

Philadelphia March 5th 1829

I have examined the ground from Fair Mount crossing the Schuylkill at Emlens hill on the western side of the River as far up as the run of water to the Eastward of Mr. Yarnals and find by continuing the level of the top of the abutments of the Bridge at Fair mount which is about 27 feet above ordinary high water mark in a direction nearly parallel with the dam this level may be made to skirt the northern slope of Emlens hill from the outlet of the Schuylkill canal to the run above mentioned without any further deviation from a straight line than may be described with a radius of 1300 ft. a good road way may be formed by benching off the hill at this level and constructing a strong slope wall at its base, which can be cheaply constructed with the materials taken off the side, and the necessity of tunnelling this point may be avoided altogether in the manner laid down on the plan from A to B, at the level which is assumed for crossing the Schuylkill at this place.

William Strickland Eng^r

We in conjunction with Mr. Strickland accurately surveyed and took the heights of the ground upon which the route for the Rail way is designated on the western side of the Schuylkill embracing the hill through which it was proposed to construct a Tunnel in order to approach the Eastern side of the river by a Bridge to be erected below Fair Mount dam, and fully concur in the opinion as above stated by the Engineer
Philad^a March 5th 1829.

Samuel Brins
City Surveyor

Jos. H. Siddall
Surveyor of St. Liberties

The figures in Red denote the height of the regulation of the streets above the plane assumed by the City regulators, which is 1 f^t 8ⁱⁿ above high water mark.

A & B on the map - The elevation above ordinary high water being 27 feet
Distance 2400 feet - Cost of quarrying 12,000 cubic yards of Rock at 50 cts per yard
Building 2400 feet ranning of Rubble wall from 14 to 20 feet in height 5 feet thick ne
7080 perches at 70 cts per perch
Earth cutting and embanking 14,200 cubic yards at 10 cts per yd
Two four feet culverts

