

## **MONMOUTHSHIRE AND BRECON CANAL - CRUMLIN ARM WORKING GROUP - 24TH NOVEMBER 2009**

**SUBJECT: UPDATE ON MATTERS RELATING TO THE CANAL**

**REPORT BY: DIRECTOR OF THE ENVIRONMENT**

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### **1. MAINTENANCE UPDATE**

#### **1.1 Canal Channel**

1.1 The new weed cutting/channel clearance regime was introduced this year. Clearance was undertaken on the following dates:

- 27th April 2009
- 27th July 2009
- 10th November 2009

During each visit all weed present within the canal channel was cut and removed, together with any accumulated litter and other debris present.

Refer to Appendix 'A', photographs 1 and 2 depicting some of the material removed from the canal in the July visit.

It is hoped that the continued removal of weed will be reflected in a reduction in the amount of silt/plant matter accumulating within the canal channel and thus reduce the frequency of dredging. This will be the subject of further monitoring and assessment in this respect.

It is worth noting that the incidents of complaints relating to the general condition of the canal channel have fallen significantly since the increase in frequency of channel clearance.

#### **1.2 Grass Maintenance**

A new grass-cutting regime, developed in accordance with the recommendations contained within the LTC Landscape Architects Report, was introduced this year.

The first cuts of this season was undertaken on 06 April with subsequent cuts undertaken on the following dates:

- 27th April 2009
- 20th May 2009
- 24th June 2009
- 20<sup>th</sup> July 2009
- 7th August 2009
- 11th September 2009
- 19th October 2009

All feedback received on the new regime has to date been positive.

## **2. 2009/2010 WORKS PROGRAMME**

### **2.1 Maintenance Term Service Contract**

Maintenance term service contract has been awarded and commenced on 19<sup>th</sup> October 2009. The contractor appointed is Alan Griffiths (Contractors) Ltd, the contract is of 2 years duration.

### **2.2 Towpath**

It is planned to re-surface sections of towpath within the sub-urban areas with a tarmac finish. The sections of towpath identified in this respect are from Moriah Hill to Gelli Avenue, Navigation Road to Penrhiw Bridge, Darran Bridge to Green Meadow Bridge and from Temperance Hill to Darran Road. Some areas of ponding have been denitrified within the rural areas, which will be addressed by localised repairs.

Refer to Appendix 'B' for drawings showing the extent proposed re-surfacing.

### **2.3 Access Enhancement**

It is planned to undertake improvement works to the access points at Thistle Way, Navigation Road, Moriah Bridge, The Prince of Wales Pub, Darran Road, Green Meadow Bridge and Halls Road. The scope of works at all locations will include to varying degrees the installation of vehicle and motorcycle barriers and areas of block paving. Where the location requires it, litter and dog fouling bins will also be installed.

Refer to Appendix 'C' for drawings showing the extent proposed re-surfacing.

### **2.4 Water Control**

It is planned to install a number of additional control measures within the canal channel in the form of depth gauges and the creation of locations suitable for installation of stank boards. The installation of stank boards at key locations will allow the easy compartmentalisation of the canal to deal with future flooding and leak issues.

### **2.5 Advanced Design**

Advanced design works for relining schemes at Pontywaun Viaduct and the section of canal downstream of the viaduct, down to Pontywaun Bridge, are planned in order to have scheme cost surety and allow future funding bids.

## **3. FUNDING**

### **3.1 Capital**

The 2009/2010 budget was fixed at £125,000.0.

The projects identified above will result in the full expenditure of this budget.

### **3.2 Revenue**

The 2009/2010 budget was fixed at £149,430.00.

Expenditure under this heading is allocated to cover the cost of grass and channel maintenance, tree maintenance, general cleansing, towpath repair, management cost and emergency response.

Expenditure to date is in line with that anticipated at this time period.

### **3.3 External Funding**

The Countryside and Landscape Group secured external funding from WEFO in the sum of £50,000.00 for access enhancement. Elements of the works identified above have been funded from this source.

## **4. GENERAL ISSUES**

### **4.1 Vandalism**

There have been several instance of vandalism directed at recently completed works, one area in particular appears to suffered more than others this being the entrance feature at Manor Road. Sections of knee rail, which are integral to the success of the vehicle and motorcycle barriers, have been removed and damaged. This will be issued to and repaired by the term service contractor in due course.

Refer to Appendix 'D' photographs highlighting the areas of damage.

### **4.2 Boats**

All boats have been removed form the canal by their owners, no explanation for this course of action received to date and it is not clear if there is any intention on the part of the said owners to at some later date apply for licences to put their boats back on the canal.

Author: K.J. Kinsey, Principal Engineer

## Appendix 'A'



Photo 1



Photo 2

**Appendix 'B'**

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DO NOT SCALE

**Notes**

- Area to be reconstructed to the following:
  - Excavate existing topsoil to a depth of 250mm;
  - Concrete sub-base DTP (100mm) - 1:1.50mm
  - 30mm binder course
  - 30mm surface course
  - AC5 med 180/225;

**Notes**

- All dimensions in millimeters unless otherwise stated

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Revisions	Description



**ENGINEERING PROJECTS GROUP  
ENGINEERING CONSULTANCY**

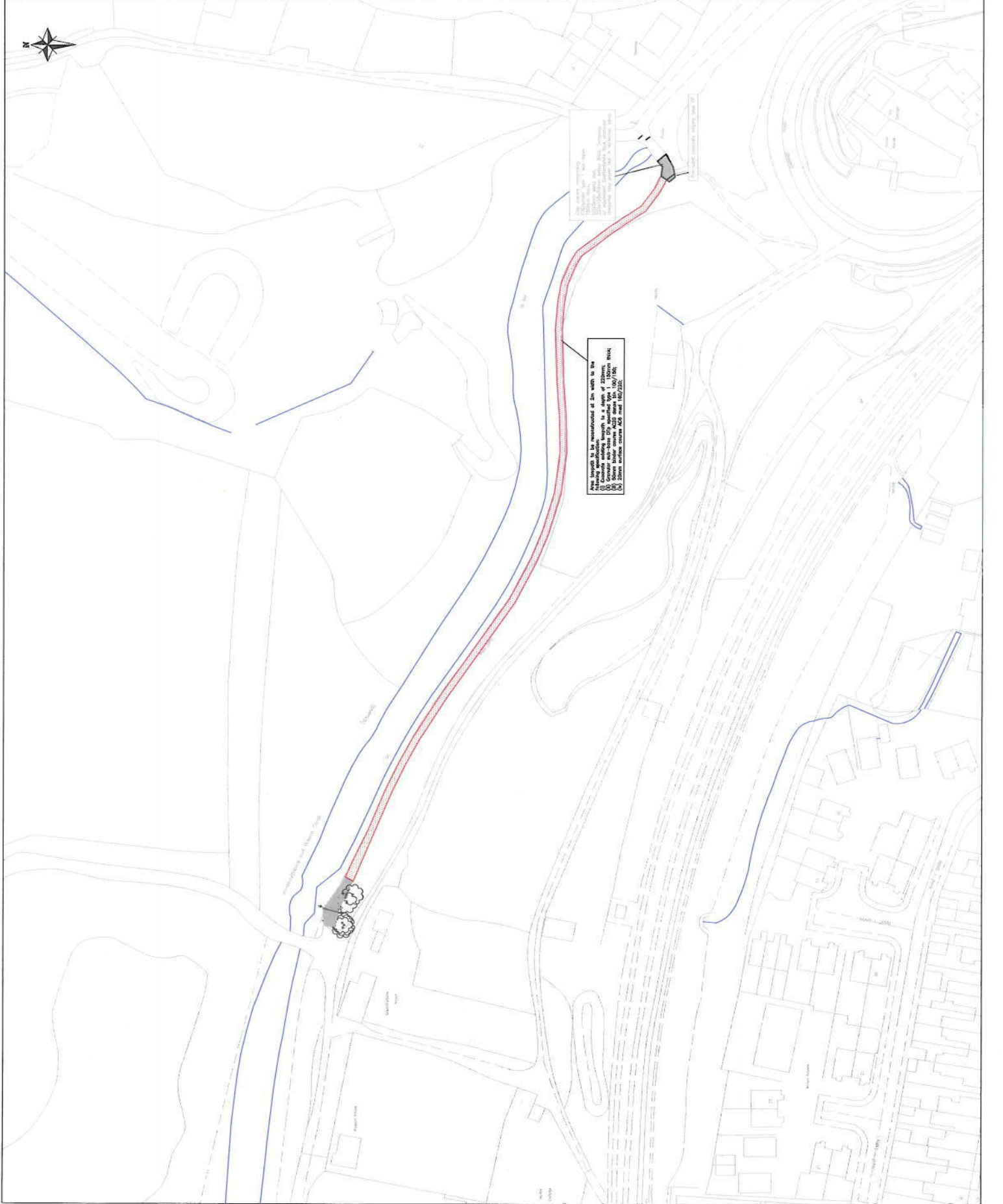
Directorate of the Environment  
Engineering Division HQ  
Council Offices, Pontlefenloch  
Blackwood NP12 2W  
Head of Engineering Services - Terry Shaw  
B.Eng. MBA C.Eng. MICE MCMI MHT  
PROJECT TITLE

Canal maintenance Term Service Contract

**drawing title**

Topsoil Re-constructing between Green Meadow Bridge and Baron Road

scale	date	drawn	checked
1:500	NOV '09	AS	KJK
project no.	118056/13	drawing no.	101
APPROVAL D	COMMENT D	INFORMATION D	UNIT D BOOK D CONTACT B AS CONTACT D



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**Legend**

Area to be reconstructed to the following specification, existing length to be reconstructed to a depth of 220mm:

- (i) Granular sub-base 150mm specified type 1
- (ii) 50mm binder course AC20 dense bit 100/150;
- (iii) 20mm binder course AC6 mes 180/220;

**Notes**

- All dimensions in millimeters unless otherwise stated

**Revisions**

Rev	Description
01	
02	
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PONTYFRITH

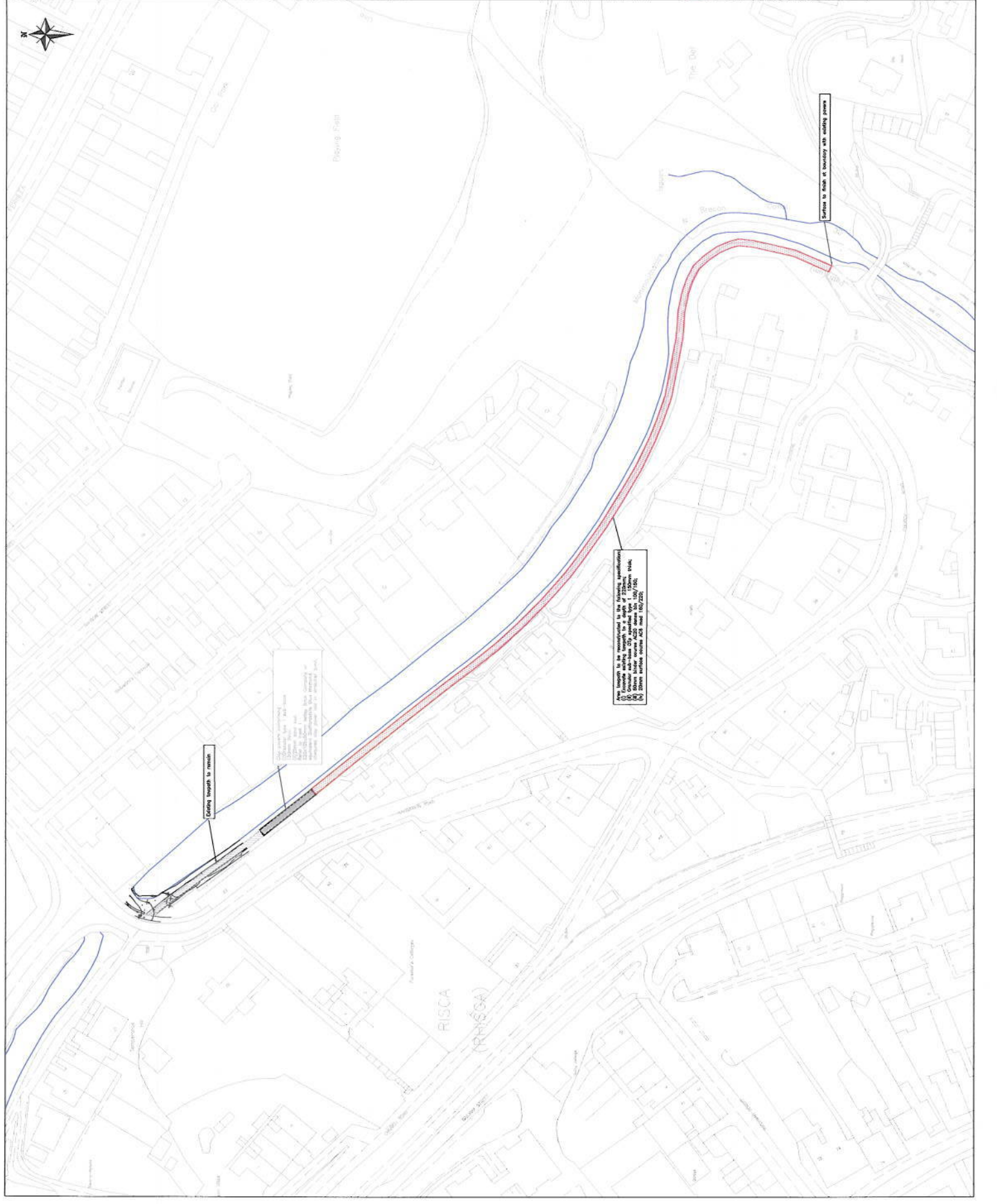
**ENGINEERING PROJECTS GROUP**  
ENGINEERING CONSULTANCY

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Council Offices, Pontyfrith  
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Project Title



Canal Maintenance term Service Contract

drawing title  
Township surface, between Navigation Road and Penrhyn Bridge

ISSUE	NO	DATE	BY	CHKD	REASON
1	1	10/06/14	AS		ISSUED FOR TENDER
2	2	10/06/14	AS		ISSUED FOR TENDER
3	3	10/06/14	AS		ISSUED FOR TENDER
4	4	10/06/14	AS		ISSUED FOR TENDER
5	5	10/06/14	AS		ISSUED FOR TENDER
6	6	10/06/14	AS		ISSUED FOR TENDER
7	7	10/06/14	AS		ISSUED FOR TENDER
8	8	10/06/14	AS		ISSUED FOR TENDER
9	9	10/06/14	AS		ISSUED FOR TENDER
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18	18	10/06/14	AS		ISSUED FOR TENDER
19	19	10/06/14	AS		ISSUED FOR TENDER
20	20	10/06/14	AS		ISSUED FOR TENDER





- Legend**
-  Area to be reconstructed to the following specification:
    - (i) Granular sub-base DTP specified type 1 230mm
    - (ii) 30mm binder course
    - (iii) AC20 dense bit 100/150;
    - (iv) 20mm surface course
    - ASB road 100/225;
  -  Existing surface area to be overlaid with 35mm surface course AC10 med 100/150
  -  Existing Reinforcing
  -  Existing surface to be in place and overlaid to a depth of 35mm or that required to give a smooth transition between new and existing surfaces
  -  Pre-cast concrete edging
  - ..... Type EF

**Notes**  
 1. All dimensions in millimeters unless otherwise stated

**Reinforced Iron Sub-base**  
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Revision	Description

**CAERPHILLY**  
 COUNTY OF SOUTH WALES  
**CAERFFILI**

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 Project Title

Cancel Maintenance Term Service Contract

drawing title  
 Terepath re-surfacing between Gail Avenue and Prince of Wales Pub

scale 1/500 date NOV '09 drawn AS checked KJK  
 project ref TH906/08 drawing no. 101 rev. X

APPROVAL D COMMENT D INFORMATION D  
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Area length to be reconstructed to the following specification:  
 (i) Granular sub-base DTP specified type 1 230mm  
 (ii) 30mm binder course  
 (iii) AC20 dense bit 100/150;  
 (iv) 20mm surface course  
 ASB road 100/225;

Existing surface area to be overlaid with 35mm surface course AC10 med 100/150

Existing Reinforcing

Existing surface to be in place and overlaid to a depth of 35mm or that required to give a smooth transition between new and existing surfaces

Pre-cast concrete edging

..... Type EF

All dimensions in millimeters unless otherwise stated

Reinforced Iron Sub-base  
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**Appendix 'C'**

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DO NOT SCALE

- Legend**
- Clay pavers comprising:
    - (i) 200mm type 1 sub-base 150mm thick
    - (ii) 200mm sand bed
    - (iii) 220x105x50mm keylay brick
    - Refer to detail 1
  - Concrete Setts pavers comprising:
    - (i) 200mm type 1 sub-base 150mm thick
    - (ii) 200mm sand bed
    - (iii) 150mm thick
  - Welsh Oak Birch type 2.



**CAERPHILLY**  
 COUNTY ADMINISTRATIVE BUILDING  
**CAERFFILI**

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 Project Title

Canal Maintenance Term Service Contract

Drawing Title  
 Prepared Works to Tow Path at  
 Thistleway

scale	date	drawn	checked
N/S	July 09	AS	WB
project ref.	drawing no.	rev.	
TH06-06	001		

APPROVAL  COMMENT  INFORMATION   
 DRAFT  TENDER  CONTRACT  AS CONSTRUCTED

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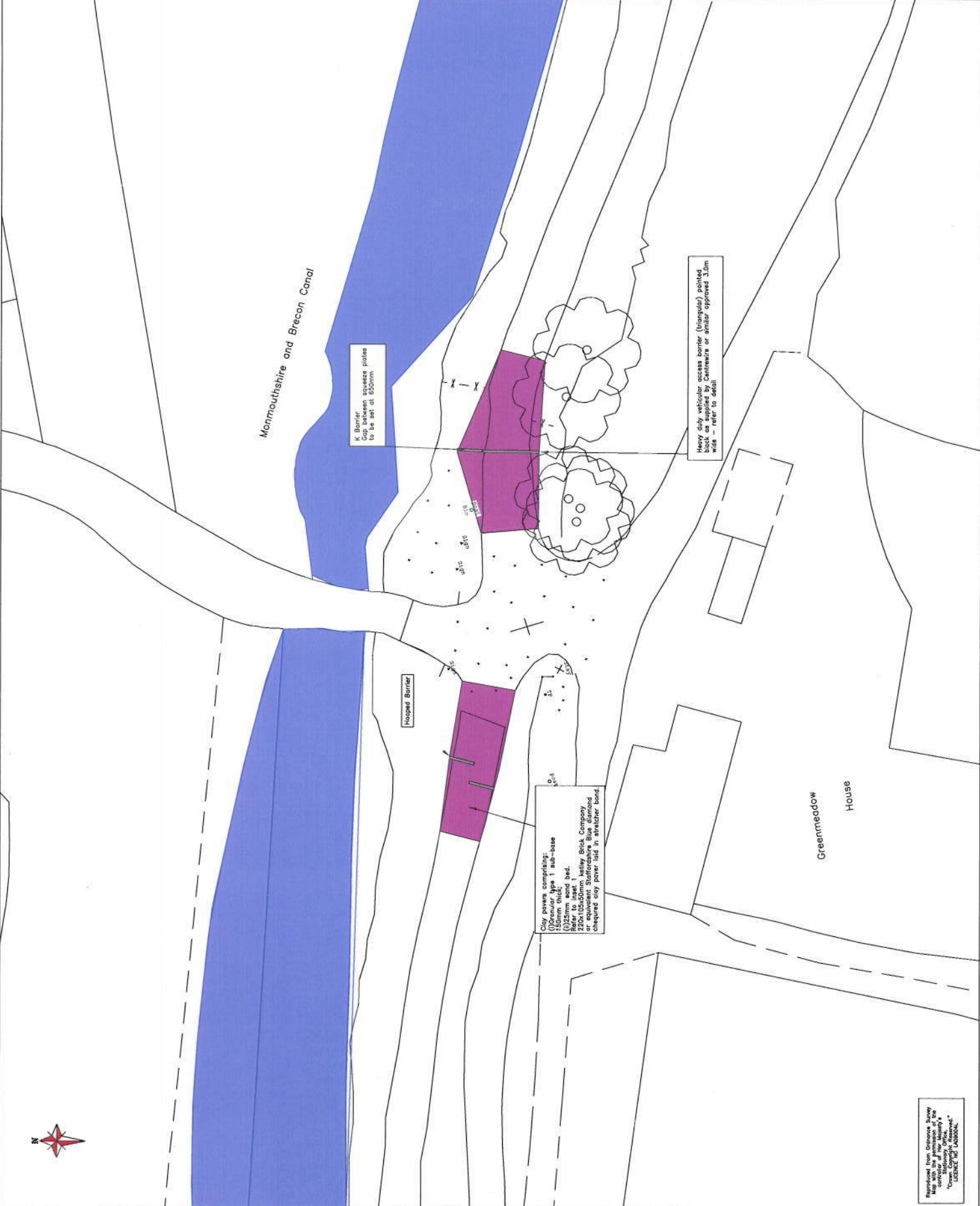
DO NOT SCALE

LEGEND

Clay pavers comprising:  
(1) Granular type 1 sub-base  
150mm thick;  
(2) 25mm sand bed.  
225x105x25mm Kelly Brick  
Company  
(3) 25mm concrete Staffordshire Blue  
diamond  
chequered clay paver laid in  
raftercher bond.



Canal



REVISIONS

No.	Description



ENGINEERING PROJECTS GROUP  
ENGINEERING CONSULTANCY  
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Project Title

CANAL MAINTENANCE TERM SERVICE  
CONTRACT

Drawing Title

Proposed Area Improvement and Barriers  
at Green Meadow Bridge

Scale	date	drawn	checked
NTS	JUL '09	AS	WB
Project ref. THS08-02		drawing no.	001
APPROVAL		COMMENT	INFORMATION
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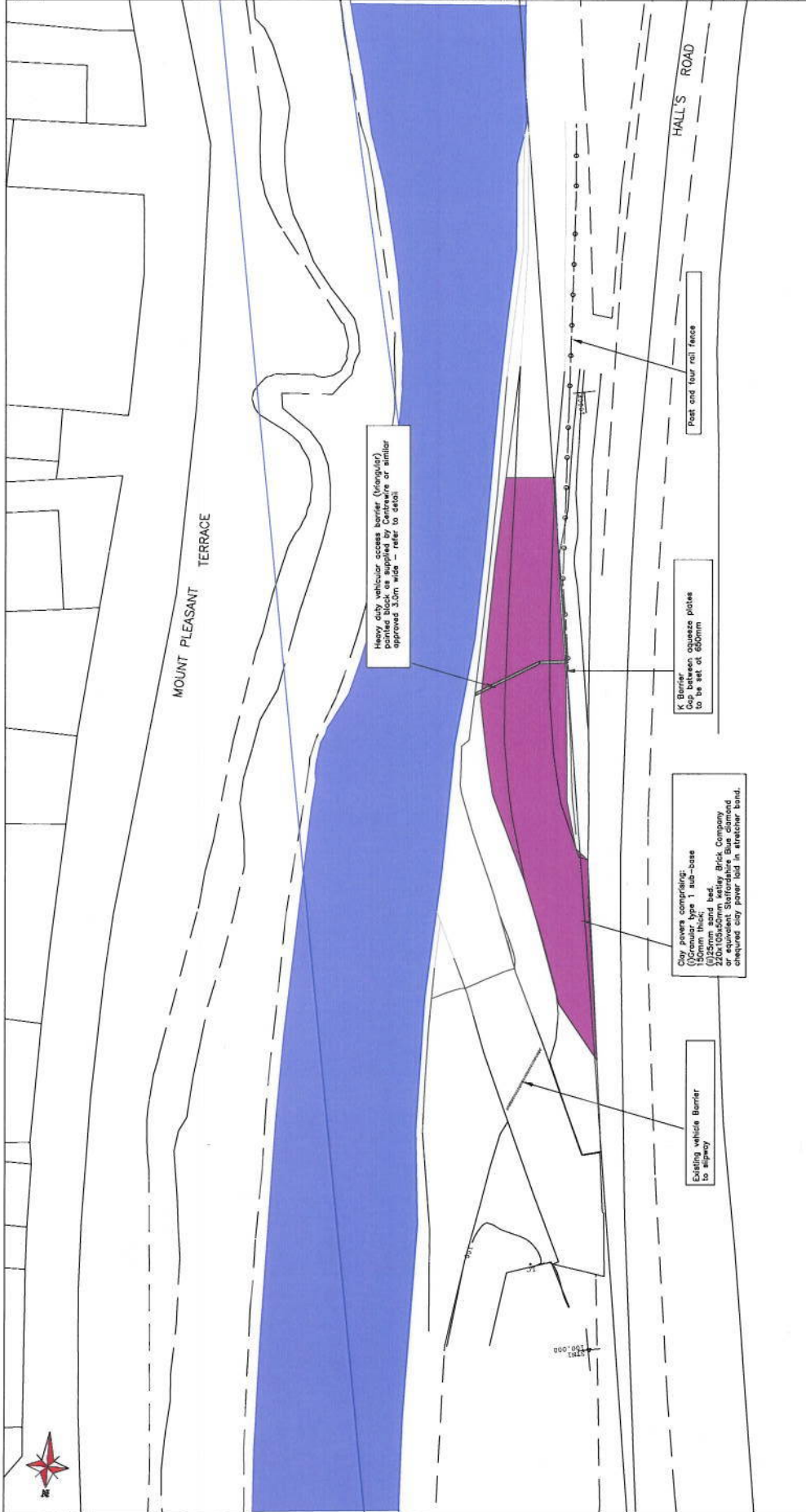
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LONDON W9 1LR



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DO NOT SCALE

Legend	
[Blue Box]	Clay pavers comprising: Oxonomar type 1 sub-base 150mm thick, (0)25mm sand bed, 220x105x40mm setlay Brick Company or equivalent Staffordshire Blue or equivalent Staffordshire Blue chequered clay paver laid in stretcher bond.
[Purple Box]	Concrete



Revisions	Description



**ENGINEERING PROJECTS GROUP**  
**ENGINEERING CONSULTANCY**  
  
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Engineering Division HQ,  
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Project title

Concrete Maintenance term service contract  
drawing title

Proposed works at Parkway railway		
scale	date	checked
1:50	Jul 09	AS WB
project ref.	drawing no.	rev.
TH806-05	001	

APPROVAL  COMMENT  INFORMATION   
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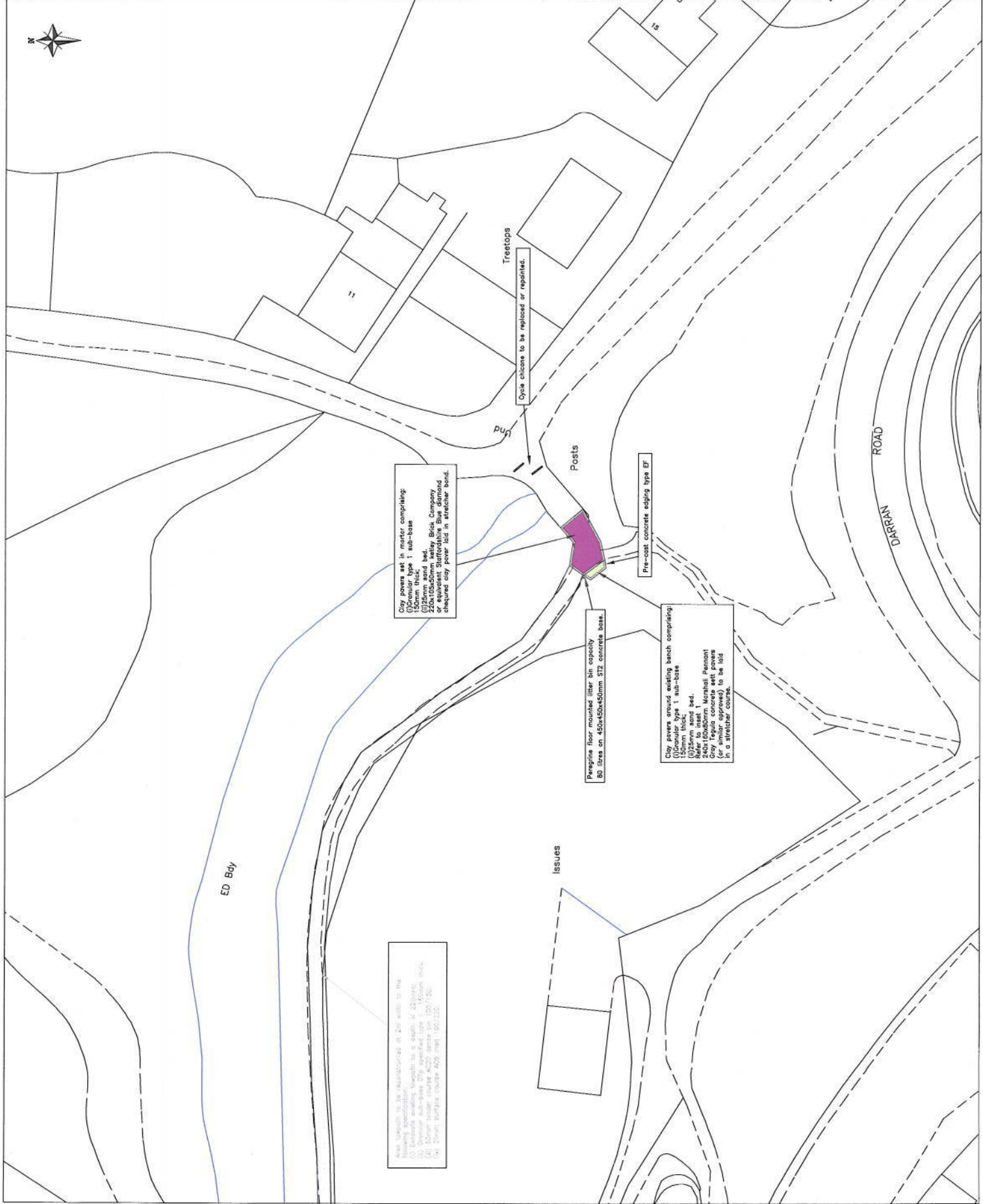
Legend

- Clay pavers comprising:
  - (1) 200mm x 150mm square
  - (2) 100mm x 150mm rectangular
  - (3) 200mm x 150mm sand bed.
  - Refer to inset 1
  - (4) 200x100x50mm Kellogg Brick
  - (5) 200x100x50mm Staffordshire Blue diamond
  - cheapest clay paver laid in stretcher bond.
- Clay pavers comprising:
  - (1) 200mm x 150mm square
  - (2) 100mm x 150mm sand bed.
  - Refer to inset 1
  - (3) 200x100x50mm Mershall Pennant
  - (4) 200x100x50mm Marshall Pennant
  - gray / yellow concrete set pavers (or similar approved) to be laid in a stretcher course.
- Pre-cast concrete edging type EF

Notes

- 1. All dimensions in millimeters unless otherwise stated.
- 2. Clay pavers to be set in mortar
- 3. 20mm mortar bed
- (mortar colour to match paver)

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Area beneath to be (re)landscaped in 2m wide to the

1. Excavate existing kerbs to a depth of 250mm.
2. Provide sub-base 275 specified type 1 - 50mm thick.
3. 10mm mortar course AC20 set to 100/250.
4. 20mm mortar course AC30 100/150.

Clay pavers set in mortar comprising:

1. 200mm x 150mm square
2. 100mm x 150mm rectangular
3. 200mm x 150mm sand bed.
4. 200x100x50mm Kellogg Brick Company or equivalent Staffordshire Blue diamond or equivalent
5. 200x100x50mm Staffordshire Blue diamond

cheapest clay paver laid in stretcher bond.

Pre-cast floor mounted fibre bin capacity 80 litres on 450x650x450mm 37.5 concrete base.

Clay pavers around existing bench comprising:

1. 200mm x 150mm square
2. 100mm x 150mm rectangular
3. 200mm x 150mm sand bed.
4. 200x100x50mm Marshall Pennant or equivalent
5. 200x100x50mm Marshall Pennant

gray / yellow concrete set pavers (or similar approved) to be laid in a stretcher course.

Pre-cast concrete edging type EF

Posts

Und

Treetops

Cycle chimes to be replaced or repaired.

Date	Description



**ENGINEERING PROJECTS GROUP**  
**ENGINEERING CONSULTANCY**

Directorate of the Environment  
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PROJECT TITLE

Canal maintenance term Service Contract

Drawing title

Darren Road Bridge Gateway Feature

scale	date	drawn	checked
1/200	NOV 09	AS	KUK
project ref.	drawing no.	rev.	x
TH006/09	101		

APPROVAL  COMMENT  INFORMATION   
 DWG  TENDR  CONTRACT  AS CONSTRUCTION

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DO NOT SCALE

Legend

Clay pavers comprising:  
 (1) granular type 1 sub-base  
 (2) 125mm thick bed  
 (3) 200 x 100 x 50mm wet lay  
 Staffordshire Blue diamond  
 textured clay paver laid in  
 structural bond.

Pre-cast concrete edging  
 type EP

Notes

1. All dimensions in millimeters  
 unless otherwise stated

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Scale

1:500

Project Ref:

TH906/08

Project Title:

Canal Maintenance Term Service Contract

Approval

Description

Drawn by

Checked by

Scale

1:500 NOV '09 AS KJK

Project Ref.

TH906/08

Project Title

Canal Maintenance Term Service Contract

Approval

DATE D TENDER D COMMENT B AS CONSTRUCTED C

Drawing Title

Canal Access Enhancements between  
 Prince of Wales and North Hill  
 Bridge

scale

1:500 NOV '09 AS KJK

project ref.

TH906/08

drawing no.

102

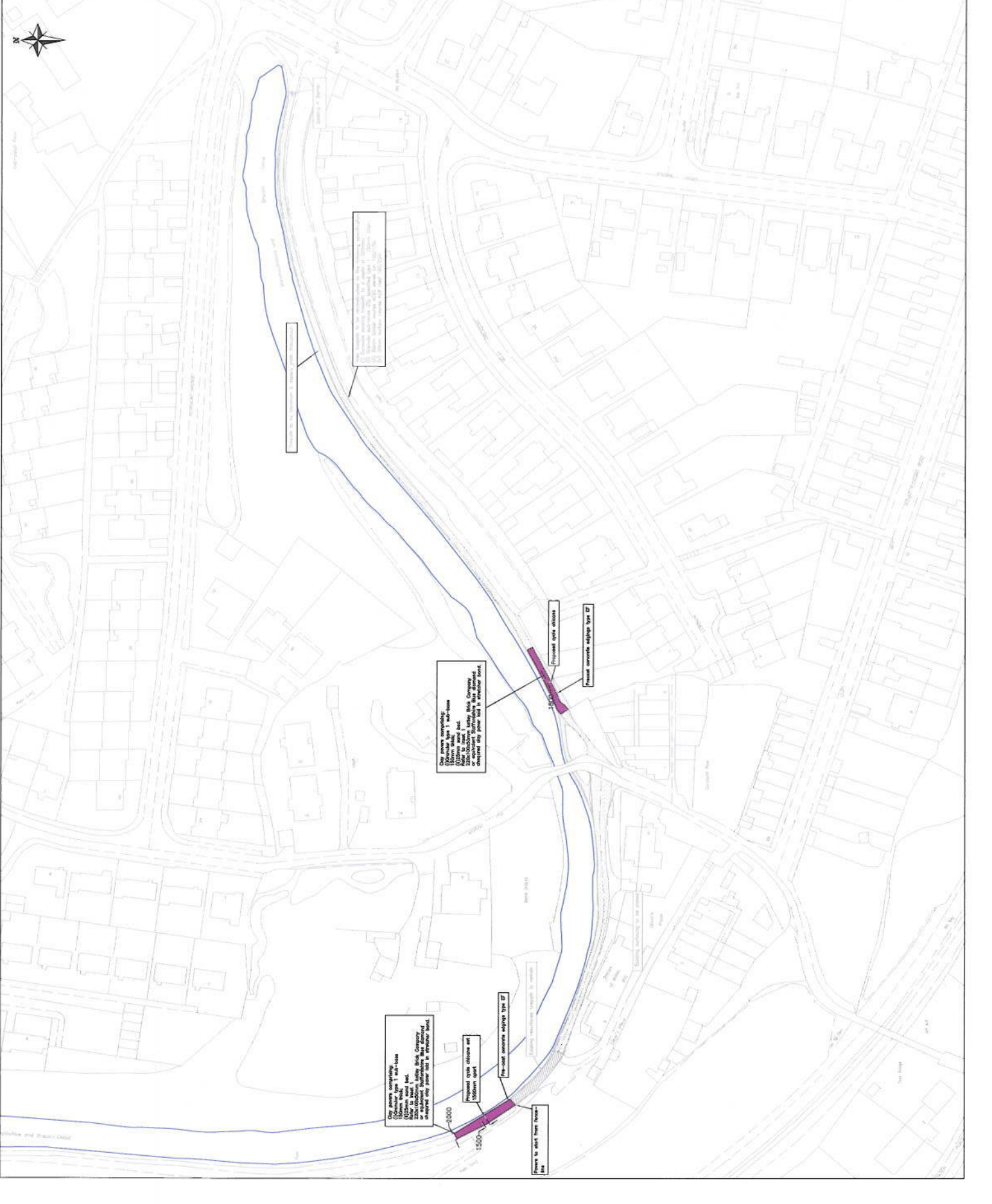
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APPROVAL

DATE D TENDER D COMMENT B AS CONSTRUCTED C

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**Legend**

Clay pavers comprising:  
 (1) granular type 1 sub-base  
 (2) 100mm thick  
 (3) 20mm sand bed  
 Refer to -inst 1  
 225x105x30mm wetlay Brick  
 (4) 20mm thick  
 (5) 20mm sand bed  
 Staggered Blue diamond  
 chequered clay paver laid in  
 stretcher bond.

Pre-cast concrete edging  
 type E1

**Notes**

1. All dimensions in millimetres  
 unless otherwise stated

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**Revisions**

No	Date	Description

**CAERPHILLY**  
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 HSE: 01495 4151  
 Email: CAERFFILI@CBC.CY  
 Project Title

Canal Access Embankments between  
 Prince of Wales and Borough Hill  
 Bridge

scale 1/500  
 date NOV '09  
 project ref. AS  
 checked KJK  
 drawing no. 102  
 rev. TH906/CB

APPROVAL COMMENT INFORMATION  
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DO NOT SCALE

Legend

Clay pavers comprising:  
 (1) Granular type 1 sub-base  
 150mm thick;  
 (2) 100mm sand bed;  
 Refer to inset 1  
 (3) 220x100x50mm kerley brick  
 Staffordshire Blue diamond  
 checked clay paver laid in  
 stretcher bond.

Existing low path to be retained.

Pre-cast concrete edging type EF

Metal knee rail fence

Notes

1. All dimensions in millimeters unless otherwise stated

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Revision	Description
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ENGINEERING PROJECTS GROUP  
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Head of Engineering Services - Terry Shaw  
 B.Sc., M.B.A., C.Eng., M.C.E., M.C.J.I., M.I.T.

Project title

Canal Maintenance term Service Contract

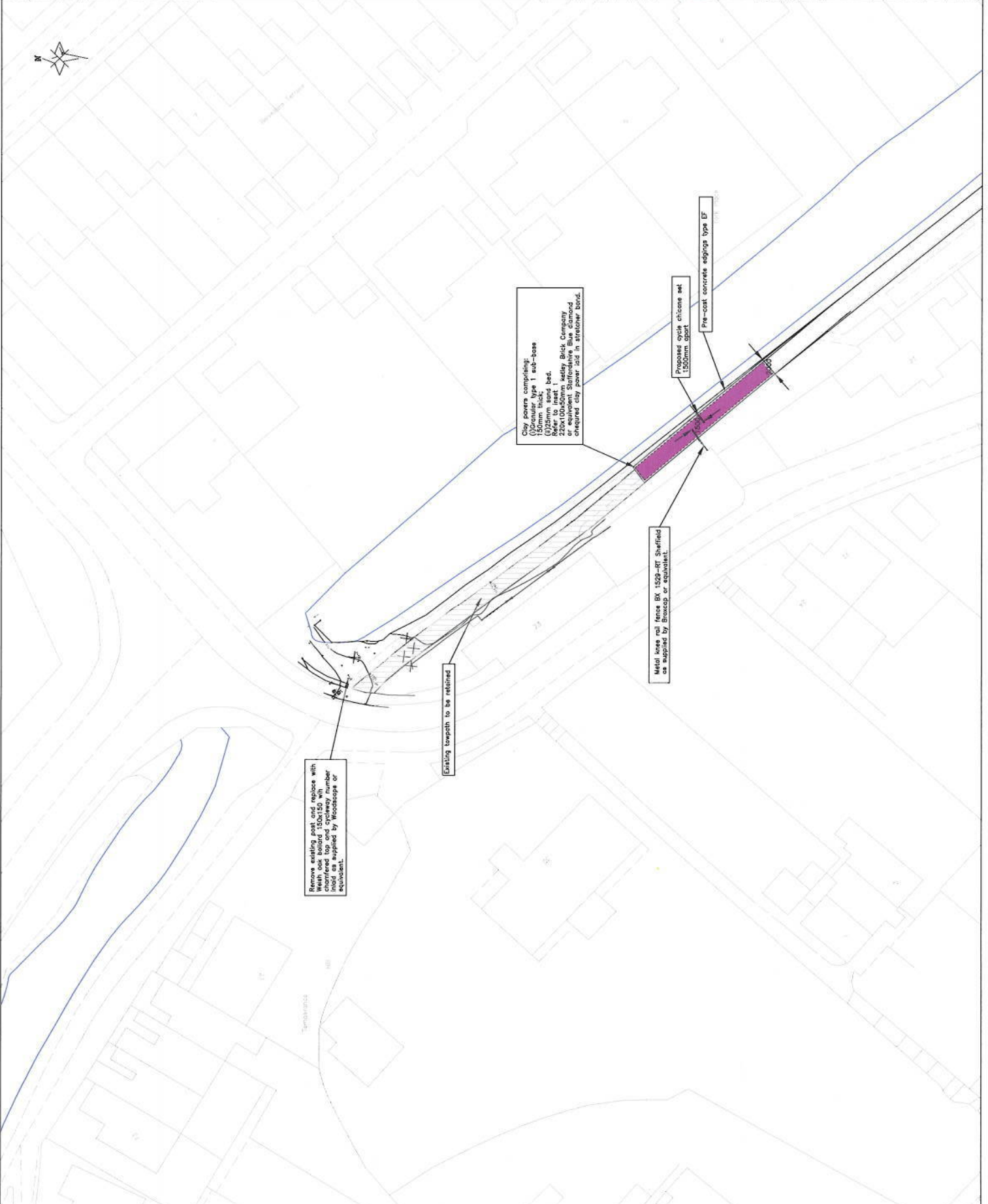
drawing title

Canal Access Enhancements Navigation  
 Road Gateway Features

NO	DATE	DRAWN	CHECKED
1	1/200	NOV '05	AS
			KJK

Project ref TH06/04  
 drawing no. 101  
 rev.

APPROVAL COMMENT INFORMATION D  
 DWG D TENDR C DRAWING AS OBTAINED D



**Appendix 'D'**



Photo 1



Photo 2



Photo 3