

MARTON CIVIL ENGINEERING LTD

METHOD STATEMENT

Project Name: MAESTAF ST BRIDGE REPLACEMENT

Contract Number:

Method Statement title :- DEMOLITION AND RECONSTRUCTION OF MAESTAF ST BRIDGE

Rev	Date	Author	Checked	Description of the amendment
1	10/10/22	Chris Price	Chris Smith	Pipes in place of Box Culverts, removal of Cranage and overpumping
	18/11/22	Chris Price	Chris Smith	
2	03/12/22	Chris Price	Chris Smith	Split pipe sleeve protection to existing DCWW pipe in channel

METHOD STATEMENT

**Preparation of
Method Statements**

Box 1

Scope of Works:

Precise location and detailed description of operation to be carried out.

This method statement is specific to the activities to be carried out by Marton Civil Engineering in relation to the demolition of the existing bridge and construction of new piped bridge at Maestaf St.

- Set Up site & Road Closure
- Carry out BT protection Works
- Set up temp water diversion
- Set up sewer protection works
- Demolition of Existing Road Bridge
- Construction of concrete base
- Installation of large pipes
- Reinforced concrete works
- Installation of PC flood wall units
- Reconstruction of highway
- Clear site

Box 2

Personnel:

Identify all those engaged in the process together with their qualifications and experience in this particular type of work including operators of plant and equipment.

This method statement must be read in conjunction with the following documentation:
Company Emergency Procedures

The following Marton personnel for these operations are:-

Site Manager	Chris Price
Supervisor	Martyn Gilbert
Plant operator	Lloyd Parker
Carpenter	David Mountford

**Programme of Operations and Potential Interface with Others.
Refer to:-**

- **Liaise with MTCBC prior to works commencing**
- **Risk Assessments**
- **Operations which may/will affect others**
- **Inductions and Tool Box/Safety Awareness Talks**

Works commencement date is 5th December 2022

Duration of works – Approx 10 weeks

MTCBC will liaise with the relevant authorities and neighbouring properties.

Specific Risk Assessments will be produced for higher risk activities –Lifting of PC units, Demolition, Excavations.

The existing Maestaf bridge and road will be closed for the duration of the works – See TM Plan

There will be Interface with neighbouring residents of Maestaf Street.

All site personnel to receive regular Tool Box Talks on relevant topics as appropriate.

Environmental Considerations to Include

- **Avoidance of pollution to feeder channel** – measures to be taken when working within and alongside feeder to avoid pollution of the watercourse i.e temporary diversion of water through large diameter pipes and Silt traps to be placed downstream of works area at low flows and whenever possible.
- Refuelling of plant to be carried out at a safe distance away from watercourse. All concrete will be placed by pump to avoid any cement pollution of the channel and these areas of work to be bunded off from channel. Dedicated Concrete wash out areas to be established away from watercourse. To avoid any fuel or oil pollution to the feeder, plant will strictly be prohibited from entering the channel at any time unless the temporary diversion is in operation. Any spills to be cleaned up and removed immediately.
- L.A. Ecologist to survey the works area prior to works commencing.
- Regular monitoring of watercourse water quality and especially at discharge points.
- Report any pollution incidents to NRW immediately: 0300 065 3000 24

Ground Conditions:- Mainly tarmaced road and some works to stream banks.

Existing services- Several underground and overhead services crossing site. Visible drainage/sewerage pipes crossing the existing stream. All services to be protected from works operations. See STAT drawings for details.

Access:- Access will be via Road Closure at junction between Maestaf St & Merthyr Road (A4054).

Materials and Suppliers to be used

Robert Price Builders Merchants - general building supplies – Pipes & PC Wall units
CBL Ltd – Heavy items of plant
Speedy Hire - Small items of plant
Mixit Ltd - Concrete and pump
Gryphonn – Aggregates
Tarmac Ltd - Tarmacadam

Safe System of Work to be Adopted:-

Detail the arrangements which are developed from the Task Specific Risk Assessments and include the environmental and co-ordination aspects.

In other words how will the job be done?

TRAFFIC/PEDESTRIAN MANAGEMENT

Traffic routes affected and public right of way to be formerly closed off by Merthyr Tydfil CBC. A road closure of Maestaf St from Merthyr Road to the far end of Maestaf Bridge will be put in place. Traffic & Pedestrians to follow temporary diversion. Access to Maestaf residents will remain open during the works from Dyffryn Road only.

ACCESS

Access to site will be via Merthyr Road.

SITE WELFARE

Site welfare will consist of a 6 man groundhog unit situated in the site compound on the verge adjacent to Maestaf St.

DELIVERY AND STORAGE OF MATERIALS

Precast concrete wall units & Large Pipes :-

Units & pipes will be delivered and off loaded by a flat-bed hiab. Units will be stored within confines of site off Maestaf. St. Units will be transported to final location as and when required using excavator and small lorry.

Concrete :- Mixit concrete will supply concrete and pump from back lane access road.

Excavated material :- Excavated material will be used to form a bund on the West bank of the stream.

Aggregates and general building materials :- All items will be delivered and stored at the site compound.

SITE CLEARANCE

Areas of Japanese Knotweed will be identified and fenced off. Any material containing Japanese Knotweed will remain on site and deposited onto areas currently containing Japanese Knotweed. Plant moving in and out of knotweed areas will undergo decontamination procedures as per best practice.

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SET UP TEMPORARY WATER DIVERSION

Construct temporary water diversion by inserting a 750mm diam pipe below the existing bridge deck and channelling the water into it by creating a low-level sandbag dam upstream. Should water levels rise quickly, the stream can overtop the low-level sandbag dam.

Place silt trap downstream to capture any possible silt/concrete from polluting the watercourse.

PROTECTION OF EXISTING BT DUCTING IN FOOTPATH

Close off footpath and temporarily divert pedestrians onto carriageway by narrowing down bridge width under traffic management.

Following trial holes to establish location & depth of existing BT ducts, footpath to be carefully excavated and split-ducting (supplied by BT) to be placed around ducts. These will be supported using scaffolding supports following the removal of the bridge.

PROTECTION OF EXISTING DCWW SEWER PIPE

Carefully excavate around existing pipe and encase with larger split piping sleeve.

Place sandbags either side and over the top of the existing 9" D.I. to protect it from construction operations.

Crash deck scaffolding to be erected below the existing bridge deck prior to demolition commencing.

Crash deck to provide additional protection to DCWW pipe.

DEMOLITION OF EXISTING BRIDGE

Set up road closure of Maestaf St (By Conemasters).

L.A. Ecologist to inspect under the existing bridge for ecology prior to demolition commencing.

Break up existing concrete structure using excavator with hydraulic breaker.

Excavated material to be stored on site before removal to recycling centre.

CONSTRUCTION OF NEW PIPED BRIDGE

Excavate and place subbase & concrete slab to ½ of channel using excavator and concrete pump.

Once cured, reposition water diversion pipe onto concrete slab.

Excavate for the remaining slab (including additional depth for new abutment), place subbase and pour concrete base.

Once cured, Install 2No of the 5No piped culvert pipes by lifting into place using excavator. Pour concrete surround.

Once cured, divert water through newly installed permanent pipes and remove temporary diversion pipes.

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Place remaining 3No permanent pipes onto concrete slab and concrete surround.

Construct reinforced concrete slab above pipes including starter bars for parapet beams.

Erect scaffold access platforms to both upstream & downstream for parapet beam shutters.

Construct RC Parapet beams.

Remove BT protection works

Lay Trief Kerbs to either side.

Construct new BT duct chamber and concrete surround to BT ducts.

Road and Footpath construction

Erect P4 safety guardrail

WORKS TO UPSTREAM

Construct temporary water diversion

Excavate $\frac{1}{2}$ the width of existing stream bed and pour RC invert slab.

Once cured, Switch water diversion onto newly-poured concrete slab and excavate remaining width of stream bed. Pour remaining RC invert slab.

Lift concrete L-Wall units into place and drill & fix in place.

Once complete, remove protection works from around DCWW pipe.

Plant, Equipment and Welfare Arrangements:

Identification of items involved. Verification of statutory tests, thorough examinations and inspection.

This section should include welfare and personal protective equipment arrangements.

PPE:-

All operatives to wear relevant PPE at all times

PLANT TO BE USED

8 tonne excavator
Hydraulic Breaker
Vibrating poker
Concrete pump

ADDITIONAL ENVIRONMENTAL MEASURES

Ecology report
Silt Booms
Spill Kits
Silt netting
Straw bales

WELFARE

Groundhog welfare unit sited in compound

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Box 7

Emergency Procedures and First Aid Arrangements

Any specific Emergency Procedures and First Aid arrangements peculiar to the task shall be described.

EMERGENCY CONTACTS

CHRIS PRICE (Marton Civil Eng Ltd) - 07824374994
CHRIS SMITH (Marton Civil Eng Ltd) – 07824374993
DAVID JONES (Marton Civil Eng Ltd)- 07824374997
MARTON HEAD OFFICE 01443 740557
NRW: 0300 065 3000 24

The nearest hospital is Prince Charles 01685 721721 or dial 999

FIRST AIDERS

David Jones
Chris Price

Box 8

Audit & Review Procedure

Identify changes in Process, Plant Material etc

Receipt Acknowledgements

Acknowledge your supervisor has received a copy of this document ☐ Yes

Signed

Date

Print Name

Box 9

The Method Statement resulting from this document must be brought to the attention of:- ☐

a) Site Operatives/Personnel ☐ X

b) Other Relevant Person ☐ X (print name)MTCBC.....NRW.....

NOTE: The Method Statement may be explained to site operatives during safety awareness talks