



PINS Document Number:
EN010140/APP/7.5

Flood Risk Assessment

April 2025



HELIOS RENEWABLE ENERGY PROJECT

FLOOD RISK ASSESSMENT

ENSO GREEN HOLDINGS D LIMITED

DOCUMENT REFERENCE NUMBER: 7.5

PART 2 OF 6

APPENDICES 4 - 6

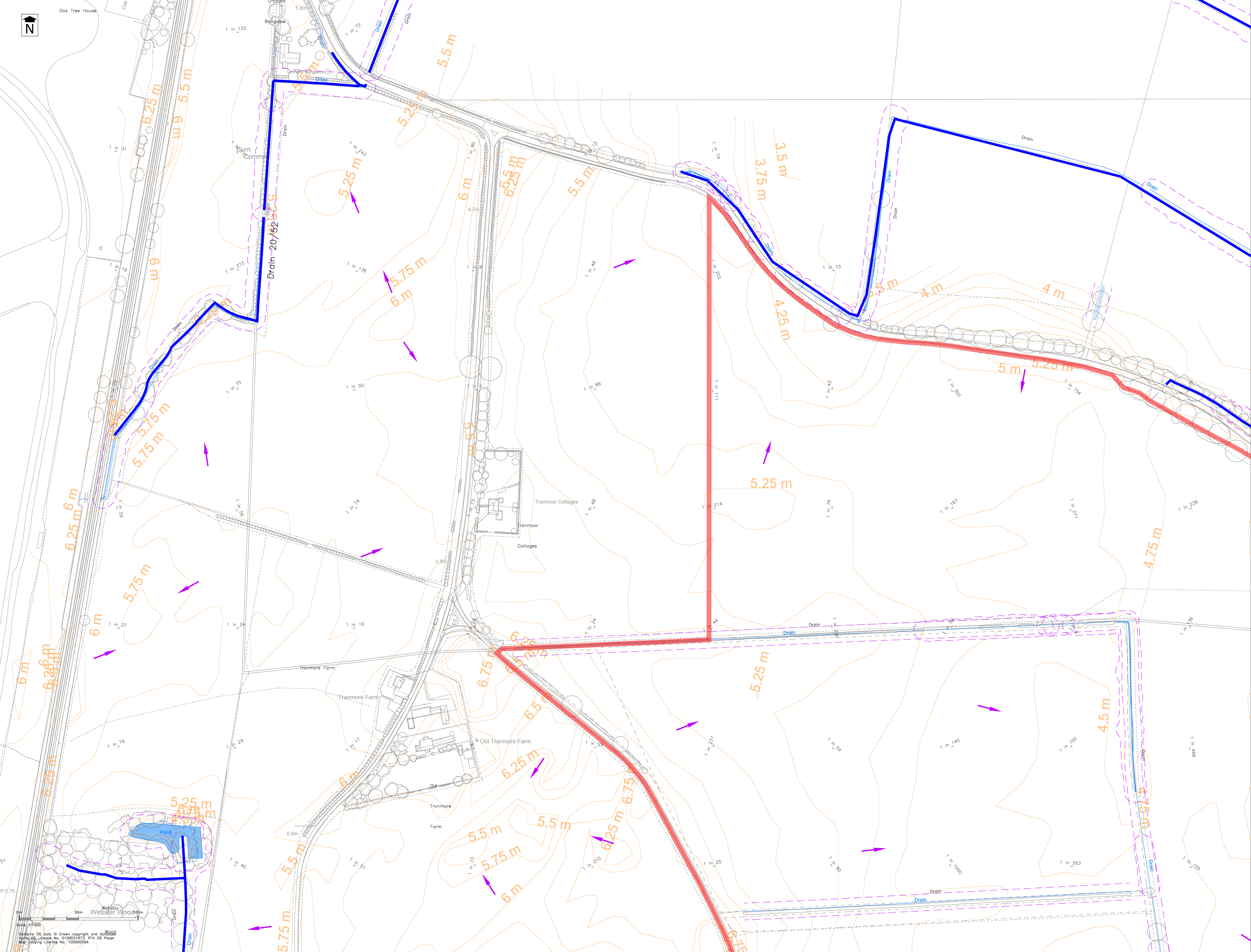
PFA Document Reference: E216-DOC01-FRA-ISSUE 3.1

APRIL 2025

PFA Consulting
Stratton Park House
Wanborough Road
Swindon
SN3 4HG

Tel: 01793 828000
Fax: 01793 835500
Email: admin@pfapl.com
Web: www.pfapl.com

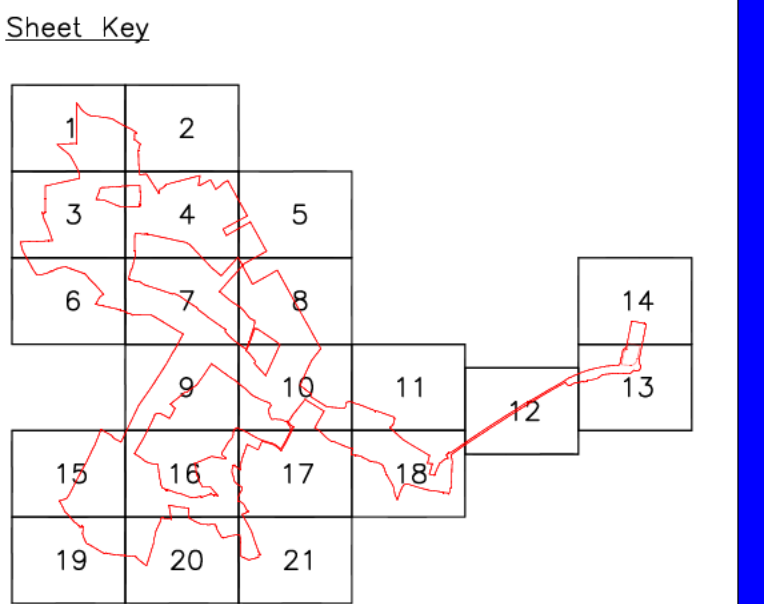
engineering the future



For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

- KEY**
- Site Boundary (Indicative Only)
 - Ordinary Watercourse
 - Ordinary Watercourse (DB Maintained)
 - 7m Watercourse Buffer
 - Overland Flow Route (Indicative Only)

- NOTES**
- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
 - Approximate Top of Bank based on LIDAR data at 0.1m intervals; 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
 - Contains public sector information licensed under the Open Government Licence v3.0.
 - 7m watercourse buffer in accordance with Selby Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).



Rev	Date	Description	Drawn	Check
#	01/06/23	First Issue	ML	BF
A	22/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BF	

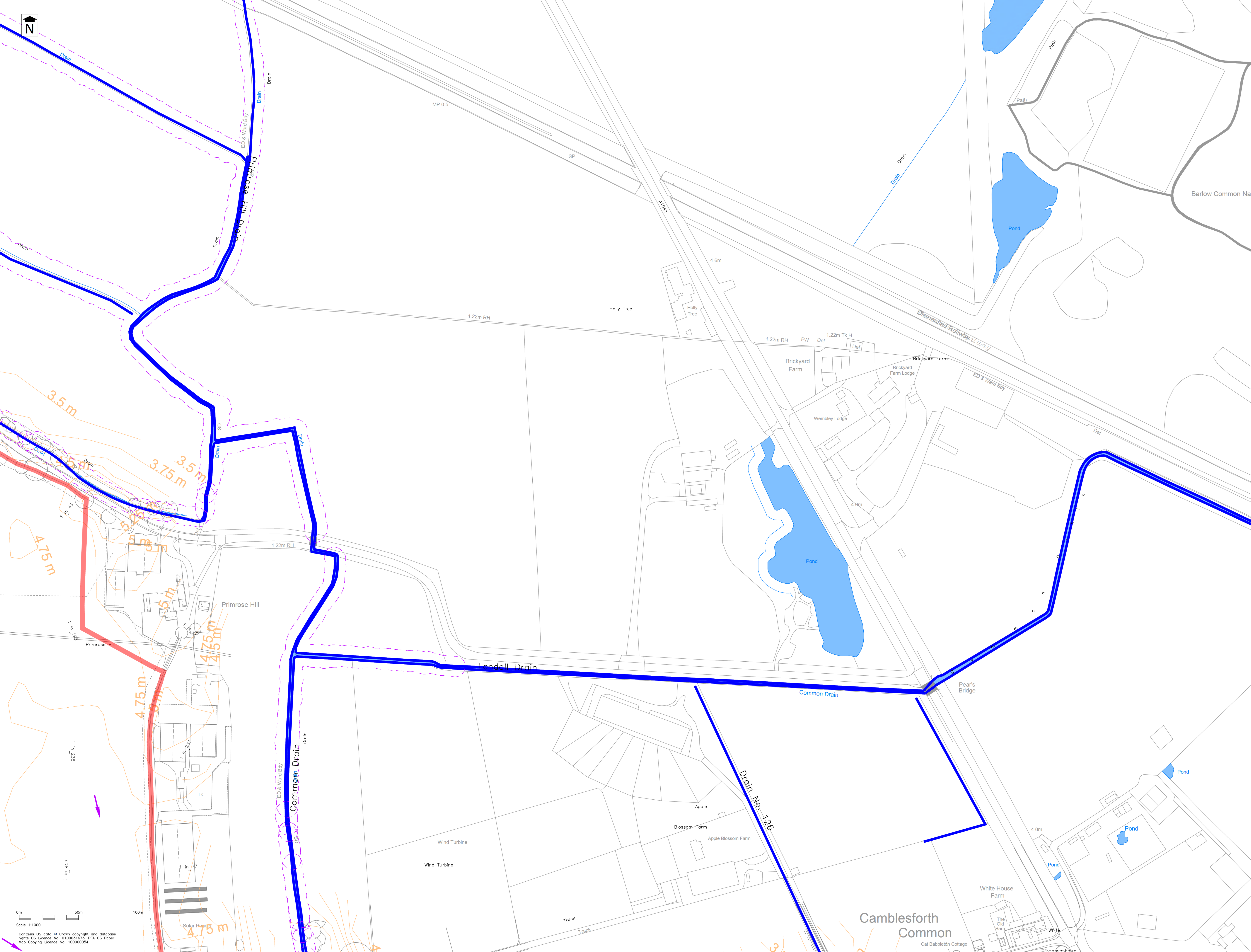
Status
FOR PLANNING

Client
Enso Green Holdings D Limited

Project
Helios Renewable Energy Project

Drawing Title
**Existing Drainage Arrangements
Sheet 1 of 21**

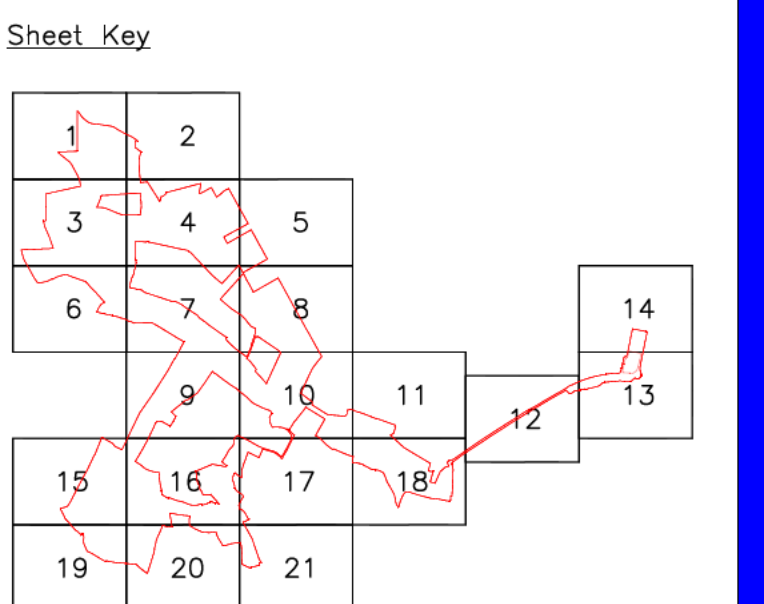
Drawing No. **E216/107**
Date: June 2023
Scale: 1:1000 @ A0
Rev B
E-Mail: info@pfpapic.com



For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

- KEY**
- Site Boundary (Indicative Only)
 - Ordinary Watercourse
 - Ordinary Watercourse (DB Maintained)
 - 7m Watercourse Buffer
 - Overland Flow Route (Indicative Only)

- NOTES**
- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
 - Approximate Top of Bank based on LIDAR data at 0.1m intervals. 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
 - Contains public sector information licensed under the Open Government Licence v3.0.
 - 7m watercourse buffer in accordance with Selby Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).



Rev	Date	Description	Drawn	Check
#	01/06/23	First Issue	ML	BF
A	22/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BF	

Status **FOR PLANNING**

Client
Enso Green Holdings D Limited

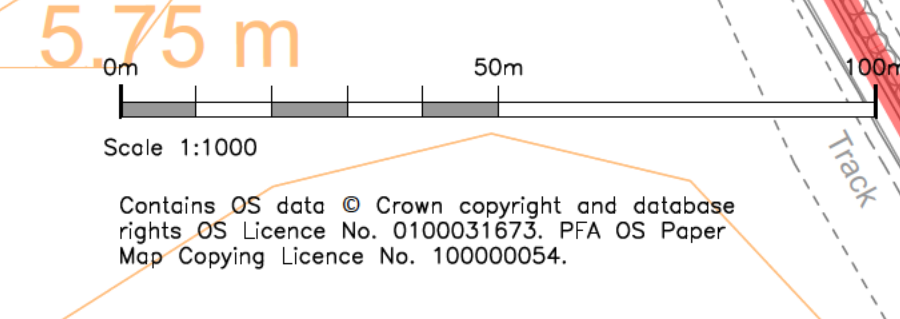
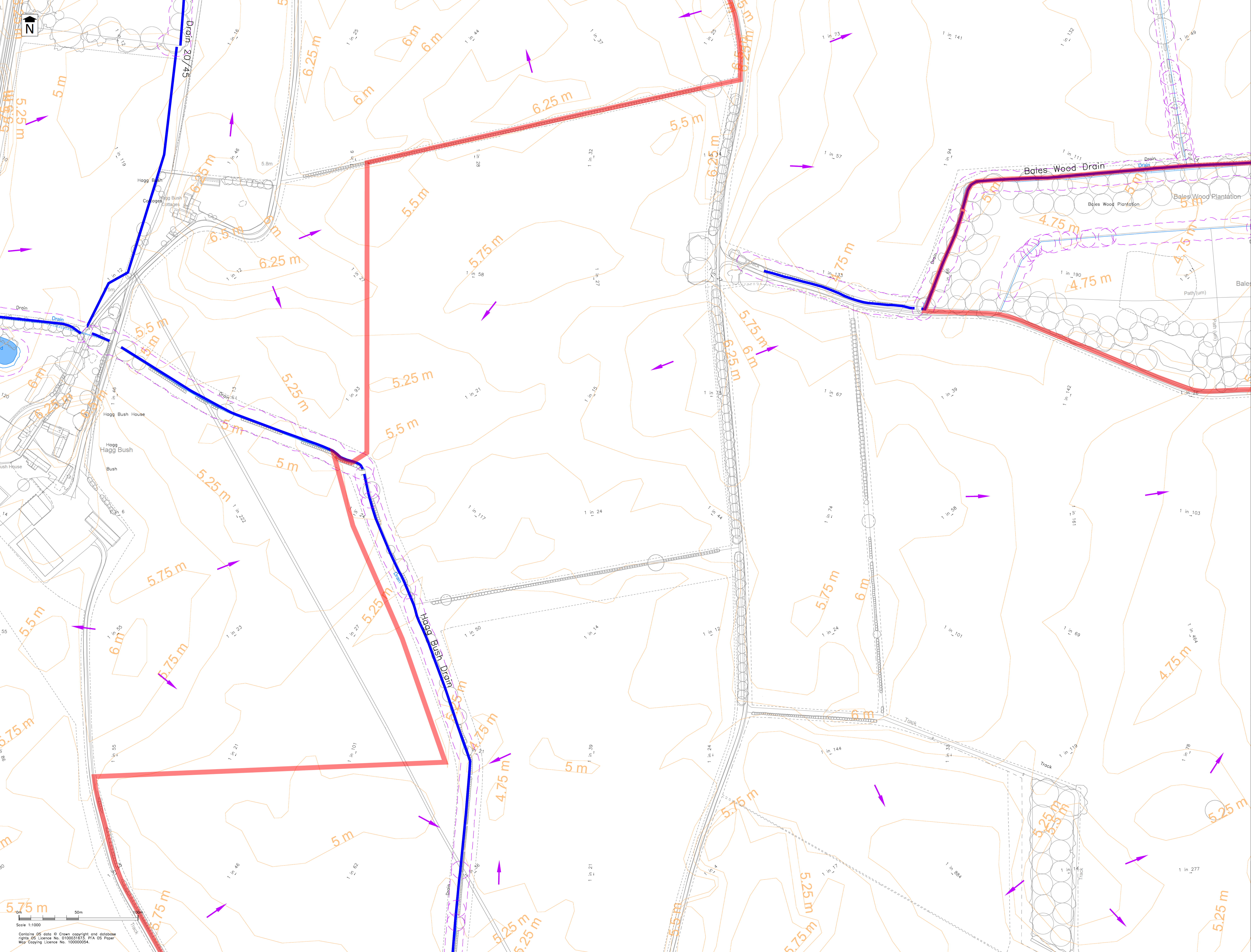
Project
Helios Renewable Energy Project

Drawing Title
Existing Drainage Arrangements Sheet 2 of 21

Drawing No. **E216/108** Rev B

Date: June 2023 Scale: 1:1000 @ A0

E-Mail: info@pfapic.com



For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

KEY

- Site Boundary (Indicative Only)
- Ordinary Watercourse
- Ordinary Watercourse (DB Maintained)
- 7m Watercourse Buffer
- Overland Flow Route (Indicative Only)

NOTES

- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
- Approximate Top of Bank based on LIDAR data at 0.1m intervals; 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
- Contains public sector information licensed under the Open Government Licence v3.0.
- 7m watercourse buffer in accordance with Selby Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).

Sheet Key

1	2	
3	4	5
6	7	8
	9	10
15	16	17
19	20	21

Rev | Date | Description | Drawn | Check

#	02/06/23	First Issue:	ML	BF
A	23/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BF	

Status

FOR PLANNING

Client

Enso Green Holdings D Limited

Project

Helios Renewable Energy Project

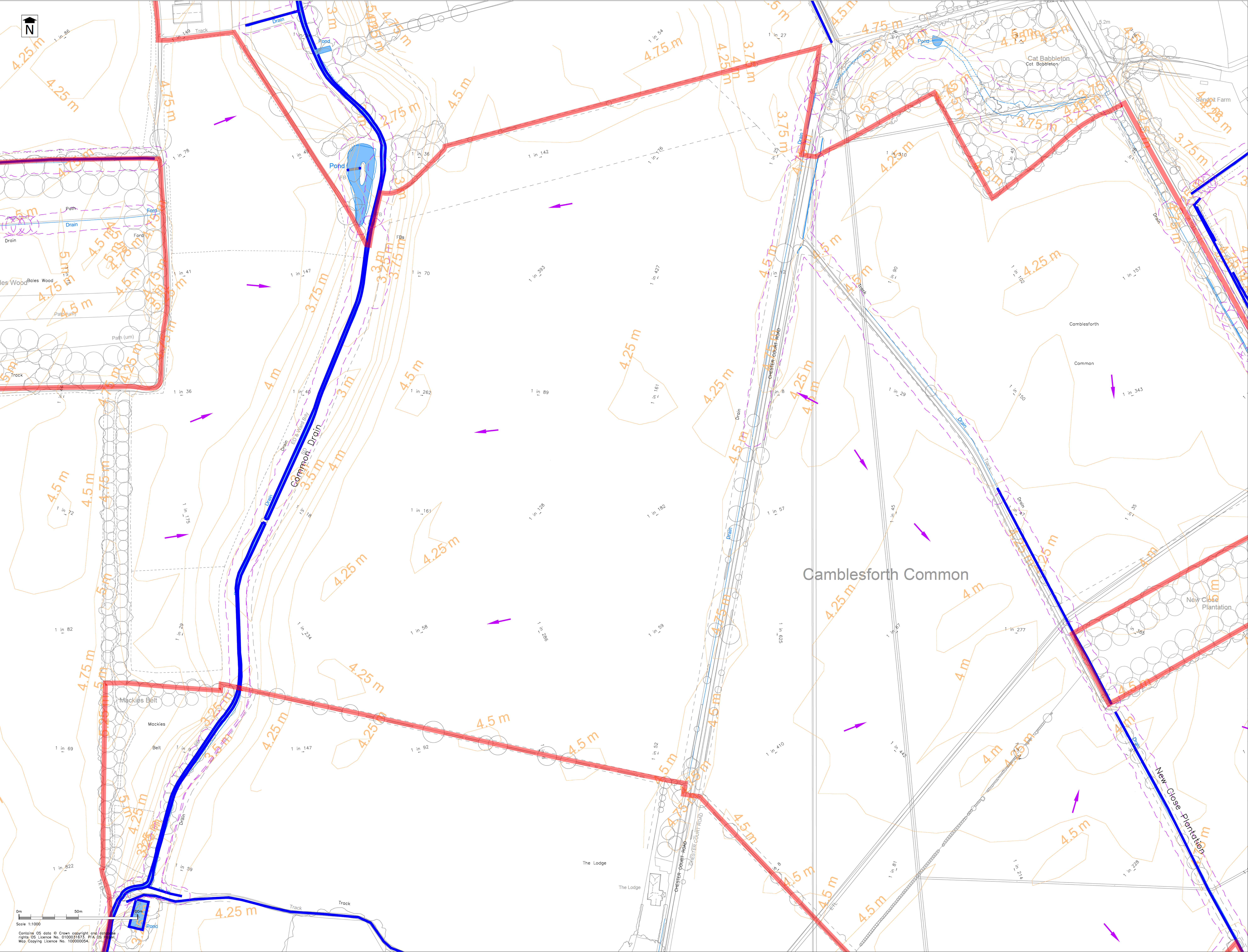
Drawing Title

Existing Drainage Arrangements Sheet 3 of 21

Drawing No. **E216/109** Rev B

Date: June 2023 Scale: 1:1000 @ A0

E-Mail: info@pfapic.com



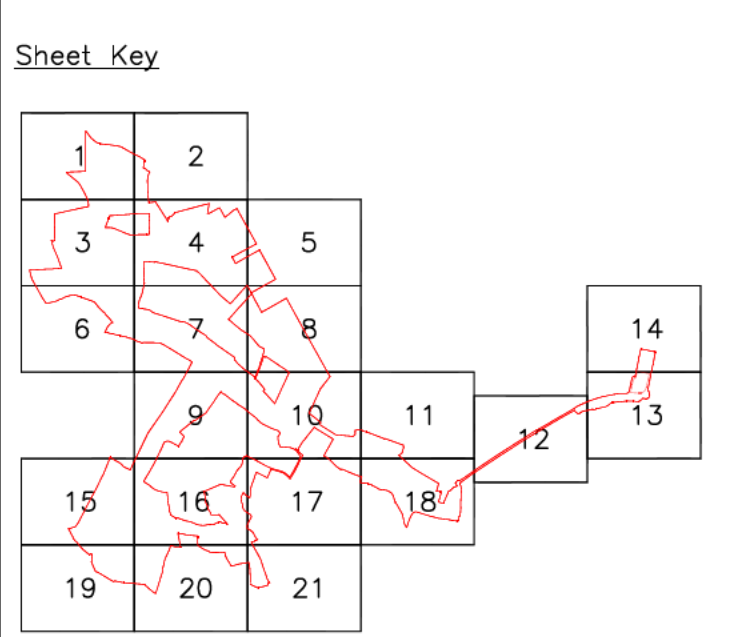
Scale 1:1000

Contains OS data © Crown copyright and database rights OS Licence No. 0100031673. PFA OS Map Copying Licence No. 100000054.

For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

- KEY**
- Site Boundary (Indicative Only)
 - Ordinary Watercourse
 - Ordinary Watercourse (DB Maintained)
 - 7m Watercourse Buffer
 - Overland Flow Route (Indicative Only)

- NOTES**
- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
 - Approximate Top of Bank based on LIDAR data at 0.1m intervals. 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
 - Contains public sector information licensed under the Open Government Licence v3.0.
 - 7m watercourse buffer in accordance with Selby Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).



Rev	Date	Description	Drawn	Check
#	02/06/23	First Issue	ML	BF
A	23/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BF	

Status
FOR PLANNING

Client
Enso Green Holdings D Limited

Project
Helios Renewable Energy Project

Drawing Title
Existing Drainage Arrangements Sheet 4 of 21

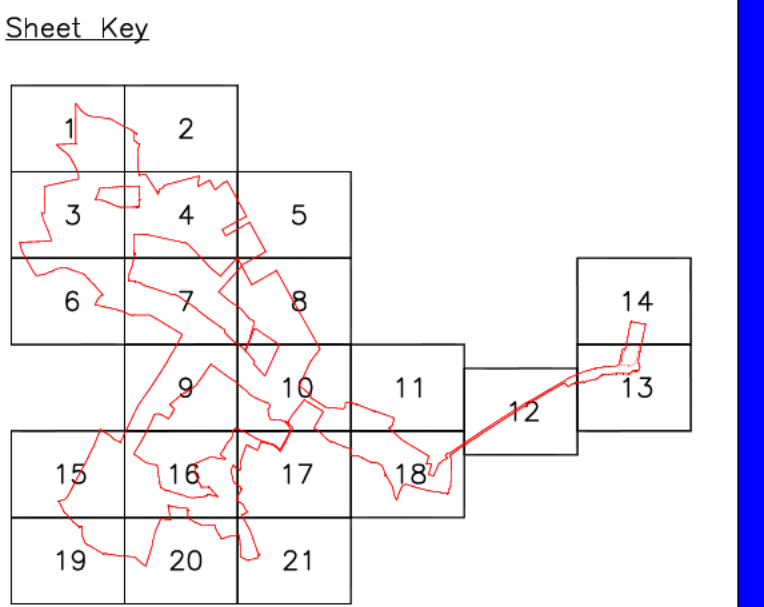
Drawing No. **E216/110** Rev B
Date: June 2023 Scale: 1:1000 @ A0
E-Mail: info@pfapic.com



For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

- KEY**
- Site Boundary (Indicative Only)
 - Ordinary Watercourse
 - Ordinary Watercourse (DB Maintained)
 - 7m Watercourse Buffer
 - Overland Flow Route (Indicative Only)

- NOTES**
- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
 - Approximate Top of Bank based on LIDAR data at 0.1m intervals. 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
 - Contains public sector information licensed under the Open Government Licence v3.0.
 - 7m watercourse buffer in accordance with Selby Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).



Rev	Date	Description	Drawn	Check
#	01/06/23	First Issue	ML	BF
A	23/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BF	

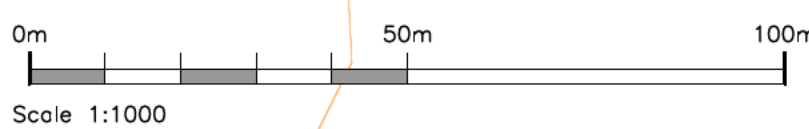
Status
FOR PLANNING

Client
Enso Green Holdings D Limited

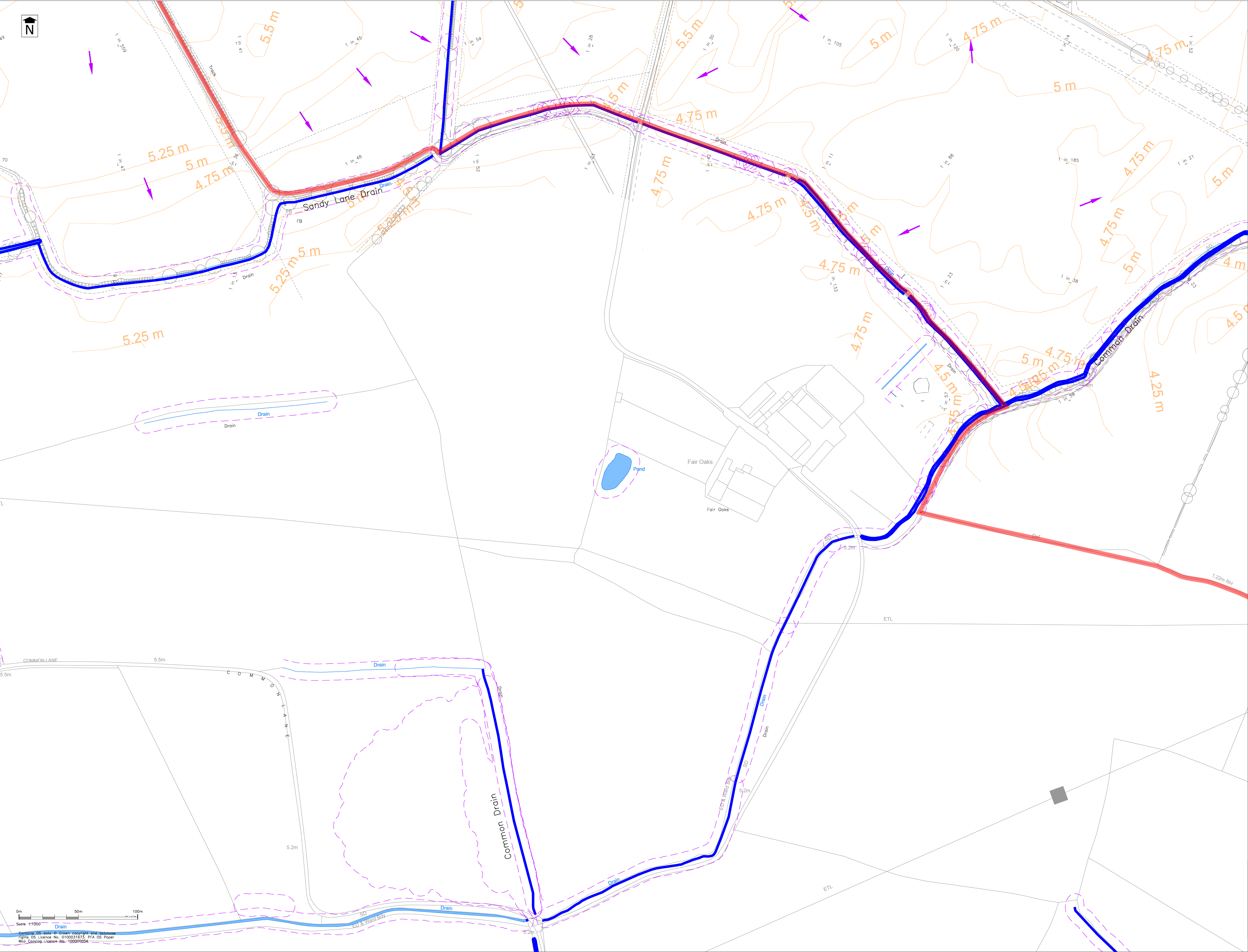
Project
Helios Renewable Energy Project

Drawing Title
**Existing Drainage Arrangements
Sheet 5 of 21**

Drawing No. **E216/111** Rev B
Date: June 2023 Scale: 1:1000 @ A0
E-Mail: @pfapic.com



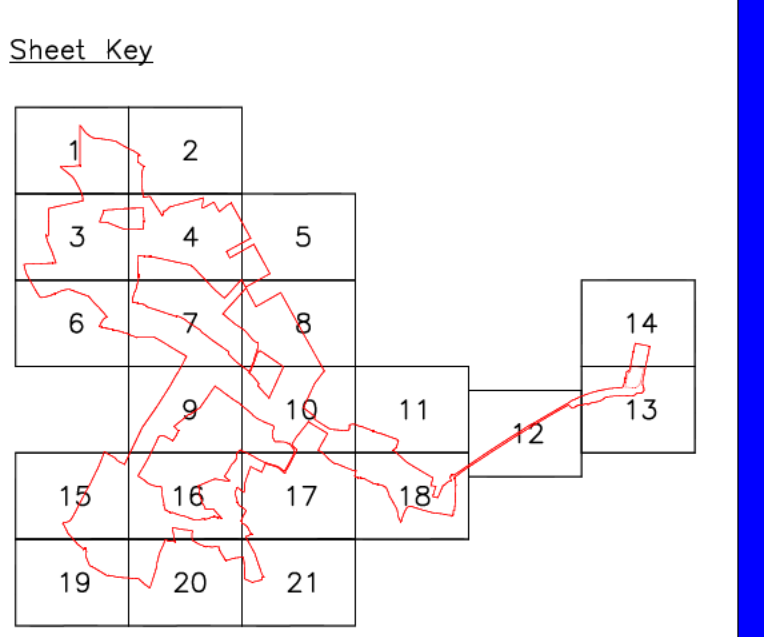
Contains OS data © Crown copyright and database rights OS Licence No. 0100031673. PFA OS Paper Map Copying Licence No. 100000054.



For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

- KEY**
- Site Boundary (Indicative Only)
 - Ordinary Watercourse
 - Ordinary Watercourse (DB Maintained)
 - 7m Watercourse Buffer
 - Overland Flow Route (Indicative Only)

- NOTES**
- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
 - Approximate Top of Bank based on LIDAR data at 0.1m intervals. 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
 - Contains public sector information licensed under the Open Government Licence v3.0.
 - 7m watercourse buffer in accordance with Selby Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).



Rev	Date	Description	Drawn	Check
#	01/06/23	First Issue	ML	BF
A	23/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BF	

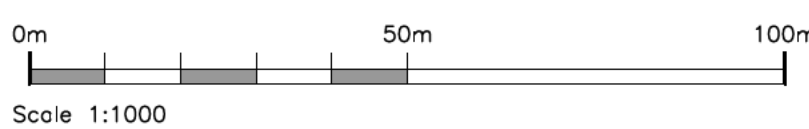
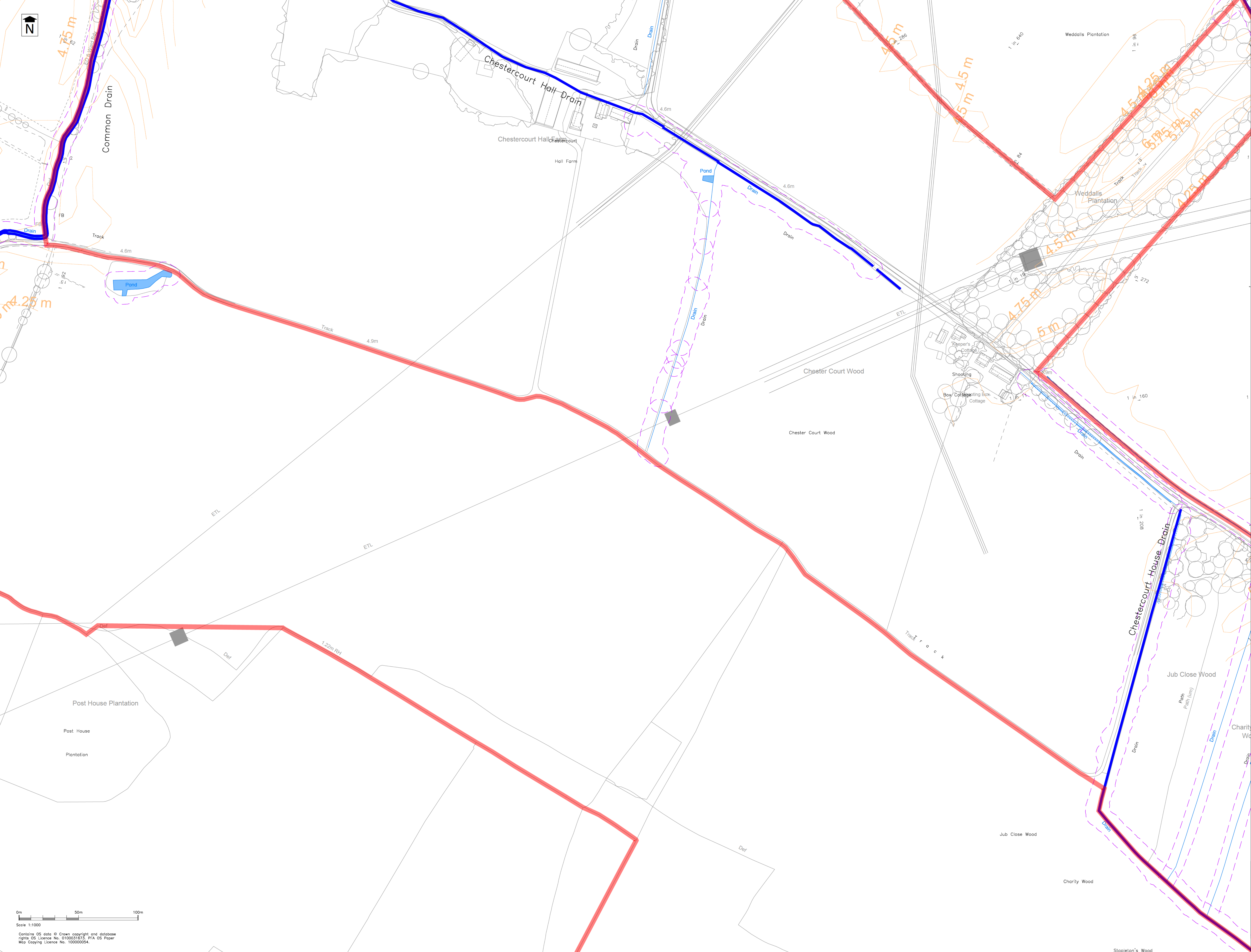
Status
FOR PLANNING

Client
Enso Green Holdings D Limited

Project
Helios Renewable Energy Project

Drawing Title
Existing Drainage Arrangements Sheet 6 of 21

Drawing No. **E216/112** Rev B
Date: June 2023 Scale: 1:1000 @ A0
E-Mail: @pfapic.com

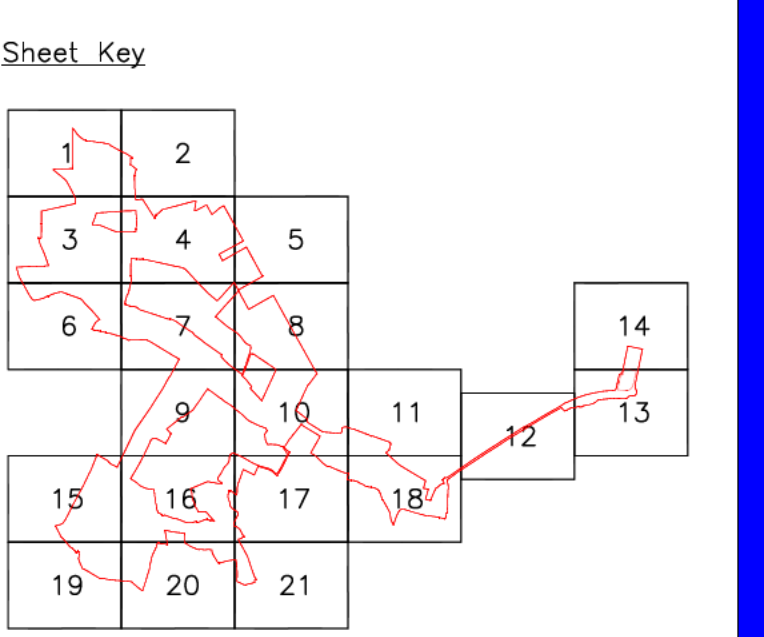


Contains OS data © Crown copyright and database rights OS Licence No. 0100031673. PFA OS Paper Map Copying Licence No. 100000054.

For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

- KEY**
- Site Boundary (Indicative Only)
 - Ordinary Watercourse
 - Ordinary Watercourse (DB Maintained)
 - 7m Watercourse Buffer
 - Overland Flow Route (Indicative Only)

- NOTES**
- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
 - Approximate Top of Bank based on LIDAR data at 0.1m intervals. 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
 - Contains public sector information licensed under the Open Government Licence v3.0.
 - 7m watercourse buffer in accordance with Selby Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).



Rev	Date	Description	Drawn	Check
#	01/06/23	First Issue	ML	BF
A	23/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BF	

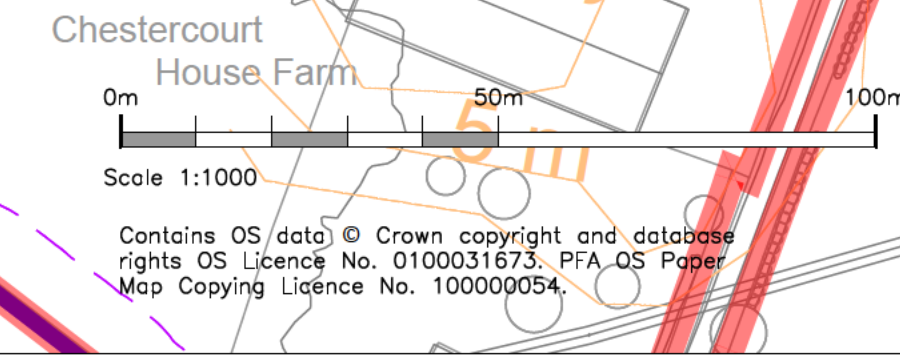
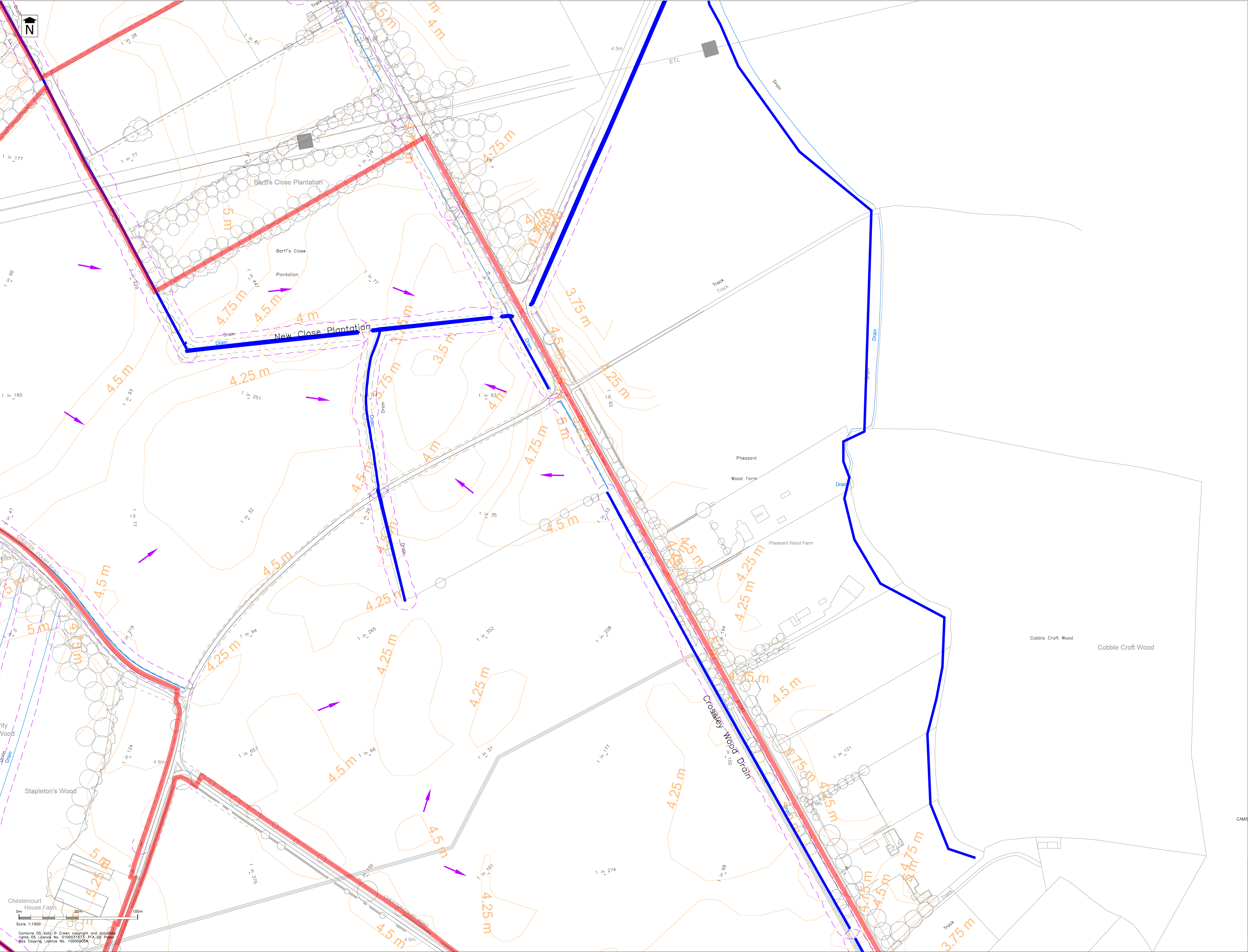
Status
FOR PLANNING

Client
Enso Green Holdings D Limited

Project
Helios Renewable Energy Project

Drawing Title
Existing Drainage Arrangements Sheet 7 of 21

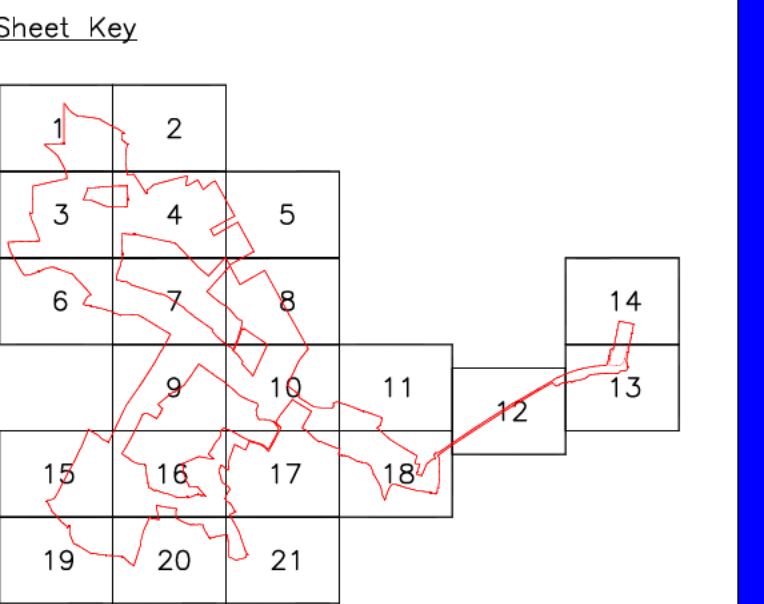
Drawing No. **E216/113** **Rev B**
Date: June 2023 **Scale:** 1:1000 @ A0
E-Mail: @pfapic.com



For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

- KEY**
- Site Boundary (Indicative Only)
 - Ordinary Watercourse
 - Ordinary Watercourse (DB Maintained)
 - 7m Watercourse Buffer
 - Overland Flow Route (Indicative Only)

- NOTES**
- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
 - Approximate Top of Bank based on LIDAR data at 0.1m intervals. 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
 - Contains public sector information licensed under the Open Government Licence v3.0.
 - 7m watercourse buffer in accordance with Selby Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).



Rev	Date	Description	Drawn	Check
#	01/06/23	First Issue	ML	BF
A	23/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BF	

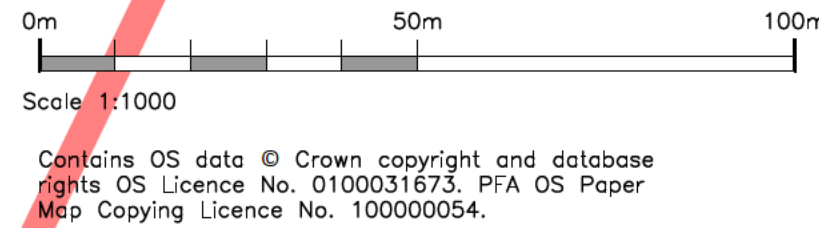
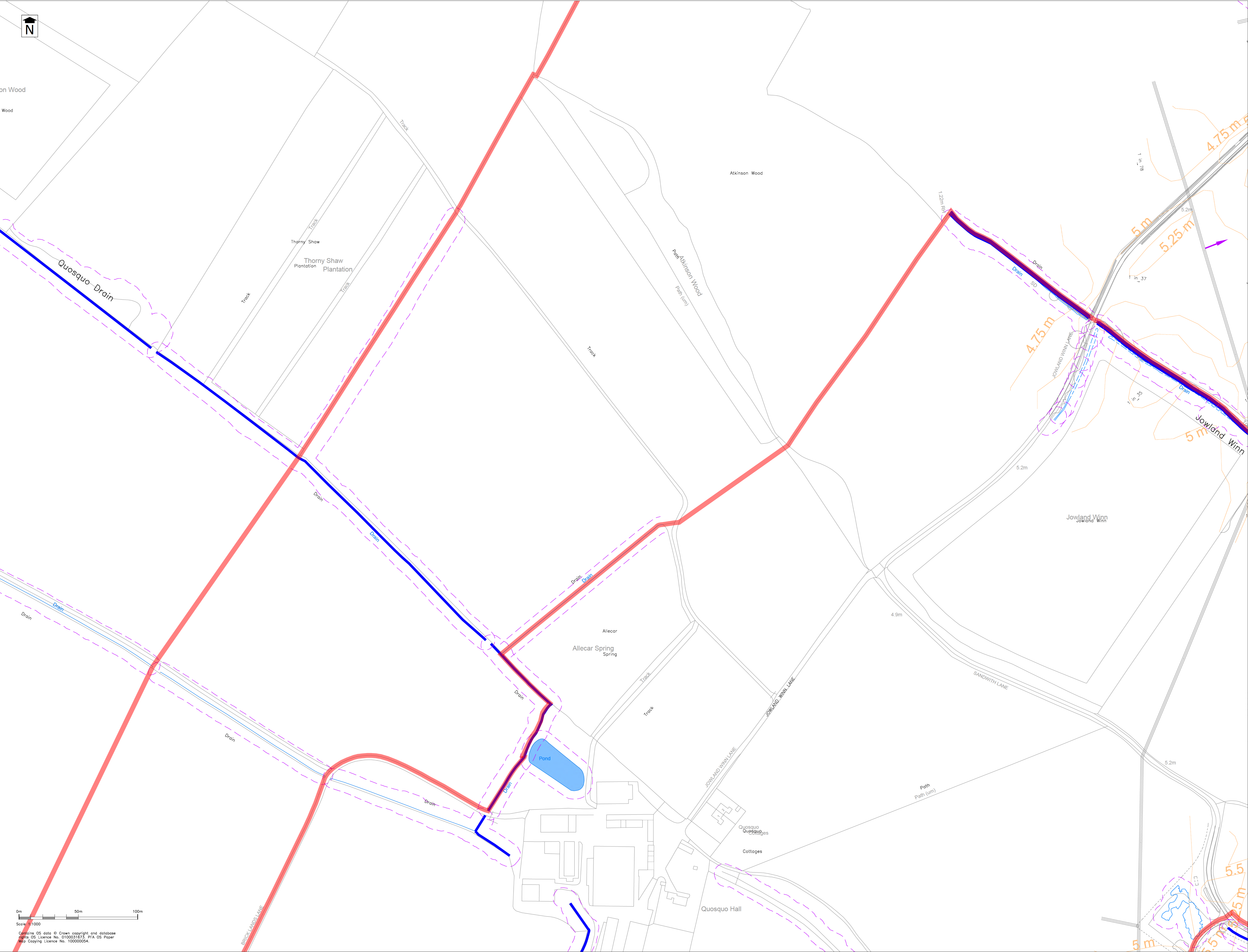
Status
FOR PLANNING

Client
Enso Green Holdings D Limited

Project
Helios Renewable Energy Project

Drawing Title
Existing Drainage Arrangements Sheet 8 of 21

Drawing No. **E216/114** Rev B
Date: June 2023 Scale: 1:1000 @ A0
E-Mail: info@pfapic.com

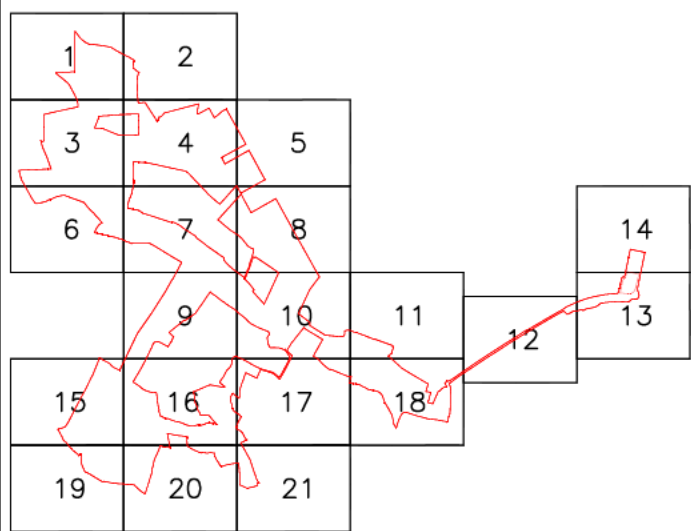


For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

- KEY**
- Site Boundary (Indicative Only)
 - Ordinary Watercourse
 - Ordinary Watercourse (DB Maintained)
 - 7m Watercourse Buffer
 - Overland Flow Route (Indicative Only)

- NOTES**
- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
 - Approximate Top of Bank based on LIDAR data at 0.1m intervals. 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
 - Contains public sector information licensed under the Open Government Licence v3.0.
 - 7m watercourse buffer in accordance with Selby Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).

Sheet Key



Rev	Date	Description	Drawn	Check
#	01/06/23	First Issue	ML	BF
A	23/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BF	

Status
FOR PLANNING

Client
Enso Green Holdings D Limited

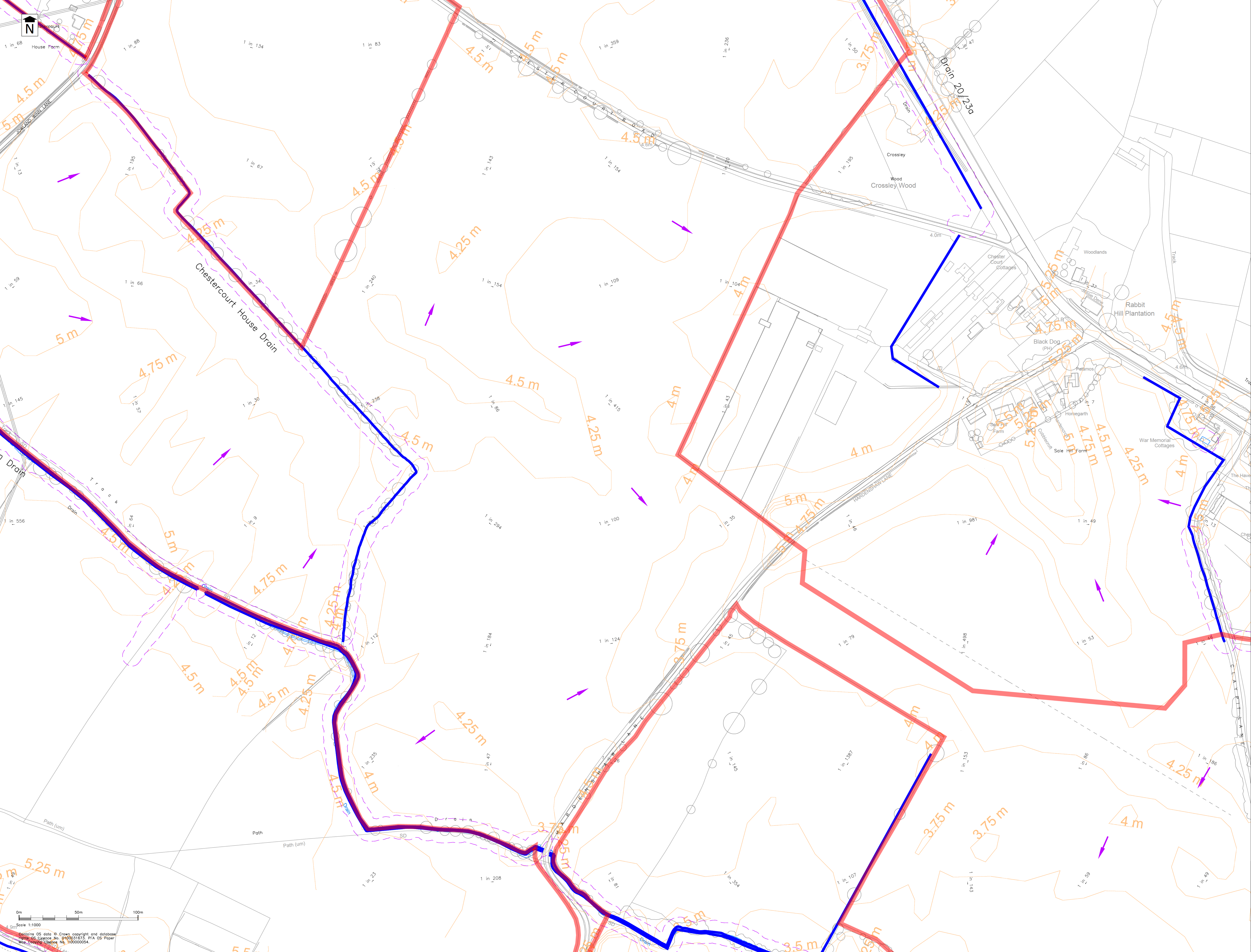
Project
Helios Renewable Energy Project

Drawing Title
Existing Drainage Arrangements Sheet 9 of 21

Drawing No. **E216/115** Rev B

Date: June 2023 Scale: 1:1000 @ A0

E-Mail: @pfapic.com



For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

- KEY**
- Site Boundary (Indicative Only)
 - Ordinary Watercourse
 - Ordinary Watercourse (DB Maintained)
 - 7m Watercourse Buffer
 - Overland Flow Route (Indicative Only)

- NOTES**
- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
 - Approximate Top of Bank based on LIDAR data at 0.1m intervals. 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
 - Contains public sector information licensed under the Open Government Licence v3.0.
 - 7m watercourse buffer in accordance with Selby Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).

Sheet Key

1	2	
3	4	5
6	7	8
9	10	11
12	13	14
15	16	17
18	19	20
21		

Rev	Date	Description	Drawn	Check
#	02/06/23	First Issue	ML	BP
A	23/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BP	

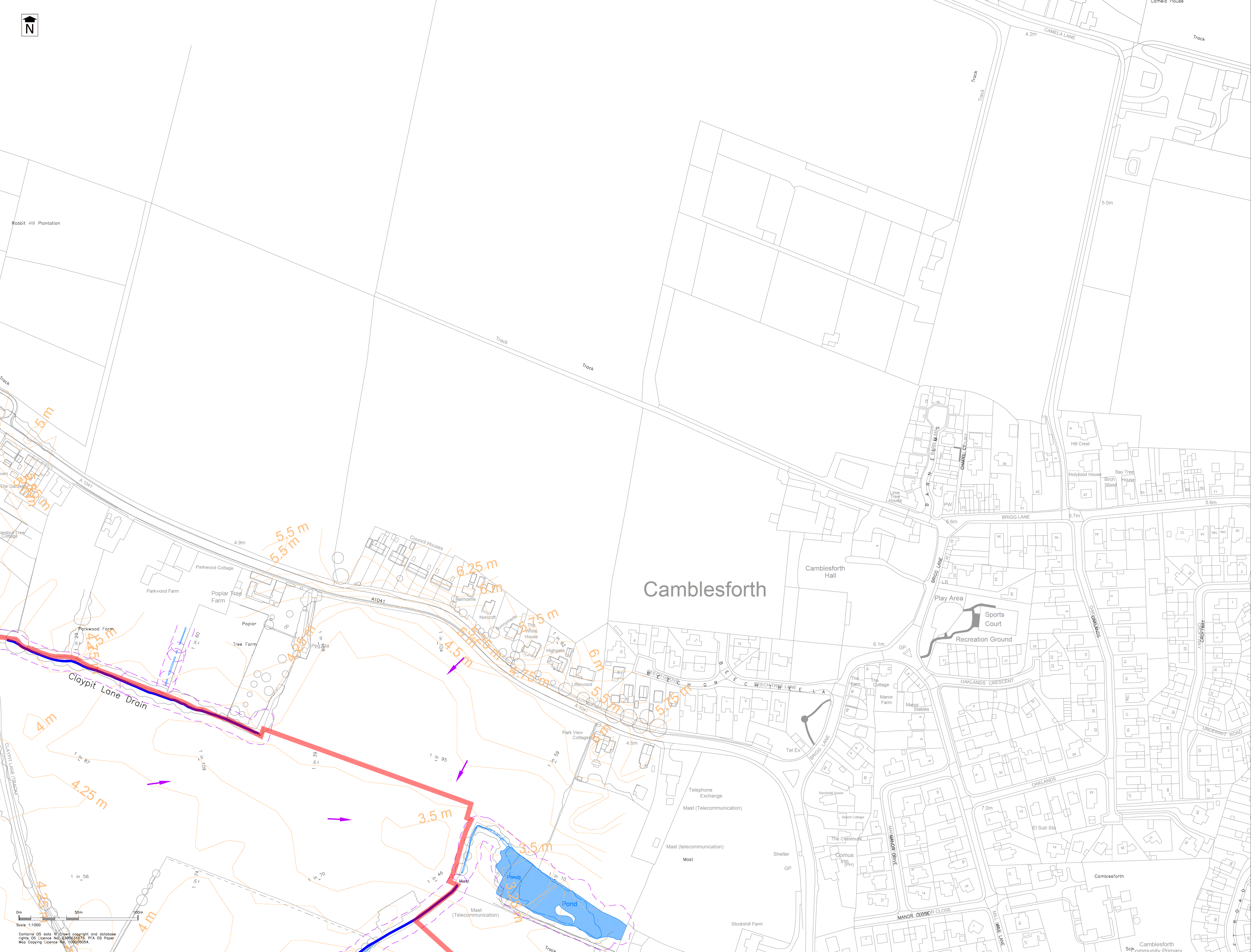
Status
FOR PLANNING

Client
Enso Green Holdings D Limited

Project
Helios Renewable Energy Project

Drawing Title
Existing Drainage Arrangements Sheet 10 of 21

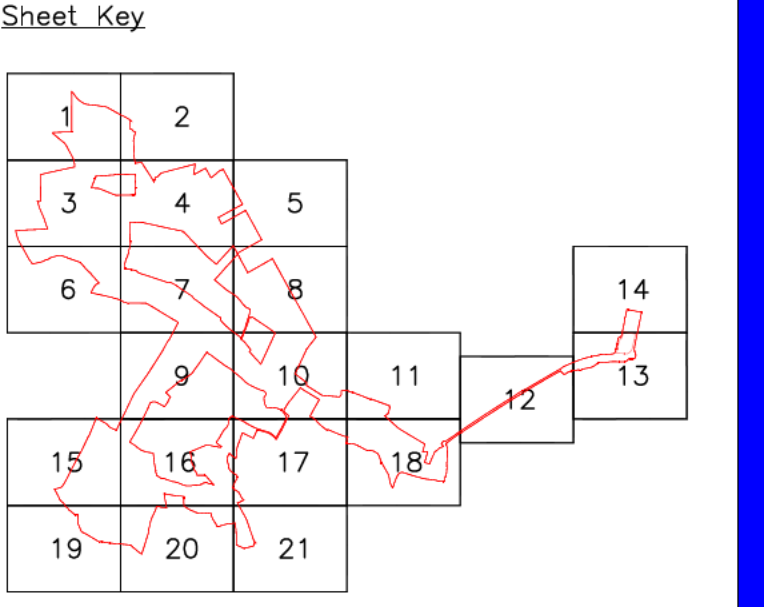
Drawing No. **E216/116** Rev B
Date: June 2023 Scale: 1:1000 @ A0
E-Mail: info@pfapic.com



For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

- KEY**
- Site Boundary (Indicative Only)
 - Ordinary Watercourse
 - Ordinary Watercourse (DB Maintained)
 - 7m Watercourse Buffer
 - Overland Flow Route Indicative Only

- NOTES**
- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
 - Approximate Top of Bank based on LIDAR data at 0.1m intervals. 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
 - Contains public sector information licensed under the Open Government Licence v3.0.
 - 7m watercourse buffer in accordance with Selby Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).



Rev	Date	Description	Drawn	Check
#	01/06/23	First Issue	ML	BP
A	23/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BP	

Status
FOR PLANNING

Client
Enso Green Holdings D Limited

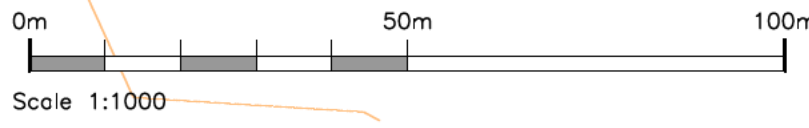
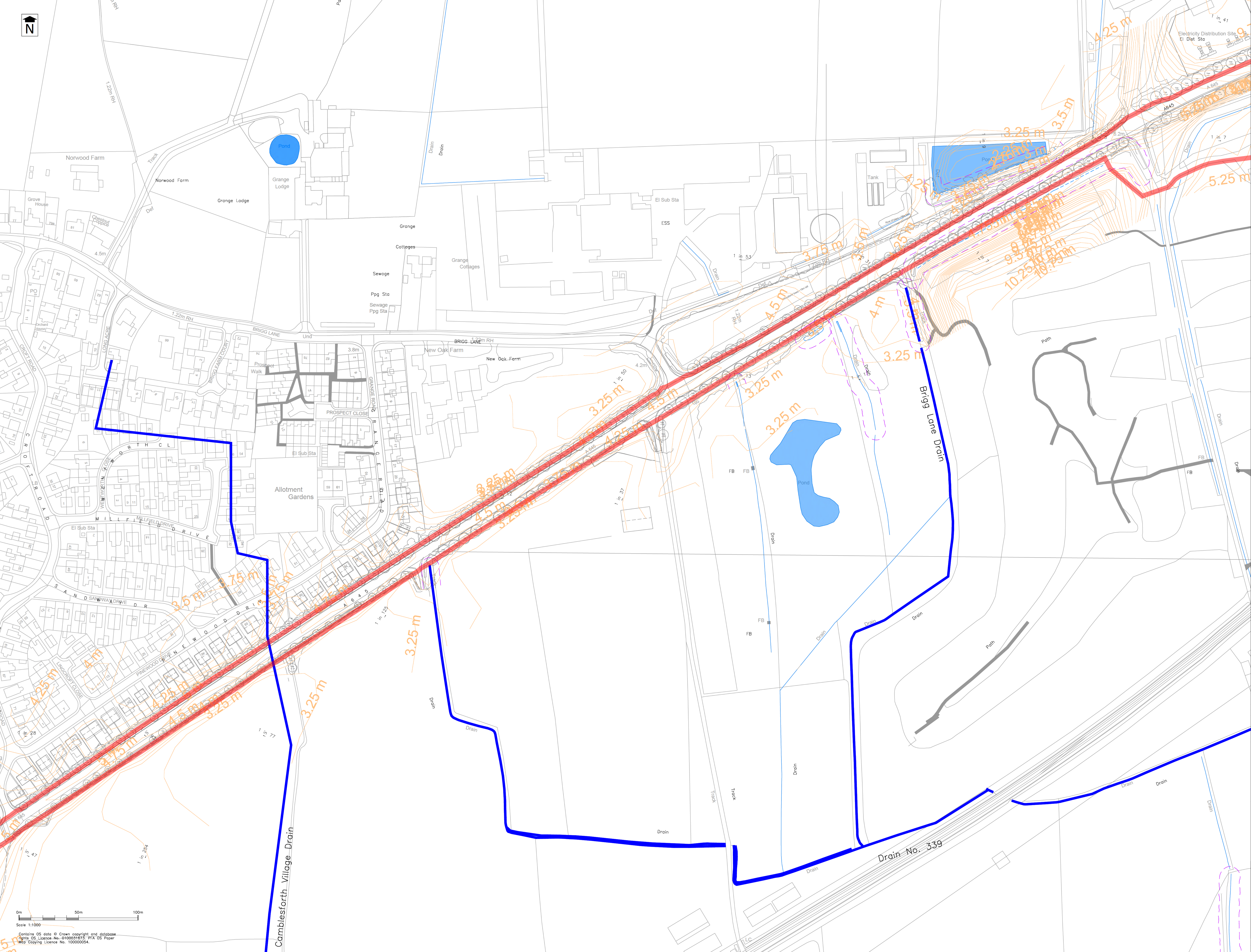
Project
Helios Renewable Energy Project

Drawing Title
Existing Drainage Arrangements
Sheet 11 of 21

Drawing No. **E216/117** **Rev B**

Date: June 2023 **Scale:** 1:1000 @ A0

E-Mail: info@pfapic.com

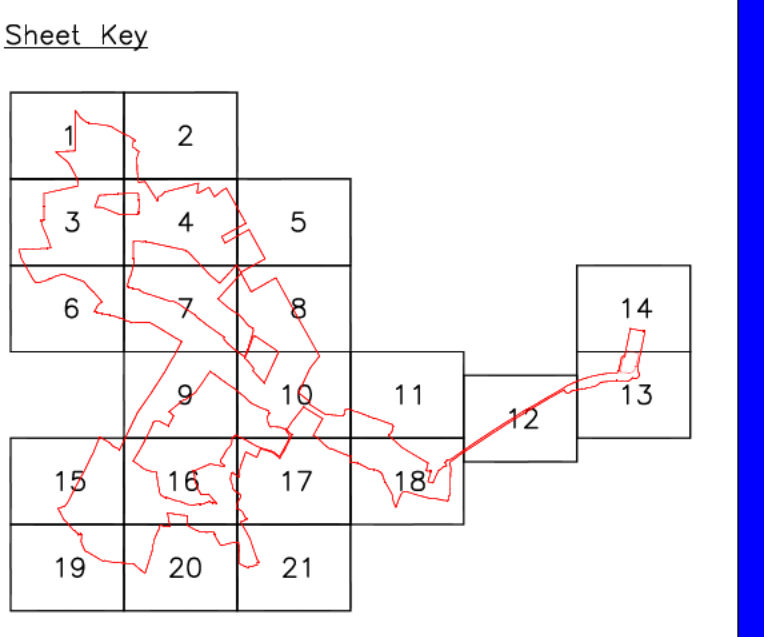


Contains OS data © Crown copyright and database rights OS Licence No. 0100031073 PFA OS Paper Map Copying Licence No. 100000054.

For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

- KEY**
- Site Boundary (Indicative Only)
 - Ordinary Watercourse
 - Ordinary Watercourse (DB Maintained)
 - 7m Watercourse Buffer
 - Overland Flow Route Indicative Only)

- NOTES**
- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
 - Approximate Top of Bank based on LIDAR data at 0.1m intervals. 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
 - Contains public sector information licensed under the Open Government Licence v3.0.
 - 7m watercourse buffer in accordance with Selby Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).



Rev	Date	Description	Drawn	Check
#	02/06/23	First Issue	ML	BF
A	23/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BF	

Status
FOR PLANNING

Client
Enso Green Holdings D Limited

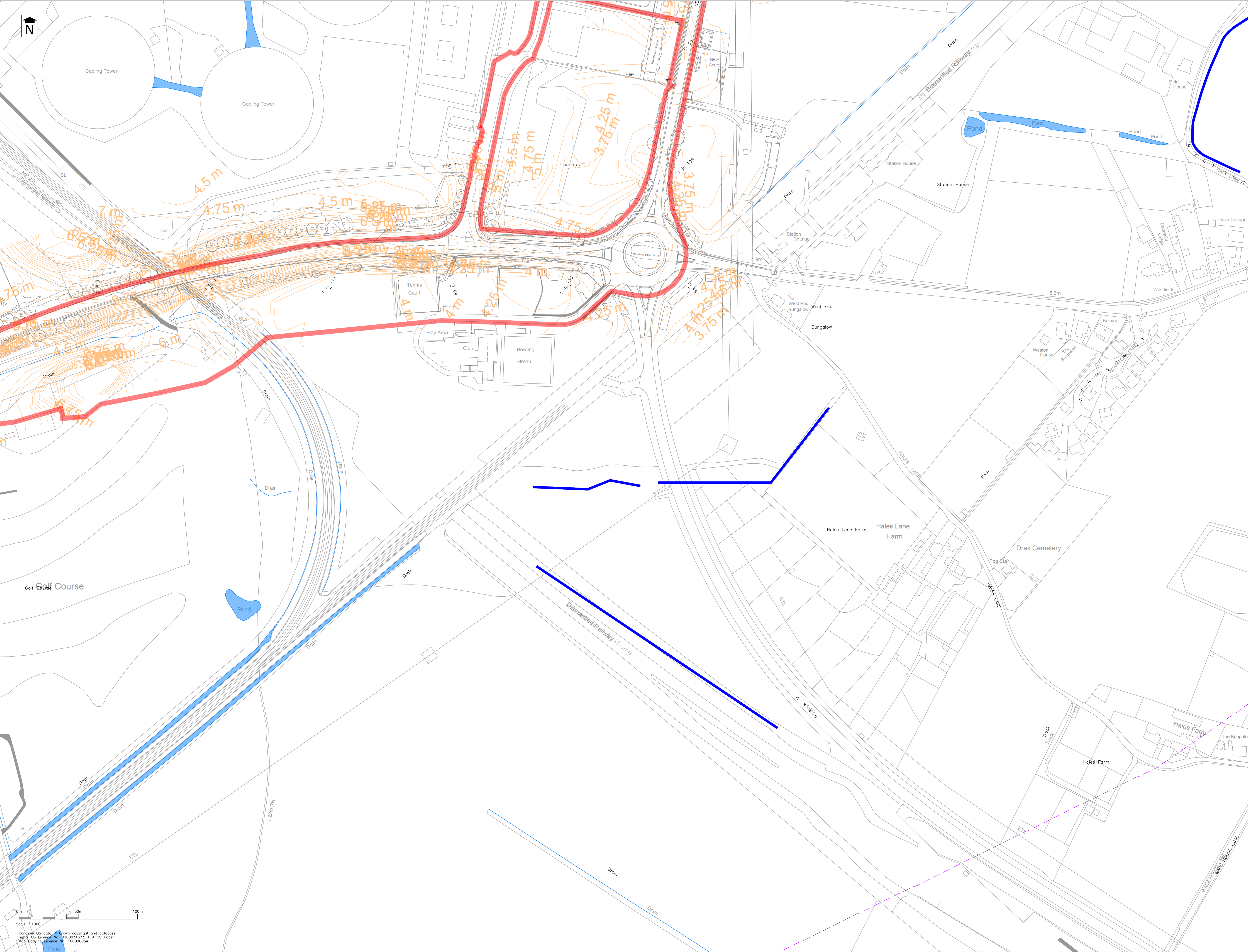
Project
Helios Renewable Energy Project

Drawing Title
Existing Drainage Arrangements Sheet 12 of 21

Drawing No. **E216/118** Rev B

Date: June 2023 Scale: 1:1000 @ A0

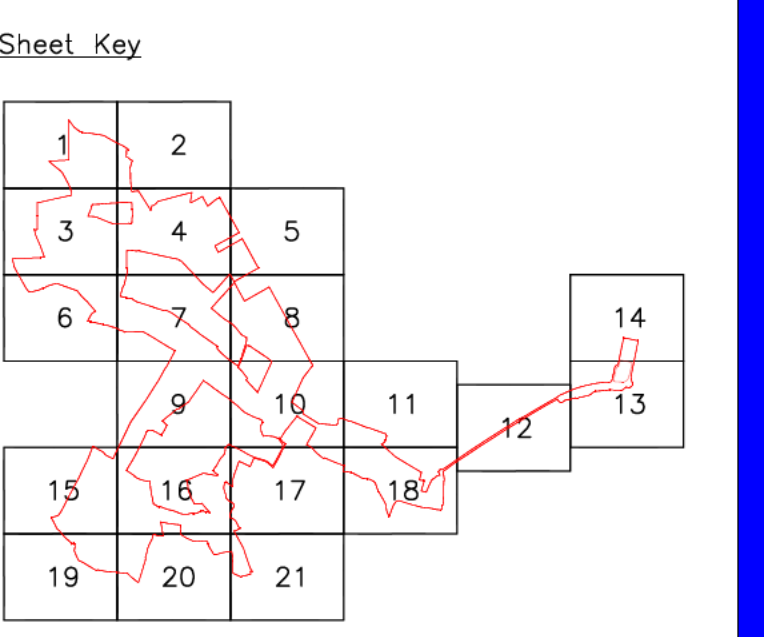
E-Mail: info@pfapic.com



For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

- KEY**
- Site Boundary (Indicative Only)
 - Ordinary Watercourse
 - Ordinary Watercourse (DB Maintained)
 - 7m Watercourse Buffer
 - Overland Flow Route Indicative Only

- NOTES**
- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
 - Approximate Top of Bank based on LIDAR data at 0.1m intervals. 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
 - Contains public sector information licensed under the Open Government Licence v3.0.
 - 7m watercourse buffer in accordance with Selby Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).



Rev	Date	Description	Drawn	Check
#	01/06/23	First Issue	ML	BF
A	23/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BF	

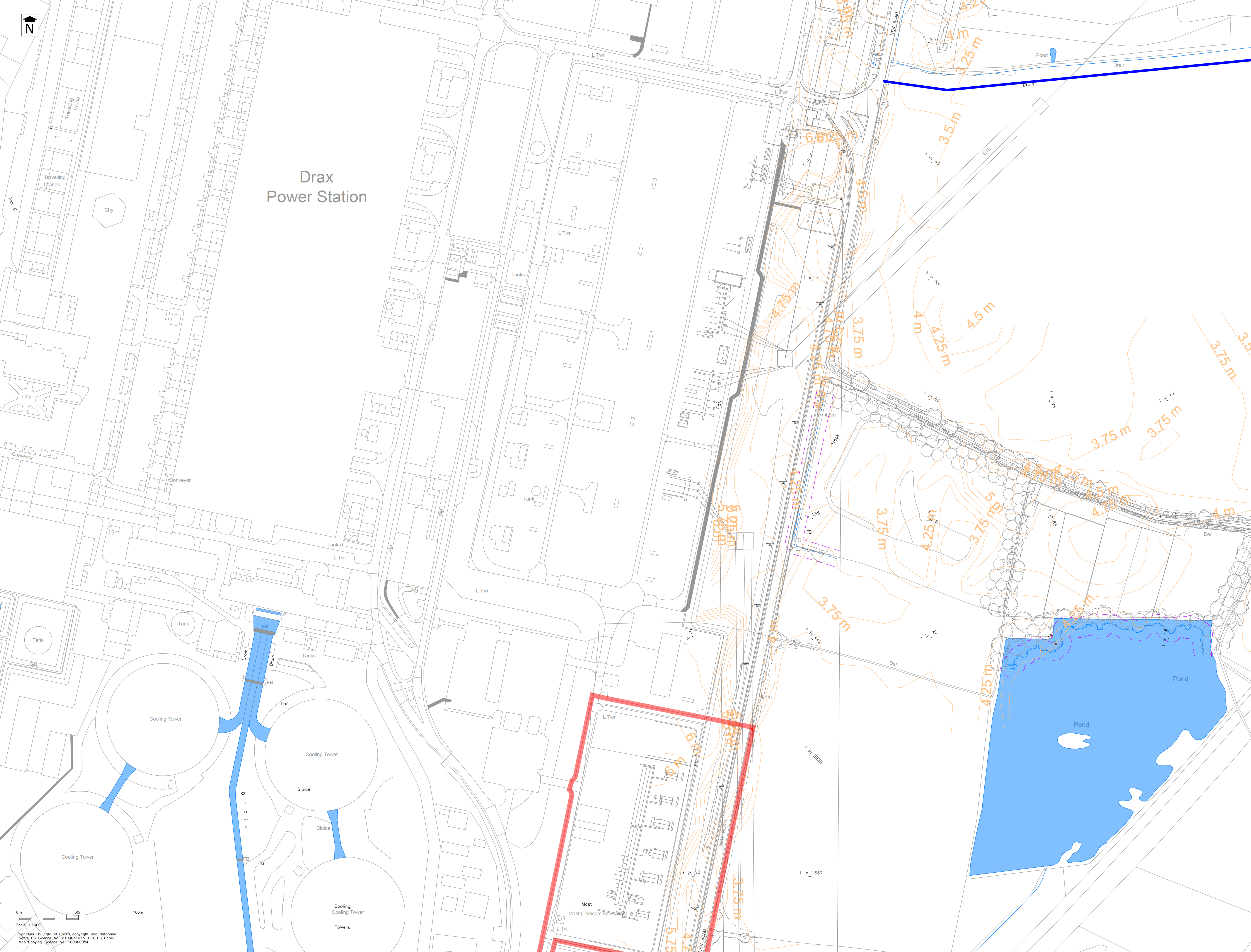
Status
FOR PLANNING

Client
Enso Green Holdings D Limited

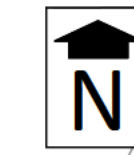
Project
Helios Renewable Energy Project

Drawing Title
**Existing Drainage Arrangements
Sheet 13 of 21**

Drawing No. **E216/119** Rev B
Date: June 2023 Scale: 1:1000 @ A0
E-Mail: @pfapic.com



Drax
Power Station



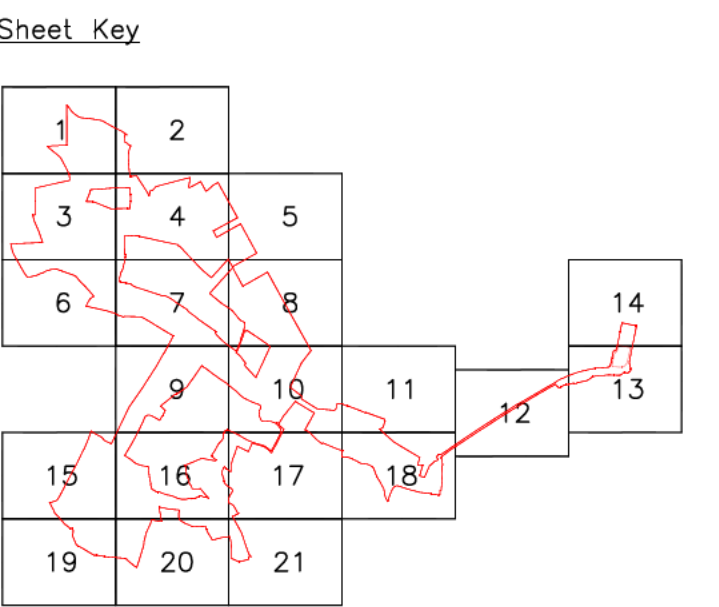
0m 50m 100m
Scale 1:1000

Contains OS data © Crown copyright and database rights OS Licence No: 0100011673. PPA OS Paper Map Copying Licence No: 100000054.

For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

- KEY**
- Site Boundary (Indicative Only)
 - Ordinary Watercourse
 - Ordinary Watercourse (DB Maintained)
 - 7m Watercourse Buffer
 - Overland Flow Route Indicative Only

- NOTES**
- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
 - Approximate Top of Bank based on LIDAR data at 0.1m intervals. 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
 - Contains public sector information licensed under the Open Government Licence v3.0.
 - 7m watercourse buffer in accordance with Selly Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).



Rev	Date	Description	Drawn	Check
#	02/06/23	First Issue	ML	BP
A	23/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BP	

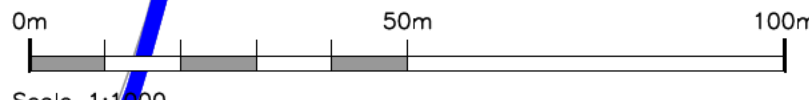
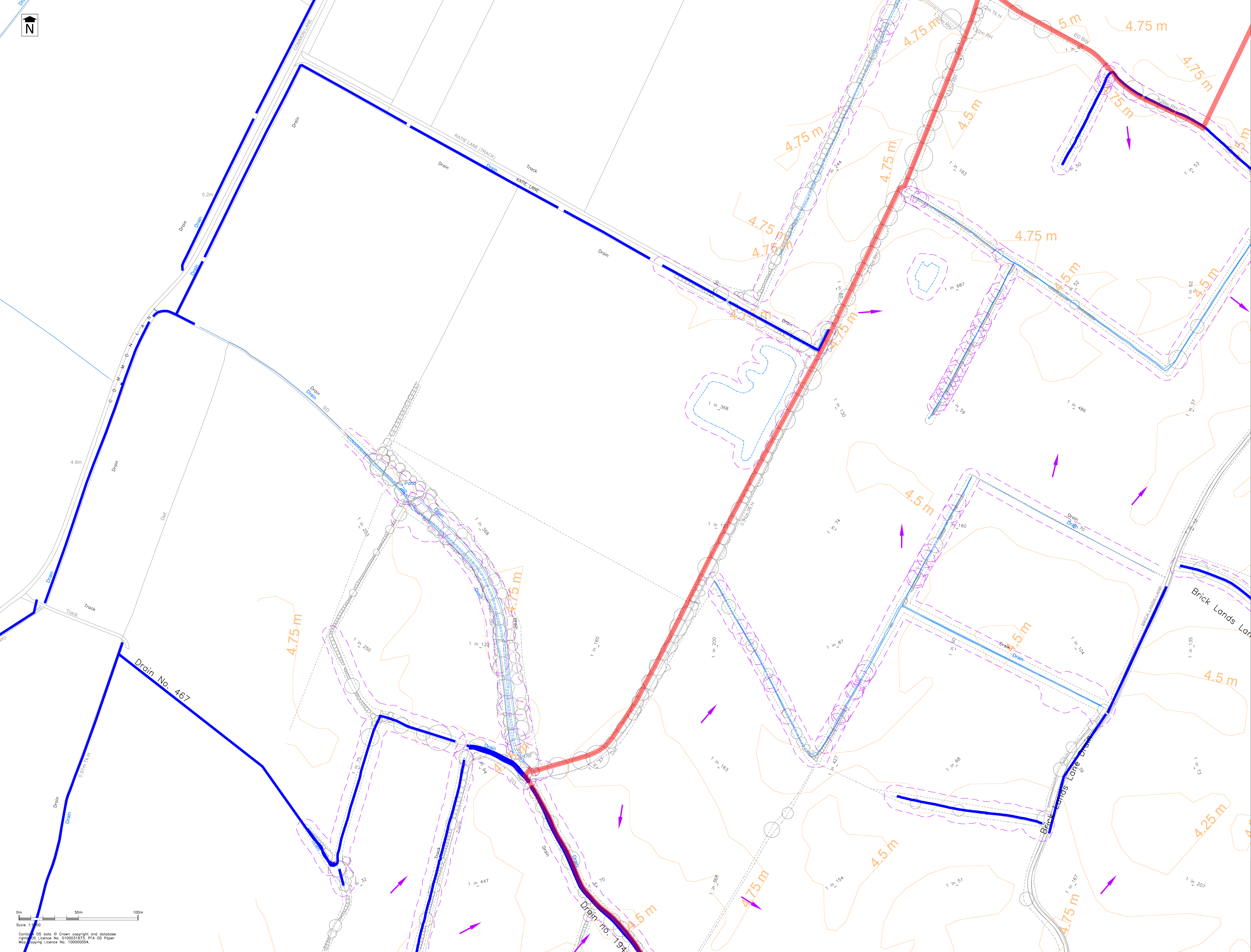
Status
FOR PLANNING

Client
Enso Green Holdings D Limited

Project
Helios Renewable Energy Project

Drawing Title
**Existing Drainage Arrangements
Sheet 14 of 21**

Drawing No. **E216/120** Rev B
Date: June 2023 Scale: 1:1000 @ A0
E-Mail: info@pfpac.com

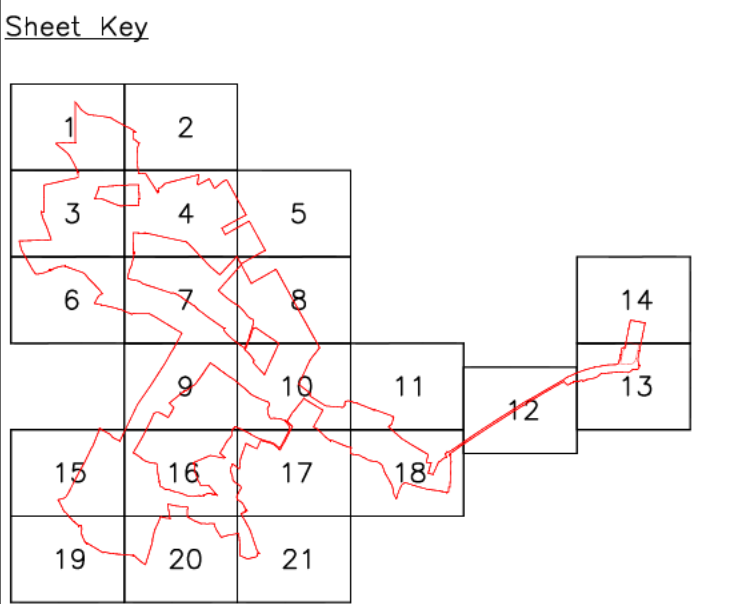


Contains OS data © Crown copyright and database rights. OS Licence No. 0100031673. PFA OS Paper Map copying Licence No. 100000054.

For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

- KEY**
- Site Boundary (Indicative Only)
 - Ordinary Watercourse
 - Ordinary Watercourse (DB Maintained)
 - 7m Watercourse Buffer
 - Overland Flow Route (Indicative Only)

- NOTES**
- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
 - Approximate Top of Bank based on LIDAR data at 0.1m intervals. 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
 - Contains public sector information licensed under the Open Government Licence v3.0.
 - 7m watercourse buffer in accordance with Selby Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).



Rev	Date	Description	Drawn	Check
#	01/06/23	First Issue	ML	BF
A	23/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BF	

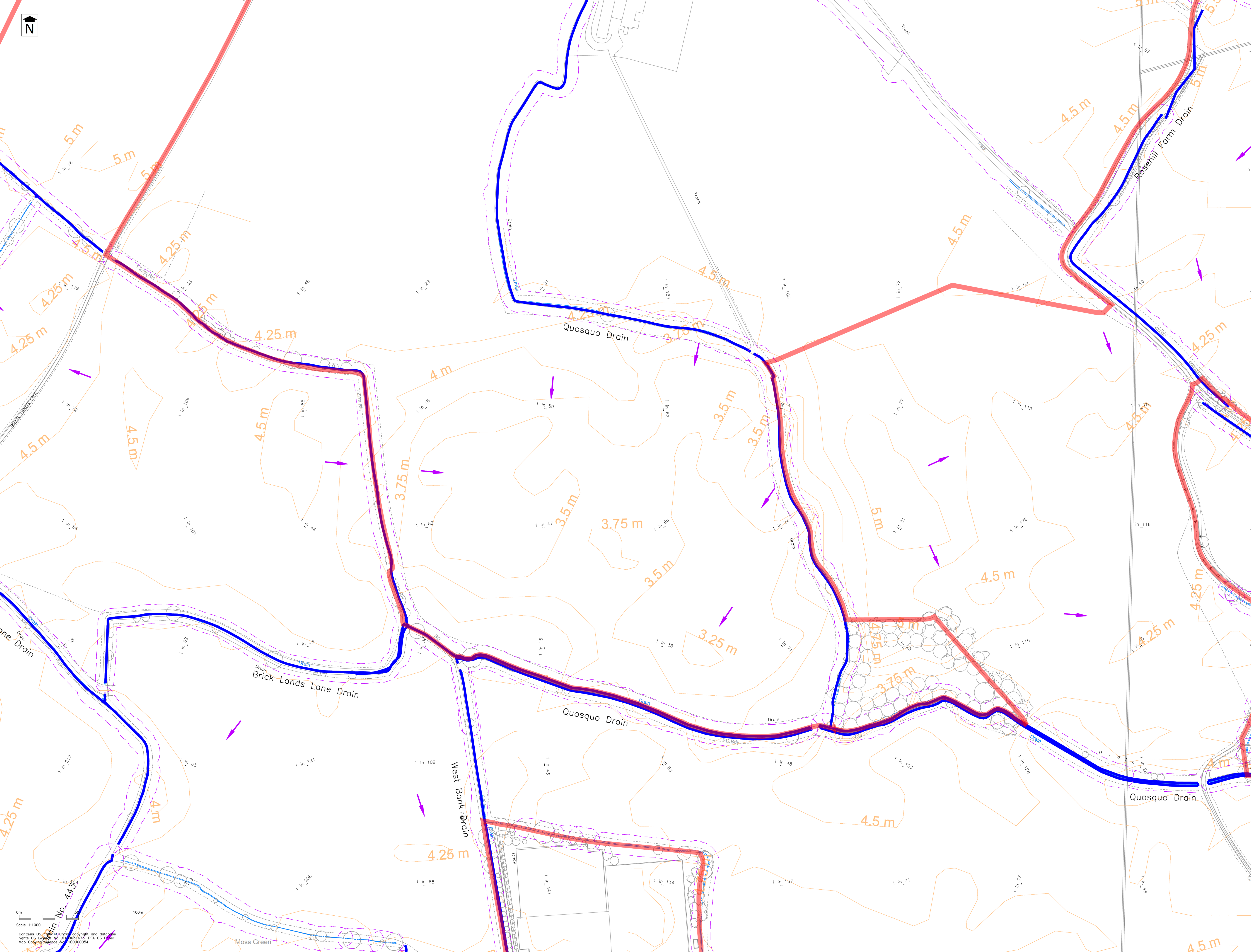
Status **FOR PLANNING**

Client
Enso Green Holdings D Limited

Project
Helios Renewable Energy Project

Drawing Title
**Existing Drainage Arrangements
Sheet 15 of 21**

Drawing No. **E216/121** Rev B
Date: June 2023 Scale: 1:1000 @ A0
E-Mail: @pfapic.com



For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

- KEY**
- Site Boundary (Indicative Only)
 - Ordinary Watercourse
 - Ordinary Watercourse (DB Maintained)
 - 7m Watercourse Buffer
 - Overland Flow Route (Indicative Only)

- NOTES**
- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
 - Approximate Top of Bank based on LIDAR data at 0.1m intervals. 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
 - Contains public sector information licensed under the Open Government Licence v3.0.
 - 7m watercourse buffer in accordance with Selby Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).

Sheet Key

1	2			
3	4	5		
6	7	8		
	9	10	11	12
15	16	17	18	13
19	20	21		

Rev	Date	Description	Drawn	Check
#	01/06/23	First Issue	ML	BF
A	23/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BF	

Status **FOR PLANNING**

Client **Enso Green Holdings D Limited**

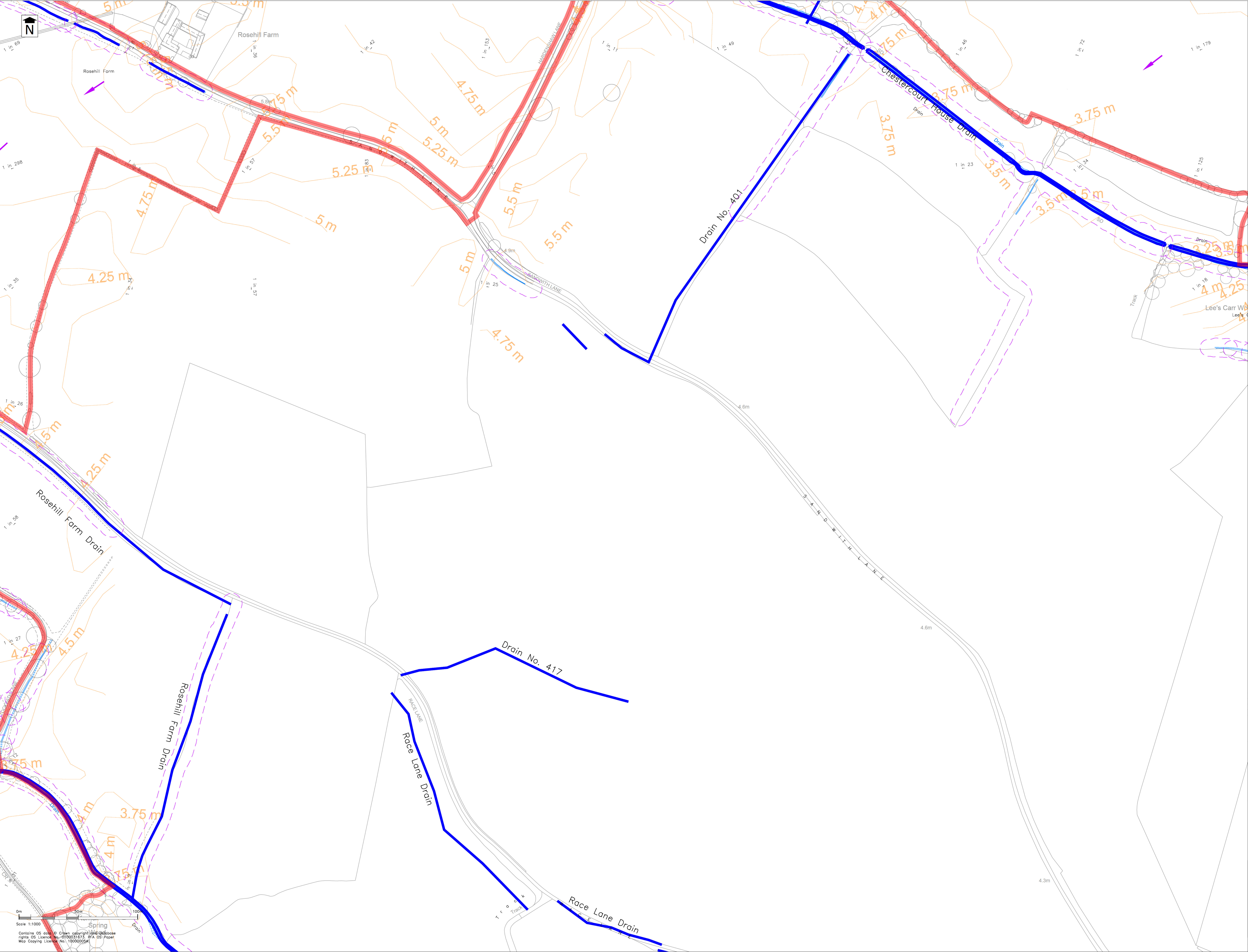
Project **Helios Renewable Energy Project**

Drawing Title **Existing Drainage Arrangements Sheet 16 of 21**

Drawing No. **E216/122** Rev B

Date: June 2023 Scale: 1:1000 @ A0

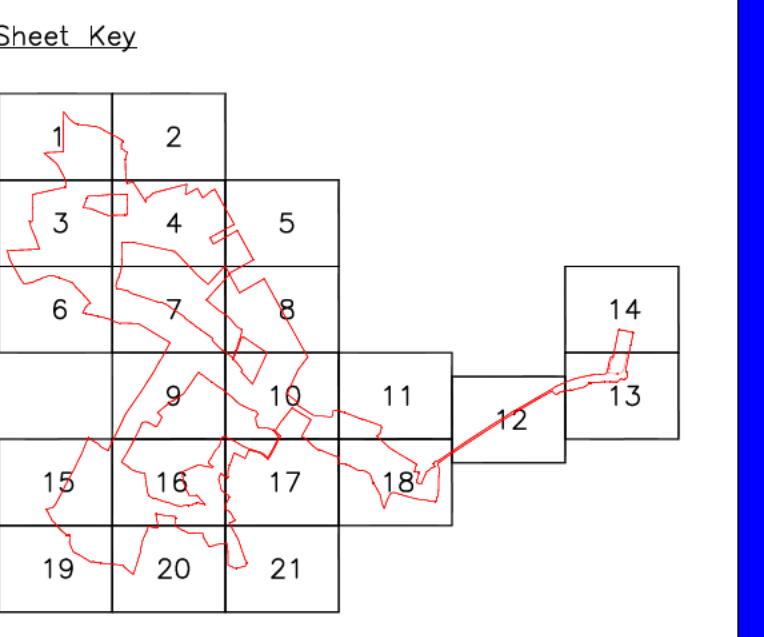
E-Mail: info@pfapic.com



For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

- KEY**
- Site Boundary (Indicative Only)
 - Ordinary Watercourse
 - Ordinary Watercourse (DB Maintained)
 - 7m Watercourse Buffer
 - Overland Flow Route (Indicative Only)

- NOTES**
- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
 - Approximate Top of Bank based on LIDAR data at 0.1m intervals. 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
 - Contains public sector information licensed under the Open Government Licence v3.0.
 - 7m watercourse buffer in accordance with Selby Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).



Rev	Date	Description	Drawn	Check
#	01/06/23	First Issue	ML	BF
A	23/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BF	

Status
FOR PLANNING

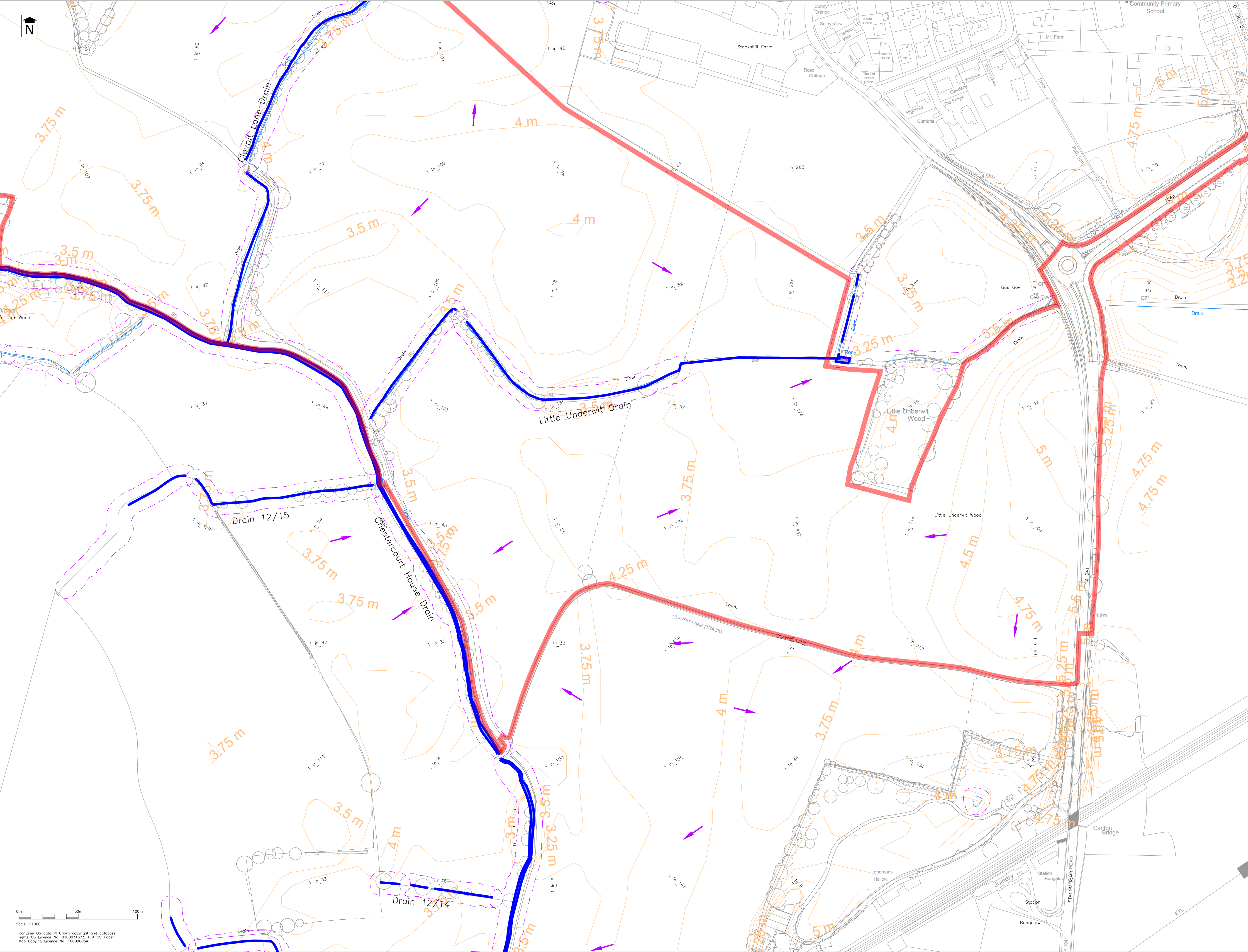
Client
Enso Green Holdings D Limited

Project
Helios Renewable Energy Project

Drawing Title
Existing Drainage Arrangements Sheet 17 of 21

Drawing No. **E216/123** Rev B
Date: June 2023 Scale: 1:1000 @ A0
E-Mail: @pfaplc.com

Contains OS data © Crown copyright and database rights OS Licence No. 100031673. IPX OS Paper Map Copying Licence No. 1000000584



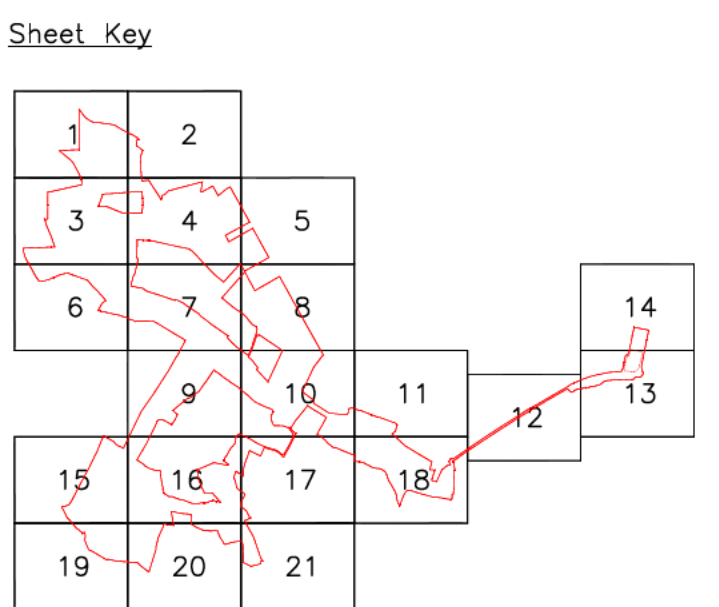
0m 50m 100m
Scale 1:1000

Contains OS data © Crown copyright and database rights OS Licence No. 0100031673. PFA OS Paper Map Copying Licence No. 100000054.

For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

- KEY**
- Site Boundary (Indicative Only)
 - Ordinary Watercourse
 - Ordinary Watercourse (DB Maintained)
 - 7m Watercourse Buffer
 - Overland Flow Route Indicative Only

- NOTES**
- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
 - Approximate Top of Bank based on LIDAR data at 0.1m intervals. 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
 - Contains public sector information licensed under the Open Government Licence v3.0.
 - 7m watercourse buffer in accordance with Selby Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).



Rev	Date	Description	Drawn	Check
#	01/06/23	First Issue	ML	BF
A	23/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BF	

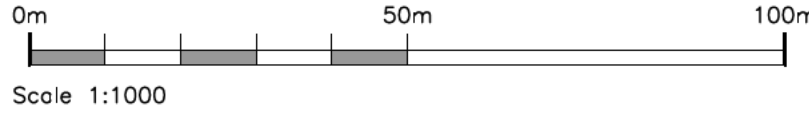
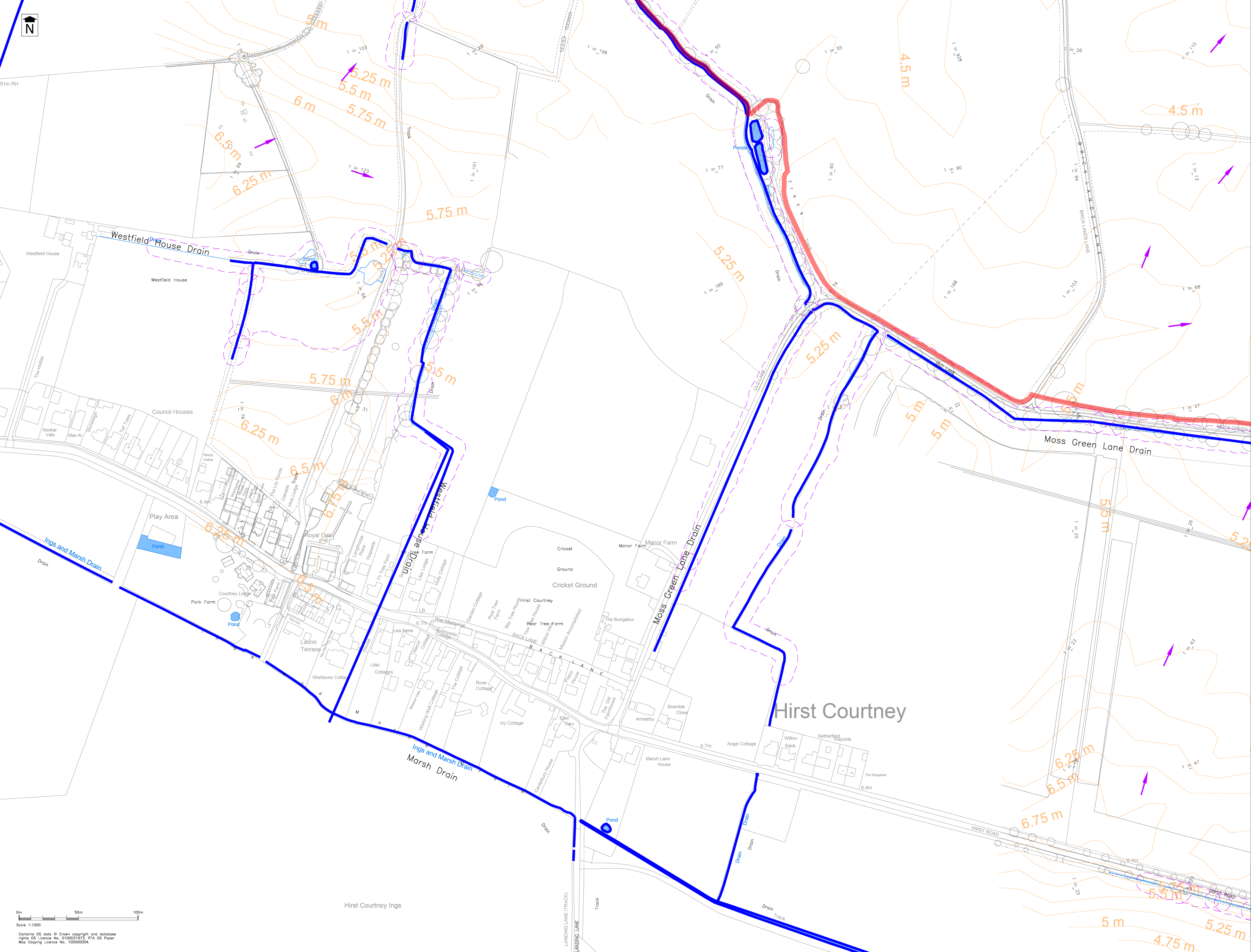
Status
FOR PLANNING

Client
Enso Green Holdings D Limited

Project
Helios Renewable Energy Project

Drawing Title
Existing Drainage Arrangements Sheet 18 of 21

Drawing No. **E216/124** Rev B
Date: June 2023 Scale: 1:1000 @ A0
E-Mail: info@pfapic.com

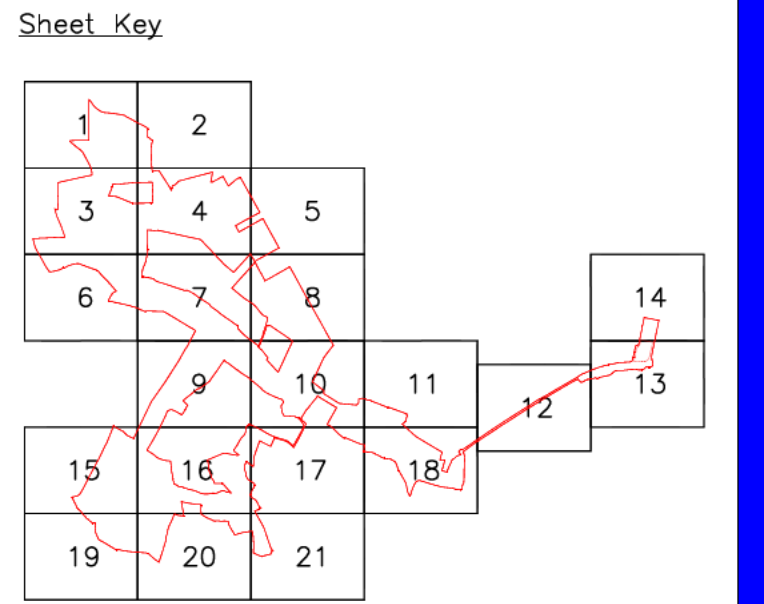


Contains OS data © Crown copyright and database rights OS Licence No. 0100031673. PFA OS Paper Map Copying Licence No. 100000054.

For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

- KEY**
- Site Boundary (Indicative Only)
 - Ordinary Watercourse
 - Ordinary Watercourse (DB Maintained)
 - 7m Watercourse Buffer
 - Overland Flow Route Indicative Only

- NOTES**
- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
 - Approximate Top of Bank based on LIDAR data at 0.1m intervals. 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
 - Contains public sector information licensed under the Open Government Licence v3.0.
 - 7m watercourse buffer in accordance with Selby Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).



Rev	Date	Description	Drawn	Check
#	01/06/23	First Issue	ML	BF
A	23/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BF	

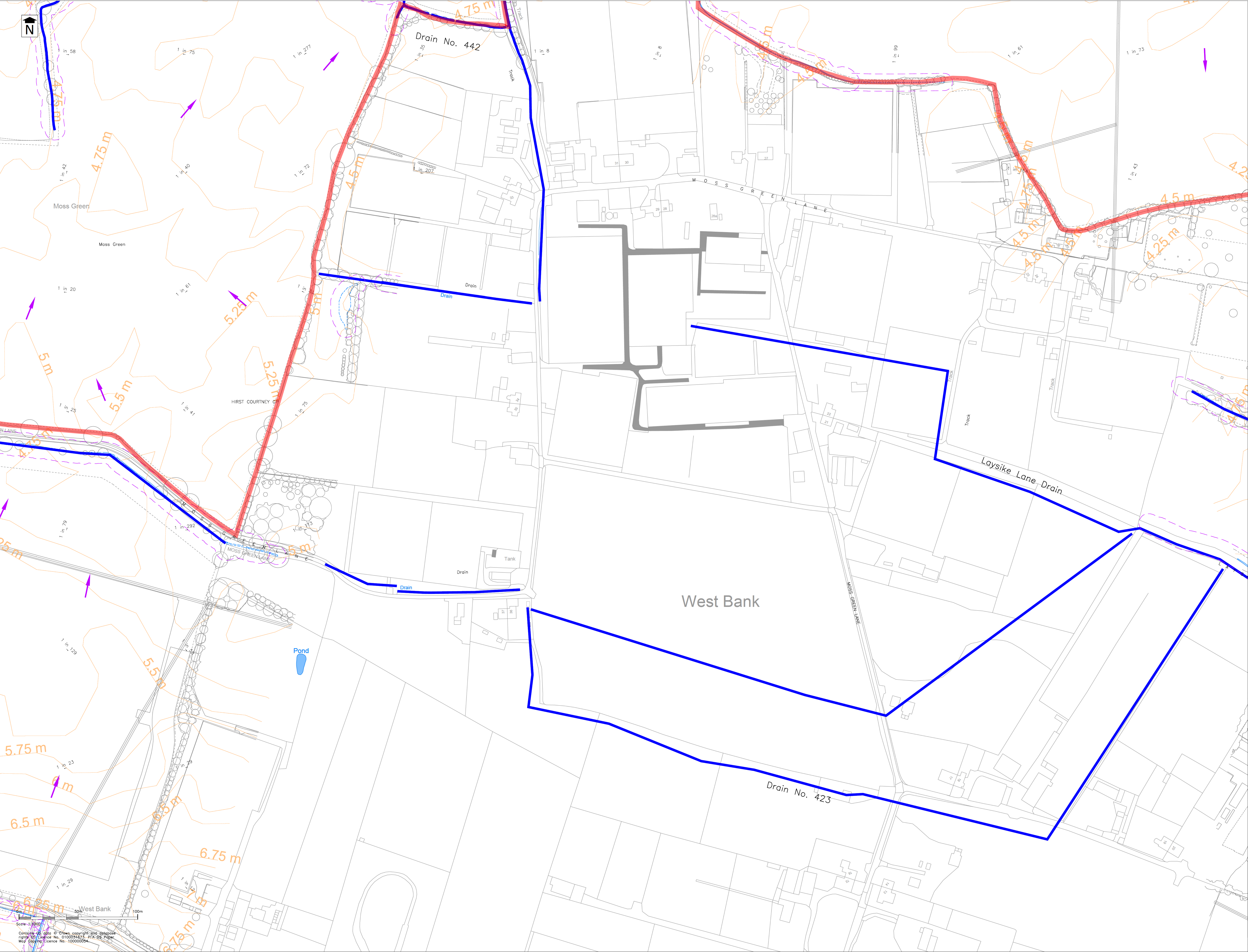
Status **FOR PLANNING**

Client
Enso Green Holdings D Limited

Project
Helios Renewable Energy Project

Drawing Title
**Existing Drainage Arrangements
Sheet 19 of 21**

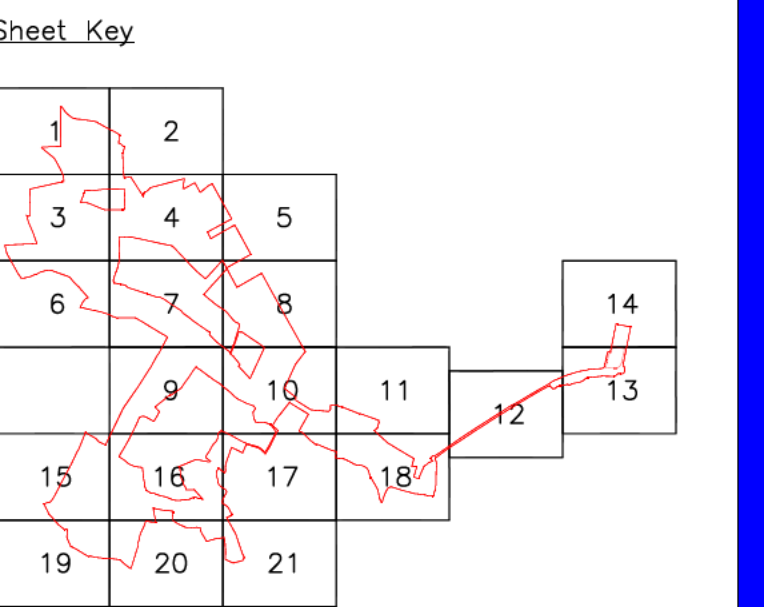
Drawing No. **E216/125** Rev B
Date: June 2023 Scale: 1:1000 @ A0
E-Mail: info@pfapic.com



For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

- KEY**
- Site Boundary (Indicative Only)
 - Ordinary Watercourse
 - Ordinary Watercourse (DB Maintained)
 - 7m Watercourse Buffer
 - Overland Flow Route Indicative Only

- NOTES**
- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
 - Approximate Top of Bank based on LIDAR data at 0.1m intervals; 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
 - Contains public sector information licensed under the Open Government Licence v3.0.
 - 7m watercourse buffer in accordance with Selby Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).



Rev	Date	Description	Drawn	Check
#	01/06/23	First Issue	ML	BP
A	23/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BP	

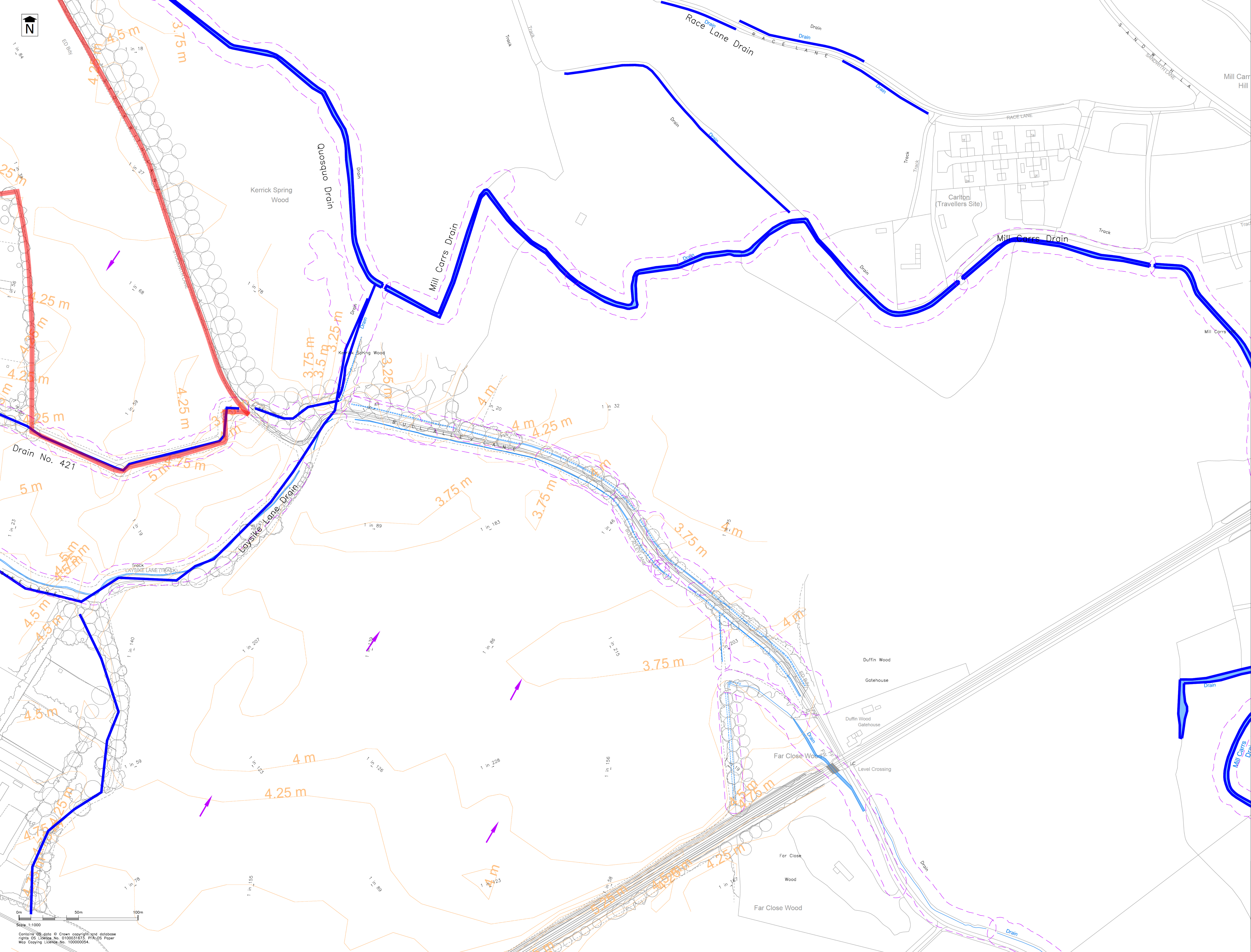
Status
FOR PLANNING

Client
Enso Green Holdings D Limited

Project
Helios Renewable Energy Project

Drawing Title
Existing Drainage Arrangements Sheet 20 of 21

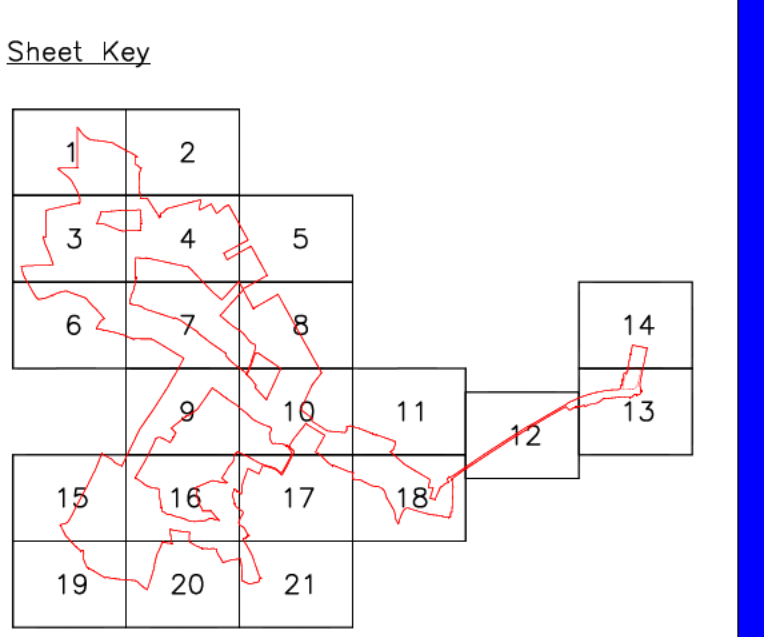
Drawing No. **E216/126** Rev B
Date: June 2023 Scale: 1:1000 @ A0
E-Mail: info@pfapic.com



For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

- KEY**
- Site Boundary (Indicative Only)
 - Ordinary Watercourse
 - Ordinary Watercourse (DB Maintained)
 - 7m Watercourse Buffer
 - Overland Flow Route (Indicative Only)

- NOTES**
- Drawing based on Topographical Survey, produced by Above Surveying Ltd., drawing number DRAX LINEWORK ("CAD") (Dated 6th May 2022).
 - Approximate Top of Bank based on LIDAR data at 0.1m intervals. 7m buffers based on the approximate top of bank data. Top of Bank will need to be accurately verified.
 - Contains public sector information licensed under the Open Government Licence v3.0.
 - 7m watercourse buffer in accordance with Selby Internal Drainage Board byelaw (Byelaw 10: No person without the previous consent of the Board shall erect any building or structure, whether temporary or permanent, or plant any tree, shrub, willow or other similar growth within 7 metres of the landward toe of the bank where there is an embankment or wall or within 7 metres of the top of the batter where there is no embankment or wall, or where the watercourse is enclosed within 7 metres of the enclosing structure).



Rev	Date	Description	Drawn	Check
#	01/06/23	First Issue	ML	BF
A	23/08/23	Update to Red Line Boundary	IS	
B	13/02/24	Update to Red Line Boundary	BF	

Status **FOR PLANNING**

Client
Enso Green Holdings D Limited

Project
Helios Renewable Energy Project

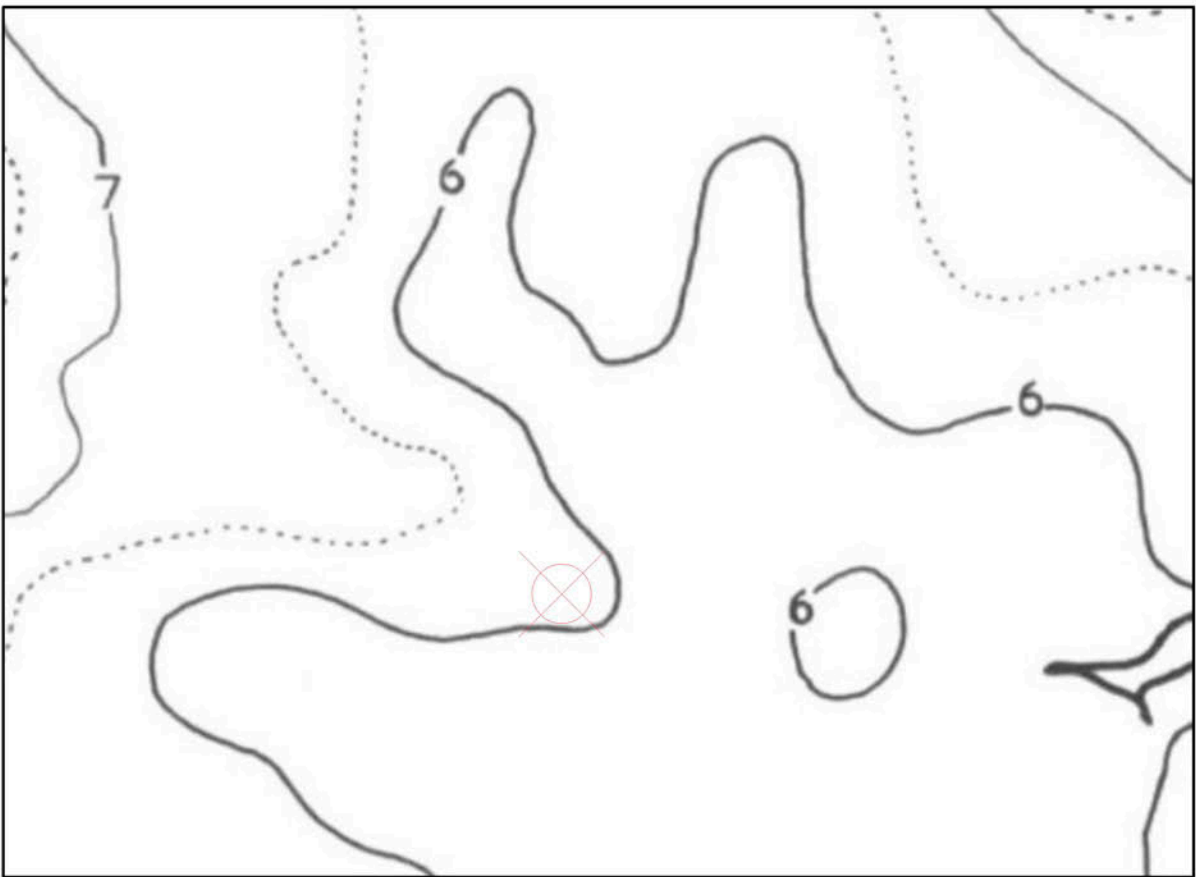
Drawing Title
Existing Drainage Arrangements Sheet 21 of 21

Drawing No. **E216/127** Rev B
Date: June 2023 Scale: 1:1000 @ A0
E-Mail: info@pfapic.com

Contains OS data © Crown copyright and database rights OS Licence No. 0100031673. PFApic Paper Map Copying Licence No. 100000054.



Location Plan



Standard Average Annual Rainfall (SAAR) (in hundreds of mm)



Winter Rain Acceptance Potential (WRAP)



Stratton Park House, Wanborough Road
Swindon, SN3 4HG
Telephone
01793 828000
Website
www.pfapl.com

For Planning
These drawings are produced for the purposes of
supporting a planning application and should not be
relied upon for tender, pricing, or construction purposes.

NOTES

1. Standard Average Annual Rainfall
(SAAR) and Winter Rain Acceptance
Potential (WRAP) map extracts shown
on this drawing are reproduced from
the maps contained in Volume V of
the Flood Studies Report –
NERC:1975.

Soil Classification			
Soil Class (WRAP)	Soil Index (IoH)	SPR (FDH)	St (ADAS)
1	0.15	10	0.1
2	0.30	30	0.5
3	0.40	37	0.8
4	0.45	47	1.0
5	0.50	53	1.3

Rev	Date	Description	Drawn	Check
#	11/05/23	First issue.	BF	
Status				
FOR PLANNING				
Client				
Enso Green Holdings D Limited				
Project				
Helios Renewable Energy Project				
Drawing Title				
SAAR and WRAP Maps				
Drawing No. E216/82				
Date: May 2023		Scale: As Shown		
E-Mail: bfox@pfaplc.com				