**Polytunnel Specification**

The National Coarse Fish Rearing Unit at Calverton near Nottingham use Polytunnels to warm up the water in rearing ponds using solar heating.

A number of these tunnels have been in use for more than 25 years and are now beyond economical repair. The contract is to supply 4 twin-span tunnels and covers for mounting over pre-existing ponds.

We are looking to replace the existing curved sided twin-span tunnels (see attached images) with straight sided ones to maximise room inside the structure and around the edges of the ponds. The tunnel sizes are fixed and cannot be adjusted. Sizes and dimensions are detailed below.

**Multispan Polytunnel**

24ft (7.3m) per span

2 spans wide x 96ft (29.0m) long

Height to gutter 8ft (2.4m)

Height to ridge 13ft (3.9m)

**Steel Framework**

The frames will comprise 60mm diameter Z35 high tensile galvanised steel hoops at 8ft (2.4m) spacings, with 8ft (2.4m) vertical side height.

We require a 50mm diameter continuous ridge, with corner, roof and full cross bracing on every hoop.

Hot dipped galvanised footplates are required for the centre foundations. The footplates will be bolted onto pre-existing concrete pads situated in the pond bottoms, (see attached images for detail).

**Valley and Side Gutters**

Aluminium valley and side guttering is required complete with integrated grip rails to which the cladding can be secured using aluminium inserts. To reduce the use of plastic, infills made from this material are not to be used.

**Steel End Frames**

We require all steel construction for the end frames removing the need for timber in the structure. For this we require aluminium grip rail lintels, mid and ground rails mounted on 60mm vertical steel posts per span.

**Polythene Cover**

To maintain continuity with the existing tunnels and based on previous results, the covers for the structures are specified as follows.

Visqueen Lumisol Diffused

*Very high diffusing cover that scatters the light as it passes through the film. This enables the light to penetrate deeper into the plant canopy (crop) as it hits the plants from all angles, not just from straight above. The film also incorporates UV ‘transparent’ characteristics. 720 gauge (180mu), Thermic effect: Over 85%, Light diffusion: Over 90%, 5 Year Guarantee.*

This film has provided excellent results over the past seasons in the growing of fish larvae.

**Anti Hot Spot Tape**

Sufficient anti-hot spot tape to be supplied for application to all internal surfaces in contact with polythene cover.

**Sides**

We require polythene sides from the side guttering down to 400mm from the floor, then a 2mm galvanised steel skirt 400mm wide to ground level, to aid strimming/maintenance and to prevent damage from livestock.

**Ground Rails**

We require the ground cladding rails to be produced from aluminium and fabricated so they can be clamped/fastened to the upright foundation tubes.

**Doors**

The new structure will require 4 sets of double sliding doors.

The doors need to be constricted from aluminium and be 2.5m wide by 2.1m high (8ft2” x 6ft10”). We require the bottom half to be constructed from aluminium (kick panel) and the top from 10mm polycarbonate sheeting. The door sets will need to be supplied with all fixings, handles, aluminium tracks and guides.

**Delivery**

Structures to be delivered to the Calverton site no later than Monday 1st February 2021.

**Payment**

Being a government organisation, payment will be in full on receipt of the structures.

No interim/part payment will be available as this goes against our procurement regulations.