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# A11 D133 Hooton Pagnell

## Site information

**Site name:** Hooton Pagnell

**Site key:** D133

**Grid reference:** [SE 483 074] (centred on)

**Site type:** disused quarries, pits and cuttings

**Local authority:** Doncaster Metropolitan Borough Council, South Yorkshire

**Site dimensions:** 20 m x 3 m

**Site owner:** Trustees of MWA Warde – Norbury

**Conservation status:** Regionally Important Geological **Site Date:** 14/9/97

**Field surveyor:** Scott Engering **Date:** 19/2/07

## Stratigraphy and rock types

**Time unit:** Permian **Rock unit:** Wetherby Member, Cadeby Formation, Zechstein Group

**Rock type:** Dolostone **Details:** Orange sandy cross-bedded ooid-limestones. Reworked Yellow Sands Formation

## Site map

(Figure 56) — D133 Hooton Pagnell

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## Site description

Exposure of lowest beds of Wetherby Member of the Cadeby Formation comprising up to 2 m of well bedded flaggy, sandy, yellow limestone with coarser pisolitic beds overlying up to 2 m of massive, sandy, yellow shelly ooid-limestones. Exposed from [SE 48337 07434] to [SE 48352 07448].

The upper flaggy beds have similarities to those exposed at Hooton Pagnell Village Pound with successions of fine grained and coarse beds with erosional surfaces but are less well cemented and friable [SE 48341 07433] and where obviously sandy, especially to the northeast of the section, differential weathering is a prominent feature of these upper beds, with the occasional development of deeply weathered sandy pockets [SE 48350 40742]0). The weathering of these upper beds clearly distinguishes them from the lower ooid-limestone [SE 48352 07448].

There is no unfenced access to the exposure and the foot of the quarry face has brambles etc and like many similar sites suffers from rubbish, including a tyre and chairs.

The lower shelly ooid-limestones are uniform throughout their length and at [SE 48352 07448] there are remnants of a breccia on the rock face.

## **RIGS assessment of site value**

Ratings: 1–2 very poor; 3–4 poor; 5–6 acceptable/useful; 7–8 quite good; 9–10 very good/excellent; N/A not applicable; D/K don't know

### **Access and safety**

#### **Aspect/Description/Rating**

**Road access & parking** Parking on roadside for 3–4 cars next to field gate and public footpath. Rating: 5

**Safety of access** Access over fence and down moderately steep slope over relatively rough ground. Usual fieldwork conduct applies. Rating: 5

**Safety of exposure** Brambles and rubbish on vegetated rock spoil. Some undermining of small trees in soil horizon. Fieldwork conditions apply. Rating: 5

**Permission to visit** The Trustees of MWA Warde – Norbury, The East Office Hooton Pagnell, Doncaster DN5 7BW. Rating: 5

**Current condition** Vegetation and rubbish etc make access awkward but rock faces are largely free of vegetation and well exposed. Rating: 6

**Current conflicting activities** Rubbish disposal

**Restricting conditions** Private ownership. No collecting

**Nature of exposure** Quarried natural limestone escarpment

**Multiple exposures /prospect for trail** With permission, some potential with Watchley Crags, Hooton Pagnell Village Pound and possibly Brodsworth Hall

**Notes** Not suitable for general public but experienced field geologists will be used to the conditions

### **Culture, heritage & economic**

#### **Aspect/Description/Rating**

**Historic, archaeological & literary associations** Associations with local vernacular architecture. Rating: 6

**Aesthetic landscape** Limestone escarpment overlooking undulating Carboniferous topography. Quite good. Rating: 6

**History of earth sciences** Local interest only in study of base of Cadeby Formation and transitional sandy beds. Rating: 6

**Economic geology** Local economic significance only. Rating: 5

**Notes** Although not a large or significant quarry, its exploitation would have contributed to the development of Hooton Pagnell, an outstanding example of an estate village

### **Education and science**

**Surface processes** Weathering of sandy dolostone. Rating: 5

**Geomorphology** Limestone escarpment and Carboniferous dip and scarp topography to the west. Rating: 6

**Sedimentary** Cross bedded ooid-limestones and high content of sand provides evidence of transitional facies and reworking of sand dunes. Rating: 7

**Fossils** Not applicable. Rating: 0

**Igneous** Not applicable. Rating: 0

**Metamorphic** Not applicable. Rating: 0

**Tectonic: structural** Not applicable. Rating: 0

**Minerals** Not applicable. Rating: 0

**Stratigraphy** Good site for studying the transitional beds beneath the Cadeby Formation. Rating: 6

**Notes** A good research or field mapping site but not really suitable for the general public

### **Geodiversity value**

A very good site, for the rarity value, lithological variety and historic/industrial archaeological interests. Rating: 8

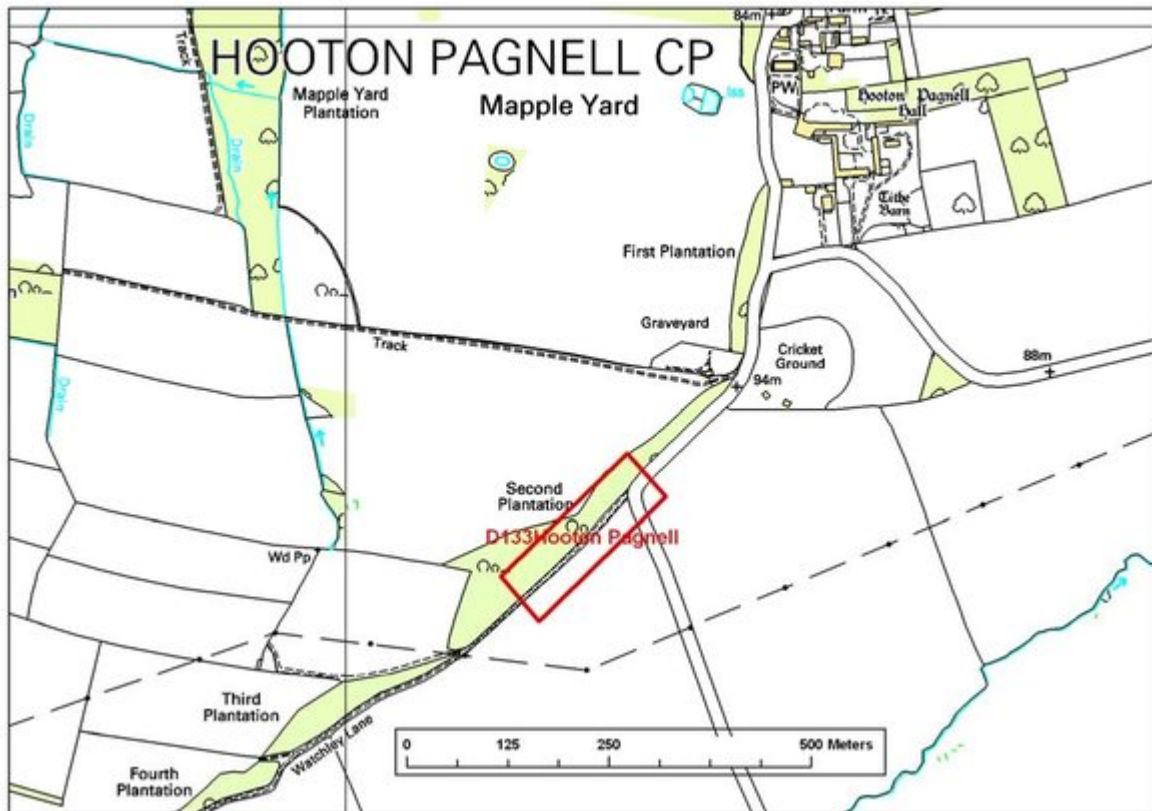
### **Site photographs D133 Hooton Pagnell**

(Figure 57) General view of old quarry face in the Wetherby Member along the limestone escarpment. [SE 48352 07448].

(Figure 58) Differential weathering between shelly ooid-limestones and overlying flaggy limestones in the Wetherby Member. [SE 48349 07443].

(Figure 59) Erosional surface between coarse pisolites and the underlying shelly ooid-limestones in the Wetherby Member. [SE 48341 07433].

(Figure 60) Sandy pockets within the flaggy limestones of the Wetherby Member. [SE 48345 07440].



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(Figure 57) General view of old quarry face in the Wetherby Member along the limestone escarpment. [SE 48352 07448].





*(Figure 58) Differential weathering between shelly ooid-limestones and overlying flaggy limestones in the Wetherby Member. [SE 48349 07443].*



*(Figure 59) Erosional surface between coarse pisolites and the underlying shelly ooid-limestones in the Wetherby Member. [SE 48341 07433].*





*(Figure 60) Sandy pockets within the flaggy limestones of the Wetherby Member. [SE 48345 07440].*