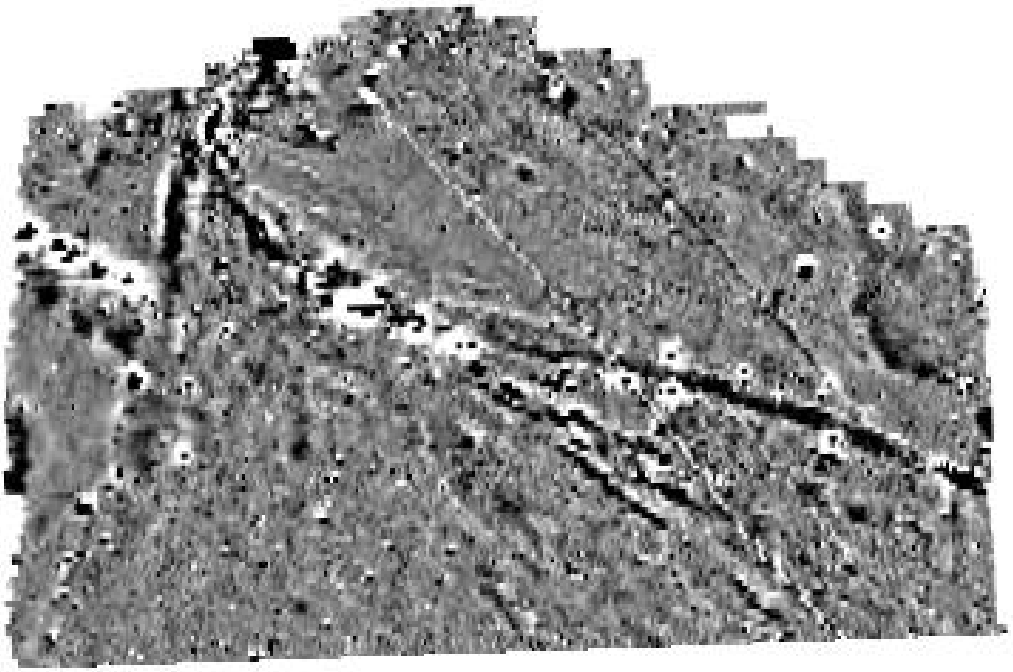
Northamptonshire Archaeology

Archaeological geophysical survey of land north of Higham Road, Burton Latimer, Northamptonshire December 2013



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Report 14/2

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QUALITY CONTOL

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Verified by	Pat Chapman	*PC*	07/01/14
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OASIS REPORT FORM

PROJECT DETAILS	**OASIS No. 167759**	
Project title	Archaeological geophysical survey of land north of Higham Road, Burton Latimer, Northamptonshire, December 2013	
Short description	Northamptonshire Archaeology was commissioned by CgMs Consulting to carry out a detailed magnetometer survey on 6.5ha of land, north of Higham Road, Burton Latimer, Northamptonshire. The survey identified Medieval ridge and furrow cultivation and probable lengths of undated enclosure ditches and pits. No other archaeological features were evident, although parts of the area were shown to have been previously quarried.	
Project type	Geophysical survey	
Previous work	Desk-based assessment	
Current land use	Pasture	
Future work	Unknown	
Monument type and period	Medieval ridge and furrow field cultivation and possible undated ditches and pits.	
Significant finds	None	
PROJECT LOCATION		
County	Northamptonshire	
Site address	Higham Road, Burton Latimer	
Easting Northing	SP 906 744	
Area (sq m/ha)	6.5ha	
Height aOD	64-84m aOD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology (NA)	
Project brief originator	CgMs	
Project Design originator	NA	
Director/Supervisor	Ian Fisher (NA)	
Project Manager	Mark Holmes (NA)	
Sponsor or funding body	CgMs Consulting	
PROJECT DATE		
Start date	11/12/2013	
End date	13/12/2013	
ARCHIVES	**Location (Accession nos.)**	**Contents**
Physical		
Paper		Site survey records
Digital		Survey data
BIBLIOGRAPHY		
Title	Archaeological geophysical survey of land north of Higham Road, Burton Latimer, Northamptonshire, December 2013	
Serial title & volume	Northamptonshire Archaeology Report 14/2	
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Date	7 January 2014	

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ARCHAEOLOGICAL GEOPHYSICAL SURVEY OF LAND NORTH OF HIGHAM ROAD, BURTON LATIMER NORTHAMPTONSHIRE DECEMBER 2013

Abstract

Northamptonshire Archaeology was commissioned by CgMs Consulting to carry out a detailed magnetometer survey on 6.5ha of land, north of Higham Road, Burton Latimer, Northamptonshire. The survey identified Medieval ridge and furrow cultivation and a localised area of probable undated enclosure ditches and pits. No other archaeological features were evident, although parts of the area were shown to have been previously quarried.

1 INTRODUCTION

Northamptonshire Archaeology was commissioned by CgMs Consulting to conduct a detailed magnetometer survey on 6.5ha of land at Higham Road, Burton Latimer, Northamptonshire (NGR SP 906 744). The fieldwork was conducted on the 11th to 13th December 2013 and conformed to a specification prepared by Northamptonshire Archaeology (NA 2013).

2 BACKGROUND

2.1 Location and geology

The survey area comprises 6.5ha of land, south-east of Burton Latimer. It is bounded to the north by Latimer Brook, the A6 to the east, and Higham Road to the south and arable fields to the west. The site slopes north at *c* 64-84m aOD.

The solid geology comprises Blisworth Limestone with superficial deposits of Bozeat Till in the southern half of the site (BGS 2013).

2.2 Historical and archaeological background

A full historical and archaeological background can be found in a desk-based assessment that was carried out by CgMs Consulting. It concluded that there is potential for Iron Age and Roman activity (Clarke 2013). A Roman settlement lies approximately 200m to the west of the survey area (HER 1921, SP 9035 7440).

Two geophysical surveys have been conducted in the surrounding area and have been successful in identifying archaeological remains. In 2003 Northamptonshire Archaeology conducted a survey approximately 300m north-east of the survey area (Butler & Burgess). The survey identified a large system of enclosure ditches which excavation identified as Late Iron Age/Early Roman (HER 5319, SP 91583 75189).

A second survey in 2010 followed by trial trench evaluation, approximately 800m south-east of the survey area, identified a third Iron Age/Roman settlement (HER 3310, SP 9164 7372) (Walford 2010).

3 METHODOLOGY

Detailed magnetometer survey was specified as the prospection technique at Higham Road, Burton Latimer. Due to the presence of a former quarry on site, the survey area was divided into two parts: an approximate 20m wide corridor adjacent to the Latimer Brook and a block covering the southern two thirds of the site.

The survey was conducted with Bartington Grad 601-2, twin sensor array, vertical component fluxgate gradiometers (Bartington and Chapman 2003). These are standard instruments for archaeological survey and can resolve magnetic variations as slight as 0.1 nanoTesla (nT).

An independent system of 30m grids was established within each of the fields to be surveyed. The grids were established with a tape measure and optical square and were tied in to the Ordnance Survey National Grid by using Leica System 1200 dGPS (EH 2008, 19). The gradiometers were carried at a brisk but steady walking pace through each grid square, collecting data along 1m spaced traverse lines. Measurements were automatically triggered every 0.25m along the traverses, giving a total of 3600 measurements per square.

All fieldwork methods complied with the guidelines issued by English Heritage and by the Institute for Archaeologists and with the agreed method statement for this project (EH 2008; IfA 2011; NA 2013).

The survey data was processed using Geoplot 3.00v software. Striping, caused by slight mismatches in sensor balance, was removed using the 'Zero Mean Traverse' function and destaggering of the data was performed as necessary.

The processed data is presented in this report in the form of grey-tone plots, at a scale of +/- 4nT black/white. The plots have been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping (Fig 2). An interpretative overlay has been produced and is shown in Figure 3. The raw data is presented in Figure 4.

4 SURVEY RESULTS

The survey blocks were extended in the field to ensure that the edges of former quarrying were identified.

Several curvilinear anomalies were identified in the southern part of the survey area. They are magnetically weak and may represent enclosure ditches. A cluster of amorphous anomalies, scattered about the southern part of the survey area may indicate pits. No other archaeologically significant features were identified by the survey.

Medieval furrows, north to south and north-east to south-west, are evident in the southern survey block. However, later quarrying has removed them from the northern part of the survey area.

Two linear anomalies, north-west to south-east, of probable agricultural origin have been identified in the northern part of the survey area. They are visible on Google Earth although their purpose is unknown, they may represent drainage features.

Two areas of reinstated quarry have previously been recorded in the survey area. The geophysical survey succeeded in locating these boundaries. A former tramway used to run through the northern part of the survey area. Its projected line runs along the northern edge of the former quarrying and may account for the enhanced magnetic signal here.

A single pipeline was identified, aligned approximately south-east to north- west, in the centre of the field.

No other significant archaeological anomalies were detected.

5 CONCLUSION

The survey has detected possible undated enclosure ditches and pits and medieval ridge and furrow cultivation. No other significant archaeological features were identified.

BIBLIOGRAPHY

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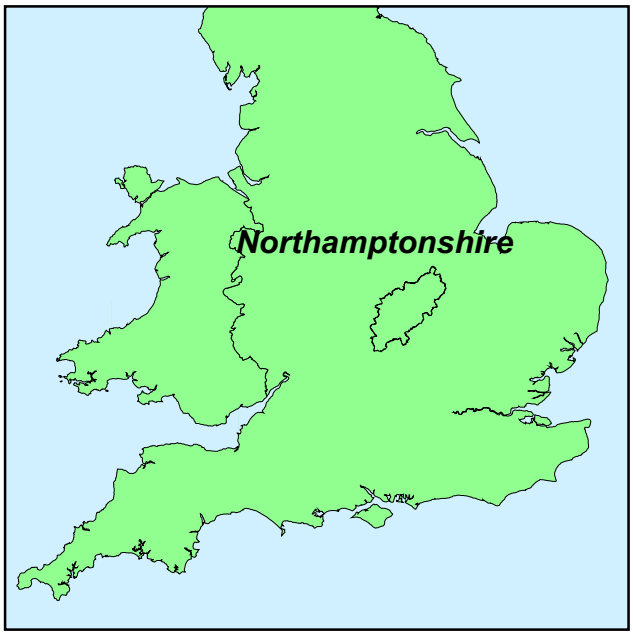
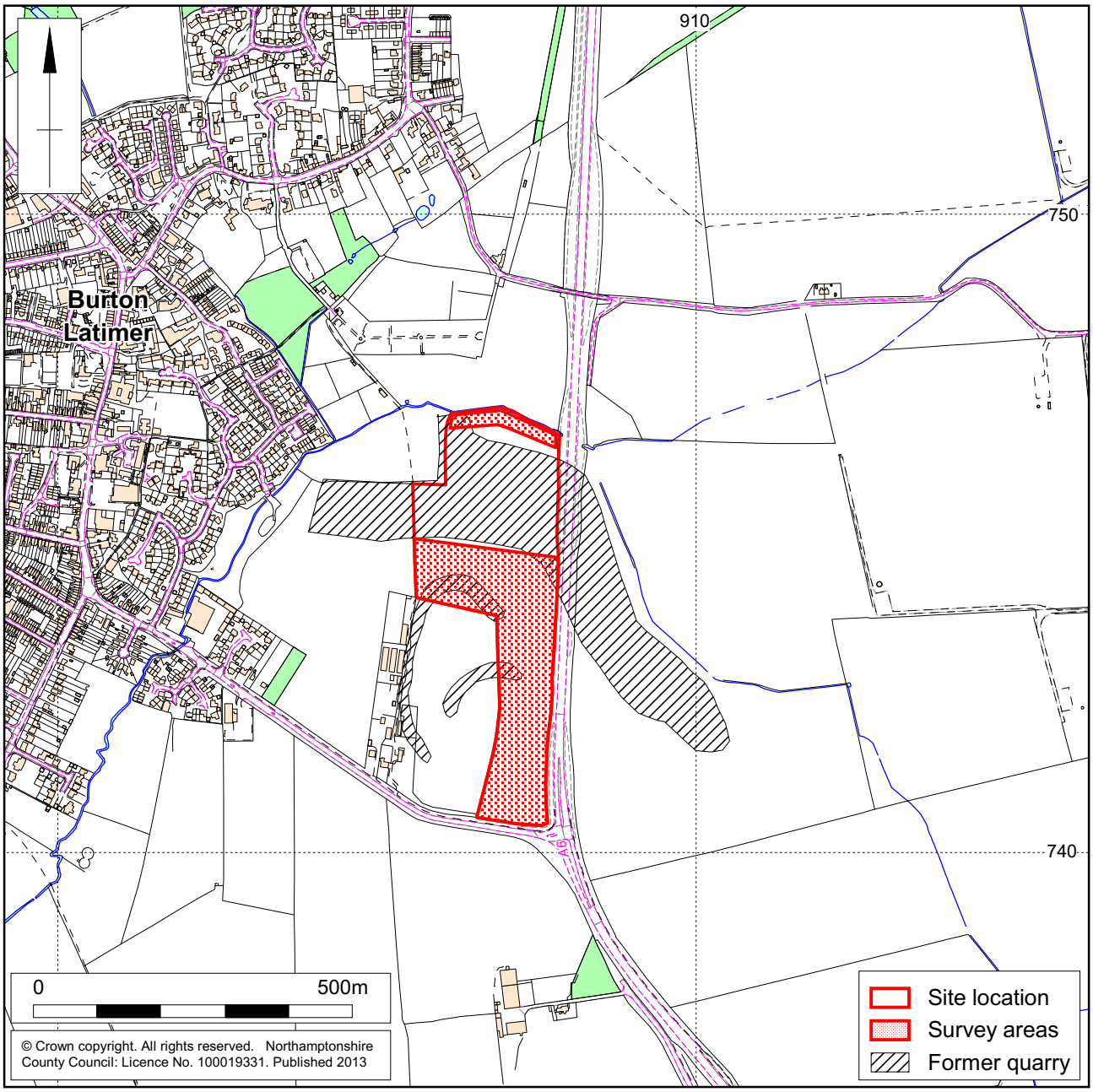


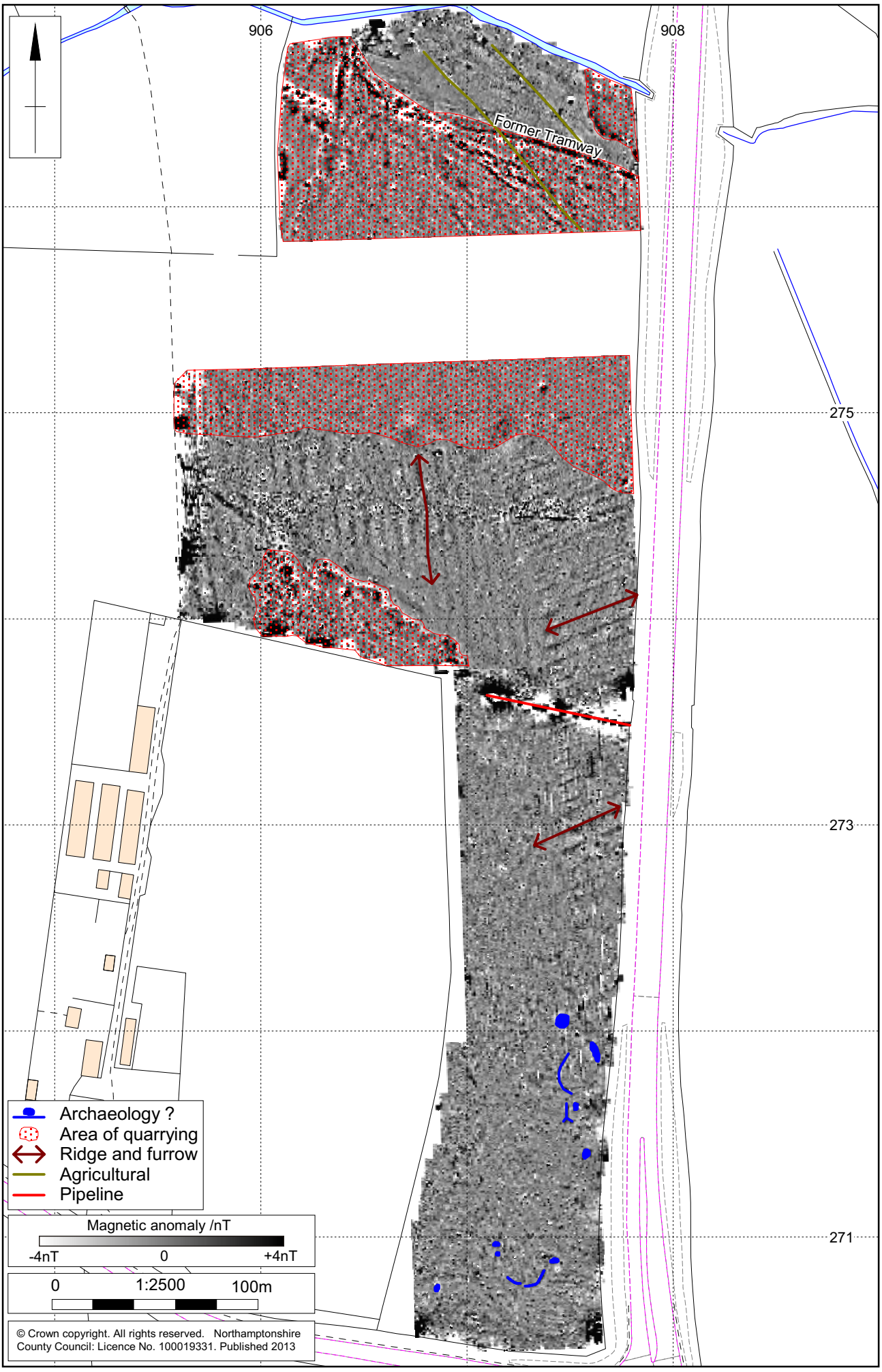


Scale 1:10,000

Site location Fig 1

1:2500 (A4)

Geophysical survey results Fig 2



1:2500 (A4)

Geophysical survey interpretation Fig 3

1:2500 (A4)

Geophysical survey raw data Fig 4

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