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NOTES  
 Proposed Development Area

# Appendix 1

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Revision Details	By	Date	Suffix

Drawing Status **FINAL**

Job Title  
**BECKTON STW  
 ENHANCED SLUDGE  
 DIGESTION FACILITY**

Drawing Title  
**AERIAL PHOTOGRAPH  
 OF THE PROPOSED  
 DEVELOPMENT AREA**

Scale at A3 **NOT TO SCALE**

Drawn	AH	Approved	AL
Stage 1 check	Stage 2 check	Originated	Date

Scott Wilson  
 Scott House  
 Monaghan Link, Basingstoke  
 Hampshire, RG21 7PP  
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 Fax (01256) 310201  
 www.scottwilson.com



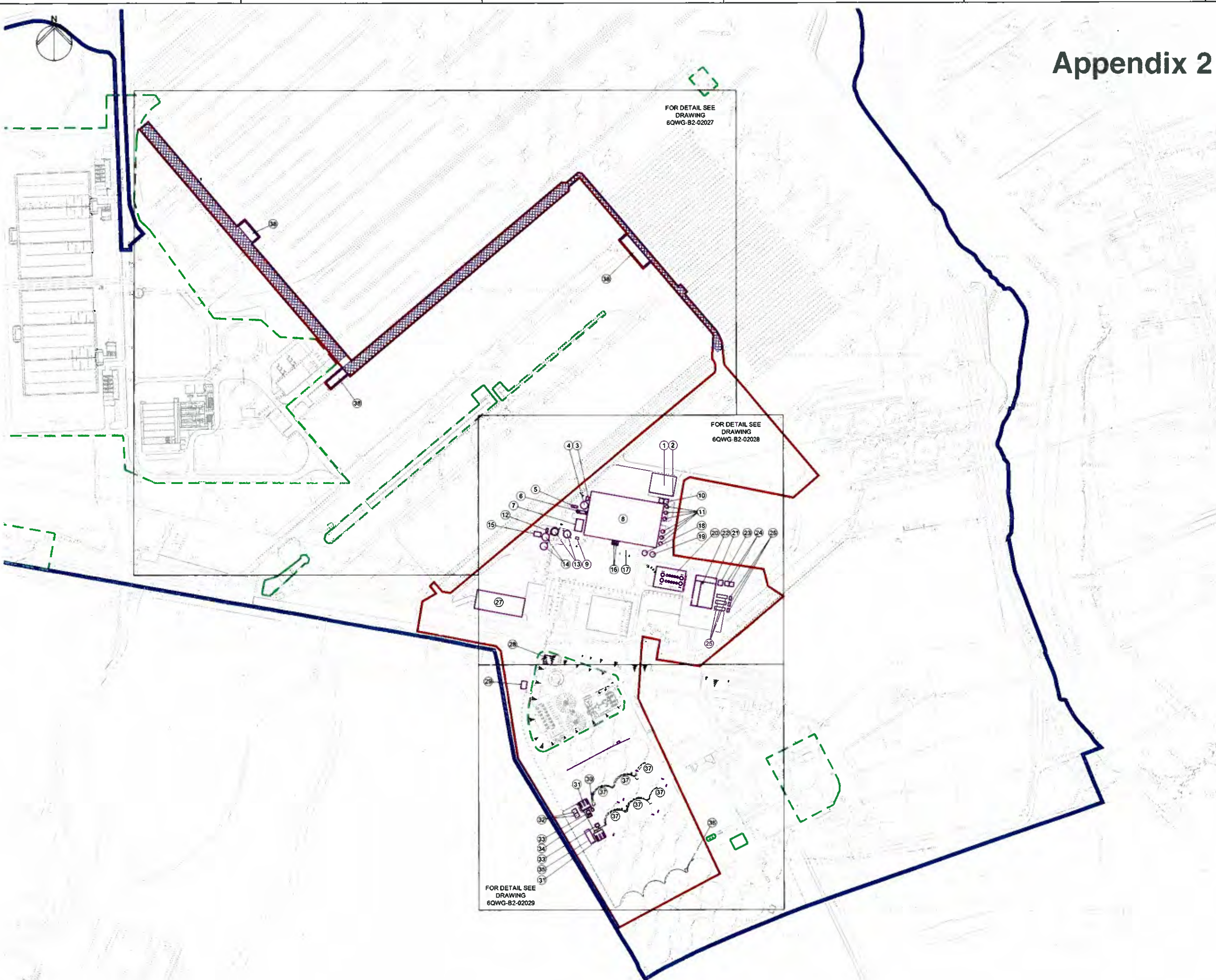
Drawing Number  
**FIGURE 2.4**

Date: 5th July 2010  
 Filepath: I:\6004 - Information\System\125412\_TW\_EIA\_Crossness\Wks\Beckton\Beckton enhanced sludge digestion facility July 2010\Figure 2.4 - Aerial photo.mxd





# Appendix 2



SCALE FOR PLANNING PURPOSES ONLY

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**NOTES**  
1. PIPE CORRIDORS SHOWN ARE INDICATIVE ONLY AND INTENDED TO SHOW MAIN CORRIDORS.

- LEGEND**
- BOUNDARY OF LAND OWNED BY THAMES WATER UTILITIES LIMITED.
  - PLANNING APPLICATION AREA BOUNDARY.
  - - - TQI PROJECT TO BE CONSTRUCTED.
  - PROPOSED STRUCTURES
  - PROPOSED PIPE CORRIDOR
  - PROPOSED PIPE BRIDGES
  - PROPOSED CHANNEL COVERS OVER SETTLED SEWAGE CHANNELS

- KEY TO ENHANCED DIGESTION PROJECT STRUCTURES**
1. ODOUR CONTROL UNIT
  2. ODOUR CONTROL STACK
  3. CENTRIFUGE FEED PUMPS
  4. CENTRIFUGE FEED TANKS
  5. WHEEL WASH WATER TANK
  6. WHEEL WASH RAMP
  7. STRAIN PRESS GANTRY
  8. SLUDGE CAKE STORAGE & DEWATERING OPERATIONS BLDG
  9. STRAIN PRESS FEED PUMPS
  10. TRANSFORMERS FOR CENTRIFUGES AND POLYMER DOSING
  11. POLYMER MAKE-UP AND STORAGE SILOS
  12. BELT PRESS FEED PUMPS
  13. BLENDING TANKS
  14. BELT PRESS FEED TANKS
  15. WELFARE BUILDING
  16. SLUDGE CAKE STORAGE BUILDING VENTILATION EXHAUST STACKS
  17. THERMAL HYDROLYSIS PLANT (THP) FEED SILOS
  18. FOUL / CONTAMINATED RUN-OFF PUMPING STATION
  19. CENTRATE AND FILTRATE TANK
  20. THP AREA WITH TWO STREAMS
  21. HEATING BUILDING WITH FLUE BOILERS & HV/LV SWITCHBOARD
  22. HEATING BUILDING FLUE STACK
  23. DIESEL FUEL TANK
  24. TRANSFORMERS FOR HEATING BUILDING
  25. COMBINED HEAT AND POWER ENGINES
  26. WASTE HEAT DUMP FANS
  27. RELOCATED WORKSHOP BUILDING
  28. SILOXANE REMOVAL PLANT
  29. SURPLUS GAS BURNER
  30. BIOGAS COMPRESSOR
  31. HEAT EXCHANGERS
  32. TRANSFORMERS FOR HEAT EXCHANGERS
  33. DIGESTER RECIRCULATION PUMPS
  34. BELT PRESS FEED TANK PUMPS
  35. DIGESTER MCC KIOSK
  36. PRE THICKENED GAS PUMPS
  37. REFURBISHED DIGESTERS WITH BIOGAS MEMBRANES
  38. SETTLED SEWAGE CHANNELS ODOUR CONTROL UNITS

PURPOSE OF ISSUE	PLANNING APPLICATION

100 m      0      100 m

SCALE 1 : 2000

A FOR INFORMATION	JC	MP	JN	26/07/10
Description	Dsgn	Chkd	Appd	Disc

**Thames Water**

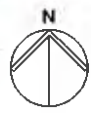
**Thames Water Utilities**  
Clearwater Court, Vauxhall Road,  
Reading, Berks RG1 8DB

**Mott MacDonald**

Demeter House  
Station Road  
Cambridge CB1 2RS  
United Kingdom  
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Fax +44 (0)1223 481 007  
Web www.mottmac.com

Location Code <b>BEC KS1ZZ</b>	OS Reference <b>TQ 454 821</b>	Security Reference <b>UBR</b>	Drawn By <b>DK</b>
Project Group <b>WASTE WATER</b>	Sub Process <b>X</b>		
Location Term <b>BARKING</b>			
Site Name <b>BECKTON STW</b>			
Construction Name <b>BECKTON STW ENHANCED SLUDGE DIGESTION</b>			
Drawing Title <b>PROPOSED SITE LAYOUT PLAN</b>			
Drawing No. <b>6QWG-B2-02012-EX</b>	Scale <b>1:2000</b>	Sheet No. <b>A1</b>	Rev. <b>A</b>

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# Appendix 2







SCALE FOR PLANNING PURPOSES ONLY

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### NOTES

1. PIPE CORRIDORS SHOWN ARE INDICATIVE ONLY AND INTENDED TO SHOW MAIN CORRIDORS.

### LEGEND

-  BOUNDARY OF LAND OWNED BY THAMES WATER UTILITIES LIMITED.
-  PLANNING APPLICATION AREA BOUNDARY
-  TTQI PROJECT TO BE CONSTRUCTED.
-  PROPOSED STRUCTURES
-  PROPOSED PIPE CORRIDOR
-  PROPOSED PIPE BRIDGES

### KEY TO ENHANCED DIGESTION PROJECT STRUCTURES

- 1 ODOUR CONTROL UNIT
- 2 ODOUR CONTROL STACK
- 3 CENTRIFUGE FEED PUMPS
- 4 CENTRIFUGE FEED TANKS
- 5 WHEEL WASH WATER TANK
- 6 WHEEL WASH RAMP
- 7 STRAIN PRESS GANTRY
- 8 SLUDGE CAKE STORAGE & DEWATERING OPERATIONS BLDG
- 9 STRAIN PRESS FEED PUMPS
- 10 TRANSFORMERS FOR CENTRIFUGES AND POLYMER DOSING
- 11 POLYMER MAKE-UP AND STORAGE SILOS
- 12 BELT PRESS FEED PUMPS
- 13 BLENDING TANKS
- 14 BELT PRESS FEED TANKS
- 15 WELFARE BUILDING
- 16 SLUDGE CAKE STORAGE BUILDING VENTILATION EXHAUST STACKS
- 17 THERMAL HYDROLYSIS PLANT (THP) FEED SILOS
- 18 FOUL / CONTAMINATED RUN-OFF PUMPING STATION
- 19 CENTRATE AND FILTRATE TANK
- 20 THP AREA WITH TWO STREAMS
- 21 HEATING BUILDING WITH FLUE BOILERS & HVALV SWITCHBOARD
- 22 HEATING BUILDING FLUE STACK
- 23 DIESEL FUEL TANK
- 24 TRANSFORMERS FOR HEATING BUILDING
- 25 COMBINED HEAT AND POWER ENGINES
- 26 WASTE HEAT DUMP FANS
- 27 RELOCATED WORKSHOP BUILDING
- 28 SILOXANE REMOVAL PLANT
- 29 SURPLUS GAS BURNER
- 30 BIOGAS COMPRESSOR
- 31 HEAT EXCHANGERS
- 32 TRANSFORMERS FOR HEAT EXCHANGERS
- 33 DIGESTER RECIRCULATION PUMPS
- 34 BELT PRESS FEED TANK PUMPS
- 35 DIGESTER MCC KIOSK
- 36 PRE THICKENED SAS PUMPS
- 37 REFURBISHED DIGESTERS WITH BIOGAS MEMBRANES

PURPOSE OF ISSUE	FOR PLANNING APPLICATION




FOR INFORMATION		JC	MP	JN	26/07/10
Description	Diggr	Child	Appl	Date	

 **Thames Water Utilities**  
Clearwater Court, Vastern Road,  
Reading, Berks. RG1 8DB

 **Mott MacDonald**  
Demeter House  
Station Road  
Cambridge CB1 2RS  
United Kingdom  
Tel +44 (0)1223 460 660  
Fax +44 (0)1223 461 007  
Web www.mottmac.com

Location Code: BECKS1ZZ	US Reference: TQ 454 821	Security Reference: UBR	Drawn By: DK
Project Name: WASTE WATER	Sub Project: X		

Location: Town BARKING

Site Name: BECKTON STW

Contract Name: BECKTON STW ENHANCED SLUDGE DIGESTION

Drawing Title: PROPOSED SITE LAYOUT - CAKE STORAGE BUILDING AND THP

Drawing No: 60WG-B2-02028-EX	Scale: 1:500	Sheet No: A1	Rev: A
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# Appendix 2

SCALE FOR PLANNING PURPOSES ONLY

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**NOTES**

1. PIPE CORRIDORS SHOWN ARE INDICATIVE ONLY AND INTENDED TO SHOW MAIN CORRIDORS.

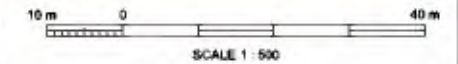
**LEGEND**

- BOUNDARY OF LAND OWNED BY THAMES WATER UTILITIES LIMITED.
- PLANNING APPLICATION AREA BOUNDARY.
- TFOI PROJECT TO BE CONSTRUCTED
- PROPOSED STRUCTURES
- PROPOSED PIPE CORRIDOR
- PROPOSED PIPE BRIDGES

**KEY TO ENHANCED DIGESTION PROJECT STRUCTURES**

1. ODOUR CONTROL UNIT
2. ODOUR CONTROL STACK
3. CENTRIFUGE FEED PUMPS
4. CENTRIFUGE FEED TANKS
5. WHEEL WASH WATER TANK
6. WHEEL WASH RAMP
7. STRAIN PRESS GANTRY
8. SLUDGE CAKE STORAGE & DEWATERING OPERATIONS BLDG
9. STRAIN PRESS FEED PUMPS
10. TRANSFORMERS FOR CENTRIFUGES AND POLYMER DOSING
11. POLYMER MAKE-UP AND STORAGE SILOS
12. BELT PRESS FEED PUMPS
13. BLENDING TANKS
14. BELT PRESS FEED TANKS
15. WELFARE BUILDING
16. SLUDGE CAKE STORAGE BUILDING VENTILATION EXHAUST STACKS
17. THERMAL HYDROLYSIS PLANT (THP) FEED SILOS
18. FOUL / CONTAMINATED RUN-OFF PUMPING STATION
19. CENTRATE AND FILTRATE TANK
20. THP AREA WITH TWO STREAMS
21. HEATING BUILDING WITH FLUE BOILERS & HVLV SWITCHBOARD
22. HEATING BUILDING FLUE STACK
23. DIESEL FUEL TANK
24. TRANSFORMERS FOR HEATING BUILDING
25. COMBINED HEAT AND POWER ENGINES
26. WASTE HEAT DUMP FANS
27. RELOCATED WORKSHOP BUILDING
28. SILOXANE REMOVAL PLANT
29. SURPLUS GAS BURNER
30. BIOGAS COMPRESSOR
31. HEAT EXCHANGERS
32. TRANSFORMERS FOR HEAT EXCHANGERS
33. DIGESTER RECIRCULATION PUMPS
34. BELT PRESS FEED TANK PUMPS
35. DIGESTER MCC KIOSK
36. PRE THICKENED SAS PUMPS
37. REFURBISHED DIGESTERS WITH BIOGAS MEMBRANES

PURPOSE OF ISSUE	FOR PLANNING APPLICATION
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FOR INFORMATION		JC	MP	JN	26/07/10
No.	Description	Dsgn	Chk	Appd	Date

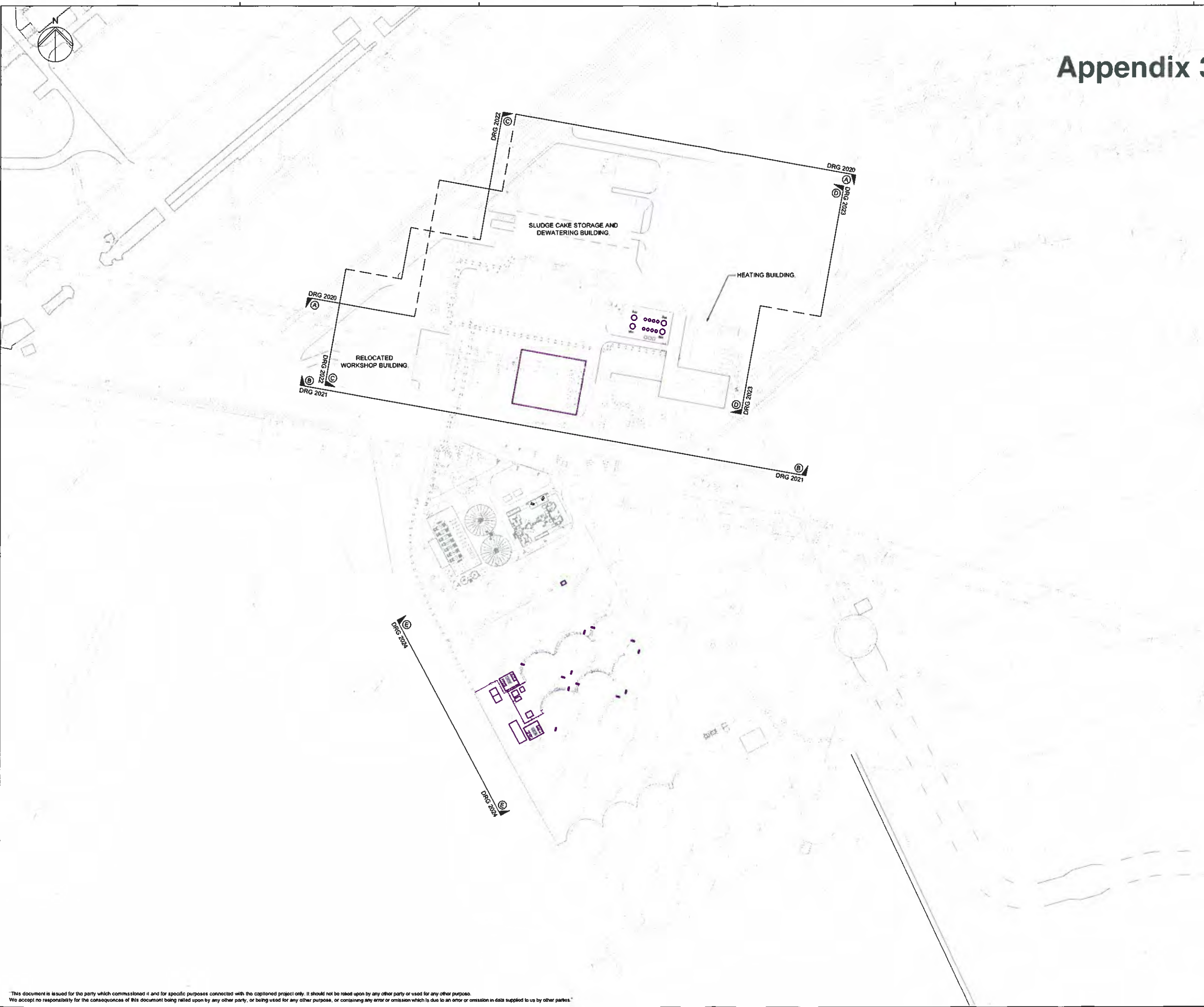
**Thames Water Utilities**  
 Clearwater Court, Vastern Road,  
 Reading, Berks RG1 4DB

**Mott MacDonald**  
 Demeter House  
 Station Road  
 Cambridge CB1 2RS  
 United Kingdom  
 Tel +44 (0)1223 460 660  
 Fax +44 (0)1223 461 007  
 Web www.mottmac.com

Location Code: <b>BECKS1Z</b>	OS Reference: <b>TQ 454 821</b>	Security Reference: <b>UBR</b>	Drawn By: <b>DK</b>
Project Group: <b>WASTE WATER</b>	Sub Process: <b>X</b>		
Location: <b>Town: BARKING</b>			
Site Name: <b>BECKTON STW</b>			
Contract Name: <b>BECKTON STW ENHANCED SLUDGE DIGESTION</b>			
Drawing Title: <b>PROPOSED SITE LAYOUT - DIGESTER AREA</b>			
Drawing No: <b>6QWG-B2-02029-EX</b>	Scale: <b>1:500</b>	Sheet Size: <b>A1</b>	Rev: <b>A</b>

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# Appendix 3



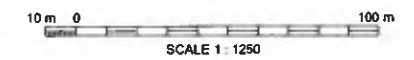
SCALE FOR PLANNING PURPOSES ONLY

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**LEGEND**

-  PROPOSED STRUCTURES
-  PROPOSED PIPE CORRIDOR
-  PROPOSED PIPE BRIDGES

PURPOSE OF ISSUE	FOR PLANNING APPLICATION
------------------	--------------------------



No	Description	JC Dgtr	MP Chd	JN Appr	26/07/10 Rev

**Thames Water** *Thames Water Utilities*  
 Clearwater Court, Vastern Road,  
 Reading, Berks. RG1 8DB

**Mott MacDonald**  
 Demeter House  
 Station Road  
 Cambridge CB1 2PS  
 United Kingdom  
 Tel +44 (0)1223 460 660  
 Fax +44 (0)1223 461 007  
 Web www.mottmac.com

Location Code <b>BECKS12Z</b>	OS Reference <b>TQ 454 821</b>	Security Reference <b>UBR</b>	Drawn By <b>CAM</b>
Project Group <b>WASTE WATER</b>		Sub Process <b>X</b>	
Location: Town <b>BARKING</b>			
Site Name: <b>BECKTON STW</b>			
Contract Name: <b>BECKTON STW ENHANCED SLUDGE DIGESTION</b>			
Drawing Title: <b>PROPOSED SITE LAYOUT PLAN - SHOWING ELEVATIONS</b>			
Drawing No. <b>60WG-B2-02013-EX</b>	Scale <b>1:1250</b>	Sheet Size <b>A1</b>	Rev <b>A</b>

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# Appendix 3

SCALE FOR PLANNING PURPOSES ONLY

**NOTES**

1. ALL LEVELS ARE IN METERS ABOVE ORDNANCE DATUM.
2. FOR KEY PLAN OF SECTIONS AND ELEVATIONS REFER TO DRAWING 6QWG-B2-02013-EX.
3. FOR PROPOSED SITE PLAN LAYOUT REFER TO DRAWING 6QWG-B2-02012-EX.
4. ASSUMED GROUND LEVELS (AGL) ARE BASED ON TOPOGRAPHICAL SPOT LEVELS GIVEN ON OS MAP.
5. FLOOR SLAB LEVEL OF SLUDGE CAKE STORAGE BUILDING ASSUMED TO BE 4.8m AOD.
6. FLOOR SLAB LEVEL OF HEATING BUILDING ASSUMED TO BE 7.8m AOD.
7. FLOOR SLAB LEVEL OF ODOUR CONTROL UNIT ASSUMED TO BE 4.95m AOD.
8. PIPE ROUTES ARE INDICATIVE ONLY.

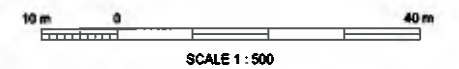
**LEGEND**

- PROPOSED STRUCTURES ARE SHOWN AS PURPLE
- EXISTING STRUCTURES ARE SHOWN AS GREY

**KEY TO ENHANCED DIGESTION PROJECT STRUCTURES (NOT ALL STRUCTURES CAN BE SEEN IN THIS ELEVATION)**

1. ODOUR CONTROL UNIT
2. ODOUR CONTROL STACK
3. CENTRIFUGE FEED PUMPS
4. CENTRIFUGE FEED TANKS
5. WHEEL WASH WATER TANK
6. WHEEL WASH RAMP
7. STRAIN PRESS GANTRY
8. SLUDGE CAKE STORAGE & DEWATERING OPERATIONS BLDG
9. STRAIN PRESS FEED PUMPS
10. TRANSFORMERS FOR CENTRIFUGES AND POLYMER DOSING
11. POLYMER MAKE-UP AND STORAGE SILOS
12. BELT PRESS FEED PUMPS
13. BLENDING TANKS
14. BELT PRESS FEED TANKS
15. WELFARE BUILDING
16. SLUDGE CAKE STORAGE BUILDING VENTILATION EXHAUST STACKS
17. THERMAL HYDROLYSIS PLANT (THP) FEED SILOS
18. FOUL / CONTAMINATED RUN-OFF PUMPING STATION
19. CENTRATE AND FILTRATE TANK
20. THP AREA WITH TWO STREAMS
21. HEATING BUILDING WITH FLUE BOILERS & H/V/L SWITCHBOARD
22. HEATING BUILDING FLUE STACK
23. DIESEL FUEL TANK
24. TRANSFORMERS FOR HEATING BUILDING
25. COMBINED HEAT AND POWER ENGINES
26. WASTE HEAT DUMP FANS
27. RELOCATED WORKSHOP BUILDING
28. SILOXANE REMOVAL PLANT
29. SURPLUS GAS BURNER
30. BIOGAS COMPRESSOR
31. HEAT EXCHANGERS
32. TRANSFORMERS FOR HEAT EXCHANGERS
33. DIGESTER RECIRCULATION PUMPS
34. BELT PRESS FEED TANK PUMPS
35. DIGESTER MCC KIOSK
36. PRE THICKENED SAS PUMPS
37. REFURBISHED DIGESTERS WITH TOP MOUNTED BIOGAS MEMBRANES AND FARADAY CAGE LIGHTNING PROTECTION

PURPOSE OF ISSUE	FOR PLANNING APPLICATION
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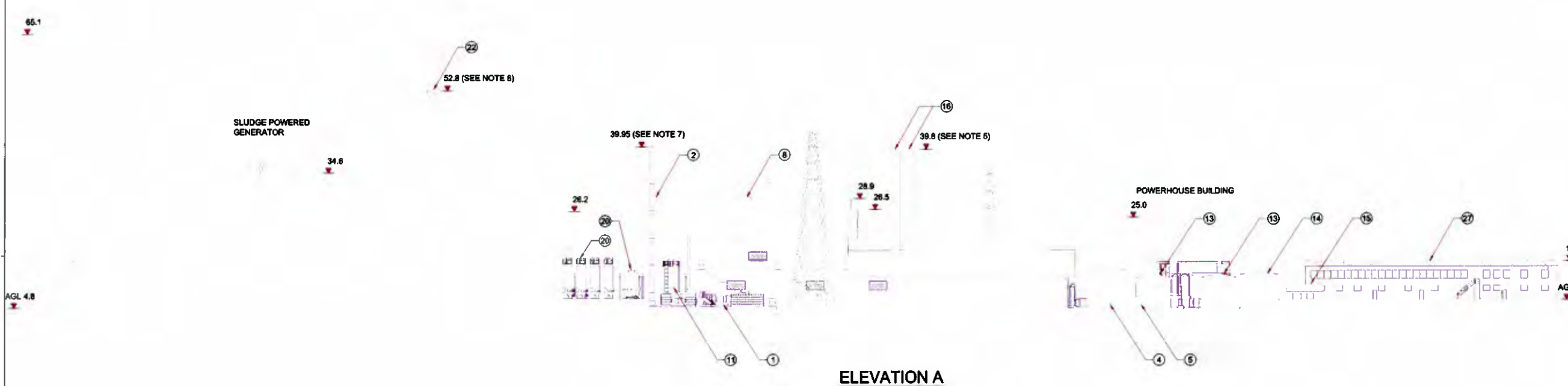

A FOR INFORMATION	JC	MP	JN	26/07/10

**Thames Water Utilities**  
Clearwater Court, Vauxhall Road,  
Reading, Berks. RG1 8DB

**Mott MacDonald**  
Tel +44 (0) 1223 460 660  
Fax +44 (0) 1223 461 007  
Web www.mottmac.com

Location Code: BECKS1ZZ	OS Reference: TQ 454 821	Security Reference: UBR	Drawn By: DK
Project Group: WASTE WATER	Sub Process: X		
Location / Town: <b>BECKTON</b>			
Site Name: <b>BECKTON STW</b>			
Customer Name: <b>BECKTON STW ENHANCED SLUDGE DIGESTION</b>			
Drawing Title: <b>PROPOSED SITE ELEVATION A</b>			

Drawing No.: 6QWG-B2-02020-EX	Scale: 1:500	Sheet Size: A1	Rev: A
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# Appendix 3

SCALE FOR PLANNING PURPOSES ONLY

**NOTES**

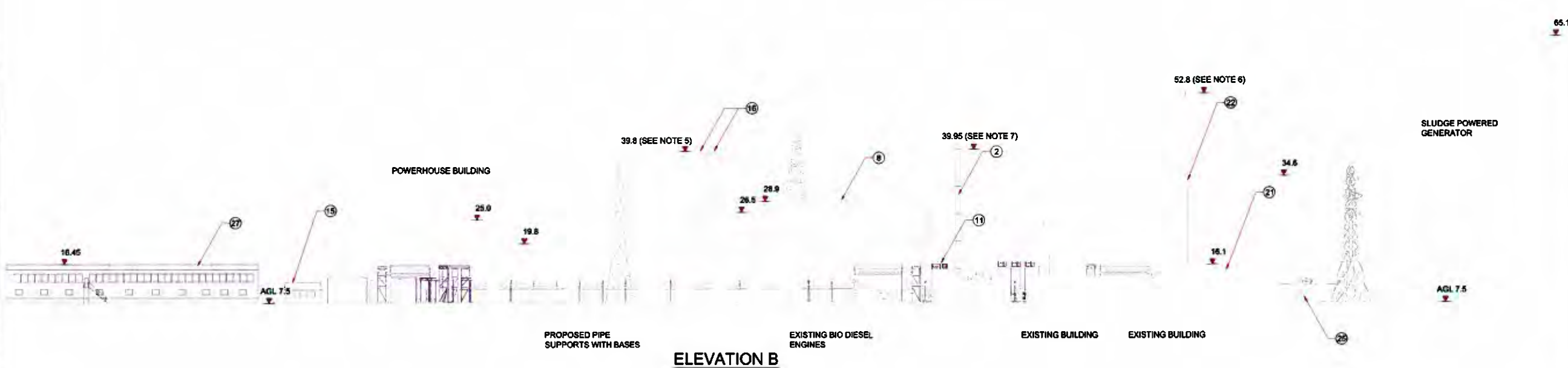
1. ALL LEVELS ARE IN METERS ABOVE ORDNANCE DATUM.
2. FOR KEY PLAN OF SECTIONS AND ELEVATIONS REFER TO DRAWING 6QWG-B2-02013-EX.
3. FOR PROPOSED SITE PLAN LAYOUT REFER TO DRAWING 6QWG-B2-02012-EX.
4. ASSUMED GROUND LEVELS (AGL) ARE BASED ON TOPOGRAPHICAL SPOT LEVELS GIVEN ON OS MAP.
5. FLOOR SLAB LEVEL OF SLUDGE CAKE STORAGE BUILDING ASSUMED TO BE 4.8m AOD.
6. FLOOR SLAB LEVEL OF HEATING BUILDING ASSUMED TO BE 7.8m AOD.
7. FLOOR SLAB LEVEL OF ODOUR CONTROL UNIT ASSUMED TO BE 4.95m AOD.
8. PIPE ROUTES ARE INDICATIVE ONLY.

**LEGEND**

- PROPOSED STRUCTURES ARE SHOWN AS PURPLE
- EXISTING STRUCTURES ARE SHOWN AS GREY

**KEY TO ENHANCED DIGESTION PROJECT STRUCTURES (NOT ALL STRUCTURES CAN BE SEEN IN THIS ELEVATION)**

1. ODOUR CONTROL UNIT
2. ODOUR CONTROL STACK
3. CENTRIFUGE FEED PUMPS
4. CENTRIFUGE FEED TANKS
5. WHEEL WASH WATER TANK
6. WHEEL WASH RAMP
7. STRAIN PRESS GANTRY
8. SLUDGE CAKE STORAGE & DEWATERING OPERATIONS BLDG
9. STRAIN PRESS FEED PUMPS
10. TRANSFORMERS FOR CENTRIFUGES AND POLYMER DOSING
11. POLYMER MAKE-UP AND STORAGE SILOS
12. BELT PRESS FEED PUMPS
13. BLENDING TANKS
14. BELT PRESS FEED TANKS
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20. THP AREA WITH TWO STREAMS
21. HEATING BUILDING WITH FLUE BOILERS & HWV SWITCHBOARD
22. HEATING BUILDING FLUE STACK
23. DIESEL FUEL TANK
24. TRANSFORMERS FOR HEATING BUILDING
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26. WASTE HEAT DUMP FANS
27. RELOCATED WORKSHOP BUILDING
28. SILOXANE REMOVAL PLANT
29. SURPLUS GAS BURNER
30. BIOGAS COMPRESSOR
31. HEAT EXCHANGERS
32. TRANSFORMERS FOR HEAT EXCHANGERS
33. DIGESTER RECIRCULATION PUMPS
34. BELT PRESS FEED TANK PUMPS
35. DIGESTER MCC KIOSK
36. PRE THICKENED SAS PUMPS
37. REFURBISHED DIGESTERS WITH TOP MOUNTED BIOGAS MEMBRANES AND FARADAY CAGE LIGHTNING PROTECTION



**ELEVATION B**

PURPOSE OF ISSUE	FOR PLANNING APPLICATION
------------------	--------------------------




FOR INFORMATION		JC	MP	JN	26/07/10
	Description	Dgr	Chd	Appd	Date

**Thames Water Utilities**  
 Clearwater Court, Vastern Road,  
 Reading, Berks. RG1 8DB

**Mott MacDonald**  
 Demeter House  
 Station Road  
 Cambridge CB2 2RS  
 United Kingdom  
 Tel +44 (0)1223 460 660  
 Fax +44 (0)1223 461 007  
 Web www.mottmac.com

Location Code:	OS Reference:	Security Reference:	Drawn By:
BECKS1ZZ	TQ 454 821	UBR	DK
Project Group:	Sub Project:		
WASTE WATER	X		
Location / Town:			
BARKING			
Site Name:			
BECKTON STW			
Contract Name:			
BECKTON STW ENHANCED SLUDGE DIGESTION			
Drawing Title:			
PROPOSED SITE ELEVATION B			
Drawing No.:	Scale:	Sheet Size:	Rev:
6QWG-B2-0201-EX	1:100	A1	A

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# Appendix 3

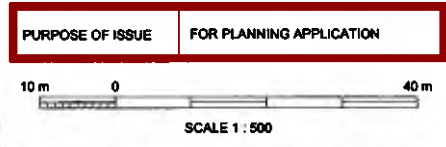
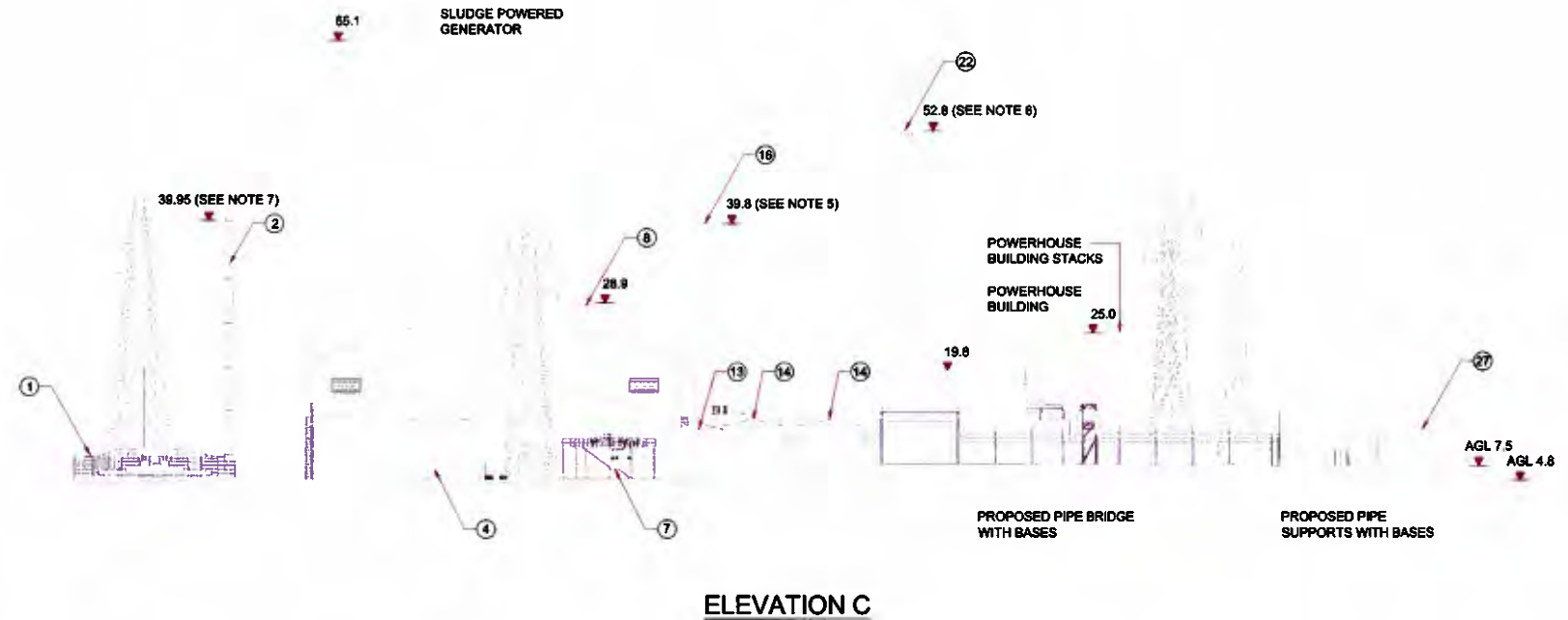
SCALE FOR PLANNING PURPOSES ONLY

- NOTES**
- ALL LEVELS ARE IN METERS ABOVE ORDNANCE DATUM.
  - FOR KEY PLAN OF SECTIONS AND ELEVATIONS REFER TO DRAWING 6QWG-B2-02013-EX.
  - FOR PROPOSED SITE PLAN LAYOUT REFER TO DRAWING 6QWG-B2-02012-EX.
  - ASSUMED GROUND LEVELS (AGL) ARE BASED ON TOPOGRAPHICAL SPOT LEVELS GIVEN ON OS MAP.
  - FLOOR SLAB LEVEL OF SLUDGE CAKE STORAGE BUILDING ASSUMED TO BE 4.8m AOD.
  - FLOOR SLAB LEVEL OF HEATING BUILDING ASSUMED TO BE 7.8m AOD.
  - FLOOR SLAB LEVEL OF ODOUR CONTROL UNIT ASSUMED TO BE 4.95m AOD.
  - PIPE ROUTES ARE INDICATIVE ONLY.

- LEGEND**
- PROPOSED STRUCTURES ARE SHOWN AS PURPLE
  - EXISTING STRUCTURES ARE SHOWN AS GREY

**KEY TO ENHANCED DIGESTION PROJECT STRUCTURES (NOT ALL STRUCTURES CAN BE SEEN IN THIS ELEVATION)**

- ODOUR CONTROL UNIT
- ODOUR CONTROL STACK
- CENTRIFUGE FEED PUMPS
- CENTRIFUGE FEED TANKS
- WHEEL WASH WATER TANK
- WHEEL WASH RAMP
- STRAIN PRESS GANTRY
- SLUDGE CAKE STORAGE & DEWATERING OPERATIONS BLDG
- STRAIN PRESS FEED PUMPS
- TRANSFORMERS FOR CENTRIFUGES AND POLYMER DOSING
- POLYMER MAKE-UP AND STORAGE SILOS
- BELT PRESS FEED PUMPS
- BLENDED TANKS
- BELT PRESS FEED TANKS
- WELFARE BUILDING
- SLUDGE CAKE STORAGE BUILDING VENTILATION EXHAUST STACKS
- THERMAL HYDROLYSIS PLANT (THP) FEED SILOS
- FOUL / CONTAMINATED RUN-OFF PUMPING STATION
- CENTRATE AND FILTRATE TANK
- THP AREA WITH TWO STREAMS
- HEATING BUILDING WITH FLUE BOILERS & HVLV SWITCHBOARD
- HEATING BUILDING FLUE STACK
- DIESEL FUEL TANK
- TRANSFORMERS FOR HEATING BUILDING
- COMBINED HEAT AND POWER ENGINES
- WASTE HEAT DUMP FANS
- RELOCATED WORKSHOP BUILDING
- SILOXANE REMOVAL PLANT
- SURPLUS GAS BURNER
- BIOGAS COMPRESSOR
- HEAT EXCHANGERS
- TRANSFORMERS FOR HEAT EXCHANGERS
- DIGESTER RECIRCULATION PUMPS
- BELT PRESS FEED TANK PUMPS
- DIGESTER MCC KIOSK
- PRE THICKENED SAS PUMPS
- REFURBISHED DIGESTERS WITH TOP MOUNTED BIOGAS MEMBRANES AND FARADAY CAGE LIGHTNING PROTECTION




FOR INFORMATION	JC	MP	JN	26/07/10
Description	Dgrs	Chkd	Appd	Date

**Thames Water Utilities**  
Clearwater Court, Vauxhall Road,  
Reading, Berks. RG1 8DB

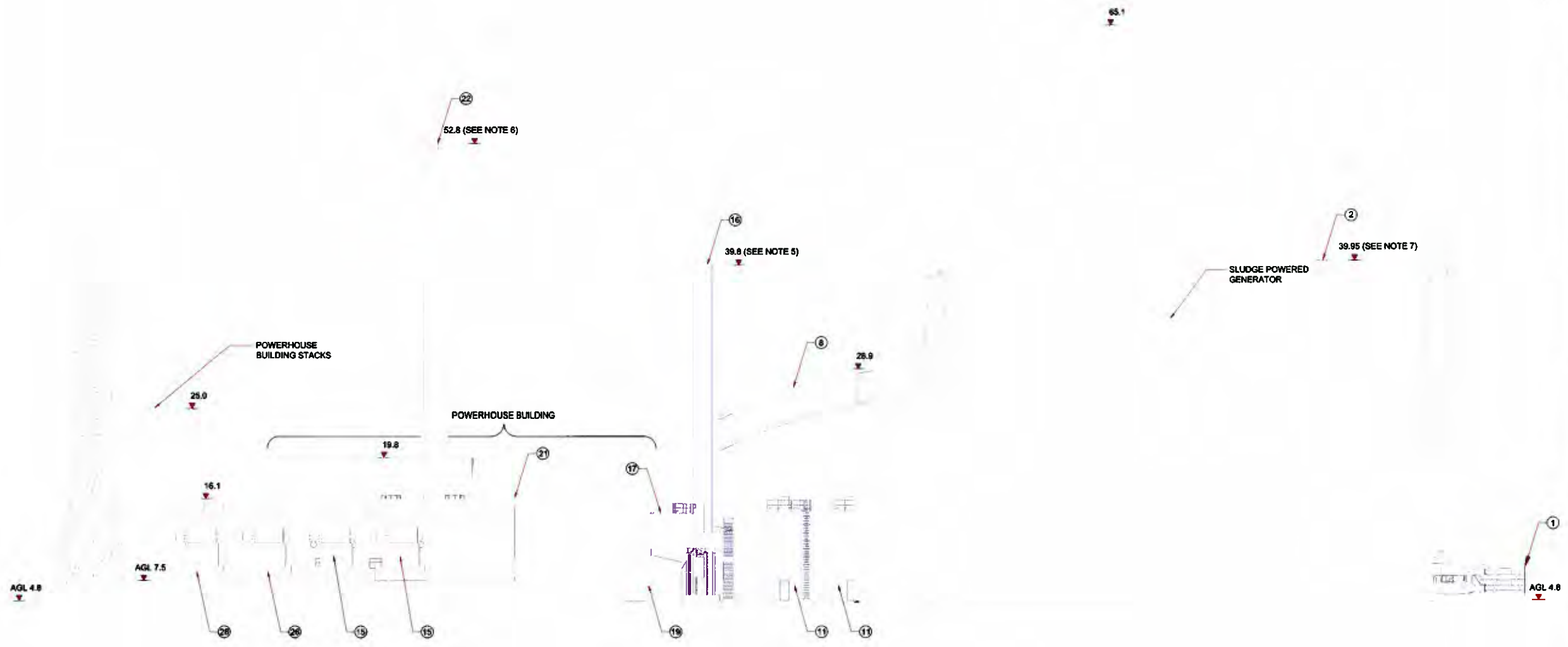
**Mott MacDonald**  
Demeter House  
Station Road  
Cambridge CB1 2RS  
United Kingdom  
Tel +44 (0) 223 460 660  
Fax +44 (0) 1223 461 007  
Web www.mottmac.com

Location Code: BECKS1ZZ	OS Reference: TQ 454 821	Security Reference: UBR	Drawn By: DK
Project Group: WASTE WATER	Sub Process: X		
Location / Town: BARKING			
Site Name: BECKTON STW			
Contract Name: BECKTON STW ENHANCED SLUDGE DIGESTION			
Drawing Title: PROPOSED SITE ELEVATION C			

Drawing No.: 6QWG-B2-02022-EX	Scale: 1:500	Sheet Size: A1	Rev: A
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# Appendix 3



ELEVATION D

SCALE FOR PLANNING PURPOSES ONLY

NOTES

1. ALL LEVELS ARE IN METERS ABOVE ORDINANCE DATUM.
2. FOR KEY PLAN OF SECTIONS AND ELEVATIONS REFER TO DRAWING 6QWG-B2-02013-EX.
3. FOR PROPOSED SITE PLAN LAYOUT REFER TO DRAWING 6QWG-B2-02012-EX.
4. ASSUMED GROUND LEVELS (AGL) ARE BASED ON TOPOGRAPHICAL SPOT LEVELS GIVEN ON OS MAP.
5. FLOOR SLAB LEVEL OF SLUDGE CAKE STORAGE BUILDING ASSUMED TO BE 4.8mAOD.
6. FLOOR SLAB LEVEL OF HEATING BUILDING ASSUMED TO BE 7.8mAOD.
7. FLOOR SLAB LEVEL OF ODOUR CONTROL UNIT ASSUMED TO BE 4.95mAOD.
8. PIPE ROUTES ARE INDICATIVE ONLY.

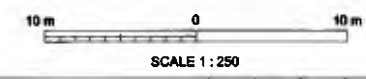
LEGEND

- PROPOSED STRUCTURES ARE SHOWN AS PURPLE
- EXISTING STRUCTURES ARE SHOWN AS GREY

KEY TO ENHANCED DIGESTION PROJECT STRUCTURES (NOT ALL STRUCTURES CAN BE SEEN IN THIS ELEVATION)

1. ODOUR CONTROL UNIT
2. ODOUR CONTROL STACK
3. CENTRIFUGE FEED PUMPS
4. CENTRIFUGE FEED TANKS
5. WHEEL WASH WATER TANK
6. STRAIN PRESS RAMP
7. STRAIN PRESS GANTRY
8. SLUDGE CAKE STORAGE & DEWATERING OPERATIONS BLDG
9. STRAIN PRESS FEED PUMPS
10. TRANSFORMERS FOR CENTRIFUGES AND POLYMER DOSING
11. POLYMER MAKE-UP AND STORAGE SILOS
12. BELT PRESS FEED PUMPS
13. BLENDING TANKS
14. BELT PRESS FEED TANKS
15. WELFARE BUILDING
16. SLUDGE CAKE STORAGE BUILDING VENTILATION EXHAUST STACKS
17. THERMAL HYDROLYSIS PLANT (THP) FEED SILOS
18. FOUL / CONTAMINATED RUN-OFF PUMPING STATION
19. CENTRATE AND FILTRATE TANK
20. THP AREA WITH TWO STREAMS
21. HEATING BUILDING WITH FLUE BOILERS & HV/LV SWITCHBOARD
22. HEATING BUILDING FLUE STACK
23. DIESEL FUEL TANK
24. TRANSFORMERS FOR HEATING BUILDING
25. COMBINED HEAT AND POWER ENGINES
26. WASTE HEAT DUMP FANS
27. RELOCATED WORKSHOP BUILDING
28. SILOXANE REMOVAL PLANT
29. SURPLUS GAS BURNER
30. BIOGAS COMPRESSOR
31. HEAT EXCHANGERS
32. TRANSFORMERS FOR HEAT EXCHANGERS
33. DIGESTER RECIRCULATION PUMPS
34. BELT PRESS FEED TANK PUMPS
35. DIGESTER MCC KIOSK
36. PRE THICKENED SAS PUMPS
37. REFURBISHED DIGESTERS WITH TOP MOUNTED BIOGAS MEMBRANES AND FARADAY CAGE LIGHTNING PROTECTION

PURPOSE OF ISSUE	FOR PLANNING APPLICATION
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A FOR INFORMATION		JC	MDP	JN	26/07/10
Description	Diagr	Chk'd	App'd	Date	

**Thames Water**  
**Thames Water Utilities**  
 Clearwater Court, Vauxhall Road,  
 Reading, Berks. RG1 8DB

**Mott MacDonald**  
 Demeter House  
 Station Road  
 Cambridge CB1 2RS  
 United Kingdom  
 Tel +44 (0)1223 460 650  
 Fax +44 (0)1223 461 007  
 Web www.mottmac.com

Location Code: BECKS1ZZ	OS Reference: TQ 454 821	Locality Reference: UBR	Drawn By: DK
Project Group: WASTE WATER		Sub Project: X	
Location / Town: BARKING			
Site Name: BECKTON STW			
Contract Name: BECKTON STW ENHANCED SLUDGE DIGESTION			
Drawing Title: PROPOSED SITE ELEVATION D			

Drawing No.: 6QWG-B2-02023-EX	Scale: 1:250	Sheet Size: A1	Rev: A
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# Appendix 3

SCALE FOR PLANNING PURPOSES ONLY

**NOTES**

1. ALL LEVELS ARE IN METERS ABOVE ORDINANCE DATUM.
2. FOR KEY PLAN OF SECTIONS AND ELEVATIONS REFER TO DRAWING 6QWG-B2-02013-EX.
3. FOR PROPOSED SITE PLAN LAYOUT REFER TO DRAWING 6QWG-B2-02012-EX.
4. ASSUMED GROUND LEVELS (AGL) ARE BASED ON TOPOGRAPHICAL SPOT LEVELS GIVEN ON OS MAP.
5. PIPE ROUTES ARE INDICATIVE ONLY.

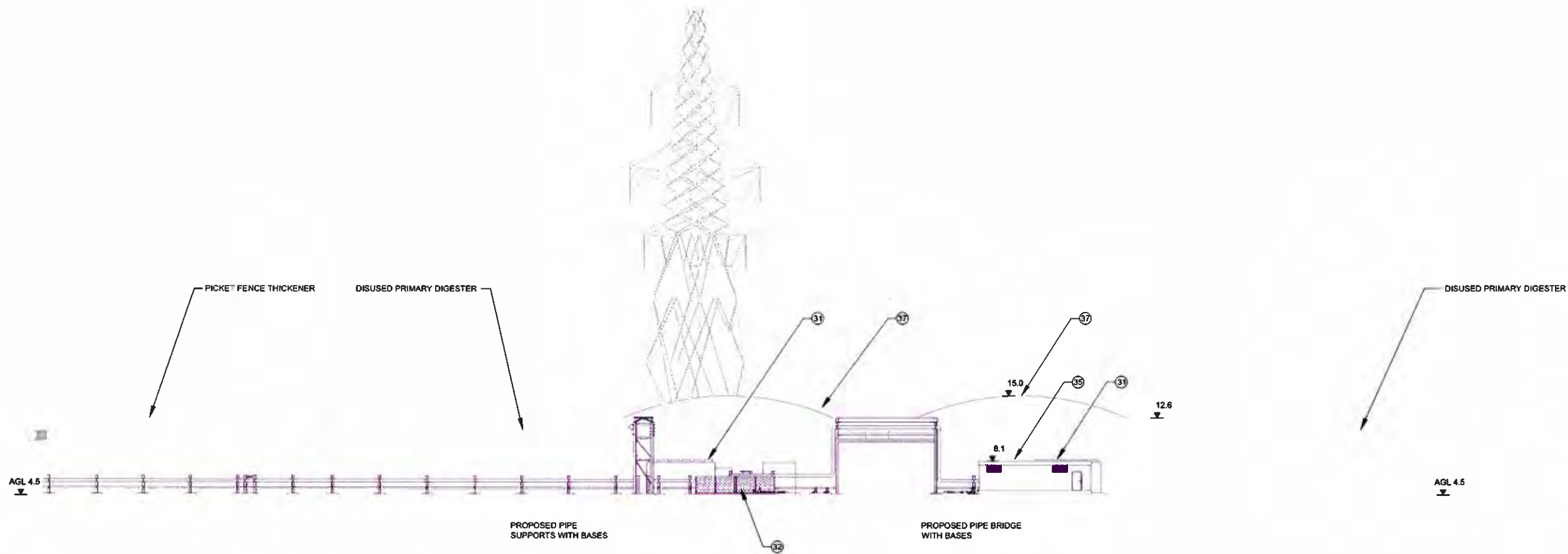
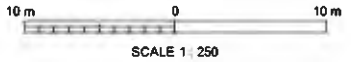
**KEY TO ENHANCED DIGESTION PROJECT STRUCTURES (NOT ALL STRUCTURES CAN BE SEEN IN THIS ELEVATION)**

1. ODOUR CONTROL UNIT
2. ODOUR CONTROL STACK
3. CENTRIFUGE FEED PUMPS
4. CENTRIFUGE FEED TANKS
5. WHEEL WASH WATER TANK
6. WHEEL WASH RAMP
7. STRAIN PRESS GANTRY
8. SLUDGE CAKE STORAGE & DEWATERING OPERATIONS BLDG
9. STRAIN PRESS FEED PUMPS
10. TRANSFORMERS FOR CENTRIFUGES AND POLYMER DOSING
11. POLYMER MAKE-UP AND STORAGE SILOS
12. BELT PRESS FEED PUMPS
13. BLENDING TANKS
14. BELT PRESS FEED TANKS
15. WELFARE BUILDING
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26. WASTE HEAT DUMP FANS
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36. PRE THICKENED SAS PUMPS
37. REFURBISHED DIGESTERS WITH TOP MOUNTED BIOGAS MEMBRANES AND FARADAY CAGE LIGHTNING PROTECTION

**LEGEND**

- PROPOSED STRUCTURES ARE SHOWN AS PURPLE
- EXISTING STRUCTURES ARE SHOWN AS GREY

PURPOSE OF ISSUE    FOR PLANNING APPLICATION




A	FOR INFORMATION	JC	JN	JN	26/07/10
	Description	Diger	Chld	Appl	Date

**Thames Water**

**Thames Water Utilities**  
Clearwater Court, Vastern Road,  
Reading, Berks. RG1 8DB

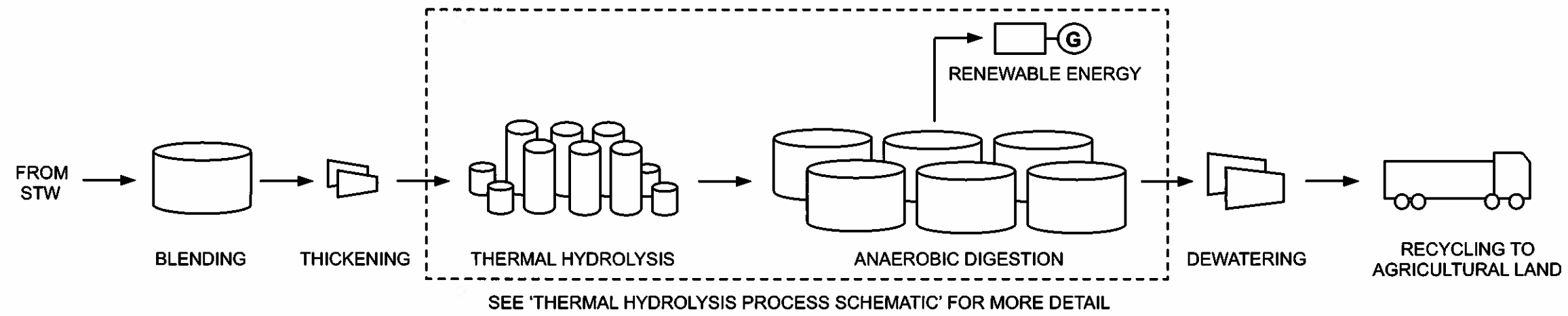
**Mott MacDonald**

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Fax +44 (0)1223 461 007  
Web www.mottmac.com

Location Code: <b>BECKSI ZZ</b>	OS Reference: TQ 454 821	Severity Reference: UBR	Drawn By: DK
Project Group: WASTE WATER		Sub-Process: X	
Location: Town <b>BARKING</b>			
Site Name: <b>BECKTON STW</b>			
Contract Name: <b>BECKTON STW ENHANCED SLUDGE DIGESTION</b>			
Drawing Title: <b>PROPOSED SITE ELEVATION E</b>			
Drawing No: <b>6QWG-B2-02024-EX</b>	Scale: 1:250	Sheet No: AI	Rev: A

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**ENHANCED DIGESTION SCHEMATIC**



**THERMAL HYDROLYSIS PROCESS SCHEMATIC**

