of the bridge and in the channel between the piers of it. Between the old and new bridges there is an old culvert across the line of the present canal, which must be removed, without any interference with the water level, and the bottom at that place sunk sufficiently low to give the full depth of the channel; but before this can be effected the west end of the culvert must be securely closed to guard against water escaping from the canal when the top covering is taken off. To enable this to be done, such a space as may be necessary in the rear of the west side of the west bank must be sunk down as low as the bottom of the culvert and the interior properly blocked up before the space is again filled in. This work must be done, and that portion of the culvert through the old canal removed by the 1st day of May, 1882. All that part of the present west bank and within the line of the new channel must be removed when the works connected with the new Aqueduct are sufficiently advanced to warrant that course. The contractor must remove these bars and patches, remove the old culvert, as well as widen out and deepen the channel wherever required, within the limits of the section, with the full and distinct understanding that the work is in every case to be paid for at the respective rates stated in the tender submitted.

Aqueduct over the Chippawa River.

This structure is to be of dressed grey limestone masonry, laid throughout in hydraulic cement mortar, of approved quality, and will be formed with six archways, any three of which will, collectively, be of sufficient sectional area to allow the water of the Chippawa River to pass freely; all of them are to be arranged and made of a depth suited to the enlarged scale of navigation as herein described.

It is to be placed in the bed of the river from 75 to 80 feet to the westward of the present aqueduct, and be in other respects so situated that the face of its north abutment shall be four feet to the north of that of the present one, and the range of the south sides of the second pier from the north side, in both the old and the new structures, shall correspond.

From the face of the north abutment to that on the south side, the distance will be 277 feet at the springing line of the arches, and the breadth at the soffit of the arches 112 feet; springing line to be 3 feet over the top of the upper offset in foundation; rise of arches 7 feet, and top of coping of side or parapet walls 28¾ feet over the centre part of the intrados.

As the water of the river must pass at the time the works are in progress, it is intended to build the principal part of the new structure in two divisions. This has to be done in order that the coffer dams necessary to enable the work to be laid dry shall, at the time when in use, occupy only a part of the river channel.

The dams must, of course, be arranged in such a manner as to occupy the least possible space consistent with their efficiency, and with a view to their expeditious removal when no longer required.

The centre line of the new Aqueduct will be parallel to that of the existing one, but 171 feet further to the west, and will in other respects be situated as previously stated, unless for some special reason its position has to be changed to another fixed point within the limits first mentioned.

Excavation.—The site of the new structure, or as much of it as can be properly done by dredging, may in the first instance be sunk to the depth of 41 feet below the top of the coping of the present Aqueduct, or to about 23 feet below the medium water level.

The seats for the different piers, after the pit has been laid dry, are to be excavated 4·73 feet lower, or to a depth of 45·73 feet below the point above mentioned (coping of present Aqueduct), and the seats of the abutments, or that part of them next the water ways, are to be sunk to 44·23 feet below the bench mark above referred to.

The space between the two structures is to be dredged to the depth of 37 feet below the same point, or to the level of the floor of the present archways, and for a distance of 65 feet above, or on the west side of the new work the bottom is to be dredged to the level of 39 feet or more, if required, below the same fixed point, that