

Nine Elms Bridge - Alignment and Clearances

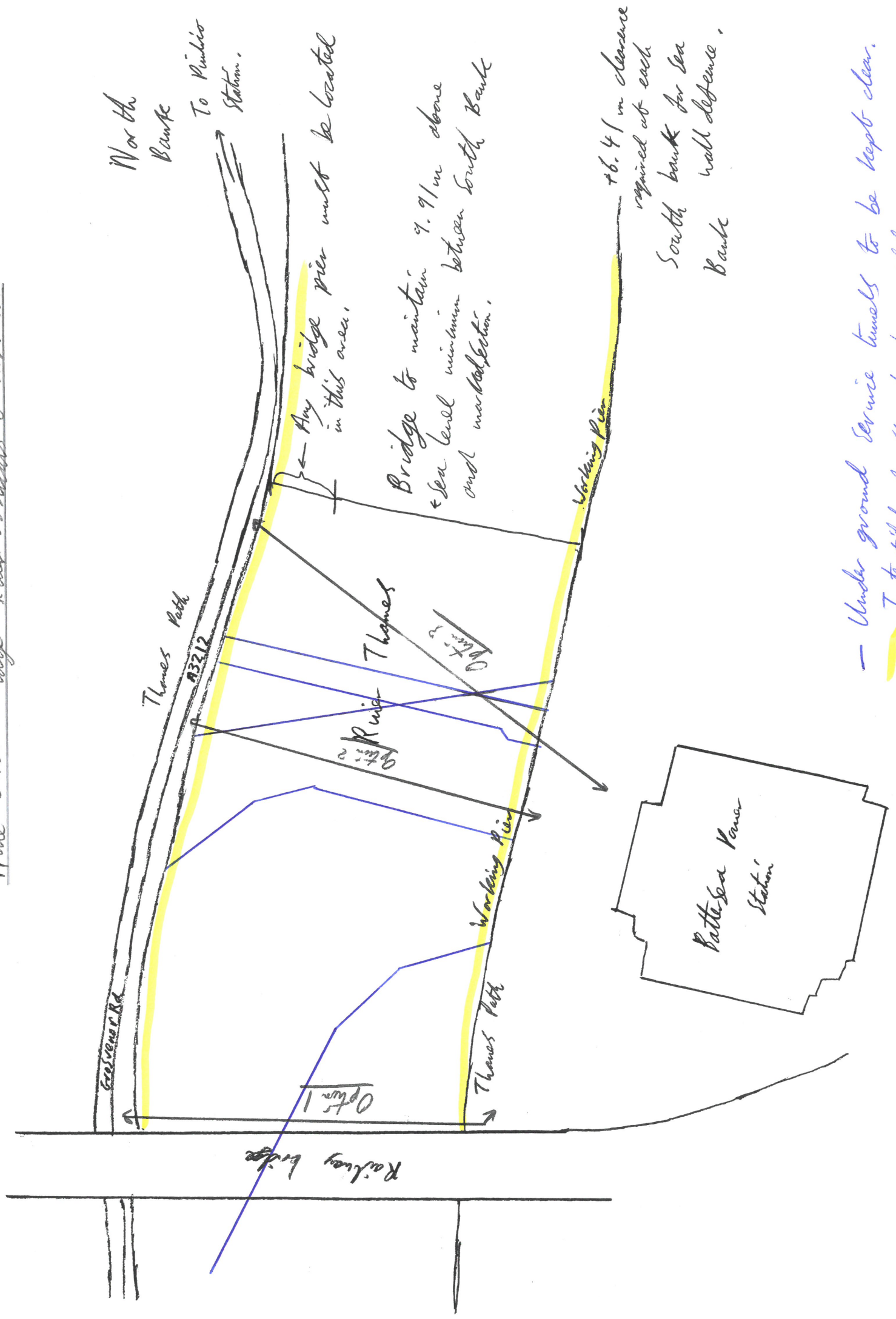


Any bridge pier must be located in this area,

Bridge to maintain 9.9m above sea level minimum between South Bank and working pier,

76.41m clearance required at each bank for sea wall distance,

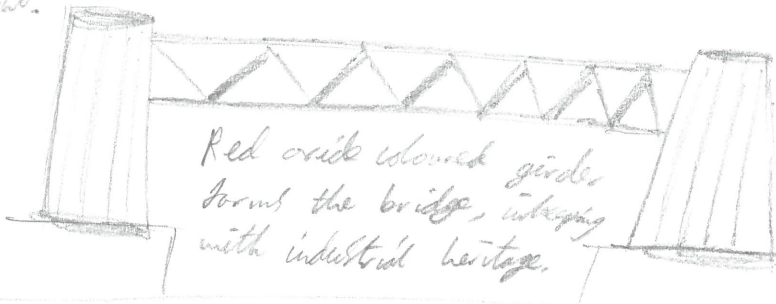
Nine Elms Bridge - River Obstacles & Constraints



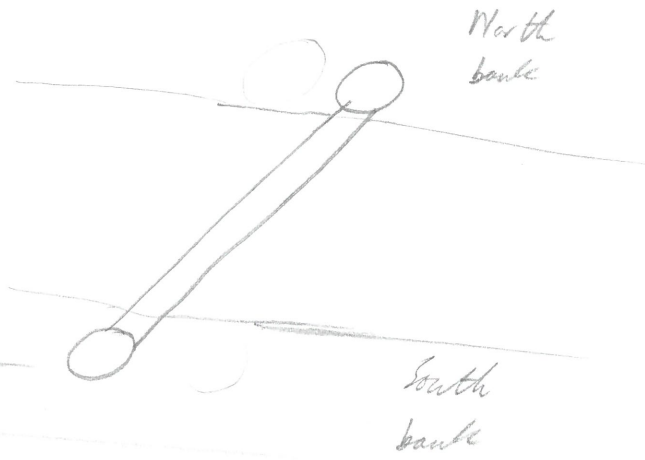
- Under ground service tunnels to be kept clear.
- Inter tidal zone to be avoided.

#1

Cast concrete 'chimneys'
house helixes to gain
height.

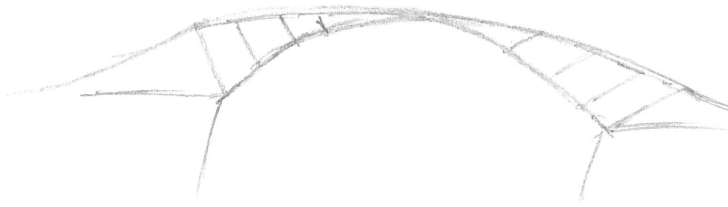


Plan view

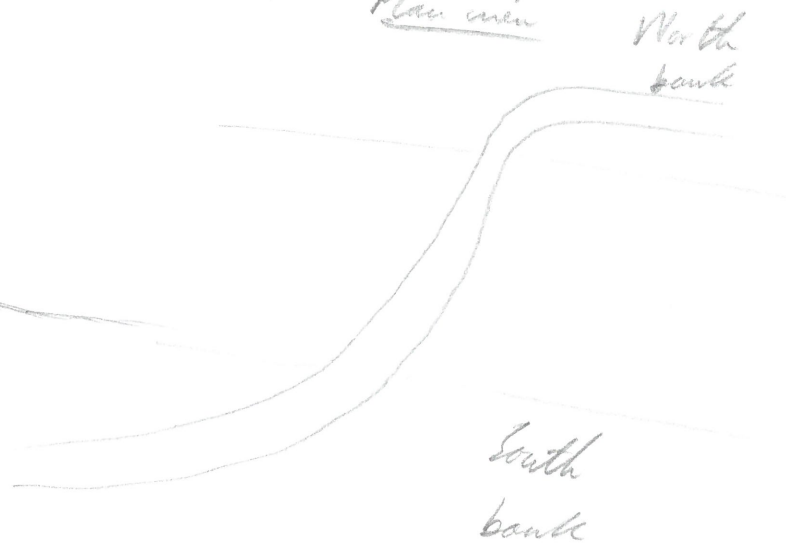


#2

Modern steel arch bridge
provides good contrast to
the power station.



Plan view



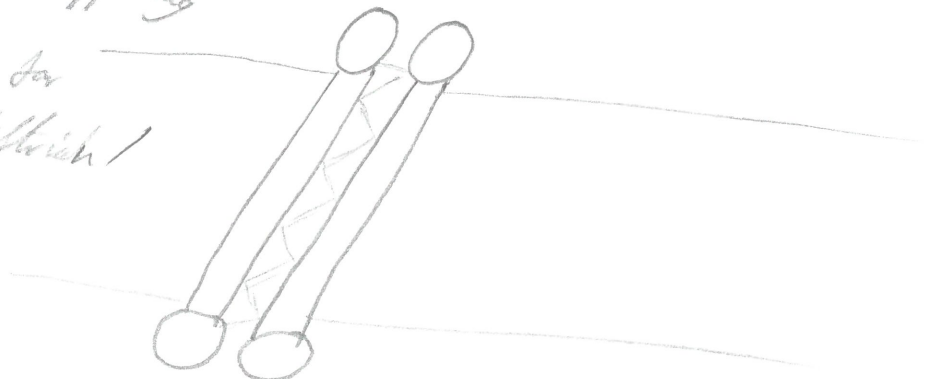
Possible problems with
foundations of arch.

Long access ramps provide sweeping,
shallow access to the bridge, in
fitting with the flowing nature of
the new London culture.

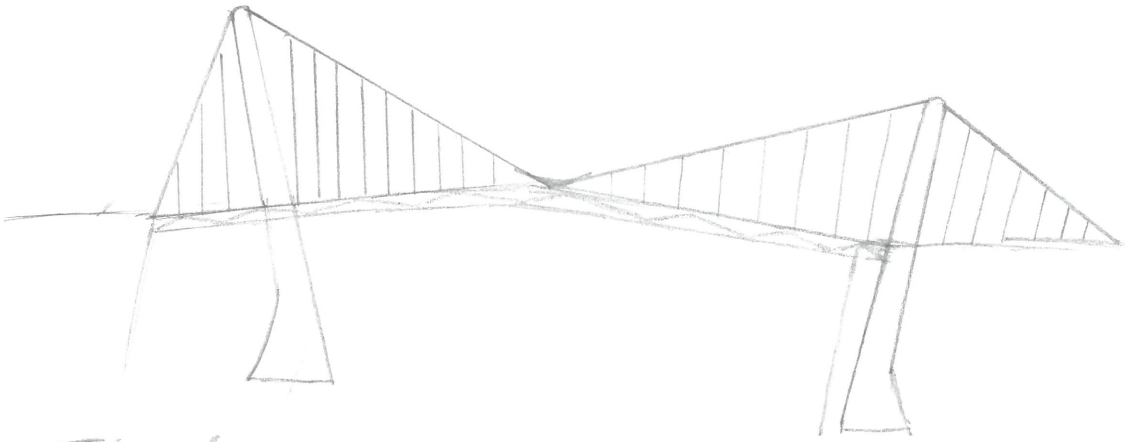
#3 - Development on #1

Plan 3 uses two pairs of concrete
towers with one bridge span supporting
two individual decks, one for
cyclists and one for pedestrian/
wheelchair use.

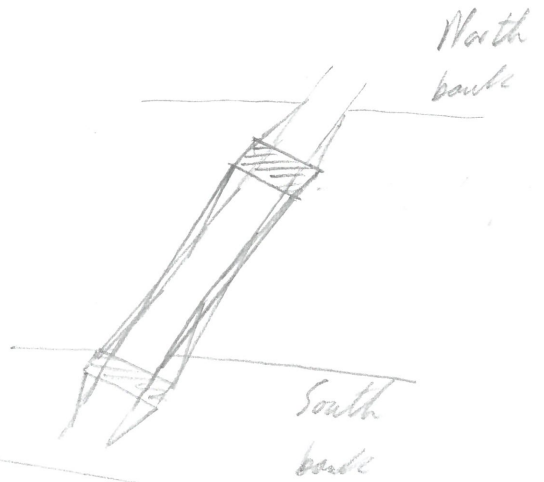
Plan view



#4



This design uses a two tower suspension bridge approach with one set into the river and one Plan view into the South bank.

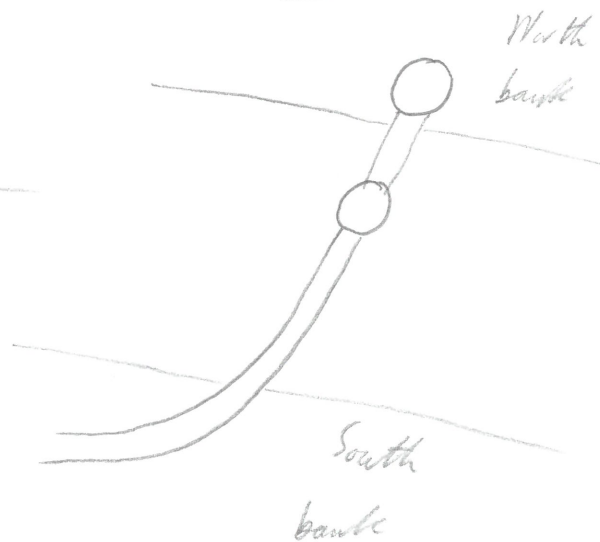


#5



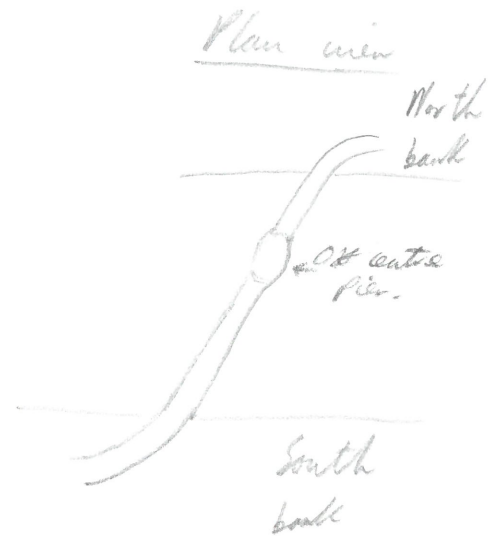
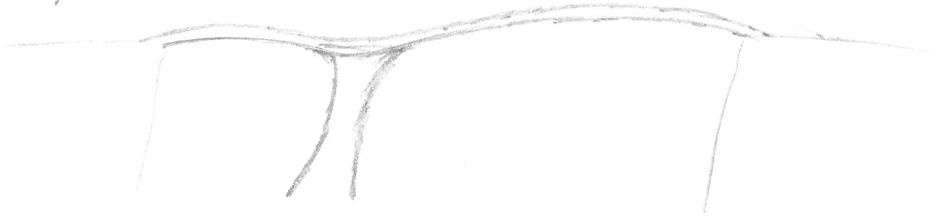
The use of an off center pier allows for two 'independent' bridges, a short red girder bridge between two concrete columns joining a steel arch bridge for the longer span.

Plan view

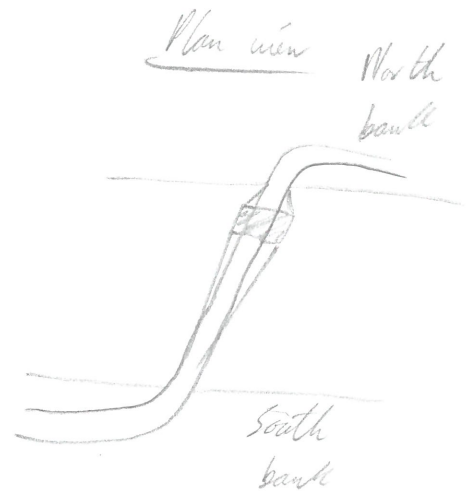
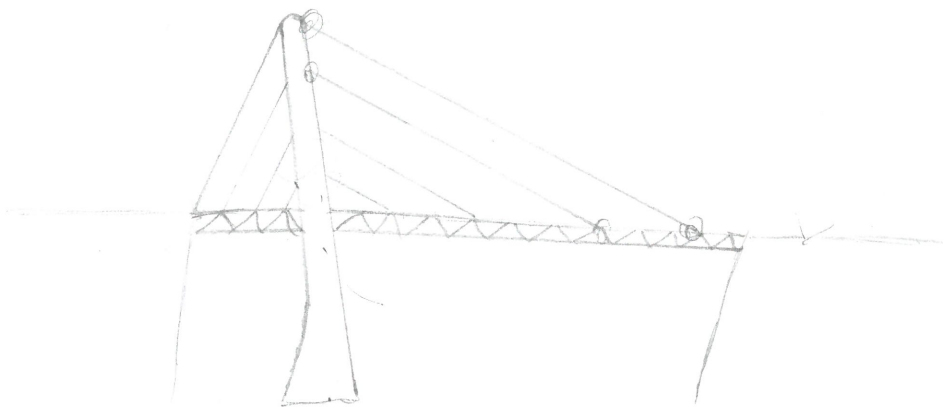


#6

A pair of steel arch bridges,
joined by a center pier could
span the river.

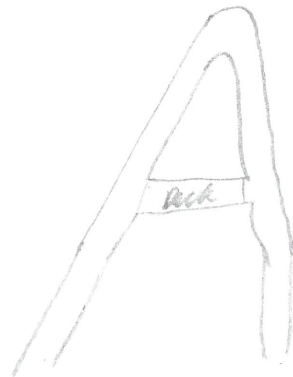


#7



Using a set tower set near the North
bank this design uses cable stay ideas
to support the bridge deck. Approach
to both sides needs finishing.

End view of tower



8



Two concrete 'chimney' towers house helixes providing access to the modern steel arch bridge span, combining old and new styles.

