

drainage of the Western side of the ridge by running the canal up the
Linganore thence along the ridge, and trap the water at Westminster.
This and all similar plans are more impracticable (if possible) than
the direct route through the ridge. -

Our examinations have brought us to the conclusion that the
most northern practicable route from the Chesapeake and Ohio Canal
to Baltimore and in fact the most judicious line for the extension of the
said Canal is one near the location traced by Dr. McHardy in 1827
thus the District of Columbia - and as far as we are enabled to form
an opinion, the estimate of cost submitted by Dr. McHardy on his plan
was at the time substantially correct.

We have spoken of the "due supply of water" - we will now
show what we considered to be that supply. It depends on the
leakage of the Summit level and of that portion of the Canal dependent
on it for its supply - on the leakage of the Lock gates - on the length, breadth
& lift of the Locks - and lastly on the amount of Tonnage which it is
calculated to accommodate. In estimating the leakage of the Canal
and the lock gates the minimum amount in a well constructed Canal
has been ascertained from actual observations on Canals in
our neighbourhood. As it regards the dimensions of the locks in
length and breadth, and of the depth of the trunk of the Canal the
same dimensions have been taken as those adopted on the Chesapeake and
Ohio Canal, of which this should be considered as an extension - If
otherwise - if the Locks should be made shorter or narrower, or the trunk
shallower, it would be as preposterous as to plan an extension of a Rail Road
with Rails closer together or wider apart so that the cars of the one could not
pass upon the other. In regard to the width of the trunk, and of the lift of the
Locks the undersigned have considered themselves at liberty to vary from the
similar dimensions of the Chesapeake and Ohio Canal, when called to do
so by a scarcity of water. To continue the comparison, it is like increasing
the grades on a Rail Road by which the useful power of a power or of a
locomotive engine is diminished, or in other words the capacity of the Road is
lessened. In calculating the quantity of water required for leakage the lift
of the Locks on that portion of the line dependent for its supply on the Summit,
has been put at 4 1/2 feet only. The effect this small lift may have as
to the loss of time in the transit of trade and also the effect of narrowing
(as we are compelled to do) such parts of the Canal as are deficient in
water come properly under the head of the capacity of the Canal when
compared with other practicable routes.

The probable amount of Tonnage on the Canal or in other
words the number of locks full of water that will be taken daily from
the Summit is another very important element in estimating the requisite
quantity of water. Looking to the history of the inland navigation of the
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