

ACK

Consultee

creating a better place



Sarah Smith
Welwyn-Hatfield District Council
Development Control
The Campus
Welwyn Garden City
Hertfordshire
AL8 6AE

Our ref: NE/2011/111405/01-L01
Your ref: N6/2010/3120/DC3
Date: 29 March 2011

PLANNING
DEPARTMENT

- 2 JUN 2011

RECEIVED

Dear Sarah

Splashlands, Stanborough Road, Welwyn Garden City.

Redevelopment of site to provide a wet play area, adventure play areas, an educational play area, high ropes attraction, changing huts, education room, cafe and toilet facilities.

Thank you for your consultation email dated 4 March and agreeing to extend my deadline for this consultation response.

In the absence of an acceptable Flood Risk Assessment (FRA) we object to the grant of planning permission and recommend refusal on this basis for the following reasons:

Reason

The FRA submitted with this application (WYG, December 2010, Ref A067207-FRA) does not comply with the requirements set out in Annex E, paragraph E3 of Planning Policy Statement 25 (PPS 25). The submitted FRA does not therefore, provide a suitable basis for assessment to be made of the flood risks arising from the proposed development.

In particular the submitted FRA fails to:

1. Provide sufficient information to demonstrate that the flood plain compensation scheme will ensure that there is no increase in flood risk as a result of this development.
2. Demonstrate that Sustainable Drainage Systems have been maximised for surface water attenuation.
3. No information has been provided about the timber viewing decks and other riverside features.

Resolution

The FRA states that level for level compensation will be provided. This has not been supported by the required evidence and the FRA does not detail how this



will be achieved. Our basic requirements for compensatory flood plain storage are:

- A volume of flood plain equal to that lost to the proposed development must be created.
- The equal volume must apply at all levels between the lowest point on the site and the design flood level. Normally this is calculated by comparing volumes taken by the development and the volume offered by the compensatory storage for a number of horizontal slices through the range defined above (see the example of compensatory storage on the last page for a depiction of this).
- The thickness of a slice should be typically 0.2 metres. In the case of large flat sites or very steep sites this may be varied to 0.1 or even 0.05 metres. The slice thickness should be set to provide between ten and fifteen slices for such unusual sites.
- Compensatory storage must be provided equal to or exceeding the development for each of these slices to ensure there will be no net loss of flood storage.
- Excavation of the compensation scheme must be complete before infilling commences to ensure that flood plain capacity is maintained during construction of the development.

The FRA acknowledges that surface water should be managed using Sustainable Drainage Systems. It also notes that above ground sustainable drainage techniques such as ponds, swales and detention basins can be designed for sites where infiltration is not possible.

However, the FRA goes on to state that the required attenuation storage will be provided in oversize pipes underground storage tanks. No explanation is given for this decision. The applicant has not provided any justification as to why a more sustainable option has not been chosen.

For a site such as this which already features ponds, marshes and open green areas there appears ample scope to incorporate Sustainable Drainage Systems into the proposal. The surface water drainage scheme must be informed by the attached SuDS hierarchy and the most sustainable options must be incorporated into the site design. The current proposed use of oversized pipes and tanks is unacceptable.

Advice to applicant

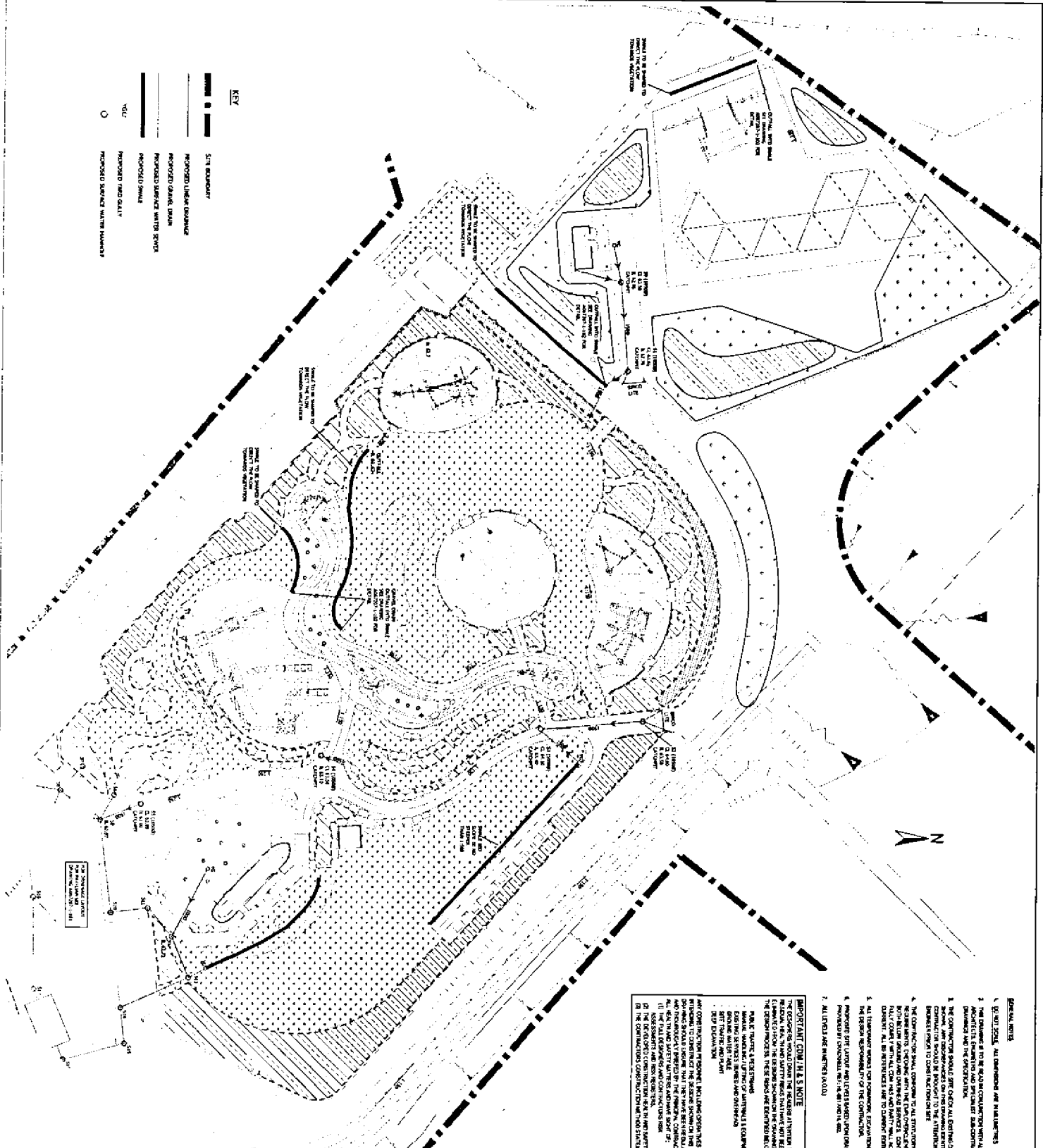
All works within 8 metres of the River Lee require Flood Defence Consent irrespective of planning permission granted. To ensure that the riverside features

are acceptable we will need to see further detail which demonstrates that there is no adverse impact upon river flows or biodiversity. Please contact Sarah Smith on 017007 632629 to discuss this further.

Please contact me if you have any queries.

Yours sincerely

Ben Llewellyn
Planning Liaison Officer
Direct dial 01707 632332
Direct e-mail colneplanning@environment-agency.gov.uk



- KEY**
- SITE BOUNDARY
 - PROPOSED UNDER DRAINAGE
 - PROPOSED DRAINAGE MANHOLE
 - PROPOSED SERVICES AND TO BE OPEN
 - PROPOSED DRAINAGE
 - PROPOSED MANHOLE
 - PROPOSED SERVICES AND TO BE OPEN

- GENERAL NOTES**
1. ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN METERS.
 2. THE DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT SPECIFICATIONS AND CONDITIONS.
 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 5. ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN METERS.
 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 7. ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN METERS.

PROPOSED CONSTRUCTION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.

- GENERAL NOTES**
1. ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN METERS.
 2. THE DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT SPECIFICATIONS AND CONDITIONS.
 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 5. ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN METERS.
 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 7. ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN METERS.
 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.
 25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.

PRE-TENDER ISSUE

WELWYN HATFIELD BOROUGH COUNCIL

STANBOROUGH PARK
WELWYN

TEL: 045 9523 641-50
FAX: 045 9523 641-51
WWW.WELWYNBOROUGH.COUNCIL.NHS



GENERAL SITE AREA DRAINAGE LAYOUT PLAN

Scale: 1:1000

DATE: 15/11/11

BY: [Signature]

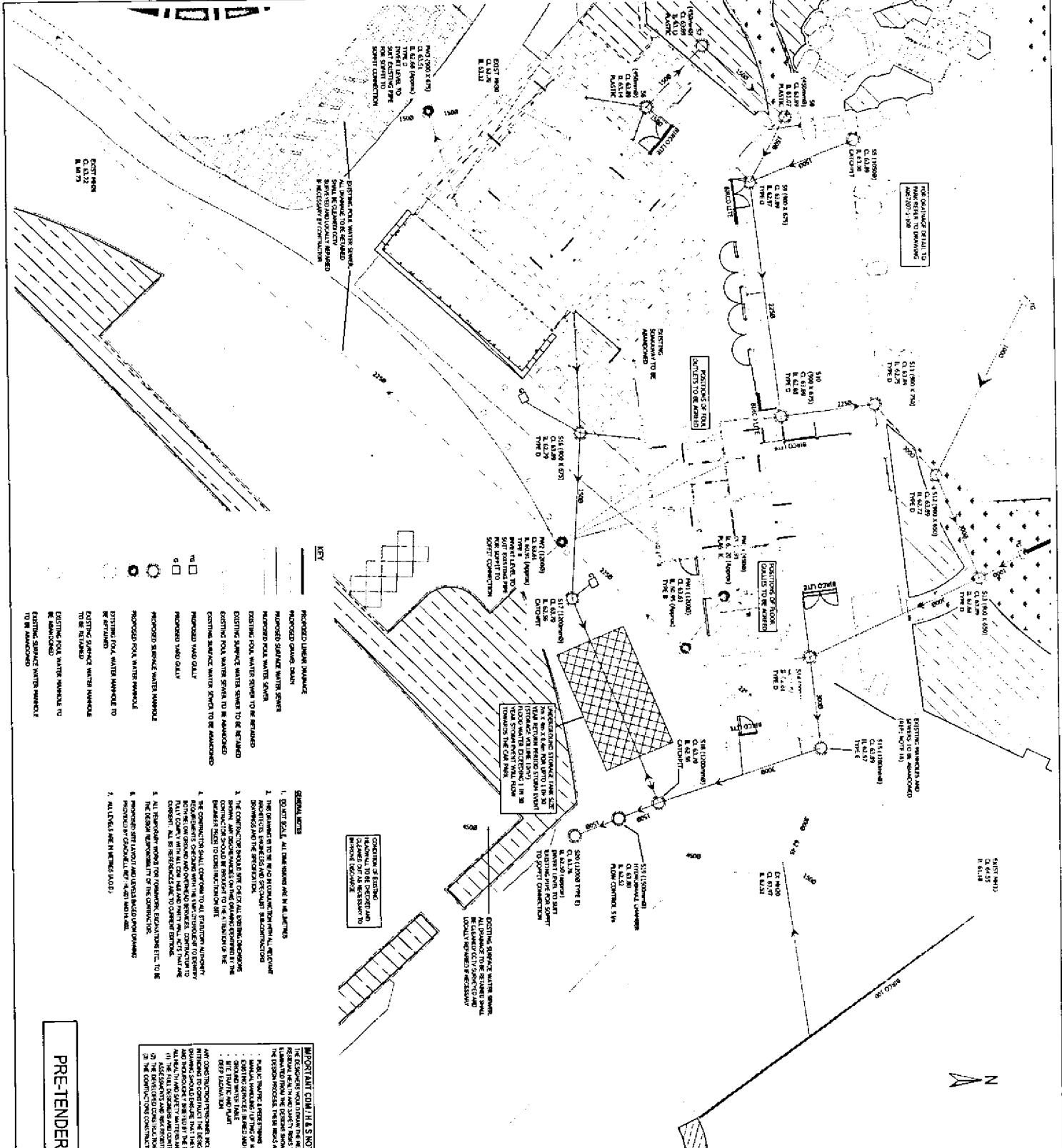
CHECKED: [Signature]

DATE: 15/11/11

PROJECT NO: 109

DATE: 15/11/11

SCALE: A



GENERAL NOTES

1. ALL DRAINAGE WORKS SHALL BE COMPLETED IN ACCORDANCE WITH THE WATER SERVICES ACT 2002 AND THE DRAINAGE ACT 2002.
2. THE CONTRACTOR SHALL ALLOW FOR SUFFICIENT GRADIENTS AND SLOPES TO BE MAINTAINED AS FAR AS POSSIBLE TO PREVENT STAGNATION OF WATER AND TO ENSURE THAT THE DRAINAGE SYSTEM IS CAPABLE OF HANDLING THE DESIGN FLOW RATE.
3. ALL DRAINAGE WORKS SHALL BE COMPLETED TO THE SATISFACTION OF THE LOCAL AUTHORITY.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
5. ALL DRAINAGE WORKS SHALL BE COMPLETED TO THE SATISFACTION OF THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
7. ALL DRAINAGE WORKS SHALL BE COMPLETED TO THE SATISFACTION OF THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
9. ALL DRAINAGE WORKS SHALL BE COMPLETED TO THE SATISFACTION OF THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
11. ALL DRAINAGE WORKS SHALL BE COMPLETED TO THE SATISFACTION OF THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
13. ALL DRAINAGE WORKS SHALL BE COMPLETED TO THE SATISFACTION OF THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
15. ALL DRAINAGE WORKS SHALL BE COMPLETED TO THE SATISFACTION OF THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.

IMPORTANT CONTRACT NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY AND THE WATER SERVICES AUTHORITY.

PRE-TENDER ISSUE

WELWYN HATFIELD ROUGH COUNCIL

STANBODOUGH PARK

WELWYN

PAVILION DRAINAGE LAYOUT PLAN

Scale: 1:500

Drawn by: [REDACTED]

Checked by: [REDACTED]

Approved by: [REDACTED]

Date: [REDACTED]

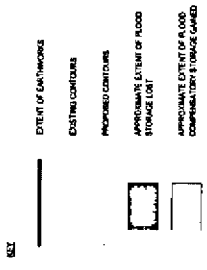
Project No: [REDACTED]

Drawing No: [REDACTED]

Sheet No: [REDACTED]

© WELWYN HATFIELD ROUGH COUNCIL

- GENERAL NOTES**
- 1 DOUBLE SCALE. ALL DIMENSIONS ARE IN MILLIMETRES.
 - 2 THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT CONTRACT DRAWINGS.
 - 3 THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, SHOWING AND OVERSEERABLE ON THE DRAWING. ANY DISCREPANCY SHOULD BE BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER TO CORRECT THEM ON SITE.
 - 4 THE CONTRACTOR SHALL COMPLY WITH ALL STATUTORY REQUIREMENTS AND REGULATIONS, INCLUDING BUT NOT LIMITED TO THE CONSTRUCTION (GENERAL) REGULATIONS 1997 AND THE CONSTRUCTION (SKELETON) REGULATIONS 1997. ALL DIMENSIONS ARE TO CENTERLINE UNLESS OTHERWISE SPECIFIED.
 - 5 ALL TEMPORARY WORKS FOR CONSTRUCTION, ETC., TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
 - 6 ALL LEVELS ARE IN METRES (A.O.D.).
 - 7 FOR SECTIONS, REFER TO DRAWING No. 113.



Approved for Construction by the Council of the Mayor of the City of London on 14th November 2011. Approved for Construction by the Council of the Mayor of the City of London on 14th November 2011. Approved for Construction by the Council of the Mayor of the City of London on 14th November 2011.

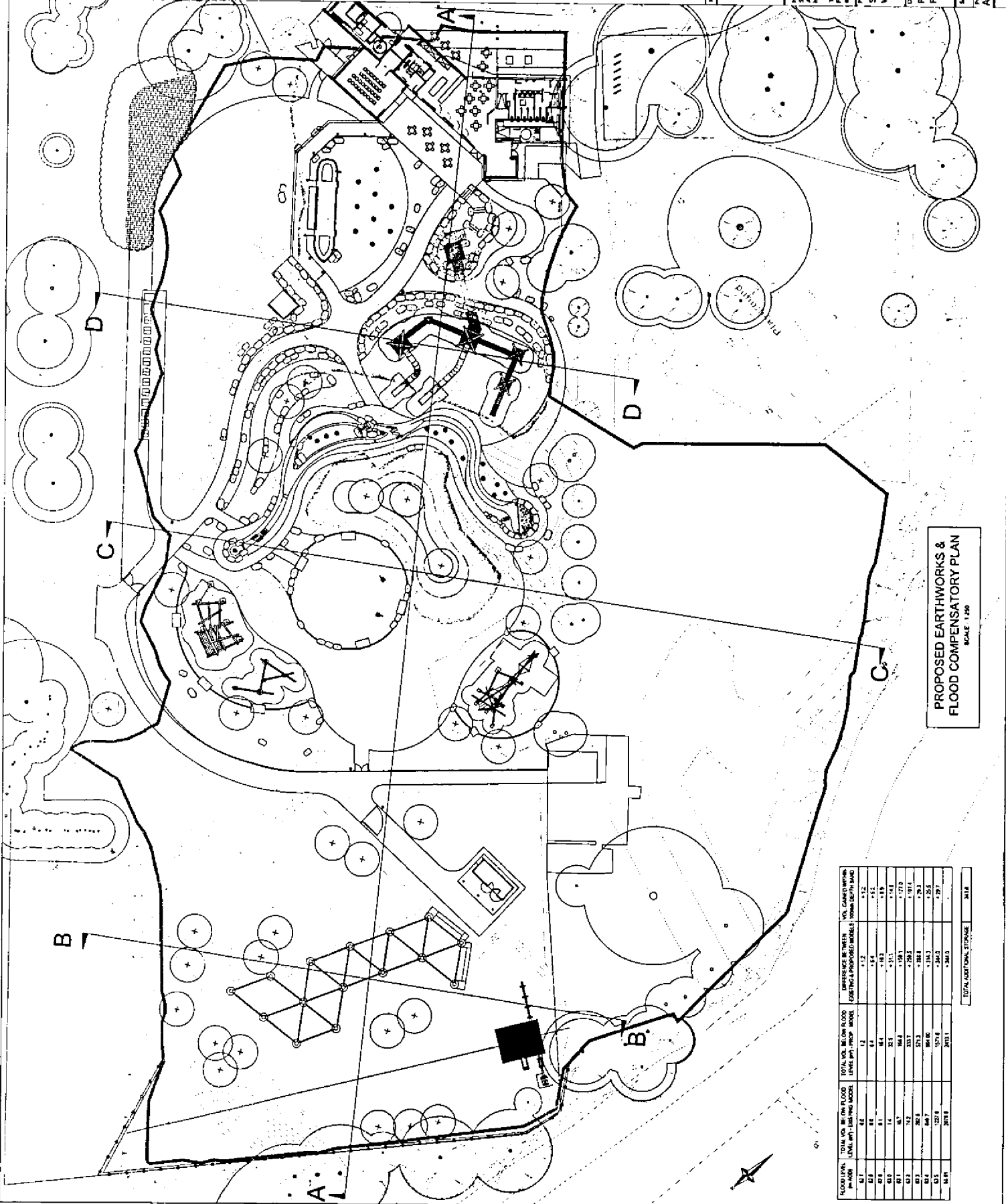
WELWYN HATFIELD BOACUUGH COUNCIL

WELWYN HATFIELD BOACUUGH COUNCIL

WYG

WELWYN COUNTY, LITTLE ONE ROAD
 STATION ROAD, WELWYN, HERTS, SG13 7JF
 TEL: 045 (0)1833 844 550
 FAX: 045 (0)1833 844 551
 E-MAIL: enquiries@wyg.co.uk

Project No.	256	Date	10.05.11	Drawn	122	Approved	122
Project Name	A067207-1 51 C&S						
Scale	A1	Drawn	10.05.11	Date	10.05.11	Drawn	122
<p>STATION ROAD, WELWYN</p> <p>PROPOSED EARTHWORKS FLOOD COMPENSATORY STORAGE PLAN</p>							



PROPOSED EARTHWORKS & FLOOD COMPENSATORY PLAN
 SCALE 1:200

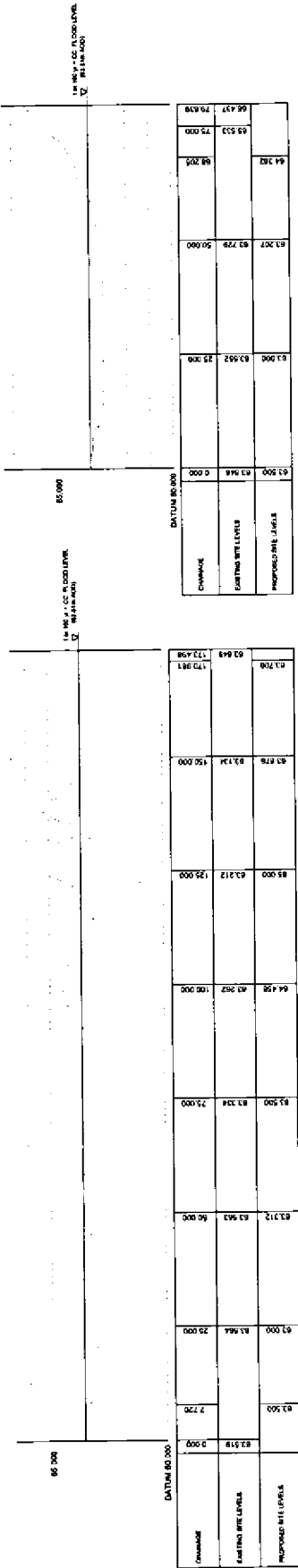
FLOOD LEVEL	TOTAL VOL. BEYOND FLOOD LEVEL (m ³)	TOTAL VOL. BEYOND FLOOD LEVEL (m ³)	DIFFERENCE BETWEEN EXISTING & PROPOSED MODEL (m ³)	WV. GAINED WITHIN FLOOD COMPENSATORY STORAGE (m ³)
82.7	12	12	+12	+12
82.8	14	14	+14	+14
82.9	14	14	+14	+14
83.0	14	14	+14	+14
83.1	14	14	+14	+14
83.2	14	14	+14	+14
83.3	14	14	+14	+14
83.4	14	14	+14	+14
83.5	14	14	+14	+14
83.6	14	14	+14	+14
83.7	14	14	+14	+14
83.8	14	14	+14	+14
83.9	14	14	+14	+14
84.0	14	14	+14	+14
TOTAL	128	128	+128	+128

GENERAL NOTES

1. DOTTED SCALE: ALL DIMENSIONS ARE IN MILLIMETRES
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT CONTRACT DRAWINGS
3. THE CONTRACTOR SHOULD CHECK ALL EXISTING DIMENSIONS, LEVELS AND DISCREPANCIES OF THE INFORMATION PROVIDED BY THE ENGINEER PRIOR TO CONSTRUCTION ON SITE
4. THE CONTRACTOR SHALL CONFORM TO ALL STATUTORY AUTHORITY REQUIREMENTS, CHECKING WITH THE ENGINEER PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND SHALL ACT THAT ARE CURRENT. ALL REFERENCES ARE TO CURRENT EDITIONS.
5. ALL TEMPORARY WORKS FOR FOUNDATION EXCAVATIONS ETC. TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
6. ALL LEVELS ARE IN METRES (AOD)
7. FOR CROSS SECTION LOCATIONS, REFER TO DRAWING No. 172

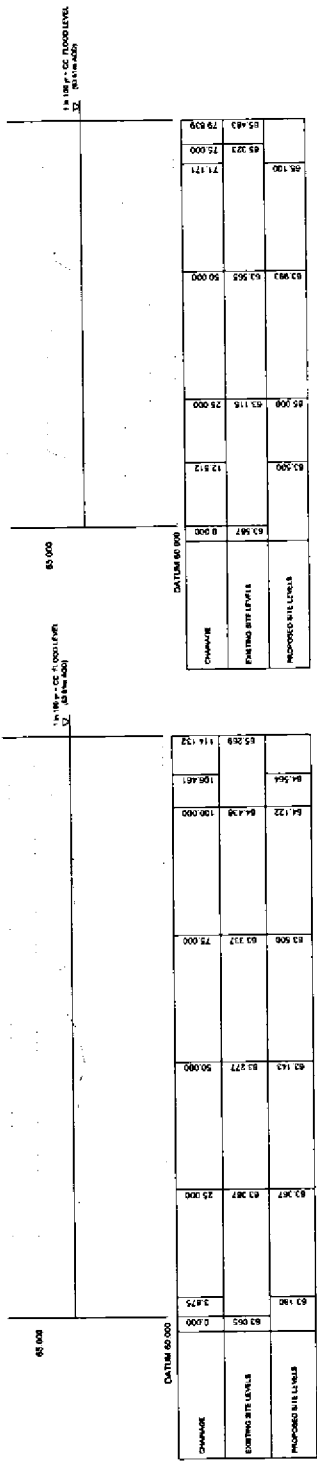
SEE

EXISTING GROUND PROFILE
 PROPOSED GROUND PROFILE
 FLOOD LEVEL
 (1 IN 100 YR CC RETURN PERIOD)
 COMPENSATORY STORAGE PROVISION



SECTION B-B

SECTION A-A



SECTION D-D

SECTION C-C

REV	DESCRIPTION	BY	CHKD	DATE
-----	-------------	----	------	------



WELWYN HATFIELD BOROUGH COUNCIL
 PROJECT: STARBOROUGH PARK
 SHEPWOOD BUSINESS PARK
 WELWYN, NOTTINGHAMSHIRE
 NG24 0EP
 TEL: +44 (0)1827 444 552
 FAX: +44 (0)1827 444 553
 e-mail: info@welwyn.gov.uk
 www.welwyn.gov.uk

Project: STARBOROUGH PARK
 WELWYN

Drawing No:

FLOOD COMPENSATORY STORAGE CROSS SECTIONS

Scale	As Shown	Checked	By	Approved	Date
Drawn	10/08/11	10/08/11	10/08/11	10/08/11	10/08/11
Project No.	000000	000000	000000	000000	000000
Drawing No.	123	123	123	123	123
A067207-1 51 [C&S]					

© WYFC Group Ltd