RURAL PARTNERS LIMITED
F I N E · P L A N S
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BACKGROUND STATEMENT

Land North of
Gable End Farm, Marsh Road
Gedney Marsh, Lincolnshire

Proposed
Irrigation Reservoir

Ref No. FP/2602/BS September 2026

JEPCO Ltd
Gedney Marsh
Gedney Drove End
Spalding
Lincolnshire
PE12 9PB

1. BACKGROUND

JEPCO are a well established farming company farming some 910 ha from Norfolk House Farm, Gedney Marsh.

An application for prior approval to replace the existing reservoir with a larger one and relocate the existing pond was approved on 7th January ref: H06-1240-25.

With changing weather patterns there is pressure on the Environment Agency to more effectively manage the country's water resources particularly during the summer months and it is Government Policy to encourage the construction of reservoirs to store winter run off.

The guarantee of irrigation water stored in the proposed reservoir will allow the company to meet customers requirements for tighter crop quality specifications using the minimum amount of energy to produce the crop quality desired for the markets they are supplying.

This weather this summer has reinforced the importance of having sufficient on farm reservoir capacity and the proposal is now to construct a larger reservoir.

A number of reservoirs have been constructed since 2012 but additional capacity is still required.

JEPCO are a well established farming company farming some 3,000 ha over a number of holdings predominately in the Holbeach / Sutton Bridge area.

Current Cropping for 2026 in the area around the proposed reservoir is as follows:-

Crop	**Area in ha's**
Wheat	28.66
Potatoes	75.11
Peas	129.96
Vegetables	18.91
ELS	20.71
	273.35

For the avoidance of doubt if permission is granted for this proposal then the reservoir approved under the previous approval ref: H06-1240-25 will not be constructed.

2. RESERVOIR DESIGN CRITERIA

The reservoir has been designed with reference to the following:-

Small Embankment Reservoirs; Report 161; CIRIA (Construction Industry Research and Information Association)
Floods and Reservoir Safety: an Engineering Guide; The Institution of Civil Engineers. (F&RS)

Freeboard Height

Design Freeboard when full is 0.60m

Fetch	0.24 km	
Average Hourly annual max wind speed	18 - 20 m/s	Fig 3 F&RS
Once in Ten Yearly maximum wind speed	24 - 26 m/s	Fig 4 F&RS
Design Wind Speed assumed	25 m /s	

Using Fig 9. F&FS Relationship between effective fetch, wind speed and significant wave height by interpolation

Significant Wave Height 0.3 m

Design Wave Height

Using Table 2 F & FS Design Wave Heights

Dam Type	Earth Fill
Crest	Grass
Downstream slope	Random grass
Design wave height factor	1.3

Design wave height	=	0.3 m x 1.3
	=	0.39 m
	=	0.4 m

Wave Run Up

Using Fig 10 F&FS Ratio of run-up height to design wave height

Dam Slope	1 : 4
Slope characteristic	Smooth
By interpolation Run-up Ratio	1.4

Minimum Freeboard Allowance	=	0.4 m x 1.4
	=	0.56 m
	=	0.6 m

3. ARCHAEOLOGY

The are no known evidence of archaeology on the site which has been intensively cultivated over the years.

Should on stripping the site any evidence be found then Lincolnshire County Councils Historic Environment Team will be advised.

4. PLANNING LEGALISATION

The proposed development can be dealt with under the Prior Notification Procedure for the following reasons:-

The reservoir is reasonable necessary for the purposes of agriculture
The development is being carried out on an area of land of greater than 5 ha
The area of the proposed operations exceeds 0.5 ha
No part of the development is within 25 metres of a metalled part of a trunk or classified road
No excavated material will be removed from the unit. (The spoil from the excavation will be used to construct the walls of the reservoir - see appendix i, any surplus will be spread on adjoining land)

5. CONCLUSION

Prior Approval should be granted for the proposed reservoir so as to enable JEPCO to provide consistent yields and quality so that they can remain competitive against other growing areas in the country and assist in future proofing the business from the effects of climate change.

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Rural Partners Ltd
Parkhouse Farm
Harbottle, Morpeth, Northumberland, NE65 7BD

Drawing No.	**Description**
FP/26/02/250	Site Plan
FP/26/02/01	Plan and Section
	Location Plan

Appendix i

Volume Calculations based on Rectangular Reservoir with
Area of Bottom = 18,415 sq m
Area of Bottom of Proposed Reservoir = 18,565 sq m

JEPCO Enlarged 16/09/2026

Client F. Parnell

Site JEPCO

CALCULATION OF RESERVOIR QUANTITIES	14,434,860	Galls
	65,613	cu m
Volume above Ground Level	8,281,016	Galls
	37,641	cu m

Description	Qty	Unit
Bottom Width of Reservoir	127.00	m
Bottom Lenght of Reservoir	145.00	m
Ratio of Side Slopes (Wet)	4.00	
Ratio of Side Slopes (Dry)	3.00	
Depth of Water	3.00	m
Freeboard	0.90	m
Depth of Excavation below existing G.L.	1.40	m
Depth of Top Soil	0.00	m
Bulk Factor for Top Soil	1.00	
Width of Bank Top	4.00	m
Height of Bank above Ground Level	2.50	m
Width at Mid Depth of Water	139.00	m
Lenght at Mid Depth of Water	157.00	m
Width at Top Water Level	151.00	m
Lenght at Top Water Level	169.00	m
Width at Top of Bank	158.20	m
Lenght at Top of Bank	176.20	m
Area of Bottom	18,415.00	sq m
Area at Mid Depth	21,823.00	sq m
Area at Top Water Level	25,519.00	sq m
Width of Liner	163.16	m
Lenght of Liner	181.16	m
Area of Liner	29,558.14	sq m
Surface Area of Excavation @ Sub-Soil level	21,586.84	sq m
Area at Mid Depth of Excavation of Sub Soil	19,969.56	sq m
Overall Width of Reservoir Top of Bank	166.20	m
Overall Lenght of Reservoir Top of Bank	184.20	m
Overall Width of Reservoir @ Sub-Soil level	181.20	m
Overall Lenght of Reservoir @ Sub-Soil level	199.20	m
Overall Area of Reservoir @ Sub-Soil level	36,095.04	

VOLUMES

Volume of Water Storage in Gallons	14,434,860	galls
Volume above Ground Level	8,281,016	galls
Volume of Sub Soil Excavated	27,972	cu m
Volume of Top Soil Strip	0	cu m
Total Volume of Excavation	27,972	cu m
Volume of Bank	21,632	cu m