



Duddington Mill Waterwheel Scheme

Initial Method Statement

Prepared By: Renewables First

Summary

This document outlines the proposed activities required for the installation of a waterwheel hydropower scheme associated infrastructure at Duddington Mill.

The detailed design process will ensure that all risks of flooding are mitigated during installation and construction. However, an initial overview of the works is provided in this document.

The final method statement will be subject to sign-off by the local planning authority.

General description of works

The works consist of the following:

- Temporary sheet piling at the proposed intake and outfall areas, plus sequentially various to ensure a dry working area
- Installation of a waterwheel and bypass channel within the existing wheel pit channel
- Installation of an eel pass within the bypass channel wall
- Installation of all cabling and electro-mechanical equipment into the Mill building

Location and access

Please see the relevant drawings that accompany this application for full details of the site location, layout and access arrangements.

The site will be accessed via Mill Street with the temporary compound/storage areas and crane pad area to be located on the property driveway adjacent to the River Welland.

Duration of Works

It is estimated that the work will take up to four to six months to complete depending on weather conditions. Severe weather conditions could delay construction considerably. However, where possible the works will be carried out during the summer months.

Method Statement

1	Site preparation
1.1	A Construction Management Plan will be completed in conjunction with the Principal Contractor and Principal Designer which will include a site access / traffic management section and submitted to the Local Authority.
1.2	Local residents will be engaged and notified as to construction details prior to works beginning.
1.3	Site compounds will be set up, incorporating storage areas for materials delivered to site and sufficient space for construction vehicles to turn.
1.4	The required safety signs, fencing and signals will be installed as and when required.

2	Waterwheel installation
2.1	28 calendar days' notice will be given to the EA before construction commences. The works involve the installation of a waterwheel, associated infrastructure and bypass structure within the existing wheel pit.
2.2	Sheet piling will be utilized in order to create a dry working area. Currently the sluice gate on the wheel pit channel is closed so the site will be as existing until the waterwheel is operational. Any water in the dry area will be pumped out and discharged through a silt trap to allow any contaminated material or silt to be settled out before water re-enters the watercourse.
2.3	The waterwheel and its associated equipment will be delivered in components and assembled within the dry working area.
2.4	Any material or spoil will be transported and disposed of off-site.
2.5	Excavation of the existing bank and potentially the channel bed will occur until a firm and stable surface is found to ensure the bearing pressure will comply with the proposed structure.
2.6	Concrete pour should occur into the formwork depending on the weather forecast. Concrete pour can occur with weather forecasts showing three consecutive clear days after the pour of concrete to avoid washout.
2.7	Concrete will be left to cure for a minimum of 3 days.