374/11r2

FLOOD RISK ASSESSMENT REPORT

AT

LONGCAR JUNIOR AND INFANT SCHOOL
LONGCAR LANE
BARNSLEY

ON BEHALF OF

STRATA GROUP LTD

JULY 2007

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1.0 INTRODUCTION

1.1 Strata Group Ltd are purchasing the site of the Longcar Junior and Infant School, off Longcar Lane, Barnsley with a view to redevelopment with residential properties. It was considered that a Flood Risk Assessment Report should be prepared to provide information for viability and planning purposes.

1.2 As part of the Planning Application, Planning Policy Statement PPS3 "Housing" clearly identifies flood risk as a specific material consideration in the allocation and release of sites for new housing. It is within the general development strategy of the Country for development in areas where there is a risk of flooding to be fully assessed to avoid unnecessary increase in the requirement of flood defence. Under Planning Policy Statement PPS25 "Development and Flood Risk", consultation should be undertaken with the Environment Agency, Land Drainage Authority and Water Authority and a Flood Risk Assessment Report should be prepared considering the development proposals.

1.3 ARP Associates have been appointed to carry out an assessment of the site, implement appropriate consultations and prepare a Flood Risk Assessment Report, in accordance with PPS25, to satisfy the requirements of the Planning Authority.

1.4 The consultations and walkover survey were carried out in July 2007.

2.0 WALKOVER SURVEY

General

2.1 The site is located to the south of Barnsley City Centre within a residential area, and is generally a rectangular site equating to an area of approximately 1.2ha. The Ordnance Survey Grid Reference is SE339 058.

2.2 A site location plan is presented in Appendix A.

Current Use

2.3 The site is currently occupied by school buildings of the Longcar Junior and Infant Schools with adjacent playground areas, particularly towards the south of the site. Longcar Nursery is located to the southeastern corner at a level lower than the remaining part of the site. There is a retaining wall between the two sections of the site.

2.4 To the north and northeastern sides of the site, there are grassed playing areas which are lower than the main School, and there is a retaining wall accommodating this difference in level. A level playground area is adjacent to the school and above the grassed areas.

2.5 The general slope of the land is mainly from south to north, but also west to east.

Boundaries

2.6 The site is bounded by Longcar Lane to the south and Racecommon Road to the west. The boundaries to both roads are formed by both walls and steel fencing. The northern boundary abuts Willow Street which is a non vehicular highway road, and this is several metres below the level of the site. This boundary has a small brick retaining wall with steel fencing above. The eastern boundary abuts rear gardens to the adjacent residential area and is formed by walls and steel fencing. A culverted watercourse is known to be located along the eastern boundary.

Drainage

2.7 All the buildings on the site have positive drainage with gutters discharging via rainwater downpipes to gulley systems. There are also gullies in the hard paved yard areas and several manholes are present. It is clear that there is a positive underground system for draining of surface water from the buildings and hard paved areas.

2.8 The general topography of the area shows a fall in level from south to north towards Barnsley City Centre, and any surface water run-off will be in this direction.

3.0 ENVIRONMENT AGENCY CONSULTATION

3.1 A formal consultation was requested from the Environment Agency, but, at the time of writing the report, this had yet to be received.

3.2 Assessing the Environment Agency Website, this shows that the site is located outside any potential flood plain and will be located in Flood Zone Category 1. There will be little evidence of any flooding on the site.

3.3 A copy of the Flood Zone Map from the website is presented in Appendix B.

3.4 In view of the above, it is highly unlikely there will be any restriction on construction levels or other mitigation measures in relation to flooding.

4.0 DRAINAGE AUTHORITY CONSULTATION

4.1 A consultation was requested from Yorkshire Water, who are the Drainage Authority for the area, and a copy of their response, reference H006355 dated 4th July 2007, is presented in Appendix C for reference.

4.2 The Local Waste Water Treatment Works (WWTW) is Lundwood and it is understood that this may have limited spare capacity. Further information is being obtained by Yorkshire Water, and this will be presented in due course. However, the replacement of the existing School site with residential development is unlikely to cause any significant increase in foul flow to the WWTW.

4.3 Foul water can discharge to the 450mm diameter public foul/combined sewer in Racecommon Road and the 225mm diameter public foul/combined sewer in Clarendon Street.

4.4 In respect of surface water, reference is made to Requirement H3 of Building Regulations 2000, and the possibility of using sustainable drainage systems. However, Yorkshire Water will allow surface water discharge to the public sewer provided there is no greater discharge than exists at the present time. It will be necessary to demonstrate a positive drainage system to the sewer, and either obtain appropriate drainage layouts or carry out a drain trace to prove the connection. Calculations will need to be submitted for agreement.

4.5 If no such information is available, then surface water discharge can connect to the 225mm diameter public surface water sewer in Racecommon Road and the 150mm diameter public surface water sewer in Clarendon Street, provided discharge is restricted to 3l/s in each case.

5.0 LAND DRAINAGE AUTHORITY CONSULTATION

5.1 A consultation was requested by Strata Group Ltd from Barnsley Metropolitan District Council, who are the Land Drainage Authority for the area, and a copy of an e-mail response dated 14th May 2007, is presented in Appendix D for reference purposes.

5.2 This identifies the location of a 375mm diameter watercourse, along the eastern boundary.

5.3 The watercourse is known to have caused flooding in the past and no free discharge of surface water from the proposed development will be acceptable. Therefore, an investigation must be undertaken to demonstrate that the existing surface water system connects to the watercourse and that a reduction in outflow rates of 30% will be required to assist with flood alleviation.

5.4 If the site does not currently discharge to the watercourse, then flows are to be restricted to agricultural levels of run-off at a maximum rate of 4l/s/ha.

5.5 No buildings shall be erected within 3m of the watercourse.

6.0 MATERIAL CONSIDERATION IN RESPECT OF PPS25

6.1 Climatic Change

Annex B of PPS25 indicates that winters will become wetter over the whole of the UK, by as much as 20% by the 2050's. A shift in the seasonable pattern of rainfall is also expected, with summers and autumn becoming much dryer than at present. In making an assessment of impacts of climate change on flooding from land, rivers and sea Table B.2 indicates that the peak rainfall intensity for developments likely to extend to between 2055 and 2085 is 20% and peak river flow between 2025 and 2115 is also expected to rise by 20%. If development is expected to extend past 2085, then a 30% peak rainfall intensity should be considered.

The site is surrounded by residential development and adopted highways which will have positive drainage systems, and, therefore, there will be no run-off into the development from outside the site boundaries. Therefore, in this case, climatic change will only be considered within the site area.

The latest published information in PPS25 shows that a 20% increase of rainfall should be allowed for the life of the development. Therefore, the proposed positive drainage system on the site shall be designed to accommodate the proposed run-off, plus 20% increase in rainfall for climatic change.

Subject to making an allowance for climatic change in the proposed drainage strategy, then the requirements of PPS25 in this respect will be satisfied.

6.2 Flooding

The site is shown to be located in Flood Zone 1, in accordance with PPS25, and there will be low risk of flooding on the site. Consequently, the site satisfies the Sequential Test of PPS25, and there is no requirement to impose the Exception Test in this instance. Therefore, no mitigation measures are required in relation to flooding matters.

The site satisfies the requirements of PPS25 in respect of flooding.

6.3 Surface Water Discharge

It is a requirement to ensure that surface water run-off from any proposed development has negligible consequence on downstream areas either in sewer capacity or discharge to watercourse.

It will be necessary to consider the possibilities of sustainable drainage systems on the site, but it is known that, in terms of geology, the area is located within the Coal Measures and the natural strata are likely to be a combination of clays, mudstones and sandstones with some coal seams present. It is highly unlikely that the surface strata will be permeable, and the relatively steeply sloping characteristics of the site may cause problems with water levels to downstream properties. Consequently, it is highly unlikely that sustainable drainage systems will be a suitable solution on this site.

The existing buildings and hardstandings have a positive drainage system and a Drainage Investigation Report was undertaken by Environmental Drainage Solutions Ltd for Strata Homes, and a copy is presented in Appendix E for reference purposes. This shows that the majority of the hardstandings drain to the watercourse along the eastern boundary, although some of the buildings (D, F and part of A) connect to the combined system on the site with connection to the public 450mm diameter combined sewer in Racecommon Road. Calculations show that 0.25ha of impermeable area drains to the watercourse and 0.39ha connects to the adopted sewer system. If an allowance of 50mm/hr rainstorm is assumed, then the discharge on this basis will be 35l/s to the watercourse and 54l/s to the sewer. As the existing drainage system has a free discharge, this calculation should reduce the existing run-off by at least 30% from the present situation and should satisfy any requirements of the Environment Agency and the Land Drainage Authority in this respect.

A copy of the proposed layout is presented in Appendix F, and this shows that the impermeable area is approximately 5850m². Making an allowance of 20% increase in rainfall for climatic change, and that the eastern third of the development will discharge to the watercourse and the western two thirds to the sewer, indicative calculations show that an attenuation of 20.4m³ will be required for discharge to the watercourse for a 1 in 100 year storm, which equates to 18m of 1.2m diameter pipe or equivalent. Indicative calculations for connection to the sewer shows that an attenuation of 31.7m³ would be required for a 1 in 30 year storm, equating to 28m of 1.2m diameter pipe or equivalent.

It will be necessary to prepare detailed calculations to justify the existing discharge rate and the proposed attenuation, and these will need to be submitted to the Planning Authority and Yorkshire Water, under a Section 104 Agreement of the Water Industry 1991, for approval.

Subject to issue of detailed calculations of the existing discharge and proposed drainage scheme to the Regulatory Authorities for approval, and an allowance is made for climatic change, then the requirements of PPS25 in respect of surface water run-off and discharge will be satisfied.

6.4 Emergency Egress During Times of Flood

It is a requirement under Planning Policy Statement PPS25 that occupants should be able to egress any building during times of flood, without being trapped by flood conditions.

As the site falls within Flood Risk Zone 1 and has low risk chance of flooding, then there is no requirement to provide special mitigation measures in respect of emergency egress in this instance, and the requirements of PPS25 are, therefore, satisfied.

7.0 COMMENT

7.1 The site falls within Flood Zone Category 1, and there are no mitigation measures required in respect of flooding.

7.2 A climatic change for a 20% increase in rainfall should be allowed in any drainage calculations.

7.3 The existing drainage assessment shows connection to both the watercourse on the eastern boundary and the combined sewer in Racecommon Road from the development. Calculations for the existing run-off and discharge rates should be prepared and issued for the approval of the Planning Authority and Yorkshire Water.

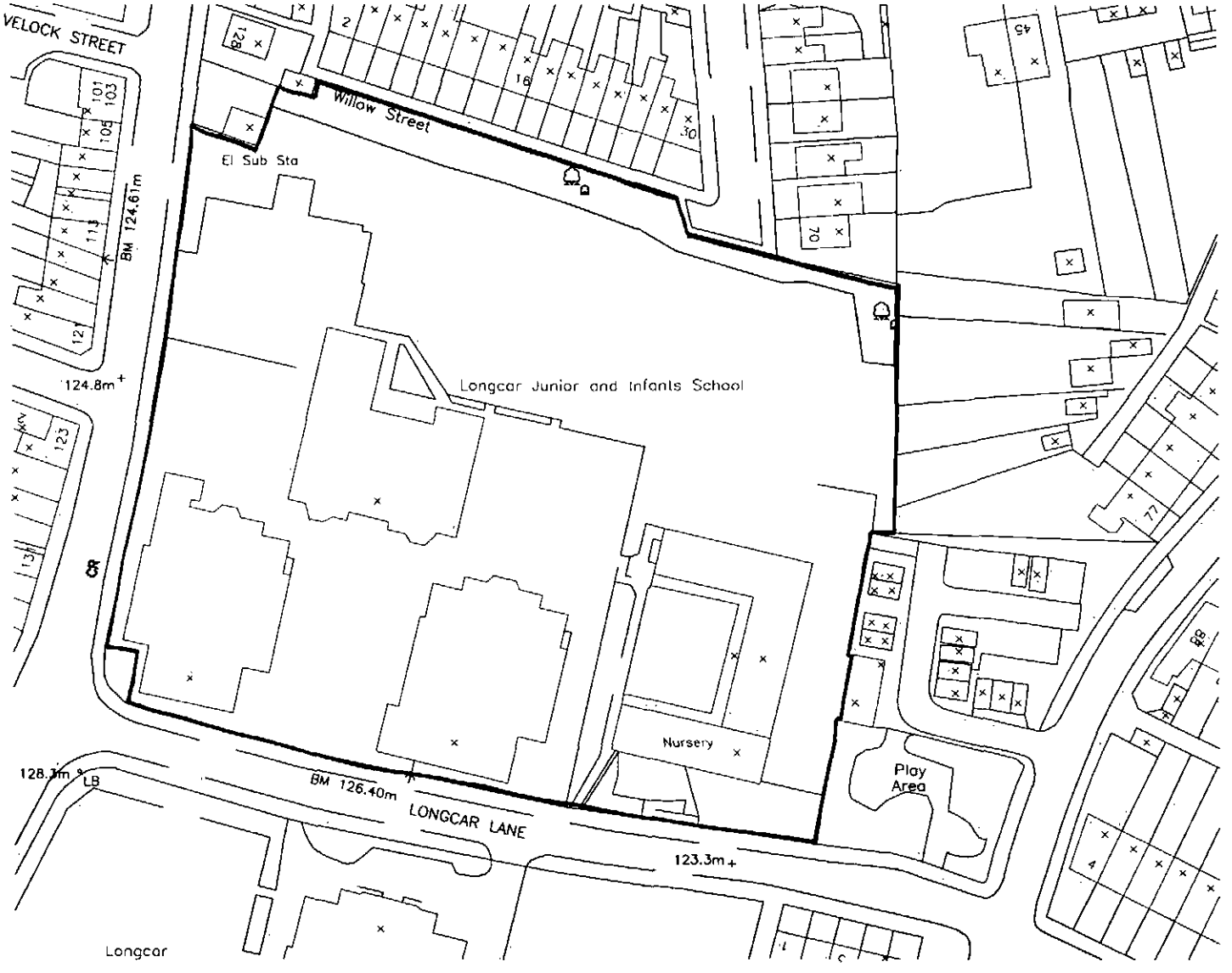
7.4 A surface water attenuation will be required for the proposed drainage on the site for the discharge restricted to the existing run-off, and the details submitted to the Planning Authority and Yorkshire Water for approval. The Developer will enter into a Section 104 Agreement of the Water Industry 1991 with Yorkshire Water.

7.5 There are no mitigation measures required for emergency egress in this instance.

7.6 Subject to compliance with the above, the proposed development satisfies the requirements of Planning Policy Statement PPS25 'Development and Flood Risk'.

APPENDIX A

SITE LOCATION PLAN



Rev	By	Date	Amendment	Chk
	MW		Issued for construction	

Project: LONGCAR JUNIOR AND INFANT SCHOOL, BARNSLEY

Client: STRATA GROUP LTD

Title: SITE LOCATION PLAN

ARP ASSOCIATES
CHARTERED CONSULTING ENGINEERS
Northwest House • 5/6 Northwest Business Park • Servia Hill • Leeds LS6 2QH
Tel: 0113 2458486 • Fax: 0113 2443964 • E-Mail: Leeds@arpassociates.co.uk

Date	JULY 07
Drawn	MW
Chk.	ARP
Scale	NTS
No	374/1.1/FR.01
Rev	

APPENDIX B

ENVIRONMENT AGENCY FLOOD ZONE PLAN

Maps

Maps
How to use the flood map
What to do in a flood
Current flood warnings
Flood risk and home insurance
Your questions answered

Search for another location:

Search for:

Placename
Postcode
Search

Overview map :



See also...

New development
Terms and conditions of use

Interactive Map :

Click on Learn more, then click the symbol or area on the map to see more information.

Click on the map to ...
Zoom Learn more

Current map scale: 1:20,000



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APPENDIX C

DRAINAGE AUTHORITY CONSULTATION

YorkshireWater

ARP
CHARTERED CONSULTING ENGINEERS
RECEIVED
6 - JUL 2007
REF NO 9494
CHP
APP
374/05

Yorkshire Water
New Development Team Sewerage
Western House
Halifax Road
PO Box 500
Bradford
BD6 2LZ

Tel: (0845)1242429
Fax: (01274) 372 834

Email:
Planning.Sewerage@yorkshirewater.co.uk

For telephone enquiries ring:

Philip Hoffmann on (0845)1242429

ARP Associates
5/6 Northwest House
Northwest Business Park
Servia Hill
LEEDS
LS6 2QH

For the attention of Allan Poyser

Your Ref: 374/05
Our Ref: H006355 /ndt-sew/peh

4th July 2007

Dear Sir,

Land at Longcar Junior and Infants School, Longcar Lane, Barnsley - Pre-Planning Sewerage Enquiry - Residential Development

Thank you for your enquiry of 18th June 2007. Our charge of £60.00 (plus VAT) will be added to your account with us, reference ARP 013. You will receive an invoice for your account in due course.

Please find enclosed a complimentary extract from the Statutory Sewer Map. This indicates the recorded position of the public sewers. The following comments reflect our view, with regard to the public sewer network only, based on a 'desk top' study of the site:

The local Waste Water Treatment Works (WWTW) is Lundwood, It is understood that this WWTW may only have limited spare capacity, if any, available. We have contacted the Area Asset Manager for more information regarding the proposed development and will contact you when an assessment has been made.

Development of the site should take place with separate systems for foul and surface water drainage. The separate system should extend to the public sewer.

Foul water should discharge to the 450mm diameter public foul/combined water sewer recorded in Racecommon Road at a point adjacent to the site, and the 225mm diameter public foul/combined water sewer in Clarendon Street at a point approximately 15 metres from the site.

The developer's attention is drawn to Requirement H3 of the Building Regulations 2000. This establishes a preferred hierarchy for surface water disposal. Consideration should firstly be given to discharge to soakaway, infiltration system and watercourse in that priority order.

Sustainable Drainage Systems (SUDS), for example the use of soakaways and/or permeable hardstanding etc., may be a suitable solution for surface water disposal appropriate in this situation. You are advised to seek comments on the suitability of SUDS in this instance from the appropriate authorities.

Where appropriate, soakaways, swales and infiltration trenches (SUDS) may be adopted as part of the public sewer network. For general conditions for the adoption of SUDS please see the attached sheet. Further information may be seen in the DEFRA publication 'Interim Code of Practice for Sustainable Drainage Systems' (ISBN 0-86017-904-4). If the developer is considering adoption of SUDS he should contact our New Development Team at Sheffield on 0845 124 24 29.

The local public sewer network does not have capacity to accept any additional discharge of surface water from the proposal site. The developer is advised to contact the local Land Drainage Authority with a view to establishing a suitable watercourse for discharge. It is understood that a culverted watercourse is located along the eastern boundary of the site.

Surface water discharges to the public sewer will be restricted to the level of run-off - i.e. same rate of discharge - to that from the existing/previous use of the site. To maintain the "status quo" in the public sewer network, any discharge of surface water from the site should take place with similar rates of flow and/or measured areas discharging to similar points of connection to that of the existing/previous use of the site. You will need to demonstrate positive drainage to the public sewer to Yorkshire Water by means of investigation and calculation carried out at your expense. To do this, Yorkshire Water requires to see previous drainage layouts with pipe sizes, gradients and connection points, proposed drainage layouts with pipe sizes, gradients and connection points, measured impermeable areas of the previous use of site and the proposed use of site, along with the calculations that show the previous discharge rate from the site to the public sewer and the proposed discharge rate from the site to the public sewer.

Failing this, the surface water discharge from the site to the shallow 225mm diameter public surface water sewer in Racecommon Road and the 150mm diameter public surface water sewer in Clarendon Street to be restricted to not greater than 3 (three) litres/second in each case.

Off-site sewerage may be required which may be provided by the developer and considered for adoption under Section 104 of the Water Industry Act 1991. Please telephone 0845 124 24 29 for advice on sewer adoptions. Alternatively, the developer may in certain circumstances be able to requisition off-site sewers under Section 98 of the Water Industry Act 1991 for which an application must be made in writing. For further information, please telephone 0845 124 24 29.

Prospectively adoptable sewers must be designed and constructed in accordance with the WRc publication "Sewers for Adoption - a design and construction guide for developers" 6th Edition as supplemented by Yorkshire Water's requirements, pursuant to an agreement under Section 104 of the Water Industry Act 1991. An application to enter into a Section 104 agreement must be made in writing prior to any works commencing on site. Please contact our New Development Team at Sheffield (telephone 0845 124 24 29) for further information.

The public sewer network is for domestic sewage purposes. This generally means foul water for domestic purposes and, where a suitable surface water or combined sewer is available, surface water from the roofs of buildings together with surface water from paved areas of land appurtenant to those buildings. Land and highway drainage have no right of connection to the public sewer network. Land drainage will not be allowed into a public sewer. Highway drainage, however, may be accepted under certain circumstances; for instance, if SUDS are not a viable option and there is no highway drain available and if capacity is available within the public sewer network. In this event, the developer will be required to enter into a formal agreement with Yorkshire Water Services under Section 115 Water Industry Act 1991 to discharge non-domestic flows into the public sewer network.

Any new connection to an existing public sewer will require the approval of Yorkshire Water. You may obtain an application form by telephoning 0845 124 24 29.

All the above comments are based upon the information and records available at the present time. The information contained in this letter together with that shown on any extract from the Statutory Sewer Map that may be enclosed is believed to be correct and is supplied in good faith. Please note that capacity in the public sewer network is not reserved for specific future development. It is used up on a 'first come, first served' basis. You should visit the site and establish the line and level of any public sewers affecting your proposals before the commencement of any design work.

Yours faithfully,

[redacted]



Date Requested :

Date Generated : 04 JUL 2007

Source : NR - No recorded depth.

UPN:

Originator:

(Ody) Based upon Ordnance Survey map data with the permission of the Controller of Her Majesty's Stationery Office, (c) Crown Copyright. Licence No. WU296561.

Whilst every effort is made to ensure that the information shown on this plan is supplied as a general guide only and no warranty as to its accuracy or completeness is given or implied. This plan must not be relied upon in the event of excavations or other works in the vicinity of public sewers. No house or property connections are shown.

Extract from Statutory Sewer Map

Location: Barnsley

Scale: ~~1/500~~ ~~1/1000~~ 1/1250 ~~1/2500~~

W/S Ref: H006355 1PEH

Sheet: 1 of 1

APPENDIX D

LAND DRAINAGE AUTHORITY CONSULTATION

Allan Poyser

From: Daniel Milner [DanielMilner@homesbystrata.com]
Sent: Tuesday 17 July, 2007 2:35 pm
To: Allan Poyser
Subject: FW: Longcar Junior School

Alan,

Barnsley MBC response to discharge into culvert.

Regards
Dan

From: Kilner , Steve [mailto:SteveKilner@Barnsley.gov.uk]
Sent: 14 May 2007 16:44
To: Daniel Milner
Cc: Atkins , Wayne
Subject: FW: Longcar Junior School

Hi Dan, standard response for this site as follows.

I attach a copy of a plan which shows the approximate location of the 375mm diameter watercourse described by Yorkshire Water. Please note that this information is given in good faith, and the Council can accept no liability in the event of any inaccuracy.

This watercourse is known to have caused flooding in the past, so no free discharge will be acceptable.

I would make the following response with respect to discharge rates.

1. If it can be demonstrated that the existing surface water system serving the site connects into this watercourse, a reduction in outflow rates of 30% will be required to assist with flood alleviation and to take account of future changes in rainfall patterns.
2. If the site does not currently discharge into the watercourse, flows must be restricted to agricultural levels of run off, at a maximum rate of 4 litres/second/Hectare.

A Flood Risk Assessment as required by Planning Policy Statement 25 will be required with any Planning Submission

A minimum clearance of 3 metres from any structure will be included as a Condition on any planning approval.

Hope this helps

Regards

Steve Kilner

Principal Engineer

Environmental Services Directorate,
Highways and Engineering

Tel: 01226 772116 Fax: 01226 772196
email: stevekilner@barnsley.gov.uk

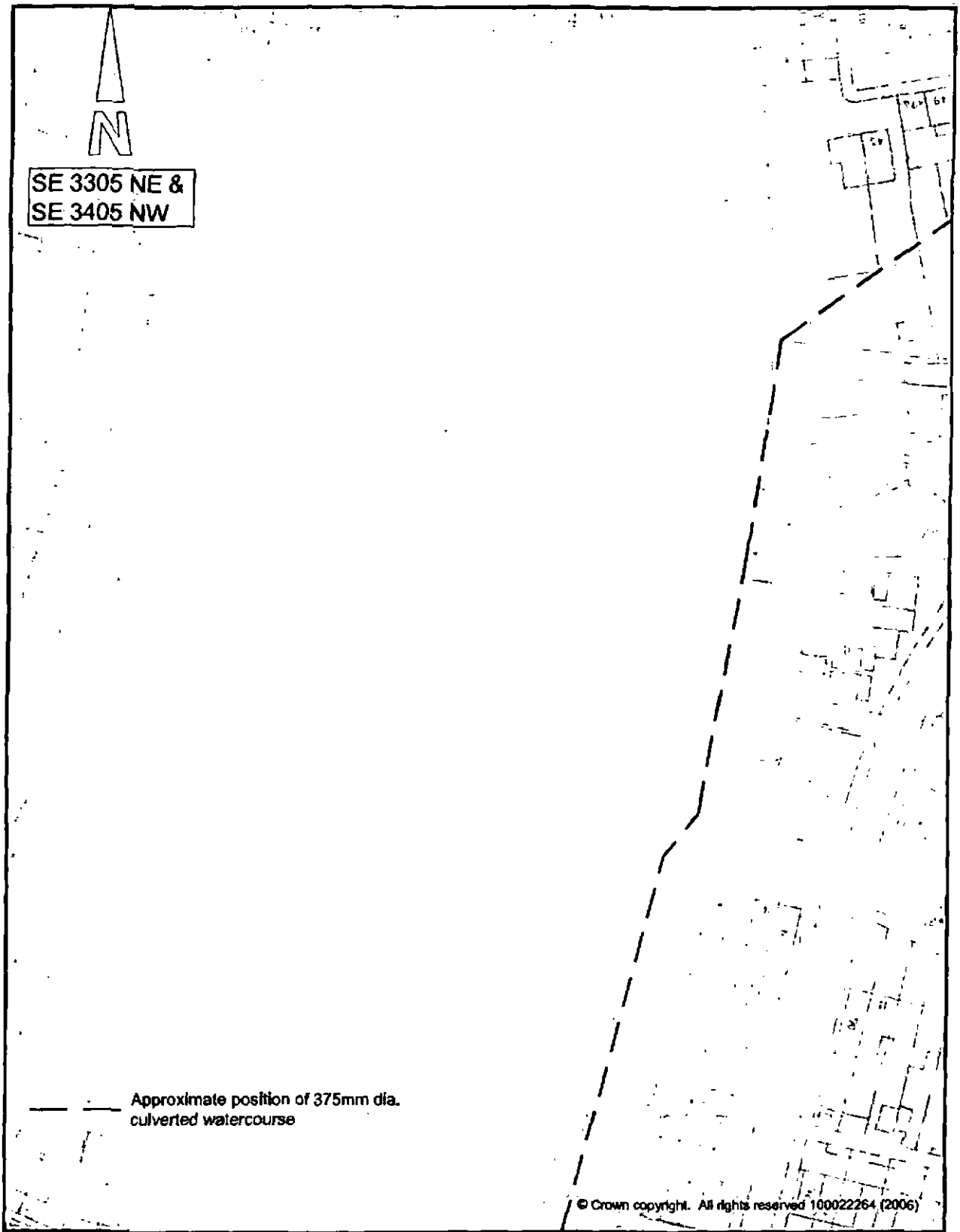
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BARNSLEY
Metropolitan Borough Council

Drawing
LONGCAR JUNIOR SCHOOL
CULVERTED WATERCOURSE LOCATON

Scale	
1/1000	
Drawn: W.A.	Date: MAY 07
Checked: S.Ki.	File:

A.J. Carnall BSc., M.Eng., M.I.C.E., M.I.H.T.,
Assistant Director, Highways & Engineering,
Central Offices, Kendray Street,
Barnsley S70 2TN.
Tel. (01226) 770770 Fax. (01226) 772222

Drawing No.
DRAWING NO. 1

APPENDIX E

DRAINAGE INVESTIGATION REPORT

DRAINAGE INVESTIGATION REPORT

CLIENT Strata Homes Ltd

SITE LONGCAR JUNIOR AND INFANT SCHOOL

DATE 14/05/2007 JOB No. JS1986

Comprehensive Site Surveys

Drainage Rehabilitation

Pipeline and Ancillary Installation

Maintenance Programme Appraisal & implementation

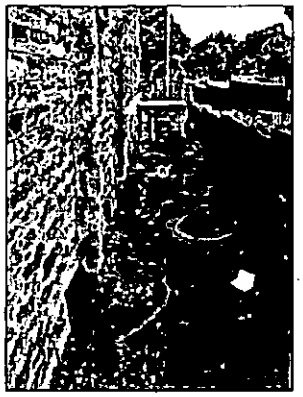
CORUS MILLS, SHEFFIELD RD, S60 1BN
Telephone 0845 2300 939 Facsimile : 0845 2300 949
email: cctv@eds.uk.net www.eds.uk.net

drainage solutions ltd

LONGCAR SCHOOL, BARNSLEY



Title: GP01
Date: 14/05/07
Description: NURSERY - LONGCAR LANE SIDE



Title: GP02
Date: 14/05/07
Description: NURSERY - LONGCAR LANE SIDE



Title: GP03
Date: 14/05/07
Description: EDS20



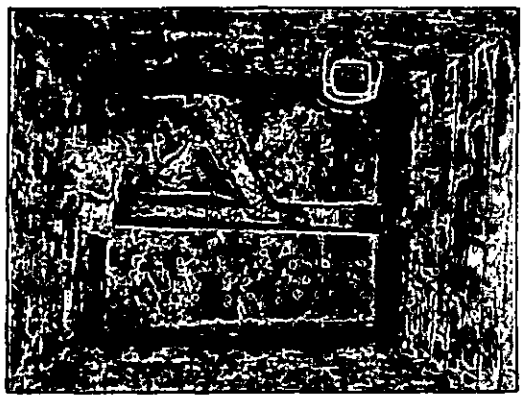
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Date: 14/05/07
Description: EDS20

GENERAL PHOTOS

LONGCAR SCHOOL, BARNSLEY



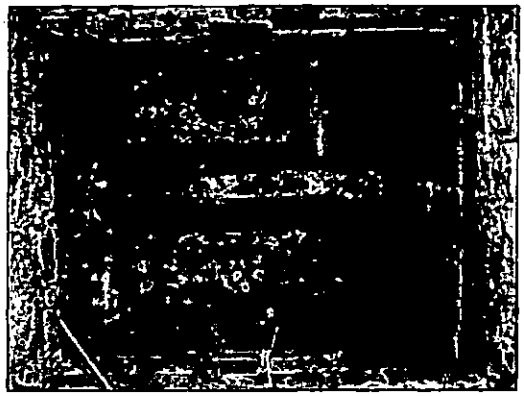
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Date: 14/05/07
Description: EDS20 LOCATION



Title: GP06
Date: 14/05/07
Description: EDS21



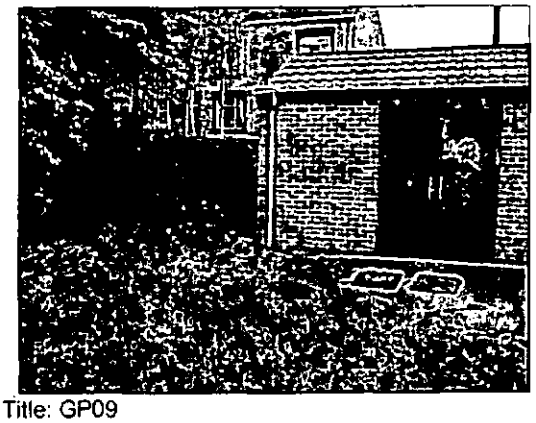
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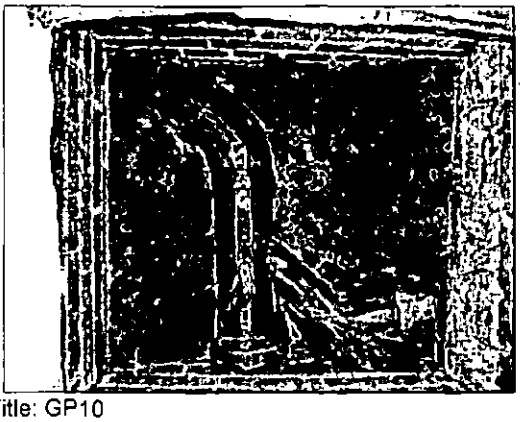
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Description: EDS28

GENERAL PHOTOS

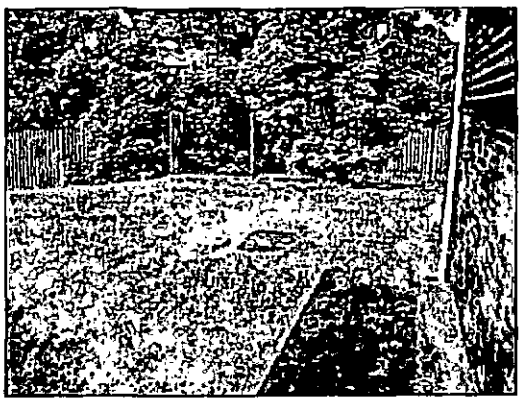
LONGCAR SCHOOL, BARNSLEY



Title: GP09
Date: 14/05/07
Description: EDS28



Title: GP10
Date: 14/05/07
Description: EDS25



Title: GP11
Date: 14/05/07
Description: EDS25



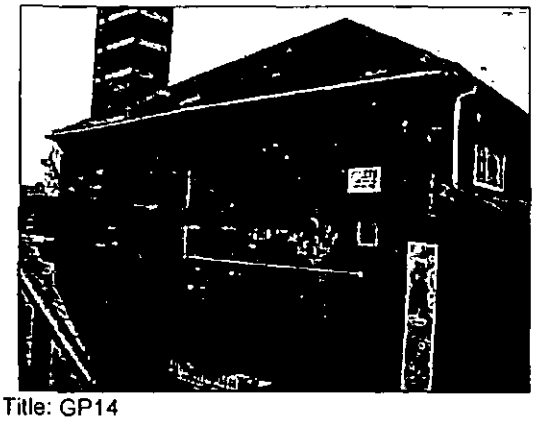
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Description: APPROX LINE OF W/C

GENERAL PHOTOS

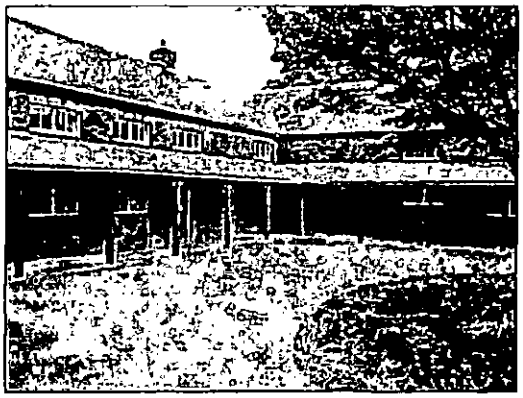
LONGCAR SCHOOL, BARNSLEY



Title: GP13
Date: 14/05/07
Description: NURSERY - SW TO EDS25



Title: GP14
Date: 14/05/07
Description: NURSERY -SW TO EDS25



Title: GP15
Date: 14/05/07
Description: NURSERY - SW TO EDS25



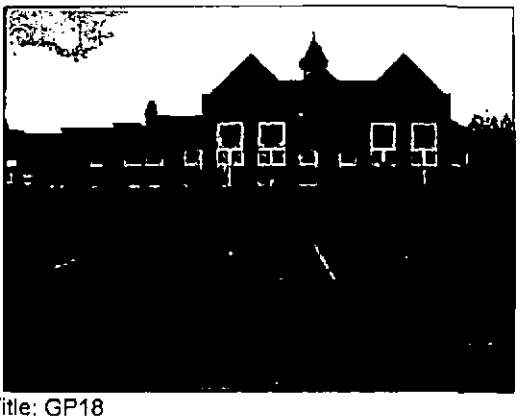
Title: GP16
Date: 14/05/07
Description: NURSERY - SW TO EDS25

GENERAL PHOTOS

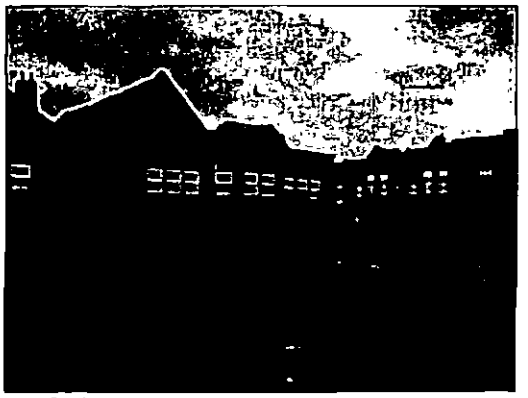
LONGCAR SCHOOL, BARNSLEY



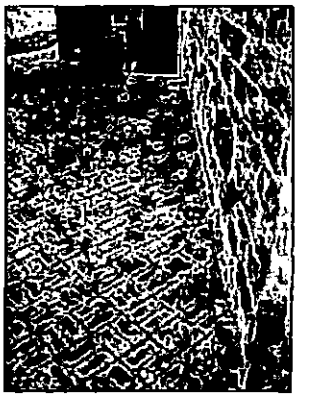
Title: GP17
Date: 14/05/07
Description: NURSERY - SW TO EDS25



Title: GP18
Date: 14/05/07
Description: VIEW OF BUILDING A FROM EDS1



Title: GP19
Date: 14/05/07
Description: VIEW OF BUILDING C FROM EDS1



Title: GP20
Date: 14/05/07
Description: EDS31

GENERAL PHOTOS

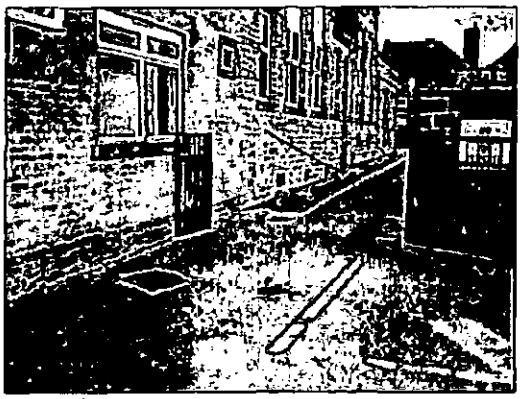
LONGCAR SCHOOL, BARNSLEY



Title: GP21
Date: 14/05/07
Description: EDS31



Title: GP22
Date: 14/05/07
Description: EDS30 TO PU IN RACE COMMON RD



Title: GP23
Date: 14/05/07
Description: EDS29



Title: GP24
Date: 14/05/07
Description: EDS15

GENERAL PHOTOS

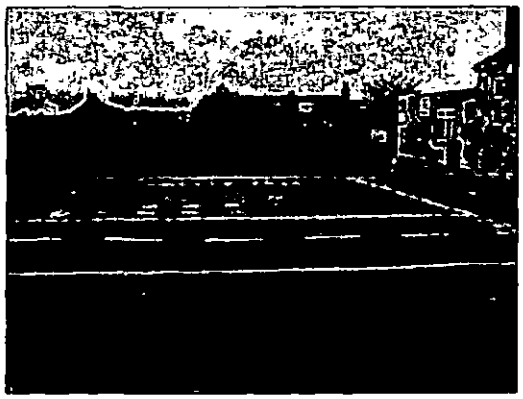
LONGCAR SCHOOL, BARNSLEY



Title: GP25
Date: 14/05/07
Description: EDS16, 17 & 18



Title: GP26
Date: 14/05/07
Description: EDS18, 17 & 16



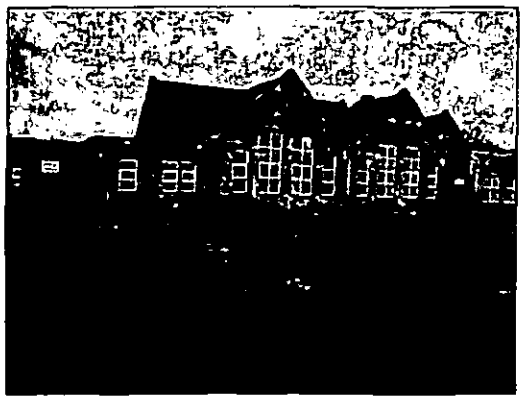
Title: GP27
Date: 14/05/07
Description: PLAYGROUND E



Title: GP28
Date: 14/05/07
Description: EDS9 & 10

GENERAL PHOTOS

LONGCAR SCHOOL, BARNSLEY



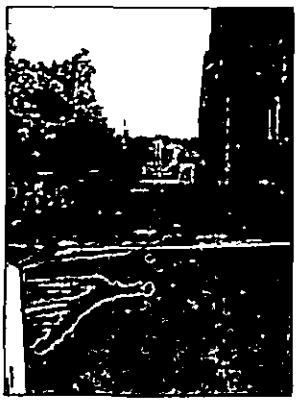
Title: GP29
Date: 14/05/07
Description: VIEW OF BUILDING C FROM PLAYGROUND



Title: GP30
Date: 14/05/07
Description: VIEW OF BUILDING A



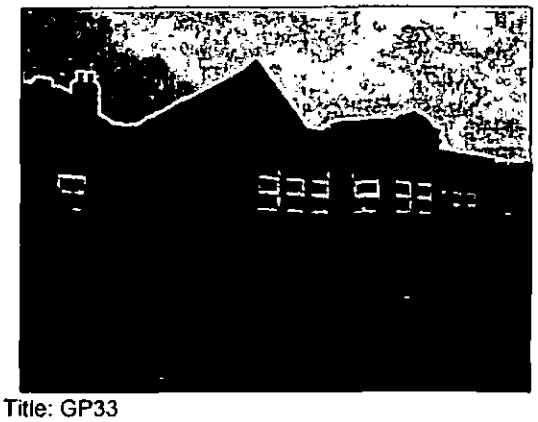
Title: GP31
Date: 14/05/07
Description: VIEW OF PLAYGROUND



Title: GP32
Date: 14/05/07
Description: EDS21 & 22

GENERAL PHOTOS

LONGCAR SCHOOL, BARNSLEY



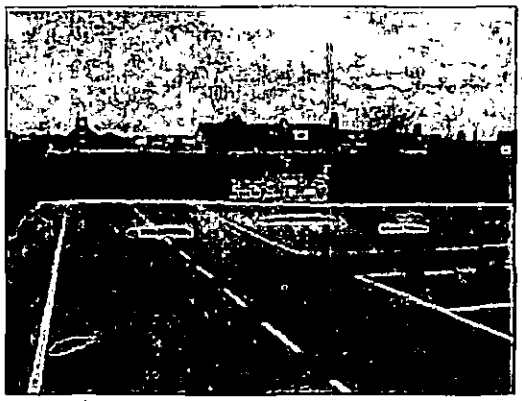
Title: GP33
Date: 14/05/07
Description: VIEW OF BUILDING C



Title: GP34
Date: 14/05/07
Description: EDS10



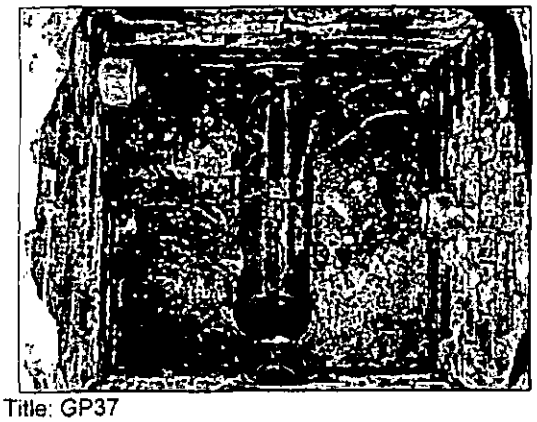
Title: GP35
Date: 15/05/07
Description: VIEW TO EDS32



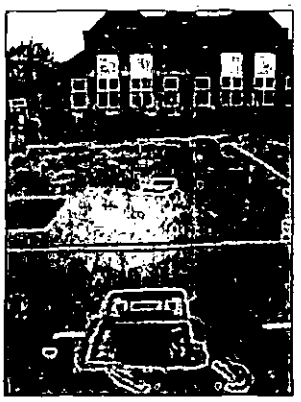
Title: GP36
Date: 15/05/07
Description: EDS14

GENERAL PHOTOS

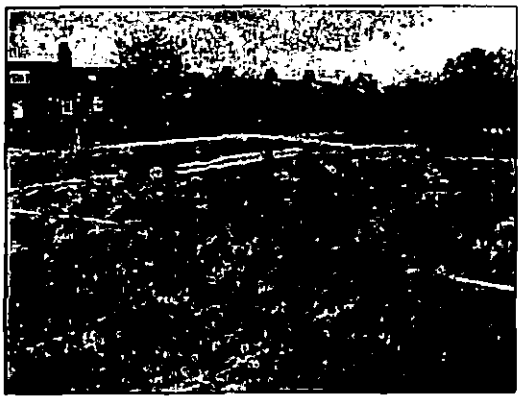
LONGCAR SCHOOL, BARNSLEY



Title: GP37
Date: 15/05/07
Description: EDS14

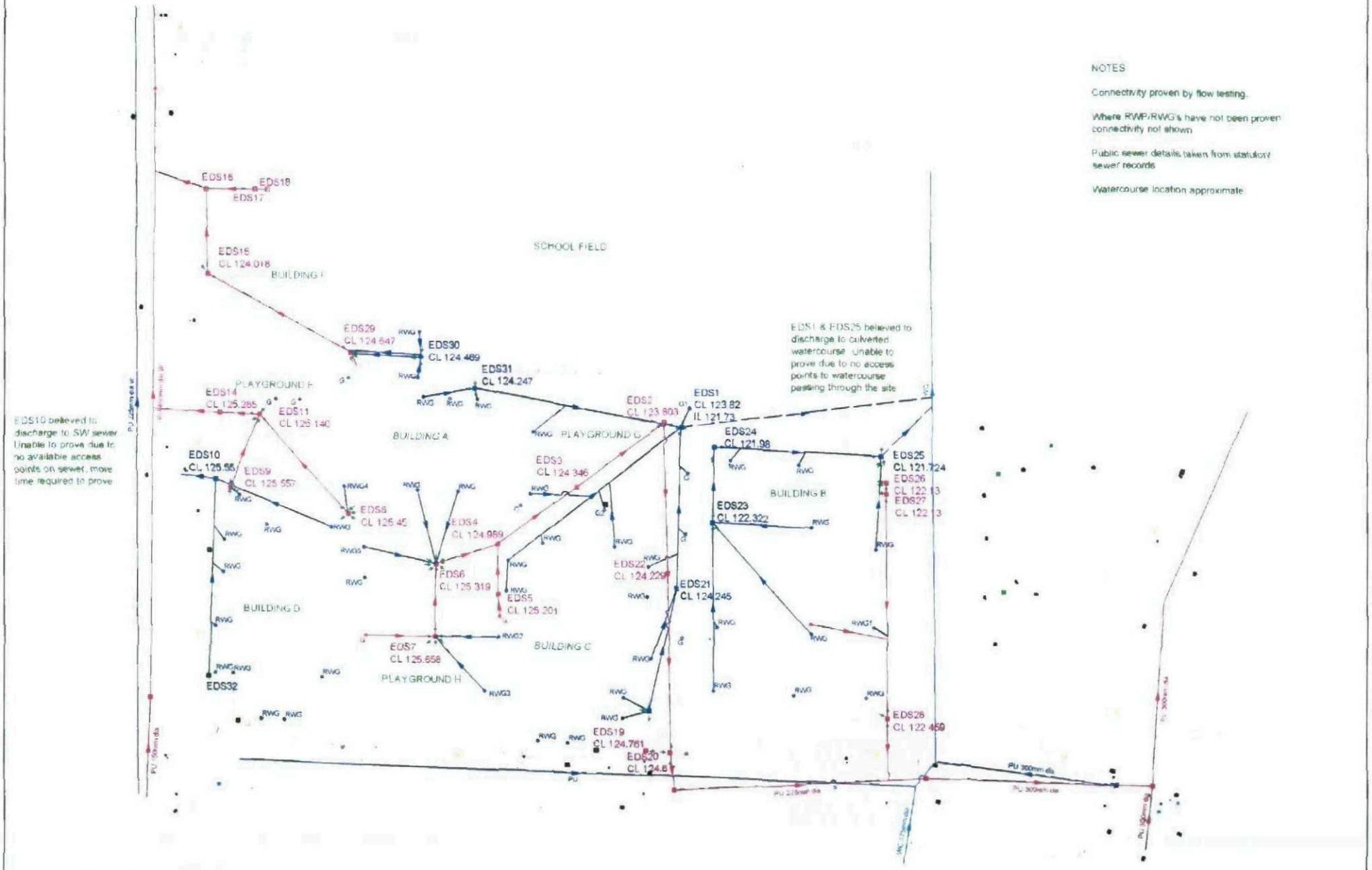


Title: GP38
Date: 15/05/07
Description: EDS14 & EDS11



Title: GP39
Date: 15/05/07
Description: CAR PARK

GENERAL PHOTOS


NOTES
Connectivity proven by flow testing.
Where RWP/RWG's have not been proven connectivity not shown
Public sewer details taken from statutory sewer records
Watercourse location approximate
EDS1 & EDS25 believed to discharge to culverted watercourse unable to prove due to no access points to watercourse passing through the site
EDS10 believed to discharge to SW sewer Unable to prove due to no available access points on sewer, more time required to prove
SCHOOL FIELD
BUILDING F
BUILDING A
BUILDING B
BUILDING C
BUILDING D
PLAYGROUND E
PLAYGROUND G
PLAYGROUND H
EDS16
EDS18
EDS17
EDS15
CL 124.018
EDS29
CL 124.647
EDS30
CL 124.489
EDS31
CL 124.247
EDS14
CL 125.285
EDS11
CL 125.140
EDS10
CL 125.55
EDS9
CL 125.557
EDS8
CL 125.45
EDS4
CL 124.989
EDS6
CL 125.319
EDS5
CL 125.201
EDS7
CL 125.858
EDS32
EDS2
CL 123.803
EDS1
CL 123.82
IL 121.73
EDS3
CL 124.346
EDS24
CL 121.98
EDS25
CL 121.724
EDS26
CL 122.13
EDS27
CL 122.13
EDS23
CL 122.322
EDS22
CL 124.229
EDS21
CL 124.245
EDS19
CL 124.761
EDS20
CL 124.61
EDS28
CL 122.459
Corus Mills
Sheffield Rd
Rotherham S60 1BN
Tel 0845 2300 939
Fax 0845 2300 949
email ops@eds.uk.net
Web www.eds.uk.net
Client
HOMES BY STRATA
Title
LONGCAR LANE SCHOOL
BARNSLEY
Drawn IW
Checked GEC
Date 16/05/07
Scale NTS
Drawing No. EDS/EAC/1986/01
LEGEND
Foul Drain/Sewer
Surface Water Drain/Sewer
Watercourse/culvert
Combined Drain/Sewer
Manhole (Colour denotes use)
Gully (Colour denotes use)
Rainwater Pipe / Gully
Soil Vent Pipe
EDS1
G
RWP RWG
SVP


Racecommon Road