

VOLUME II- ENGINEERING DRAWINGS

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A1

GREENOUGUE INDUSTRIAL ESTATE

General notes: -

Structural drawings to be read in conjunction with structural specifications, all architects and services drawings and specifications.

Do not scale. use figured dimensions only.

The contract structural drawings and specifications represent the finished structure. they do not indicate the method of construction. the contractor shall provide all measures necessary to protect the structure during construction. such measures shall include, but not be limited to bracing, shoring of loads due to construction equipment, etc. before related work commences the contractor shall submit a method statement and sequence of work to the engineer and architect.

The contractor shall verify all dimensions and elevations with architectural drawings prior to start of construction. all discrepancies to be notified, in writing to engineers and architects for resolution. all setting-out to be taken from the architects drawings.

Construction material shall be spread out if placed on framed floors or roof, in such a manner that the structure is not overloaded in either the permanent or temporary condition.

Where reference is made to various test standards for materials, such standards shall be the latest edition and/or addendum. other standards may be considered but only with prior approval by the engineer.

Contractor to establish and verify all openings and inserts for architectural, mechanical, electrical and plumbing with appropriate trades, drawings and subcontractor prior to construction.

Options are for contractors convenience. he shall be responsible for all changes necessary if he chooses an option and he shall coordinate all details.

All dimensions on drawings are in millimeters unless otherwise noted. written dimensions only apply. drawings are not to be scaled.

For clarity, all roof and floor openings may not be shown on framing plans. for exact size, number and location for opening, see architectural, mechanical, electrical and plumbing drawings. where openings are indicated on the structural drawings, these are to be checked by the contractor against relevant service engineers or subcontractors drawings prior to construction.

All levels are related to the ordnance datum (od) - main head.

For location and details of electrical earthing of structure refer to electrical drawings and details.

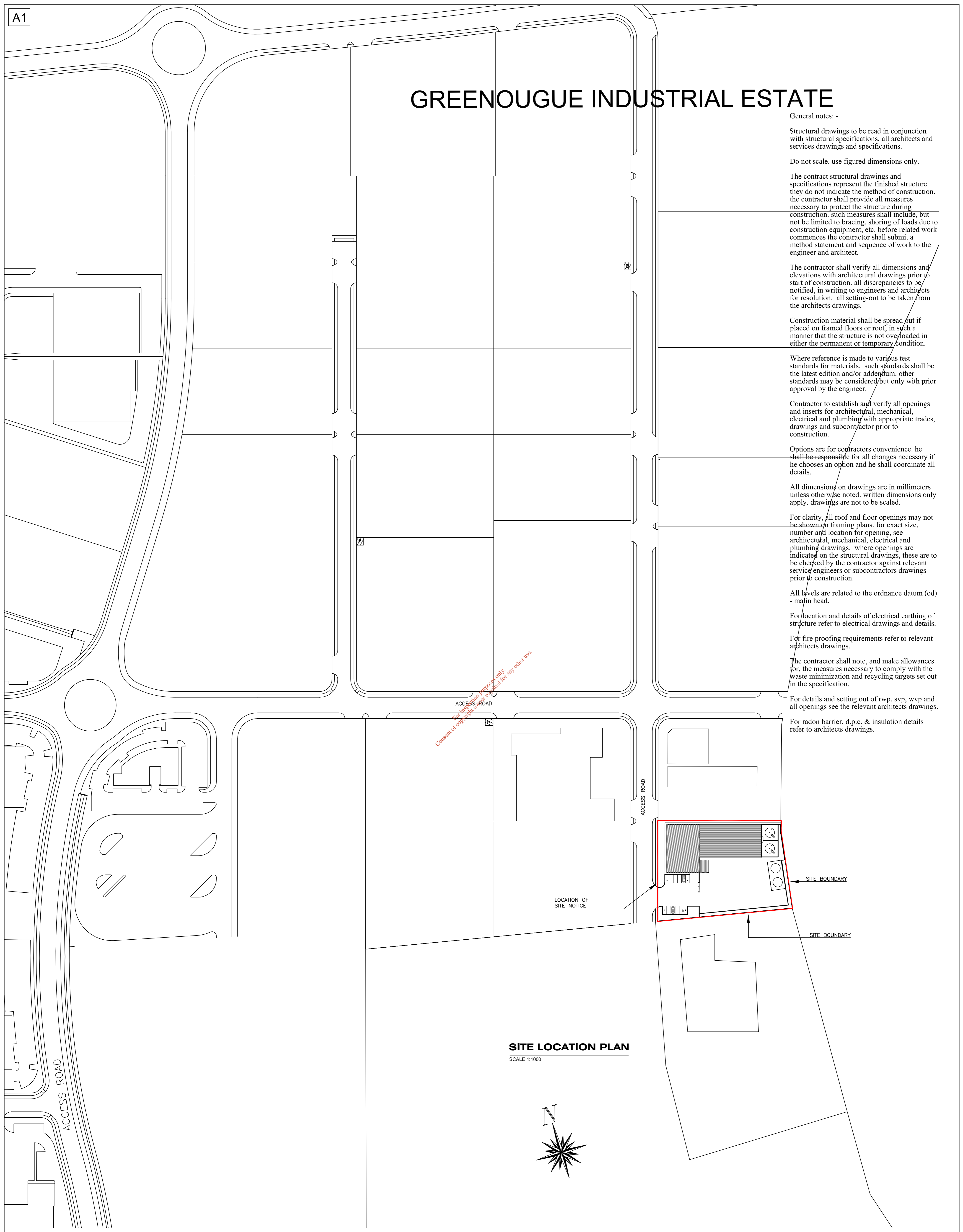
For fire proofing requirements refer to relevant architects drawings.

The contractor shall note, and make allowances for, the measures necessary to comply with the waste minimization and recycling targets set out in the specification.

For details and setting out of rwp, svp, vwp and all openings see the relevant architects drawings.

For radon barrier, d.p.c. & insulation details refer to architects drawings.

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SITE LOCATION PLAN
SCALE 1:1000

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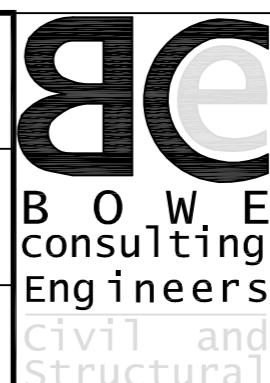
Referenced drawings	
Dwg No.	Dwg Title

Revision change notes			
Rev.	Date	Description	

Issue register					
Rev.	Date	Description	Dwn.	Chkd.	Appvd.
25.05.07		PLANNING	W.C.	I.B.	
03.06.07		PLANNING	R.G.		

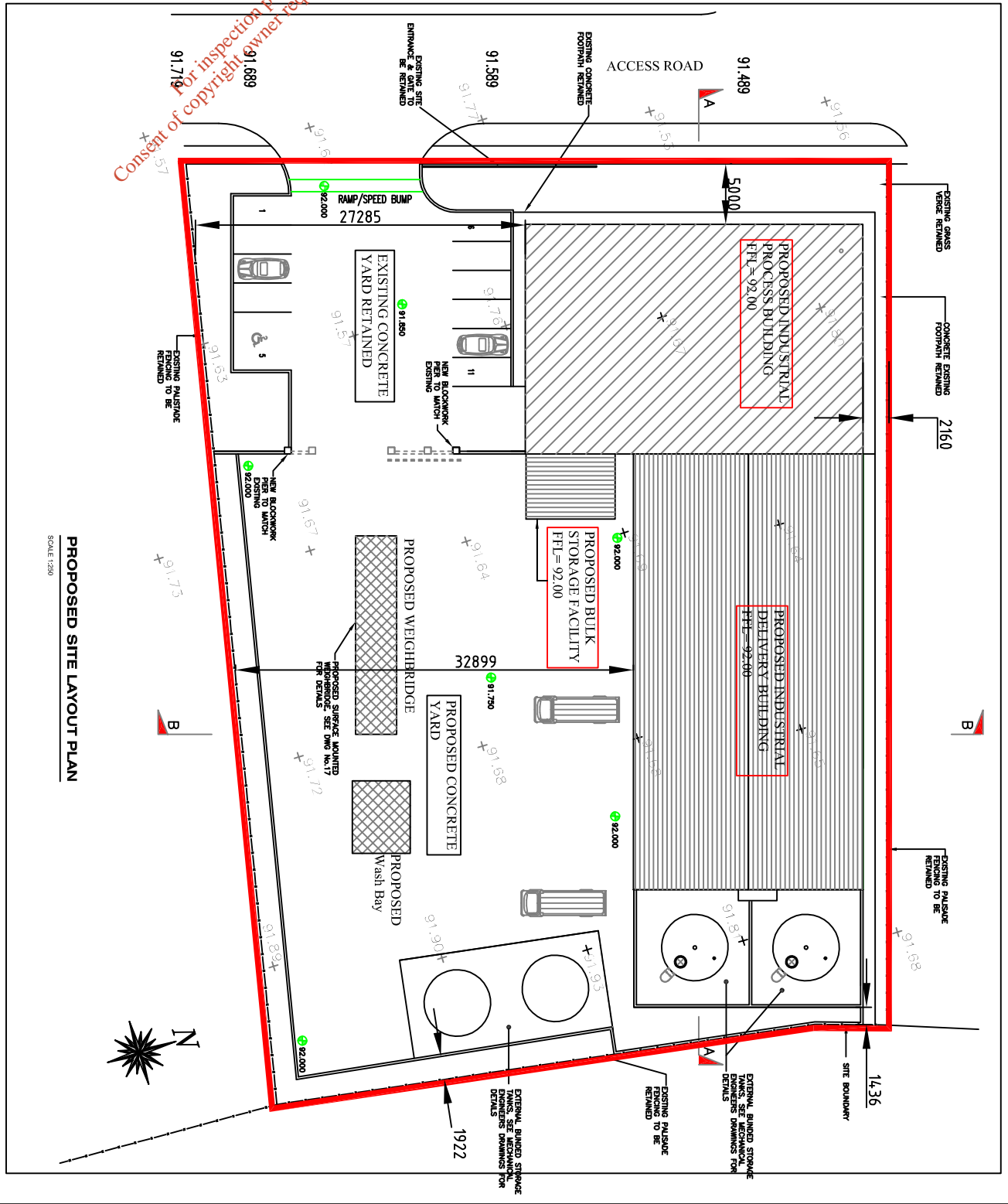
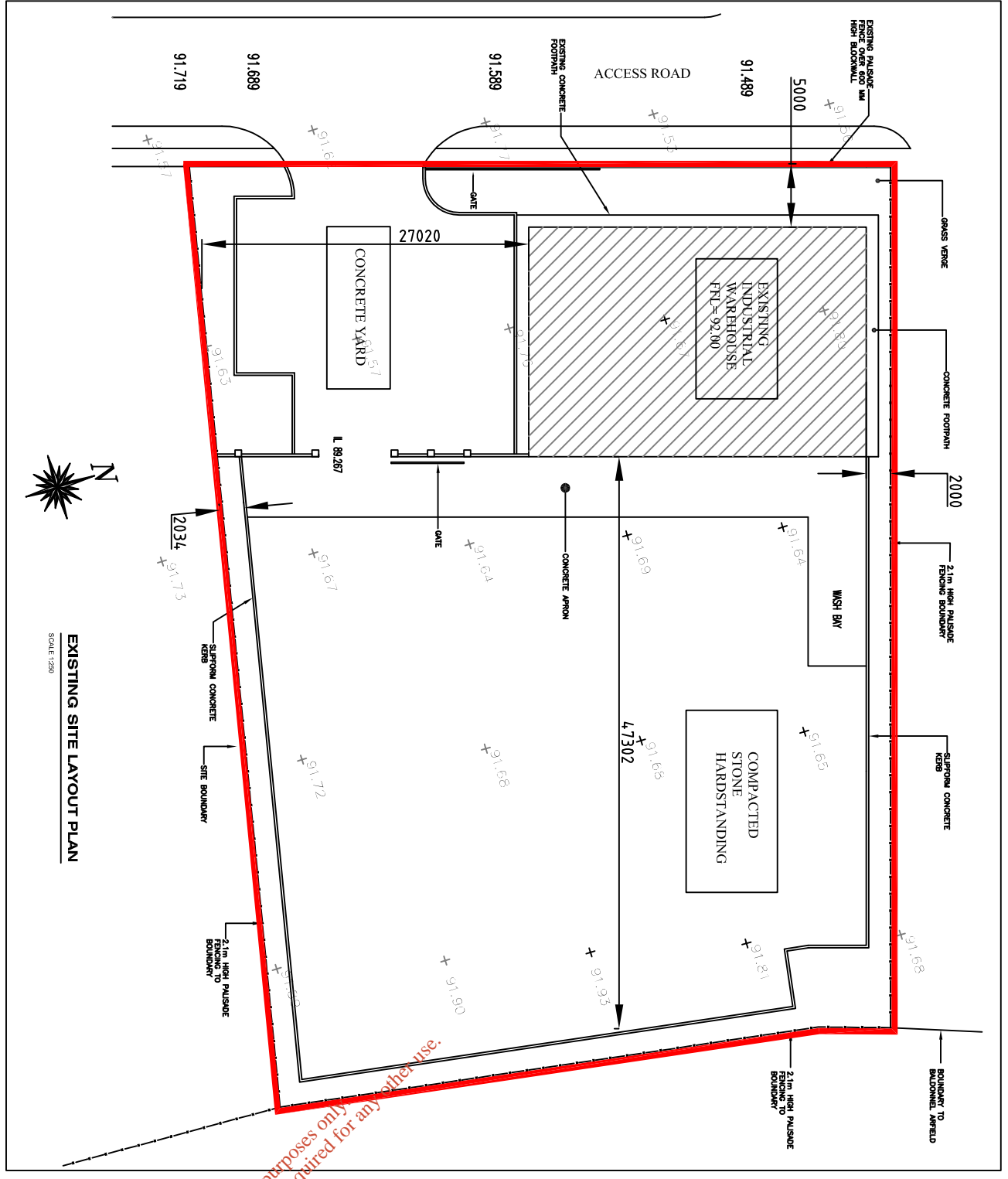
Drawing Title: Site Location Plan	
Date: 23.05.07	Scale: 1:1000
Drawn By: W.C.	Checked By: I.B.

Client: ORMONDE ORGANICS LTD	
Job Description: PROPOSED WASTE RECYCLING AND RECOVERY FACILITY	
Project No: 7P183	Drawing Ref: 01
Rev: -	



Bowe Consulting Engineers

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General notes:-

Structural drawings to be read in conjunction with structural specifications, all architects and services drawings and specifications.

Do not scale, use figured dimensions only.

The contract structural drawings and specifications represent the finished structure. The contractor shall provide all measures necessary to protect the structure during construction, such measures shall include, but not be limited to bracing, shoring of loads due to construction equipment, etc. before related work commences the contractor shall submit a method statement and sequence of work to the engineer and architect.

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Contractor to establish and verify all openings and inserts for architectural, mechanical, electrical and plumbing with appropriate trades, drawings and subcontractor prior to construction.

Options are for contractors convenience, he shall be responsible for all changes necessary if he chooses an option and he shall coordinate all details.

All dimensions on drawings are in millimeters unless otherwise noted, written dimensions only apply, drawings are not to be scaled.

For details and setting out of rvp, svp, wvp and all openings see the relevant architects drawings.

Revisions

Rev. No.	Rev. Date	Rev. Description

Issue register

Rev. No.	Rev. Date	Rev. Description	Rev. By	Rev. Check

Notes

Rev. No.	Rev. Date	Rev. Description

NOTES:

For details and setting out of rvp, svp, wvp and all openings see the relevant architects drawings.

Drawing Title: Existing and Proposed site Layout Plans

Date: 25.05.07

Scale: 1:250

Drawn By: W.C.

Checked By: I.B.

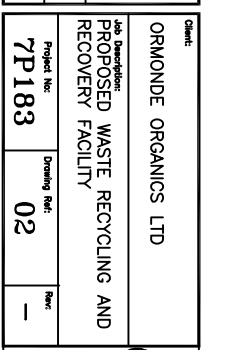
Client: ORMONDE ORGANICS LTD

Job Description: PROPOSED WASTE RECYCLING AND RECOVERY FACILITY

Project No.: 7P183

Drawing No.: 02

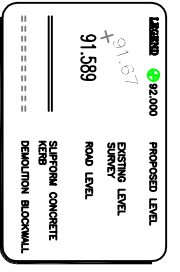
Rev.: -

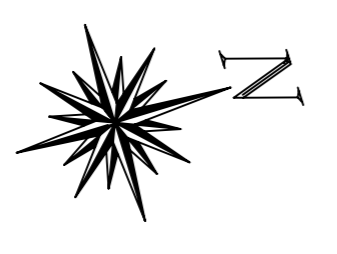
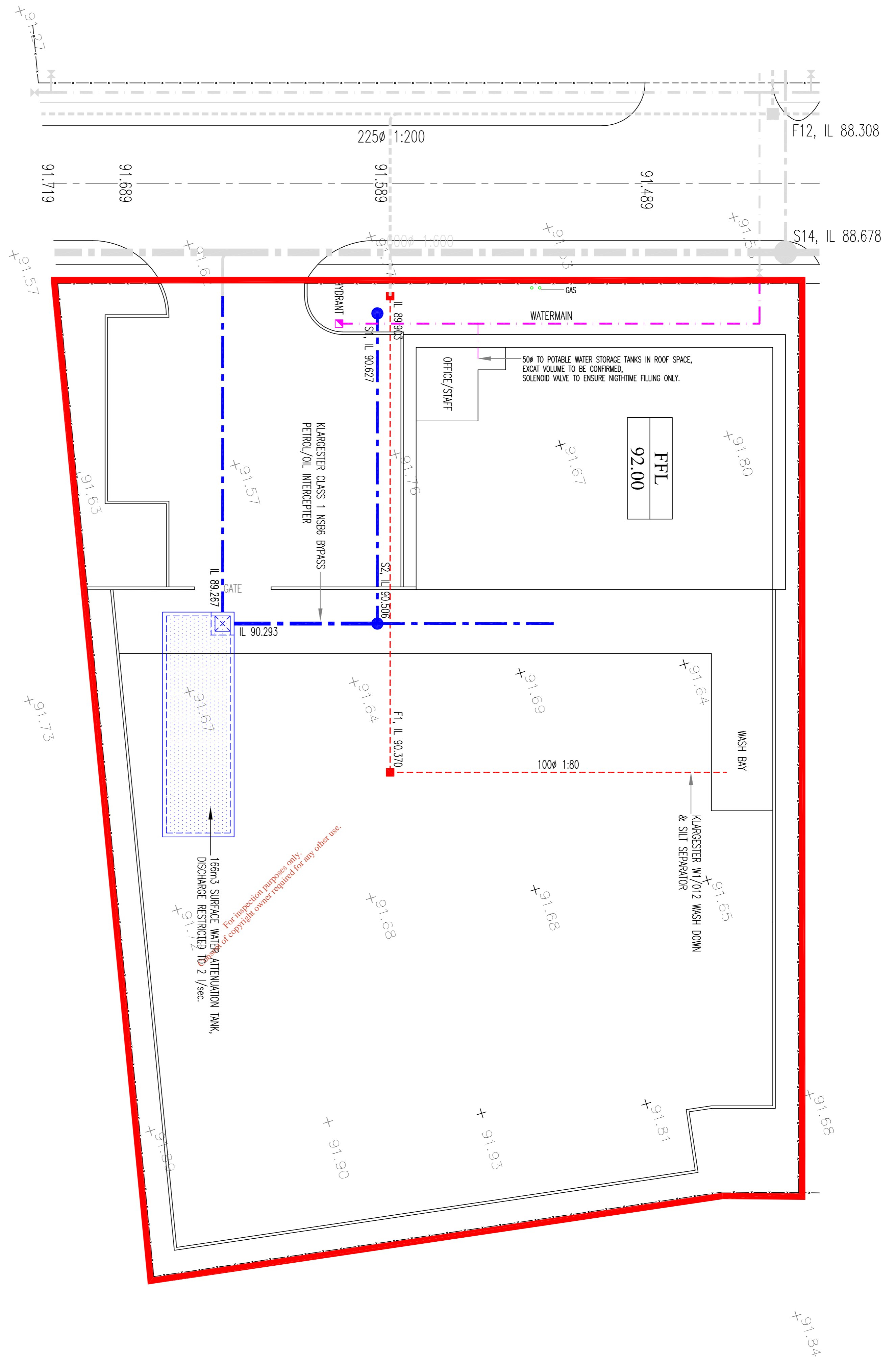


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EXISTING SITE SERVICES PLAN
SCALE 1:200

LEGEND	
91.67	LEVEL SURVEY
91.589	ROAD LEVEL
	SITE STORM DRAIN
	SITE FOULED DRAIN
	SITE WATERMAIN
	PUBLIC STORM DRAIN
	PUBLIC FOULED SEWER
	PUBLIC WATERMAIN
	STORMWATER ATTENUATION TANK
	GAS MAINS
	STORCOCK (WATERMAIN)
	HYDRANT(WATERMAIN)
	PALISADE BOUNDARY
	FENCE
	ROAD CENTRELINE
	CONCRETE KERBS

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Referenced drawings		Revision change notes		Issue register				
Dwg No.	Dwg Title	Rev.	Date	Description	Rev.	Date	Description	Drawn/Checked/Approved
DWG1	DESCRIPTION					25.05.07	PLANNING	WC B

NOTES:

Existing Site Services Layout

Date: 25.05.07
Drawn By: W.C.
Scale: 1:200
Checked By: I.B.

Client: ORMONDE ORGANICS LTD
Job Description: PROPOSED WASTE RECYCLING AND RECOVERY FACILITY
Project No: 7P183
Drawing Ref: 03
Rev: -

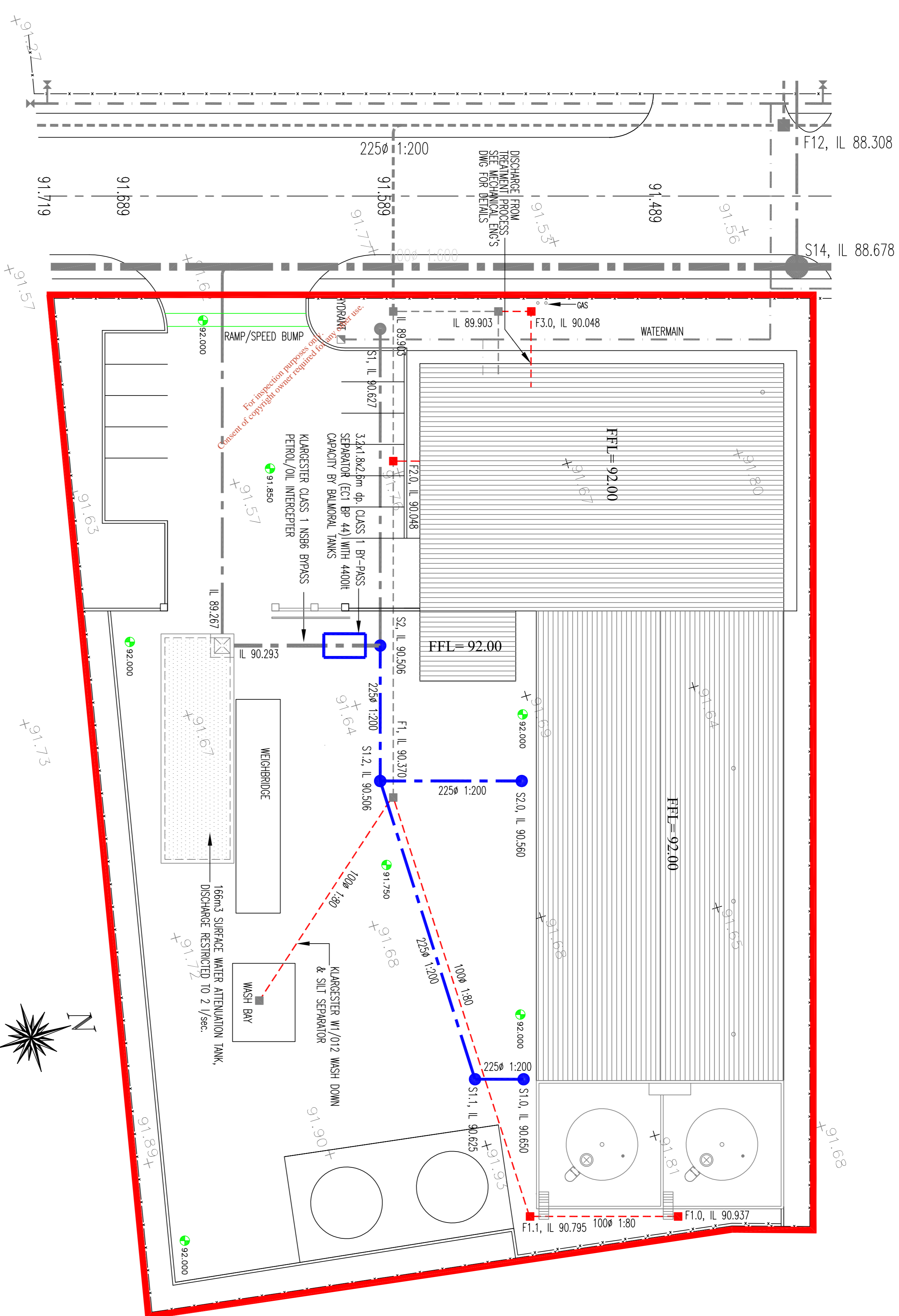
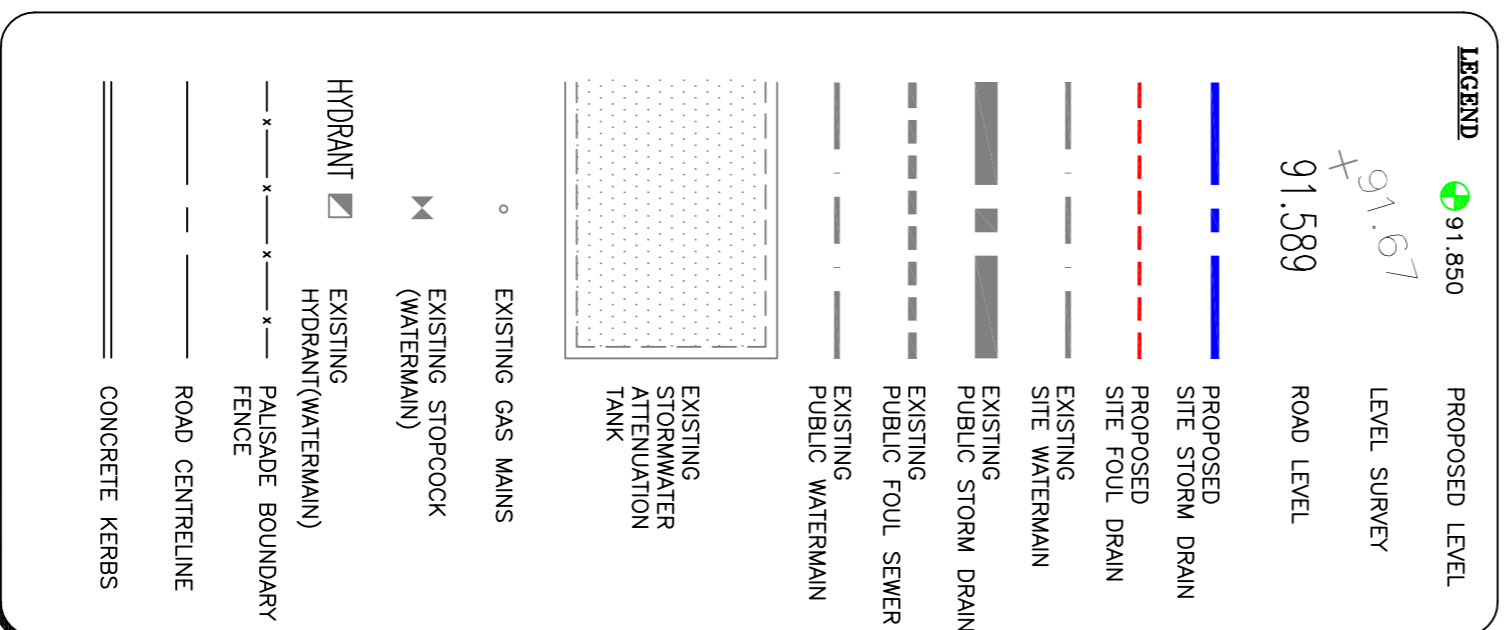
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GREENOGUE IND. ESTATE CO. DUBLIN				
String of Retention	7P183			
Area m ²	3398			elisechec
Allowable Use	2			
Return Period	1:100 YEAR			
DURATION	RAINFALL	RUNOFF	ALLOWABLE	RETENTION REQ.
minutes	mm	m ³	m ³	m ³
5	12.00	40.66	0.6	40.06
10	17.00	57.60	1.2	56.40
15	22.60	76.57	1.8	74.77
30	29.60	100.28	3.6	96.68
60	37.50	127.03	7.2	119.85
120	43.30	147.38	14.4	132.98
240	52.20	176.85	28.8	148.05
360	61.60	206.70	43.2	165.50
720	74.50	252.41	86.4	166.01
1440	89.30	302.55	172.8	129.75
2880	104.50	354.05	345.6	84.5
Max. Attenuation Req.(m ³)			166.01	

REFERENCE	IMPERMABLE AREA (m ²)		RUNOFF (50mm/hr)		SELECTED PIPE		FULL FLOW CONDITIONS		ACTUAL VELOCITY		COMMENT
	Total	I/s	∅	fall	D(I/s)	V(m/s)	m/s				
S1-S2	752	11	225	1:200	45	1.14	0.94	OK			
S1.2-S2	1717	25	225	1:200	45	1.14	1.17	OK			
S2-Tk.	919	3388	47	300	300	78	1.10	1.15	OK		



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Draw No.	Draw Title	Rev.	Date	Issue Register	Drawn	Checked	Approved
DM01	DESCRIPTION		25.05.07	PLANNING	WC	B	
			02.02.07	PLANNING	WC	B	

NOTES:

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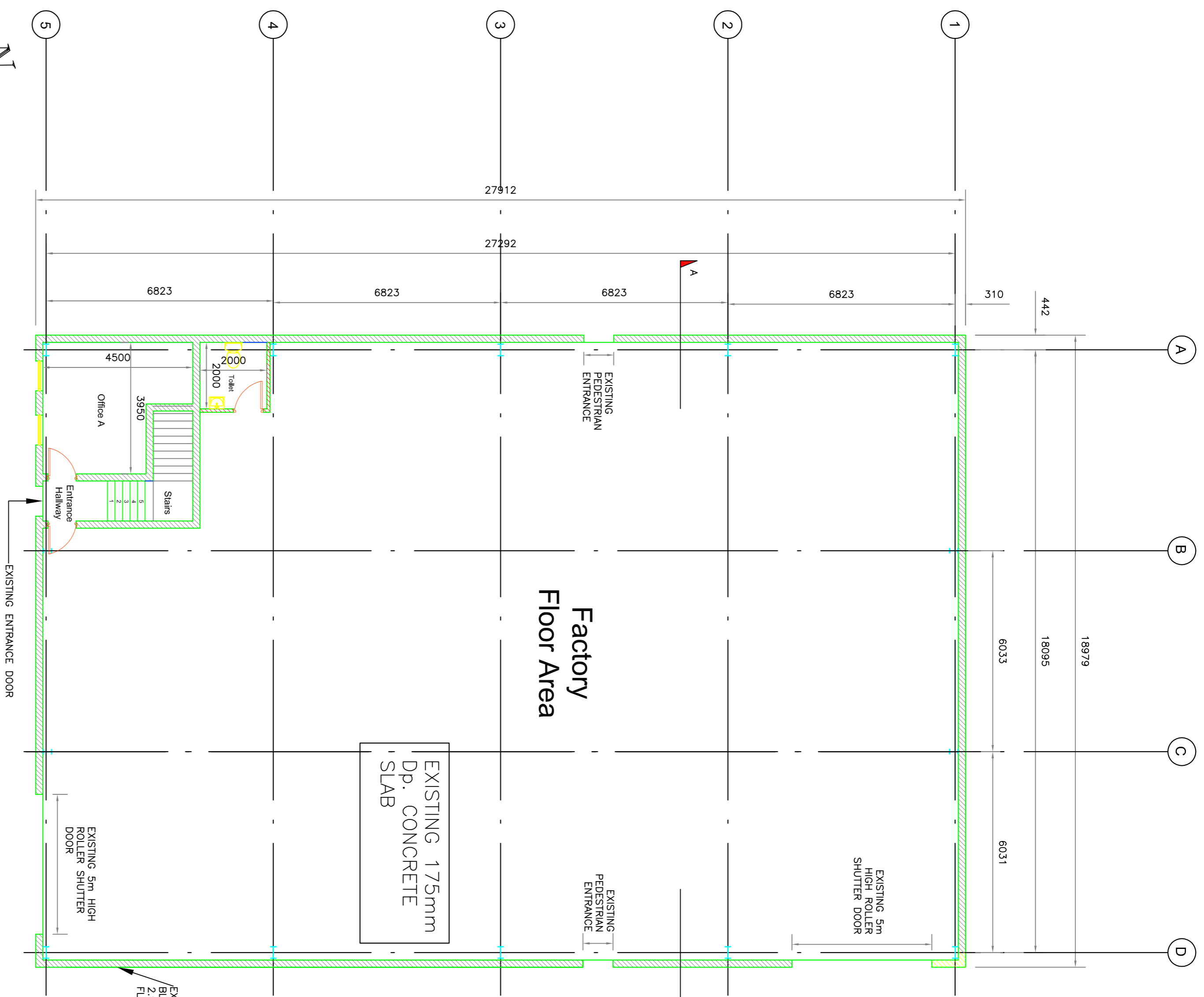
Drawing Title:	Proposed Site Services Plan
Date:	25.05.07
Drawn By:	W.C.
Scale:	1:200
Checked By:	I.B.

Client:	ORMONDE ORGANICS LTD
Job Description:	PROPOSED WASTE RECYCLING AND RECOVERY FACILITY
Project No.:	7P183
Drawing Ref.:	04
Rev.:	-

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Civil and Structural

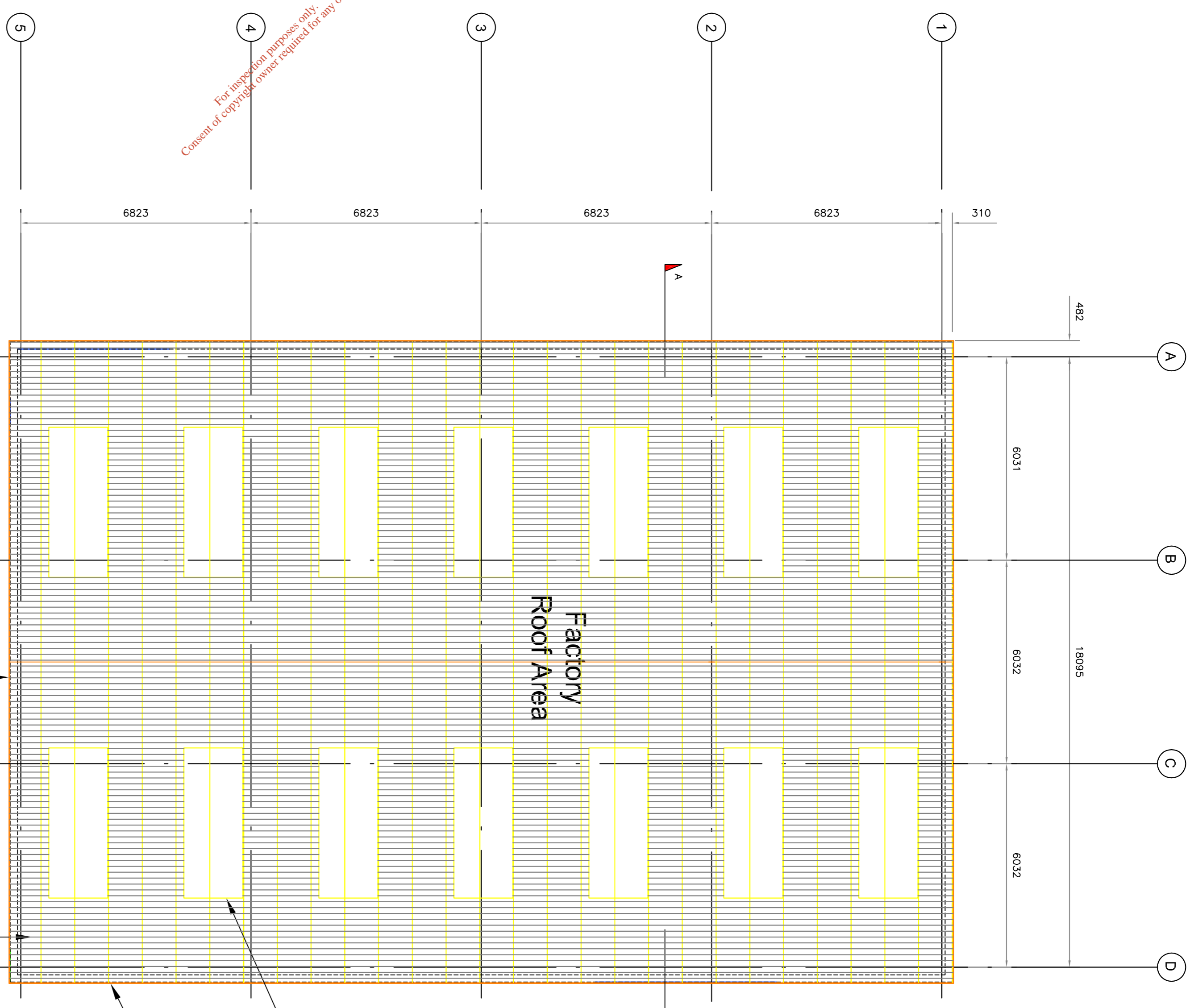
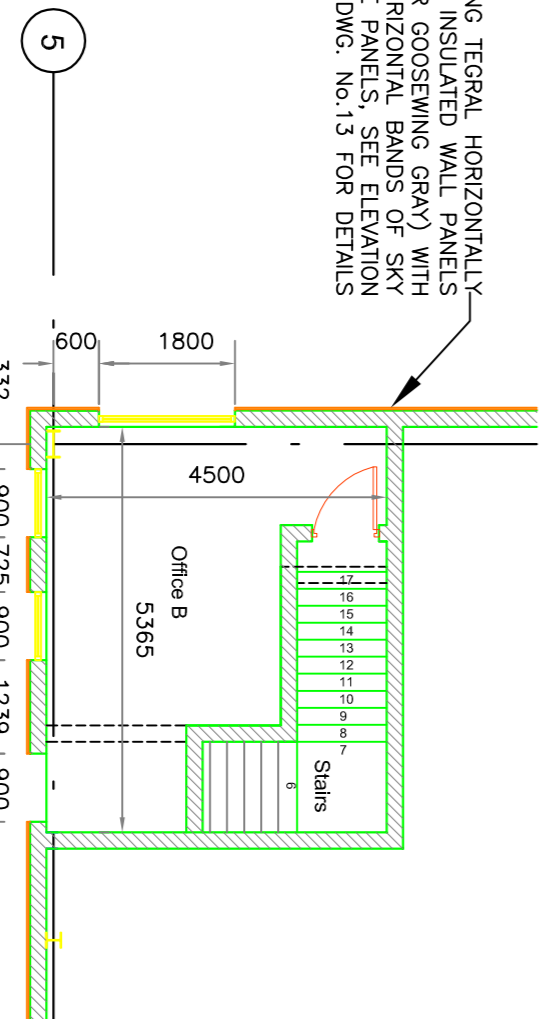
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GROUND FLOOR	AREA	FIRST FLOOR	AREA
PROCESS FLOOR	4.79	STAIRS - A	6
OFFICE - A	15	OFFICE - B	16.7
HALL	2.3		
WC	4.3		
STAIRS	5.6		
INTERNAL WALLS	2.1		

FIRST FLOOR PLAN
SCALE 1:100



Factory Floor Area	
Ground Floor Area = 479 sq.m	Incl. Floor & 29.3 sq.m Office Space
First Floor Area = 22.7 sq.m	Office Space
Floor Area = 479 sq.m	Incl. Floor & 52 sq.m Office Space
Total Floor Area = 531 sq.m	

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Revised	Date	Description

Rev.	Date	Description	Drawn/Checked/Approved

NOTES:

Drawn By:	Checked By:	Scale:
W.C.	I.B.	1:100

Client:	Job Description:
ORMONDE ENVIRONMENTAL	PROPOSED WASTE RECYCLING AND RECOVERY FACILITY

Project No.:	Drawing Ref.:
7P183	10

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Civil and Structural

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Rev.	Date	Description
1	25.05.07	PLANNING

Rev.	Date	Description	Drawn/Checked/Approved
1	25.05.07	PLANNING	WC @

NOTES:

Drawing Title: **Proposed Floor Plan**

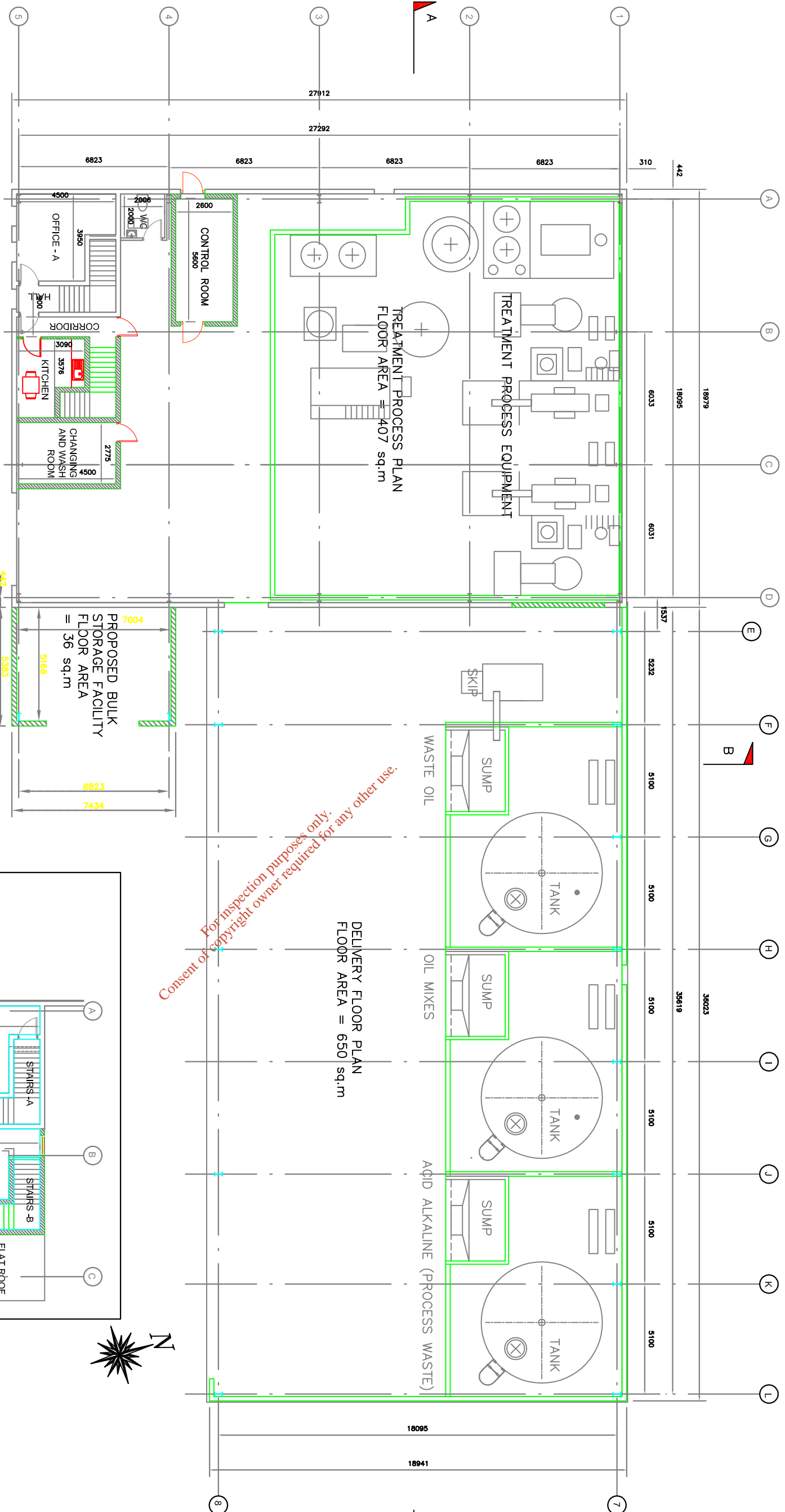
Date: 25.05.07
Scale: 1:100
Drawn By: W.C.
Checked By: I.B.

Client: **ORMONDE ORGANICS LTD**

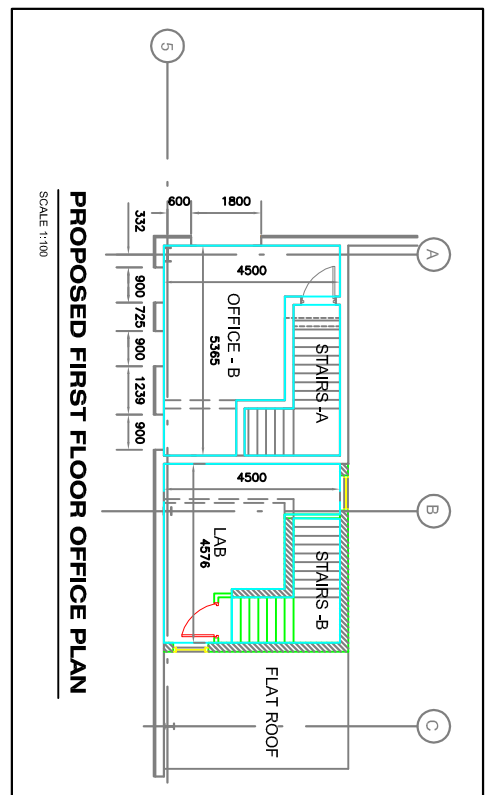
Job Description: **PROPOSED WASTE RECYCLING AND RECOVERY FACILITY**

Project No: **7P183**

Drawing No: **11**



GROUND FLOOR AREA	FIRST FLOOR AREA	TOTAL AREA	
PROCESS FLOOR	407	STAIRS - A	6
CONTROL ROOM	15	STAIRS - B	5.6
OFFICE - A	15	OFFICE - B	16.7
CHANGING AND WASH ROOM	13	LAB	14
HALL	2.3	INTERNAL WALL	5.7
CORRIDOR	4.0		
KITCHEN	9.2		
WC	4.3		
INTERNAL WALLS	10.7		



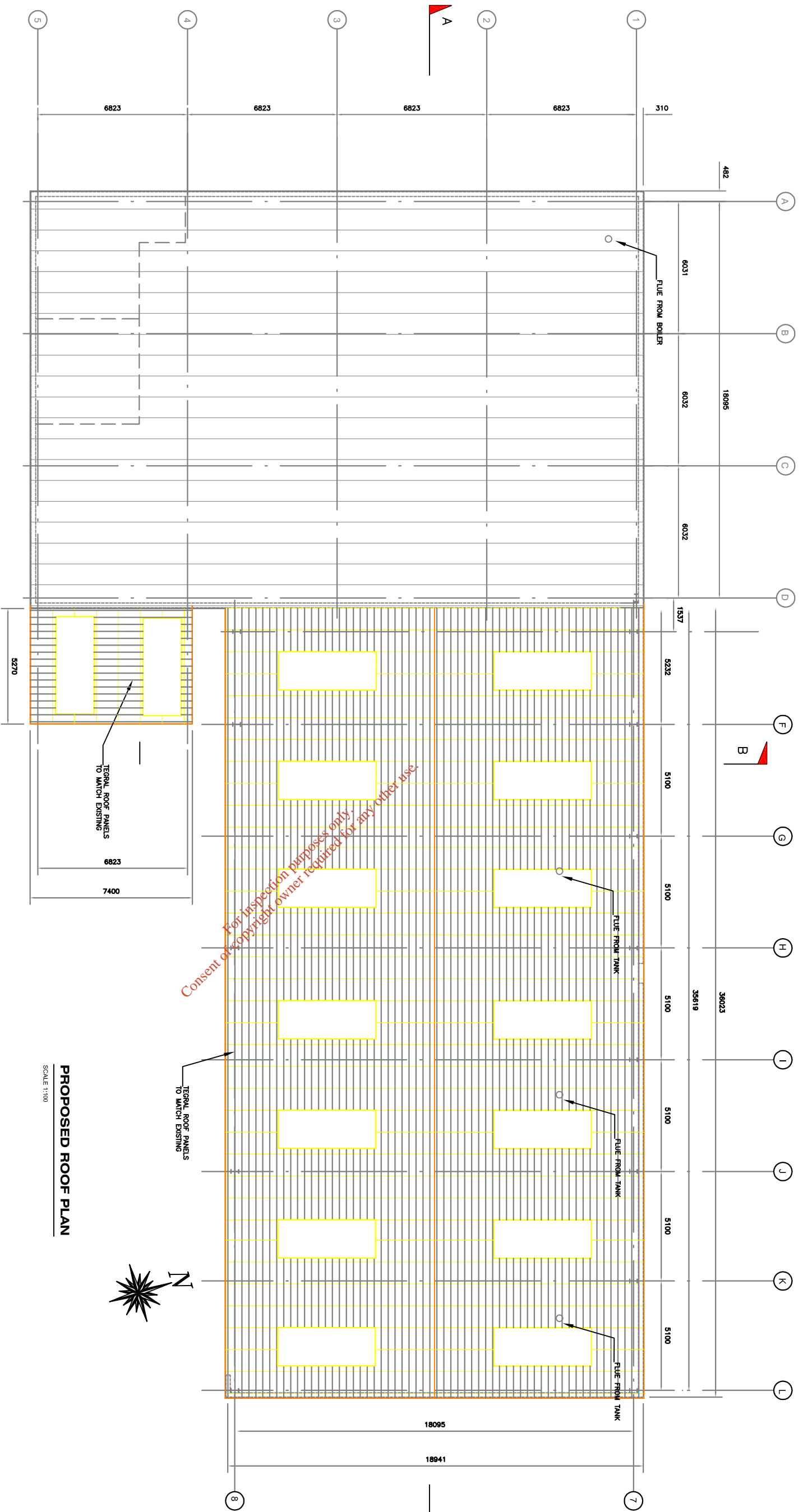
Factory Floor Area

Proposed process Floor Area = 407 sq.m
Proposed Delivery Floor Area = 650 sq.m
Proposed bulk storage Building = 36 sq.m
(Total extension floor area = 696 sq.m)
Note: Overall floor area of existing building has reduced due to proposed increased thickness of walls.

Existing Office / Ancillary Area = 52 sq.m
Proposed Office / Ancillary Area = 121.5 sq.m
(Additional Office / Ancillary floor Area = 69.5 sq.m)

Total Floor Area = 1214.5 sq.m
of which factory floor = 1093 sq.m
& office / ancillary floor = 121.5 sq.m

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PROPOSED ROOF PLAN
SCALE 1:100

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Revised drawings	
Dwg No.	Dwg Title

Revision change notes	
No.	Date

Issue register		
No.	Date	Description
	25.05.07	PLANNING

NOTES:

1. TERRAL ROOF PANELS TO MATCH EXISTING

Drawing Title:	
Proposed Roof Plan	
Date: 25.05.07	Scale: 1:100
Drawn By: W.C.	Checked By: I.B.

Client:	
ORMONDE ORGANICS LTD	
Job Description:	
PROPOSED WASTE RECYCLING AND RECOVERY FACILITY	
Project No:	Drawing No:
7P183	12

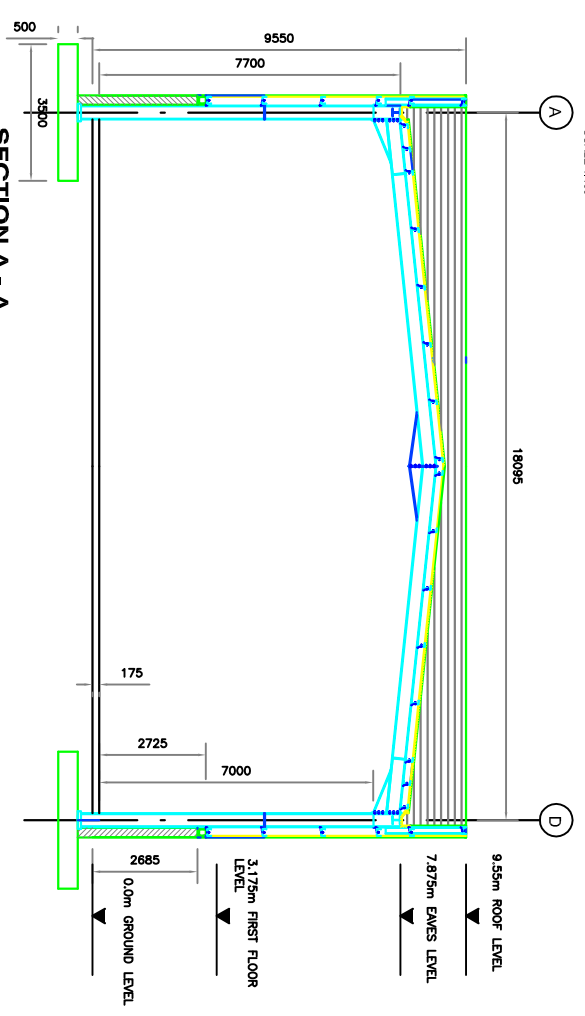
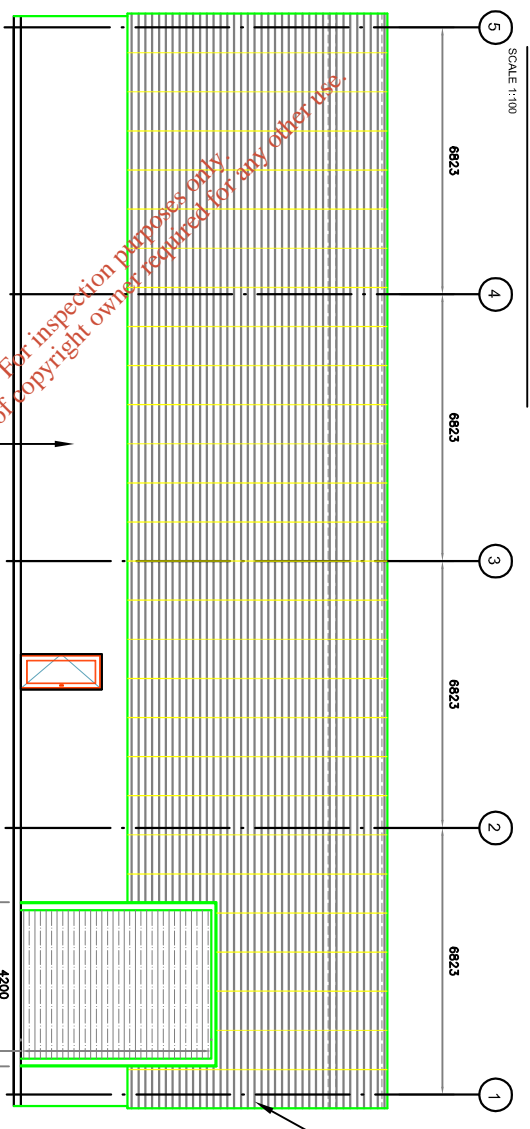
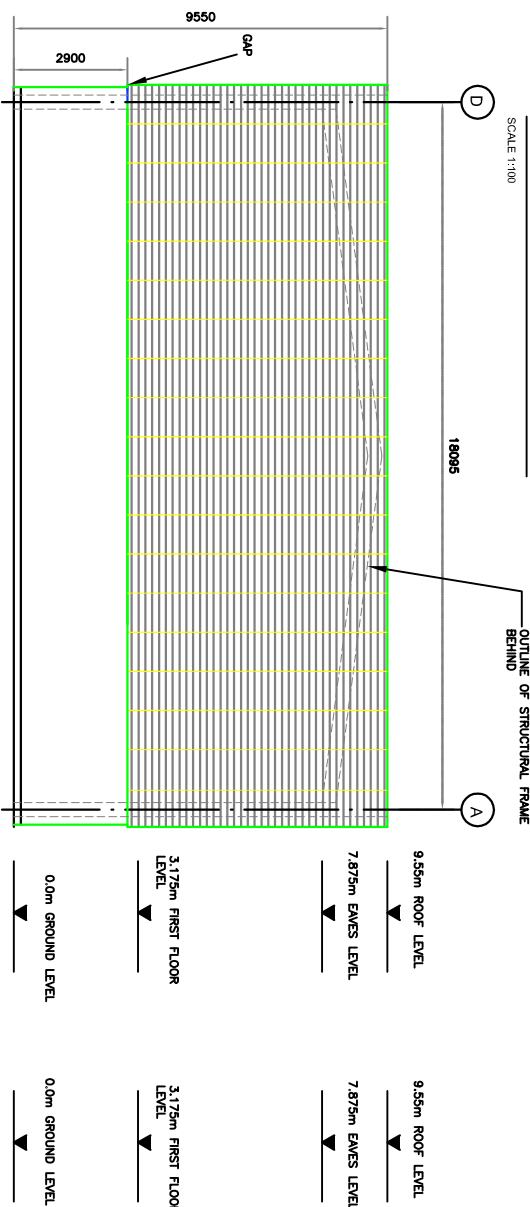
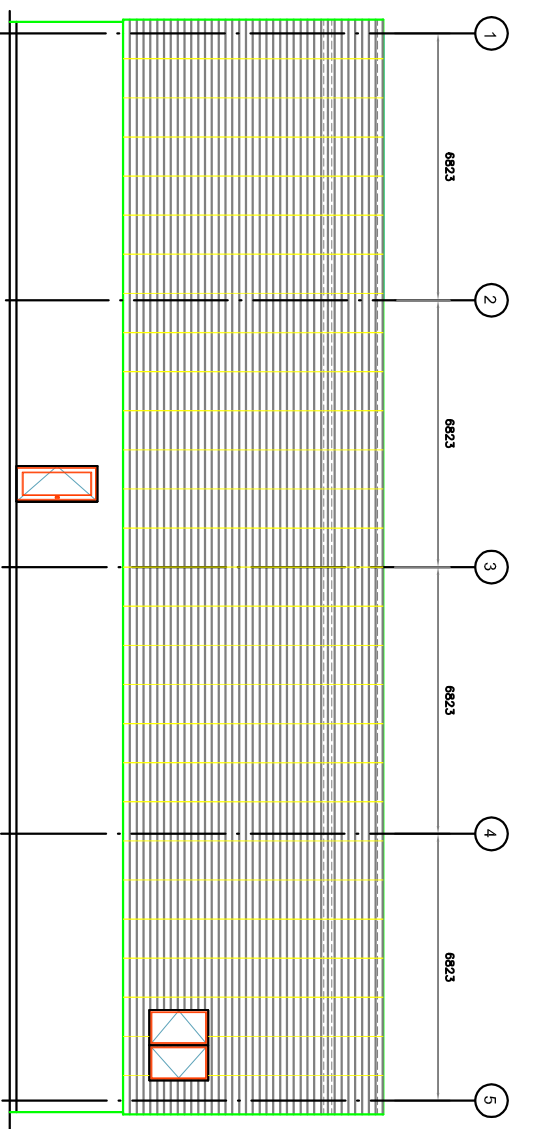
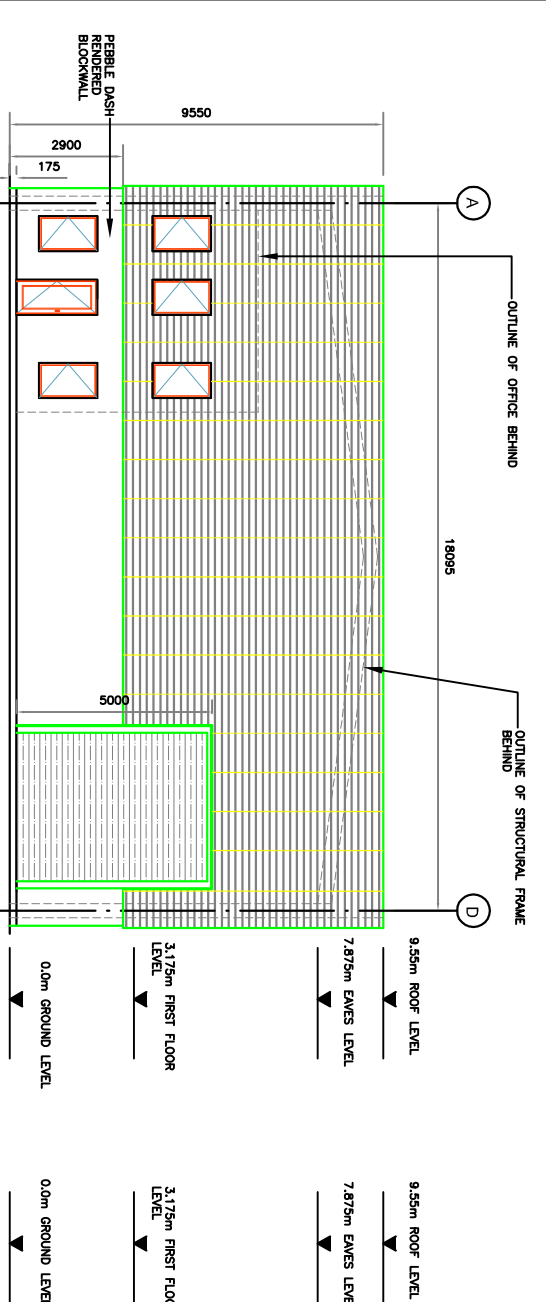
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Engineers

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Revised drawings	
Drawn By:	Checked By:
Date:	Date:
Revision change notes	
Rev:	Date
1	25.05.07
Issue register	
Description:	Issue Ref:
FLAMINGO	WC @

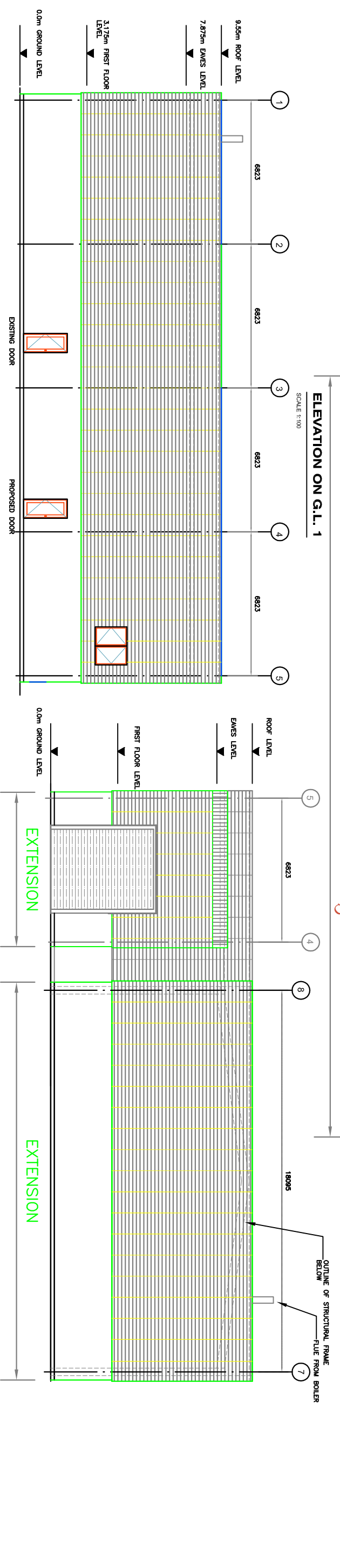
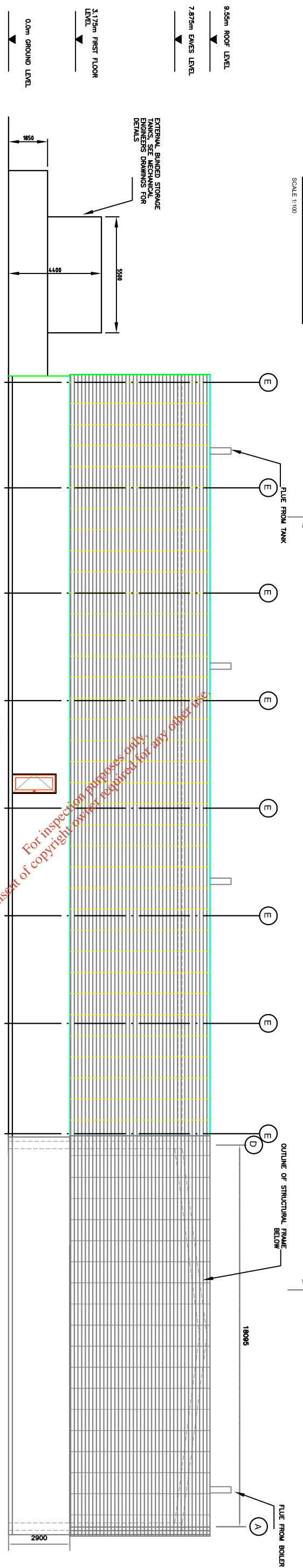
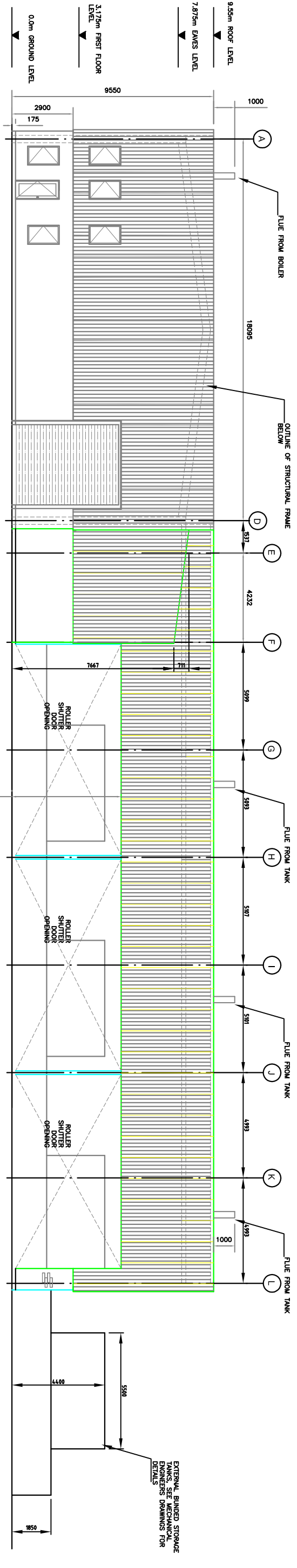
NOTES:

Drawing Title:	
Existing Elevations & Cross-Section	
Date:	Scale:
23.05.07	1:100
Drawn By:	Checked By:
W.C.	I.B.

Client:
ORMONDE ORGANICS LTD
Job Description:
PROPOSED WASTE RECYCLING AND RECOVERY FACILITY
Project Ref:
7P183
Drawing Ref:
13

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Revised drawings	Revision No.	Date	Description

Issue register	Issue No.	Date	Description

Drawings	Drawn	Checked	Date

NOTES:

1. All dimensions are in millimeters unless otherwise stated.

2. The contractor shall be responsible for checking the accuracy of all dimensions and levels.

3. The contractor shall be responsible for ensuring that all work is carried out in accordance with the approved drawings.

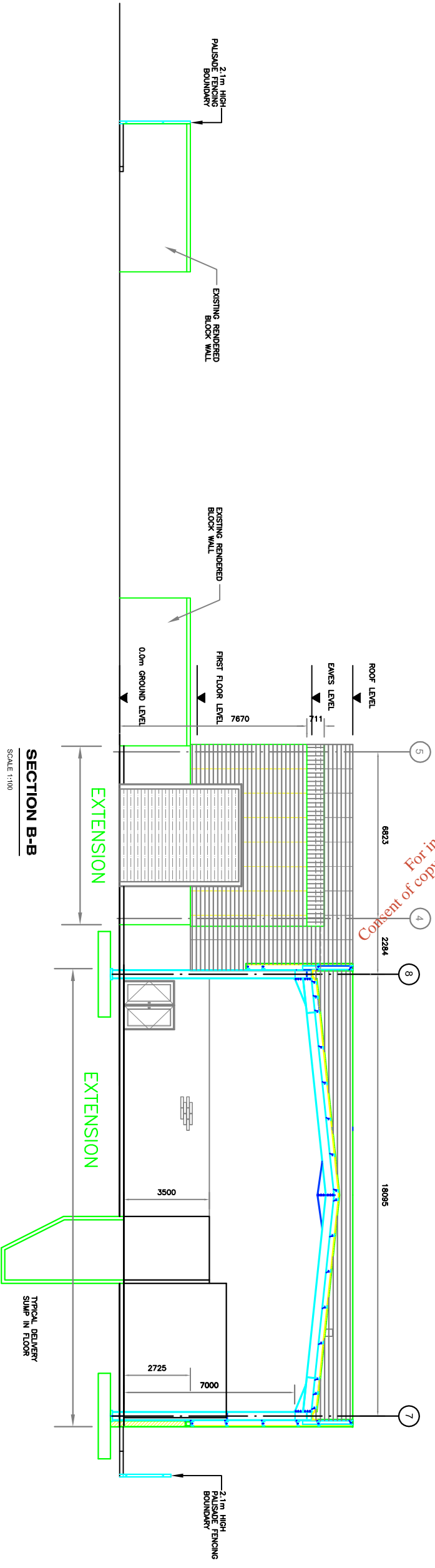
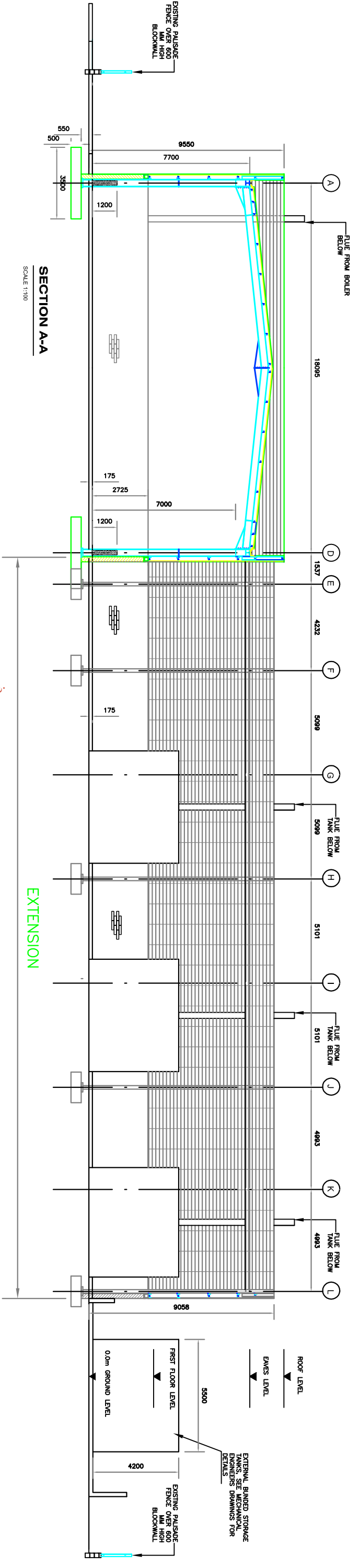
4. The contractor shall be responsible for ensuring that all work is carried out in accordance with the relevant building regulations.

Proposed Elevations
 'Process and Delivery Building'
 Date: 25.05.07
 Scale: 1:100
 Drawn By: W.C.
 Checked By: I.B.

Client:
 ORMONDE ORGANICS LTD
Job Description:
 PROPOSED WASTE RECYCLING AND RECOVERY FACILITY
 Project No: 7P183
 Drawing No: 14

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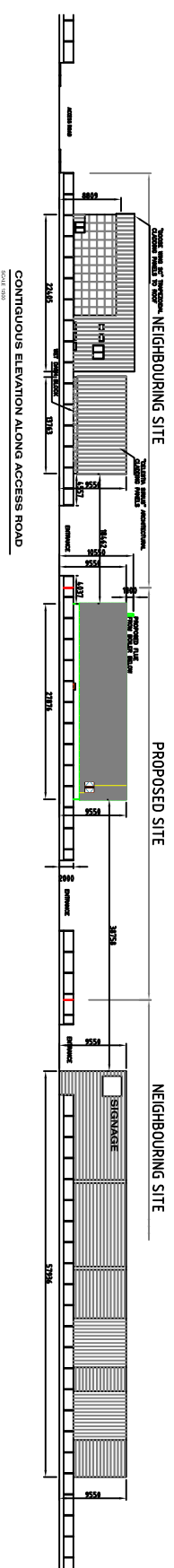
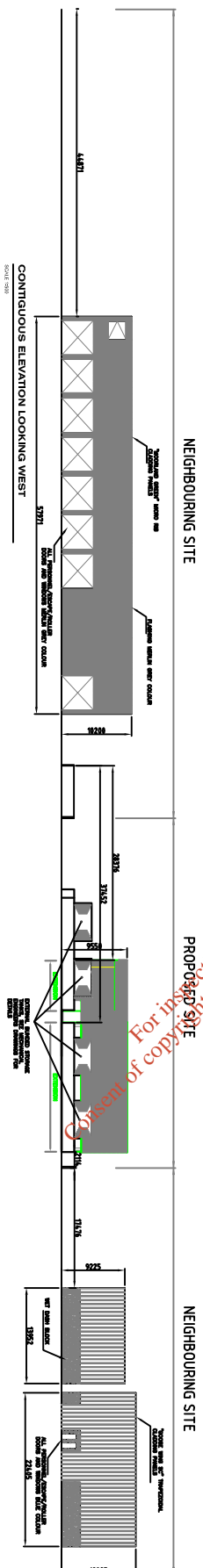
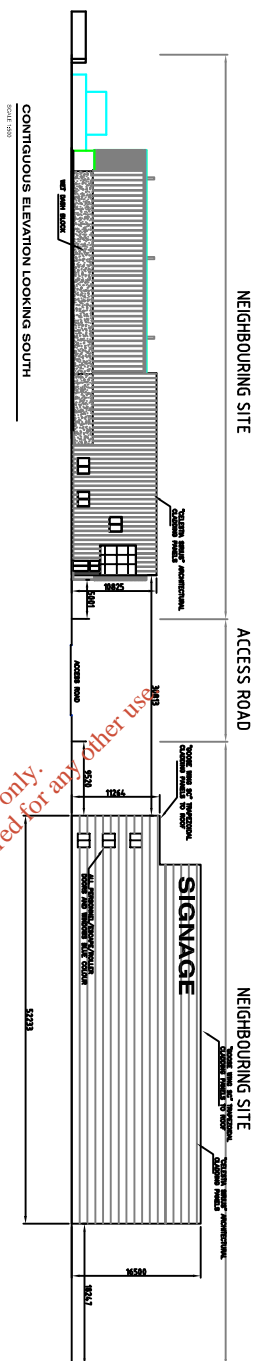
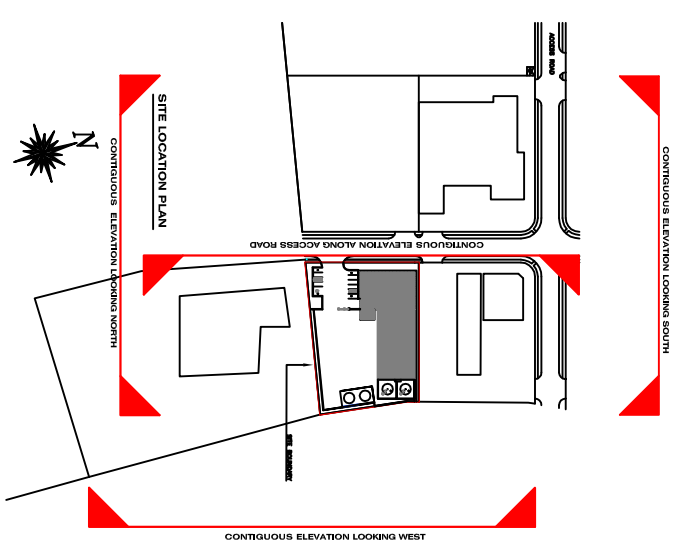
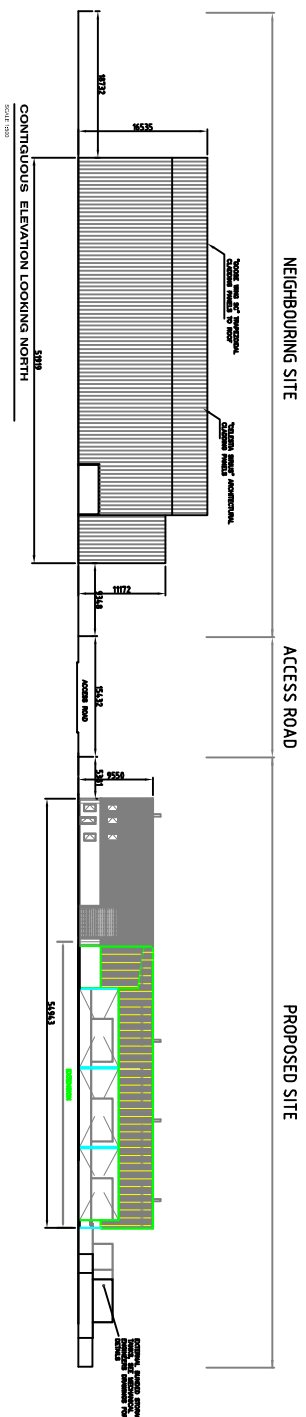


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Proposed Cross Sections AA & BB		Drawing Title:	
Date: 25.05.07		Scale: 1:100	
Drawn By: W.C.		Checked By: I.B.	
Client: ORMONDE ORGANICS LTD			
Job Description: PROPOSED WASTE RECYCLING AND RECOVERY FACILITY			
Project No: 7P183 Drawing No: 15			
BOWE CONSULTING ENGINEERS		Bowe Consulting Engineers	
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(050) 9131411		(050) 9131411	

Revision Change Index		Issue Register	
No.	Date	Description	Issue Register

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Revised drawings	
Draw No.	Draw Title

Revision change notes		
Rev.	Date	Description

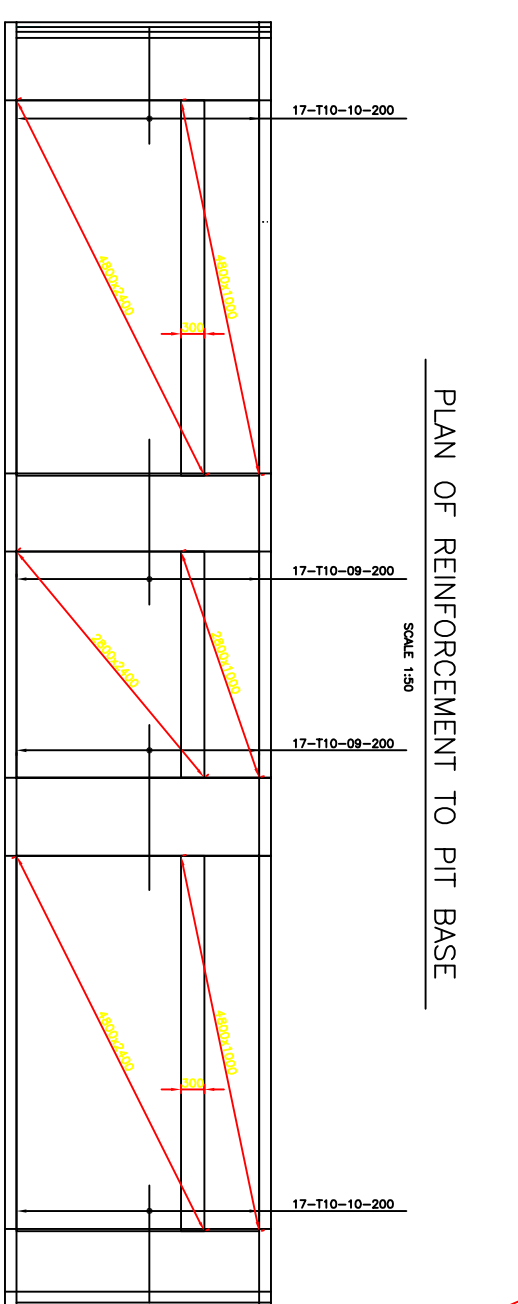
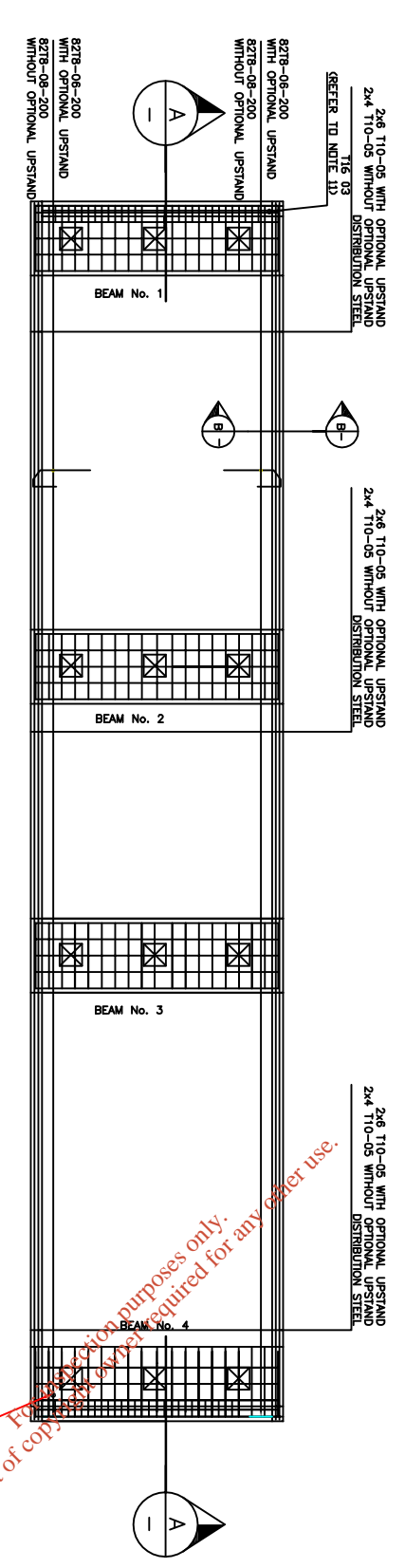
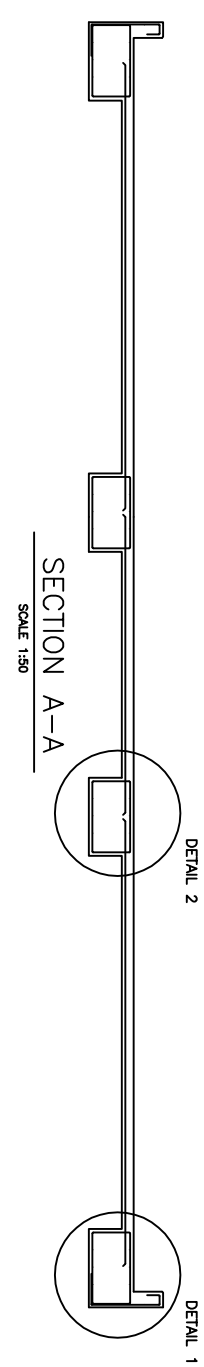
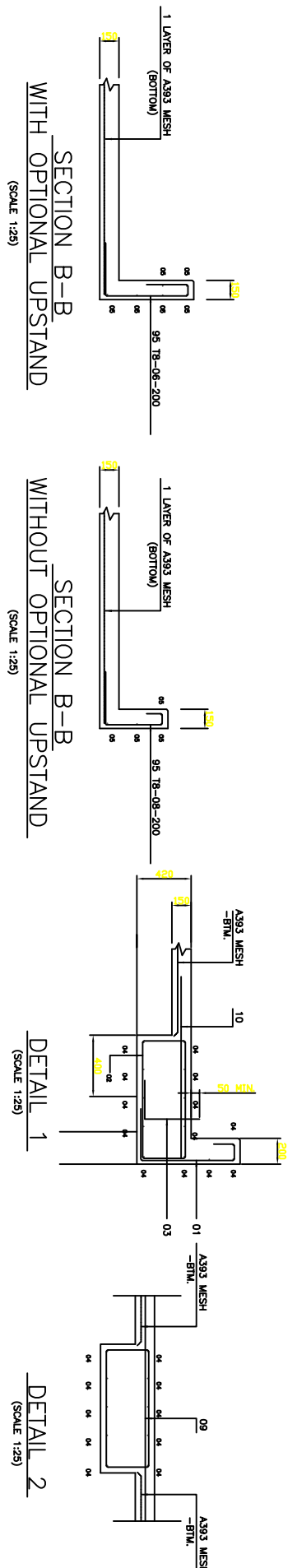
Issue register			
Rev.	Date	Description	Drawn/Checked/Issued

NOTES:

Drawing Title:	CONTIGUOUS ELEVATIONS
Date:	23.05.07
Drawn By:	R.G.
Scale:	1:500
Checked By:	I.B.

Client:	ORMONDE ORGANICS LTD
Job Description:	PROPOSED WASTE RECYCLING AND RECOVERY FACILITY
Drawing No.:	7P183
Drawing Date:	16

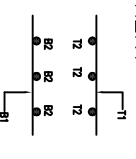
Bowe Consulting Engineers
1061 4, Stroud Business Park, Stroud, Gloucestershire, GL5 2JG
Tel: 01452 874747
Fax: 01452 874748
Email: info@boweconsulting.co.uk



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PLAN OF MESH REINFORCEMENT TO PIT BASE
SCALE 1:50

- (1) REINFORCEMENT TO BE GRADE 460 COMPLYING WITH THE REQUIREMENTS OF BS 8666
- (2) CONCRETE TO BE GRADE C35N20, WITH A MINIMUM CEMENT CONTENTS OF 360KG/m³ IN ACCORDANCE WITH BS8110 & EURO CODE 2 MECHANICALLY VIBRATED, LEANMIX CONCRETE BLINDING TO BE 15N20.
- (3) CONCRETE COVER TO ALL REINFORCEMENT TO BE 45mm MIN.
- (4) THE FOUNDATION HAS BEEN DESIGNED FOR A MINIMUM BEARING CAPACITY OF 100KN/m². THESE DETAILS ARE PREPARED ON THE BASIS THAT THE GROUND IS NOT SUSCEPTIBLE TO MOISTURE MOVEMENT OR FROST HEAVE. A CONSULTING ENGINEER SHOULD BE RETAINED BY THE CLIENT IN THE EVENT OF THESE REQUIREMENTS NOT BEING MET.
- (5) LOCATING LAYERS OF REINFORCEMENT



- (6) FOR GENERAL ARRANGEMENT DETAILS REFER TO DRAWING 04033/01
- (7) REFER TO 'PRECIA MOLEN' TSE WEIGH BRIDGE 'PRELIMINARIES BEFORE INSTALLATION' DOCUMENT FOR CONSTRUCTION GUIDE LINES, SPECIFICATION AND TYPICAL DETAILS. ALL TOLERANCE LIMITS TO BE ADHERED TO.
- (8) MINIMUM REINFORCEMENT LAP LENGTHS
 T10 - 400MM
 T12 - 480MM
 T16 - 640MM
 T20 - 800MM
 T25 - 1000MM
 T32 - 1250MM
- (9) FOR R.C. DETAILS OF DECK REFER TO DRAWING NO. 04033/05
- (10) PROVIDE 2x5.5 DECKS + 1x3.6 DECK FOR 16x3 TSE WEIGH BRIDGE
- (11) PROVIDE T16 REINFORCING BARS WELDED TO THE REINFORCEMENT IN THE BASE AND PROTRUDING A MIN. OF 50mm FOR LIGHTNING PROTECTION (2 NO. REQUIRED FOR EACH BRIDGE)
- (12) REINFORCEMENT WITHIN 300x300x150dp. RECESS TO BE CUT ON SITE TO SUIT REQUIREMENTS

Revisions No. Date Description _____ _____ _____ _____ _____ _____		Issue register No. Date Description _____ _____ _____ _____ _____ _____	
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Drawing Title: Weightbridge Details		Date: 25.05.07	
Scale: VARIES		Checked By: I.B.	
Client: ORMONDE ORGANICS LTD		Drawing No.: 7P183	
Job Description: PROPOSED WASTE RECYCLING AND RECOVERY FACILITY		Drawing Date: 17	
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