (PRO, Hayes Repository) and drawings of "Proposed Reel Stove, Great Hoppit, RGPF", undated, cat. H7.B.06 (MOD Central Disposals Unit, Chessington).

Drawings of "Proposed Reel Stove, Great Hoppit, RGPF", undated, cat. H7.B.06 (MOD Central Disposals Unit, Chessington).

Drawings of "Proposed Reel Stove, Great Hoppit, RGPF", undated, cat. H7.B.06 (MOD Central Disposals Unit, Chessington).

Drawing of Reel Stove No. 2: "Additional Loading Porch" on west side, with barrier board, shoe box and gunmetal rails, dated 10/1/1941, cat. H8.B.15 (MOD Central Disposals Unit, Chessington).

The interior of the addition on the west side was not inspected.

Bomb damage no. 2 reel store 15/10/1940, cat. WASC 1655/66-68.

Drawing showing details of new roofing, dated 7.12.1940, cat. H7.B.04 (MOD Central Disposals Unit, Chessington).

# History of H7

There were three constructional phases in the history of H7 and each is described below.

## **Cordite Reel Drying Stove, 1904-**

The architectural history of this phase is described in detail in the RCHME Threatened Buildings Report, although a few details are noted here.

The barrier boards in the 'truck porches' although mentioned in the RCHME report do not exist now, although their positions as defined on the proposed plan for the building can be seen on the ground.

The RCHME report states that there are round blocked openings for the steam pipes on the north and south elevations. It appears that the steam pipes were removed with the surrounding bricks, and replaced with yellow stock inserted into the original fabric.

The proposed plan shows the bay walls to have 'cambered heads' on the exterior elevations. This design was not taken up and the walls were constructed with 'straight heads' as shown on the 1945 plan.

There are three lightening conductors on the roof although the original plan only shows two.

## **Use as a Laundry**

The RCHME component sheet states that from c1916 the building was used as a laundry. It is also marked as such on a map of 1923. Further evidence of this, and how this fits in with the 1945 refurbishment could not be found during a rapid search of the archive.

## **1945 Refurbishment**

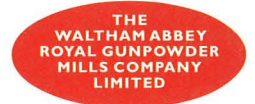
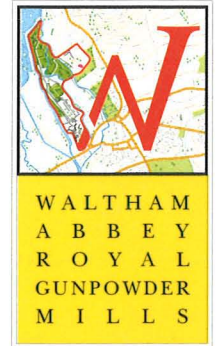
A number of new features were added during this phase of refurbishment.

- All the existing windows in the east and west elevations were replaced, and the two windows on the north and south elevations were inserted.
- Two internal e-w-running walls were inserted dividing the building into three bays.
- A porch on the eastern elevation was added with a door added to gain access into the new central bay.
- New double doors replaced the earlier doors in the north and south elevations.
- The 'truck porches' were replaced with the ones visible today.

### 1961 Conversion to a Magazine

- Modifications were made to the northern bay. All the windows in the building were blocked up, although it is not clear on the plan for the modifications whether this had already taken place.
- The vent on the western elevation was replaced with an extractor fan. This has since been blocked up.
- A trap on the western elevation was replaced with a invert trap and a gulley inlet. This has since been blocked up.
- Internally, the brickwork on the eastern third of the northern e-w wall was thickened, and the new part raised in height. The five baffle walls to hold racks were inserted, as were radiators associated with them. A small room with a door was added west of the door into the bay onto the northern elevation. The racks in the room remain *in situ*.

Mr S Chaddock  
2 Oughtonhead Farm Cottage  
Pirton Road  
Hitchin  
Herts SG5 2EU



Our Ref: WARGM/AJP/45

28 August 1998

Dear Steve

### Research into H7

As requested, I have carried out some research into H7. Please find enclosed the following:

- ⇒ History of H7
- ⇒ Copy of RCHME Threatened Building Report
- ⇒ Copy of plan from 1902
- ⇒ Copy of plan from 1945
- ⇒ Copy of plan from 1961

The report includes details on the different phases of activity, although I was unable to find out much about the its use as a laundry, which itself appears strange given the dates quoted and its subsequent use and refurbishment, which gives the impression be continuing in use as a Reel Drying Stove.

The report includes details of the interior e-w walls that were inserted in 1945 and the baffle walls, which were inserted in 1961.

I hope the enclosed is useful for the meeting. Please note that Clive England has complete copies of two of the plans; he should be bringing them along to the meeting with you.

Have a relaxing Bank Holiday.

Regards

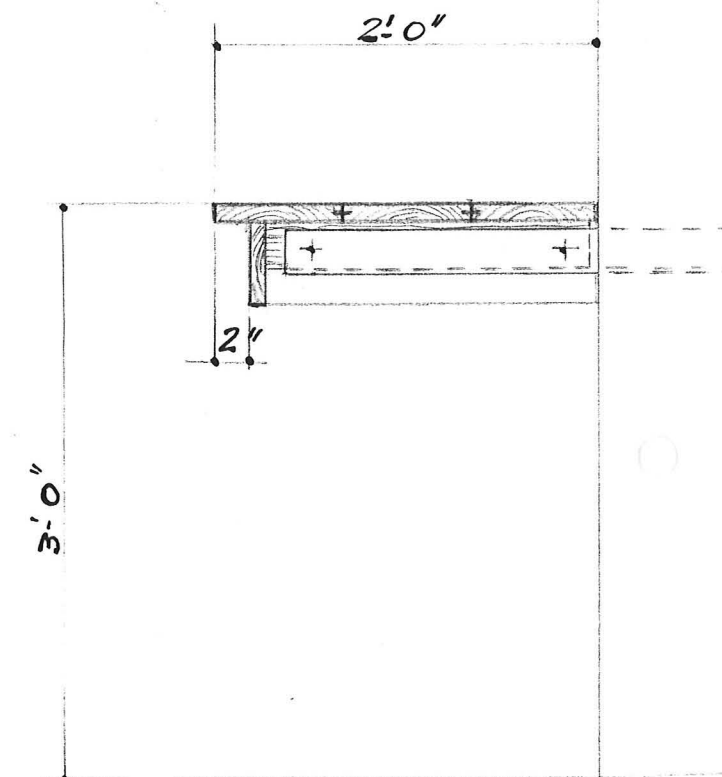
*Andrew*

POWDERMILL LANE  
WALTHAM ABBEY ESSEX EN9 1BN  
TELEPHONE: 01992 767022  
FAX: 01992 710341

Registered Charity No. 1062968/0  
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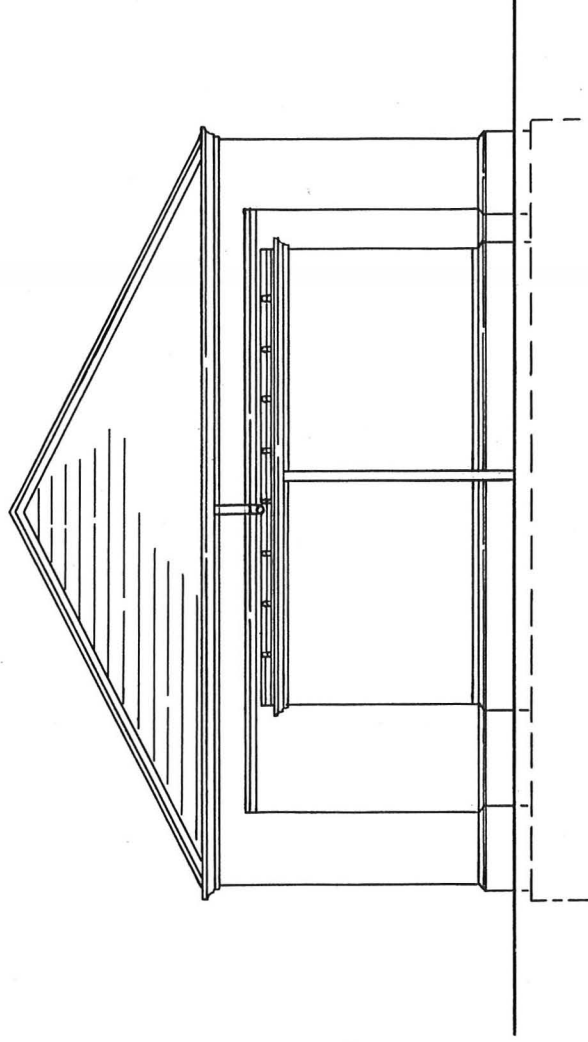


D- Electrical S

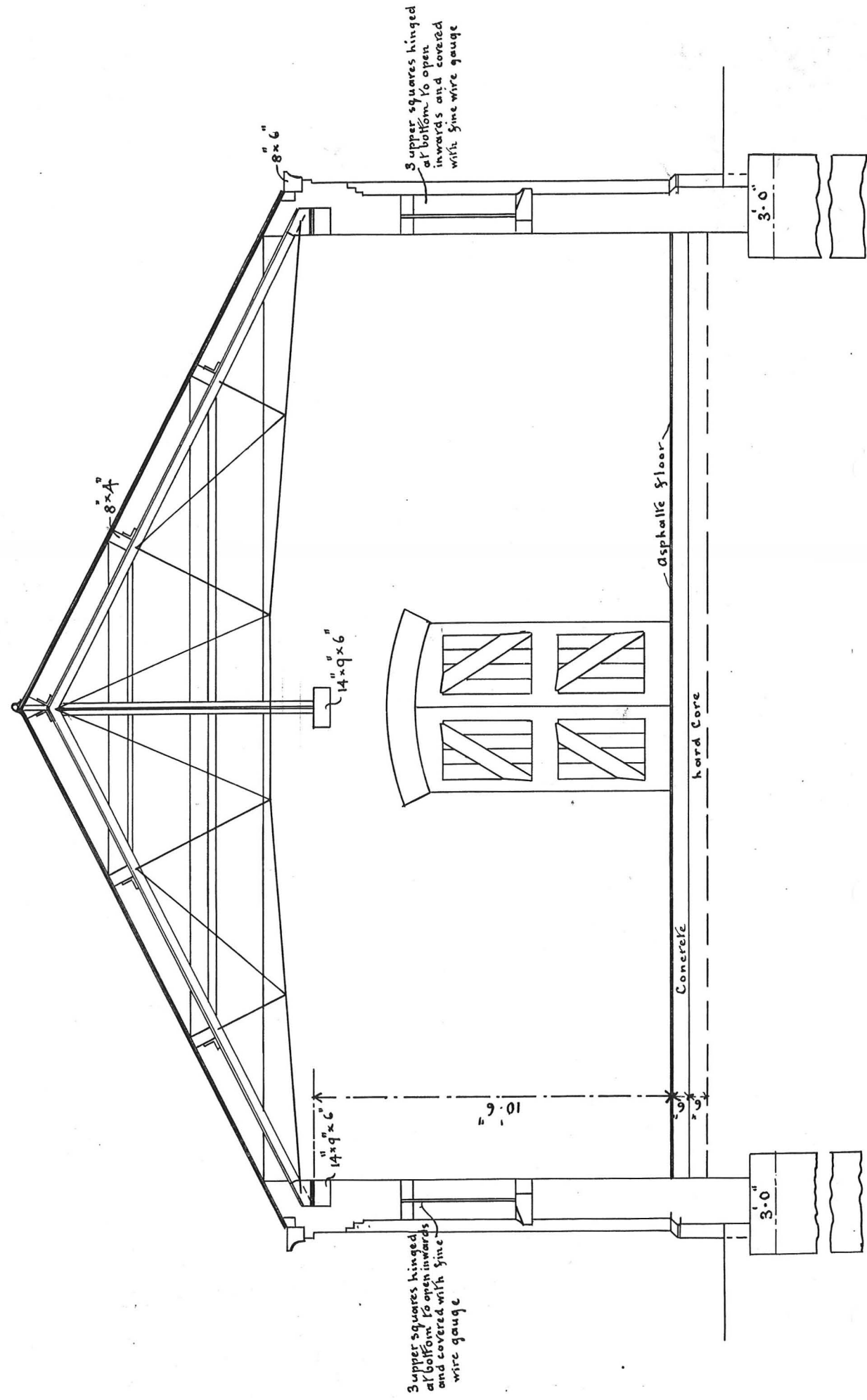


BENCH DETAIL

M7.8.01  
1945

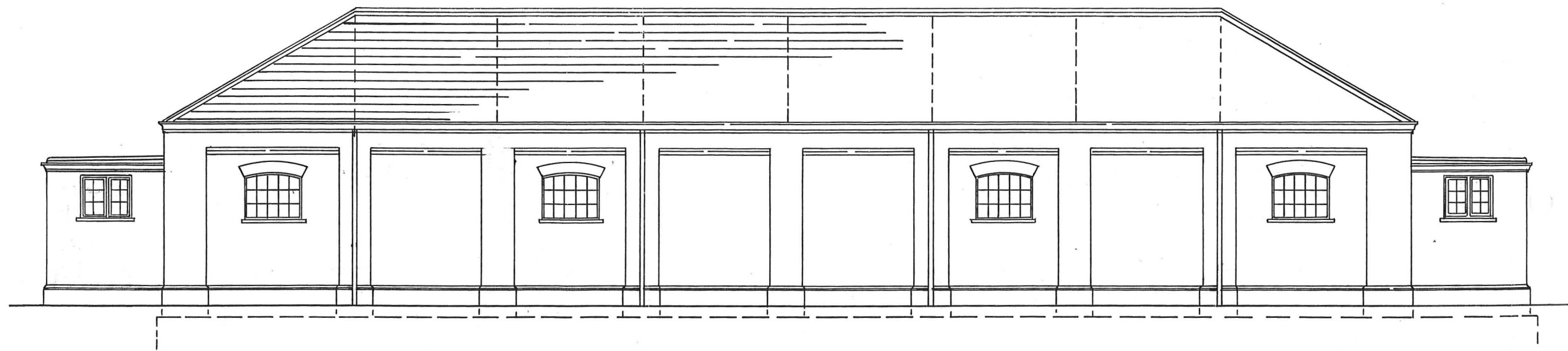


## END ELEVATION

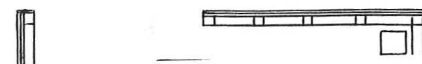


## SECTION A-B

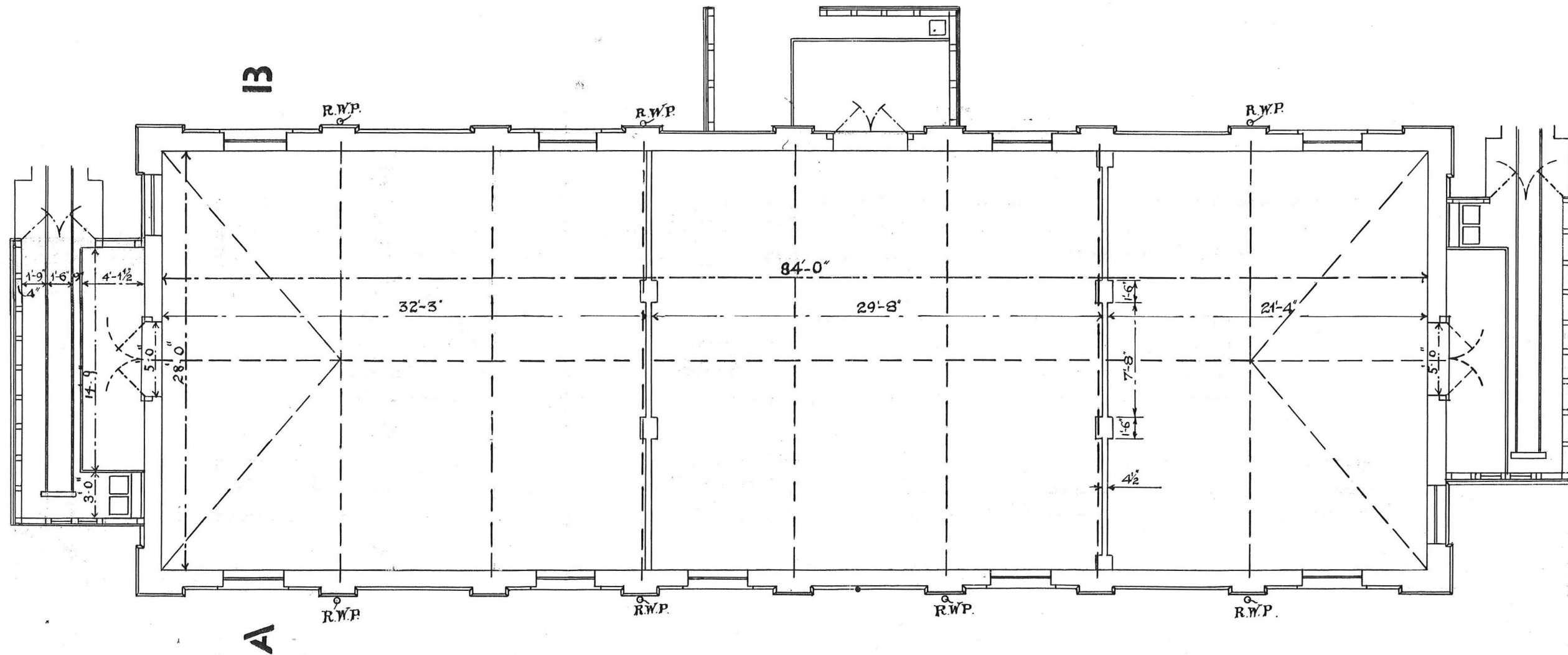
# Nº 1 REEL STOVE, CI



SIDE ELEVATION

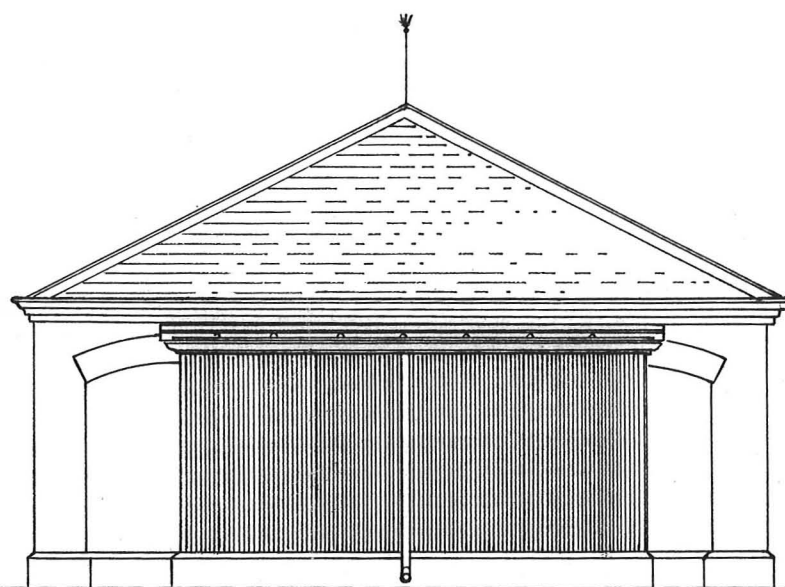
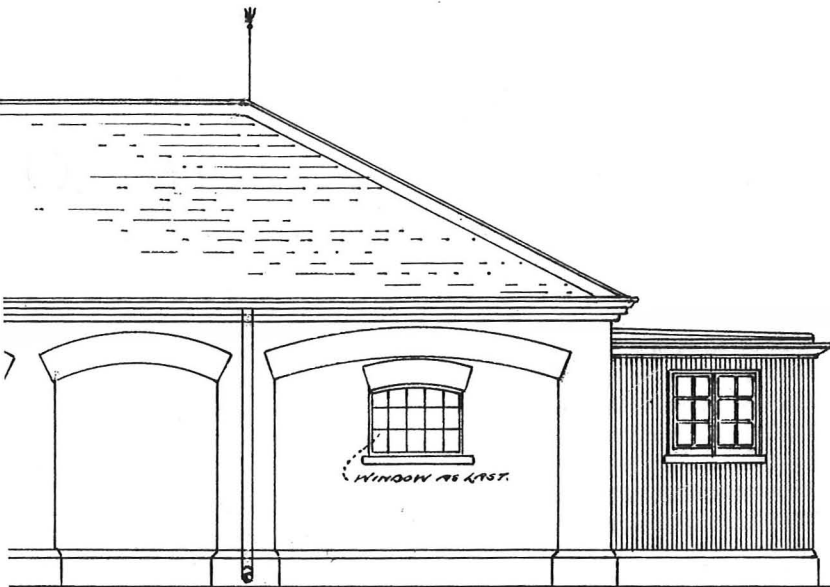


## SIDE ELEVATION

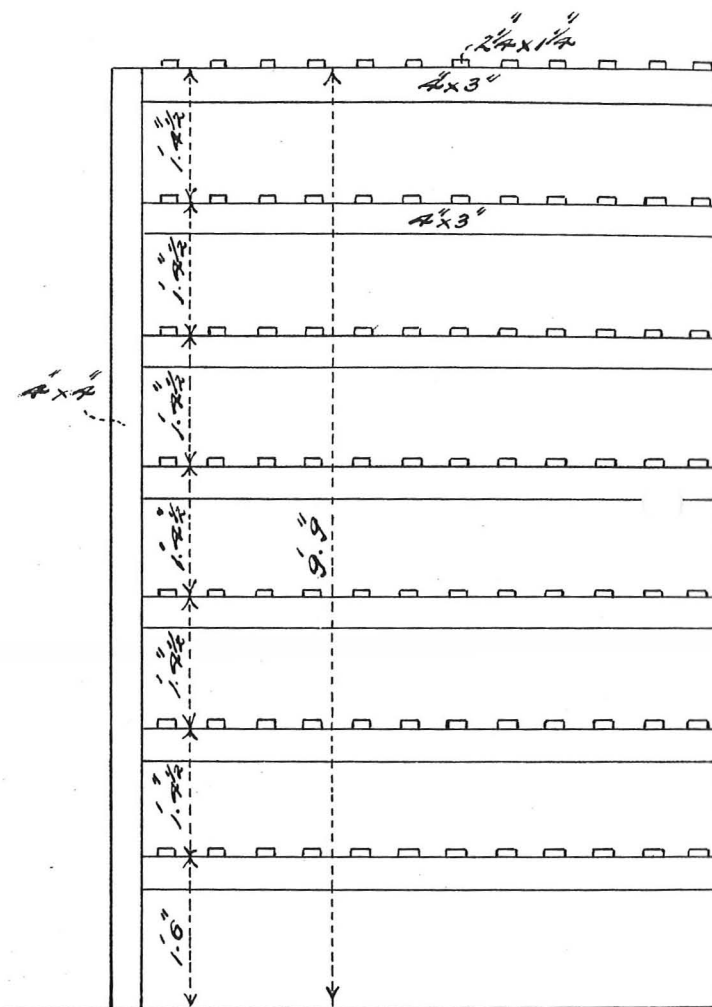


# PLAN

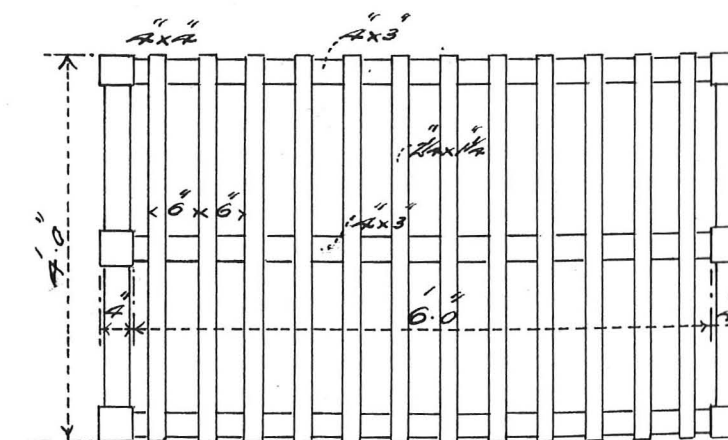
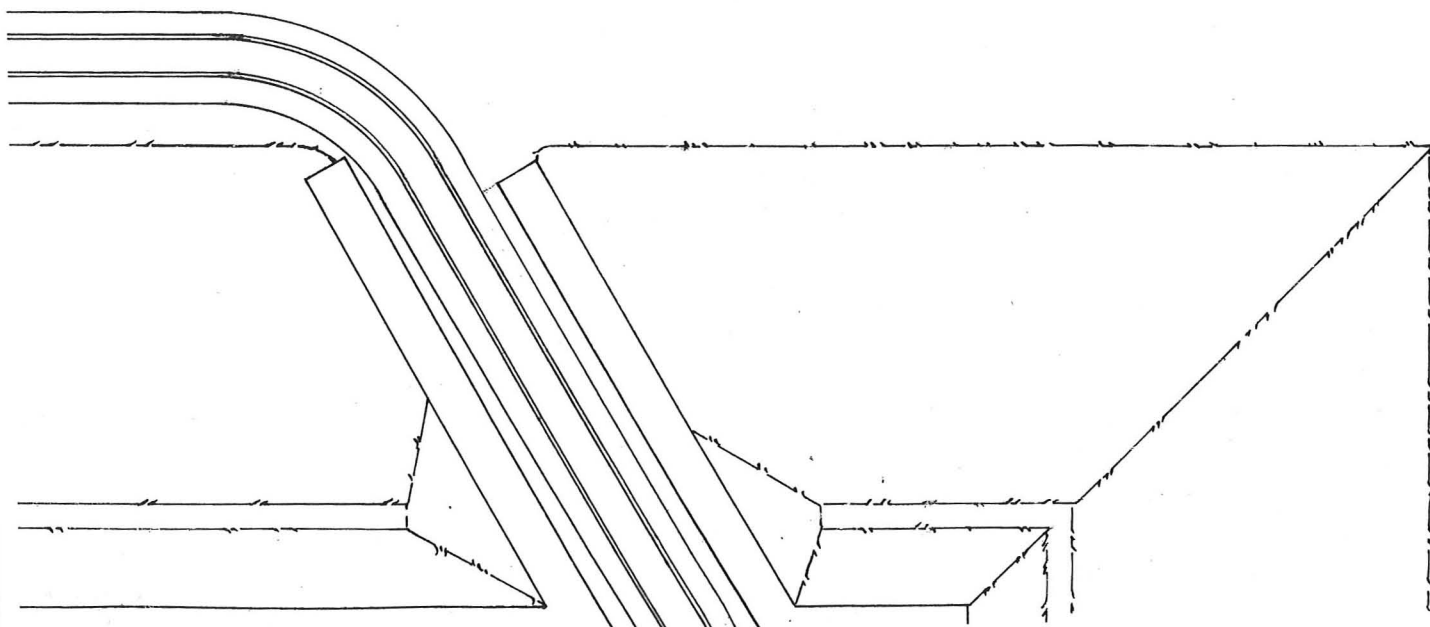
M7.B.06  
1902



— End Elevation. —



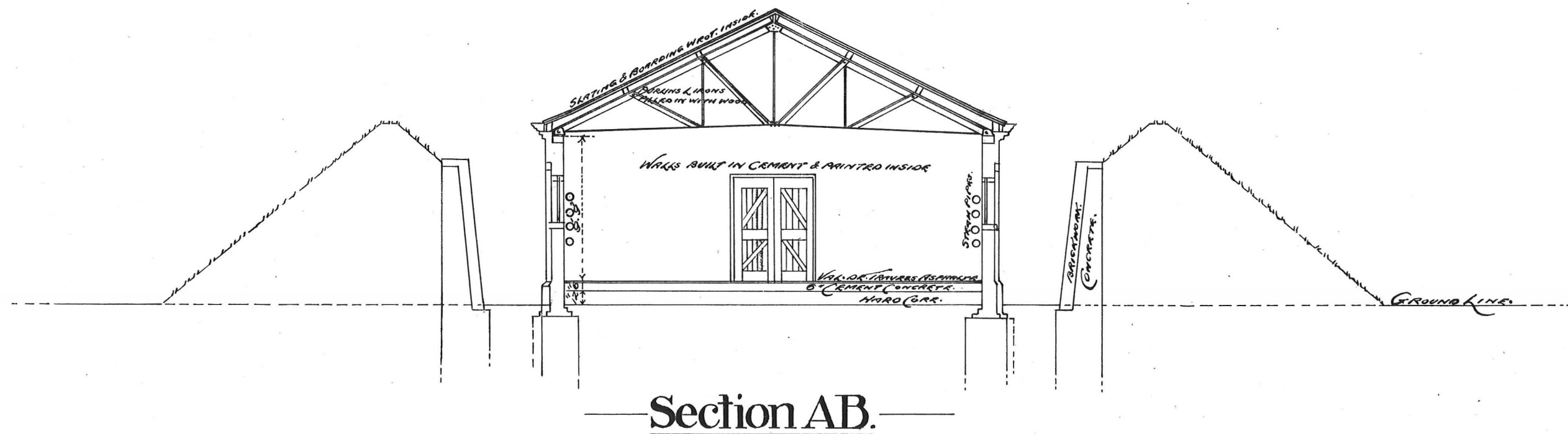
— Elevation —

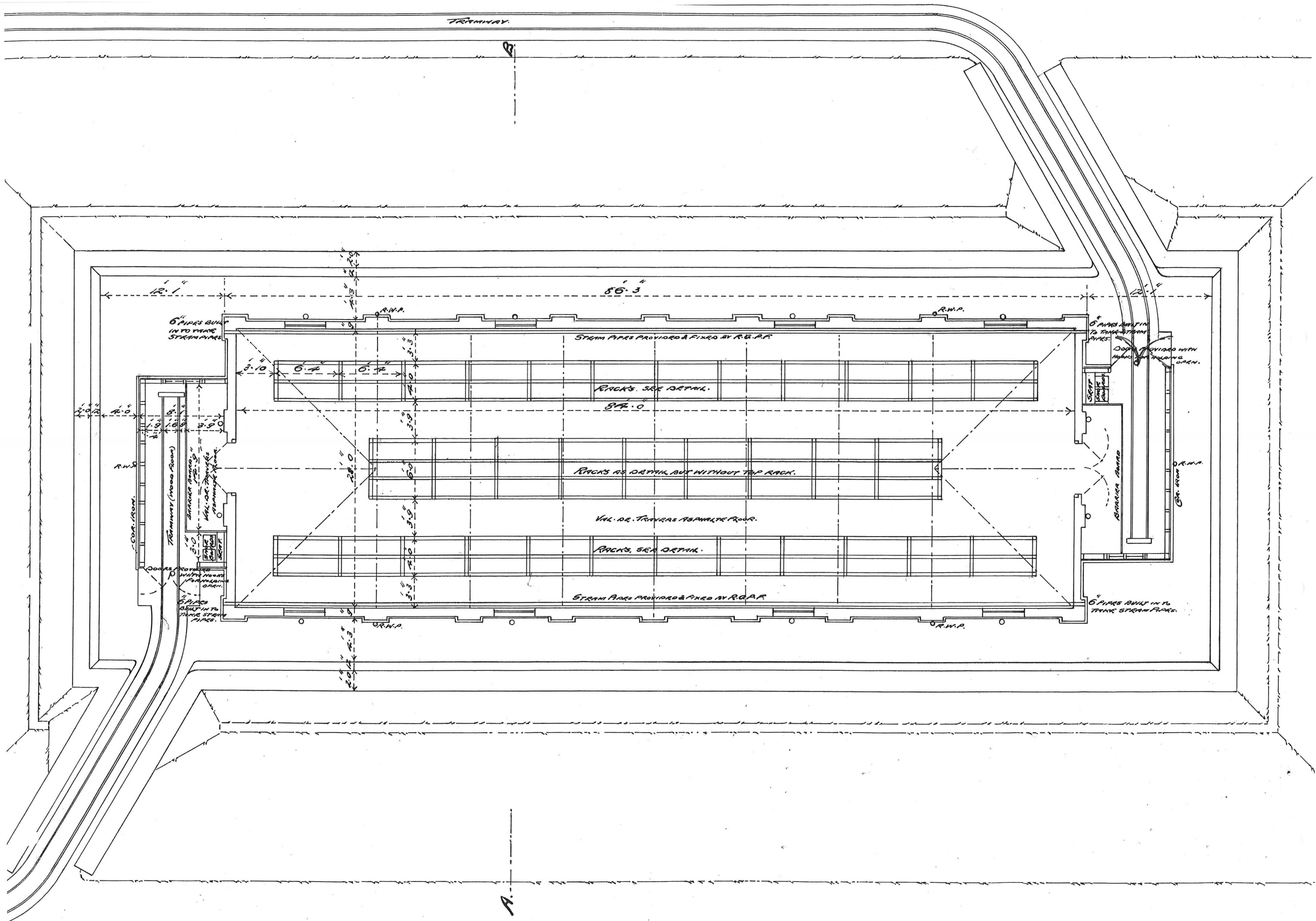


— Plan —  
— Detail of Rack —  
Scale 1 in 1 ft.



— Plan —  
— Detail of Racks. —  
— Scale  $\frac{1}{2}$  in = 1 ft. —



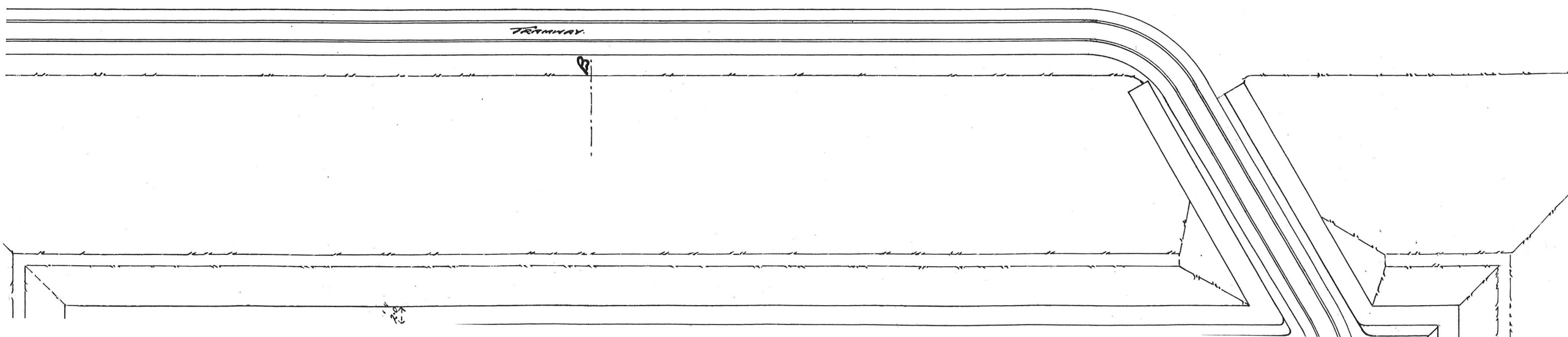


— SCALE 8 FEET TO 1 INCH. —



— Side Elevation. —

ELECTRIC LIGHT POINTS (1A) ARE SHOWN THUS. ○



H7fe.

## Waltham Abbey Royal Gunpowder Mills

RFI No: 130

Request For Information from

Thomas Ford &amp; Partners

Fax: 0181 6593146

	To	Company	Fax.	From
*	Steven Chaddock	WARGM Co Ltd	speed dial #16	Clive England  Date: 20.10.98 Time: 17:26  Sheets (total): 1  Ref: 753201
*	David Prince/ Stephen Bashford	Prince Research Consultants	#8	
*	Adrian Howell/ David Higgins	Turner & Townsend	#9	
*	David Gosling	Event Communications	#10	
*	Andrew Kirk	Kensall Partnership	#11	
*	Stuart Pearson	Pearson Landscape	#12	
*	Nicholas Ronalds/ Jo Wright	Harris & Sutherland	#14	
*	John New	Edward Pearce & Partners	#15	
*	John Bowles	WARGM Co Ltd	#13	
Distribution (fax only): as * <b>Bold</b> for action All to T&T (DH)				

## Query

- 1 H7 - Following research on site and at the PRO, I can find no evidence for the zinc roof previously proposed for the building. From 1902 to 1939 the building appears to have had a main slate roof 'slating and boarding wrot inside', the north and south lean-to's are unlabelled but drawn as a metal roof with rolls. The spacing of the rolls and typical construction elsewhere on the site would indicate zinc rather than lead. In 1940 the roof was replaced in 'Ruberoid and Cretex on Durasteel sheets', together with some additions to the secondary roof joinery. The roof is now finished in felt, presumably over this later construction.

Unless there are any objections (or other evidence) I would now propose to return to the slate/ zinc roofs of 1902-39, suitably upgraded with insulation. This is likely to involve the removal of the timber packings, Durasteel etc. added in 1940.

Signed:

## Response

(please respond using this sheet and numbering, even if only to refer to other documents)

ref 747

WARGM Co.	
Date Rec'd	21 OCT 1993
File	
Action	Copy

Signed:

Date:

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H8	OLD SERIES 199	RCHME NUMBER	N.G.R. TL 37580 01018
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NAME/FUNCTION Cordite Reel drying stove Magazine	START DATE 1904	END DATE 1994
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NO PHOTOGRAPHY  
AVAILABLE

## CARTOGRAPHIC DEPICTION

c1910 WASC 900/65 ; Reel Drying Stove No.2  
c1910 WASC 900/79 ; Reel Drying Stove No.2  
1917 WASC 900/70 ; Reel Drying Stove No.2  
1917 WASC 900/72 ; 199  
1919 WASC 900/74 ; 199  
c1920 WASC 900/80 ; Reel Drying Stove No.2  
1923 WASC 900/84 ; 199  
1932 WASC 900/87 ; 199  
> 1940 WASC 900/91A ; 199  
1954 A - B.34 ; H8  
c1960 WASC 900/94 ; H8  
c1963 WASC 900/97 ; H8  
1972 WASC 900/102 ; H8  
1972 WASC 900/104 ; H8  
1976 WASC 900/113 ; H8

## DOCUMENTARY REFERENCES

1908 RGPF Ledger WASC 1509 + WASC 1764 ; Reel Drying Stove, Truck Porch, Traverse built 1904 p20  
c1925 RGPF Ledger WASC 1680 ; Reel Drying Stove, Truck Porch, Traverse H8  
c1945 RGPF Ledger WASC 1508 ; Reel Drying Stove, Truck Porch, Traverse H8  
1972 ERDE List ; Magazine 1916  
1992 RARDE List ; Magazine  
1992 FBRC Class 1 Explosives  
1993 RCHME NBR No.91448

## PHOTOGRAPHY HISTORIC

WASC 1655/66-68 Bomb damage No.2 reel store  
15.10.1940  
PRO Supply 5 311, 312, 314 Parachute bomb damage  
15-Nov-1940

## PHOTOGRAPHY RCHME

1) 206/H/11 02 Feb 1993 From South East  
206/T/33 17 Mar 1993 Earthen Traverse from South East  
206/T/34 17 Mar 1993 From South  
206/T/4 17 Mar 1993 Cordite Reel Stove from South West  
206/T/5 17 Mar 1993 Showing Steam Pipes entering South East corner  
2) BB92/26053 H8 Cordite Reel Magazine view from South West  
4) 4788/14 06.05.1993

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H7, H10, H12

CONDITION

Good

Demol

DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Brick in English bond
- 2) ROOF MATERIALS AND STRUCTURE  
Roofing felt over timber boards and Fink truss, originally Supply 5/863 314 shows galvanised metal covering.
- 3) POWER SOURCE  
Electricity and formerly steam heat
- 4) DIMENSIONS i) L 26.75m ii) W 9.7m iii) HT eave 3.65m
- 5) See RCHME Threatened Buildings Section Report at the end of H7.

Building H8 burnt out and demolished  
in Summer 1994



# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H10	OLD SERIES 218	RCHME NUMBER	N.G.R. TL 37630 00952
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NAME/FUNCTION Cordite Reeling house Laboratory area	START DATE 1904 1950	END DATE 1945 1992
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NO PHOTOGRAPHY  
AVAILABLE

*Demol. 1994*

## CARTOGRAPHIC DEPICTION

c1910 WASC 900/65 ; Reeling House  
c1910 WASC 900/79 ; Reeling House  
1917 WASC 900/70  
1917 WASC 900/72 ; 218  
1919 WASC 900/74 ; 218  
c1920 WASC 900/80 ; 218  
1923 WASC 900/84 ; 218  
1932 WASC 900/87 ; 218  
> 1940 WASC 900/91A ; 218  
1954 A - B.34 ; H10  
c1960 WASC 900/94 ; H10  
c1963 WASC 900/97 ; H10  
1972 WASC 900/102 ; H10  
1972 WASC 900/104 ; H10  
1976 WASC 900/113 ; H10

## DOCUMENTARY REFERENCES

1908 RGPF Ledger WASC 1509 + WASC 1764 ;  
Reeling House/Engine House built 1904 p24  
c1925 RGPF Ledger WASC 1680 ; Reeling  
House/Engine House H10  
c1945 RGPF Ledger WASC 1508 ; Reeling  
House/Engine House H10  
  
Plans:  
H10 B01 - B18 ; Plans and Elevations 1951 to 1984  
  
1972 ERDE List ; Lab Area  
1992 RARDE List ; Lab Area  
1992 FBRC Explosives laboratory  
1993 RCHME NBR No.91472

## PHOTOGRAPHY HISTORIC

## PHOTOGRAPHY RCHME

- 1) 206/I/35 01 Feb 1993 From South West  
206/K/4 01 Feb 1993 From South West  
206/S/35 17 Mar 1993 From South East
- 2) BB92/26045 H10 Cordite Reeling House Laboratory  
view from South East  
BB92/26354 H10 Reeling House Plan & Elevations  
( Chessington)

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: primary H7, H8, H12 : secondary H1,H2,H3,H5,H6,H11,H21,H32,H66,H71

CONDITION *Good Demol.*

DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Brick in English bond
- 2) ROOF MATERIALS AND STRUCTURE  
Roofing felt over double gable with glass roof lights
- 3) POWER SOURCE  
Electricity and steam heat
- 4) DIMENSIONS i) L 30.85m ii) W 16.38m iii) HT estimate 5m
- 5) The building has a double gable with a central dividing spine wall. It is split into four bays by three partition walls. The wooden panel between each of the partitions is modern and relates to last use of the building as a laboratory.

Building fired + demolished summer 1994

ROYAL COMMISSION ON THE HISTORICAL MONUMENTS OF ENGLAND

MOD Building No. H10  
Reeling House  
The Royal Gunpowder Factory  
Waltham Abbey  
Essex

NBR No: 91472  
NGR: TL 37630 00952

Built in 1904 as a Reeling House, this single storey building has a double-pile rectangular plan and a double-gable roof. The main part of the building is of four bays by two bays, around which a covered way creates a further narrow bay on all sides. Reeling of cordite strands took place in three of the four main bays. The covered western end was a tram stop. In the covered eastern end was an engine house and off its east side was a landing stage beside the canal.

The main walls are of yellow brick laid in English bond. Less substantial, the north and south sides of the building were of timber construction. The roof is of iron with bolted timber purlins. The engine house is weatherboarded.

-oo0oo-

Situated on the Great Hoppit part of the site of the Royal Gunpowder Factory at Waltham Abbey, the Reeling House was built in 1904.<sup>12</sup> The cordite would have been pressed in other buildings such as the former gunpowder incorporating mills, then dried in the Reel Drying Stoves (H7 or H8), before it was brought to this Reeling House for winding strands of cordite on reels by machinery.<sup>13</sup>

Rectangular in plan, the building is of 30.85 x 16.38 metres and has a height of 16.38 metres. The main part of the building is of four bays by two bays, around which a covered way creates a further narrow bay on all sides. Of the main bays, the eastern one is a single room, whereas the other three main bays were divided at the centre to form six rooms which carried reeling machinery.<sup>14</sup> The covered north and south sides were an open corridor. The covered west end had tramways entering from the north and south sides which terminated at a 'shoe board' in the centre.<sup>15</sup> Here workers would have had to don special leather over-boots before stepping over a barrier board into a corridor and around to either the north and south sides where there are two doors to each room.<sup>16</sup> At the eastern end of the building, another tramway approached from the north side to an engine house, which provided power for the building. East of this was a covered landing stage beside the canal, where the cordite reels would have been transferred to a barge and transported to other parts of the site.<sup>17</sup>

The five partition walls, which are aligned north to south, and the central dividing wall, aligned east to west, are constructed

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Ledger c1908, cat. WASC 1509, (PRO, Hayes Repository).

Although describing the process carried out on a building on the south site of the Gunpowder Factory, an article in written in 1900 explains the process of reeling the cordite: The cordite issues from the machine in the shape of a continuous yellowish-brown thread of varying thicknesses. It is wound on brass reels by machinery. The various sizes are cut by machinery into lengths, each representing the regulation charge for the guns for which they are to be used. (The Penny Pictorial Magazine, No. 35, Vol. 3, Week Ending 3 February 1900, cat. WASC 412).

An undated and uncatalogued ink drawing of proposed Reeling House, Great Hoppit, shows these six rooms with reeling machinery secured to the floor with Lewis bolts. (PRO, Hayes Repository).

Drawing of Plan and Sections of Reeling House, Great Hoppit, RGPF Waltham Abbey, cat. H10.B.02 (MOD Central Disposals Unit, Chessington).

Although describing the process carried out on a building on the south site of the Gunpowder Factory, an article in written in 1900 outlines how workers had to don these immense leather over-boots whilst standing on the shoe board, before they were permitted to cross the wooden barrier into the building. (The Penny Pictorial Magazine, No. 35, Vol. 3, Week Ending 3 February 1900, cat. WASC 412).

The reels may have been transported to magazines on the south site of the Gunpowder Factory and then off site for packing.

of yellow brick laid in English bond. The interior brick walls were rendered in cement. The north and south walls are of timber and glass. The relatively insubstantial side walls and roof could be easily replaced in the event of an explosion.<sup>18</sup> The corridors on the north and south sides were originally open. At their outer sides are a row of cast iron columns, upon which the principals of the roof trusses rest.

The roof is constructed of iron with bolted timber purlins and has a zinc covering.<sup>19</sup> It has a double gable form, comprising four pairs of trusses. The inner principals rest on the central brick wall or, in the case of the easternmost main bay, on an RSJ. The outer principals extend lower to rest on the columns on the north and south sides, thereby creating a covering for the corridor. At the west side the iron roof extends to form a hipped roof over the tramway. The engine house at the east end is timber and has a lean-to roof.

The tie beams of the trusses carried a pair of steam pipes which ran the entire length of the building.<sup>20</sup> The tie beams of the trusses in the six reeling rooms also carried shafting for the reeling machinery. The machinery was secured to the floor with Lewis bolts.<sup>21</sup> The floor may have been lead-covered<sup>22</sup> and that of the engine house was concrete.<sup>23</sup> The building was lit both by side windows and skylights and by electric lighting.<sup>24</sup>

By 1917 the building appears to have ceased functioning as a Reeling House and was used as a Women's Shifting Room and Landing Site.<sup>25</sup> In c1951 it was converted into laboratories.<sup>26</sup> The covered way beside the engine house appears to have been enclosed, using yellow brick in stretcher bond, at this date.<sup>27</sup> The open corridors on the north and south sides were enclosed in c1969.<sup>28</sup>

Surveyed March 1993  
Report by R L Burgess

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"A Handbook of the Manufacture and Proof of Gunpowder, as carried on at the Royal Gunpowder Factory, Waltham Abbey," by Captain F M Smith, Royal Artillery, Assistant Superintendent. London, 1870, p43.

Ledger c1908, cat. WASC 1509 (PRO, Hayes Repository).

Drawing of Plan and Sections of Reeling House, Great Hoppit, RGPF Waltham Abbey, cat. H10.B.02 (MOD Central Disposals Unit, Chessington).

An undated and uncatalogued ink drawing of proposed Reeling House, Great Hoppit, (PRO, Hayes Repository).

**The ledger of c1908 (cat. WASC 1509) states that the floor of the reeling house was lead-covered but an undated and uncatalogued drawing also at Hayes PRO shows a cement concrete floor (PRO, Hayes Repository).**

Ledger c1908, cat. WASC 1509 (PRO, Hayes Repository).

Undated and uncatalogued ink drawing of proposed Reeling House, Great Hoppit (PRO, Hayes Repository).

Site plan of Royal Gunpowder Factory at Waltham Abbey, 1:2500, as named 13 September 1917, revised March 1919 and March 1923, cat. WASC 900/84.

Drawing dated 1/1/1951 showing benches for alterations to laboratories, cat. H10.B.01 (MOD Central Disposals Unit, Chessington).

Plans dated 11/6/1951 for enclosure for rectifier at east end of the building, cat. H.10.B.06. (MOD Central Disposals Unit, Chessington).

Drawing dated 16/5/1969 showing enclosure of verandahs on the building, cat. H10.B.09A (MOD Central Disposals Unit, Chessington).

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H11	OLD SERIES	RCHME NUMBER	N.G.R. TL 37640 00932
NAME/FUNCTION Solvent and chemical store		START DATE 1940?	END DATE 1992
NO PHOTOGRAPHY AVAILABLE			
<b>CARTOGRAPHIC DEPICTION</b>  > 1940 WASC 900/91A 1954 A - B.34 ; H11 c1960 WASC 900/94 ; H11 c1963 WASC 900/97 ; H11 1972 WASC 900/102 ; H11 1972 WASC 900/104 ; H11 1976 WASC 900/113 ; H11		<b>DOCUMENTARY REFERENCES</b>  1972 ERDE List ; Solvent and Chemical Store 1992 RARDE List ; Solvent and Chemical Store  1992 FBRC List ; H11 ?	
<b>PHOTOGRAPHY HISTORIC</b>		<b>PHOTOGRAPHY RCHME</b> 1) 206/K/8 01 Feb 1993 Waste 206/K/9 01 Feb 1993 From East 206/S/32 17 Mar 1993 From East	
<b>RELATIONSHIPS WITH OTHER MONUMENTS</b>  ASSOCIATED WITH: H1, H2, H3, H5, H32, H66, H71			
<b>CONDITION</b> Fair			
<b>DESCRIPTION</b> 1) CONSTRUCTIONAL MATERIAL Concrete over corrugated iron sheeting  2) ROOF MATERIALS AND STRUCTURE Concrete  3) POWER SOURCE -  4) DIMENSIONS i) L 9.1m ii) W 4.1m iii) HT 2.4m  5) The structure is semi-circular in shape formed from cast concrete 6" in thickness over corrugated iron. The floor is also concrete into which is set a H girder along the centre line of the building.  The building is presumed to be identical to L197 and RCHME 167.  H11 was demolished in August 1993			

*floor slab removed summer 1994*

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H12	OLD SERIES 231	RCHME NUMBER	N.G.R. TL 37630 00890
NAME/FUNCTION Cordite Reel Magazine No.1 Proof Stand	START DATE 1904 1947	END DATE 1947 198?	
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
c1910 WASC 900/65 ; 231 c1910 WASC 900/79 ; 231 1917 WASC 900/70 ; 231 1917 WASC 900/72 ; 231 1919 WASC 900/74 ; 231 c1920 WASC 900/80 ; 231 1923 WASC 900/84 ; 231 1932 WASC 900/87 ; 231 > 1940 WASC 900/91A ; 231 1954 A - B.34 ; H12 c1960 WASC 900/94 ; H12 c1963 WASC 900/97 ; H12 1972 WASC 900/102 ; H12 1972 WASC 900/104 ; H12 1976 WASC 900/113 ; H12		1908 RGPF Ledger WASC 1509 + WASC 1764 ; Reel Magazine built 1904 p26 c1925 RGPF Ledger WASC 1680 ; Reel Magazine (H12) c1945 RGPF Ledger WASC 1508 ; Reel Magazine (H12)  1946-50 H12 B01 - B13 Plans and Elevations 1947 'The Chemical Research and Development Department its Programme and Facilities CRDD 21 May 1947 (12 page internal document describes proof stand No.1)  1972 ERDE List ; Reel Magazine/Firing Point 1992 RARDE List ; Reel Magazine/Firing Point  1993 RCHME NBR No.91464	



PHOTOGRAPHY  
HISTORIC

PHOTOGRAPHY  
RCHME

- 1) 206/I/25 01 Feb 1993 Detail along Eastern side  
206/I/26 01 Feb 1993 East Firing Bay  
206/I/27 01 Feb 1993 West Firing Bay  
206/I/28 01 Feb 1993 from South West  
206/I/29 01 Feb 1993 Safety Barrier  
206/I/36 01 Feb 1993 From South East  
206/S/18 17 Mar 1993 Firing Point from South  
206/S/21 17 Mar 1993 Firing Point West side  
206/S/22 17 Mar 1993 Firing Point West chamber  
206/S/23 17 Mar 1993 Firing Point East side  
206/S/24 17 Mar 1993 Firing Point East side  
206/S/25 17 Mar 1993 Firing Point roof detail from South East  
206/S/26 17 Mar 1993 Barrier to North Entrance from South  
206/S/27 17 Mar 1993 Interior of Firing Point from North  
206/S/28 17 Mar 1993 Showing Internal Northern wall  
206/T/35 17 Mar 1993 Firing Point from South
- 2) BB92/26046 H12 Cordite Reel Magazine/Firing Point from South East  
BB92/26047 H12 Cordite Reel Magazine East Chamber from South East  
BB92/26048 H12 Cordite Reel Magazine West Chamber from South West  
BB92/26049 H12 Cordite Reel Magazine West Chamber from South West  
BB92/26050 H12 Cordite Reel Magazine East passage from South West  
BB92/26051 H12 Cordite Reel Magazine West passage from North West  
BB92/26189 H12 Firing Bay, central Control and Observation room  
BB92/26357 H12 Drawing H12.B.01 Proof stand plan 12.April 1947 ( Chessington)

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: primary H7, H8, H10 : secondary H14,H54,H65

CONDITION

~~Fair~~ *Derol*

DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Original structure brick in English bond, later additions concrete and breeze block
- 2) ROOF MATERIALS AND STRUCTURE  
Central control room flat concrete slab, remainder corrugated iron over RSJs
- 3) POWER SOURCE  
Electricity and steam heat
- 4) DIMENSIONS i) L 17.05m ii) W 13.7m iii) HT 2.85m
- 5) Historic artifacts - lights from firing bays, some of the control room equipment and 'tub' with associated pipe work along eastern passage barriers.

See attached RCHME Threatened Buildings Section report.

*H12 stripped out, fired + demolished ~~22~~ spring 1996*

## ROYAL COMMISSION ON THE HISTORICAL MONUMENTS OF ENGLAND

MOD Building No. H12  
Reel Magazine  
The Royal Gunpowder Factory  
Waltham Abbey  
Essex

NBR No: 91464  
NGR: TL 37630 00890

Built in 1904 as a Reel Magazine for storing reels of cordite, this single storey building originally had a rectangular plan and is surrounded by a tall earth traverse. It is constructed of yellow brick laid in English bond.

By c1946 the building was converted into a Firing Point and the fabric was reinforced. It then had more of a U-shaped plan contained two firing rooms, two control rooms and a central command room, and contained monopropellant proof stand(s). Bunkers were added at the east and west sides.

-oo0oo-

Building H12 was built in 1904 as a Reel Magazine.<sup>29</sup> It is situated on the Great Hoppit part of the Gunpowder Factory site, approximately 60 metres to the south of a Reeling House (H10) of the same date. North of that Reel House are a pair of Reel Drying Stoves (H7 and H8) which were also part of that same 1904 building phase. All these buildings relate to cordite production. After pressing, cordite would have been brought to the Reel Drying Stoves for drying, then taken to the Reeling House for winding strands of cordite, before being brought to this Reel Magazine for storage.

Constructed of yellow brick laid in English bond, the building is surrounded by a tall earth traverse. On the exterior of the traverse, a signal bridge gives access to an opening on the north-west side of the traverse to the building.<sup>30</sup>

The building was originally rectangular in plan, 37'3" x 22'3" (approximately 11 x 6.5 m) with a projection, 16' x 8'3" (approximately 4.8 x 2.4 m) on the west side.<sup>31</sup> The main rectangular block is single-storeyed, 13'9" (approximately 4 m) in height and had a gabled roof, and the projection was slightly lower and had a lean-to roof.<sup>32</sup> The latter may have functioned as a shoe porch, like those in the contemporary buildings H7, H8 and H10, whereby special leather over-boots would have had to have been put on before entering the building to protect it from grit.<sup>33</sup> Heavy-duty lighting may belong to the original phase or may be secondary. The building was still used as a Reel Magazine by 1923.<sup>34</sup>

In around 1946-8 the building was converted to a Firing Point and its fabric reinforced as a result.<sup>35</sup> In 1945 the Explosives

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Ledger c1908, cat. WASC 1509 (PRO, Hayes Repository).

The opening in the traverse is part of the original 1904 phase, and it is shown in the Ledger of c1908, but the actual signal bridge with its barrier may belong to a later phase, cat. WASC 1509 (PRO, Hayes Repository).

The building is aligned north-north-west to south-south-east but for clarity in this report it is described as if it was aligned north to south.

Ledger c1908, cat. WASC 1509 (PRO, Hayes Repository).

Although describing the process carried out on a building on the south site of the Gunpowder Factory, an article in written in 1900 outlines how workers had to done these immense leather over-boots whilst standing on the shoe board, before they were permitted to cross the wooden barrier into the building. (The Penny Pictorial Magazine, No. 35, Vol. 3, Week Ending 3 February 1900, cat. WASC 412).

Site plan of Royal Gunpowder Factory at Waltham Abbey, 1:2500, as named 13 September 1917, revised March 1919 and March 1923, cat. WASC 900/84.

Drawings of ground floor plan and schedules of fabric and reinforcement, dated 12/4/1946, cat. H.12.B.01 (MOD Central Disposals Unit, Chessington). Drawings showing monopropellant proof stand and armour steel screen to motor, dated 21/6/1948, cat. H.12.B.12 (MOD Central Disposals Unit, Chessington).

Research and Development Establishment (ERDE) had taken over the site of the former Gunpowder Factory.<sup>36</sup> The Establishment was the sole Government laboratory responsible for research on, and development of, non-nuclear military explosives.<sup>37</sup> These were tested vigorously in a number of buildings on the whole of the site. It is not certain which types of explosives were tested in the former Reel Magazine but it is likely that they had less impact than some of the high explosives that had to be tested in specially designed structures, for example at the northern part of the site.<sup>38</sup>

After conversion to a Firing Point in c1946-8, building H12 comprised two control rooms at its northern end, a central command room, with firing rooms on the east and west sides. Probably at this time the roof was replaced and the projection with lean-to roof was also removed or replaced. The command room and control rooms have a flat roof and the firing rooms are at the present time without roofs, although presumably they were covered originally. Bunkers were added on the exterior of the north and south sides. Looking onto the firing rooms, the sides of the command room and the south end of the control rooms have heavy-duty inspection windows for observing the explosions. Iron rails are positioned diagonally against the inner walls of the firing rooms. They are possibly part of the reinforcement of the building.<sup>39</sup> There are concrete beds in the firing rooms.

The firing area was later extended further southward by the addition of walls of red brick and breeze block.

Surveyed March 1993  
Report by R L Burgess

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"The Explosives Research and Development Establishment, Waltham Abbey", Research Establishments in Europe: 48, reprinted from Chemistry and Industry, 1965, pp320-327.

"The Explosives Research and Development Establishment, Waltham Abbey", Research Establishments in Europe: 48, reprinted from Chemistry and Industry, 1965, pp320-327.

The various types of explosives are described in an article, "The Explosives Research and Development Establishment, Waltham Abbey", Research Establishments in Europe: 48, reprinted from Chemistry and Industry, 1965, pp320-327.

A drawing dated 8/8/1947 shows a Proof Stand No. 1 and the position of these wall rails, cat. H12.B.06, (MOD Central Disposals Unit, Chessington).

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H13	OLD SERIES HE13/232a	RCHME NUMBER	N.G.R. TL 37600 00862
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NAME/FUNCTION Narrow gauge Locomotive shed Metal store	START DATE 1916 1950?	END DATE 1950? 1992
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NO PHOTOGRAPHY  
AVAILABLE

## CARTOGRAPHIC DEPICTION

1917 WASC 900/68 ; Engine House  
 1917 WASC 900/70 ; Locomotive House  
 1917 WASC 900/72 ; 232a  
 1919 WASC 900/74 ; 232a  
 c1920 WASC 900/80 ; 232a  
 1923 WASC 900/84 ; 232a  
 1932 WASC 900/87 ; 232a  
 > 1940 WASC 900/91A ; HE13  
 1954 A - B.34 ; H13  
 c1960 WASC 900/94 ; H13  
 c1963 WASC 900/97 ; H13  
 1972 WASC 900/102 ; H13  
 1972 WASC 900/104 ; H13  
 1976 WASC 900/113 ; H13

## DOCUMENTARY REFERENCES

Plan;  
 H13 B01 - 30/12/1961 ; Details of Engine House  
  
 1972 ERDE List ; Engine Shed/Metal Store  
 1992 RARDE List ; Engine Shed/Metal Store  
  
 1992 FBRC List ; Metal Store

## PHOTOGRAPHY HISTORIC

## PHOTOGRAPHY RCHME

1) 206/I/32 01 Feb 1993 From South East  
 206/S/19 17 Mar 1993 Narrow gauge 18" Locomotive  
 shed from South  
 206/T/36 17 Mar 1993 Locomotive shed from South  
 2) BB92/26042 H13 Narrow Gauge Locomotive Shed &  
 Metal store from South East  
 BB92/26043 H13 Narrow Gauge Locomotive Shed &  
 Metal store interior from South East

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH:

CONDITION ~~Good~~ *Demol.*

*H13 ~~fire~~ Demolished in spring/summer 1994*

DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Brick

- 2) ROOF MATERIALS AND STRUCTURE  
Slate over timber boards ???

- 3) POWER SOURCE  
Electricity

- 4) DIMENSIONS i) L 10.25m ii) W 4.75m iii) HT 2.5m

- 5) Single storey narrow gauge locomotive shed with gabled ends north and south and three double windows along either side. The building is entered from the south through hinged doors under a concrete lintel. Attached to the exterior wall to the left of the entrance is a metal contraband box. Inside two 18" gauge rails survive insitu.

Historic artifacts: Small enamel sign on north wall, contraband box Western exterior wall.

## THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H14	OLD SERIES	RCHME NUMBER	N.G.R. TL 37660 00871
NAME/FUNCTION Store shed		START DATE 1960?	END DATE 1992
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  c1963      WASC 900/97 ; H14 1972      WASC 900/102 ; H14 1972      WASC 900/104 ; H14 1976      WASC 900/113 ; H14		DOCUMENTARY REFERENCES  1972      ERDE List ; Store Shed 1992      RARDE List ; Store Shed	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME 1) 206//30 01 Feb 1993 From South 206/K/10 01 Feb 1993 From South West 206/S/14 16 Mar 1993 From South West 206/S/15 16 Mar 1993 Waste 206/S/16 16 Mar 1993 Waste 206/S/17 17 Mar 1993 Waste	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: H12			
CONDITION      Good			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Breeze block  2)      ROOF MATERIALS AND STRUCTURE Flat concrete slab  3)      POWER SOURCE Electricity  4)      DIMENSIONS i) L 4.7m ii) W 2.3m iii) HT 2.5m  5)      A small breeze block building with double wooden doors on its south west side and a single wooden door to the north east. Demolished August 1993.			



# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H15	OLD SERIES	RCHME NUMBER	N.G.R. TL 37620 01006
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NAME/FUNCTION Air raid shelter Store glass technology	START DATE 1940?	END DATE 1992
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NO PHOTOGRAPHY  
AVAILABLE

## CARTOGRAPHIC DEPICTION

> 1940 WASC 900/91A  
1954 A - B.34 ; H15  
c1960 WASC 900/94 ; H15  
c1963 WASC 900/97 ; H15  
1972 WASC 900/102 ; H15  
1972 WASC 900/104 ; H15  
1976 WASC 900/113 ; H15

## DOCUMENTARY REFERENCES

1972 ERDE List ; Concrete Air Raid Shelter  
1992 RARDE List ; Concrete Air Raid Shelter

## PHOTOGRAPHY HISTORIC

## PHOTOGRAPHY RCHME

1) 206/K/11 01 Feb 1993 From South  
206/I/31 01 Feb 1993 From South  
206/S/12 16 Mar 1993 Air Raid Shelter from South  
West

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH:

CONDITION Good

## DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Concrete
- 2) ROOF MATERIALS AND STRUCTURE  
Flat 9" concrete slab
- 3) POWER SOURCE  
Electricity
- 4) DIMENSIONS i) L 9.23m ii) W 5.2m iii) HT 2.44m
- 5) Concrete air raid shelter with two staggered entrances on the south side. Traces of wavy camouflage paint remain on the exterior.  
Demolished August 1993.

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H16	OLD SERIES 246a	RCHME NUMBER	N.G.R. TL 37620 01006
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NAME/FUNCTION Press House No.10 Cordite Press House Electronics glass blowers heat transfer	START DATE 1916  1950?	END DATE  1950?
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NO PHOTOGRAPHY  
AVAILABLE

## CARTOGRAPHIC DEPICTION

1916 WASC 900/66a ; Cordite Press House  
 1917 WASC 900/68 ; Cordite Press House  
 1917 WASC 900/70 ; 246a  
 1917 WASC 900/72 ; 246a  
 1919 WASC 900/74 ; 246a  
 c1920 WASC 900/80 ; 246a  
 1923 WASC 900/84 ; 246a  
 1932 WASC 900/87 ; 246a  
 > 1940 WASC 900/91A  
 1954 A - B.34 ; H16  
 c1960 WASC 900/94 ; H16  
 c1963 WASC 900/97 ; H16  
 1972 WASC 900/102 ; H16  
 1972 WASC 900/104 ; H16  
 1976 WASC 900/113 ; H16

## DOCUMENTARY REFERENCES

c1925 RGPF Ledger WASC 1680 ; Press House No.10  
 c1945 RGPF Ledger WASC 1508 ; Press House No.10  
  
 Plans;  
 H16 B01 - B43 ; Plan and Elevations 1916 to 1975  
  
 1938 Text Book of Explosives 1938 H.M.S.O  
 ChpXV p99-111 Figs 15.2-9  
 1972 ERDE List ; Cordite Press House  
 1992 RARDE List ; Cordite Press House

## PHOTOGRAPHY HISTORIC

## PHOTOGRAPHY RCHME

1) 206/S/11 16 Mar 1993 Site of used for Waste Sorting  
 206/H/7 02 Feb 1993 From South waste dump over

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H19

CONDITION Demolished

## DESCRIPTION

The building has been demolished, the concrete floor slab at the time of survey was being used for the storage of contaminated waste and was therefore unavailable for inspection.

Floor slab removed summer 1994

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H17	OLD SERIES	RCHME NUMBER	N.G.R. TL 37620 01006
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NAME/FUNCTION Sewer pump house	START DATE 1960?	END DATE <del>1992</del> in use.
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NO PHOTOGRAPHY  
AVAILABLE

## CARTOGRAPHIC DEPICTION

c1960 WASC 900/94  
c1963 WASC 900/97 ; H17  
1972 WASC 900/102 ; H17  
1972 WASC 900/104 ; H17  
1976 WASC 900/113 ; H17

## DOCUMENTARY REFERENCES

1972 ERDE List ; Sewer Pump House  
1992 RARDE List ; Sewer Pump House

## PHOTOGRAPHY HISTORIC

## PHOTOGRAPHY RCHME

1) 206/H/10 02 Feb 1993 From  
206/T/3 17 Mar 1993 From South West

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H24, H31, L126, L170

CONDITION Good

## DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Brick
- 2) ROOF MATERIALS AND STRUCTURE  
Roofing felt over timbers boards supported on a RSJ
- 3) POWER SOURCE  
Electricity
- 4) DIMENSIONS i) L 4.32m ii) W 3.4m iii) HT 2.85m
- 5) The rectangular brick pump house is set on a small earthen mound. The building is entered through a single blue door on the west side and is lit by a window on the north side. Inside the building the two pumps remain.

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H19	OLD SERIES 261a	RCHME NUMBER	N.G.R. TL 37650 00750
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NAME/FUNCTION Womens Shifting & Dining Room Shifting and Dining House	START DATE 1914-18?	END DATE 1970?
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NO PHOTOGRAPHY  
AVAILABLE

## CARTOGRAPHIC DEPICTION

1919 WASC 900/74  
c1920 WASC 900/80  
1923 WASC 900/84 ; 261a  
1932 WASC 900/87 ; 261a  
> 1940 WASC 900/91A ; H19  
1954 A - B.34 ; H19  
c1960 WASC 900/94 ; H19  
c1963 WASC 900/97 ; H19

## DOCUMENTARY REFERENCES

c1925 RGPF Ledger WASC 1680 ; Womens Shifting & Dining Room  
c1945 RGPF Ledger WASC 1508 ; Womens Shifting & Dining Room  
1972 ERDE List ; Shifting and Dining Room  
1992 RARDE List ; Shifting and Dining Room

PHOTOGRAPHY  
HISTORIC

PHOTOGRAPHY  
RCHME

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H16

CONDITION Demolished

## DESCRIPTION

5) No surface remains are visible.

*No foundations found during  
surface strip out*

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H21	OLD SERIES	RCHME NUMBER	N.G.R. TL 37680 00755
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NAME/FUNCTION Magazine	START DATE 1957?	END DATE 1991,
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NO PHOTOGRAPHY

AVAILABLE

## CARTOGRAPHIC DEPICTION

1954 A - B.34  
c1960 WASC 900/94 ; H21  
c1963 WASC 900/97 ; H21  
1972 WASC 900/102 ; H21  
1972 WASC 900/104 ; H21  
1976 WASC 900/113 ; H21

## DOCUMENTARY REFERENCES

Plans;  
H21 B01 -B02 Plans and Elevations 1982  
  
1972 ERDE List ; Magazine  
1992 RARDE List ; Magazine

## PHOTOGRAPHY HISTORIC

## PHOTOGRAPHY RCHME

1) 206/H/9 02 Feb 1993 From South East  
206/T/2 17 Mar 1993 From South East

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H10

CONDITION Good

## DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Brick
- 2) ROOF MATERIALS AND STRUCTURE  
Corrugated translucent plastic
- 3) POWER SOURCE  
Electricity
- 4) DIMENSIONS i) L 1.9m ii) W 1.9m iii) HT 2.7m
- 5) The building is square with a single red door on the eastern side shielded by a brick wall 4.3m in length and 2.3m high. The building is protected by a lightning conductor. At the building the path to H10 may be closed by a red and white plastic chain.  
Demolished August 1993.

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H21/1	OLD SERIES	RCHME NUMBER	N.G.R. TL 37680 00757
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NAME/FUNCTION Building	START DATE post 1945	END DATE by 1972
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NO PHOTOGRAPHY  
AVAILABLE

CARTOGRAPHIC DEPICTION  
1960 Drg NoLSG/8: H21  
1967 O.S. Plan TL 3700 NE

DOCUMENTARY REFERENCES

PHOTOGRAPHY  
HISTORIC

PHOTOGRAPHY  
RCHME

RELATIONSHIPS WITH OTHER MONUMENTS  
  
ASSOCIATED WITH: H22

CONDITION      Demolished

DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL
- 2) ROOF MATERIALS AND STRUCTURE
- 3) POWER SOURCE
- 4) DIMENSIONS i) L      ii) W      iii) HT
- 5) The number H21 was re-allocated to a later building.



# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H22	OLD SERIES	RCHME NUMBER	N.G.R. TL 37680 00742
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NAME/FUNCTION Building	START DATE post 1945	END DATE by 1967
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NO PHOTOGRAPHY  
AVAILABLE

## CARTOGRAPHIC DEPICTION

1960 Drg No LSG/8; H22

## DOCUMENTARY REFERENCES

## PHOTOGRAPHY HISTORIC

## PHOTOGRAPHY RCHME

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H21/1

CONDITION Demolished

## DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL
- 2) ROOF MATERIALS AND STRUCTURE
- 3) POWER SOURCE
- 4) DIMENSIONS i) L ii) W iii) HT
- 5) No surface remains of this building were seen.

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H23	OLD SERIES 272A	RCHME NUMBER	N.G.R. TL 37676 00718
NAME/FUNCTION Work takers office Storage shed		START DATE 1918	END DATE 1991
NO PHOTOGRAPHY AVAILABLE			
<b>CARTOGRAPHIC DEPICTION</b>  1917 WASC 900/70 ; Work Takers Office 1917 WASC 900/72 ; 272a 1919 WASC 900/74 ; 272a c1920 WASC 900/80 ; 272a 1923 WASC 900/84 ; 272a 1932 WASC 900/87 ; 272a > 1940 WASC 900/91A ; H23 1954 A - B.34 c1960 WASC 900/94 ; H23 c1963 WASC 900/97 ; H23 1972 WASC 900/102 ; H23 1972 WASC 900/104 ; H23 1976 WASC 900/113 ; H23		<b>DOCUMENTARY REFERENCES</b>  c1925 RGPF Ledger WASC 1680 ; Work Takers Office c1945 RGPF Ledger. WASC 1508 ; Work Takers Office  1972 ERDE List ; Storage Shed 1992 RARDE List ; Storage Shed	
<b>PHOTOGRAPHY HISTORIC</b>		<b>PHOTOGRAPHY RCHME</b> 1) 206/H/5 02 Feb 1993 From South East 206/S/1 16 Mar 1993 From South East	
<b>RELATIONSHIPS WITH OTHER MONUMENTS</b>  ASSOCIATED WITH:			
<b>CONDITION</b> <i>Good Demolished</i>			
<b>DESCRIPTION</b> 1) CONSTRUCTIONAL MATERIAL Brick  2) ROOF MATERIALS AND STRUCTURE Roofing felt over timber boards  3) POWER SOURCE Electricity  4) DIMENSIONS i) L 10.7m ii) W 4.1m iii) HT gable 3.9m  5) A single storey brick gabled building, the building was entered from the eastern side through a single door flanked on either side by small windows. The building is lit by a row of windows on the north and south sides and a window on the west side. There is a further door into the rear of the building on the south side. Demolished August 1993.			

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H24	OLD SERIES 273A	RCHME NUMBER	N.G.R. TL 37630 00712
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NAME/FUNCTION Sewage pump house	START DATE 1916	END DATE 1992
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NO PHOTOGRAPHY  
AVAILABLE

## CARTOGRAPHIC DEPICTION

1917 WASC 900/70 ; Pump  
1917 WASC 900/72 ; 273a  
1919 WASC 900/74 ; 273a  
c1920 WASC 900/80 ; 273a  
1923 WASC 900/84 ; 273a  
1932 WASC 900/87 ; 273a  
> 1940 WASC 900/91A ; 273a  
1954 A - B.34 ; H24  
c1960 WASC 900/94 ; H24  
c1963 WASC 900/97 ; H24  
1972 WASC 900/102 ; H24  
1972 WASC 900/104 ; H24  
1976 WASC 900/113 ; H24

## DOCUMENTARY REFERENCES

Plan;  
H24 B01 - 1916 ; Drawing Great Hoppit - Details of  
Sewage Tank Pump  
  
1972 ERDE List ; Sewage Pump House  
1992 RARDE List ; Sewage Pump House

## PHOTOGRAPHY HISTORIC

## PHOTOGRAPHY RCHME

1) 206/1/37 01 Feb 1993 From South East  
206/S/3 16 Mar 1993 From North East

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H17,H31,L126,L170

## CONDITION

~~Good~~ Demolished

## DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Brick
- 2) ROOF MATERIALS AND STRUCTURE  
Flat concrete slab
- 3) POWER SOURCE  
Electricity
- 4) DIMENSIONS i) L 2.58m ii) W 2.57m iii) HT 2.45m
- 5) The pump house is a small brick building with a single door on the north side.  
Demolished August 1993.

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H25	OLD SERIES 275b	RCHME NUMBER	N.G.R. TL 37660 00665
NAME/FUNCTION Womens Hospital Flats	START DATE 1916 1947	END DATE 1947	
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1916 WASC 900/66a ; Hospital and Extension 1916 WASC 900/67a ; Hospital and Extension 1917 WASC 900/68 ; Womens Hospital 1917 WASC 900/70 ;Womens Hospital (Remains of) 1917 WASC 900/72 ; 275b 1919 WASC 900/74 ; 275b c1920 WASC 900/80 ; 275b 1923 WASC 900/84 ; 275b 1932 WASC 900/87 ; 275b > 1940 WASC 900/91A ; H25 1954 A - B.34 ; H25 c1960 WASC 900/94 ; H25 c1963 WASC 900/97 ; H25 1972 WASC 900/102 ; H25 1972 WASC 900/104 ; H25 1976 WASC 900/113 ; H25		DOCUMENTARY REFERENCES  c1925 RGPF Ledger WASC 1680 ; Womens Hospital c1945 RGPF Ledger WASC 1508 ; Womens Hospital  Plans; H25 B01 - B16 ; Plan and Elevations 1916 to 1947  1972 ERDE List ; Old Surgery/Womens Hospital 1992 RARDE List ; Old Surgery/Womens Hospital  1993 RCHME NO.91450	
PHOTOGRAPHY HISTORIC WASC 1350 Sandhurst Hospital		PHOTOGRAPHY RCHME 1) 206/H/1 02 Feb 1993 Womens Hospital from South East 206/S/5 16 Mar 1993 Womens Hospital from South East  2) BB92/26039 H25 Womens Hospital view from North West BB92/26040 H25 Womens Hospital view from North East BB92/26041 H25 Womens Hospital view from South East BB92/26228 H25 Interior of Womens Hospital Ground floor North West room,view from West. BB92/26229 H25 Interior of Womens Hospital view of stairs from first floor landing from South.	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: H25a, H26			

CONDITION	Fair
DESCRIPTION	
1)	CONSTRUCTIONAL MATERIAL Weather board over timber frame
2)	ROOF MATERIALS AND STRUCTURE Asbestos? tiles
3)	POWER SOURCE Electricity
4)	DIMENSIONS i) L 12m ii) W 10.3m iii) HT estimate 6m
5)	See attached RCHME Threatened Buildings Section report Demolished August 1993

ROYAL COMMISSION ON THE HISTORICAL MONUMENTS OF ENGLAND

MOD Building No. H25  
Women's Hospital  
The Royal Gunpowder Factory  
Waltham Abbey  
Essex

NBR No: 91450  
NGR: TL 37660 00665

Built in 1916-17 as the Women's Hospital on site at the Royal Gunpowder Factory, building number H25 is a wood-framed building with a weatherboard exterior. It originally had a Y-shaped plan and comprised a two-storeyed rectangular main range with a pair of single-storey wards at the rear.

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The Women's Hospital is situated approximately 25 metres to the west of the other hospital on site at the Gunpowder Factory, the Sandhurst Hospital (H26).

Built in c1916-17, it originally had a Y-shaped plan which comprised a main two-storeyed range and two single-storey wings projecting on the south-west and north-west sides.<sup>40</sup> Only the central two-storeyed range survives. It is 12 x 10.3 metres in plan, and approximately six metres to the gable.

Entered through a doorway on the east front, the ground floor of the main range contains an entrance hall (approximately 1.5 metres wide), with two main rooms on each side. The heated south-east front room was the nurses' sitting room. West of this is an unheated room which functioned as a "dark room", and toward the south-west end of the hall there are toilets, a bathroom, linen stores and cupboards. On the north side of the entrance hall is a north-east front room which was a kitchen and had a range on its north wall. Entered by both the hall and the kitchen, an unheated room on the west side of the kitchen was the scullery. It contains a larder, sink and hot water system and there is a on its north wall is a back door. West of the scullery is a staircase to the first floor. The north-west room, which is of one storey and has a flat roof with skylights, was the operating room.

The six rooms on the first floor were three nurses bedrooms, matron's bedroom, servants bedroom and bathroom.

The single-storeyed western end of the building has been demolished. At the end of the main entrance hall there was a corridor leading to a ward in each of the two wings. On the west side of the corridor was a nurses duty room which had inspection windows looking out to the wards on the north and south sides. Each ward contained four beds and had, on the east side, a verandah, lobby and wc.

A wood-framed building with a weatherboard exterior, the Women's Hospital has a concrete plinth around the east, south and north sides. The roof is of standard rafter construction, with no trusses, and has plain timber bargeboards and tile coverings on the exterior.

The entrance door is set back beyond an arched frame which is flush with the house front. The windows and entrance arch have flat hoods with moulded corbels. The windows for the ward wings were double-hung sashes.

The staircase on the north side of the entrance hall is a dog-leg stair with winders. It has plain balusters and newels posts and a rounded handrail against the wall, following the rise of the stairs. The stair is lit by a pair of six-panelled windows. Most of the fireplaces in the building appear to have had bead and reel decoration.

The building ceased to be used as a hospital around the middle of this century. Plans dated 1947 show a proposed conversion of the building, including the wards, into four flats.<sup>41</sup> The removal of the western wings did not take place until some time after 1972.<sup>42</sup>

A separate brick structure on the north side of the house is divided into four sheds with four doors on its south side. It appears to be secondary and probably functioned as a coal store and general shed.

Main Reference: Plans and Elevations of Women's Hospital, dated 31/7/1916, cat. H25.B.02 (MOD Central Disposals Unit, Chessington).

Surveyed March 1993  
Report by R L Burgess

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Plan showing proposed conversion of the hospital into four flats, dated 20/1/1947 (amended 25/1/1947, cat. H25.B.16 (MOD Central Disposals Unit, Chessington).

Map of "ERDE Waltham Abbey", North site; scale 1:2500, April 1972.



## THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H25a	OLD SERIES	RCHME NUMBER	N.G.R. TL 37650 00681
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NAME/FUNCTION Toilet block	START DATE 1916	END DATE
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NO PHOTOGRAPHY  
AVAILABLE

CARTOGRAPHIC DEPICTION

DOCUMENTARY REFERENCES

PHOTOGRAPHY  
HISTORIC

PHOTOGRAPHY  
RCHME  
1) 206/H/4 02 Feb 1993 From South West  
206/S/4 16 Mar 1993 From East

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H25

CONDITION Fair

### DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Brick
- 2) ROOF MATERIALS AND STRUCTURE  
Roofing felt over timber boards
- 3) POWER SOURCE  
None
- 4) DIMENSIONS i) L 6.2m ii) W 2.95m iii) HT 3.2m
- 5) Small single gabled toilet block, four single doors on the south side. The western cubicle retains an ash pit while the others are floored. There is a single door on the rear of the building at the western end.  
  
Demolished August 1993.

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H26	OLD SERIES	RCHME NUMBER	N.G.R. TL 37678 00669
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NAME/FUNCTION Sandhurst Hospital Flats	START DATE 1894 1947?	END DATE 1947?
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NO PHOTOGRAPHY  
AVAILABLE

## CARTOGRAPHIC DEPICTION

1897 WASC 900/53C  
c1910 WASC 900/65 ; Hospital  
c1910 WASC 900/79 ; Hospital  
1917 WASC 900/70 ; Mens Hospital  
1917 WASC 900/72 ; Mens Hospital  
1919 WASC 900/74 ; 276  
c1920 WASC 900/80 ; 276  
1923 WASC 900/84 ; 276  
1932 WASC 900/87 ; 276  
> 1940 WASC 900/91A ; 276  
1954 A - B.34 ; H26  
c1960 WASC 900/94 ; H26  
c1963 WASC 900/97 ; H26  
1972 WASC 900/102 ; H26  
1972 WASC 900/104 ; H26  
1976 WASC 900/113 ; H26

## DOCUMENTARY REFERENCES

1908 RGPF Ledger WASC 1509 + WASC 1764 ;  
Hospital built 1895 p31  
c1925 RGPF Ledger WASC 1680 ; Hospital (H26)  
c1945 RGPF Ledger WASC 1508 ; Hospital  
Plans;  
H26 B01 - B05 Plans and Elevations 1894 to 1949  
1972 ERDE List ; Residential/Old Sandhurst Hospital  
1992 RARDE List ; Residential/Old Sandhurst  
Hospital  
1993 RCHME NBR No.91449

## PHOTOGRAPHY HISTORIC

- 1) Strand Magazine 1895
- 2) PRO Supply 5/860 104 189? Eastern elevation

## PHOTOGRAPHY RCHME

- 1) 206/H/2 02 Feb 1993 Sandhurst Hospital from South  
206/N/12 12 Mar 1993 Sandhurst Hospital from South  
East  
206/S/6 16 Mar 1993 Sandhurst Hospital 1894 plaque  
206/S/7 16 Mar 1993 Sandhurst Hospital from South  
East
- 2) BB92/26037 H26 Sandhurst Hospital built 1894 view  
from South West  
BB92/26038 H26 Sandhurst Hospital built 1894 view  
from South East  
BB92/26230 H26 Sandhurst Hospital 1894  
Interior,ground floor North room,view from West.

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H25

CONDITION Good

DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Brick
- 2) ROOF MATERIALS AND STRUCTURE  
Tile
- 3) POWER SOURCE  
Electricity
- 4) DIMENSIONS i) L 17.4m ii) W 13.1m iii) HT estimate 7m
- 5) A terracotta plaque on the east wall has the following legend 'Sandhurst Hospital 1894'.  
  
See attached RCHME Threatened Buildings Section report.

ROYAL COMMISSION ON THE HISTORICAL MONUMENTS OF ENGLAND

MOD Building No. H26  
Sandhurst Hospital  
The Royal Gunpowder Factory  
Waltham Abbey  
Essex

NBR No: 91449  
NGR: TL 37678 00669

The Sandhurst Hospital was built in 1894 as a short-stay surgery for injured workmen at the Royal Gunpowder Factory. It contained two wards, containing six or seven beds in total, three nurses' rooms, a cook's room, a kitchen, a scullery, and a store. The building is constructed of yellow brick with red brick bands, and has a timber verandah and timber trussed gables. It has a T-shaped plan, the central part of which rises to two storeys.

-ooOoo-

Named after Lord Sandhurst, who officially opened the building shortly after it was completed in 1894,<sup>43</sup> the new hospital was described in 1895 as standing "... close to one of the myriad streams that intersect the vast grounds of the factory, and is intended solely for the benefit of injured workmen".<sup>44</sup>

T-shaped in plan, the overall dimensions of the building are 17.4 x 13.1 metres. The height of the central two-storeyed block is approximately seven metres. Behind a verandah on the east side of the building, the main entrance led to a lobby which, in turn, led to the ground floor rooms and to stairs to the first floor. On the south side of the lobby is a heated room which was the nurse's room, with a window on its south wall for viewing a ward at the southern end of the building. This ward, which contained four beds, has a fireplace on its north wall and a projection off its west side for a sink and earth closet. A heated room on the north-east side of the lobby was a ward for two or three beds. The projecting western side of the building contains rooms which were originally a kitchen, a cook's room, a scullery, a bathroom and a store. At the north-west end of the lobby is a straight staircase with winders at the top and bottom. Beside the stair is a back door leading to an outside earth closet and sink.

The first floor rooms were two nurses' rooms, only the south one of which was heated, and a linen closet.

The building is constructed of yellow brick which is laid in English bond except in the western projections, at the back of the building, where the bricks are in Flemish bond. There is a plinth of chamfered black brick and above, at approximately one metre up from the ground level, a band of red brick. On the east front are two further bands of red brick below the eaves. The windows have cambered heads of rubbed red-brick and chamfers to the bricks at the sides.

Timber features in the building include posts of the verandah, which are of chamfered timber with moulded timber braces, trussed gables at the south sides of the east and west elevations, and the staircase which has turned newel posts and plain balusters. The doors are four-panelled.

The roof, which is tile-covered, has gables at the north and south ends, a lean-to for the verandah, and hips for both the projection at the centre of the west elevation and the two-storeyed block.

Later alterations to the building relate to its conversion to two dwellings. The main entrance doorway on the east elevation was blocked, and a new doorway inserted on the west elevation for the new dwelling at the south end. The dwelling at the northern end of the building, which included the first floor rooms, was entered both by the original back door on the north side and by double doors which were inserted in place of a three-light window on the east elevation.

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A stone plaque on the east front reads 'Sandhurst Hospital 1894'.

"How Explosives are Made" by William G. Fitzgerald, The Strand Magazine, Vol IX Jan- June 1895.

#### References

Drawings of plans and elevations of Cottage Hospital, Waltham Abbey, dated 1893 - H-26/2 and H26/3 (cat. H26.B.04), MOD Central Disposals Unit, Chessington.

Surveyed March 1993  
Report by R L Burgess

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER H27/H28	OLD SERIES 286	RCHME NUMBER	N.G.R. TL 37663 00629
NAME/FUNCTION Coal Yard & Latrines		START DATE by 1886	END DATE by 1967
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1886 WASC/38; Coalyard c1900 WASC/79; Firestation 1923 WASC/84; Coalyard & Latrines 1954 A-B.35; H28 1960 Drg No LSG/9; Concrete Base & Latrines		DOCUMENTARY REFERENCES 1908 RGPF Ledger WASC 1509 + WASC 1764; EC built 1903 p32	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH:			
CONDITION      Demolished			
DESCRIPTION 1) CONSTRUCTIONAL MATERIAL  2) ROOF MATERIALS AND STRUCTURE  3) POWER SOURCE  4) DIMENSIONS i) L      ii) W      iii) HT  5)			

*Remains of Latrine pits uncovered, recorded + removed  
May 1994*

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H29	OLD SERIES 287	RCHME NUMBER	N.G.R. TL 37685 00608
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NAME/FUNCTION Surgery	START DATE 1872	END DATE by 1972
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NO PHOTOGRAPHY  
AVAILABLE

## CARTOGRAPHIC DEPICTION

c1900 WASC 900/79; Surgery  
1923 WASC 900/84; 287 Surgery  
1954 A-B.35; H29  
1960 Drg No LJG/9; H29  
1967 O.S. No LGJ/9; H29

## DOCUMENTARY REFERENCES

1900 RGPF Ledger WASC 1509 Surgery built 1872  
p32

PHOTOGRAPHY  
HISTORIC

PHOTOGRAPHY  
RCHME

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH:

CONDITION Demolished

## DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL
- 2) ROOF MATERIALS AND STRUCTURE
- 3) POWER SOURCE
- 4) DIMENSIONS i) L ii) W iii) HT
- 5) No surface remains. Inspection of service trench in the rear indicates that upto 1m of rubble may be heaped over the site of the surgery.



# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H30	OLD SERIES	RCHME NUMBER	N.G.R. TL 37604 00867
NAME/FUNCTION Solvent store		START DATE 1970?	END DATE 1992
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
1972 WASC 900/102 ; H30 1972 WASC 900/104 ; H30 1976 WASC 900/113 ; H30		1972 ERDE List ; Solvent Store 1992 RARDE List ; Solvent Store	

PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME 1) 206/I/33 01 Feb 1993 From East 206/S/20 17 Mar 1993 From East
RELATIONSHIPS WITH OTHER MONUMENTS	
ASSOCIATED WITH:	
CONDITION Fair	
DESCRIPTION 1) CONSTRUCTIONAL MATERIAL Corrugated iron over steel frame  2) ROOF MATERIALS AND STRUCTURE Corrugated iron  3) POWER SOURCE None  4) DIMENSIONS i) L 4.1m ii) W 2.2m iii) HT 2.1m  5) Small rectangular store with metal mesh gate to east, demolished August 1993.	

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H31	OLD SERIES	RCHME NUMBER	N.G.R. TL 37675 00795
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NAME/FUNCTION Sewer pump house	START DATE 1956	END DATE
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NO PHOTOGRAPHY  
AVAILABLE

## CARTOGRAPHIC DEPICTION

c1963 WASC 900/97 ; H31  
1972 WASC 900/102 ; H31  
1972 WASC 900/104 ; H31  
1976 WASC 900/113 ; H31

## DOCUMENTARY REFERENCES

Plans;  
H66 B01 - B02 Plans and Elevations 1950 to 1951  
  
1972 ERDE List ; Sewer Pump House  
1992 RARDE List ; Sewer Pump House

## PHOTOGRAPHY HISTORIC

## PHOTOGRAPHY RCHME

1) 206/H/6 02 Feb 1993 From South West  
206/S/2 16 Mar 1993 From North East

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H17, H24, L126, L170

CONDITION Good

## DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Brick
- 2) ROOF MATERIALS AND STRUCTURE  
Roofing felt over timber boards
- 3) POWER SOURCE  
Electricity
- 4) DIMENSIONS i) L 4.4m ii) W 3.5m iii) HT 2.79m
- 5) The pump house is a small rectangular building set on a low earthen mound. The building is entered through a single door on the north side, demolished August 1993.

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H32	OLD SERIES	RCHME NUMBER	N.G.R. TL 37608 00928
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NAME/FUNCTION Portacabin offices	START DATE 198?	END DATE
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NO PHOTOGRAPHY  
AVAILABLE

CARTOGRAPHIC DEPICTION

DOCUMENTARY REFERENCES

1972	ERDE List ; Portacabin Offices
1992	RARDE List ; Portacabin Offices
1992	FBRC Office

PHOTOGRAPHY  
HISTORIC

PHOTOGRAPHY  
RCHME

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H1, H2, H3, H5, H6, H10, H11, H32, H66, H71

CONDITION      Good

DESCRIPTION

Modern portacabin not described.

Removed and replaced temporarily adjacent to  
A200.

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H37	OLD SERIES	RCHME NUMBER	N.G.R. TL 37692 00591
NAME/FUNCTION Police gate house	START DATE 1964	END DATE	
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  > 1940      WASC 900/91A ; H37? 1954      A - B.34 ; H37 c1960      WASC 900/94 ; H37 c1963      WASC 900/97 ; H37 1972      WASC 900/102 ; H37 1972      WASC 900/104 ; H37 1976      WASC 900/113 ; H37		DOCUMENTARY EVIDENCE  Plans; H37      B01 - B09 Plans and Elevations 1963 to 1971  1972      ERDE List ; Old Police Gatehouse 1992      RARDE List ; Old Police Gatehouse	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME 1) 206/S/10 16 Mar 1993 Police lodge from North	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: H38    OVERLIES: RCHME 311? RCHME 314?			
CONDITION      Fair			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Brick  2)      ROOF MATERIALS AND STRUCTURE Flat concrete roof  3)      POWER SOURCE Electricity  4)      DIMENSIONS i) L 7.3m ii) W 5.93m iii) HT 2.7m  5)      L shaped building, all the opening were boarded over at the time of survey. Demolished August 1993.			

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H38	OLD SERIES	RCHME NUMBER	N.G.R. TL 37677 00586
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NAME/FUNCTION Gas meter house	START DATE 1963	END DATE 1992?
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NO PHOTOGRAPHY  
AVAILABLE

## CARTOGRAPHIC DEPICTION

c1960 WASC 900/94 ; H38  
c1963 WASC 900/97 ; H38  
1972 WASC 900/102 ; H38  
1972 WASC 900/104 ; H38  
1976 WASC 900/113 ; H38

## DOCUMENTARY REFERENCES

Plans  
H.37.B.01 22.1.63  
  
1972 ERDE List ; Old Gas Meter House  
1992 RARDE List ; Old Gas Meter House

## PHOTOGRAPHY HISTORIC

## PHOTOGRAPHY RCHME

1) 206/K/12 01 Feb 1993 From South West  
206/S/8 16 Mar 1993 From East

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H37

CONDITION Fair

## DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Brick
- 2) ROOF MATERIALS AND STRUCTURE  
Flat concrete slab
- 3) POWER SOURCE  
Electricity and gas
- 4) DIMENSIONS i) L 3.9m ii) W 2.45m iii) HT 2.8m
- 5) Single storey valve house with a single blue door on the eastern side.  
Demolished August 1993.

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER H54	OLD SERIES	RCHME NUMBER	N.G.R. TL 37673 00909
NAME/FUNCTION Building		START DATE Post 1945	END DATE by 1967
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION 1960 Drg No LSG/8; H54		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: H12?			
CONDITION      Demolished			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL  2)      ROOF MATERIALS AND STRUCTURE  3)      POWER SOURCE  4)      DIMENSIONS   i) L      ii) W      iii) HT  5)      No surface remains of this building were seen.			

<b>THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY</b>			
NUMBER H64	OLD SERIES	RCHME NUMBER	N.G.R. TL 37673 00909
NAME/FUNCTION Process Water Supply To Building H12		START DATE 1948?	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1972    WASC 900/102 ; H64 1972    WASC 900/104 ; H64		DOCUMENTARY REFERENCES  Plans; H64    B01 - B03 Plans and Elevations 1948	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH:			
CONDITION      Demolished			
DESCRIPTION  5)      No surface remains			



# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H65	OLD SERIES	RCHME NUMBER	N.G.R. TL 37592 00900
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NAME/FUNCTION Liquid fuel magazine	START DATE 1949	END DATE 1992
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NO PHOTOGRAPHY  
AVAILABLE

## CARTOGRAPHIC DEPICTION

1972 WASC 900/102 ; H65  
1972 WASC 900/104 ; H65  
1976 WASC 900/113 ; H65

## DOCUMENTARY REFERENCES

Plan;  
H65 B01 - 18/4/1949 ; Layout of Dithekite Store  
  
1972 ERDE List ; Small Concrete Shelter  
1992 RARDE List ; Locker Magazine

## PHOTOGRAPHY HISTORIC

## PHOTOGRAPHY RCHME

1) 206/I/34 01 Feb 1993 From South  
206/T/37 17 Mar 1993 From South East

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H12

CONDITION Good

## DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Breeze block
- 2) ROOF MATERIALS AND STRUCTURE  
Corrugated asbestos
- 3) POWER SOURCE  
None
- 4) DIMENSIONS i) L 3.3m ii) W 1.9m iii) HT 2.5m
- 5) The fuel magazine is a small rectangular breeze block structure with an entrance on the northern side, set within an earthen mound.

*Demolished summer 1994*

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H66	OLD SERIES	RCHME NUMBER	N.G.R. TL 37640 00924
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NAME/FUNCTION Locker Magazine	START DATE 1950?	END DATE 1992
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NO PHOTOGRAPHY  
AVAILABLE

## CARTOGRAPHIC DEPICTION

c1960 WASC 900/94 ; H66  
c1963 WASC 900/97 ; H66  
1972 WASC 900/102 ; H66  
1972 WASC 900/104 ; H66  
1976 WASC 900/113 ; H66

## DOCUMENTARY REFERENCES

Plans;  
H66 B01 - B02 ; Plans and Elevations 1950 to 1951  
  
1972 ERDE List ; Locker Magazine  
1992 RARDE List ; Locker Magazine  
1992 FBRC Class 1 Explosives

## PHOTOGRAPHY HISTORIC

## PHOTOGRAPHY RCHME

1) 206/K/3 01 Feb 1993 From South West  
206/K/7 01 Feb 1993 North side from West  
206/S/29 17 Mar 1993 Locker Magazine Interior from West  
206/S/31 17 Mar 1993 Locker Magazine from North East  
2) BB92/26044 From North West

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H10

CONDITION Good

## DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Brick
- 2) ROOF MATERIALS AND STRUCTURE  
Corrugated asbestos
- 3) POWER SOURCE  
Electricity
- 4) DIMENSIONS i) L 9.8m ii) W 2.6m iii) HT Gable 3.05m
- 5) The magazine is brick built with gabled ends. The magazine was entered through single doors painted red at either end of the northern side. Adjacent to each door on the outside of the building is a small shelf. The building is protected by a copper lightning conductor. Internally are six magazine lockers along the northern side of the building.  
Demolished August 1993.

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H67a,b,c	OLD SERIES	RCHME NUMBER	N.G.R. TL 37560 01165
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NAME/FUNCTION Ballistics Laboratory Mechanical testing areas	START DATE 1955	END DATE
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NO PHOTOGRAPHY  
AVAILABLE

## CARTOGRAPHIC DEPICTION

c1960 WASC 900/94 ; H67  
c1963 WASC 900/97 ; H67  
1972 WASC 900/102 ; H67  
1972 WASC 900/104 ; H67  
1976 WASC 900/113 ; H67

## DOCUMENTARY REFERENCES

Plans;  
H67 B01 - B58 ; Plans and Elevations 1955 to 1968  
  
1972 ERDE List ; Mechanical Testing Areas (a,b,c)  
1992 RARDE List ; Mechanical Testing Areas (a,b,c)

## PHOTOGRAPHY HISTORIC

## PHOTOGRAPHY RCHME

1) 206/H/14 02 Feb 1993 Labs from South East  
206/H/15 02 Feb 1993 West end blast wall  
206/Q/30 16 Mar 1993 Front Elevation from South  
206/Q/37 16 Mar 1993  
2) BB92/26054 H67 Mechanical Testing Ballistics Lab  
from North West  
BB92/26055 H67 Mechanical Testing Interior West  
chamber from North East  
BB92/26056 H67 Mechanical Testing Test Bed from  
North East

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H68, H69, H70, H72

CONDITION FAIR

## DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Brick
- 2) ROOF MATERIALS AND STRUCTURE  
Flat concrete slab covered by roofing felt
- 3) POWER SOURCE  
Electricity and steam heat
- 4) DIMENSIONS i) L 58.4m ii) W 12.8m iii) HT 3.8m
- 5) H67 is a single storey laboratory with a central corridor giving access to rooms on either side. At the western end of the building is a firing bay formerly closed by double metal doors protected by a breeze block blast wall. Demolished August 1993.

*Slab removed August 1995*

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H68	OLD SERIES	RCHME NUMBER	N.G.R. TL 37554 01192
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NAME/FUNCTION Test bed	START DATE 1956	END DATE
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NO PHOTOGRAPHY  
AVAILABLE

## CARTOGRAPHIC DEPICTION

c1960 WASC 900/94 ; H68  
c1963 WASC 900/97 ; H68  
1972 WASC 900/102 ; H68  
1972 WASC 900/104 ; H68  
1976 WASC 900/113 ; H68

## DOCUMENTARY REFERENCES

Plans;  
H68 B01 - B06 ; Plans and Elevations 1955 to 1975  
  
1972 ERDE List ; Test Bed  
1992 RARDE List ; Test Bed

## PHOTOGRAPHY HISTORIC

## PHOTOGRAPHY RCHME

1) 206/H/16 02 Feb 1993 From South East  
206/H/17 02 Feb 1993 From East  
206/Q/34 16 Mar 1993 From East  
206/Q/35 16 Mar 1993 From South East  
206/Q/36 16 Mar 1993 From South West  
2) BB92/26057 H68 Firing Point from South West  
BB92/26058 H68 Firing Point from North East  
BB92/26059 H68 Interior of Firing Point South West  
chamber from South West  
BB92/26060 H68 Interior of Firing Point South West  
chamber detail North wall & floor

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H67, H69, H70, H72

CONDITION Good

## DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Reinforced Concrete
- 2) ROOF MATERIALS AND STRUCTURE  
Concrete slab
- 3) POWER SOURCE  
Electricity
- 4) DIMENSIONS i) L 11.45m ii) W 8.35m iii) HT 2.9m
- 5) The Test Bed has a central control room with two firing bays to the west and a single bay to the east. Small apertures in the northern wall of the building are protected by baffle walls constructed from railway sleepers and breeze block. Demolished August 1993.

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H68a	OLD SERIES	RCHME NUMBER	N.G.R. TL 37544 01212
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NAME/FUNCTION Firing Tunnel	START DATE 1958?	END DATE
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NO PHOTOGRAPHY  
AVAILABLE

CARTOGRAPHIC DEPICTION

DOCUMENTARY REFERENCES

1972 ERDE List ; Firing Tunnel/PCC Pipe  
1992 RARDE List ; Firing Tunnel/PCC Pipe

PHOTOGRAPHY  
HISTORIC

PHOTOGRAPHY  
RCHME  
1) 206/H/18 02 Feb 1993 From  
206/Q/33 16 Mar 1993 Firing tube from East

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H67, H68, H69, H70, H72

CONDITION FAIR

DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Pre-cast concrete
- 3) POWER SOURCE  
None
- 4) DIMENSIONS i) L 14.86m ii) W - iii) HT - iv) DIA 0.93m
- 5) The firing tunnel is constructed from twelve segments of pre-cast concrete pipe set on breeze block and timber supports. Fragments of breeze block base indicate that it once extended further westwards.  
Demolished August 1993.

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H69	OLD SERIES	RCHME NUMBER	N.G.R. TL 37576 01189
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NAME/FUNCTION Magazine (Cordite Store)	START DATE 1958	END DATE
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NO PHOTOGRAPHY  
AVAILABLE

## CARTOGRAPHIC DEPICTION

c1960 WASC 900/94 ; H69  
c1963 WASC 900/97 ; H69  
1972 WASC 900/102 ; H69  
1972 WASC 900/104 ; H69  
1976 WASC 900/113 ; H69

## DOCUMENTARY REFERENCES

1972 ERDE List ; Magazine  
1992 RARDE List ; Magazine

## PHOTOGRAPHY HISTORIC

## PHOTOGRAPHY RCHME

1) 206/H/20 02 Feb 1993 From West  
206/Q/31 16 Mar 1993 From South West

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H67, H68, H70, H72

CONDITION Poor

## DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Brick
- 2) ROOF MATERIALS AND STRUCTURE  
Corrugated asbestos
- 3) POWER SOURCE  
Electricity
- 4) DIMENSIONS i) L 5.25m ii) W 3.25m iii) HT 2.8m
- 5) The magazine was fired in 1992. The magazine was entered through a single red steel door on the west side. Demolished August 1993.

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H70	OLD SERIES	RCHME NUMBER	N.G.R. TL 37573 01200
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NAME/FUNCTION Solvent store	START DATE 1958	END DATE 1992
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NO PHOTOGRAPHY  
AVAILABLE

## CARTOGRAPHIC DEPICTION

c1960 WASC 900/94 ; H70  
c1963 WASC 900/97 ; H70  
1972 WASC 900/102 ; H70  
1972 WASC 900/104 ; H70  
1976 WASC 900/113 ; H70

## DOCUMENTARY REFERENCES

1972 ERDE List ; Solvent Store  
1992 RARDE List ; Solvent Store

## PHOTOGRAPHY HISTORIC

## PHOTOGRAPHY RCHME

1) 206/H/19 02 Feb 1993 From West  
206/Q/32 16 Mar 1993 From South West

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H67, H68, H68a, H69, H72

CONDITION Good

## DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Brick
- 2) ROOF MATERIALS AND STRUCTURE  
Flat concrete slab
- 3) POWER SOURCE  
Electricity
- 4) DIMENSIONS i) L 2.6m ii) W 2m iii) HT 2.78m
- 5) The store is a single storey brick building with a flat concrete roof. It is entered by a single yellow door on the west side with brass furniture. The interior is shelved and lit by electric lights.  
Demolished August 1993.



# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H71	OLD SERIES	RCHME NUMBER	N.G.R. TL 37610 00943
NAME/FUNCTION Offices for propellant section		START DATE 1956	END DATE 1992
NO PHOTOGRAPHY AVAILABLE			
<b>CARTOGRAPHIC DEPICTION</b>  c1960      WASC 900/94 ; H71 c1963      WASC 900/97 ; H71 1972      WASC 900/102 ; H71 1972      WASC 900/104 ; H71 1976      WASC 900/113 ; H71		<b>DOCUMENTARY REFERENCES</b>  Plans; H71      B01 - B10 ; Plans and Elevations 1956 to 1970  1972      ERDE List ; Offices Adjoining H10 1992      RARDE List ; Offices Adjoining H10 1992      FBRC Office	
<b>PHOTOGRAPHY HISTORIC</b>		<b>PHOTOGRAPHY RCHME</b> 1) 206/H/8    02 Feb 1993 From South West 206/T/1    17 Mar 1993 From South West	
<b>RELATIONSHIPS WITH OTHER MONUMENTS</b>  ASSOCIATED WITH: H1, H2, H3, H5, H6, H10, H11, H66			
<b>CONDITION</b> Good			
<b>DESCRIPTION</b> 1)      CONSTRUCTIONAL MATERIAL Brick  2)      ROOF MATERIALS AND STRUCTURE Roofing felt over flat roof  3)      POWER SOURCE Electricity and steam heat  4)      DIMENSIONS i) L 14.5m ii) W 9.3m iii) HT 3.1m  5)      The offices are joined to H10 by a short corridor. Entry to the offices was also gained through double doors on the north and south sides. The full length of the western side of the building is glazed while the eastern side is lit by smaller windows.			

Stripped, fired and demolished in summer 1994

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER H72	OLD SERIES	RCHME NUMBER	N.G.R. TL 37590 01166
NAME/FUNCTION Compressor house for H67		START DATE 1960	END DATE 1992
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  c1960      WASC 900/94 ; H72 c1963      WASC 900/97 ; H72 1972      WASC 900/102 ; H72 1972      WASC 900/104 ; H72 1976      WASC 900/113 ; H72		DOCUMENTARY REFERENCES  Plan; H72      B01 - 13/11/1959 ; Proposed Building for Nitrogen Compressor  1972      ERDE List ; Compressor House for H67 1992      RARDE List ; Compressor House for H67	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME 1) 206/H/13 02 Feb 1993 From South East 206/L/3 09 Mar 1993 From South East	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH:      H67			
CONDITION      Good			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL Brick  2)      ROOF MATERIALS AND STRUCTURE Flat timber boards covered by roofing felt.  3)      POWER SOURCE Electricity  4)      DIMENSIONS i) L 3.8m ii) W 3.15m iii) HT 2.75m  5)      A small brick building entered from the north side through double yellow painted doors. Externally on the south wall are two pressure gauges by Budenburg Broadheath Manchester housed in a protective casing. Demolished August 1993.			

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER	OLD SERIES 278,279,280,281,282	RCHME NUMBER	N.G.R. TL 37719 00665
NAME/FUNCTION New Saltpetre Refinery		START DATE 1816	END DATE 195?
NO PHOTOGRAPHY AVAILABLE			
<b>CARTOGRAPHIC DEPICTION</b>  1827 WASC 900/04 + MPH 271 ;35,36,37,38 New Refinery 1830 WO55 2694 1830 WASC 900/05 c1830 WASC 900/06 c1835 WASC 900/07 1861-1868 WASC 900/10A 1865 WASC 900/13 1865 WASC 900/14 1871 SUPP5 682 1865 WASC 900/38 + SUPP5 975 1865 WASC 900/41A 1865 WASC 900/42 1897 WASC 900/53C c1910 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 1923 WASC 900/84 ; 288 1932 WASC 900/87 ; 288 > 1940 WASC 900/91A 1954 A - B.34 ; HS 30 c1960 WASC 900/94 ; H30		<b>DOCUMENTARY REFERENCES</b>  1830 Drayson.F. p33 35 Saltpetre refinery, 36 Storehouse 1830 WO55/2694 37 Mixing & Storehouse, 38 Crystallising house 1841 WO55/2856 37 Mixing & Storehouse, 38 Crystallising house 1908 RGPF Ledger WASC 1509 + WASC 1764 ; Saltpetre Store/Melting House,Crystallizing House,Grough Store,Refining House built 1816 p31-2 c1925 RGPF Ledger WASC 1680 ; Saltpetre Store/Melting House,Crystallizing House,Grough Store,Refining House c1945 RGPF Ledger WASC 1508 ; Saltpetre Store/Melting House,Crystallizing House,Grough Store,Refining House	
<b>PHOTOGRAPHY HISTORIC</b>		<b>PHOTOGRAPHY RCHME</b>	
<b>RELATIONSHIPS WITH OTHER MONUMENTS</b> Unknown			
<b>CONDITION</b> Demolished			
<b>DESCRIPTION</b>  No Surface Remains			

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER	OLD SERIES 288	RCHME NUMBER	N.G.R. TL 37660 00600
NAME/FUNCTION Saltpetre Refinery Building Store House Guncotton Refining House Acetate of Lime Store Clean Store	START DATE 1801-06 1827 1865? 1900? by 1923	END DATE 1827 1865? 1900? by 1923	
<p>NO PHOTOGRAPHY</p> <p>AVAILABLE</p>			
<p>CARTOGRAPHIC DEPICTION</p> <p>1806? WO 78/1352 + MR 580 1827 WASC 900/04 + MPHH 271 ; Store House 1830 WO55 2694 1830 WASC 900/05 c1830 WASC 900/06 c1835 WASC 900/07 1861-1868 WASC 900/10A 1865 WASC 900/13 1865 WASC 900/14 1871 SUPP5 682 1865 WASC 900/38 + SUPP5 975 ; General Store 1865 WASC 900/41A 1865 WASC 900/42 1897 WASC 900/53C c1900 WASC 900/79 ; Acetone Factory c1910 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 ; General Store 1932 WASC 900/87; 288 &gt; 1940 WASC 900/91a 1954 A-B.34; HS30 c1960 WASC 900/94; H30</p>		<p>DOCUMENTARY REFERENCES</p> <p>1807 Statement of Property WO55 2694 1830 Statement of Property WO55 2351 1841 Statement of Property WO55 2856 1851 Statement of Property WO55 3027  1908 RGPF Ledger WASC 1509 + WASC 1764 ; Acetone Factory c1925 RGPF Ledger WASC 1680 ; Acetone Factory c1945 RGPF Ledger WASC 1508 ; Acetone Factory</p>	
<p>PHOTOGRAPHY HISTORIC</p>		<p>PHOTOGRAPHY RCHME</p> <p>1) BB92/26036 From Northeast</p>	

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: 288, 291

CONDITION Demolished

DESCRIPTION

No Surface Remains

288 probably represents the original structure

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER	OLD SERIES 291	RCHME NUMBER	N.G.R. TL 37661 00586
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NAME/FUNCTION Saltpetre Refinery Building Gun Cotton Building (part of) Acetate of Lime and Drum Store Clean Store	START DATE 1801-06 1865? 1898? 1923	END DATE 1865? 1898 by1923
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NO PHOTOGRAPHY  
AVAILABLE

## CARTOGRAPHIC DEPICTION

1806? WO 78/1352 + MR 580  
1827 WASC 900/04 + MPH 271  
1830 WO55 2694  
1830 WASC 900/05  
c1830 WASC 900/06  
c1835 WASC 900/07  
1861-1868 WASC 900/10A  
1865 WASC 900/13  
1865 WASC 900/14  
1871 SUPP5 682  
1865 WASC 900/38 + SUPP5 975 ; Gun Cotton  
1865 WASC 900/41A  
1865 WASC 900/42  
1897 WASC 900/53C  
c1910 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 ; Clean Store  
1932 WASC 900/87 ; 291  
> 1940 WASC 900/91A  
1954 A - B.34 ; HS 31  
c1960 WASC 900/94 ; HS31

## DOCUMENTARY REFERENCES

1807 Statement of Property WO55 2694  
1830 Statement of Property WO55 2351  
1830 Drayson.F. Plan & Elevation p1  
1841 Statement of Property WO55 2856  
1851 Statement of Property WO55 3027  
  
1908 RGPF Ledger WASC 1509 + WASC 1764 ;  
Acetate of Lime and Drum Store built pre 1872  
p33  
c1925 RGPF Ledger WASC 1680 ; Acetate of Lime  
and Drum Store  
c1945 RGPF Ledger WASC 1508 ; Acetate of Lime  
and Drum Store

PHOTOGRAPHY  
HISTORIC

PHOTOGRAPHY  
RCHME

## RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: 288, 291a

CONDITION Demolished

## DESCRIPTION

No Surface Remains  
291 probably represents the original structure after various alterations

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER	OLD SERIES 291a	RCHME NUMBER	N.G.R. TL 37680 00577
NAME/FUNCTION Building (part of Saltpetre refinery) Crystallising House Gun Cotton Factory (part of) Acetone Factory (part of) Timber Store	START DATE pre 1783 1827 by 1863 c1900 by 1923	END DATE 1827 by 1863 c1900 by 1923	
NO PHOTOGRAPHY AVAILABLE			
<b>CARTOGRAPHIC DEPICTION</b>  1783 WASC 900/01 + MR 593 1783 WASC 900/01A 1801 WASC 900/58 + MR 580 1806? WO 78/1352 + MR 580 1827 WASC 900/04 + MPH 271 ; Crystallising House 1830 WO55 2694 1830 WASC 900/05 c1830 WASC 900/06 c1835 WASC 900/07 1861-1868 WASC 900/10A 1865 WASC 900/13 1865 WASC 900/14 1871 SUPP5 682 1865 WASC 900/38 + SUPP5 975 ; Gun Cotton 1865 WASC 900/41A 1865 WASC 900/42 1897 WASC 900/53C c1910 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 ; Timber Store > 1940 WASC 900/91A 1954 A - B.34		<b>DOCUMENTARY REFERENCES</b>  1807 Statement of Property WO55 2694; 14 Saltpetre Crystallising 1830 Statement of Property WO55 2351; 26 Crystallising House 1830 Drayson F Plan and Elevation p2 1841 Statement of Property WO55 2856; 26 Crystallising House 1851 Statement of Property WO55 3027; 62 Crystallising House 1908 RGPF Ledger WASC 1509; 291 Acetate of Lime and Drum Store	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
<b>RELATIONSHIPS WITH OTHER MONUMENTS:</b>  ASSOCIATED WITH: 288, 291, RCHME 313, RCHME 315			
CONDITION Demolished			
<b>DESCRIPTION</b>  No Surface Remains Probable that 291a represents a later 20th Century building with earlier underlying structures			



# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER	OLD SERIES 294	RCHME NUMBER	N.G.R. TL 33720 00588
NAME/FUNCTION Boiler House Store		START DATE by 1923	END DATE
NO PHOTOGRAPHY AVAILABLE			
<b>CARTOGRAPHIC DEPICTION</b>  c1835      WASC 900/07 1861-1868      WASC 900/10A 1865      WASC 900/13 1865      WASC 900/14 1871      SUPP5 682 1865      WASC 900/38 + SUPP5 975 1865      WASC 900/41A 1865      WASC 900/42 1897      WASC 900/53C c1910      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: Store		<b>DOCUMENTARY REFERENCES</b>  1908 Ledger WASC 1509 p35 built before 1872 Boiler House boilers removed	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
<b>RELATIONSHIPS WITH OTHER MONUMENTS</b>  ASSOCIATED WITH: RCHME 316 Early Guncotton Factory      PART OF:			
CONDITION Demolished			
<b>DESCRIPTION</b> 1)      CONSTRUCTIONAL MATERIAL Brick  2)      ROOF MATERIALS AND STRUCTURE Tiles  3)      POWER SOURCE Steam  4)      DIMENSIONS i) L      ii) W      iii) HT  5)      Former boiler house associated with the early Guncotton Factory adjacent to the Highbridge Street entrance.			

<b>THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY</b>			
NUMBER	OLD SERIES	RCHME NUMBER 100	N.G.R. TL 37704 00680
NAME/FUNCTION Narrow gauge railway swing bridge		START DATE 1916	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES 1916 WASC 901/265 22 Mar 1916 Details of Swing Bridge near Saltpetre Refinery 1916 WASC 901/266 7 June 1916 Swing Bridge Great Hoppit Details of opening gear WASC 901/269 Not Dated Swing Bridge Great Hoppit revised details of central pier 1917 WASC 901/282 7-Feb-1917 Swing Bridge Great Hoppit details of locking gear 1989 Jenkins p394,413	
PHOTOGRAPHY HISTORIC  1) Jenkins J M 1989 p394 2) PRO Supply 5/861 327 (no date)		PHOTOGRAPHY RCHME  2)BB92/26462 Detail Swing Bridges Great Hoppit	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH:			
CONDITION      Poor			
DESCRIPTION <p>The remains of the swing bridge comprise the central concrete pier in the middle of the canal and a concrete abutment on the western bank. The line of the tramway may be followed westwards as an earthwork embankment for 15m with a width of 3.9m.</p> <p>The bridge formerly comprised a fixed eastern section and a section on the western side that swung on a turntable fixed to the west bank (Jenkins 1989, 394). The fixed eastern portion and the controlling signal was demolished in 1987 (Jenkins 1989, 413).</p>			

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER	OLD SERIES	RCHME NUMBER 262	N.G.R. TL 37692 00651
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NAME/FUNCTION Edge runner Capstan base	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

ASSOCIATED WITH:

CONDITION Fair

## DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL  
Limestone
- 4) DIMENSIONS iii)w 0.46m iv)DIA 1.84m
- 5) The gunpowder mill edge runner is set horizontally, the cracked stone has been strengthened by the addition of iron bars bolted and set in lead.  
  
The edge runner appears to have been reused as a base for a capstan probably to aid the passage of barges through the former canal to the south.

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER	OLD SERIES	RCHME NUMBER 311	N.G.R. TL 37694 00596
NAME/FUNCTION Saltpetre Refinery		START DATE pre 1783	END DATE by 1806
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1783      WASC 900/01 + MR 593 1783      WASC 900/01A 1801      WASC 900/58 + MR 580		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  UNDERLIES: RCHME312? H37?			
CONDITION Demolished			
DESCRIPTION  No Surface Remains			

<b>THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY</b>			
NUMBER	OLD SERIES	RCHME NUMBER	N.G.R.
		312	TL 37690 00594
NAME/FUNCTION		START DATE	END DATE
Saltpetre Refinery Building		1801-06	pre 1827
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES	
1806 WO 78/1352 + MR 580 ;			
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS			
OVERLIES: RCHME 311?			
CONDITION Demolished			
DESCRIPTION			
No Surface Remains			

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 313	N.G.R. TL 37672 00608
NAME/FUNCTION Saltpetre Refinery Building Sulphur Refining House Gun Cotton Building Acetone Factory	START DATE 1801-06 1827 1865? c1900	END DATE 1827 1865? 1900?	
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1806? WO 78/1352 + MR 580 1827 WASC 900/04 + MPH 271 ; Sulphur Refining House 1830 WO55 2694 1830 WASC 900/05 c1830 WASC 900/06 c1835 WASC 900/07 1861-1868 WASC 900/10A 1865 WASC 900/13 1865 WASC 900/14 1871 SUPP5 682 1888 WASC 900/38 + SUPP5 975 ; Gun Cotton 1900 WASC 900/79 Acetone Factory		DOCUMENTARY REFERENCES  1807 Statement of Property WO55 2694 1830 Statement of Property WO55 2351; 30 Sulphur Refining House 1841 Statement of Property WO55 2856; 30 Sulphur Refining House 1851 Statement of Property WO55 3027 1830 Drayson.F. Drwgs 6 & 7 Sulphur by Fusion	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: 288, 291, 291A, RCHME 315			
CONDITION Demolished			
DESCRIPTION  No Surface Remains			

<b>THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY</b>			
NUMBER	OLD SERIES	RCHME NUMBER 314	N.G.R. TL 37687 00589
NAME/FUNCTION Building		START DATE 1827-65	END DATE 1890?
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1865      WASC 900/38 + SUPP5 975		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  UNDERLIES: H37?			
CONDITION Demolished			
DESCRIPTION  No Surface Remains. Function of this building is unknown possibly associated with Guncotton Factory.			



THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER	OLD SERIES	RCHME NUMBER 315	N.G.R. TL 37658 00606
NAME/FUNCTION Copper Smiths Forge & Engine House Guncotton Factory Acetone Factory		START DATE 1806-27 1863 c1900	END DATE 1863 c1900
NO PHOTOGRAPHY AVAILABLE			
<b>CARTOGRAPHIC DEPICTION</b>  1827      WASC 900/04 + MPH 271 ; Copper Smiths Forge 1830      WO55 2694 1830      WASC 900/05 c1830      WASC 900/06 c1835      WASC 900/07 1861-1868      WASC 900/10A 1865      WASC 900/13 1865      WASC 900/14 1871      SUPP5 682 1865      WASC 900/38 + SUPP5 975		<b>DOCUMENTARY REFERENCES</b>  1807 WO55/2351 1830 WO55/2694; 29 Forge & Engine House 1841 WO55/2856; 29 Forge & Engine House 1851 WO55/3027; 59 Forge & Engine House	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH: 288, 291, 291A, RCHME 313			
CONDITION Demolished			
<b>DESCRIPTION</b>  No Surface Remains. A building on its site was later incorporated into the Guncotton and later Acetone Factory. It is not known whether the original structure survived or if a new building was constructed.			

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER	OLD SERIES	RCHME NUMBER 316	N.G.R. TL 37723 00610
NAME/FUNCTION New Refinery (part of) Gun Cotton Works		START DATE 1816?	END DATE 1900
NO PHOTOGRAPHY AVAILABLE			
<b>CARTOGRAPHIC DEPICTION</b>  1827 WASC 900/04 + MPH 271 ; 33 New Refinery 1830 WO55 2694 1830 WASC 900/05 c1830 WASC 900/06 c1835 WASC 900/07 1861-1868 WASC 900/10A 1865 WASC 900/13 1865 WASC 900/14 1871 SUPP5 682 186 WASC 900/38 + SUPP5 975 ; Gun Cotton and Boiler House 1866 WASC 900/41A 1866 WASC 900/42 - Guncotton 1897 WASC 900/53C c1910 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 ; Boiler House		<b>DOCUMENTARY REFERENCES</b>  1830 WO55/2694; 33 Washing Saltpetre Bags 1841 WO55/2856; 33 Washing Saltpetre Bags 1908 RGPF Ledger WASC 1509 + WASC 1764 ; 214 Boiler House p33 c1925 RGPF Ledger WASC 1680 ; Boiler House c1945 RGPF Ledger WASC 1508 ; Boiler House	
<b>PHOTOGRAPHY HISTORIC</b>		<b>PHOTOGRAPHY RCHME</b>	
<b>RELATIONSHIPS WITH OTHER MONUMENTS</b>			
<b>CONDITION</b> Demolished			
<b>DESCRIPTION</b>  No Surface Remains			

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER	OLD SERIES 261	RCHME NUMBER 317	N.G.R. TL 37580 00790
NAME/FUNCTION Stable for Contact Horses Sulphur Storehouse Acetone Store		START DATE 1801-06 1818 1898	END DATE 1818 1898 by 1923
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1806 WO 78/1352 + MR 580 1827 WASC 900/04 + MPHH 271 ; Sulphur Storehouse,late Stable for Contact Horses  1830 WO55 2694 1830 WASC 900/05 c1830 WASC 900/06 c1835 WASC 900/07 1861-1868 WASC 900/10A 1865 WASC 900/13 1865 WASC 900/14 1871 SUPP5 682 1865 WASC 900/38 + SUPP5 975 ; Store House 1865 WASC 900/41A 1865 WASC 900/42 1897 WASC 900/53C		DOCUMENTARY REFERENCES  1808 Engraving, Powder Mills Waltham Abbey ERG Mint Binder 1808 1908 Ledger Acetone Store built before 1850 p29.	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS Unknown			
CONDITION Demolished			
DESCRIPTION  No Surface Remains, may survive as a buried feature on the West bank of Horsemill Stream.			

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER	OLD SERIES	RCHME NUMBER 318	N.G.R. TL 37542 00880
NAME/FUNCTION Master Workers Dwelling Clerks Quarters		START DATE 1806-27 1865?	END DATE 1865? 1900?
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1827      WASC 900/04 + MPH 271 ; Late Master Workers Dwelling 1830      WO55 2694 1830      WASC 900/05 c1830      WASC 900/06 c1835      WASC 900/07 1861-1868      WASC 900/10A 1865      WASC 900/13 1865      WASC 900/14 1871      SUPP5 682 1865      WASC 900/38 + SUPP5 975 ; Clerks Qtrs 1865      WASC 900/41A 1865      WASC 900/42 1897      WASC 900/53C		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS    Unknown			
CONDITION    Demolished			
DESCRIPTION  No Surface Remains			

## THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER

OLD SERIES

RCHME NUMBER  
319

N.G.R.  
TL 37530 01024

NAME/FUNCTION

Dwelling of the 2nd Clerk, Storekeepers Dept

START DATE

1806-27

END DATE

pre1865

NO PHOTOGRAPHY

AVAILABLE

### CARTOGRAPHIC DEPICTION

1827 WASC 900/04 + MPHH 271 ; Dwelling of the  
2nd Clerk,Storekeepers Dept

## DOCUMENTARY REFERENCES

## PHOTOGRAPHY HISTORIC

PHOTOGRAPHY  
RCHME

## RELATIONSHIPS WITH OTHER MONUMENTS

CONDITION Destroyed

### DESCRIPTION

May survive as buried feature on West side of Millhead Stream.

**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER	OLD SERIES	RCHME NUMBER 320	N.G.R. TL 37560 00950
NAME/FUNCTION Watch House	START DATE 1806-27		END DATE 1900?
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1827      WASC 900/04 + MPH 271 ; Watch House 1830      WO55 2694 1830      WASC 900/05 c1830      WASC 900/06 c1835      WASC 900/07 1861-1868      WASC 900/10A 1865      WASC 900/13 1865      WASC 900/14 1871      SUPP5 682 1865      WASC 900/38 + SUPP5 975		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS			
CONDITION   Demolished			
DESCRIPTION  No Surface Remains			

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER	OLD SERIES	RCHME NUMBER 340	N.G.R. TL 37600 00825
NAME/FUNCTION Building	START DATE post 1945	END DATE by 1972	
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1967 O.S. TL 3700 NE 1:1250	DOCUMENTARY REFERENCES		
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME		
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: H16			
CONDITION Demolished			
DESCRIPTION 1) CONSTRUCTIONAL MATERIAL  2) ROOF MATERIALS AND STRUCTURE  3) POWER SOURCE  4) DIMENSIONS i) L ii) W iii) HT  5) The building is depicted by the O.S. as having an earthwork traverse against its North and South walls.			



**THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY**

NUMBER

OLD SERIES

RCHME NUMBER

341

N.G.R.

TL 37607 00811

NAME/FUNCTION

Building

START DATE

post 1945

END DATE

by 1972

NO PHOTOGRAPHY  
AVAILABLE

CARTOGRAPHIC DEPICTION

1967 O.S. TL 3700 NE

DOCUMENTARY REFERENCES

PHOTOGRAPHY  
HISTORICPHOTOGRAPHY  
RCHME

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: H16

CONDITION

Demolished

DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL
- 2) ROOF MATERIALS AND STRUCTURE
- 3) POWER SOURCE
- 4) DIMENSIONS i) L      ii) W      iii) HT
- 5)

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER	OLD SERIES	RCHME NUMBER 342	N.G.R. TL 37608 00806
NAME/FUNCTION Building		START DATE post 1945	END DATE by 1972
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1967 O.S. TL 37 00 NE		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: H16			
CONDITION      Demolished			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL  2)      ROOF MATERIALS AND STRUCTURE  3)      POWER SOURCE  4)      DIMENSIONS   i) L      ii) W      iii) HT 5)			

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER	OLD SERIES	RCHME NUMBER 343	N.G.R. TL 37637 00871
NAME/FUNCTION Guncotton Drying Shed		START DATE 1872?	END DATE 1904?
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1886 WASC 900/38 1897 O.S. Essex XLIX.14 c1900 WASC 900/79		DOCUMENTARY REFERENCES	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: Guncotton Factory 288,291,291a, RCHME 313			
CONDITION      Demolished			
DESCRIPTION 1)      CONSTRUCTIONAL MATERIAL  2)      ROOF MATERIALS AND STRUCTURE  3)      POWER SOURCE  4)      DIMENSIONS i) L      ii) W      iii) HT  5)      No surface remains. Owing to the small size of this building the N.G.R. can only be regarded as an approximate siting. The shed probably went out of use when guncotton production began on the South site. The building is shown on mapping until circa 1900 and was probably demolished during the redevelopment of this area for cordite production in 1904.			

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY

NUMBER	OLD SERIES	RCHME NUMBER 359	N.G.R. TL
NAME/FUNCTION Corning House		START DATE 1787-1801	END DATE 18th April 1801
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  WASC 900/01 Site of Corning		DOCUMENTARY REFERENCES  1887 Winters 57-9	
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME	
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: Horsemill Islands			
CONDITION: Demolished			
DESCRIPTION 1) CONSTRUCTIONAL MATERIAL  2) ROOF MATERIALS AND STRUCTURE  3) POWER SOURCE Muscle  4) DIMENSIONS i) L      ii) W      iii) HT  5) Horse Corning Mills destroyed in an explosion on 18th April 1801 with the loss of nine lives and four horses. It was situated between the Watch House [RCHME 320] and the Gloom Stove [148, 149, 150].			