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REMEDIATION PLAN FOR RESIDENTIAL DEVELOPMENT OF FORMER AGRICULTURAL PREMISES EAUGATE ROAD MOULTON EAUGATE SPALDING LINCOLNSHIRE

Report Reference C15587A(1)

On behalf of:

Woodgate Farms Limited
109 Eaugate Road,
Moulton Chapel
Spalding
PE12 0XJ

November 2022

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Client's Plan showing proposed remodelled ground surface levels

Client's Plan showing location of the woodland garden areas, lawned areas and non-food crop residential planting strips.

WOODGATE FARMS LIMITED

OGLESBY & LIMB LIMITED
ARCHITECTS

REMEDIATION PLAN

FOR RESIDENTIAL DEVELOPMENT

OF

FORMER AGRICULTURAL PREMISES

EAUGATE ROAD

MOULTON EAUGATE

SPALDING

LINCOLNSHIRE

Report Reference No. C15587A(1) **November 2022**

INTRODUCTION

Ground Engineering Limited was instructed by the client, Woodgate Farms Limited, through Oglesby and Limb Architects, to present a remediation plan in preparation for the construction of a detached dwelling on their farm premises on Eaugate Road, Moulton Eaugate, Spalding.

This remediation plan has been prepared using the findings of a ground investigation documented in Ground Engineering Report C15587: April 2022.

SUMMARY OF GROUND ENGINEERING REPORT C15587: APRIL 2022

The following remediation plan has been derived from consultation with the client, and from the findings presented in Ground Engineering Report C15587: April 2022, which concluded the following:

- The former farm premises comprised an agricultural shed with gravel/earth surfaced storage yard.
- The strata encountered in the exploratory holes comprised between 0.50m and 1.00m thickness of made ground over Tidal Flat Deposits.
- The near surface made ground, which contained gravel of brick, siltstone, ash, clinker, flint and quartzite, was contaminated with elevated PAH concentrations that exceeded the respective SSVs for residential with home grown produce and residential without home grown produce end use. Consequently, this made ground soil is considered unsuitable for re-use at the surface within any new landscaped and garden areas featuring within the proposed residential development.
- The made ground could however be retained or re-used beneath buildings and hardstanding areas providing that it is geotechnically suitable.
- The made ground could also be retained beneath a suitably thick clean capping layer.

REMEDIATION PLAN

This remediation plan follows on from the demolition of the existing agricultural building and licensed disposal of all asbestos containing sheet cladding materials.

The new development comprises the construction of a detached dwelling with driveway and lawned gardens. The woodland garden areas around the periphery will be retained unaffected by the redevelopment. There are no residential with home grown produce gardens included within the scheme and small narrow, non-food crop residential planting strips located along the front of the house. The client proposes to use retain geotechnically suitable made ground for re-use beneath buildings and hardstanding.

To the rear of this report, two plans (provided by the client) show the proposed remodelled ground surface levels; and location of the woodland garden areas, lawned areas and non-food crop residential planting strips.

General Comments

1. In the event that subsequent site works reveal materials that may appear to be contaminated, the works will stop and appropriate professional advice will be sought.
2. Standard Health and Safety precautions should be observed by groundworkers when dealing with soils across the site.
3. The made ground soil is considered unsuitable for re-use at the surface within any new landscaped and garden areas featuring within the proposed residential development.
4. All soils removed from site will be disposed of using licensed carriers and taken to appropriately licensed disposal facilities.
5. The local authority will be informed regarding each stage of the works and photographic evidence together with copied waste transfer receipts for all soil and material disposal should be gathered, as they are essential to demonstrate the works.

Buildings and Hardstanding Areas

6. Providing that it is geotechnically suitable, the made ground is to be retained and re-used beneath buildings and permanent hardstanding areas.
7. The risk of soils affecting future users when present beneath buildings and permanent areas of hardstanding would be considered to be very low. This is because it would be highly unlikely that the general site users would normally be able to penetrate the building floors and hardstanding, which would be necessary for them to uncover any contaminated soils beneath the site.

Woodland Garden Areas

8. No remediation is proposed for existing wooded areas around the periphery.
9. This is because these the woodland use will not be changed by the redevelopment.

Residential Garden Areas

10. Unsuitable soil at the surface within gardens or lawned areas will be covered/replaced with a suitably thick, clean capping layer.
11. For lawned areas the clean capping layer will be at least 0.60m thick.
12. For residential gardens with non-food crops the clean capping layer will be at least 0.60m thick.
13. The analysis of all imported soil samples will meet current UK soil levels (DEFRA C4SLs, LQM/CIEH S4ULs for Residential Use with Home Grown Produce).

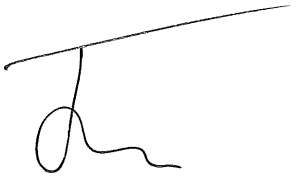
Verification

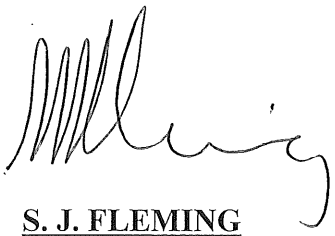
14. The new lawned and garden areas will be inspected prior to final capping to ensure that the correct thickness of soil has been employed and to ensure that unsuitable materials have not been inadvertently placed in the landscaped areas during the preceding stages of redevelopment works.
15. All imported soils will be certified 'clean' fill and will be suitable for use in accordance with UK legislation and Environment Agency policy.

Validation

16. The work will be fully documented and on completion a validation report prepared providing a full descriptive record of the process, quantities of material excavated, stored and removed, and the materials imported and placed, together with chemical test results and photographs.

GROUND ENGINEERING LIMITED





J. H. GIBB

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Associate

S. J. FLEMING

M.Sc., M.C.S.M., C.Geol., F.G.S.

Director

Figures

Client's Plan Showing Landscaping

DENOTES EXTENT OF NO CUT REQUIRED + 600mm FILL TO GRASSED AREAS

DENOTES EXTENT OF 300mm AVERAGE CUT + 600mm FILL TO GRASSED AREAS

DENOTES EXTENT OF 150mm AVERAGE CUT + 600mm FILL TO GRASSED AREAS

DENOTES EXTENT OF 150mm AVERAGE CUT TO GRAVELED DRIVEWAY

DENOTES EXTENT OF 75mm AVERAGE CUT TO GRAVELED DRIVEWAY

DENOTES EXTENT OF NO CUT REQUIRED TO GRAVELED DRIVEWAY

DENOTES EXTENT OF 75mm AVERAGE CUT TO PATIO AREAS

CUT TO BE DISTRIBUTED ALONG LENGTH OF AGRICULTURAL ACCESS TRACK & ROLLED IN TO IMPROVE SURFACE (APPROX 900m LENGTH 250mm DEPTH OF CUT MATERIAL)

TRACK LEVELS TO BE BUILT UP TO SUIT NEW LEVELS

NEW GRAVEL DRIVEWAY

NEW LAWNED AREA

NEW HOUSE FFL 3.95

NEW FALL

Existing trees and shrubs to be retained and interplanted as landscaping plan

Existing highway access to be retained

gate

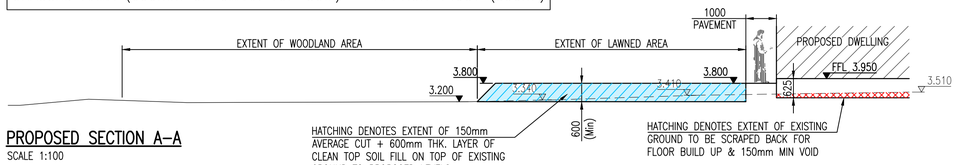
EAUGATE ROAD

FRESHWATER DRAIN

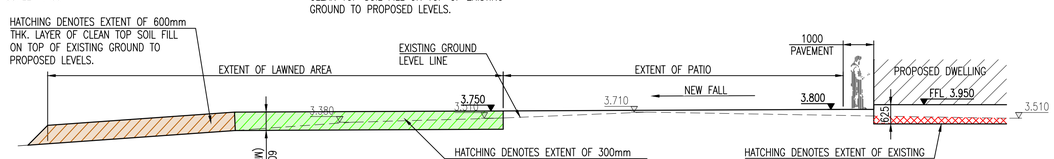
CUT VOLUMES (ALL VOLUMES ARE ESTIMATES):

FOUNDATIONS	–	108m³ (132m² x (1 – 0.185))
SUB-FLOOR VOID	–	57m³ (307m² x 0.185)
GRAVEL	–	41m³ ((213m x 0.150) + (120 x 0.075))
GRASS	–	350m³ ((419 x 0.150) + (23 x 0.150) + (201 x 0.300) + (240 x 0.300) + (480 x 0.300) + (21 x 0.300))
TOTAL	–	556m³ x 1.2 BF = 667m³

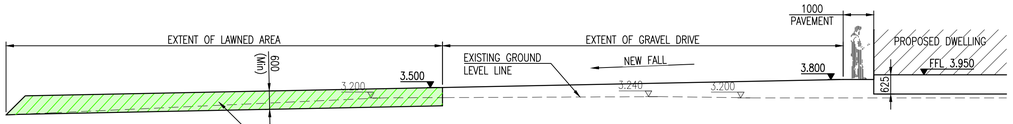
FILL VOLUME:
GRASSED AREA (600mm OF CLEAN TOP SOIL) – APPROX 1495T (830m³)



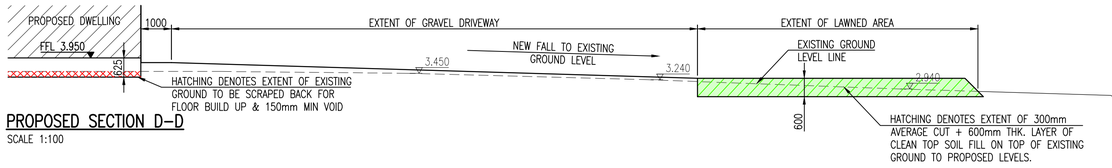
PROPOSED SECTION A–A
SCALE 1:100



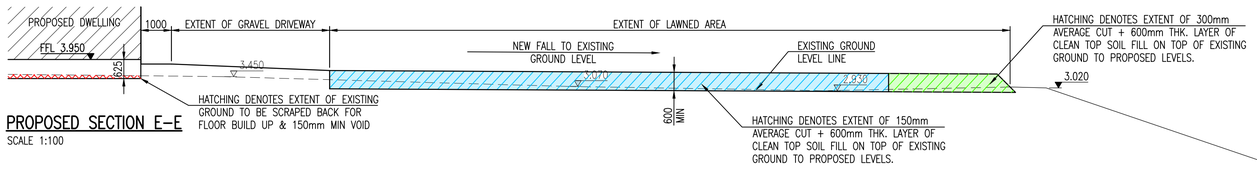
PROPOSED SECTION B–B
SCALE 1:100



PROPOSED SECTION C–C
SCALE 1:100



PROPOSED SECTION D–D
SCALE 1:100



PROPOSED SECTION E–E
SCALE 1:100

0 1 2 3 4 6 8 10m
1:100

0 2 4 6 8 12 16 20m

REV.	DESCRIPTION	DRN.	APP.	DATE
C	DRAWING UPDATED TO COMMENTS.	AS	APW	15.11.22
B	PROPOSED CUT & FILL DEPTH UPDATED TO 600mm.	AS	APW	10.11.22
A	PROPOSED LEVELS AMENDED ON SECTIONS THROUGH	AS	APW	19.08.22
–	PRELIMINARY – FOR APPROVAL	AS	APW	05.08.22

SHIELDS WILSON
e: info@shieldswilson.co.uk t: 01775 729252
STRUCTURAL AND CIVIL ENGINEERING

STATUS: FOR INFORMATION

CLIENT: Mr W. RAVELL

PROJECT: PROPOSED NEW DWELLING, EAUGATE ROAD, MOULTON CHAPEL, SPALDING LINCS, PE12 0XJ

TITLE: TOPOGRAPHICAL SURVEY OF EXISTING SITE

DATE	AUG. '22	SCALE @A1	DRAWING NO.	REV.
DRAWN	AS	1:200 1:100	SW 22-217-01	C

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This drawing should be read in conjunction with the following:
Topographical survey - Ratcliff Land & Engineering Surveys Ltd drawing no 7386-1
Foul & surface water drainage - Shields Wilson drawing SW- 22-217-10
Landscaping - John Biggadike drawing RAV/22/1

Hatched area indicates parts of site within 9m of the brink of a South Holland Internal Drainage Board dyke, all permanent structures within this area are included within the application to relax Byelaw 10.

Existing trees along north boundary to be retained

Dyke (B29 Roslyns Dyke)

Brink of dyke (from topographical survey

New hedge as Landscape Architect's layout

New timber fence to return along northern boundary to first mature tree

Access road to rear field

Access road to rear field realigned

9000 min

Foundations of north garage wall must not be closer than 9.0m to the brink of the dyke

Existing steel palisade fence and gates removed and new timber fence and gates erected on the same line

316750N

Existing building to be demolished

New hedge, fencing and gate as Landscape Architect's layout planted to ensure a minimum of 9m from the brink of the dyke

Garage

gravel

New gravel drive

New entrance gates

Existing access bridge retained and resurfaced

New IDB access gates

PROPOSED HOUSE

Entrance

lawn

patio

Existing electricity pole with overhead electricity service to site retained. Condition and suitability to be checked and replaced as required along existing line.

See drawing A1490-11 for details of entrance bridge and gates

New hedge as Landscape Architect's layout planted to ensure a minimum of 9m from the brink of the dyke

lawn

Brink of dyke (from topographical survey)

Dyke (B15 Eaudyke Drain-South)

Eaugate Road

Existing trees and shrubs to be retained and interplanted as landscaping plan

316700N

529950E

N

SCALE 1 : 200
SCALE 1 : 1

0m 5m 10m 15m 20m
0m 10mm 20mm 40mm 60mm 80mm 100mm

Ref.	Date	Description	Initial
P1	09.11.22	Site plan redrawn based on topographical survey and replaces drawing A1490-10-P2	AP

Oglesby & Limb Ltd
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PE11 1SL
Tel: 01775 761196
e-mail: design@o-l-ltd.co.uk

Client:
Mr W. Ravell

Project:
Proposed new dwelling
Eaugate Road, Moulton Chapel
Spalding, PE12 0XJ

Drawing Title:
Site plan as proposed

PRELIMINARY

Date:	Scale:
Jul 22	as shown @ A1
Drawn by: AP	Checked by: AJO

Drawing Number:	Rev:
A1490-11	P1