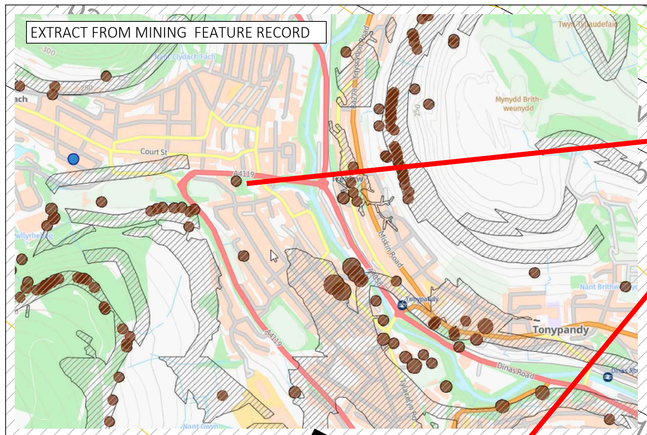
EXTRACT FROM MINING FEATURE RECORD



GEOTECHNICAL & MINING RISK NOTE

PRELIMINARY RESEARCH INDICATES A POTENTIAL RISK OF A RECORDED MINE ENTRY WITHIN THE EXISTING CAR PARK AREA. ITS EXACT LOCATION IS NOT YET KNOWN.

IF THE MINE ENTRY IS WITHIN THE FENCED AREA TO THE REAR OF THE CAR PARK VERGE IN WHICH THE POWERHOUSE IS SHOWN TO BE SITED, THEN A 20M EXCLUSION ZONE WILL APPLY AND AN ALTERNATIVE LOCATION FOR THE POWER HOUSE WITHIN THE CAR PARK WILL NEED TO BE SELECTED.

THIS IS SUBJECT TO A PHASE 1 GEOTECHNICAL AND GEO-ENVIRONMENTAL DESK STUDY AND FOLLOW-UP INVESTIGATIONS. THE LOCAL AUTHORITY MAY BE ABLE TO ASSIST IN PROVING THIS ALSO.

ALTERNATIVE LOCATION OPTIONS ARE SHOWN IN THE AERIAL PHOTO EXTRACT BELOW.

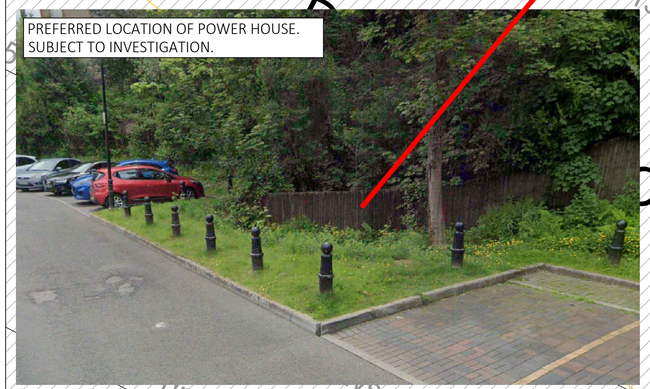
WATER RETURNS BACK TO EXSITING WATERCOURSE VIA 600Ø PIPE INTO THE NANT CLYDACH RIVER. NEW OUTFALL STRUCTURE TO BE BUILT WITHIN RIVER WALL (SIGNIFICANT STRUCTURE) WATER FLOW IS DIRECTED TO AVOID FLOW INTERFERING WITH THE 250mm COMBINED SEWER

NANT CLYDACH RIVER CHANNEL

250Ø COMBINED SEWER RUNS ABOVE GROUND NEAR RIVER BED LEVEL

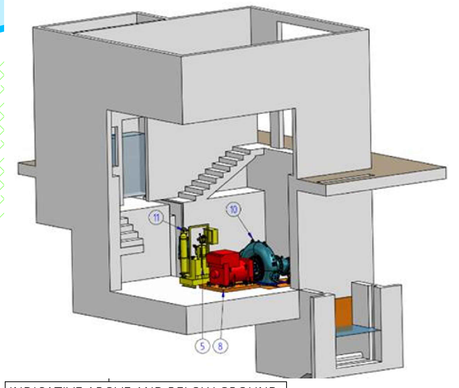
EXAMPLE OF TYPICAL POWER HOUSE EXTERNAL MATERIALS

PREFERRED LOCATION OF POWER HOUSE. SUBJECT TO INVESTIGATION.



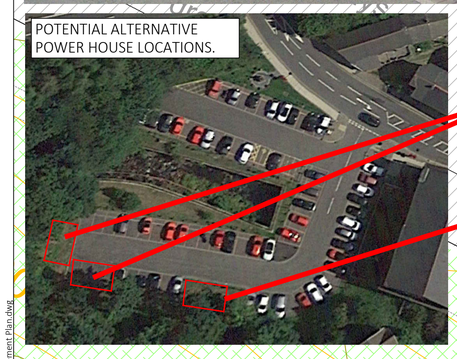
INDICATIVE AREA OF CAR PARK TO BE REINSTATED FOLLOWING MAJOR EXCAVATION

600Ø PIPE OUTLET TO WATERCOURSE. INVERT LEVEL = 134.05 TBC (1.2m BELOW FLOOR LEVEL).



INDICATIVE ABOVE AND BELOW GROUND SECTIONS OF TYPICAL POWER HOUSE

POTENTIAL ALTERNATIVE POWER HOUSE LOCATIONS.



ALTERNATIVE POWER HOUSE LOCATIONS TO BE CONSIDERED, IF MINING RISK CONSTRAINTS PREVENT PROPOSED LOCATION. FURTHER CONSTRAINTS MAY APPLY.

PREFERRED LOCATION OF POWER HOUSE, AS SHOWN ON THIS DRAWING.

POWERHOUSE SITS WITHIN KERBED VERGE WITHIN THE CAR PARK AND DOES NOT CURRENTLY OCCUPY ANY ACTIVE CAR PARKING SPACES, BUT THIS IS SUBJECT TO DETAILED DESIGN AND INPUT BY SPECIALIST.

BELOW GROUND CONCRETE CHANNEL

INDICATIVE LOCATION OF ELECTRICAL ROOM, BASED ON EXAMPLE POWERHOUSE DRAWING FROM TURBINE SUPPLIER GUGLER.

INDICATIVE OUTLINE OF POWERHOUSE BASED ON EXAMPLE DRAWING FROM TURBINE SUPPLIER GUGLER. FINAL DIMENSIONS ARE LAYOUT ARE SUBJECT TO FURTHER DESIGN BY SPECIALIST.

PROPOSED FORM OF CONSTRUCTION IS A COMBINATION OF REINFORCED CONCRETE FOR BELOW GROUND SECTIONS AND TRADITIONAL MASONRY CAVITY WALL CONSTRUCTION, WITH TIMBER TILED ROOF. STONE CLADDING TO OUTER SKIN

INDICATION OF FRANCIS TURBINE AND ASSOCIATED EQUIPMENT, CHANNELS, DUCTS ETC.

PRIVATE WIRE CABLE CONNECTION OUT OF POWERHOUSE, TO HEAD TOWARDS PIPE ROUTE TO SHARED TRENCH

PENSTOCK PIPE PLACED ABOVE GROUND INTO THE POWER HOUSE CONNECTION POINT

EXISTING GROUND LEVELS DROP DOWN FROM CAR PARK VERGE LEVEL, SO A FORM OF RETAINING WALL (APPROX 1.2m) WILL BE REQUIRED BEHIND (OR WITHIN) THE REAR ELEVATION OF THE POWER HOUSE. STRUCTURE TO ACCOUNT FOR THIS. THIS AREA CURRENTLY GATHERS AND HOLDS WATER.

FURTHER INVESTIGATION REQUIRED TO DETERMINE WHETHER THERE ARE LAND DRAINAGE FLOWS FEEDING INTO THIS LOWERED AREA THAT NEEDS TO BE ACCOUNTED FOR, OR ANY EXISTING DRAINAGE TO BE DIVERTED.

REFER TO GEOTECHNICAL RISK NOTE

DO NOT SCALE

NOTES:

1. DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT PROJECT DRAWINGS AND SPECIFICATIONS
2. ALL FIGURED LEVELS ARE IN METRES AND RELATED TO EXISTING SURVEY GRID & DATUM UNLESS NOTED OTHERWISE
3. ALL FIGURED DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE, DIMENSION ARE NOT TO BE SCALED.
4. APPROXIMATE PLACEMENT OF POWERHOUSE INFORMATION
   - 4.1. GRID REFERENCE: SS 99189 92659
   - 4.2. X (EASTING) 299189, Y (NORTHING) 192659
   - 4.3. What3Words: conjured.arriving.assist

REVISIONS

P02	TEAM REVIEW	01/05/25	BRM	RB | RB
P01	FIRST ISSUE	20/03/25	BRM	RB | RB
Rev.	Revision Notes	Date	Drawn By	Checked | Approved

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CLIENT: RHONDDA CYNON TAFF COUNCIL

PROJECT: NANT CLYDACH MICRO HYDRO SCHEME

TITLE: POWER HOUSE GENERAL ARRANGEMENT PLAN

HYDROCK PROJECT NO.	SCALE @ A1
C-37199	1:50
STATUS DESCRIPTION: SUITABLE FOR INFORMATION	STATUS: S2
DRAWING NO.: 37199-HYD-XX-XX-DR-C-1020	REVISION: P02

Filename: P:\37000-37999\37199 - RCT Clydach Hydro Concept Study\01 WIP\08. Drawing\C\37199-HYD-XX-XX-C-1020 Power House General Arrangement Plan.dwg