

NOTES / KEY

- Groundwater table
- Superficial deposits (Low permeability clay)
- Aquifer unit (sandstone)
- Aquitard unit (Mudstone)
- Upward flow of bedrock groundwater inhibited by low permeability of Superficial deposits
-

DRAWING TITLE

EXAMPLES OF DRY HEATH ECOLOGY
HYDROGEOLOGICAL SYSTEMS

PROJECT TITLE

YORK POTASH PROJECT

CLIENT

SIRIUS MINERALS PLC

STATUS

FINAL

DRAWN BY

CB

SCALE

NOT TO SCALE

PROJECT NUMBER

1433Dev

DATE

December 2016

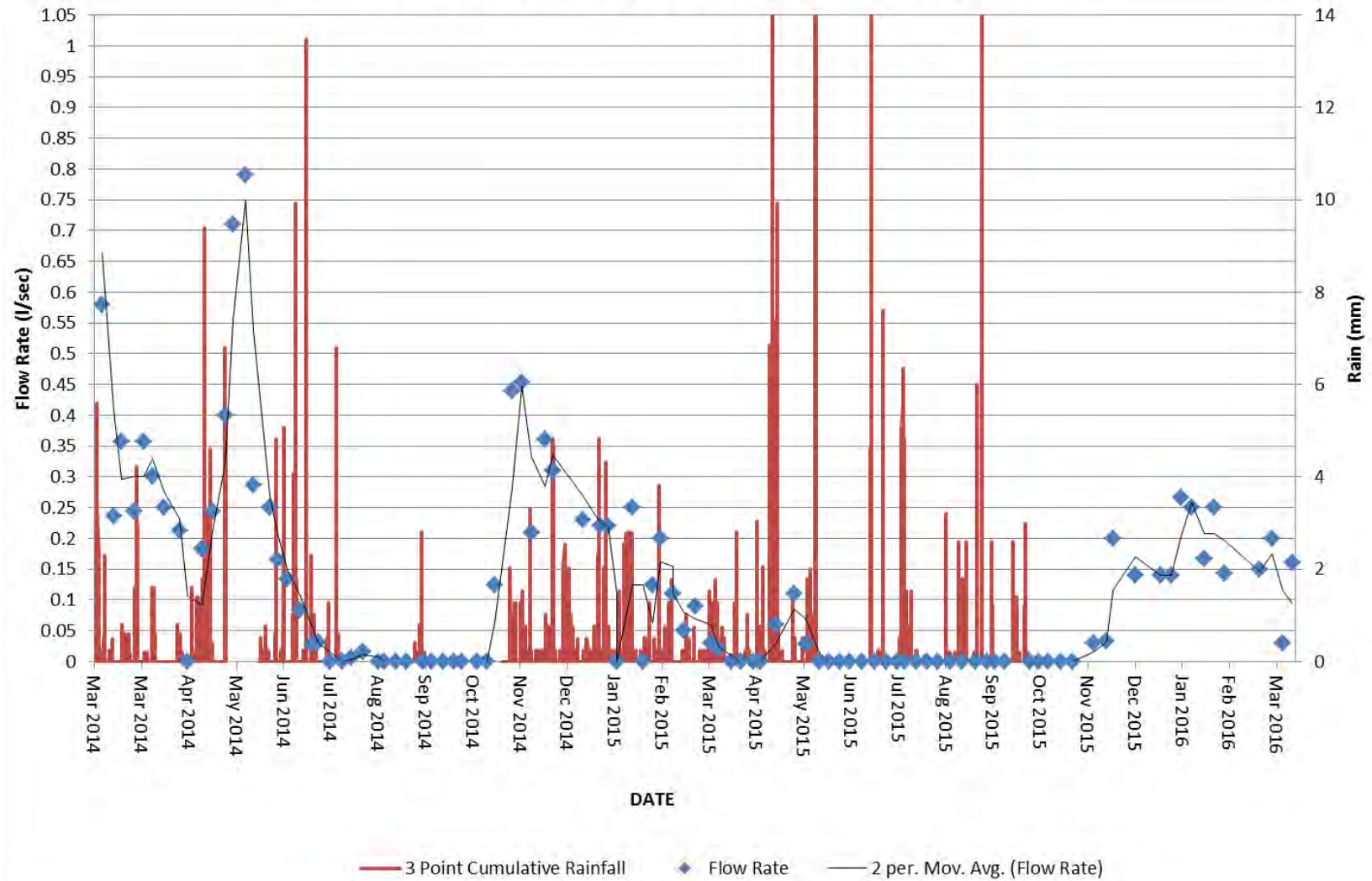
DRG. No.

1433DevOD240

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Co Durham
DL16 7UT

SP01 FLOW RATE VS 3 POINT CUMULATIVE RAIN



NOTES / KEY

Due to technical faults with the weather station no rainfall data is available from the 23 May – 13 June 2014, 5 August – 19 September 2014, 27 September - 14 November 2014, and October 2015 – December 2015.

3 point cumulative rainfall – summation of 3 consecutive ½ hourly rainfall values , utilised to show an exaggerated rainfall trend.

DRAWING TITLE

Ugglebarby Moor Spring (SP01) SPRING FLOW RATE

PROJECT TITLE

YORK POTASH PROJECT

CLIENT

SIRIUS MINERALS PLC

STATUS

FINAL

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CB

SCALE

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1433Dev

DATE

December 2016

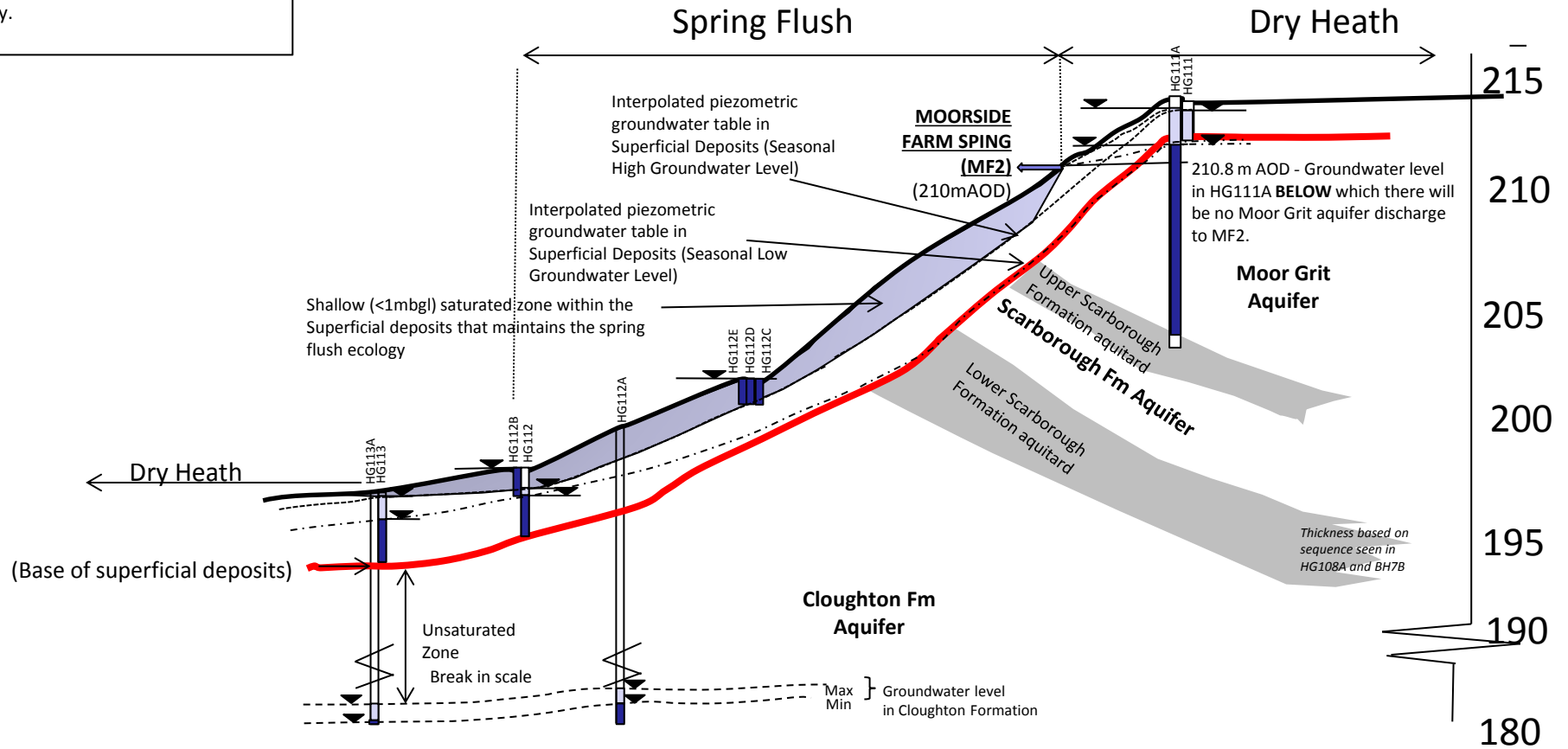
DRG. No.

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NB: Seasonal High and Low Groundwater Level periods in the Scarborough Formation at this location is based on Drawings 1975OD40 and 1975OD39 respectively.



NOTES / KEY

DRAWING TITLE
SCHEMATIC GEOLOGICAL CROSS-SECTION AND HYDROGEOLOGICAL INTERPRETATION OF THE SPRING FLUSH ON UGLEBARNBY MOOR SAC

PROJECT TITLE
YORK POTASH PROJECT

CLIENT

Sirius Minerals plc.

STATUS

FINAL

DRAWN BY

CB

SCALE

NOT TO SCALE

PROJECT NUMBER

1433Dev

DATE

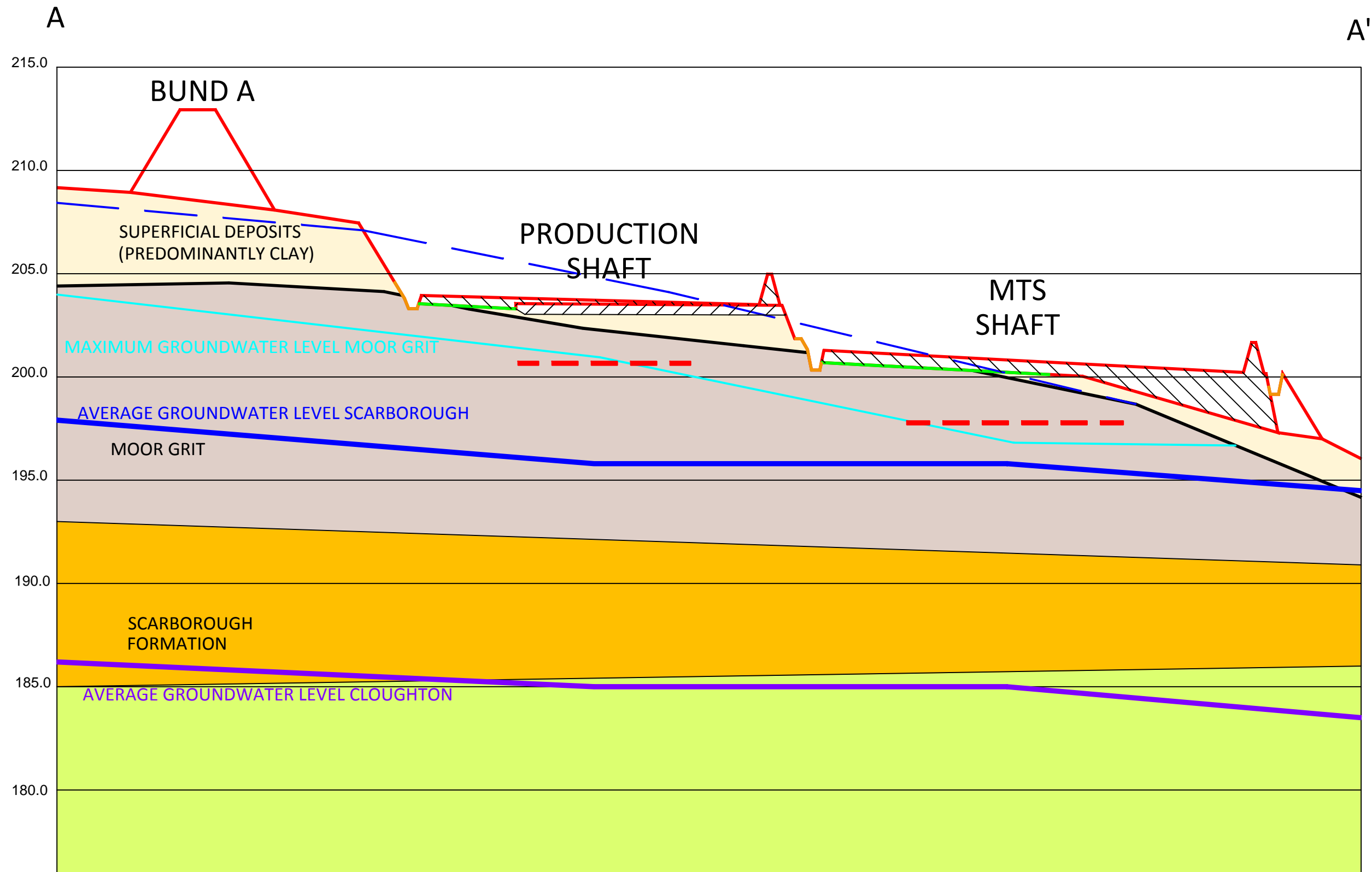
December 2016

DRG. No.

1433DevOD235

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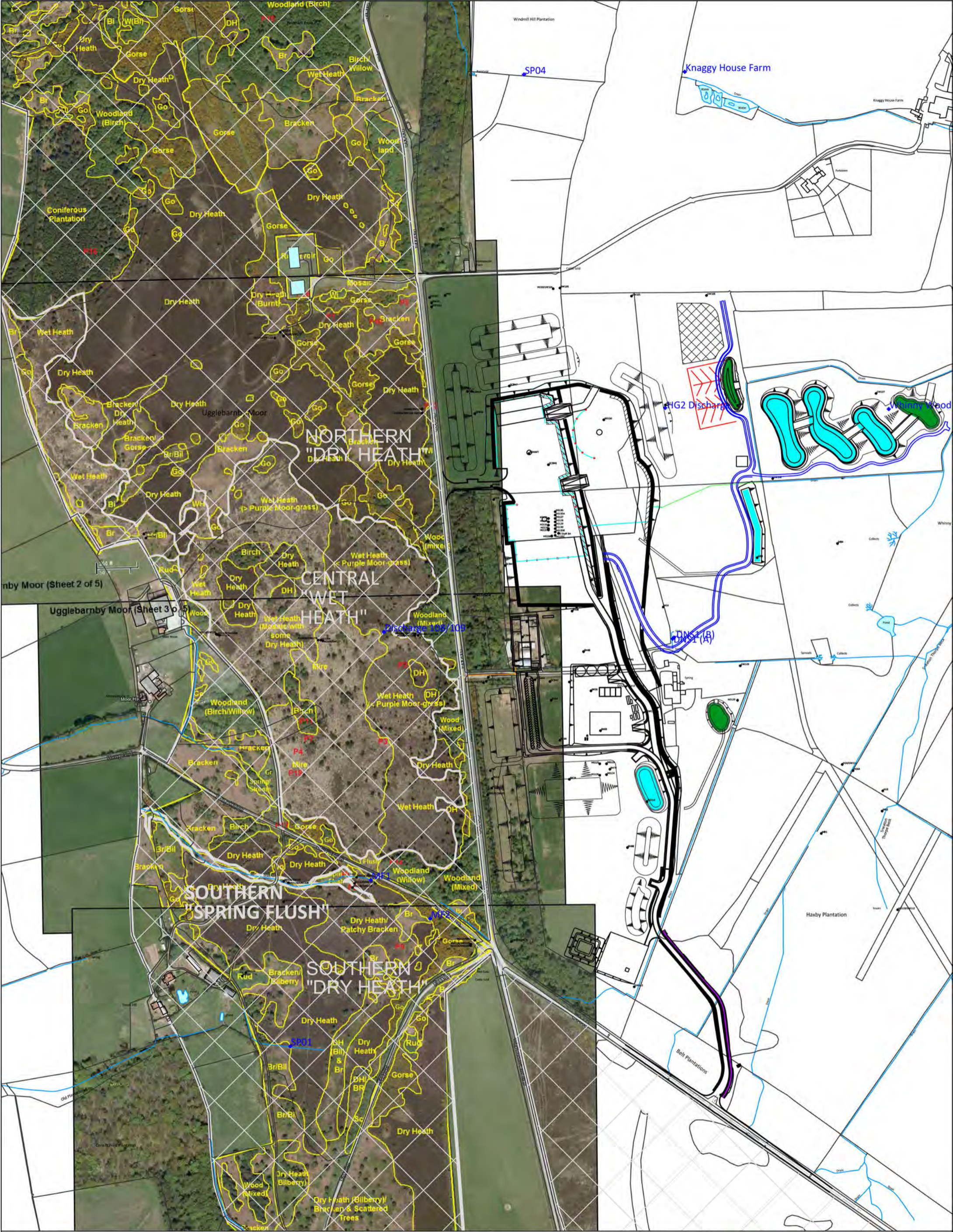
NOTES / KEY	
GEOLOGY	
COHESIVE SUPERFICIAL DEPOSITS	
MOOR GRIT	
EXISTING GRANULAR PLATFORM CONSTRUCTION	
NEW GRANULAR PLATFORM CONSTRUCTION	
	DEWATERING LEVEL (3 m BSPL)
GROUNDWATER LEVEL	
	MOOR GRIT SEASONAL HIGH GROUNDWATER LEVEL
	MOOR GRIT SEASONAL LOW GROUNDWATER LEVEL
	DASHED LINE REPRESENT CONFINED PIEZOMETRIC HEAD WITHIN THE MOOR GRIT AQUIFER
	PHASE 3 WORKS SURFACE CONSTRUCTION LEVELS
	GEOMEMBRANE
	LINED DRAINAGE DITCH

DRAWING TITLE
SCHEMATIC HYDROGEOLOGICAL SECTION THROUGH TIERED SHAFT PLATFORM SHOWING DEWATERING GROUNDWATER MANAGEMENT MEASURES
PROJECT TITLE
YORK POTASH PROJECT

CLIENT	
SIRIUS MINERALS PLC	
STATUS	PROJECT NUMBER
FINAL	1433
DRAWN BY	DATE
CB	MARCH 2017
SCALE	DRG. No.
AS SHOWN	1433DevOD268Rev3

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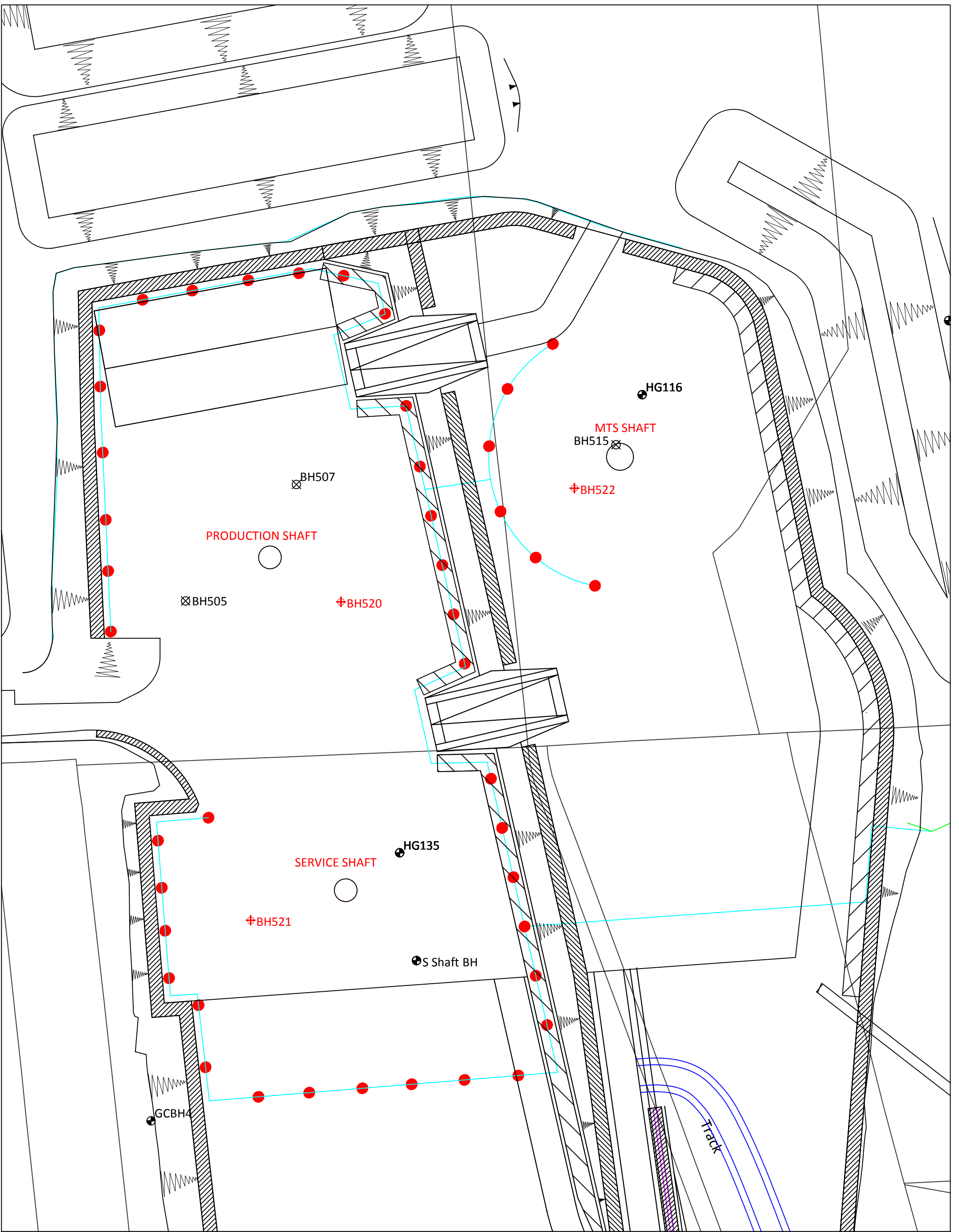
NOTES / KEY	
NYM SAC	
SURFACE WATER	
BOREHOLES	GCB01
HYDROGEOLOGICAL RECEPTORS	MF2

DRAWING TITLE	ECOLOGICALLY SENSITIVE HABITATS ON UGGLEBARNBY MOOR
PROJECT TITLE	YORK POTASH PROJECT

CLIENT	SIRIUS MINERALS PLC	
STATUS	FINAL	PROJECT NUMBER 1433Dev
DRAWN BY	CB	DATE March 2017
SCALE	1:5,000@A3/1:2,500@A1	DRG. No. 1433DevOD270Rev1

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NOTES / KEY
 EXISTING MONITORING WELLS ⊕ GCBH01
 NEW MONITORING WELLS ⊕ BH520
 DEWATERING LOCATIONS ●

DRAWING TITLE
 MONITORING WELL
 ARRANGEMENT FOR
 TEMPORARY PHASE 3
 DEWATERING

PROJECT TITLE
 YORK POTASH PROJECT

CLIENT
 SIRIUS MINERALS PLC

STATUS
 FINAL

PROJECT NUMBER
 1433Dev

DRAWN BY
 CB

DATE
 March 2017

SCALE
 1:1,000@A3

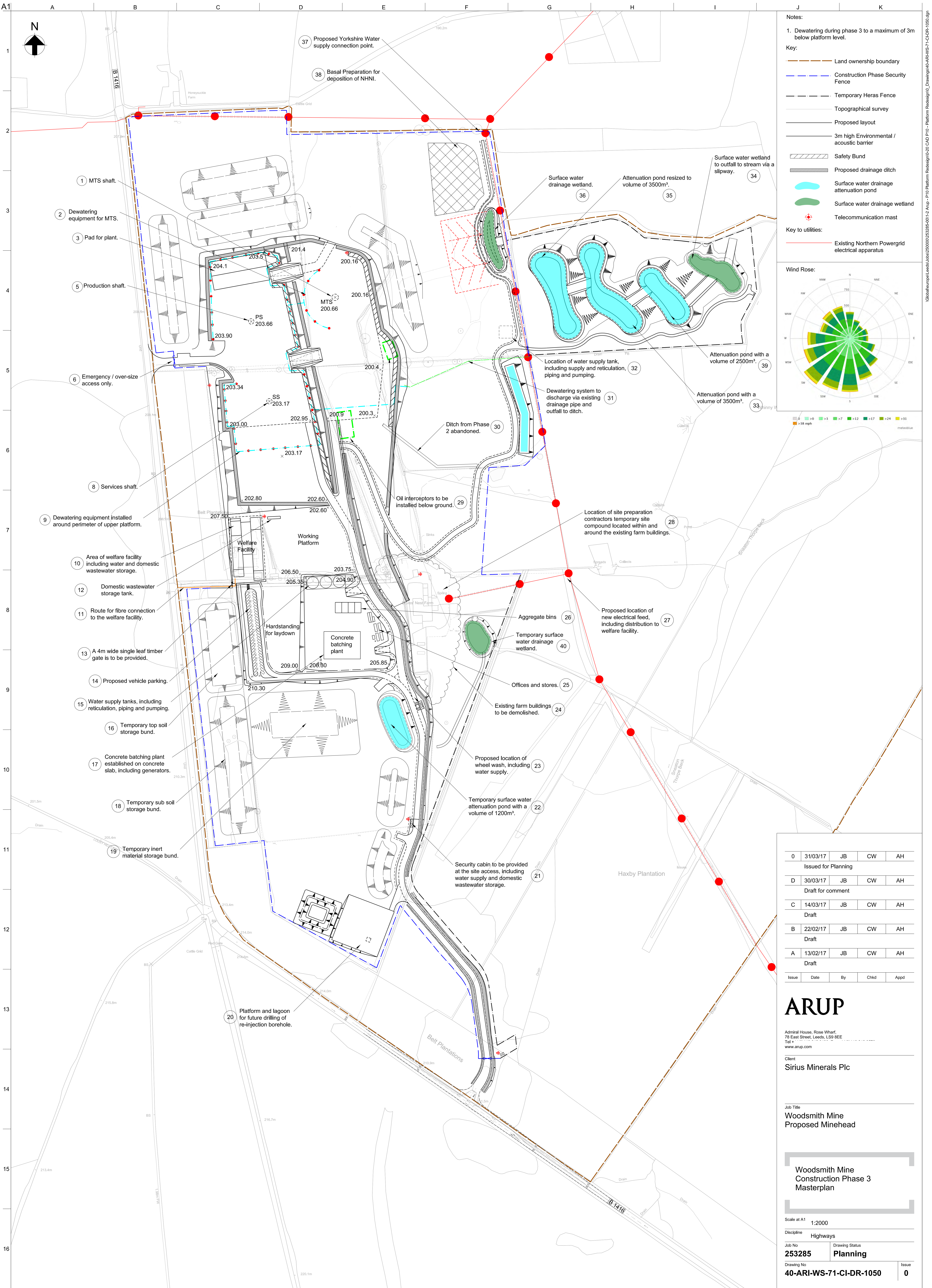
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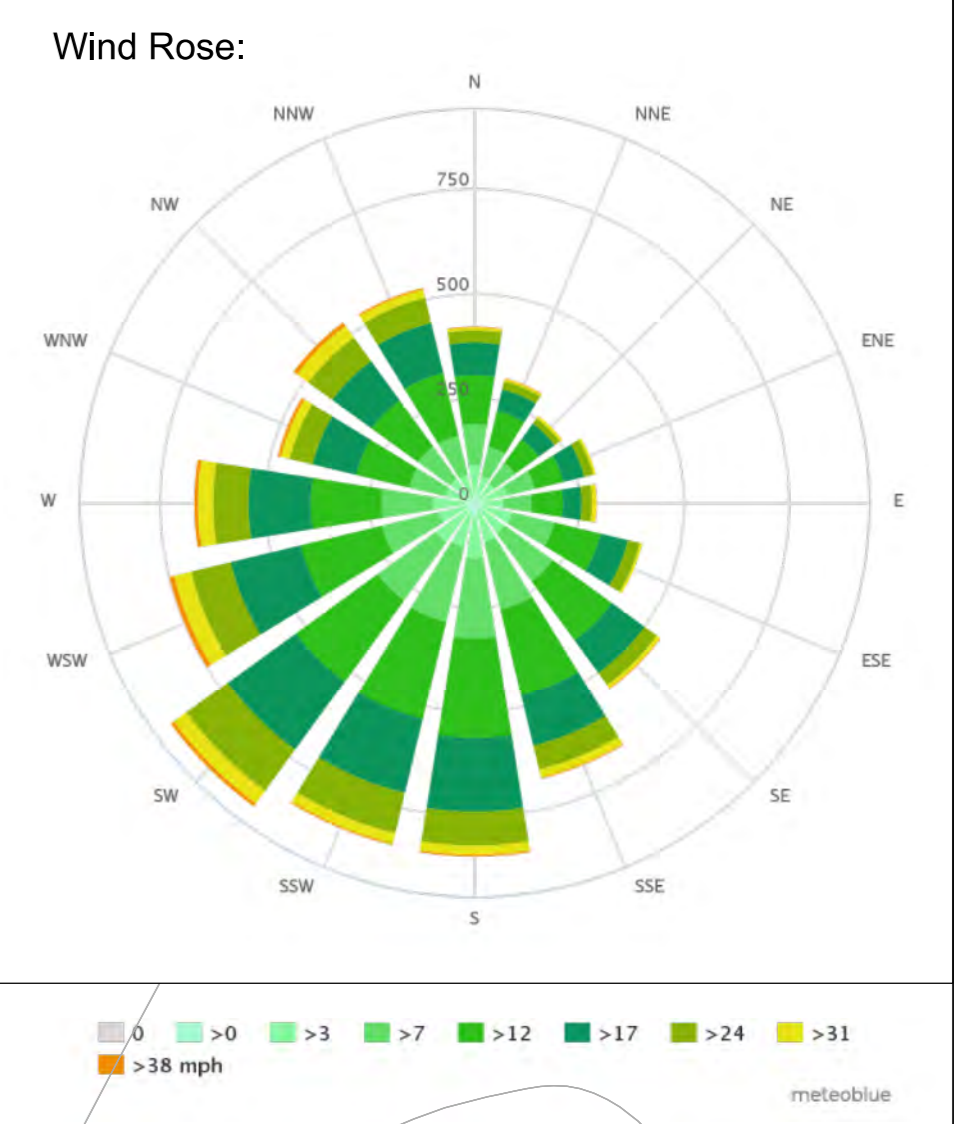
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APPENDIX 2

CONSTRUCTION DEVELOPMENT DETAILS



- Notes:
- Dewatering during phase 3 to a maximum of 3m below platform level.
- Key:
- Land ownership boundary
 - Construction Phase Security Fence
 - Temporary Heras Fence
 - Topographical survey
 - Proposed layout
 - 3m high Environmental / acoustic barrier
 - Safety Bund
 - Proposed drainage ditch
 - Surface water drainage attenuation pond
 - Surface water drainage wetland
 - Telecommunication mast
- Key to utilities:
- Existing Northern Powergrid electrical apparatus



0	31/03/17	JB	CW	AH
Issued for Planning				
D	30/03/17	JB	CW	AH
Draft for comment				
C	14/03/17	JB	CW	AH
Draft				
B	22/02/17	JB	CW	AH
Draft				
A	13/02/17	JB	CW	AH
Draft				
Issue	Date	By	Chkd	Appd

ARUP

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Client
Sirius Minerals Plc

Job Title
**Woodsmith Mine
Proposed Minehead**

**Woodsmith Mine
Construction Phase 3
Masterplan**

Scale at A1 1:2000
Discipline Highways
Job No 253285
Drawing Status Planning
Drawing No 40-ARI-WS-71-CI-DR-1050
Issue 0

