

Legend

- Route option
- 500m Buffer around Shortlisted Option
- Well - from historic map interpretation
- Active mineral site
- Watercourse
- Historical railway line (includes main Aberdeen-Inverness line)

Historical map features*

- General quarrying
- Quarrying of sand & clay, operation of sand & gravel pits
- Infilled quarry or water feature
- Heap, unknown constituents (identified from historical mapping review)
- Heap, unknown constituents (data provided by landmark)
- Marshlands

Landmark potentially infilled land (water feature)**

- Blue triangle

Landmark potentially infilled land (non-water feature)**

- Green triangle

Potential hazard

- Landslide ground stability: Moderate (purple), Low (pink), High (red), Compressible ground stability ***: High (orange), Moderate (yellow)
- Collapsible ground stability: Very Low (dotted pattern)
- Ground dissolution stability: Very Low (cross-hatch pattern)
- Shrinking or swelling clay ground stability: Low (horizontal lines), Very Low (vertical lines)

Artificial Deposits - Superficial

- Infilled Ground - Made Ground (Composition Unspecified), IG (dotted pattern)
- Landed Ground (Undivided) - Unknown Lithology, LGU (cross-hatch pattern)
- Made Ground (Undivided) - Made Ground (Composition Unspecified), MGU (dotted pattern)
- Worked Ground (Undivided) - Void, WGU (cross-hatch pattern)

* Derived from Landmark Potentially Contaminative Industrial Uses (Past Land Use) dataset and a review of the historical maps
 ** Data received from Landmark, from their small scale mapping product
 *** Due to the extensive coverage and overlay of the data presented on the Geotechnical Constraints drawings, areas of low hazard for potential compressible ground, areas of very low and low hazard for running sand ground stability and areas of very low hazard for landslide ground are included within the GIS database only, and are not indicated on the drawings
 Cut off in compressible deposits associated with the River Spey floodplain anticipated to be due to error in GIS dataset

0 500 1,000 Metres

CO1	27/11/2018	Approved as Stage Complete	JB	SR
Rev.	Rev. Date	Drawing Suitability	Drawn	Appr'd

Mott MacDonald Sweco

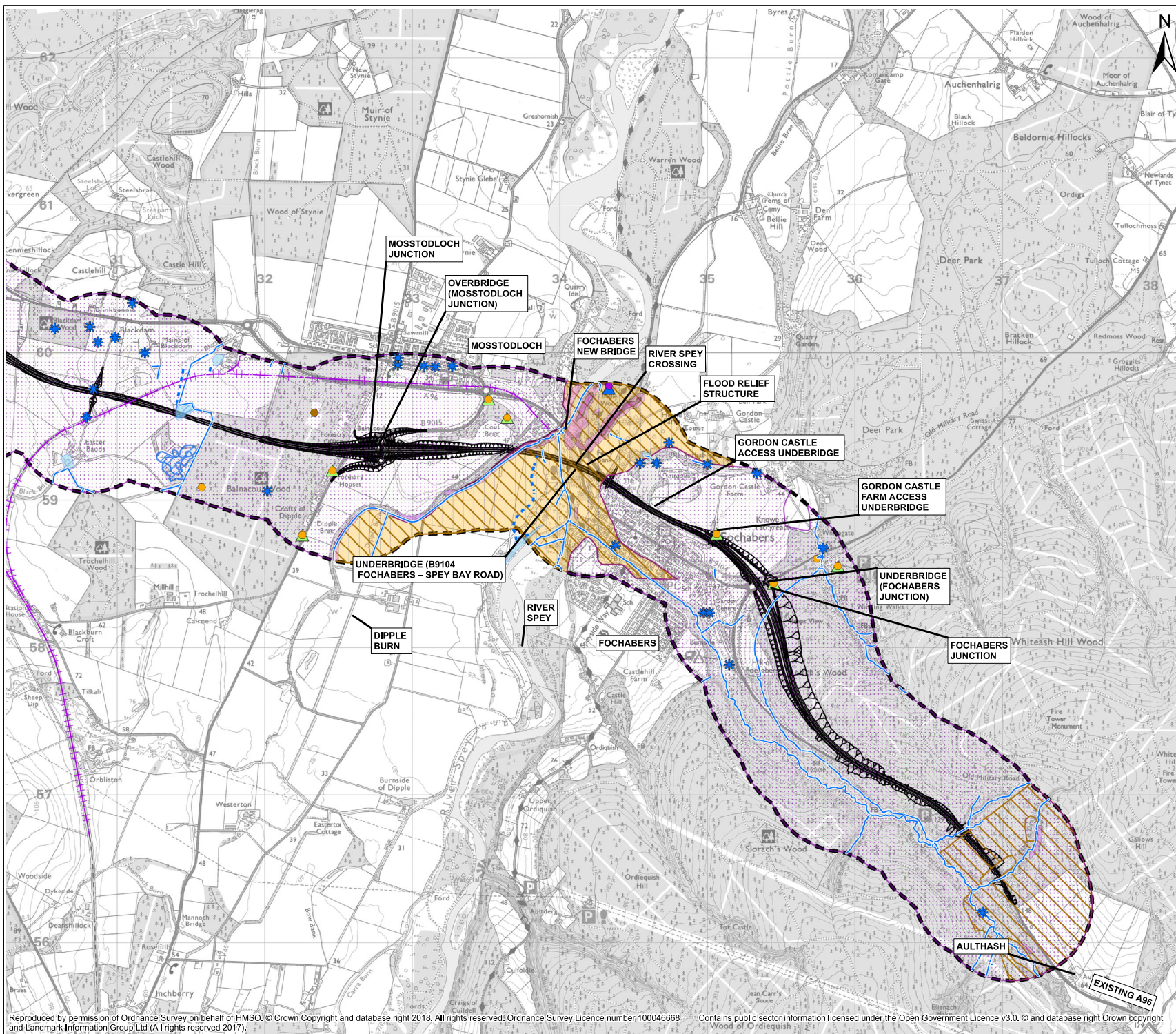
Client: **ASD DUALLING**
HARDMUIR TO FOCHABERS

Project: **A96 DUALLING**
HARDMUIR TO FOCHABERS

Drawing Title: **FIGURE 7.13 LHANBRYDE TO EAST OF FOCHABERS**
NORTH OPTION GEOTECHNICAL CONSTRAINTS
SHEET 1 OF 2

Scale @ A3	1:25,000	DO NOT SCALE
Project No.	117780	Status
BIM No.	A96PHF-MMS-EGT-00000-DR-GE-00039	A2

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- Heap, unknown constituents (data provided by landmark)
- Marshlands

Landmark potentially infilled land (water feature)**

- Landmark potentially infilled land (non-water feature)**

Potential hazard

- Landslide ground stability
 - Moderate
 - Low
- Compressible ground stability ***
 - High
 - Moderate
- Collapsible ground stability
 - Very Low
- Ground dissolution stability
 - Very Low
- Shrinking or swelling clay ground stability
 - Low
 - Very Low

Artificial Deposits - Superficial

- Infilled Ground - Made Ground (Composition Unspecified), IG
- Landscape Ground (Undivided) - Unknown Lithology, LGU
- Made Ground (Undivided) - Made Ground (Composition Unspecified), MGU
- Worked Ground (Undivided) - Void, WGU

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0 500 1,000 Metres

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Rev.	Rev. Date	Drawing Suitability	Drawn	Appr'd

Mott MacDonald Sweco

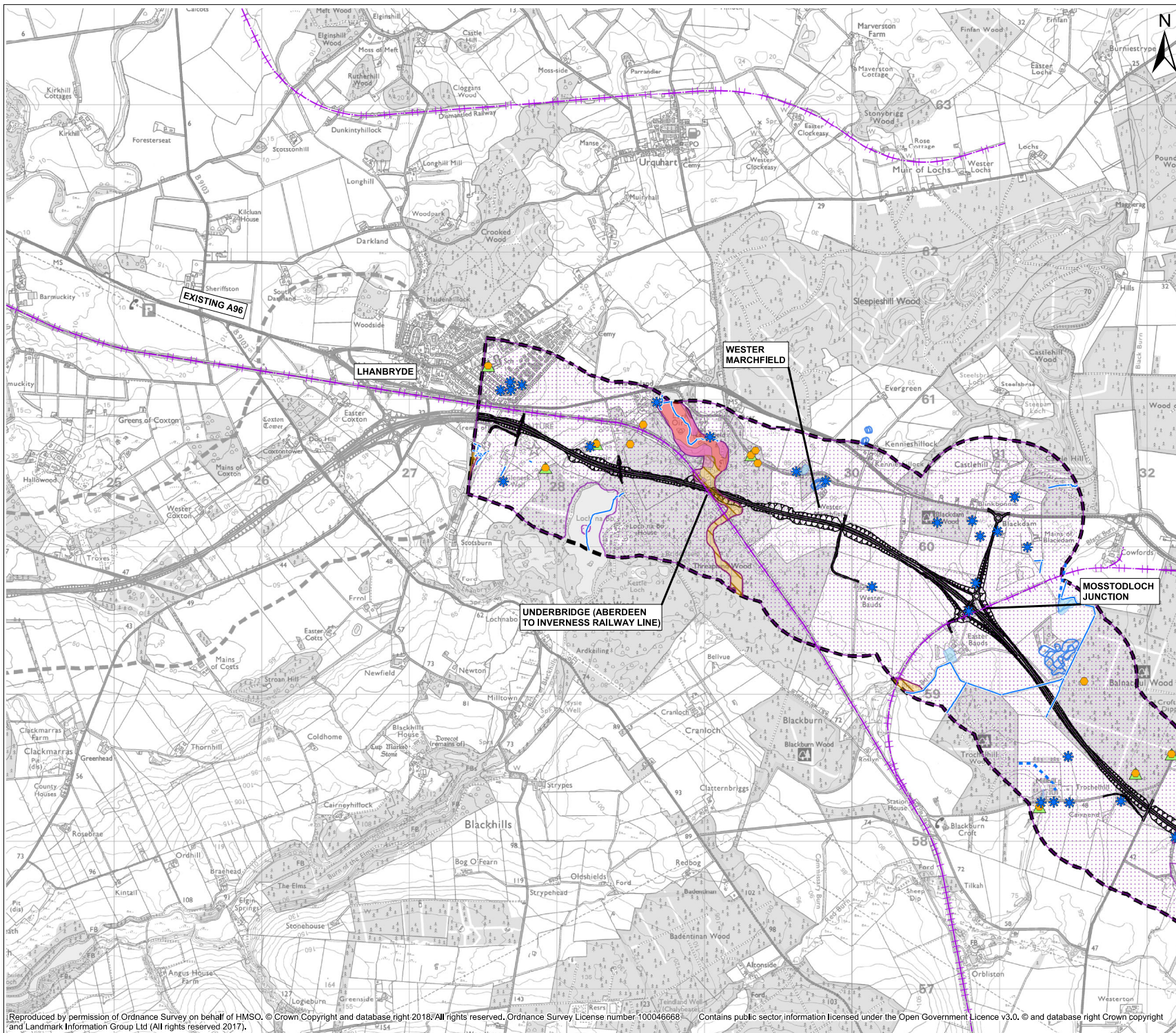
Client: **A96 DUALLING HARDMUIR TO FOCHABERS**

Project: **A96 DUALLING HARDMUIR TO FOCHABERS**

Drawing Title: **FIGURE 7.14 LHANBRYDE TO EAST OF FOCHABERS NORTH OPTION GEOTECHNICAL CONSTRAINTS SHEET 2 OF 2**

Scale @ A3	1:25,000	DO NOT SCALE
Project No.	117880	Status
BIM No.	A96PHF-MMS-EGT-00000-DR-GE-00040	

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- Historical railway line (includes main Aberdeen-Inverness line)

Historical map features*

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- Quarrying of sand & clay, operation of sand & gravel pits
- Infilled quarry or water feature
- Heap, unknown constituents (identified from historical mapping review)
- Heap, unknown constituents (data provided by landmark)
- Marshlands

Landmark potentially infilled land (water feature)**

- Landmark potentially infilled land (non-water feature)**

Potential hazard

- Landslide ground stability
 - Moderate
 - Low
- Compressible ground stability***
 - High
 - Moderate
- Collapsible ground stability
 - Very Low
- Ground dissolution stability
 - Low
 - Very Low
- Shrinking or swelling clay ground stability
 - Low
 - Very Low

Artificial Deposits - Superficial

- Infilled Ground - Made Ground (Composition Unspecified), IG
- Landscaped Ground (Undivided) - Unknown Lithology, LGU
- Made Ground (Undivided) - Made Ground (Composition Unspecified), MGU
- Worked Ground (Undivided) - Void, WGU

* Derived from Landmark Potentially Contaminative Industrial Uses (Past Land Use) dataset and a review of the historical maps
 ** Data reviewed from Landmark, from their small scale mapping product
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0 500 1,000 Metres

CO1	27/11/2018	Approved as Stage Complete	JB	SR
Rev.	Rev. Date	Drawing Suitability	Drawn	Appr'd

Mott MacDonald Sweco

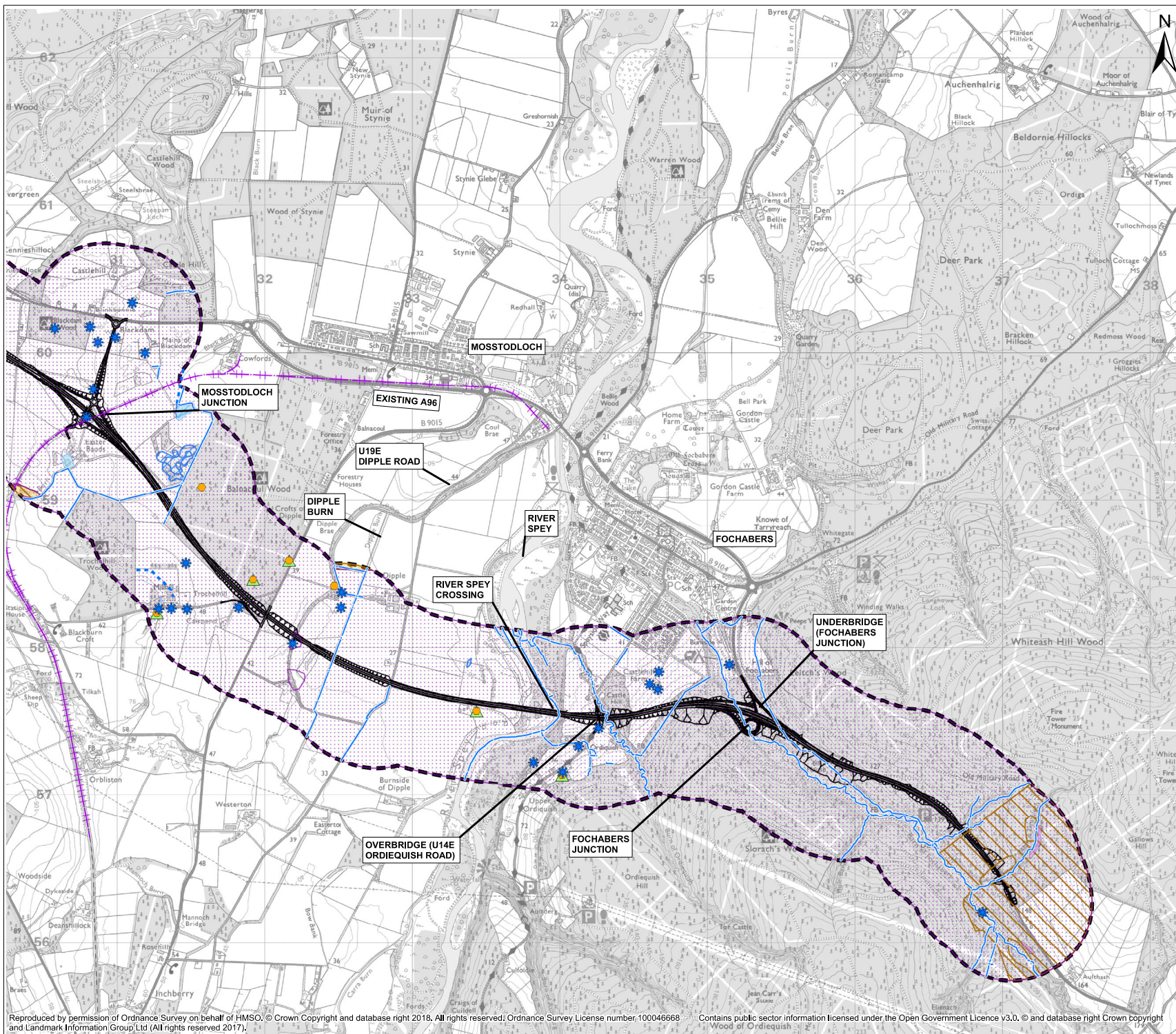
Client: **TRANSPORENT SCOTLAND** **A96 DUALLING HARDMUIR TO FOCHABERS**

Project: **A96 DUALLING HARDMUIR TO FOCHABERS**

Drawing Title: **FIGURE 7.15 LHANBRYDE TO EAST OF FOCHABERS SOUTH OPTION GEOTECHNICAL CONSTRAINTS SHEET 1 OF 2**

Scale @ A3	1:25,000	DO NOT SCALE
Project No.	117880	Status
BIM No.	A96PHF-MMS-EGT-00000-DR-EG-00041	A2

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Historical map features*

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- Quarrying of sand & clay, operation of sand & gravel pits
- Infilled quarry or water feature
- Heap, unknown constituents (identified from historical mapping review)
- Heap, unknown constituents (data provided by landmark)
- Marshlands

Landmark potentially infilled land (water feature)**

- Landmark potentially infilled land (non-water feature)**

Potential hazard

- Landslide ground stability
 - Moderate
 - Low
- Compressible ground stability***
 - High
 - Moderate
- Collapsible ground stability
 - Very Low
- Ground dissolution stability
 - Very Low
- Shrinking or swelling clay ground stability
 - Low
 - Very Low

Artificial Deposits - Superficial

- Infilled Ground - Made Ground (Composition Unspecified), IG
- Landslapped Ground (Undivided) - Unknown Lithology, LGU
- Made Ground (Undivided) - Made Ground (Composition Unspecified), MGU
- Worked Ground (Undivided) - Void, WGU

* Derived from Landmark Potentially Contaminative Industrial Uses (Past Land Use) dataset and a review of the historical maps
 ** Data reviewed from Landmark, from their small scale mapping product
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0 500 1,000 Metres

C01	27/11/2018	Approved as Stage Complete	JB	SR
Rev.	Rev. Date	Drawing Suitability	Drawn	Appr'd

Mott MacDonald Sweco

Client: **TRANSRIP SCOTLAND** **A96 DUALLING HARDMUIR TO FOCHABERS**

Project: **A96 DUALLING HARDMUIR TO FOCHABERS**

Drawing Title: **FIGURE 7.16 LHANBRYDE TO EAST OF FOCHABERS SOUTH OPTION GEOTECHNICAL CONSTRAINTS SHEET 2 OF 2**

Scale @ A3	1:25,000	DO NOT SCALE
Project No.	117880	Status
BIM No.	A96PHF-MMS-EGT-00000-DR-GE-0042	A2

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