

July 2nd 1842

John Kingston

THE
REPORT

OF
MESSRS.

HUDSON,
GOLBORNE,
AND
MAXWELL;

ON
THE IMPROVEMENT

OF
THE CUTFALL

OF
THE RIVER

WELLAND,

IN
THE COUNTY OF

LINCOLN.

SPALDING:

PRINTED BY J. ALBIN, MDCCXCII.

Oct 15th 1842

THE
REPORT, &c.

IN Consequence of the Resolutions of a Meeting of the PROPRIETORS of Estates in SPALDING, DEEPING-FEN, and Parishes adjoining, held at the *White Hart Inn* at SPALDING, in the County of LINCOLN, on the 24th. Day of *August*, 1791; and of the Resolutions of the 3d. of *October* following, of a COMMITTEE appointed at such Meeting, We whose Names are under-signed, met at the said *White Hart Inn* at *Spalding*, on the 7th. Day of *November*, 1791, and proceeded the next Day to examine the State of the present Out-fall of the River WELLAND, which we found very defective; and, in order to form a Plan for improving the same, we viewed the *Reservoir*, and the Marsh Lands down to *Wyberton Roads*, and the various Sluices which discharge Water into the Bay, and into the Out-fall of the River *Welland*; and also viewed *Vernatt's Drain*, the *Westlode*, and the River *Glenn*, and all the Tunnels as well through the Banks thereof, as through the Banks of the River *Welland*, but could proceed no further at that Time in the Execution of the Business submitted to us, on account of the Inclemency of the Weather. We have again met this 15th. Day of *August*, 1792, and upon mature Deliberation think it highly improper to make any further Progress in the Business, on Account of the Resolutions of the House of Commons which were passed in the last Session of Parliament, relating to Improvements in Navigations, the same Resolutions requiring a Plan of all Lands necessary to be cut through for obtaining such Improvement, to be annexed to the Reports of the Engineers employed; and we do not consider ourselves empowered by the Resolutions of the 24th. of *August* last, and of the 3d. of *October* following, to order such Plan to be made; but from the said Views, we are of Opinion that no lasting and effectual Improvement can be obtained in the said Out-fall, without making an entire New Cut through the Marshes to commence at or near the *Reservoir*, and to empty itself into deep Water between the *Scalp* and *Wyberton Roads* — And we beg Leave to submit to the said COMMITTEE, the Propriety of enabling us to procure a Plan of the Lands, pursuant to the said Resolutions of the House of Commons.

Signed

Long Sutton,
15th. *August*, 1792.

JOHN HUDSON.
JAMES GOLBORNE.
GEORGE MAXWELL.

The above having been sent by us to Messrs. ASHLEY and SANDERSON, they summoned a Meeting of the COMMITTEE at the *White Hart Inn* at *Spalding*, on the 17th. Day of *August*, 1792, when Messrs. HUDSON and MAXWELL attended; and it was unanimously Resolved by the said COMMITTEE,

COMMITTEE, that it would be proper to obtain a Survey and Plan of the Marshes from the *Reservoir* to *Wyberton Roads*. — In Consequence of such Resolution, Messrs. HUDSON and MAXWELL appointed to meet at *Fosdike Inn* on Monday the 8th. Day of *October*, 1792, the latter having engaged to set a Surveyor to Work, and, in the mean Time to ascertain the Levels, and to apprise Mr. GOLBORNE of the Day appointed for proceeding in the Business and forming a Report thereon, with an Estimate of the Works required.

Having accordingly met on the 8th. Day of *October* 1792, at *Fosdike Inn*, a Plan of part of the Marshes was laid before us by THOMAS THORPE, the Surveyor, appointed to make the same with a Profile of the Levels that had been previously taken by Mr. MAXWELL, who for the sake of precluding an Opposition to the Scheme from the Owners of the inclosed Marshes, had carried the Line of the said Levels as much as possible through the un-embanked part of the Marshes, and directed the Surveyor to measure and lay down no more of the inclosed Marshes, than was necessary to describe the said Line; as well for the sake of saving Expences, as for completing the Survey in the Time required.

But on Examination of the said Profile, it appears to us, that the Surface of the un-embanked Marshes is, in general, much higher than the Surface of the Land within the Roman Bank, and consequently that the Expence of cutting a River through the former will be very considerably greater, than through the latter; and having bored into the Land both on the outside of and within the Roman Bank, we find the Soil of the former, below *Fosdike Inn*, from four Feet deep to the depth required for a River, to be in general of a light sandy Nature; and the latter, to be mostly strong Clay and Silt.

On the whole, it appears to us to be highly expedient, to commence the New River upon the open Marsh, at a Place near *Hooton's Gibbet*; and to carry the same along the open Marsh, to a Place near *Gosberton Sluice*; but for the Reasons before-mentioned, we recommend it to be carried from thence into the inclosed Marshes, keeping within the same from the last-mentioned Place, down to *Wyberton Roads*, nearly as described on the Plan above referred to; and we have subjoined an Estimate of the Expence of cutting a River in that direction, with the Value of the Land that will be cut through and covered by the Banks thereof.

On comparing the Surface of the Water at *Vernatt's Sluice*, with the Surface of low Water at *Wyberton Roads*, we find a difference of eleven Feet, five Inches, and seven Tenths; and at that Time there was four Feet nine Inches of Water on the Pointing of *Vernatt's Sluice*. — These Circumstances shew very forcibly the Impediments in the present Channel; and we beg leave to remark, that neither that Part of *South Holland* which is at present annoyed by the Waters of *Lord's Drain*, nor the Lands on

on the opposite side of the River above *Spalding*, can, in our Opinion, ever be completely drained without an alteration in the present System, as well as an Improvement in the Out-fail; and we here state our Reason for that Opinion.

The Lands in *Deeping* inclosed Fens are at present drained, partly by means of a subteraneous Tunnel, which conveys the Water under the River *Welland*, into the said Drain called *Lord's Drain*, and running for several Miles through *South Holland*, and emptying itself into the Channel of the *Welland* through a Sluice WITH ONE WATER-WAY OF TEN FEET; and other Parts of the *Deeping* Fen Waters are discharged through a Sluice at the Termination of *Vernatt's Drain*, which Sluice has TWO WATER-WAYS, EACH OF FIFTEEN FEET WIDE, but one of the Water-ways of that Sluice has been blocked up for many Years; and as the Threshold of *Vernatt's Sluice* is lower by eight Inches, than that of *Lord's Drain*, we are clearly of Opinion, that a much greater quantity of Water might be run through the Water-ways of *Vernatt's Sluice*, than can ever be discharged through one of those Water-ways, and the Sluice of *Lord's Drain*; but we must remark, that *Vernatt's Drain* appears to us to be neither sufficiently wide nor deep, for conveying so much Water to the Sluice as might be discharged through it. — We are also clearly of Opinion that the subteraneous Tunnel should be discontinued, as well because it will become un-necessessary for the Drainage of *Deeping Fen*, as because it greatly annoys *South Holland*—To give a free Passage for the Water from *Deeping Fen*, it is necessary to deepen the Bed of the *Welland* from *Vernatt's Sluice* to *Hooton's Gibbet*, and to take off the bend in the sides thereof; and we propose the Bed of the New River at its commencement near *Hooton's Gibbet* to be two Feet ten Inches lower than the Pointings of *Vernatt's Sluice*, and to carry it on an inclined Plane of four Inches in a Mile from thence to its Termination; the distance being about seven Miles and a half.

The Bottom of the River at its Termination, will be two Feet higher than the present Low-water Surface at *Wyberton Roads* where we recommend a Sea Sluice with pointing Doors to Sea and Land, to be laid one Foot lower than the present Surface of low Water; as we conceive the Bed of the River may be improved to that depth by Friction, and the use of the Spade Machine.

THE FOLLOWING IS AN ESTIMATE OF THE EXPENCE.

| | | | |
|---|---------|----|----|
| To improving the Bed of the River from a little above Vernatt's Sluice, and taking off the Bends in the Sides thereof, to a certain Place called Shepherd's Hole | £ 693 | S. | D. |
| To making a Dam across the present Channel, from the Commencement of the New River, to the nearest Point on the opposite Shore | 237 | o | o |
| To cutting a New River from Hooton's Gibbet to a Place East of the Ship Ale-house, at Wyberton Roads, being seven Miles and a half in length, with a Bottom of fifty Feet, and a Slope on each Side of two Feet in a Foot, and Fore-lands of forty Feet | 21,020 | o | o |
| To Purchase of the LANDS for CUT COVER and FORE-LANDS. | | | |
| Salt Marshes, 104 Chains in length | £ 285 | s. | d. |
| Inclosed Marsh, 488 Chains in length | 668 | 12 | o |
| | 6,970 | 12 | o |
| To making a Sea Sluice of three Eyes at Wyberton Roads, 50 Feet Water-way; with a double Pen-lock of 14 Feet Water-way, and Pointing Doors to Sea and Land | 10,500 | o | o |
| To Ten Bridges | 3,500 | o | o |
| Contingencies, at 15 per Cent. | 6,438 | o | o |
| | £49,358 | 12 | o |

We have not included any part of the River above *Vernatt's*, because we think the Bed of it may be sufficiently improved by the Spade Machine; and whatever is done by that Means, will be Permanent, after the New River is made.

The Works proposed will be Expensive, as appears by the above Estimate, but the Object at Stake is of great Magnitude; and there can be no Question, whether a rich and fertile Country ought to remain in its present unproductive State, or be converted to a subject of great Private and Public Advantage.— The New Cut will, in our Opinion, not only insure a complete Drainage of the low Lands, and the Preservation of the Banks on both Sides of the River above *Spalding*, but greatly improve the Navigation, and be the Means of opening a regular and safe Communication between the two Shores at *Fosdike Wash*; and of acquiring some thousands of Acres, from the laying up of the Sands adjoining to the present Channel; and when all these Advantages are considered, there can be no doubt as to the practicability and propriety of the Scheme; but not having either an Account of the Quantity of Land to be drained, the Amount of the Tonnage of Goods annually imported, any proper Documents relating to the Tolls arising at *Fosdike Wash*, or a Survey of the bare Sands; we cannot enter into the Business any further at present, than merely to point out the abovementioned Improvements, as affording different Heads of the Means for raising a sufficient Fund the Purposes aforesaid.

SPALDING, 15th. OCTOBER, 1792.

JOHN HUDSON.
JAMES GOLBORNE.
GEORGE MAXWELL.