



Supplementary Report on Manhattan Terminals at the Port of New York

Submitted by CALVIN TOMKINS, Commissioner of Docks

DEPARTMENT OF DOCKS AND FERRIES,
PIER "A," NORTH RIVER,
NEW YORK, November 21, 1910. }

Hon. WILLIAM J. GAYNOR,

Mayor of The City of New York:

SIR—I beg to submit herewith correspondence between myself and Mr. W. J. Harahan, Assistant to the President of the Erie Railroad Company, relative to west side terminals. Mr. Harahan propounds a series of questions to which I have replied in detail.

The terse and pertinent questions of Mr. Harahan afford the opportunity for a popular, as distinguished from a technical, understanding of the present status of the project.

I am proceeding with the consideration of this highly complicated and difficult west side problem in accordance with your expressed wish and advice that all possible information, criticism and co-operation shall be secured in developing a plan which may ultimately be found practicable of execution. Such a process is necessarily slow and involves frequent reconsideration and change.

I. Q. Does this proposition contemplate the abandonment of all railroad freight stations now on the west side of Manhattan? Or within what district?

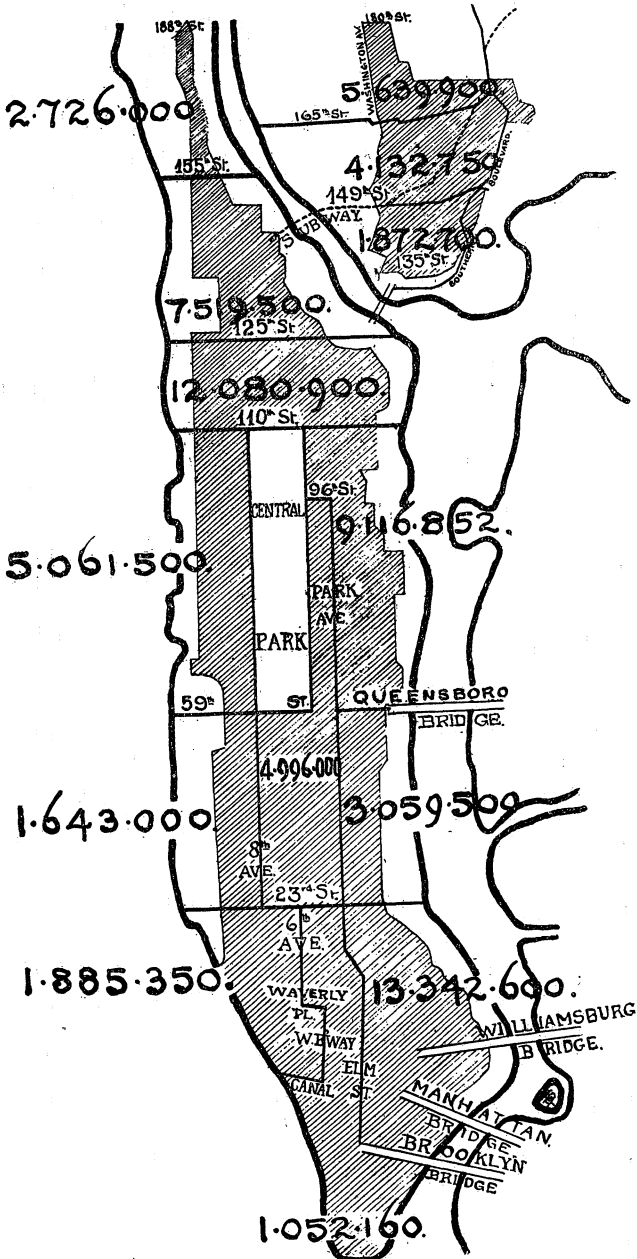
A. The plan contemplates bringing railroad cars to the east side of the street and marginal way along the west side of Manhattan, where will be located freight stations at various points. If this shall be done the railroads should be able to release waterfront property which they now occupy and use as freight terminals and for which they pay high rentals. It is hoped, that as a consequence of this change, the waterfront may be devoted to a greater extent than at present to marine as distinguished from railroad commerce.

It is not intended to force the railroads away from waterfront occupancy, but to provide conditions under which they will find it advantageous to exchange such occupancy for a more favorable location.

2. Q. Is it intended chiefly to bring manufacturing industries to Manhattan? If so, what are the inducements offered?

A. It is admitted that the location of factories in Manhattan is not, generally speaking, an advantage, and every opportunity should be afforded by providing adequate terminals at other points to encourage manufacturers to locate outside of Manhattan. It is also admitted that if terminals shall be located on the easterly side of the river street, the tendency will be to utilize adjacent lands and the overhead space for manufacturing and storage purposes. My contention is that if an orderly industrial development shall be anticipated and planned for, the intensive use of waterfront lands for these purposes will not necessarily produce congestion, but will rather tend to attract industries from the centre of the island, where they are now conducted under less sanitary and desirable conditions. At present it is comparatively unimportant whether freight once placed on drays is taken one block or several blocks, the principal expense incurred being that of loading and unloading. This accounts for the comparative neglect of waterfront properties for industrial use and the location of factories and warehouses farther inland. (See accompanying map, Lawyers Mortgage Company.)

A considerable amount of drayage and street congestion will be avoided if factories shall be located over terminals or at nearby points. It is to be understood that the suggestion herein contained for industrial overhead use, as distinguished from transportation solely, is intended principally to help pay the carrying charges by the collection of rentals.



MANHATTAN AND BRONX GUARANTEED MORTGAGES OUTSTANDING, JULY 1, 1910. MORTGAGES LIMITED TO SHADED AREAS

The above is the principal object, but the secondary object is, by providing industrial sites near the waterfront, to relieve the congestion at the centre of the island. Attention is called to the successful development of storage and manufacturing business in the vicinity of the Bush Stores, and to the use for office and other purposes of the buildings at the sites of the new Grand Central Station and the Hudson Terminal Buildings.

Modernizing the waterfront implies intensive use of waterfront lands. Is it not wise to anticipate this inevitable result, and the consequences which must follow, by planning in advance for such new uses?

3. *Q.* Is it intended to reduce the cost of terminal handling; if so, how?

A. It is intended to reduce the cost of terminal handling, by providing more space than at present exists on the waterfront for the reception of cars, and for interchange with drays. This transferring between cars and drays in the present limited area is the cause of great congestion and expensive delays, which may be lessened by increasing the capacity of the freight stations.

4. *Q.* To what extent will trucking be reduced, and in what way? What commodities will be affected?

A. The actual drayage may not be greatly reduced, except at the sites of the terminals themselves, where commodities will be directly delivered to factories; but the *delays* incident to the present congestion will be reduced, which will decrease the time now consumed in expensive waiting by the drays.

The installation of mechanical conveying apparatus in terminals will also minimize delays and expense.

5. *Q.* What other benefits, if any, will result and in what manner?

A. The main object of the scheme is to terminate the present unseemly congestion by separating the railroad-city business from the steamship-city business. This will be accomplished by locating the railroad terminals east of the marginal way, thus leaving the piers and bulkheads free for marine commerce. These proposed railroad terminals may be indefinitely added to as necessity demands; whereas the present railroad facilities do not admit of any expansion and little improvement. The North River waterfront is now entirely occupied, the present occupants

are clamoring for more room and many applications are on file from railroad and steamship interests which desire to locate on the North River waterfront.

Apart from the extra expense to the shippers and consignees caused by the high terminal charges and due very largely to truck congestion and delays, great benefit would result by placing the railroad terminals on the east side of West street and releasing the waterfront for marine commerce.

6. *Q.* Will there be any change in the fleet of car floats and lighters now in use?

A. It will be a matter for the railroads to determine whether they can advantageously operate larger car floats under the proposed plan. No further necessity will exist for a central truckage gangway on a two-track car float; additional tracks may be provided, thereby increasing the unit capacity.

7. *Q.* The proposition refers to a subterminal, consisting of an elevated railroad yard between Spring and West Houston streets. Will all freight pass by elevator between ground floor and the elevated yard?

A. As described in the plan, drays will be confined to the ground level and railroad cars to the upper level, and it is proposed that transfers shall be made by chutes and elevators. It will be possible, however, if desired, to bring the drays to the upper level by means of ramps.

8. *Q.* Will there be other stations between the two terminals mentioned; and if so, where and what capacity?

A. It now appears to me desirable to construct a four-track elevated structure down West street at least as far as Washington Market, where a site is at the present time available as a terminal and might be devoted by the City to the development of this policy. The original report provided for only one sub-terminal at Spring street. There is street room for additional tracks should prompt dispatch of trains during rush hours necessitate additional trackage. It will be possible to establish terminals on the east side of the street wherever they may be required. Such sub-terminals could be utilized jointly or acquired and used individually by the railroad companies. The number of these terminals and their location would be progressively determined by the demands of commerce. The overhead space at these terminals could be availed of for other purposes than transportation, thus helping to meet expenses.

9. *Q.* Will the cars be moved by steam or electricity?

A. By electricity.

10. *Q.* In apportioning the expense, will the terminal cost per ton be the same to each railroad, regardless of the tonnage handled?

A. It would seem proper to apportion the expense at the terminal in proportion to the area occupied. It might, however, be apportioned on a tonnage or mileage basis. What would be your suggestion?

11. *Q.* What opportunity for expansion of facilities, *i. e.*, if a railroad's quarters become cramped?

A. See answers to Nos. 5 and 8.

12. *Q.* What is the rental now paid by railroads for stations that will be abolished through the establishment of the proposed terminals?

A. Only experience can determine what existing waterfront terminals it would be economical and advantageous to abolish. As a matter of interest, I submit herewith the rentals now paid by railroads for waterfront properties along the west side of Manhattan, below Seventy-second street:

P. R. R. Co.....	\$218,053 23	
N. Y., N. H. & H. R. R. Co.....	7,697 26	
Erie R. R. Co.....	148,933 07	
B. & O. R. R. Co.....	59,979 44	
D. L. & W. R. R. Co.....	57,141 20	
C. R. R. Co. of N. J.....	175,000 00	
L. V. R. R. Co.....	99,525 00	
	<hr/>	\$726,329 20
N. Y. C. & H. R. R. R. Co.....	\$128,737 50	
N. Y. C. & H. R. R. R. Co., Sixtieth Street Yard	42,088 65	
	<hr/>	\$170,826 15
W. Shore R. R. Co.....	55,596 37	
	<hr/>	226,422 52
		<hr/> <hr/>
		\$992,751 72

13. *Q.* What is the object of having railroads take charge of warehouses, as suggested in the proposition, and rent them out?

A. In the plan for terminals above Twenty-third street, as outlined in my first report, the railroads will guarantee the terminal holding company the rental for the buildings which they occupy, and for this reason it would seem proper that they should themselves arrange for its occupation. The construction of these terminal buildings may be deferred until a later date, if not now needed.

As to the sub-terminals below Twenty-third street, the simplest plan will be for the railroads, without municipal help, to secure the terminal facilities they require by purchase of real estate along the line of the City railroad. If, however, the several railroad companies can come together to organize a joint west side terminal, including the main terminal above Twenty-third street and the minor ones below, then the charges could be apportioned on a tonnage or car mileage basis for service rendered, and the buildings could be constructed, used in such a manner and under such conditions as such terminal corporation would deem most advantageous.

14. *Q.* Reference is made to transferring freight between railroads quickly and cheaply; what class of freight has Mr. Tomkins in mind?

A. The class of freight which I had in mind was the New England freight; but as a result of further study, I do not think this is material in Manhattan, however important the proper location of transfer stations may be outside.

15. *Q.* Will freight be lightered to vessels, from vessels and to and from harbor points, as before; if not, what change?

A. It does not seem probable that there will be any material change in the lighterage business.

16. *Q.* Do freight tunnels enter into this proposition, and if so, are any contemplated, and between what points?

A. The plan as outlined does not contemplate the present construction or use of tunnels; if, however, tunnels or bridges shall in the future be constructed across the North River, they can be connected with the proposed terminals, and the only difference in operation will be that the cars will then reach the terminals by tunnels, or bridges, instead of as at present by car floats. In this way the scheme is adaptable to future development.

17. Q. Is it considered to permit each railroad to do its own floating and lightering; and will float bridges be apportioned off for their individual use?

A. Yes.

18. Q. In the model steamship pier, how will freight be handled from vessels to trucks? Vice versa?

A. It is not anticipated that any large amount of steamship business will be imposed upon the railroad freight terminals. The handling of steamship freight from piers is more particularly connected with the problem of improved freight handling devices and appliances. The piers in front of the terminal above Twenty-third street are not to be regarded as *model* steamship piers. The steamship business at these piers will be of secondary importance; undoubtedly steamers will berth here, but subject to such conditions as the proper conduct of railroad business makes necessary. Lighterage and canal boat business will also probably be developed at these piers, in connection with their railroad uses, and part of the freight handled at such piers will probably be transferred to the upper floors of the terminal buildings for storage or manufacture.

It is possible to provide access to the piers in front of the terminal buildings by drays, if this is desirable. A driveway will be left clear between the surface tracks and the bulkhead sheds, and access to this driveway can be had at, say Twenty-third street, which will be south of any surface tracks. Drays will be able, therefore, to get to the piers without crossing the surface tracks running north and south. The original report did not provide for drays to be taken on the piers, but, if it is considered desirable, it may be done as indicated above.

19. Q. Will the piers outside of the joint terminal be equipped with tracks, and if so, will trucks be allowed on such piers?

A. Provision for tracks on the piers below Twenty-third street is not now a feature of the installation. It is believed that the piers now used for marine commerce will be continued to be used pretty much as at present, except that possibly the second stories may be made more available by mechanical conveyance, which it may be found desirable to extend across the street to warehouses located there.

20. *Q.* Does the proposition contemplate lining West street with factories and warehouses?

A. The plan does not contemplate the construction of factories and warehouses along West street other than incidentally as mentioned in the report; but the probable effect of the terminal installation will be to stimulate the construction of such buildings by private interests.

21. *Q.* Reference is made on page 14 to transferring freight to flat cars. Does this refer to any particular kind of freight?

A. The intention was to provide flat cars to transfer such freight as might be delivered at contiguous piers or bulkheads to the terminal buildings at the rear.

22. *Q.* Are there any figures made up covering the tonnage of freight handled by the railroads in Manhattan, and the cost of handling under a joint terminal?

A. From Mr. Wilgus' report of 1907, the amount of freight handled by the railroads on Manhattan Island was 9,800,000 tons; the cost of handling at the Manhattan stations varied from 63 cents to 85 cents per ton. There is no information at hand on which could be based precise costs for freight handling under such a terminal plan as that proposed in the report of the Dock Department. It would seem reasonable to assume, however, that freight can be handled much cheaper when the disorder and congestion which now exists shall be obviated by providing more spacious terminals for its reception and delivery back from the street where space can be found for still further expansion. It is at least evident that the economic limit has already been exceeded at most piers and bulkheads.

In answer to your queries regarding quotations which you make from pages 5 and 8 of the Dock Department's report, I beg to reply as follows:

"Increasing land values, and the difficulties attending changes in established City plans, have made it impossible for railroads to materially extend their terminals in large cities without municipal co-operation."

Q. What is the relation of this statement to the proposition for a consolidation of the railroads?

A. There is no relation. It is not proposed to consolidate the railroads. The suggestion is that by co-operation with the

City, to procure better terminal arrangements, the railroads are much more likely to secure such facilities promptly than without such municipal co-operation. It is very difficult to change a fixed City plan and disrupt existing conditions. Desirable changes are much more likely to be permitted if made to serve the convenience of a number of railroads than if intended for the convenience of separate roads, thus making large sections of the City equally accessible to all such roads. For example, a general west side terminal plan, which shall open all of the west side to service by all of the New Jersey and New York roads, will be more popular and easy of attainment than an exclusively New York Central railway scheme.

“The completion of the Erie Canal improvements, and later on the opening of the Panama Canal and the prospective provision for an intra-coastal canal from Baltimore, through New York harbor to Fall River, or Boston, will inevitably swell the volume of commerce flowing through New York, and means for handling this increase should now be anticipated.”

Q. Would this increase or decrease the volume of railroad business; and what bearing has it on a joint railroad terminal?

A. Unquestionably, any influences which tend to build up the general commerce of the City of New York will impose obligations on all railroads leading to New York to care for an increasing traffic. Two of these waterway improvements are approaching completion, and the inter-coastal waterway is being vigorously advocated. It would seem incumbent upon the railroads to provide in advance the land facilities for this additional water-borne commerce which will inevitably come to this port. With terminals already unduly congested, how can this be done except by thorough-going terminal reorganization?

“If the enlarged canals accomplish the chief purpose for which they were undertaken, there will be an enormous increase in railroad freights, through the reduction in rates forced by the improved canal competition, reinforced with adequate and well-placed terminals. New York State will then become an irresistible magnet attracting to and through it to the port of New York, a vast amount of new business from the Great Lakes and be-

yond, besides the business newly created in the State along the canals and waterways, all of which will focus upon the port of New York. The most superficial student of canal development in this state will realize that the enlarged business of the canals themselves will be the least important accomplishment. If it causes the final abolition of the railroad differential, the increase in the traffic both ways should be very large. One of the earliest accomplishments, in my judgment, destined to follow the completion of canal enlargement and the establishment of needed terminals, will be the compulsory establishment of joint rail and water rates, the pro-rating of rail and water rates, on precisely the same basis that accompanies interchange of freight between railroads to-day; the abolition of the practice of the railroads insisting that all water-borne freight is local freight, from the place of trans-shipment from water to rail carriers, or from the original point of shipment by rail carrier to water carrier; but, on the contrary, through rates will obtain as between rail and water carriers with a fair division of same as between each, precisely as railroads now share earnings on through freight. This result should have the effect of greatly increasing railroad through freight to and from the port of New York.”—

A. R. Smith.

“Freight communication between the four parts of the harbor, New Jersey, Staten Island, Long Island and Manhattan (see page 5 of report), is now provided for by car floats and lighters; and not until the community is rich enough to afford freight as well as passenger tunnels under the rivers will the consequence of separation be entirely overcome.”

Q. What prospects are there for freight tunnels? And in the meantime, and in what way will the establishment of joint terminals affect the consequences of the above separation?

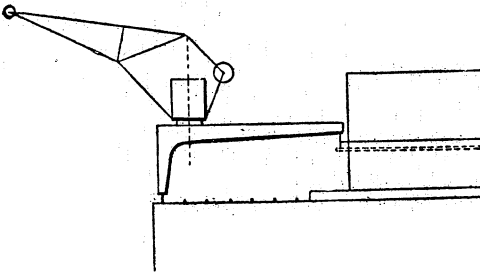
A. I presume that freight tunnels will be constructed when commerce increases to such an extent as to make them necessary and remunerative, and when the railroads can procure the capital to build them. In the meantime, the most effective utilization by car floats should be established. Under present conditions the west side terminal of Manhattan is floated from New Jersey to

Manhattan in the morning; it obstructs an undue amount of the water front in Manhattan throughout the day, and is moved over to Jersey City in the evening. Under the Department's plan, this large flotilla would not obstruct the Manhattan water front by its daily storage there, but instead, the cars would be transferred from floats over the bulkhead to the terminals on the other side of the marginal way, thus making it possible to release a large water-frontage which the railroads are now using in an ineffective manner, and at great expense to them—inconvenience to the community and to the exclusion of marine commerce.

“The municipal problem at present is to provide water-front terminals where transfers can be quickly and cheaply made between cars and vessels and between railroad lines.”

Q. What commodities are here referred to; and how will the handling of the same differ from the present method?

A. The municipal problem above referred to is not the local Manhattan problem, but the larger question which is facing most maritime ports in this and other countries, where provision has been made for ships before railroads had developed. At Hamburg, Bremerhaven, Rotterdam and Antwerp, which are truly modern ports, the railroads are properly articulated with the docks, and the car service is brought to the vessel's side; the trans-shipment shed is located on the other side of the track and overhead cranes effect transfers between warehouse, car and ship. Such a service is not possible of attainment on the Island of Manhattan below Fifty-fourth street, but can be secured at South Brooklyn, Staten Island and other parts of the Port. (See cut.)



“Congestion along West street is probably due to the fact that there is no method of transferring freight

between piers and warehouses or factories, except by trucks."

Q. What part of the Port does this statement refer to and does the joint terminal propose to relieve it of this congestion; if so, in what way? What particular commodities would be affected, and would the congestion simply be diverted to some other point or done away with entirely?

A. The insular position of Manhattan has made necessary, and will continue to make necessary, the dray as the means of communication between the waterfront, railroad terminals and factories and stores located inland. The most advantageous location for a factory manufacturing bulky or heavy commodities is on a railroad siding, and this condition is not generally attainable on the Island of Manhattan, except as it might be made possible by the association of factories with terminal buildings along the waterfront.

The prompt unloading of drays at waterfront terminals will tend to remove local congestion by keeping them on the move; and the fabrication and storage of materials at the waterfront will, to a certain extent, by eliminating drayage, obviate congestion in the streets. It is frankly admitted, however, that drayage through the streets of Manhattan will always constitute an incubus upon industries located here, and for this reason it is desirable that manufacturing plants should be located on railroad sidings outside, rather than inside of Manhattan. The probable location of factories and warehouses near the waterfront should not, however, be a deterrent to modernizing waterfront conditions in Manhattan. Can the 15 to 30 story city which is being built back of the waterfront be much longer served with its food, fuel, raw material and general supplies—and export its products over piers and bulkheads which are only used to an average height of six feet above the ground level—that is, as high as a longshoreman can shoulder up cargo?

Until within recent years, the reception pier and the shipping bulkhead, as utilized by the railroads in Manhattan, have admirably served the needs of the City, which has now grown beyond their capacity for such service.

SUMMARY.

Briefly summarizing my proposal, I beg to say that it is intended to transfer the reception and shipment of car freight—which will continue to be principally delivered and received by drays—from the immediate waterfront to the land back of the marginal way, where there is room for progressive expansion. Above Twenty-third street it is possible to accomplish this result in the simplest way, that is, by transferring the cars from the floats to the rear lands. In brief, it will ultimately be possible by joint railroad and City co-operation to convert the waterfront in this locality into a most economical and effective railroad yard, with industrial adjuncts comparable to those offered by the Bush Terminal.

Below Twenty-third street, conditions are entirely different. Owing to the established uses of the street which cannot be changed, it will be impossible to take the cars from floats to the other side of the street at grade. I believe that it will be found as impracticable to transfer cars from floats overhead across the street as below the street grade, consequently, the only alternative is to bring the cars down by an elevated railroad from above Twenty-third street, as shown in the plan. It is proposed to provide four tracks for this service and more may be added later if necessary for prompt despatch. Once this shall have been done, in my judgment, the railroads will find it more advantageous to pay for property on the other side of the street—and to pay service charges in one form or another for the use of the connecting railroad and float bridges above Twenty-third street—than to continue to pay the very high rentals they are now paying the City for piers and bulkheads, the useful service limit of which has already been reached. Such waterfront property will then be released for the use of marine commerce—its proper use.

The original report outlines a completed terminal with all necessary lands and expensive buildings above Twenty-third street, and with provision for an elevated connecting railroad through West street. It was thought best to present the plan in this comprehensive way in the first instance, in order to make clear its ultimate scope and purpose, and to attract criticism to it *as a whole*. I have, however, always realized that such a terminal must be a growth rather than a creation; that as it develops it must be made to serve existing needs, as well as anticipate those of the future; that established uses may not

be suddenly terminated, and finally that costs shall neither be burdensome upon the City nor upon the companies. Consequently, I do not expect that the City or the railroad corporations will be prepared to assume the responsibilities for so large a commitment at the present time. Changes will be made slowly and the conversion of the present inadequate west side terminal into such a one as that contemplated in this report will proceed by successive steps.

For reasons too extensive to elaborate, I believe that the needs of the New York Central Railway are greatest along the entire line, and that the needs of the New Jersey roads are greatest below Twenty-third street. If this is so, then the City may expect most general co-operation from the Central along the whole line, and from the other roads downtown—always pressing to secure from all companies the joint effort necessary to construct the connecting elevated railroad, and the terminal float bridges above Twenty-third street. These inseparable community features, while costly, are not unduly so, and if they shall be provided or procured by the City, it is reasonable to suppose they can soon be placed on a self-sustaining basis. This will leave with the roads the responsibilities for providing the other requisite terminal features, either jointly or separately and relatively with or without municipal help.

If the railroads which have their terminals in New Jersey are not willing to co-operate with the City towards consummating this, or some such plan which may be demonstrated to be practicable, the possible consequences may be that the future west side terminal will become a more or less exclusive New York Central enterprise. The Central already has secured above Twenty-third street the lands adapted for the kind of a terminal above outlined, and the pressing necessity of removing its tracks from the street surfaces will impose upon that company the substitution of elevated terminals and tracks along the marginal way farther south.

The object of the City should be to secure for the entire west side the combined facilities of all the railroads; but it cannot compel the co-operation of the railroads. It can only present a favorable opportunity for their consideration.

Since the original report was issued, and as a result of further examination and conference, the following changes will probably be suggested:

That if it shall be found desirable, drays be admitted to the piers above Twenty-third street;

That tracks be excluded from the upper level of the piers above and below Twenty-third street.

That the track ramps in the buildings be eliminated and placed in the marginal way.

That wider platforms and roadways be provided in the terminal buildings.

That the transfer of less than car-load freight may be impracticable in Manhattan, and that consequently the yard between Thirty-eighth and Fortieth streets should not be laid out for this purpose; but it seems desirable that there should be a yard at about this point for car storage and assembly. Transfer of less than car-load freight will be conducted at suburban terminals in New Jersey.

That a four-track elevated railway extension should be carried along the marginal way as far as Washington Market, the site of the market affording a possible opportunity for the installation of a sub-terminal.

That aside from the elevated railroad and the connecting float bridges above Twenty-third street, the various terminals should be made as individualistic as possible to overcome the manifest objections of the railroads to joint occupancy. The float bridges above Twenty-third street connecting with the elevated railroad can also probably be individualized for the use of each road separately, as distinguished from joint use. This would still permit the whole enterprise to be available of development and utilization under the auspices of a joint terminal corporation controlled by the participating roads, should this be desirable.

Respectfully yours,

CALVIN TOMKINS,

Commissioner of Docks.