

Channel Tunnel Rail Link
Union Railways (South) Ltd.

WWII MUNITIONS STORE AT FARMEAD FARM, WESTENHANGER, KENT

ARCHAEOLOGICAL RECORD IN ADVANCE OF DEMOLITION

NGR: TQ 6125 1374

Environmental Statement Route Window No.: 36



Oxford Archaeological Unit
February 2001

WWII MUNITIONS STORE AT FARMEAD FARM, WESTENHANGER, KENT

ARCHAEOLOGICAL RECORD IN ADVANCE OF DEMOLITION

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Summary

The Oxford Archaeological Unit (OAU) were commissioned by Union Railways (South) Ltd (URS) to undertake a programme of archaeological recording in advance of the demolition of the World War II Munitions Store at Fairmead Farm, Westenhanger, Kent (NGR: 6125 1374).

The munitions store dates from the Second World War, when it was used as a magazine for 12-inch railway guns, for which sidings were provided at Grove Bridge. It is rectangular in plan with a flat roof and a core comprising four concrete bays separated internally by concrete walls. The roof is supported by a series of rails, an 'I' section beam and a series of secondary beams.

The munitions store is not statutorily protected, but is of interest in the history of the defensive landscape of Kent.



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ARCHAEOLOGICAL RECORD IN ADVANCE OF DEMOLITION

1 INTRODUCTION

- 1.1 The Oxford Archaeological Unit (OAU) was commissioned by Union Railways (South) Limited (URS) to undertake the archaeological recording of the WWII munitions store at Fairmead Farm, Westenhanger, Kent (NGR: TQ 6125 1374; see Figure 1) in advance of the demolition of the structure prior to the construction of the Channel Tunnel Rail Link (CTRL), in whose path it lies. Although no recording was required as a condition of planning consent, it was considered appropriate that a record be made, equivalent to a 'Level 2' survey as defined by the RCHM (1996) '*Recording Historic Buildings: A Descriptive Specification*', prior to its demolition.
- 1.2 The current recording work forms part of an extensive programme of archaeological investigation and historic building recording work carried out in advance of the construction of the CTRL.

2 SITE LOCATION

- 2.1 The munitions store is sited in an isolated location on a spit of land between the M20 motorway and the mainline Ashford–London railway, 2km ESE of the village of Sellindge, Kent.

3 HISTORICAL BACKGROUND

- 3.1 The Munitions store at Fairmead Farm is a magazine for the Second World War 12-inch railway guns, for which railway sidings were provided at Grove Bridge 1.75km to the east. It is understood that the store was formerly enclosed within a 'barn-like' structure, now demolished, probably representing an intended concealment given its strategic function.

4 RECORDING STRATEGY

- 4.1 A rapid measured survey of the structure was undertaken. This comprised the generation of a floor plan and representative longitudinal and transverse cross sections through the building at a scale of 1:50, while construction details were recorded at a scale of 1:10. In addition, a 35mm black and white negative and colour slide photographic record was made. Recording work was undertaken on the 5th February 2001.

5 DESCRIPTION (see Figures 2-4 and plates 1-6)

- 5.1 The store building is rectangular in plan and of a single storey, flat roofed with overall dimensions of 17.30m (E/W) x 10.6m (N/S) x 3m high (ground beam/upper side of roof). The core comprises a four bay concrete structure 13.85m (E/W) x



5.35m (N/S). To the south and east, the roof structure projects and is supported by collonades of cast iron columns encased in reinforced concrete.

- 5.2 The core of the store is formed by a four bay, cellular structure (bays numbered 1-4 from west to east for the purposes of this record) of *in-situ* cast concrete construction. Externally, evidence of horizontal shuttering was recorded in bays 1 and 2; elsewhere diagonal pour lines were clearly evident. Internally, the storage bays are separated by 0.35m wide concrete walls (here rendered). The bays are accessed independently via wide openings in the southern wall, there being no access between bays. The storage bays have dimensions as follows:

Bay	Width	Depth	Width of access opening
1	3.45m	4.82m	2.70m
2	2.85m	4.70m	2.30m
3	2.85m	4.40m	2.30m
4	3.20m	4.50m	2.40m

Table 1: Dimensions of storage bays

The smaller depth of bays 3 and 4 is the result of the widening of the rear wall from 0.20m to 0.50m at the eastern end of the structure. To the north of each bay, a concrete platform occupies the rear 1.70m; the main body of the bays are infilled with earth and have been badly disturbed by animal burrowing activity, though traces of a compacted earth floor survive within bay 3 (see Figure 00).

- 5.3 The flat roof of the structure is formed by a 150mm (max) deep layer of wire-reinforced concrete laid upon corrugated iron sheeting, supported by a series of north-south aligned transverse sections of flat bottomed, narrow-gauge rail at c.1m centres. The transverse rails are supported by a series east-west aligned, longitudinal rails of similar section at the southern limit of the roof, at the southern wall of the concrete core and at 1.75m south of the northern wall. Further support is provided by an east-west aligned, 150mm x 125mm ‘I’ section beam running centrally to the southern section of projecting roof. This ‘I’ section beam is supported by a series of secondary beams, which run from the jambs between the concrete bays to a southern collonade of iron and concrete pillars (see §.5.4 below).
- 5.4 The southern limit of the roof is supported on a total of six cast iron and reinforced concrete pillars at c.3.5m centres. The pillars take the form of a 0.115m diam. (4½") cast iron column flanked to east and west by 100mm x 72mm (4" x 3") vertical timbers. In the case of the corner pillars, the whole is encased within a circular concrete pillar, reinforced with iron tree ‘stays’, evidently shuttered with corrugated iron. In other cases, the arrangement of iron column and timber is secured to an adjacent (to the interior) concrete pillar of semi-circular section (Figure 4). At the head of each column, an arrangement of flanges and holding plates (Figure 4) secure a longitudinal member, again formed of flat bottomed narrow-gauge rail, which extends the full length of the structure in two 8.60m sections, jointed in the centre by bolted iron plates. This longitudinal member supports the transverse rails of the roof structure. Joints between rails are secured by wire lashing. A similar collonade of four pillars supports the eastern limit of the projecting roof.

6 DISCUSSION

- 6.1 The munitions store at Westenhanger is of interest within the defensive landscape of Kent during the Second World War. Its location was of strategic importance situated close to the railway sidings at Grove Bridge, its function being to store the 12-inch



railway guns. Its construction is also of interest being supported partly on rails and enclosed within a barn (demolished at the time of investigation), which acted as a means of concealment. Although not statutorily protected the store has been recorded for posterity prior to its demolition.

Appendix A: Photographic Register

Black and White Film 1		
Negative No.	Subject	Date and Author
Film 1/01	General view from the south-east	RDT (OAU); 5 th February 2001
Film 1/02	General view from the south-east	RDT (OAU); 5 th February 2001
Film 1/03	General view from the west	RDT (OAU); 5 th February 2001
Film 1/04	General view from the north	RDT (OAU); 5 th February 2001
Film 1/05	General view from the north	RDT (OAU); 5 th February 2001
Film 1/06	North elevation: detail of horizontal shuttering	RDT (OAU); 5 th February 2001
Film 1/07	North elevation: detail of angled shuttering	RDT (OAU); 5 th February 2001
Film 1/08	General view from the south-east	RDT (OAU); 5 th February 2001
Film 1/09	General view from south-east	RDT (OAU); 5 th February 2001
Film 1/10	Detail of south collonade	RDT (OAU); 5 th February 2001
Film 1/11	Detail of secondary buttressing (west end)	RDT (OAU); 5 th February 2001
Film 1/12	Detail of SW corner column	RDT (OAU); 5 th February 2001
Film 1/13	Detail of column	RDT (OAU); 5 th February 2001
Film 1/14	Detail of column head	RDT (OAU); 5 th February 2001
Film 1/15	Detail of column head	RDT (OAU); 5 th February 2001
Film 1/16	Detail of roof construction	RDT (OAU); 5 th February 2001
Film 1/17	Detail of roof construction	RDT (OAU); 5 th February 2001
Film 1/18	Detail of roof construction	RDT (OAU); 5 th February 2001
Film 1/19	Detail of bay 3	RDT (OAU); 5 th February 2001
Film 1/20	Detail of bay 1	RDT (OAU); 5 th February 2001
Film 1/21	Detail of roof construction	RDT (OAU); 5 th February 2001
Film 1/22	Detail of surviving earth floor (bay 3)	RDT (OAU); 5 th February 2001
Film 1/23	Detail of surviving earth floor (bay 3)	RDT (OAU); 5 th February 2001
Film 1/24	Detail of roof construction	RDT (OAU); 5 th February 2001
Film 1/25	Detail of concrete structure	RDT (OAU); 5 th February 2001
Film 1/26	Detail of concrete pour lines (east end)	RDT (OAU); 5 th February 2001
Film 1/27	Detail of corner column	RDT (OAU); 5 th February 2001
Film 1/28	Column detail	RDT (OAU); 5 th February 2001
Film 1/29	Detail of corner column	RDT (OAU); 5 th February 2001
Film 1/30	Column detail	RDT (OAU); 5 th February 2001
Film 1/31	Detail of collonade	RDT (OAU); 5 th February 2001
Film 1/32	General view from south-west	RDT (OAU); 5 th February 2001
Film 1/33	General view from south-west	RDT (OAU); 5 th February 2001
Film 1/34	General view from south-east	RDT (OAU); 5 th February 2001
Film 1/35	General view from south-east	RDT (OAU); 5 th February 2001



Colour Slide Film 1		
Slide No.	Subject	Date and Author
Film 1/01	General view from the south-east	RDT (OAU); 5 th February 2001
Film 1/02	General view from the south-east	RDT (OAU); 5 th February 2001
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Film 1/04	General view from the north	RDT (OAU); 5 th February 2001
Film 1/05	General view from the north	RDT (OAU); 5 th February 2001
Film 1/06	North elevation: detail of horizontal shuttering	RDT (OAU); 5 th February 2001
Film 1/07	North elevation: detail of angled shuttering	RDT (OAU); 5 th February 2001
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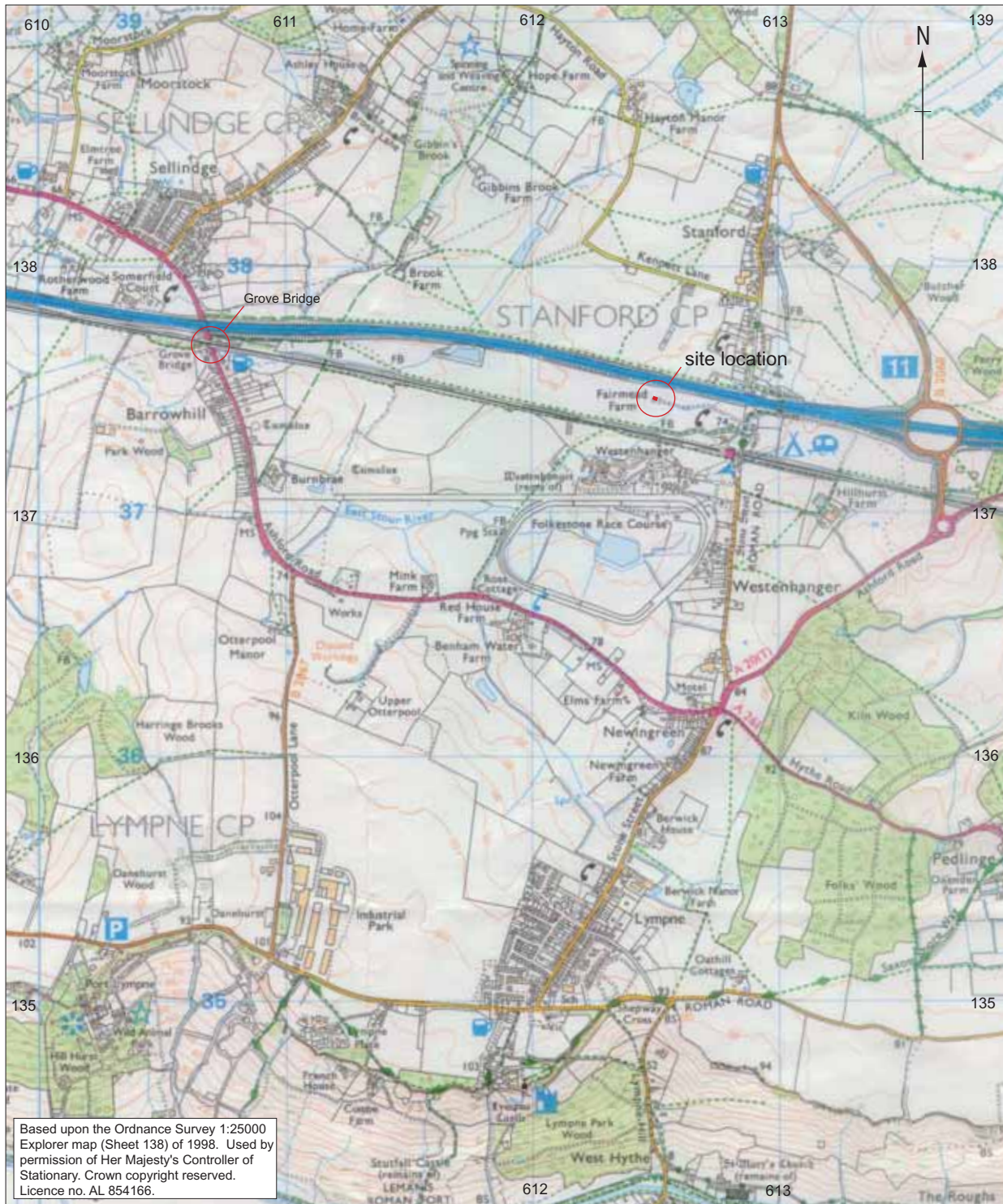
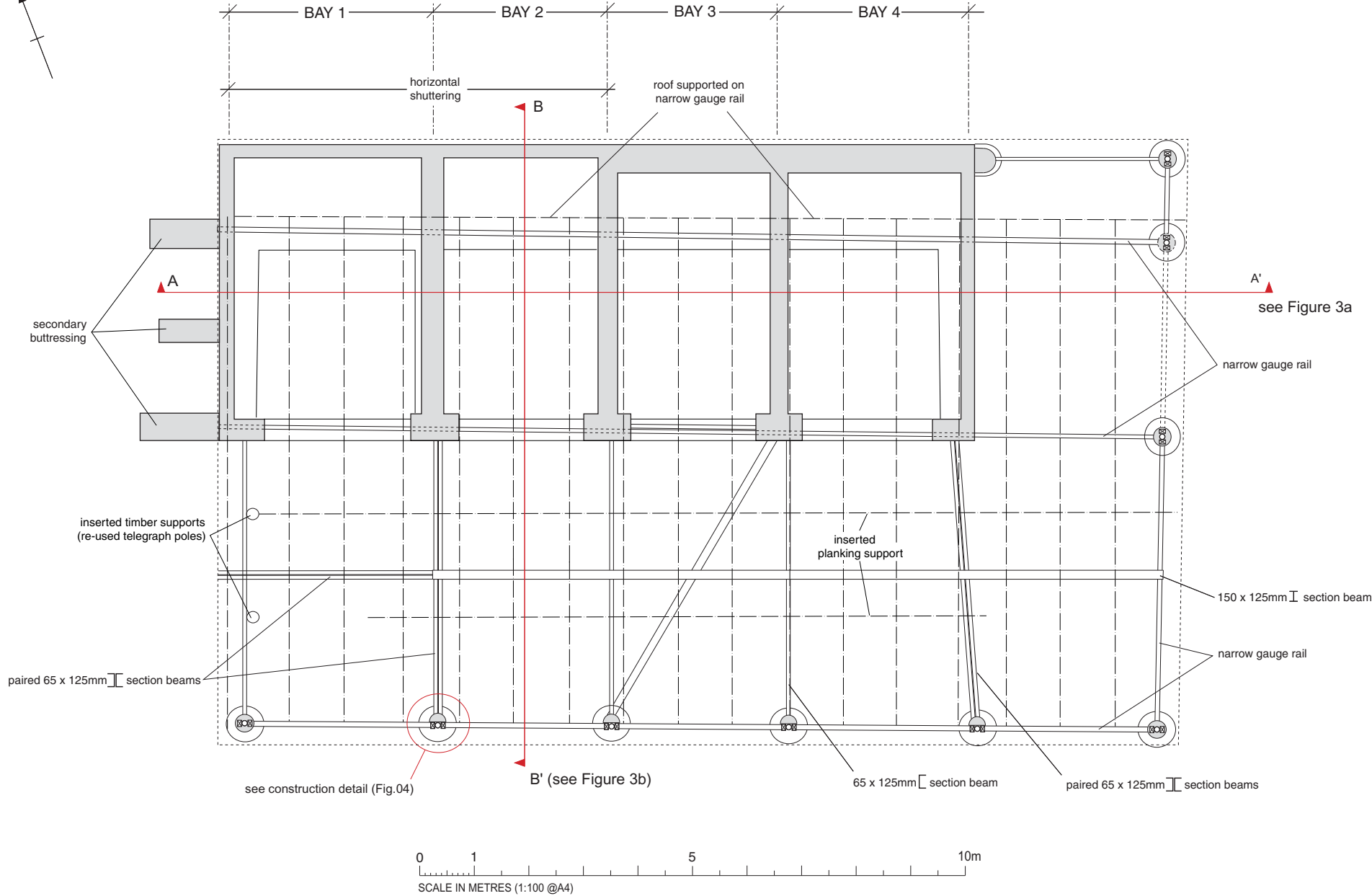
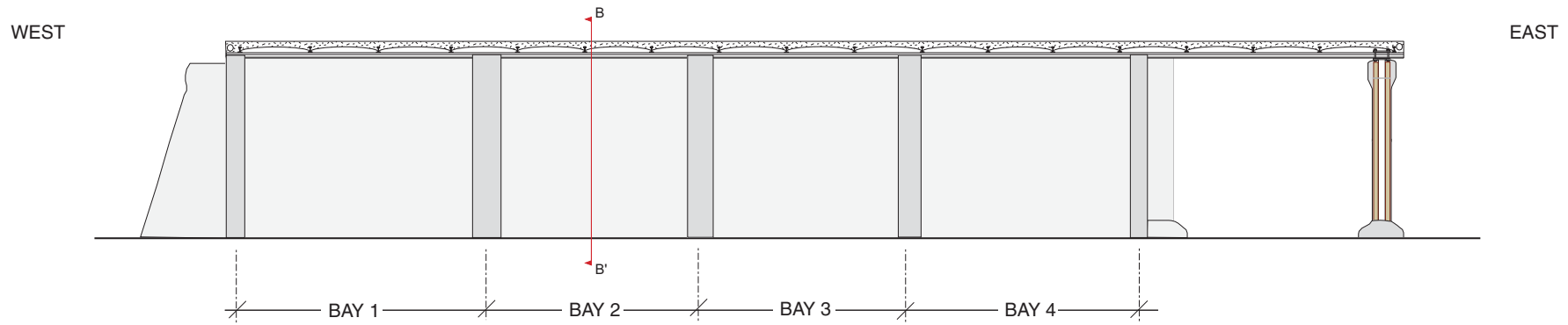
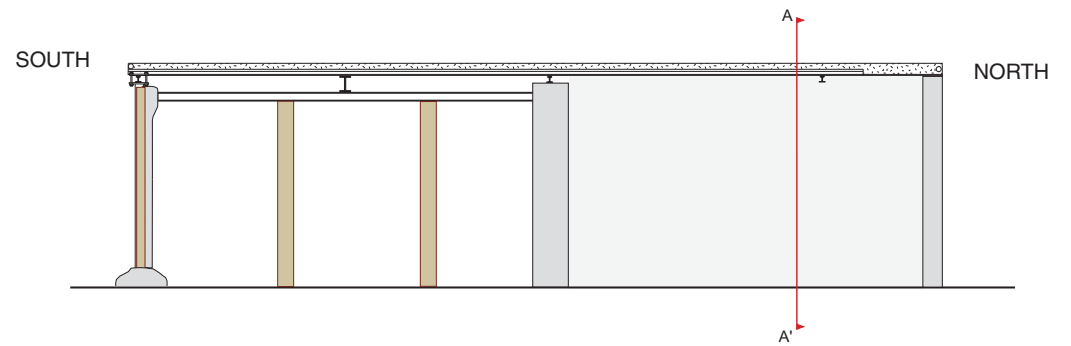
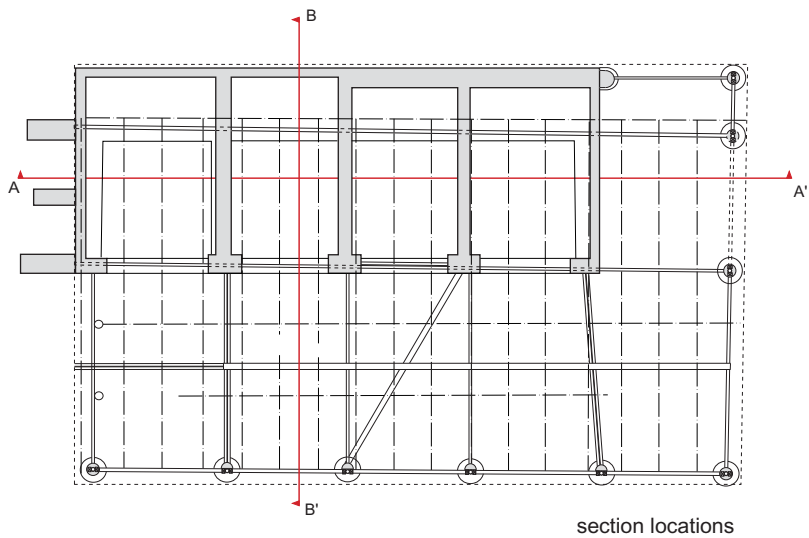
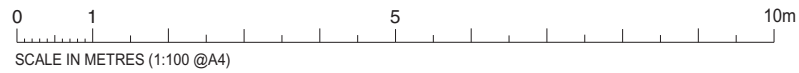


Figure 01: Site Location Plan
also indicating Grove Bridge (location of sidings for 12" Howitzer guns)





(a) Longitudinal section A-A'



(b) Transverse section B-B'

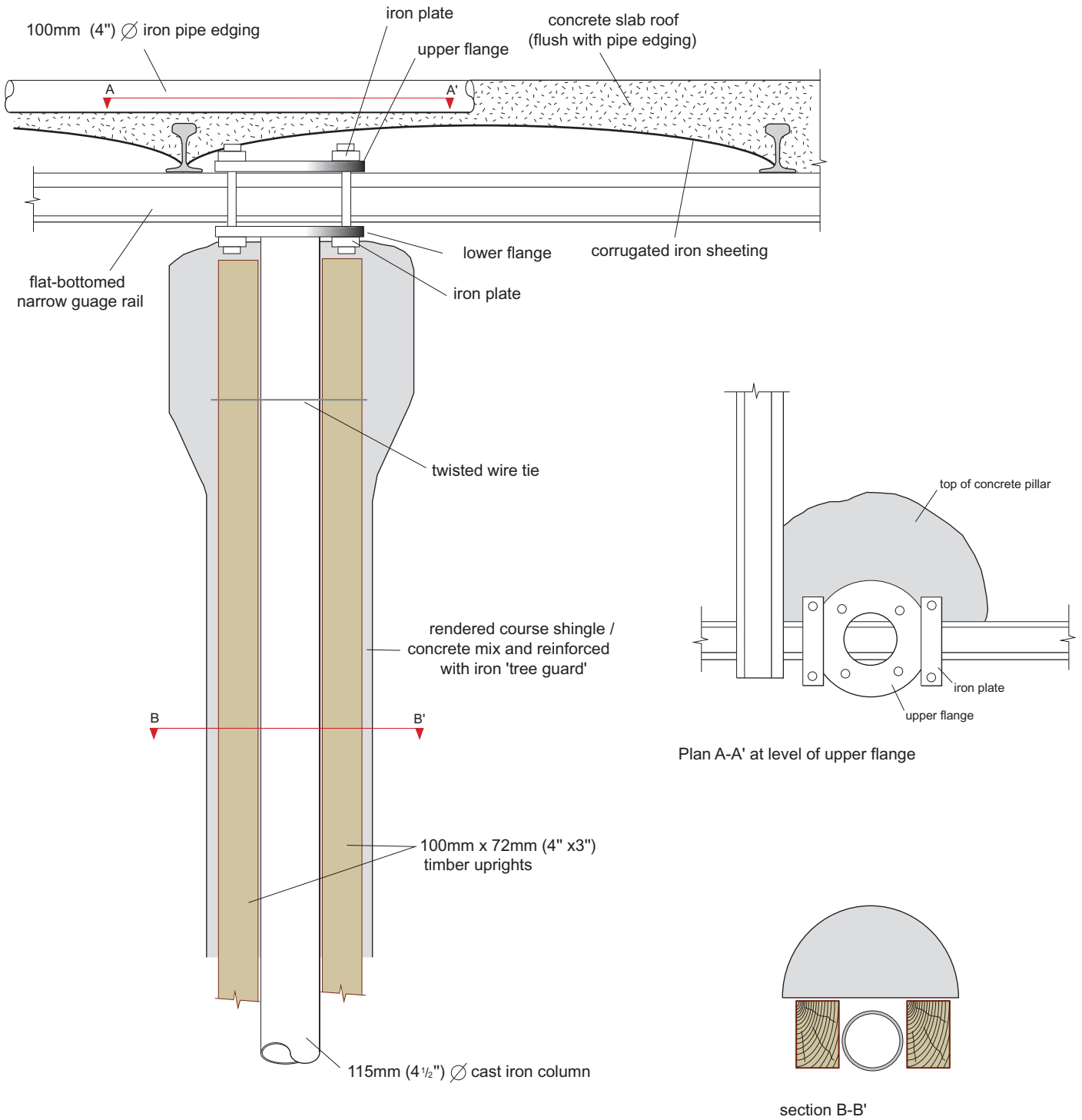




Plate 1: General view from the south-east



Plate 2: General view from the north-east



Plate 3: Cellular concrete core structure from the south-west



Plate 6: Detail of roof structure

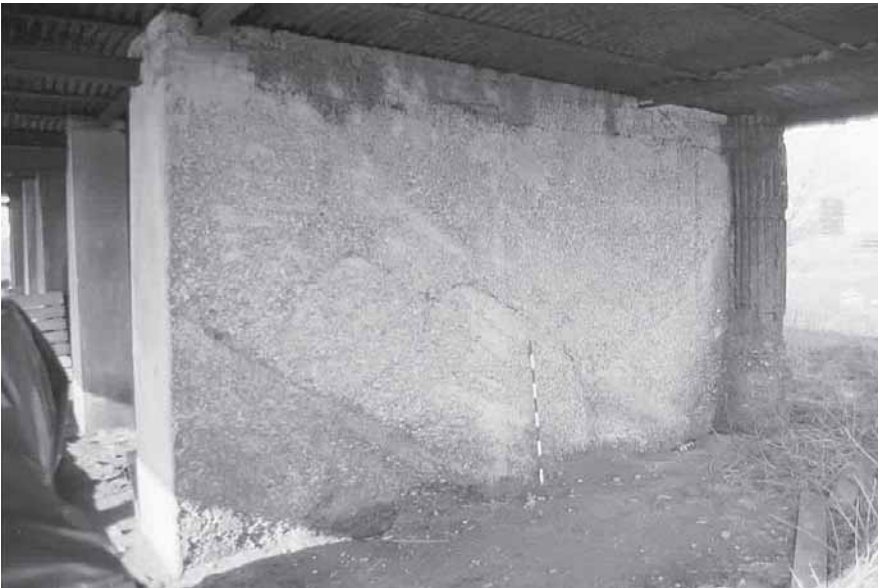


Plate 4: East wall of concrete core showing diagonal tip lines



Plate 7: Detail of projecting roof support pillar



Plate 5: Remains of compacted earth floor within bay 3



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