

The contract for the trenching of the pipe was let to Mr. Thos. McLaughlin, of Ottawa, for \$63,514 and work is now proceeding very rapidly. Mr. J. B. McRae, consulting engineer, Ottawa, has charge of the work. The tender for the lock-bar type of pipe was awarded to Messrs. Laurin & Leitch, of Montreal, at a cost of \$19,400.

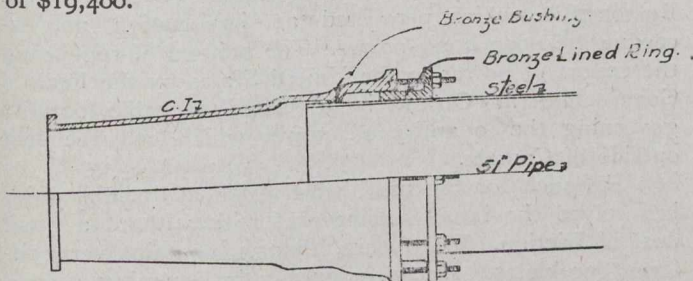


Fig. 4.—Detail of 51-inch x 42-inch Reducer Expansion Joint.

ONTARIO HYDRO RADIAL PROJECTS.

The Hydro-Electric Power Commission of Ontario has prepared an elaborate scheme of hydro radials for what is generally known as the western peninsula of the province. The project, with a total estimated cost of about \$13,734,000, will consist of a line from Toronto westward to London, with an approximate length of 127 miles, divided into eight sections as follows:—

Toronto Terminal-Humber River section: From a passenger terminal located near the foot of Yonge Street the line will run westerly to Sunnyside, using Harbor Board property and private right-of-way wherever possible; thence to the Humber River the line will parallel the G.T.R., as at present constructed.

Humber River-Port Credit section: From the west limits of the city of Toronto at the Humber River, the line runs westerly parallel to the G.T.R. main line. It crosses the Credit River at a point between the Lake Shore Road and the G.T.R.

Port Credit-Milton section: Leaving Port Credit, the line crosses the G.T.R. about one mile west, running thence to a point north of Sheridan P.O., and from there directly to Milton.

Milton-Guelph section: Crossing the C.P.R. west of the C.P.R. station at Milton, location runs to township of Esquesing, thence to township of Nassagaweya, thence to township of Puslinch, and thence in the general direction of the Eramosa River to Guelph.

Guelph-Berlin section: From Guelph the line continues to Berlin, leaving Guelph in a westerly direction and entering Berlin from the northeast. The location lies north of the present G.T.R. between Guelph and Berlin.

Berlin-Stratford section: From Berlin the line runs to the G.T.R. main line, which it parallels to a point near Baden, and thence south of the G.T.R. to a point east of Stratford, where it will cross the G.T.R. and enter the city.

Stratford-St. Marys section: In Stratford the line runs westerly over private property and over the city streets to the western limits of the city. Thence it runs parallel to the G.T.R. to St. Marys, through Downie and Blanchard townships. It then runs southerly and westerly through the town over private property and streets, crossing the C.P.R. at grade and thence over the Thames River.

St. Marys-London section: From the western limits of the town of St. Marys the line runs in a southwesterly direction through Blanchard and Biddulph townships parallel to the G.T.R. to Granton. From Granton it runs through Biddulph township southerly to the northern boundary of London township. From thence it runs southeast through London township to a point between the Sarnia Road and the Thames River, a short distance west of the Wharnccliffe Road just outside the northwesterly boundary line of the city of London. From this point the line runs southeasterly over private property and city streets and over the Thames River to Bathurst Street, and easterly along Bathurst Street to the London and Port Stanley Railway, which at present terminates on Bathurst Street just east of Richmond Street.

In this system, as outlined a few days ago by Sir Adam Beck, chairman of the Commission, the total amount of debentures to be issued by the respective municipalities for deposit with the Commission is as follows: Township of London, \$630,389; Trafalgar, \$578,921; Waterloo, \$521,903; Blanchard, \$402,909; Wilmot, \$479,065; Downie, \$418,735; South Easthope, \$316,262; Toronto, \$345,355; Nassagaweya, \$343,147; Guelph, \$361,025; Etobicoke, \$401,335; North Easthope, \$248,585; Biddulph, \$142,166; Esquesing, \$91,922; Puslinch, \$70,300; Eramosa, \$42,180; Nelson, \$31,130; Ellice, \$33,100; East Zorra, \$39,000.

City of Toronto, \$4,240,196; London, \$1,109,303; Berlin, \$774,040; Guelph, \$734,862; Stratford, \$651,735. Town of Waterloo, \$193,900; St. Marys, \$153,940; Milton, \$65,000.

Village of Mimico, \$111,200; New Toronto, \$82,250; Port Credit, \$54,050; New Hamburg, \$66,250.

Total amount of bonds to be issued, \$13,734,155.

The maintenance charges for the entire road, apart from operating expenses, are estimated at \$214,583. The operating revenue is estimated at \$1,692,175, and the operating and maintenance at \$817,025. The total amount estimated to be needed annually for interest charges is \$686,708, and the sinking funds needed for the whole road amount to \$137,342.

On Tuesday, December 7th, a conference was held relative to Toronto's share of the scheme, a report of which is too late for publication in this issue. At this meeting Sir Adam Beck, and the city's Rapid Transit Commission, consisting of Messrs. E. L. Cousins, chief engineer of the Toronto Harbor Commission; F. A. Gaby, chief engineer of the Hydro-Electric Power Commission, and R. C. Harris, commissioner of works for the city, met the Board of Control for the purpose of discussing the scheme prior to submitting it to the City Council.

It is probable that the various municipalities concerned will vote upon the project at the January municipal elections.

RAILROAD EARNINGS

		Canadian Pacific Railway		Inc.
		1915.	1914.	
November 7	....	\$3,015,000	\$1,908,000	+ \$1,107,000
November 14	....	3,035,000	1,878,000	+ 1,157,000
November 21	....	2,960,000	1,729,000	+ 1,231,000
		Grand Trunk Railway		
		1915.	1914.	
November 7	....	\$ 986,755	\$ 906,941	+ \$ 79,824
November 14	....	971,715	860,676	+ 111,039
November 21	....	935,884	841,607	+ 94,277
		Canadian Northern Railway		
		1915.	1914.	
November 7	....	\$ 806,500	\$ 525,800	+ \$ 280,700
November 14	....	820,800	533,700	+ 287,100
November 21	....	768,900	571,300	+ 257,400