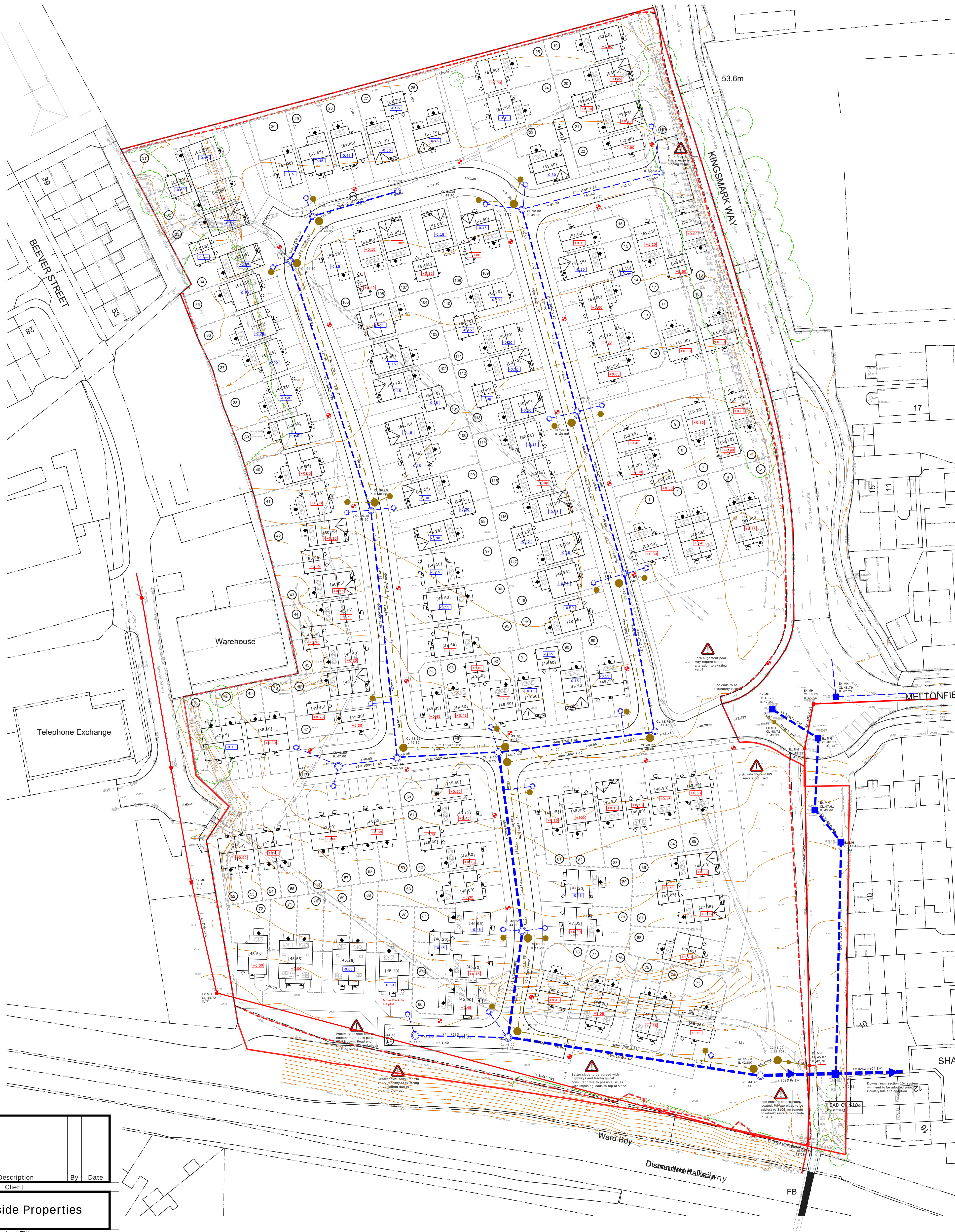




Rev	Description	By	Date
Client:			
Countryside Properties			
Project Title:			
Goldthorpe			
Drawing Title:			
Engineering Feasibility			
Scale		Date	
1:500 @ A1		June 2019	
Drawing No		Revision	Status
5003-C-D10-01		0	Draft



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LEGEND

F1

Proposed foul water manhole and sewer.

S1

Proposed surface water manhole and sewer.

1500

Proposed surface water lateral drain.

1500

Proposed foul water lateral drain.

0.5m

Proposed retaining wall.

0.5m

Proposed additional facing bricks below DPC.

13.35

Proposed D.P.C. level.

+00.00

Proposed ground level.

+99.00

Existing ground level.

LC13

Proposed street lighting.

Construction/Commercial/Design Risk

+0.45

Underbuild (difference between existing and proposed GL).

-0.45

Cut (difference between existing and proposed GL).

ENGINEERING NOTES

Ground conditions
Northern area of site is greenfield previously undeveloped. Southern area is brownfield being former quarry site. Deep made ground present in southern area (see foundation zoning plan) which features contaminants, slag and red shale and therefore requires remediation. Topsoil onto natural strata in the north.

Topsoil is suitable for re-use in northern area. Unsuitable for reuse in southern area due to contaminants and unsuitable material for surface gardens.

Remediation
The southern area requires 2m of made ground re-engineering and screening to remove shale/slag and also to reduce risk of combustion. 1m clean capping required (0.85m sub soil/0.15m top soil) in garden areas.

Roads within the southern area will require re-engineering to provide 3% CBR. Due to risk of combustion service trenches require overdigging and filling with clean material so services excavation does not encounter contamination. Approval of YW to this method required for water mains.

Remediation strategy to be agreed with planning department and may require validation report. Strategy to be agreed with warranty provider.

Highways
Kerb alignment at access may require adjustment. CBR value in natural ground is 3% according to SI. Further in situ testing required once formation is exposed. Re-engineering of roads crossing made ground is required as part of remediation stage. Level of southern turning head has been set so as not to surcharge embankment. Slope stability of embankment may be queried and should be reviewed by site investigation consultant. Barrier system may be required by highways? Highway condition survey required prior to commencing. Survey to be lodged with highway authority.

Drainage
Site to discharge unrestricted into head od S104 system built by adjacent developer. No surface water calculations have been made available at this stage so it is assumed that there is sufficient capacity in downstream network. Agreement of YW required prior to purchase of site. Section of private sewer in south east has not been used so as to avoid S102 agreement.

Retaining Walls
Walls in southern area subject to further investigation and design by structural engineer as will be founded on deep fill. Wall adjacent boundary in SW may be out of deep fill zone. Further trial pitting recommended close to boundary. Consider designing out wall to rear of 52-59 by installing batters in gardens due to significant foundation costs.

General
Layout does not include sufficient room to accommodate plot footpaths on many plots - adjust prior to planning. Proximity of turning head to southern embankment pulls down levels for plots 67-72 thereby increasing amount of fill to be exported from site/relocated. Plots in northern area set low to generate clean sub soil for capping in south. Plot levels are indicative at this stage and subject to detailed design.