

Swimming Pool and Spa Engineers

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Mr. Steven Wright
Etwell Leisure Centre
John Port School
Etwell
Derbyshire
DE65 6LU

9th July 2004

Re: Sand Filter Survey

Dear Steven,

Further to recent ultrasonic testing of your swimming pool sand filter vessel, please find enclosed, marked up drawing highlighting the mild steel wall thickness taken at random points about the filter body.

Today's thickness specification for new build filter vessels in the UK is generally accepted to be 8mm sidewalls and 10mm at the dished ends. Having said that, in Europe, 6mm and 8mm respectively is the norm.

Readings taken during our survey indicate that the average thickness of the sidewalls is 8.06mm and 8.48mm at the dished ends. The thinnest reading of 4.6mm to the sidewall is slightly worrying and we strongly recommend that this ultrasonic procedure be carried out annually. This will determine any pattern of deterioration in the steel and offer a measure in timescale to work with.


Other observations made at the time of our survey should be considered as essential maintenance if you wish to avoid any future deterioration in pool water quality and filtration efficiency.

- Your plant engineer tells us that the present sand bed is 10yrs old. We recommend that the sand bed be changed between 5 - 7 years depending upon bathing load.
- The backwash sight glass is discoloured and prevents the operator from accurately assessing how effective the backwash procedure has been. We recommend that the sight glass be replaced with a new unit.
- The air scour compressor is broken and from our inspection, is probably beyond repair. Air scouring is an essential aid to backwashing and fluidising the sand bed. Backwashing without this procedure will undoubtedly result in poor filtration and we recommend that this system be reinstated at the earliest time.

We would be pleased to offer a quotation to carry out any or all of the aforementioned remedial works, however we shall require a further visit to ascertain certain technical requirements, sizes and equipment accessibility etc. This inspection would be at our cost and you would be under no obligation to accept our quotation.

We hope that we have been of service to you and ask you to contact the undersigned if we can be of any further assistance whatsoever.

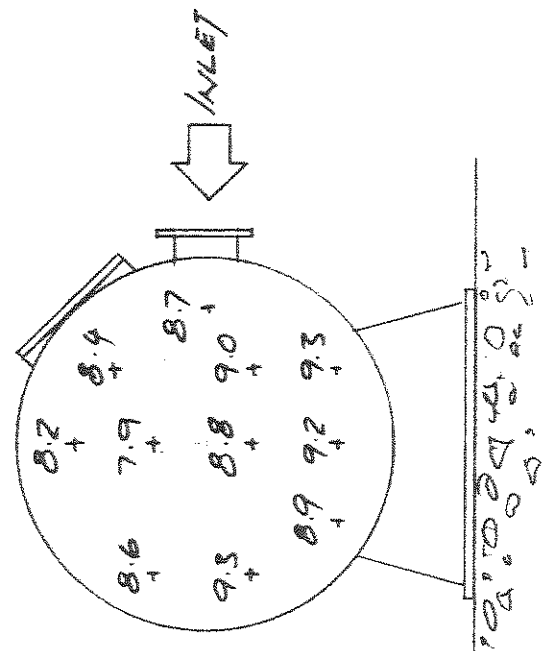
Yours sincerely,


Carl Elbro M.I.S.P.E
Director

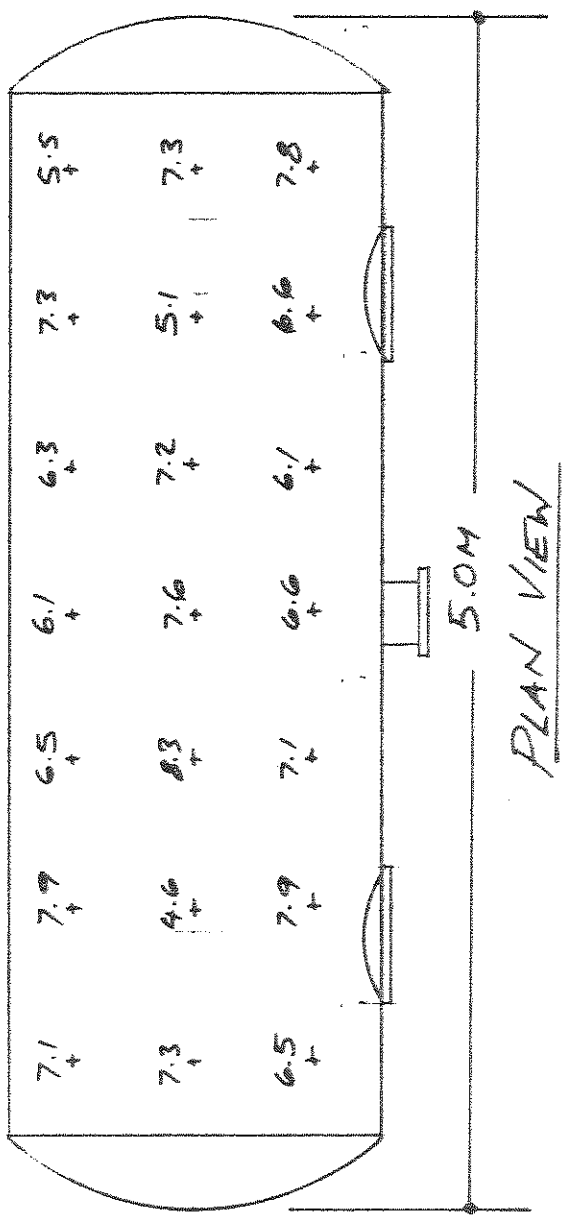
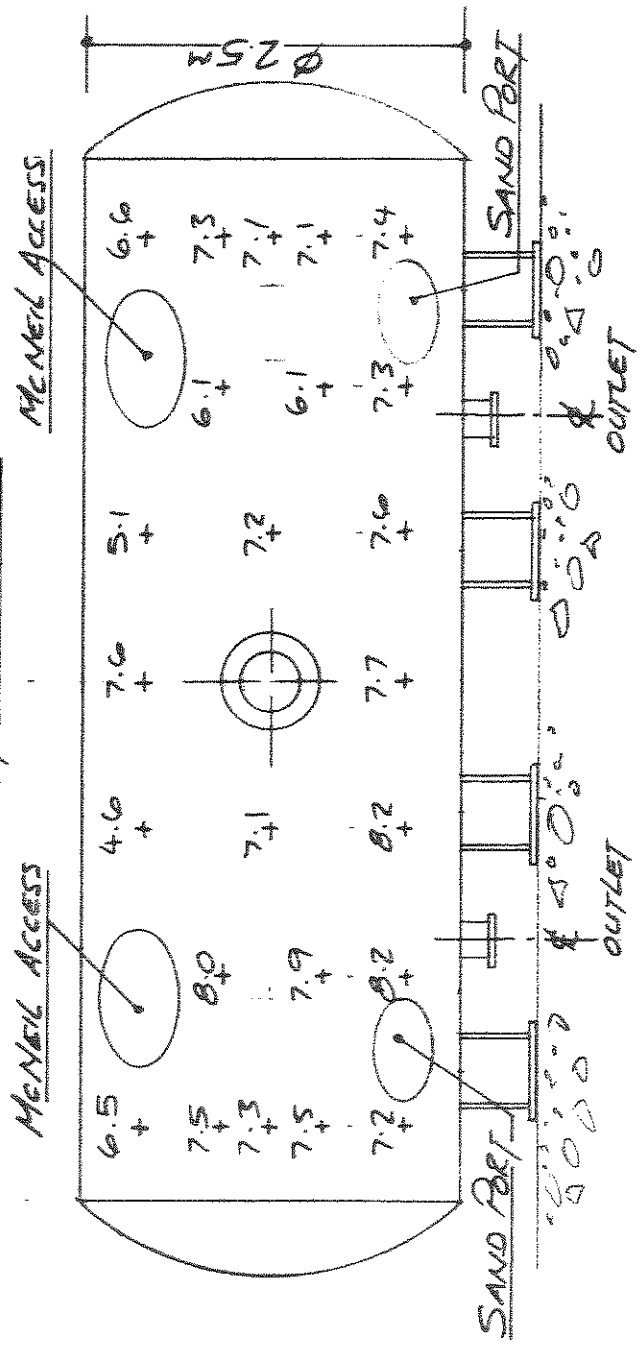
Tel: 01386 833718



END ELEVATION



FRONT ELEVATION



ET WALL LEISURE CENTRE
FILTER WALL THICKNESS
ULTRASONIC TEST RESULTS
ALL DIMENSIONS IN MM
SURVEY DATED 29.6.04

PLAN VIEW



The Pool and Spa People Ltd
Swimming Pool and Spa Engineers

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PSQ024A

Mr. Steven Wright
Etwall Leisure Centre
John Port School
Etwall
Derbyshire
DE65 6LU

16th September 2004

Re: Filtration Plant Quotation.

Dear Steven,

We are pleased to offer our fixed price quotation for the following:

1. Filter Media Replacement.
For the removal, disposal and replacement with new, 22,000 Kg's 6mm triple washed pea gravel and 16/30 grade silica sand.

For the sum of _____ £ 7,990.00 + VAT

2. Air Scour Unit.
For the supply and installation of a 5.5 Kw air blower complete with all necessary pipework, plumbing and electrical works. Air blower is rated to deliver 439 m³/h @ 200 mbar and sufficient to lift the filter bed to enhance the backwash cleaning process.

For the sum of _____ £ 5,480.00 + VAT

3. Pre-Filter (Strainer Box) Replacement.
For the supply and installation of a 60 Litre capacity Pre-filter complete with all necessary pipework and plumbing services. Strainer manufactured from polyester and fibreglass with 8" connections and a stainless steel basket.

For the sum of _____ £ 2,140.00 + VAT

We hope that our offer proves to be of interest and await your further instructions in due course.

Yours sincerely,


Carl Elbro-M.H.S.P.E
Director

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1491



Scotland

To: **Etwall Leisure Centre**
Attention of: **Mr. Steve Wright**
Fax No.: **01283 734453**

From: **Ruaridh Cameron**
Date: **20 August 2004**
Page: **1 of 1**

Your Ref:
Our Ref: V/SM5545011.DOC

SUBJECT: FILTER PLANT

Dear Steve,

Further to our discussion this morning regarding our previous quotation for filter plant upgrades please see below our updated costs plus a breakdown of these costs.

We had originally included for our labour costs to carry out the strainer box and air blower replacement at the same time so this cost will increase if they are carried out separately.

To replace the air blower unit complete with pipework would be a sum of £3315.00
To replace the strainer box and valve including any pipework modification would be a sum of £2659.00
To carry out both items on one visit would be a sum of £5597.00.

To remove and dispose of the filter media, shotblast and reline the internal surfaces, fit new manways to comply with the H&S regulations and refill with fresh media.
The underdrains would be inspected when the vessel is empty and any additional work would only become apparent when this happens.
The cost to refurbish the vessel would be a sum of £10,155.00.
It would be prudent to allow for a sum of £4000.00 should the underdrain systems require replacement.

Please note all costs exclude Vat that will be added at the rate in force.

Should you have any questions or wish to proceed with any of the above please do not hesitate to contact me.

We would require a minimum of two weeks notice to organise manpower and materials.
All the works would be guaranteed for a period of 12 months.

Regards

Ruaridh Cameron
Service Manager
Service Division