

EXISTING HIGHWAY DRAIN AND PROPOSED BELLMOUTH PROFILE
(SCALE H 1:1000, V 1:200)

 GULLY A WITH 150# CONNECTION (U.N.O) IN ACCORDANCE WITH WSCC DETAIL 5278/38/11 A
 HIGHWAY SURFACE WATER DRAIN 225# (U.N.O)
 EXISTING HIGHWAY DRAINAGE
 EXISTING LEVELS
 PROPOSED LEVELS

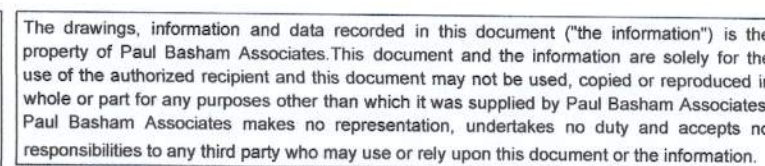


The catchment area and subsequent flow rate for each of the gullies have been calculated using the 'Rational Method' rate of flow calculation $Q = 2.78 \times R \times A_p$, where R = Rainfall at 75mm/hr and where A_p = the cumulative area in hectares

The total catchment area for the existing and proposed arrangement, using this existing section of highway drainage are as follows:

Existing total = 606m² (12.63l/s)
Proposed total = 1,139m² (23.74l/s)
Additional total = 533m² (11.11l/s)

Using the Colebrook White equation, the existing highway drain (525Ø @ 1:129) has capacity for a flow rate of 426l/s. The additional total catchment (11.11l/s) accounts for an increase of only 2.6% and demonstrates adequate capacity within the existing highway drainage system.



None of the below is deemed to relieve any contractor of his obligations under all applicable health and safety legislation.

In preparing the design shown on this and related drawings Paul Basham Associates has considered and, where reasonably practicable, eliminated foreseeable risks. Any further abnormal or unusual risks, which remain, are numbered below and identified thus  and should be given particular attention by all those carrying out construction or of future maintenance works.

1. HV Underground cables in area
- 2.
- 3.

GENERAL NOTES

1. THIS DRAWING IS INTENDED TO BE VIEWED IN COMBINATION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, SERVICES AND SPECIALIST DRAWINGS AND SPECIFICATION.
2. ANY VARIATIONS OR DISCREPANCIES BETWEEN THESE DRAWINGS IN TERMS OF DIMENSIONS OR DETAILS SHOULD BE DRAWN TO THE ATTENTION OF THE ARCHITECT AND/OR THE ENGINEER FOR CLARIFICATION.
3. PAUL BASHAM ASSOCIATES ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND INFORMATION PRODUCED BY THIRD PARTIES - THIS MUST BE TREATED AS INDICATIVE ONLY.
4. ALL DIMENSIONS AND LEVELS ARE IN METRES. DO NOT SCALE THIS DRAWING, PRINT, PLOT OR DISK.
5. THIS DRAWING SHOULD ONLY BE USED FOR CONSTRUCTION IF THE PROJECT PHASE IN THE TITLE FRAME BELOW IS SHOWN AS "CONSTRUCTION". PAUL BASHAM ASSOCIATES TAKE NO RESPONSIBILITY FOR CONSTRUCTION WORKS UNDERTAKEN TO DRAWINGS WHICH ARE NOT MARKED UNDER THIS PHASE.

HIGHWAY NOTES

1. WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE MANUAL OF CONTRACT FOR HIGHWAY WORKS (MCHW). IF THERE IS ANY AMBIGUITY BETWEEN THE SPECIFICATION AND THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER.
2. EQUILIBRIUM CBR VALUE FOR CARPARKWAY CONSTRUCTION TO BE AGREED ON-SITE FOLLOWING IN-SITU CBR TESTS. ALL EXCAVATIONS ARE SUBJECT TO THE CBR RESULTS.
3. TRAFFIC MANAGEMENT TO BE IN ACCORDANCE WITH CHAPTER 8 OF THE TRAFFIC SIGNS MANUAL AND RELEVANT CODES OF PRACTICE.
4. ALL LIVING AND SIGNING DIAGRAM NUMBERS REFER TO THE TRAFFIC SIGNS REGULATIONS & GENERAL DIRECTIONS 2016 (TSRGD2016).

EXISTING SERVICES

1. IT IS THE RESPONSIBILITY OF ANY ON SITE CONTRACTOR TO IDENTIFY AND LOCATE ANY UTILITY PLANT PRIOR TO CONSTRUCTION WORK BEING UNDERTAKEN.
2. THE INFORMATION PROVIDED ON THIS DRAWING ABOUT THE EXISTING UTILITY SERVICES IS BASED ON HISTORICAL RECORDS PROVIDED BY THE STATUTORY UTILITIES. THE ACTUAL POSITION AND STATUS OF ANY MAINS AND SERVICES MUST BE VERIFIED AND ESTABLISHED ON SITE. THIS DRAWING IS PROVIDED FOR INFORMATION ONLY.
3. CABLES TO STREET LIGHTING, ROAD SIGNS AND ILLUMINATED BOLLARDS ARE NOT SHOWN BUT MUST BE ASSUMED TO EXIST.

APPLICABLE WSCC STANDARD DETAILS

S278/38/02 B - APPROVED KERB TYPE SELECTION (SHEET 1)
S278/38/03 A - APPROVED KERB TYPE SELECTION (SHEET 2)
S278/38/04 B - FOOTWAY/CYCLEWAY (TYPE 1)
S278/38/09 B - SERVICE MARGINS
S278/38/11 A - DRAINAGE GULLY A - PRE-CAST CONCRETE
S278/38/18 A - STREET FURNITURE TACTILE CROSSINGS
S278/38/20 B - TIE-IN OPTIONS
S278/38/21 F - CARRIAGEWAY FLEXIBLE SPECIFICATION

NOT APPROVED

S278 DRAWING/DESIGN IS STILL 'SUBJECT TO LHA APPROVAL'
YOU ARE ADVISED TO MAKE DUE ALLOWANCE

B	- GULLY POSITIONS REVISED - GULLY CATCHMENT AREAS REVISED	05.04.18	EK	CL
A	- DRAINAGE/LEVELS REVISED - GULLY CATCHMENT PLAN ADDED	23.02.18	EK	CL
Rev	Description	Date	By	Chkd

Project Name
NYTON ROAD, WESTERGATE
Title
DRAINAGE LAYOUT - A29 FONTWELL AVENUE

Project Phase

DETAILED DESIGN

Checked By	Checked Date	Drawn By	Drawn Date
CL	11.10.17	BH	06.10.17

Client Drawing No.	Scale	
-	1:200	(AT A1 SIZE)