

NORFOLK AND WESTERN RAILROAD COMPANY.

Philadelphia, November 16th, 1887

To the Executive Committee:

When organized in 1881 your Company operated 428 miles of railroad and transported during that year 216,000 passengers and 538,000 tons of freight. At the close of the present year, 1887, the Company will have in operation about 570 miles of railroad, and its traffic for the year will have increased to about 535,000 passengers and 2,200,000 tons for freight. The increase in the tonnage for 10 months of the present year as compared with the previous year is more than the entire tonnage of the Company for the year 1881. The increase in the Company's property and traffic has reached a point where it is advisable that increased facilities be provided and some modifications made in the organization of the Transportation Department.

When organized in 1881 the 428 miles of railroad belonging to the Company was, for the convenience of management, divided at Lynchburg into two divisions of 214 miles, each in charge of a Division Superintendent who reported to the General Manager. Each of these divisions was sub-divided, the Eastern Division at Petersburg, 83 miles from Norfolk, and the Western Division at Radford, about midway between Lynchburg and Bristol. Each of these sub-divisions were considered as a suitable run for engines and crews, but on account of the present superior condition of track and equipment are now too short, 130 miles being considered the most desirable sub-division.

The Company had in service in 1881, 81 locomotives, of light weight and small capacity, and was provided with engine houses at

Norfolk	for	9	engines	
Petersburg	"	10	"	
Lynchburg	"	12	"	
Radford	"	25	"	(struck through, 22 penciled in)
Bristol	"	none		

No additional engine houses have been built except at Roanoke, where there are now stalls for 20 engines, of which 11 are rented to the Shenandoah Valley Railroad Company.

At the close of the prevent year the Company will have in service about 154 engines of greatly increased size and capacity, and the engine houses now belonging to the Company are so small that in most instances it is necessary to remove the tenders before the engines can go into the houses; and at no point have the Engine Houses a sufficient number of stalls. The Engine Houses at Petersburg and Lynchburg were erected some 35 years since and are at present in such a condition as to require large expenditures for repairs. In consideration of the fact that these are unsuitable and improperly located, it is desirable that instead of repairing them, new houses of proper size and construction be built at more suitable localities.

The motive power of the Company is now of the most approved pattern and it is of the utmost importance that it be properly taken care of and this can only be accomplished by providing for it when not in service, suitable protection from the weather.

The increase in the Company's mileage has been almost exclusively upon the Western Division;- at the close of the year 1887 the mileage in charge of the Superintendent of the Eastern Division will be about 220 miles, wheras the Superintendent of the Western Division will have charge of 356 miles.

The proper conduct of the business requires that the Division

Superintendents should not only be familiar with the condition of the Company's property, but should also be familiar with the requirements of shippers, and this can only be accomplished by frequent trips over the line, and stoppages at all important points and direct communication with shippers. On account of the great increase in traffic, the prompt movement of trains and the quick unloading and handling of cars are matters that are of vital importance to your Company. It is believed that much better results can be accomplished by a re-divisioning of the line, and in anticipation of the completion of the Clinch Valley Division, about 115 miles in length, during the year 1888, I recommend that the line be divided into five divisions as follows:-

Eastern Division,	from Norfolk to Crewe, This including the Lambert's Point & City Point Branches, will be a total mileage of	143.41 miles
Roanoke "	from Crewe to Roanoke, including the Blue Ridge Branch,	136.60 miles
New River "	from Roanoke to Bluefields,	105.80 miles
Western "	" Radford to Bristol, including the Cripple Creek Extension and branches,	154.08 miles
Clinch Valley "	from Bluefields to Norton, including all branches to coal mines	142.27 miles
	Total	682.16 miles

Each of these Divisions to be in charge of a Division Superintendent, who will report to the General Manager who should have an Assistant.

The re-divisioning of the line will necessitate the construction at both Crewe and Bluefields, of an engine house, turn table, small repair shops, store house, office building, houses for employees, yards and sidings for the handling and making up of trains,

the estimated cost of these facilities, at each point, being about \$130,000. There should also be erected at Bristol an engine house to accommodate 10 engines, estimated to cost \$15,000.00.

In anticipation of this necessary work, your management has for the past year been quietly securing the necessary real estate at the points designated, and in doing so has acquired lands at very low prices, and plans are herewith submitted showing how these lands are to be utilized. The property required for railroad purposes should be deeded directly to the Railroad Company; such lands as will not be required for railroad purposes, but used for buildings for employees and for general town purposes, should be deeded to the Iron Belt Land Mining & Development Company, and it is propose, that such land as may not be required for Company purposes be sold as rapidly as occasion will admit, it being the opinion of the management of the Company that important centres of trade and business can be built up at these points, thus adding to the traffic of the Company.

The amounts realized from the sales of land will, to some extent, reimburse the Company for the expenses incurred.

Accompanying this will be found statements of the General Manager showing the desired chances in organization and comparative expenses, also estimates showing the cost of improvements at the several points mentioned.

Heretofore it has been the practice of the company to do the bulk of improvement and extension work during the latter part of each year, as during those months the earnings of the Company are the heaviest and the Company has had more money at its disposal. The present financial condition of the Company is such that for the improvements now recommended delay for financial causes will be unnecessary, and it is believed by the officers of the Company that

the work should be undertaken at the earliest possible moment.

The facilities of the Company are now taxed to their utmost with the present business. At this rate the Company is handling from the coal fields an average of over 200 cars of coal and coke per day. These cars are collected from 8 short branches, made up into trains in the Pocahontas or Flat Top yards and are thence sent through to Radford a distance of 75 miles. There is no room at the Pocahontas or Flat Top yards for further extensions and with the increased shipments from the new operations and the construction of new coke ovens now in progress, the traffic will be so largely increased by next spring that additional yard room will be absolutely necessary.

Under the plan herein recommended these facilities will be provided at Bluefields. The coke and coal will then be gathered from the various branches and taken to the Bluefield yard where it will be made up into trains and then sent through to Roanoke.

Heretofore it has been the custom of your management to submit early in each year an estimate of the improvements required, but the importance in preparing in time for the increase of business which from the many new industries now in progress upon our line may be anticipated for the coming year renders it necessary that the matter be considered earlier than customary.

In order therefore that you may consider the matter as a whole there will be attached to this statements prepared by the General Manager and Chief Engineer showing the requirements for next year in addition to those especially referred to in this report.

The following is a summary:-

G E N E R A L S U M M A R Y

Estimated Cost to the Norfolk and Western Railroad Company of the increased facilities incident to the re-divisioning of the line, necessitated by the increasing traffic of the Company.

CREWE,		
Lands 100-acres	4.000	
8 miles yards & Sidings, etc.	67.788	
Engine-house, Shops, Store-house, Office, &c.	62.780	134.568.
BLUEFIELDS		
Land 30 acres	3.800	
5 miles yards and Sidings &c.	48.919.50	
Engine-house, Shops, Store-house, Offices &c	61.940.	113.650.50
ROANOKE,		
3 miles yards sidings, etc.	42.844.20	
Offices, etc.	2,310	45.154.20
NEW RIVER.		
Direct connection with New River Div'n including bridges, interlocking signals	57.000.	
		351.381.70

Estimated Cost of General Improvements & Extensions to Company's property for 1888.

4 new Stations including Union Passenger Station at Lynchburg and enlargements of 20 Old stations	84.246	
29 houses for employees &c.	12,535	
48 Tool houses & 55 Watch Boxes	4.050	
6-1/2 miles additional sidings including switches	70,206	
Engine-house at Bristol	15.000	
12 Iron bridges & various small structures	122,800	
Advances to Norfolk Terminal Company for additional side tracks & houses for employees	6,456	315,293.
		666.674.70

Estimated Cost to the Iron Belt Land Mining & Development Company incident to the re-divisioning of the line

436 acres at Crewe, costing	10,900	
Improvements including 30 houses	34.850	45.750
279 acres land Bluefields costing	21,274	
Improvements including Eating-house and 21 houses	46.085	67,289
735 acres & 51 houses and Improvements		113,039

The annual rentals to be paid by employees for houses, as estimated by General Manager Sands, aggregates \$8250 or over 7% on the total cost of all land and buildings. It is believed that a very considerable portion of the cost of lands and improvements will be realized from the sale of lots and houses.

Total cost to both Companies	779,313.70
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The accompanying letters and statements show in detail the expenditures for improvements and extensions required and recommended. The following explanations, however, are necessary:-

The members of our Board of Directors are fully acquainted with the retched facilities now afforded to passenger travel at Lynchburg, which are not only inconvenient but extremely dangerous. The only location at Lynchburg suitable for the erection of a union station is upon the ground now occupied by the present round house and machine shop, which will be vacated and can be torn down upon the erection of the new facilities at Crewe and Bluefields. It is proposed to erect a passenger station similar in its general features to the plan herewith submitted, upon the conditions, however, that the City of Lynchburg or the citizens should purchase and donate to the Company the Langhorn property as shown on the plan, which will cost about \$25,000; the cost of improvements to be borne by the Norfolk and Western Railroad Company but to be used jointly by our Company, the Virginia Midland and the Richmond and Alleghany, the two latter companies to pay each one third of the interest on the cost of the improvements and the estimated value of the real estate; the operating expenses of the station to be borne jointly by the three Companies; the control and operation of the station to be governed by the Norfolk and Western Railroad Company.

The houses for employees as shown in the statement are not to be rented to the employees, the custom of the Company being to pay reduced wages to employees when occupying company's houses, the returns from such investments being estimated at from 12% to 15%.

In the matter of iron bridges, the principal item of cost will be for the two crossings of the Elizabeth River near Norfolk. The present bridges were built over 30 years since, mostly of cast iron

and of a design now obsolete. Some 3 years since to accommodate the passage of our heavy engines these bridges were strengthened by wooden supports which were put in with the consent of the Harbor Commissioners on the understanding that if they were found to obstruct navigation that they would be removed or new bridges erected. More than a year since the Company was notified by the Commissioners that navigation was being obstructed, and the Company was ordered to remove the supports or build new bridges, and it has only been through the leniency of the Commissioners that the matter has been deferred until the present time. It is now necessary that the new bridges should be erected.

EQUIPMENT

In regard to the equipment of the Company I report that at the close of the present year the Company will have in service 154 engines, which is a sufficient number to move the freight equipment of the Company, which consists of 5320 cars of all descriptions. The coal and coke cars already provided have proved sufficient for the immediate requirements of that branch of the business, but for many months past the other business of the Company has been seriously effected through the lack of a sufficient number of box cars and flat cars.

Upon the completion of the 3 new iron furnaces and more than 1000 coke ovens now in course of construction or under contract, an increased number of coal and coke cars will be absolutely necessary, and it is greatly to be desired that a steady and continued increase to the box car equipment of the Company be provided. An increase in freight equipment will require a proportionate increase in the number of engines. During the present year the Company has provided new equipment to the value of about

\$1,000,000, and as a consequence the gross earnings of the Company will have to increase very nearly if not quite \$1,000,000, of which \$400,000 will be clear profit. It is believed that the increase in earnings of the Company is now solely dependent upon the quantity of equipment provided, and that the matter should now be carefully considered so that arrangements may be made for the equipment to be provided for the business of the coming year, and to this end I beg to make the following suggestions:-

The most serious obstacle in the way of rapid construction of equipment is the getting together of the materials and supplies needed in its construction. To meet this difficulty it is advisable that there be constantly kept on hand everything required for the construction of 100 box cars, 100 coal and coke cars and two engines the aggregate value of this material being estimated at \$75,000 and that upon completion of the remaining \$250,000 Clinch Valley Equipment, arrangements be made with the Roanoke Machine Works for the construction of 2 engines per month and 5 freight cars per day of the class for which at the moment there may be the most pressing necessity, the number of cars to be increased or decreased or work entirely suspended as the business of the Company may justify.

If the recommendations herein made meet with your approval it is suggested that resolutions be adopted to that effect, and that the same be submitted with this report to the Board of Directors at their next meeting Wednesday November 30th in order that early action may be taken and the work undertaken without delay so that it may be completed as early next spring as possible.

Very respectfully,

(s) F. J. Kimball

President

Philadelphia, November 16th, 1887