

A REINFORCED CONCRETE PAVEMENT.

During the summer of 1910 a reinforced concrete pavement was laid in Plymouth, Wisconsin. The base was laid 5 in. thick and the surface coat $1\frac{1}{2}$ in. thick, according to standard concrete specifications. Three unusual features of construction were used in the building of this pavement. "Pecky" cypress was used for expansion joints in place of the usual asphaltum, or tar. The 1-in. by 8-in. boards were used along each gutter and every 4 feet across the street, and at the end of the ties of the street car tracks. These boards were used as forms for the outside of the cement gutters and as a template for the crown of the street. A considerable saving of lumber as well as time in placing and removing the same was thus effected.

The reinforcement used was Triangle Mesh, Style 7 woven wire. This was placed directly on the concrete base so as to lie between the surface and the base.

The surface-finished coat consisted of granite chips from $\frac{1}{4}$ in. to $\frac{3}{4}$ in. in diameter, granite screenings from $\frac{1}{4}$ in. down to dust and Portland cement in proportion to give the densest mixture. After this mortar was spread over the concrete base and the mesh, it was troweled smooth, and while still soft the larger granite chips were cast by hand over the surface of the pavement, giving the entire area a roughened appearance. Some of the stones disappeared entirely into the soft cement mortar, leaving depressions in the pavement, while the others sank in only part way. The result was a surface which, while level enough to cause no annoyance in riding over it, was still rough enough to overcome any slipperiness of surface.

This pavement, in monolithic squares of 40 feet, is now nearly two years old, has passed through two winters, and there is not the sign of a crack or a flaw in it. It is not slippery and does not wear perceptibly. The expansion joints have worn off some, but not enough to show any abrasion of the concrete along the edges of the boards. The contract price for this pavement, including grading, was \$1.23 $\frac{1}{2}$ cent per square yard. The pavement was designed and constructed under the supervision of Mr. W. G. Kirchoffer, of Madison, Wisconsin.

MINING CLUB IN VANCOUVER, B.C.

The Vancouver Mining Club was recently organized by a large number of the city's well known mining men.

Mayor Findlay outlined the objects of the association, and stated that it could and would, no doubt, take a very prominent place in the mining affairs of the province. The public had lost faith in mining schemes for they had been victimized by the wild-catter and it was the duty of the club to put before the public the real facts of the different mining activities that from time to time excite the public.

Mr. R. Hedley spoke of the work of other mining clubs. The Spokane Mining Club, he said, had aided the mining interests of that part of the country to a considerable extent. The club in Slocan had also done good work in making some mining promoters retract their prospects for getting rich quick. The association, in his opinion, would make Vancouver the headquarters of all mining activities for the province and would also be a place where reliable information could be obtained relative to the mineral resources of the province.

ORDERS OF THE RAILWAY COMMISSIONERS OF CANADA.

Each week on this page may be found summaries of orders passed by the Board of Railway Commissioners, to date. This will facilitate ready reference and easy filing. Copies of these orders may be secured from The Canadian Engineer for small fee.

- 16347—April 17—Directing G.T.R. to construct within 30 days from date of this Order spur from main line into property of Clifton Sand, Gravel & Construction Co., in 1wp. of Stamford, County of Welland, Ontario.
- 16348—April 20—Authorizing C.P.R. to reconstruct 8 bridges on its Crow's Nest, Lethbridge, Havelock, Red Deer, Mountain and Farnham Subdivisions; and construct bridge at mileage 38.7, Kootenay Central Sub-division.
- 16350—April 20—Approving location of Kettle Valley Ry. Co. between mileage 53.92 and 65 west of Midway, B.C.
- 16351—April 20—Approving location of James Bay & Eastern (C.N.R.) station grounds at St. Feleicien, Que.
- 16352—April 20—Authorizing G.T.R. to reconstruct 5 bridges on its 12th District Northern Division.
- 16353—April 20—Approving location of G.T.P. B.L. Co. stations on its Tofield-Calgary Branch (11 stations).
- 16354—April 20—Approving location of C.N.O. Ry. through unsurveyed territory, Dist. of Thunder Bay, mileage 363 to 383 from Sudbury Jct.
- 16355—April 19—Authorizing C.P.R. to construct its Bassano to Irricano Branch across 13 highways and diversions in Alberta.
- 16356—April 22—Authorizing G.T.P. B.L. Co. to cross and divert highway in N.E. $\frac{1}{4}$ of Sec. 23, Twp. 53, R. 8, west 5th. Mileage 67.9, Alberta.
- 16357—April 23—Directing Bell Telephone Co. to extend its telephone lines into Township of York, to provide a telephone service to said W. E. Duncan, Wm. E. Riley, and J. B. Riley, work to be completed within 30 days.
- 16358—April 23—Dismissing application of city of Valleyfield, Que., re G.T.R. crossing at Edmond Street.
- 16359—April 23—Directing city of Montreal to commence work of constructing subway authorized by Order 10455 of April 28th, 1910, not later than 15th May, 1912, same to be completed within 6 months from 15th May, 1912.
- 16360—April 22—Approving revised plan of C.N.R. Standard Pile and Frame Trestle, for Eastern Lines.
- 16361—April 22—Approving location of Algoma Eastern Rly. Station at Nairn Centre, Ontario.
- 16362—April 23—Authorizing G.T.P. Ry. Co. to construct spur for Fitchhugh Lime and Stone Co., Ltd., near Edmonton, Alta.
- 16363—April 13—Authorizing G.T.P. B.L. Co. to erect stations at 18 points on its Regina-Boundary Branch, Saskatchewan.
- 16364—April 23—Authorizing C.P.R. to construct its Kipp to Aldersyde Branch across road allowance at mileage 83.66.
- 16365—April 22—16366—April 18—Authorizing C.P.R. to construct three spurs for Tyndall Quarry Co., Ltd., near Winnipeg, Man., and spur for J. Wilson, near village of Como, Que.
- 16367—April 24—Authorizing C.P.R. to use and operate bridge No. 87.9, Swift Current Subdivision.
- 16368—April 23—Authorizing London, Lake Erie Ry. and T. Co. to cross with spur line into their gravel pit London and Port Stanley Gravel Road, at Lambeth, County of Middlesex, Ontario.
- 16369—April 26—16370—April 25—Authorizing G.T.R. to construct siding into premises of New Burford Canning Co., Ltd., Twp. of Burford, County of Brant, Ontario, and for Ford Motor Co., Ltd., in the Twp. of Sandwich East, County of Essex, Ont. (Windsor).
- 16371—April 24—Amending Order 16159, March 20, 1912, by making Lot "1" read Lot "2" in recital and operative parts of Order.
- 16372—April 24—Authorizing G.T.R. to construct 7 bridges on its Holme-dale Branch, Brantford, Ontario.
- 16373—April 24—Authorizing T.H. & B. Ry. to construct spur into premises of Fretz, Limited, Hamilton, Ontario.
- 16374—April 25—Approving locations of G.T.P. B.L. Co.'s stations on its Moose Jaw North-West Branch, (7 station sites).
- 16375—April 26—Authorizing C.N.Q. Ry. to construct spur on Prince Albert Street, Tetraultville, now Montreal, Que., for delivery of carload freight to residents.
- 16376—April 23—Approving revised location of C.N.O. Ry. station grounds at mileage 174.5, Twp. of Storrington, Ontario.
- 16377—April 24—Authorizing C.N.O.R. to cross seven highways in the County of Pontiac, Quebec.
- 16378—April 24—Authorizing C.N.O. Ry. (Montreal-Port Arthur Line) to cross public road between Lots 3 and 4 in Twp. of Bristol, County of Pontiac, Que.
- 16379—April 22—Authorizing C.N.O. Ry. to cross seven highways in the Twps. of March and Torbolton, and Fitzroy, Ontario.
- 16380—April 24—Authorizing C.N.O. Ry. to construct spur track to proposed local freight terminals in city of Regina, Sask.
- 16381—April 24—Authorizing C.N. Alberta Ry. to cross with lines and tracks of its main line under lines and tracks of G.T.P. Ry. main line in N.W. $\frac{1}{4}$ Sec. 3, Twp. 53, R. 18, W. 5 M.
- 16382—April 25—Approving by-law No. 1 of Pere Marquette R.R. authorizing Geo. C. Conn, E.T.M., and Wm. E. Wolfenden, G.P.A., to prepare and issue tariffs of passenger tolls.
- 16383—April 24—Approving location of Lumber Conveyor of T. S. Sims & Co., Ltd., Fairville, N.B., across C.P.R.
- 16384—April 27—Authorizing C.P.R. to reconstruct 5 bridges on its Mac-Leod, and Cartier Subdivisions, Alta. & Lake Superior Divisions.
- 16385—April 25—16386—April 24—16387—April 25—16389—April 26—16390—April 25—16391—April 22—Authorizing C.P.R. to construct spur for Redcliffe Clay Products Co., Ltd., Redcliffe, Alta. For Whitworth Brothers at Pilot Butte, Sask. For Sovereign Lime Works, near Angus Station, Que. For Messrs. F. W. Baird & Son, Parish of St. Jeanne de Neuville, County of Portneuf, Que. For C.P.R. on Lot 95, Parish of St. Paul, Manitoba. For C.P.R. on Lot DGS, 25, St. John, city of Winnipeg, Manitoba. For James McLaren Co., Ltd., in Twp. of Campbell, County of Labelle, Que.
- 16392—April 20—Authorizing C.P.R. to expropriate for purposes of taking care of traffic, lands in the Parish of Kildonan, and part of N.W. $\frac{1}{4}$ of Sec. 17, Twp. 11, R. 4, E.P.M., to establish East Yard near Winnipeg, Manitoba.