FLOOD RISK ASSESSMENT

ADDENDUM FLOOD RISK ASSESSMENT FOR PROPOSED RESIDENTIAL DEVELOPMENT, LAND NORTH OF JAMES ROAD, CROWLAND



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RMA

ADDENDUM FLOOD RISK ASSESSMENT FOR PROPOSED RESIDENTIAL DEVELOPMENT, LAND NORTH OF JAMES ROAD, CROWLAND

Planning approval Reference: H02-0259-15 was granted on 11 February 2016 subject to the following condition(s) for the Proposed residential development, replacement allotments and new cemetery including woodland burial plots, associated infrastructure and new accesses.



2 The development hereby permitted shall be carried out in accordance with the following approved plans: Dwg. No: 1144-02-SP01A (indicative only). Flood Risk Assessment (prepared by RM Associates, Version 1 dated 1 March 2015).

Reason: For the avoidance of doubt and in the interests of proper planning.

20 The development hereby permitted shall be carried out in accordance with the approved Flood Risk Assessment (prepared by RM Associates, Version 1 dated 1 March 2015) forming part of this planning application and in particular the following mitigation measures:

1. *Finished floor levels of all single storey dwellings shall be set no lower than 3.3mAOD.*
2. *Finished floor levels of all two storey dwellings shall be set no lower than 3.0mAOD.*

The mitigation measures shall be fully implemented prior to occupation and subsequently in accordance with the timing/phasing arrangements embodied within the scheme, or within any other period as may be subsequently be agreed, in writing, by the local planning authority.

Reason: To ensure that the development does not increase the risk of flooding or be at risk of flooding.

This Condition is imposed in accordance with national guidance contained in Section 10 of the National Planning Policy Framework, 2012.

This addendum report is to vary Conditions 2 & 20 following the issuing of an updated South-East Lincolnshire Strategic Flood Risk Assessment (March 2017) Appendix B – 2115 1% Fluvial and 0.5% Tidal Event Probability Map

A GPS topographical survey has been carried out for the site which has identified that the land levels for the site are approximately 1.0m below those stated in the approved FRA. **Plan 1**

From the topographical survey the site levels vary from 2.15mODN on the access road at the northern boundary falling to 0.677mODN on the southern boundary with James Road at 2.10mODN. The ground level in the middle of the site is 1.20mODN.

The Residual Peak Depth Map – Crowland (2115) 1% fluvial/0.5% tidal event probability shows that for the majority of the site the depth of flooding would be 0.5 -1.0m deep, with an area 1.0m – 2.0m deep. **Map 1**

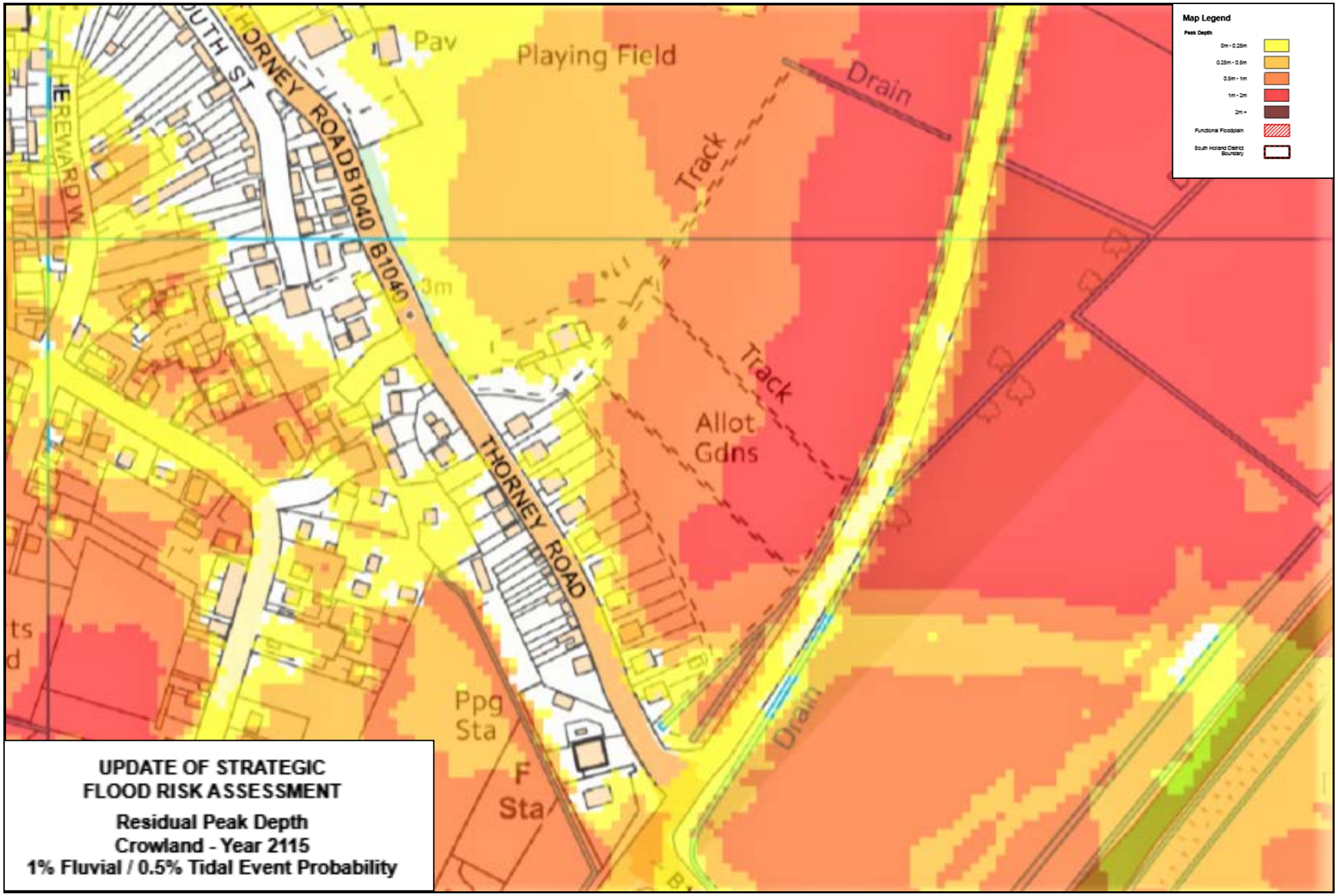
From t the Residual Peak Depth for Crowland, year 2115 0.1% Event Probability Map, is very similar with part of the site is 0.5 – 1.0m deep and the remainder 1.0 – 2-0m. **Map 2**

The Environment Agency recommends that for proposals, which do not include ground floor sleeping, should be informed by the flood depths arising from the 2115 1% breach scenario. For Areas where the flood depths are between 0.5 and 1.0m the finished Floor Level (FFL) should be set 1.0m above the ground level with flood resilient construction 300mm above the predicted flood level. For areas where the flood depths are between 1.0 – 1.6m the proposal should be 2 storeys and the finished Floor Level (FFL should be set 1.0m above the ground level with flood resilient construction

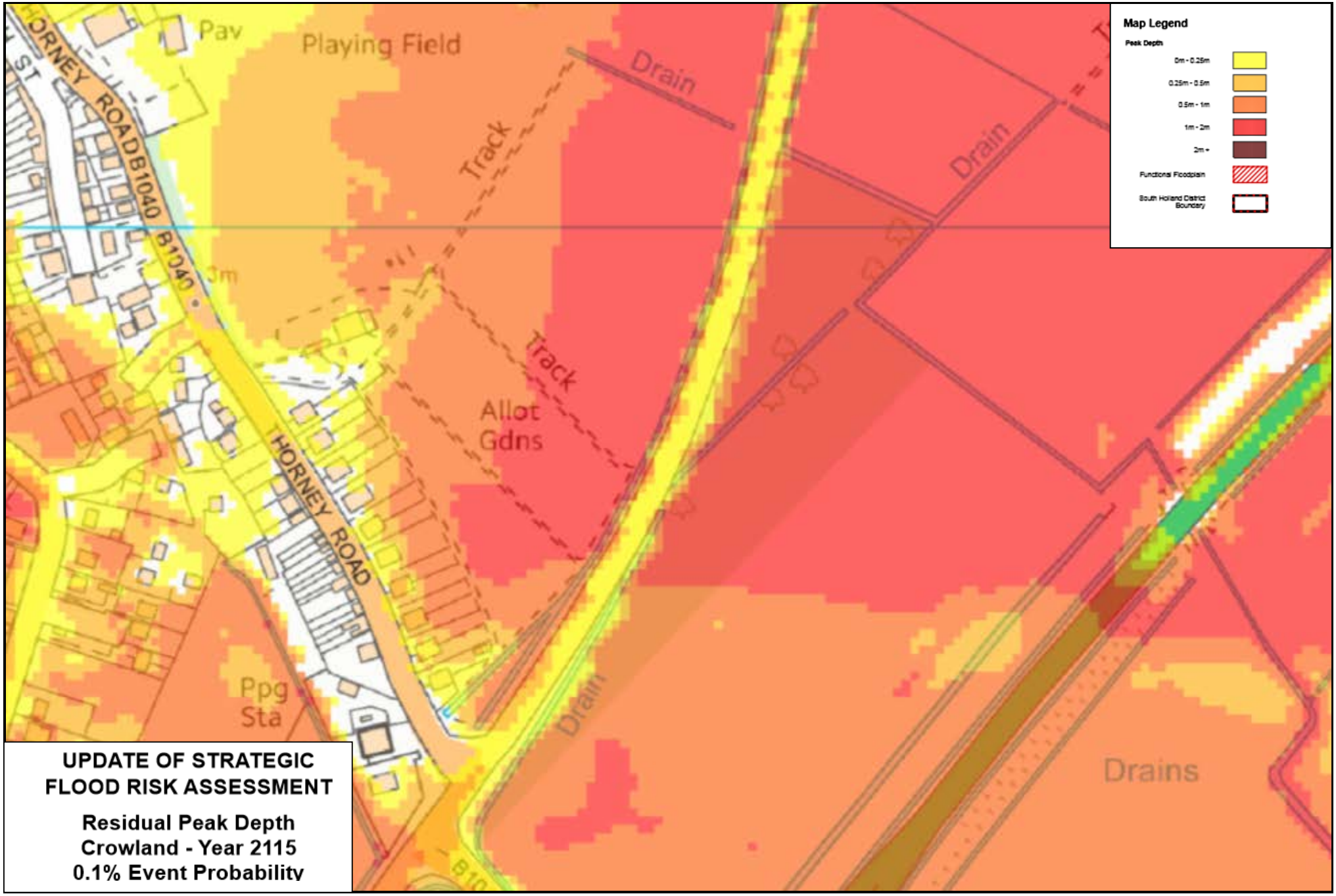
300mm above the predicted flood level. In addition, demountable flood defences to a height of 600mm should be installed to all ground floor doorways.

With the average ground level for the site being 1.20mODN the FFL for all the properties will be set at 2.20mODN, with flood resilient construction 300mm above the predicted flood level. Those properties within the higher depth zone will also be set at 2.20mODN with flood resilient construction 300mm above the predicted flood level and provided with demountable flood defences to a height of 600mm to all ground floor doorways. The single storey properties located on the higher ground.

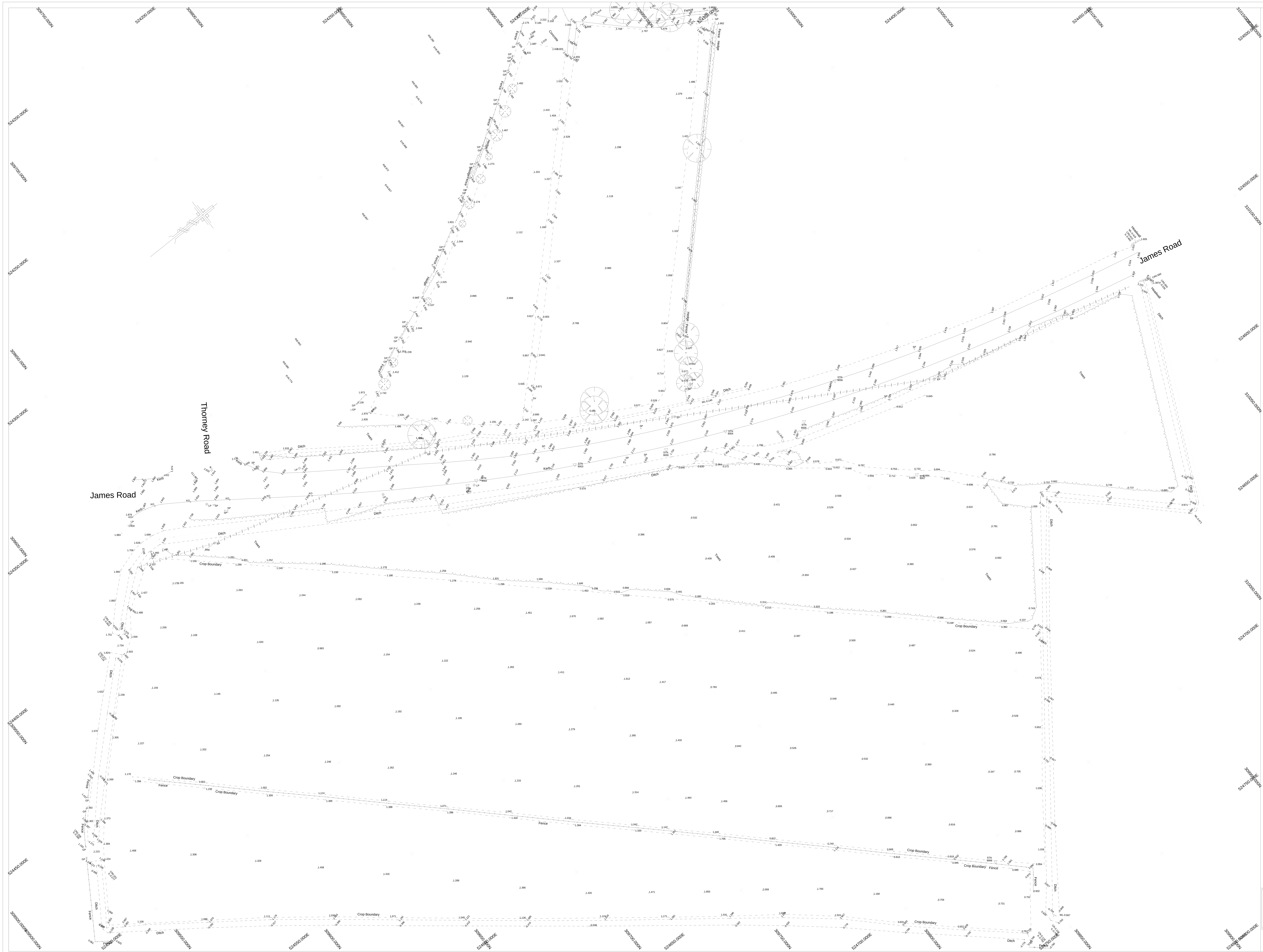
Approval is therefore requested to vary condition 2 & 20 that the above revised floor levels are accepted.


Map Legend
Peak Depth
0m - 0.25m
0.25m - 0.5m
0.5m - 1m
1m - 2m
2m +
Functional Floodplain
South Holland District Boundary
Playing Field
Pav
Drain
Track
Track
Allot Gdns
THORNEY ROAD B1040
B1040
THORNEY ROAD
HEREWARD W
3m
Ppg Sta
F Sta
Drain
UPDATE OF STRATEGIC FLOOD RISK ASSESSMENT
Residual Peak Depth
Crowland - Year 2115
1% Fluvial / 0.5% Tidal Event Probability

Map 1


Map Legend
Peak Depth
0m - 0.25m
0.25m - 0.5m
0.5m - 1m
1m - 2m
2m +
Functional Floodplain
South Holland District Boundary
Pav
Playing Field
Drain
Track
Drain
HORNEY ROAD B1040
Track
Allot Gdns
HORNEY ROAD
Ppg Sta
Drain
Drains
UPDATE OF STRATEGIC FLOOD RISK ASSESSMENT
Residual Peak Depth
Crowland - Year 2115
0.1% Event Probability

Map 2



KEY:

BUILDING
FENCE
HEDGE
CHANNEL
WALL
BANK EDGE
STORM DRAINAGE
FOUL DRAINAGE
CHANGE OF SURFACE
OVERHEAD ELECTRIC
OVERHEAD TELEPHONE
TREE
BOREHOLE
MANHOLE
CONTROL STATION

NOTES:

1. Survey plotted to OS National Grid.
2. All levels related to OS Datum.

Initial Survey Date: 12 MAY 2016

CONTROL STATIONS

Stn:	Eastings:	Northings:	Height:
9000	524482.998	309842.571	2.065
9001	524442.043	309766.758	2.264
9002	524442.607	309771.012	2.139
9003	524463.610	309808.041	2.086
9004	524492.713	309867.203	2.142
9005	524510.445	309896.042	2.155
9006	524505.106	309917.111	1.896
9007	524558.223	309919.468	.668
9008	524708.324	309842.346	0.962

Rev:	Amendments:	Date:

Client:

CROWLAND PARISH COUNCIL

Project Title:

Drawing Title:

OGL SURVEY

Scale: 1:500

Date: 20 MAY 2016

Drawing No: AS2157/1

Rev: A0

C.A.D. Title: RDCCROWLAND120516

Drawn By: D.J.SMITH

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