

The New Municipal Office Building, New York

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The rapid growth and addition of boroughs to Greater New York increased the population of that city and also the administration, so that for many years the Old City Hall has been inadequate for the demands. For some years a project of erecting a Municipal office building had been discussed, and as a result many plans were advanced, one especially interesting, which was submitted by the Commissioner of Bridges, to restore City Hall Park to its original condition and remove all buildings except the City Hall, and to construct a group of county and municipal buildings on adjoining property. While the plan was generally favoured, its complete execution was thought to be so costly as to be impracticable.

The plan finally adopted was for the construction of a huge Municipal office building occupying the site between Centre Street and Park Row, and between Tyrone Row and Duane Street, covering an area of 92,676 square feet and having a height of twenty-five stories for the main building, and forty stories, including the tower, built of grey granite.

An unusual feature is the use which the street level will be put to, which will be a public "concourse" or thoroughfare. But what is still more unusual, in view of the character of the building and its enormous height, is the fact that the basement will mainly be a large station for Rapid Transit Subways now under construction. The original plan called for a four-track subway station, which on the recommendation of the Public Service Commission will be increased to a six-track station. As this suggestion was approved, additional property was purchased for a station far larger than the actual property occupied by the Municipal Office Building.

Thus at the present time, practically all the basement is used for a station. The mechanical plant is placed under the sidewalk on the easterly side of the building, and the connection between the boilers and the stack, which is on the south-west corner (the nearest one on the photograph), is through a mezzanine floor in the underground station.

Undoubtedly, among the numerous difficulties encountered in erecting this enormous edifice, that of securing a sure foundation was the most difficult. In the original plan it was contemplated to place the foundations on sand carried to a depth of 28 ft. below mean high water built to carry a minimum load of 8 tons per square foot; but the wisdom of erecting so important building on a sand foundation was questioned, and as another building, the Criminal Court Building, on a similar foundation, in the same district showed signs of failure, it was decided to modify the plans and carry the foundations down to solid rock, which was believed after several tests had been made, to be about one hundred feet below mean high water, or within practicable limits where pneumatic work could be carried on.

Bids already received under the first plan were therefore rejected, and new contracts made for carrying foundations to bed rock. Work was commenced on the caissons at the southerly end of the site and the Foundation Company, who secured the contract, made a number of additional borings to determine with more accuracy the precise depth of the underlying rock. Through these borings it was discovered that the rock fell rapidly away, so that at the northerly end of the building it was about 178 feet below mean

high tide, or far below the depth where men could work by the aid of pneumatic air, and that which had been taken for solid rock proved only to be large boulders.

This presented a very serious problem, which, for a time, seemed insuperable, for it was impossible to reach a solid foundation for the northern section of the building. However, after very many important consultations, it was decided that the plans should be again modified by so enlarging the caissons so as to reduce the load of 15 tons per square foot to 6 tons per square foot, at a depth of 40 ft. below mean high water, or seventy feet below the street level, being some twelve feet lower than contemplated in the original plans, a depth which it was believed would be well below any subway construction.

To place two-thirds of an important building of this kind on rock foundation and the remaining portion on sand, seemed at first a somewhat startling suggestion, but after careful consideration, it was believed to be entirely prudent, and the wisest course to pursue under the circumstances. It is interesting to note that the foundations alone cost the sum of \$1,351,400.

In such an enormous building there necessarily must be a net work of pipes for plumbing and heating purposes, and it is interesting to note that in this case the usual custom of placing them beneath the surface is not followed, but that they are placed entirely on the fourth floor. It will be noticed in the photograph that there are no windows on the fourth floor, but merely openings. Also the fact that the smoke stack is entirely enclosed, is a decided feature of improvement to the building.

No money has been spared in building a thoroughly well-constructed edifice, but there is no attempt at ornate design in the interior finish, the idea being for Municipal offices, hence it corresponds with that of a good office building constructed of fireproof material, concrete floors, trimmings of steel, the exterior being of grey granite.

The contract price for the larger items is as follows:

Foundations.....	\$1,351,400
Steel frame and extension finish, with rough plumbing.....	5,895,000
Partitions and interior finish.....	3,058,100
Elevator Equipment.....	465,400
	\$10,769,900

This important work is under the Board of Estimate and Apportionment of the City, of which Mr. Nelson P. Lewis is Chief Engineer, whose work in connection with the improvements of Greater New York is watched with considerable interest all over the world.

In Canada there are some admirers and advocates of sky scrapers and there are also those who believe in the equal division of light and air to all. But it is only logical before making any decision to consider the extraordinary situation in New York, for from this centre the idea finds most favour. Due to a lack of foresight on the part of the city fathers the location of the city proper is on a narrow strip of land, surrounded on two sides by water, and thus being able to expand in but one direction.

Land in New York is at a premium and probably in no other municipality is there the same need for buildings accommodating the equal of a small city's population, whose towers reach the tremendous height of 750 feet.