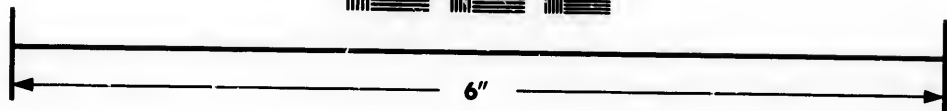
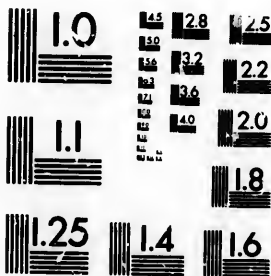


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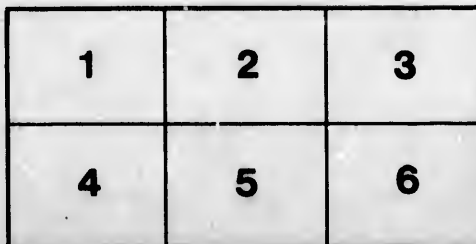
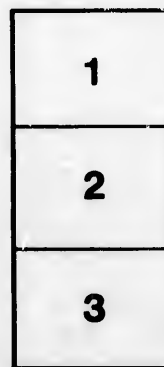
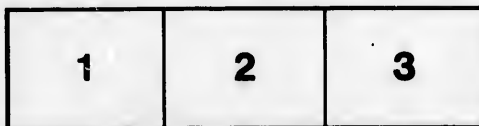
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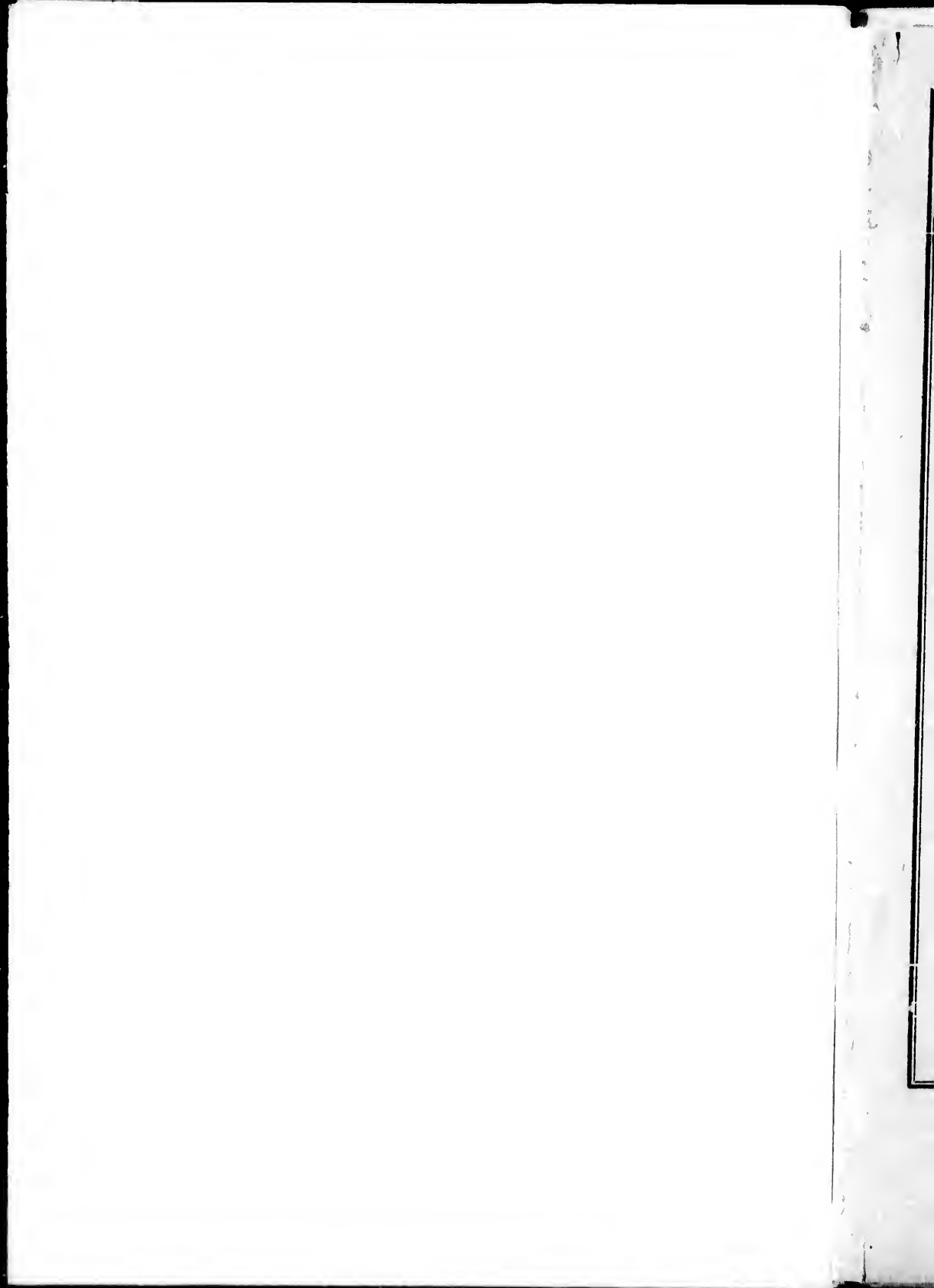
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A CITY TERMINUS

FOR THE



GRAND TRUNK RAILWAY
COMPANY;

CONSIDERED IN

A REPORT

TO THE

HARBOUR COMMISSIONERS OF MONTREAL.

By WALTER SHANLY, Esq., C.E.

Montreal:

PRINTED BY JOHN LOVELL, ST. NICHOLAS STREET.
1859.

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A CITY TERMINUS

FOR THE

GRAND TRUNK RAILWAY.

MONTREAL, *4th October*, 1859.

SIR,

I have the honor to report on the question submitted to me by the Harbour Commissioners, through your letter of 17th August; the points on which my views were requested being summed up in the following words:—

“ That the Grand Trunk Railway Company should extend their rails to a central point within the city, and connect them with the wharves in such a manner as will best subserve the general interests of the citizens and of the trade of the country.”

Without in any way hampering my freedom of opinion as to the mode of extending the rails so as best to conduce to the above ends, your letter brings under my notice seven different localities, within the city limits, to which public attention has already been directed, as, in the opinion of those advocating them, fit and proper

situations for the terminus; a method of connecting certain of the points with the harbour being also suggested.

The places referred to are,—

- 1st. Windmill Point, south of the Canal, opposite McGill Street.
- 2nd. Chaboillez Square, by way of the Lachine Railway.
- 3d. The Terminus of the Lachine Railway, Bonaventure Street.
- 4th. The Hay-market, by extension of the line of the Lachine Railway, and thence down McGill Street to the wharves.
- 5th. The Champ-de-Mars, by way of the Hay-market and along Craig Street, and thence tunnelling under Jacques Cartier Square to the harbour.
- 6th. Viger Square, by further extension down Craig Street, and by tunnel to the harbour.
- 7th. Same line produced to "Hochelega Bay," and from thence a return line of rails to the wharves above.

With a view to making this Report as brief as is compatible with a full and impartial discussion of the important subject submitted, I will endeavor to narrow the debatable ground comprised in the number of the foregoing projects, by culling out as early as possible such of them, as, from obvious reasons, will not admit of both *desiderata* being attained in combination,—viz., Convenient station position for the ordinary Passenger and Freight business of the City, and connection with the Harbour.

Dealing with generalities before entering on details, I would observe, that such of the schemes as involve the necessity of laying rails for any considerable distance along any of the thoroughfares of the city, present a weak side as compared with those of their competitors which are freer from that objectionable feature; the last mode that ever should be resorted to in contriving railway accommodation for a city or town.

The frequent passage, to and fro, of locomotive engines and long trains of railway cars along a crowded street, is not merely

a public inconvenience in the present, but it is an inconvenience of that class which is forever increasing in degree as the town or city affected by it increases in population and importance, until at last the railway comes to be cited as a nuisance.

One project, which I have lately seen debated in the public journals, though not of those to which my attention has been directed by the Harbour Commissioners, I look upon as peculiarly assailable from the foregoing point of view. I allude to the proposed line down Wellington Street, a much frequented but narrow highway, of upwards of a thousand yards in length, along which, supposing that method of extending the Grand Trunk rails into the city were adopted, engines might move and trains be dragged at any hour of the day or night.

The Wellington Street scheme should meet with no kind of favour from the citizens of Montreal. It would not be two years on trial ere the universal voice of popular opinion would clamour for its abolition.

In dealing with this question of establishing a convenient station in the city, and bringing the rails into direct connection with the shipping, the leading point to be considered, it appears to me, is not merely, "What will suit the requirements of to-day," but in what way they may be met within the limits of reasonable present outlay, and yet upon a plan, that, while affording all necessary accommodation now, will admit of being enlarged and extended from time to time, as the exigencies of trade may demand, without necessitating the abandonment of, and consequent loss of expenditure on, any portion of the works at first to be carried out.

It would be unwise, it strikes me, for the citizens of Montreal, or the Grand Trunk Railway Company, or both united, to attempt to mature all at once a terminal scheme of such comprehensiveness as to be suited to what the trade of this port and of the railways in connection with it may be expected to be in 1870.

How to begin right is what should now, chiefly engage the attention of all parties interested.

Of the seven proposed terminal points to which my attention has been drawn by the Commissioners, the two which contemplate gaining the harbour by means of tunnels, are, on that score, very

objectionable *in practice*. Apart from the great expense and uncertainty of tunnelling, the position of the two places referred to, the Champ-de-Mars and Viger Square, relatively to the harbor, is such as would involve very abrupt curvature in any links connecting them and it. The whole line of tunnel, in either case, together with the approaches to it at both ends, some 1800 feet in length altogether, would have to be curved to a radius of, at most, 700 feet,—quite too short for convenient and economical railway service.

Both places, too, are widely open to the objection, above commented on, of being only approachable by lines of rails running for long distances lengthwise of an important street; in the one case fully 3000 feet, in the other upwards of 4000 feet, of the length of Craig Street, being so encroached upon.

Projects Nos. 5 and 6 in the list submitted to me, must, I fear, be counted out; as well for not possessing the attributes essential to the desired combination, as for the inconvenience of access to em in the first instance.

No. 7 is also open, and in a greater degree than either of the two last-named projects, to the objection of street obstruction. It would literally sever the city, as it were, into two distinct districts the whole way from the Hay-market to, almost, its extreme easterly limits; and, in fact, counting from the Lachine Railway, of which the line to "Hochelega Bay" would be a continuation, it would intersect every north and south avenue in the city,—some eight-and-twenty "level crossings" in a distance of about two miles, and each crossing a point of danger to the public.

Nor has No. 7 project anything to recommend it as a means of access to the harbour. If we take the Bonaventure Street station, for instance, as the point of departure, it will be found that the distance to be traversed by a railway train, following the route proposed by Hochelega Bay, would be close upon four miles before it could deliver its load at the Island Wharf; while over a direct line from the Lachine Railway terminus to the harbour, the same train would have to be moved a length of scarce three-quarters of a mile to reach the same central point among the shipping.

It would seem to be a hard case if no more facile mode of connecting some central point in the interior of the city with the water could be devised, than one involving the necessity of carrying every ton of merchandize which is to compose the looked for inter change of traffic, over a distance from five to six times as great as actually exists in a direct line between such central point and the focus of marine business on the harbour. Believing the case not to be surrounded with any such difficulties as would render a resort to that circuitous mode of securing the desired connection imperative, I must record my opinion against the adoption of project No. 7.

The Hay-market comes next in order, ascending the list, on which it stands No. 4; and, in point of position relatively to the business centre of the city and to the harbour, will compare with the three remaining places on the list as follows:

	From Place d'Armes.	From Island Wharf.
1st. Windmill Point	1500 yards.	900 yards.
2d. Chaboillez Square	1050 "	1300 "
3d. Lachine Railway Station	1250 "	1500 "
4th. Hay-market	650 "	1100 "

The Place d'Armes is here assumed as the centre of the business population of the city; the Island Wharf, as that of harbour traffic. The distances above given, though not obtained from actual measurement, may be received as sufficiently correct for purposes of comparison.

From the figures in the foregoing table, project No. 4 would seem to be entitled to the preference over its three competitors, considered with regard to city convenience only; but unfortunately there exist certain *geometrical* objections to the site itself, sufficient to neutralize all its outward advantages of centrality.

The Hay-market, proper, being all that portion of the vacant space, so called, lying north of Craig Street, is an oblong of about 350 feet long by 200 feet in width; but, allowing for the streets that would necessarily have to be left all round it, 300 × 140 feet is, probably, as much as could be spared for railway uses,—scarcely

space for a passenger and freight station for Montreal, even if available to the full limit of those proportions—which it would not be, and for the following reasons:

The longest side of the oblong runs north and south, or at right angles to Craig Street, while the line of railway access to it must be in the contrary direction, east and west. No matter, then, whether the approach be formed by extending the line of the Lachine Railway down Bonaventure Street (which would necessitate its carving through the block of buildings between it and Craig Street, facing Commissioners' Square), or whether, on leaving the Lachine station it should at once cross Bonaventure Street and be pushed directly towards the proposed terminus (whereby it would have to pass through much private property, all built over)—in neither case, I say, could a track be laid down on any practicable railway curve which would not in its curvature so far encroach upon the longest side of Hay-market Square as to leave scarce half its length available, *in straight line*, for station buildings. The *width* of the so-called square, east and west, is quite too insignificant to be thought of for the *length* of a passenger station for Montreal. It would scarcely be suited to that of an ordinary way-station platform at a second-rate town.

In brief, no long trains drawn by locomotive engines could be laid lengthwise of the Hay Market by any practicable extension of the Lachine Railway; and for the same causes that operate to prevent their being so manœuvred, they could not be headed from the Hay Market down McGill street, so as to be moved towards the harbour near the foot of McGill Street again, and the corner would have to be turned, and which the engine and train could not turn without passing through the centre of the Grey-Nun enclosure.

What is desired by the citizens, I take it, in agitating this question of a City Station, is to obtain one of such comprehensiveness of character, as will equally accommodate the travelling community and the merchant,—one of such amplitude of space as will admit, in the future at all events, of the erection of a commodious and handsome passenger building as one of the adornments of the city, and where at the same time the freighting business of the city can, to a certain extent, also be transacted.

I also take it for granted that so lame a plan as that of dragging the passenger carriages into town by horses, leaving the merchandise cars still outside, would meet with no public favor at all.

If I am correct in my views, the Hay Market is the least eligible place on the list, for all the purpose which it is sought to combine.

Projects Nos. 2 and 3 may be taken as one. Chaboillez Square (No. 2) could only spare room enough from its modest proportions for the reception of a very moderately sized passenger building; but, taken as an adjunct of the Lachine Railway Station, to which it is near by and easy of access, it could for such a purpose, *forte-de-mieux*, be turned to tolerably good account. I should be sorry, however, to suppose that this city might not, and at no distant day, aspire to possessing a station for the accommodation of travellers, equal, in all important points of capacity, to that at Portland for instance, the length of which is pretty nearly one half as much again as the entire stretch of Chaboillez Square.

It is hardly necessary, I imagine, to comment further upon projects No. 2, and I now turn to its neighbour,—the Bonaventure Street station of the Lachine Railway; the grounds in connection with which are sufficiently spacious for all ordinary purposes of a Station, and would afford ample room for the freighting business of both lines as far as the merchandise to be received and sent out of the city proper is concerned; and, looking to the convenience of the citizens alone, I believe that were the Grand Trunk rails extended no further into town than to the Lachine Station, the people generally, after some little time at least, would be satisfied with it; and, setting aside the harbour question, I am satisfied that, with the friendly co-operation of all parties interested, none of the proposed schemes could be carried out within such moderate limits of expenditure or so early brought into useful operation.

To reach the wharves from that point would, however, be attended with no inconsiderable difficulty and expense. I do not mean engineering difficulty, for of that there would be none beyond what must be met by any plan that can be devised,—the having to descend from the level of Commissioner Street to

the level of the wharves (14 feet) within a very limited distance,—but whatever the line adopted to connect Bonaventure Street with the shipping, much private property must necessarily be interfered with, and which, if the line be laid so as to shun the College and Grey-Nun domains altogether, is all more or less built upon. It would probably be found necessary to purchase for “right of way” some 50,000 superficial feet of occupied ground.

The great distance (about four miles) which trains would have continually to traverse between the Bonaventure Street Station and Point St. Charles, where the principal business establishments of the Grand Trunk Railway must ever be maintained, will of course, prevent the Grand Trunk Managers from viewing with favor the proposed union with the Lachine line as a means of ingress to the city; and as that objection, undeniably forcible as it is, applies in common to every mooted project except No. 1, it, The Windmill Point Scheme, may, in my opinion, be so modified, if not wholly acceptable as it stands, as, at all events, to form the basis of a plan on which the majority of interests involved would be most likely to unite.

The Windmill Point *route* has unquestionably striking *railway* advantageous over all competitors. No other line could be laid down which would effect so intimate a connection between the points it is sought to unite,—Point St. Charles, the City, and the Harbour; while it also presents another favorable feature, peculiarly its own, and from which the Railway Company and an important section of the manufacturing interests of the city would alike derive benefit,—that is, its passing close along the mills and factories established on the Canal. Grain in bulk, for the handling and storing of which there are no conveniences at Point St. Charles, could, with such a line of rails laid down, and by aid of the simple and inexpensive expedient of elevators on the rear, as there already are on the front or Canal side of the storehouses, be delivered directly at the mill door from the Grand Trunk cars; and I presume, that, without any material additions to, and with but trifling alterations in the present buildings, from 50,000 to 100,000 bushels of grain might conveniently be stored away on the railway side of the premises along Mill Street. In like manner other raw material could

be brought in, and manufactured articles taken away, wholly independent of the medium of cartage.

Apart altogether from the general question of extending the Grand Trunk rails, the business created by the water power of the Canal is of such importance even now, and so expansive in its character, as to render it probable that a side track would ere long have to be run down from Point St. Charles on purpose to accommodate it.

The opportunities for laying down such a track at small expense are as favorable as could be desired. From the present Station the ground is almost on a dead level to and along Mill Street; and whether it be a question of traffic to or from the East, or to or from the West, the means of connecting with the main line are of the most facile order.

The distance from Point St. Charles to the competing points for Station honor, and to the wharves, by way of those points are:

To Windmill Point,.....	1,800 yards.
“ Bonaventure Station,	6,800 “
“ Island Wharf by way of Windmill Point, ...	2,700 “
“ “ by way of Bonaventure street, ..	8,300 “

These distances tell powerfully in favor of the *Windmill Line*; but for station purposes at the *Windmill Point* the ground would have to be nearly altogether reclaimed from the river; there is not, naturally, sufficient dry land there available to afford more than mere temporary accommodation, should it be so required, for the passenger business of the railway.

The major portion of the Station ground would require to be on a level with Commissioner Street, that being the height to which high water not uncommonly attains while the ice is “shoving.” It has been as much as two feet above that level opposite McGill Street.

To raise the reclaimed land to such an elevation, would involve filling or embanking to an average height of some 30 feet above the bottom of the river; and the cost of land so reclaimed from the St. Lawrence, including the necessary outer protection, by means

of a revetment wall of some description, to guard against damage from ice, could not be far short of £5,000 per acre.

To carry out the connection with the Harbour, a bridge would have to be thrown across the lower lock of the Canal, and at such a height above its coping as would place it, too, out of the reach of harm from the ice; in other words, on a level with Commissioner Street. The bridge would of course have to be a moveable or "swing" one.

With such a bridge necessarily constructed, and the track which crosses it just at the right level to allow of trains being run into the city, and with the necessity existing for paying at the rate of £500 per acre for Station land on the south side of the Canal, it would seem as though it would be worth while to make an extra effort to secure station space upon the north side, the *whole* cost of *access* to which is part and parcel of the Windmill Point Scheme.

A bridge over navigable water, liable to be *swung* at any moment during the season of navigation, is a source of much less public inconvenience if adapted solely to railway service, in the crossing over of trains, than if used for the ordinary purposes of street traffic in a crowded city. One engine with a goodly train of cars behind it would, in one crossing of the bridge, occupying five minutes of time perhaps, bring over tonnage enough to represent fifty traverses to and fro of the trucks and waggons that would have to cross over, were the railway business to be conducted on the opposite side of the canal, from that which is the seat of city business. The convenience to passengers too, in being at once landed in the city, instead of, as would often be the case, waiting impatiently in a blocked highway for the bridge to be swung-to, cannot be over-rated.

It will be asked how and where can the necessary space be obtained on the city side of the canal in connection with the Mill Street line of railway. To the *how* I reply, that that involves a financial question with which I have nothing to do, beyond saying that no comprehensive scheme of terminal arrangements can be effected in the case at issue between the city of Montreal and the Grand Trunk Railway Company without a large expenditure

being incurred, or represented in some way or other,—whoever may have to bear the burden. The *where* I hope to be able to explain satisfactorily.

I have already said that the principal business of the railway will continue to be carried on at Point St. Charles. There it is that the bulky articles of Western commerce will be received and stored; and when called for at the sea board or in the New England market, from thence it is that they will be despatched.

The railway business to be transacted within the crowded portions of the city will consist, for the most part, of the receiving and forwarding of imported merchandise, and of such cereals, &c., as are needed for home consumption, or as will be shipped for foreign markets by way of the St. Lawrence.

The proposed connection with the harbour would go far towards meeting the exigencies of the latter class of business; the whole navigable front of the city becoming as it were a part of the railway station. Much of the merchandise brought in by way of the river, and, in fact, *all* that portion of it billed for Western towns direct, could there too be at once transferred from the hold of the vessel into the cars, or be temporarily shedded on the wharves awaiting railway shipment.

The space requisite for a convenient passenger station is almost a "known quantity" in railway science. To anticipate the wants of general trade, on the other hand, involves, in a growing community like ours, a certain amount of hazardous calculation. I think, however, that taking into account, in the case in question, the proportion of business that can be carried on during the busiest period of the year directly on the wharves, and keeping Point St. Charles in view as the centre of the railway business at all seasons, we may venture to estimate that an acre of ground under roof, in the form of one large receiving and delivering shed, would go far towards providing convenient accommodation for the remainder of the business of the city proper.

The bridge by which it is proposed to carry the railway track over the canal *en route* for the harbour, would face the end of McGill Street, in such a way that a train once across, on the north side, would be in the direct line of the street. Immediately on crossing

the lock, an easy curve to the left (on a somewhat steep incline, however) would lead to the wharves. The direct line produced from the bridge would, in a distance of 300 feet and upon a level plane, place the train in McGill Street.

Upon either side of McGill Street, at its lower end, there is a block of land unoccupied by buildings of any value. That on the west side extends from Commissioner Street to Wellington Street, having Grey Nun Street for its rear boundary, and covers an area of about 550 feet by 110 feet; the longest dimensions being in the line of McGill and Grey-Nun Streets.

On the east side the unoccupied ground* extends from Commissioner Street, to the domain wall of the Grey Nunnery, about 350 feet, the vacant space having a least depth of 120 feet.

The lengths above given, in both cases, cover Youville Street, which is thereby supposed to be wholly abandoned to railway uses; a concession that would have to be made as well in carrying-out the Bonaventure Street Scheme as in the one under discussion here.

A shed with a double line of rails, occupying the whole length available on the west side of the street, the building to have some 80 feet of width, would form a convenient and commodious freight depot for that portion of the business which would not be carried-on at Point St. Charles or on the wharves. The train of cars, 500 feet in length, would stretch along the McGill Street side of the building; on the other side, fronting Grey Nun Street, the carters would drive in to deliver or receive their loads.

The Passenger Station I propose to place on the east side of the street: lines of rails to be run into the building as at Portland; entrances for passengers to open on the McGill Street front. By taking 120 feet in length by the same depth off the Nunnery property, in extension of the block of land above described, room for a passenger-station as large as the Portland one would be had; and larger than that Montreal would never want, be her growth what it may.

Passenger and Freight Station would thus be "located" in close proximity to one another, on one of the wide streets of the city, and, it seems to me, as convenient to the centre of business as any reasonable man can expect.

I do not believe that any plan, not involving the purchase of lands and buildings of too great value to admit of its being entertained as *feasible*, can be devised which will so well meet the exigencies of city traffic in connection with the Grand Trunk Railway, as that which I have sketched above, and which will be rendered more intelligible by reference to the map accompanying this Report. If it cannot be carried out because of the cost attending it, or because others should differ from me in my estimate of its adaptation or adequacy to the purposes sought to be subserved, then, in my judgment, the choice of a site for the city station will lie between that at Bonaventure Street, as it is, and that at Windmill Point, with the water to be converted into dry land. As a railway man, I am in favor of the latter, for it would allow of the desired connection being brought about with the least mileage of trains. The convenience of the citizens might, perhaps, be as well served at the first named place. Certain it is, however, that by no other line can the Grand Trunk trains be worked into the city, and access to the harbour had, on so low a scale of running expenses for all time to come as by the line *via* Mill Street and the Wind Mill Point; nor do I think that any plan of which that line is not a part, can properly provide for extension of and additions to the station premises in the future.

The making of land south of the canal, abreast of the lower basin and lock, is a mere question of expense. Of ground at that point, suited to the business of all the year round, the cost would necessarily be high; because, as has already been stated in the foregoing pages, it would require to be raised to a height of upwards of 20 feet above the summer level of the water, or some 30 feet on an average above the bottom of the river. Less than half that elevation would be sufficient for such portion of the ground as would be used during the season of navigation only, and, as there is ample depth of water at and south of the foot of the lock, a connection with the sea going vessels may there be conveniently effected.

The foregoing remarks as to the reclaiming of land, are meant to apply to the acquiring of space suited to the proportions of a trade not yet developed. I would still fain hope that means may

be devised for securing room enough for the earlier wants of the community at all events, on the city side of the canal. Both sides, it is to be hoped, will be *City* by and by, and that all railway advantages may be made to keep pace with the requirements of commerce without marring the usefulness of whatever plan may be adopted and acted upon in the meantime.

Looking to enlargement of accommodation in connection with the McGill Street Station, as above suggested: If on the east side of the street a strip of ground could be had from the Grey Nun property all the way to the St. Ann Market, and of about 120 feet in depth,—and if on the west side it were possible to secure the whole length from Commissioner Street to William Street, with Grey Nun Street for its rear boundary,—Montreal would then be provided with all reasonable conveniences for the establishment of a general Station, easy of access in every way, and as nearly central to the forwarding business of the city, as, combining other advantages, it would, I imagine, now be possible to reach. Failing the practicability of obtaining the whole of the space indicated, however, its partial occupation, even in the manner herein-above described, would be sure to prove a great public convenience.

Before finally closing with this part of my subject, I would make one more suggestion as regards the passenger station, but only as an alternative, *un dernier resort*, in the event of the McGill Street site proving to be out of reach. I have already shown that the Hay Market is not conveniently accessible by rail from Bonaventure Street. From McGill Street, via the Mill Street line, it is.

Should Windmill Point be chosen as the site for the general station, thus establishing the Mill Street line, passenger cars, at all events, might be taken thence, by horses, on a track laid in the centre of McGill Street, to a station in the Hay Market.

To erect a properly commodious station there, it would be necessary to break the continuity of Craig Street; and if that could be permitted, and a small part of Commissioner Square taken in, there would be abundant space for a very commodious one, and which, from its position, facing so wide a street as McGill, might

be made more of an architectural ornament there, perhaps, than at any other of the places that have been discussed.

However this question may ultimately be decided, I cannot see how any good excuse can be made for not running the passenger cars, at all events, "into town."

So far, I have only essayed to point out what to me appears to be the *best plan*, in an engineering point of view, for effecting the triple union,—of Point St. Charles, the City proper, and the Harbour,—which is specially the question on which my opinion has been asked by the Commissioners. I will now take the liberty of saying a few words as to what I consider would be the comparative cost of "extending the Grand Trunk rails" by the two routes, the Bonaventure Street way and that by Mill Street, to which, I trust, I have succeeded in narrowing the debatable ground.

To carry out the former plan, including the line from Bonaventure Street Station to the foot of McGill Street, there to connect with the rails leading down to the wharves, would cost, I should say, not less than £40,000; that is to say, between the actual present outlay to be incurred and the annual rent to be paid to the Lachine Railway Company for the use of their line between the Tanneries and the station, that much money would be represented, and would include the right of use, jointly with their proper owners, by the Grand Trunk Company, of the station ground and passenger building. Freight sheds for their own business would have to be provided by the latter body, at further outlay.

The line from Point St. Charles by way of Mill Street, including the bridge over the Canal, and all due precautions to guard against the intrusion of ice, which sometimes packs to a considerable height in rear of Gould's mill, and calculating to leave a clear, unembarrassed width of 40 feet for the street, would involve an expenditure, ere a train could be run into McGill Street, of £25,000, or bordering upon that; and in that sum is not embraced the cost of station land or of any buildings whatsoever.

The space to be acquired from private property for the proposed station at foot of McGill Street would amount to about 100,000 superficial feet.

If the Grand Trunk rails are to be extended into the city, the expense of erecting a large freight shed will be common to any point that may be selected for the terminus. A passenger building of unpretending exterior, yet sufficiently large to meet the wants of that department of the traffic for some years to come, might be quickly put up, and at inconsiderable cost, should McGill Street be the place chosen; but in that case *the whole of the ground, the boundaries of which I have above defined, would have to be secured now—or never.* The ways and means are not for me to deal with.

The estimates I have above given, not being the result of any more minute survey than mere ocular examination of the several lines and localities, must only be considered as approximations to what the actual outlay in each case would be. The relative proportions, however, may be accepted as tolerably near the truth.

The laying down of rails from the foot of McGill Street to and along the wharves, is not taken into account here. It would form an item of expenditure entirely distinct from the calculations on which I have based the figures by which to compare the relative *financial* difficulties of "getting into town."

The descent from the plane of Commissioner Street to that of the wharves, is a matter that will involve some considerable expense, as well as some derangement of the existing breastworks and "ramps" between Port Street and the Canal Basin.

This season is now too far advanced for much to be done towards bringing into effect for this year's uses any of the plans proposed, save that to Bonaventure Street. A temporary passenger station might, however, be erected at Windmill Point, and reached by a line of rails, also temporary, laid on Mill Street, if it was considered that public convenience would thereby be so far subserved as to make it worth while to enter upon crude and imperfect arrangements,—which, as a general thing, are unsatisfactory in their results to all parties, and, invariably, a prolific source of leakage in railway coffers.

To attempt to carry on any of the freighting business of the railway on the ground now available at Windmill Point, is out of the question.

My advice to all parties interested would be, to turn their united attention to agreeing upon and maturing a plan about the all sufficiency of which there can be "no mistake"; and also to agree to make the best they can of existing arrangements, until the adopted design can be brought into use in its entirety.

Before closing this Report, there is one other point to which I have as yet made no allusion, but which is of too much importance to be overlooked in fairly discussing the general question of railway extension; that is, the necessity of keeping in sight the means of reaching the eastern end of the city, and Hochelaga Bay, whenever it may be found advantageous to commercial interests to do so.

In the event of the North Shore line to Quebec being constructed, or any other lines from the North and North-west terminating in Montreal, there can be no question that their proper entry into the city will be considerably east of the centre, and their first access to the river below the present system of wharves.

Railway entry from the West, so as to include a harbour line, is, I have already recorded my opinion, limited to the Bonaventure Street route and that by Mill Street, to both of which one mode of direct connection with the wharves is common. Once at wharf level, the line of rails can be extended eastward, *pari passu*, with the wharves as they advance in that direction, at a rate of cost just the same as laying rails on any other dead level would be,—some two dollars per foot forward. A wharf line, however, would be of no use during the reign of the ice; and to provide for the required intercourse between the west and east quarters of the city during that season, I would lay a track along Commissioner Street as far as to a short distance below the "Quebec Gate" Barrack; thence continuing it, on a terraced roadway, along the face of the river bank, to Hochelaga Bay, or as far eastward as required.

A track along Commissioner Street would be much less of a public obstruction than one along Craig Street, for instance. It would be chiefly called into requisition in the winter, when the street is least of a thoroughfare, and crossed not once in the day for ten times that it is during the season of navigation.

No such cheap or convenient and safe plan of rail connection between the upper and lower sections of the port of Montreal can be devised as that above traced,—by way of the wharves for one season of the commercial year, and, secondly, along Commissioner Street (from the Canal Basin) to the Military Hospital, and so on, along the river, to the Bay below.

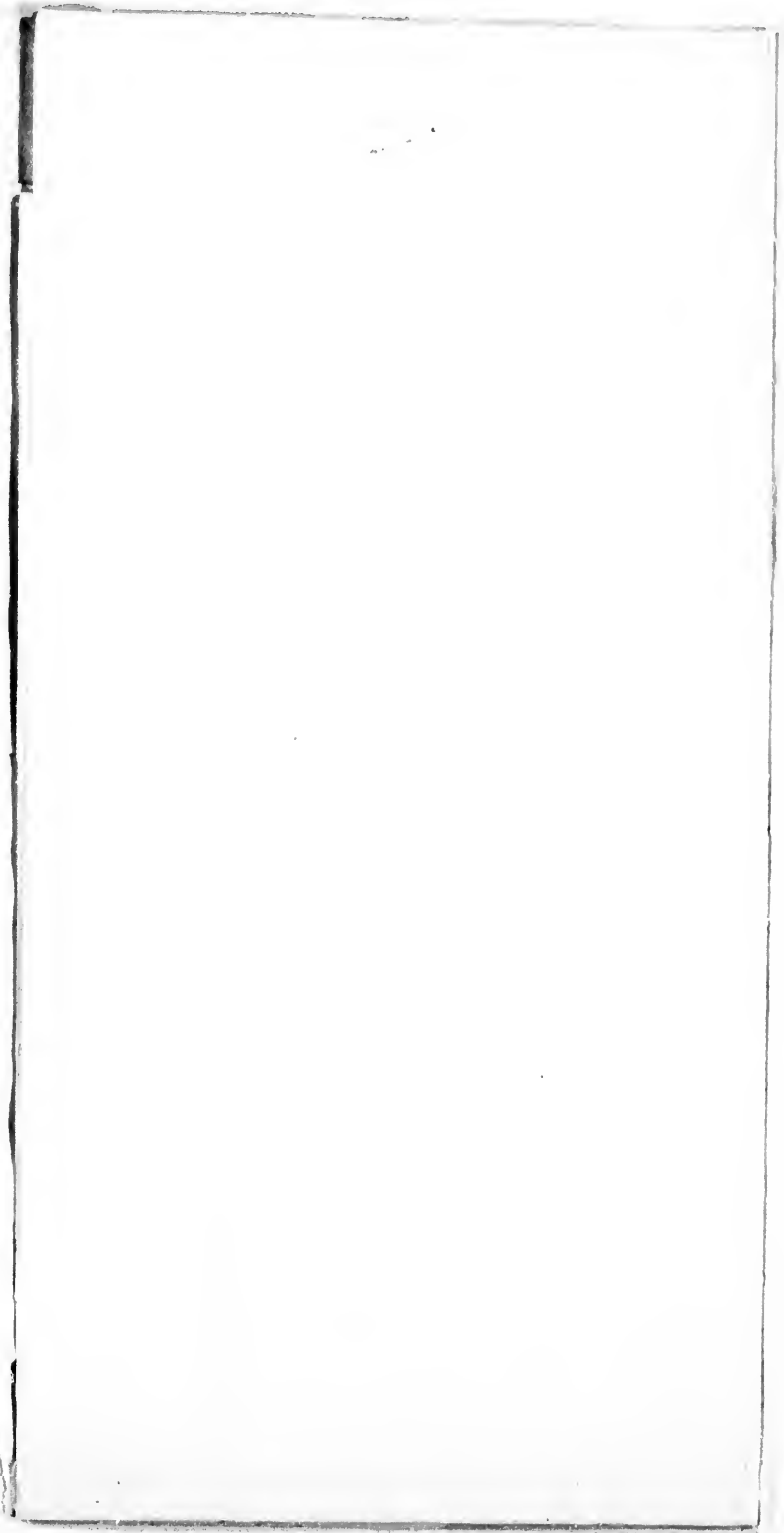
I remain,

Sir,

Your obedient servant,

W. SHANLY.

ALEXANDER CLERK, Esq.,
 Secretary,
 Harbour Commissioners. }



WITH REPORT

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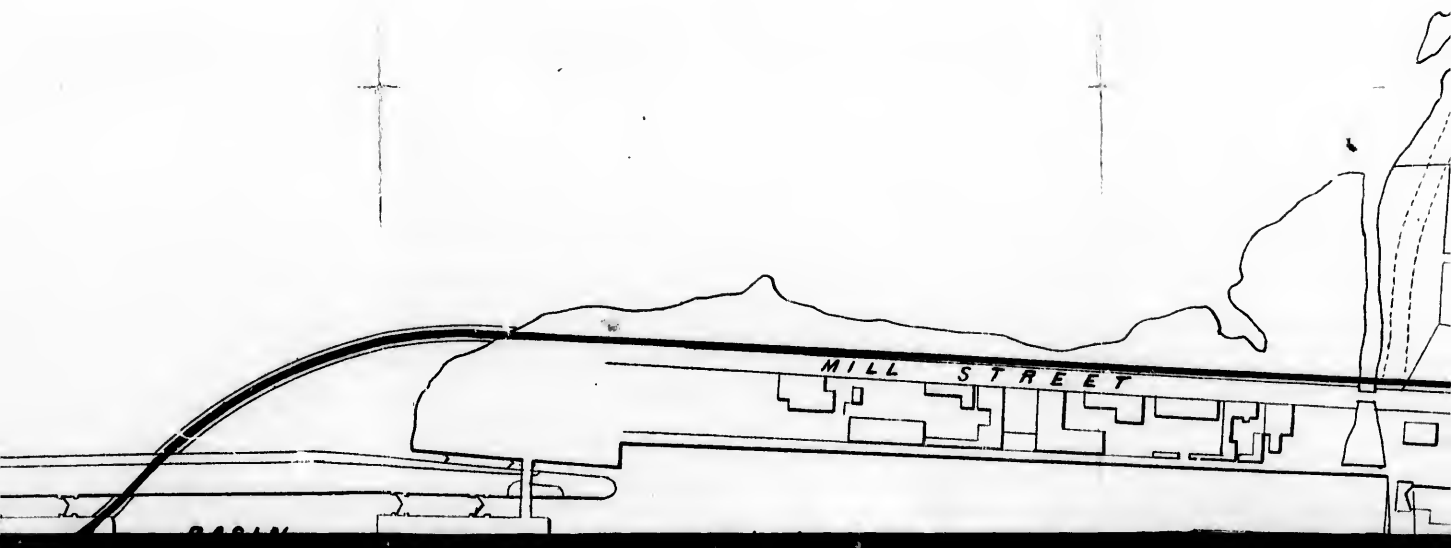


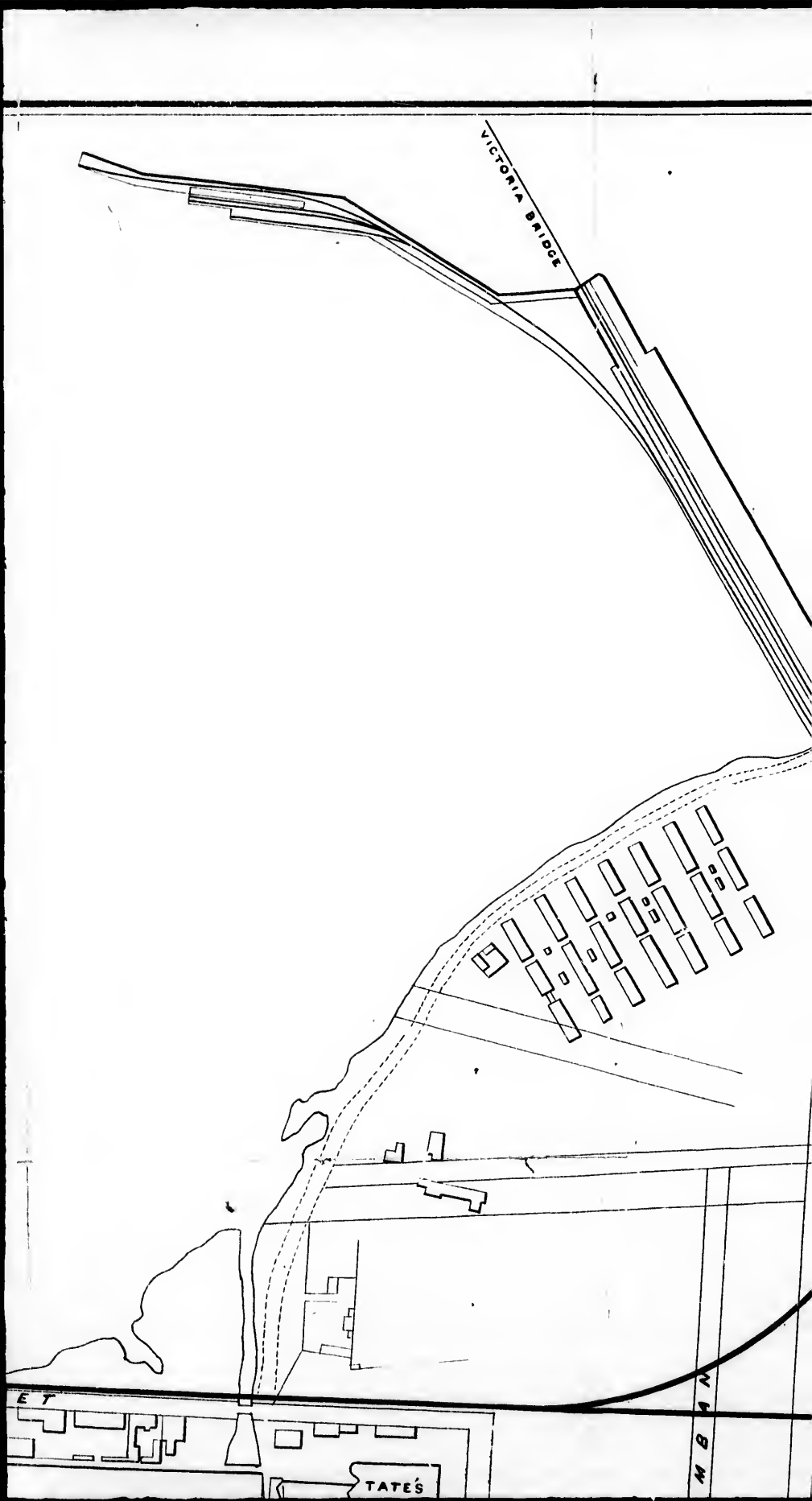
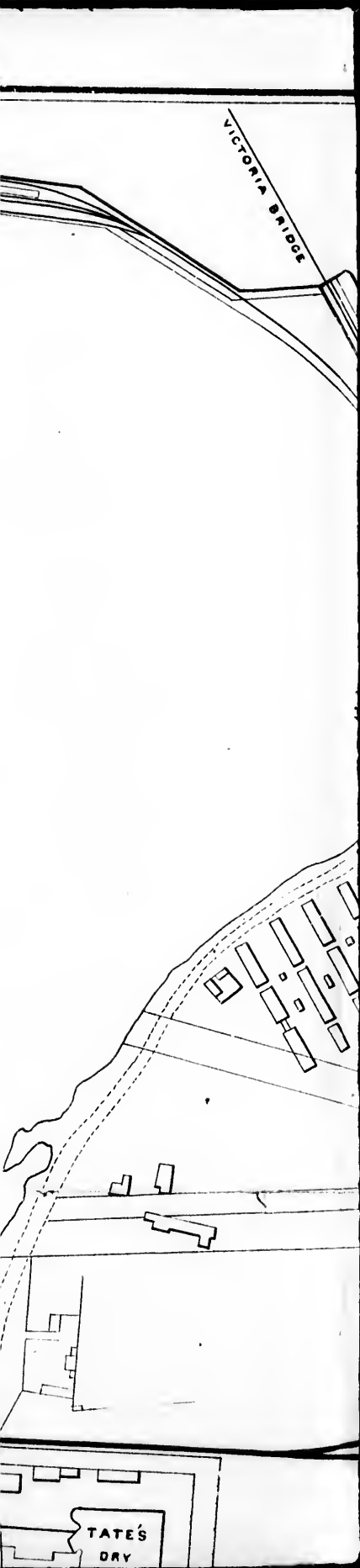
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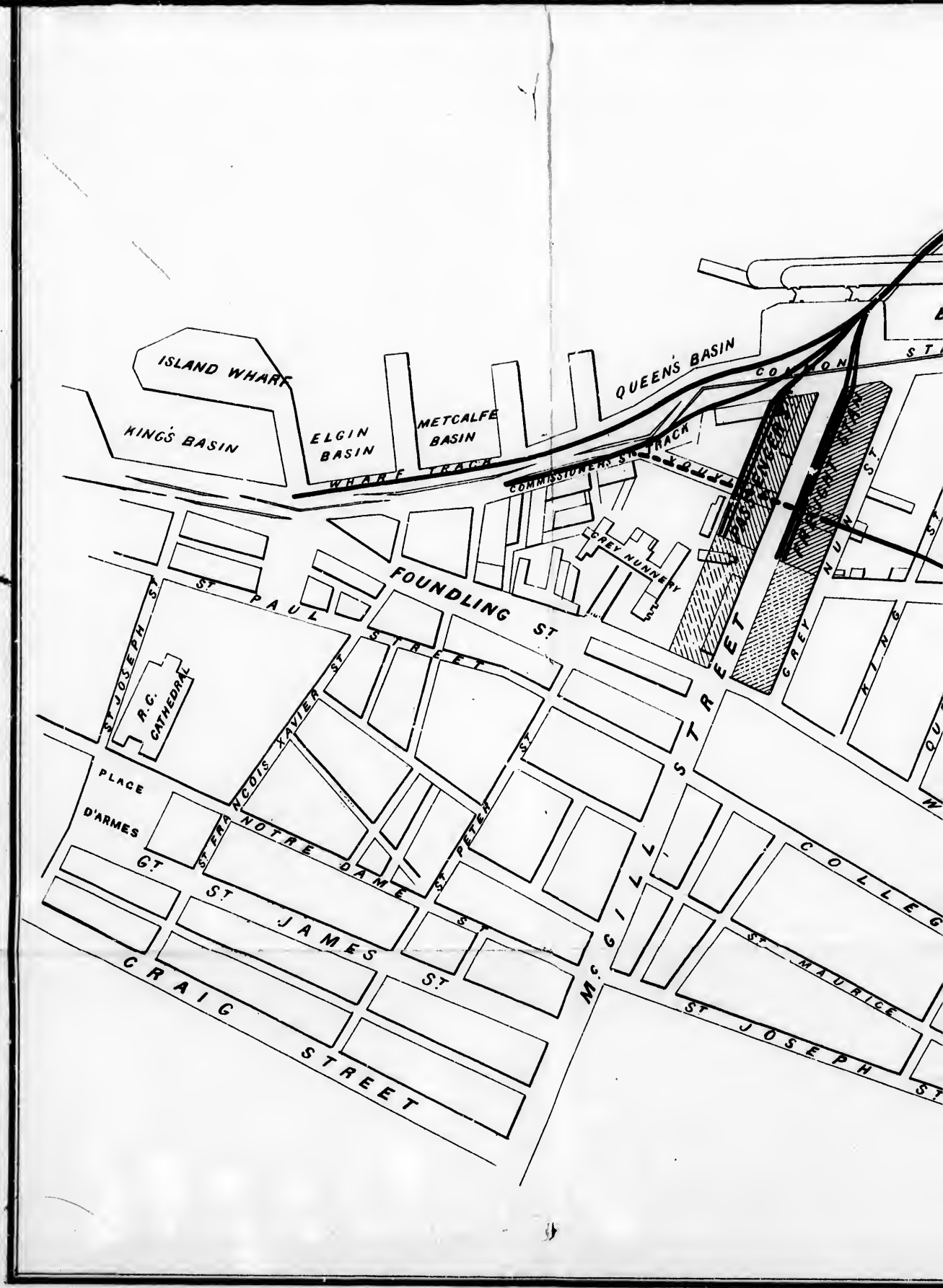
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W. Shanly.









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ELGIN BASIN

METCALFE BASIN

QUEENS BASIN

WHARF CRANE

COMMISSIONERS STORAGE TRACK

COMMON

FOUNDLING ST

ST PAUL

ST JOSEPH ST

R.C. CATHEDRAL

GREY NUNNERY

ST ANNE ST

ST NICHOLAS ST

ST NOTRE DAME

ST PETER ST

PLACE D'ARMES

ST JAMES ST

ST GEORGE ST

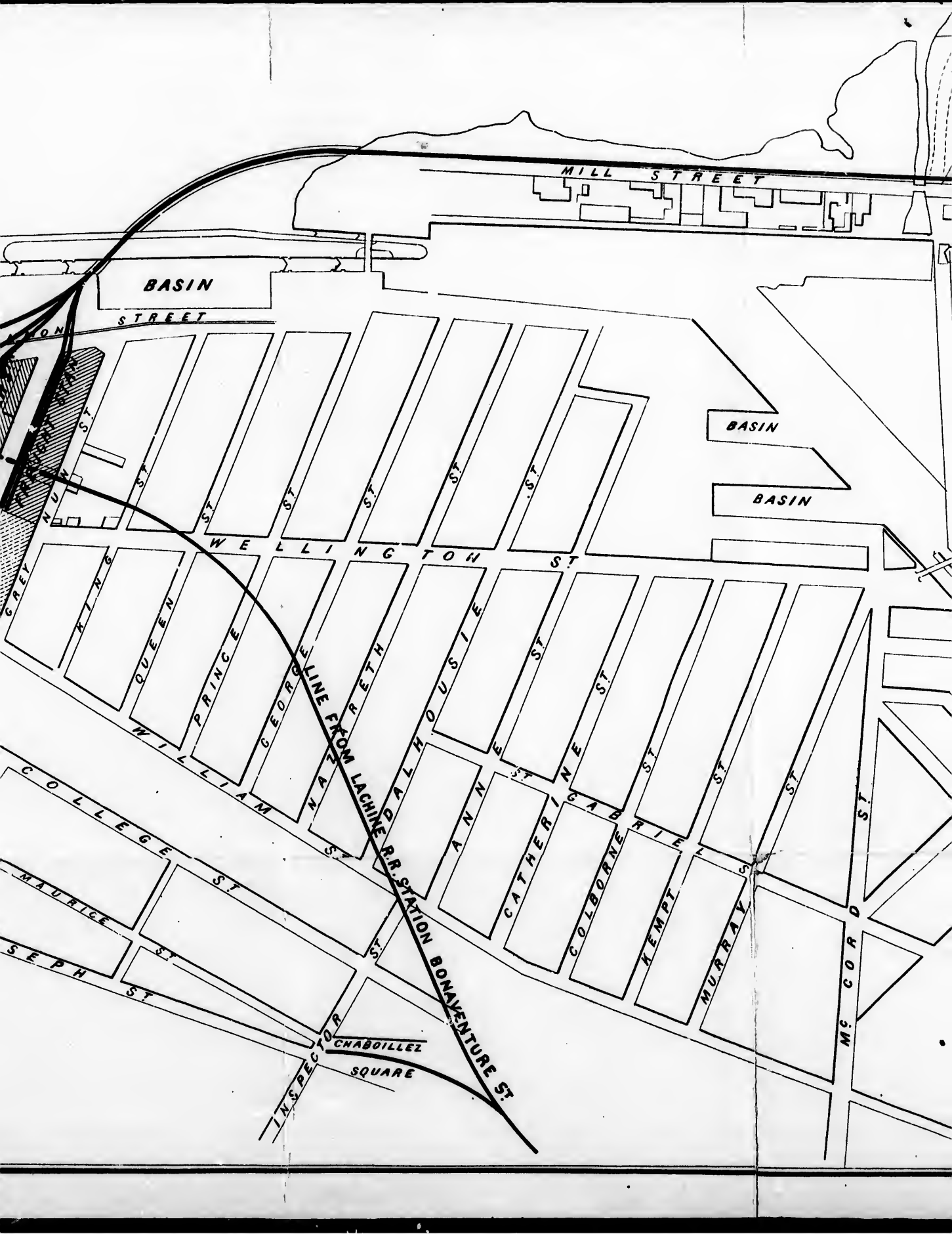
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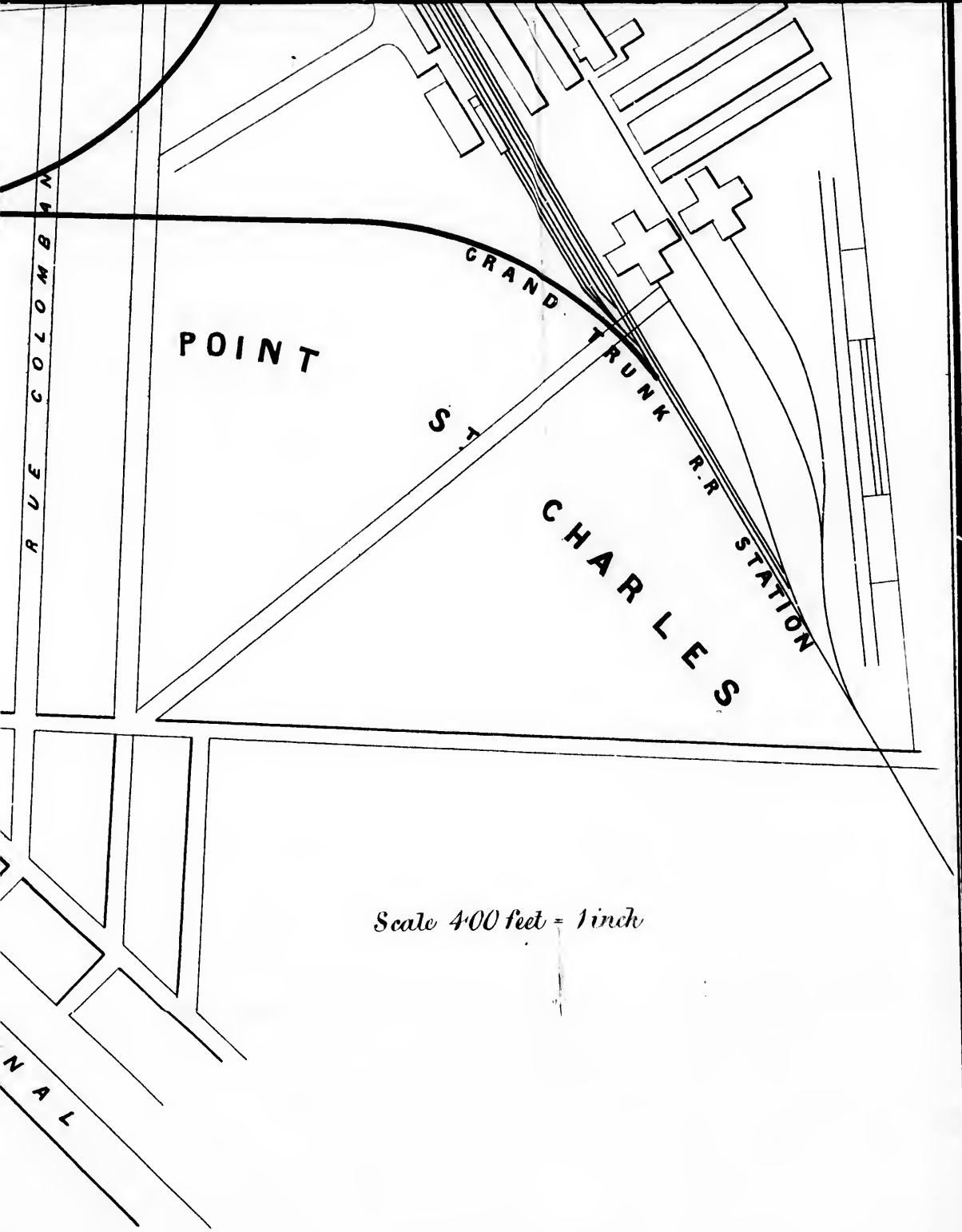
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Scale 400 feet = 1 inch

W. Little. Lith. Montreal

