CHAPTER 5

THE PARRETT NAVIGATION BEFORE 1830

When the preliminary programme of research for this study was drawn up the present writer was aware that William Gravatt had been Engineer to the Parrett Navigation Company while he was also acting as Brunel's assistant on the B&ER.\(^1\) It was reasonable to assume that Brunel's presence in Somerset in late 1835, in connection with the B&ER, would have had some bearing on Gravatt's engagement on the PNC, and possibly that Brunel himself might have played a part in the design of the works that were subsequently carried out under Gravatt. It also seemed likely that earlier navigation projects and proposals would have significantly influenced the inception of the PNC and the development of its plans. The aim of this chapter therefore is to trace the history of proposals for improving the navigability of the Parrett above Bridgwater, and of its major tributaries, up to 1830; the developments that culminated in the incorporation of the PNC are examined in Chapter 6, and the subsequent construction of the improvement works is described in Chapter 7.

The surviving records of the former Somerset River Authority, its forerunners, and associated concerns such as the PNC, constitute a remarkably large corpus but regrettably they are inconsistent in coverage so that in many areas there is a dearth or even complete absence of relevant evidence. In order to piece together a chronology it has been necessary to rely heavily on chance references that have survived elsewhere, and consequently there is always the possibility that fruitless proposals that would otherwise have had a major impact on the navigation have been missed. Though the main focus of this part of the study is on improvements to the navigation, drainage schemes which had the potential to impinge on the navigation have of necessity also been included. The first section of this chapter is an introduction to the general setting and the underlying problems affecting navigation on the Parrett and its tributaries, up to 1790. This cut-off date has been chosen as representing the start of the 'canal mania' in Somerset, when the river traders on the Parrett began to realise the scale of the threat to their undertakings from rival canal and navigation schemes.

The second section takes the study through to the end of the initial boom in about 1800; the main topic of relevance to this part of the study is the Ilchester Navigation scheme. The third section runs through to the commencement in 1830 of the West Moor

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\(^1\) For example: Hadfield E.C.R., SW England, p.86.
enclosure project, an undertaking that re-focused interest in improving the Parrett navigation. Some of the projects put forward during this later period have been investigated in more depth as they involved Nicholas Broadmead who would later be the driving force behind the establishment and development of the PNC.

At various times the river flowing through Langport was called the Parrett, the Ivel and the Yeo, and the reach between Burrow Bridge and Bridgwater was occasionally called the Tone. However, for the purposes of this study, and unless quoting from original sources, the name 'Parrett' will be applied, as in modern usage. Also, 'the navigation' is generally intended to mean 'the navigable river'; that is to say, no attempt has been made to study the history of the vessels that actually used the navigation, or of the trading and transport concerns that operated, or were reliant, on the navigation.1

In his seminal study of the draining of the Somerset Levels, Michael Williams has dealt comprehensively with the geological and geomorphological distinctiveness of the Parrett catchment, and the associated tidal and alluviation characteristics which not only gave rise, and still give rise, to flooding but which also created difficult and dangerous conditions for inland navigation.2 For the purposes of this present study, only a summarised account will be given.

### 5.1 The General Setting in 1790

The Parrett is the principal river running through Somerset; it rises near South Perrott in Dorset and flows generally northerly and north-westerly through central Somerset to enter the sea about 14 miles downstream of Bridgwater, effectually cutting the county into two, as is graphically illustrated in Saxton's 'Atlas' of 1575 (Map 5.1).3 The major tributaries above Langport are the Isle and the Yeo, alias Ivel; in the stretch below Langport, the Tone joins from the west and, until 1795, the Cary from the east (Map 5.2).4

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4 The King's Sedgemoor Drain was cut in 1791-1795 to divert the Cary away from the Parrett to an outfall into the estuary at Dunball.
MAP 5.1 THE PARRETT CATCHMENT
The lower reaches of the Parrett catchment consist of a series of isolated moorland basins, the 'Southern 'Levels,' divided by upland ridges. The present-day mean high water spring tide level is about 21ft. above Ordnance Datum, whereas the moors stand at 10-12ft. AOD; consequently the rivers flowing through them have only a very slight fall. Natural levees have formed where the river bed is about level with the ground surface, as the result of the over-flowing of the sediment-rich water. The river channels can contain the fresh and tidal waters in normal flow conditions, but overtopping and associated flooding can occur when high fresh water flows ('freshes') are tide-locked. Historically, the tide at high neaps sometimes reached above the confluence of the Parrett and Tone, and at high springs almost up to Langport and Taunton; indeed, driven
by a strong gale the tidal wave or 'bore' could reach above the confluence of the Parrett and the Isle, over two miles above Langport.\(^1\) Collinson recorded in the early 1790s that at high spring tides the river at Burrow Bridge was 60ft. wide and 18ft. deep.\(^2\) By contrast, at neaps the tide very often did not reach Burrow Stones, a shoal just below Burrow Bridge; even as late as 1836 it could be said of the reach above Burrow Bridge:

At spring tides, for about 8 days in a fortnight, the tide is sufficient to carry boats to Langport … but in a considerable portion of the other six days of neap tide the navigation is so imperfect that generally speaking, unless there is flood water in the river, the barges are much delayed in navigating to Langport Bridge, and for the most part the Bargemen do not attempt to navigate to Langport at all, knowing it to be useless.\(^3\)

Water transport was an important feature of the Parrett catchment from at least Roman times.\(^4\) It is said that Athelney Abbey, founded in the late ninth century at the confluence of the Parrett and Tone, could only be reached by water.\(^5\) Quays and port facilities were probably first established at Bridgwater when the earliest bridge over the Parrett was built there around 1200; the bridge effectively prevented sea-going ships, but

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1 Bazalgette J.W. and Whitehead A., *Report on the Yeo, Parrett and Isle Drainage* (1869). Langport Bridge, it seems, was damaged by the bore on at least one occasion: in 1471 forty days' indulgences were granted to:

… persons who shall … contribute towards the repair of the bridge of Langport … which has been very gravely damaged by the sea, not far distant, and by flood, so that the masonry is split:


2 Collinson J., *The History and Antiquities of the County of Somerset* (Taunton, 1791), Vol.1, p.84. Collinson added that 'coal barges of forty or fifty tons easily come up it.'

3 SRO D/RA 3/3/2, brief for the promoters of the Parrett Navigation Bill, undated [1836].

4 Peter Leach has premised that that the Yeo and Parrett provided a direct link from Ilchester to the Bristol Channel on the basis of evidence of the remains of Roman wharfs on both sides of the Yeo downstream of the present Ilchester Bridge: Leach P. (ed.), *Ilchester: Vol.2: Archaeology, Excavations and Fieldwork to 1984* (Sheffield, 1994), p.6. More recently Stephen Rippon has re-examined evidence from the excavation of a Roman site downstream of Bridgwater and concluded that its position made it a prime location for transhipping sea-going vessels to smaller vessels: Rippon S., 'Coastal Trade in Roman Britain: the Investigation of Crandon Bridge, Somerset, a Romano-British Transhipment Port beside the Severn Estuary' *Britannia* Vol.39 (2008), p.134.

not smaller craft, sailing further upstream.\(^1\) At various times meanders in the course of the Parrett and its tributaries were intentionally cut across for drainage and land reclamation purposes, and embankments were raised with the same objectives, but any improvement of the navigation resulting from these works would in general have been incidental. In complete contrast to the Parrett and the Yeo, by 1717 the Tone had been made navigable to Taunton by means of locks and half-locks. Nevertheless it is clear

that the potential benefits to be gained from improving and extending the navigation of
the Parrett, the Yeo and even the Isle were appreciated a century before the canal mania
of the 1790s. Writing in 1709, John Speke described contemporary proposals to develop
navigation on the Parrett, the Yeo and the Isle:

[In 1699] did a worthy Countryman write a notable letter to Mr. Roger
Hoare then at London attending the Parliament and therein presseth him
with reasons that Clauses should be added to the [Sedgemoor Drainage]
Bill to make Parrot river navigable & withal sayes that with Locks built at
seaven mills between Pill bridge & Sherborne the river Yeo or Yeovel
might be made navigable by Art with Locks to Sherborne but more easily
up to Bradford [Abbas]. Carry the copy sent you to my Cousin Wm.
Phelips … that he may peruse it about the three rivers navigation by
Great boates to Pederton bridges & Braden mills.¹

These ambitious proposals came to naught.

The evident success of the Duke of Bridgewater's canal, opened in 1761 to carry
coal from his collieries at Worsley to Manchester, led to a steady rise in the number of
speculative proposals for both short and long distance canals and river navigations in
Britain. Among these was a proposed navigable link between the English and Bristol
Channels to avoid the dangerous sea passage round Land's End which, if constructed,
would have significantly affected the Parrett navigation above Burrow Bridge. The line
was surveyed by Robert Whitworth in 1769, under the supervision of James Brindley
whom some Taunton promoters had engaged the previous year.² The route ran via the
Devon Axe valley to a summit level at Chard, and thence via the Isle valley. From
Midelney the line ran around the western edge of Perry Moor, to enter the Parrett just
downstream of Langport Bridge and thence to Bridgwater, apparently without any
improvement of the Parrett itself (Map 5.4).³

¹ John Speke to 'Mr. Pittard, Clothyer, In Yeovell,' 15 Sep 1709: SRO DD/PH 212/29. Petherton Bridge is on the Parrett, Bradon mill is on the Isle.
³ 'A Plan of the intended Navigable Canal from Langport … to the English Channel near Avmouth' by Robert Whitworth 1769. Thomas Telford referred to it as:
... a canal of small dimensions, as was usual in that early state of inland navigation ... This project was condemned, on account of its cutting up rich meadows, interfering with mills, and incurring the necessity of transhipment of sea-borne cargoes:
Rickman J. (ed.), Life of Thomas Telford, Civil Engineer, Written by Himself (1838), p.270.
Medieval drainage in Somerset was concerned more with the rapid removal of flood water than the prevention of flooding.¹ Later schemes might well have had a flood prevention objective but there were, and still are, agricultural benefits to be gained by exploiting the manuring effects of properly-regulated seasonal freshwater flooding.² Even when the needs of drainage, irrigation and the control of flooding dominated those

2 The autumnal and winter floods contain the most valuable particles of manure, washed from the higher lands; these, by artificial means, may be stayed in their progress towards the sea, and made to deposit a most ample manurance of the lands near the river, at little or no expence: anonymous promotional article: Taunton Courier 11 Jun 1818.
of navigation one would expect there to be a presumption that a scheme should not impair the navigation, and probably an expectation that the navigation would in fact be improved.\(^1\) Even so, any attempt to resolve all the conflicting issues ran the risk of fomenting commercial contention and neighbourly dispute. Added to that, the successful design, financing and implementation of effective, comprehensive, large-scale schemes were normally beyond local capabilities which were generally limited to resolving specific local problems and with little concern for the long-term consequences. In regard to this, the geomorphologist Ed Rhodes has observed:

> It seems likely that the potential malign effects of modifying existing river channels may not have been obvious to former generations. Indeed … engineering work sometimes appears to have been planned in the absence of a clear understanding of the consequences. The time scale of response to modification was in many cases probably long enough not to alter the planning of engineering works significantly, as the builder was unlikely to be directly responsible for future repairs or upkeep.\(^2\)

With the exception of the Parrett catchment, interest in enclosing, draining and reclaiming moors that were still unimproved in Somerset increased rapidly from the mid-eighteenth century in line with the national trend, so that by 1790 many reclamation schemes in, for example, the Brue and Axe catchments had been undertaken or at least were under way. Admittedly, many of these failed to achieve a lasting improvement until comprehensive drainage schemes, including the improvement of the main rivers themselves, were carried out in the early nineteenth century. By contrast, in 1790 the Southern Levels of the Parrett catchment were still virtually untouched, due in great part to the inability of the Parrett itself to evacuate surplus water effectively.\(^3\)

The obstacles on the Parrett, the Yeo and the Tone in 1790, and the upper limits of navigation on each, will now be considered in turn.

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\(^1\) The aspirations of the promoters of most, if not all, such schemes were succinctly voiced in 1824 by Nicholas Broadmead, who was later to be Clerk to the PNC: ‘Our wish is to have a complete command of the water’: Nicholas Broadmead to Sir John Palmer Acland, 7 Jun 1824: SRO DD/AH 24/3.


5.1.1 The Parrett between Bridgwater Bridge and Langport Bridge

The first bridge upstream of Bridgwater Bridge was Burrow Bridge, which in 1790 was a narrow masonry structure whose inadequate waterway was an obstacle to the navigation and the cause of regular and ruinous flooding of the Levels upstream of it. It had three pointed arches, spanning 16ft., 21ft. and 17ft., with piers about 6ft. wide. At low water there was 10ft. 6ins. headroom under the centre arch, but at high spring tides and times of fresh water floods all three arches were effectively drowned out (Figure 5.1).\(^1\) For reasons which have not yet been satisfactorily explained, eight parishes were responsible for repairing the bridge in 1790, and had been doing so since at least 1621.\(^2\)

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\(^1\) SRO D/RA 9/20, 'Elevation, Plan & Section of the Bridge over the River Parrett at Burrow, Somerset, Philip B. Ilett, May 1824; SRO Q/AB 31, 'Elevation of Burrow Bridge, P.B. Ilett' undated [c.1824].

\(^2\) SRO Q/SR 41/156, 1621/2 Epip, Quarter Sessions Order to eight parishes to rebuild 'Burrowe Bridge' in timber. Primary evidence concerning the history of the bridge is surprisingly scarce and contradictory for such a strategically important structure; even evidence connected with such a seemingly momentous event as the construction of the masonry bridge that replaced the 'Bridge of Tymber over Ivel' at 'Michelboro' seen by Leland in the early 1540s does not appear to have survived: Bates E.H. 'Leland in
Two timber bridges are depicted on the Parrett at Oath, midway between Burrow Bridge and Langport, on Robert Whitworth's plan for a proposed inter-Channel canal that was surveyed in 1769 (see Map 5.5).\(^1\) One of these may have been the 'Oath Bridge' that was repaired by the Aller Churchwardens on at least ten occasions between 1808 and 1846; from evidence in the wardens' accounts it is clear that this was a footbridge over the Parrett.\(^2\) The Aller Overseers repaired an arch over a rhyne 'near Oath Hay Bridge' in 1817, and Greenwood's map of 1822 showed a single bridge, named 'Hay Bridge,' over the Parrett near Oath.\(^3\) Further, in 1838 the Parrett Navigation Company

MAP 5.5  BRIDGES NEAR OATH, c.1769

Base map: 'A Plan of the intended Navigable Canal from Langport ... to the English Channel near Axmouth' by Robert Whitworth 1769.

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Somersetshire, 1540-1542,' Proceedings Somerset Archaeological & Natural History Society Vol.33 (Taunton, 1887), p.60. The present writer is currently researching the history of Burrow Bridge.

\(^1\) 'A Plan of the intended Navigable Canal from Langport ... to the English Channel near Axmouth' by Robert Whitworth 1769.

\(^2\) SRO D/P/all 4/1/1, Aller Churchwardens' Accounts, 1808-1846 passim. Most of the payments were for timber repairs; on one occasion the bridge and 'steps' were 'rited' and on two occasions a boatman was paid to ferry people 'over the river at Oath' while repairs were carried out.

\(^3\) SRO D/P/all 13/2/1, Aller Overseers' Accounts, 1817; Greenwood C. and Greenwood J., Map of the County of Somerset, from Actual Survey made in the Years 1820 & 1821 (1822), reproduced in facsimile by Somerset Record Society, Vol.76 (Taunton, 1981).
gave notice to the occupier of Oath Farm 'to erect the Hay Bridge of a proper height to allow the passage of the Boats.'\(^1\) These references imply that 'Oath Bridge' and 'Oath Hay Bridge' were not the same bridge; it seems likely that the 'Hay Bridge' was a seasonal temporary bridge, erected annually across the Parrett to provide access between Oath Farm and the south side of Aller Moor.\(^2\)

The next bridge upstream from Oath was Langport Bridge, which was a narrow masonry arch bridge right up until the early 1840s. 'The bridge of Langport' was mentioned in a charter of 1220, and in 1548 it was said to be 'a great bridge of stone with xxx [ie. 30] arches.'\(^3\) This large number included some arches over the Parrett at the western (Curry Rivel) end of the causeway across the flood-plain, known as Bow Street, plus one or two more at the eastern end of Bow Street over the drain known as the Portlake Rhyne which ran from Cocklemoor to rejoin the Parrett downstream of Langport Bridge. The remainder were, in effect, 'bows' or arched drains under Bow Street itself.\(^4\) A charter of 1563 acknowledged the ancient rights of the Portreeve and Commonalty of Langport, and confirmed market and fair tolls for the purpose of repairing the 'bridges' which were 'in so great ruin and dilapidation.' A second charter, granted in 1617, sanctioned the incorporation of the Borough, with powers to collect 'wheelage' and 'pontage' to maintain the bridges, 'containing in the whole one and thirty bowes.'\(^5\) In the accounts of the Langport Portreeves between 1646 and 1799 the Parrett crossing was variously referred to as Broad Bow, Great Bow, the Bridge, Bow Bridge, Great Bridge, Great Bow Bridge and Broad Bow Bridge.\(^6\)

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\(^1\) SRO D/RA 3/1/2, PNC Committee Minutes, 14 Apr 1838.

\(^2\) In 1653 provisions were made for just such a bridge to be erected annually on the feast of St. John the Baptist (24 June) over the Rhine Ditch at Pathe, on the west side of Aller Moor:

> … for men to fetch & carry their hay out of Aller Moor which slape or bridge must there remain until the Nativity of St. Mary then following commonly called our Lady Day [8 September]:

SRO D/P/all 23/2, Customs of the Manor of Aller, 16 Apr 1653. Oddly, the Aller tithe map, dated 1838 but annotated 'From a survey made in 1833,' shows no bridge over the Parrett along this stretch.

\(^3\) VCH3, p.19.


\(^5\) SRO D/RA 2/9/54, rider to draft case for Counsel in a dispute between Somerset County Council and the Somersetshire Drainage Commissioners relating to Langport Bridge and its approaches, undated [1913]; VCH3, p.19.

\(^6\) SRO D/B/la 81, Accounts of the Portreeve of the Borough of Langport, 1646-1652, passim; SRO D/B/la 12, Accounts of the Portreeve and Treasurer of the Borough of Langport, 1707-1799, passim.
There is some uncertainty about the number of arches that actually spanned the Parrett itself. The earliest pictorial view of the bridge seen by the present writer is dated 1777 and it showed the bridge to have five arches to the left (west) of a cutwater or refuge and two more to the right (Figure 5.2). According to Ross, writing in 1907, Langport Bridge in 1825 was 'a long and narrow stone bridge of nine arches.' He accompanied this statement with a rather crudely drawn illustration captioned 'Langport's Ancient Stone Bridge of Nine Arches' (see Figure 5.3). In Ross' opinion:

The painting is probably not according to scale … All accounts of the old Bridge insist on it having 9 stone arches. The painting only shows four or five.\(^1\)

There appear to be two arches either side of a massive cutwater; presumably the other spans were obscured from the artist's viewpoint. In contrast, a rough sketch of the bridge made in 1839 by Charles Hodgkinson showed only five arches;\(^3\) and in 1913 Henry Butcher recalled there were five arches in the bridge when he began work as a cart-boy in Langport in the mid-1830s.\(^4\) It is possible that both Hodgkinson and Butcher were referring to the five arches to the left of the cutwater. However, two primary sources found during this study referred to nine arches over the Parrett. The first is a report on the state of the bridge in 1838 by Maurice Davis, which included a sketched elevation of the upstream face of the bridge that does not in fact show the cutwater; Davis noted that four of the arches were of small span.\(^5\) The second reference is a comment made by William Gravatt in 1839, 'There are nine arches altogether'; he gave the span of the largest arch as 20ft. 'or even more.\(^6\) On balance, it seems likely that the five main spans of the old bridge were all to the west of the cutwater.

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\(^1\) SRO DD/SAS C549/14, 'Plan of the Manor of Langport Westover … Surveyed by B. Pryce of Salisbury 1777.'
\(^2\) Ross D.M., 'The Papers of the Former Corporation of Langport, 1596-1886' Proceedings Somerset Archaeological & Natural History Society Vol. 53 (Taunton, 1907), p.164. Ross later said the illustration was based on a photograph taken by G.H. Hemmel of a painting made by 'Mr. Bagehot' about 1810, which was in the possession of G.A. Cox in 1912: Ross to G.I. Simey (Clerk to Somerset County Council), 1 May 1912: copy in SRO D/RA 2/9/54, papers regarding liability to repair Langport Bridge.
\(^4\) SRO D/RA 2/9/54, 'Statement made January 14th 1913 by Henry Butcher.'
\(^5\) SRO D/B/la 29, 'M. Davis' Report,' 7 Nov 1838, and 'Plan referred to in M. Davis' Report', undated [1838]. There is a typed transcript of the report and a tracing of the elevation in: SRO D/RA 2/9/54.
\(^6\) PA HC/CL/PB/2/5/14, evidence taken before the Commons Committee on the Parrett Navigation Bill (further powers), William Gravatt, 15 Mar 1839, p.100.
Even when there was sufficient depth of water for boats to navigate up to the bridge, their passage through the bridge was effectively prevented, except in times of flood, by an 'overfall' caused by pitched masonry inverts or 'sills' under the river spans. The original purpose of the sills is not known but it was probably to protect the foundations from scour and undermining. In consequence of these sills, and the 'very imperfect' nature of the navigation upstream of the bridge, coal and other goods destined for delivery above the bridge were 'taken out in Baskets and carried on men's shoulders
thro' the Bridge upon a plank into … small Boats above the Bridge\(^1\) (Figure 5.3). The coal was damaged during the process and so the trade was less profitable.\(^2\) Generally it was impracticable to carry bulky items such as timber, building materials and heavy groceries such as hogsheads of sugar through the bridge, so they were taken on by land carriage or sold from yards near the bridge, although 'timber was sometimes dragged up thro' the Bridge with horses.'\(^3\) During dry seasons temporary dams were built at the bridge, either by the upstream farmers to aid irrigation or by the bargemen to aid navigation.\(^4\)

There was no proper towing path alongside much of the Parrett's course before the mid-1830s and during the winter such paths as existed were said to be often 6ft. under water in places; men, boys and horses drowned as a result.\(^5\) A thirteenth century

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\(^1\) SRO D/RA 3/3/2, 'Old & new mode of navigating to Thorney,' undated [1836]; SRO D/RA 3/3/5/3, evidence taken before the Lords Committee on the Parrett Navigation Bill (further powers), Uriah Burt, 5 Jun 1839, p.8. According to Nicholas Broadmead, writing in 1825:

The tide flows up to or raises the fresh water as high as Langport Bridge but not above it except at the equinoxes, & consequently the water is above more shallow & the coals are obliged to be shifted into much smaller boats:

Nicholas Broadmead to Edward Berkeley Portman, 22 Apr 1825: SRO DD/AH 24/3.


\(^3\) SRO D/RA 3/3/4, evidence taken before the Lords Committee on the Parrett Navigation Bill, Thomas Watson Bagehot, 10 Jun 1836, p.12; SRO D/RA 3/3/5/1, proof of Uriah Burt, undated [April 1839], p.35; SRO D/RA 3/3/5/2, evidence taken before the Commons Committee on the Parrett Navigation Bill (further powers), Uriah Burt, 15 Mar 1839, p.15. Because of the expence and injury to goods being transhipped through the bridge, a tanner with premises on the banks of the Yeo about a mile above Langport found it was:

… cheaper and better to have his goods discharged at the Wharfs at Langport Bridge and taken to his Premises by Land Carriage altho’ a greater distance than the water Carriage:

SRO D/RA 3/3/2, draft proof of James Broadmead, undated [1836].

\(^4\) SRO D/RA 3/3/18, 'Case for the opinion of Mr. Cowling,' Sep 1839, p.3. A boatman stated in 1839 that the dams were constructed with 'balks and clay and muck and dung’ from arch to arch, and it took a day and a night to pen the water 3ft. deep. Another boatman had seen three baulks stacked under each arch; when they were removed the 'flash' raised the water level about 6ins. for a considerable distance downstream: TPA HC/CL/PB/2/5/14, evidence taken before the Commons Committee on the Parrett Navigation Bill (further powers), William Howe, 20 Mar 1839, pp.7-47 passim, 63-64; ibid, Samuel Glover, 20 Mar 1839, pp.90-91.

dispute between the Burgesses of Bridgwater and one of the owners of Aller Moor revolved around the owner's claim that the use of the towing path through his land depended on 'the good will of himself and his ancestors and by their grant.'\textsuperscript{1} The right of way along some lengths of the river bank was still a matter of dispute in the early nineteenth century.\textsuperscript{2} Stiles and fences were another hindrance along the towing path, which the barge horses were obliged to jump over as late as the 1820s.\textsuperscript{3} The navigation was sometimes impeded during the summer when the river banks were not cut back or repaired or when riparian occupiers placed 'bays' or dams across the river to divert the flow into irrigation channels.\textsuperscript{4} Although the primary role of the Commissioners of Sewers was to maintain the drainage, on at least one occasion in the early 1790s they interceded on behalf of the navigation interests by ordering the removal of 'impediments and annoyances to the current & navigation in the river' between Langport and Burrow Bridge.\textsuperscript{5}

However, the major obstructions to navigation between Bridgwater and Langport Bridge in the early 1790s were caused by shoals. As there are no records of major dredging operations in the Parrett during the first third of the nineteenth century, nor of any other known cause why the river flow regime should change significantly, it is

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\item In the event, the Jury decided the Burgesses and any others had had the right to tow their boats 'from time out of mind at their own good will': Landon L. (ed.), Somersetshire Pleas from the Rolls of the Itinerant Justices for 1280 (Taunton, 1929), pp.119-120.
\item In the 1820s the principal river traders, Stuckey & Bagehot, responded to a landowner's threat of legal action against the use of the towing path through his property by surreptitiously purchasing title to the disputed land: TPA HC/CL/PB/2/5/14, evidence taken before the Commons Committee on the Parrett Navigation Bill (further powers), Nicholas Broadmead, 14 Mar 1839, pp.46-51.

They were ridden by little boys, who were tied fast to them when they first began to ride; and when a horse came to a stile there was a stop made to allow the rope to slacken sufficiently for the leap. The boy then seized the end of the rope and gave the signal, whereupon the horse cleared the stile and set off once more to draw the barge:

Quekett W., My Savings and Doings, with Reminiscences of my Life (1888), p.26. I am grateful to Francis Farr-Cox for drawing my attention to this reference.
\item SRO D/RA 1/6/1, Sewers Sessions Orders for the Southern Division, 25 Sep 1793.
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reasonable to assume that the principal shoals which existed in the 1790s would be generally similar in location, form and size to those named on a plan of the Parrett above Bridgwater Bridge, published in 1836 (Map 5.6): ¹

1. 'The Stones,' a hundred yards or so upstream of Bridgwater Bridge. This was a solid shoal of stone, said to have been formed 'by putting stones into the river to keep back the water when the Bridge was being built.' ²

2. 'The Coals,' near Moorland, about 4 miles above Bridgwater, 'so called from being of a turfy nature & looking black'; also known as 'Yew Tree Shoal' or 'Chard's Shoal.' ³

3. 'Burrow Stones,' described variously as being 'opposite Thos. Bathe's House about 50 yards below Burrow Bridge' and 'about 250yds. below Burrow Bridge.' ⁴

4. 'Hancock's Shoal,' just above the confluence of the Parrett and Tone at Stanmoor. In his draft proof relating to the case for the promoters of the Parrett Navigation Bill, Edward Winslade, a Parrett boatman, described it as 'a bad shoal, a few yards only in length.' ⁵

5. 'Langford's Shoal,' about a mile above Burrow Bridge, only a few yards in length. Winslade named this 'Langford's Clize Shoal,' and located it about ½ mile above Burrow Stones.

6. 'Jeanes's Shoal' at Stathe, about ¾ mile above Langford's. ⁶

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¹ SRO D/RA 3/3/2, 'Case of the Promoters, as proved before the Lords Committee, 1836.'
⁴ SRO D/RA 3/3/2, draft proof of Edward Winslade, undated [1836], unpaginated; SRO D/RA 7/4/4/1824, 'Report on the Navigation of the River Tone from Taunton to Bridgewater' by William Armstrong 1824, unpaginated. Armstrong said of this shoal: The first thing which struck my mind was that it was caused by the fall at the Bridge and that the Stones which had been occasionally taken out were those which had been washed down from the Bridge, having been deposited there to preserve the Foundation of the Piers, whether this be the case or as some have asserted that a Stratum of Stone crosses the country at this point, there can be no difficulty in removing it and at a trifling expence.
⁵ SRO D/RA 3/3/2, draft proof of Edward Winslade, undated [1836], unpaginated.
⁶ There was a ford through the Parrett at this location in 1924, suggesting that a shoal was still extant: SRO D/RA 2/9/20, 'Survey of the river at Stathe, 1924.'
Winslade referred to two more shoals between Langford's and Jeanes' that are not shown on the plan or mentioned elsewhere:

7. 'Parson's Shoal … opposite Chard's brick yard.' This brick yard and the adjacent shoal have not been located.¹

8. 'Wind Mill Point Shoal … in Warmoor.' In 1769 Robert Whitworth depicted a post mill near the right bank of the Parrett downstream of Stathe (see Map 5.3).²

² 'A Plan of the intended Navigable Canal from Langport … to the English Channel near Axmouth' by Robert Whitworth 1769.
Elsewhere, a plan surveyed in 1768 showed an 'island' in the Parrett about ¾ mile downstream of Langport Bridge, known as 'Ackland's Island'.\(^1\) A plan of a longer stretch of the Parrett, surveyed nine years later, named it 'Lady Ackland's Island' and showed another, 'Lord North's Island,' ½ mile further downstream.\(^2\) Both islands were still extant in 1835\(^3\) but as neither of them is mentioned in any of the PNC records seen during this study it is presumed they did not interfere with the navigation.

Paradoxically, at certain states of the tide the shoals could actually assist navigation. For example, as late as 1836 the Bridgwater & Taunton Canal Co.'s solicitor stated that boats would not be able to get so frequently from the Parrett into the canal at Huntworth basin without the damming effect of the Stones shoal.\(^4\) And Edward Winslade described how shoals in conjunction with weed-growth in the river channel between Burrow Bridge and Langport could be used to good effect in dry seasons:

> In the reach above Hancock's Shoal & up the River there are weeds growing from the middle of May to the month of August which bay the water several feet ... & by dragging the boats on upon the mud they get into the reach above the Shoal & meet the water bayed back by the weeds.\(^5\)

5.1.2 The Parrett above Langport Bridge

The preamble to the Parrett Navigation Act of 1836 referred to the benefits that would be attained if the navigation of the Parrett were to be improved up to 'the extremity of the Parish of Muchelney.'\(^6\) This placed the upper limit of the improved navigation at Thorney. The boundary between the parishes of Muchelney and Kingsbury Episcopi runs down a winding watercourse, known in medieval times as 'Oldriver

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1 SRO DD/PR 78, Map and Survey of Knowles, Neales and Barra Moors in Muchelney, Langport and Huish Episcopi by Samuel Donne 1768.
2 SRO DD/SAS C549/14, 'Plan of the Manor of Langport Westover ... Surveyed by B. Pryce of Salisbury 1777.' Both islands are shown, but not named, on: SRO Q/RUp 10, 'A Plan for a Navigable Canal from the River Avon (near Bristol) to Bridgwater and Taunton.' 29 Sep 1795.
3 SRO Q/RUp 124, 'Plan and Section of the intended Langport and Westmoor Canal', deposited 30 Nov 1835.
4 SRO D/RA 3/3/4, evidence taken before the Lords Committee on the Parrett Navigation Bill, Isaac Cooke, 15 Jun 1836, p.149. In Brunel's opinion it was possible that this shoal had in fact been deliberately formed 'for the purpose of impeding the ebb of the tide': SRO D/RA 3/3/3, evidence taken before the Commons Committee on the Parrett Navigation Bill, I.K. Brunel, 10 May 1836, p.51.
5 SRO D/RA 3/3/2, draft proof of Edward Winslade, undated [1836], unpaginated.
6 6&7 Will. IV, c.101: An Act for improving the Navigation of a Portion of the River Parrett, and for making a Navigable Canal from the said River to Barrington [4 Jul 1836].
Brook,' to join the Parrett about 50yds. upstream of Thorney Bridge, whence the boundary follows the Parrett down to its confluence with the Isle. 'Oldriver Brook' is said to indicate the original course of the Parrett.\(^1\) Across the Parrett itself, in the parish of Kingsbury Episcopi about 450yds. above Thorney Bridge, there is a weir associated with Thorney Mill. It is possible that one of the two unnamed mills in 'Chingesberie' [Kingsbury] that are mentioned in Domesday was at Thorney; there was certainly a 'mill of Thorny' by 1235. The river for at least a mile above the weir has been straightened and embanked, evidently to provide a sufficient head of water to drive a mill at or near this site, resulting in the abandonment of the original course that ran via Oldriver Brook (Map 5.7).\(^2\)

William Bradford operated as a coal merchant from wharfs on the left bank downstream of Thorney Bridge from 1770; but there is strong evidence that building stone from quarries on Ham Hill, about five miles south-east of Thorney as the crow flies, was being transported downstream from wharfs at Thorney by the mid-thirteenth century.\(^3\) The inference is that the weir was such of an obstacle that the land transport of bulky goods to and from destinations above Thorney was generally a more

\(^1\) VCH3, p.38.
\(^3\) Green J., Ollerenshaw P. & Wardley P. (eds.), Business in Avon and Somerset: a Survey of Archives (Bristol, 1991), p.16. The financial accounts for building work at Taunton Castle in 1245-1249 include items for quarrying and transporting 'stones' from 'Hamdon.' This is clearly a reference to the building stone known as Ham stone or Ham Hill stone. Some items cover the carriage of stones 'from the foot of the hill to the water' and others are for transporting the same stones by water to Ruishton, which lies on the Tone about four miles downstream of Taunton; in one case, 'for bringing the stones by water from the monks' meadow to [Ruishton]': Hunt T.J., 'Some 13th Century Building Accounts for Taunton Castle' Proceedings Somerset Archaeological & Natural History Society Vol.115 (Taunton, 1971), pp.39-44. According to Hugh Prudden, citing personal correspondence with Robert Dunning, 'monks' meadow' may have been on the east bank of the Parrett at Thorney: Prudden H.C., Geology and Landscape of Taunton Deane (Taunton, 2001), p.20. On a similar tack, a study by Christopher Gerrard of the distribution pattern of Ham stone built into medieval parish churches in Somerset found that the distributions to the north and west of Ham Hill:

… appear to be enhanced by the possible use of cheap water transport along the River Parrett and its tributaries … Churches with the most Ham Hill stone in their fabrics appear to lie closest to the navigable rivers, although statistics cannot indicate whether this relationship is causal or direct:
practical option than water transport. Nevertheless there still exists a masonry chamber between the weir and the right bank at Thorney which was labelled 'Navigation Lock (disused)' on a plan drawn up in 1918 by William Lunn, the Engineer to the Somerset Drainage Commissioners; the left side wall of the chamber now operates as a side weir to the main weir during high freshes.\(^1\) Lewis et al. have interpreted the chamber as a 'compromise between a halflock and a pound lock,' apparently on the basis of a misconstrued reference in the PNC records to 'Thorney Half Lock.'\(^2\) However, there is unambiguous evidence to show that in 1839 'Thorney Half Lock' was actually located in

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\(^2\) SRO D/RA 2/9/28, Somersetshire Drainage Commissioners' correspondence, 22 May 1918.

the reach between the Parrett/Isle confluence and Thorney Bridge.\(^1\) By that date there were wharfs belonging to the Bradford family (left bank) and Stuckey & Bagehot (right bank) in the reach between the half-lock and Thorney Bridge.\(^2\) An attempt to date the construction of the existing chamber at the weir has so far proved inconclusive. A terminus ante quem of 1844 is tentatively suggested on the basis of cartographical evidence, but a terminus post quem has so far been impossible to arrive at. There is a date-stone – 1842 – in one wall of the present mill building, and it is possible that the chamber was built, altered or rebuilt contemporaneously with a major refurbishment of the mill and weir at that time, perhaps with a view to improving water control for the purposes of milling and flood alleviation, and/or to maintain or encourage navigation upstream of the weir.\(^3\) No references have been found to the PNC having constructed or operated a 'lock' here, and it was not listed among the liabilities of the PNC that were transferred to the Somersetshire Drainage Commissioners in the 1870s; the PNC's powers did not extend up to this point anyway.\(^4\) The only evidence to have been found relating to navigation on the Parrett upstream of Thorney weir is cartographical: a boat house is shown on the left bank near Kingsbury Episcopi vicarage in 1900. Brian Murless is probably correct in associating this boat house with social status and leisure pursuits in the reach above Thorney weir, rather than a commercial concern.\(^5\) Pending further research, on the balance of evidence it is reasonable to conclude that the upper

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\(^1\) In 1839 the PNC's Resident Engineer measured the distance from the Parrett/Isle confluence up to Thorney half-lock as 858yds., and from the half-lock up to Thorney Bridge as 462yds.: SRO D/RA 3/3/5/1, proof of Charles Hodgkinson, 22 May 1839, p.32; SRO D/RA 3/3/10/59, 'Levels & area of the river towards Bridgwater,' undated [c.1839].


\(^3\) It may be significant that when Thorney Mill was advertised for sale in September 1841 it was said that:

> … from its commanding situation it might, with a little judicious outlay and addition to the present machinery, be rendered the most effective Flour Mill on the whole course of the stream:

_Somerset County Gazette_ 18 Sep 1841. I am grateful to Brian Murless for drawing my attention to this reference.

\(^4\) SRO D/RA 2/4/24, Reports of PNC liabilities, 1878, 1881, 1900.

\(^5\) OS 2\(^{nd}\) ed. 1/2500; Brian Murless, pers. comm.
limit of commercial navigation on the Parrett in 1790 was at Bradford's wharf near Thorney Bridge.¹

Three bridges crossed the Parrett in the reach between Langport and Thorney weir (Map 5.8). Huish Bridge, just downstream of the Parrett/Yeo confluence, was described by Collinson in 1791 as a wooden bridge supported by four stone piers; it was depicted in 1793 as a footbridge alongside a ford.² About 1½ miles further upstream Bage Bridge, alias Barge Bridge, crossed between Westover Farm and Muchelney. In 1768 it was portrayed as having three spans, apparently of timber trusses carrying timber parapets.³ It was maintained ratione tenurae jointly by the landowners on each side of the river and it carried only foot traffic; wheeled traffic used Muchelney Ford, about 400yds. downstream of the bridge.⁴ Thorney bridge was mentioned in 1553 and was named on Saxton's 'Atlas' of 1575.⁵ The present bridge is of unknown construction date but it was in its present masonry arch form by 1874.⁶ No evidence has been found that the navigation was significantly hindered by these three bridges, or by the four

¹ I am very grateful to Brian Murless, Francis Farr-Cox and Pat Jones for their willingness to share their own on-going research work relating to the Thorney area and other Parrett Navigation topics.
² Collinson J., op.cit., p.470; SRO Q/RUp 2, 'Plan of the River Yeo &c from Ilchester to Langport in the County of Somerset survey'd & estimated by A. Crocker & C. Harcourt Masters', deposited 9 Nov 1793. The Huish Episcopi Churchwardens' accounts contain numerous payments for masonry and timber repairs to the bridge during the eighteenth and early-nineteenth centuries: SRO D/P/h.ep 4/1/1, Huish Episcopi Churchwardens' Accounts, 1717-1822 passim.
³ SRO DD/PR 78, 'An accurate map and survey of Knowles, Neales and Barra Moors situate within the parishes of Muchelney, Langport and Hewish … taken by Saml. Donne of Melbury Osmond …', 1768.
⁴ For details of seventeenth century disputes between the Lord of the Manor of Drayton and the inhabitants of the parish of Drayton, regarding responsibility for maintaining the bridge, see: SRO DD/CTV 165, 'Instrument about Barge Bridge, 1666'; Dawes M.C.B. (ed.), Quarter Sessions Records for the County of Somerset: Charles II, 1666 - 1677 (Taunton, 1919), pp.30-31; SRO Q/SO 7, 1683 Estr, 1683 Mids, 1684 Estr, 1684 Mids, 1684 Mmas, 1684/5 Epip.
⁵ SRO DD/PH 156, Survey of the Manor of Muchelney, 1553; Saxton C., Atlas of England and Wales (1579). Describing Muchelney in 1633 Thomas Gerard wrote:

Where the island of Midleton was I cannot find but Tourney lyeth sure on the West of Muchelney separated by the River Parrett and bounded on the other side by the River Ile, for the bridge by which men passe over the Parrett unto Muchelneye is to this day called Thornybridge:

⁶ SRO Q/AB 17, Plans of County Bridges, 1874, p.51.
(unnamed) shoals in the Parrett between Langport and the Parrett/Isle confluence that Brunel remarked on in 1836.\(^1\)

**MAP 5.8 BRIDGES OVER THE PARRETT UPSTREAM OF LANGPORT**

Base map: O.S. 'Old Series' 1 inch, 1811.

**5.1.3 The Yeo**

There is strong evidence that craft were using the Parrett and the Yeo up to Ilchester (Lendiniae) in Roman times.\(^2\) Subsequent aggradation brought the upper limit of navigation, under normal flow conditions, 1½ miles downstream to Pill Bridge by


\(^2\) Leach P. (ed.), op.cit., p.6.
1633, although craft could still reach Ilchester in times of flood as late as 1836.\textsuperscript{1} By the 1790s there were numerous shoals between Ilchester and the Yeo/Parrett confluence; a longitudinal section made around 1795 shows at least 24 points where the water depth at the time of levelling was less than 2ft.\textsuperscript{2}

Load Bridge, 2½ miles downstream of Pill Bridge, was a major obstacle to larger craft using the Yeo in the early eighteenth century, as recorded by John Speke:

Load Bridge is built too low[,] a great present Loss to Ilchester Inhabitants & to Dorsetshire for now when Waters are high for boates to goe up to Pill bridge & even to Ilchester on [?floods] they are hindered passing up[;] besides the Country sooner [?drowns][.] whereas else my Barge with six wey could come up commonly to Pill bridge & in floods to Ilchester [and] drawes but two foot water[,] now only small wey boates[,] which is far dearer[,] come up & renders water carriage the Dearer.\textsuperscript{3}

Figure 5.4 The present Load Bridge

The present bridge has five arches of which the four side spans are pointed in the medieval style, whereas the centre arch is semicircular and appears to have been rebuilt to improve the waterway area and headroom (Figure 5.4). From the tenor of Speke's

\textsuperscript{1} Bates E.H. (ed.), \textit{The Particular Description of the County of Somerset drawn up by Thomas Gerard of Trent, 1633} (Taunton, 1900), p.209; SRO D/RA 3/3/4, evidence taken before the Lords Committee on the Parrett Navigation Bill, Thomas Watson Bagehot, 10 Jun 1836, p.10. The present Pill Bridge is a three-span masonry arch bridge, built in the seventeenth century: \textit{VCH3}, p.179.

\textsuperscript{2} SRO D/RA 3/3/22, 'Section of the Intended Navigation from Ilchester to Langport,' undated [c.1796].

\textsuperscript{3} John Speke to 'Mr. Pittard, Clothyer, In Yeovell,' 15 Sep 1709: SRO DD/PH 212/29, Phelips MSS. Suggested punctuation has been added by the present writer.
letter, the centre arch was not in its present form in 1709. That year it was repaired by order of Quarter Sessions at a cost to the County of about £110.\textsuperscript{1} It is possible that this substantial sum represents the cost of raising the piers of the centre span and rebuilding the arch itself to its present semicircular profile, perhaps as the result of pressure from influential individuals with an interest in the Yeo navigation. However, it may not have been until 1747 that this major work was carried out, as it is possible that a similar sum was expended at that time.\textsuperscript{2} Whatever the case may have been, it seems certain that by 1790 the bridge was essentially in its present form.\textsuperscript{3}

MAP 5.9  BRIDGES OVER THE YEO DOWNSTREAM OF ILCHESTER

There were timber footbridges over the reach between Pill Bridge and Load Bridge at Witcombe and Milton, from at least the sixteenth century.\textsuperscript{4} Three miles downstream of Load Bridge there was a ford at Pibsbury which had a footbridge alongside it, possibly by 1763 and certainly before 1820.\textsuperscript{5} A further ¾ miles

\begin{itemize}
\item \textsuperscript{1} SRO Q/SO 9, Sessions Orders, 1709/10 Epip, 1710 Estr, 1711 Mmas, 1712 Estr; SRO Q/FAw 1, Disbursements of the Treasurer of the Western Division, 1710, 1712.
\item \textsuperscript{2} That year combined payments were made of about £200 in total for repairs at Load Bridge and Mudford Bridge. Unfortunately there is no indication of how much of that sum was spent on Load Bridge: SRO Q/SO 11, Sessions Orders, 1746 Estr, Mmas, 1746/7 Epip, 1747 Estr, Mids.
\item \textsuperscript{3} The masonry parapets were replaced by cast-iron railings in 1824 and subsequently by steel railings set in concrete.
\item \textsuperscript{4} VCH3, p.3; VCH4, p.79.
\item \textsuperscript{5} SRO DD/WY C/306/43, Plan of the parish of Muchelney, 1820, stated to be copied from a map entitled ‘An accurate Map and Survey of the once famous but now dissolved
downstream, by 1793 there was a footbridge next to a ford at Huish Episcopi, known as Bicknell or Bicknell's Bridge.¹ None of these footbridges seems to have been of much consequence to the navigation (Map 5.9).

5.1.4 The Tone

It has already been noted that building stone from Ham Hill was being transported in the mid-thirteenth century down the Parrett and up the Tone to Ruishton.² That boats were able to navigate under favourable conditions right up to Taunton by the mid-fourteenth century is borne out by evidence given during a judicial process instituted against the Abbot of Glastonbury in 1382 for inter alia allowing his corn and fulling mills at Bathpool to obstruct the waterway so that 'the boats which used to pass with all their freight from Briggewater to Taunton were not able to do so.' In his defence the Abbot alleged that there was a place called Bathpool Cross below Bathpool Mills:

… up to which place all boats coming from Briggewater towards Taunton … ought by right or could of old ascend or pass, but were there accustomed time out of mind to be discharged and unladen.

He went on to state that sometime around 1368 his predecessor had made, for the use of the Bishop of Winchester:

… a certain cist ['cistam'] of planks inclosed in the mill-head of the aforesaid mills … through which cist boats in the times of the inundation of the waters there flowing in could be drawn to and into the aforesaid mill-head; and that so boats, drawn through the said cist, sometimes ascended up to the mill of the said Bishop called Tobriggemull in Taunton.

In the event, the Abbot was discharged. Thomas Hugo, from whose account of the Patent Rolls for 1382-1384 the above information has been taken, described the remains

Monastery and Farm of Muchelney … Made and taken by Sam. Donne of Melbury Osmond near Yeovil in the County of Dorset, 1763.'

¹ 'Bicknel Bridge & Ford': SRO Q/RUp 2, 'Plan of the River Yeo &c from Ilchester to Langport in the County of Somerset survey'd & estimated by A. Crocker & C. Harcourt Masters', deposited 9 Nov 1793; 'Bicknell Bridge': S RO Q/RUp 7/1, 'Plan of the Navigation from Ilchester to Langport', deposited 30 Sep 1794. The present bridge, now known as 'Bicknell's Bridge,' was built to carry wheeled traffic by the Langport, Somerton & Castle Cary Turnpike Trust in 1829-30; VCH3, p.3; Bentley J.B. & Murless B.J., op.cit., pp.44, 90.

² According to Hunt:

Unloading at Ruishton was necessitated by the existence of a ford near the church, mentioned in a perambulation of the boundaries of West Monkton in 1249.

of the 'cist' in the 1860s as being 'very similar to a disused lock of later construction'. Regrettably, modern alterations have completely destroyed all traces and so his description and conjectural reconstruction of the 'cist' and his speculation of how it operated are of considerable interest, bearing as they do an uncanny resemblance to those of Lewis et al. regarding the putative 'lock' adjacent to the weir at Thorney Mill, referred to earlier.¹

In 1505 it was said that 'in the winter season the medewes be so filled and replenysshed with water, that the bootes may go over at every place' between Ham Mill and Taunton. The advantage of transporting heavy goods by water rather than road at that time was emphasized by the Taunton merchants who complained that, before Ham Mill was built, they had free passage along the river:

… for all maner of marchaundyses, corne, cole, stones, and othre stuff … Wher if the said mylles had not be made, we shuld have hadde our cariages by water, and that in every tone better chepe by ijs. then the cariage is to cary it by land, to our grete charge.²

In 1638 John Malet or Mallett was granted a Commission to improve the Tone up to Ham Mills, and thereby gained sole navigation rights between Bridgwater and Taunton with power to levy tolls. The Tone Navigation Act of 1699 authorised a group of traders and merchants in the Taunton area to purchase the rights from the Malet family and to establish the Conservators of the River Tone, with powers to 'cleanse and keep the said River Tone navigable from Bridgwater to Ham Mills, and thence to the town of Taunton.' It seems that some improvements had been carried out before then above Ham Mills, as one of the first recorded acts of the Conservators in 1699 was to

¹ Hugo speculated that the 'cist' was normally dry, but in times of flood the river flowed over into it. At the same time, the water level below the mill rose and boats could get up into the 'cist' via the mill tail:

It consisted of three sides of a long and deep rectangular basin, the two long sides of which were of ashlar ... The third was composed of moveable planks placed across the channel after a boat had entered the basin from the mill-tail. After such entry of a boat and such barring of the stream by these moveable planks, the water began to accumulate, the basin to fill, and the boat to ascend, until, when it had arrived at the upper level, it passed out into the river:

Hugo T., A Ramble by the Tone (Taunton, 1862), pp.14-16.

repair 'Barpool lock.'\textsuperscript{1} By 1717 the river had been made navigable to Taunton by means of locks and half-locks (Map 5.9 and Table 5.1).\textsuperscript{2}

MAP 5.10   LOCKS AND HALF-LOCKS ON THE TONE NAVIGATION

![Map of the Tone Navigation](image)

Source: SRO DD/TC 15, plan of the rivers Tone and Parrett and the B&TC, undated [c.1831].

Table 5.1 Locks and Half-Locks on the Tone Navigation

<table>
<thead>
<tr>
<th>OS Grid Ref</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Obridge lock</td>
<td>3236 1252</td>
</tr>
<tr>
<td>Conigar half-lock</td>
<td>3239 3255</td>
</tr>
<tr>
<td>Bathpool lock</td>
<td>3248 3257</td>
</tr>
<tr>
<td>Bathpool half-lock</td>
<td>3253 3256</td>
</tr>
<tr>
<td>Creech lock</td>
<td>3272 3253</td>
</tr>
<tr>
<td>Ham lock</td>
<td>3287 3252</td>
</tr>
<tr>
<td>Ham half-lock</td>
<td>3290 3255</td>
</tr>
<tr>
<td>Currymoor half-lock</td>
<td>3318 3269</td>
</tr>
</tbody>
</table>

Source: SRO DD/TC 15, Plan of the rivers Tone and Parrett and the B&TC, undated [c.1831].

\textsuperscript{1} SRO DD/TC 1, Tone Conservators, Treasurer's Accounts, 1699; Haskell T., \textit{By Waterway to Taunton} (Taunton, 1994), pp.2-3.

5.2 Developments between 1790 and 1800

With the ending of the American War of Independence came a new spirit of optimism, buoyed up by a succession of good harvests. More prosperity, more disposable income and a less cautious approach to speculation resulted in a rapid increase in the number of proposals for building new canals and improving river navigations in South West England from 1790. Some of the competing schemes projected during this 'Canal Mania,' if they had come to fruition, would have impinged on the Parrett and its tributaries.¹ However, it has to be said that very few of such schemes progressed to the stage where parliamentary plans were deposited, and construction of only one scheme was commenced. As a result there is a general lack of relevant detailed evidence. The surviving documents from this period, though limited in extent, sometimes contradictory and often undated, are therefore of major importance in any study of the development of later proposals to improve the Parrett.

Among the more imposing schemes intended to link the English and Bristol Channels was a proposal in early 1793 to build a canal from Poole to Ilchester, which would link via the Yeo and Parrett to other projected schemes leading towards Bristol in one direction and towards Exeter in the other.² This comprehensive proposal foundered, but the episode stimulated an attempt to promote a local scheme later that year, aimed at improving the navigation from Langport up to Ilchester. This was probably the earliest serious proposal to construct major river control works with the objective of improving navigation in the Yeo and the Parrett above Langport although, oddly, at the time there was no claim or implication that the works were intended to improve navigation on the Parrett itself any higher than its confluence with the Yeo. The project has been investigated in depth for the purposes of this study, because of the significant effects it would have on later schemes.

In October 1793 Abraham Crocker, a Frome surveyor and schoolmaster, was engaged by a group of unidentified individuals to report on the feasibility of making the Yeo navigable up to Ilchester. He proposed altering 'in some degree' one of the arches of Langport Bridge, clearing shoals, and constructing five locks (A1 to A5 on Map 5.11A), the lowest of which would be located just upstream of Langport Bridge. To avoid the

shoals in the upper reaches of the river, he recommended that a navigable cut should be made across Great Yard, Ilchester, to a 'Bason' and 'Quay'; in which case a lock would be necessary to get into the cut, but then the uppermost river lock (A5) could then be dispensed with. It is unclear what Crocker hoped to achieve by putting a lock and basin just upstream of Langport Bridge. In view of the age-old problem of the overfall caused by the high sills under the bridge arches, it would likely have taken much more than his proposed 'alterations' at the bridge to enable large boats from Bridgwater to navigate through the bridge to reach the lock and basin; it would still have been necessary to tranship cargoes through the arches. A parliamentary plan prepared by Crocker and Charles Harcourt Masters, another surveyor, was deposited with the Clerk of the Peace on 9 November 1793. This showed five locks (B1-B5 on Map 5.11B) that were at different locations from those in the report, plus a lock in the cut at Ilchester (B6). An anonymous second plan of proposals was deposited in September 1794. There are erasures on this plan at the locations of the proposed locks in Crocker's report, suggesting that this was in fact originally a plan that accompanied his report, but which was then modified and used as a base map on which the 1794 proposals were drawn. In this revised scheme the intended navigation would by-pass Langport Bridge altogether as it would utilise the Portlake Rhyne. There would be one lock in the Portlake Rhyne (C1 on Map 5.11C) and five locks in the Yeo (C2-C6). Charles Hadfield was probably correct in naming William Bennet as the engineer responsible for the proposals shown

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1 SRO D/RA 3/3/21, 'Ilchester Navigation: Copy [of] Mr. Crocker's Report', undated [1793]. Crocker (1742-1821) was described as an 'able mathematician and surveyor' and is said to have produced many 'useful' publications, including The Elements of Land Surveying, Designed Principally for the Use of Schools and Students 1809: SRO A/AQP, Edmund Rack's Topographical Notes on the History of Somerset; Western Flying Post 14 Aug 1809. For biographical details of Crocker see Bendall, S., Dictionary of Land Surveyors and Local Map-Makers of Great Britain and Ireland 1530-1850 (1997), p.122.


3 SRO Q/RUp 7/1, 'Plan of the Navigation from Ilchester to Langport', deposited 30 Sep 1794.
MAP 5.11A  LOCK POSITIONS AS DESCRIBED IN CROCKER'S REPORT


MAP 5.11B  LOCK POSITIONS AS SHOWN ON THE 1793 DEPOSITED PLAN

Source: SRO Q/RUp 2, 'Plan of the River Yeo &c from Ilchester to Langport', deposited 9 Nov 1793.

MAP 5.11C  LOCK POSITIONS AS SHOWN ON THE 1794 DEPOSITED PLAN

Source: SRO Q/RUp 7/1, 'Plan of the Navigation from Ilchester to Langport', deposited 30 Sep 1794.
Base maps: Greenwood C. & Greenwood J., Map of the County of Somerset, from Actual Survey made in the Years 1820 & 1821 (1822).

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on this deposited plan.¹

A small anonymous supplementary deposited plan followed in February 1795.² This merely showed a new cut or 'canal' running from the Portlake Rhyne, just above Little Bow Bridge, to join the Yeo upstream of Bicknell's Bridge, effectively by-passing altogether the Parrett above Langport Bridge; no locks were shown on the canal, but the navigation could not have functioned without at least one lock (Map 5.12). Of immediate interest here is the handwriting in the title of the plan and the accompanying book of reference, which can be identified as the hand of Josiah Easton, a prominent surveyor, civil engineer and land agent who lived at Hele, near Taunton.

MAP 5.12 THE 'NEW CUT' FROM THE PORTLAKE RHYNE TO THE YEO, 1795

Source: SRO Q/RUp 7/2, 'A Plan of the proposed New Cut from Bicknell Bridge to Portlake Rhine', deposited 3 Feb 1795.

The differences between the river control structures proposed in Crocker's report and those on the deposited plans, and between the plans themselves, are substantial and

¹ Hadfield E.C.R., SW England, pp.83-84, BDCE, p.51. Certainly Bennet was consulted by the promoters on or before 10 October 1794, very soon after the plan was deposited. In a Western Flying Post report he was referred to as 'the engineer', but it is unclear if he had been formally employed by the promoters to design the scheme, or he had been called in after the plan was deposited merely to advise them. He was directed to prepare a further report (not found) for the promoters' next meeting on 3 November: Western Flying Post 20 Oct 1794. For biographical details of William Bennet(t) (fl.1790-1826) see BDCE1 pp.51-52.
² SRO Q/RUp 7/2, 'A Plan of the proposed New Cut from Bicknell Bridge to Portlake Rhine', deposited 3 Feb 1795.
no doubt represent developments resulting from redesigns having been carried out after
the report was submitted. The original report would have been prepared at a time when
the promoters needed a stakeholders' formal resolution to carry the project forward, so
the differences could represent changes made to appease landowners concerned about
deleterious effects on their property.

The 'Ivelchester Navigation' Act of June 1795 authorised the promoters to raise
£6,000 to improve the Yeo from Ilchester Bridge down to Bicknell's Bridge and to make
a new navigable cut from there to the Portlake Rhyne.¹ The 'Company of Proprietors of
the Navigation from Ivelchester to Langport' met formally for the first time at The Swan
in Ilchester on 24 June 1795, with George Tuson of Ilchester as their Clerk.² Tenders
were immediately advertised for making the 'navigable cut or canal' between the
Portlake Rhyne and the Yeo and for building bridges over the rhyne and the canal.³
Towards the end of July tenders were sought for building a lock in the Portlake Rhyne
and for constructing several more bridges; plans, sections and specifications 'drawn by
the Surveyor of the said Company' could be seen at Tuson's office.⁴ The canal was being
dug by mid-August when advertisements appeared inviting labourers 'accustomed to soft
cutting' to apply at 'the Works, near Langport', or to 'Mr. Easton, surveyor', at Taunton.⁵
Clearly Easton was now playing a major role in the project, and this mention of him as
'surveyor' coming so soon after the reference to the anonymous 'Surveyor of the said
Company' could well indicate that he was indeed the Company's Surveyor and had in
fact designed the bridges and river control works.⁶ In early January 1796 tenders were
advertised for completing the works, including building four locks and weirs between
Ilchester Bridge and Bicknell's Bridge and another two locks on the canal, and re-
building Little Bow Bridge.⁷ Unfortunately no record has been found of the progress

¹ 35 Geo. III, c.105: An Act for improving and supporting the Navigation of the River
Ivel otherwise Yeo, from the Town of Ivelchester to Bicknell Bridge, in the Parish of
Huish Episcopi in the County of Somerset, and for making a Navigable Cut from thence
into a certain Drain, called Portlake Rhine, in the Parish of Langport, in the same
County, and for making the said Drain navigable from thence to the River Parrett, below
Great Bow Bridge in the Town of Langport [22 Jun 1795].
² Report of meeting held on 24 June 1795: Western Flying Post 29 Jun 1795.
³ Notice inviting tenders, dated 25 June 1795: ibid, 29 Jun 1795.
⁴ Notice inviting tenders, dated 20 July 1795: ibid, 27 Jul 1795.
⁵ Notice dated 18 August 1795: ibid, 24 Aug 1795.
⁶ Hadfield is more positive on this point, stating that the work began with 'Josiah Easton,
a local man of strong opinions, in charge': Hadfield E.C.R., SW England, p.84.
⁷ Notice inviting tenders, dated 30 December 1795: Western Flying Post 4 Jan 1796.
Charles Hadfield's research notes, held by the London School of Economics, mention
achieved during 1796, but towards the end of the year Robert Whitworth was called in to advise on what was needed to complete the works. His report to a special meeting on 12 December 1796 prompted the calling of yet another special meeting on 31 January 1797; according to Hadfield, the result was the abandonment of the whole scheme, probably on the grounds of cost.¹

Little material work had been achieved; Nicholas Broadmead wrote in 1843:

The Company spent the £6,000 authorized to be raised in paying the costs of the Act, surveys, &c. and in partly making navigable the New Cut but they did scarcely any thing on the river Yeo.²

No cartographic or indeed any other form of evidence has been found from which an assessment can be made of just how much of the canal was actually completed. However, there is sufficient documentary evidence to be able to conclude with a fair degree of certainty that construction was started on two locks: one in the Portlake Rhyne and the other in the Yeo between Pill Bridge and Ilchester.

In the case of the first site, William Hart set out the circumstances surrounding the rebuilding of Little Bow Bridge in 1800:

After the Arch [of Little Bow Bridge] was turned, I received Orders from Mr. G. Stuckey to go with the workmen into Langport moor and take what Bath stone was wanted, then lying there belonging to the Canal company, for the Base of the Iron railing and Brackets.³

It is unlikely that the stone was originally destined for a bridge across the Portlake Rhyne: the present two-span arch bridge at the point where the Portlake Rhyne entered Little Moor, known as Langport Moor Bridge, was not built until 1838, and there is no

¹ Notice dated 18 January 1797: Western Flying Post 23 Jan 1797; Hadfield E.C.R., SW England, p.84. The proposals and activities of the Ilchester Navigation promoters’ technical advisers seem to have stimulated the Commissioners of Sewers to consider in June 1794 whether they should likewise employ a 'proper Engineer' to advise them on the 'more speedy and effectual Draining' of the Parrett catchment area above Burrow Bridge; in the event the topic was 'respited' at several subsequent meetings before it finally disappeared from the agenda after June 1796: SRO D/RA 1/6/1, Sewers Sessions Orders for the Southern Division, 4 Jun, 24 Sep 1794, 3 Jun, 30 Sep 1795, 1 Jun 1796.
² SRO D/RA 3/3/21, 'Case for Mr Rogers', Sep 1843.
evidence of an earlier masonry bridge here or any other site downstream of it.\(^1\) It is almost certain that the stone was originally intended for the Portlake Rhyne lock: what appears to be an existing lock chamber in the rhyne at its outfall into the Parrett is depicted on a large scale plan of intended works to enlarge the rhyne, deposited in May 1839.\(^2\) Also, there is a hint that work had started on a lock in the rhyne, in an undated report written by Josiah Easton in 1795 or 1796 in response to an instruction by the 'Committee of Subscribers for improving the Navigation from Ivelchester to the River Parrett' to consider 'whether it would be necessary to have six Locks (as proposed by other surveyors) or two Locks as proposed by me.'\(^3\) In his estimate for his proposed works he included only one lock, near Pill Bridge. Where, then, was his second lock? It is possible that a lock in the canal or the Portlake Rhyne was already under construction, and so its cost was already accounted for.

Evidence for a lock at a second site appears on a longitudinal section of the 'Intended Navigation from Ilchester to Langport' that had been prepared by an anonymous surveyor and later annotated by Josiah Easton in 1795 or 1796. At points 100yds. apart about a half-mile downstream of the Ilchester 'Bason' Easton noted: 'This shoal at the head of the Lock 4 Inches deep' and 'The depth of the Shoal at the tail of the Lock 5 Inches.' With no indication that this was merely a proposed lock, these statements suggest that its construction had already started.\(^4\) There is more convincing evidence on an undated and anonymous longitudinal section of the Yeo that is almost certainly a draft of the section-cum-profile that formed part of a parliamentary deposit relating to Yeo Navigation proposals in 1836.\(^5\) On the draft, which is drawn to a greater vertical exaggeration than the parliamentary section and thus shows more detail, 'Old

\(^1\) SRO D/RA 3/3/10/28/1, John Lock's tender and contract for Langport Moor Bridge, Feb 1838. A stone tablet on the bridge engraved 'I Lock Builder 1838' was seen by the present writer in 1990, and was recorded in a 1900 report: SRO D/RA 2/4/24, report of William Dunn to the Somerset Drainage Commissioners, 8 Dec 1900.

\(^2\) SRO Q/RUp 146, 'Parrett Navigation,' enlargement of cut in Langport, deposited 10 May 1839.

\(^3\) SRO DD/CH 34, copy report 'To the Committee of Subscribers for improving the Navigation from Ivelchester to the River Parrett' by Josiah Easton, undated [c.1795], p.99.

\(^4\) SRO D/RA 3/3/22, 'Section of the Intended Navigation from Ilchester to Langport,' undated [c.1795/1796].

lock pit’ is noted against a distinct depression in the bank levels at the location mentioned by Easton.

Meanwhile, Whitworth re-surveyed his Seaton-Chard-Ilminster-Langport route in 1793 and found it still to be feasible.¹ The following year a plan for a canal between Bristol and Taunton was deposited; the surveyor was William White who, like Easton, was heavily involved in navigation schemes at this time.² The line passed about 1½ miles to the east of Bridgwater and then along the eastern edge of the Parrett valley before turning south-westerly to cross the Parrett at Stathe; from here it ran along the southern edge of Stan Moor to join the Tone at Curload. White deposited an amended plan in September 1795 that included a modification such that the line at Stathe actually joined the Parrett, which was then followed for about ¾ mile downstream before reverting to the 1794 line along the edge of Stan Moor. A collateral branch canal alongside the right

MAP 5.13  PART OF WHITE’S PLAN, 1795


² SRO Q/RUp 5, ‘A Plan for a Navigable Canal from the River Avon (near Bristol) to Taunton … together with collateral branches to Bridgwater, Brean Pill and Nailsea,’ 30 Sep 1794. For biographical details of William White (c.1749-1816) see BDCE1 pp.776-777.
bank of the Parrett, running from Stathe up to the downstream side of Langport Bridge, appears to have been added as an afterthought, perhaps in response to the Ilchester Navigation proposals (Map 5.13). This is the earliest scheme to have been found that had as an objective the improvement of the navigation between Langport and Burrow Bridge, in this case by effectively by-passing the Parrett over that length.¹ But by now the 'canal mania' had evaporated as the onset of the French Revolutionary Wars curbed speculation.

5.3 Developments between 1800 and 1830

Several unsuccessful attempts were made during the first quarter of the nineteenth century to promote drainage and navigation schemes that would have had a considerable effect on the Parrett navigation. As with the earlier schemes, evidence is generally patchy and in fact only two schemes reached the stage where parliamentary plans were deposited. The earliest of these was an ambitious scheme of Josiah Easton in 1809 to improve the Parrett navigation up to Langport, and the Tone up to the Curry Moor half-lock. He proposed to cut an eight mile long navigable drain from a lock on the right bank of the Parrett upstream of Oath, down to a lock into the Parrett on the left bank at Dunwear, crossing en route the Parrett midway between Stathe and Burrow Bridge, and the Tone between Athelney Bridge and Stanmoor Bridge. An anonymous parliamentary plan of the scheme was deposited in September 1809 (Map 5.14) but it appears that nothing was done to progress it at that time.² There was also a revival of interest in the idea of an inter-Channels canal running from Seaton to Bridgwater: in 1810 John Rennie supervised a parliamentary survey for an ultimately abortive ship canal scheme for vessels of 120 tons, which generally followed Whitworth's route except that it completely bypassed the Parrett by running on from Langport via a new cut to a

¹ SRO Q/RUp 10, 'A Plan for a Navigable Canal from the River Avon (near Bristol) to Bridgwater and Taunton … together with collateral branches to Brean Pill, Langport and … Nailsea,' 29 Sep 1795. The plan of the Langport branch was drawn in a framed inset, and the word 'Langport' in the title is written in a different hand to the rest of the title. For a speculative explanation of the objectives behind the selection of the circuitous route proposed by White, see: Haskell T., op.cit., pp.15-16.
² Easton J., To Land-owners and Occupiers of Land affected by the imperfect Drainage of the Rivers Tone and Parrett (29 Sep 1809); SRO Q/RUp 27, untitled and anonymous plan of a 'navigable drain' from Langport to Bridgwater, deposited 29 Sep 1809. In Easton's own words:

Perhaps this Plan is one of the greatest ever undertaken in this part of the Kingdom, therefore I suggest that you should take the opinion of one of the most eminent Engineers that can be found, in order to examine my Plan and Section of the Country.
Source: SRO Q/RUp 27, untitled and anonymous plan of a 'navigable drain' from Langport to Bridgwater, deposited 29 Sep 1809.

wet-dock at Combwich (Map 5.15). Work commenced that same year on another Rennie project, the Grand Western Canal, intended to link Exeter and Taunton. At the same time, he also became Engineer to the proposed Bristol & Western Union Canal, soon renamed the Bristol & Taunton, which was quickly shelved.

Following severe floods in 1817 riparian owners and occupiers along the Parrett and the Yeo engaged John Martin to prepare plans for draining the Levels between

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Ilchester and Burrow Bridge, which they adopted in July 1818 with a view to applying for an Act.¹ The details of Martin's proposal are not stated but it seems most likely to have been a revival or modification of Easton's navigable drain scheme of 1809.² In their efforts to secure their appointment as attorneys for passing the Act, the Messiters of Wincanton and George Tuson of Ilchester joined forces in canvassing landowners, and

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¹ Notice of intention to submit a proposal for obtaining a drainage Act to the meeting of the Commissioners of Sewers on 5 June 1817, dated 23 May 1817: Taunton Courier 29 May 1817; notice of meeting to be held on 1 April 1818, dated March 1818: ibid, 19 Mar 1818; report of meeting held on 1 April 1818: ibid, 11 Jun 1818; Messiter & Tuson to Sir John Palmer Acland, 1 Jul 1818: SRO DD/AH 65/14.

² When another scheme 'to make a public Drain between Langport & Bridgwater' was promoted in 1824 Richard Toller was probably referring to Martin's project when he mentioned his own involvement, 'a few years since, when a similar scheme was in agitation': Toller & Nicholetts to Edward Berkeley Portman, 16 Jun 1824: SRO DD/PM 8/6.
similarly Richard Toller of South Petherton teamed up with Nicholas Broadmead of Langport; Broadmead later claimed that it was he who 'first called the attention of the Publick to the means of relieving themselves from the Summer floods in the year 1817.'

In June 1818 the Taunton Courier reproduced a lengthy promotional article for a competing scheme which was based on altogether different principles. In essence, it was proposed to rebuild Burrow Bridge with a single 60ft. span, deepen the Portlake Rhyne and the bed under the arches of Langport Bridge, and provide masonry inverts under the arches on which would be erected adjustable and easily-worked 'hatches,' with 'double hatches' at one arch for navigation. In the event, neither Martin's nor the competing scheme was pursued at that time.

A succession of severe floods during the springs and summers of the early 1820s, plus an accident on Burrow Bridge, stimulated efforts in September 1823 to get Burrow Bridge rebuilt. The promoters of the Burrow Bridge Bill sought to reimburse their expenses by levying tolls at the bridge and by rating the parishes that would benefit from the improved drainage. Soon after, a group of interested landowners attempted to force the hand of the County authorities by getting Burrow Bridge indicted on the grounds that it was out of repair and dangerously narrow. Edward Coles, Clerk of the Peace, obtained legal advice to the effect that in point of law it was unlikely that the eight parishes who had repaired the bridge immemorially could be compelled to continue to be responsible for the bridge, and that the question of whether a County was bound to widen a County Bridge was undecided. In the event, the landowners gave up the prosecution of the indictment in early May 1824 when Coles and the Taunton Turnpike Trustees reached agreement on financial terms and protective clauses with the promoters of the Burrow Bridge Act.

Renewed interest in the 1810 Bristol & Taunton Canal proposals led to the passage of a Bill in 1824 authorising construction of the length from Taunton to the

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2 Taunton Courier 11 Jun 1818.
3 As a post-chaise in which the Rev. Warre of Cheddon was travelling crossed the bridge, the horse on which the post-boy rode leaped over the parapet into the river; fortunately part of the harness broke, and the only injuries sustained were 'some slight contusions to the rider': Taunton Courier 17 Sep 1823.
4 SRO D/T/ta 9, Taunton Turnpike Trust Minutes, 12 Aug, 2 Sep 1823, 3, 10, 24 Feb 1824; Taunton Courier 3 Sep 1823; SRO Q/AH 26/9, 1824 Epip, p.174; SRO Q/C 7/1/2, 'Burrow Bridge - case for the opinion of Mr Gaselee,' opinion dated 20 Apr 1824; SRO Q/AO 4, 1824 Estr; Richard Combe to Edward Coles, 3 May 1824: SRO Q/AB 31.
Parrett upstream of Bridgwater at Huntworth, completely bypassing the Tone between Taunton and Burrow Bridge. The scheme was renamed the Bridgwater & Taunton Canal and work began immediately.\textsuperscript{1} Motivated by concerns as to how the all the contending proposals might affect their interests, the Tone Conservators engaged William Armstrong in February 1824 to inspect the navigation from Taunton to Bridgwater. His comprehensive report dated April 1824 described the obstacles and their causes, and set out a series of suggested improvements. In essence, rebuilding Burrow Bridge, replacing the half-lock at Obridge with a full lock, and building a new lock just below Athelney Bridge would render the Tone ‘navigable without the assistance of Tide at all seasons of the year from Athelney Bridge to Taunton.’\textsuperscript{2} The Conservators took no action on Armstrong's recommendations and, oddly, it seems they took no role, either active or supportive, as a body or as individuals, in any of the proposals to rebuild Burrow Bridge despite the clear benefits that such an improvement would bring to their enterprise. The Burrow Bridge Act received the Royal Assent on 3 June 1824 and the Commissioners appointed under the Act engaged as their 'Surveyor' Philip Bawler Ilett, a Taunton land surveyor and valuer about whom surprisingly little is known despite the plentiful evidence of his phenomenal output in the 1820s in the form of estate, turnpike road and parish maps, plans, surveys and valuations.\textsuperscript{3} Tenders were advertised in mid-January 1825 for constructing a cast-iron bridge of about 70ft. span (Figure 5.5), with a completion date of Michaelmas 1825. None of the tenders being considered acceptable,

\footnotesize{\textsuperscript{1} Hadfield E.C.R., SW England, pp.35-36; Haskell T., By Waterway to Taunton (Taunton, 1994), pp.24-33 passim.} 
\footnotesize{\textsuperscript{2} SRO D/RA 7/4/4/1824, 'Report on the Navigation of the River Tone from Taunton to Bridgewater' by William Armstrong 1824. Armstrong would have preferred that the lock near Athelney Bridge would keep the tide out:
\begin{verse}
... but as this would interfere with the Drainage and be much more expensive I propose a Lock and Weir of sufficient extent to allow the water to run freely off and by means of planks about 12 Inches wide so placed on the top of the Weir that they may be easily removed, during the winter season, little or no obstruction would be felt and the water run off as soon as at present.
\end{verse}

According to BDCE, p.21, William Armstrong (d.1858) entered the Clifton Bridge competition in 1829, and was later an architect and building surveyor in the Bristol area. He was probably a son of John Armstrong (1775-1854), who was the first Resident Engineer on the Thames Tunnel and later City Surveyor to Bristol Corporation.} 
\footnotesize{\textsuperscript{3} 5 Geo. IV, c.92: An Act for Taking down Burrow Bridge, over the River Parrett, in the County of Somerset, and erecting another in lieu thereof [3 Jun 1824]. Armstrong recorded that he had based his report not only on his own survey and longitudinal section of the navigation from Taunton to Burrow Bridge, but also on a plan of the Parrett from Burrow Bridge to Bridgwater that had been made by Ilett.
the Commissioners waited for an expected fall in the price of iron which in the event did not occur.\footnote{Demand for iron was outstripping supply at this point. It was not until the invention of the hot-blast process by Neilson in 1829 that iron production costs fell: David Mitchell, Head of Conservation Research, Historic Scotland, pers.com.} In September 1825 they re-advertised for tenders for a stone bridge of unspecified span. They accepted the tender of John Stone of Yarcombe in November.
1825, work started in early 1826 and tolls on river traffic passing under the new bridge were taken for the first time on 16 November 1826.\textsuperscript{1} The bridge was the second longest single-span masonry arch bridge in Somerset at that time, with a span of about 68ft.\textsuperscript{2} It is still extant as-built, except that the parapets on one side have been replaced (Figure 5.6).

Extensive flooding in early 1824 was said to have caused damage exceeding the cost of an effectual drainage scheme, prompting the Commissioners of Sewers to call a meeting of landed interests, to be held in Langport on 21 July.\textsuperscript{3} Broadmead and Toller immediately canvassed two of the largest landowners, Sir John Palmer Acland and Edward Berkeley Portman respectively, in support of their attempts to be appointed Solicitors for a Private Bill if that should prove necessary.\textsuperscript{4} Acland responded that he felt no scheme should be adopted until 'some eminent civil engineer' had surveyed the floodable lands and reported on the best solution; it seems likely that Easton's navigable drain scheme was being promoted again at that stage.\textsuperscript{5} A Committee of interested parties met for the first time on 30 July and resolved to apply in the next parliamentary session for an Act to improve the drainage; the navigation would be safeguarded by protective clauses. Toller and Tuson were appointed the Committee's solicitors, but Broadmead continued to take an active and influential, but less high-profile, part in the proceedings as adviser to Acland and, later, Portman.\textsuperscript{6}

William Stuckey, one of the Committee members, and Walter Long, another landowner, had serious reservations about the way the business was being handled,

\textsuperscript{1} SRO Q/AB 31, correspondence and plans regarding Burrow Bridge, 1824; Taunton Courier 19 Jan, 2 Mar, 31 Aug, 12 Oct, 23 Nov 1825, 25 Jan, 8 Nov, 20 Dec 1826.
\textsuperscript{2} 'New Bridge', completed by 1740 over the Avon about 3 miles downstream of Bath, has a span of 85ft.: Buchanan R.A., 'The Bridges of Bath' Bath History Vol.3 (Gloucester, 1990), pp.5-7; Cragg R. (ed.), Civil Engineering Heritage: Wales & West Central England (1997), pp.141-142.
\textsuperscript{3} SRO D/RA 1/6/1, Sewers Sessions Orders for the Southern Division, 2 Jun 1824; Taunton Courier 9 Jun 1824.
\textsuperscript{4} Nicholas Broadmead to Sir John Palmer Acland, 7 Jun 1824: SRO DD/AH 24/3; Toller & Nicholetts to Edward Berkeley Portman, 16 Jun 1824: SRO DD/PM 8/6.
\textsuperscript{5} Sir John Palmer Acland to Vincent Stuckey, 29 Jun 1824: SRO DD/AH 24/3. Toller mentioned in his letter to Portman that 'a scheme [is] in contemplation for applying for an Act to make a public Drain between Langport & Bridgwater.' In similar vein, the banker Vincent Stuckey, who had considerable estates in the floodable area, wrote to Acland asking him to support a scheme which showed great promise: 'It is by having an additional Cut thro' Aller Moor, Othery, &c.': Vincent Stuckey to Sir John Palmer Acland, 25 Jun 1824; ibid.
\textsuperscript{6} Report of a meeting held on 21 July 1824: Taunton Courier 28 Jul 1824; SRO DD/PM 8/6, copy of the resolutions of a Committee meeting on 30 Jul 1824.
feeling that the whole thing would be 'a complete Job, and a most heavily expensive one at that':

This Act founded on no information, or estimate, is to give to Two Solicitors, three Commissioners, and a surveyor or surveyors unlimited authority to proceed as they please, and to rate or Tax the property to the extent of several thousand acres perfectly ad libitum.¹

Long got himself appointed onto the Committee and was able to report after the next meeting on 14 September that, 'in spite of the Lawyers,' he had convinced the Committee that they should delay any further consideration of the Bill until they had received a 'scientific plan & estimate' from an eminent engineer, a sentiment shared by Acland: 'All these measures do require deep & expensive consideration from men well versed as civil Engineers in practical cases of this kind.'² Philip Ilett and John Martin, who were also at the Committee meeting, offered to produce plans for effectually draining an area covering the Parrett from Bridgewater to Gaw Bridge; the Tone; the Yeo up to Ilchester Bridge, and the Isle to Hambridge; crucially, without injuring the navigation. Ilett so impressed the Committee that they immediately accepted the offer.³

Long was completely won over by Ilett's evident proficiency. He wrote to Acland:

This Mr. Ilatt [sic] having been born & bred in the flooded country is perfectly at home in the business ... he is a young man of high repute as a scientific man ... He proposes the first year only to widen the river banks & cut off angles & make waste channels to carry off all above high water mark between Langport & Boroughbridge & that at an expence of £4,500 only – then to wait one flood season & see what effect that will have on the country above Langport & then to proceed further or not according to the necessity of the case.

Ilett's estimate for the complete scheme was £18,366 15s. 6d.⁴ From the sparse surviving details, it seems likely that the scheme relied to a great extent on raising and

³ SRO DD/PM 8/6, resolutions of a Committee meeting, 14 Sep 1824; Nicholas Broadmead to Sir John Palmer Acland, 18 Sep 1824, with a copy of the resolutions of a Committee meeting on 14 September 1824: SRO DD/AH 24/3; Walter Long to Sir John Palmer Acland, 9 Nov 1824: ibid, emphasis as in the original.
⁴ Walter Long to Sir John Palmer Acland, 9 Nov 1824: SRO DD/AH 24/3, emphasis as in the original; Nicholas Broadmead to Edward Berkeley Portman, 27 Nov 1824, with a copy extract of Ilett's estimate: SRO DD/PM 8/6. Long noted that 'one of the Navigators of the Bridgwater Waterworks was willing to contract to carry Mr. Illat's plans into effect at the sums estimated.' This is certainly a reference to the B&TC, which had been under construction since 1822. According to Tony Haskell, the original contractors were
strengthening the existing flood banks and building new ones, and improving the flow under Langport Bridge and along Portlake Rhyne. Formal notice of intent to apply to Parliament was published in early November 1824.¹ Many landowners held back their support until they could judge the effectiveness of a rival proposal from John Pinney – to replace Langport Bridge and Load Bridge with larger spans at the cost of the parties responsible for maintaining them. By early December Portman and many of his tenants had determined to oppose the Bill; the other landowners quickly followed suit, and by Christmas Eve 1824 the intention to proceed with the Bill had been abandoned.²

Lord Ilchester felt that Pinney and his associates should be given an opportunity to get Langport Bridge and Load Bridge rebuilt and this heralded the start of the next phase.³ Pinney's first move was to try to get both bridges indicted at the Epiphany Sessions 1825.⁴ Edward Coles already had counsel's opinion in the similar case of Burrow Bridge but before the issue was resolved the matter moved on to another stage.⁵ In early April 1825 Pinney and his supporters were granted a dispensation of Standing Orders by the House of Commons, allowing them to apply for an Act to replace the two bridges, despite it being too late to give the regular formal notice. The Bill had already been read a second time when the opponents heard about it.⁶ Opposition was quickly organised and draft responses and petitions were got up. In the event these were not

¹ Notice of intention to apply for a Bill to drain certain lands, dated 6 November 1824: Taunton Courier 10 Nov 1824.
² SRO DD/AH 24/3, 1-28 Nov 1824 passim; SRO DD/PM 8/6, 29 Oct – 24 Dec 1824 passim. There is an undated petition opposing the Bill, signed by 50 persons, 'on behalf of themselves and others, Owners and Occupiers of Low Lands and Grounds' in 34 parishes, in: SRO DD/S/BT 24/12/1, Butleigh Court Papers. The leading signatories were Portman and Pinney.
⁴ SRO D/B/la 29, 'Indictment against Langport Bridge', 10 Jan 1825. The Taunton Courier reported that it was intended to indict the bridges on the ground that the waterway was insufficient 'by which navigation is impeded,' commenting that this was quite a novel attempt to 'onerate' the County, its liability having been previously supposed to be limited to the safety of traffic travelling over a bridge: Taunton Courier 26 Jan 1825.
⁵ Edward Coles to John Warren, 4 Mar 1825: SRO D/B/la 29; Warren to Coles, 7 Mar 1825: ibid; Coles to Warren, 19 Mar 1825: ibid; Warren to Coles, 2 Apr 1825: ibid; Coles to Warren, 6 Apr 1825: ibid.
⁶ Nicholas Broadmead to Sir John Palmer Acland, 7 Apr 1825: SRO DD/AH 24/3; 'A Bill For taking down and re-building Great Bow Bridge over the River Parrett, and Load Bridge over the River Ivel otherwise Yeo, in the County of Somerset, 6 Geo. IV. Sess. 1825'; SRO D/B/la 29, 'Case of Great Bow Bridge and Load Bridge,' undated [1825].
needed; Pinney accepted that he could not carry the Bill when Portman and Lord Ilchester told him in April 1825 that they now intended to oppose it, and no more was heard of the scheme.¹

In September 1825 Long revived his earlier proposals, now modified to define more clearly the Commissioner's powers and to ensure that the expence of the work was fairly apportioned.² His optimism at the support he thought he detected was short-lived: a public meeting ended in confusion when Pinney turned up with 'a host of farmers little interested.' As support for his plan began to waver, Long urged that parliamentary notices should be published so that the scheme could go ahead if he could rally sufficient support, but this was to no avail. As a result, Broadmead felt that Long's annoyance with his fellow landowners' vacillation would prevent him participating in any future schemes and by the end of November 1825 it became clear that, once again, all the efforts had come to naught.³ Elsewhere, construction of the B&TC continued, culminating in its opening in January 1827.

Meanwhile, in August 1824 Thomas Telford reported on a grandiose scheme that would take vessels of 200 tons from Beer to Stolford via Chard, Ilminster, Creech St. Michael and Bridgwater. James Green surveyed the line under Telford's supervision, and a parliamentary plan was deposited in November 1824.⁴ Although the proposals did not

¹ SRO Q/AO 4, 1825 Estr; SRO Q/AH 26/9, 1825 Epip, p.234; SRO D/B/la 29, 'Remarks on the Case of Great Bow Bridge and Load Bridge,' draft, undated [1825]; ibid, 'The Humble Petition of the undersigned Inhabitants of the Town of Langport Eastover in the County of Somerset,' draft, undated [1825]; ibid, 'The Humble Petition of the undersigned Owners and Occupiers of Low Lands in the Parish of [blank] in the County of Somerset,' draft, undated [1825]; Nicholas Broadmead to Walter Long, 21 Apr 1825: copy letter in SRO DD/AH 24/3.
² Sir John Palmer Acland to Walter Long, 15 Sep 1825: SRO DD/AH 24/3; circular letter from Nicholas Broadmead reporting on the 'Drainage Meeting' held on 11 October 1825, 11 Oct 1825, copies in: ibid and SRO DD/PM 8/6; Nicholas Broadmead to Sir John Palmer Acland, 13 Oct 1825: SRO DD/AH 24/3; Walter Long to Edward Berkeley Portman, 17 Oct 1825: SRO DD/PM 8/6. There was a counter-proposal at the meeting that the Engineer should be directed 'in his scientific executions' by a committee of representatives from the 27 affected parishes. Long reported:

I could not help stating that I c'd not conceive how a well digested plan founded entirely on hydraulic principles could be carried into effect by a man who perfectly understood his business, when directed or rather impeded by men who could know nothing at all about it, & in this doubt I was joined by all the other Gents.

³ Nicholas Broadmead to Sir John Palmer Acland, 7,22 Nov 1825: SRO DD/AH 24/3.
directly impinge on the Parrett navigation, it is relevant to this part of the study as it was Nicholas Broadmead who was engaged to oppose the project by the affected landowners, some of whom also had property in the Parrett catchment.\(^1\) The Ship Canal Act was passed on 6 July 1825 but within a year the scheme had been shelved as the canal boom came to an end.\(^2\) A half-hearted attempt was made in 1828-1829 to promote a 'reduced' drainage scheme in the upper Parrett area; the attempt failed, due in large part to opposition from Lord George Cavendish who wanted assurance of its sufficiency from a 'competent engineer.'\(^3\) Broadmead, who had been to the fore in the business as always, now turned his attention to a scheme that would become inextricably linked to navigation proposals for the Parrett above Langport – the enclosing and draining of West Moor.

\(^1\) Anon, Reasons why the projected Ship Canal will not answer the purposes of its projectors, nor be beneficial to the public (1825), printed circular with covering printed letter signed by Broadmead, 8 Mar 1825, copy in: SRO DD/AH 17/12. By June 1825 Broadmead was so heavily involved in the parliamentary process that he was forced to apologise for seemingly having neglected his regular business in the Langport area:

_I am exceedingly sorry there should have been so much delay, & beg to assure you that it has been wholly involuntary on my part ... so far as regards the Ship Canal, I have left Town for a very short period to attend to these important concerns & other business not admitting further delay – it will be satisfactory to you to know that Ship Canals do not spring up many times in a century – On the present occasion we hope to give our opponents complete quietus in the House of Lords. One barrister & my self have had to contend with four barristers & a host of agents on the other side:_

Nicholas Broadmead to Sir John Palmer Acland, 4 Jun 1825: SRO DD/AH 24/3.
\(^3\) Nicholas Broadmead to Robert Clarke, 21 Feb 1829: SRO DD/AH 24/3.