

CHAPTER THREE

IMPLEMENTATION OF THE ACT: WHAT WAS NOT DONE

3.1 No canal was built

It must be stressed that no canal was ever built as a result of the act of 1571, nor were any navigation cuts made along the lower stretches of the river. Such a firm statement is necessary both because the City later established the mistaken opinion that they had built a 'new cut' along the lower Lea at this date (see 12.1), and because many historians have stated or assumed that either a canal or a navigation cut was built by the City.¹

That no such were ever built can be definitely established from contemporary evidence. In 1592 petitioners stated without contradiction that no canal had been built to the north side of London.² With regard to the cut along the lower Lea, documents dated 1551 and 1589 delineate exactly the same course for the lower Lea, whilst a survey in 1576 or 1577 notes that the channel which was later to be called the 'new cut' was and had been in existence for many years.³ Furthermore the City never carried out any improvements to the river at this date, the act gave them no such powers.

Although never implemented, the various canal schemes considered by the City are of considerable interest. When they obtained the act the City intended to build the most ambitious canal then ever considered in this country, and one of the most ambitious to emerge before the start of the Canal Age in the 1750s and 1760s. Furthermore, after this scheme had been thwarted, they advanced two other less ambitious schemes, both of which were still far in advance of contemporary English development.

3.2 The original scheme

In 1571 the City intended to build a canal by cut and fill techniques* to run on one level without locks from Hoddesdon in Hertfordshire to fields in Islington known as the Commandery Mantells. It was then to be extended to join the river Fleet near Holborn Bridge, thus opening up communication with the Thames. Such a canal was about 17 or 18 miles long.⁴

This route had been surveyed earlier in 1571 by James Basendyne, a Scot who had become a naturalised Englishman in June 1562, and who in the late 1580s was involved in a voyage along the northern coast of Russia beyond the river Pechora. To effect this survey Basendyne had to make his own instruments to take the levels between the stations* along the proposed course. In this task he received the help of Thomas, the late servant of Albert Stuges. It is obvious that this scheme tested existing surveying techniques to their limit.⁵

In addition maps, now no longer extant, were prepared by Jaques Furrier and James Aldaye. Furrier was French, and had come to England in the 1560s to avoid religious

persecution.⁶ Aldaye had been the chief assistant to Sebastian Cabot, and was also involved in trade and exploration in Russia and Morocco.⁷

Since Basendyne was paid for only three days work on the survey it is possible that he was merely checking or amplifying earlier work. However, whoever was responsible for the original idea had sufficient skill to note the eminent suitability of the terrain. This suitability allowed the construction of the New River, and encouraged the promotion of other canal and water supply schemes in the ensuing centuries.⁸

8. *In the early 1600s there were proposals to supply Theobalds House from Lynch Mill in Hoddesdon, whilst in the 1630s there were proposals to supply London from the same source. In 1773 there was a scheme to build a canal from Waltham Abbey to Moorfields, with further variations on this scheme in 1802 and 1810. In 1805 the intended East London Waterworks Company proposed to bring water from Waltham Cross to a reservoir at Mile End. None of these schemes were implemented. The suitability of the terrain was stressed by James Sharp in 1773:- 'I had the Level taken from the Quarters in Moorfields, to see where it would run into the River Lee, and to my very great Surprise, I found it extend no less than thirteen Miles and an half, viz as near Waltham Abbey...':*

Of particular interest is the New River scheme. This was an artificial channel built to convey drinking water from springs near Ware down the Lea Valley to the Commandery Mantells in Islington, from whence it was distributed by gravity flow to customers throughout the capital. The City sponsored acts in 1606 and 1607 to authorise the construction of this channel, and it was completed in 1613 by Hugh Myddelton who took over the scheme from the City.

No evidence has been found to prove a connection between the City's canal scheme in 1571 and the New River. However the similarities are so great that it is impossible not to believe that the canal scheme provided at least the germ of the idea that inspired the construction of the New River.

The New River was an easier technical challenge than the canal would have been. It was narrower, shallower, and followed a more circuitous route in order to lessen the amount of expensive cutting and embanking. One critic of this last policy argued 'it is best to bringe this river the nearest waie...eyther by reasonable deepe digging in some places(as namely in Cheshunt field) or indifferent high bankinge, as at Enfield parkes and some other such like places'.⁹ Such a comment illustrates the obstacles to be overcome by proponents of the canal scheme in 1571.

Further speculation about this original scheme is possible. The head of the canal was to be Hoddesdon, an important market already supplying London, with a potential for further expansion. Another factor may have been that there was an additional supply of water for the canal besides that to be taken from the Lea.

In the early 1600s a scheme to supply water to Theobalds House involved the purchase of the Lynch Mills in Hoddesdon so that the springs which drove the mills could be diverted and taken by canal to Theobalds. This canal was to be built by cut and fill techniques at an estimated cost of 1000 marks, was to be 6 miles long, 12 feet wide and 5 feet deep,

and was to take in additional water from other springs along its course.¹⁰ The scheme was never implemented, but it is worth speculating that it repeated ideas that were first generated during the planning of the canal scheme of 1571.

One query about this original scheme must remain unanswered. How did the City intend to finance it? Where was the investment capital to be raised, and was it to be repaid? No evidence has been discovered.

3.3 The first alternative

The response of the City to the frustration of their original plan was to consider a canal across the Isle of Dogs between the Lea just below Bow Lock and the Thames at Limehouse. This canal was surveyed in 1573 by a Dutchman called either Anthony Trapper or Anthony Trotter, the name is recorded differently in the two sources. His plan is reproduced below.

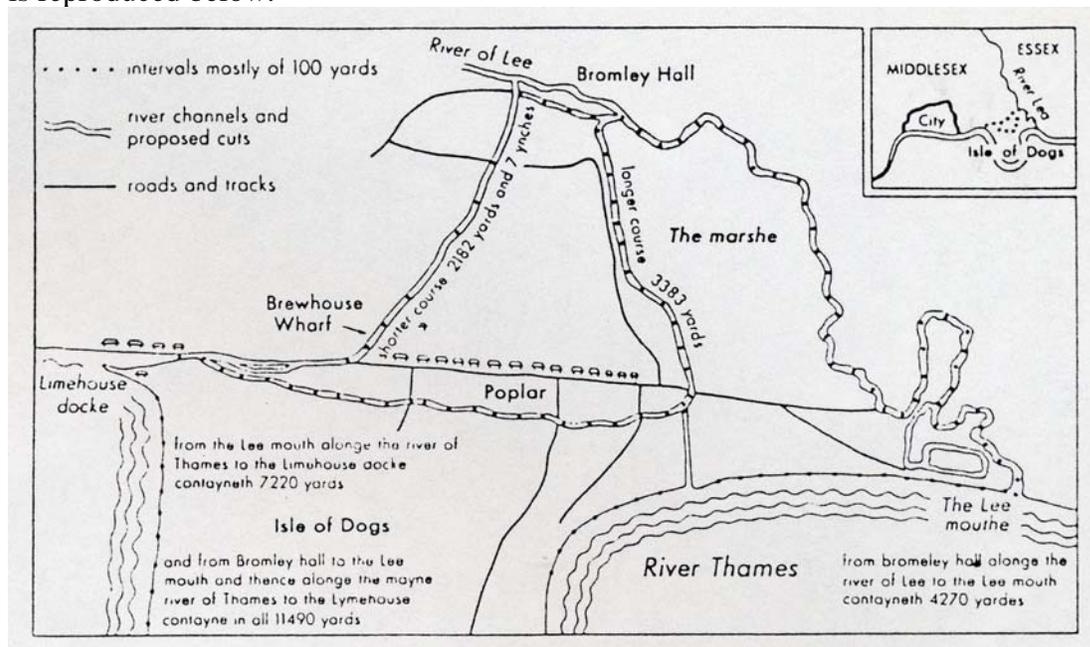


Figure 1. Isle of Dogs Canal, 1573

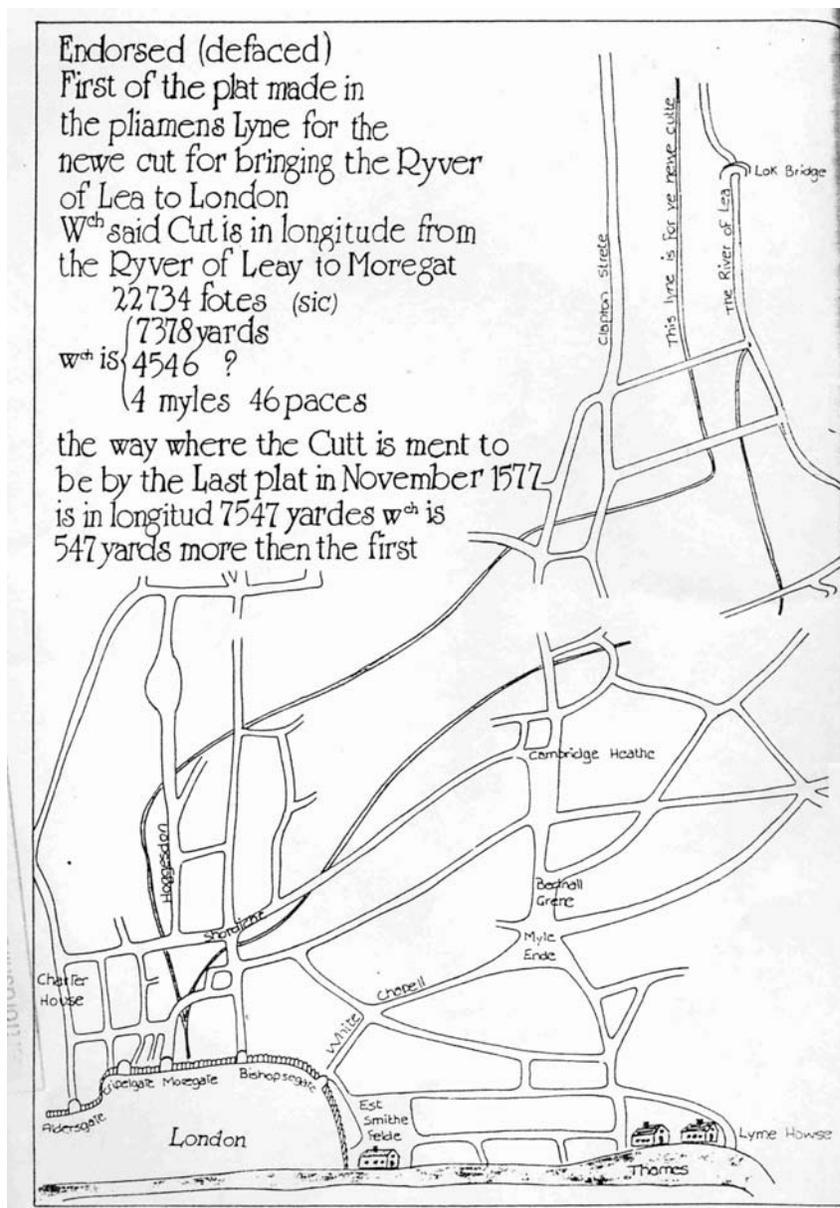
There are problems in interpreting this map,¹¹ but what is definite is that it shows at least one proposed route for a canal between the Lea and Limehouse. Such a proposal was a sensible response to the limitations imposed by Parliament.

It was much shorter than the original canal, required the purchase of less expensive land, and did not incur any compensation payments to mill-owners. It thus required far less finance. Yet it still offered great advantages. Barges bringing grain and malt down river to the capital wasted much time waiting for favourable tides and winds both to navigate the lower Lea down to the Thames and then round the Isle of Dogs and up the Thames to London. The proposed canal would have substantially reduced this wasted time.

A major problem with this proposal was that the City had no authority to build such a canal. It did not fall within the terms of reference cited in the Act of 1571. Further legislation would have been necessary. Perhaps this is sufficient explanation why the proposals were not pursued.

It remains to note that it is surprising that such a good idea is not encountered again until the 1750s,¹² and that when such a canal was authorised in 1767, it was as an afterthought to Smeaton's original proposals. Furthermore the Limehouse Cut which was opened in 1770 was less ambitious than that proposed by Trapper in 1573. He had proposed that it be built for use at all times, the canal opened in 1770 could only be used at high tides. It was not until further improvement in the middle of the nineteenth century that Trapper's standards were achieved.¹³

3.4 The second alternative



The next canal scheme to be considered by the City did fall within the terms specified in the act, but it too was a much shorter and cheaper proposal than that originally favoured. In October 1577 Burghley was informed that the City were considering a canal from the Lea to just outside the city walls at Moorgate, and that they intended to produce a 'platt of ground and debyt'. The 'debyt' no longer remains, but the 'platt' is reproduced to the left.¹⁴

This plan shows that two alternative routes were considered. The longer and favoured route left the Lea near Tottenham Mills, whilst the alternative

rejected route left the river in the vicinity of the present day Lea Bridge between Hackney and Walthamstow. Nothing else is known of this scheme, and it seems improbable that anything was actually done.

A major reason must have been that by this date there was less incentive to build a canal. The City had proposed a canal to provide cheap regular transport facilities down the Lea valley. This same objective was by 1577 being accomplished by a Commission of Sewers, who concentrated on improving the river itself. A canal would seem superfluous. There is in fact no evidence that the City ever again considered building a canal. All that is known is that in 1607 Thomas Procter suggested that the canal from Lock Bridge to Moorgate, the City's last scheme, would be a valuable undertaking.¹⁵

15. *Thomas Procter, A worthy worke Profitable to the whole Kingdome (London,1607). Procter calls Lock Bridge beneath Tottenham Mill 'Stock-bridge'.*

After that the City's proposals disappear altogether. They cannot be said to have stimulated any schemes elsewhere in the country.

NOTES TO CHAPTER THREE

1. H. Chauncey, *The Historical Antiquities of Hertfordshire* (2 vols, Bishops Stortford, 1828 ed), 9-10; N. Salmon, *The History of Hertfordshire* (London, 1728), 247; W. Robinson, *The History and Antiquities of Tottenham* (2 vols, London, 1840), i.21; W.T. Jackman, *The Development of Transportation in Modern England* (London, 1966 ed) 166; E.M. Hunt, *The History of Ware* (Hertford 1946) 18; G.B.G. Bull, 'Elizabethan maps of the lower Lea valley' *Geographical Magazine*, Vol. 1.124 (1958), 375-78; N.J. Barton *The Lost Rivers of London* (Leicester, 1962), 83; T.S. Willan, *The Inland Trade* (Manchester, 1976), 24; J. Boyes, R. Russell, *The Canals of Eastern England* (Newton Abbot, 1977), 16; M. Denney, *London's Waterways* (London, 1977), 3; J.G.L. Burnby, M. Parker, *The Navigation of the River Lea (1190-1790)*, *Edmonton Hundred Historical Society, Occasional Papers N.S. no.36* (1978), 5; *VCH Midd. v.130*; *VCH Essex, v.166*.

It should be emphasised that this writer needed two attempts:

K.R. Fairclough, 'A Tudor Canal Scheme for the River Lea', *London Journal*, v pt.2 (1979), 218-22;

K.R. Fairclough, 'A Tudor Canal Scheme for the River Lea- a note', *London Journal*, viii pt.1 (1982), 90-91 (see back folder)-.

2. Bodl. MS. Rawl. Essex 11 fos.94-95.
3. Harte, fos.169-70; BL. Lansdowne MS. 60 no.35; PRO, S.P. 12/248 no.97 (see also Chapter 4 fn.4).

4. B.R. Masters, editor, Chamber Accounts,130; K.R. Fairclough,1982.
5. B.R. Masters,editor, Chamber Accounts,130; W.Page,editor, Letters of Denization and Acts of Naturalisation for Aliens in England, 1509-1603, Publications of Huguenot Society of London, Quarto Series viii(Lymington,1893),16; CSPD,Addenda 1566-79, 53; R. Hakluyt, The Principall Navigations, Voiages, Traffiques and Discoveries of the English Nation (12 vols,Glasgow,1903-05 ed), iii.119-24; G.L.E. Turner, 'Mathematical instrument-making in London in the sixteenth century' in S. Tyacke,editor, English Map-making 1500-1650(London,1983),92-104.
6. B.R. Masters,editor, Chamber Accounts,130; R.E.G. Kirk, E.F. Kirk,editors, Return of Aliens dwelling in the City and Suburbs of London, Publications of the Huguenot Society of London, Quarto Series- x(4 vols Aberdeen,1900-08), pt.2,40; pt.3,352; A.M. Oakley, editor, Actes du Consistoire de l'Eglise Francaise de Threadneedle Street, Londres, 1571-77, Publications of the Huguenot Society of London, Quarto Series, xlvi (London,1969),94,176.
Name variously spelt:- Furrey, Fure, Fraier, Frayer, Fraiere, Frayere.
7. .B R Masters,editor, Chamber Accounts,130; R. Hakluyt, Principal.Voiages, iii.197-200, vi.136-37; E.G.R Taylor, The Mathematical Practioners of Tudor and Stuart England (Cambridge,1954) ,168.
8. In the early 1600s there were proposals to supply Theobalds House from Lynch Mill in Hoddesdon, whilst in the 1630s there were proposals to supply London from the same source. In 1773 there was a scheme to build a canal from Waltham Abbey to Moorfields, with further variations on this scheme in 1802 and 1810. In 1805 the intended East London Waterworks Company proposed to bring water from Waltham Cross to a reservoir at Mile End. None of these schemes were implemented. The suitability of the terrain was stressed by James Sharp in 1773:- 'I had the Level taken from the Quarters in Moorfields, to see where it would run into the River Lee, and to my very great Surprize, I found it extend no less than thirteen Miles and an half, viz as near Waltham Abbey...':
S.P. 14/5 no.27; Sir Walter Roberts, An answer to Mr Fords booke, entitled A designe for bringing a navigable river, from Rickmansworth in Hartfordshire to St Giles in the Fields (London,1641); Guildhall Library, Fo. pamp 3349, J. Sharp, An address to the Right Honourable the Lord Mayor ...(London, 1774; R. Dodd Report of the Intended North London Canal(London,1802 ; GLRO, MR/UP/29 MR/UP/18A (1) .
9. Alnwick Castle, Percy Family, Letters and Papers, ix, fo.52.
10. PRO, S.P. 14/5 no.27.
11. K.R. Fairclough, 1979.

12. Gentleman's Magazine, xxiv(1754),376-77,426; ibid, xxviii 1 5
13. Enfield, The Report of John Smeaton, Engineer, upon the new making & completing the navigation of the River Lee, from the Thames thro Stanstead & Ware to Hertford; PRO, RAIL 845/4, 6 July 1770; ERO, D/DYc 11/2.
14. BL, Lansdowne MS. 25 no.12; PRO, MPF 282.
15. Thomas Procter, A worthy worke Profitable to the whole Kingdome(London,1607). Procter calls Lock Bridge beneath Tottenham Mill 'Stock-bridge'.