### THE ROYAL GUNPOWDER FACTORY WALTHAM ABBEY

**New Hill Nitroglycerine Factory** 



THE ROYAL O	GUNPOWDER FACTORY	Y - WALTHAM ABBE	Y	
NUMBER S1	OLD SERIES	RCHME NUMBER	N.G.R. TL 37742 02014	
NAME/FUNCTION Pump House		START DATE 1941	END DATE	
		TOGRAPHY ILABLE		
CARTOGRAPHIC D > 1940 WASC 900 1954 A - B.34 c1960 WASC 900 c1963 WASC 900 1972 WASC 900 1972 WASC 900 1976 WASC 900	0/91A 0/94 ; S1 0/97 ; S1 0/102 ; S1 0/104 ; S1	Plans; S1 B02,B03; Plans and Elevations 1941 4; S1 7; S1 1972 ERDE List; Pump House 1991 Mott McDonald survey; Pump House 1992 RARDE List; Pump House		
PHOTOGRAPHY HISTORIC  PHOTOGRAPHY RCHME 1) 206/N/5 From North East 206/N/6 Detail of pipes West of S1 from North				
RELATIONSHIPS W	ITH OTHER MONUMENTS			
ASSOCIATED WITH	: New Hill Nitroglycerine factory			
CONDITION F	air			
DESCRIPTION  1) CONSTRU- Brick in Eng	CTIONAL MATERIAL glish bond			
,	ROOF MATERIALS AND STRUCTURE Flat concrete slab with felt covering			
,	POWER SOURCE Steam and Electricity			
4) DIMENSIO	NS i) L 4.64 ii) W 4.07 iii) HT 3.25			
64mm dip i set on a co	g has a single door on the eastern w nto the Cornmiill Stream. The pipes ncrete base within the pump house, t with pipe work.	have flanged heads and formerly	connected to a machine	

# THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY NUMBER OLD SERIES RCHME NUMBER N.G.R. S2 24/145 RCHME NUMBER TL 37780 02044 NAME/FUNCTION START DATE END DATE 1987

#### NO PHOTOGRAPHY AVAILABLE

CARTOGRAPHIC DEPICTION	DOCUMENTARY REFERENCES	
> 1940 WASC 900/91A 1954 A - B.34 c1960 WASC 900/94 ; S2 c1963 WASC 900/97 ; S2 1972 WASC 900/102 ; S2 1972 WASC 900/104 ; S2 1976 WASC 900/113 ; S2	Plans; S2 B01,B02; General Plans 1941 1972 ERDE List; Electrical Sub Station 1991 Mott McDonald survey; Electrical Sub Station 1992 RARDE List; Electrical Sub Station 1992 FBRC Transformer House	
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME  1) 206/D/1 From North West 206/D/12 Interior Control room 206/D/13 Interior Control room  2) BB92/26152 Interior of West room from South West BB92/26153 Interior of East room from South East BB92/26154 North East room from North West	

#### RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: New Hill Nitroglyerine Factory

CONDITION

Fair

#### DESCRIPTION

1) CONSTRUCTIONAL MATERIAL

Brick

ROOF MATERIALS AND STRUCTURE

Concrete

3) POWER SOURCE

Electricity

- 4) DIMENSIONS i) L 11.85 ii) W 8.01 iii) HT 3.48
- 5) The building is a single storey structure. To the north are two open bays screened by a brick wall within, each of these bays is a transformer. Each transformer has a makers plate that reads 'The British Thomso-Houston Co Ltd Rugby Manu 1941 250 KV'. The building was entered through two single doors on the west wall that gave access into two switch rooms. Both the switch rooms retain all their original equipment.

Historic artefacts - switch rooms and transformers, salvage some/all the equipment, makers plates. Seal and mothball?

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER OLD SERIES RCHME NUMBER S3 24/103		N.G.R. TL 37830 02050	
NAME/FUNCTION Store/Small Scale Trial House		START DATE 1941	END DATE 197? (demolished)

CARTOGRAPHIC DEPICTION	DOCUMENTARY REFERENCES	
> 1940 WASC 900/91A 1954 A - B.34 c1960 WASC 900/94; 24/103 c1963 WASC 900/97; S3 1972 WASC 900/102; S3 1972 WASC 900/104; S3 1976 WASC 900/113; S3	Plans S3 B01 - B07; Plan and Elevations 1941 to 1957  1972 ERDE List; Demolished Store 1991 Mott McDonald survey; Small Scale Trials House 1992 RARDE List; Demolished Store	
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME 1) 206/D/2 From North West	

#### RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH:

CONDITION Demolished

#### DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL Brick
- 3) POWER SOURCE Electricity
- 4) DIMENSIONS i) L 14.6 ii) W 9.2
- 5) The building has been demolished a concrete slab remains, a former porch may be discerned on the north side.

NUMBER \$5	OLD SERIES 24/129	RCHME NUMI	1	880 02064
NAME/FUNCTION Charge Machinery Blo Process Building	ck	START DATE 1941 1958?	END D 1958? 198?	
		PHOTOGRAPHY AVAILABLE		
CARTOGRAPHIC DEPICT >1940 WASC 900/91A 1954 A - B.34 c1960 WASC 900/94; c1963 WASC 900/97; 1972 WASC 900/102 1972 WASC 900/104 1976 WASC 900/113	24/129 S5 ; S5 ; S5	Plans; S5 B01 - I 1972 ERDE 1991 Mott I Block 1992 RARD	S5 B01 -B15; Plans and Elevations 1940 to 1959  1972 ERDE List; Charge Macinery Block 1991 Mott McDonald survey; Charge Machining Block 1992 RARDE List; Charge Machinery Block	
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME 1) 206/D/4 From North West			
	THER MONUMENTS			

- Brick
- 2) ROOF MATERIALS AND STRUCTURE Concrete slab covered in felt
- 3) POWER SOURCE Steam, Electricity
- DIMENSIONS i) L 23.88 ii) W 9.81 iii) HT 3.4 4)
- The building is a single storey structure. Two principal building phases were recognised. On the western and 5) eastern elevations is a single door and a window. Along the northern wall a timber framed corridor covered by asbestos has been added. The single and double doors on this wall are protected by toe boards to delineate dirty and clean areas. the interior of the building appears most recently to have been used as workshops and laboratories. Uses include a Casting room, Pressing bay, Incorporator, 1+2 Ball and Casting room and Drill room and associated switch rooms.

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER \$6	OLD SERIES 24/137	RCHME NUMBER	N.G.R. TL 37872 02051
NAME/FUNCTION Lavatories Magazine		START DATE 1941 195?	END DATE 198?

CARTOGRAPHIC DEPICTION > 1940 WASC 900/91A	DOCUMENTARY REFERENCES Plans;	
1954 A - B.34 c1960 WASC 900/94 ; 24/137 c1963 WASC 900/97 ; S6 1972 WASC 900/102 ; S6 1972 WASC 900/104 ; S6 1976 WASC 900/113 ; S6	S6 B01 - 29/1/41; Architectural Details of Units  1972 ERDE List; Magazine 1991 Mott McDonald survey; Magazine 1992 RARDE List; Magazine	
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME 1) 206/D/3 From North West	

#### RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: S5

CONDITION

#### DESCRIPTION

1) CONSTRUCTIONAL MATERIAL Brick in English Bond

Fair

- 2) ROOF MATERIALS AND STRUCTURE Concrete slab at two heights
- 3) POWER SOURCE Steam and Electricity
- 4) DIMENSIONS i) L 5.1 ii) W 6.37 iii) HT 3.0
- 5) To the North a door in an outshot gives access into the magazine the dirty and clean areas delimited by a toaboard at the threshold. Inside are four open fronted lockers. The South elevation is blank and on the West are two doors. To the East are another two doors one of which is blocked. The building was formerly protected by a screen wall.

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER OLD SERIES S7 24/101	RCHME NUMBER	N.G.R. TL 37960 02093	
NAME/FUNCTION Store ( Nitromethane Store)	START DATE 1941	END DATE	
TO CONTRACT OF THE PROPERTY OF	OGRAPHY .ABLE		
CARTOGRAPHIC DEPICTION  > 1940 WASC 900/91A  1954 A - B.34  c1960 WASC 900/94; 24/101  c1963 WASC 900/97; S7  1972 WASC 900/102; S7  1972 WASC 900/104; S7  1976 WASC 900/113; S7	DOCUMENTARY REFERENCES  Plans; S7 B01 - B05; Plans and Elevations 1940 to 1941  1972 ERDE List; Demolished Store only Base Remains  1991 Mott McDonald survey; Nitromethane Store 1992 RARDE List; Demolished Store		
PHOTOGRAPHY HISTORIC  PHOTOGRAPHY RCHME  1) 206/D/9 From North East			
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH:			
CONDITION Demolished			
DESCRIPTION  1) CONSTRUCTIONAL MATERIAL Concrete  4) DIMENSIONS i) L 21.3 ii) W 11.3  5) The building has been demolished a concrete slab re	mains		

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NUMBER \$9	OLD SERIES	RCHME NUMBER	N.G.R. TL 38096 02145
NAME/FUNCTION Police Gate Hou	se	START DATE 1941	END DATE
		PHOTOGRAPHY AVAILABLE	
1972 WASC 90	D/91A D/94	1972 ERDE List; Pol 1991 Mott McDonald	1 ; Temporary Police Hut
PHOTOGRAPHY HISTORIC		PHOTOGRAPHY RCHME 1) 206/D/10 From North	West
RELATIONSHIPS W	TTH OTHER MONUMENTS:S42,S43	,	
CONDITION F	air		
Asbestos sh  2) ROOF MA' Wood with  3) POWER SO	CTIONAL MATERIAL eet over wooden frame FERIALS AND STRUCTURE Felt covering		
5) The North I	NS i) L 3.9 ii) W 2.0 Cast and North West elevations hat the contract of the c	we windows in the angles. To the W	est is a door and porch and to

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER \$10	OLD SERIES 24/128	RCHME NUMBER	N.G.R. TL 37920 02064
NAME/FUNCTION Dark Room & Ofice Block		START DATE 1941	END DATE 198?

CARTOGRAPHIC DEPICTION > 1940 WASC 900/91A	DOCUMENTARY REFERENCES Plans;
1954 A - B.34 c1960 WASC 900/94; 24/128 c1963 WASC 900/97; S10 1972 WASC 900/102; S10 1972 WASC 900/104; S10 1976 WASC 900/113; S10	S10 B01 - B03; Plans and Elevations 1940 to 1965  1972 ERDE List; Dark Room and Office Block 1991 Mott McDonald survey; Dark Room and Office Block 1992 RARDE List; Dark Room and Office Block 1992 FBRC Laboratory
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME 1) 206/D/6 from North East

#### RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH:

#### CONDITION Fair

#### DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL Brick
- 2) ROOF MATERIALS AND STRUCTURE Flat concrete slab with felt covering
- 3) POWER SOURCE Electricity
- 4) DIMENSIONS i) L 16.45 ii) W 5.29 iii) HT 2.88
- The eastern elevation originally comprised a recessed central door flanked by two metal windows with tile sills. The northern elevation has a single window, the west side has two windows and an external toilet. A small extension has been added to the southern end of the building 3.93m in length. It is brick built in stretcher bond with a single door and window. Its most recent use has been as a locker and shower room. The recessed door on the eastern side gave access to a central lobby to the left was a laboratory area and to the right a darkroom. The room to the rear of the lobby was also a darkroom.

NUMBER S11	OLD SERIES	RCHME NUMBER	N.G.R. 37916 02077
NAME/FUNCTION Small Shed		START DATE 1941	END DATE 198?
		DTOGRAPHY AILABLE	
CARTOGRAPHIC DEI > 1940 WASC 900/ 1954 A - B.34 c1960 WASC 900/ c1963 WASC 900/ 1972 WASC 900/ 1972 WASC 900/ 1976 WASC 900/	Plan;   S11   Bo1 - 14/5/1940 ; Structural Details   S11   S11   Bo2   Structural Details   S11   S1		
PHOTOGRAPHY HISTORIC  PHOTOGRAPHY RCHME 1) 206/D/5 From North West			West
RELATIONSHIPS WIT ASSOCIATED WITH:	H OTHER MONUMENTS		
CONDITION Poo	r		
	TONAL MATERIAL er Timber Frame		
	ROOF MATERIALS AND STRUCTURE Flat Asbestos sheeting		
3) POWER SOU Electricity	RCE		
	S i) L 1.25 ii) W 1.18 iii) HT 2.15		
	n a single door on the northern sidects - Radio equipment	, inside the shed is Radio Telep	hone equipment

## NUMBER OLD SERIES RCHME NUMBER N.G.R. TL 37928 02044 NAME/FUNCTION Chemical Store START DATE 1941 END DATE 198?

#### NO PHOTOGRAPHY AVAILABLE

CARTOGRAPHIC DEPICTION	DOCUMENTARY REFERENCES	
>1940 WASC 900/91A 1954 A - B.34 c1960 WASC 900/94 ; 24/135 c1963 WASC 900/97 ; S12 1972 WASC 900/102 ; S12 1972 WASC 900/104 ; S12 1976 WASC 900/113 ; S12	Plans; S12 B01,B02; Plan and Elevations 1941  1972 ERDE List; Chemical Store 1991 Mott McDonald survey; Lab,Hose and Reel House and Store 1992 RARDE List; Chemical Store 1992 FBRC Laboratory	
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME 1) 206/D/7 From North East	

#### RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: S13

CONDITION Good

#### DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL Brick in English bond
- 2) ROOF MATERIALS AND STRUCTURE Flat concrete slab with felt covering
- 3) POWER SOURCE Steam and Electricity
- 4) DIMENSIONS i) L 7.18 ii) W 5.9 iii) HT 3.12
- 5) To the east two sets of double doors give access into two bays. To the north a single door gives access into a rear room.

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER \$13	OLD SERIES	RCHME NUMBER	N.G.R. TL 37947 02052
NAME/FUNCT	TION	START DATE 1940	END DATE 198?
	NO PHOTO AVAIL		
CARTOGRAPHIC DEPICTION  > 1940 WASC 900/91A  1954 A - B.34  c1960 WASC 900/94  c1963 WASC 900/97; S13  1972 WASC 900/102; S13  1972 WASC 900/104; S13  1976 WASC 900/113; S13  DOCUMENTARY REFERENCES  Plans;  S13 B01,B02; Plans and Elevations 1941  S13 B01,B02; Plans and Elevations 1941  S13 B01,B02; Plans and Elevations 1941  S14 Plans;  S15 B01,B02; Plans and Elevations 1941  S17 ERDE List; Store  1992 RARDE List; Store			d Elevations 1941
PHOTOGRAPI HISTORIC PRO Supply 5	HY /863 August 1940 342 As built	PHOTOGRAPHY RCHME 1) 206/D/8 From North west	
RELATIONSH ASSOCIATED	IPS WITH OTHER MONUMENTS WITH: S12		
CONDITION	Good		
Brick	STRUCTIONAL MATERIAL in English Bond F MATERIALS AND STRUCTURE		
	oncrete slabs over two RSJ's  ER SOURCE  ricity		
	ENSIONS i) L 8.33 ii) W 5.2		
The West elevation has a single door and a double roll door. The interior has a crane with RSJ runners above a Parquet floor.			

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER OLD SERIES \$14	RCHME NUMBER	N.G.R. TL 37969 01953	
NAME/FUNCTION Solex Fuel Store	START DATE 1941	END DATE 198?	
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  1976 WASC 900/113; \$14	Expence Mag.	ab of S14 Providing Day vey; Solex Fuel Store	
PHOTOGRAPHY HISTORIC  PHOTOGRAPHY RCHME  1) 206/B/9 From South			
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH: S16?			
CONDITION Fair			
DESCRIPTION  1) CONSTRUCTIONAL MATERIAL Brick in English Bond  2) ROOF MATERIALS AND STRUCTURE Flat concrete slab  4) DIMENSIONS i) L 4.1 ii) W 2.31 iii) HT 2.2  5) The entrance to the building is from the South. The doors has a sign which reads 'corrosive Acids'.	interior has two cubicles to the E	East and a Urinal. One of the	

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THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER \$15	OLD SERIES	RCHME NUMBER	N.G.R. TL 38002 01947
NAME/FUNCTION Plenum Heater H Control Room &	louse Firing Point (S16)	START DATE 1941	END DATE 198?

CARTOGRAPHIC DEPICTION  > 1940 WASC 900/91A  1954 A - B.34 c1960 WASC 900/94; S15 c1963 WASC 900/97; S15 1972 WASC 900/102; S15 1972 WASC 900/104; S15 1976 WASC 900/113; S15	DOCUMENTARY REFERENCES  Plans; S15 B01 - B03; Plans and Elevations 1940 to 1969  1972 ERDE List; Control Room and Firing Point S16 1991 Mott McDonald survey; Control Room 1992 RARDE List; Control Room and Firing Point S16 1992 FBRC Control room for S16		
PHOTOGRAPHY HISTORIC  PHOTOGRAPHY RCHME 1) 206/B/6 From North			
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: S16			
CONDITION Fair			
DESCRIPTION  1) CONSTRUCTIONAL MATERIAL  Brick in English bond			
2) ROOF MATERIALS AND STRUCTURE Concrete slab with felt covering			
3) POWER SOURCE Electricity			
4) DIMENSIONS i) L 5.37 ii) W 2.93 iii) HT 2.8			

The building is single storied with a double door on the north wall. The internal switch gear has been removed.

5)

#### THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY NUMBER OLD SERIES RCHME NUMBER N.G.R. 24/105 S16 TL 38020 01934 NAME/FUNCTION START DATE END DATE Nitrating House 1940 1945 Firing Point No 1 195? 198?

#### NO PHOTOGRAPHY AVAILABLE

CARTOGRAPHIC DEPICTION	DOCUMENTARY REFERENCES
>1940 WASC 900/91A 1954 A - B.34 c1960 WASC 900/94; 24/105 c1963 WASC 900/97; S16 1972 WASC 900/102; S16 1972 WASC 900/104; S16 1976 WASC 900/113; S16	Plans; S16 B01 - B24 ; Plans and Elevations 1940 to 1975 1972 ERDE List ; Firing Point No.1 1991 Mott McDonald survey ; Firing Point No.1 1992 RARDE List ; Firing Point No.1 1992 FBRC Firing Chamber
PHOTOGRAPHY HISTORIC  PRO Supply 5/863 August 1940 331, 332, 33, 335, 336 Photographs of construction	PHOTOGRAPHY RCHME  1) 206/B/7 Entrance from North 206/B/17 Process Earthernware 206/B/18 Tower on East side with Earthernware bases 206/B/19 Tower on East side with Earthernware bases 2) BB92/26135 Detail of Earthernware fragment BB92/26136 Nitrator view from East BB92/26148 Interior BB92/26351 S16 Drawing S.16.B.12 Details of Support to Fume pipe 4.Mar.1941 (MOD Chessington) BB92/26368 S16 Drawing S16.B.18 Pipework General Arrangement (MOD Chessington)

#### RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: S14?, S15, S19, S23 consists of: S18

CONDITION Fair

#### DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL Brick Earthwork
- 2) ROOF MATERIALS AND STRUCTURE Concrete formerly attached to bolts around the top
- 3) POWER SOURCE Electricity
- 4) DIMENSIONS i)INT L 10.0 ii)INT W 9.8
- 5) S16 was originally constructed as nitrating house during the second world war. It is however believed that it was never used for this purpose. The structure was subsequently converted to firing point.

The interior of the structure was protected by slightly battered concrete walls surrounded by an earthen traverse. It was entered from the north through a curving tunnel. To the south a straight exit tunnel formerly enclosed channels to S19 The Washing House, S23 the Wash Water Settling House and S25 The Flume House. On the southern side of the mound a raised concrete platform S18 formerly supported a timber framed building and tanks.

Subsequent to its conversion to a firing point a gantry 4.65m by 4.63m and 2.85m in height has been constructed. The straight tunnel to west has been partly blocked by breeze blocks and a breeze block structure built at the end. Around the top,of the firing point has been fenced protecting a walkway with timber decking. On the east side of the mound are two brick pillars supporting a concrete slab covered in asphalt. This platform formerly supported two pottery towers, the bases adhering to the platform are 1m in diameter. At the base of this structure is apile of broken process earthenware.

Historic artefacts - Fume Piipe earthenware at base of east side.

NUMBER \$17	OLD SERIES	RCHME NU	MBER N.G.R. TL 37998 01932	
NAME/FUNCTION Expense Magazine Control Room		START DAT 1941 194?	END DATE 195? 198?	
		HOTOGRAPHY VAILABLE		
CARTOGRAPHIC DEPICTION > 1940 WASC 900/91A 1954 A - B.34 c1960 WASC 900/94 c1963 WASC 900/97; S 1972 WASC 900/102; S 1972 WASC 900/104; S 1976 WASC 900/113; S	17 517 517	1972 ERI 1991 Mot 1992 RAF	1991 Mott McDonald survey; Expense Magazine 1992 RARDE List; Expense Magazine	
PHOTOGRAPHY HISTORIC  PHOTOGRAPHY RCHME 1) 206/B/8 From North West				
RELATIONSHIPS WITH OT	HER MONUMENTS			
ASSOCIATED WITH: \$16				
CONDITION Fair				
DESCRIPTION  1) CONSTRUCTIONA  Brick in English Bor				
2) ROOF MATERIAL Flat concrete slab	ROOF MATERIALS AND STRUCTURE			
POWER SOURCE Electricity				
4) DIMENSIONS i) L	DIMENSIONS i) L 3.17 ii) W 3.15 iii) HT 2.80			
5) The magazine was en high shelf and some	The magazine was entered through a single door on the southwest side. The building has largely been stripped, a high shelf and some coat hooks remain on the west side.			

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER \$18	OLD SERIES	RCHME NUMBER	N.G.R. TL 38040 01923
NAME/FUNCTION Part of Nitrator S Compressor Roo		START DATE 1940 1950	END DATE 195? 198?

CARTOGRAPHIC DEPICTION	DOCUMENTARY REFERENCES
>1940 WASC 900/91A 1954 A - B.34 c1960 WASC 900/94 c1963 WASC 900/97; S18 1972 WASC 900/102; S18 1972 WASC 900/104; S18 1976 WASC 900/113; S18	Plans; S18 B01 - B07; Plan and Elevations 1940 to 1941  1972 ERDE List; Remains of shed 1991 Mott McDonald survey 1992 RARDE List; Remains of shed 1992 FBRC Compressor Room
PHOTOGRAPHY HISTORIC PRO Supply 5/863 August 1940 342	PHOTOGRAPHY RCHME 1) 206/B/15 From South 206/B/16 From South East 2) BB92/26369 S18 Drawing S18.B.02 Pipework General Arrangement 20.May.1940 (MOD Chessington)

#### RELATIONSHIPS WITH OTHER MONUMENTS

PART OF: S16

#### CONDITION Fai

#### DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL Concrete
- 3) POWER SOURCE Electricity
- 4) DIMENSIONS i) L 17.29 ii) W 6.05
- All that remains of S18 is a raised concrete platform on the southern side of the nitrator S16. On top of the platform were two buildings set on a low concrete sills to which the timber frame was bolted. The walls were covered by asbestos sheets secured by copper nails. The whole of the platform appears to have once been covered. The original plans of the building show tanks placed on the platform, to serve the nitrator. A photograph in PRO Supply 5/863 shows a timber building on top of the platform painted in camouflage paint.

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER OLD SERIES \$19 24/107	RCHME NUMBER	N.G.R. TL 37964 01918	
NAME/FUNCTION Washing House Firing Point No 2	START DATE 1941 195?	END DATE 1945 198?	
	OGRAPHY .ABLE		
CARTOGRAPHIC DEPICTION  >1940 WASC 900/91A  1954 A - B.34  c1960 WASC 900/94; 24/107  c1963 WASC 900/97; S19  1972 WASC 900/102; S19  1972 WASC 900/104; S19  1976 WASC 900/113; S19	1972 ERDE List ; Firing F	nd Elevations 1940 to 1982 Point No.2 vey; Firing Point No.2 (All.5) Point No.2	
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME 1) 206/B/14 From top of S16 206/T/27 Looking to the S 2) BB92/26134 Nitroglycering South west BB92/26137 Wash house f BB92/26138 Wash house f BB92/26139 Washgutter so North West BB92/26149 Interior from S BB92/26348 S19 Drawing Nitroglycerine Gutter 30.Ja BB92/26371 S19 Drawing arrangement or Washing H Chessington)	outh e gutter support from from North East from North East upport stanchions from South West S.19.B.27 Detail of n.1940 (MOD Chessington) S19.B.25 Plenum Heating	
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH: S16, S21, S23			

CONDITION

Fair

#### DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL Concrete and Earthwork
- 2) ROOF MATERIALS AND STRUCTURE Part concrete slab
- 3) POWER SOURCE Electricity
- 4) DIMENSIONS i) L 12.1 ii) W 12.65
- The structure was originally built as a washing house for the nitrator S16. It is believed that the plant was never used for the production of nitroglycerine. The washing house was situated in the centre of a square earthen mound surrounded by slightly battered concrete walls. The building was entered from the north west through a curving tunnel. The wash house would have been served through a straight tunnel from S16 the nitroglycerine gutters carried on concrete stanchions between the buildings. From the wash house the contaminated water would have been channelled through astraight tunnel to the south to the wash water settling house. The nitrogleerine through a tunnel to the west to the Mixing house S21.

The structure has subsequently been converted into a firing point. This has involved the insertion of a massive armoured steel structure into the centre of the mound. The roof of the firing point covered in about 0.30m of soil. From the original northwestern entrance to the mound and the former westerly nitrogleerine tunnel access may be gained to an observation room around three sides of the chamber. Armoured glass panels allow experiments within the chamber to be observed. The tunnel on the eastern side of the mound has been blocked at its inner end where there is a pipe 0.28m in diameter containing wires. Entry into the firing point is through the former wash water tunnel from the south.

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER \$20	OLD SERIES	RCHME NUMBER	N.G.R. TL 37945 01929
NAME/FUNCTION Plenum Heater House Control Room for S19		START DATE 1941 195?	END DATE 1945 1992

CARTO	GRAPHIC DEPICTION	DOCUM	IENTARY REFERENCES
>1940 1954 c1960 c1963 1972 1972	WASC 900/91A A - B.34 WASC 900/94 WASC 900/97; S20 WASC 900/102; S20 WASC 900/104; S20 WASC 900/113; S20	1972 1991 1992	ERDE List; Control Room for S19 Mott McDonald survey; Control Room for S19 (All.5) RARDE List; Control Room for S19
PHOTOC HISTOR		RCHMI	OGRAPHY E B/11 From West with entrance to S19
RELATION	ONSHIPS WITH OTHER MONUMENTS		

ASSOCIATED WITH: S19

#### CONDITION

### DESCRIPTION

CONSTRUCTIONAL MATERIAL 1) Brick English Bond

Fair

- 2) ROOF MATERIALS AND STRUCTURE Flat Concrete slab
- 3) POWER SOURCE Electricity
- DIMENSIONS i) L 3.15 ii) W 3.14 iii) HT 2.6 4)
- 5) The building is a single storey structure with a single door on the west side. Inside the biulding is a wash basin and fuse boxes. on the southern external wall are switch boxes for S19 and S20.

NUMBER \$21	OLD SERIES 24/110	RCHME NUMBER	N.G.R. TL 37906 01896	
NAME/FUNCTION Mixing House Large Magazine		START DATE 1941 195?	END DATE 1945 1992	
NO PHOTOGRAPHY AVAILABLE				
CARTOGRAPHIC DE  > 1940 WASC 900/ 1954 A - B.34 c1960 WASC 900/ c1963 WASC 900/ 1972 WASC 900/ 1972 WASC 900/ 1976 WASC 900/	91A 94 97; 24/110 102; S21 104; S21	Plans; S21 B01 - 1972 ERDE 1991 Mott I	RY REFERENCES  B12; Plans and Elevations 1940 to 1985  List; Large Magazine (derelict)  McDonald survey; Proof Stand (All.5)  E List; Large Magazine (derelict)	
PHOTOGRAPHY HISTORIC		S19 206/B/13 Nit S21 from S1 206/B/23 En 206/B/28 Ra 206/B/29 En 206/B/30 Po 2) BB92/26150 BB92/26379	troglycerine gully support leading from	
	TH OTHER MONUMENTS			

CONDITION

Fair

#### DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL Brick and Earthwork
- 3) POWER SOURCE Electricity
- 4) DIMENSIONS i) L 12.6 ii) W 10.0 iii) HT 3.5
- S21 was originally constructed during the second world war as a Mixing house as part of the New Hill Nitroglycerine Factory. It is believed that the factory was never operational. The building was sited in the centre of a square earthen traverse revetted by gently battered concrete walls. It was intended that the nitroglycerine would have been run along a gutter from the washing house S19 to the mixing house. The concrete stanchions to support the gutter nsurvive along the footpath between S19 and S21. The nitroglycerine would have then entered the mixing house along a straight concrete tunnel through the traverse and into the mixing house. A section of the wooden support shelf remains insitu along the south side of the tunnel, the shelf was constructed with copper screws and was covered by a canvas strip. The mixing house (demolished) was a timber framed structure, 8m x 5m, with a loading porch on the west side. The frame was bolted to a low sill wall, the floor was asphalt. The building was originally served by the narrow guage railway system through straight tunnels from the north and south. The rails remain insitu within the northern tunnel. As the rails approach the entrance porch to the building the metal rails give way to teak rails.

Part of this structure has subsequently been adapted as a firing point by the blocking of the northern tunnel at either end.

Historic artefacts - wooden nitroglycerine gutter support in the eastern tunnel

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER OL \$22	D SERIES	RCHME NUMBER	N.G.R. TL 37921 01874
NAME/FUNCTION Plenum Heater House Control Room		START DATE 1941 195?	END DATE 1945 1992
		HOTOGRAPHY AVAILABLE	
CARTOGRAPHIC DEPICTION  > 1940 WASC 900/91A  1954 A - B.34  c1960 WASC 900/94  c1963 WASC 900/97; S22  1972 WASC 900/102; S22  1972 WASC 900/104; S22  1976 WASC 900/113; S22	WASC 900/91A A - B.34 WASC 900/94 WASC 900/97; S22 WASC 900/102; S22 WASC 900/104; S22		ntrol Room survey (All.5)
PHOTOGRAPHY HISTORIC  PHOTOGRAPHY RCHME 1) 206/B/22 From South			
RELATIONSHIPS WITH OTHER	MONUMENTS		
ASSOCIATED WITH: S21			
CONDITION Fair			
DESCRIPTION  1) CONSTRUCTIONAL M Brick in English Bond  2) ROOF MATERIALS AN			
Flat Concrete slab  3) POWER SOURCE			
Electricity  DIMENSIONS IN L. 216	22 W 244 222 TERR	.,	
<ul><li>4) DIMENSIONS i) L 3.16</li><li>5) The building is a single st</li></ul>			the west is a slit wind an analysis
the north wooden louvre valve.	vent. The interior has	single door on the south side. To s three small concrete bases and so	me switch gear and steam pipe

valve.

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER	OLD SERIES	RCHME NUMBER	N.G.R.
S23	24/108		TL 37954 01857
NAME/FUNCTION	tling House	START DATE	END DATE
Wash Water Sett		1941	1945
Large Nitration F		195?	1992

CARTOGRAPHIC DEPICTION  > 1940 WASC 900/91A  1954 A - B.34  c1960 WASC 900/94; 24/108 c1963 WASC 900/97; \$23  1972 WASC 900/102; \$23  1972 WASC 900/104; \$23  1976 WASC 900/113; \$23	DOCUMENTARY REFERENCES  Plans; S23 B01 - B08; Plans and Elevations 1940 to 1941  1972 ERDE List; Large Nitration Plant 1991 Mott McDonald survey (All.5) 1992 RARDE List; Large Nitration Plant	
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME 1) 206/B/20 Entrance tunnel from South 206/B/21 Interior & exit tunnel from North 206/B/25 From South showing Earthernware gully	

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: S16, S19, S24, S25

CONDITION Fair

#### DESCRIPTION

- CONSTRUCTIONAL MATERIAL
   Concrete and Earthwork
- 2) ROOF MATERIALS AND STRUCTURE Timber with felt covering
- 3) POWER SOURCE Electricity
- 4) DIMENSIONS i) L 19.0 ii) W 10.4
- This structure was built as a wash water settling house as part of the New Hill Nitroglycerine factory laid out during the second world war. It is believed that the factory was never operational.

The building lay in the centre of a rectangular earthen traverse within a concrete lined cellar 1.6m in depth. The building was timber framed covered by flat asbestos sheets bolted to low concrete sill walls. It measured 16.4m x 7.5m. At ground level on the eastern side are the footing of a small lobby area. Within the well of the building are two circular concrete bases covered by asphalt, diameters 5m and 0.88m each with a height of 0.7m. The Wash Water Settling tank originally sitting on the larger of the two bases (see drwg .S23 BO6 28-12-40). It was intended that the water used in the washing of nitroglycerine would be channelled into the building through a tunnel on the north side. Two rows of concrete stanchions link it to S16 and S19 originally intended to carry a wooden gutter. After the settling process the water was discharged along a tunnel to the south in direction of the Flume house S25. In the base of this tunnel is a open white earthen ware drain. It is unclear whether or not this drain was originally open or whether it had a metal pipe within it packed around with clay.

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY			
NUMBER S24	OLD SERIES	RCHME NUMBER	N.G.R. TL 37950 01833
NAME/FUNCTION Plenum Heater Hou Small Brick Building		START DATE 1941 195?	END DATE 1945 198?

CARTOGRAPHIC DEPICTION	DOCUMENTARY REFERENCES	
>1940 WASC 900/91A 1954 A - B.34 c1960 WASC 900/94 1976 WASC 900/113 ; S24	Plan; S24 B01 - 10/6/41 ; Plenum Heater House 1972 ERDE List ; Small Brick Building 1991 Mott McDonald survey (All.5) 1992 RARDE List ; Small Brick Building	
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME 1) 206/B/24 From South	

#### RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: S23

CONDITION

Fair

#### DESCRIPTION

- 1) CONSTRUCTIONAL MATERIAL Brick in English Bond
- 2) ROOF MATERIALS AND STRUCTURE Flat Concrete slab
- 3) POWER SOURCE Electricity
- 4) DIMENSIONS i) L 3.46 ii) W 3.16 iii) HT 2.55
- 5) The building is a single storey structure with a single door on the south side. On the west side at gound level is a wooden louvre vent. On the north side there is a slit opening. The interior has three small concrete bases and a fuse box along with steam pipes.

#### THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY NUMBER OLD SERIES RCHME NUMBER N.G.R. S25 TL 37944 01804 NAME/FUNCTION START DATE END DATE Flume Unit House 1941 1945 198? Charge Assembly 195? NO PHOTOGRAPHY **AVAILABLE** CARTOGRAPHIC DEPICTION DOCUMENTARY REFERENCES > 1940 WASC 900/91A Plans; A - B.34 S25 B01,B02; Plans and Elevations 1941 1954 c1960 WASC 900/94 WASC 900/97; S25 1972 c1963 ERDE List; Charge Assembly 1972 WASC 900/102; S25 1991 Mott McDonald survey; Charge Assembly 1972 WASC 900/104; S25 (AII.5) 1976 WASC 900/113; S25 1992 RARDE List; Charge Assembly PHOTOGRAPHY **PHOTOGRAPHY** HISTORIC **RCHME** 1) 206/B/26 From East 206/B/27 From South East 206/T/24 Interior from East 206/T/25 Eatrhernware trough to West 206/T/26 Earthernware trough to West 2) BB92/26140 Flume house from North East BB92/26155 Earthernware gullies leading to \$25 BB92/26156 Interior flume house from North

RELATIONSHIPS WITH OTHER MONUMENTS

ASSOCIATED WITH: S16, S23

CONDITION

Fair

#### DESCRIPTION

- CONSTRUCTIONAL MATERIAL
   Asbestos and Concrete walls
- 2) ROOF MATERIALS AND STRUCTURE Asbestos
- 3) POWER SOURCE Electricity
- 4) DIMENSIONS i) L 17.88 ii) W 3.06 iii) HT 2.95
- The building is a single storey with a gabled roof, the north and south elevations each have four small windows. Traces of wavy camouflage paint remain on the exterior of the biulding. The building was entered through two single doors on the east side giving access into a lobby or changing area. A further door then gave access into a long narrow room with a path along the northern side of the building leading to a single door to the south. In the centre of this room is a channel 1.15m in width and 0.10m in depth. To either side of this channel were seven pairs of leg settings 0.35m x 0.35m. At the western end the channel was drained by a metal pipe into a concrete tank. Over the tank was a metal extractor hood served by a fan attached to the north wall. From the tank the water drained southwards into an open earthenware drain and then into Cornmill Stream. A metal pipe packed around remains insitu for part of the length of this drain perhaps indicating the other earthenware drains originally also contained metal pipes.

#### THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY NUMBER OLD SERIES RCHME NUMBER N.G.R. S26 TL 37909 01847 NAME/FUNCTION START DATE END DATE Toilet Block 1941 NO PHOTOGRAPHY AVAILABLE CARTOGRAPHIC DEPICTION DOCUMENTARY REFERENCES WASC 900/91A > 1940 1972 ERDE List ; Toilet Block 1954 A - B.34 1991 Mott McDonald survey (All.5) c1960 WASC 900/94 1992 RARDE List; Toilet Block c1963 WASC 900/97; S26 WASC 900/102; S26 1972 1972 WASC 900/104; S26 1976 WASC 900/113; S26 **PHOTOGRAPHY PHOTOGRAPHY** HISTORIC **RCHME** RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH: CONDITION DESCRIPTION CONSTRUCTIONAL MATERIAL 1) Brick in English Bond ROOF MATERIALS AND STRUCTURE 2) Concerte slab 4) DIMENSIONS i) L 4.1 ii) W 2.3 iii) HT 2.2

Closet with two cubicles to the north with buckets in situ roofed by slab. The south end is open with a urinal,

5)

it was entered from the east.

ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY				
number old series \$42	RCHME NUMBER	N.G.R. TL 38090 02155		
NAME/FUNCTION Sentry Box	START DATE 1941	END DATE		
NO PHOTOGRAPHY AVAILABLE				
CARTOGRAPHIC DEPICTION  >1940 WASC 900/91A  1954 A - B.34  c1960 WASC 900/94  c1963 WASC 900/97; S42  1972 WASC 900/102; S42  1972 WASC 900/104; S42  1976 WASC 900/113; S42	DOCUMENTARY REFERENCES  1972 ERDE List; Sentry Post 1991 Mott McDonald survey (All.5) 1992 RARDE List; Sentry Post			
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME			
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH: S9, S43				
CONDITION Demolished				
DESCRIPTION  5) No field remains				

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY				
NUMBER OLD SERIES \$43	RCHME NUMBER	N.G.R. TL 38087 02142		
NAME/FUNCTION Concrete block bunker	START DATE 1941	END DATE		
NO PHOTOGRAPHY AVAILABLE				
CARTOGRAPHIC DEPICTION  > 1940				
PHOTOGRAPHY HISTORIC  PHOTOGRAPHY RCHME  1) 206/D/11 15 Feb 1993 From South West				
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: S9, S42				
CONDITION Fair				
DESCRIPTION  1) CONSTRUCTIONAL MATERIAL Breeze block and Timber  2) ROOF MATERIALS AND STRUCTURE Concrete				
<ul> <li>DIMENSIONS i) L 2.99 ii) W 2.3 iii) HT 2.0</li> <li>The sentry post has a single entrance on the south east angle. There are observation slits on all sides formed from breeze blocks laid on their side.</li> </ul>				

	JOIN OWDER PACE	ORY - WALTHAM ABE	16.1
NUMBER X3	old series \$51	RCHME NUMBER	N.G.R. TL 37935 01977
NAME/FUNCTION Sand Bagged Bui	nker	START DATE 1941?	END DATE
NO PHOTOGRAPHY AVAILABLE			
CARTOGRAPHIC DEPICTION  DOCUMENTARY REFERENCES  1972 ERDE List; Bunker (sand bagged) 1992 RARDE List; Bunker (sand bagged)			nker (sand bagged)
HISTORIC RCHME 1) 206/B/		PHOTOGRAPHY RCHME 1) 206/B/31 From South 206/B/32 From South	
RELATIONSHIPS WI	TH OTHER MONUMENTS		
CONDITION F	iir		
	CTIONAL MATERIAL		

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY				
NUMBER OLD SERIES	RCHME NUMBER 102	N.G.R. TL37575 01973		
NAME/FUNCTION Pipe bridge	START DATE 1940	END DATE 1945		
NO PHOTOGRAPHY AVAILABLE				
CARTOGRAPHIC DEPICTION DOCUMENTARY REFERENCES S-B 39 4.4.41 O-B 24 22.4.41				
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME 1) 206/I/20 From South 206/N/7 Cornmill Stream Bridge			
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: Acid factory and New Hill Nitroglycerine Factory				
CONDITION Poor				
DESCRIPTION  1) CONSTRUCTIONAL MATERIAL Angle iron				
4) DIMENSIONS i) L ii) W iii) HT  5) The bridge carried an acid pipe, compressed air progressed air progressed air progressed air progressed air progressed air progresses:  3"-3.5" Steam main  2.5" Mixed acid  2" Waste acid  2" compressed air line				

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THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY				
NUMBER OLD SERIES	RCHME NUMBER 234	N.G.R. TL37575 01973		
NAME/FUNCTION Nitroglycerine Drowning Pond	START DATE 1940	END DATE		
NO PHOTOGRAPHY AVAILABLE				
CARTOGRAPHIC DEPICTION DOCUMENTARY REFERENCES				
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME			
RELATIONSHIPS WITH OTHER MONUMENTS ASSOCIATED WITH: ? S16				
CONDITION Good				
DESCRIPTION  1) CONSTRUCTIONAL MATERIAL Earthwork  4) DIMENSIONS iv)DIA  5) A circular bank, height 0.8m width 5.4m encloses a pond.				

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THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY				
NUMBER OLD SERIES	RCHME NUMBER 235	N.G.R. TL 38048 01878		
NAME/FUNCTION Inspection covers	START DATE 1940?	END DATE		
NO PHOTOGRAPHY AVAILABLE				
CARTOGRAPHIC DEPICTION DOCUMENTARY REFERENCES				
PHOTOGRAPHY HISTORIC	PHOTOGRAPHY RCHME			
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH:				
CONDITION Good				
DESCRIPTION  1) CONSTRUCTIONAL MATERIAL Concrete  4) DIMENSIONS i) L 6.55m ii) W 1.7m  5) Concrete drain ducts and three inspection covers.				

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THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY					
NUMBI	ER OLD SERIES	RCHME NUMBER 255	N.G.R. TL37782 02035 TL37870 01814		
	FUNCTION power line	START DATE 1941?	END DATE		
NO PHOTOGRAPHY AVAILABLE					
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES			
PHOTO HISTOR	GRAPHY IC	PHOTOGRAPHY RCHME			
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: S2					
CONDITION Fair					
DESCRIPTION  1) CONSTRUCTIONAL MATERIAL Timber poles					
2)	ROOF MATERIALS AND STRUCTURE				
3)	POWER SOURCE Electricity				
4)	DIMENSIONS i) L ii) W iii) HT				
5)	Overhead power line connecting to transformer house S2, the cable is generally supported on small brown insulators although large white insulators are used on changes of direction.				

THE ROYAL GUNPOWDER FACTORY - WALTHAM ABBEY					
NUMBE	ER OLD SERIES	RCHME NUMBER 256	N.G.R. TL37852 01884 TL37880 01836		
	FUNCTION ph wire	START DATE 1941?	END DATE		
NO PHOTOGRAPHY AVAILABLE					
CARTOGRAPHIC DEPICTION		DOCUMENTARY REFERENCES			
PHOTOG HISTOR	GRAPHY IC	PHOTOGRAPHY RCHME			
RELATIONSHIPS WITH OTHER MONUMENTS  ASSOCIATED WITH: PART OF: CONSISTS OF: CUTS: CUT BY: ABUTTS: ABUTTED BY: OVERLIES: UNDERLIES:					
CONDITION Poor					
DESCRIPTION  1) CONSTRUCTIONAL MATERIAL  Wooden pole					
2)	ROOF MATERIALS AND STRUCTURE				
3)	POWER SOURCE Electricity				
4)	DIMENSIONS i) L ii) W iii) HT	iv)DIA			
5)	5) Line of telegraph poles one stamped GPO 28L 39 (1939?), insulators bitumen solid types stamped LE GPO 47, screw tops T GPO 47.				

