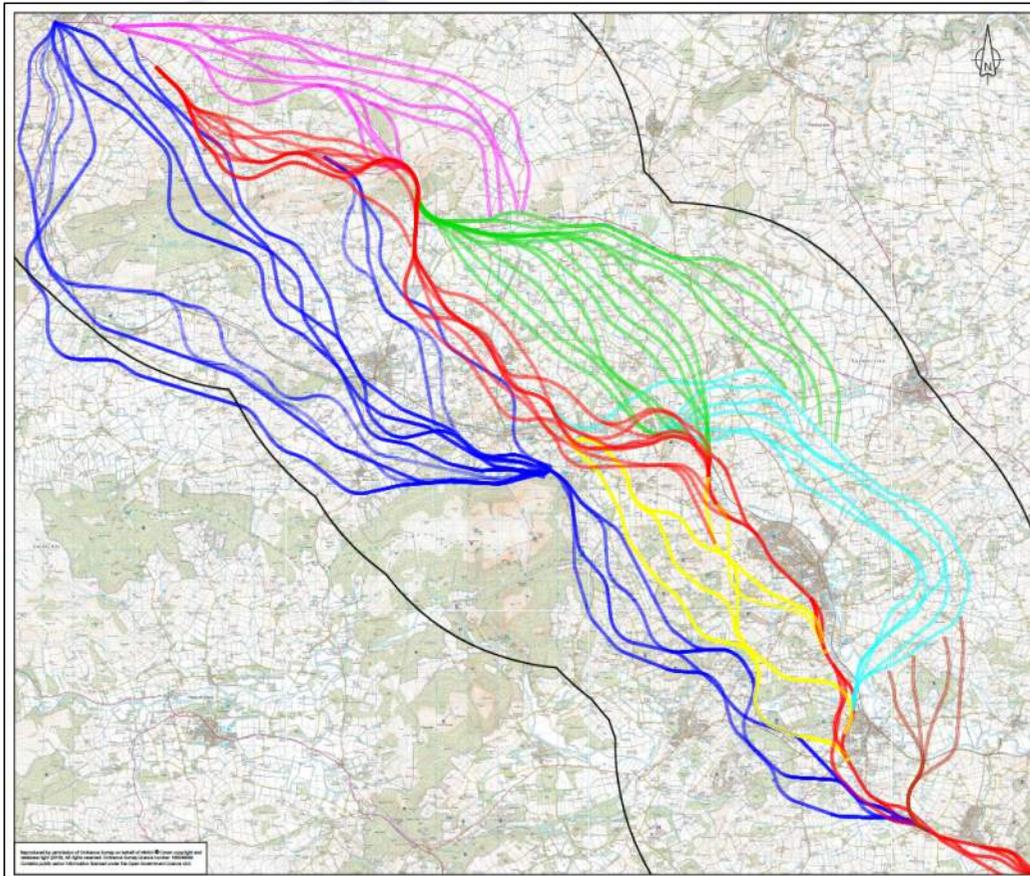


# First Fix Alignment Development



- A range of alignments developed within each corridor and tested with respect to engineering compliance, complexity and environmental constraints
- Alignments developed to:
  - Avoid remaining high impact constraints where possible
  - Comprise fully compliant horizontal and vertical geometry
  - Represent a geographical spread across the corridor
  - Avoid onerous engineering elements wherever possible
  - Avoid unnecessary social impacts where possible

# First Fix Alignment Development



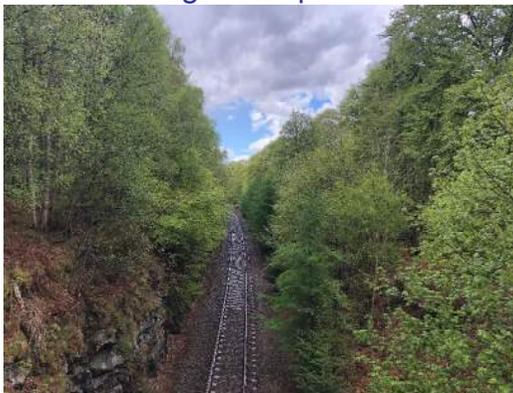
- 16 Corridors
- 80 alignments
- 1,010 km of alignments created and appraised
- Plan and Longitudinal section drawings
- Alignments analysed within GIS
- 3D Visualisations of key points produced to assist Landscape assessment

# Key Constraints (Site Visit)

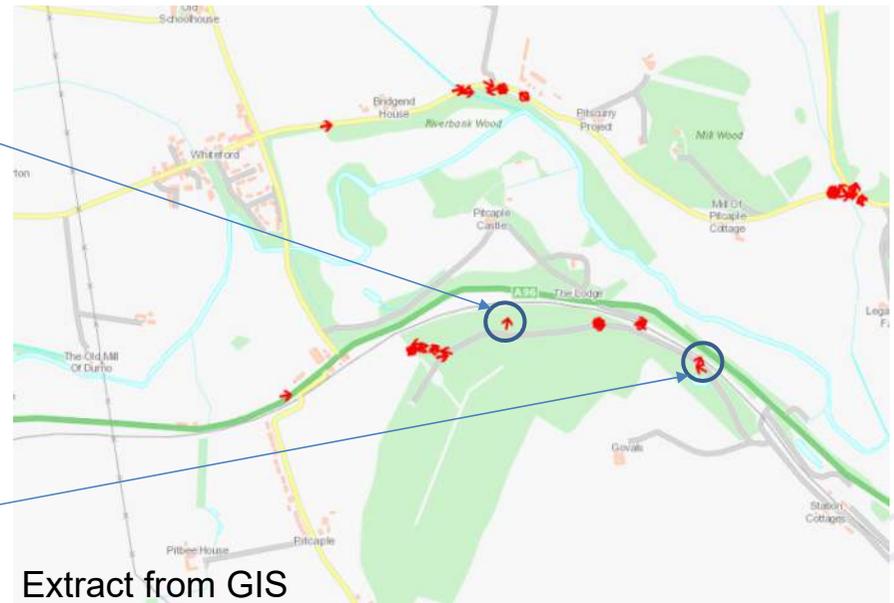
**A96**  
DUALING  
EAST OF HUNTLY TO ABERDEEN



Looking north towards A96 and Pitcaple Castle through Pitcaple Wood



Looking west along railway line at Pitcaple



Extract from GIS

Numerous constraints in one area including existing A96, A Listed castle, railway line, ancient woodland, numerous properties

## Key Constraints (Site Visit)



SSE High Voltage power lines and pylons at Hill of Skares

**A96**  
DUALING  
EAST OF HUNTLY TO ABERDEEN



Looking west at Glen Water towards Hill of Bainshole

# Engineering Traffic and Environmental First Fix Appraisal Process



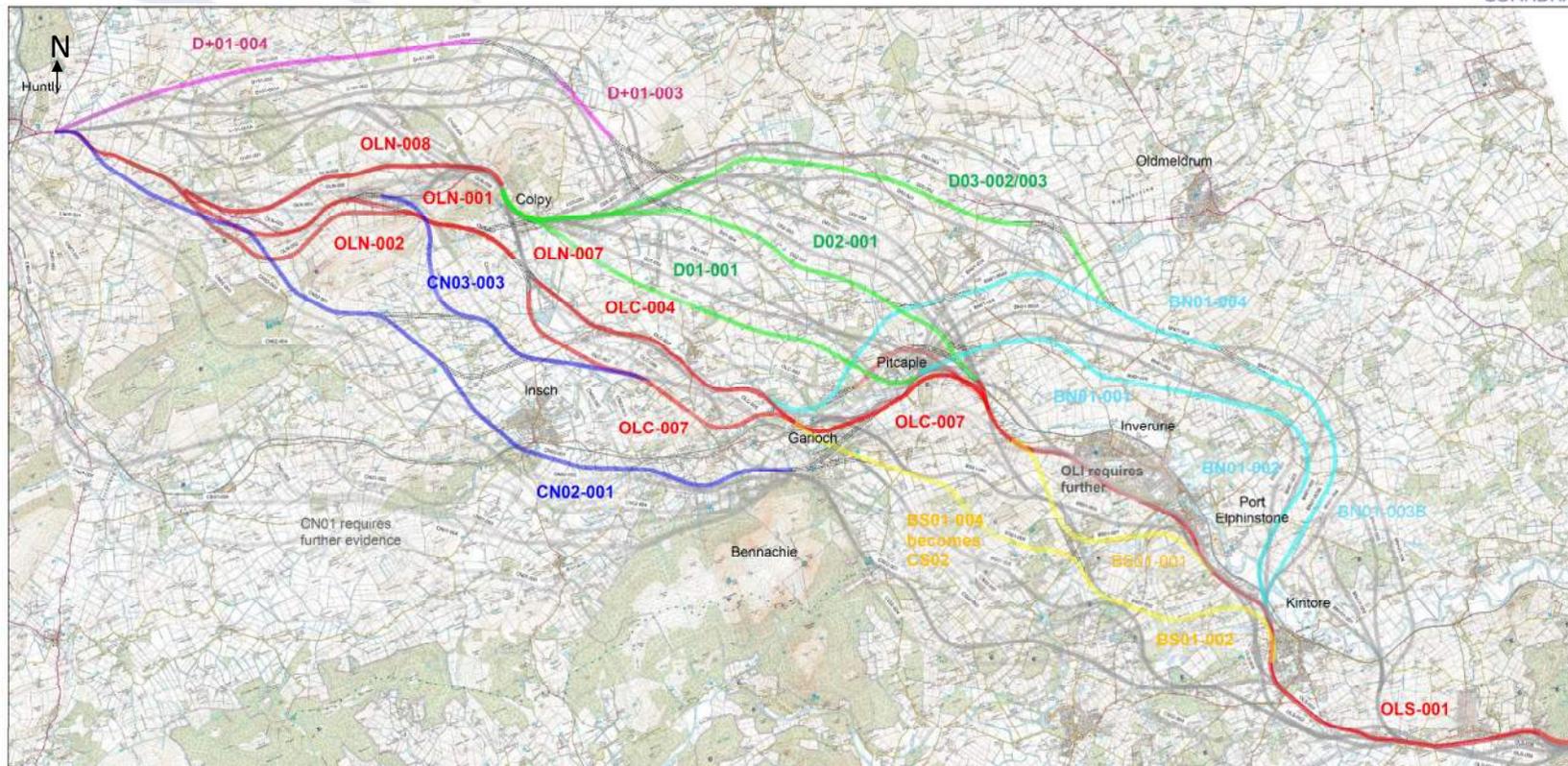
- Each alignment was subject to Environmental, Engineering and Traffic Appraisal using 7 point scale
- Engineering and Environmental 7 point scale scoring mapped on GIS
- ‘Better performing’ alignments and/ or sections of alignments identified to be taken forward to 2<sup>nd</sup> fix development
- Complex and challenging areas identified for further detailed consideration to verify viability

7 point scale

Colour Coding	Assessment
Red	Major Adverse Impact
Orange	Moderate Adverse Impact
Yellow	Minor Adverse Impact
Light Blue	Neutral Impact
Light Green	Minor Beneficial Impact
Medium Green	Moderate Beneficial Impact
Dark Green	Major Beneficial Impact

Spreadsheet based approach using colour coding to score each alignment accompanied by QUALITATIVE commentary

# First Fix Sifting Workshop - April 2018



# First Fix Workshop – Key Outcomes



Alignments within BN+ 01 and D+02 sifted out.

Further assessment required to validate the findings of the First Fix Appraisal:

1. CN01 (through Strathbogie) further assessment on Traffic, Engineering and Resilience
2. BS01 (Southern Bypass of Inverurie) – Impact on LDP Land
3. OLI (Online through Inverurie) – Engineering and Traffic Further Assessment