ADDITIONAL SURVEYS AND SPECIFICATIONS.

[APPENDIX NO. 1.]

SPECIFICATIONS FOR DESIGNS

For a Bridge from the City of New York to Long Island, Crossing over Blackwell's Island.

The designs shall consist of:

1st. An approach on the New York side 4,580 feet long, of which about 1,000 feet shall be in tunnel, extending from a connection with the tracks of the Harlem Railroad on 4th Avenue, in the vicinity of 73rd Street, to the crossing of Lexington Avenue; whence shall begin an iron structure, curving to the centre of the blocks between 76th and 77th Streets, and continuing eastward through the same to the west bank of the western channel of the East River.

2d. Of a single span across the said west channel 734 feet long in the clear.

3d. Of an iron structure across Blackwell's Island, about 700 feet long.

4th. Of a single span across the eastern channel of the said East River, 618 feet long in the clear.

5th. Of an approach on the Long Island side, 3,900 feet long, extending to the high ground.

The total length of said bridge is thus 10,532 feet approximately.

Spans of 100 feet in the clear shall be provided across the 8 Avenues shown on the profile. The other spans in the approaches and over Blackwell's Island may be such as the respective designers shall deem most economical.

There shall be main approaches for carriages; and in addition thereto, there shall be two return auxiliary approaches for carriages, ascending with gradients of 4 feet per 100. The return approach on the New York side from the vicinity of Avenue A, and that on the