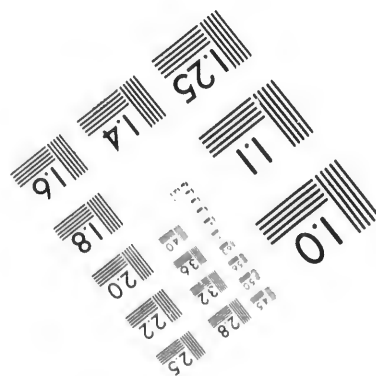
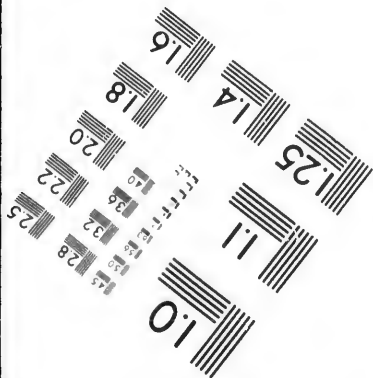
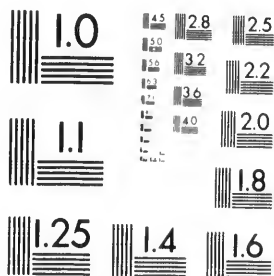


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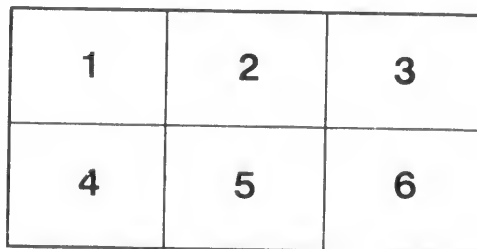
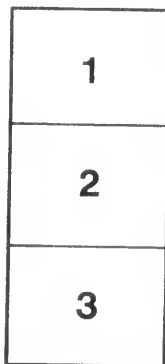
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# REPORT

-- ON --

## The Shortest Route for a Railway

BETWEEN

## LAKE SUPERIOR AND FORT GARRY.

-- BY --

S. J. DAWSON, Civil Engineer.

---

*This Report was moved for by Mr. E. B. BARRON, M. P., for Algoma, at whose instance  
it is now printed for general information.*

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Ottawa:

PRINTED BY MacLEAN, ROGER & CO., "TIMES" OFFICE.

1874.

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# Report on the Shortest Route for a Railway

BETWEEN

## LAKE SUPERIOR AND FORT GARRY

By S. J. DAWSON, Civil Engineer.

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OTTAWA, *22nd December*, 1873.

SIR,—

In a communication addressed to your predecessor, I took occasion to draw attention to the fact that, in prosecuting surveys from time to time, on the line of the Red River route, much information had been obtained, as to the practicability of running railroads in sections where the ground was previously believed to be too rough and broken to admit of their construction, and expressed the opinion, founded on the result of these surveys, that a line of railway could be run from Thunder Bay to Fort Garry, in a line nearly direct. I now beg leave to lay before you a brief statement of the more obvious advantages, which this line—should it be found to be practicable, as I believe it will be,—would have over any other that could be adopted between those places and, among these, I may at once notice the following :—

1st. It would be the shortest which could be adopted between Lake Superior and Fort Garry.

2nd. It would be further South, on a lower level and, consequently, in a better climate, than any other line which could be projected, within British territory, between the same points.

3rd. It would lead to the development of a country rich in timber, having valuable minerals and, in some parts, presenting fine agricultural land, and thus create a local traffic, which it would be needless to look for in lines further to the north.

4th. At some points, it would touch on and for a great part of the way be contiguous to navigable waters which would render a wide extent of country tributary to its traffic.

5th. It would be easy of construction, inasmuch as the present line of communication would afford the means of carrying men, supplies and material to various points, thus admitting of work being carried on simultaneously, at moderate intervals of distance, throughout its whole extent.

6th. Every link of it would become available and yield a return, as made. Thus, when Shebandowan was reached, on the one side, and the Lake of the Woods on the other, the expense at present involved in maintaining teams of horses, for transportation, would be done away with. Fort Garry would at once become easy of access, and the traffic would rapidly increase as the road was extended.

7th. It might be made to form a portion of the Great Pacific road, by being extended to Nipigon Bay and the eastward, and, even between Nipigon Bay and Fort Garry it would still, I am warranted in believing, be the shortest practicable route.

There would, indeed, be a detour in passing from Nipigon Bay to the valley of the Kaministaquia, but lines without serious deviations from a given course, are not to be thought of in a district so broken. Besides, grades have to be considered as well as distance and, in this latter respect, at least, there would be advantage, I believe, in bringing the line of the Pacific road from Nipigon Bay, by way of Black Bay and Thunder Bay, to the valley of the Kaministaquia, rather than to run it up through the broken ground, intervening between Nipigon Bay and the high plateau of the water-shed.

Moreover, it should not be lost sight of that, in bringing the main Pacific line by the route indicated, the expense of a branch would be altogether avoided.

8th. In the Summer season, the shortest line between Fort Garry and Lake Superior, other circumstances being equal, would command the traffic of the West. Now, a line from Thunder Bay to Fort Garry, by the route suggested, would be 375 miles in length, or to make full allowance for deviations, say 390 miles. This would on the one hand be shorter, by about 50 miles, than a line from Nipigon Bay, and on the other nearly, if not quite, a hundred miles shorter than the route by the Northern Pacific

and projected Pembina line. In fact, as regards Fort Garry, the Thunder Bay line would have an advantage of 300 miles over the route by Duluth. That is, taking Thunder Bay as the starting point, to go by water to Duluth 200 miles, and thence by rail to Fort Garry 500 miles, would be 700 miles as against 390 miles by the route under consideration.

But other circumstances would not be equal, for there is a tract of navigable waters on the Thunder Bay route which, when heavy and bulky articles of agricultural produce come to be carried, cannot be left out of consideration, and I do not hesitate to say that, if a railroad is run from Lake Superior to the North West Territories, at a distance from and in a way to ignore these navigable waters, the day will come when the error will be seen and felt.

Apart from the comparative advantages arising from a saving in distance, probable easier grades, a lower general level, a better climate and a region in which are mines, forests of valuable timber and areas of agricultural land to be developed, there are others of scarcely less importance and among these, I would call attention to the excellence of Thunder Bay as a harbour. Well sheltered on all sides, it is at the same time easy of access to sailing vessels, as well as steamers. It opens early in Spring, as compared to most of the other ports on Lake Superior, and, in the Fall, never freezes to an extent to impede navigation, till the middle of December.

Last Spring was unusually late, but Thunder Bay was open on the 9th May, while Duluth was blocked with ice for a fortnight longer and Nipigon Bay did not open till the 23rd of May.

I have traced roughly on the accompanying map, the general direction which the line proposed would follow, namely:—from Thunder Bay by the valley of the Kaministiquia and its tributary, the Matawin, to Shebandowan Lake. Thence, westerly by the north side of that Lake to Kashabowie Portage, thence, westerly, by the valley of a brook falling in at the head of that Portage to the Height of Land, where there is an Indian trail through an easy pass, thence curving down by the valley of a brook running to Windegoostigon Lake, then along the south side of the Lake last named, to the valley of its discharge, the little French River; thence to the head of Kaogassikok Lake, and thence, in as direct a line as can be obtained, to Sturgeon Falls on the River Seine, (a most important point which will be

further referred to). From Sturgeon Falls, the line, in its course to the narrows of the Lake of the Woods, would touch on two other long indentures or arms of Rainy Lake, then skirting the northern coast of the upper part of the Lake of the Woods, it would cross at the narrows to the point forming the north eastern promontory of the Northwest Angle Bay, and from thence would run over a level country, in a line nearly direct, to Fort Garry.

This route is now tolerably well known, except the section intervening between Sturgeon Falls and the narrows of the Lake of the Woods, and that portion would be easy of exploration for it borders on navigable waters. Nothing could be easier than the western section, of a hundred miles from the narrows to Fort Garry, for it is level or but gently sloping throughout.

From Thunder Bay to Sturgeon Falls, the distance is, in round numbers, 160 miles, and in some parts of this Section, the ground is, no doubt, rather broken, but from the reports of the surveying parties attached, from time to time, to the Red River Route, I am warranted in saying that it is quite practicable, and, indeed, I have been myself over a great part of it.

The grand point, in any line starting from Lake Superior, is to find an easy grade in a given course to the plateau of the water-shed, and in no part of the coast that I am aware of, is there a river valley, cutting in a Westerly course, directly across the hilly region, except that of the Matawin. All the other river valleys run more or less with the strike of the mountain ranges, and this valley is at right angles to that strike.

The difference is explained by the Geological structure of the country, to which it is unnecessary here to refer, further than to say that Shebandowan Lake and the valley of its outlet, the Matawin, are in a band of soft slaty rocks of Huronian age, with gneissoid ranges of the harder Laurentian series abutting on either side.

Through these soft schists the Matawin has cut its valley, forming a highway through the rugged country, to the more level regions of the interior.

It is partly to take advantage of this natural highway, lying, as it does, directly in the route to Fort Garry, in an otherwise difficult section, that I urge so strongly the expediency of having this route thoroughly explored, before concluding to adopt any other.

Along the north side of Shebandowan Lake, I can say, from my own experience, that the ground is practicable for a railway and from Kasha-bowie Portage, there is a fine valley running, in the course indicated on the map, to the Height of Land.

Westward of the water-shed, I believe that, with careful survey, a very good line can be found, for the country is far less broken and hilly than on the Lake Superior slope.

It has been said that the Lakes are so numerous, large and deep, as to form a serious obstacle, but, on the route marked out, the large Lakes are avoided, and although there are small ones, occurring at intervals, they can be passed.

It will doubtless suggest itself, that the feasibility of this scheme hinges, in a measure, on the practicability of crossing at the narrows of the Lake of the Woods at a reasonable outlay. This is, of course, a matter requiring thorough investigation. The surveys so far made and soundings taken show that at the narrows, a cluster of Islands extends completely across the Lake, that, in fact, the Lake ends and presents numerous channels, shallow and of moderate width, among low islands mostly well wooded.

The channels are so land-locked and sheltered that there can be no danger of ice shoves in winter, or of a surge arising in summer.

Material is abundant for crib-work on which to support bridges, and I believe that no serious difficulty would be encountered. Indeed, the cost would be much less than would be involved in making a detour, which would of necessity add greatly to the distance, by Rat Portage.

Some misapprehension arises in regard to the "Lake of the Woods," from the circumstance of the whole water area, between the mouth of Rainy River and Rat Portage, being called by that name, for the Indians make a distinction calling the area south of the narrows by the name of "The Lake of the Sand Hills" and that north of the narrows "The Lake of the Woods," the tract of water called the Lake of the Woods on the maps forms in reality two Lakes, and I mention this to let it be understood that I do not so much propose to run a bridge across a Lake as over a series of channels connecting two Lakes.

In a report published some years ago, in commenting on the then mooted scheme of a railroad from Thunder Bay to Rainy Lake, I took

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occasion to remark that the Lake of the Woods would prove a serious obstacle to its being made, at a future period, a portion of a line which should cross the continent, but if the Lake of the Woods can be crossed at the narrows, as I now believe and am convinced it can, this objection, of course, vanishes.

In conclusion, I would draw attention to the point marked "Sturgeon Falls" on the accompanying map.

This place is at the head of navigation, on the north easterly arm of Rainy Lake, and once the railroad had reached it, from Lake Superior, there would from thence, (that is, from Sturgeon Falls,) be navigation, broken only by the Fall at Fort Frances—which twenty-eight feet of Lockage would overcome, all the way to the North West Angle, and it should not be lost sight of that there are already two fine Steamers on these waters, besides Steam Launches and barges.

For the reasons I have stated, I would respectfully recommend that this route should be thoroughly explored.

It has not, as yet been at all examined, professedly, with a view to a Railroad, and in expressing the belief that it is practicable, I speak from the experience of some years in the country to be passed through.

Respectfully submitting this important matter to your notice.

I have the honor to be,

Sir,

Your most obedient servant,

S. J. DAWSON.

Hon. ALEXANDER MCKENZIE,  
Minister of Public Works,  
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Ottawa.

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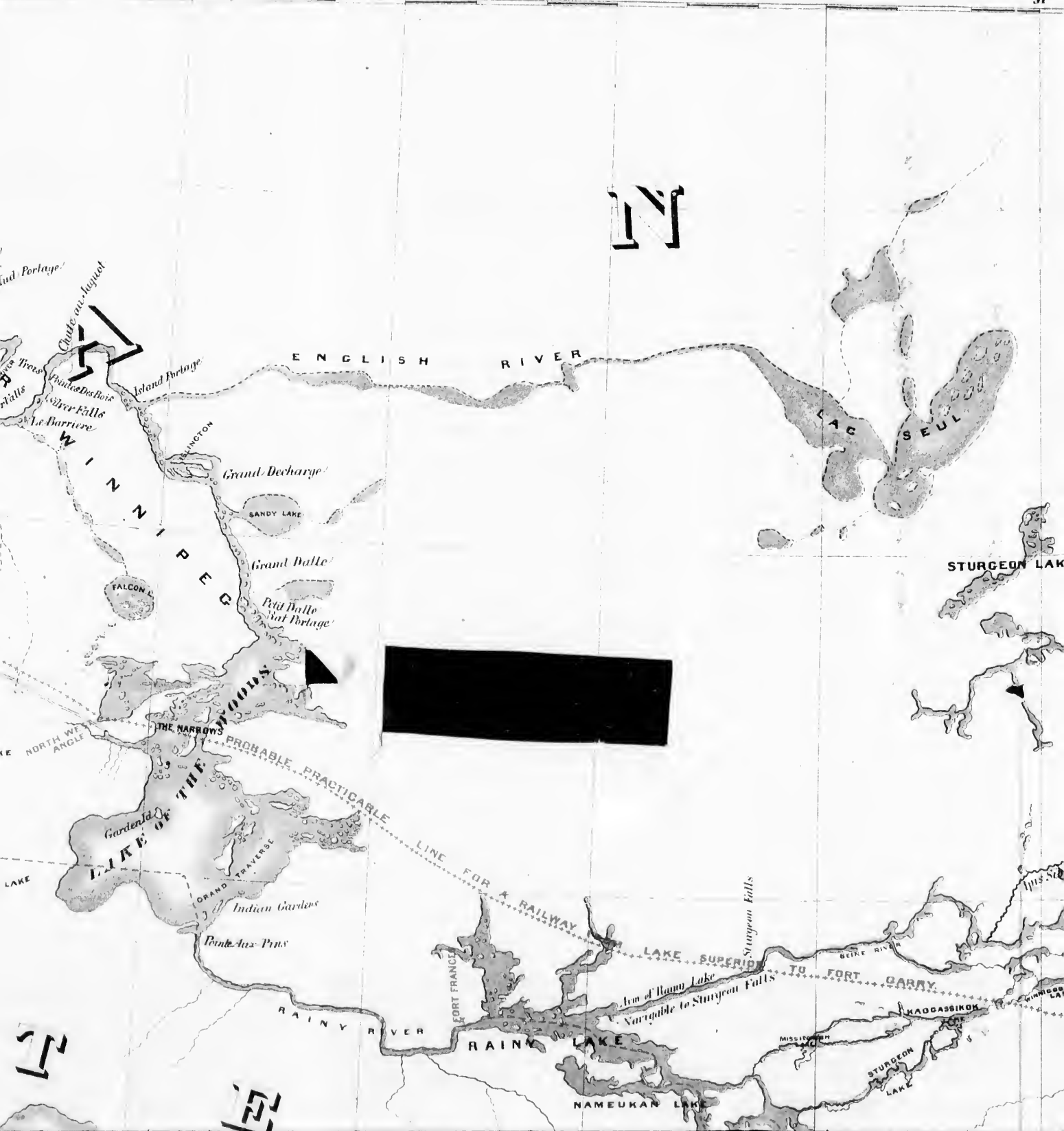
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**MAP**  
**OF PART OF**  
**THE NORTH WEST TERRITORIES,**  
**OF THE**  
**DOMINION OF CANADA,**  
**SHewing**  
**THE SHORTEST ROUTE FOR A RAILWAY BETWEEN**  
**LAKE SUPERIOR AND FORT GARRY,**  
**SUPPOSED TO BE PRACTICABLE.**

SCALE 20 MILES TO ONE INCH.  
**1873.**



*Table of Distances.*

<i>Sault St<sup>e</sup> Marie to Fort Garry via Prince Arthur Landing</i>	
<i>Sault St<sup>e</sup> Marie through Lake Superior to Prince Arthur Landing</i>	275 Miles.
<i>Prince Arthur Landing overland to Fort Garry</i>	375 "
<i>Total</i>	650 "
<hr/>	
<i>Sault St<sup>e</sup> Marie to Fort Garry via Duluth and the Northern Pacific Railway</i>	
<i>Sault St<sup>e</sup> Marie through Lake Superior to Duluth</i>	400 "
<i>Duluth to Moorhead</i>	252 "
<i>Moorhead to Fort Garry</i>	238 "
<i>Total</i>	890 "
<i>Difference in favour of route by Prince Arthur Landing</i>	240 "

*St. Lawrence River*

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Red Lake River

Sheyenne River

ANDERHEAD

CLYNDON

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PACIFIC RAILWAY

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46

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97

96

95

12

LEECH  
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