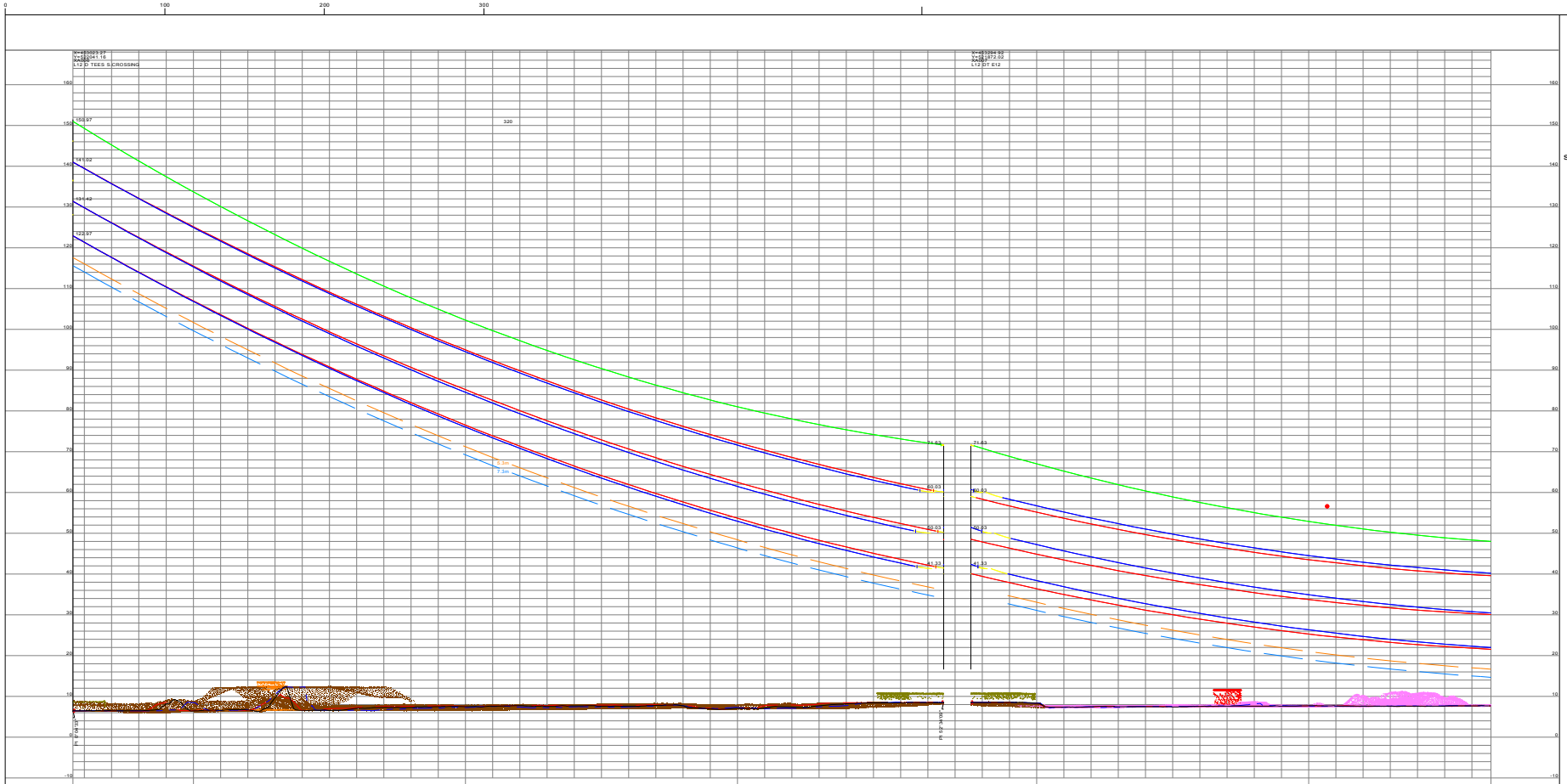


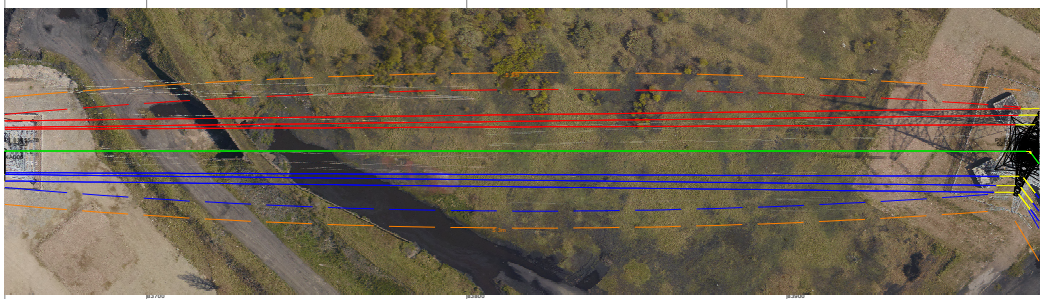

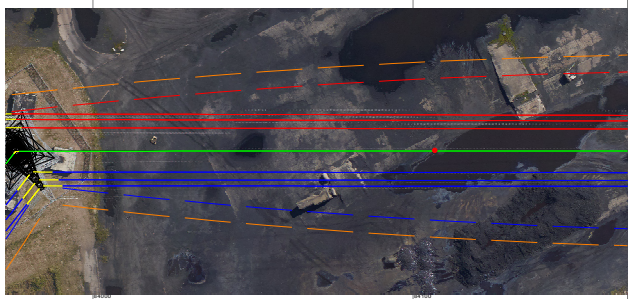

XA004 - XA007, 275kV, GTACSR/GZTACSR620SQ, bundle of 2, Displayed Rated Temp 170 Creep
XA004 - XA007, 275kV, GTACSR/GZTACSR620SQ, bundle of 2, Displayed Rated Temp 170 Creep
XA004 - XA007, 275kV, GTACSR/GZTACSR620SQ, bundle of 2, Displayed Rated Temp 170 Creep
XA004 - XA007, 275kV, GTACSR/GZTACSR620SQ, bundle of 2, Displayed Rated Temp 170 Creep
XA004 - XA007, 275kV, GTACSR/GZTACSR620SQ, bundle of 2, Displayed Rated Temp 170 Creep
XA004 - XA007, 275kV, GTACSR/GZTACSR620SQ, bundle of 2, Displayed Rated Temp 170 Creep
XA004 - XA007, 6kV, 185mm² AACSR - Kestrel, Displayed Rated Temp 170 Creep

National Grid Overhead Line Profiles

Profile Description:
This profile is derived from the use of LiDAR data and shows the position and status of the power line at the time of survey. Please note that ground levels may have changed since the survey date.

As the amount of power increases in the lines the conductors heat up and become longer, creating greater sag. A computer model has been applied to show the conductor at the maximum rated temperature. Please note that on an average day the conductors may not be at rated temperature and their height above ground is likely to change.

The profile states the lines current voltage. Any construction under the lines should allow for the likely possibility of upgrading of the line from 132kV to 275kV or 275kV to 400kV. Any permanent structures should adhere to the increased clearances .

It remains the responsibility of the third party to ensure the safety clearances are met by their proposed operations by using the bottom conductor attachment points as reference benchmarks.

Drawing Key:
The following clearances are derived from the Energy Networks Association Technical Specification 43-8.

**Feature Description**

- Tower Base
- Ground / Model Key Points
- Parallel Power Lines
- River Navigable
- Lake Navigable
- Pond Non Navigable
- Swimming Pool
- Stream Non Navigable
- Rivers
- Bridges
- Footpath/Bridleway/Track
- Motorways
- Railways
- Fences
- Wall
- Building
- Vegetation
- Power Line Crossing Wires
- Street Furniture
- Power Line Crossing Structures
- Leisure Area
- Processing Plant / Industrial
- Substation
- Temporary Object
- Interpolated Ground Points

| Item | Description of Clearance | Minimum Clearance (metre) at 400kV |
|---|---|---|
| 1 | To Ground | 7.3 |
| 2 | To Normal Road Surface | 8.1 |
| 3 | To road surface of designated "6.1 metres high load" routes | 9.2 |
| 4 | To motorway or other road surface where "skycradle" can be used | 10.5 |
| 5 | To motorway road surface where skycradle can not be used:<br>(i) Normal 3 lane motorways<br>(ii) Elevated 2 lane motorways | 16.3<br>13.3 |
| 6 | To any object/building on which a person may stand, including ladders, access platform, etc. | 5.3 |
| 7 | To any object to which access is not required AND on which a person cannot stand or lean a ladder | 3.1 |
| 8 | To trees under or adjacent to line and:<br>(i) Unable to support ladder/climber<br>(ii) Capable of supporting ladder/climber<br>(iii) Trees falling towards line with line conductors hanging vertically only | 3.1<br>5.3<br>3.1 |
| 9 | To trees in orchards and hop gardens | 5.3 |
| 10 | To irrigators, slurry guns and high pressure hoses | 30.0 |
| 11 | To street lighting standards with:<br>(i) Standard in normal upright position<br>(ii) Standard falling towards line with line conductors hanging vertically only<br>(iii) Standard falling towards line | 4.0<br>4.0<br>1.9 |

Swing Clearances:
The conductors may swing (blow-out) to a maximum of 45 Degrees during very strong winds, clearances need to be maintained for this situation.

| | | | |
|---|---|---|---|
| ISSUE | A | | |
| DRAWN | Fugro 02/12/16 | | |
| CHECKED | JB 13/01/17 | | |
| APPROVED | | | |

FIRST ISSUE: As Surveyed

6.0 m Horiz. Scale

4.0 m Vert. Scale

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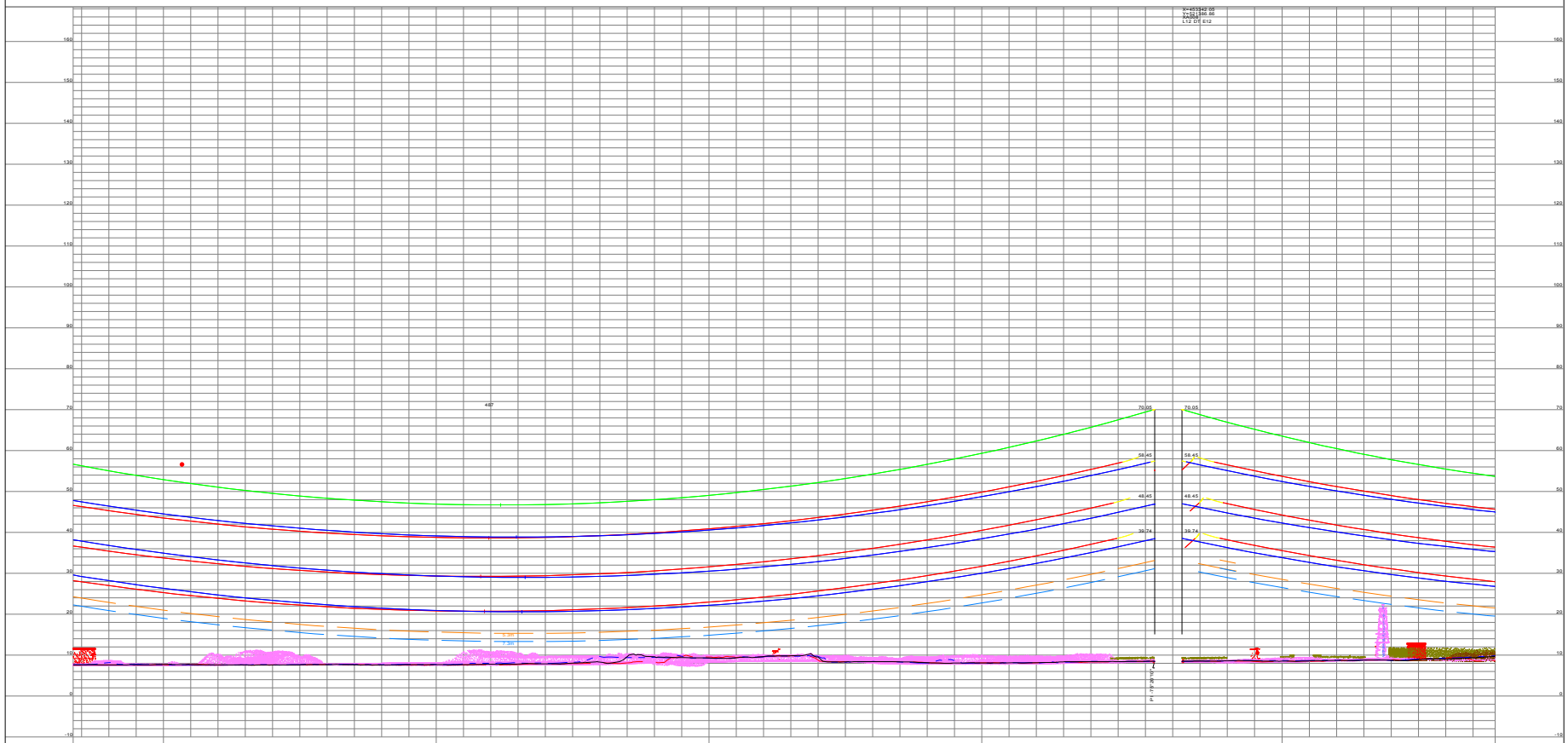
National Grid plc — UK Transmission
Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA

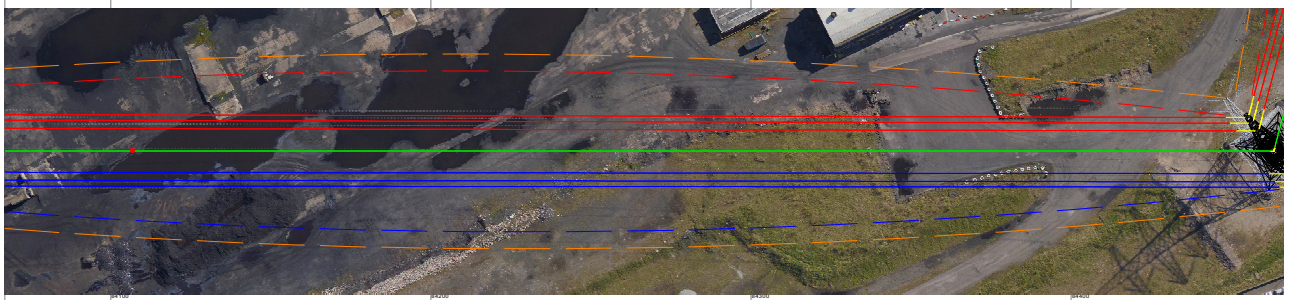
Title: Towers XA006 to XA007

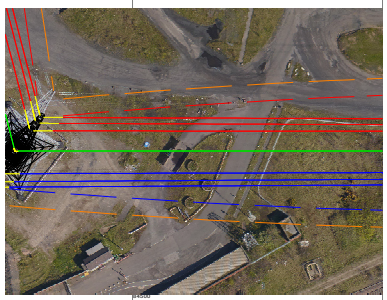
Left - B304, B305, B307, B309, B310, B351, B352, B311
Right - B303, B300, B306, B308, B326, A32D

Survey Date: 17 & 24/04/16

| | | | |
|---|---|---|---|
| Site | ZZA & XA Blyth - Lackenby | | A0 |
| Originator Drawing Number | zza001-251_10816_11216_a | | CAD |
| NG Drawing Number | 28_NG_0388_1 | Sheet No. 1 / No. of Sheets 3 | ISSUE A |
| SCALE:- | | NG Project No | |





National Grid Overhead Line Profiles

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- Vegetation
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- Power Line Crossing Structures
- Leisure Area
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| Item | Description of Clearance | Minimum Clearance (metre) at 400kV |
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| ISSUE | A | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DRAWN | Fugro 02/12/16 | FIRST ISSUE | | | | | | | | | | |
| CHECKED | JB 13/01/17 | As Surveyed | | | | | | | | | | |
| APPROVED | | | | | | | | | | | | |

6.0 m Horiz. Scale

4.0 m Vert. Scale

National Grid plc UK Transmission
Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA

Title
Towers XA008 to XA008

Left - B304, B305, B307, B309, B310, B351, B352, B311
Right - B303, B300, B306, B308, B326, A32D

Survey Date: 17 & 24/04/16

| Site | ZZA & XA Blyth - Lackenby | | A0 |
|---|---|---|---|
| Originator Drawing Number | zza001-251_10816_11216_a | | CAD |
| NG Drawing Number | 28_NG_0388_1 | Sheet No. 2 / No. of Sheets 3 | ISSUE A |
| SCALE:- | NG Project No | | |

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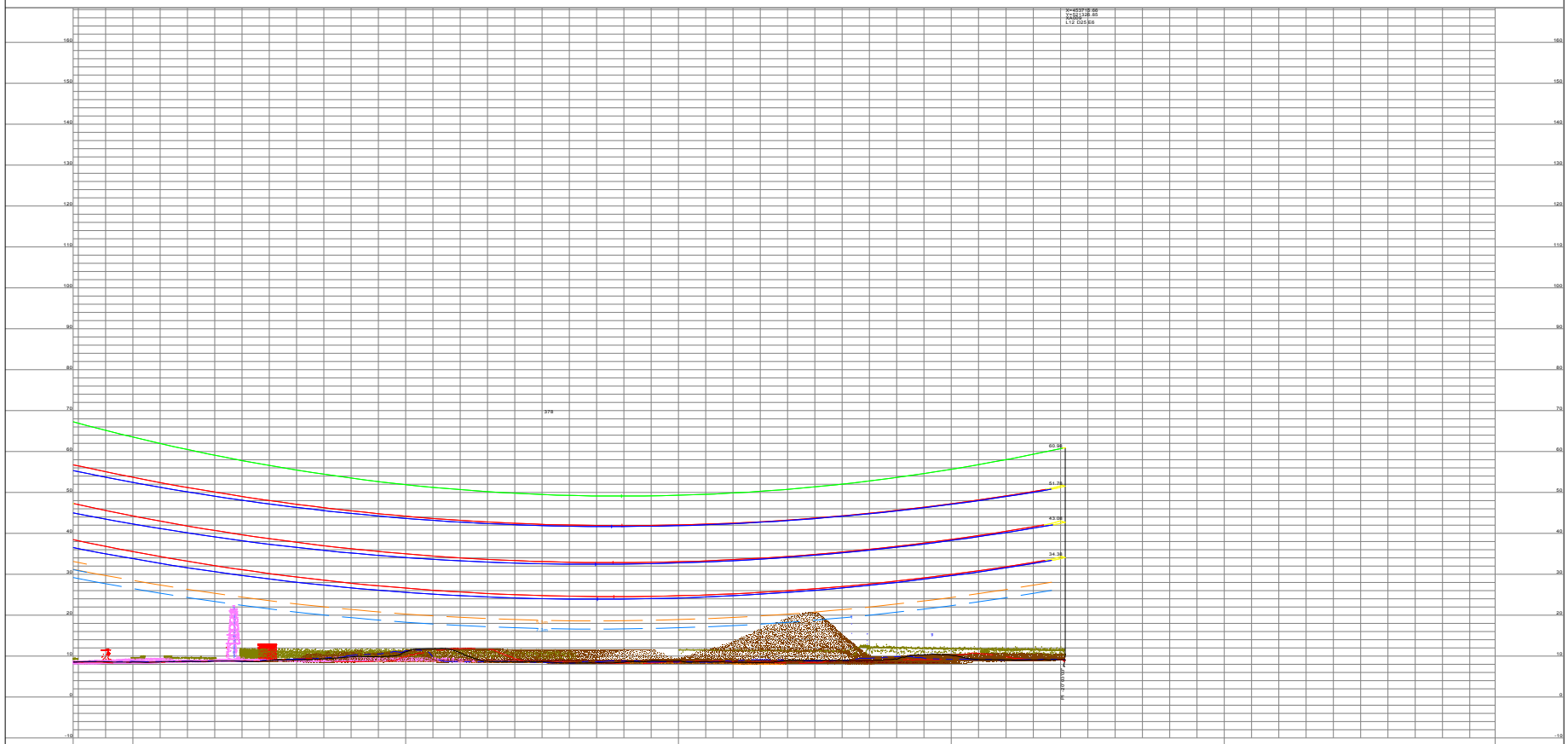


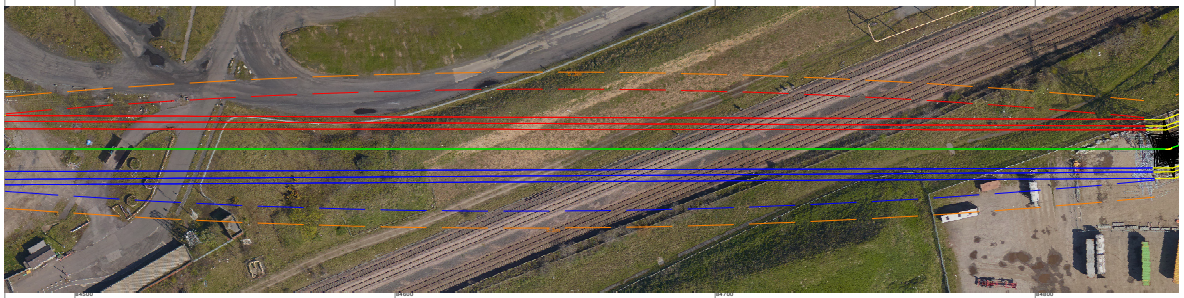

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| APPROVED | | | |

FIRST ISSUE: As Surveyed

6.0 m Horiz. Scale

4.0 m Vert. Scale

National Grid plc — UK Transmission
Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA

Title: Towers XA009 to XA009

Left - B304, B305, B307, B309, B310, B351, B352, B311
Right - B303, B300, B306, B308, B326, A32D

Survey Date: 17 & 24/04/16

| | | | |
|---|---|---|---|
| Site | ZZA & XA Blyth - Lackenby | | A0 |
| Originator Drawing Number | zza001-251_10816_11216_a | | CAD |
| NG Drawing Number | 28_NG_0388_1 | Sheet No. 3 / No. of Sheets 3 | ISSUE A |
| SCALE:- | NG Project No | | |

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