

- Notes:
- Design assumes that any vehicles larger than a 3.5T panel van are unable to turn around within the constraints of the site and will need to access the site by either reversing from or onto the B1416 under supervision.
  - The levels intent is based on existing topographical survey information and is to be confirmed on site prior to the commencement of construction to ensure the levels intent and falls are achieved.
  - Pavement design is in accordance with Asphalt Information Services design guide "Construction and Surfing of Parking Areas including Private Drives". Design is based upon the heavier usage loading criteria. A minimum total thickness of 450mm has been assumed for frost susceptibility.
  - The contractor is to confirm that a minimum CBR of 2.5% is achieved under all pavement areas.
  - For the NPG kiosk design refer to drawing 40-SMP-WS-7231-CI-17-00001. A minimum undrained shear strength of 50kN/m<sup>2</sup> is required for the foundation to the kiosk, to be proved by a minimum of 3 sets of 3 hand shear vane tests at formation level. Any soft material with undrained shear strength below 50kN/m<sup>2</sup> to be removed and replaced with Type 1 or Type 3 unbound mixture compacted in accordance with the specification for highway works.

- Key:
- Existing Fence/ Gate Line
  - Realigned Fence Line
  - 208.66 Indicative Levels
  - 2.5% Indicative Fall
  - Existing borehole location, remedial works to borehole to suit revised level strategy to be agreed with Sirius
  - Area of 300mm thick of compacted Type 1 granular sub-base with a layer of Terram 1000 geotextile or equivalent
  - Area with the following pavement build up:

Surface course	30mm thick AC 10 close surf 100/150, to PD 6691 Annex B
Binder course	60mm thick AC20 dense bin 100/150, to PD 16691 Annex B
Base course	360mm thick Type 1 sub-base with a layer of Terram 1000 geotextile or equivalent beneath the base course

**NYMNP**  
26/03/2018

0	16/03/18	JB	CW	AH
For construction				
B	15/03/18	JB	CW	AH
For comment				
A	16/02/18	EC	CW	AH
Draft				
Issue	Date	By	Chkd	Appd

**ARUP**  
Admiral House, Rose Wharf,  
75 East Street, Leeds, LS9 8EE  
www.arup.com

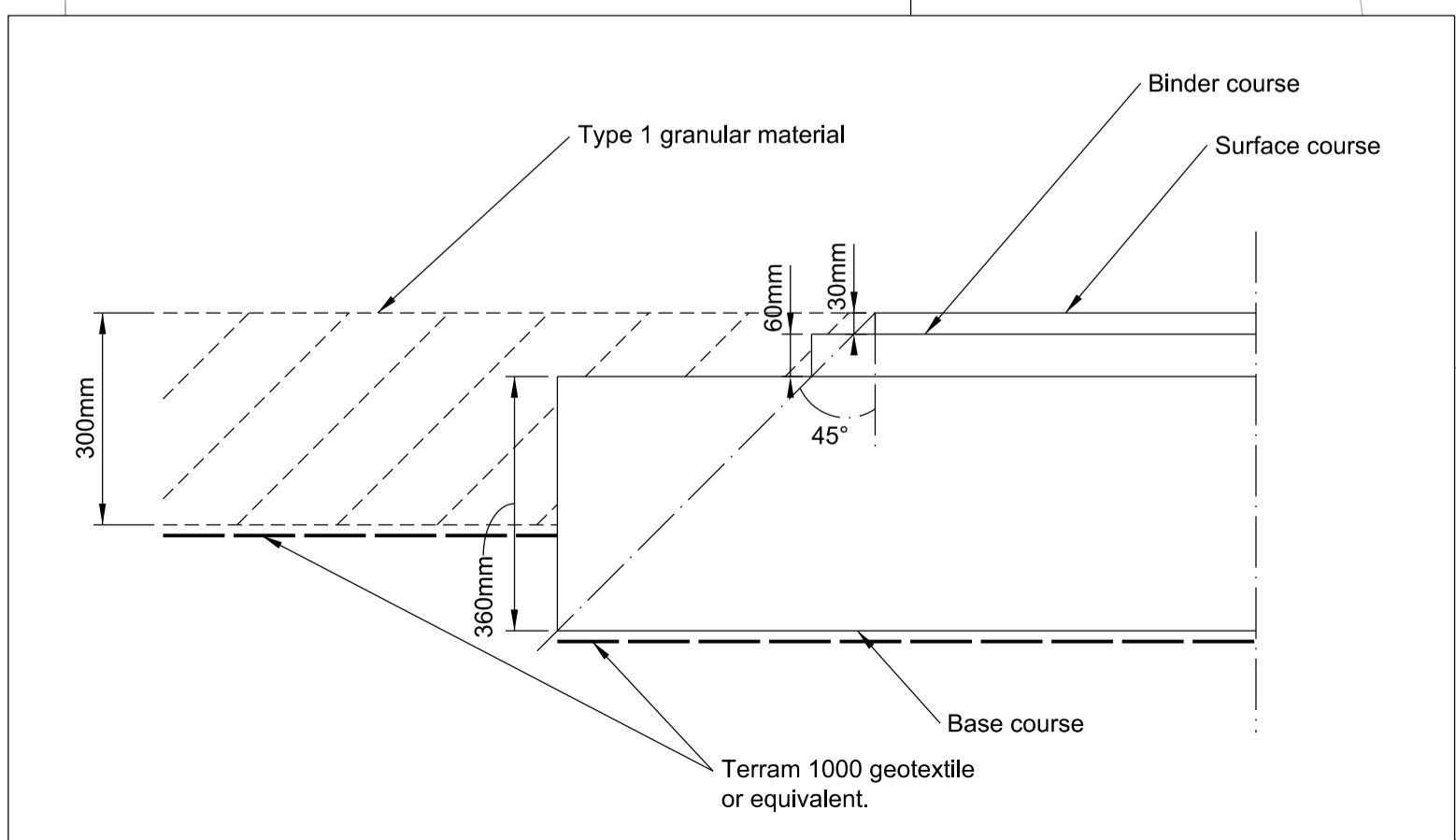
Client  
**Sirius Minerals Plc**

Job Title  
**Woodsmith Mine Ongoing Support**

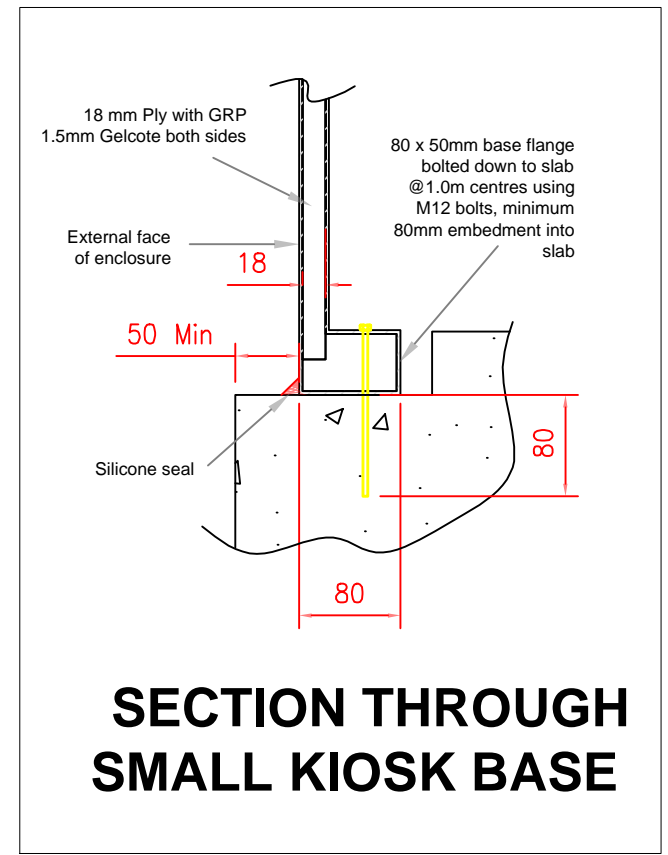
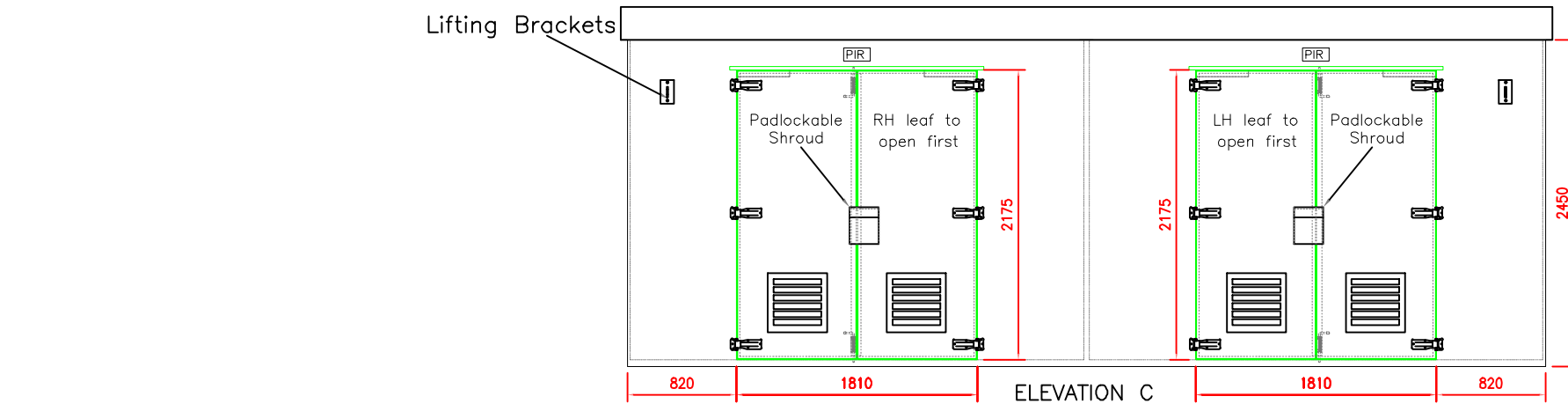
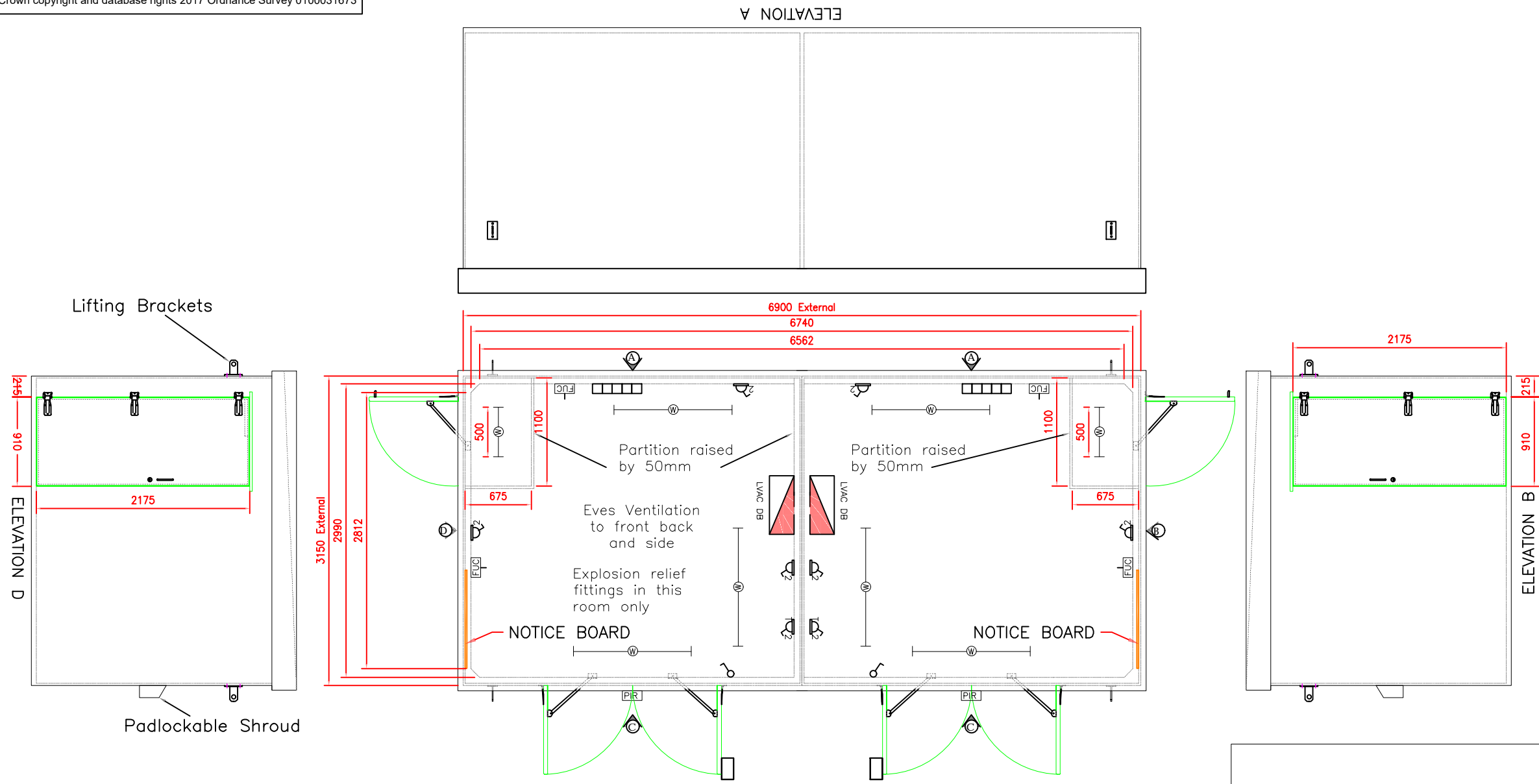
**NPG Substation General Arrangement and Access**

Scale at A1: 1:100  
Discipline: Civil  
Job No: 253285  
Drawing Status: For Construction  
Drawing No: 40-ARI-WS-56-CI-DR-3000  
Issue: 0

	Easting	Northing	Elevation
SOP1	489234.214	505097.719	208.530
SOP2	489233.967	505100.860	208.530
SOP3	489241.092	505098.260	208.530
SOP4	489240.845	505101.401	208.530
SOP5	489232.839	505091.185	As existing
SOP6	489242.684	505097.483	As existing
SOP7	489241.975	505106.502	As existing



**Detail A - Pavement tie in detail**  
Scale 1:10



**Electrics key**

	2 Off 1 gang 1 way Light Switch		2 off LV distribution board (Notthern Powergrid) 5 way 100A SP MCB board (1200mm above floor)
	6 Off 13A RCD Twin switched socket outlet (450mm above floor)		6 off 58W x1500 fluorescent tubes in IP56 fittings (wall mounted 2200mm above floor)
	2 Off 13A Twin switched socket outlet Marked "NPG test equipment only"		2 off Tube heater thermostatically controlled to maintain a min temp of 5°C (300mm above floor)
	4 Off Un switched fused spur outlet (450mm above floor)		2 Off PIR operated lights
	2 off 58W x500 fluorescent tubes in IP56 fittings		

**GRP Bespoke Double Unit Type 1**

**Dimensions**  
6900mm (L) x 3150mm (W) x 2450mm (H) Ceiling is the clear internal height.  
The internal height will be reduced if the kiosk is mounted on a stepped concrete base.  
All other dimensions are external.

**Construction**  
Monolith  
All round base flange to allow bolting down, no integral floor.  
Ply / GRP composite. Wall 18mm Ply. Single Pitch Roof 9mm Ply.  
External resins to BS476 Part 7: Class 2 (surface spread of flame) to provide self extinguishing laminates  
"U" value is no more than 1.5W/m2°C  
1 off internal partition size 2865mm (W) x 2400mm (H)  
Explosion relief to NPG side  
4 off Lifting lugs  
2 off Pin Notice Board

**Finish**  
External standard texture finish. Colour RAL 6008 from BS4800 colour range  
Internal GRP white BS4800 - 00/E/55

**Access**  
2 off Double Door 1810mm (W) x 2175mm (H)  
Aluminium door trim surround, other materials are available on request  
Door stays  
Yale 82 with strap and padlockable shroud  
ST/ST Hinges  
BZP Spring Bolts

2 off Single Door 910mm (W) x 2175mm (H)  
Aluminium door trim surround, other materials are available on request  
Door stays  
Asec Night Latch  
ST/ST Hinges  
Door handle

**Ventilation**  
4 off YEDL Vent Type 3 (365mm x 365mm)  
Eaves ventilation to 3 walls

**Electrics**  
As per key

A(PLA)	26/03/2018	DW	SB	SB
Revision Description				
REV	DATE	BY	CHKD	APPD



Drawing Title: **NPG Kiosk General Arrangement**

SCALE @ A3: **NTS**

CONT No:

DRG No: **40-SMP-GE-5611-EL-18-00001** REV **A**

**DOCUMENT CERTIFICATION**