Proposed Re-location of 100 Volt Transmission Rack from EMI plant room
to
Radio Heatherwood
(with view to replace old unit in Radio Heatherwood Studio)

In order to facilitate any kind move of the EMI transmission rack, preliminary investigations will need to be carried out. In addition to the move of the EMI rack a proposal to re-instate the bedhead system on ward 10 by linking to EMI cable distribution is included in this project.

On completion of satisfactory investigations, proposals to site the rack in Radio Heatherwood studio's can be approved and funded ?.

Details of estimated funding which will be required are enclosed.

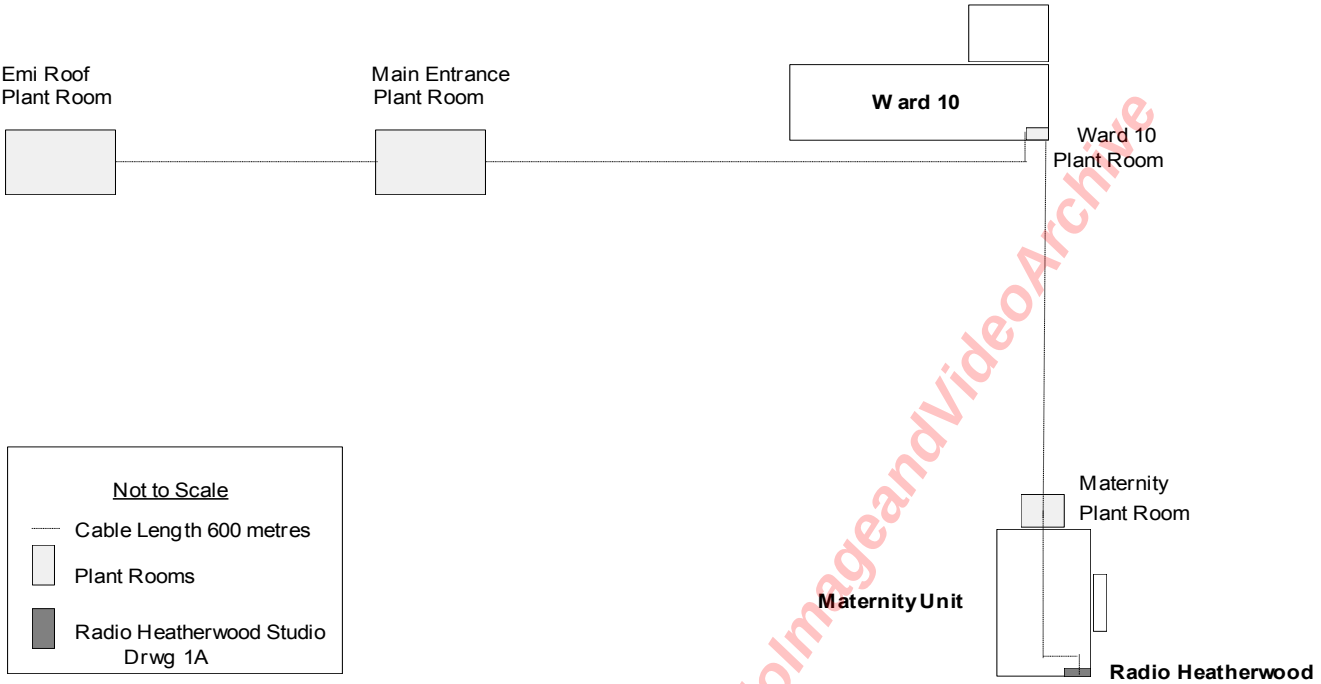
Feasibility Tests

1. Check Impedance of EMI Cable Distribution system (is their a fault with the cabling ?).
2. Check and fault find EMI amps (determine present fault with units).
3. Locate cable termination point of Ward 10 bedhead system to facilitate new link to EMI.
4. Check Impedance of Ward 10 Cable Distribution system (is their a fault with cabling ?).
5. Check Impedance of 100 volt Amp Cable Distribution system (old unit Radio Heatherwood: is their a fault with the cabling ?). Special check of channel 4 system which has currently disabled the amp which cannot be repaired.
6. Locate cable termination point of Ward 4/5 bedhead system to facilitate new link to EMI (option 2).

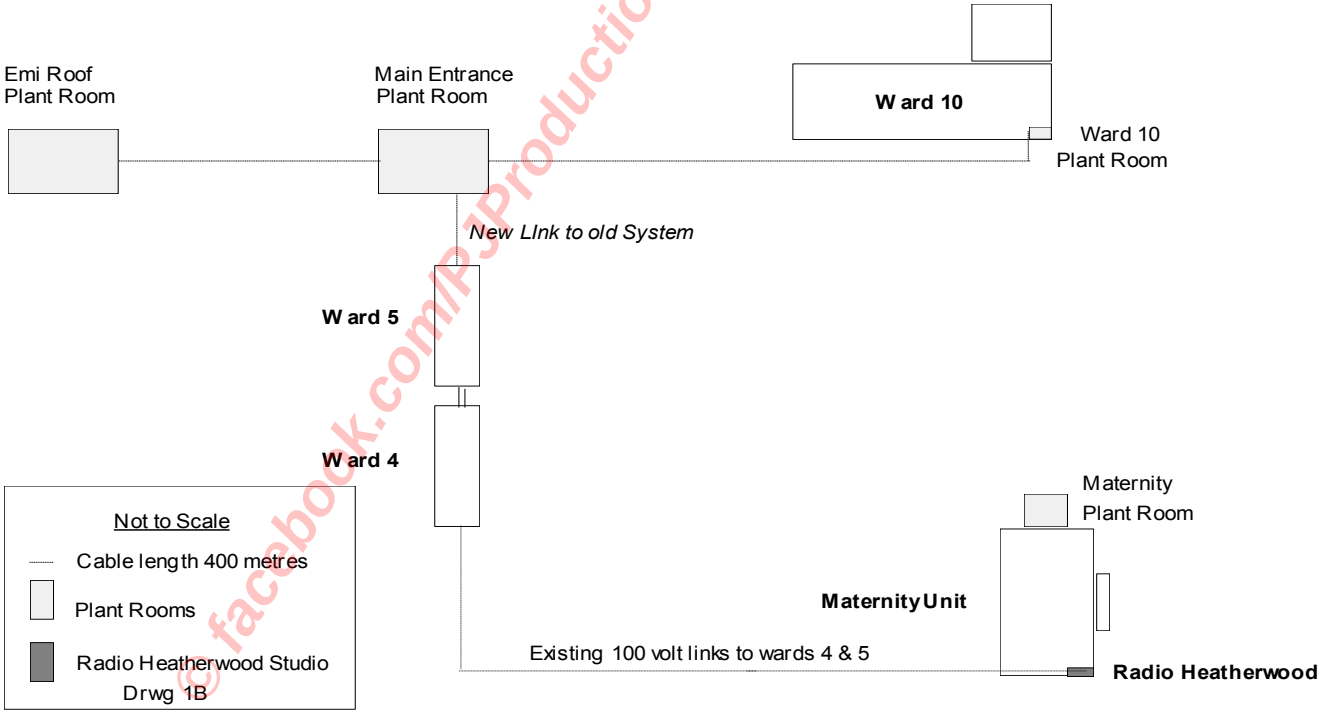
If problems appear with the above tests, this would have a serious implication on estimated costs and involvement by Radio Heatherwood.

In the event the project proceeds it is not likely that Radio Heatherwood could undertake any work on this until late 1995 as other projects scheduled for the year are already in place and demand the time which is available.

100 Volt Emi Distribution Proposals Option 1



100 Volt Emi Distribution Proposals Option 2



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Cable Connections

In the light of the possible changing shape of the hospital two possible connection options can be achieved with the re-siting of the EMI amp.

Option 1 (Drwg 1A)

This option will allow for the new changes which will come to the layout of the site at the same time offering greater flexibility in additions to the system. In the event the current cabling network cannot be added to, a separate link to a relative new installation can be fed separately from the studios. Common connection points at the plant rooms.

1. Determine and agree cable route from Radio Heatherwood to plant room far end of maternity unit (including siting of termination box within plant room).
2. Determine and agree cable route from plant room far end of maternity unit to ward 10 plant room (including siting of termination box within plant room) + route to current bedhead termination box.
3. Determine and agree cable route from plant room ward 10 to plant room EMI unit: Ground floor (including siting of termination box within plant room).
4. Determine and agree cable route from plant room EMI unit: Ground floor to plant room roof of EMI unit (including siting of termination box within plant room).

Option 2 (Drwg 1B)

This option takes in the minimum amount of cable run required but does not allow for the future changes with demolition of ward 5 etc. It is the cheaper option on cable costs but the reduction is minimal.

1. Determine and agree cable route from Ward 4/5 present 100 volt termination box to plant room EMI unit: Ground floor (including siting of termination box within plant room).
2. Determine and agree cable route from plant room ward 10 to plant room EMI unit: Ground floor (including siting of termination box within plant room).
3. Determine and agree cable route from plant room EMI unit: Ground floor to plant room roof of EMI unit (including siting of termination box within plant room).

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Estimated Cable & Accessories cost:- Total £419.56 exc vat

Exchange of Information

We may be able to reduce the amount of time spent if there can be an exchange of information I.E. any details which the hospital may have about the current bedhead systems, drawings etc. If copies could be forwarded to Radio Heatherwood.

19" Rack

A new rack to be purchased 37U which will allow adequate ventilation and facilitate the inclusion of a time switch which is not available on the unit in the EMI plant room. The rack will also allow for expansion of facilities which may be required utilising 19" rack technology. The amps and associated listening facilities to be swapped to new rack.

Estimated Rack & Accessories Total £736.73 exc vat

Ward 10 Bedhead

This ward was originally connected to ward three and didn't have it's own transformer isolation unit. A new unit will need to be supplied. Once new service has been provided to ward 10 replacement headsets will be required.

Bedhead Replacement & Headsets Total £179.60 exc vat

Man-hours ??

Radio Heatherwood will provide the man power to install the new cable links and technical support for the repair of the EMI rack amps.

In estimating the man-hours which will be required, we need to look at the difficulties to be overcome in running the new cable links and the additional time which will be required in carrying out the feasibility tests on the existing equipment.

I would estimate the cabling and termination points alone would take two men 40 hours @ £40 hr = £3200.

Man-hours Total £3200.00 exc vat

Miscellaneous

It is likely that the fault with the EMI amps will require replacement output transistors and fuses. Cable fixings hire of portable two way communicators to assist with cable installation and allowing for any unforeseen expenses, a figure of £400 needs to be set aside

Miscellaneous expenses £400.00 exc vat

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Cable Connections Sub Total £419.56 exc vat
19" Rack Sub Total £736.73 exc vat
Ward 10 Bedhead Sub Total £179.60 exc vat
Miscellaneous Sub Total £400.00 exc vat
Nett Total £1735.89 exc vat
£303.78 Vat

Overall Estimated Project Cost inc Vat £2039.67.
(Excluding Man-hours)

Compiled by P Davidson-Smith
19 March 1995