

Retaining Walls.—The side or retaining walls of the structure are to be $13\frac{1}{2}$ feet in width at the bottom line of the canal, and their outer faces, as well as those of the spandrel walls under them, are to be of cut stone "rock work," dressed with a chiselled draft, $1\frac{1}{2}$ inch wide around the arrises.

The face work of the spandrel walls is to be properly fitted, by checking or otherwise, to the heads of the ring stones; all other parts of these walls up to the crown of the arches are to be of "block masonry," prepared and laid as herein subsequently described.

The inner faces of the retaining walls for a stretch of about 427 feet on the east side, and 462 feet on the west side, are to be of cut stone neatly boucharded on the face, the stones for both outer and inner faces of which must be dressed so as to lay to $\frac{3}{16}$ of an inch mortar joints and to a batter of one in twenty-four. They are to consist of headers and stretchers, the latter to be two feet six inches ($2\frac{1}{2}$ feet) and three feet six inches ($3\frac{1}{2}$ feet) depth of bed in alternate courses. In every course there must be headers not less than 2 feet long in line of wall and 5 feet depth of bed.

The stretchers are not to be less than three (3) feet length of face, and the headers are not to be more than 6 feet apart in any one course; if a stretcher is $5\frac{1}{2}$ feet in length, which is the longest that will be allowed, there must be a header placed at both ends of it.

All the face stones must be neatly dressed to the batter; those for the inside face are to be carefully boucharded, and the arrises of those for both the outer and inner faces kept good.

To avoid future misunderstanding, contractors are requested to bear in mind when tendering that the beds of all the face stones must be dressed parallel, straight, fair and smooth, and that a stone with depressions in the bed of it three-eighths of an inch deep, which in the aggregate exceed one-tenth part of the superficial area of the bed of the stone, will not be allowed in the work. Further, that none of the face stones for the retaining wall will be accepted in which there are depressions in the beds of them one-fourth of an inch deep, with 6 inches of the face, if such depressions in the aggregate exceed an area of 9 square inches.

It should also be clearly and distinctly understood that both the headers and stretchers must have their end joints kept full and straight—without depressions or "wants"—for at least three-fourths ($\frac{3}{4}$) the depth of the bed of the stone, and that the tail of a header must in all cases have a width of at least three-fourths ($\frac{3}{4}$) the length of its face, and the balance of it must invariably be picked or dressed down at right angles to the bed.

The back parts of all face stones, whether headers or stretchers, must be picked or otherwise dressed off to a line parallel with the face, so that the backing stones, when laid, may form with them joints not exceeding 1 inch in width.

No two vertical joints in adjoining courses of face stones are to be nearer each other than 12 inches, and care must be taken that at least three-fourths of the whole backing has also 12 inches bond, and the other fourth not less than 9 inches bond.

The courses on the outer and inner faces of the retaining walls must be of the same height for the entire length of the structure, and if they are over 26 inches in height the beds of the stretchers must be of greater width than that above stated.

The course under the coping must be from 16 to 18 inches in height, and on the outer sides of the structure have a projection of 8 inches, the lower part of which is to be slightly bevelled off as indicated on plan.

Backing Stones.—For the retaining walls must throughout be picked or otherwise prepared in such a manner that, when laid, they will form what may be termed "block masonry;" all the stones of which must be dressed into blocks of a regular shape, and each made of a suitable thickness, before they are taken to the place, or, at all events, before they are allowed to be brought on the work. None of the stones to have less than 3 feet area of bed, and they should, for the most part, be of the same thickness as the face work; but occasionally two thicknesses may be used, provided their joint depth does not exceed that of the face.