

ACCESS ROAD CUT AND FILL VOLUMES			
CUT (m³)	FILL (m³)	NET (m³)	TOTAL TOPSOIL STRIP (m³)
1527	5	1522	288

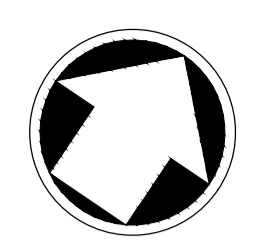
PLATFORM CUT AND FILL VOLUMES			
CUT (m³)	FILL (m³)	NET (m³)	TOTAL TOPSOIL STRIP (m³)
4912	2276	2636	1534

POND CUT AND FILL VOLUMES			
CUT (m³)	FILL (m³)	NET (m³)	TOTAL TOPSOIL STRIP (m³)
609	0	609	211

TOTAL SUBSTATION CUT AND FILL VOLUMES						
CUT (m³) (raw)	FILL (m³) (raw)	NET (m³) (raw)	EXCESS TOPSOIL (m³) (raw)	EXCESS SUBSOIL MATERIAL (m³) (raw)	EXCESS SUBSOIL MATERIAL (m³) (bulked)	EXCESS TOPSOIL (m³) (bulked)
7710	2537	4573	2033	2540	3556	2846



- Notes
- Do not scale from this drawing.
  - All dimensions are in metres/millimetres unless otherwise stated.
  - This drawing is to be read in conjunction with all relevant documents and drawings.
  - No unauthorised disclosure, storage or copying.
  - All spatial coordinates relate to the Ordnance Survey, British National Grid (OSGB36).
  - Existing ground profile modeled from topographical survey information by Zenith Land Survey dated April'22.
  - All levels are in meters and relate to AOD (Ordnance Survey, Newlyn).
  - Some areas where no feasible to achieve 1:3 embankment slope, a retaining solution is to be adequately designed during the detailed design stage.
  - Cut slopes 1:3 and Fill slopes 1:3 have been assumed for this preliminary earthworks design. The feasibility of these slopes are to be verified during detailed design. Cut slopes 1:2 indicated on the drawing, contractor should provide stabilization.
  - The following bulk factors have been assumed for this preliminary earthworks design.
    - subsoil bulk factor: 1.40
    - topsoil bulk factor: 1.40
  - A topsoil strip is to occur across the site at the location of the proposed substation platform, access road and SUDs pond. Thickness applied to topsoil strip: 200mm. It is assumed all excess topsoil and subsoil material is to be removed from site.
  - Material cut from the site to be exported off-site for re-use shall be subject to representative chemical contamination testing in accordance with the requirements of the receiving site.
  - A permanent road construction depth of 750mm has been assumed for this preliminary earthworks design. Permanent road assumed asphalt finish or similar.
  - New platform assumed with concrete slab finish. A 500mm allowance for concrete surface construction for the substation platform surface.
  - All works shall be completed as per the Manual of Contract Documents for Highway Works (MCHW). Follow Table 6/2 Grading Requirements (Refer Volume 1 Series 600 of MCHW); and Table 6/4 Method of Compaction for Fill (Refer Volume 1 Series 600 of MCHW).
  - Temporary works design associated with the construction of the works shall be responsibility of the contractor.
  - This earthworks assessment assumed that any cut below topsoil level can be reused for fill works. This assumption is to be verified during detailed design and review of recent geotechnical investigation results once received.
  - This earthworks assessment does not account for any temporary works or construction laydown areas. This is to be accounted for the detailed earthworks design once an EPC contractor is appointed.
  - Earthworks quantities provided are for establishing a formation level only. Any additional material required to build up a site platform is to be determined during detailed design.

Reference drawings

- 108939-MMD-BRGR-XX-DR-C-0044 Hydrogen Production Facility - Drainage Layout
- 106856-MMD-BRGR-XX-DR-C-0047 Hydrogen Production Facility - Earthworks Longitudinal Sections
- 106856-MMD-BRGR-XX-DR-C-0048 Hydrogen Production Facility - Earthworks Cross Sections
- 106856-MMD-BRGR-XX-DR-C-0002 Bridgend Green Hydrogen - Site Layout

Rev	Date	Drawn	Description	Ch'k'd	App'd
P02	15/11/2022	OJ	Seconds Issue		PM SA
P01	07/11/2022	OJ	First Issue		SA JP

Status Stamp

NOT FOR CONSTRUCTION

M M

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Title

Bridgend Green Hydrogen

Hydrogen Production Facility  
Earthworks

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Dwg check	T. King	TK	Approved	J. Paul	JP
MMD Project Number	108939		Scale at A1	1:250	Security <b>STD</b>
Suitability Description	Suitable for Review & Comment				Suit. Code <b>S3</b>
Drawing Number	108939-MMD-BRGR-XX-DR-C-0046				Revision <b>P02</b>

Key to symbols

- NEW PROPOSED PERMANENT ROAD (LEVEL VARIES)
- NEW PROPOSED PERMANENT FOOTPATH (LEVEL VARIES)
- NEW SUBSTATION PLATFORM EXTENT
- NEW PLATFORM (FFL=+63.800mAO, FORMATION=+63.300mAO)
- CUT/FILL EARTHWORKS
- EXISTING WELSH WATER COMBINED SEWER
- EXISTING WELSH WATER MAIN
- PROPOSED RETAINING WALL
- PROPOSED CUT EMBANKMENT AT 1:2

1:250

0 12.5m 25m

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