

Upwell I.D.B.

Consulting Engineers Report – May 2022

Pumping Stations

Other than the matters previously reported at the last meeting and that described below, only routine maintenance has been carried out.

Bedlam Bridge

The corroded pump bolts on pump 1 have not been addressed, it is recommended these are attended to this summer.

As previously reported the issue with the electricity meter only having one rate continues to be at an impasse with the meter operator refusing to alter it, stating rates can be seen remotely. On checking the electricity footprint report and bills, the majority of the pumping is during the lower night tariff as it should be.

Cock Fen

An order was placed and an upfront payment made for the installation of a 3-phase supply at Cock Fen. In order to hold prices, the order for the plant was placed with E Rand & Sons allowing items to be manufactured, stored and vested in the name of Upwell IDB for installation and commissioning in summer 2022. The order placed included for the repairs to the flap valve main frames which are badly corroded.

This project has been delayed by several legal matters relating to the new electricity supply to site and the Mechanical and Electrical Engineer considers it unlikely that these matters will be resolved in time for installation to be undertaken this year.

1. Pumping station land was not registered. The Middle Level Commissioners' Solicitor is preparing the Statutory Declaration to register the land.
2. Access deeds of grant for UKPN to legally access site. Still ongoing, UKPN liaising with South Yorkshire pensions who own the land. The Middle Level Commissioners' Solicitor is arranging an undertaking with the other landowner.
3. Deed of Grant for underground and overhead lines with Environment Agency. The draft deed and enquiries have been issued. UKPN solicitor has chased for an update.

Nordelph

It remains the case that the Middle Level Commissioners are trying to get the issue with the electricity meter resolved. EDF metering came to site to replace the meter on 15th December but we did not let them proceed with the work as they wanted to downgrade the cut-out fuses from 200A to 160A which would allow no discrimination between UKPN fuses and the pump panel fuses. This could mean if there was an issue the UKPN fuses could blow before the pump fuses which would lead to longer downtime. The solution is to fit a CT metering system rather than whole current metering, UKPN is currently quoting for this. The most recent bills have been disputed as the estimates do not reflect the usage as it has been a dry winter.

Cranbrook/Counter Drain (CCD) FRM Strategy

Since the last Board meeting, the Middle Level Commissioners' Planning Engineer has represented both the Middle Level Commissioners and the relevant Boards at regular "Update" Progress Meetings, as well as more specific meetings. Unless there is a specific issue related to the authority, attendance at these meetings is not charged to the Board.

Jeremy Benn Associates Limited (JBA) has been appointed to undertake the hydraulic modelling of the CCD Catchment. In order to assist in the preparation of the model details of the Board's Pumping Stations have been provided:

Upwell Assets and other FDGiA Schemes

A meeting was held with the Board's Chairman and the Middle Level Commissioners' Engineers to discuss the GiA schemes. It was decided that the best approach was to progress with inspecting the various culverts and structures on main drains which need work soonest and make an application for grant. Then use some of the other funds allocated by the EA against future pumping station works, to progress a study of the full Board catchment and options for the various pumping stations and network as a whole, later this financial year (late 2022/early 2023).

The Engineer met with the District Officer and visited various sites, highlighting three main ones which needed to be addressed as part of the first FDGiA bid. These are Flint House Road (Point 129), Horsehead Drove (Point 92) and Duck Puddle Drove (Point 113). Surveys of these to progress soon and drawings to be produced, alongside the FDGiA business case and application which has started.

There were a number of other culverts inspected which are present solely for access to private property so it was advised that the owners should have responsibility to maintain these rather than using grant. As they are on the Old Croft River, contact will be made with the Manea & Welney District Drainage Commissioners before writing to the relevant owners to inform them of their maintenance, remedial works or replacement as required.

Planning Applications

In addition to matters concerning previous applications, the following 11 new development related matters have been received and, where appropriate, dealt with since the last meeting:

MLC Ref.	Council Ref.	Applicant	Type of Development	Location
525	21/01945/F	Ms A Manin	Residence	Cock Fen Road, Lakes End
526	21/02206/PACU3	Mr D Lunn	Residential (3 plots)	Squires Drove, Three Holes
527	21/02084/F	R & F Johnson	Residential (7 plots)	Main Road, Three Holes
528	21/02050/F	J B Fletcher & Sons	Agricultural (Concrete Apron)	Silt Road, Nordelph
529	21/02322/F	Mr & Mrs B England	Residence	High Street, Nordelph
530	21/02301/F	Mr P Blaxill	Residence (Double garage)	Silt Road, Nordelph
531	21/02510/AG	HG Bliss Farm Ltd	Agricultural (Grain store)	Half Penny Toll Road, Lott's Bridge
532	21/02450/F	Mr P Rolfe	Residence (Garage and shed)	Flint House Road, Lott's Bridge
533	21/02296/F	Mr & Mrs Wright	Residence (Barn conversion)	Wisbech Road, Tipps End
534	F/YR22/0221/AG1	Scott Oldroyd & Co	Agricultural (Grain store)	Scotts Road, Christchurch
535	22/00187/F	Claire Gibbons	Residence (Extension)	Wisbech Road, Tipps End,

***Planning applications ending 'PACU' relate to notification for Prior Approval for change of use of agricultural
Planning applications ending 'AG1' relate to Agricultural Notification***

From the information provided it is understood that all the developments propose to discharge surface water to soakaways, infiltration devices and/or Sustainable Drainage Systems (SuDS). The applicants have been notified of the Board's requirements.

Some of the above may discharge treated foul effluent water into the Board's system either via private treatment plants or Water Recycling Centres (WRC).

The following applicants have chosen to use the Infiltration Device Self-Certification or Checking Service and, in doing so, agreed that if the device was to fail in the future the land owner would be liable for any remedial works to rectify the situation.

- a) Ms Manin - The Barn at Willow Farm, Cock Fen Road, Lakes End (MLC Ref No 525)
- b) Mr Blaxhill - Silt Road, Nordelph (MLC Ref No 530)

No further correspondence has been received from the applicants or the applicants' agents concerning the following developments and no further action has been taken in respect of the Board's interests.

- *Erection of a house with detached carport – The Ely Diocesan Board of Finance (MLC Ref No 269) & Mr & Mrs Mannion (MLC Ref Nos 309, 313 & 366) & Dr & Ms Mannion (MLC Ref No 416) & 2 plots on land south west of The Rectory, Church Road, Christchurch – Dr C Mannion & Ms R Amin-Mannion (MLC Ref Nos 465 & 512)*
- *Erection of four bedroom detached farmhouse and garage at Mill House, Boothes Road, Nordelph – Mr Denis Pearcey (MLC Ref Nos 338 & 485)*
- *Erection of 4 dwellings with detached garages, comprising of 2 x 2-storey 4-bed dwellings and 2 x 3-storey 5-bed dwellings at the site of the former Shrub House, 46 Church Road, Christchurch – P J Farms Ltd (MLC Ref Nos 409, 412 & 414)*
- *Proposed residential development (4 dwellings) at former Three Tunns Public House, Main Street/Bedford Bank (East) Welney – Elgood & Sons Ltd (MLC Ref No 475)*
- *Residential development on land to the south west of Syringa House, Upwell Road, Christchurch - Mr J Stittle & Miss R Watson (MLC Ref No 437) & Mr B Dawson (MLC Ref Nos 476 & 513)*
- *Retrospective planning application for the change of use of residential garden for use of dog kennels and runs at The Cottage, Welney Road, Lakes End – Mrs S Millington (MLC Ref No 492)*

In view of the absence of recent correspondence and any subsequent instruction from the Board it will be presumed, unless otherwise recorded, that the Board is content with any development that has occurred and that no further action is required at this time.

Further to the entry in the “Planning Updates & Consultations” document entitled “Long-term Ownership, Funding and Maintenance of Sustainable Drainage Systems (SuDS)” it is presumed that the Board will require its interests to be protected by ensuring the provision of adequate arrangements for the long-term ownership funding, management and maintenance arrangements for the upkeep of any water level and flood risk management system, whether on or off site, in perpetuity.

In order to assist further discussion when dealing with development related matters, the Board is asked to consider the proposal, advise on any requirements it may have and provide instruction on how it would wish us to proceed.

Christchurch (General area rather than parish/town boundaries)

The Croft off Church Road, Christchurch – Hazelmere Homes Ltd (Butcher & Harris)
(MLC Ref Nos 106, 167, 230, 240 & 242)

A response is currently awaited from Anglian Water to confirm that it has adopted the on-site waste water systems as public sewers.

This matter is currently being followed up.

Erection of 4-bed dwellings and formation of access road at land north of playing field Upwell Road, Christchurch - Christchurch Parish Council (MLC Ref Nos 342 & 362); – *Mr M Simonds*, (MLC Ref No 397) & - *Messrs G & K Baxter & D Smith* (MLC Ref No 414)

Note. A section 278 agreement (or s278) is a section of the Highways Act 1980 that allows developers to enter into a legal agreement with the local authority to make permanent alterations or improvements to a public highway, as part of a planning approval.

Further to previous Board Meeting Reports, an e-mail was received in November from Cambridgeshire County Council concerning a S278 application for the construction of a footway associated with the above development which stated that the applicant had advised that they do not require permission for the proposed saddle connection to the pipe as “it is a riparian owned ditch”.

In response, the Middle Level Commissioners’ Planning Engineer provided the following reply:

“In respect of the piping and filling of the open watercourse the Board issued consent to Christchurch Parish Council under Section 23 (Prohibition on obstructions etc. in watercourses) of the Land Drainage Act (LDA) circa the end of 2012/beginning of 2013. This was later amended as detailed in the e-mail dated 5th January 2016.

Any works that “.. alter a culvert in a manner that would be likely to affect the flow of an ordinary watercourse” requires the Boards prior written consent under Section 23 of the LDA. Therefore, if the saddle is likely to affect the flow within the pipeline then consent is required.

The use of a saddle to connect the road gully to the pipeline is noted but, in the circumstances, a suitable inspection chamber may be more appropriate.

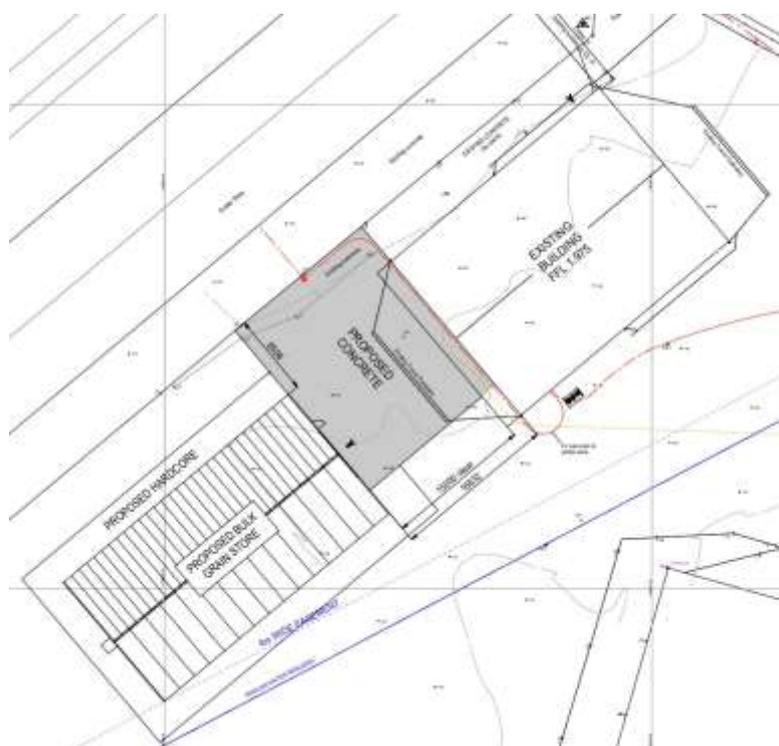
An application for the discharge of both surface and treated foul effluent water into the adjacent watercourse was submitted in June 2017. The plans associated with this application infer that only the discharge from the house and garage were included but I am currently ascertaining the position.

In the absence of this information, it is difficult to comment positively, but it does appear that the proposed footpath was not included and as this will increase the rate of run-off and/or volume entering the Boards system either directly or indirectly, i.e. via highways drains, private or public sewers etc. the Boards prior written consent is required.”

An application for discharge consent was subsequently received from Rural Designer Homes Ltd in February and is being progressed.

Developments on land to the south west of The Limes, Scotts Road, Christchurch - Scott Oldroyd & Son (MLC Ref Nos 357 & 534)

An Agricultural Notification was validated by the District Council in February for the erection of a 350m² agricultural grain storage building and associated concrete apron. In March the Council decided that prior approval was not required but the development must be carried out within five years of the application.



Extract from Thurlow Nunn Standen Ltd's Drawing No. 2207 03 01 Rev. P1

A Drainage Advisory Note was included on the Decision Notice but to date no correspondence has been received from the applicant or its agent, Thurlow Nunn Standen Ltd (TNS).

Lakes End (General area rather than parish/town boundaries)

Development at Stanborough House, Welney Road, Lakesend – Mrs K Porto (MLC Ref Nos 339 & 522)

Further to item iii) of Minute B.1995 Consulting Engineers' Report, including Planning and Consenting Matters "That the Planning Engineer issues an Advisory Notice to the applicant and requests a note be added to the Local Land Charges Register, if the application submission is not received within two months" an Advisory Notice was sent to the applicant in January and copied to its agent, Churchgate Property.

Following further discussion an Infiltration Device Option 1 'self-certification' application form, in relation to an extension to the house erected circa 2011 which had remained outstanding, together with an application for discharge consent for surface water disposal from the general-purpose building was received from the applicant in March. A positive recommendation for the latter was forwarded to the Clerk to the Board.

Revised drainage at 1-6 Hurst Crescent, Lakesend – Freebridge Community Housing (MLC Ref No 508)

The application for discharge consent is currently being progressed.

Lotts Bridge (General area rather than parish/town boundaries)

Developments at Beechwood Farm, Half Penny Toll Road, Lott's Bridge – HG Bliss Farms Ltd (MLC Ref Nos 239 & 531)

An agricultural notification was validated by the Borough Council in December for the erection of a 450m² agricultural grain storage building and associated concrete apron. In January it was decided that the Council's prior approval was not required but the development must be carried out within five years of the application.

An Infiltration Device Option 1 'self-certification' application form together with supporting information was received in February from Thurlow Nunn Standen Ltd (TNS), the applicant's agent for the above. In view of the size of the development, an Option 2 'Checking Service' option, a paid service provided by the Middle Level Commissioners, is required. Discussions are continuing with TNS.



Extract from Thurlow Nunn Standen Ltd's Drawing No. 2197: 01: 01 Rev. P0 – Location Plan

Nordelph (General area rather than parish/town boundaries)

Development at Fendale Farm, Silt Road, Nordelph – J B Fletcher & Sons (MLC Ref No 528)

A planning application was validated by the Borough Council for the following;

- A. The replacement of the existing stone and road planing hardstandings between other existing concrete bases at the front of the farm yard with a 200m² concrete apron with the run off discharging to an existing sediment pit and
- B. The installation of two 15,000 litre above ground plastic water storage tanks to collect and store run off from the roofs for the agricultural building to be re-used for cleaning agricultural machinery and as an emergency livestock water supply.

Planning permission was granted on the 2nd March subject to the imposition of planning conditions.

Whilst the Board's policy generally promotes the use of rainwater collection and grey water re-cycling, particularly if drought conditions become more regular and if the impact

of climate change becomes a reality, it also considers that such systems should be in addition to but not replace or form any part of a surface water disposal system thus ensuring that there is adequate storage volume to receive the run off from at least a design rainfall or exceedance event or otherwise dealt adequately to ensure that it does not contribute to flooding in the area. In the absence of sufficient information, it is not possible to advise positively on the proposal. The applicant has been asked to provide more information and further details are currently awaited.

Three Holes (General area rather than parish/town boundaries)

Seven dwellings with gardens and parking, new highway access off the A1101, additional vehicle parking for Three Holes Village Hall, and biodiversity enhancements on land to the north of Paradise Farm, Main Road, Three Holes - Richard and Fran Johnson (MLC Ref Nos 527)

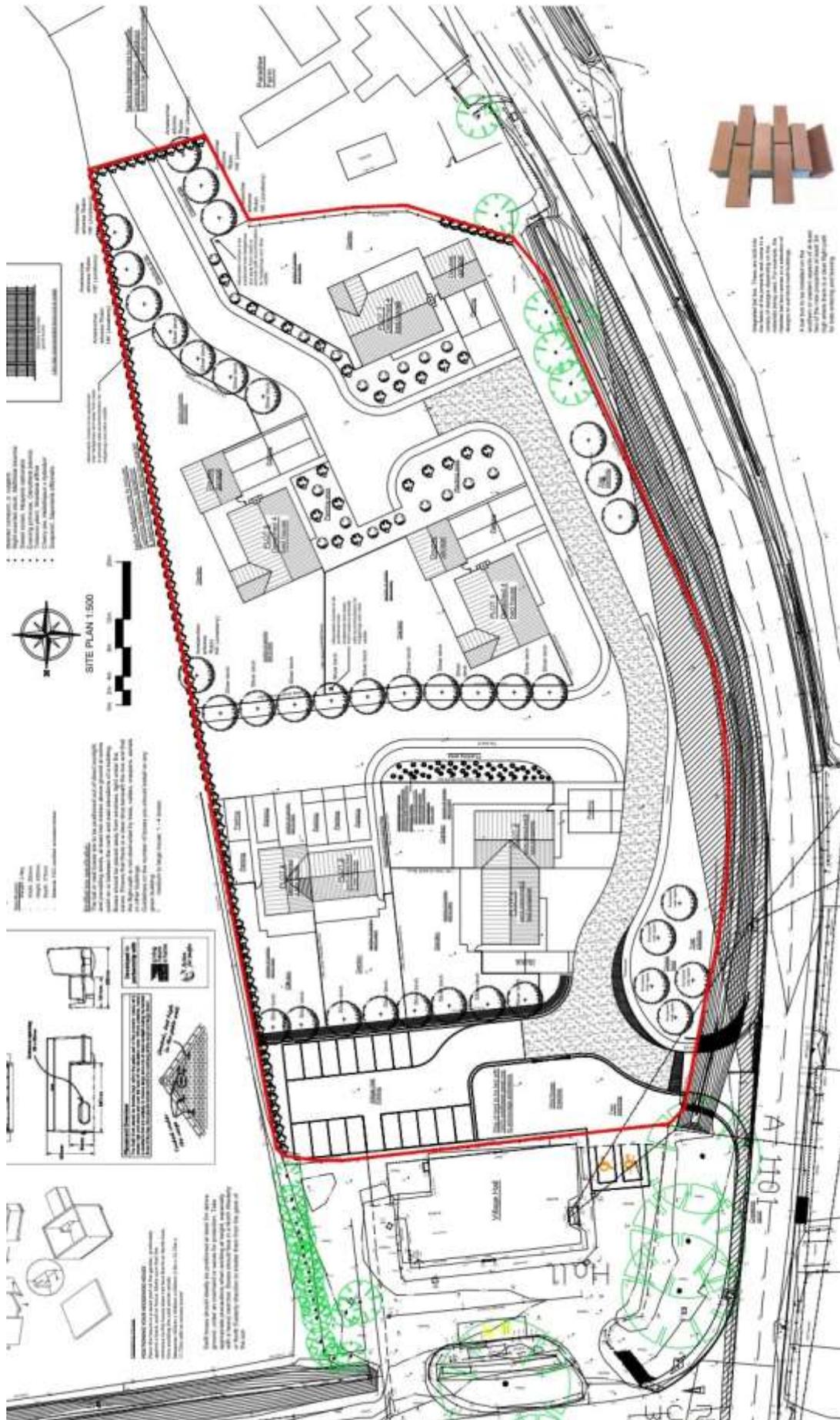
A planning application was submitted by Collective Community Planning, the applicant's agent, on behalf of the applicant, for a residential development adjacent to the Village Hall.

Whilst detailed consideration of the submission documents has not been undertaken, following a brief review it is noted that the Planning, Design & Access Statement dated November 2021, prepared by the applicant's agent, advises that:

"As a consequence of ground conditions, a full infiltration Sustainable Urban Drainage System is not possible. Instead, there will be an attenuation Sustainable Drainage system such that surface water will be directed to the drainage ditch on the western boundary following attenuation of the flow through the use of permeable paving on areas of hardstanding (parking areas/ access roads). For foul water, a sewage treatment plant system will be used and will discharge treated water into the drainage ditch. The drainage ditch will be maintained to ensure that it continues to function properly."

The Flood Risk Assessment and Surface Water Drainage/SuDS Strategy Ref: 2805/RE/09-21/01 dated September 2021, prepared by Evans Rivers and Coastal Ltd, is quite detailed but concludes that:

"An assessment of the practical use of sustainable drainage techniques has been carried out. As soil types will not support the effective use of infiltration devices, it is proposed that surface water is attenuated through the use of permeable paving prior to discharge into the local ditch system."



Extract from Greg Saberton Design's Drawing No. 02 / 2662 / 21 – Site Plan

In respect of adoption and maintenance of the surface water disposal system the content is quite brief simply advising that:

“The permeable paving across parking areas and access road will be privately adopted and maintained (perhaps by a management company or homeowners). The permeable paving should be maintained in accordance with Table 20.15 of CIRIA 753 (Table 3 hereafter)”

A detailed review of this document has not been undertaken but it is likely to consist of standard rather than site specific text and is not as comprehensive as that suggested in the Long-term Ownership, Funding and Maintenance of Sustainable Drainage Systems (SuDS) entry included within the Strategic Planning Consultation Responses document referred to elsewhere in this document.

According to the Borough Council’s webpage this application is “Awaiting decision”.

Tipps End (General area rather than parish/town boundaries)

Development at Walnuts, Tipps End – Mr M Dickinson (MLC Ref No 135), Mr Gibbons (MLC Ref No 523) and Claire Gibbons (MLC Ref No 535)

Since the last Board Meeting Report, a planning application has been submitted to the Borough Council for first-floor and rear single storey extensions, with internal alterations but not the replacement garage previously proposed.

Planning permission was granted in March subject to the imposition of Planning Conditions none of which were relevant to the Board.

No reference was made to the means of surface water disposal or the close proximity of the Old Croft River (OCR) in either the planning submission, the Case Officer’s Report or the Decision Notice.

No subsequent correspondence has been received from either the applicant or her agent, Gary Johns Architects Limited, concerning issues that affect the Board.

Developments at Croft Barn, Wisbech Road, Tipps End - Mr & Mrs Wright (MLC Ref Nos 515 & 553)

Further to the recent planning application for a barn conversion, Borough Council Ref 21/00892/F (MLC Ref No 515), which was granted planning permission in July 2021, a

Welney (General area rather than parish/town boundaries)

Proposed residential development of 17 units to the north west of The Grange and south east of North Road, Welney – Lincoln Jack Ltd (Loyd Homes/Client of JPP Consulting/SEA Structural Engineers Ltd) (MLC Ref No 462)

Further to the last Board Meeting Report, a meeting was held on site with the developer's consultant, SEA Structural Engineers Ltd, previously this had been JPP Consulting but the point of contact is unchanged; the appointed contractor, L4 Civils Ltd; and the Middle Level Commissioners' Planning Engineer to discuss the contents of the various consents that have been issued and discuss how the works would be undertaken.

Over the Christmas/New Year period concerns were raised about the proximity of plots 1 and 2 which "look very close" to the brink of the Old Croft River.

Following some discussion, a meeting was arranged to:

1. Measure the proximity of the dwellings to the "brink" of the watercourse.

With suitable representatives to take part in/or witness the measurements being taken.

- 2.

- a) If there is no encroachment then no further action is required.
- b) If there is an encroachment then a discussion will be required concerning the re-establishment of the full width of the maintenance strip and any mitigation that may be required.

At the meeting attended by the applicant's representative, a representative from SEA Structural Engineers Ltd, the Board's Chairman, the Chairman of the neighbouring Manea and Welney DDC and the Middle Level Commissioners' Planning Engineer, the distance between the brink of the OCR and Plots 1 and 2 was measured. One of these measurements was found to be very close to the minimum 9.0m wide maintenance access strip required. However, the applicant's representative explained that before completing the development the brink of the OCR will be raised and reshaped to meet the Board's requirements. This proposal was agreed by all parties in attendance.

Development Contributions

Contributions received in respect of discharge consent will be reported under the Agenda Item – ‘*Contributions from Developers.*’

Norfolk Water Management Partnership [Norfolk County Council (LLFA)]

Flood Investigation Report into Winter Flooding 2020-2021

The Middle Level Commissioners have recently been consulted on an Addendum to the Norfolk Flood Investigation Report (FIR) Winter 20/21. This included flooding reported at Lake Avenue, Lakes End experienced during the high rainfall and a flooding incident event on the 24th December 2020.

The Middle Level Commissioners’ Planning Engineer has provided a response to the LLFA on the Board’s behalf.

The County Council advises that “The finalised report will be shared with affected property owners and local members and then published on the County Council website” but does not give a timescale for doing this.

Norfolk Water Strategy Programme (NWSP)

The Eastern Region, and specifically Norfolk, is experiencing growing pressures on water resources. The ability of freshwater bodies to sustain biodiversity is considered by many to be at risk due to water shortage, pollution and destruction of native habitats.

Collaborative, cross-sector approaches and actions are required to ensure that there is enough water to meet the growth in population, support the recovery and growth of the local economy post-COVID and enable the local natural environment to recover and flourish to 2050 and beyond.

Water Resources East (WRE), together with Norfolk County Council, Anglian Water and The Nature Conservancy (TNC) have formed a partnership to prepare a sustainable Norfolk Water Strategy with associated funding and governance arrangements.

The objectives of the NWSP are to secure good quality, long-term water resource supply for all water users, while protecting the environment and showcasing the county as an international exemplar for collaborative water management.

The programme seeks to demonstrate how cross-sector, integrated water management action can deliver multiple benefits and help achieve the county’s net zero targets. Early outputs and learnings

from the project will feed into the development of the long-term Regional Plan - Water Resources East (wre.org.uk).

The development of the plan and associated governance arrangements, initially funded for two years, will entail working with a variety of organisations to test and implement a number of nature-based solutions (nbs) to manage water in the county. These nbs will be amalgamated into an investable, long-term, proposition for private and public financing which will underpin the creation of a governance structure referred to as a 'Water Fund'. Water Funds are a well-established model for facilitating collective action to address water security challenges through the implementation of nbs as a complement for more traditional so-called 'grey' infrastructure such as pipelines and treatment plants. Norfolk is one of two European pilots selected for Water Funds by TNC, to add to TNC's global portfolio of Water Funds.

The Middle Level Commissioners and associated Boards are members of WRE and late last year the Middle Level Commissioners (representing both itself and the administered Boards within Norfolk) were invited to join the Steering Committee.

Since this time the Middle Level Commissioners' Planning Engineer has attended several virtual meetings where issues such as funding streams and sources; Governance and legal challenges; WFD targets; surface water abstraction pressures; climate change mitigation and adaption have been discussed.

Synergies have been identified and will feed into the Cranbrook/Counter Drain FRM Strategy, which involves the Commissioners and Boards on the north western side of the Ouse Washes together with the Hundred Foot Washes IDB. It is hoped that other similar projects may also benefit.

Planning Updates & Consultations

To reduce the size of this consultant's report and to increase public transparency the section of this report which provides information on the various strategic consultations and issues that may affect the Middle Level Commissioners and administered/associated Internal Drainage Board has been relocated to our website and can be found on www.middlelevel.gov.uk towards the bottom of the page under "Strategic Planning Consultation Responses".

General Advice

Assistance has been given, on the Board's behalf, in respect of the following:

- (a) Welney Parish Council – An application for byelaw consent to remove a notice board adjacent to the Old Croft River and the junction of the A1101/B1101 and re-erect it

adjacent the Old Croft River and the access road to St. Mary's Church, Welney was recommended for approval.

- (b) Mr M J Smith – An application for byelaw consent to erect a 1.2 metre high picket fence and plant native species hedging over the piped Board's watercourse at Meadow Farm, main Street, Welney was recommended for approval.
- (c) Organise repairs to a bank slip at Thorpe Terrace, Silt Road near Nordelph. The slip occurred after a burst water main was repaired in October 2021 and the repair will be paid for by Anglian Water plc. Work was undertaken and completed on 9th April 2022.

Consulting Engineer

13 May 2022

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