
Bm/5055/Drainstrat

Drainage Strategy, Land of Lancaster Lane, Brockholes

Report Date:
13 November 2020

Engineer:
Brian Menmuir

Introduction

Purpose of the Assessment

Holloway Jennings have been commissioned to undertake a Sustainable Drainage Strategy to support the planning application in respect of proposed residential development located off Lancaster Lane, Brockholes.

Site location and Description

The proposed development site is a greenfield site within an existing residential area, located to the east of Brockholes town centre. The existing site area covers approximately 0.33 ha. The site is all green space. Existing site access is via Lancaster Lane.

The existing site is roughly square shaped bounded by A616 to the west, Lancaster Lane to the east, potential development site to the north and open space to the south. The surrounding area is mainly residential uses with light industry to the north.

No drainage systems are currently installed on site, however, a main public surface water sewer runs through the open space directly south.

Development Proposals

The proposed development is for eight new residential units to be constructed along with associated access roads/paths. See attached drawings 5055 -\701ArchlevelE for locations and size of proposed developments.

Existing access to the site will be off Lancaster Lane. The entrance to Lancaster Lane off River Holme View will be upgraded to allow access to the development.

Drainage Management

See attached drawings 5055 -\601A for proposed drainage layout.

Surface Water

Due to the space restrictions on site a SUDs system capable of attenuating the surface water is unpractical. As such it is proposed to attenuate on site via a private drainage system and discharge into the existing sewer network via a flow regulated manhole. The proposals show new surface water discharges connecting into the existing public sewer on River Holme Road. The existing manhole on River Holme View will be relocated to allow the surface water connection. Where existing pipes are now redundant, they should be fully removed or grouted.

The new drainage system will be privately maintained and has been designed to accommodate the run-off rates for the 1:30 and 1:100+40% climate events within storage tanks under the non-adopted highway. The run-off is discharged to the existing sewer through a hydro-brake limiting discharge to 3.0l/s.

There are no alterations to the layout/fall of any existing drains which would affect discharge rates.

Foul Water

New private foul network is connected to the existing via a repositioned manhole on River Holme View. The extra volume of foul waste is not considered as excessive and will not impact on the existing system.

Highway Drainage

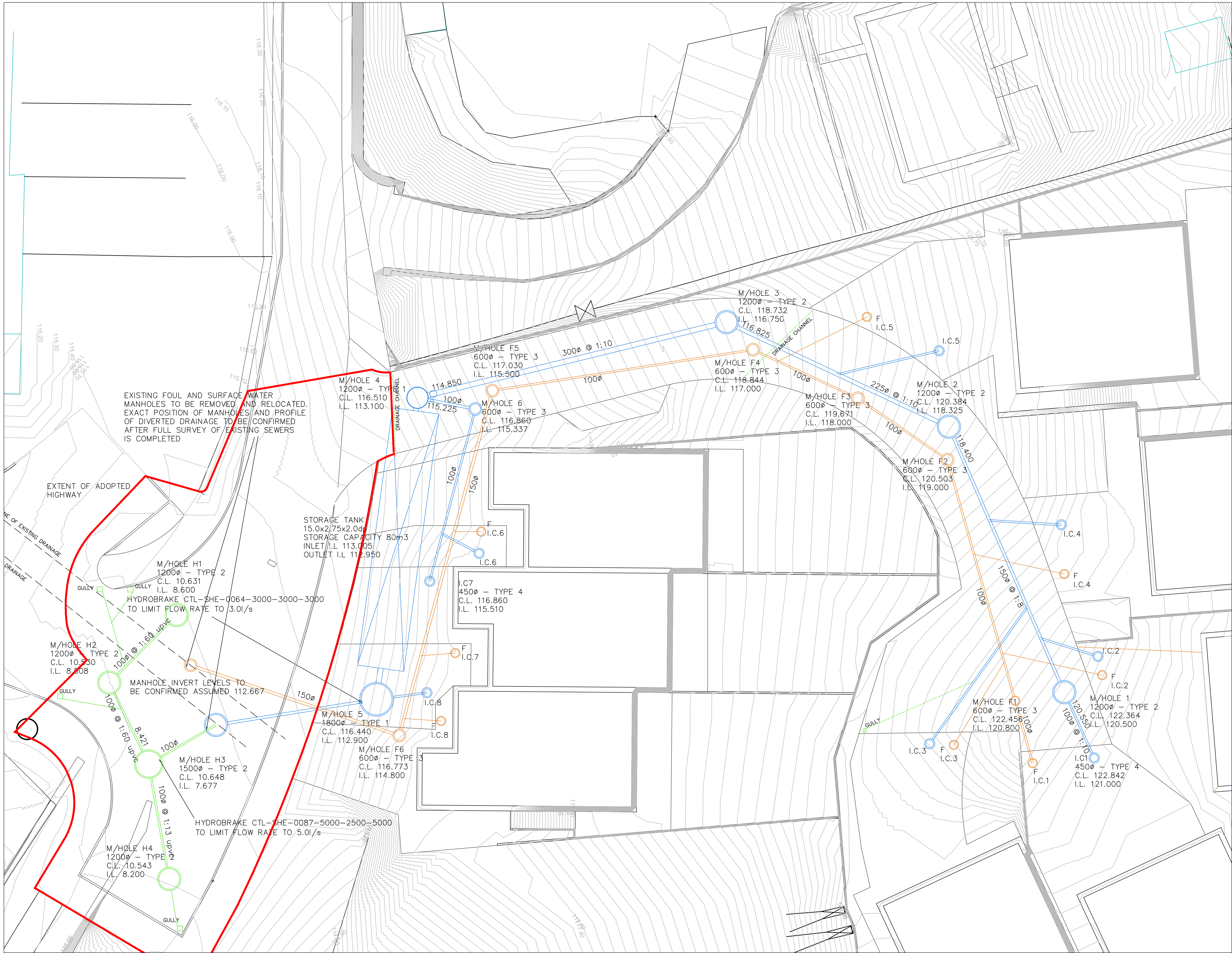
Highway drainage servicing the adopted highway has been designed to store run-off from 1:30 and 1:100+40% climate events. It is discharged into a relocated manhole on River Holme View via a hydro-brake limiting flow to 5.0l/s.

Maintenance

An on-going maintenance scheme will be agreed in regard to private systems.

Inspection Chambers and Gully Traps

It is recommended that the chambers/traps be inspected monthly for the first three months and thereafter at six monthly intervals. Emptying to be determined on site subject to silt collection rate.



Notes.

A	Adopted highway drainage added	16.11.2020		
REV	COMMENT	DATE	DRAWN	CHECK

Holloway Jennings

Consulting Engineers

Connaught House
Park View
Lothouse
Wakefield
West Yorkshire
WF3 3HA

Telephone: 01924 824 433
Facsimile: 0871 900 4243
email: admin@hjce.co.uk

DRAWING STATUS:

PRELIMINARY

CLIENT:

PROJECT:
**LANCASTER LANE
SOUTH SITE
BROCKHOLES**

TITLE:
PROPOSED DRAINAGE

DESIGNED: CHECKED: DRAWN:

SCALE: 1:1000
A1
DATE:
SEP 2020

PROJECT No: 5055
DRAWING No: 601
REV: A

