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ROYAL COMMISSION ON THE HISTORICAL MONUMENTS OF ENGLAND

HISTORIC BUILDING REPORT

**Carriage Works
Holgate Road
York
City and County of York**

June 1996

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**National Monuments Record Centre, Kemble Drive, Swindon SN2 2GZ
Tel: (01793) 414600 Fax: (01793) 420728**

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City and County of York

NBR No: 94376

York

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Carriage Works, Holgate Road

SUMMARY

The York Carriage Works, built by the North Eastern Railway in 1880-84, was a fully integrated site whose buildings comprised a lodge, offices and stores, smiths shop, paint shop, two carriage building and repair shops, a saw mill and machine shop, and a timber-drying shed. The buildings are of brick, the various workshops being tall, single-storeyed structures with walls of pier and panel construction and interiors with cast-iron columns and metal roof trusses. The need to build up-to-date eight-wheeled coaches led to the re-equipping and enlargement of the Works between 1897 and 1900, when most of the existing workshops were extended and new ones, including a lifting shop and a gas fitting shop, were built. Facilities for servicing and repairing electric carriage lighting systems were added in 1914-15. There was little subsequent new building, although a fire led to the rebuilding of a carriage building shop in 1945-6. The Carriage Works closed in 1995.

REPORT

Historical introduction

York was a railway centre from 1839, when the first station was opened, and it served successively as the headquarters of the York & North Midland Railway (1839-1854), the North Eastern Railway (1854-1922), the London & North Eastern Railway - North Eastern Area (1923-1947), the North Eastern Region of British Railways (1948-1967) and from 1967 of the Eastern Region of British Rail.¹ In addition to the construction of two successive permanent stations, each with an associated hotel,² the growth of the railways brought the construction of extensive locomotive running sheds as well as shops for locomotive maintenance and repair, and for carriage and wagon building and repair.

¹ K Appleby, *Britain's Rail Super Centres. York* (1993), 7-8.

² The station which opened in 1839 was near Queen Street, and was only a temporary structure. It was superseded by a permanent station, which opened in 1841, and this in turn was succeeded by the present York Station, which opened in 1877.

A small carriage-repair shop was opened in Queen Street in 1839,³ and in 1842 and 1844 the York & North Midland Railway invited tenders for the construction there of workshops capable of maintaining the company's rapidly growing fleet of locomotive and rolling stock. The amalgamation of railway companies which in 1854 created the North Eastern Railway brought more work to the locomotive and carriage shops, and in 1855 improvements were made to the latter. The Queen Street site, however, lacked potential for expansion, proved increasingly inadequate, and in 1865 the North Eastern Railway decided that a new wagon works was needed to replace the outmoded facilities there. The new Wagon Works was opened in 1867 on a site north-west of the Queen Street workshops and on the north side of the then main railway line from York to Darlington.⁴ It was enlarged in 1875, bringing the site up to 16 acres, of which four were occupied by buildings.⁵ An indication of the scale of work at this time is given by the fact that in 1876 the York Workshops built 102 carriages and 2,387 wagons, and repaired 419 engines, 2,865 carriages and 22,185 wagons.⁶

The decision of the North Eastern Railway in 1880 to concentrate more carriage construction in York led to the construction of a new Carriage Works immediately opposite the Wagon Works, on a site on the south side of the railway lines. Tenders were accepted in 1880, 1882 and 1883, and the Carriage Works opened in 1884,⁷ and staff lists survive for this from this year.⁸ Many of the successful tender drawings survive.⁹ The construction of purpose-built Wagon Works and Carriage Works on sites with room for expansion reinforced York's established position as a centre for this work.

³ C Feinstein, 'Population, occupations and economic development, 1831-1981' in C Feinstein (ed), *York 1831-1981. 150 Years of Scientific Endeavour and Social Change* (York, 1981), 129.

⁴ This railway line became a by-pass line after the new railway station and its associated new main line was opened in 1877.

⁵ Appleby 1993, 54, 57; Feinstein 1981, 129.

⁶ BREL, *BREL York Works Open Day 15th September 1984. Souvenir Programme* (York, 1984), 9.

⁷ Victoria County History, *A History of Yorkshire. The City of York* (London, 1961), 270; K Hoole, *The Railways of York* (Clapham, 1976), 50; BREL 1984, 9.

⁸ C Myler, *The Life and Times of York Carriage Works. 1884-1995* (1995), 13.

⁹ A small number of these drawings were seen on site in 1995, when it was the intention to deposit them with the National Railway Museum, York. All these drawings, and many more, survive on reels of 70mm microfilm which are held by Railtrack London North Eastern at their York Records Centre. They are referred to in the footnotes below as Railtrack, York Records Centre, followed by the reel number and frame number(s). These references are not always exhaustive, and at times quote only some of the relevant drawings appearing on the appropriate reel.

The removal of wagon and carriage repair and construction from the works in Queen Street made it possible for those buildings to be used solely as a Locomotive Works. The York Works had never been a centre of locomotive building, only a handful of locomotives actually being built there, but locomotive repair work continued. In due course, with accommodation cramped, little room left for expansion, and a large new erecting shop completed at Darlington North Road Works in 1903, the North Eastern Railway decide to close the York locomotive workshops operation and transfer activities to Darlington. This took effect in 1905.¹⁰

The principal buildings of the Carriage Works which opened in 1884 were a lodge, offices and stores, smiths shop, paint shop, two carriage building and repair shops, a saw mill and machine shop, and a timber-drying shed. The site had few facilities for its workforce, but this was remedied in 1887-88 by the construction of a mess room close to the entrance form Holgate Road.¹¹ In 1889-90 a standing and washing shed for carriages was built, but otherwise the site underwent few alterations until a major programme of work, intended to enable the construction of larger carriages, was carried out at the end of the 1890s. The North Eastern Railway had been one of the earliest railway companies to take six, not four, wheeled coaches as their standard for main line trains, but they did not maintain their advantage. At the beginning of the 1890s, long after clerestory bogie coaches were universal on the Great Western Railway and common on the Midland Railway, the North Eastern Railway held to their antiquated pattern of short and not very roomy coaches in which a lavatory was an exceptional luxury and an eight-wheeled coach was a thing unknown. By the end of the 1890s, however, eight-wheeled coaches with clerestory roofs were almost invariable on the main line expresses of the North Eastern Railway and were fast becoming the prevailing type on cross-country lines.¹² The re-equipping and enlargement of the York Carriage Works which was necessary to enable these coaches to be built was made possible by a massive building programme and by the purchase of the cranes needed to lift the longer carriages. The purchase of the cranes was authorised in 1896 and 1898,¹³ and the building work, which involved the extension of most of the existing shops as well as the construction of new ones, was carried out to tenders submitted between December 1897 and October 1899.¹⁴ The most popular vehicle built in the enlarged Works was the eight-wheeled bogie coach, and in the early 1900s rolling stock for the North

¹⁰ Hoole 1969, 40, 49-50; Appleby 1993, 54-57.

¹¹ Railtrack, York Records Centre: 121/179-80.

¹² W J Scott, 'North Eastern Coaching Stock', *The Railway Magazine*, 5 (July-December 1899), 79-80.

¹³ BREL 1984, 9.

¹⁴ Railtrack, York Records Centre: 121/89 and other drawings.

Tyneside Electrification Scheme was constructed there prior to the inauguration of the service in 1904. Other vehicles built at this period included saloons powered with petrol and petrol-electric systems, as well as a number of railcars and char-a-bancs. In 1906 the first transverse built sleeper cars were built for the London-Edinburgh service, and in 1909 a Royal Saloon for the King and Queen.¹⁵ The importance of the York Carriage and Wagon Works to the North Eastern Railway at the beginning of the 20th century is indicated by the number of people it employed in building and repairing carriages and wagons there, namely 1,879, compared with 988 at Shildon and 312 at Walker Gate and elsewhere.¹⁶

The extent and use of the buildings forming the Carriage Works is known from a guide, whose site plan is dated 1906, produced for official visits to the Carriage and Wagon Works in York.¹⁷ This guide records that the Carriage Works then occupied an area of slightly over 45 acres, including over 13 acres of roofed buildings. It built the whole of the carriage stock of the North Eastern Railway, carried out the greater part of the repairs necessary to keep the vehicles in running order, and built and maintained a considerable portion of the East Coast Joint Stock and Great Northern and North Eastern Joint Stock. About 2,050 men, women and boys were employed, and the Works was capable of turning out one bogie carriage per day in a process which took the ironwork from its raw state and the timber from the log.¹⁸

The history of the Carriage Works in the 20th century was one of adaptation to changing requirements, with only a limited amount of new building work. During World War I the Works turned out road and rail wagons for war use, including tank-carrying vehicles and water tank carriers, and government contracts were also undertaken during World War II.¹⁹ The position of the Carriage Works was strengthened after the Grouping in 1923 when, arising from the 1921 Railway Act, the railway companies in the country were formed into four main groups. In 1923 the North Eastern Railway, along with five others, became part of the London & North Eastern Railway (LNER), and the whole of the coaching stock fleet of the company's North Eastern Area became York's responsibility.²⁰ The development of the LNER's Gresley type rolling stock was undertaken in York, and in 1928 the method

¹⁵ BREL 1984, 9.

¹⁶ J Russell, 'The Gateshead Locomotive Works and some locomotives of the North-Eastern Railway', *The Railway Magazine*, 11 (July-December 1902), 34.

¹⁷ North Eastern Railway, *Visit to the Carriage and Wagon Works, North Eastern Railway, Holgate, York* (no date, c1906).

¹⁸ North Eastern Railway c1906, 3.

¹⁹ BREL 1984, 9-10; Appleby 1993, 57.

²⁰ Appleby 1993, 11, 57.

of manufacturing coach bodies changed from piece-by-piece construction in one area until complete, to a sectional building method where major parts of a coach body were produced separately in sections on benches and then transferred to erecting gangs who completed the vehicle body in an erecting area. This system was retained into the 1930s when the Works' manager, Mr A H Peppercorn, pioneered a new progressive system of building, laying down all the vehicle bodies at one point and progressively moving them forward at regular intervals, passing through seven successive construction stages until emerging complete except for final painting and varnishing.²¹

On 15 December 1944 the main Carriage Building Shop was destroyed by fire, but it was rebuilt to drawings approved towards the end of 1945²² as a new shop designed and equipped for the progressive construction of new vehicles. It was claimed on its completion to be the finest workshop of its kind in the country. Work continued on traditional coaching stock designs until the mid 1950s, but after 1958 it tended to specialise in the construction of electrical multiple units. Modernisation and reorganisation was undertaken between 1965 and 1967 at a cost of £976,000. The 1968 Transport Act established British Rail Engineering Limited (BREL) as a wholly owned subsidiary of British Rail, but on 1 January 1970 it commenced trading in its own right, working for British Rail and for outsiders. The York Carriage Works became BREL's York Works, and in 1985-6 they became part of a separate construction business along with two Works in Derby and one in Crewe. Privatisation saw the four works sold in 1989 as a single unit to Asea Brown-Boveri and Trafalgar House and trading as BREL Limited. Trafalgar House later sold its holding to its partner who on 2 September 1992 changed the corporate name to ABB Transportation.²³ The Works closed in December 1995.²⁴

The buildings²⁵

York Carriage Works was built at Holgate, on the outskirts of York, on fields on the south-west side of the by-pass line to York station. The Wagon Works were on the north-east side of this line which, until the opening of the new railway station in 1877 and the reorganisation of the tracks, had been the main railway line from York to Darlington. With the main line diverted to the

²¹ BREL 1984, 9; Appleby 1993, 57.

²² Drawings for reconstructing gables (Railtrack, York Records Centre: 121/283-4) were approved late in 1945, one of them on 11 October 1945.

²³ BREL 1984, 10-11; Appleby 1993, 57-8.

²⁴ *Yorkshire Evening Press*, 22 December 1995.

²⁵ Full use has been made of the tender drawings which survive for the Carriage Works (see above), but old photographs held by the National Railway Museum, York, have not been consulted. A number of photographs are included in Myler 1995.

north, the area close to the two works developed into an extensive yard for goods and mineral wagons, with tracks serving the existing Wagon Works and the new Carriage Works.

The original buildings of 1880-84

York Carriage Works was built in 1880-84. The earliest contract located is dated 9 September 1880, when tenders totalling £10,084 were accepted for carriage building shops and a paint shop; further new shops costing £10,962 were authorised in March 1882, and costing £56,000 in August 1883.²⁶ The extent of the principal buildings is shown on a plan, probably of 1883²⁷ (Fig 2), and the site as a whole, with a few early additions, appears on the Ordnance Survey map surveyed in 1889²⁸ (Fig 3).

The Carriage Works was purpose built and self contained. Access for the workforce was from the south, off Holgate Road, past the lodge (Building 1; see Block Plan, Fig 1) to a tightly-knit group of buildings which formed the works proper and was serviced by railway tracks from the north west. These buildings comprised offices and stores (Building 2), a smiths shop and spring shop (Building 3), paint shop (Building 4), a pair of carriage building and repair shops (Buildings 5 and 6) separated by a combined saw mill and machine shop (Building 7), and a timber-drying shed (Building 8) with a fire engine house (Building 9) beyond. The sequence of construction is fairly clear, principally on the evidence of the tender drawings. Roundels reset in the heightened gable ends of the offices (Building 2) bear the date 1881, but this must commemorate the start of building work on the site, since the actual designs for the offices and stores are dated 10 August 1883,²⁹ as are drawings of Building 3.³⁰ Building 4 presents an outside wall to Building 5, and the two buildings are dated to 1880 and 1882 in later annotations on the plan of about 1883³¹ (Fig 2). There are also drawings dated August 1883 for a service bay across the south-east end of these two buildings.³² Drawings

²⁶ Hoole 1976, 50.

²⁷ Railtrack, York Records Centre: 121/89.

²⁸ Ordnance Survey, 25 inch, Yorkshire, Sheet CLXXIV.6,10, surveyed 1889, published 1892.

²⁹ Railtrack, York Records Centre: 121/134-6, 197-99, 265-66.

³⁰ Railtrack, York Records Centre: 121/133, 192-3.

³¹ Railtrack, York Records Centre: 121/89

³² Railtrack, York Records Centre: 121/120-21.

of this date also survive for Building 6³³ and Building 7,³⁴ and Buildings 7 and 8 are also annotated as dating to 1883 on the plan of about 1883.³⁵ Most of the tender drawings dated to August 1883 are signed by Kele & Chambers, but those relating to Building 6 are signed by Samuel Barrel & Co., The Teeside Iron and Engine Works Co. Ltd. No other company names are recorded.

The lodge (Building 1) (Fig 9), as befits its position and use, has slightly more architectural elaboration than most buildings on the site. Two storeys high with attics, it is a brick building, T-shaped in plan, with coved eaves and a hipped, Welsh slate roof with pedimented dormers front and rear. A first-floor band, three courses deep, the middle course of bricks set in a saw-tooth pattern, runs round most of the building. Apart from a bay window to the ground-floor front room, the original door and window openings have brick camber-arch heads, the windows with stone sills and hung sash frames whose upper lights have small panes. The front door opens into a combined entrance and stair hall with a moulded cornice. A passage leads off to the rear. There are two rooms to the left, that to the front (now reached only from the back room) with a moulded cornice, and one to the right. The stairs, with an open string and shaped cheekpieces, the balustrade boarded in, rise with a half landing to a first floor with three rooms, all of them plain. Doors throughout are of four panels with moulded architraves; all chimneypieces have been removed. A door off the half landing of the stairs runs steeply up to the attics where there are three main rooms.

The stores and workshops (Buildings 2-7), as far as they have survived later alteration and demolition, are all built in a similar style. With the exception of the offices across one end of Building 2, and of the timber-drying shed (Building 8), they are gabled, largely single-storeyed buildings of brick, all originally with Welsh slate roofs. The walls are of pier-and-panel construction, the recessed panels having double chamfered brick sills and dentilled heads under an overall dentilled eaves course. The original gable ends, which now survive only on Buildings 2, 3 and 7, have shaped kneelers, coping and apex blocks which are of stone. The recessed panel within each gable has the appearance of a tympanum with stepped brick slopes and a central circular window. The wide door and window openings all have segmental-arched brick heads with stone springers set under a flush, blue brick band. The windows, of timber with small-pane glazing, have cast iron sills. In addition to these windows, light also came from skylights along virtually the full length of most roofs, while ventilation came from ventilators running the full length of the ridge.

³³ Railtrack, York Records Centre: 121/93-4.

³⁴ Railtrack, York Records Centre: 121/125-6, 132, 168.

³⁵ Railtrack, York Records Centre: 121/86.

Building 2 (Fig 14) was built as a combined offices and stores. The offices, across the north-east end, were originally two storeys high. Stone roundels bearing the date 1881, in the gable ends of the added second floor, are reset from the original gables, their keyed-in circular surrounds being shown on the original design for the building (see below). The date, as noted above, must mark the beginning of construction work on the site, since the surviving designs of the offices and stores are dated 10 August 1883.³⁶ The offices, 11 bays long by 3 bays deep, are of brick with stone detailing, the latter including the plinth and window sills. Ground-floor openings have segmental-arched brick heads with stone springers, those on the first floor rectangular stone lintels chamfered to the opening. Flush, blue brick bands enliven the elevations, and there is also a first-floor band repeating the form of that on the lodge. There were originally three external ground-floor doors, two in the north-west gable wall and one in the middle of the north-east wall. Two of these doors were converted into windows in 1899 (see below), but the door in the north-west gable wall, next to the junction with the stores, remains and leads into a stairhall from which corridors run along the rear of the offices on both ground and first floors. The stairs, which rise with a half landing, have an open string with shaped cheekpieces, a balustrade (now boarded-in) and a swept handrail. A series of individual rooms of various sizes open off the corridors, and from the ground floor there was also access to the stores. Drawings dated 10 August 1883 include plans which show the original layout and use of the rooms.³⁷ On the ground floor, from the north-west end, the rooms were an office for the time boards, a time keepers office, pay office, messengers waiting room, a passage leading from the outside door to the internal corridor, the store keepers room, and across the south-east end a store and a lavatory and urinal. On the first floor there was a drawing office, rooms for the chief clerk, superintendent, chief clerk, a clerks office and, as on the ground floor, a store and a lavatory and urinal across the south-east end.

The stores, which form the principal part of Building 2, occupy a single-storeyed, double-gabled range 12 bays long by 6 bays wide. Its brick walls are of pier-and-panel construction, of the form noted above, the side walls with two windows (several since converted to doors) in each wide panel, the end wall with two wide doorways each flanked by windows, the latter in individual recessed panels. The two end doorways, with stone blocks in their jambs for the hinge pivots which supported the original doors, were each designed to take a single standard gauge railway track which ran the full internal length of the stores. Turntables immediately outside the building enabled wagons to be turned to enter and leave it. Inside, the stores were divided into two parts. The first four bays, specifically called the 'Iron Store' when first built (Fig 2), were open the full height and full width of the

³⁶ Railtrack, York Records Centre: 121/197-98, 265-66.

³⁷ Railtrack, York Records Centre: 121/197-98.

building, a single central cast iron column supporting the valley gutter between the two roofs. Beyond a brick cross wall the inner eight bays, called the 'Stores' had ground and first floors, the latter rising into the roof. On the ground floor, five rows of three cast iron columns with octagonal plinths, circular shafts and flanged capitals support the longitudinal rolled girders which carry the floor above. The first floor, an open area with four trapdoors through to the ground floor and five hoppers to cast light into it, was itself lit from rooflights.³⁸ Its roof is carried on ten triangulated metal trusses with tie-beams in three lengths, the middle one raised. Each truss has principal rafters formed from back-to-back angle iron, a tie-beam, king rod and struts all of round-sectioned iron, and two further short struts per side, one fish-bellied in section with bars linking the two curved side plates, the other straight and formed from two back-to-back rectangular-sectioned bars. One of the original designs for the building³⁹ shows that the four-bay long 'Iron Store' housed three racks, one for steel and two for bar iron. The longer 'Store' contained five oil tanks, shelves for varnish cans, racks for leather and for nuts and bolts, a store keepers office and, close to one side, a long counter from which materials were no doubt issued.

Building 3 (Fig 12) is a single-storeyed, double-gabled building whose north-west range was built as the smiths shop and south-east range as the spring shop (Fig 2).⁴⁰ Its brick walls are of pier-and-panel construction, the side walls 18 bays long (all openings were originally windows, with two per wide panel), the gable walls each having a wide central doorway flanked by blind panels. Inside, the two halves of the building are separated by a spine wall pierced by 18 round-headed openings. The smiths shop originally had 17 hearths or furnaces down each side, each with its own chimneystack (Fig 13),⁴¹ and in the centre there were two, five hundredweight anvils and a steam hammer. The central row of chimneystacks each had two flues, but only six of these originally served a function in the spring shop, two of them for furnaces built against the spine wall, and two pairs serving the spring furnace and tyre furnace which were freestanding features. As well as these furnaces, the plan of the spring shop shows three bolt machines, a nut machine, a Ryders Hammer, and a cluster including a boiler, a furnace for heavy forging, a ten hundredweight steam hammer and an anvil. Both ranges have identical triangulated metal roof trusses in which the tie-beam is formed from back-to-back angle iron, while the principal rafters and both pairs of raked struts are T-shaped in section. Round-sectioned rods are used for the central vertical rod and for the single uprights on each side.

³⁸ Railtrack, York Records Centre: 121/198.

³⁹ Railtrack, York Records Centre: 121/197.

⁴⁰ Railtrack, York Records Centre: 121/133, 192-93.

⁴¹ These and the other chimneystacks on the building have all been taken down and the hearths cleared away. See Myler 1995, 102 for an external photograph.

Building 4 was built as the paint shop, with Building 5, a carriage building and repairing shop, added along its south-west side (Fig 15), and a one-bay deep service end built across the south-east end of both, all within the years 1881-84. Building 4, as initially built, was a single-storeyed, double-gabled shop, 13 bays long and 6 bays wide. The north-west gable wall was lost on extension, and that to the south-east was demolished later, but the 13-bay long side walls survive. These walls are of pier-and-panel construction, of the form noted earlier, with a single wide opening in each panel. There were originally three doorways in each side wall, sited in the central bay and in the third bay in from each end; the other bays had windows. The north-west gable wall had six doorways, each taking an individual railway track which ran the full length of the shop. Inside, a central row of 12 cast iron columns, in form like those in the stores, support a girder with a lattice-work web which in turn carries the triangulated metal roof trusses and central valley gutter (Fig 18). The roof trusses, one at each column and two in each bay, are similar to those in Building 3 but have two uprights on either side and three pairs of raked struts.

Building 5, a carriage building and repairing shop, was rebuilt after burning down in 1944. As first built, however, it is likely to have been identical to the adjacent paint shop, against which it was built,⁴² in all its details. The main shop, single-storeyed and double-gabled, 13 bays long and 6 bays wide, has a central row of columns supporting the valley gutter. The doors and windows in the side wall repeated those of the paint shop, the gable openings each taking a standard gauge railway track which ran the full length of the shop.

The service end (now demolished) was built across the south-east end of Buildings 4 and 5 after they had been built. The designs⁴³ show a building one-bay deep and 12 bays long, the longer elevation with four gables run in continuation with those of the shops behind. The service block was two storeys high. The ground-floor part associated with the paint shop contained a paint and oil store, while that next to the carriage building and repair shop housed a coach trimmers' shop. Both had doors into the main shop and stairs up to the first floor. In the centre of the ground floor there was a single-bay boiler house.

Building 6, the second carriage building and repairing shop of the original Carriage Works, was similar to the other one in plan (Fig 2) and no doubt also in appearance. This second building originally had a single-storeyed, double-gabled shop, 13 bays long and 6 bays wide, with a service end which has since been demolished. The surviving 13-bay long side walls represent the full length of the original shop, and their pier-and-panel construction is

⁴² The south-west side wall of the paint shop has all the detailing of an external face.

⁴³ Railtrack, York Records Centre: 121/120-21.

like that noted elsewhere. The door and window openings repeat those in the other shop, although the central doors are considerably wider and are spanned not by segmental arches but by girders. The north-west gable wall, taken down when the shop was extended, had six doorways, each taking a railway track the full length of the shop.⁴⁴ Inside, the central row of cast iron columns, the girder and the triangulated metal roof trusses (Fig 20) are similar to those in Building 4. The ground floor of the service bay across the south-east end was exactly like that of Building 4, having a boiler house and coach trimmers' shop, with stairs to the first floor in the latter room.

Building 7 survives for its full, original length, although it has been extended. Set between the two carriage building shops, the 15-bay long building housed the saw mill (also called the wood machinery shop) at its north-west end, the machine shop with its lathes, etc., at the south-east end, and a boiler house, saw sharpener and tool shop in the two bays between (Fig 16). The original building, like the other shops, was single-storeyed and double-gabled with brick walls of pier-and-panel construction. The 7-bay long saw mill, with opposed doors at its innermost end, had five wide openings in its now demolished gable-end wall,⁴⁵ an arrangement repeated in the end wall of the extension. A timber gantry, covering a travelling crane, was set in front of one of the ranges. Inside, the central row of cast iron columns, the girder and the roof trusses (Fig 19) repeat the form of those in Building 6. Power for the machinery was derived from a small steam engine in the boiler house, and was delivered through a basement beneath the main working floor.⁴⁶ The 6-bay long machine shop has two wide doorways in its gable end wall, and opposed doors off-centre in its side walls. Inside, a row of five cast iron columns supports girders with solid webs and metal roof trusses. The trusses differ from those in the tender drawing of August 1883,⁴⁷ and the columns have brackets immediately below their capitals to support line shafting. No drawing has been found showing power being produced for the machinery here, and it is possible that the surviving structure represents a late change to the original plans. The roof is of tie-beam form with pairs of raked struts rising in opposite directions. The tie and principal rafters are T-shaped in section, the former made from back-to-back angle iron, while the struts rising towards the apex are flat bars, those away from it being fish-bellied with internal links. The site plan of 1899 (Fig 4) shows the central area of Building 7 occupied by a boiler house, engine house and tool store, not the arrangement shown on the plan of about 1883 (Fig 2). Again, this could be a late change of plan. Its roof has timber queen-post trusses.

⁴⁴ Railtrack, York Records Centre: 121/91.

⁴⁵ Railtrack, York Records Centre: 121/91.

⁴⁶ Railtrack, York Records Centre: 121/125-6, 151.

⁴⁷ Railtrack, York Records Centre: 121/132.

Building 8, a freestanding building north west of the saw mill and now demolished, was a timber-drying shed. It was a tall, double-gabled structure, 9 bays long, with a central row of columns and supports for a traverser in each range. It was timber framed, its outer walls weather-boarded.⁴⁸ Its roof was like that in Building 6.

Building 9, a fire engine house shown beyond the timber-drying shed on the 1889 map (Fig 3), was probably one of the original buildings. An undated drawing⁴⁹ shows it as a single-storeyed, two-bay long gabled building with the standard gauge railway track entering one end. It was evidently of brick but was demolished, and a successor built elsewhere on the site, at the very end of the 19th century.

Additions in the late 1880s and early 1890s

The first additions to the Carriage Works were a mess room for the workforce and a time office, both built close to the site entrance from Holgate Road, and a carriage standing shed and washing shed some distance away from the main works.

Tender drawings for the mess room (Building 10) were submitted in October 1887 in the name of Robert Kitching,⁵⁰ and it was probably built in 1887-88. The building, as completed, was a gabled, single-storeyed structure, 7 bays long by 3 bays wide, with brick-built walls of pier-and-panel construction and a Welsh slate roof (Figs 9, 10). The detailing of the building broadly copies that of the original buildings, minor differences including stone rather than cast iron window sills, and tripartite timber mullioned and transomed windows with central, upper hoppers. The interior of the mess room has been altered and a suspended ceiling inserted. The tender drawings of 1887 show that to the left and right of the entrance in the centre of the south-east wall were a pair of serveries, each with a cooking range, table, sink and counter, with heating apparatus in the bay beyond the servery to the right, and a lavatory beyond that to the left. The rest of the interior was occupied by two long rows each of 20 fixed tables with benches down each side. The roof, which had three individual conical ventilators on its ridge, two of which survive, has triangulated metal trusses with tie-beams raised in the centre and with raked struts. The principal rafters are T-sectioned, the three-part tie and the struts which rise towards the apex of the truss being of round-sectioned iron, the struts which rise away from the apex being rectangular in section.

In 1889-90 a carriage standing shed and washing shed (Building 11) was built towards the extreme north-west end of the Carriage Works site. The tender

⁴⁸ Railtrack, York Records Centre: 121/148-50, 215.

⁴⁹ Railtrack, York Records Centre: 121/191.

⁵⁰ Railtrack, York Records Centre: 121/179-80.

drawings, signed by T P Barry, are dated of 18 September 1889,⁵¹ and construction began later that year since the building is shown in outline on the Ordnance Survey map (Fig 3) which was revised that year. The drawings show a 20-bay long, 9-bay wide structure with ten individual ridge ventilators. Now demolished, the standing shed was a double-gabled building with a central row of columns. Four lines of railway track ran through each range. A mess room and a boiler house were attached to the south-west side of the building, while a gabled, single-bay washing shed ran the full length of the south-east side. Roofs had triangulated metal trusses with tie-beams raised in the centre and with raked struts.

A time office (Building 12) was built in the early or mid 1890s close to the entrance from Holgate Road. The building does not appear on the 1889 Ordnance Survey map, and though no original tender drawings have been located, those for its extension, which are dated 5 April 1899,⁵² survive. The original time office, incorporated in the south-west corner of the enlarged building, was a single-storeyed brick building two bays wide by three deep with a door and window facing the site entrance (Fig 11). Openings have segmental brick heads with stone springers. The clock over the middle side window is shown on the 1899 drawing.

At some time between 1884 and 1889 the offices (Building 2) were altered. A strong room and lavatory were created at the south-east end of the ground floor with a spiral staircase into an enlarged general office on the first floor above. Additional first-floor space was also created by building three rooms out into the stores, namely two storerooms flanking a messengers room and, opening from the general office, a further storeroom.⁵³

Major expansion, 1897-1900

The major programme of extension at the Carriage Works between 1897 and 1900 was carried out to enable the North Eastern Railway to build the new, larger coaches it had come to require. The increase in the length of coaches from 34 feet to 60 feet not only created problems with the inadequate size of the existing buildings but, from an economical and a safety point of view, it also posed problems with the lifting of the coaches. The company's response was to enlarge most of the existing workshops, as well as to build new ones, and to purchase necessary new equipment. In 1896 the Directors authorised the purchase of electrically-powered overhead cranes at a cost of £22,363, and

⁵¹ Railtrack, York Records Centre: 121/79-82.

⁵² Railtrack, York Records Centre: 121/203-4.

⁵³ An undated drawing survives for the ground-floor alteration (Railtrack, York Records Centre: 121/200); plans of 1883 (see above) show the original room disposition, while others of 1899 (see below) show the altered arrangements.

a further expenditure of £64,000 in 1898.⁵⁴ At the same time new building work was planned, and between 15 December 1897 and 19 October 1899 a series of tenders were submitted for contracts for the phased extension of the Carriage Works. A plan relating to the last contract, but annotated to show the earlier ones, survives, (Fig 4),⁵⁵ as do many of the tender drawings (see below).

The first tenders were not approved until January 1898,⁵⁶ and the actual building programme, which involved changes of use for some of the original buildings, therefore took place between 1898 and 1900. The sequence of construction appears to have been as follows. Tenders submitted on 15 December 1897 were for the lifting shop (Building 13), the extension of the repairing shop (Building 6a), and the construction of a boiler house in the south corner of Building 5, its chimney attached to Building 7 whose boiler house it also served. Tenders of 15 December 1898 were for the extension of the saw mill (also called wood machinery and saw shop) with a gantry (Building 7a) and the construction of a frame shop (Building 14). Tenders of 5 April 1899 were for heightening the offices (Building 2) and extending the time office (Building 12a), of 3 May 1899 for extending the paint shop, varnishing shop and building shop (Buildings 4a and 5a; the latter represented the subdivision of an original carriage building and repair shop), constructing a brake shop (Building 15) and extending the timber-drying shed (Building 8a), of 19 October 1899 for a gas shop and store (Building 16), a new fire engine house (Building 17), boiler house (Building 18), small timber shed (Building 19), hair teasing shed (Building 20) and a carriage breaking-up shed (Building 21). The contractor for the tenders dated 5 April 1899 was T P Barry, but all the others were awarded to R Blackett & Son.

The lifting shop (Building 13) (Fig 17), as completed, had a single-storeyed, triple-gabled shop with a two-storeyed stores block, later demolished, across its south-east end.⁵⁷ Both buildings were of brick with Welsh slate roofs, the roof over the stores being hipped. The surviving 16-bay long side walls represent the full length of the original shop, and their detailing is similar to the earlier buildings. The walls are of pier-and-panel construction, the panels having low sills and dentilled heads which were close to the wall head, which lacked a separate eaves course. The walls had opposed doors towards each end and a door in between in the south-west wall. The wall across the north-west end of the shop had three gables, each with a recessed panel with

⁵⁴ BREL 1984, 9.

⁵⁵ Railtrack, York Records Centre: 121/89.

⁵⁶ Railtrack, York Records Centre: 121/112, 114 and 139, for the lifting shops, are among the tender drawings submitted for 15 December 1897 and annotated 'Approved Jany 6th 1898'.

⁵⁷ Tender drawings include Railtrack, York Records Centre: 121/110-14 and 139-44.

straight, not sloping sides, and a circular window. Under each gable were two, wide, segmental-arched openings, all since replaced by wider openings. Inside, the lifting shop is divided by three rows of cast iron upright piers, called stands on the tender drawings, which support longitudinal lattice girders and the metal roof trusses (Fig 21). The triangulated metal trusses have principal rafters and pairs of raked struts of T-sectioned iron, the tie-beams and the central and side uprights being of round-sectioned iron. A short post rises from the apex to support the ridge of the long ridge ventilator. Brackets on opposing sides of the piers, at about their mid-height, in conjunction with cast iron piers bolted to the side walls, carried the girders along which traversers ran down each bay.⁵⁸ The stores block was two storeys high and six bays long by one deep. A detailed design⁵⁹ shows it to have had undivided ground and first floors for use as stores and trimmers shop respectively, the latter linked by a gangway to the service end of the workshop to its north east. The roof was hipped and had metal roof trusses of raised tie-beam form.

The repairing shop (Building 6a), saw mill (Building 7a) and the paint, varnishing and building shops (Buildings 4a, 5a) were all extended to the north west by three bays,⁶⁰ their new end walls built in line with that of the newly-built lifting shop (Building 13). The extensions were all carried out by taking down the original gable-end walls and extending the internal row of columns and roofs. The detailing of the new work closely followed that of the primary build, with only minor changes in detailing, such as brick rather than cast iron sills to the windows of Buildings 4a and 7a (Building 5a was rebuilt after a fire in 1944). The copying of detail included repeating the stepped inner slope to the gables, rather than the even slope adopted for the new lifting shop, (Building 13). The saw mill, which had a gantry projecting from one of its ranges, had five wide openings with flat heads formed by girders, but the other extensions all had segmental-arched brick heads. This difference in form reflected the need to move substantial baulks of timber into the saw mill, in contrast to the more regular shape of coaches. The gantry which projected from saw mill was the old timber gantry refixed.

The frame shop and wheel shop (Building 14) and the brake shop (Building 15) were each created by roofing over the space between existing buildings. The frame shop and wheel shop (Building 14),⁶¹ infilled between the repair

⁵⁸ The tender drawings use the term 'traverser girders' when referring to the supports for the traverser, i.e. the overhead crane.

⁵⁹ Railtrack, York Records Centre: 121/114.

⁶⁰ Tender drawings include Railtrack, York Records Centre: 121/113, 169 for Building 6a; 121/127-8, 159-61 and 164 for Building 7a; 121/95, 117, 137, 145 and 165 for Buildings 4a and 5a.

⁶¹ Railtrack, York Records Centre: 121/131, 162-3.

shop (Building 6/6a) and the saw mill, etc. (Building 7/7a), were originally divided from each other by a cross wall with a sliding door. The space created is roofed by a series of triangulated metal roofs. The principal rafters and tie-beams are T-sectioned, the latter formed from back-to-back angle iron, with pairs of raked struts rising towards the apex of rectangular-sectioned iron, and pairs rising away from it fish-bellied with internal links. The form of the roof is largely as shown in the tender drawings, although some of the detailing is different. The building has been shortened at its south-east end, but the original plain gable, with a circular window over a pair of wide, segmental-arched openings for railway tracks, survives to the north west. The brake shop (Building 15), infilled between the repair shop (Building 6/6a) and the lifting shop (Building 13), has been shortened at its south-east end. Much of the interior is hidden by later insertions, but towards the north-west end a number of metal roof trusses with tie-beams raised in the centre can be seen. The principal rafters and the single set of struts which rise away from the apex are of angle iron, the tie and set of struts rising to the apex being of bar iron. The north-west end wall is noted on the tender drawing⁶² as 'corrugated iron bolted to end principal'; the present gable wall is of modern brick.

The gas fitting shop and store (Building 16) (Fig 22),⁶³ was built along the south-west boundary of the site with its north-west end in line with the main block of workshops. It was a single-storeyed, L-shaped, double-gabled building of brick which repeated the pier-and-panel construction of the contemporary lifting shop (Building 13). The gas fitting shop occupied the 10-bay long range which opened internally into a shorter 4-bay range housing the stores (Fig 23). The valley gutter between these two ranges is supported on a row of three cast-iron columns which carry a lattice girder. The metal roof over both ranges has trusses like those over the brake shop (Building 15), but with an additional set of raked struts to span the greater width. Two standard gauge railway tracks originally ran the full length of the main range, entering through segmental-arched openings in the end wall.

The timber-drying shed was doubled in length by an addition (Building 8a) at its north-west end. This was double gabled, in continuation of the original shed, was supported on cast iron columns, and had outer walls which were timber framed and weather-boarded. The central row of columns had cast-in brackets which, in conjunction with supports down the side walls, carried traversers (overhead cranes) along both ranges. The triangulated metal roofs were of tie-beam form with raked struts and uprights.⁶⁴ The building has been demolished.

⁶² Railtrack, York Records Centre: 121/115.

⁶³ Railtrack, York Records Centre: 121/174-6.

⁶⁴ Railtrack, York Records Centre: 121/166-7, 170-71, 188-9.

The extension of the timber-drying shed involved demolishing the original fire engine house (Building 9), necessitating the construction of a new one, Building 17, close to the south-west side of the lifting shop where a boiler house, Building 18, was also built.⁶⁵ Other small ancillary buildings erected close to the timber-drying shed were a timber shed (Building 19) and a hair teasing shed (Building 20), both with weather-boarded timber frames and metal roof trusses. All these buildings have been demolished.

The expansion of the Carriage Works made it necessary to enlarge both the offices and the time office. The offices (Building 2) were heightened by the addition of a second floor.⁶⁶ This was eleven bays long by three deep, and was built of brick with stone sills and lintels, its gables each having a roundel dated 1881 reset from the original gables (Fig 14). The added floor was reached from a continuation of the original staircase in the corner of the building. A three-bay office for piece-work clerks was situated next to the staircase, the remainder of the floor being occupied by a seven-bay long drawing office with a small office and lavatory between it the two. A printing office was built out over the stores, reached from the drawing office. At the time of heightening the two doors in the long ground-floor wall were blocked and converted to windows.

The time office, as extended (Building 12a), was a two-storeyed building of brick, 7 bays long by 4 wide (Fig 11).⁶⁷ Doors and windows have segmental-arched brick heads and stone sills, and flush blue brick bands run level with the top and bottom of the windows. The ground floor included a gatekeeper's room, time office, board room, strong room and store, as well as an ambulance room reached only from outside. The first floor had two main rooms, a piece work office and time clerks' office.

The principal addition in the yard which led to the Carriage Works was of a carriage breaking-up shed (Building 21) close to the existing carriage standing and washing shed. The new shed, now demolished, was a 10-bay long building with a roof with a curved outer profile supported by steel stanchions.⁶⁸

Additions and alterations during the 20th century

The major expansion of the Carriage Works between 1897 and 1900 was rounded off in the few years after 1900 by a series of additions which are not shown on the 1899 plan (Fig 00) but are on that of 1906 (Fig 00). Most of

⁶⁵ Railtrack, York Records Centre: 121/83.

⁶⁶ Railtrack, York Records Centre: 121/201-2.

⁶⁷ Railtrack, York Records Centre: 121/203-4.

⁶⁸ Railtrack, York Records Centre: 121/78, 116.

these were small scale, among them a polishing shop added to the side of the paint shop (Building 6/6a), a saw sharpening shop added to Building 7/7a, probably as a result of alterations to the central area of the building, and a rear addition (Building 10a) to the mess room. This addition, a single-storeyed, gabled brick structure, was required to cater for the much enlarged workforce. The tour notes accompanying the 1906 plan describe the whole building as the workmen's dining room, capable of seating 1,350 men.⁶⁹ An additional workshop, the rully shop, for the building and repairing of various types of road vehicle, platform barrows, etc.,⁷⁰ was built in 1904 by John Wilson and Sons to tender drawings dated 1 December 1903.⁷¹ It was created by adding a single-storeyed, gabled brick range (Building 22) along the south-east side of the smiths shop (Building 3) (Fig 12). Eighteen bays long by three bays wide, the pier-and-panel construction of the building follows the style of the lifting shop and gas fitting shop (Buildings 13 and 16). The side wall has two windows in each panel, while the gable walls each have a wide, central doorway between windows, all with segmental-arched brick heads. The triangulated metal roof is of tie-beam form with principal rafters and struts of T-section, the latter of back-to-back angle iron, and uprights of rounded-section iron. At the same time as the rully shop was built, a men's convenience, a single-storeyed, gable brick building was built between it and the time office.⁷²

In July 1909 a tender was submitted by W Bellerby for a twelve and a half bay long extension (Building 8b) to the timber shed.⁷³

On 8 September 1914 a tender was submitted for an electrical shop and charging shop (Building 16a) which infilled the angle of Building 16 (Fig 22). The building,⁷⁴ probably constructed in 1914-15, was a single-storeyed, gabled brick structure, 7 bays long, 2 bays wide, of pier-and-panel construction. The interior was divided by a cross wall into two, four-bay long sections, the outer the cell charging shop, the inner the electrical shop with an office in one corner.

Some expansion followed the incorporation of the Carriage Works in the London and North Eastern Railway in 1923. The first floor of the time office came to house the Sectional Locomotives Accounts Office, and in 1925 this

⁶⁹ North Eastern Railway c1906, 9.

⁷⁰ North Eastern Railway c1906, 9.

⁷¹ Railtrack, York Records Centre: 121/248-9.

⁷² Railtrack, York Records Centre: 121/194, 242.

⁷³ Railtrack, York Records Centre: 121/218-19.

⁷⁴ Railtrack 121/177-8.

was altered and extended south west over part of the entrance from Holgate Road.⁷⁵ The existing large office at the south-west end of the first floor was subdivided and steps inserted through the end wall into a spacious, six-bay long office (Building 12b) built out to the south-west, over the approach to the time office (Fig 9). Steel uprights support this new office which has steel-framed walls with brick infill. The end wall has a pair of windows, and the roof is supported on triangulated metal trusses with raised tie beams, king rods, braces and struts.

Map evidence indicates that between 1907 and 1937 (Figs 6 and 7)⁷⁶ conveyors for moving carriages were built along both ends of the building shop and lifting shop (Buildings 6, 6a and 13), that to the south east necessitating the demolition of the service blocks to these buildings and the shortening of the intervening brake shop (Building 15).

In October 1940 plans were prepared for the conversion of the breaking-up shed (Building 21) to a washing shed, with brick walls replacing the felt covered timber-framed side walls.⁷⁷ A plan of the main part of the site, showing the current uses of the buildings, was made in April 1941 (Fig 8).⁷⁸

The main carriage building shop (Building 5,5a) was rebuilt during late 1945 and probably early 1946 after being destroyed by fire on 15 December 1944. The new buildings, for which several drawings survive,⁷⁹ was double-gabled like its predecessor, each gable having three segmental-arched openings for railway tracks and a tall gable over these with stepped brick inner sides and a central circular window. The gable of the adjacent paint shop (Building 4) was refaced to plans approved on 11 October 1945.⁸⁰ It had three flat-headed openings in each gable.

Visited by Ian Goodall, Barry Jones and Bob Skingle, 17 August 1995 and 12 December 1995.

Large format photography by Bob Skingle

Report written by Ian Goodall

⁷⁵ Railtrack, York Records Centre: 121/205-8.

⁷⁶ Ordnance Survey, 25 inch, Yorkshire, Sheet CLXXIV.6,10, revised 1907 and 1937, published 1909 and 1937.

⁷⁷ Railtrack, York Records Centre: 123/292.

⁷⁸ Railtrack, York Records Centre: 121/90.

⁷⁹ Railtrack, York Records Centre: 123/280, 283-4.

⁸⁰ Railtrack, York Records Centre: 123/281.

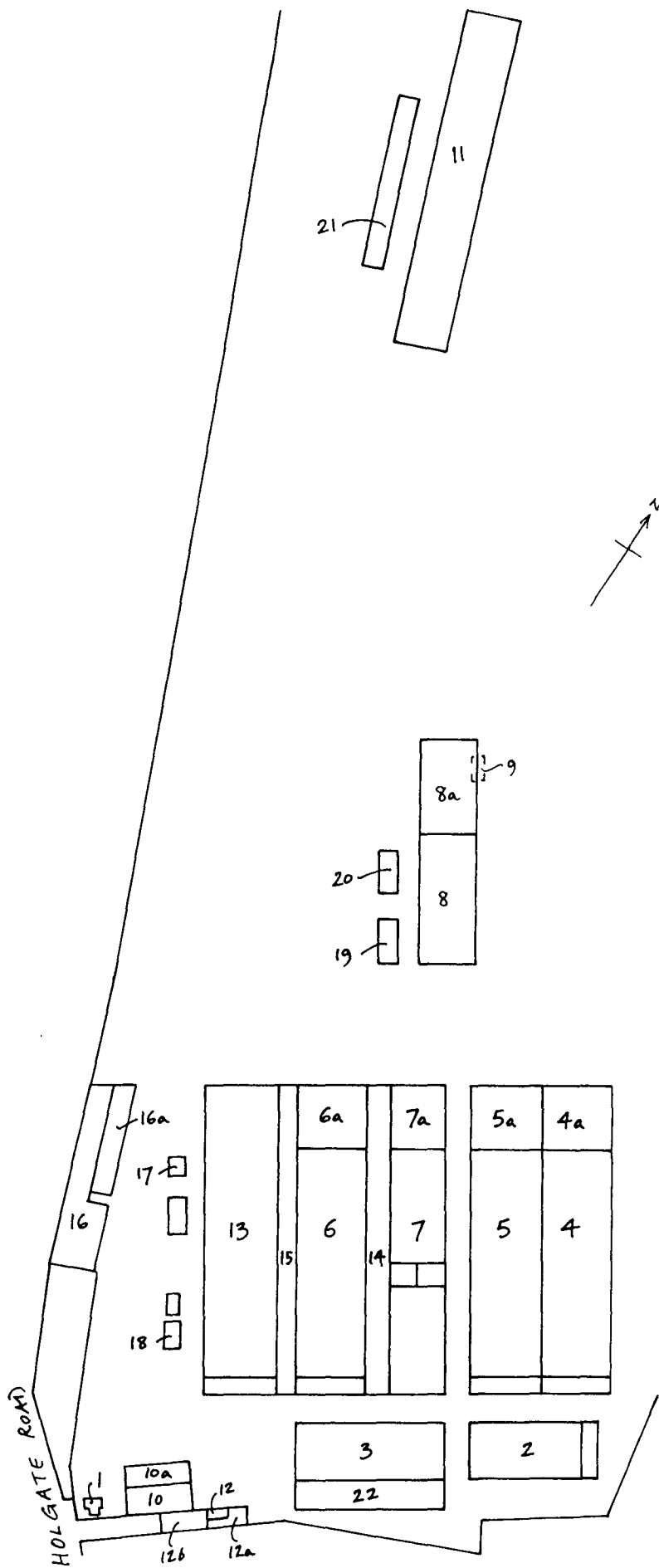


Fig 1. Carriage Works, York. Block Plan.

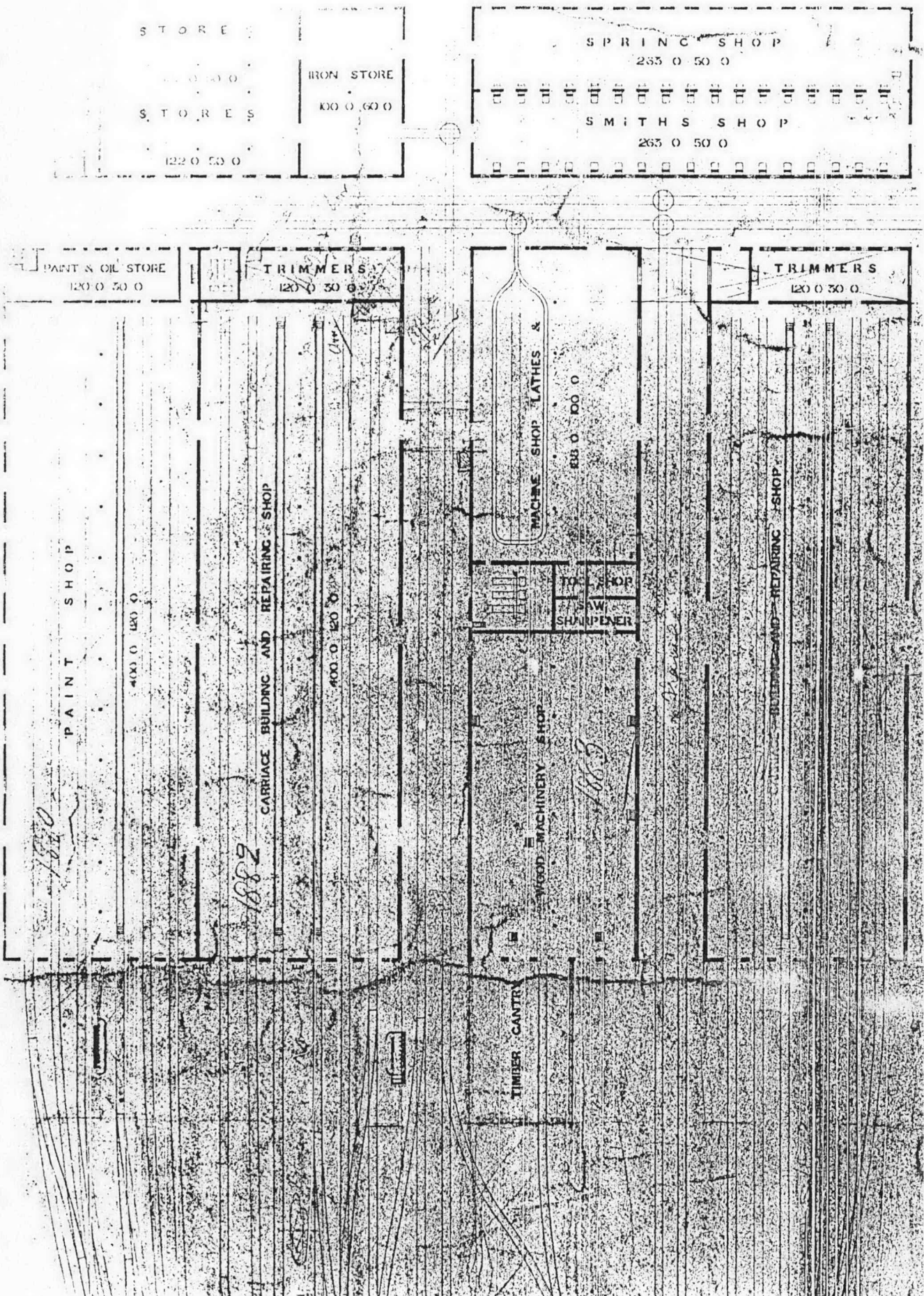


Fig 2. Detail of site plan, c1883.
 (From copy of Reel 121, Frame 89, supplied by Railtrack London North Eastern,
 York Records Centre. Copyright reserved.)

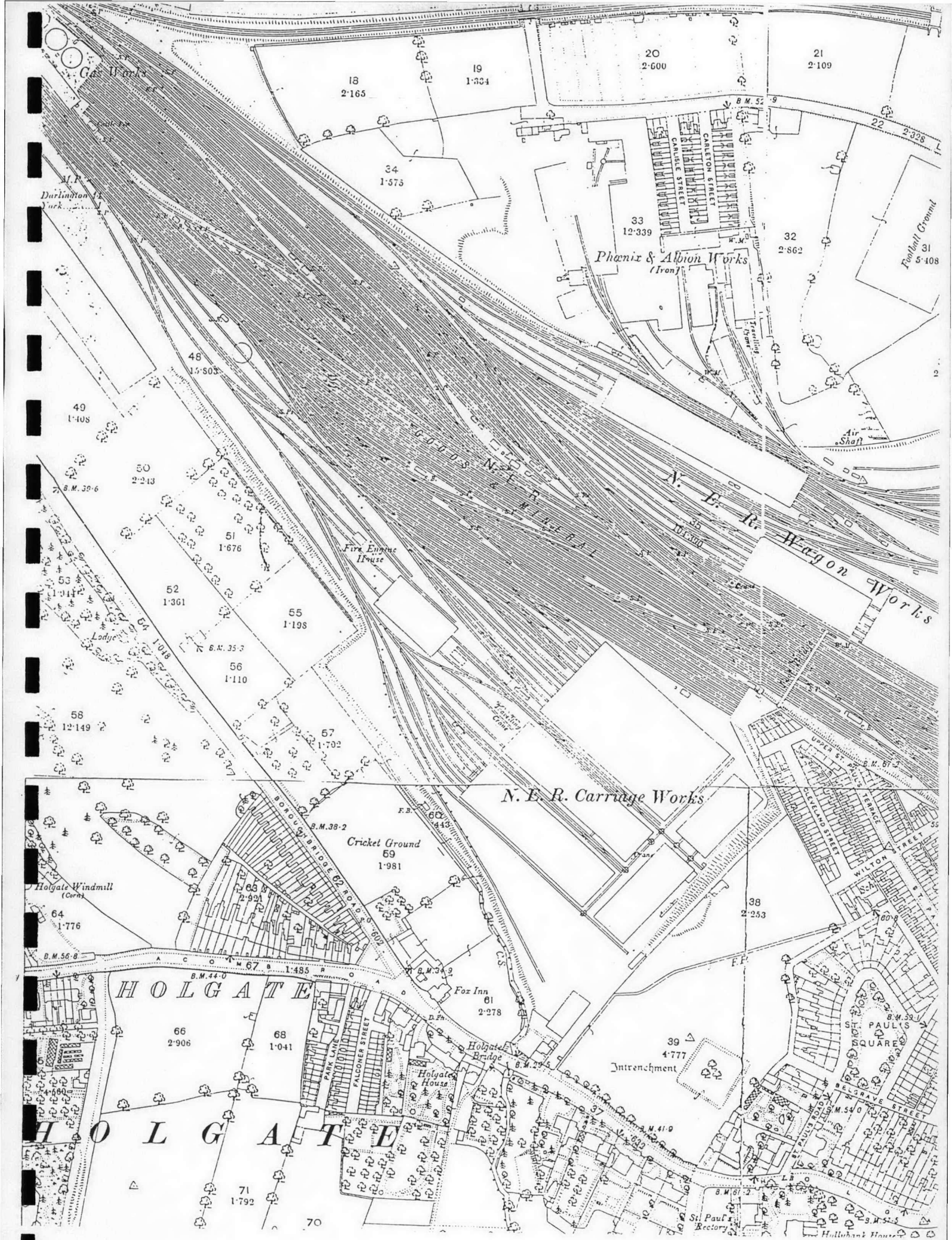


Fig 3. Ordnance Survey map, surveyed 1889.

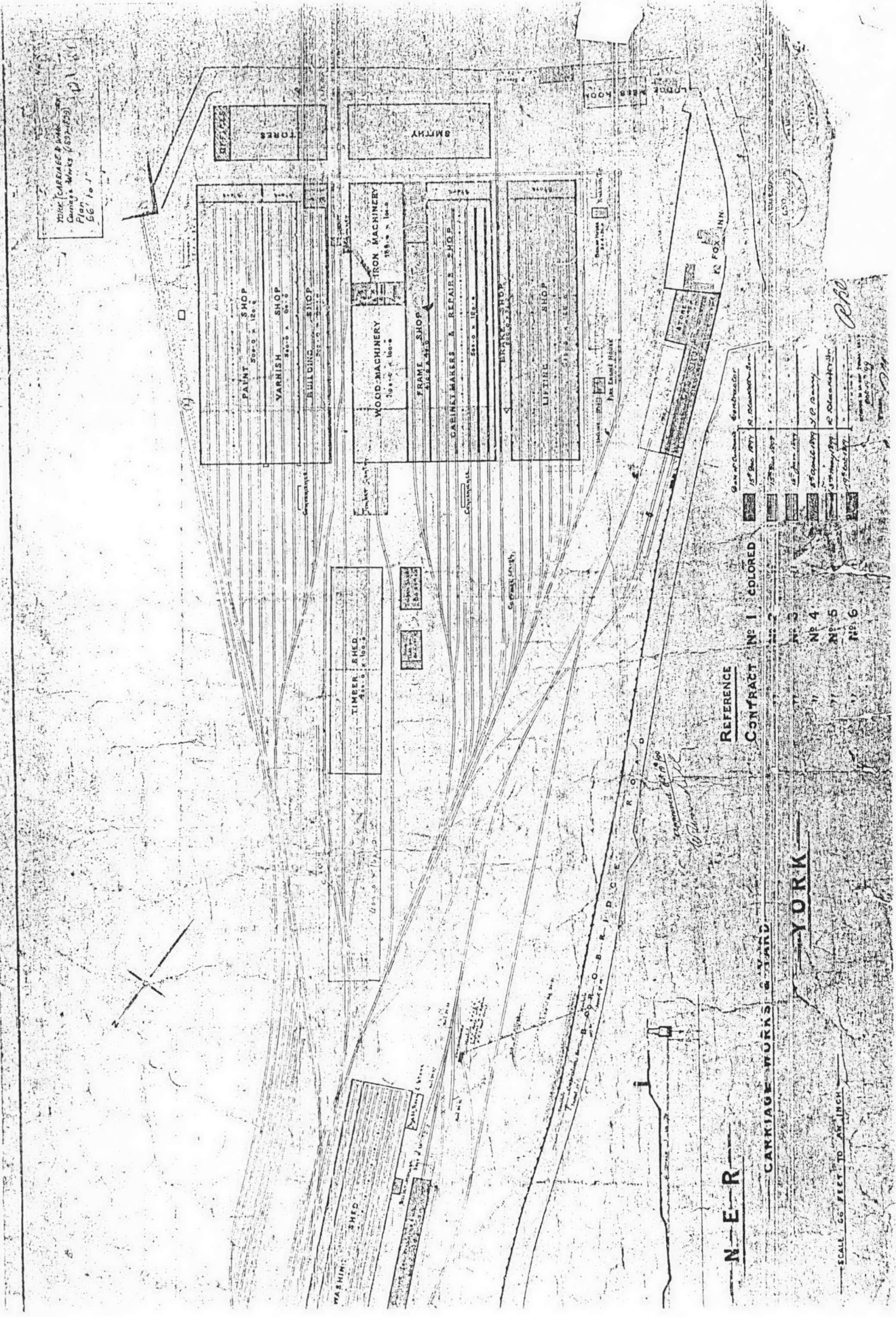
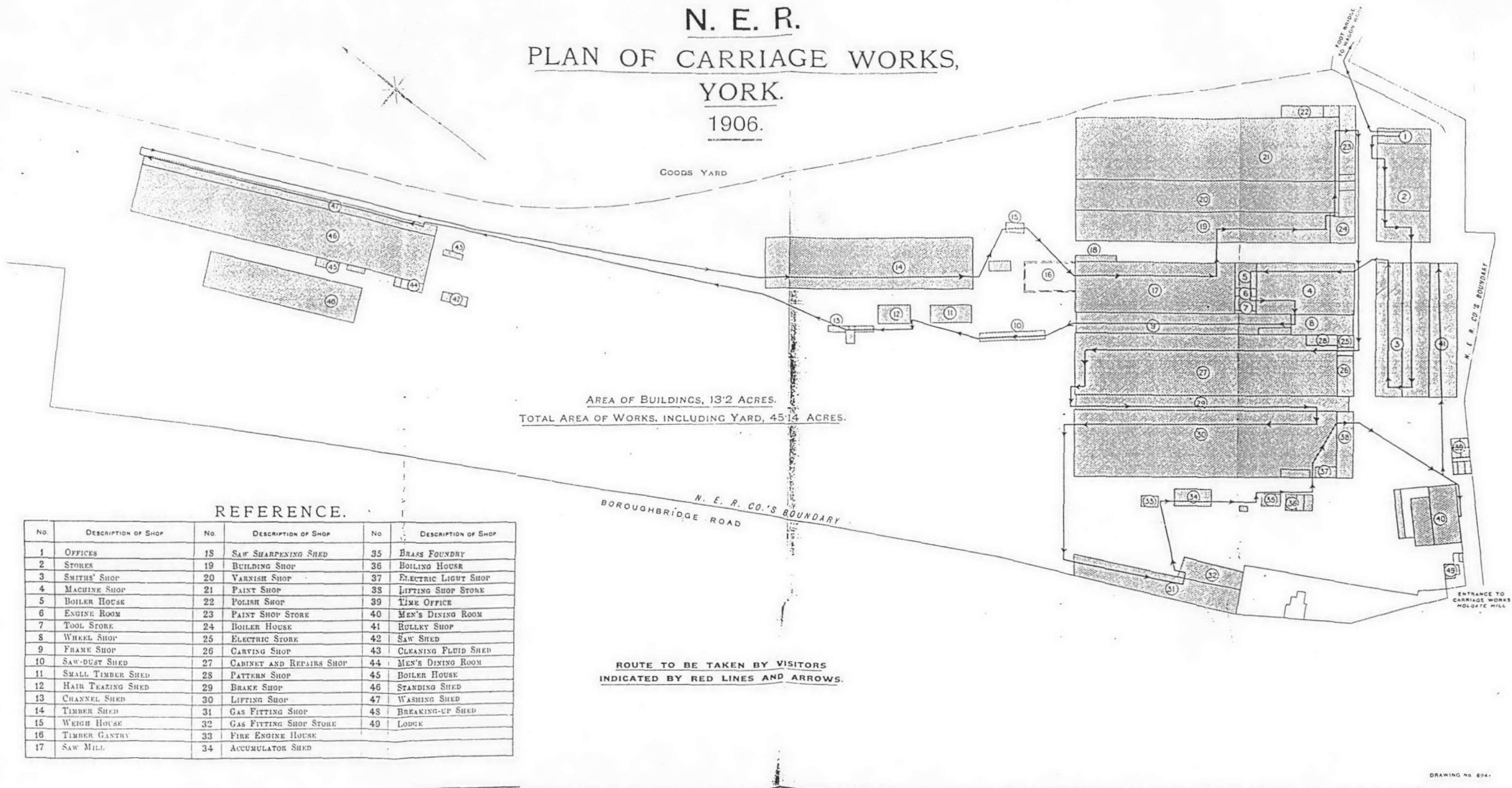


Fig 4. Site plan of 1899 relating to contracts of 1897-1899.
 (From copy of Reel 121, Frame 89, supplied by Railtrack London North Eastern,
 York Records Centre. Copyright reserved.)

N. E. R.
 PLAN OF CARRIAGE WORKS,
 YORK.
 1906.



REFERENCE.

No.	DESCRIPTION OF SHOP	No.	DESCRIPTION OF SHOP	No.	DESCRIPTION OF SHOP
1	OFFICES	15	SAW SHARPENING SHED	35	BRASS FOUNDRY
2	STORES	19	BUILDING SHOP	36	BOILING HOUSE
3	SMITHS' SHOP	20	VARNISH SHOP	37	ELECTRIC LIGHT SHOP
4	MACHINE SHOP	21	PAINT SHOP	38	LIFTING SHOP STORE
5	BOILER HOUSE	22	POLISH SHOP	39	TIME OFFICE
6	ENGINE ROOM	23	PAINT SHOP STORE	40	MEN'S DINING ROOM
7	TOOL STORE	24	BOILER HOUSE	41	RULLY SHOP
8	WHEEL SHOP	25	ELECTRIC STORE	42	SAW SHED
9	FRAME SHOP	26	CARVING SHOP	43	CLEANING FLUID SHED
10	SAW-DUST SHED	27	CABINET AND REPAIRS SHOP	44	MEN'S DINING ROOM
11	SMALL TIMBER SHED	28	PATTERN SHOP	45	BOILER HOUSE
12	HAIR TEAZING SHED	29	BRAKE SHOP	46	STANDING SHED
13	CHANNEL SHED	30	LIFTING SHOP	47	WASHING SHED
14	TIMBER SHED	31	GAS FITTING SHOP	48	BREAKING-UP SHED
15	WEIGH HOUSE	32	GAS FITTING SHOP STORE	49	LODGE
16	TIMBER GANTRY	33	FIRE ENGINE HOUSE		
17	SAW MILL	34	ACCUMULATOR SHED		

ROUTE TO BE TAKEN BY VISITORS
 INDICATED BY RED LINES AND ARROWS.

DRAWING NO. 894.

Fig 5. Site plan of 1906, from North Eastern Railway, *Visit to the Carriage & Wagon Works, North Eastern Railway, Holgate, York, (c1906).*
 (Courtesy of the National Railway Museum, York)

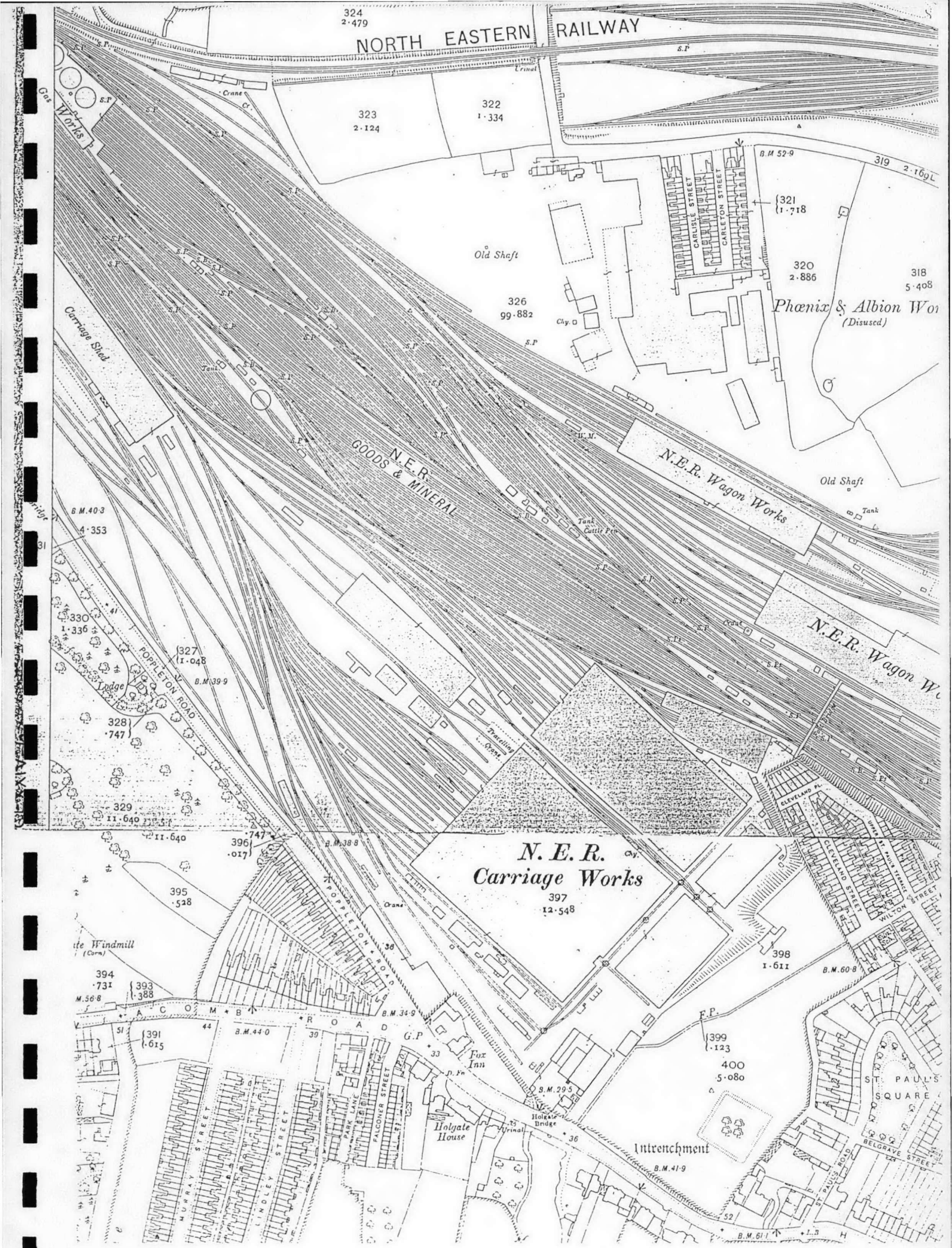


Fig 6. Ordnance Survey map, revised 1907.

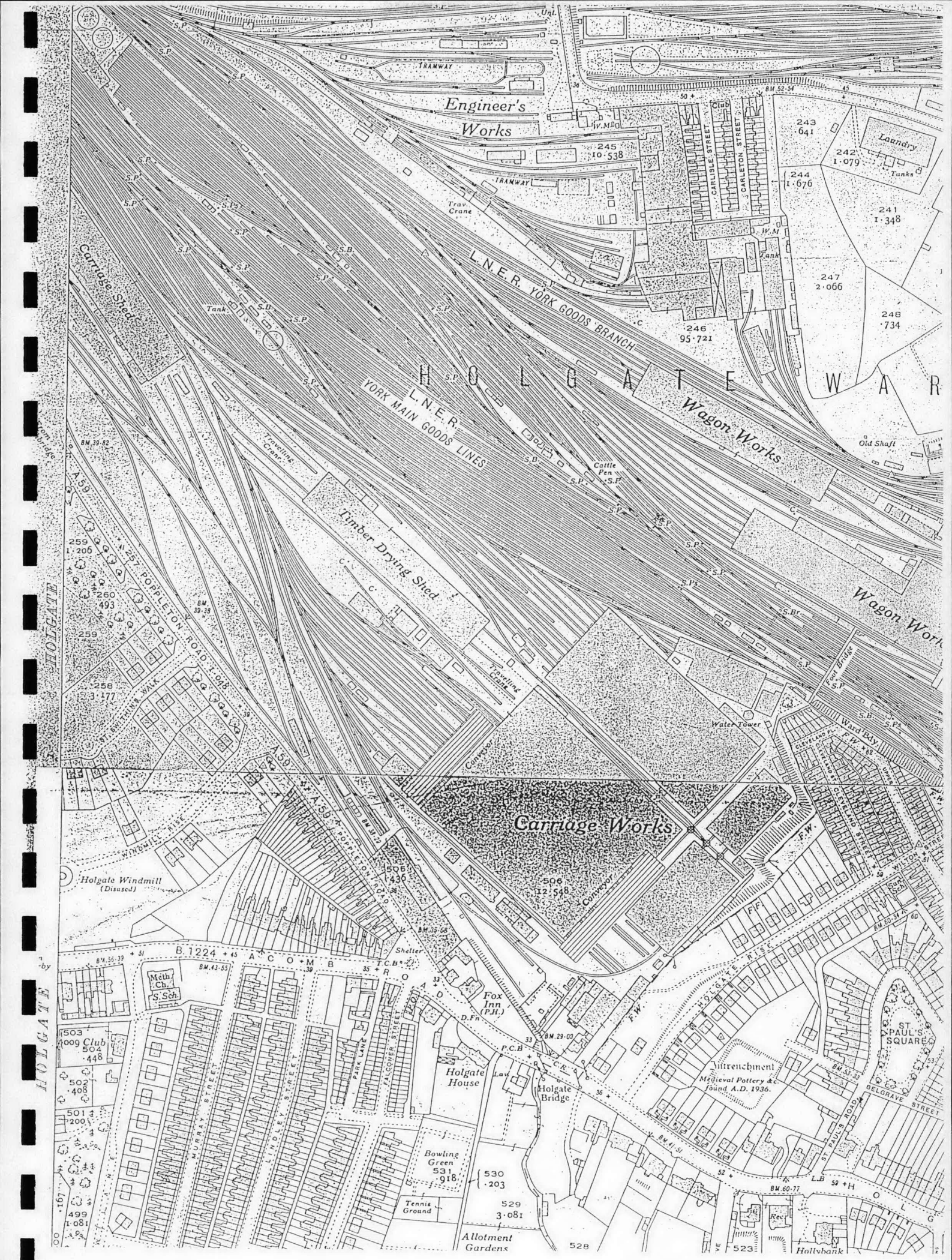


Fig 7. Ordnance Survey map, revised 1937.



Fig 9. Lodge, mess room and offices (Buildings 1, 10 and 12b) from south west.
(AA96/21)

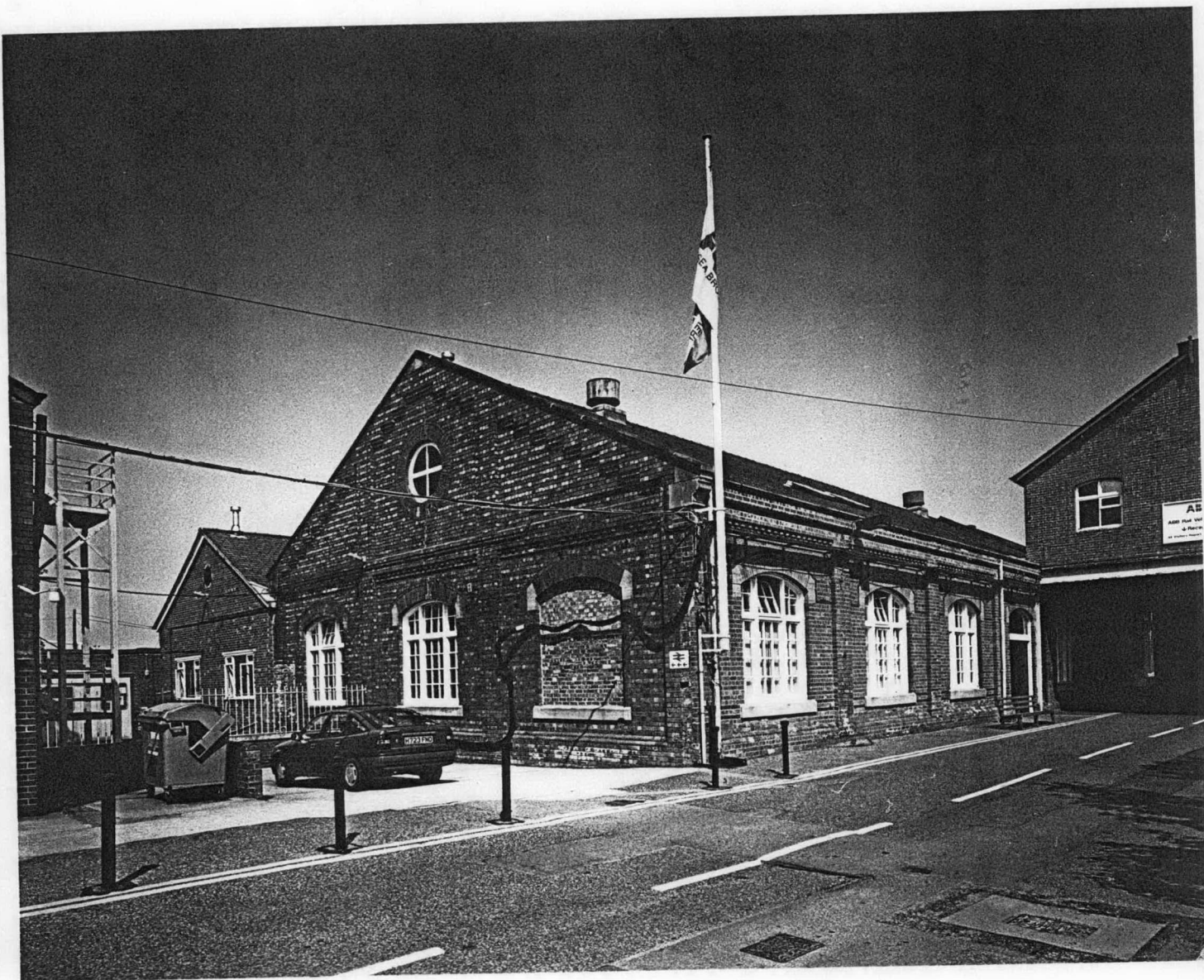


Fig 10. Mess room (Building 10/10a) from south. (AA95/3564)



Fig 11. Time office (Building 12/12a/12b) from west south west. (AA95/3566)



Fig 12. Smiths shop and rullely shop (Buildings 3 and 22) with offices and stores (Building 2) beyond. From south west. (AA96/22)



Fig 13. Interior of smiths shop (Building 3), including stacks above removed hearths.
From south west. (AA95/3576)



Fig 14. Offices and stores (Building 2) from north. (AA95/3605)

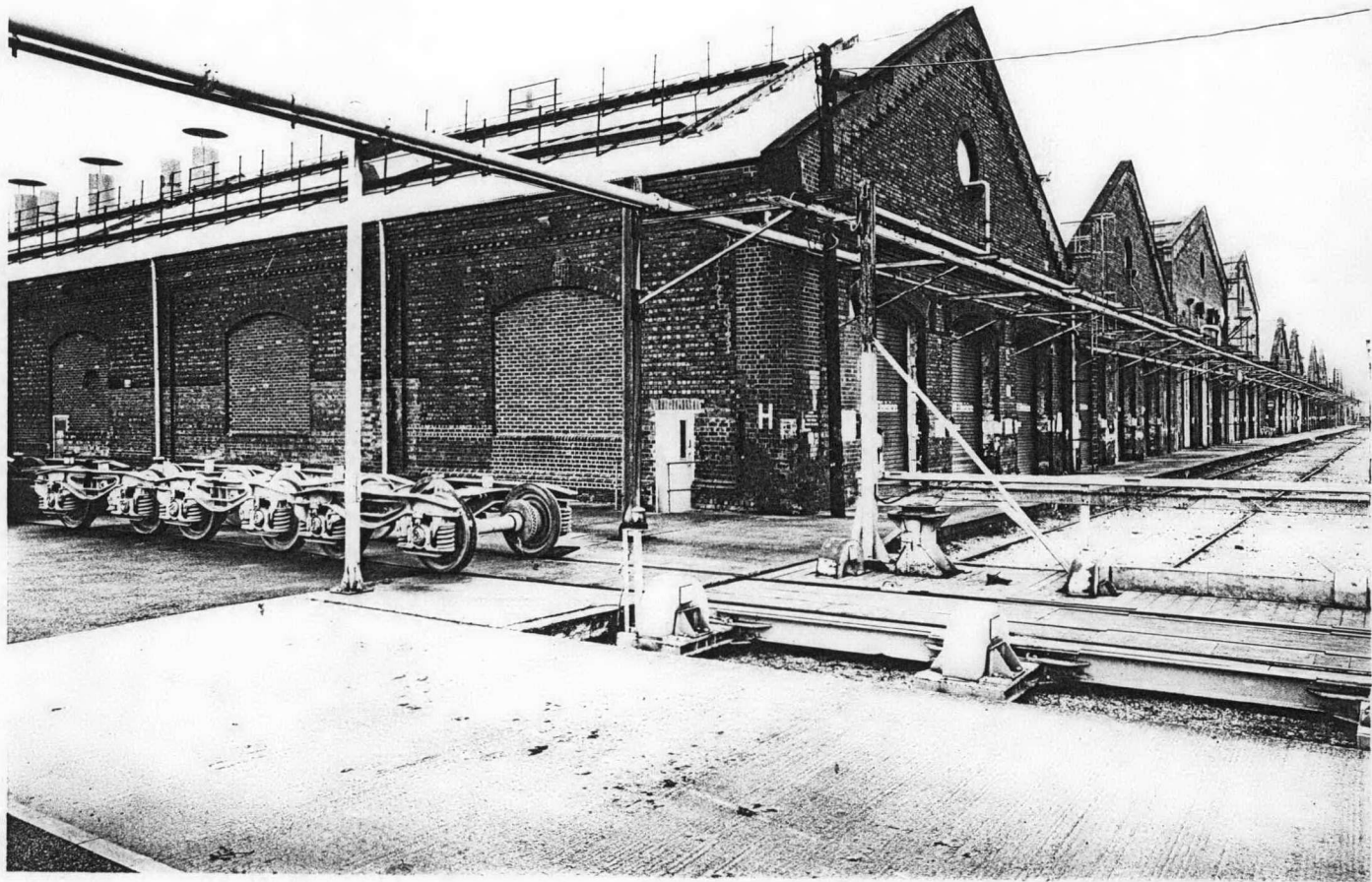


Fig 15. Paint shop and rebuilt carriage building and repair shop (Buildings 4/4a and 5/5a) in foreground, from north. (AA96/24)

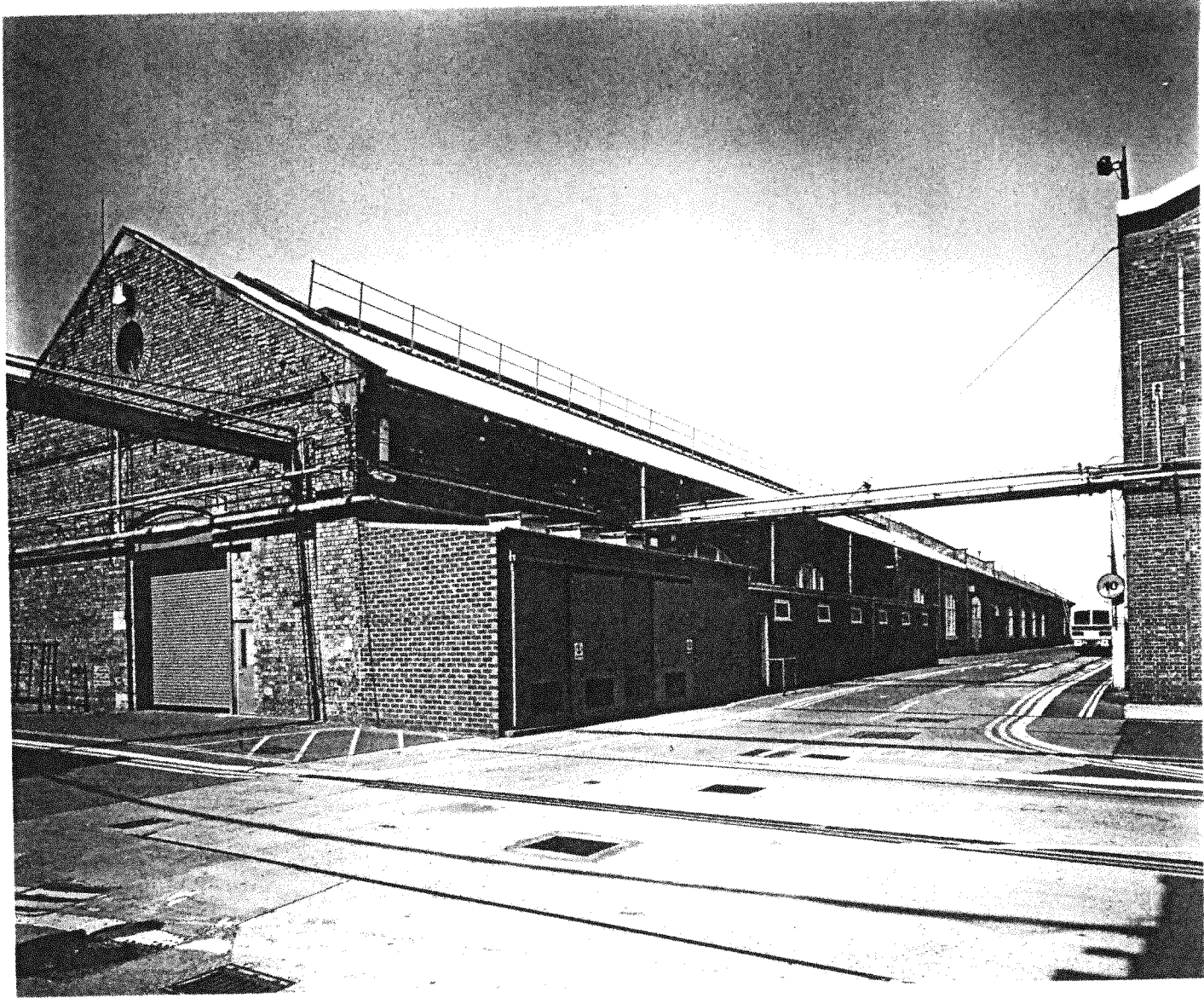


Fig 16. Machine shop and saw mill (Building 7/7a) from east. (AA95/3603)



Fig 17. Lifting shop, brake shop, repairing shop, frame shop and saw mill, etc.
(Buildings 13, 15, 6/6a. 14, 7/7a) in foreground and centre, from west. (AA96/25)



Fig 18. Interior of paint shop (Building 4/4a) from east. (AA95/3586)

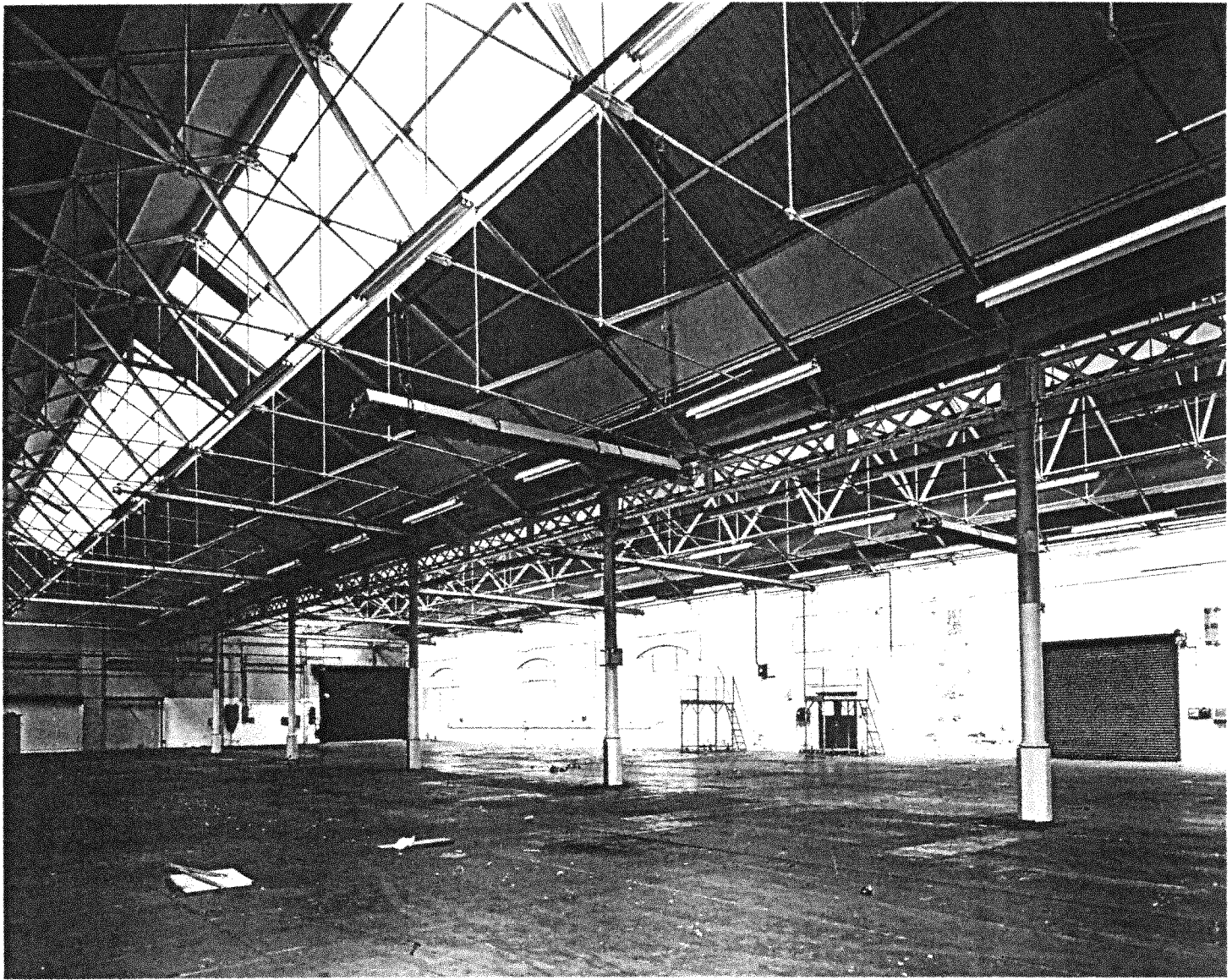


Fig 19. Interior of saw mill (Building 7/7a) from south. (AA95/3589)



Fig. 20. Interior of repairing shop (Building 6) from north west. (AA95/3581)

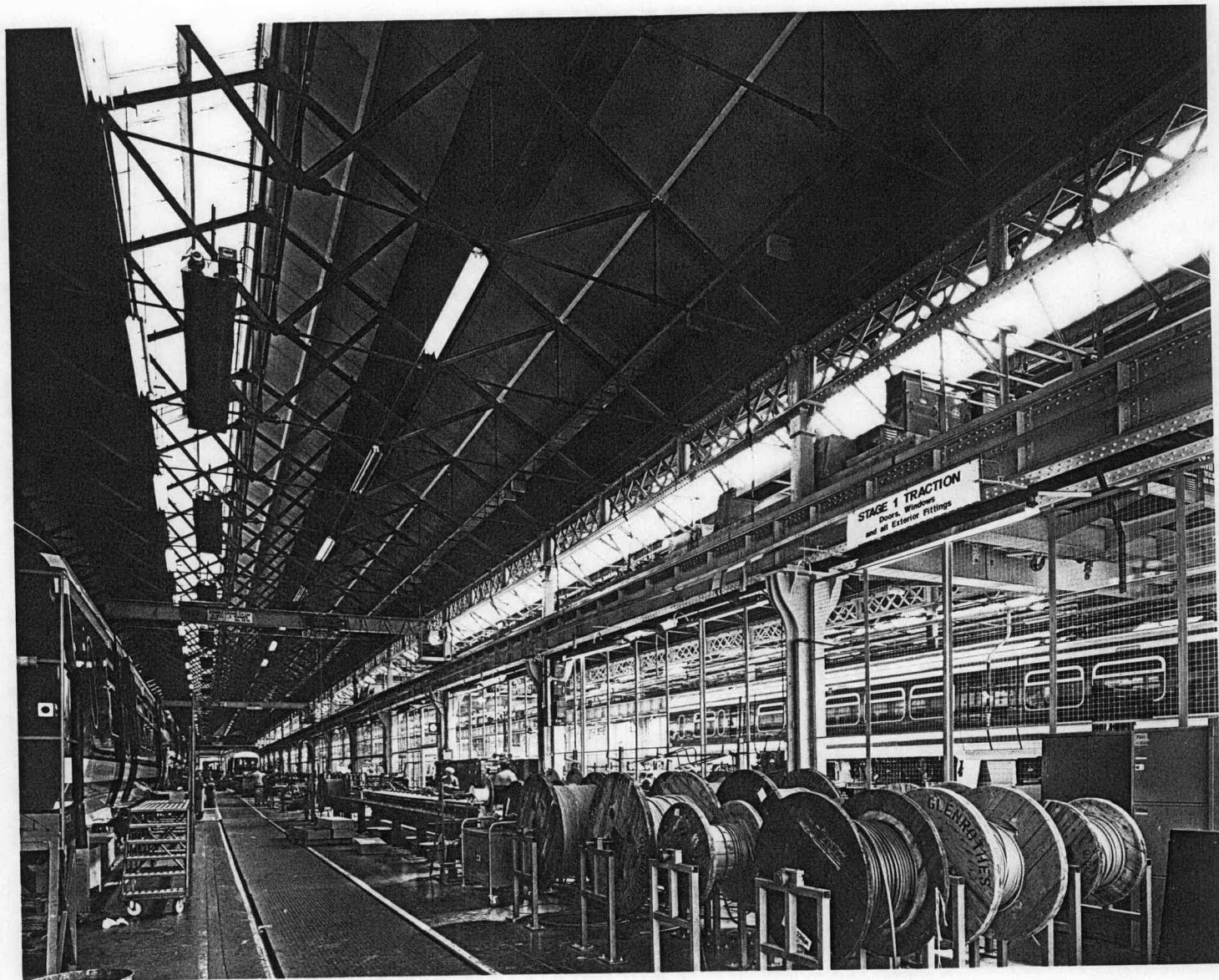


Fig 21. Interior of lifting shop (Building 13) from south east. (AA95/3584)



Fig 22. Gas fitting shop and store with added electrical shop and charging shop
(Building 16/16a) from north. (AA96/28)



Fig 23. Interior of gas fitting shop and store (Building 16) from east. (AA95/3575)

LIST OF RCHME PHOTOGRAPHS OF YORK CARRIAGE WORKS

AA95/3564 MESS ROOM FROM SOUTH. NBR NO: 94173
AA95/3565 LODGE FROM EAST.NBR NO.94173
AA95/3566 TIME OFFICE FROM WEST SOUTH WEST.NBR NO.94173
AA95/3567 RULLEY SHOP AND SMITHS SHOP, FROM SOUTH SOUTH EAST. NBR NO: 94173
AA95/3568 RULLEY SHOP FROM SOUTH. NBR NO: 94173
AA95/3569 MESS ROOM AND ADDITIONS FROM NORTH EAST. NBR NO.94173
AA95/3570 SAW MILL, NORTH SIDE FROM EAST.NBR NO.94173
AA95/3571 OFFICES AND STORES FROM WEST.NBR NO.94173
AA95/3572 GAP BETWEEN GAS FITTING SHOP AND STORE AND ADDED ELECTRICAL SHOP AND CHARGING SHOP, FROM NORTH. NBR NO: 94173
AA95/3573 INTERIOR. DETAIL OF HAND WASH BASIN IN GAS FITTING SHOP. NBR NO.94173
AA95/3574 INTERIOR OF GAS FITTING SHOP AND STORE FROM NORTH WEST. NBR NO.94173.
AA95/3575 INTERIOR OF GAS FITTING SHOP AND STORE, FROM EAST. NBR NO: 94173
AA95/3576 INTERIOR OF THE SMITHS SHOP FROM SOUTH WEST. NBR NO: 94173
AA95/3577 INTERIOR. DETAIL OF THE ROOF OF THE MACHINE SHOP.NBR NO.94173
AA95/3578 DETAIL OF WOODEN ROOF TRUSS IN ENGINE ROOM BETWEEN SAW MILL AND MACHINE SHOP. NBR NO: 94173
AA95/3579 INTERIOR OF FRAME SHOP FROM SOUTH EAST.NBR NO.94173
AA95/3580 INTERIOR OF FRAME SHOP FROM SOUTH EAST.NBR NO.94173
AA95/3581 INTERIOR OF CABINET AND REPAIRS SHOP FROM NORTH WEST. NBR NO.94173
AA95/3582 INTERIOR OF CABINET AND REPAIRS SHOP FROM SOUTH EAST. NBR NO.94173
AA95/3583 INTERIOR. EAST END OF PATTERN SHOP FROM EAST. NBR NO.94173
AA95/3584 INTERIOR OF LIFTING SHOP FROM SOUTH EAST.NBR NO.94173
AA95/3585 DETAIL OF IRON COLUMN ON NORTH SIDE OF LIFTING SHOP. NBR NO.94173
AA95/3586 PAINT SHOP, SHOWING COLONNADE AND LATTICE GIRDER FROM EAST. NBR NO.94173
AA95/3587 INTERIOR OF PAINT SHOP FROM NORTH WEST. NBR NO: 94173
AA95/3588 INTERIOR OF BUILDING SHOP REBUILT IN 1945 FROM NORTH WEST. NBR NO: 94173
AA95/3589 INTERIOR OF SAW MILL FROM SOUTH.NBR NO.94173
AA95/3590 INTERIOR OF SAW MILL FROM NORTH. NBR NO.94173
AA95/3591 INTERIOR OF NORTH WEST CORNER OF SAW MILL. NBR NO.94173
AA95/3592 DETAIL OF INTERIOR OF MACHINE SHOP. NBR NO: 94173
AA95/3593 NORTH WEST END OF PAINT SHOP, FROM NORTH. NBR NO: 94173
AA95/3594 GENERAL VIEW OF TRAVERSER RAILS FROM EAST. NBR NO.94173
AA95/3595 SOUTH WEST SIDE OF BUILDING SHOP, REBUILT IN 1945, FROM WEST. NBR NO: 94173
AA95/3596 GENERAL VIEW OF WORKSHOPS, TRAVERSER, AND CARRIAGES, FROM NORTH EAST.NBR NO.94173
AA95/3597 DETAIL OF BOGEY AND CARRIAGE. NBR NO: 94173
AA95/3598 TEST HOUSE FROM WEST. NBR NO: 94173
AA95/3599 LODGE FROM SOUTH.NBR NO.94173
AA95/3600 MACHINE SHOP, BUILDING SHOP REBUILT IN 1945 AND PAINT SHOP, FROM SOUTH. NBR NO: 94173
AA95/3601 MACHINE SHOP, CABINET AND REPAIRS SHOP, AND LIFTING SHOP,

FROM NORTH EAST. NBR NO: 94173

AA95/3602 BUILDING SHOP REBUILT IN 1945, FROM SOUTH EAST. NBR NO: 94173

AA95/3603 MACHINE SHOP AND SAW MILL FROM EAST. NBR NO: 94173

AA95/3604 FRAGMENT OF TRANSHIP SHED OF GOODS YARD, FROM SOUTH WEST. NBR NO: 94173

AA95/3605 OFFICES AND STORES FROM NORTH. NBR NO: 94173

AA95/3606 OFFICES AND STORES WITH SMITHS SHOP BEYOND, FROM NORTH. NBR NO.94173

AA95/3607 PAINT SHOP FROM EAST.NBR NO.94173

AA95/3608 SMITHS SHOP, WITH OFFICES AND STORES BEYOND, FROM SOUTH WEST. NBR NO: 94173

AA95/3609 GAS FITTING SHOP AND STORE WITH ADDED ELECTRICAL SHOP AND CHARGING SHOP, FROM NORTH-WEST. NBR NO: 94173

AA95/3610 SAW MILL, FRAME SHOP, CABINET AND REPAIRS SHOP, BRAKE SHOP AND LIFTING SHOP, FROM WEST. NBR NO: 94173

AA95/3611 REPAIR SHOP, FRAME SHOP AND PART OF LIFTING SHOP, FROM WEST. NBR NO: 94173

AA95/3612 GENERAL VIEW OF SHOPS WITH CARRIAGES IN FOREGROUND, FROM WEST.NBR NO.94173

AA95/3613 VIEW OF WORKSHOP WITH CARRIAGE IN THE FOREGROUND NBR NO.94173.

AA95/3614 PAINT SHOP AND BUILDING SHOP REBUILT IN 1945, FROM WEST. NBR NO: 94173

AA95/3615 SAW MILL, FRAME SHOP, CABINET AND REPAIRS SHOP, BRAKE SHOP AND LIFTING SHOP FROM NORTH. NBR NO: 94173

AA95/3616 SAW MILL, FRAME SHOP AND PART OF CABINET AND REPAIRS SHOP. NBR NO: 94173

AA95/3617 STORES FROM SOUTH EAST. NBR NO: 94173

AA95/3618 COPY OF DRAWING,CARRIAGE SHOP EXTENSION, 1897 (= RAILTRACK, YORK RECORDS CENTRE: 121/169). NBR NO: 94173

AA95/3619 COPY OF DRAWING OF PROPOSED MESS ROOM. NBR NO.94173

AA95/3620 COPY OF DRAWING. MESS ROOM AT WAGON WORKS (= RAILTRACK, YORK RECORDS CENTRE: 121/278) NBR NO: 94173

AA95/3621 COPY OF DRAWING,EXTENSION OF CARRIAGE WORKS, NEW STORE AND TRIMMERS SHOP, 1897 (=RAILTRACK, YORK RECORDS CENTRE: 121/114)

AA95/3622 COPY OF DRAWING OF CARRIAGE SHOPS EXTENSION, 1897 (= RAILTRACK YORK RECORDS CENTRE: 121/142). NBR NO: 94173

AA95/3623 PLAN OF CARRIAGE WORKS 1899 (= RAILTRACK, YORK RECORDS CENTRE: 121/89). NBR NO: 94173

AA95/3624 PLAN OF CARRIAGE AND WAGON WORKS, 17 MARCH 1903, WITH LATER UPDATING. NBR NO: 94173

AA96/21 LODGE, MESS ROOM AND OFFICES OVER TIME OFFICE, FROM SOUTH-WEST. NBR NO: 94173

AA96/22 SMITHS SHOP AND RULLEY SHOP, WITH OFFICES AND STORES BEYOND, FROM SOUTH-WEST. NBR NO: 94173

AA96/23 PAINT SHOP FROM NORTH. NBR NO: 94173

AA96/24 GENERAL VIEW OF MAIN BLOCKS OF WORKSHOPS FROM NORTH. NBR NO: 94173

AA96/25 GENERAL VIEW OF MAIN BLOCKS OF WORKSHOPS FROM WEST. NBR NO: 94173

AA96/26 LIFTING SHOP FROM NORTH-WEST. NBR NO: 94173

AA96/27 SOUTH-WEST SIDE OF LIFTING SHOP FROM SOUTH. NBR NO: 94173

AA96/28 GAS FITTING SHOP AND STORE WITH ADDED ELECTRICAL SHOP AND CHARGING SHOP, FROM NORTH. NBR NO: 94173

AA96/29 GAS FITTING SHOP AND STORE FROM SOUTH. NBR NO: 94173