AFON GOCH: NORTH AMLWCH TO COAST

DETAILS REQUIRED FOR HYDROGRAPHIC SURVEY.

Survey Type

The survey should be conducted preferably using a GPS, with levels provided to ODN.

River Channel and Floodplain Cross Sections

The channel and floodplain section drawings show the approximate locations and extents of the section work that we need. We appreciate that you might not be able to adhere exactly to this plan whilst in the field due to access/overgrowth restrictions. We do expect, however, that you should try and reproduce these section locations and extents as closely as possible.

The channel sections need to be more detailed than the floodplain sections. From bank to bank, the Afon Goch throughout this reach is generally between 2-5m wide. Between the peak bank crest levels at each section location we, therefore, require spot levels at approximately 0.1m intervals, with particular care being taken to capture changes in channel cross section level.

From the peak bank crest level on either side of the river to the extent of the section identified on the attached plan (i.e. the floodplain), we require levels at every 3-10m or so, depending on the length of the section identified, with particular care being taken to capture changes in floodplain cross section level (especially if the sections cross roads/embankments etc).

Embankments

Please be aware that there maybe embankments throughout the area to be surveyed that are not shown on the OS plan. Please survey any such features found as appropriate.

Hydraulic Structures

For all of the hydraulic structures identified on the attached plan we require the following, where appropriate:

1) a comprehensive indication of soffit/deck/invert levels across the structure on both upstream and downstream sides;
2) full dimensions (width, length, depth, internal dimensions) of each structure;
3) an indication of channel bed levels at/under each structure on both upstream and downstream sides;
4) pipe diameters with top of pipe levels;
5) full weir dimensions and levels including sloping surfaces;
6) Ponds: bed levels throughout; bank slope and bank crest levels all around perimeter;
7) River-Pond connections: width, levels and slopes of spillways;
8) Internal dimensions of road culverts (including bridge struts etc), with deck level of road clearly identified on both upstream and downstream sides

Please be aware that there maybe hydraulic structures throughout the area to be surveyed that are not shown on the OS plan. Please survey any such structures found as appropriate.

Access

It is likely that access will need to be granted for some parts of the survey. Details of which will be arrange following the commissioning of the survey work.

Deliverables

Survey drawings should be provided in a CAD (.dwg) format and all aerial plans should be geo-referenced. The aerial survey plan **MUST** show the channel sections.

The channel section data needs to be presented in a MS Excel spreadsheet. Each section must be presented as follows:

Column 1	Column 2	Column 3
Chainage (m)	Level (m AODN)	National Grid Coordinates

It is **ESSENTIAL** that the section chainages and associated levels are presented going from ***left to right across the section looking downstream.*** Chainage 0 for each section will therefore be the far left value as if you were looking downstream.

Timescale

We ideally need this survey work to be turned around and results delivered by 08 November 2006.