
Cambridge New Town – A Victorian Microcosm

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After the 1807 Enclosure Act for the Eastern or Barnwell Fields, Cambridge could expand outside the historic core within which it had been enclosed for more than eight hundred years. The expansion was initially slow, but after 1830 the pace quickened, and New Town was the earliest major addition to the town. Using the original enclosure awards and documents relating to their subsequent sale and development by new landowners, this paper traces the factors that have influenced the evolution of New Town's urban morphology from the early 19th century to the present time. It shows how its development from the 1820s onwards can be related to both the enclosure allocations and the nature of the people and institutions to which they were granted. In a period in which urban development was unhampered by planning and building regulations, changes in the physical landscape were strongly influenced by the nature and aims of the developers themselves. Not surprisingly, these changes gave rise to significant social differences within New Town.

The 1927 6" Ordnance Survey of New Town (Fig. 1) shows New Town after some one hundred years of development. On to this map the authors have superimposed shading to distinguish properties which have been demolished (for reasons given in the article), and those still (2005) in their original condition. From the 1930s, the initial development has been changing physically and socially in response to new factors. Whether these changes have altered the area to a 20th century microcosm is an interesting question.

Introduction

Since the second decade of the 19th century New Town formed a distinctive part of Cambridge's urban structure, not least because its clear cut boundaries (Lensfield Road, Hills Road, Trumpington Road and, post 1835, the northern limit of the Botanic Garden) defined precisely its area of approximately 80 acres. Any attempt to describe and explain the origin and later development of New Town needs to be set against the general economic and social context of Cambridge in the early

19th century, when the country was emerging from the traumas of the Napoleonic Wars. It was a period when, for a variety of factors, the town's population, 9276 in the first national census of 1801, was growing rapidly, reaching 20,917 in 1831 and about 26,603 in 1851. Most of the growth was attributable to immigration of new workers from nearby villages and more distant parts of the country. One important factor was the marked expansion of the university and its constituent colleges, which dominated the town. Annual matriculations rose from 150 in 1815 to 450 in 1830, enlarging the demand for college and university buildings and additional staff. It was also a period in which, as in many towns in England, the seeds of future civic expansion were sown. The Paving, Cleansing and Lighting Act of 1788 established the Paving Commissioners, who set about the paving, drainage, cleaning and laying out of streets. This provided vital underpinning for housing expansion and development of public utilities and civic amenities, which in turn opened up a growing market for branches of the construction industry.

Increased natural growth and the influx of workers created considerable pressure on housing, and by 1815 there was a marked shortage, which led to rising rents and a ready and lucrative market for new houses. The existing area of the town was overcrowded and could not provide space for the scale of house building needed. It was also an area from which many people, particularly the better-off classes, wished to escape, for it was notorious for overcrowding and insanitary conditions.

Fortunately a solution was at hand, for two Enclosure Acts opened up the possibility of house building on large areas in the former common fields. The St Giles Enclosure Act for the Western or Cambridge Fields was passed in 1802 and that for the Eastern or Barnwell Fields in 1807 (Fig. 2). The Awards re-distributing the land to individual owners were made in 1805 and 1811 respectively, and these Awards have had an enduring influence on the urban pattern of the town. For reasons that are not entirely clear, the land allotted by the enclosure of the Western Fields, most of which went to colleges (see Guillebaud, this volume), was not made

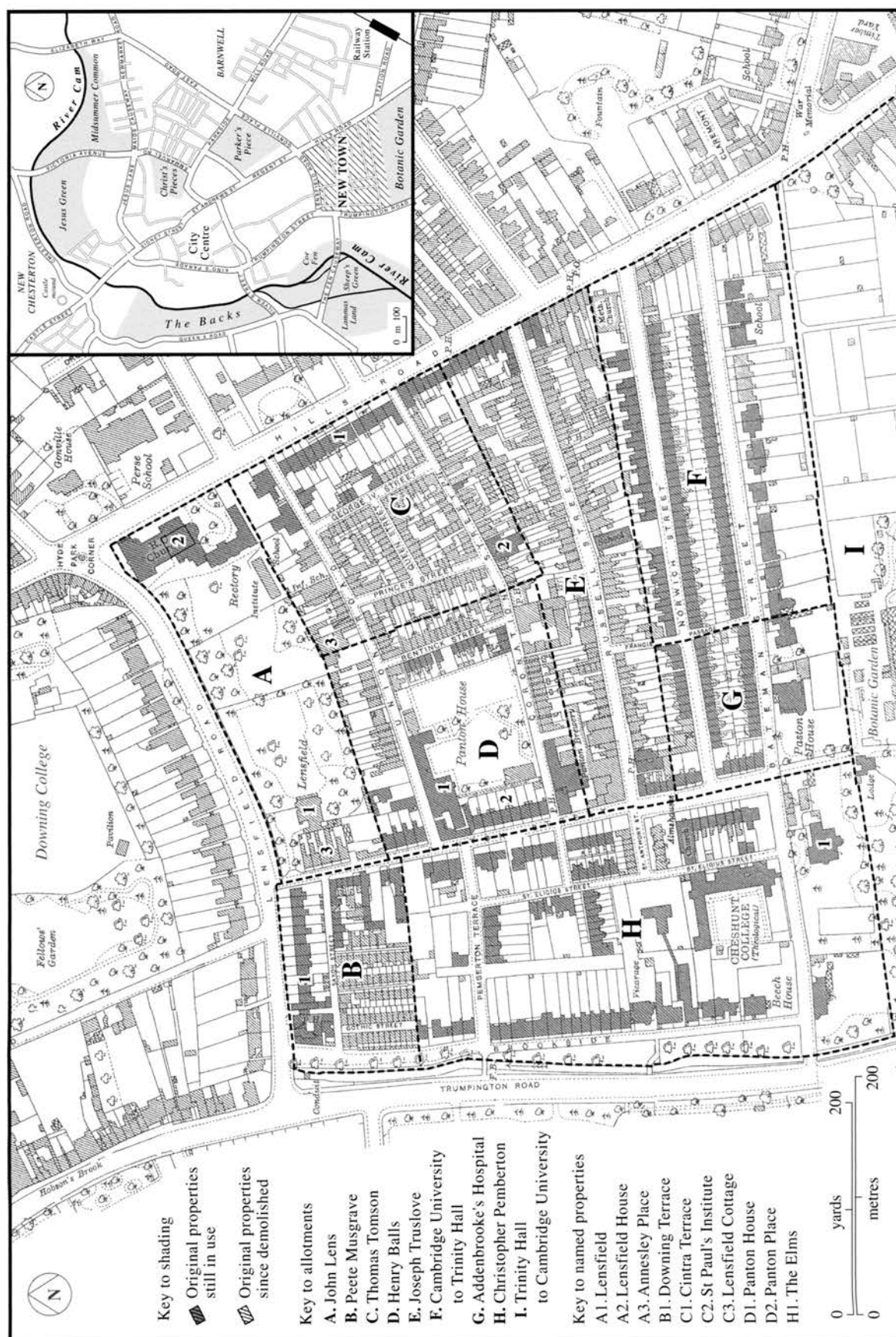


Figure 1. Ordnance Survey 6" 1927 Plan of New Town.

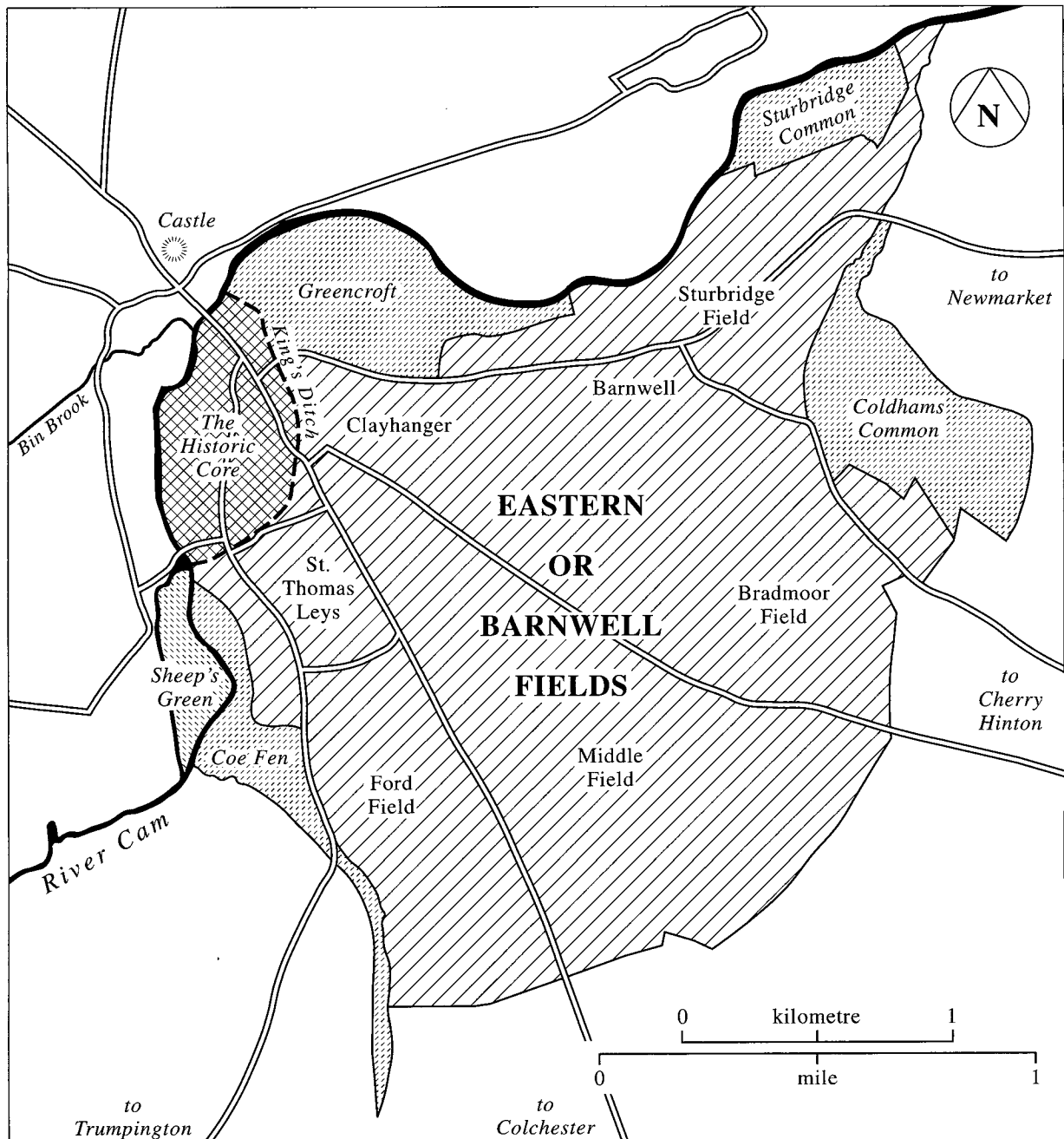


Figure 2. The pre-enclosure Eastern or Barnwell Fields.

available for large scale domestic residential building. The university and colleges were not entirely favourable to the enclosure of the Barnwell Fields. Henry Gunning notes in his *Reminiscences*(1) that the university and the colleges opposed the 1807 bill for enclosure, although it was passed at the second attempt. What they feared was curtailment of their rides over the open fields and consequent injury to health, and the possible undesirable effects on undergraduates arising from the loss of their recreational and sporting areas in the West Fields. The potential for damage to the Backs may also have carried weight.

Nevertheless in the Barnwell Fields several colleg-

es, notably Jesus, Gonville and Caius, and Peterhouse, did take early advantage of the opportunities to develop land for housing, although most colleges tended to move more slowly than private owners. It may be that the Repeal of the Corn Laws and the subsequent severe decline in agricultural land values in the post 1860 period had some effect. As large landowners, the colleges must have been affected by declining rents from 1860, which may have caused them to look at building development as a way of maintaining income.

In Barnwell Fields some private owners also moved rapidly and began to develop new housing soon after

1815; by 1820 the pace of building was quickening significantly. Those who developed their lands early were owners of small allotments that included street frontages near the town, as witnessed in New Town. Others whose lands lay further from the town had difficulty in developing until the later 19th century.

In this post 1815 expansion the human factor was important. The re-allocated lands were in effect green field sites. To build on them required laying out roads, provision of public services (minimal at the outset), a ready supply of risk capital and credit, the services of architects and a huge number of skilled and semi-skilled manual labourers – bricklayers, carpenters, plumbers, roofers and many others. The contracts for prestigious buildings in the university, such as college expansion, the Fitzwilliam Museum and the Pitt Press, and in the town, were for the most part awarded by competition, although non-competitive awards were made to well-known or well-connected architects in the university and the town. Less prestigious but profitable housing contracts were undertaken either by owners of newly allocated land or by entrepreneurs. In this situation it is obvious that those who had an intimate knowledge of the land market would be in a good position to undertake lucrative projects. Men such as Charles Humfrey, William Wilkins, Julian Skrine, James Burleigh, Thomas and Edward Tomson and Joseph Truslove occur frequently in the records. They were variously bankers, solicitors, architects, builders and skilled craftsmen by profession, and it is clear that they and others developed what may be called ‘close associations’ to take advantage of this situation. Romilly’s diary (2) reveals that many of these men, both of the town and the university, were in regular professional, social, and political contact, leading to a network of mutually supportive entrepreneurs whose ears were closely attuned to opportunities in a rapidly expanding building market. Architects and bankers would have had a key role to play in many enterprises. The part played by architects changed over time, but during the early decades they had a major role because they undertook both the design and the building, recruiting, employing and supervising all necessary labour. Their function changed after 1834, when the Institute of British Architects (now the Royal Institute of British Architects) was founded. After that, it was separated professionally from the actual building operations; a consequence was that foremen and craftsmen who had worked for architects founded small building firms, and not a few improved their financial and social status by so doing. The bankers supplied loan capital for the purchase of land, laying out of roads and construction of houses.

These entrepreneurial associations of landlords, lessees, bankers, architects and builders undertook work of varying styles and qualities for the university, town and the private landlord or lessee. They built handsome individual mansions for the richer members of the town and university, usually near the margins of the existing town. Close to the town centre there were terraces of substantial two and three storey houses for professional people. Lower down the scale

and further from the town there were longer terraces of soundly built but more humble homes, and in some areas these graded down into tenements and cottages of very poor quality, many of which rapidly deteriorated into slums.

The factors and themes set out above can all be exemplified in detail in this study of New Town, which was a microcosm of Victorian urban development.

The Ford Field pre-enclosure

The land on which New Town was built post-enclosure had been part of the medieval Ford Field (Fig. 2), itself one of the subdivisions of the Barnwell or Eastern Fields. It was named after the Trumpington ford by which the London (Trumpington) Road crossed the Vicar’s Brook at the present junction of Trumpington Road and Brooklands Avenue. Before the 1811 Award, Ford Field ran southwards from the southern limit of the medieval town (approximately the line of the present Pembroke Street/Downing Street) to the boundary of Trumpington parish, bounded by Regent Street and Hills Road on the east and Coe Fen on the west.

The northern part of this field, lying between Pembroke Street and Lensfield Road, was known as St Thomas Leys, a marshy area used by university men for wild fowling. At an earlier date (1801) than the rest of the Ford Field, the rights of common over St Thomas Leys were extinguished by a separate Act of Parliament. It was this area that was chosen in 1801 for Downing College, following decades of protracted wrangling over the estate of its progenitor, Sir George Downing.

The extensive remaining part of Ford Field south of Lensfield Road became available for development after 1807, and the lands were allotted in 1811 to private and corporate owners (colleges, the university, the town and Addenbrooke’s Hospital), who were free to sell and/or develop in any way they thought fit. The part of Ford Field over which New Town was built, the concern of this article, amounted to approximately 80 acres. This was allocated to six private owners, only one of whom received more than 10 acres, and three corporate owners, one of whom received a large holding (Table 1). The subsequent pattern of development, still in various ways manifest on the ground, is physically and socially related to these initial allocations.

Post-enclosure development

As stated above, the earliest developments were in the northern part of Ford Field, known as St Thomas Leys, where most of the land was earmarked for Downing College. Immediately adjacent to the existing town area there was land south of the King’s Ditch available between Tennis Court Road and Trumpington Street. Houses were built here for wealthier members of society who had long been desperate to escape cramped and unpleasant conditions within the town, where

Table 1. *Allocated lands relevant to the development of the New Town area (see Figure 1).*

Map Ref.		Acres (approx)
<i>Private Owners</i>		
A	John Lens	4
B	Peete Musgrave	2
C	Thomas Tomson	5
D	Henry Balls	4
E	Joseph Truslove	5
H	Chris. Pemberton	12
<i>Corporate Owners</i>		
F	Cambridge University (to Trinity Hall)	7
G	Addenbrooke's Hospital	2
I	Trinity Hall (to Cambridge University)	37

outbreaks of epidemic diseases were still not unknown. Surviving examples can be seen in Fitzwilliam Street (1822) and Tennis Court Road (1825). Many of these initial developments were higher-class properties on or near main road frontages. At this time it was considered desirable to have a property fronting onto a main road, preferably with access for carriages, and with spacious gardens to afford views, privacy and room for entertaining. Many early developments were on college land that was no doubt available preferentially to college fellows.

South of Lensfield Road lay the area which was to become New Town. The key to the development of these post-enclosure fields was the availability of land, its ownership and its configuration. As shown above, this land had been allocated to a variety of owners, and from the outset there was no overall plan for its development. The pattern, style and density of development matches the layout of post-enclosure land awards with such remarkable accuracy that it is crucial to understanding its urban pattern. The various allotments were laid out and developed at times and in ways that would best serve the individual owner's intentions, amongst which was securing either immediate or long-term income. Thus the new owners adopted different strategies, and it is this that led to both large individual properties and rows of terrace houses of different sizes, architectural styles and social character – a microcosm of the town's 19th century development. In New Town as a whole there were several large individual mansions (Lensfield, Lensfield House, Panton House, The Elms, The Beeches), substantial terraces for the well-to-do (Downing Terrace, Brookside, Gloucester Terrace), whole streets of identical or near-identical houses (Bateman Street, Norwich Street), streets of more humble working class houses (Union Road, Coronation Street, Russell Street) and smaller areas of poorer quality tenements and cottages (Saxon Street, Gothic Street, Doric Street.). Much of this building survived into the 20th century and its original character can still to be seen in some areas, externally if not always internally. But over the years, and particularly post 1950, substantial parts were de-

molished and replaced by modern civic housing and university laboratories. It is also possible to see where individual original properties have been redeveloped or substantially altered.

The 19th century process of development was costly. Considerable capital was needed, which explains the importance of bankers and solicitors. In general the private developers working on a smaller scale tended to look for quick profits, which could be maximised by sales of high-density building for working class people. Larger scale developers, such as the gentry and colleges, tended to build more substantial properties for a wealthier middle and upper class clientele, many on long leases.

The general method of development was that after roads and other services had been laid out, the landlord offered plots for sale either by auction or private contract, unless he was intending to undertake development himself. The number of plots governed the density of housing, although more than one plot could be purchased to allow for larger houses. There is evidence of close links between developers, builders and craftsmen and it was not unknown for developers to have 'teams' of builders and workers for this work. Plots could be bought by builders for speculative development or by private individuals for their own houses. In lower class areas there was no great external variation in the type of housing built save for decorative touches; most were basically the two up, two down variety. Houses for the wealthy show more individual design, externally and internally.

Development of New Town

The earliest developments were along its northern edge facing onto Lensfield Road (then Cross Road), and the above factors are all well exemplified by them. From the outset different approaches were taken by the men allocated land in this area, Thomas Musgrave (son of Peete Musgrave) and John Lens. Their allocations lay on either side of what is now Panton Street, which took its north-south line from a track through the common fields known as Bishop's Way.

The earliest development was on the land allocated to John Lens, a large elongated area bounded by Lensfield Road, Hills Road and Panton Street, with its southern boundary lying not on, but to the north of Union Road. Lens was an ex-fellow of Downing College who lived in London, where he had a prosperous law practice. As he did not reside in Cambridge he allowed his allotment to be used for the building of two large residences, each with ample grounds. One was 'Lensfield' (A1), built by William Wilkins c.1811 for his own use, with grounds that stretched eastwards towards Hyde Park Corner. Wilkins was a noted architect and a former fellow of Caius College. He was responsible for the initial design and construction of the early part of Downing College and many other college and civic buildings in the town. He would certainly have known Lens, and it is possible that Lens made this large site available to encourage him to proceed

with building Downing College. The house, which passed into the ownership of the university, survived until the present Chemistry Laboratory was built in 1953. In 1822 Wilkins sold part of the land near his house along the east side of Panton Street (which he named Annesley Place (A3)) for five substantial terrace houses. Both 'Lensfield' and these houses were demolished in 1955. At this time the term 'place' was often used to give an air of social superiority to an area of quality housing. It should be noted that the name Panton Street did not come into use until 1868. Previously parts of it were given different names, such as Annesley Place, Panton Place and Henrietta Street.

Land in the eastern part of John Lens's allocation was originally the site of another large house, Lensfield House (A2), built in 1810 for a prominent and well-connected local banker, Julian Skrine, who was later in partnership with Charles Humfrey. This house later became the home of the Wentworth family, local property auctioneers, until purchased by the Catholic Church, which was raising funds for a new church. The house was demolished in mid-1885 and the new church (Our Lady of the Assumption and English Martyrs) was begun the same year. It was built to replace an earlier church of St Andrew standing in Union Road, which had been designed by AW Pugin and consecrated in 1843. St Andrew's Church was later taken down brick by brick and re-erected in St Ives, where it still stands. The land on which St Andrew's stood was on the north side of Union Road; it is now occupied by a renamed (1962) St Alban's RC County Primary School. A new presbytery was added, leaving the church in occupation of all the eastern end of this area, including Wanstead House (No. 2, Hills Road) a fine town house with a splendid Corinthian entrance portico facing onto Hills Road, built in 1826. Wanstead House actually lies in Thomas Tomson's allotment.

At the western end of Lensfield Road another early but somewhat different type of development, Downing Terrace (B1), began c.1819 on land allocated to Peete Musgrave. He was a prominent tailor and woollen draper, born of a Cambridge family, who died in 1817. In the decades on either side of 1800 the unreformed Town Corporation had been selling or leasing land to Musgrave and other prominent businessmen, councillors, aldermen and freemen at under market value. These men showed particular interest in land immediately beyond the southern town boundary, which they resold or held onto as estates to be developed later. These transactions were severely criticised at the Commissioners' Enquiry of 1833 (3). Records show that Musgrave and his son Thomas sold land to Gonville and Caius, and it is clear that the family had close personal and professional links with the well-to-do and notable of Cambridge society. Both his sons, Charles and Thomas, became Fellows of Trinity College, and the eldest, Charles, was its chaplain. Thomas rose through the Anglican hierarchy to become Archbishop of York, with Romilly as his chaplain.

As Peete Musgrave died in 1817, it is not clear

whether he initiated the plans for Downing Terrace, or whether it was an enterprise of his son, Thomas. Downing Terrace, still extant, consisted of 13 substantial architect-designed houses, built facing onto Lensfield Road in or just before 1820. Although somewhat altered in later years, the terrace remains a small but interesting original element in the town's domestic architecture. Having successfully completed Downing Terrace, Musgrave seems to have changed his development strategy, for later in the 1830s he built a block of very poor-quality housing south of Downing Terrace, with a rectangular grid formed by Saxon Street, Gothic Street (Fig. 3), Doric Street and Terrace Lane. The classical allusions bore no resemblance to the housing, which was of the worst quality in New Town. As early as 1850 the area was unfavourably commented on by the Board of Improvement Commissioners (4) and by the second half of the 20th century it was regarded as an area of slums. Because there was some difficulty in finding accommodation for those who would be displaced the area was not cleared until 1956. After clearance, the area became a car park; in the early 1990s the present blocks of houses (Fitzwilliam Court) were built. A remaining oddity in the area is Gothic Cottage, a house built c.1820 that has been incorporated into the 'Cross Keys' pub.

An interesting name change, reported in the *Cambridge Chronicle* of October 18 1822, was to take place soon after the early 1820 developments. The original name of the new settlement was 'New Zealand', but in 1822 its name was changed to 'New Town', after a deputation of landowners and other proprietors had requested that 'the new buildings known by the name of New Zealand be inserted in the parish books, and hereinafter called New Town'. Soon after this more intensive development began. This was to the south of Lens's allotment, on land allocated to Henry Balls and Thomas Tomson. They obviously held different views on development of their lands because each evolved in a distinctive manner. The Tomson brothers, Thomas and Edward, had been specifically chosen by Wilkins as his stonemasons to work on the first buildings of Downing College. Their building and masonry premises occupied No 69, whilst in No 70 Balls had his currier and leather cutters premises. How and why they were allocated adjoining holdings is not clear, but it is possible that they were known to the two Commissioners who made the Award.

Enclosure Commissioners were by law supposed to have no direct interest in areas with which they were dealing, but early 19th century Cambridge offers many examples of political jobbery. One example was Joseph Truslove, an important farmer and landowner, who was awarded a block of land immediately south of the Balls/Tomson holdings; the other was William Custance, a prominent and well-connected local surveyor, map-maker and builder, who did much work in Cambridge. Tomson's family had held land in the common fields prior to enclosure, which would have given him entitlement, but it seems likely that Balls purchased land in the fields. This and many other instances also show that prosperous tradesmen played



Figure 3. Gothic Street prior to its demolition in 1956. (Cambridgeshire Collection)

an important part in development of housing in New Town.

Although the two men did not develop their holdings in the same way, there must have been some collusion between them, not least in the laying out of Union Road across both holdings, starting from the Hills Road end. For the most part Tomson's intention was to build high-density two up, two down terrace housing, only a few examples of which survive. Balls built for a higher-class market, exemplified by the still existing terrace of Panton Place (D2). Why they adopted different strategies is not certain, but it may be because Tomson did not intend to live on his land, as he had already built a new home on Barton Road, whereas Balls did intend to build himself a new home on his land. This was Panton House (D1), which stood towards the northwest corner of his allocation at the junction of Union Road and Panton Street. It later passed to the Perse Girls School and formed its initial premises in New Town, where it has remained (Fig. 4). The house is incorporated in their much-enlarged school on this site. Apart from the eight houses forming Panton Place (Fig. 10), Balls used the rest of his allocation for a garden and an orchard, now largely built over by the school. Circa 1846, some twenty five years after his initial ventures, he took a strip of land on the eastern boundary of his garden to build Bentinck Street, the western side of which still exists in its entirety.

As stated, Tomson and Balls must have agreed on some matters, most obviously that both Union Road and Coronation Street (Fig. 5) should run straight across their two holdings. But the actual development of their holdings was quite different. Tomson subdivided his holding by building George Street,

Princes Street and Queen Street between 1821 and 1825, creating many more frontages. Building in this way also allowed cramming in extra courts of houses (Green's Court, Sell's Court, Queen's Court) within the square formed by exterior street frontages, achieving higher density. Laying out Coronation Street in the same period allowed further intensive house building across both holdings. An innovative large-scale urban renovation project in the mid-1960s, one of the earliest in post-war Cambridge, led to demolition of all the properties along the eastern side of Bentinck Street, western side of George IV Street, Queen Street, Princes Street and the north side of Coronation Street (Fig. 4).

The northern side of Union Street, which also runs across both holdings, abutted onto the southern boundary of Lens's land. This allowed space for a variety of good quality houses, mainly on Balls's land. The most notable was Lensfield Cottage (C3), which was built across the boundary of the two holdings. It seems to have had access to, if not possession of, some of Wilkins' land to form a garden, which argues for some cooperation between two, if not three landholders. Farcet House and Annesley Cottage were other sizeable properties, the latter still standing. St Paul's Infant School also lay on the northern side of Union Road. Most of these properties were demolished in the 1950–60s, and the remainder in the early years of this century.

Dates given for these roads do not imply that they were fully developed at this time. Evidence of land sales and the detailed characteristics of individual surviving properties reveal that plots were sold to different builders for speculative development, some being developed many years after the initial building

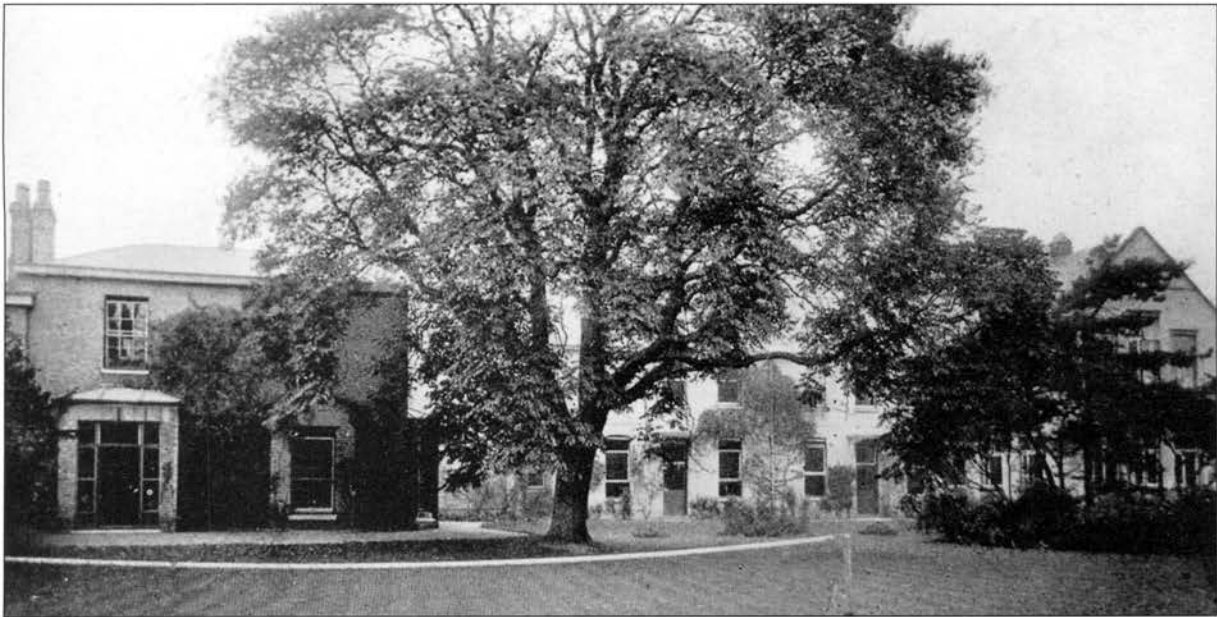


Figure 4. Panton House in 1904, built by Henry Balls (left), with more recent Perse School buildings in its extensive grounds. (D1). (Cambridgeshire Collection)

commenced.

The final element in the development of Tomson’s holding is an excellent illustration of the importance attached to sites on main roads, for on the eastern (Hills Road) frontage a terrace of twelve high quality town houses was built from the 1820s onwards in a propitious location between Union Road and Coronation Street, facing onto the main road out of town. Being so near the station would have increased the desirability of this location after the coming of the railways in 1845. This length of Hills Road from Union Road past Coronation Street was originally known as Gloucester Terrace. The Duke of Gloucester was the Vice-Chancellor from 1811 to 1834 and the name persisted until the 1850s. These houses were occupied initially by the likes of clergy, gentry and wealthy businessmen. The four outer houses on either side of Cintra Terrace (C1) were built in the 1820s (Nos 3, 4, 5, 6 and 11, 12, 13, 14); the infill of the middle four (Nos 7, 8, 9, 10) was between 1830 and 1850. It was the middle four which by 1855 was known as Cintra Terrace, now Cintra House. The elegant new façade for Cintra Terrace appears to have been executed 1860–1865 by John Edlin, a local architect. Cintra House now combines these four houses and flats into one property that forms the regional headquarters of the Open University.

The importance of the main road attracted further housing and shop development along Hills Road spreading southwards across Tomson’s and Truslove’s holdings until Trinity Hall’s land was reached. An interesting example of the influence of a college’s attitude to development was that it would not permit the building of shops or pubs on its Hills Road frontage, although it allowed a large Methodist Church at the corner of Norwich Street in 1871 (demolished in 1973).

From Norwich Street to the southern end of the college’s holding it permitted two imposing residential blocks, Dorset Terrace to Bateman Street and Eastern Terrace.

Table 2. Variation in the size and quality of early housing developments can be demonstrated by the following table of 1837 rateable values. (5)

South of the Balls and Tomson allotments an elongated wedge-shaped area had been allotted to Joseph Truslove, a well known Cambridge landowner and surveyor who had served as an Enclosure Commissioner on three occasions for St Giles, Cherry

Street	No. of Houses	Average rateable Value
Panton Place.	9	£30:4:5
Annesley Place.	20	£22:0:0
Downing Terrace.	15	£20:8:0
Union Road.	32	£14:5:0
Princes Street.	14	£10:2:10
George IV Street.	18	£9:8:10
Coronation Street.	73	£9:1:1
Queen Street.	23	£7:18:11
Saxon Street.	72	£8:13:4

Hinton and St Thomas Leys. He laid out Russell Street (Fig. 6) to run more or less centrally along the length of his allocation from Hills Road to Panton Street. It is first mentioned in documents in 1835, but most of the building was 1840–1850, and some is later still. Map and documentary evidence show that Truslove created a high-density development. Very little of Russell Street’s original character can now be seen, for in the



Figure 5. Coronation Street as seen from the tower of St Paul's Church, 1964. Demolition taking place preparatory to the building of Royalty Square in 1968. (Cambridge Evening News)

late 1960s almost its entire length was involved in a major urban clearance project and only a few original properties at its eastern end are still in being. The reconstruction did not in fact take place until the 1980s.

The east–west running streets (Union Road, Coronation Street, Russell Street, Norwich Street and Bateman Street) all terminated at the north–south line of Panton Street. The reason for this is that the land west of Panton Street lay in the allocations of Musgrave and Pemberton, which were developed at different times and in a different manner.

Properties on the northern side of Russell Street backed onto a common boundary with Coronation Street houses, although the premises of both the Panton and Albion Breweries were built across this boundary. The wedge-shaped outline of Truslove's allocation meant that properties could be much longer at the Hills Road end, permitting gardens, courts and yards for additional houses and commercial premises behind main street frontage. Houses on both sides of Russell Street had more of these courts and yards behind them than any other part of New Town.

Development of Norwich Street and Bateman Street in the mid-1860s provides an excellent example of the way in which a site developed by a college, Trinity Hall, gave rise to a strongly contrasted type of development. In the original allotment this block of nine acres had been awarded to the university, whilst a much larger area of 38 acres lying to the south of New Town was given to Trinity Hall. In the early 19th century the rising tide of science demanded a larger Botanic Garden than existed in the New Museum site, and in 1831 a private Act of Parliament was passed en-

abling the university to purchase the Trinity Hall allotment for the new Botanic Garden, and for the college to receive the former university holding. Trinity Hall also received £2210 as part of the exchange. The new Botanic Garden began on their present site in 1846, but initially only occupied twenty of the original 38 acres on the western side of the holding. Legal and financial problems delayed development of the Botanic Garden until 1845. The first trees were not planted until 1846, the plants in 1847 and the process was completed by 1852. The eastern 18 acres was owned by the Botanic Garden, but there was insufficient money for it to be developed, so it was leased to several tenants until 1953, when a bequest from William Cory enabled the remainder of the original allotment to be developed.

Land acquired in 1831 by Trinity Hall by this exchange was a block extending from Hills Road to Francis Passage. At its western end the small allocation of two acres to Addenbrooke's Hospital formed a natural extension of Trinity Hall lands. But it was not until the mid-1860s that Trinity Hall decided to start building. In 1865 they leased the land to Robert Sayle, who under covenant agreed to lay out Norwich Street and Bateman Street, named after the founder of the college (1350), William Bateman, Bishop of Norwich. Norwich Street is, to all intents and purposes, the only street in New Town still preserved, externally at least, in its original condition. Despite minor variations, houses on both sides of the street form almost unbroken terraces of uniform characteristics. Although small, the houses had a sturdy construction, but as was common in those days, they lacked such amenities as bathrooms, and had outside WCs. Unlike pri-



Figure 6. Terrace housing in Russell Street, 1964. Built mainly 1840–1850, the Russell Street houses are now entirely demolished. (Cambridge Evening News)

vate landlords, the college took a strict line with its properties, and with only a very few exceptions would not permit commercial activities in these houses, and there were no yards or courts behind the frontages in which they could take place. The housing built on Addenbrooke's land west of Francis Passage bears a fairly strong similarity to the Trinity Hall properties, although closer examination reveals minor differences.

Bateman Street was laid out as a more imposing architectural development with larger properties, although its two sides have very different characteristics. On the northern side the houses, which are of uniform style, are much larger than those in Norwich Street, all having three floors and a basement facing onto the street, with gardens behind (Fig. 7). The southern side of the street was uniform in general character, but more varied in detail. A number of large town houses were built, some detached and some in pairs, but all with three storeys and a basement. Large gardens at the rear looked onto the new Botanic Garden. It is unfortunate that demolition of some houses for modern offices, and use of others for educational purposes, have destroyed some of its uniformity and character, although a number of houses retain their original appearance. At the western end of the street, on land allocated to Addenbrooke's, two further detached houses (Paston House and Bateman Lodge) were built, both now incorporated into St Mary's School. Another modern development by Trinity Hall in 1983 has resulted in those houses between Nos 48 to 56 losing half of their gardens for Bateman Mews, sixteen town houses lying behind the main frontage.

Bateman Street today continues west of its junction with Panton Street to link with Trumpington Road, but this section of the road was made originally as an access to 'The Elms' (H1), a large mansion built for Ebenezer Foster, a well-known Cambridge solicitor. The road still runs at a slightly different line to the original Bateman Street. 'The Elms' now forms an important part of St Mary's School.

Commercial and Social Activities

At the time that New Town came into being, many of the incomers had been attracted by the availability of work in the university and the service industries of the town. The town was not, and never had been, a centre of importance industrially, but there were numerous small firms scattered around the town catering for the local population. In the absence of public transport as we know it, people expected to buy their daily food within walking distance, and local shops opened in almost all the new streets. Directories show that in a number of houses small businesses were carried on, such as joinery, bakery, chimney sweep, dressmaking, tailoring, millinery, shoemaking and cobbling, many with small workshops with stores for tools and materials at the rear.

Pubs

There were a large number of pubs, and seven breweries; small breweries were numerous at this time, serving local markets. The earliest can be dated to 1830, when it is offered for sale in the *Cambridge Chronicle*.



Figure 7. Four-storey houses along the northern edge of Bateman Street, built in the mid-1860s. Photographed in the 1950s. (Cambridgeshire Collection)

All of them were in existence by 1869 and the last ceased brewing in 1957. Most started as small brew-houses with a tap to an adjacent pub, but only three survived as breweries into the 20th century. It is likely that they were attracted here not merely because of the growing local population, but also because of a supply of pure artesian water underground. The water supply for Cambridge was a matter of growing importance in the early 19th century because of the dubious quality of existing supplies, and it was a topic that persistently exercised the local authorities. Nevertheless it was not until 1852 that an Act was forwarded to Parliament for formation of the Cambridge University and Town Water Company to supply the town as a whole with pure water, so access to a pure local supply was important factor.

Artesian water is water held in porous underground rock strata under natural pressure. The rock strata in the Cambridge area consist of a series of beds of sedimentary rocks dipping underground to the southeast, rather like a tilted layer cake. The uppermost bed, the Chalk, forms the high land east of Cambridge, with older beds coming to the surface beneath and west of the town. Most of central Cambridge is built on Gault Clay. The bed containing the artesian water was Lower Greensand; it is soft porous sandstone that holds water in the interstices between grains of loosely cemented sand. The generalised thickness of the bed can be up to 20–25m. The Greensand lies between two impermeable strata, the Gault Clay above it, which under Cambridge is about 45m thick and the Kimmeridge Clay beneath, about the same thickness. These two clay beds prevent the water in the Greensand from escaping upwards or downwards, and as more water enters the rock from the surface it places existing groundwater under pressure. A well or borehole sunk to 50m could tap the artesian water in the Greensand, which was forced up the pipe under natural pressure. Indeed at the outset the water spurted several feet into the air, but if more is extracted than enters, the pressure falls and water has to be pumped out. The breweries were able to obtain licences to have their own boreholes within their premises and the Panton Arms had three up to 80m deep.

Schools

Provision of schools for local children goes back almost to earliest houses, for an infants' school was opened in 1826 in Union Road. By 1844 this building was used for older boys, with the girls educated in St Paul's Chapel. Infants were then taught in cottages. This provision lasted until a new National School was built in Russell Street in 1845 with separate but conjoined accommodation for boys and girls and two adjacent houses for a schoolmaster and schoolmistress. This enabled the infants to move back into their original premises. The buildings of the National School are still standing in Russell Street, although they have now been adapted and enlarged for housing. The infants' school was rebuilt after 1846 and closed in 1932. On its site Houghton Hall, named after a 16th century

Catholic martyr, was built in 1936 to serve as a public hall and assembly room, but this no longer stands. A Catholic school was opened in 1843, also fronting onto Union Road, although children had previously been educated in local cottages. A new school was built in 1867–8 in part of the grounds of Wanstead House, which was enlarged in 1894. It was then refurbished in 1936 on the site of the former Catholic Church, where it still stands; at this time an additional new building was added on the site.

Churches

Apart from the Catholic Church, New Town had a Methodist Church built in 1871 on Robert Sayle's Trinity Hall land, on the corner of Hills Road and Norwich Street. It survived until 1973, when it was demolished for a new office block. In 1886 a Primitive Methodist Chapel was built on the west side of Panton Street, a short distance from Norwich Street. In 1911 it was sold to the First Church of Christ Scientist, which still uses it. Panton Hall was established in Bolton's Van Yard premises at 14 Panton Street and now belongs to the Open Plymouth Brethren.

Businesses

As mentioned above, businesses were carried on in quite a few houses, and the existence of courts and yards behind some street frontages provided sizeable areas for commercial development, as well as, in some cases, additional housing. These were found mostly in the area between Union Road and Russell Street, not least because in the higher-class areas developed by Trinity Hall and the Pemberton family such commercial development was expressly forbidden. Examples of such developments were Bull's Dairy, a blacksmith's yard, Winter's Yard and Sell's Court.

The Pemberton Allotment

The final part of the New Town area to be developed was twelve acres allotted to the solicitor Christopher Pemberton; he signed the Enclosure Award and acted as Secretary to the Enclosure Commissioners. The Pembertons were a powerful and affluent land-owning Cambridgeshire family with large estates in Trumpington and Newton. The land formed a trapezoid lying between Panton Street and Trumpington Road, with its long axis running north–south. The northern boundary abutted onto Musgrave's Gothic Street/Doric Street development, and the southern boundary ran south of but parallel to Bateman Street. This shape was dictated by Panton Street running north–south, whereas other internal main roads in New Town run east–west. Panton Street itself forms something of an internal 'boundary', and various sections of its eastern and western sides have visibly different housing patterns because they were developed by different owners at different times.

Christopher Pemberton built and already lived in a very substantial mansion, Grove Lodge, which stands on land leased from Peterhouse, opposite the former

Addenbrooke's Hospital. Perhaps for this reason the land given to him was not developed until after his death in 1850, although there was considerable tree planting on the allotment, as is characteristic of all the Pemberton holdings. When development finally began in 1851 a grid street pattern was envisaged, although it was never fully realised. There were to be two north-south roads between Brookside and Panton Street, Brookside Lane and St Eligius Street. Only the northern part of Brookside Lane was ever completed, and still exists; St Eligius Street was laid out in 1853, running the full length of the allotment. The only complete east-west road on their land is Pemberton Terrace, but the short sections of Coronation Street and St Anthony's Street had the same orientation. Plots of land along these roads were sold at auction for the building of houses, some purchasers taking two or three contiguous plots to build larger mansions, as seen at the southern end of Brookside. The building of houses on the allotment continued up to 1896, but after 1868 it slowed and some plots at the southern end were not taken up.

Apart from Brookside itself, development on Pemberton land up to 1900 does not conform to any master plan; the variety of houses certainly gives little evidence of such a plan. In this respect it offers an interesting contrast to the rest of New Town, where the intentions of the developer were clear. Nor does there seem to be any evidence that the Pembertons exercised social or architectural control over the ownership or character of the properties built other than in Brookside itself, although the high prices of the plots may have exercised their own control. The only stated prohibitions were to forbid shops, pubs and places of business. The obvious initial intention of the Pemberton family was to develop Brookside as a series of large and impressive family houses; this is hardly surprising, for with its clear views across Coe Fen Leys it was one of the most desirable sites in Cambridge.

Particulars of the first plots of land for sale were announced in 1851; 26 lots in Henrietta Street (west side of Panton Street), 26 lots in Pemberton Terrace (now Brookside), 4 lots in Christopher Buildings (north of Pemberton Terrace) and 12 lots in Newton Place (the site of Freemasons Hall).

Development of Brookside began in 1853. The southern end was developed first when the western end of Bateman Street was laid out in 1853 as an access carriage-way to Brookside. In 1853 *The Elms* was built for Ebenezer Foster, and in 1855 No 1 Brookside for an architect, John Smith. In 1855 building of the terrace now known as Brookside started from the southern end, probably to avoid close contact with low quality housing on Musgrave's land. Freeholders of houses on Brookside also had, and still have, control of the garden area fronting the houses. The Pembertons paid for the three iron footbridges over Hobson's Brook.

The first house in Brookside proper was Beech House, built in spacious grounds for James Nutter, the Grantchester miller. Altogether six large family mansions (Nos 2-7) were built with imposing heavy

frontages, followed by eleven town houses (Nos 8-19) forming a terrace. At a casual glance the houses look much alike, but there are significant differences. Nos 15 and 16, originally Pemberton Villas, have five stories and were built pre-1866, before the other houses. Nos 8, 9, 10, 11 and 12 are uniform in style; 13 and 14 are later and rather less grand. No 17 is a neo-Georgian red brick covering three plots, and the double frontage of Nos 18 and 19 is one house internally divided into two, the entrance to No 19 being on Pemberton Terrace.

Early purchasers of the southern part of Brookside make an interesting social point: miller, grocer, farmer, vicar, two professors, two college fellows. Here, and in other parts of the Pemberton estate, one can see the middle classes moving up-market.

Most of the remainder of the Pemberton land was developed with substantial family houses fronting onto Pemberton Terrace, Panton Street and sections of St Eligius Street. From their varied character it is evident that plots were bought for development by builders or potential house owners. Nos 24 to 52, situated on the west side of Panton Street, range from 1854 to post 1901, although most are built from the mid-1860s. There were also a few short terraces of modest cottages in Coronation Place and on the north side of St Anthony Street. On the south side of St Anthony Street the almshouses of St Anthony and St Eligius were rebuilt. It is intriguing that these almshouses, which had stood at the southern end of Trumpington Street since medieval times, were the very first buildings erected on Pemberton's land. Was this a philanthropic gesture, or some kind of deal connected with land or property?

The one anomalous building in the Pemberton allotment is Cheshunt College. It lies in an area that was originally intended for housing, and a small number of cottages were built facing onto St Eligius Street. But the remainder of the land was not taken up and it was ultimately sold for a religious college. The university could not have any specifically religious colleges until after the abolition of religious tests in 1871, but in 1876 it proposed the establishment of such a college. Ridley Hall and Westcott College opened in 1881 and Westminster College in 1899. Cheshunt College had no original connection with Cambridge as it had been founded in 1768 as a Methodist religious college, initially in Brecon and later (1792) in Cheshunt (Hertfordshire). Twelve students and a tutor moved to Cintra Terrace in 1906 and were taken under the wing of Westminster College, but later a new college was established on Pemberton land. The initial intention was to buy three houses in Brookside and cottages in St Eligius Street and redevelop the whole site; a competition was held for the college's design, but only half of its ambitious mock-Tudor plan was realised. The college was opened in 1913 with its main entrance facing Bateman Street. It survived until 1967, when it merged with Westminster College and the property came into the ownership of the Freemasons.

1900–1950

From its beginnings c.1820 it took roughly eighty years for the initial building of New Town. By 1900 houses covered almost all its 80 acres; only a few small areas remained to be occupied. In this small area, housing ranged from large family mansions for the wealthy to the meanest of houses for the poor. The area had acquired churches, schools, breweries, shops and a variety of small businesses to serve the local community. Socially it embraced in close proximity all classes from wealthy professional and university families to the poorest working-class households. Many inhabitants had moved from other parts of the town or adjacent villages, but others were incomers attracted by employment opportunities in the expanding economies of town and university. New Town was now mature as a settlement and a community.

Change was inevitable in the coming years, but it occurred gradually and there was no point that denoted a radical alteration to its physical or social character. Nevertheless forces for change were at work. At the poorer end of the housing market, deterioration had set in; at its worst some areas had become slum property condemned as unfit for habitation even before 1900. Many smaller houses lacked amenities such as bathrooms and inside lavatories, which were increasingly being recognised as essential. But landlords were reluctant to invest capital in upgrading these properties and both the houses and their tenants suffered accordingly, especially in the 1930s and after. By then investment was being channelled into new housing estates, especially to the east and south-east of Cambridge, and parts of New Town slipped into greater decay. Another factor initiating change was education. New Town was becoming a favoured site for new schools, and several of the detached family mansions with large gardens were demolished or adapted by the university and private schools. Several were acquired to meet the expanding demand for education of girls.

Student numbers had risen significantly in the 19th century; annual matriculations rose from c. 250 in 1800 to c. 1000 by 1890. In the same period the university was under frequent pressure from various sources to institute reforms to its ancient practices. There were strong demands to increase the number of Triposes, particularly in Natural Science and Engineering, and this led to a search for sites outside the town's crowded central core where new laboratories, teaching and research facilities could be built. The first manifestation of this in New Town was in 1934, when the Scott Polar Research Centre was built in the garden of Lensfield Cottage, facing onto Lensfield Road. Lensfield Cottage was a large property on the north side of Union Road which had a substantial garden running through to Lensfield Road.

Two schools were the Perse School for Girls and St Mary's. The demand for both boarding and day school places for girls was rising in the later 19th century and New Town, which was close to the town centre, also contained large residential properties suitable for

conversion to private schools. The Perse School for Girls had begun in 1881 in 68 Trumpington Street, but steady expansion demanded more accommodation and by 1883 it had moved into Panton House, originally built by Henry Balls as his family home, passing to Charles Foster, the banker, who leased it to the school. When the lease expired in 1892 the house was purchased, and it has remained the core of the school ever since. On several occasions up to the late 20th century the school has added new buildings within the site on which Balls had built his house, using his original garden, so that it now occupies the entire rectangle between Union Road, Bentinck Street, Coronation Street and Panton Street, save for the terraces of houses on the west side of Bentinck Street and the east side of Panton Street. The school also owns New Town properties close by the main school, such as the former St Paul's Institute (C2), now a sixth form centre, and Rosedale House, a junior school in St Eligius Street.

The history of St Mary's School is similar. A Catholic Order of nuns, the Institute of the Blessed Virgin Mary (IBVM) opened a house in Furness Lodge on Parkside in 1898. It seems to have been the intention to found a boarding school, but it had a slow and difficult start. Nevertheless by 1904 the Order had purchased The Elms in Bateman Street, once the home of Ebenezer Foster. Later it became the home of Professor Kennedy, Regius Professor of Greek, a progenitor of women's education in Cambridge. As with Perse Girls, its subsequent history was one of enlargement by the purchase and incorporation of adjacent properties, ie Paston House in 1909 and 47 Bateman Street in 1988.

Post Second World War – 1950 to date

Immediately following the end of the second world war, little public or private building was possible because available resources were directed into the rebuilding of the national economy. In consequence there was little change in New Town until the 1950s, when there were two new factors for change. The first was education, which has influenced the area in a number of ways. The second was housing, in which the local authority now played a dominant role. With newly gained planning powers, New Town could be viewed in terms of meeting the housing needs of the city. The council was required to consider the area not as a self-contained Victorian entity, but as part of the city as a whole.

The university, after a dormant period during the war, had begun its post-war expansion, particularly in the disciplines of Natural Science and Engineering, where there was a desperate need for new teaching and research facilities. Consideration was given to the possibilities of expansion in New Town. As the Holford Report (6) said, 'the dilapidated condition of many buildings in New Town and the existence of the University Botanic Garden on its southern edge suggested to us that in time a large part of New Town

might suitably be used for University buildings'. But Holford later reversed this view, because he came to consider that the area was too distant from the headquarters of science on the New Museums site and that a westward expansion of science was preferable, as has come to pass.

The direct role of the university in post-war New Town has therefore been limited. In the main, it has been confined to the area originally allotted to John Lens. With the exception of the eastern end occupied by the Catholic Church, its presbytery and primary school, all the remaining land in Lens's allotment is now occupied by university buildings and related science activities. The first major change came in 1953, when new Chemistry Laboratories were built in the grounds of Wilkins's former home, Lensfield. The new laboratories, which by Cambridge standards at that time constituted a large building project, extended as far as the Scott Polar Research Centre. Some fifty years later they were refurbished and extended and accommodation for new high-tech enterprises (The Unilever Cambridge Centre for Molecular Informatics and the Cambridge Crystallographic Data Centre) was added to occupy all land up to the Union Road frontage. This led to demolition of all original properties along the north side of Union Road except Annesley House. The university has also owned other properties in the area. Despite Holford's earlier fears that 'students would have to cross or mix with heavy local and through traffic journeying between New Town and the town centre', hundreds of students make this journey daily.

In most parts of New Town it might be said that education has become the major activity. Both the Perse School for Girls and St Mary's have expanded their accommodation, partly by building on their existing site and partly by taking over other properties in close proximity. Bateman Street, particularly its southern side, is dominated by various forms of education. Some of the original houses have been demolished and the site used for a purpose-built school (Eurocentre) for foreign language students. Other houses have been taken over for the New School of English, the Arts Council and St Mary's Sixth Form Centre. Many houses in this and other streets are used as accommodation for college students, with Trinity Hall having a substantial presence on the north side of Bateman Street. In the largely demolished Russell Street a new hostel for students has been built by St Catharine's College.

Building new houses was a matter of high importance for the government in the post-war period. A prime objective of the Labour Government, spurred by the wartime Beveridge Report, was its pledge to provide houses for rent that were to be built by local authorities. Housing on the scale needed could not be provided by small local building firms, and so the architectural profession found itself faced with the challenge of designing and building local authority housing projects on a large scale, both houses and blocks of flats. The deterioration of older housing in New Town had brought it to the end of its useful life;

it had gone beyond the possibility of renovation to the standards demanded by the post-war generation.

Ever since the Artisans and Labourers Dwellings Improvement Act 1875, local authorities had compulsory powers to buy up slum property and demolish or improve it, but in the post-war period these powers were not easy to exercise because of tight monetary controls. Local authorities had to submit detailed plans and could not go ahead without permission. In consequence, it was not until the late 1950s that the Council could seriously consider proceeding with large-scale housing clearances in two parts of New Town:

- a. Saxon Street, Doric Street, Gothic Street and Terrace Lane.
- b. George IV Street, Princes Street, Queen Street, Coronation Street and Russell Street.

In both cases virtually complete clearance was the objective. With the Saxon Street scheme, the main aim was to demolish properties that had for decades been unfit for habitation, and to re-house occupants in other properties in New Town owned by the Council. But the Council had no immediate use for the site, so when cleared in 1956 it was used as an open-air car park. It was eventually redeveloped for private housing in the early 1990s.

The second development was much larger, although against the wider Cambridge scale it involved only a small concentrated area. In 1950 the Holford Report had grouped Cambridge houses into Good, Below Standard, Short Life, No Life. Holford's view was that redevelopment of the East Road area should take priority as two thirds of its houses fell into the lower two categories, and New Town could not come into the picture until substantial progress had been made there. Holford also took the view that the outward spread of low-density housing might be arrested if inner residential districts were developed with modern houses and flats, and he regarded New Town as ideally placed to play this role. In New Town over half the houses fell into the two lower classes, most of which had been built on the land developed by Tomson and Truslove. Unlike many of Holford's proposals this part of his plan was acted on, for from 1960 through to the 1980s the Council demolished, cleared and redeveloped virtually all King George IV Street, Queen Street, the south side of Union Road, Coronation Street and Russell Street. The flats cover all the land within the area bounded by King George IV Street, Union Road, Bentinck Street and Coronation Street (Fig. 8). Little more than odd isolated original properties now remain. Although redevelopment involved social as well as the physical aspects, its major feature was the blocks of flats, Royalty Square, completed by 1968. The design drawn up by the city architects was considered highly innovative. Two multi-storey blocks were built, one flanking King George IV Street (Hanover Court) and the other Bentinck Street (Princess Court); a multi-storey car park forms the northern side, abutting on Union Road, while the southern side is open to Coronation Street. A new St Paul's C of E County Primary School was built on Coronation Street, together with a Day



Figure 8. Bentinck Street, Princess Court (City Council housing built late 1960s), Unilever Cambridge Centre for Molecular Informatics, Cambridge Crystallographic Data Centre in 2005.

and Care Centre, with grounds running through to Russell Street. Apart from a short stretch at its eastern end, now being rebuilt, the south side of Coronation Street was completely redeveloped for modern housing (Russell Court) from the Primary School west to the Pantons Arms.

Apart from its eastern end, Russell Street is now a cul-de-sac and the land between it and Coronation Street has been completely redeveloped for housing, school and community use. On its southern side new housing blocks have been built for the Granta Housing Society and Cambridgeshire County Council; the grounds of the former National School (which retains its original frontage), have been built over for flats. The western end of Russell Street has been redeveloped as a semi-enclosed housing area including residential homes for elderly people (Figure 9). On the north side, Catharine's College has built a hostel for its students.

The effect of this redevelopment on the physical landscape of New Town in the second half of the 20th century is difficult to summarise. The areas of original 19th century building which are wholly or substantially unaltered are; Norwich Street, the northern side of Bateman Street and most of its southern side; the Pemberton allotment, including both sides of Pantons Street (Figure 10); Downing Terrace; the Hills Road frontage southwards from Lensfield Road to Russell Street. In simple terms, in the heart of New Town there

is now a core formed by the Council's post-war redevelopments, although within this core there are still a few scattered but important survivals from the 19th century, such as Bentinck Street and a small number of other houses, the Pantons Arms and the National School,

It is hardly surprising that social characteristics have also changed. A major new element is a considerable resident and non-resident student population, from primary school to post-graduate age. New Town is also now regarded as an attractive residential area, within easy walking distance of the town's social, academic, business and administrative functions. Much, but not all of it is free from through traffic and therefore more peaceful than many such areas. It is within easy reach of the railway and bus stations. Therefore although houses prices reach very high levels, even for quite modest properties, many are sought after by academic and professional families and those who are retired. The areas redeveloped by the Council are a mix of Council owned flats and houses and property developed by housing associations, with a varied social composition.

In its earliest days New Town grew to be a small microcosm of the physical and social characteristics associated with the spread of 19th century Victorian suburbs beyond their historic cores. What was then a new settlement on the edge of Cambridge's medieval core is now itself an inner city area, but it retains a



Figure 9. Russell Court, 2005. A City Council housing development in the 1980s.



Figure 10. Panton Place, 2005, built by Henry Balls (D2).

recognisable identity resulting from the patterns gradually established from its inception just over 180 years ago.

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