



Cape May County, Holly Beach Turnpike, During Construction, Pumping in Sandfill.

# **SEVENTEENTH ANNUAL REPORT**

**OF THE**

## **Commissioner of Public Roads**

**For the Year ending October 31**

**1910**

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1911.

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OFFICE OF COMMISSIONER OF PUBLIC ROADS,  
TRENTON, NEW JERSEY, January 14, 1911.

*To His Excellency, John Franklin Fort, Governor, and the Legislature of New Jersey:*

I have the honor to submit the Seventeenth Annual Report of the Commissioner of Public Roads for the fiscal year ending October 31, 1910, with such comments and suggestions as existing circumstances seem to require.

FREDERICK GILKYSON,  
*Commissioner of Public Roads.*

# Report.

In compliance with the act of March 27, 1905, we make a statement of cost of roads, as follows:

## COST OF ROADS.

### Atlantic County.

	Miles.		
Cologne and Port Republic road. ....	8.077		
Cost. ....		\$18,199.10	
State's share. ....			\$6,066.37

### Camden County.

	Miles.		
Coffin's Corner and Gibbsboro road. ....	2.247		
Cost. ....		\$24,001.01	
State's share. ....			\$8,000.33
Nicholson road. ....	1.237		
Cost. ....		12,654.20	
State's share. ....			4,218.07
Brown's Corner road. ....	1.629		
Cost. ....		19,496.44	
State's share. ....			6,498.81
	5.113	\$56,151.65	\$18,717.21

### Cape May County.

	Miles.		
Holly Beach turnpike. ....	3.042		
Cost. ....		\$56,530.57	
State's share. ....			\$18,843.52

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## Essex County.

	Miles.		
Runnymede road.....	1.701		
Cost.....		\$18,883.76	
State's share.....			\$6,294.59
Mountain avenue.....	0.061		
Cost.....		561.00	
State's share.....			187.00
	<hr/>	<hr/>	<hr/>
	1.762	\$19,444.76	\$6,481.59

## Hunterdon County.

	Miles.		
Ringoes and Woodsville road.....	4.081		
Cost.....		\$35,106.33	
State's share.....			\$11,702.11
Asbury and Ludlow road.....	1.000		
Cost.....		7,164.21	
State's share.....			2,388.07
Milford road.....	5.126		
Cost.....		39,106.66	
State's share.....			13,035.55
	<hr/>	<hr/>	<hr/>
	10.207	\$81,377.20	\$27,125.73

## Middlesex County.

	Miles.		
Kingston Lane.....	0.721		
Cost.....		\$6,276.61	
State's share.....			\$2,092.20
Main street, Milltown.....	1.303		
Cost.....		15,041.17	
State's share.....			5,013.72
Somerset street, New Brunswick.....	0.386		
Cost.....		4,142.50	
State's share.....			1,380.83
	<hr/>	<hr/>	<hr/>
	2.410	\$25,460.28	\$8,486.75



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## Monmouth County.

	Miles.		
Red Bank and Holmdel road, first section	3.826		
Cost. ....		\$18,561.66	
State's share. ....			\$6,187.22
Farmingdale and Hamilton road, second section. ....	1.900		
Cost. ....		10,386.00	
State's share. ....			3,462.00
Lakewood and Adelphia road, second section. ....	2.500		
Cost. ....		6,190.00	
State's share. ....			2,063.33
	<hr/> 8.226	<hr/> \$35,137.66	<hr/> \$11,712.55

## Morris County.

	Miles.		
Morris Plains and Parsippany road. ....	2.598		
Cost. ....		\$30,636.48	
State's share. ....			\$10,212.16
Gladstone and Chester road. ....	3.987		
Cost. ....		40,902.22	
State's share. ....			13,634.07
Pompton and Newark turnpike. ....	2.938		
Cost. ....		16,272.90	
State's share. ....			5,424.30
	<hr/> 9.523	<hr/> \$87,811.60	<hr/> \$29,270.53

## Passaic County.

	Miles.		
Union avenue, Paterson. ....	.789		
Cost. ....		\$11,712.54	
State's share. ....			\$3,904.18

## Salem County.

	Miles.		
Barnsboro turnpike. ....	3.310		
Cost. ....		\$10,973.30	
State's share. ....			\$3,657.77

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## Somerset County.

	Miles.		
Chester road. ....	0.586		
Cost. ....		\$6,777.72	
State's share. ....			\$2,259.24

## Sussex County.

	Miles.		
Frankford and Sandyston road, second section. ....	3.455		
Cost. ....		\$30,620.22	
State's share. ....			\$10,206.74
Frankford and Sandyston road, third section. ....	3.278		
Cost. ....		22,892.97	
State's share. ....			7,630.99
	6.733	\$53,513.19	\$17,837.73

## Union County.

	Miles.		
Raritan road and Lake avenue. ....	2.465		
Cost. ....		\$40,429.74	
State's share. ....			\$13,476.58
Washington avenue and Edgar road connection. ....	0.246		
Cost. ....		3,209.00	
State's share. ....			1,069.67
Edgar road, Lenington street and Milton avenue connection. ....	0.132		
Cost. ....		1,473.05	
State's share. ....			491.02
	2.843	\$45,111.79	\$15,037.27

Total number of miles. ....	62.621		
Total cost allowed. ....		\$508,201.36	
Total paid on contracts from 1910 appropriation. ....			\$169,400.44
Total paid supervisors. ....			24,807.30
Total paid out. ....			194,207.74
Appropriation. ....			300,000.00
Balance due, against which contracts were filed October 31, 1910. ....			105,792.26

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The following roads were paid for from the appropriation for the year 1909, but were not completed in time to be listed in the 1909 report:

## Essex County.

	Miles.		
River road.....	1.223		
Cost.....		\$13,491.17	
State's share.....			\$4,497.06

## Middlesex County.

	Miles.		
Seventh street, New Market.....	1.685		
Cost.....		\$13,076.68	
State's share.....			\$4,358.89
Deans and Franklin Park road.....	2.748		
Cost.....		8,984.00	
State's share.....			2,994.66
	<hr/>	<hr/>	<hr/>
	4.433	\$22,060.68	\$7,353.55

## Somerset County.

	Miles.		
Warrenville road.....	0.682		
Cost.....		\$7,756.45	
State's share.....			\$2,585.48

## Warren County.

	Miles.		
Beattystown road.....	8.587		
Cost.....		\$62,507.54	
State's share.....			\$20,835.85
Total number of miles.....	14.925		
Total cost allowed.....		\$105,815.84	
Total paid on contracts from 1909 ap- propriation.....			\$35,271.94



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The following road was paid for from the appropriation for the year 1908, but its completion has been delayed until this year.

## Essex County.

	Miles.	
Central avenue and Greenbrook avenue.	2.828	
Cost. ....		\$28,016.80
State's share. ....		\$9,338.93

The total length of improved roads added to our mileage during the year 1910, is as follows:

*Paid from 1910 appropriation.....	62.621 miles.
Paid from 1909 appropriation.....	14.925 "
Paid from 1908 appropriation.....	2.828 "
	<hr/>
	80.374 miles.

\*Includes 6.765 miles completed after end of 1909 fiscal year and included in 1909 mileage in 1909 report, but paid from 1910 appropriation. In the 1910 report this has been deducted from the 1909 and added to the 1910 mileage.

The following roads were paid for from the appropriation for the year 1911 and will be more fully reported and described in the 1911 report:

## Camden County.

	Miles.	Cost.
Chapel avenue. ....	0.855	\$12,114.32

## Essex County.

Fairview avenue. ....	2.344	\$20,193.25
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## Mercer County.

Portion of Brunswick Pike road, second part. ....	1.104	\$9,953.65
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## Monmouth County.

Red Bank and Holmdel road, second section. ....	1.550	\$13,441.00
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## Passaic County.

	Miles.	Cost.
Main street extension.....	0.223	4,107.00

## Union County.

Springfield avenue.....	1.584	\$26,559.40
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## Warren County.

Buttzeville road.....	3.678	\$28,717.30
Total number of miles.....	11.338	
Total cost.....		\$115,085.92

The following roads are approaching completion, but were not finished in time to be reported in the preceding lists:

## Burlington County.

	Miles.	Cost.
Atsion road.....	4.261	\$13,560.20
Smalley's Corner and Vincentown road.....	2.900	22,452.65
	7.161	\$36,012.85

## Cumberland County.

Vineland and Malaga road.....	5.395	\$8,863.01
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## Essex County.

Normal avenue.....	0.755	\$35,040.20
Cedar street.....	1.666	21,200.82
	2.421	\$56,241.02

## Gloucester County.

Swedesboro and Auburn road.....	3.431	\$44,105.10
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## Hudson County.

Belleville turnpike.....	1.570	\$32,317.02
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## Hunterdon County.

	Miles.	Cost.
Whitehouse and Lebanon road.....	4.366	\$51,173.45
Ringoes and Ringoes Station road.....	0.554	4,766.15
	<hr/> 4.920	<hr/> \$55,939.60

## Mercer County.

Yardville and Allentown road.....	3.408	\$33,093.00
Rocky Hill road.....	0.796	8,181.20
	<hr/> 4.204	<hr/> \$41,274.20

## Middlesex County.

Perth Amboy and Keasbey road.....	2.363	\$28,000.00
South River and New Brunswick road..	0.757	5,000.00
Spotswood and Englishtown road.....	2.015	8,149.70
	<hr/> 5.135	<hr/> \$41,149.70

## Monmouth County.

Cedar avenue and Monmouth boulevard.	2.615	\$21,000.00
Lakewood and Adelpia road, third section.....	2.516	6,901.00
Lakewood and Adelpia road, fourth section.....	0.980	3,238.80
Cream Ridge and New Egypt road.....	1.946	13,950.00
	<hr/> 8.057	<hr/> \$45,089.80

## Ocean County.

New Egypt section of Lakewood and New Egypt road..	3.000	\$16,787.20
Seaside Park and Bayhead road, southern section.....	5.379	37,601.87
	<hr/> 8.379	<hr/> \$54,389.07

## Passaic County.

Main street.....	2.563	\$63,130.42
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## Salem County.

	Miles.	Cost.
Elmer Borough road. ....	1.781	\$7,418.32

## Somerset County.

Watchung road. ....	3.172	\$39,187.75
Greater Cross Roads road. ....	1.983	20,812.91
Blackwell's Mills and Millstone road, first section. ....	2.653	23,610.20
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	7.808	\$83,610.86

## Sussex County.

Newton and Stanhope road . . . . .	9.780	\$33,453.16
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## Union County.

Springfield avenue and Shunpike road. .	1.131	\$14,256.83
Total number of miles. ....	73.736	
Total cost . . . . .		\$672,251.01
Total to be paid by State. ....		\$224,083.67

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The total amount expended by the State and the number of miles paid for in each county from the passage of the State Aid Law to October 31, 1910, are as follows:

COUNTY.	MILES.	AMOUNT
Atlantic.....	111.177	\$110,686.18
Bergen.....	34.303	118,418.33
Burlington.....	189.143	298,090.61
Camden.....	116.497	230,990.08
Cape May.....	47.370	94,218.06
Cumberland.....	1.220	14,773.23
Essex.....	112.485	287,548.56
Gloucester.....	80.635	89,431.80
Hudson.....	4.760	40,135.27
Hunterdon.....	33.472	87,419.24
Mercer.....	132.494	340,006.58
Middlesex.....	162.910	326,199.37
Monmouth.....	116.611	211,955.37
Morris.....	77.348	167,946.50
Ocean.....	53.643	65,083.24
Passaic.....	63.028	126,661.07
Salem.....	36.223	56,727.29
Somerset.....	84.052	166,066.82
Sussex.....	14.331	33,254.31
Union.....	27.375	83,446.20
Warren.....	51.789	110,824.59
	<hr/>	<hr/>
	1,550.866	\$3,059,882.70
Completed since October 31, 1910.....	11.338	
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	1,562.204	

The following table shows the number of miles of road built in each county, in each year, since the passage of the State Aid Law, also the total number of miles built each year, and the total number of miles built in each county.

COUNTY.	1892. No. Miles.	1893. No. Miles.	1894. No. Miles.	1895. No. Miles.	1896. No. Miles.	1897. No. Miles.	1898. No. Miles.	1899. No. Miles.	1900. No. Miles.	1901. No. Miles.	1902. No. Miles.	1903. No. Miles.	1904. No. Miles.	1905. No. Miles.	1906. No. Miles.	1907. No. Miles.	1908. No. Miles.	1909. No. Miles.	1910. No. Miles.	1911. No. Miles.	Total No. Miles.
Atlantic.....					12	10	6.84	4.03	.....	7.03	20.10	13	1	1.51	.....	6.41	13.94	7.24	8.077	.....	111.177
Bergen.....											1.02		9.375	2.22	.42	1.14	9.595	10.533	.....	.....	34.303
Burlington.....			20.46	9.75	11.02	10.48	15.03	18.36	8.93	17.36	19.131	27.98	2.48		3.71	3.11	10.67	.132	.....	.....	189.143
Camden.....		13.62		8.25		4.125	12.79	2.23	1	4.48	8.80	9.50	5.985	1.40	.....	23.04	11.33	4.834	5.113	0.855	117.352
Cape May.....										6	5.394	6.20	2.23	2.63	.....	6.605	3.399	11.870	3.042	.....	47.370
Cumberland.....												1.22			.....					.....	1.220
Essex.....				6.50	6	4.91	9.276	12.07	9.60	9.36	8.723	5.79	8.545	8.24	.....	5.035	12.623	.....	5.813	2.344	114.829
Gloucester.....				7.75	6	5.50	7.59	11.40	4.61	17.44	6.875	7.73			.....		5.74	.....		.....	80.635
Hudson.....									2.44						2.32						4.760
Hunterdon.....															5.55	5.37	6.478	5.867	10.207	.....	33.472
Mercer.....			9.46	6.40	10.95	4.75	2.704	10.83	9.16	10.37	15.89	12.30	7.55	16.18		5.85	7.85	2.25		1.104	133.598
Middlesex.....	10.55	3.18	2.36	7.68	8.43	4.75	6.164	13.10	9.01	6.12	14.95	9.52	12.42	8.335	4.981	3.23	17.674	13.613	6.843	.....	162.910
Monmouth.....					3.75	5	5.10	14.46	5.64	6.67	13.25	17.67	5.21	7.47	3.36	2.18	11.54	7.085	8.226	1.550	118.161
Morris.....						6.13	6.30	10.46	6.53	4.306	10.079	7.13	5.98	3.59	6.63	.69					77.348
Ocean.....											3.90	9.97	11.83	7.16		6.91	11.006	2.867			53.643
Passaic.....						4.79	5.48	8.67	6.73	3.987	6.57	6.09	1.54	5.38	3.88	4.132	4.99		0.789	0.223	63.251
Salem.....					2.67			2.17	2.05		3.25	4.61	7.477				2.906	7.78	3.31	.....	36.223
Somerset.....						6.23	7.27	6.60	6.65	7.93	5.88	6.24	10.68	2.635	5.60	7.284	4.37	5.365	1.268	.....	84.052
Sussex.....										.893		4.03	1.695	.98				6.733			14.331
Union.....									3.432		2.141		.63		4.01	2.336	4.226	7.757	2.843	1.584	28.959
Warren.....								.08		7.43	8.792	3.94	13.09				7.95	1.92	8.587	3.678	55.467
Total built each year	10.55	27.34	32.28	46.33	60.82	66.665	84.544	114.46	75.782	109.376	154.745	152.92	107.717	67.780	40.461	83.322	146.287	89.113	80.374	11.338	1,562.204



# Description of Roads Improved in 1910.

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## ATLANTIC COUNTY.

### *Cologne and Port Republic Road, 8.077 Miles Long.*

The improvement of this road begins at the Reading railroad in Cologne and extends northeasterly, through the sand and pines, to the Main Shore road in Port Republic. The work as a whole forms one of the most striking contrasts in road conditions seen in recent years. The old roadway was crooked and deep-rutted, a mere by-road in many places. All of these conditions have been changed. The sharp angles and irregular turnings have been entirely removed or greatly improved. The value of this hard, smooth gravel roadway, twenty feet in width and an average of six inches in depth, is almost inestimable to the truck raising section in which it lies. It also forms at present a part of the most direct route to Cape May.

The maximum grade was reduced from 5.2 per cent to 2 per cent.

## CAMDEN COUNTY.

### *Coffin's Corner and Gibbsboro Road, 2.247 Miles Long.*

This work is an extension of that commenced at Haddonfield in 1907 and carries this improvement onward to Gibbsboro. The road is of great local value at present, as it furnishes a fine, smooth highway for the farmers living along it to Haddonfield and thence to Camden. When the improvement is extended to Berlin, the through travel to Atlantic City, which is now concentrated upon the White Horse Pike, will be in part diverted to this new route

The pavement, forming the surface of this road, is Amiesite, fourteen feet in width and having a depth, including the stone foundation, of seven inches.

The maximum grade was reduced from 4.11 per cent. to 3.21 per cent.

*Nicholson Road, 1.237 Miles Long.*

This work completes the improvement of the road for its entire length, thus giving the farmers and fruit and vegetable raisers of southwestern Camden county a good improved highway to the Gloucester ferry, without using the only remaining toll road in that section.

The improvement is of Amiesite, fourteen feet wide, and, including the stone base, seven inches deep.

The maximum grade was reduced from 2.5 per cent. to 0.6 per cent.

*Brown's Corner Road, 1.629 Miles Long.*

The work of improvement on this road begins at the White Horse road at Kirkwood and runs southeasterly to Brown's Corner, passing through Laurel and Laurel Springs. The road is of great value to the residents of this section, giving, as it does, a direct route to Camden and the Philadelphia markets. It is also the mill road of the farmers.

The pavement is of Amiesite, fourteen feet wide, and, including the stone base, seven inches deep.

The maximum grade was reduced from 9.2 per cent. to 5 per cent.

CAPE MAY COUNTY.

*Holly Beach Turnpike, 3.042 Miles Long.*

This was a work of re-construction. The original road was built upon poles laid upon the top of the meadow. This was often covered with water at high tide, rendering the road impassable at times. Owing to the rapid growth of Holly Beach, Wildwood and Anglesea, this was a condition that could no longer be tolerated; therefore, the road was re-built four feet higher than the old one, or five feet above the meadow, in order that it might be above the highest tides at all times. Thus far

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this end has been attained, and the residents of Five Mile Beach have a good, hard road at all seasons. As nothing edible is raised on the beach, all of the fruit, vegetables and milk must be brought over from the main land; therefore, the improvement was a real necessity. The present benefits are great and the future benefits are almost incalculable to the residents of this section.

The maximum grade was reduced from 1 per cent. to 0.6 per cent.

The width of the gravel bed, laid on top of this fill, is thirty feet, and its depth varies from nine inches in the center to three inches on the extreme outer edges.

## ESSEX COUNTY.

*Runnymede Road, 1.701 Miles Long.*

This road begins at Roseland in the borough of Essex Fells and follows the banks of two brooks through this borough and that of Caldwell to Belleville avenue. Throughout its entire length this is one of the most picturesque highways improved during the past year. The running water on one side and the heavily wooded hills on the other unite to make it one of Essex county's finest pleasure drives. It has a further value in that it is practically a continuation of Central avenue, thus forming another through route from the southern to the northern end of the county.

The road is built of telford, sixteen feet wide and eight inches deep, cemented with heavy asphaltum oil.

The maximum grade was reduced from 8.35 per cent. to 5.68 per cent.

*Mountain Avenue, .061 Miles Long.*

This is a short piece of road in Caldwell which it was necessary to build to complete the improvement of three other roads. It is, in the fullest sense of the word, a connecting link. It is built of telford, sixteen feet wide and eight inches deep.

The grade was practically unchanged.

*River Road, 1.223 Miles Long.*

This is a re-improvement of the old telford road along the westerly bank of the Passaic river from Belleville to the Passaic



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county line. The immediate portion improved begins at the Belleville line and extends through the borough of Nutley to the Passaic county line. The pavement proper consists of telford, sixteen feet wide, eight inches deep, with an asphaltum binder which was afterward finished with an application of screenings and water. The road is of great value to the teamsters, as it is comparatively level, and hence over it they can draw heavier loads than over the adjacent more hilly streets.

This road would also be a very popular pleasure drive if the Passaic river were the limpid stream that it was years ago, and it is hoped that in the near future this river may be restored to its original cleanliness. At present there are many handsome mansions along the road that are abandoned or else occupied by poor families, the original owners having been driven away from one of nature's beauty spots by the foul condition of the river.

There were very few changes in the grade, the maximum of which was reduced from 3.10 per cent. to 2.40 per cent.

*Central Avenue and Greenbrook Avenue, 2.828 Miles Long.*

This improvement begins at Bloomfield avenue in Caldwell, and extends northward to the West Caldwell township line. It forms a connection from Bloomfield avenue in Caldwell northward toward the Passaic county line. A greater portion of the road before improvement was hardly more than a country lane. It is now a smooth, hard highway, with a telford pavement sixteen feet wide and eight inches deep. A section of the road near Green Brook was very rocky and steep. An idea of the improvement may be gained from the fact that the maximum grade was reduced from 13.95 per cent. to 5.59 per cent., much of this grading being through solid rock.

The northern end of the road follows the picturesque stream known as Green Brook, one of Essex county's beautiful natural streams.

## HUNTERDON COUNTY.

*Ringoes and Woodsville Road, 4.081 Miles Long.*

The construction of this road completes the line of improved roads from Trenton to Flemington. Commencing, as it does, at the Mercer county line at Woodsville, it continues the macadam pavement from this point to the Old York road at Ringoes.





Hunterdon County, Milford Road, Before.



Hunterdon County, Milford Stone Road, After.

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The completion of this road marks one of the greatest improvements of the year, because not only were the steep grades reduced but also the many very crooked portions of the road were straightened.

The value of the road is very great to Hunterdon county and also to Mercer county, furnishing an outlet for the farmers and peach growers of Hunterdon to the great market of Trenton.

This road is built of macadam, fourteen feet wide and six and eleven inches deep. In lieu of the heavy asphaltum binder, an application of 45 per cent. asphaltum oil is to be made to this road, at the rate of one-half gallon per square yard, after it has become entirely settled next spring. A deduction from the first cost of this road is made because of this change.

The maximum grade was reduced from 10 per cent. to 6 per cent.

*Asbury and Ludlow Road, 1 Mile Long.*

The improvement of this road begins in Asbury at the bridge over the stream forming the Warren county line, and extends to the railroad station at Ludlow. The road before improvement was very rough, narrow, and, at certain seasons, almost a slough. Now the inhabitants of Asbury have a smooth, hard, and convenient highway at all seasons of the year between their pretty little town and the railroad station. They appreciate the benefits they have received to such an extent that they have voted to pay ten per cent. of the cost of the continuation of the road through their village to Washington.

The pavement was of macadam, fourteen feet wide and six inches deep. The maximum grade was reduced from 9.5 per cent. to 7 per cent.

*Milford Road, 5.126 Miles Long.*

This improvement is in an entirely new section of Hunterdon county from that in which the road work has heretofore been prosecuted. It begins at Spring Mills and runs thence southerly through Milford, thence follows the line of the Delaware River and the borough line of Frenchtown.

This road is of great value to the rapidly growing towns of Milford and Frenchtown. At present it is only of local value, but as the roads north and south of it are improved, it will, in time, form one of the main north and south lines along the Delaware.

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The road was built of macadam, fourteen feet wide and six and eleven inches deep. Three-sevenths of the road was built with a heavy asphaltum oil binder; the remainder is a water-bound macadam upon which a lighter asphaltum oil is to be applied next spring, at the rate of one-half gallon to the square yard.

The maximum grade was reduced from 11 per cent. to 5 per cent.

## MIDDLESEX COUNTY.

*Kingston Lane, .721 Miles Long.*

This connecting link reduces the distance between Trenton and New Brunswick one and one-half miles, as, by its construction, the detour through Dayton is entirely eliminated. It is therefore of far greater value for through travel than its length would indicate. In other words, it may be tersely described as a cut off. The pavement is of macadam, fourteen feet wide, eight inches deep, bound with heavy asphaltum oil.

The maximum grade was reduced from 4.75 per cent. to 1.628 per cent.

*Main Street, Milltown, 1.303 Miles Long.*

This road is the main street of Milltown, the improvement of which begins at the bridge and extends to Fisher's Corner. It really is an extension of the macadam road which was built by the township from the Cranbury Turnpike to Milltown.

The macadam was laid over very heavy clay soil, the nature of which was such as to render the road practically impassable in the spring of the year. It is hoped in the near future that the road will be extended to South River. The pavement is fourteen feet wide and eight inches deep of waterbound macadam.

The maximum grade was reduced from 6.00 per cent. to 4.40 per cent.

*Somerset Street, New Brunswick, .386 Miles Long.*

This road is the New Brunswick end of the Franklin Park and New Brunswick road, and begins at the city line and extends to the permanent pavement in New Brunswick. It is another of



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those short stretches of road which it was necessary to improve to connect pavements already laid.

The completion of this work gives the people of Franklin Park and New Brunswick an inlet and outlet over continuous improved roads. The pavement is of macadam, fourteen feet wide, eight inches deep, cemented with a heavy asphaltum binder.

The maximum grade was reduced from 4.00 to 2.724 per cent. by filling a deep hollow at the western end of the road.

*Seventh Street, New Market, 1.685 Miles Long.*

This improvement begins at the city line of Plainfield and extends to Main street in New Market. It forms the most direct route at present improved between Plainfield and New Brunswick.

The soil over which this road was built was very sandy; in fact, the sand was so deep that the road had been practically abandoned for over thirty years. Now, since it has been improved with an Amiesite pavement, fourteen feet wide, and, including the stone base, seven inches deep, it forms one of the most used thoroughfares in that section of the State.

The maximum grade was reduced from 2.40 per cent. to .82 per cent.

*Deans and Franklin Park Road, 2.748 Miles Long.*

This road begins at the Cranbury turnpike in Deans, and extends to the road leading from Franklin Park to New Brunswick. It is built of gravel, twenty feet wide, nine inches deep in the center and three inches on the sides. The road is of great local value, as it forms the only outlet for the people of Franklin Park and immediate neighborhood to the railroad station at Deans.

The maximum grade was reduced from 8.33 per cent. to 2.62 per cent.

## MONMOUTH COUNTY.

*Red Bank and Holmdel Road, First Section, 3.826 Miles Long.*

This road begins at Broad street in Red Bank and runs west-erly to and through the town of Lincroft. It is the first section of the proposed improved road from Red Bank to Holmdel,



# SEVENTEENTH ANNUAL REPORT

thence to Bradevelt, where it connects with the Freehold turnpike. The road will be of great value to the residents of Red Bank and vicinity, as it will give them a first class improved road to the county seat at Freehold. It is built of gravel, eighteen feet wide and eight inches thick.

The maximum grade was reduced from 7.40 per cent. to 5.00 per cent.

## *Farmingdale and Hamilton Road, Second Section, 1.90 Miles Long.*

This new work begins at the end of last year's improvement, where it leaves the old road, and extends easterly in a straight line, a distance of 7,000 feet, to a point on the old road which is then followed to the portion improved westerly from Asbury Park in 1904 and 1905.

The improvement of both alignment and grade are very marked. The old road was crooked, steep and narrow. The new is straight, wide and devoid of steep hills. This is most clearly shown by the change in maximum grade from 14.3 per cent. to 3.64 per cent.

The width of the gravel covering is eighteen feet and its average depth is six inches.

## *Lakewood and Adelphia Road, Second Section, 2.50 Miles Long.*

The work done under this contract begins at Southard and extends two and one-half miles farther north through the sand and pines. The improvement consists in clearing and grading to a width of thirty-three feet and covering with gravel to a depth of eight inches, the fourteen feet forming the central portion.

This is the second portion of the cut off between Adelphia and Lakewood. When the improvement is finished, Lakewood will be brought four and one-half miles nearer Freehold and all points north and west.

The maximum grade was reduced from 2.34 per cent. to 1.73 per cent.

## MORRIS COUNTY.

### *Morris Plains and Parsippany Road, 2.598 Miles Long.*

This is the completion of the improvement begun in 1905, and finishes the through line from Morristown via Morris



Monmouth County, Farmingdale and Hamilton Road, 2d Section, Before.



Monmouth County, Farmingdale and Hamilton Gravel Road, 2d Section,  
After.

## COMMISSIONER OF PUBLIC ROADS.

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Plains to Boonton. The road as a whole is one of the finest pieces of work done this year. The fourteen foot Amiesite pavement is even and regular, the shoulders are finished and the slopes are trimmed true to the cross sections.

The road crosses a series of short hills, hence it was comparatively easy to reduce the maximum grade from 8.50 per cent. to 4.00 per cent.

*Gladstone and Chester Road, 3.987 Miles Long.*

This work marks the completion of the through north road from Trenton via Princeton to Chester. At the latter point it connects with the road over Schooley's Mountain to Hackettstown.

The road has a great local value as it is the outlet for the farmers, dairymen and other residents to the railroad at Gladstone. When we consider that the grade rises 523 feet in three and one-half miles, the reduction in grade from 12.80 per cent. to 7.50 per cent. is quite an improvement.

The pavement proper is of Amiesite, fourteen feet wide, laid upon a six-inch telford base.

*Pompton and Newark Turnpike, 2.938 Miles Long.*

The continuation of this work, from the end of the old macadam to the Paterson and Hamburg Turnpike, marks the completion of the improvement of the direct line across Pompton Plains. This work was commenced in 1902 and was done in three sections. The road is already very much used by persons traveling northward toward the Sussex county line, as it is much more direct than the Paterson and Hamburg Turnpike which follows the sweep of the hills to the north.

The road throughout its entire length is built over the fertile Pompton Plains, one of the oldest cultivated sections in New Jersey. The change in grade was made simply by filling in the gullies that had been eroded by the action of the elements.

The pavement proper is built of macadam with asphaltum binder. Its width is fourteen feet and its depth six inches. The graded width of the road varies from twenty-eight to thirty-two feet, and its maximum grade was reduced by filling from 4.00 per cent. to 1.33 per cent.



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## PASSAIC COUNTY.

*Union Avenue, .789 Miles Long.*

The work of improving this outlying street of Paterson begins at the end of the brick pavement at the westerly line of Paterson Avenue, and extends to the city line. This is one of the pieces of work which it was necessary to do, in order that the permanent pavement of the city might be connected with the improved roads of the country. In other words, it fills one of those bad gaps so often found in the suburbs of many cities between the closely built up portion and the open country.

The pavement is of macadam, bound with asphaltum, and has a total width which varies from thirty-seven feet to twenty-four feet and a finished depth of seven inches.

The maximum grade was reduced from 5.66 per cent. to 5.14 per cent.

## SALEM COUNTY.

*Barnsboro Turnpike, 3.31 Miles Long.*

The improvement of this old turnpike begins at Main street in the borough of Elmer and extends northwardly to the Gloucester county line. It is the first improved road built in the eastern section of Salem county and connects the enterprising borough of Elmer with the improved roads of Gloucester county. The completion of this work leaves only a little over one mile of highway to be built, in order to make a continuous improved thoroughfare from Elmer to Camden.

The road is covered with gravel to a width of twenty feet and to a depth of eight inches in the center and six inches on the sides, after consolidation.

The maximum grade was reduced from 2.98 per cent. to 1.16 per cent.

## SOMERSET COUNTY.

*Chester Road, .586 Miles Long.*

This is the Somerset county end of the road from Gladstone to Chester. Its principal value lies in the fact that it connects



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the improved roads of Somerset county with those of Morris county, thus making a fine outlet and inlet and a convenient highway for the interchange of commodities between these two counties. The pavement proper is of telford, fourteen feet wide and having a total depth of ten inches. The upper course was bound with heavy asphaltum oil.

At the very beginning of the road there was a short, sharp hill which it was necessary to cut down in order that the road might be of greater value to the people who use it. The maximum grade was therefore reduced from 11 per cent. to 7 per cent.

*Warrenville Road, .682 Miles Long.*

This improvement completes the road from Watchung to Warrenville, thus connecting two of the old villages of Somerset county with a good, hard stone road. The pavement is of macadam, fourteen feet wide and eight inches thick, the upper portion of which is cemented with heavy asphaltum oil.

The maximum grade was reduced from 6 per cent. to 4 per cent.

## SUSSEX COUNTY.

*Frankford and Sandyston Road, Second Section, 3.455 Miles Long.*

This is a continuation of the improvement of the stone road through Culver's gap in the Blue mountains to the borough line of Branchville. It is another link in the line of improved roads across the State from the Hudson to the Delaware, and opens up to the tourist and summer visitor the most picturesque section of New Jersey. The succession of mountains and lakes in northern New Jersey are a constant source of surprise and pleasure to the residents of the central and southern sections of our State, and all that they require is that accessibility which good roads afford.

Work on this road was commenced in 1908 and it is therefore of plain macadam made from the native rock along the road. The width of this macadam is fourteen feet and its depth eight inches.

Owing to the very mountainous character of the country, it was found necessary to change the alignment of the road in

order to avoid hills and gulleys. The result of this work, together with the grading, is that the maximum grade is reduced from 12 per cent. to 4.50 per cent.

*Frankford and Sandyston Road, Third Section, 3.278 Miles Long.*

The County of Sussex has pushed its line of improved roads still farther across the State. Commencing at Tuttle's Corner on the westerly side of Culver's Gap through the Blue mountains, the work of improvement has been carried westward to the small plank bridge in the village of Layton, and at the same time a branch from Pine Hill to the Little Flat Brook bridge was constructed. Our line of improved roads is now within two miles of Dingman's Ferry across the Delaware. It is hoped before another year closes that we will have an improved road from the Hudson to the Delaware across the northern end of our State. When this is an accomplished fact a section of country will be opened to tourists that is fully equal, if not superior, to the far famed Berkshire Hills.

The pavement laid on this section of road is of macadam, fourteen feet wide and seven inches thick, the upper course of which is bound with hard asphalt.

Some idea of the improvement that has been made in this road may be gained from the fact that the maximum grade has been reduced from 11 per cent. to 5 per cent.

## UNION COUNTY.

*Raritan Road and Lake Avenue, 2.465 Miles Long.*

This road begins at the end of the Terrill road improvement and extends through Willow Grove, over Goodman's crossing, to Palisade avenue. Through one-half of its length this improvement follows the line of the old Raritan road, one of the oldest highways in eastern New Jersey. The object in improving this road is to connect Plainfield, Scotch Plains and Fanwood with Rahway.

The natural soil over which the road is built varies from boulders to fine sand, being a portion of the terminal moraine. As a consequence, the original road was very rough and uneven. In the construction of this road many crooks and turns were eliminated, thus enhancing the improvement. The pavement is



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Amiesite, laid for a width of sixteen feet and having a depth, with the foundation, of eight inches.

The grade, as well as the alignment, was very much improved, as will be seen when we note that the maximum grade was reduced from 5.90 per cent. to 3.40 per cent.

*Washington Avenue and Edgar Road Connection, and Edgar Road, Lenington Street and Milton Avenue Connection, .378 Miles Long.*

These two short pieces of road complete the improvement of the Edgar road from Elizabeth to Rahway. They were not constructed last year because it was hoped that the county would be able to induce the New York and Baltimore railroad to build an overhead bridge at this point, then the improvement could be carried under the railroad tracks. As the negotiations failed, a fill was made on each side, in order that the highway might cross the railroad at grade.

The macadam stone bed is sixteen feet wide and eight inches deep, cemented with heavy asphaltum oil.

The maximum grade on one side was reduced from 1.70 per cent. to .6 of one per cent., on the other side from 6.50 per cent. to 4.00 per cent.

## WARREN COUNTY.

*Bcattytown Road, 8.587 Miles Long.*

This is one of the improvements that has long been hoped for by tourists traveling across our State. Its completion gives the residents and visitors a good, smooth highway from Newark via Morristown, Chester, Schooley's Mountain and Washington to Phillipsburg and Easton. One of the principal reasons why this road was not improved earlier was that the old road commenced in Warren county and crossed the river into Morris, continued south into Hunterdon and then back into Warren county again. The road not only traverses three counties, but also seemed in some places to twist and wind out of its way to climb over hills and down into hollows. It was therefore necessary to lay out an entirely new road for nearly 2.4 miles, along the banks of the Musconetcong river. The road as completed makes one of the most delightful drives to be found anywhere in the State,

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following, as it does, for a greater portion of its length, the beautiful Musconetcong river. Its freedom from curves and sharp turns and the comparatively easy grades obtained mark it as one of the greatest improvements of the year.

The pavement is macadam, fourteen feet wide and six inches deep, bound with heavy asphaltum oil.

The maximum grade was reduced from 11.40 per cent. to 6.56 per cent.



## Cost of Repairs.

In compliance with the act of April 12, 1906, amended April 21, 1909, moneys from the motor vehicle fund have been sent during the year 1910 to the various local authorities for repairs on the following roads:

NAME OF ROAD.	COUNTY.	AMOUNT.
Allaire to Manasquan. ....	Monmouth. ....	\$1,000.00
Allamuchy. ....	Warren. ....	998.00
Bridgeton to Roadstown. ....	Cumberland. . .	200.00
Bloomfield avenue. ....	Essex. ....	3,000.00
Brunswick Pike. ....	Mercer. ....	72.00
Bound Brook to Dunellen. ....	Middlesex. ....	200.00
Barbour avenue. ....	Passaic. ....	2,500.00
Bedminster. ....	Somerset. ....	890.00
Bernardsville. ....	Somerset. ....	600.00
Basking Ridge to Morris Co. ....	Somerset. ....	950.00
Bennett's Corner. ....	Somerset. ....	400.00
Blairstown. ....	Warren. ....	345.00
Cedar Lane, Teaneck township. ....	Bergen. ....	500.00
Central avenue. ....	Essex. ....	3,000.00
Crown Point. ....	Gloucester. ....	3,500.00
Chambers street, Trenton. ....	Mercer. ....	6,840.95
Cranbury to Dayton. ....	Middlesex. ....	500.00
Chester to German Valley. ....	Morris. ....	8,209.50
Cooper's Corner. ....	Somerset. ....	500.00
Cranbury to Mercer County line. ....	Middlesex. ....	300.00
Dayton to New Brunswick. ....	Middlesex. ....	900.00
Dayton to Rhode Hall. ....	Middlesex. ....	200.00
Dayton to Monmouth Junction. ....	Middlesex. ....	300.00
Davidson Bridge. ....	Somerset. ....	800.00
Dead River. ....	Somerset. ....	700.00
Danville. ....	Warren. ....	715.00
Engle street, Tenafly borough. ....	Bergen. ....	700.00
Eagle Rock avenue. ....	Essex. ....	2,000.00
Edinburg-Windsor. ....	Mercer. ....	2,500.00
Edinburg-Dutch Neck. ....	Mercer. ....	336.80
Eatontown to Long Branch. ....	Monmouth. ....	1,000.00

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NAME OF ROAD.	COUNTY.	AMOUNT.
East Thirty-first street.....	Passaic.....	\$2,600.00
East Twenty-second street.....	Passaic.....	100.00
Elsinboro.....	Salem.....	1,000.00
Fort Lee turnpike, Leonia borough.....	Bergen.....	500.00
Freehold stone road.....	Monmouth.....	4,000.00
Farmingdale to Lakewood.....	Monmouth.....	1,000.00
Freehold to Adelphia.....	Monmouth.....	300.00
Far Hills to Peapack.....	Somerset.....	800.00
Franklin Park-New Brunswick.....	Somerset.....	800.00
Franklin township.....	Warren.....	848.00
Gravel road, Berlin to Atlantic County.....	Camden.....	6,000.00
Greenwich to Hopewell.....	Cumberland.....	300.00
Green Bank to New Gretna.....	Burlington.....	1,000.00
Grove street.....	Essex.....	2,000.00
Glassboro-Clayton.....	Gloucester.....	500.00
George street, Hamilton street to Bridge.....	Middlesex.....	300.00
German Valley to Schooley's Mountain.....	Morris.....	2,600.00
Great Notch.....	Passaic.....	2,300.00
Greenwood Lake-Midvale.....	Passaic.....	2,290.00
Gladstone.....	Somerset.....	300.00
Greenwich township.....	Warren.....	625.00
Hightstown to Freehold.....	Middlesex.....	2,937.65
Highland gravel road.....	Monmouth.....	3,000.00
Hamilton to Ocean Grove.....	Monmouth.....	1,000.00
Harlingen-Belle Mead.....	Somerset.....	980.00
Hardyston township.....	Sussex.....	1,000.00
Harmony township.....	Warren.....	375.00
Iselin to Rahway.....	Middlesex.....	600.00
Iselin to Oak tree.....	Middlesex.....	300.00
Jobstown Pike.....	Burlington.....	3,820.75
Jamesburg to Englishtown and State Home.....	Middlesex.....	500.00
Kelly's Hill, Fairview borough.....	Bergen.....	500.00
Kinderkamack, Westwood borough.....	Bergen.....	500.00
Kinderkamack, Delford borough.....	Bergen.....	500.00
Kinderkamack, Riverside.....	Bergen.....	500.00
Kingston-Rocky Hill.....	Somerset.....	900.00
Livingston street, Northvale.....	Bergen.....	1,000.00
Livingston street, Norwood borough.....	Bergen.....	500.00
Lambertville to Flemington.....	Hunterdon.....	2,750.00
Long Branch to Asbury Park.....	Monmouth.....	2,000.00
Lakewood and Adelphia.....	Monmouth.....	1,000.00
Lakewood and Point Pleasant.....	Ocean.....	664.82
Lakewood and Toms River.....	Ocean.....	1,297.02
Long Hill.....	Passaic.....	1,740.00
Lafayette street.....	Passaic.....	200.00
Lower Alloways Creek.....	Salem.....	1,000.00
Lopatcong township.....	Warren.....	265.00

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NAME OF ROAD.	COUNTY.	AMOUNT
Meadow Boulevard.....	Atlantic ....	\$10,000.00
Mullica River Bridge approach.....	Burlington ..	700.00
Moorestown Pike.....	Burlington ..	8,000.00
Mauricetown Bridge.....	Cumberland .	300.00
Mauricetown to Millville.....	Cumberland .	200.00
Mercerville-Edinburg .....	Mercer .....	8,000.00
Monmouth Junction to Kingston.....	Middlesex ...	500.00
Main street, South River.....	Middlesex ...	400.00
Matawan-Cheesequakes .....	Middlesex ...	300.00
Metuchen to Perth Amboy.....	Middlesex ...	950.00
Maple avenue, South Plainfield.....	Middlesex ...	300.00
Metuchen to Iselin.....	Middlesex ...	500.00
Monmouth Beach.....	Monmouth ...	1,000.00
Market street and Mt. Kimbal avenue.....	Morris .....	9,000.00
Macopin .....	Passaic .....	180.00
Main street, Salem.....	Salem .....	500.00
Mine Brook.....	Somerset ....	970.00
Mountain avenue, North Plainfield.....	Somerset ....	750.00
Millstone .....	Somerset ....	900.00
Middlebush and New Brunswick.....	Somerset ....	995.00
Mountain avenue, Bound Brook.....	Somerset ....	600.00
Morris turnpike, Lopatcong township.....	Warren .....	685.00
Newport to Fortescue.....	Cumberland..	200.00
Newark turnpike.....	Hudson .....	22,147.64
New Brunswick to Raritan Landing.....	Middlesex ...	200.00
New Brunswick to Franklin Park.....	Middlesex ...	500.00
New Brunswick to South River.....	Middlesex ...	900.00
New Brunswick to Metuchen.....	Middlesex ...	950.00
New Brunswick to Bound Brook.....	Middlesex ...	900.00
New Brunswick to Livingston Park.....	Middlesex ...	800.00
New Brunswick to Woodbridge avenue.....	Middlesex ...	600.00
Naachtunk .....	Passaic .....	1,590.00
Neshanic to Neshanic station.....	Somerset ....	600.00
North Branch.....	Somerset ....	900.00
North Branch to Hunterdon County.....	Somerset ....	600.00
North Broad street, Elizabeth to Newark..	Union .....	6,000.00
Osborn's Run to Rocap's Run.....	Cumberland ..	200.00
Osborn's Run to Page's Run.....	Cumberland ..	200.00
Old Bridge, Englishtown.....	Middlesex ...	500.00
Old Bridge, Matawan.....	Middlesex ...	400.00
Old Mannington.....	Salem .....	600.00
Palisade and Grand avenue, Englewood....	Bergen .....	800.00
Paramus road, Midland township.....	Bergen .....	8,200.00
Paramus road, Maywood borough.....	Bergen .....	1,500.00
Park street and Farnsworth avenue.....	Burlington ..	6,000.00
Port Elizabeth to Leesburg.....	Cumberland ..	200.00
Pleasant Run to North Branch.....	Hunterdon ...	2,000.00



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NAME OF ROAD.	COUNTY.	AMOUNT.
Princeton-Kingston. ....	Mercer. ....	\$2,500.00
Pennington-Hopewell. ....	Mercer. ....	447.74
Park avenue, South Plainfield. ....	Middlesex. ....	200.00
Pine Brook. ....	Morris. ....	16,000.00
Paterson and Hamburg turnpike. ....	Passaic. ....	4,500.00
Pennsgrove and Dancer's Mill. ....	Salem. ....	600.00
Penn's Neck. ....	Salem. ....	800.00
Pluckamin. ....	Somerset. ....	950.00
Pohatcong. ....	Warren. ....	545.00
Riverside-Bridgeboro. ....	Burlington. ....	2,000.00
Riverside. ....	Burlington. ....	1,500.00
Roadstown to Town Hall. ....	Cumberland. ....	200.00
River road. ....	Mercer. ....	502.66
Raritan Landing to New Market road. ....	Middlesex. ....	450.00
Rocky Hill to Harlingen. ....	Somerset. ....	980.00
Roxburg. ....	Warren. ....	984.00
Schraalenburg, Harrington Park. ....	Bergen. ....	500.00
Stone road, Berlin to Camden. ....	Camden. ....	6,000.00
Springfield avenue. ....	Essex. ....	3,000.00
Sandford street. ....	Essex. ....	2,000.00
South Amboy to Amboy Bridge. ....	Middlesex. ....	300.00
South Amboy to Morgan Draw. ....	Middlesex. ....	400.00
South River to Old Bridge. ....	Middlesex. ....	400.00
Sayreville to South Amboy. ....	Middlesex. ....	500.00
Stelton to New Market. ....	Middlesex. ....	850.00
Sea Girt to Belmar. ....	Monmouth. ....	1,000.00
South street, Morristown. ....	Morris. ....	6,000.00
Salem and Pennsville. ....	Salem. ....	300.00
Salem and Hancock's Bridge. ....	Salem. ....	200.00
South Somerville. ....	Somerset. ....	975.00
Skillman. ....	Somerset. ....	800.00
South Bound Brook. ....	Somerset. ....	725.00
Sussex-Newton. ....	Sussex. ....	1,000.00
Sparta. ....	Sussex. ....	1,000.00
Stewartville. ....	Warren. ....	625.00
Straw Church. ....	Warren. ....	615.00
Tuttle's Corner. ....	Sussex. ....	2,000.00
Union avenue. ....	Somerset. ....	985.00
Winant avenue, Ridgefield Park. ....	Bergen. ....	1,000.00
Westfield Pike. ....	Burlington. ....	2,000.00
Washington avenue. ....	Essex. ....	3,000.00
Westville and Glassboro. ....	Gloucester. ....	6,000.00
Windsor-Hightstown. ....	Mercer. ....	5,359.05
White Horse. ....	Mercer. ....	6,440.80
Washington street, South Amboy. ....	Middlesex. ....	100.00
Woodbridge to Perth Amboy. ....	Middlesex. ....	900.00
Woodbridge to Iselin. ....	Middlesex. ....	500.00



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NAME OF ROAD.	COUNTY.	AMOUNT.
Woodbridge Creek to Perth Amboy.....	Middlesex.....	\$600.00
Wood's Tavern and Neshanic.....	Somerset.....	850.00
Wagner's Corner.....	Somerset.....	400.00
Washington Valley.....	Somerset.....	800.00
Wood's Tavern Crossing.....	Somerset.....	2,600.00
Westfield avenue, Roselle.....	Union.....	6,000.00
Washington.....	Warren.....	375.00
Total.....		308,127.38

The following amounts have been appropriated for repairs from the county funds during the year 1910:

COUNTY.	AMOUNT.
Atlantic.....	\$52,169.74
Bergen.....	126,000.00
Burlington.....	23,000.00
Camden.....	30,231.87
Cape May.....	6,561.01
Cumberland.....	.....
Essex.....	85,133.54
Gloucester.....	10,000.00
Hudson.....	370,000.00
Hunterdon.....	2,000.00
Mercer.....	46,000.00
Middlesex.....	45,865.01
Monmouth.....	89,000.00
Morris.....	100,000.00
Ocean.....	7,000.00
Passaic.....	56,000.00
Salem.....	3,606.68
Somerset.....	.....
Sussex.....	1,500.00
Union.....	25,500.00
Warren.....	6,601.19
\$1,086,169.04	

## State Highway Along the Ocean Front.

Pursuant to the provisions of Chapter 220, Laws of 1910, the State Highway Commission met at the Governor's cottage, Sea Girt, on July 28, 1910. The Commissioner of Public Roads presented a map showing the proposed State Highway along the ocean front. The line planned was accepted as a temporary route and it was directed that the map be filed in the office of the Commissioner of Public Roads.

The following amounts were appropriated for the purpose of carrying out the work:

	Appropriation.	Payments during 1910.
For the acquisition of land and the opening at Atlantic Highlands, conditioned upon the county expending a like amount.....	\$10,000.00	
For filling in the head of Wesley Lake and the construction of a roadway between Ocean Grove and Asbury Park.....	5,700.00	
For the acquisition of land and the opening up and improvement of the road known as the extension of Ocean avenue in the Borough of Spring Lake.....	4,300.00	\$4,312.90
For the improvement of the road between Lakewood and Tom's River.....	11,000.00	11,000.00
For the improvement of the road between New Gretna and the Mullica River Bridge.....	7,000.00	7,000.00
For the straightening, widening and improvement of the road between Chestnut Neck and Absecon .....	5,000.00	5,000.00
For the improvement of the Main Shore road between Cape May Court House and Cape May, and the road between Petersburg and Seaville .....	7,000.00	
Amount appropriated.....	\$50,000.00	
Amount expended during 1910.....		\$27,312.90

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Total cost of repairs to county roads in New Jersey during 1910.

Cost of repairs. ....	\$308,127.38
State Highway along the ocean front. ....	27,312.90
Cautionary signs. ....	137.55
<hr/>	
Total amount paid from motor vehicle fund. ....	\$335,577.83
Total amount paid from county funds. ....	1,086,169.04
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Total amount paid for road repairs during 1910. ....	\$1,421,746.87

NEW JERSEY STATE LIBRARY





Atlantic County, Cologne and Port Republic Road, Before.



Atlantic County, Cologne and Port Republic Gravel Road, After.

# Cost of Roads.

## Cologne and Port Republic Road.

Detailed statement of the cost of the Cologne and Port Republic road, township of Gallaway and city of Port Republic, county of Atlantic.

Total length, 42,644.4 feet, or 8.077 miles.

Width of gravel-bed, 20 feet.

Length of gravel-bed, 42,644.4 feet.

Depth of gravel-bed, 8 inches at centre, 4 inches at sides; average depth 6 in hes.

Gravel, 15,794.22 cubic yards, at 90 cents; total. ....	\$14,214.80
Earth excavation, 13, 942.40 cubic yards, at 25 cents; total, ....	3,485.60
Grubbing, 10 acres, at \$50.00; total.....	500.00
	<hr/>
	18,200.40
Less difference tween items and lump sum. ....	1.30
	<hr/>
Total. ....	\$18,199.10
Super lary. ....	465.00
Engineering nses. ....	909.96
	<hr/>
Total cost of road. ....	\$19,574.06
	<hr/>
Lump sum, contract price. ....	\$18,199.10
Total allowed by the State. ....	18,199.10
One-third of above, amount paid by State. ....	6,066.37
	<hr/>
Maximum grade before. ....	5.2 per cent.
Maximum grade after. ....	2.0 per cent.

E. D. RIGHTMIRE,

Engineer.

JOHN W. HUBER,

Supervisor.

## SEVENTEENTH ANNUAL REPORT

## Coffin's Corner and Gibbsboro Road.

Detailed statement of the cost of the Coffin's Corner and Gibbsboro road, Township of Voorhees, County of Camden:

Total length, 11,865.9 feet, or 2.247 miles.	
Width of stone-bed, 14 feet.	
Length of stone-bed, 11,865.9 feet.	
Depth of stone-bed, 7 inches.	
Macadam, with amiesite, 18,458.07 square yards, at \$1.16; total .....	\$21,411.36
Earth excavation, 4,493.8 cubic yards, at 24 cents; total.	1,078.51
Drain, 500 lineal feet, at 12 cents, total.....	60.00
Rubble stone gutter, 1,560 square yards, at 90 cents; total	1,404.00
	<hr/>
	\$23,953.87
Plus difference between items and lump sum.....	107.14
	<hr/>
	\$24,061.01
Less \$60.00 for drain not laid.....	60.00
	<hr/>
Total .....	\$24,001.01
Supervisor's salary .....	525.00
Engineering expenses .....	720.00
	<hr/>
Total cost of road.....	\$25,246.01
	<hr/>
Lump sum, contract price.....	\$24,061.01
Total allowed by the State.....	24,001.01
One-third of above, amount paid by the State.....	8,000.33
Maximum grade before.....	4.11 per cent.
Maximum grade after.....	3.21 per cent.

J. J. ALBERTSON,  
Engineer.

CHARLES SNYDER,  
Supervisor.

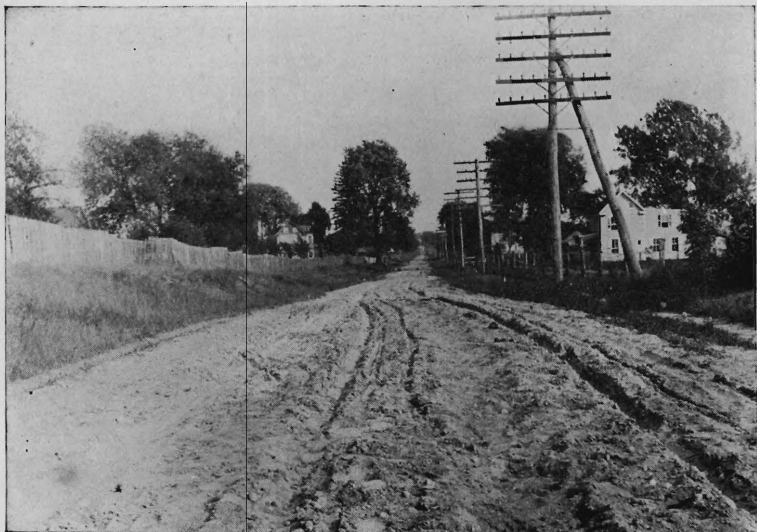
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Nicholson Road.

Detailed statement of the cost of the Nicholson road, Township of Hadden, and city of Gloucester, County of Camden:

Total length, 6,532.2 feet, or 1.237 miles.  
Width of stone-bed, 14 feet.  
Length of stone-bed, 6,454.6 feet.  
Depth of stone-bed, 7 inches.





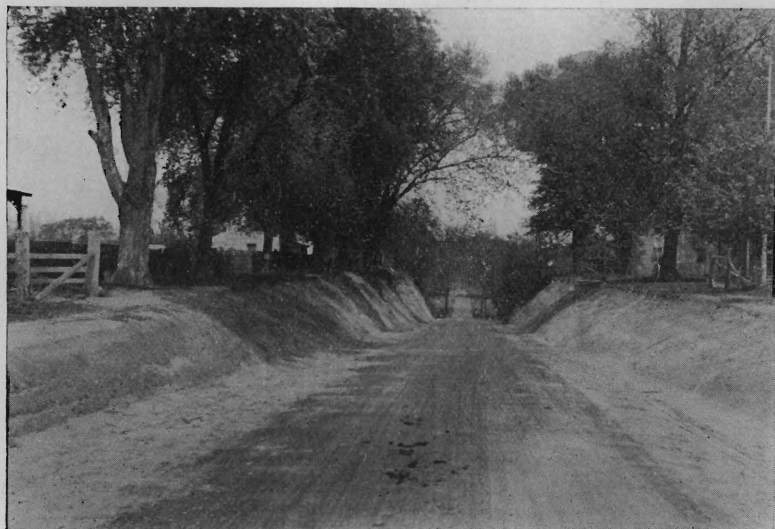
Camden County, Coffin's Corner and Gibbsboro Road, Before.



Camden County, Coffin's Corner and Gibbsboro Amiesite Road, After.



Camden County, Brown's Corner Road, Before.



Camden County, Brown's Corner Amiesite Road, After.

# COMMISSIONER OF PUBLIC ROADS.

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Macadam, with amiesite, 10,040.5 square yards, at \$1.12; total	\$11,245.36
Earth excavation, 3,635.5 cubic yards, at 35 cents; total.	1,272.42
Drainage .....	136.42

Total .....	\$12,654.20
Supervisor's salary .....	135.00
Engineering expenses .....	379.62

Total cost of road.....	\$13,168.82
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Lump sum, contract price.....	\$12,817.78
Total allowed by the State.....	12,654.20
One-third of above, amount paid by the State.....	4,218.07

Maximum grade before.....	2.5 per cent.
Maximum grade after.....	0.6 per cent.

J. J. ALBERTSON,

Engineer.

WILLIAM C. WOOD,

Supervisor.

## Brown's Corner Road.

Detailed statement of the cost of the Brown's Corner Road, Township of Clementon, County of Camden.

Total length, 8,601 feet, or 1.629 miles.

Width of stone-bed, 14 feet.

Length of stone-bed, 8,514.2 feet.

Depth of stone-bed, 7 inches.

Macadam, with amiesite, 13,244.3 square yards, at \$1.17; total.	\$15,495.83
Earth excavation, 8,002.2 cubic yards, at 30 cents; total.	2,400.66
Rubber stone gutter, 1,777.8 square yards, at 90 cents; total...	1,600.02

\$19,496.51

Less difference between items and lump sum.....	.07
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Total .....	\$19,496.44
Supervisor's salary .....	312.00
Engineering expenses .....	584.89
Extras, paid by county.....	74.60

Total cost of road.....	\$20,467.93
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## SEVENTEENTH ANNUAL REPORT

Lump sum, contract price. ....	\$19,496.44
Total allowed by the State. ....	19,496.44
One-third of above, amount paid by the State. ....	6,498.81

Maximum grade before.....	9.20 per cent.
Maximum grade after. ....	5.00 per cent.

J. J. ALBERTSON,  
Engineer.

FREDERICK H. TOMLINSON,  
Supervisor.

## Holly Beach Turnpike.

Detailed statement of the cost of the Holly Beach Turnpike, in the Townships of Middle and Lower, County of Cape May.

Total length, 16,064 feet, or 3.042 miles.  
Width of gravel-bed, 30 feet.  
Length of gravel-bed, 15,325.2 feet.  
Depth of gravel-bed, 9 inches at centre, 3 inches at sides.

Gravel, compacted, 8,530 cubic yards, at \$1.74½; total. ....	\$14,884.85
Earth excavation, 955 cubic yards, at 20 cents: total. ....	191.00
Earth embankment, 177,943 cubic yards, at 20 cents; total. ....	35,588.60
Grubbing, 1 acre, at \$25.00; total. ....	25.00
Curbing, 22,522 lineal feet, at 4 cents; total. ....	900.88
Retaining fence, 22,522 lineal feet, at 9¼ cents; total. ....	2,083.29
Bulkhead, 850 lineal feet, at \$2.84; total. ....	2,414.00
Extra Bulkhead, supplemental contract, 150 lineal feet at \$2.84; total. ....	426.00
Plus difference between items and lump sum. ....	16.95

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Total, including extra contract. .... \$56,530.57

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Supervisor's salary. ....	\$1,032.00
Engineering expenses. ....	2,625.94
Extras, paid by county. ....	1,820.00

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Total cost of road. .... \$62,008.51

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Lump sum, contract price. ....	\$56,104.57
Total allowed by the State. ....	56,530.57
One-third of above, amount paid by the State. ....	18,843.52



Cape May County, Holly Beach Turnpike, Before.



Cape May County, Holly Beach Turnpike, Gravel. After.

## COMMISSIONER OF PUBLIC ROADS.

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Maximum grade before.....1.0 per cent.  
 Maximum grade after. ....0.6 per cent. level across meadows.

R. FENDALL SMITH,  
 Engineer.

O. B. SMITH,  
 Supervisor.

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 Runnymede Road.

Detailed statement of the cost of the Runnymede road, Boroughs of Caldwell, West Caldwell and Essex Fells, County of Essex:

Total length, 8,984 feet, or 1.701 miles.  
 Width of stone-bed, 16 feet.  
 Length of stone-bed, 8,917 feet.  
 Depth of stone-bed, 8 inches.

Telford with asphaltum binder, 15,974 square yards, at 84 cents;	
total. ....	\$13,418.16
Earth excavation, 13,664 cubic yards, at 40 cents; total. ....	5,465.60
	<hr/>
Total. ....	\$18,883.76
Supervisor's salary. ....	525.00
	<hr/>
Total cost of road. ....	\$19,408.76
	<hr/>
Lump sum, contract price. ....	\$18,883.76
Total allowed by the State. ....	18,883.76
One-third of above, amount paid by the State. ....	6,294.59

Maximum grade before.....8.35 per cent.  
 Maximum grade after. ....5.68 per cent.

JAS. OWEN,  
 Engineer.

WALTER L. VAN NESS,  
 Supervisor.



## SEVENTEENTH ANNUAL REPORT

## Mountain Avenue.

Detailed statement of the cost of Mountain avenue, Borough of Caldwell, County of Essex:

Total length, 325 feet, or .061 miles.	
Width of stone-bed, 16 feet.	
Length of stone-bed, 305 feet.	
Depth of stone-bed, 8 inches.	
Telford, with asphaltum binder, 592 square yards, at 90 cents; total .....	\$532.80
Earth excavation, 94.18 cubic yards, at 30 cents; total..	28.25
	<hr/>
	\$561.05
Less difference between items and lump sum.....	.05
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Total .....	\$561.00
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Total cost of road.....	\$561.00
	<hr/>
Lump sum, contract price.....	\$561.00
Total allowed by the State.....	561.00
One-third of above, amount paid by the State.....	187.00
Maximum grade before.....	2.75 per cent.
Maximum grade after.....	2.50 per cent.

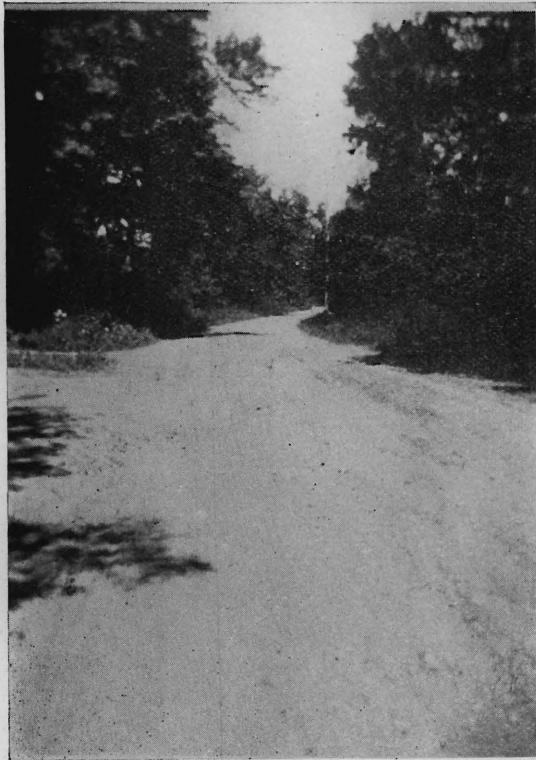
JAMES OWEN,  
Engineer.

HARRY R. BALDWIN,  
Supervisor.

## River Road.

Detailed statement of the cost of the River road, Town of Nutley, County of Essex.

Total length, 6,458 feet, or 1.223 miles.	
Width of stone-bed, 16 feet.	
Length of stone-bed, 6,458 feet.	
Depth of stone-bed, 8 inches.	
Telford, with asphaltum binder, 11,544.25 square yards, at 89 cents; total .....	\$10,274.38
Earth excavation, 4,250 cubic yards, at 39 cents; total...	1,657.50
Top coating with screenings.....	1,559.29
	<hr/>
Total .....	\$13,491.17



Essex County, River Road at Grant Avenue, Before Improvement.



Essex County, River Road at Grant Avenue, Stone Construction, After Improvement.



Essex County, Central Avenue and Greenbrook Avenue, Before Improvement.



Essex County, Central Avenue and Greenbrook Avenue, Stone Construction, After Improvement. Slopes and shoulders not yet completed.



# COMMISSIONER OF PUBLIC ROADS.

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Supervisor's salary .....	\$214.50
<hr/>	
Total cost of road.....	\$13,705.67
Lump sum, contract price.....	\$11,892.50
Total allowed by the State.....	13,491.17
One-third of above, amount paid by the State.....	4,497.06
Maximum grade before.....	3.10 per cent.
Maximum grade after.....	2.40 per cent.

JAMES OWEN,  
Engineer.

ANDREW BARR,  
Supervisor.

## Central and Greenbrook Avenues.

Detailed statement of the cost of Central avenue and Greenbrook avenue, Boroughs of Caldwell, North Caldwell and West Caldwell, County of Essex.

Total length, 14,934 feet, or 2.828 miles.  
Width of stone-bed, 16 feet.  
Length of stone-bed, 14,924 feet.  
Depth of stone-bed, 8 inches.

Telford, 26,556 square yards, at 55 cents; total.....	\$14,605.80
Earth excavation, 26,822 cubic yards, at 50 cents; total..	13,411.00
<hr/>	
Total .....	\$28,016.80
Supervisor's salary .....	1,396.50
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Total cost of road.....	\$29,413.30
Lump sum, contract price, before change in grade.....	\$28,696.00
Total allowed by the State.....	28,016.80
One-third of above, amount paid by the State.....	9,338.93
Maximum grade before.....	13.95 per cent.
Maximum grade after.....	5.59 per cent.

JAMES OWEN,  
Engineer.

WM. H. H. CONDIT,  
Supervisor.

# SEVENTEENTH ANNUAL REPORT

## Ringoes and Woodsville Road.

Detailed statement of the cost of the Ringoes and Woodsville road, Townships of East and West Amwell, County of Hunterdon:

Total length, 21,547 feet, or 4.081 miles.

Width of stone-bed, 14 feet.

Length of stone-bed, 21,547 feet.

Depth of stone-bed, rock road, 11 inches; macadam, 6 inches.

Macadam, 4,511 square yards, at 67½ cents; total. . . . .	\$3,044.92
Rock road, 29, 356 square yards, at 73½ cents; total. . . . .	21,576.66
Macadam driveways, 430 square yards, at 67½ cents; total. . . .	290.25
Earth excavation, 24,970 cubic yards, at 35 cents; total. . . . .	8,739.50
Extra excavation, 260 cubic yards, at 35 cents; total. . . . .	91.00
Underdrain, 7,550 lineal feet, at 18 cents; total. . . . .	1,359.00
Cobble stone gutter, 10 square yards, at 50 cents; total. . . . .	5.00

Total. . . . .	\$35,106.33
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Supervisor's salary. . . . .	559.50
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Extras, paid by county. Iron pipe and open drain. . . . .	759.84
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Total cost of road. . . . .	\$36,425.67
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Lump sum, contract price. . . . .	\$35,242.14
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Total allowed by the State. . . . .	35,106.33
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One-third of above, amount paid by the State. . . . .	11,702.11
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Maximum grade before. . . . .	10 per cent.
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Maximum grade after. . . . .	6 per cent.
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GRANT DAVIS,

Engineer.

J. HART LA ROWE,

Supervisor.

## Asbury and Ludlow Road.

Detailed statement of the cost of the Asbury and Ludlow road, Township of Bethlehem, County of Hunterdon.

Total length, 5,280 feet, or 1 mile.

Width of stone-bed, 14 feet.

Length of stone-bed, 5,166 feet.

Depth of stone-bed, 6 inches.



Hunterdon County, Ringoes and Woodsville Road, Before.

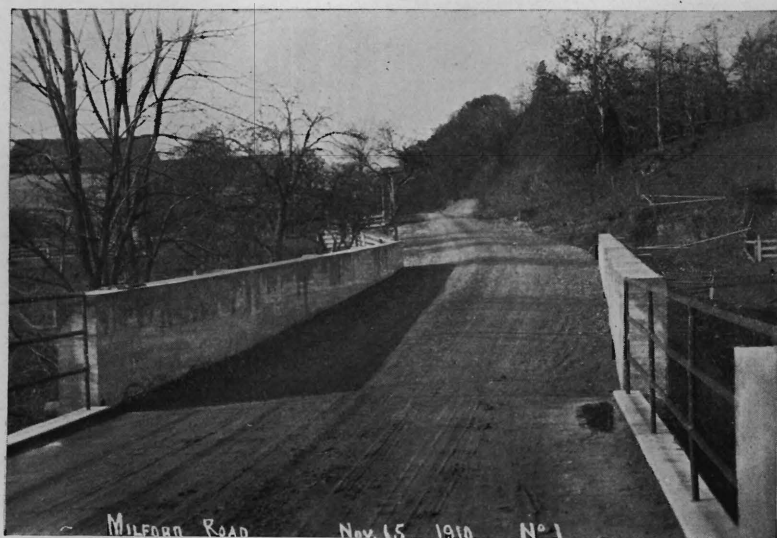


Hunterdon County, Ringoes and Woodsville Stone Road, After.





Hunterdon County, Milford Road, Before.



Hunterdon County, Milford Stone Road. After.

# COMMISSIONER OF PUBLIC ROADS.

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Plain macadam, 8,201 square yards, at 60 cents; total.....	\$4,920.61
Borrowed embankment, 2,050 cubic yards, at 25 cents; total. . .	512.50
Excavation without classification, 2,950 cubic yards, at 40 cents; total. . . . .	1,180.00
Extra excavation, 20 cubic yards, at 50 cents; total.....	10.00
Drain, 3,506 lineal feet, at 15 cents; total.....	525.90
Cobble stone gutter, 38 square yards, at 40 cents; total.....	15.20
<hr/>	
Total. . . . .	\$7,164.21
Supervisor's salary.....	177.00
Extras, paid by county. Iron pipes and laying; 40 cubic yards excavation; open ditch. . . . .	158.79
<hr/>	
Total cost of road. . . . .	\$7,500.00
<hr/>	
Lump sum, contract price. . . . .	\$6,813.31
Total allowed by the State.....	7,164.21
One-third of above, amount paid by the State.....	2,388.07
<hr/>	
Maximum grade before.....	9.5 per cent.
Maximum grade after.....	7.0 per cent.

GRANT DAVIS,  
Engineer.  
CHAS. EDGERTON,  
Supervisor.

## Milford Road.

Detailed statement of the cost of the Milford Road, Townships of Holland and Alexandria, County of Hunterdon:

Total length, 27,065 feet, or 5.126 miles.  
Width of stone-bed, 14 feet.  
Length of stone-bed, 26,977 feet.  
Depth of stone-bed, macadam 6 inches; telford, 11 inches.

Macadam, asphaltum oil binder, 10,111 square yards, at 57 cents; total.....	\$5,763.27
Telford, asphaltum oil binder, 8,244 square yards, at 71 cents; total.....	5,853.24
Macadam, water bound, 24,323 square yards, at 55½ cents; total.....	13,499.27
Macadam driveways, 360 square yards, at 57 cents; total.....	205.20
Earth excavation, 22,376 cubic yards, at 32 cents; total.....	7,160.32
Extra excavation, 2,020 cubic yards, at 32 cents; total.....	646.40

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Rock excavation, 3,720 cubic yards, at \$1.25; total.....	\$4,650.00
Under drain, 6,772 lineal feet, at 18 cents; total.....	1,218.96
Cobble stone gutter, 220 square yards, at 50 cents; total..	110.00
Total .....	<u>\$39,106.66</u>
Supervisor's salary .....	566.00
Extras, paid by county. Open drain 825 lineal feet, at 7½ cents; total.....	61.87
Total cost of road.....	<u>\$39,734.53</u>
Lump sum, contract price.....	\$34,015.32
Total allowed by the State.....	39,106.66
One-third of above, amount paid by the State.....	13,035.55
Maximum grade before.....	11 per cent.
Maximum grade after.....	5 per cent.

GRANT DAVIS,

Engineer.

JOHN A. SHAFER,

Supervisor.

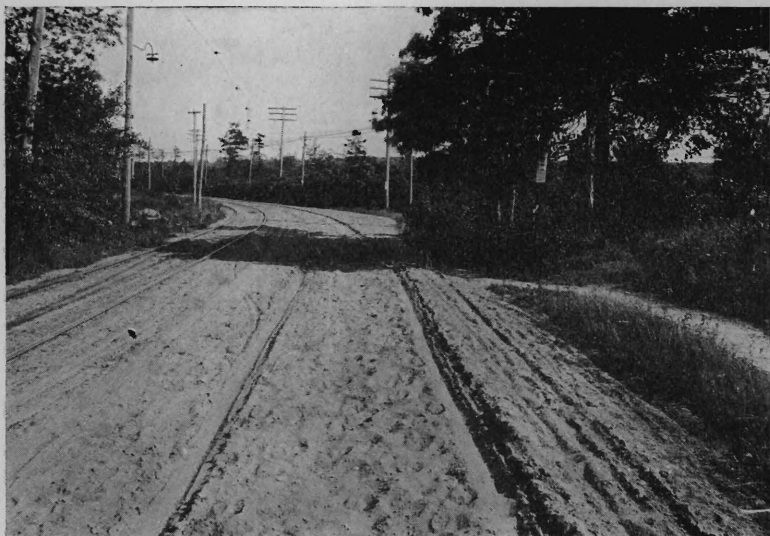
## Kingston Lane.

Detailed statement of the cost of Kingston Lane, Township of South Brunswick, County of Middlesex:

Total length, 3,805 feet, or 0.721 miles.  
Width of stone-bed, 14 feet.  
Length of stone-bed, 3,805 feet.  
Depth of stone-bed, 8 inches.

Macadam, with asphaltum binder, 6,170 square yards, at 83 cents; total.....	\$5,121.10
Earth excavation, 3,610 cubic yards, at 25 cents; total...	902.50
Macadam driveways, 33 square yards, at 69 cents; total..	22.77
Extras, screenings, \$130.39; oil, \$106.12; total.....	236.51
	<u>\$6,282.88</u>
Less difference between items and lump sum.....	6.27
Total .....	<u>\$6,276.61</u>
Supervisor's salary .....	273.00
Total cost of road.....	<u>\$6,549.61</u>





Middlesex County, Main Street, Milltown, Before.



Middlesex County, Main Street, Milltown, Stone; After Improvement.

## COMMISSIONER OF PUBLIC ROADS.

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Lump sum, contract price.....	\$5,856.67
Total allowed by the State.....	6,276.61
One-third of above, amount paid by the State.....	2,092.20
Maximum grade before.....	4.750 per cent.
Maximum grade after.....	1.628 per cent.

FRED. SIMONS,

Engineer.

WILLIAM W. STULTS,

Supervisor.

## Main Street, Milltown.

Detailed statement of the cost of Main street, Town of Milltown,  
County of Middlesex.

Total length, 6,878 feet, of 1.303 miles.

Width of stone-bed, 14 feet.

Length of stone-bed, 6,878 feet.

Depth of stone-bed, 8 inches.

Macadam, 10,834 square yards, at 80 cents; total.....	\$8,667.20
Macadam driveways, 391 square yards, at 80 cents; total.....	312.80
Earth excavation, 4,917 cubic yards, at 40 cents; total..	1,966.80
Excavating clay and filling in same with brick bats, 265 cubic yards, at \$1.65; total.....	437.25
Laying and taking up cobble gutter, 133 square yards, at \$1.65; total.....	219.45
Filling at retaining wall, 400 cubic yards, at 40 cents; total....	160.00
Cobble stone gutter, 989½ square yards, at \$2.45; total..	2,424.89
Excavating clay and filling same with brick bats, 466 cubic yards, at \$1.83; total.....	852.78
Total .....	\$15,041.17
Supervisor's salary .....	558.00
Extras, paid by county. Culvert pipe.....	211.50
Total cost of road.....	\$15,810.67

Lump sum, contract price.....	\$10,699.60
Total allowed by the State.....	15,041.17
One-third of above, amount paid by the State.....	5,013.72

Maximum grade before.....	6.0 per cent.
Maximum grade after.....	4.4 per cent.

FRED. SIMONS,

Engineer.

ROBERT A. HARKINS,

Supervisor.

## SEVENTEENTH ANNUAL REPORT

## Somerset Street, New Brunswick.

Detailed statement of the cost of Somerset street, City of New Brunswick, County of Middlesex.

Total length, 2,040 feet, or .386 miles.

Width of stone-bed, 14 feet.

Length of stone-bed, 2,040 feet.

Depth of stone-bed, 8 inches.

Macadam, with asphaltum binder, 3,314 square yards, at 70 cents; total.....	\$2,319.80
Earth excavation, 951 cubic yards, at 35 cents; total.....	332.85
Earth embankment, 2,987 cubic yards, at 50 cents; total. ....	1,493.50
	<hr/>
	\$ 4,146.15
Less difference between items and lump sum.....	3.65
	<hr/>
Total.....	\$4,142.50
Supervisor's salary.....	48.00
Extras, paid by county. Culvert pipe.....	65.42
	<hr/>
Total cost of road.....	\$4,255.92
	<hr/>
Lump sum, contract price.....	\$4,142.50
Total allowed by the State.....	4,142.50
One-third of above, amount paid by the State.....	1,380.83
	<hr/>
Maximum grade before.....	4.000 per cent.
Maximum grade after.....	2.724 per cent.

FRED SIMONS,

Engineer.

THOMAS HOWLEY,

Supervisor.

## Seventh Street, New Market.

Detailed statement of the cost of Seventh street, New Market, Township of Piscataway, County of Middlesex.

Total length, 8,700 feet, or 1.685 miles.

Width of stone-bed, 14 feet.

Length of stone-bed, 8,700 feet.

Depth of stone-bed, 7 inches.



## COMMISSIONER OF PUBLIC ROADS.

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Macadam, with amiesite, 14,031 square yards, at 80.5943 + cents; total.....	11,308.19
Earth excavation, 3,757 cubic yards, at 37 cents; total.....	1,390.09
Extra excavation, 940 cubic yards, at 37 cents; total.....	347.80
Macadam driveways, 60 square yards, at 51 cents; total.....	30.60
Total.....	<u>\$13,076.68</u>
Supervisor's salary.....	361.50
Extras, paid by county. Culvert pipes, etc., \$91.50. Filler, \$1,683.72.....	<u>1,775.22</u>
Total cost of road.....	<u>\$15,213.40</u>
Lump sum, contract price.....	\$12,728.88
Total allowed by the State.....	13,076.68
One-third of above, amount paid by the State.....	4,358.89

Maximum grade before.....	2.400 per cent.
Maximum grade after.....	0.822 per cent.

MORGAN F. LARSON,  
Engineer.

SAMUEL R. MANNING,  
Supervisor.

## Deans and Franklin Park Road.

Detailed statement of the cost of the Deans and Franklin Park road  
Township of South Brunswick, County of Middlesex.

Total length, 14,508 feet, or 2.748 miles.  
Width of gravel-bed, 20 feet.  
Length of gravel-bed, 14,508 feet.  
Depth of gravel-bed, 9 inches at center, 3 inches at sides.

Gravel, 5,336 cubic yards, at \$1.20; total.....	\$6,403.20
Earth excavation, 7,943 cubic yards, at 30 cents; total.....	2,382.90
Drain, 1,100 lineal feet, at 18 cents, total.....	<u>198.00</u>
	\$8,984.10
Less difference between items and lump sum.....	<u>.10</u>
Total.....	\$8,984.00
Supervisor's salary.....	<u>789.00</u>
Total cost of road.....	<u>\$9,773.00</u>

# SEVENTEENTH ANNUAL REPORT

Lump sum, contract price.....	\$8,984.00
Total allowed by the State.....	8,984.00
One-third of above, amount paid by the State.....	2,994.66

Maximum grade before.....	8.33 per cent.
Maximum grade after.....	2.62 per cent.

FRED. SIMONS,

Engineer.

FRANCIS MULVEY,

Supervisor.

## Red Bank and Holmdel Road.

Detailed statement of the cost of the Red Bank and Holmdel road, first section, County of Monmouth.

Total length, 20,200 feet, or 3.826 miles.

Width of gravel-bed, 18 feet.

Length of gravel-bed, 20,200 feet.

Depth of gravel-bed, 8 inches.

Gravel, Class A, 4,488 cubic yards, at \$1.99; total.....	\$8,931.12
“ Class B, 4,488 cubic yards, at \$1.08; total.....	4,847.04
Earth excavation, 17,789 cubic yards, at 25 cents; total..	4,447.25
Drain, 2,800 lineal feet, at 12 cents; total.....	336.00

\$18,561.41

Plus difference between items and lump sum.....	.25
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Total .....	\$18,561.66
Supervisor's salary .....	564.00
Engineering expenses .....	556.85
Extras, paid by county.....	53.25

Total cost of road.....	\$19,735.76
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Lump sum, contract price.....	\$18,561.66
Total allowed by the State.....	18,561.66
One-third of above, amount paid by the State.....	6,187.22

Maximum grade before.....	7.4 per cent.
Maximum grade after.....	5.0 per cent.

GEO. K. ALLEN, Jr.,

Engineer.

MATTHEW MULLIN,

Supervisor.



Monmouth County, Red Bank and Holmdel Road, 1st Section, Before.



Monmouth County, Red Bank and Holmdel Gravel Road, 1st Section, After.





Farmingdale and Hamilton Gravel Road, 2d Section, Williams' Corner,  
Before.



Farmingdale and Hamilton Gravel Road, 2d Section, Williams' Corner,  
Showing change of line, After.

## COMMISSIONER OF PUBLIC ROADS.

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## Farmingdale and Hamilton Road.

Detailed statement of the cost of the Farmingdale and Hamilton road, second section, County of Monmouth:

Total length, 10,931 feet, or 1.90 miles.

Width of gravel-bed, 18 feet.

Length of gravel-bed, 10,031 feet.

Depth of gravel-bed, 9 inches at centre; 3 inches at sides.

Gravel, 3,344 cubic yards, at \$1.20; total.....	\$4,012.80
Earth excavation, 26,950 cubic yards, at 19 cents; total..	5,120.50
Drain, 8,200 lineal feet, at 12 cents; total.....	984.00
Grubbing, 2.84 acres, at \$50.00; total.....	142.00
Extra for changing alignment.....	125.00
	<hr/>
	\$10,384.30
Plus difference between items and lump sum.....	1.70
	<hr/>
Total .....	\$10,386.00
Supervisor's salary .....	732.00
Engineering expenses .....	311.58
	<hr/>
Total cost of road.....	\$11,429.58
	<hr/>
Lump sum, contract price.....	\$10,261.00
Total allowed by the State.....	10,386.00
One-third of above, amount paid by the State.....	3,462.00
	<hr/>
Maximum grade before.....	14.30 per cent.
Maximum grade after.....	3.64 per cent.

GEO. K. ALLEN, Jr.,  
Engineer.

LEVI W. FARRY,  
Supervisor.

## Lakewood and Adelpia Road.

Detailed statement of the cost of the Lakewood and Adelpia road, second section, Township of Howell, County of Monmouth.

Total length, 13,200 feet, or 2.50 miles.

Width of gravel-bed, 14 feet.

Length of gravel-bed, 13,200 feet.

Depth of gravel-bed, 8 inches.

## SEVENTEENTH ANNUAL REPORT

Gravel, 4,600 cubic yards, at 90 cents; total. . . . .	\$4,140.00
Earth excavation, 12,000 cubic yards, at 20 cents; total. . . . .	2,400.00
Grubbing, 5 acres, at \$50.00; total. . . . .	250.00
	<hr/>
	\$6,790.00
Less difference between items and lump sum. . . . .	600.00
	<hr/>
Total. . . . .	\$6,190.00
Supervisor's salary. . . . .	375.00
Engineering expenses. . . . .	216.65
	<hr/>
Total cost of road. . . . .	\$6,781.65
	<hr/>
Lump sum, contract price. . . . .	\$6,190.00
Total allowed by the State. . . . .	6,190.00
One-third of above, amount paid by the State. . . . .	2,063.33
	<hr/>
Maximum grade before. . . . .	2.34 per cent.
Maximum grade after. . . . .	1.73 per cent.

PETER FORMAN,  
Engineer.

ARTHUR G. PATTON,  
Supervisor.

## Morris Plains and Parsippany Road.

Detailed statement of the cost of the Morris Plains and Parsippany road,  
Township of Hanover, County of Morris.

Total length, 13,718 feet, or 2.598 miles.

Width of stone-bed, 14 feet.

Length of stone-bed, 13,718 feet.

Depth of stone-bed, 6 inches.

Macadam, with amiesite, 21,644 square yards, at \$1.12; total. . . . .	\$24,241.28
Earth excavation, 21,000 cubic yards, at 30 cents; total. . . . .	6,300.00
Drain, stone and tile, 560 lineal feet, at 17 cents; total. . . . .	95.20
	<hr/>
Total. . . . .	\$30,636.48
Supervisors's salary. . . . .	747.00
Engineering expenses. . . . .	597.80
Extra. Iron pipe paid for by county. . . . .	1,195.25
	<hr/>
Total cost of road. . . . .	\$33,176.53





Monmouth County, Lakewood and Adelpia Road, 2d Section, Before.



Monmouth County, Lakewood and Adelpia Gravel Road, 2d Section, After.

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Lump sum, contract price. ....	\$32,328.08
Total allowed by the State. ....	30,636.48
One-third of above, amount paid by the State. ....	10,212.16

Maximum grade before. ....	8.50 per cent.
Maximum grade after. ....	4.00 per cent.

WM. E. KING,  
Engineer.

AUGUST MOLLER,  
Supervisor.

## Gladstone and Chester Road.

Detailed statement of the cost of the Gladstone and Chester road, Township of Chester, County of Morris.

Total length, 21, 053 feet, or 3.987 miles.

Width of stone-bed, 14 feet.

Length of stone-bed, 21,053 feet.

Depth of stone-bed, 9 inches.

Telford, with amiesite, including Ys, 32,906 square yards, at 95 cents; total. ....	\$31,260.70
Earth excavation, 17,355 cubic yards, at 50 cents; total. ....	8,677.50
Extra excavation. ....	725.02
Excavation outside of road, 1,450 cubic yards, at 10 cents; total. ....	145.00
Stone drain, 940 lineal feet, at 10 cents; total. ....	94.00

Total. ....	\$40,902.22
Supervisor's salary. ....	966.00
Engineering expenses. ....	1,111.25

Total cost of road. ....	\$42,979.47
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Lump sum, contract price. ....	\$40,174.05
Total allowed by the State. ....	40,902.22
One-third of above, amount paid by the State. ....	13,634.07

Maximum grade before. ....	12.8 per cent.
Maximum grade after. ....	7.5 per cent.

WM. E. KING,  
Engineer.

GEORGE M. HOWELL,  
Supervisor.

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## Pompton and Newark Turnpike.

Detailed statement of the cost of the Pompton and Newark turnpike, Township of Pequannock, County of Morris.

Total length, 15,515.5 feet, or 2.938 miles.

Width of stone-bed, 14 feet.

Length of stone-bed, 15,515.5 feet.

Depth of stone-bed, 6 inches.

Macadam, with asphaltum binder, 24,818 square yards, at 54 cents; total.....	\$13,401.72
Earth excavation, 10,634 cubic yards, at 27 cents; total.....	2,871.18
Total .....	\$16,272.90
Deducted from original contract 575 cubic yards excavation at 27 cents; \$155.25.	
Supervisor's salary .....	642.00
Engineering expenses .....	1,011.95
Extras, paid by county, iron pipe.....	1,004.00
Total cost of road.....	18,930.85
Lump sum, contract price.....	\$17,432.15
Total allowed by the State.....	16,272.90
One-third of above, amount paid by the State.....	5,424.30
Maximum grade before.....	4.00 per cent.
Maximum grade after.....	1.33 per cent.

WM. E. KING,

Engineer.

JOHN LYON,

Supervisor.

## Union Avenue, Paterson.

Detailed statement of the cost of Union avenue, City of Paterson, County of Passaic.

Total length, 4,163.5 feet, or .789 miles.

Width of stone-bed, 37 inches in curbed portion, 24 inches in remainder.

Length of stone-bed, 4,099 feet.

Depth of stone-bed, 7 inches.

Macadam, with asphaltum binder, 12,151.4 square yards, at 77 cents; total.....	\$9,356.58
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Passaic County, Union Avenue, During Construction.



Passaic County, Union Avenue, Stone Construction, After.

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By special agreement, $\frac{3}{4}$ -inch stone, wearing surface 1 inch thick, 12,151.4 square yards, at 15 cents; total..	\$1,822.71
20 bbls. extra asphaltum binder, at \$4.25; total.....	85.00
Earth excavation, 1,793 cubic yards, at 25 cents; total..	448.25
<b>Total .....</b>	<b>\$11,712.54</b>
Supervisor's salary .....	216.00
Extras, paid by county; pipe catch basin, masonry, etc...	323.44
<b>Total cost of road.....</b>	<b>\$12,251.98</b>
Lump sum, contract price.....	\$9,950.55
Total allowed by the State.....	11,712.54
One-third of above, amount paid by the State.....	3,904.18
Maximum grade before.....	5.66 per cent..
Maximum grade after.....	5.14 per cent..

GARWOOD FERGUSON,

Engineer.

T. A. McPHERSON,

Supervisor.

## Barnsboro Turnpike.

Detailed statement of the cost of the Barnsboro turnpike, Township  
of Upper Pittsgrove, Borough of Elmer, County of Salem:

Total length, 17,479 feet, or 3.310 miles.

Width of gravel-bed, 20 feet.

Length of gravel-bed, 17,479 feet.

Depth of gravel-bed, 8 inches in centre, 6 inches at sides.

Gravel, 7,553 cubic yards, at \$1.10; total.....	\$3,308.30
Earth excavation, 11,125 cubic yards, at 28 cents; total..	3,115.00
	<b>\$11,423.30</b>
Less difference between items and lump sum.....	450.00
<b>Total .....</b>	<b>\$10,973.30</b>
Supervisor's salary .....	280.50
Engineering expenses .....	486.00
Extras, paid by county.....	1,300.00
<b>Total cost of road.....</b>	<b>\$13,039.80</b>

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Lump sum, contract price. ....	\$10,973.30
Total allowed by the State. ....	10,973.30
One-third of above, amount paid by the State. ....	3,657.77

Maximum grade before. ....	2.98 per cent.
Maximum grade after. ....	1.16 per cent.

H. B. KEASBEY,  
Engineer.  
BENJ. ELWELL,  
Supervisor.

## Chester Road.

Detailed statement of the cost of the Chester road, Township of Bedminster, County of Somerset.

Total length, 3,095 feet, or .586 miles.  
Width of stone-bed, 14 feet.  
Length of stone-bed, 3,095 feet.  
Depth of stone-bed, 10 inches.

Telford, with asphaltum binder, 4,978 square yards, at 90 cents; total. ....	\$4,480.20
Driveways, 210 square yards, at 60 cents; total. ....	126.00
Earth excavation, 2,595 cubic yards, at 45 cents; total. ....	1,167.75
Rebuilding stone wall, 44.2 cubic yards, at \$4.00; total. ....	176.80
Drain, 2,306 lineal feet, at 20 cents; total. ....	461.20
Building new stone wall, 59.333 cubic yards, at \$6.00; total. ....	356.00
Cobble stone gutter, 41 square yards, at \$1.00; total. ....	41.00
Extra base, 64 square yards, at 50 cents; total. ....	32.00
Cost, plus 10 per cent. for taking up new road for additional drains and for changing grade. ....	235.45
Total. ....	\$7,076.40
Less cost of oil for 4,978 square yards, at 6 cents; total. ....	298.68
Total. ....	\$6,777.72
Supervisor's salary. ....	\$147.00
Engineering expenses. ....	152.50
Extras, paid by county (included in above). 639.65	
Total cost of road. ....	\$7,077.22
Lump sum, contract price. ....	\$6,436.75



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Total allowed by the State: .....	\$6,777.72
One-third of above, amount paid by the State. ....	2,259.24

Maximum grade before. ....	11 per cent.
Maximum grade after. ....	7 per cent.

JOSHUA DOUGHTY, JR.,  
Engineer.

CHAS. HILLARD,  
Supervisor.

## Warrenville Road.

Detailed statement of the cost of the Warrenville Road, Township of Warren, County of Somerset:

Total length, 3,600 feet, or .682 miles.  
Width of stone-bed, 14 feet.  
Length of stone-bed, 3,600 feet.  
Depth of stone-bed, 8 inches.

Telford, with asphaltum binder, 5,600 square yards, at 75 cents; total. ....	\$4,200.00*
Four-inch macadam drives, 105 square yards, at 50 cents; total, .....	52.50
Earth excavation, 7,531 cubic yards, at 45 cents; total. ....	3,388.95
Drain, 500 lineal feet, at 15 cents; total. ....	75.00
Cobble stone gutter, 50 square yards, at 80 cents; total. ....	40.00

Total. ....	\$7,756.45
Supervisor's salary. ....	243.00
Engineering expenses. ....	310.68

Total cost of road. ....	\$8,310.13
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Lump sum, contract price. ....	\$7,756.45
Total allowed by the State. ....	7,756.45
One-third of above, amount paid by the State. ....	2,585.48

Maximum grade before. ....	6 per cent.
Maximum grade after. ....	4 per cent.

JOSHUA DOUGHTY, JR.,  
Engineer.

W. HOWARD TOMS,  
Supervisor.

## SEVENTEENTH ANNUAL REPORT

## Frankford and Sandyston Road, Second Section.

Detailed statement of the cost of the Frankford and Sandyston road, second section, Townships of Frankford and Sandyston, County of Sussex.

Total length, 18,243 feet, or 3.455 miles.

Width of stone-bed, 14 feet.

Length of stone-bed, 18,243 feet.

Depth of stone-bed, 8 inches.

Macadam, 28,378 square yards, at 64 cents; total.....	\$18,161.92
Earth excavation, 28,600 cubic yards, at 36 cents; total..	10,296.00
Rock excavation, 700 cubic yards, at \$1.60; total.....	1,120.00
Drain, 2,978 lineal feet, at 35 cents; total.....	1,042.30

Total .....	\$30,620.22
Supervisor's salary .....	600.00
Engineering expenses .....	619.60
Extras, paid by county.....	2,908.10

Total cost of road.....	\$34,747.92
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Lump sum, contract price.....	\$32,079.17
Total allowed by the State.....	30,620.22
* One-third of above, amount paid by the State.....	10,206.74

Maximum grade before.....	12.0 per cent.
Maximum grade after.....	4.5 per cent.

A. H. KONKLE,

Engineer.

WILLIAM H. DALRYMPLE,

Supervisor.

## Frankford and Sandyston Road, Third Section.

Detailed statement of the cost of the Frankford and Sandyston road, third section, Township of Sandyston, County of Sussex.

Total length, 17,309.25 feet, or 3.278 miles.

Width of stone-bed, 14 feet.

Length of stone-bed, 17,177.25 feet.

Depth of stone-bed, 7 inches.



Sussex County, Frankford and Sandyston Road, 3d Section, Before.



Sussex County, Frankford and Sandyston Stone Road, 2d Section, After.





Union County, Raritan Road and Lake Avenue, Before.



Union County, Raritan Road and Lake Avenue, Amiesite, After.

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Macadam, with asphaltum binder, 26,792.6 square yards, at 59 cents; total.....	\$15,807.63
Earth excavation, 14,922.1 cubic yards, at 44 cents; total.	6,565.72
Extra earth excavation, 132 cubic yards, at 60 cents; total	79.20
Rock excavation, 231.8 cubic yards, at \$1.90; total.....	440.42
<hr/>	
Total .....	\$22,892.97
Supervisor's salary.....	328.50
Extra earth excavation.....	\$477.30
Extras, paid by County, sluice pipes and moving building \$1,615.12	} 2,092.30
<hr/>	
Total cost of road.....	\$25,313.87
<hr/>	
Lump sum, contract price.....	\$23,705.80
Total allowed by the State.....	22,892.97
One-third of above, amount paid by the State.....	7,630.99
<hr/>	
Maximum grade before.....	11 per cent.
Maximum grade after.....	5 per cent.

A. H. KONKLE,

Engineer.

JOHN SNIDER,

Supervisor.

## Raritan Road and Lake Avenue.

Detailed statement of the cost of the Raritan road and Lake avenue,  
Townships of Fanwood and Clark, County of Union:

Total length, 13,013 feet, or 2.465 miles.

Width of stone-bed, 16 feet.

Length of stone-bed, 13,013 feet.

Depth of stone-bed, 8 inches.

Macadam, with Amiesite, 23,887 square yards, at \$1.22; total .....	\$29,142.14
Earth excavation, 30,574 cubic yards, at 35 cents; total..	10,700.90
Earth excavation, outside road, 1,130 cubic yards, at 35 cents; total.....	395.50
Macadam driveways, 478 square yards, at 40 cents; total..	191.20
<hr/>	
Total .....	\$40,429.74
Supervisor's salary .....	360.00
Extras, paid by county; laying water pipes across street, etc. ....	31.01
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Total cost of road.....	\$40,820.75

# SEVENTEENTH ANNUAL REPORT

Lump sum, contract price. ....	\$41,083.30
Total allowed by the State. ....	40,429.74
One-third of above, amount paid by the State. ....	13,476.58
Maximum grade before. ....	5.90 per cent.
Maximum grade after. ....	3.40 per cent.

F. J. HUBBARD,  
Engineer.

WILLIAM HAND,  
Supervisor.

## Washington Avenue and Edgar Road Connection.

Detailed statement of the cost of the Washington avenue and Edgar road connection, Township of Linden, County of Union.

Total length, 1,300 feet, or 0.246 miles.

Width of stone-bed, 16 feet.

Length of stone-bed, 1,300 feet.

Depth of stone-bed, 8 inches.

Macadam, with asphaltum binder, 2,311 square yards, at \$1.00; total. ....	\$2,311.00
Earth excavation, 2,245 cubic yards, at 40 cents; total. ....	898.00
Total. ....	\$3,209.00
Supervisor's salary. ....	63.00
Total cost of road. ....	\$3,272.00
Lump sum, contract price. ....	\$3,209.00
Total allowed by the State. ....	3,209.00
One-third of above, amount paid by the State. ....	1,069.67
Maximum grade before. ....	6.50 per cent.
Maximum grade after. ....	4.00 per cent.

J. L. BAUER,  
Engineer.

GUSTAV PEIN,  
Supervisor.



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## Edgar Road, Lenington Street and Milton Avenue Connection.

Detailed statement of the cost of the Edgar road, Lenington street and Milton avenue connection, Township of Linden, County of Union.

Total length, 700 feet, or 0.132 miles.

Width of stone-bed, 16 feet.

Length of stone-bed, 700 feet.

Depth of stone-bed, 8 inches.

Macadam, with asphaltum binder, 1,244.5 square yards, at \$1.05;	
total. ....	\$1,306.73
Earth excavation, 504 cubic yards, at 33 cents; total. ....	166.32
	<hr/>
Total cost of road. ....	\$1,473.05
	<hr/>
Lump sum, contract price. ....	\$1,473.05
Total allowed by the State. ....	1,473.05
One-third of above, amount paid by the State. ....	491.02

Maximum grade before. .... 1.70 per cent.

Maximum grade after. .... .60 per cent.

J. L. BAUER,  
Engineer.

CHARLES MAXFIELD,  
Supervisor.

## Beattystown Road.

Detailed statement of the cost of the Beattystown road, Townships of Mansfield and Washington, County of Warren.

Total length, 45,341 feet, or 8.587 miles.

Width of stone-bed, 14 feet.

Length of stone-bed, 45,341 feet.

Depth of stone-bed, 6 inches.

Macadam, with asphaltum binder, 70,530.44 square yards, at 62½ cents; total. ....	\$44,081.52
Earth excavation, unclassified, 48,055 cubic yards, at 35 cents; total. ....	16,819.25

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Extra excavation, driveways, 1,286 cubic yards, at 35 cents; total.....	\$450.10
Drain, 800 lineal feet, at 15 cents; total.....	120.00
Cobble stone gutter, 3,455 5-9 square yards, at 30 cents; total .....	1,036.67

Total .....	\$62,507.54
Supervisor's salary .....	936.00
Engineering expenses .....	1,670.00
Extras, paid by county, piping, retaining walls, etc.....	8,466.66

Total cost of road.....	\$73,580.20
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Lump sum, contract price.....	\$63,008.92
Total allowed by the State.....	62,507.54
One-third of above, amount paid by the State.....	20,835.85

Maximum grade before.....	11.40 per cent.
Maximum grade after.....	6.56 per cent.

F. W. SALMON,  
Engineer.

SAMUEL S. STEWART,  
Supervisor.

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# APPENDICES.

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# Appendix A.

## STANDARD STATE AID SPECIFICATIONS FOR STONE ROADS.

### SPECIFICATIONS.

FOR A STONE ROAD IN. . . . . COUNTY, NEW  
JERSEY, KNOWN AS. . . . .  
BEGINNING AT. . . . .  
EXTENDING TO. . . . .  
A DISTANCE OF. . . . . FEET, OR. . . . . MILES.  
STONE. . . . . FEET WIDE. . . . . INCHES DEEP.  
EARTH. . . . . FEET WIDE. TOTAL WIDTH. . . . . FEET

### WORK TO BE PERFORMED.

1. The work to be performed will consist in furnishing all material, tools, machinery and labor necessary for the efficient and proper grading of roadway, side ditches and side banks, laying, spreading and rolling of road metal, and all other work of construction incidental thereto, as hereinafter specified, and leaving the roadway complete in every manner ready for immediate use.

### PLANS AND DRAWINGS.

2. The plan, profile and cross-sections on file in the office of the State Commissioner of Public Roads and at the office of. . . . .  
County Engineer. . . . . New Jersey, show  
general location, profile, details and dimensions. The work will be constructed  
in all respects according to the above-mentioned plan, profile and cross-sections,  
which form part of these specifications.

3. Any variation of location, profile, size and dimensions from that shown  
on the plans, as may be required by the exigencies of construction, will, in all  
cases, be determined by the engineer, but the contractor shall not, on any

pretense, save that of the written order of the contracting parties and the State Commissioner of Public Roads, deviate from the intent of the plans or specifications.

4. On all drawings, figured dimensions are to govern in cases of discrepancy between scale and figures.

#### GRADING.

5. Under this head will be included all excavation and embankment required for the formation of the highway, cutting all ditches or drains about or contiguous to the road, removing all fences, walls, buildings, trees, poles or other encumbrances, the excavation and embankment necessary for reconstructing cross or branch roads or entrances to dwellings in cases where they are destroyed or interfered with in the formation of the roadway and all other excavations and embankments connected with or incidental to the construction of the said road.

#### EXCAVATION.

6. The roadway, intersecting, cross or branch roads and entrances to dwellings are to be excavated or built to the widths and depths as shown on plans and to a curvature to conform to the final surface of the road when finished. The grade, from center to sides, must not exceed three-quarters of an inch per foot.

7. The material taken from any cut or ditch shall be deposited where the engineer may direct, either within or without the line of the road, but no material shall be removed from the line of the road without the order of the engineer.

8. The grading shall be completed for the full width of the road, from gutter to gutter, before any macadamizing is commenced.

#### EMBANKMENT.

9. Material taken from the excavations, except when otherwise directed by the engineer, shall be deposited in the embankments, either on the roadway or sidewalks. Rejected or excess material will be used to increase the width of the embankments or deposited in spoil banks or waste piles, as and where the engineer may direct.

10. When there is not sufficient material in the excavations of the road to form the embankments, the deficiency must be supplied by the contractor from without the road. The character of said material and place of excavation must be approved by the engineer.

11. The embankments will be formed in layers of such depth, generally one (1) foot, and the material deposited and distributed in such a manner as the engineer may direct, the required allowance for settling being added. Each layer shall be carried across the entire width of the embankment and completed before commencing another, and this method shall be followed with each succeeding layer until the established grade is reached.

#### SLOPES.

12. Slopes in both embankment and excavation shall be one and one-half ( $1\frac{1}{2}$ ) horizontal to one (1) vertical, when the width of the road will permit,

## COMMISSIONER OF PUBLIC ROADS.

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unless otherwise shown on cross sections; if the road is too narrow to allow the full slope within its side lines, the engineer shall not calculate the quantities, either in embankment or excavation, beyond said side lines, unless the required ground shall be first dedicated to the public in writing by the owner or owners thereof.

## WIDTH AND DEPTH.

13. The construction to be.....inches deep and.....feet wide, as shown on plan and detail sheet.

*Sub-Foundations.*

14. When the excavations and embankments have been brought to a proper depth below the intended surface of the roadway, the cross-section thereof conforming in every respect to the cross-section of the road when finished, the same shall be rolled with a ten (10) ton standard steam macadam roller until approved by the engineer and supervisor. The roller shall be so constructed as to give a compressing power of not less than four hundred (400) pounds per lineal inch on drivers. If any depressions form under such rolling, owing to improper material or vegetable matter, the same shall be removed and good earth substituted, and the whole re-rolled until thoroughly solid and to above-mentioned grade. Water must be applied in advance of the roller when, in the opinion of the engineer and supervisor, it is necessary.

15. After the road-bed has been prepared and properly rolled the same shall be..... inches below the intended surface of the roadway, and the surface thereof shall not be disturbed by any unnecessary carting or hauling upon it, but if the surface is disturbed the same shall be re-formed and re-rolled before the spreading of stone is commenced.

## FINAL FINISH OF SLOPES AND SHOULDERS.

16. The final finish of slopes and shoulders in both embankment and excavation, must be completed before the spreading of the second course of broken stone. After the spreading of the second course of broken stone no work will be allowed upon either slopes or shoulders that will tend to deposit any earth upon this course of stone or upon the finished surface of the macadam.

## STONE CONSTRUCTION.

*Telford Foundations.*

17. After the road-bed has been formed and rolled as above specified, and has passed the inspection of the engineer and supervisor, a bottom course of stone, of an average depth of..... inches, is to be set by hand as a close, firm pavement, the stones to be placed on their broadest edges lengthwise across the road in such manner as to break joints as much as possible, the breadth of the upper edge not to exceed four (4) inches. The interstices are then to be filled with stone chips, firmly wedged by hand with a hammer, and projecting points broken off. No stone of greater length than ten (10) inches or width of four (4) inches shall be used, except each alternate stone on outer edge, which shall be double the length of the others and well tied into the bed of the road. All stones with a flat, smooth surface must be broken. The whole surface of this pavement must be subjected to a thorough settling or



ramming with heavy sledgehammers, and thoroughly rolled with a . . . . . ton . . . . . roller. No stone larger than two and one-half ( $2\frac{1}{2}$ ) inches shall be left loose on top of telford.

#### MACADAM.

##### *First Course of Broken Stone.*

18. After the road-bed has been formed and rolled as above specified, and has passed the inspection of the engineer and supervisor, the first layer of broken stone, consisting of two and one-half ( $2\frac{1}{2}$ ) inch stone, or stone that will pass through a ring three (3) inches in diameter, shall be deposited in a uniform layer, having a depth of . . . . . inches, and rolled repeatedly with a ten (10) ton standard steam macadam roller until compacted to the satisfaction of the engineer and supervisor. No stone in this course shall be less than two (2) inches in length.

19. The depth of loose stone in this and all other courses must be measured by blocks the required thickness of the said loose stone. These blocks must be placed at frequent intervals amid the loose stone when being spread.

#### BINDER ON FIRST COURSE OF BROKEN STONE.

20. On the first course of stone a quantity of stone screenings shall be spread in a uniform layer, and the whole rolled until the stone ceases to sink or creep in front of the roller. The quantity and quality of this binder shall be subject to the approval of the engineer and supervisor. Gravel found along the line of the road or furnished by the contractor, of a quality approved by the engineer, shall be used as a binder in addition to the stone screenings. The quantity and manner of applying the gravel shall be subject to the approval of the engineer and supervisor, but no binder shall be applied in sufficient quantity to completely cover or form a coating upon this course of stone.

#### SECOND COURSE OF BROKEN STONE.

21. The second course of broken stone shall consist of one and one-half ( $1\frac{1}{2}$ ) inch stone; that is, every piece of stone shall be broken so that it can be passed through a ring two (2) inches in diameter, and no stone shall be more than two (2) inches nor less than one (1) inch long. This course shall be spread in a uniform layer having a depth of . . . . . inches and rolled with a ten (10) ton standard steam macadam roller until thoroughly settled into place to the satisfaction of the engineer and supervisor. After the one and one-half ( $1\frac{1}{2}$ ) inch stone has been rolled into place and is ready for the asphaltum binder, the road shall be protected from travel as much as possible. Should any mud, clay, sand, gravel or other foreign material get on the surface of the road before the binder is applied, it shall be removed and the one and one-half ( $1\frac{1}{2}$ ) inch stone re-rolled into place, if necessary, before the binder is applied. In no case is the binder to be applied to moist or wet stone. During the rolling and until the top dressing has been added, the road must be kept as free from dust and dirt of all kinds as possible.

The contractor will not be allowed to spread the second course of broken stone until he is ready to apply the asphaltum binder, as hereinafter specified. This should be done immediately after this course of stone is properly pre-

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pared. When so prepared and until its final finish the contractor must protect that portion of the roadway from all unnecessary travel that will tend to destroy the desired crown of the macadam.

## ASPHALTUM BINDER.

22. When the second course of broken stone has been spread and rolled as above specified, asphaltum binder shall be applied by means of a mechanical distributor designed to evenly distribute the asphaltum binder, to regulate the width of distribution, to control the quantity distributed and to maintain the asphaltum binder at a uniform temperature.

23. The quantity of asphaltum binder required will be 1.2 gallons of residual bitumen per square yard of macadam surface, the temperature of which when applied shall be not less than 190 deg. F. nor more than 200 deg. F. Residual bitumen is to be determined as provided in Article 31, Section 7.

Before any binder is applied to the one and one-half ( $1\frac{1}{2}$ ) inch stone, the contractor must have on hand the required amount of three-quarter ( $\frac{3}{4}$ ) inch stone and screenings necessary to finish the road so the same can be applied at once after the rolling has been finished, also the quantity of the one and one-half ( $1\frac{1}{2}$ ) inch stone coated at any one time shall not be so large but that there will be sufficient binder left in the car for the surface dressing.

24. After the application of the asphaltum binder the rolling shall continue until the stone ceases to sink or creep in front of the roller. The wheels of the roller are to be kept constantly wet so that they will not adhere to any of the coated stone during the rolling. The amount of rolling required to be done shall be subject to the approval of the engineer and supervisor.

25. Any depressions formed during the rolling, or from any other cause, are to be filled with one and one-half ( $1\frac{1}{2}$ ) inch stone or three-quarter ( $\frac{3}{4}$ ) inch stone or both, together with asphaltum binder, as ordered by the engineer, and the roadway then rolled until brought to the proper grade and curvature as determined by him. Additional asphaltum binder must also be applied in such quantities and at such points as directed by the engineer, so that the entire surface of the second course of stone will show a uniform quantity of asphaltum binder upon its face before the spreading of the surface course of stone.

## SURFACE.

26. When the two courses of stone are rolled to the satisfaction of the engineer and supervisor, a coat of three-quarter ( $\frac{3}{4}$ ) inch stone shall be spread of sufficient thickness to make a smooth and uniform surface to the road. This three-quarter ( $\frac{3}{4}$ ) inch stone must not contain over five per cent. of material small enough to pass a screen having one-quarter inch openings and must be as free as possible from dust. A second application of the asphaltum binder shall then be made at the rate of three-tenths (.3) of a gallon of residual bitumen per square yard, and after this second application of binder has thoroughly penetrated the three-quarter ( $\frac{3}{4}$ ) inch stone, stone dust shall be applied in sufficient quantity to just fill the voids and the road again rolled until it becomes thoroughly consolidated, hard and smooth.

27. Rolling must be done by contractor with a ten (10) ton standard steam



macadam roller, so constructed as to give a compressing power of not less than four hundred (400) pounds per lineal inch on drivers, approved by the engineer.

#### MANNER OF ROLLING.

28. In the rolling the roller must start from the side lines of the stone bed and work towards the center, unless otherwise directed. The rolling shall at all times be subject to the directions of the engineer and supervisor, who may from time to time, direct such methods of procedure as in their opinion the necessities of the case may require.

#### WATER.

29. No water will be allowed in the construction of the macadam work. The stone to which the asphaltum binder is to be applied must be dry at the time the application is made, and should there be a shower or heavy dew this part of the work must stop until the stone has thoroughly dried.

#### QUALITY OF MATERIALS.

##### *Broken Stone.*

30. All stone must be as nearly cubical as possible, broken with the most approved modern stone-crushing machinery, free from all screenings, earth and other objectionable substances, of uniform size, and the same kind and quality, or equally as good in every particular, as that shown in the engineer's office. The one and one-half ( $1\frac{1}{2}$ ) inch stone, three-quarter ( $\frac{3}{4}$ ) inch and dust for binder and final finish must be of the best trap rock, free from loam or clay.

#### ASPHALTUM BINDER.

31. When the binder is made from a petroleum oil, it must pass the following test:

1. It must be uniform and homogeneous and show no segregation or stratification of the ingredients when cooled slowly from 165 deg. C. (329 deg. F.) without being disturbed or agitated. No cars of oil will be accepted containing lumps or layers of bitumen which have a higher viscosity test than that given for the oil itself.

2. It must not contain over four-tenths per cent. of mineral and organic matter insoluble in cold carbon bisulphide.

3. It must not have a viscosity of over 660 seconds per first 50 cm.<sup>3</sup> at 90 deg. C. (194 deg. F.) or less than 480 seconds when the oil is to be applied before the 15th of October, or 540 seconds per first 50 cm.<sup>3</sup> at 90 deg. C. (194 deg. F.) or less than 300 seconds if applied after the 15th of October and before the 1st of the following May. (The above test to be made with an Engler Viscosimeter using 240 cm.<sup>3</sup> at 90 deg. C. (194 deg. F.) The value of the viscosimeter is 200 cm.<sup>3</sup> of distilled water in 50.6 seconds at 20 deg. C. (70 deg. F.).]

4. It must not flash below 85 deg. C. (185 deg. F.) as determined by the Tagliabue Open Cup Tester.

5. It must not contain over one-tenth per cent. of water.

6. It must be free from coal tar or coal tar products.



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7. When fifteen grams of the binder are heated to and maintained at a temperature of 162 deg. C. (325 deg. F.) in an open tin box two and one-quarter inches in diameter and one inch deep for a period of five hours, it must not lose in weight over twenty per cent. for the 660 viscosity oil or over twenty-five per cent. for the 540 viscosity oil, and yield a residue having the following characteristics:

a. It must have a specific gravity of not less than .995 at 15.5 deg. C. (60 deg. F.).

b. It must have a penetration of not less than 65 or over 115 at 77 deg. F. as determined by the Dow Penetration Machine, using a No. 2 needle under a load of 100 grams applied for five seconds.

c. It must not contain over three per cent. of paraffin scale as determined by the Holde method.

When the binder is made from a fluxed natural asphalt, tests 2 and a are changed to read as follows:

2. It must not contain over five per cent. mineral and organic matter insoluble in cold carbon bisulphide.

a. It must have a specific gravity of not less than 1.02 at 15.5 deg. C. (60 deg. F.).

No oil is to be taken from any car until it has been sampled, analyzed and released by the State Road Department. The release will designate the actual quantity of asphaltum binder to be used to secure the specified quantity of residual bitumen.

The oil must be heated to a uniform temperature of not less than 90 deg. C. (194 deg. F.) before it is drawn from the car. The supervisor shall take the temperature as each wagonload of oil is drawn from the car, and if the temperature has fallen below 90 deg. C. (194 deg. F.) no more oil shall be taken from the car until the oil has been reheated to 90 deg. C. (194 deg. F.) or above.

### OTHER METHODS OF CONSTRUCTION.

.....  
32. The contractor must furnish samples to the engineer of the kind of stone and asphaltum binder to be used in the work before the opening of the bids, and to the State Commissioner of Public Roads before the approval of the contract by him.

#### ENTRANCES TO DWELLINGS.

33. Driveways leading to dwellings located along the road, if indicated on the plans, shall be macadamized with the second course of broken stone (see Article 21) and finished in the same manner as prescribed for finishing macadam.

34. The macadamizing shall be carried to the lengths and widths as shown on plans, not exceeding, however, a distance of six (6) feet beyond the gutter line of the road, but in no case shall the macadamizing be carried beyond the side line of the road as indicated by the fences.

#### SHOULDERING.

35. A shoulder of firm earth or gravel is to be left or made on each side, extending at the same grade and curvature of road to side ditches or gutters. This shoulder is to be rolled according to the directions of the engineer.

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### SIDE DITCHES OR GUTTERS.

36. The side ditches or gutters are to be excavated as per stakes furnished by engineer, in order to give an easy flow of water, so that no water shall be left standing on the road or in the ditches, for which no extra payment will be made.

### PAVED SIDE AND CROSS GUTTERS.

37. Gutters shall be paved with belgian blocks or cobble stones, as indicated, and for the lengths and widths as shown on plans.

### BELGIAN BLOCKS.

38. If belgian blocks are used in paving gutters the contractor shall first excavate to a sufficient depth below the finished grade of the gutter to allow for a bed of good sharp sand or gravel of a depth not less than six (6) inches below the blocks. The cost of excavating this material and removing same must be included in the price bid for paving.

39. The blocks shall be laid vertically on edge and parallel with the line of the gutter. They shall be of the best quality of trap-rock and subject to the approval of the engineer and supervisor. Each block shall not measure less than eight (8) nor more than twelve (12) inches in length, not less than three and one-half ( $3\frac{1}{2}$ ) nor more than four and one-half ( $4\frac{1}{2}$ ) inches in width, and not less than seven (7) nor more than eight (8) inches in depth. All blocks shall be of the same quality as to hardness, color and grain. No out-crop, soft, brittle or laminated stone will be accepted. The blocks must be split and dressed so as to form, when laid, close end joints and side joints not exceeding one-half ( $\frac{1}{2}$ ) inch in width, top and bottom, with fair and true surfaces on top, bottom and ends. All end joints must be broken by a lap of at least three (3) inches.

40. After the blocks are laid as above specified, the surface of the blocks must be covered with fine, dry sand, which shall be swept until the joints are completely filled. The blocks shall then be carefully rammed to a firm, unyielding bed with a uniform surface and with the proper grade and curvature. After ramming the blocks the surface of the same shall be again covered with fine, dry sand, and again swept until all the joints are filled.

### COBBLE STONES.

41. If cobble stones are used in paving gutters, the contractor shall proceed as provided for in Article 38.

42. The cobbles must be good, hard, sound stone and of as uniform size as practicable. Medium size stone not over five (5) inch face on its longest diameter must be used, excepting for center line and side lines of gutter, where eight (8) inch stone may be used. The stones are to be set upon their small ends with their greatest dimensions vertical and with their greatest horizontal dimensions parallel with the line of the gutter.

43. After the cobbles are laid as above specified, the same are to be covered with sand, rammed and again covered with sand, as provided for in Article 40. All stones broken in ramming shall be removed and replaced with perfect stones.



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### UNDERDRAINS.

44. Underdrains, as shown on plans, shall be constructed by the contractor of good four (4) inch round, porous tile. The top of the tile shall be at least thirty (30) inches deep, unless otherwise directed by the engineer, the joints shall be covered with salt hay, or material equally as good, and the trench filled with pervious earth. Additional underdrains, if found necessary, will be constructed as an extra, and will be governed by the provisions of Article 48.

45. When directed by the engineer, a stone drain may be used in place of the tile drain. A trench one foot wide and one foot six inches deep shall be excavated below the sub-grade, said excavation to be filled with loose broken stone to a depth required by the engineer.

### BROAD TIRE WAGONS.

46. All wagons and carts used during the construction for hauling stone, earth or any other material must have tires not less than three and one-half ( $3\frac{1}{2}$ ) inches in width.

### NO EXTRA PRICE.

47. No allowance in measure of depth of pavement will be made on account of any material which may be driven into the road-bed by rolling. The pavement, when completed, must conform to the grade and the cross-sections, and be satisfactory to the engineer and the State Commissioner of Public Roads, whose decisions shall be final.

48. No extra work will be paid for unless the same, together with the price, has been agreed upon between the contracting parties, including the State Commissioner of Public Roads, and endorsed upon the agreement, witnessed by the engineer.

49. All gravel for shouldering or binder and all extra hauling shall be done at the contractor's expense.

### BIDS.

50. Bids will only be received under these specifications for the completion of the entire work as called for in the estimate of quantities given below, including all the items as specified, and the total or lump sum of the bid will govern in the awarding of the contract. The contractor must give separate prices per unit of measure for each of the several classes of work to be performed and all bids should balance; that is to say, the total of the estimates given, multiplied by the prices per unit of measure, should equal the lump sum bid for the entire work. No bids will be received in which all of the following items are not filled out:

(1) Price per cubic yard for excavating, removing and depositing material, without classification and measured in excavation, as per cross-sections throughout the length of the road.

(2) Price per cubic yard for any necessary excavations and removing material, without classification and measured in excavation, not included in the length and width of the road.

(3) Price per square yard for macadam road complete.

(4) Price per square yard for macadamizing driveways to dwellings.

(5) Price per square yard for telford road complete.



(6) Price per square yard for laying belgian block gutters, furnishing all material and labor.

(7) Price per square yard for laying cobble stone gutters, furnishing all material and labor.

(8) Price per lineal foot for underdrains, furnishing all material and labor.

(9) .....

(10) .....

(11) Price per square yard for.....road complete.

(12) Price per square yard for.....road complete.

(13) Price per unit of measure for any additional work called for, furnishing all material and labor.

(14) Price (lump) for the whole road complete, according to above specifications and plans.

#### ESTIMATE OF QUANTITIES.

51. (1) Excavations.....cubic yards.
- (2) Excavations outside road.....cubic yards.
- (3) Macadam.....square yards.
- (4) Macadam driveways.....square yards.
- (5) Telford.....square yards.
- (6) Belgian block gutters.....square yards.
- (7) Cobble stone gutters.....square yards.
- (8) Underdrains.....lineal feet.
- (9) .....
- (10) .....
- (11) .....
- (12) .....
- (13) .....
- (14) .....

52. These quantities are the result of careful calculation, but are to be considered as approximate. The county will only pay the contractor for the actual amount of work performed, which will be determined after the completion of the contract, and at the price bid for the same. The Board of Chosen Freeholders reserves the right to increase or decrease any of the items in the above estimate of quantities, subject, however, to the provisions of Article 48. If there be any increase in the quantities as given, the county will pay for the same at the rate bid for the work in question. The contractor is expected to satisfy himself as to the nature, character and quantity of the material and labor required by a personal examination of the work contemplated.

#### CHECK ACCOMPANYING BIDS.

53. All bidders shall accompany their bid with a certified check, payable to the order of the Director of the Board of Chosen Freeholders, in the sum of one thousand dollars (\$1,000), as a guarantee that if the contract shall be awarded to him he will, when required by said board, execute an agreement in writing to perform the work according to the specifications. Upon failure

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by the contractor to enter into said agreement with the said Board of Chosen Freeholders, said certified check shall be forfeited and considered as liquidated damages.

### LIABILITIES OF CONTRACTOR.

54. He shall maintain sufficient guards by day and night to prevent accidents from travel, and will be liable for any damage which may arise from his neglect to do so, or from any omission on his part.

55. He is to commence and prosecute the work upon the road at the end farthest from the source of supply of broken stone, unless otherwise ordered by the engineer, within.....days from and after the signing of the contract, and shall continue work thereon until completion, except as herein provided.

56. He further agrees to complete the same on or before the .....day of .....A. D..... Twenty dollars for each day that the work shall remain uncompleted, after the time allowed by contract, may be deducted, as liquidated damages, from any moneys due contractor, unless otherwise agreed upon by the Board of Chosen Freeholders, after presentation of certificate of the engineer recommending the extension of the time limit of completion.

57. The contractor shall keep the finished roadway, shoulders, side slopes, ditches and underdrains in repair for the period of one year from the date of its completion and acceptance, and, in addition thereto, for as much longer as for any period or periods during said year it shall be out of proper condition. If, during that time, the roadway or any part of the work shall, in the judgment of the engineer and the Board of Chosen Freeholders, require repairing, and they shall duly notify the contractor to make such repairs as required, and the contractor should refuse or neglect to do so to the satisfaction of the said engineer and the Board of Chosen Freeholders, within five days from the date of service of notice, then the said Board of Chosen Freeholders shall have the right to have the work done by other proper parties, and to deduct from any moneys due to said contractor an amount sufficient to cover the cost of said repairs, and if there be no money due to said contractor, then the said Board of Chosen Freeholders shall have the right to maintain an action against the surety of said contractor for the recovery of the cost of said repairs.

58. The contractor will be required to preserve all stakes and bench-marks made and established on the line of work until duly authorized by the engineer to remove the same. All stakes or bench-marks disturbed or removed by the contractor or his agents without the permission of the engineer shall be replaced at the expense of the contractor.

59. The contractor shall not disturb the position of title stones (the corners of properties adjacent to the road), but where they appear he will either lift or lower them, under the personal supervision of the engineer.

60. The contractor must also preserve the roadway on which he is working from needless obstruction, and where necessary he must construct safe and commodious crossings, to be maintained in good order. He shall afford all proper and reasonable means for the accommodation of the public, and leave the roadway complete in every manner ready for immediate use.



61. All loss or damage arising from the nature of the work to be done or from any unforeseen or unusual obstruction or difficulty, which may be encountered in the prosecution of said work or from the action of the elements, shall be sustained by the contractor.

PROVISION FOR DRAINAGE.

62. If it is necessary in the prosecution of the work to interrupt or obstruct the natural drainage of the surface, or the flow of artificial drains, the contractor shall provide for the same during the progress of the work in such a way that no damage shall result to either public or private interests. He shall be held liable for all damages which may result from any neglect to provide for either natural or artificial drainage, which he may have interrupted.

RIGHT TO BUILD BRIDGES, CULVERTS, ETC., AND SUSPENSION OF WORK.

63. The right of the county to build bridges, culverts, lay pipes or other appurtenances in said road during the progress and prior to the completion of the work is expressly reserved, as well as suspending the work or any part thereof during the construction of the same, for the purposes above stated, without further compensation to the contractor for such suspension than an extension of time for completing the work as much as it may have been delayed.

STOPPING WORK ON ACCOUNT OF WEATHER.

64. The State Commissioner of Public Roads, engineer or supervisor, may stop any portion of the work, if, in their judgment, the weather is such as to prevent the same being done properly. No allowance of any kind will be made for such stoppage, except an extension of the time for the completion of the work as herein provided.

ABANDONMENT OF CONTRACT.

65. If at any time the work under contract should be abandoned, or if at any time the engineer should judge and so certify in writing that said work, or any part thereof, is unnecessarily delayed, or that the contractor is willfully violating any of the conditions or covenants of this contract, or is executing the same in bad faith, then, in that case, the Board of Chosen Freeholders shall notify the said contractor to discontinue all work under this contract. Said board may employ other parties to complete the work in such manner as it may decide, and use such material as may be procured upon the line of aforesaid work, and, if necessary, procure other material for its completion, and charge the expense of the said labor and material to the contractor, which expense shall be deducted from any moneys due him under contract. In case these expenses shall exceed the sum which would have been payable under contract, if the same had been completed by said contractor, he or his bondsmen shall pay the amount of the excess to the Board of Chosen Freeholders, on notice from the engineer.

ENGINEER.

66. The engineer shall be selected or appointed by the Board of Chosen Freeholders and paid by it. He shall furnish all surveys, profiles, plans, specifications and estimates of quantities of all kinds before specifications are



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signed, and in such a clear manner that lump bids can be made upon the work. He shall furnish all lines and grades required for the completion of the work. He shall furnish estimates for quantities of work done before partial payments can be made, the quantity of road laid being determined by surface measurements. Should any difference arise between the contracting parties as to the meaning or intent of these specifications, his decisions on these matters are to be final and conclusive. The work is to be done according to his directions, and if any material of which he does not approve is brought upon the road, it is to be removed at the expense of the contractor. If the contractor fails or neglects to do any part of the work as specified or as directed by the engineer, then, in that case, all other work shall be discontinued on notice from the engineer to the contractor, or to the superintendent or foreman in charge of the work for the contractor, until such time as the work complained of has been done to the satisfaction of the engineer, and the contractor will not be entitled to or allowed any compensation or extension of time for such discontinuation or suspension of the work.

### SUPERVISOR.

67. Nothing in these specifications relating to the duties of the engineer shall be taken or construed in any manner to conflict with the duties of the supervisor, as specifically set forth in the act entitled "An act to provide for the permanent improvement of public roads in this State," approved March 27th, 1905, but they shall co-operate as far as practicable.

### INCOMPETENT WORKMEN.

68. The contractor shall employ competent men to do the work, and whenever the engineer and supervisor shall inform him, or his representative in charge, in writing, that any man on the work is unfitted for the place, or is working contrary to the provisions of the specifications or the instructions of the engineer and supervisor, he shall thereupon be discharged.

### INSPECTION.

69. All directions and determinations necessary to give due and full effect to any of the provisions of these specifications shall be given by the engineer and supervisor.

70. All material and workmanship of any kind shall be subject at all times to the inspection of the engineer and supervisor. Whenever unfaithful and imperfect work is discovered, it shall be immediately repaired or replaced by the contractor, after due notification from the engineer and supervisor.

### SUB-LETTING OF CONTRACT.

71. The contractor shall not assign or sub-let any portion of this contract without the consent of the Board of Chosen Freeholders and the State Commissioner of Public Roads.

### PAYMENTS.

72. Monthly payments will be made by the Board of Chosen Freeholders to the contractor for work performed, upon presentation by him of the proper certificates of the engineer and supervisor, in a sum not to exceed eighty per cent. of the amount then due, together with releases from all liens, if required.

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Fifteen per cent. will be paid at the completion of the work and the acceptance of the same in writing by the Board of Chosen Freeholders and the State Commissioner of Public Roads. The remainder or five per cent. will be retained by the Board of Chosen Freeholders for a period of one year as security for the faithful performance of Article 57.

## BOND OF CONTRACTOR.

73. The contractor will be required to execute, within thirty days of giving of contract, a bond in such sum and with such securities as shall be approved by the Board of Chosen Freeholders, conditioned for the faithful performance of the contract, to indemnify and save harmless the Board of Chosen Freeholders from all suits or actions of any name or description brought against it on account of any act or omission of the contractor or his agents, and for the faithful performance of the contract by the contractor. Said bond shall be in a sum of not less than the estimated cost of the road when completed. Any change made in the plans, specifications, agreements or quantities without the consent of the bondsmen shall in no way vitiate said bond. The contractor hereby further agrees that so much of the money due him, under and by virtue of this agreement, as shall be considered necessary by the Board of Chosen Freeholders, may be retained by it until all such suits or claims for damages aforesaid shall have been settled, and evidence to that effect furnished to the satisfaction of the Board of Chosen Freeholders.

## CONTRACTOR TO INSURE PAYMENT FOR LABOR, MATERIAL, ETC., ON FINAL ESTIMATE.

74. The contractor must also furnish the engineer with satisfactory evidence that all persons who did work, or furnished material for this contract, or who have sustained damage or injury by reason of any act, omission or carelessness on his part or his agents in the prosecution of the work, have been duly paid or secured. He shall also give notice to the engineer within ten days after the completion of the work, and before final estimate is made, that any balance for such work or materials, or compensation for such damages due, has been fully paid or released.

75. The right is reserved to reject any or all bids, if deemed to the interest of the county or State.

.....  
*County Engineer.*

Plans, including profiles, cross-sections and specifications, approved this ..... A.D. .... by resolution of the Board of Chosen Freeholders of the county of .....

.....  
*Director of Board of Chosen Freeholders.*

.....  
*Clerk of Board of Chosen Freeholders.*

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OFFICE STATE COMMISSIONER OF PUBLIC ROADS, TRENTON, N. J.

I have this day carefully read and examined the foregoing specifications, and the plans, profiles and cross-sections therein referred to, and the same are hereby approved.

Any departure from these specifications must have the written consent of the State Commissioner of Public Roads.

Given under my hand this....., A. D. 19....

.....  
*State Commissioner of Public Roads.*

NEW JERSEY STATE LIBRARY



PROPOSAL.

*To the Board of Chosen Freeholders, County of.....and State of New Jersey :*

GENTLEMEN—The undersigned hereby declare....that....he....ha....carefully examined the annexed specifications and the drawings therein referred to, and will provide all necessary machinery, tools, apparatus and other means of construction, and do all the work and furnish all the material called for by said specifications in the manner prescribed by the specifications and the requirements of the engineer and supervisor under them, for the following prices:

1. For excavating and removing material without classification and measured in excavation, as per cross-sections, throughout the length of the road ..... cubic yards, at ..... cents, \$.....

2. Price per cubic yard for any necessary excavations and removing material without classification and measured in excavation, not included in the length and width of the road.....cubic yards, at ..... cents, \$.....

3. For furnishing all material and labor for macadamizing roadway and driveways, including application of asphaltum binder.

Macadam.....square yards, at.....cents, \$.....

4. Macadam for driveways.....square yards, at.....cents, \$.....

5. Telford.....square yards, at.....cents, \$.....

6. For paving gutters, furnishing all material and labor:

(1) Belgian block gutters.....square yards, at.....cents, \$.....

(2) Cobble stone gutters .....square yards, at.....cents, \$.....

7. For underdraining, furnishing all

• material and labor.....lineal feet, at.....cents, \$.....

8. ....at.....cents, \$.....

9. ....at.....cents, \$.....

10. ....at.....cents, \$.....

11. ....at.....cents, \$.....

12. ....at.....cents, \$.....

13. ....at.....cents, \$.....

14. Price (lump) for the whole road complete according to the specifications and plans therein referred to.....

Accompanying this proposal is a certified check for the sum of one thousand dollars (\$1,000), payable to the order of the Director of the Board of Chosen Freeholders of.....county, which check is to be forfeited as liquidated damages if, in case this proposal is accepted, the undersigned shall fail to execute a contract with said Board of Chosen Freeholders, under the conditions of this proposal, within the time provided for by the foregoing advertisement for proposals, otherwise said check is to be returned to the undersigned.

Signed.....

Address.....

NOTE.—Opposite items where no quantities are specified, the contractor will name price per unit of measure for each class of work called for, but will not include same in his total column.

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CONTRACT.

This agreement, made the.....day of....., in the year of our Lord one thousand nine hundred....., between THE BOARD OF CHOSEN FREEHOLDERS OF THE COUNTY OF....., party of the first part and....., party of the second part.

*Witnesseth*, That the said party of the second part for and in consideration of the payments hereinafter specified and agreed to be made by the party of the first part, hereby covenants and agrees to furnish and deliver all the materials and to do and perform all the work and labor required to be furnished and delivered; done and performed in and about the improving of..... beginning at..... and extending to..... in the township of..... a distance of..... in strict and entire conformity with the plans on file in the engineer's office and with the specifications hereto annexed and duly approved by resolution of THE BOARD OF CHOSEN FREEHOLDERS OF THE COUNTY OF..... adopted the .....day of..... in the year to our Lord one thousand nine hundred..... and approved by the State Commissioner of Public Roads on the.....day of..... in the year of our Lord one thousand nine hundred..... which said plans and specifications are hereby made part of this agreement as fully and with the same effect as if the same had been set forth at length in the body of this agreement.

In consideration of the premises the party of the first part hereby agrees to pay to the party of the second part for said work, when completed in accordance with the said specifications, the sum of..... payments to be made as provided in said specifications upon presentation of the proper certificates of the engineer and supervisor and upon the terms set forth in the annexed specifications.

This contract to be binding upon THE BOARD OF CHOSEN FREEHOLDERS OF THE COUNTY OF..... its successors or assigns, and upon..... the party of the second part.

*In Witness Whereof*, THE BOARD OF CHOSEN FREEHOLDERS OF THE COUNTY OF..... has caused this instrument to be signed by its director, attested by its clerk and its corporate seal to be hereunto affixed, pursuant to a resolution of said Board passed for that purpose, and the said party of the second part ha... hereunto set..... hand.... and seal.... the day and year first above written

(SEAL.)

.....  
*Director of the Board of Chosen Free-  
holders of the County of*

Attest:

.....  
*Clerk.*  
.....  
.....  
.....

Signed, sealed and delivered in the presence of

.....

This contract approved this.....day of..... 19....

.....  
*State Commissioner of Public Roads.*

KNOW ALL MEN BY THESE PRESENTS, That we.....  
.....and.....of the county of.....  
and State of New Jersey, are held and firmly bound unto THE BOARD OF CHOSEN  
FREEHOLDERS OF THE COUNTY OF....., in the sum of.....dollars,  
lawful money of the United States, to be paid to the said THE BOARD OF CHOSEN  
FREEHOLDERS OF THE COUNTY OF....., its successors or assigns, to which  
payment well and truly to be made, we bind ourselves, our heirs, executors and  
administrators, jointly and severally, firmly by these presents.

Sealed with our seals and dated this.....day of..... A. D. nine-  
teen hundred and.....

*The Condition of this Obligation is such,* That if the above bounden.....  
shall well and truly perform his part of the contract hereto annexed, and all  
the covenants and conditions therein perform, then this obligation to be void,  
otherwise to remain in full force and virtue.

.....  
.....  
.....  
.....

SIGNED, SEALED AND DELIVERED  
IN THE PRESENCE OF

.....

This Bond approved this.....day of.....A. D. 19....

.....  
*Director.*

*Be it remembered,* on this.....day of.....in the year of our  
Lord one thousand nine hundred and.....before me, a Master in Chan-  
cery of the State of New Jersey, personally appeared.....and.....  
who acknowledged that they signed, sealed and delivered the foregoing bond  
as their voluntary act and deed for the uses and purposes therein expressed.

.....



COMMISSIONER OF PUBLIC ROADS.

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### JUSTIFICATION OF SURETY.

STATE OF NEW JERSEY, }  
COUNTY OF..... } ss.

On this.....day of ....., A. D. 19...., before me, a Notary Public in and for the county and State aforesaid, personally appeared ..... who, being duly sworn, on his oath declares that he is a resident of the county of....., in the State of New Jersey; that he is a freeholder in said county, and that he owns real estate in said county, in his own right, to the amount of .....over and above all his indebtedness and after all his debts are paid, and over any contingent liability by reason of being bail, surety, endorser or guarantor.

Subscribed and sworn to before me this.....day of....., A. D. 19..... I hereby certify that the contents of the above have been carefully made known to affiant before execution.

STATE OF NEW JERSEY, } ss.  
COUNTY OF..... }

On this ..... day of ..... A. D. 19...., before me, a Notary Public in and for the county and State aforesaid, personally appeared ..... who, being duly sworn, on his oath declares that he is a resident of the county of ....., in the State of New Jersey, that he is a freeholder in said county, and that he owns real estate in said county, in his own right, to the amount of ..... over and above all his indebtedness and after all his debts are paid, and over any contingent liability by reason of being bail, surety, endorser or guarantor.

Subscribed and sworn to before me this.....day of ..... A. D. 19.... I hereby certify that the contents of the above have been carefully made known to affiant before execution.

# STANDARD STATE AID SPECIFICATIONS FOR GRAVEL ROADS.

## SPECIFICATIONS

FOR A GRAVEL ROAD IN. . . . .COUNTY, NEW  
 JERSEY, KNOWN AS. . . . .  
 BEGINNING AT. . . . .AND  
 EXTENDING TO. . . . .  
 A DISTANCE OF. . . . .FEET OR. . . . .MILES.  
 GRAVEL. . . . .FEET WIDE. . . . .INCHES DEEP.  
 SHOULDERS. . . . .FEET WIDE. TOTAL WIDTH OF ROAD. . . . .FEET.

### WORK TO BE PERFORMED.

1. The work to be performed will consist in furnishing all materials, tools, machinery and labor necessary for the efficient and proper grading of roadway, side ditches and side banks, laying, spreading and rolling of road material, and leaving the roadway complete in every manner ready for immediate use.

### PLANS AND DRAWINGS.

2. The plan, profile and cross-sections on file in the office of the State Commissioner of Public Roads and at the office of. . . . .  
 County Engineer. . . . .New Jersey, show general location, profile, details and dimensions. The work will be constructed in all respects according to the above-mentioned plan, profile and cross-sections, which form part of these specifications.

3. Any variation of location, profile, size and dimensions from that shown on the plan, as may be required by the exigencies of construction, will, in all cases, be determined by the engineer, but the contractor shall not, on any pretense, save that of the written order of the contracting parties and the State Commissioner of Public Roads, deviate from the intent of the plan or specifications.

4. On all drawings, figured dimensions are to govern in cases of discrepancy between scale and figures.

### GRADING.

5. Under this head will be included all excavations and embankments required for the formation of the highway, cutting all ditches or drains about or contiguous to the road, removing all fences, walls, buildings, trees, poles or other encumbrances, the excavation and embankment necessary for reconstructing cross or branch roads or entrances to dwellings in cases where they

## COMMISSIONER OF PUBLIC ROADS.

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are destroyed or interfered with in the formation of the roadway, and all other excavations and embankments connected with or incidental to the construction of the said road.

## EXCAVATION.

6. The roadway to the width of.....feet must be excavated or built to the same curvature as shown on plans.

7. The material taken from any cut or ditch shall be deposited where the engineer may direct, either within or without the lines of the road, but no material shall be removed from the line of the road without the order of the engineer.

## EMBANKMENT.

8. Material taken from the excavations, except when otherwise directed by the engineer, shall be deposited in the embankments, either on the roadway or sidewalks.

9. When there is not sufficient material in the excavations of the road to form the embankments, the deficiency must be supplied by the contractor from without the road. The character of said material and place of excavation must be approved by the engineer.

10. The embankments must be formed in layers of such depth, generally twelve (12) inches, and the material deposited and distributed in such manner as the engineer may direct, the required allowance for settling being added. Each layer must be carried across the entire width of the embankment and completed before commencing another, and this method shall be followed with each succeeding layer until the established grade is reached.

## SLOPES.

11. Slopes in both embankment and excavation shall be one and one-half ( $1\frac{1}{2}$ ) horizontal to one (1) vertical, when the width of the road will permit; if the road is too narrow to allow the full slope within its side lines, the engineer shall not calculate the quantities, either in embankment or excavation, beyond said side lines, unless the required ground shall be first dedicated to the public in writing by the owner or owners thereof.

## ROADWAY.

*Sub-Foundations.*

12. When the excavations and embankments have been brought to a proper depth below the intended surface of the roadway, the cross-section conforming in every respect to the cross-section of the road as shown on plans, the same shall, if ordered by the engineer, be rolled until approved by him. If any depressions form under such rolling, owing to improper material or vegetable matter, the same shall be removed and good earth substituted, and the whole re-rolled until thoroughly solid and to above-mentioned grade.

## SHOULDERING.

13. A shoulder of firm earth or gravel is to be left or made on each side of the gravel-bed, extending at the same grade and curvature of road to side ditches or gutters. This shoulder is to be rolled according to the directions of the engineer.



UNDERDRAINS.

14. Underdrains, if found necessary, shall be constructed by the contractor (at prices named in bids) of good . . . . . inch . . . . . tile, laid upon a board of not less than one (1) inch in thickness and six (6) inches in width, whenever and wherever the engineer shall decide; top of tile or pipe must be at least . . . . . inches deep, unless otherwise directed by the engineer; the joints of the tile or pipe must be covered with salt hay, or material equally as good, and trench filled with pervious earth.

15. When directed by the engineer a stone drain may be used in place of the tile drains. A trench one foot in width and one foot six inches in depth shall be excavated below the subgrade, said excavation to be filled with loose broken stone to a depth required by the engineer.

MATERIALS.

16. The material to be used in surfacing the road is to be furnished by the contractor.

17. The engineer and State Commissioner of Public Roads will pass upon and approve all gravel to be used in surfacing the road. The contractor is to dig, cart and place upon the road, in accordance with the specifications, the gravel selected and use no other. Should any objectionable material be used, he is to remove the same at his own expense.

18. The contractor must furnish to the engineer and State Commissioner of Public Roads samples of the kind of gravel to be used in the work before the opening of the bids.

19. The gravel is to be placed upon the road in such manner as shall be approved by the engineer, and be thoroughly rolled and solidified until it is consolidated, firm, and approved by the engineer. The gravel shall be of such thickness that when it is thoroughly compacted and approved, it shall be . . . . . inches deep in the center and slope at a regular grade to . . . . . inches in depth at a distance of . . . . . feet on each side of the center line.

20. Should any depressions appear these are to be carefully filled with gravel, so that the finished road will conform to the approved profile.

21. The contractor is to be paid by the cubic yard, as per depths above named, for the compacted gravel that he puts on the road, at the price named in the accepted bid, which shall include finishing the road and shaping the shoulders as above specified.

22. The contractor is to place sufficient gravel on the road to allow it to shrink thirty-three per cent. in rolling and settling.

SIDEWALKS.

23. The contractor will also be required, when the engineer so directs, to grub and remove from a strip of land . . . . . feet on outside of curb-lines all material objectionable to the engineer, such as trees, stumps, roots and brush, and refill the holes with earth, thereby completing the opening of the entire road to a width of . . . . . feet, which shall be . . . . . feet on each side of the center line.

24. The grubbing and removing of such objectionable material that is ordered by the engineer shall be styled as "grubbing," and paid for by the acre at price named in accepted bid.

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### OPEN DITCHES.

25. The contractor is to grade the shoulders and open all necessary side ditches (as per stakes furnished by the engineer) so that there will be no water allowed to stand by the side of the road or upon it, for which no extra payment will be allowed.

### EXTRA DEEP.

26. Should the engineer and State Commissioner of Public Roads so order, the contractor is to build in all respects, as already specified, the gravel-bed to a greater depth or thickness than that already named. The contractor is to do the same at a price named per square yard for each extra inch in depth.

### NO EXTRA PRICE.

27. No allowance in measure of depth of pavement will be made on account of any material which may be driven into the roadbed by rolling. The pavement, when completed, must conform to the grade and cross-section and be satisfactory to the engineer and State Commissioner of Public Roads, whose decision shall be final.

28. No extra work will be paid for unless the price has been agreed upon between the contracting parties, including the State Commissioner of Public Roads, and endorsed upon the agreement, witnessed by the engineer.

### BROAD-TIRE WAGONS.

29. All wagons and carts used during the construction, for hauling stone, earth or any other material must have tires not less than three and one-half ( $3\frac{1}{2}$ ) inches in width.

### BIDS.

30. Bids will only be received under these specifications for the completion of the entire work as called for in the estimate of quantities given below, including all the items as specified, and the total or lump sum of the bid will govern in the awarding of the contract. The contractor must give separate prices per unit of measure for each of the several classes of work to be performed and all bids should balance; that is to say, the total of the estimates given, multiplied by the prices per unit of measure, should equal the lump sum bid for the entire work. No bids will be received in which all of the following items are not filled out:

(1) Price per cubic yard for excavation, without classification, as per plans and cross-sections throughout the length and width of the road.

(2) Price per acre for grubbing and removing objectionable material from sidewalks.

(3) Price per lineal foot for completed tile drain.

(4) Price per cubic yard for compacted gravel as specified.

(5) Price per square yard for each ordered inch in depth in excess of thickness named.

(6) Price (lump) for the whole road complete, according to the specifications and plans prepared by the engineer.

No bid will be received in which all the above items are not filled out.



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## ESTIMATE OF QUANTITIES.

31. (1) Excavations.....cubic yards.  
(2) Grubbing.....acres.  
(3) Tile drain.....lineal feet.  
(4) Compacted gravel.....cubic yards.

32. These quantities are the result of calculation, but are to be considered as approximate. The county will not be responsible for any excess in above quantities, should any occur. The contractor is expected to satisfy himself by a personal examination of the work contemplated, about the nature, character and quantity of the labor and material required.

## CHECK ACCOMPANYING BIDS.

33. Bids shall be accompanied with a certified check, payable to the Director of the Board of Chosen Freeholders, for the sum of one thousand dollars (\$1,000), as a guarantee that if the contract shall be awarded to him he will when required by said board, execute an agreement in writing to perform the work according to the specifications, and upon failure by the contractor to enter into said agreement with the said Board of Chosen Freeholders, said certified check shall be forfeited and considered as liquidated damages.

## LIABILITIES OF CONTRACTOR.

34. He shall keep up sufficient guards by day and night to prevent accidents from travel, and will be liable for any damage which may arise from his neglect to do so, or from any omission on his part.

35. He is to commence and prosecute the work upon the road at such points as may be directed by the engineer, within.....days from and after the signing of the contract, and shall continue work thereon until completion, except as herein provided.

36. He further agrees to complete the same on or before the.....day of....., A. D.

37. Twenty dollars for each day that the work shall remain uncompleted, after the time allowed by contract, may be deducted, as liquidated damages, from any moneys due contractor, unless otherwise agreed upon by the Board of Chosen Freeholders, after presentation of certificate of the engineer recommending the extension of the time limit of completion.

38. The contractor shall keep the finished roadway, earthwork, side ditches and underdrains in repair for the period of one year from the date of its completion and acceptance, and, in addition thereto, for as much longer as for any period or periods during said year it shall be out of proper condition. If, during that time, the roadway or any part of the work shall, in the judgment of the engineer and the Board of Chosen Freeholders, require repairing, and they shall duly notify the contractor to make such repairs as required, and the contractor should refuse or neglect to do so to the satisfaction of the said engineer and Board of Chosen Freeholders, within five days from the date of service of notice, then the said engineer and Board of Chosen Freeholders shall have the right to have the work done properly by other parties and recover the cost for the same from the said contractor or his surety.



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39. The contractor will be required to preserve all stakes and bench-marks made and established on the line of work until duly authorized by the engineer to remove the same.

40. The contractor shall not disturb the position of title-stones (the corners of properties adjacent to the road), but where they appear he will either lift or lower them, under the personal supervision of the engineer.

41. The contractor must also preserve the roadway on which he is working from needless obstruction, and where necessary construct safe and commodious crossings, to be maintained in good order. He shall afford all proper and reasonable means for the accommodation of the public, and leave the roadway complete in every manner ready for immediate use.

42. All loss or damage arising from the nature of the work to be done, or from any unforeseen or unusual obstruction, or difficulty, which may be encountered in the prosecution of said work, or from the action of the elements, shall be sustained by the contractor.

### PROVISION FOR DRAINAGE.

43. If it is necessary in the prosecution of the work to interrupt or obstruct the natural drainage of the surface, or the flow of artificial drains, the contractor shall provide for the same during the progress of the work in such a way that no damage shall result to either public or private interests. He shall be held liable for all damages which may result from any neglect to provide for either natural or artificial drainage, which he may have interrupted.

### RIGHT TO BUILD BRIDGES, CULVERTS, ETC., AND SUSPENSION OF WORK.

44. The right of the county to build bridges, culverts, lay pipes or other appurtenances in said road during the progress of the work, is expressly reserved, as well as suspending the work, or any part thereof, during the construction of the same, for the purposes above stated, without further compensation to the contractor for such suspension than an extension of time for completing the work as much as it may have been delayed.

### STOPPING THE WORK ON ACCOUNT OF WEATHER.

45. The State Commissioner of Public Roads, engineer or supervisor may stop any portion of the work if, in their judgment, the weather is such as to prevent the same being done properly. No allowance of any kind will be made for such stoppage, except an extension of the time for the completion of the work as herein provided.

### ABANDONMENT OF CONTRACT.

46. If at any time the work under contract should be abandoned, or if at any time the engineer should judge and so certify in writing that said work, or any part thereof, is unnecessarily delayed, or that the contractor is willfully violating any of the conditions or covenants of this contract, or is executing the same in bad faith, then, and in that case, the Board of Chosen Freeholders shall notify the said contractor to discontinue all work under this contract. It may employ other parties to complete the work in such a manner as it may decide, and use such material as may be procured upon the line of aforesaid work, and, if necessary, to procure other material for its completion, and

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charge the expense of the said labor and material to the contractor, which expense shall be deducted from any moneys due him under contract. In case these expenses shall exceed the sum which would have been payable under contract, if the same had been completed by said contractor, he or his bondsmen shall pay the amount of the excess to the Board of Chosen Freeholders, on notice from the engineer.

## ENGINEER.

47. The engineer shall be selected or appointed by the Board of Chosen Freeholders and paid by it. He shall furnish all surveys, profiles, plans, specifications and estimates of quantities of all kinds before specifications are signed, and in such a clear manner that lump bids can be made upon the work. He shall furnish all lines and grades required for the completion of the work. He shall furnish estimates for quantities of work done before partial payments can be made, the quantity of road laid being determined by surface measurements. Should any difference arise between the contracting parties as to the meaning or intent of these specifications, his decisions on these matters are to be final and conclusive. The work is to be done according to his directions, and if any material of which he does not approve is brought upon the road, it is to be removed at the expense of the contractor. If the contractor fails or neglects to do any part of the work as specified or as directed by the engineer, then, in that case, all other work shall be discontinued, on notice from the engineer to the contractor, or to the superintendent or foreman in charge of the work for the contractor, until such time as the work complained of has been done to the satisfaction of the engineer, and the contractor will not be entitled to or allowed any compensation or extension of time for such discontinuation or suspension of the work.

## SUPERVISOR.

48. Nothing in these specifications relating to the duties of the engineer shall be taken or construed in any manner to conflict with the duties of the supervisor, as specifically set forth in the act entitled "An act to provide for the permanent improvement of public roads in this State," approved March 27th, 1905, but they shall co-operate as far as practicable.

## INCOMPETENT WORKMEN.

49. The contractor shall employ competent men to do the work, and whenever the engineer and supervisor shall inform him, or his representative in charge, in writing, that any man on the work is unfitted for the place, or is working contrary to the provisions of the specifications or the instructions of the engineer and supervisor, he shall thereupon be discharged.

## INSPECTION.

50. All directions and determinations necessary to give due and full effect to any of the provisions of these specifications shall be given by the engineer and supervisor.

51. All material and workmanship of any kind shall be subject at all times to the inspection of the engineer and supervisor. Whenever unfaithful and imperfect work is discovered, it shall be immediately repaired or replaced by the contractor, after due notification from the engineer and supervisor.



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### SUB-LETTING OF CONTRACT.

52. The contractor shall not assign or sub-let any portion of this contract without the consent of the Board of Chosen Freeholders and the State Commissioner of Public Roads.

### PAYMENTS.

53. .... monthly payments will be made by the Board of Chosen Freeholders to the contractor for work performed, upon presentation by him of the proper certificates of the engineer and supervisor, in a sum not to exceed eighty per cent. of the amount then due, together with releases from all liens, if required. Fifteen per cent. will be paid at the completion of the work and the acceptance of the same in writing by the Board of Chosen Freeholders and the State Commissioner of Public Roads. The remainder, or five per cent., will be retained by the Board of Chosen Freeholders for a period of one year as security for the faithful performance of Article 38.

### BOND OF CONTRACTOR.

54. The contractor will be required to execute, within thirty days of giving of contract, a bond in such sum and with such securities as shall be approved by the Board of Chosen Freeholders, conditioned for the faithful performance of the contract, to indemnify and save harmless the said Board of Chosen Freeholders from all suits or actions of any name or description brought against it on account of any act or omission of the contractor or his agents, and for the faithful performance of the contract by the contractor. Said bond shall be in a sum of not less than the estimated cost of the road when completed. Any change made in said plans, specifications, agreements or quantities without the consent of the bondsmen shall in no way vitiate said bond. The said contractor hereby further agrees that so much of the money due him, under and by virtue of this agreement, as shall be considered necessary by the Board of Chosen Freeholders, may be retained by it until all such suits or claims for damages aforesaid shall have been settled, and evidence to that effect furnished to the satisfaction of the said Board of Chosen Freeholders.

### CONTRACTOR TO INSURE PAYMENT FOR LABOR, MATERIAL, ETC., ON FINAL ESTIMATE.

55. The contractor must also furnish said engineer with satisfactory evidence that all persons who did work, or furnished material for this contract, or who have sustained damage or injury by reason of any act, omission or carelessness on his part or his agents in the prosecution of the work, have been duly paid or secured; he shall also give notice to said engineer within ten days after the completion of the work, and before final estimate is made, that any balance for such work or materials, or compensation for such damages due, has been fully paid or released.

56. The right is reserved to reject any or all bids, if deemed to the interest of the county or State.

.....  
*County Engineer.*



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Approved this.....day of....., A. D., 19...., by resolution of  
the Board of Chosen Freeholders of the county of.....

.....  
*Director of Board of Chosen Freeholders.*

.....  
*Clerk of Board of Chosen Freeholders.*

OFFICE STATE COMMISSIONER OF PUBLIC ROADS, TRENTON, N. J.

I have this day carefully read and examined the foregoing specifications,  
and the plans, profiles and cross-sections therein referred to, and the same are  
hereby approved.

Any departure from these specifications must have the written consent of  
the State Commissioner of Public Roads.

Given under my hand, this.....day of....., A. D. 19....

.....  
*State Commissioner of Public Roads.*

# COMMISSIONER OF PUBLIC ROADS.

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## PROPOSAL.

*To the Board of Chosen Freeholders, County of.....and State of New Jersey:*

GENTLEMEN—The undersigned hereby declare....that ..he.. ha.. care-fully examined the annexed specifications and the drawings therein referred to, and will provide all necessary machinery, tools, apparatus and other means of construction, and do all the work and furnish all the material called for by said specifications in the manner prescribed by the specifications and the re-quirements of the engineer and supervisor under them, for the following prices:

- (1) Price per cubic yard for excavation, without classification, as per plans and cross-sections throughout the length and width of the road .....per cubic yard.
- (2) Price per acre for grubbing and removing objectionable material from sidewalks.....per acre.
- (3) Price per lineal foot for completed tile drain.....per lineal foot.
- (4) Price per cubic yard for compacted gravel as specified.....cubic yard.
- (5) Price per square yard for each ordered inch in depth in excess of thick-ness named.....per square yard.
- (6) Price (lump) for the whole road complete, according to the specifica-tions and plans prepared by the engineer.....

Accompanying this proposal is a certified check for the sum of one thousand dollars (\$1,000), payable to the order of the Director of the Board of Chosen Freeholders of.....county, which check is to be forfeited as liquidated damages if, in case this proposal is accepted, the undersigned shall fail to execute a contract with said Board of Chosen Freeholders, under the condi-tions of this proposal, within the time provided for by the foregoing advertise-ment for proposals; otherwise, said check is to be returned to the undersigned.

Signed.....

Address.....

.....N. J., .....

## CONTRACT.

This agreement, made the.....day of.....in the year of our Lord one thousand nine hundred....., between THE BOARD OF CHOSEN FREEHOLDERS OF THE COUNTY OF....., party of the first part, and .....party of the second part.

*Witnesseth*, That the said party of the second part, for and in considera-tion of the payments hereinafter specified and agreed to be made by the party of the first part, hereby covenant and agree to furnish and deliver all the materials and to do and perform all the work and labor required to be furnished and delivered, done and performed in and about the graveling of.....

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beginning at..... and extending to....., in the township o.  
....., a distance of....., in strict and entire conformity with  
the plans on file in the engineer's office and with the specifications heret  
annexed and duly approved by resolution of THE BOARD OF CHOSEN FREE  
HOLDERS OF THE COUNTY OF..... adopted the..... day of.....  
....., in the year of our Lord one thousand nine hundred.....  
and approved by the State Commissioner of Public Roads, on the.....  
day of..... in the year of our Lord one thousand nine hundred.....  
which said plans and specifications are hereby made part of this agreement  
as fully and with the same effect as if the same had been set forth at length  
in the body of this agreement.

In consideration of the premises the party of the first part hereby agrees  
to pay to the party of the second part for said work, when completed in ac-  
cordance with the said specifications, the sum of..... payments to be  
made as provided in said specifications upon presentation of the proper certifi-  
cates of the engineer and supervisor and upon the terms set forth in the an-  
nexed specifications.

This contract to be binding upon THE BOARD OF CHOSEN FREEHOLDERS OF  
THE COUNTY OF....., its successors and assigns, and upon.....  
the party of the second part.....

*In Witness Whereof*, The director of THE BOARD OF CHOSEN FREEHOLDERS  
OF THE COUNTY OF....., by authority of a resolution of said board,  
hath hereunto set his hand and affixed the corporate seal of the said board  
and the said party of the second part ha.... hereunto set ..... hand.. and  
seal.. the day and year first above written.

.....  
*Director of the Board of Chosen Free-  
holders of the County of.....*

Attest:

.....  
*Clerk.*  
.....  
.....  
.....

Signed, sealed and delivered in the presence of  
.....

This contract approved this..... day of....., 19...

.....  
*State Commissioner of Public Roads.*



COMMISSIONER OF PUBLIC ROADS.

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KNOW ALL MEN BY THESE PRESENTS, That we.....  
.....and.....of the county of.....  
and State of New Jersey, are held and firmly bound unto THE BOARD OF  
CHOSEN FREEHOLDERS OF THE COUNTY OF.....in the sum of.....  
dollars, lawful money of the United States, to be paid to the said THE BOARD  
OF CHOSEN FREEHOLDERS OF THE COUNTY OF....., its successors or  
assigns, to which payment well and truly to be made, we bind ourselves, our  
heirs, executors and administrators, jointly and severally, firmly by these  
presents.

Sealed with our seals and dated this.....day of....., A. D. nine-  
teen hundred and.....

*The Condition of this Obligation is such*, That if the above bounden.....  
shall well and truly perform his part of the contract hereto annexed, and all  
the covenants and conditions therein perform, then this obligation to be void,  
otherwise to remain in full force and virtue.

.....  
SIGNED, SEALED AND DELIVERED  
IN THE PRESENCE OF  
.....

This Bond approved this.....day of....., A. D. 19...

.....  
*Director.*  
.....  
.....  
.....

*Be it remembered* on this.....day of....., in the year of our  
Lord one thousand nine hundred and....., before me, a Master in Chan-  
cery of the State of New Jersey, personally appeared.....and.....  
who acknowledged that they signed, sealed and delivered the foregoing bond  
as their voluntary act and deed for the uses and purposes therein expressed.  
.....

JUSTIFICATION OF SURETY.

STATE OF NEW JERSEY, }  
COUNTY OF..... } ss.

On this.....day of....., A. D. 19..., before me, a Notary Public in and for the county and State aforesaid, personally appeared..... who being duly sworn, on his oath declares that he is a resident of the county of....., in the State of New Jersey; that he is a freeholder in said county, and that he owns real estate in said county, in his own right, to the amount of..... over and above all his indebtedness and after all his debts are paid, and over any contingent liability by reason of being bail, surety, endorser or guarantor.

Subscribed and sworn to before me, this.....day of....., A. D. 19... I hereby certify that the contents of the above have been carefully made known to affiant before execution.

.....

STATE OF NEW JERSEY, }  
COUNTY OF..... } ss.

On this.....day of....., A. D. 19..., before me, a Notary Public in and for the county and State aforesaid, personally appeared..... who, being duly sworn, on his oath declares that he is a resident of the county of....., in the State of New Jersey; that he is a freeholder in said county, and that he owns real estate in said county, in his own right, to the amount of..... over and above all his indebtedness and after all his debts are paid, and over any contingent liability by reason of being bail, surety, endorser or guarantor.

Subscribed and sworn to before me, this.....day of....., A. D. 19... I hereby certify that the contents of the above have been carefully made known to affiant before execution.

.....

## Appendix B.

### CHAPTER 58.

An act to provide for the permanent improvement of public roads in this State (Revision of 1905). With amendments of 1906 and 1909.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. The board of chosen freeholders of any county in this State may, at any time, by resolution, direct that any public road or section of road located within said county, being at least thirty-three feet in width, and at least one mile in length, or, being less than one mile in length, is an extension of or connection with some permanently improved or paved road or street, be improved by the construction of a macadamized road, or a telford or other stone road, or a road constructed of gravel, oyster shells or other similar materials, with or without plastic binder, in such manner that the same, of whatever materials constructed, shall, with reasonable repairs thereto, at all seasons of the year, be firm, smooth and convenient for travel. When more roads are applied for than can be constructed in any one year, the board of chosen freeholders and State Commissioner of Public Roads shall have power and authority to select from the roads petitioned for the ones first to be constructed, having first regard to the most important roads and the distribution of the benefits of this act to all parts of their counties. The board of chosen freeholders may, before approval of any road, require as a condition of said approval that the township or townships or other municipality through which said road runs shall pay ten per centum of the cost of said improvement, said payment to be applied to the improvement of said roads constructed under this act.

Improve-  
ments of  
roads by  
freeholders.

Selection of  
roads.

Township  
assistance.
2. The said board, after passage of the resolution, shall cause a survey of said road so to be improved to be made, and plans, cross-sections and specifications of the work to be done on the same to be prepared. The survey shall indicate the width and length of said road, and shall also show how much of said road may be improved by deviation from the then existing lines, but no survey shall be commenced until the consent of the State Commissioner of Public Roads shall have been first obtained. When the said plans, cross-sections and specifications shall have been prepared, they shall be submitted to the board of chosen freeholders for its approval or rejection. If such board shall approve the same, they shall then be submitted to the State Commissioner of Public Roads for his approval or rejection, whose duty it shall be, before approving of said plans, cross-sections and specifications, to ascertain, by personal inspection or otherwise, the natural character of the soil upon which such road is proposed to

Survey  
made.

Approval by  
board and  
commissioner.



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Limit of State expenditure.	be constructed, and any and all other facts that he may deem important. If, after examination of the plans, cross-sections and specifications, and an inspection of the road, as aforesaid, he shall be satisfied as to the advisability of the improvement of the road as contemplated, and that one-third of the cost of the construction of said road, together with one-third of the cost of the construction of all other roads or sections of roads in this State, under plans and specifications previously approved by him, will not in any one year exceed the sum of four hundred thousand dollars, or such sum as shall in each year be appropriated for that purpose, then he shall approve said plans, cross-sections and specifications, otherwise he shall reject the same.
Proposals invited.	3. Within thirty days after approval of the plans, cross-sections and specifications by the Commissioner of Public Roads, it shall be the duty of the board of chosen freeholders to advertise for bids for said work in two or more of the public papers printed in said county, and in at least one engineering journal published in the city of New York, for three weeks successively, at least once in each week. This advertisement shall state the place where bidders may examine said plans, cross-sections and specifications, and the time and place where bids for said work will be received by the board of chosen freeholders, or a committee of said board.
Bidder's guarantee.	Each bidder must accompany his bid with a certified check, payable to the director of the board of chosen freeholders, for one thousand dollars, as a guarantee that if said work be awarded to him he will enter into a contract with said board for the same.
Contract.	This contract must be executed, together with a bond of the successful bidder, in the penal sum of at least the estimated cost of said work, with two or more sureties, freeholders of the county, or a surety or trust company created by this State, or a surety or trust company of another state, authorized to transact business within this State, to be approved by the director of the board of chosen freeholders, conditioned for the faithful performance of said work in strict conformity with the plans, cross-sections and specifications for the same, within thirty days from the awarding of the contract. The contract, before any work is done thereunder, must be exhibited to the State Commissioner of Public Roads for his approval, in writing, thereon, and said commissioner is hereby authorized, whenever, in his judgment, the best interests of the county require him so to do, to reject the same, in which case he shall write upon said contract the word "rejected," and append thereto his signature and official title of office, and said contract and the bond required to accompany the same shall, from the time of such rejection, be absolutely null and void, but such rejection shall in no wise operate to prevent said board from readvertising for bids and proceeding thenceforth under the provisions of this act; <i>provided</i> , such action is taken within four months after such rejection, otherwise said approval shall be null and void. The time and manner of payment for work done under any contract awarded under this act shall be set forth in said contract, and at least five per centum of the contract price shall not be paid to the contractor until after the expiration of one year from the completion of the work and acceptance thereof in writing by the Commissioner of Public Roads.
Approved by commissioner.	
May reject contract.	
Proviso.	
As to payment under contract.	
Excess over contract allowable.	4. The estimated amount of all contracts for road improvements awarded in any one year by the board of chosen freeholders, together with the estimated cost of repairs of roads already constructed, shall not exceed (in excess of the amount which any county may raise in any one year) one-fifth of one per centum of

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the ratables of the county, as reported to the State Comptroller for the preceding year, exclusive of the State appropriation for road purposes apportioned to any county.

5. A true copy of the specifications, bid, contract, bond and justification of surety, certified to be such by the director of the board of chosen freeholders, shall, immediately after the awarding of any contract, be furnished by the board of chosen freeholders to the State Commissioner of Public Roads, to be filed and remain of record in the office of such commissioner.

Copy of specifications, &c., filed with commissioner.

6. Immediately after the awarding of any contract under the provisions of this act, the State Commissioner of Public Roads shall appoint a competent supervisor to take charge of the work required to be performed under said contract, who shall receive for his services the sum of three dollars per day, to be paid to the said supervisor, out of the sum hereinafter appropriated for the one-third of the cost of all roads constructed under this act, on the approval of the State Commissioner of Public Roads. Such supervisor, before assuming the duties of his office, shall make and subscribe an oath or affirmation, before any officer authorized to administer the same, that he will faithfully, and to the best of his ability and understanding, perform all the duties of his office. The State Commissioner of Public Roads may, however, summarily discharge any supervisor and may appoint a new supervisor in the place of the one so discharged. Where any contract provides for partial payments based upon the amount of work done, it shall be the duty of the supervisor, as each payment becomes due, to present to the board of chosen freeholders a certificate, signed by such supervisor and the engineer, in which certificate shall be stated, as near as can be, the amount of work done for which payment is to be made, and that the same has been done, in all respects, in strict conformity with the contract, plans and specifications. When the work done under any contract shall have been fully completed, the supervisor and engineer shall prepare a detailed and itemized statement, in quadruplicate, of the cost of the improvement, one copy whereof shall be filed with the board of chosen freeholders, one with the clerk of the county and two with the State Commissioner of Public Roads.

Supervisor appointed by commissioner.

Per diem.

Oath.

May be summarily dismissed.

Certificate of partial payments.

Final statement on completion of contract.

State appropriation.

7. One-third of the cost of all roads constructed under this act, not exceeding in any one year the sum of four hundred thousand dollars, shall be paid out of the State treasury, out of any moneys not otherwise appropriated, if the same be first appropriated in the annual appropriation act. The Governor and State Commissioner of Public Roads shall certify from time to time to the State Comptroller the amount to be paid to any county, township, town, borough, village or other municipality for such year, and the State Comptroller shall draw his warrant on the State Treasurer in favor of the county collector or collector of the township, town, borough, village or municipality, as the case may be, for the amount so certified, and the State Treasurer shall thereupon pay the same.

Payments to various municipalities.

8. On or before the day fixed by law for the meeting of the county board of assessors in any county in each year, the board of chosen freeholders of such county shall certify to the said county board of assessors, either in the annual tax budget or separately, two-thirds of the estimated cost of all work contracted for under the provisions of this act since the day fixed by law for the meeting of the board of assessors in the year next preceding. The county board of assessors shall include in their assessment of county taxes the sum so certified, and the

Notice to county board of assessors.

Assessment and collection of road moneys.



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If deficiency.	<p>same shall be collected and paid over to the county in the same manner and at the same time that other county taxes are collected and paid over; if a deficiency shall exist, in consequence of the cost exceeding the estimate, or in consequence of the receipt of less than one-third of the cost from the State, the board of chosen freeholders shall have authority to borrow, on temporary loans, such deficiency, and the said board shall certify to the county board of assessors the total amount of such deficiency, which shall be included in the next annual tax levy, and shall be assessed, collected and paid over as other taxes are assessed, collected and paid over. If there be a surplus, by reason of the estimate exceeding the cost, the same shall be retained and used in the construction of other roads under this act, or in repairs to roads constructed under this act.</p>
If surplus.	
Bonds instead of tax.	<p>9. The board of chosen freeholders may, instead of certifying to the county board of assessors the two-thirds cost of any work done under this act, as required by the eighth section of this act, by resolution, adopted by a vote of at least two-thirds of all its members, issue bonds of the county for two-thirds of the estimated cost of said work. These bonds shall be designated as "road improvement bonds," and shall be for such sums and in such amounts, payable in not less than six nor more than thirty years from date thereof, with interest at a rate not exceeding five per centum per annum, payable annually or semi-annually, as said board of chosen freeholders, by said resolution, may determine. The said bonds shall be signed by the director of the board of chosen freeholders and by the county collector, sealed with the seal of the board, properly numbered, and a registry thereof kept by the board, and may be either coupon or registered bonds; if coupon bonds, the coupons shall be signed by the director of the board, and shall be numbered to correspond to the several bonds to which they shall be severally attached. The board of chosen freeholders shall, when bonds are issued under the provisions of this section, certify to the county board of assessors, in each and every year, so long as any of said bonds remain outstanding, a sum sufficient to pay the interest accruing on said bonds for said year and the principal of any bond or bonds that shall mature in said year, and the said county board of assessors shall include the said sum in the annual tax levy or assessment for said year, and the same shall be collected and paid over in the same manner and at the same time as other county taxes.</p>
Amount, rate, time.	
Amount annually raised.	
Improved roads to be county roads.	<p>10. Any road constructed under the provisions of this act, or of any previous act entitled "An act to provide for the permanent improvement of public roads in this State," and any road accepted by any board of chosen freeholders under chapter one hundred and fourteen of the laws of one thousand nine hundred and four shall forever hereafter be a county road, and the duty of keeping the same in repair shall devolve exclusively upon the board of chosen freeholders and the county supervisor, as hereinafter mentioned, and all other powers and duties respecting such roads shall be imposed upon and vested in the said board of chosen freeholders, to the exclusion of all township, town, borough, village, or other municipal officers; <i>provided, however,</i> that nothing in this act shall divest the municipal authorities of townships or boroughs of their power to construct, grade, curb, pave or repair the sidewalks along said county roads, nor shall this power of said governing bodies divest the board of chosen freeholders of their right to construct across or under the sidewalks the necessary culverts or other provisions for the</p>
Maintained by free-holders.	
Provido.	



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maintenance of such county roads. If any such road shall become out of repair, and shall not be repaired within sixty days after notice in writing so to do, given by the State Commissioner of Public Roads to the board of chosen freeholders, or to its director, the said Commissioner of Public Roads shall certify such neglect or refusal to the State Comptroller, who shall withhold payment to such county of any moneys already apportioned, or that may thereafter be apportioned, to such county by the State, and no payment shall be made to said county until the State Commissioner of Public Roads shall certify to the State Comptroller that said road has been placed in a good state of repair.

Road appropriation withheld for failure to maintain.

11. After the first county road shall have been constructed under this act in any county, it shall be the duty of the board of chosen freeholders to appoint some suitable person as county supervisor of roads, who, before assuming the duties of his office, shall make and subscribe an oath or affirmation that he will faithfully perform all the duties of his office to the best of his ability and understanding. Such supervisor shall hold his office for three years and until his successor is appointed and qualified. He shall give bond to the board of chosen freeholders in the penal sum of one thousand dollars, conditioned for the faithful performance of the duties of his office, with such surety or sureties as the board shall approve, and shall receive such compensation for his services as the said board shall determine. Said supervisor may be summarily dismissed at any time by the board of chosen freeholders or the State Commissioner of Roads, whenever in their or his judgment such supervisor is incompetent or neglectful in the performance of his duties, in which event the board of chosen freeholders shall immediately appoint a new supervisor to hold for the unexpired term of the supervisor so discharged. The said board of chosen freeholders shall appropriate all moneys necessary to keep any and all roads constructed under this act in good repair and free from obstructions, and if the board shall have no money which may be lawfully used for such purposes, it shall have the power to borrow the same, on the credit of the county, until the next annual taxes shall have been levied and collected. The cost of all repairs and removal of obstructions shall be paid by the county collector, upon the order of the board of chosen freeholders, and all bills for repairs and removal of obstructions shall be verified by affidavit, and shall be certified to be correct by the county supervisor of roads.

County supervision of roads.

Term.

Bond.

Subject to dismissal.

Moneys for maintenance and repairs.

Cost of repairs paid by county collector.

Acquire lands for road purposes.

By purchase.

12. Whenever it is deemed advisable by the board of chosen freeholders of any county of this State to acquire land for the purpose of laying out, widening, changing or straightening any road to be made or improved under the provisions of this act, said board is hereby authorized to agree with the owner or owners of any land or lands required for that purpose as to the compensation to be paid by said board for a conveyance of said land or lands, and to make compensation therefor out of any moneys applicable for road improvement purposes, or, if there be no money on hand for such purpose, said board may borrow the necessary sum or sums on temporary loans, on the credit of the county, until the next annual taxes shall have been levied and collected. In case said board cannot agree with the owner or owners of any land for the acquisition of the same by the said board for road improvement purposes, said board shall have the power to acquire said land by condemnation, in the manner prescribed by law, and shall have authority and power to pay all necessary costs and expenses from any moneys applicable

By condemnation.

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<p>Improvement of road by abutting owners.</p>	<p>for road improvement purposes, or may borrow so much as may be necessary on temporary loans, on the credit of the county, until the next annual taxes shall have been levied and collected; nothing in this act contained, however, shall be so construed as to prevent said board from acquiring any land for road improvement purposes by gift.</p>
<p>Such road to be a county road.</p>	<p>13. If all the owners of property abutting on any road or highway, in any county, which has not been improved, or it not undergoing improvement, desire said road, or any section thereof, to be improved, and shall certify, in writing, to the board of chosen freeholders, that they are willing to bear the entire expense of such improvement, the county engineer, or other competent engineer, shall prepare plans, cross-sections and specifications for the work to be done on such road, or any section thereof, so to be improved, and shall submit the same to the owners, and if satisfactory to such owners, they are hereby authorized to enter into contract for such work, said contract to be first submitted to the board of chosen freeholders for its approval. Upon the completion of the work to the satisfaction of the county supervisor and the board of freeholders, and upon the submission to said board of proper receipts showing full payment for all work done, the said board of chosen freeholders may, by resolution, declare that said road, or any portion thereof, be thereafter a county road. The location of any portion of said road may be changed, if deemed desirable, upon acquiring the consent, in writing, of the owner or owners of land abutting on such portion of road so to be changed, and upon acquiring, without expense to the county, the land necessary for such change. The county supervisor shall be paid the sum of twenty-five dollars for supervising said work, to be paid by said owners.</p>
<p>Change of location of road.</p>	
<p>Improve approaches to dwellings.</p>	<p>14. The board of chosen freeholders shall have full power to lay out, open, construct and improve all necessary approaches to any dwelling along the line of such road which may have been destroyed or damaged by any alteration in the existing grade, whether within or without the line of such road, and all costs and expenses incurred therefor shall be paid by the said board of chosen freeholders in the same way and manner as other work done under this act is paid for.</p>
<p>Improvement of roads bordering on State property.</p>	<p>15. Whenever any public road is sought to be improved under the provisions of the thirteenth section of this act, upon which road any lands or real estate owned by the State of New Jersey may front or border, the board of managers, or other body having the control and management of said lands and real estate, are hereby authorized to consent to the improvement of said road and to enter into contract for the same in the manner directed by said section, and to pay for said improvement out of any moneys appropriated to said board of managers, or other governing body.</p>
<p>Boundary line roads.</p>	<p>16. The provisions of this act shall extend to the improvement of any road, or section of road, constituting the boundary line between two counties, whenever said improvement shall be agreed to by the board of chosen freeholders of both counties.</p>
<p>Act not to apply to cities.</p>	<p>17. The provisions of this act shall extend to townships, towns, boroughs, villages, or any municipality or municipalities except cities. The common council or other governing body, the assessor or assessors, the mayor or other chief executive officer, the clerk and collector, respectively, of any township, town, borough, village, or other municipality, shall have the power and shall perform all the duties as are in this act cast upon the board of chosen freeholders, the county board of assessors, the director of the</p>



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board of chosen freeholders, the county clerk and county collector, respectively. Any of said municipalities may raise, by taxation, funds with which to pay for the cost of the construction of any road or roads, or may issue bonds for the payment of the same, in the same manner, as nearly as may be, as the board of chosen freeholders may do under this act, it being the expressed intention of this section to confer upon townships, towns, boroughs, villages, or other municipalities, full power to improve any road, or section of road, under the provisions of this act, all proceedings conforming, as nearly as may be practicable, to the provisions of this act. Any such road, or section of road, so constructed by any township, town, borough, village, or other municipality, other than by the county, shall be exclusively under the jurisdiction and control of such township, town, borough, village, or other municipality, and shall be repaired and maintained by such municipality. Nothing, however, contained in section four of this act shall be held to apply to any township, town, borough, village, or other municipality.

Right of municipalities to improve roads.

Control thereof.

Exception.

18. Whenever any road, or section of road, constructed by the board of chosen freeholders, shall lie within the corporate limits of any city, such city may enter into an agreement, in writing, with the board of chosen freeholders for the repair and maintenance of said road, or section of road, and from and after the making of said agreement, and the approval thereof by the State Commissioner of Public Roads, said road shall be exclusively under the jurisdiction and control of such city, and shall be repaired and maintained by the same.

As to roads in cities.

19. All acts and parts of acts inconsistent with the provisions of this act be and the same are hereby repealed; *provided*, that this repealer shall not revive any act heretofore repealed, nor shall any proceeding for the improvement of any public road entered into before the passage of this act abate, but such proceeding shall continue as prescribed in the act under which the improvement was commenced.

Repealer. Proviso.

20. This act shall take effect immediately.

Approved March 27, 1906.

## CHAPTER 53.

A Supplement to an act entitled "An act to provide for the permanent improvement of public roads in this State (Revision of 1905)," approved March twenty-fifth, one thousand nine hundred and five.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. Whenever there shall be presented to the board of chosen freeholders of any county a petition signed by the owners of at least two-thirds, either in lineal feet or in area, of the land and real estate, fronting or bordering on any public road or section of road in such county, taking in said estimate of area all the lands of every such owner, which are assessed for taxes in said county, and which lie together in any farm tract or lot of which a part has a frontage on said road or section of road, praying the board to cause such road or section to be improved, under the act to which this act is a supplement, and setting forth that the town-

Upon petition setting forth certain facts, road to be improved.



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Proviso.

ship or other municipality within which the same shall lie has appropriated the ten per centum of the estimated cost of the said road as required by the said act, it shall be the duty of the board to cause such improvement to be made; *provided*, that the road or section desired to be so improved shall be at least one mile in length and be an extension of or connection with some other permanently improved or paved road or street.

2. This act shall take effect immediately.

Approved April 1, 1908.

## CHAPTER 54.

A Supplement to an act entitled "An act to provide for the permanent improvement of public roads in this State" (Revision 1905), approved March twenty-seventh, one thousand nine hundred and five.

*BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:*

Resolution to pay ten per cent. of cost of road binding on township.

1. A resolution passed by the township committee of any township, or the governing body of any other municipality, through which said road runs, to pay ten per centum of the cost of said improvement provided for in the first section of the act to which this is a supplement, shall be binding upon such township, or such other municipality, as the case may be.

2. This act shall take effect immediately.

Approved April 1, 1908.

## CHAPTER 82.

Supplement to an act entitled "An act to provide for the permanent improvement of public roads in this State" (Revision 1905), approved March twenty-seventh, one thousand nine hundred and five.

*BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:*

Issue road improvement bonds..

1. Whenever any township or other municipality shall have undertaken to pay ten per centum of the cost of any improvement under the provisions of the act to which this act is a supplement, either by resolution of the township committee or other governing body, or otherwise; and if in the opinion of any such township committee or other governing body, to be determined by resolution of such township committee or other governing body, it would be too burdensome on the taxpayers of such township or other municipality to place in the tax levy for any fiscal year the portion of the expense of said improvement to be borne by it, then it shall be lawful for such township committee or other governing body to issue a bond or bonds for the amount undertaken to be paid as aforesaid by such township or other municipality; said bonds shall be designated as "road improvement bonds," and shall be for such sums and such amounts, payable within thirty years from the date thereof, with

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interest, at a rate not exceeding five per centum per annum, payable annually or semi-annually, as such township committee or other governing body by resolution may determine; said bond or bonds may be either registered or coupon bonds, and shall be signed, sealed and executed in the manner that bonds of such township or other municipality are usually signed, sealed and executed, or as such township committee or other governing body may by resolution direct. After the issue of such bond or bonds there shall be placed in the annual tax levy of such township or other municipality a sum sufficient to pay the interest accruing on said bond or bonds, and also a sum which, with interest and accumulations thereon, will be sufficient to pay off and discharge said bonds at maturity.

Rate.

Provision  
for interest  
and dis-  
charge of  
bonds.

2. This act shall take effect immediately.

Approved April 1, 1910.

## CHAPTER 46.

A Supplement to an act entitled "A general act relating to boroughs" (Revision of 1897), approved April twenty-fourth, one thousand eight hundred and ninety-seven.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. Whenever, in the judgment of the council of any borough of this State, it is necessary to construct a drain for surface water for the joint purpose of draining one or more improved roads of the county in which such borough is situate, and one or more roads or streets of said borough, and the board of chosen freeholders of the said county in which said borough is situate shall have approved the plans for such proposed drain and shall have appropriated a specific sum towards the construction of such drain, with the proviso that such drain shall be constructed by said borough, and that said borough shall pay the balance of the cost of the same, then and in such case the said council may, by ordinance or resolution, cause such drain for surface water to be constructed, and may provide for the payment of the balance of the cost of the same by the appropriation of any money remaining in the borough treasury unpledged at the end of the preceding fiscal year; *provided*, that the amount of money in the borough treasury unpledged at the end of such preceding fiscal year shall be sufficient for such purpose.

Providing for  
surface  
draining im-  
proved roads  
and streets.

2. This act shall take effect immediately.

Approved April 1, 1908.



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## CHAPTER 69.

A Further Supplement to an act entitled "An act to authorize the board of chosen freeholders of any of the several counties of this State to lay out, open, construct, improve and maintain a public road therein," approved April seventh, one thousand eight hundred and eighty-eight.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

Relative to  
rebuilding  
improved  
roads to  
meet in-  
creased re-  
quirements.

Proviso.

Estimates.

Financial  
arrange-  
ments.

Bond issue.

Proviso.

Limitation  
as to cost.

1. Whenever, in any county of this State, where a road or roads shall have been constructed, improved and maintained under the provisions of the act to which this is a supplement, or the acts supplementary thereto and amendatory thereof, it shall become necessary, in the opinion of the body vested by law with the care of such road or roads, as expressed by resolution duly passed at a regular meeting of said body, to reinforce, relay, reconstruct, or rebuild any portion of the roadway paving, the curb and gutters, the drainage system, the lighting plant, including the laying of conduits and placing cables therein, or bridges, or all of them upon such road or roads, to meet the requirements incident to increase of population, traffic and use, it shall be lawful for such body to so reinforce, reconstruct and rebuild such parts of said road or roads hereinbefore designated; *provided*, that all work exceeding in cost one thousand (\$1,000) dollars shall be done by contract, after advertisement in the public press, in the same manner as prescribed for work authorized under the act to which this is a supplement.

2. Before advertising for proposals for any contract for work authorized by this act, the body vested by law, with the care of such road or roads, shall, from time to time, submit a full statement of the work necessary and proposed to be executed at that time, with the estimated cost of such work, prepared by a competent engineer, and a requisition for the amount of such cost to the body vested by law, with the control of the finances of said county.

On receipt of said statement, estimate and requisition, the said body having control of the finances of said county shall make such financial arrangements as shall be necessary to provide the funds necessary to pay for the work so proposed, and until such financial arrangements are made, no further steps shall be taken in the prosecution of said proposed work.

3. The moneys necessary for defraying the costs, charges and expenses of the work herein authorized, shall be raised and obtained, and the bonds issued therefor in the manner and by the methods provided in said act to which this is a supplement, including provision for annual interest payments, and payments into a sinking fund, and shall be paid out by the county collector on the order of the body vested by law with the control of said road or roads; *provided*, that no payments for work done under any contract shall be made, except on the certificate of the engineer, approved by said body to take charge of said work.

4. The total cost of all work authorized by this act, shall not exceed a sum equal to two-tenths of one per cent. of the total assessed value of the ratables of said county assessed for county purposes in the year in which the last work authorized by this act shall be completed.



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5. Nothing in this act shall authorize the expenditure of any moneys secured by the sale of bonds for the ordinary maintenance, repairs, and lighting of said road or roads.

Funds not used for ordinary maintenance.

6. All acts and parts of acts inconsistent herewith, be and the same are hereby repealed, and this act shall take effect immediately.

Repealer.

Approved April 2, 1908.

## CHAPTER 238.

An Act to authorize boards of chosen freeholders to lay out, open, widen, straighten, alter, change the grade or location of or otherwise improve any public highway under their control and for that purpose to acquire lands by gift, purchase or condemnation, and to vacate any part of said public highway that may be rendered unnecessary for public travel by the widening, straightening, altering or changing of location of said public highway or any part thereof.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. The board of chosen freeholders of any county in this State shall have power to lay out, open, widen, straighten, alter, change the grade or location of or otherwise improve any public highway under its control or any part thereof, and to cause a map to be made and filed in the office of the clerk of the county showing the proposed laying out, opening, widening, straightening, altering, change of grade or location of any such highway and after such map shall be made and filed as aforesaid it shall be lawful for such board to acquire by gift or purchase in its corporate name any real estate in the county that may be necessary for that purpose, and in case such board and the owner of any real estate required for such purpose cannot agree upon the price or terms of sale thereof, whether by reason of disagreement as to the price or the legal incapacity or absence of the owner, or his inability to convey valid title, or by reason of any other cause whatsoever, it shall be lawful for one of the justices of the Supreme Court or a Circuit Court judge on application in writing made by or on behalf of such board and verified by the oath of the engineer or agent of the board, and filed in the office of the clerk of said county, setting forth a particular description of the land and property required and the names and residences, if the same can be ascertained of the owners and occupants, if any there be, and of the persons appearing of record to have any interest in said land and property, to appoint three disinterested freeholders as commissioners to fix the compensation to be paid for such land and property.

Freeholders may acquire lands for improvement of highways.

Commissioners to fix compensation.

2. The justice or judge to whom such application shall be made, shall assign, by order, a time and place for the hearing of said application before himself or any other justice of the Supreme Court or Circuit Court judge not less than ten days after the date of the order, and direct not less than six days' notice thereof to be given said owners, occupants and persons interested therein, which notice shall be served upon parties residing in this State, either personally or by leaving at their residence, if known, and when the residence is unknown or out of the State, notice shall be given and published as the justice or judge shall direct, by

Notice of hearing.

Service.

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- publication for not less than one week, and by mailing to parties whose address can be ascertained, and notice given in the manner prescribed by said justice or judge shall be valid and effectual to bind all parties interested in the land or property; the order shall be filed in the office of the clerk of the county where the land or other property lies, and a notice of the pendency of the proceedings, which notice shall name the parties interested if known, and describe the land taken, shall be recorded in the same manner and place for the same fees as notices of suits pending in chancery; in default whereof persons acquiring an interest in the property pending the proceedings without notice thereof, shall not be bound thereby.
3. Where the title to the land or property shall appear to be in dispute, all known claimants may be made parties, and where it shall appear to the justice or judge that the ownership is in doubt, or that the names of the owners cannot be ascertained, he may direct notice to be published addressed to the unknown owners of the property, which shall be described in the notice, and the notice shall also set forth such statement of the former or last known owner as the justice or judge may direct, and the publication of such notice in the manner directed shall have the same force and effect as if personally served on such unknown owners.
4. Upon the day fixed for the hearing upon said application and filing in the office of the county clerk evidence satisfactory to the justice or judge before whom the hearing is held that notice has been served or published as required by this act, the said justice or judge shall appoint under his hand three disinterested freeholders, residents of the county where the land or property to be taken lies, commissioners to examine and appraise the said land or property and to assess the damages on at least six days' notice to be given to the persons interested in the land or property in such manner as shall be directed by said justice or judge, who shall in the order of appointment fix the date on or before which the commissioners must file their report; the justice or judge may by order extend the time, and the report shall be made on or before the day limited by said justice; the order of appointment shall be filed in the county clerk's office.
5. The commissioners having first taken and subscribed an oath or affirmation faithfully and impartially to examine the matter in question and to make a true report according to the best of their skill and understanding shall meet at the time and place appointed and proceed to view and examine the land or other property, and, after hearing if practicable such owner or his agent or representative, shall make a just and equitable appraisal of the value of the same, and an estimate and assessment of the damages that any such owner will sustain by the taking of said lands or other property with the appurtenances for the purposes aforesaid; in making such estimate and assessment of damages the commissioners shall take into account the benefits, if any, conferred by the improvement on the remainder of any lot or tract of land partly taken; in all cases where the lines of such public highway when the same shall be laid out, opened, widened, straightened, altered or the location thereof changed or otherwise improved shall include or bisect any building or the location thereof, the said commissioners may determine, as to them shall seem most just, either to condemn and cause to be taken the whole of said building, or so much thereof as stands upon the land required for such purpose, or to require the owner thereof to remove such building beyond the proposed lines of said road
- Order filed;  
what to show.
- When title  
in dispute.
- Commission-  
ers to exam-  
ine and ap-  
praise land.
- Oath of com-  
missioners.
- Considera-  
tions in  
making as-  
sessment.
- Removal of  
buildings.



## COMMISSIONER OF PUBLIC ROADS.

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in case the owner has land enough left for that purpose, and the estimate or appraisal of damages of said commissioners, having due regard to all attendant expenses, shall be made accordingly; and the said commissioners shall in such case estimate and take into account the amount likely to be realized from the sale of any building or part of any building necessary to be taken, removed or disposed of for the purpose aforesaid; and the said commissioners shall also where any such public highway or any part thereof shall be vacated, estimate and take into account the benefits likely to accrue to any owner or owners by reason of such vacation; the report of said commissioners shall state the amount to be paid by the said board of chosen freeholders for such land or other property and damage aforesaid, as of the date of filing of the petition and order therein, which report shall be made in writing under the hands of said commissioners or any two of them, and filed by them within the time limited by the justice or judge in the office of the clerk of the county in which the land or other property is situate, to remain of record therein; if the report is not made within the time limited the powers of the commissioners shall cease, and an application may be made to a justice of the Supreme Court or a Circuit Court judge for the appointment of new commissioners on such notice as the justice or judge may direct; in case any commissioner shall die pending the proceedings, or is disqualified, or is unable to act, or shall fail or refuse to act and perform the duties of the appointment the other two commissioners shall proceed to perform the duties of their appointment with the same powers as if all three were acting.

Report.

Vacancy in commission.

6. Upon the filing of the report of the commissioners all subsequent proceedings had or taken relative thereto shall be in the manner provided by "An act to regulate the ascertainment and payment of compensation for property condemned or taken for public use" (Revision of 1900), approved March twentieth, one thousand nine hundred, and the supplements and amendments thereto, and from said report the said board or the owner of any of the land or property taken may appeal in the manner provided by said hereinbefore mentioned act.

Subsequent proceedings.

7. Said lands when so acquired shall be incorporated in and become a part of said public highway and thereafter built, maintained and kept as a county road.

Use of acquired land.

8. The compensation for services rendered by commissioners appointed in pursuance of this act and the necessary disbursements incurred by them in the discharge of their duties, together with counsel fees and other necessary expenses shall be fixed by order of said justice or judge and paid by the board of chosen freeholders of the county.

All expenses met by freeholders.

9. It shall be lawful for the board of chosen freeholders to borrow such sum or sums of money as may be necessary in complying with the provisions of this act, and to issue notes therefor, the payment of which shall be provided for in the tax levy next thereafter made.

Borrow to meet obligations.

10. This act shall take effect immediately.  
Approved April 13, 1908.



## SEVENTEENTH ANNUAL REPORT.

### CHAPTER 114.

An act to enable boards of chosen freeholders to accept as county roads, roads or sections of roads, in townships, which have been or shall hereafter be permanently improved without State or county aid.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

Roads improved by townships may be transferred to county on petition.

Becomes a county road.

Petition may include.

1. Whenever any public road or section of road, located in any township in this State, has been or shall hereafter be permanently improved, without State or county aid, by the construction thereon of a macadamized road, or telford or other stone road, so that the same is or shall be, with reasonable repairs thereto, firm, smooth and convenient for travel at all seasons of the year, and approved by the State Commissioner of Public Roads, such public road or section of road may, upon the petition in writing of the township committee of the township wherein such public road or section of road so improved lies, addressed to and filed with the board of chosen freeholders of the county within which such township is situate, accompanied by a map or survey of the public road or section of road so improved, and a copy of the specifications under which such improvements were made, together with proofs showing full payment to the contractor or contractors for all work done, be, by said board of chosen freeholders, by resolution, accepted as and declared to be a county road, if in the judgment of said board of freeholders said road is of sufficient public importance; and such public road or section of road shall, upon such acceptance, forever thereafter be a county road and subject to the exclusive jurisdiction of said board of chosen freeholders, in the same manner as roads built by State aid, and the duty of keeping the same in repair shall devolve exclusively upon such board of chosen freeholders.

2. More than one public road or section of road in the same township may be included in one petition.

3. This act shall take effect immediately.

Approved March 28, 1904.

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## CHAPTER 38.

An act to enable boards of chosen freeholders of two or more counties of this State, where such counties now are or hereafter may be charged by law with the maintenance and repair, or now are or hereafter may be in the possession and control of any road or roads lying wholly in one or partly in one and partly in other such county or counties, to rebuild, reconstruct, change the grade of, widen and improve such road or roads, and to acquire lands for such widening by gift, devise, purchase or condemnation, and to agree as to the proportion of the total expense thereof to be borne by each, and to issue bonds for the payment of the same, and to agree with any street railway company using or hereafter using such road or roads as to the share of the expenses thereof to be borne by it for and towards such improvement.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. Whenever two or more counties of this State now are or hereafter may be charged by law with the maintenance and repair, or now are or hereafter may be in the possession and control, of any road or roads lying wholly in one or partly in one and partly in other such county or counties, it shall be lawful for such counties to jointly rebuild, reconstruct, change the grade of, improve and widen such road or roads, and to acquire lands for such widening by gift, devise, purchase or condemnation, and agree as to the proportion of the total expense thereof to be borne by each; and it shall and may be lawful also for such boards to agree with any street railway company, using or hereafter using such road or roads as to the share of the expense thereof to be borne by it for and towards such improvement.

Joint improvement and maintenance of roads by counties.

2. If such boards shall determine to make the improvements and do the work authorized by this act, it shall have prepared plans and specifications of such work; and if the cost thereof is in excess of one thousand dollars, shall advertise for bids, for two weeks, in at least two daily newspapers, or four weeks in two weekly newspapers, in each of such counties; and the contract shall be awarded to the lowest responsible bidder who shall furnish satisfactory security, to be approved of by said boards; and said boards, voting separately, shall approve of the plans and specifications and award the contract.

Agreement with street railway companies.

Plans and cost.

Award of contract.

3. In order to receive the bids each board shall appoint certain of its members, who together shall constitute a joint committee, and such joint committee shall receive the bids at the time and place specified in the advertisement, and shall open the bids, in open meeting of such committee, and publicly announce the amount or items comprising each bid, and the members of the committee from each county shall forthwith report the bids to their board for action thereon.

Receipt and opening of bids.

4. The contract for said work shall specify the share or proportion of the cost thereof to be borne and paid by each county, and each county shall be severally liable only for such share or proportion.

Proportionate cost.



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Bonds may  
be issued.

5. If in the opinion of said boards, or either of them, to be determined by a resolution passed by either of said counties separately for the purpose, to place in the tax levy for any one fiscal year its share or proportion of the cost of acquiring said lands, doing the work and making the improvements herein authorized, would be too burdensome on the taxpayers of such county or counties, then it shall be lawful for such board to issue the bonds of such county, to raise the funds wherewith to defray the cost aforesaid, which bonds shall run for a period not exceeding fifty years, shall bear interest at not exceeding four per centum per annum, and shall be sold for not less than par, and shall be signed by the director of the board and the county collector, under the corporate seal of the county; and the board so issuing such bonds shall annually thereafter place in the tax levy a sufficient sum to meet the interest on said bonds, and a further sum to be deposited in a sinking fund, to be created for the purpose, to pay and discharge said bonds at maturity.

Time and  
rates.

Sinking fund.

6. This act shall take effect immediately.

Approved March 27, 1906.

## CHAPTER 132.

A Supplement to an act entitled "An act to enable boards of chosen freeholders of two or more counties of this State, where such counties now are or hereafter may be charged by law with the maintenance and repair, or now are or hereafter may be in the possession and control of any road or roads lying wholly in one or partly in one and partly in other such county or counties, to rebuild, reconstruct, change the grade of, widen and improve such road or roads, and to acquire lands for such widening by gift, devise, purchase or condemnation, and to agree as to the proportion of the total expense thereof to be borne by each, and to issue bonds for the payment of the same, and to agree with any street railway company using or hereafter using such road or roads as to the share of the expenses thereof to be borne by it for and towards such improvement," approved March twenty-seventh, one thousand nine hundred and six.

*BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:*

Joint county  
improvement  
and extension  
of roads.

1. Wherever the boards of chosen freeholders of two or more counties of this State have heretofore or shall hereafter proceed to jointly rebuild, reconstruct, change the grade of, improve and widen a road under the first section of the act to which this is a supplement, and such road on either end terminates at and is continued by an existing street in any municipality, and in the judgment of such boards it is advisable to extend the rebuilding, reconstruction, change of grade, improvement and widening of such road to some intersecting street or streets in such municipality or municipalities, then it shall and may be lawful for such boards to jointly rebuild, reconstruct, change the grade of, improve and widen such road beyond the ends of such road in its possession



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or control for a distance of not exceeding five hundred feet to intersecting street or streets in the municipality or municipalities, and to acquire the lands therefor, and to issue bonds for the purpose, in the manner provided in the act to which this is a supplement.

Distance.

May issue bonds.

2. This act shall take effect immediately.

Approved April 8, 1910.

### CHAPTER 185.

An act relative to past due assessments under an act entitled "An act to provide for the permanent improvement of public roads in this State," approved March twenty-second, one thousand eight hundred and ninety-five.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. It shall be the duty of the collector or receiver of taxes in any city, township, borough, or other municipality, in which may lie the lands assessed for the amount of peculiar benefits conferred thereon in the manner prescribed by the act of the Legislature of this State entitled "An act to provide for the permanent improvement of public roads in this State," approved March twenty-second, one thousand eight hundred and ninety-five, to accept the amount due thereon, both of principal and all interest, as prescribed by the said statute, in full satisfaction of such assessments, and to give a receipt for the amount paid in satisfaction thereof to the person paying the same, which receipt, signed by such collector or receiver of taxes, shall be sufficient evidence of the payment and satisfaction of such assessments, and upon presentation thereof to the clerk of the county in which such land is situate, he shall satisfy the assessment and other record or records in his office relating to such unpaid assessments so far as relates to the payment of the said assessment on payment to him of a fee of twenty cents for his services.

Satisfaction of assessment by county clerk.

Fee.

2. This act shall take effect immediately.

Approved May 2, 1906.

### CHAPTER 189.

Supplement to an act entitled "An act to provide for the permanent improvement of public roads in this State" (Revision of 1905), approved March twenty-seventh, one thousand nine hundred and five.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. Wherever any road or portion thereof is on the dividing line between two or more counties of this State, and part of the width thereof is in one county and part in another, or part of the length and part of the width thereof is in one county and

Joint improvement of road lying in different municipalities.

## SEVENTEENTH ANNUAL REPORT.

part in another, and (a) the boards of chosen freeholders of such counties, or (b) the board or boards of chosen freeholders of such county or counties, together with one or more of the municipalities of such county or counties abutting on said road, or any part thereof, or (c) the municipalities of different counties abutting on said road or any part thereof, desire the said road, or a portion thereof, should be improved within the limits of said counties, in accordance to the act to which this is a supplement, and the supplements thereto and the amendments thereof, it shall and may be lawful for such board or boards of chosen freeholders and municipalities, or any of said municipalities acting together, or such municipalities of different counties abutting on said road, or any part thereof, acting together, to improve said road for its entire length, or any portion thereof, within the limits of such counties, regardless of whether or not a portion or portions thereof may be wholly in one county or more counties, and agree upon the proportion of the expense thereof to be borne by such board or boards of chosen freeholders and the municipality or municipalities undertaking said improvement.

Resolutions  
of intent.

2. If said boards of chosen freeholders and said municipalities, or such of them as are authorized to make said improvement under the first section of this act, desire to undertake said improvement, such board or boards of chosen freeholders shall pass a resolution in accordance to the act to which this is a supplement, and any supplement thereto and amendment thereof; and if such municipality or municipalities desire to make said improvement either in conjunction with or without such board or boards of chosen freeholders, the governing body of such municipality or municipalities shall pass a resolution in the form and in accordance with the terms of the act to which this is a supplement, and any supplement thereto and amendment thereof, which said resolution or resolutions shall be passed and approved (if approval is necessary) in the same manner that resolutions are passed and approved by such board or boards of chosen freeholders or governing body of such municipality or municipalities.

Surveys  
made and  
plans pre-  
pared.

3. That after the passage of said resolutions, the board or boards of chosen freeholders and municipality or municipalities undertaking said improvement shall cause surveys to be made, and plans, cross-sections and specifications of the work to be done on the road to be prepared, and do and cause to be done the various acts and things required to be done under the act to which this is a supplement, and the supplements thereto and amendments thereof, in the same manner as if such road or portion thereof, lay wholly within one county and the improvement was undertaken by the board of chosen freeholders of such county.

Joint com-  
mittee.

4. In order to receive bids, the board or boards of chosen freeholders or municipality or municipalities undertaking said improvement shall each appoint certain of its members, who together shall constitute a joint committee, and such joint committee shall organize by electing a chairman and clerk. Said joint committee shall advertise for bids under the terms, conditions, and in the manner specified in the act to which this is a supplement, and the supplements thereto and the amendments thereof, which advertisement shall have at the foot thereof the names of the chairman and clerk of said joint committee, and said bids shall be received at the time and place specified in the advertisement and opened in open meeting of such joint committee, and the amount or items composing each bid shall be publicly announced, and the members of the committee from said board or boards of chosen freeholders or municipality or

Invite  
proposals.

Opening of  
bids.



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municipalities appointing them shall forthwith report the bids to the board or body so appointing them for action thereon; and thereupon the board or boards of chosen freeholders and the governing body or bodies of such municipality or municipalities undertaking said improvement, voting separately, shall by resolution award the contract for said improvement in the same manner provided in the act to which this is a supplement, and the supplements thereto and amendments thereof, as if said road lay wholly in the body of one county and the improvement was undertaken by the board of chosen freeholders of such county.

Award contract.

5. The contract for said work shall specify the share or proportion of the cost of such improvement to be borne and paid by the county or counties and municipality or municipalities engaging in said improvement, and each of the respective boards or bodies engaging in said improvement shall be liable for such share or proportion, and no more.

Proportionate cost.

6. If in the opinion of any board of chosen freeholders or any municipality joining in or undertaking such improvement, to be determined by a resolution passed by such board of chosen freeholders or the governing body of such municipality in the manner that resolutions are passed and approved (if such approval is necessary) by such board or body, to place in the tax levy for any one fiscal year the proportion of the expense of said improvement to be borne by it would be too burdensome on the taxpayers of such county or municipality, then it shall be lawful for such board or municipality to issue bonds for its proportion of the expense of said improvement to be borne by it. These bonds shall be designated as "road improvement bonds," and shall be for such sums and such amounts, payable in not less than six nor more than thirty years from the date thereof, with interest at a rate not exceeding five per centum per annum, payable annually or semi-annually, as such board of chosen freeholders or governing body of such municipality by resolution may determine. Said bonds may be either registered or coupon and interchangeable from registered to coupon or coupon to registered at the will of the holder thereof, and shall be signed, sealed and executed in the manner that bonds of such county or municipality are usually signed, sealed and executed, or as such board of chosen freeholders or governing body of such municipality may by resolution direct; that annually after the issue of such bonds there shall be placed in the tax levy of such board or municipality issuing said bonds a sum sufficient to pay the interest accruing on said bonds, and likewise a sum which, with interest and accumulations thereon, will be sufficient to pay off and discharge said bonds at maturity, which said sums of money collected for the discharge of principal, together with the accumulations and interest shall be deposited and kept in a sinking fund, to be used for the payment of said bonds at maturity.

May issue bonds to meet expense.

Title of bonds.

Time and rate.

Payment at maturity.

7. After the completion of the said improvement, the said road or portion thereof shall be maintained by the municipalities abutting said road or portion thereof so improved, unless the board of chosen freeholders of either county, by resolution, passed by a majority of the whole board, shall accept and adopt said road or the portion thereof so improved as a county road, in which case the duty of maintaining that part of said road or portion thereof so improved lying in such county shall thereafter be upon such board of chosen freeholders.

By whom road maintained.

8. This act shall not be taken or construed to repeal any existing act.

Act construed.

9. This act shall take effect immediately.

Approved May 2, 1906.



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## CHAPTER 220.

An act to amend an act entitled "An act to provide for the permanent improvement of public roads in this State (Revision of 1905)," approved March twenty-seventh, one thousand nine hundred and five.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

Section 11  
amended.

County su-  
pervisor of  
roads and en-  
gineer.

Term.

Bond.

Right to dis-  
miss super-  
visor.

Maintenance  
of roads.

Cost paid.

1. Section eleven of the act referred to in the title of this act is hereby amended to read as follows:

11. After the first county road shall have been constructed under this act in any county, it shall be the duty of the board of chosen freeholders to appoint some suitable person as county supervisor of roads, and a qualified civil engineer as county engineer, who, before assuming the duty of their offices, shall each make and subscribe an oath or affirmation that he will faithfully perform all the duties of his office to the best of his ability and understanding. Such supervisor and engineer shall hold their offices for three years and until a successor is appointed and qualified. Each shall give bond to the board of chosen freeholders in the penal sum of one thousand dollars, conditioned for the faithful performance of the duties of his office, with such surety or sureties as the board shall approve, and shall receive such compensation for his services as the said board shall determine. Nothing in this act contained, however, shall affect the term of office of any county engineer having a term of office prescribed by statute. Said supervisor may be summarily dismissed at any time by the board of chosen freeholders or the State Commissioner of Roads whenever in its or his judgment such supervisor is incompetent or neglectful in the performance of his duties, in which event the board of chosen freeholders shall immediately appoint a new supervisor to hold for the unexpired term of the supervisor so discharged. The said board of chosen freeholders shall appropriate all moneys necessary to keep any and all roads constructed under this act in good repair and free from obstructions, and if the board shall have no money which may be lawfully used for such purposes, it shall have the power to borrow the same, on the credit of the county, until the next annual taxes shall have been levied and collected. The cost of all repairs and removal of obstructions shall be paid by the county collector, upon the order of the board of chosen freeholders, and all bills for repairs and removal of obstructions shall be verified by affidavit, and shall be certified to be correct by the county supervisor of roads.

2. This act shall take effect immediately.

Approved April 20, 1909.

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### CHAPTER 34.

A Further Supplement to an act entitled "An act concerning roads" (Revision), approved March twenty-seventh, one thousand eight hundred and seventy-four.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey*:

1. Whenever in any county of this State where the board of chosen freeholders shall consist of less than six members, an application shall have heretofore or shall hereafter be made to the Court of Common Pleas of said county for the appointment of chosen freeholders of said county to view any road or roads laid out, vacated or altered by the surveyors of the highways of said county, it shall be lawful for said court to appoint all of the members of said board of chosen freeholders to view said road so laid out, vacated or altered, and certify the same to said court, and the return of the members of said board of chosen freeholders so appointed, or a majority thereof, shall be of the same force and effect as if six chosen freeholders had been lawfully appointed by said court under the act to which this act is a supplement.

Freeholders  
appointed  
by court to  
view road.

2. This act shall take effect immediately.

Approved March 31, 1909.

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### CHAPTER 236.

A Further Supplement to an act entitled "An act for the permanent improvement of public roads in this State" (Revision of 1905), approved March twenty-seventh, one thousand nine hundred and five.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey*:

1. In order to enable the Commissioner of Public Roads to execute the provisions of section thirty-seven of an act of the Legislature of this State entitled "An act defining motor vehicles and providing for the registration of the same and the licensing of the drivers thereof; fixing rules regulating the use and speed of motor vehicles; fixing the amount of license and registration fees; prescribing and regulating process and the service thereof and proceedings for the violation of the provisions of the act and penalties for said violations," approved April twelfth, one thousand nine hundred and six, said commissioner is hereby authorized to appoint two persons to be known as "Assistant Supervisors of Roads," who shall under the instruction and supervision of the Commissioner of Public Roads, have jurisdiction over all roads in respect to repairs to said roads made by the Commissioner of Public Roads under the provisions of this act. The said Commissioner of Public Roads may either pay over to the collector of the board of chosen freeholders of a county or the proper fiscal officer of any other municipality of the county, the

Two assistant  
super-  
visors of  
roads.

Duties.

Use of  
moneys.



# SEVENTEENTH ANNUAL REPORT.

amount of money estimated to be necessary for the repair of any road in such municipality, or said commissioner may invite, by advertisement, sealed proposals for the repair of any such road and award a contract to the lowest average responsible bidder, reserving to himself, however, the right to reject any and all bids. The said commissioner shall be allowed the sum of three thousand dollars per year for the employment of said assistant supervisors, and the further sum of three thousand dollars per year, or so much thereof as may be necessary for the expenses of said Commissioner of Public Roads in defraying the traveling and other expenses of said supervisors, said sum to be paid from such moneys as shall be appropriated to said Commissioner of Public Roads for the repair of improved roads throughout this State. Said supervisors shall hold their positions during the pleasure of the Commissioner of Public Roads.

Salaries of supervisors.

Expenses met.

Tenure.

2. This act shall take effect immediately.

Approved April 21, 1909.

## CHAPTER 33.

An act constituting a State Highway Commission and defining its powers and duties.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

State highway commission.

Expenses met.

Map and route of ocean boulevard.

Duplicate maps furnished municipalities and counties affected.

1. A commission to be known as the State Highway Commission, consisting of the Governor, President of the Senate, Speaker of the House of Assembly and the Commissioner of Public Roads, is hereby created, which commission shall be charged with the duties hereinafter specified. Said commissioners shall receive no compensation for their services under this act, but shall be entitled to their actual expenses incurred in carrying out the provisions of this act, to be paid out of any appropriation made to said commission.

2. The Commissioner of Public Roads shall, under the direction of said State Highway Commission, prepare a map and designate thereon a route for an ocean boulevard, commencing at Atlantic Highlands, in the county of Monmouth, and continuing thence to the city of Cape May, in the county of Cape May. Said route shall follow, as far as practicable, the available and convenient improved roads now constructed, which route shall be as near the ocean front as practicable. Such map when prepared and approved by said commission shall be filed in the office of the Commissioner of Public Roads. Said Commission of Public Roads, with the approval of said State Highway Commission, may make such changes from time to time in said route as shall be deemed necessary, and shall prepare and file a map showing said changes in his office.

3. The Commissioner of Public Roads shall, after the filing of said map, prepare duplicates thereof, and shall furnish one copy of said duplicates to the board of chosen freeholders and one copy to the common council or other governing body of each county or municipality through which said proposed ocean boulevard will pass. The said commissioners shall designate on said map just what portion of said proposed route in any county or in any municipality has been improved.



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4. The board of chosen freeholders of any county, or the governing body of any other municipality desiring to improve any road, or portion thereof, shown on the map so as aforesaid prepared and filed by the Commissioner of Public Roads, may improve and pay for said road, or any portion thereof, as provided in the act of the Legislature, entitled "An act to provide for the permanent improvement of public roads in this State" (Revision of 1905), approved March twenty-seventh, one thousand nine hundred and five.

Improve-  
ment of pro-  
posed route.

5. This act shall take effect immediately.

Approved March 30, 1909.

## CHAPTER 220.

A Supplement to an act entitled "An act constituting a State Highway Commission and defining its powers and duties," approved March thirtieth, one thousand nine hundred and nine.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. The State Highway Commission shall designate a route for a continuous highway, to be known as the "Ocean Highway," commencing at Atlantic Highlands, in the county of Monmouth, and continuing thence to the city of Cape May, in the county of Cape May, following, so far as practicable, the available and convenient improved roads now constructed, which route shall be as near the ocean front as practicable, and shall prepare a map thereof, which, when approved by the said commission, shall be filed in the office of the Commissioner of Public Roads.

Ocean High-  
way desig-  
nated.

2. The Commissioner of Public Roads is hereby authorized, with the approval of the State Highway Commission, to repair and improve the roads and parts thereof included within the route designated for the ocean highway.

Map.

Maintenance.

3. The Commissioner of Public Roads is hereby authorized to expend for the purposes of this act, with the approval of the State Highway Commission, the sum of fifty thousand dollars, or so much thereof as may be necessary, from moneys coming into the hands of the said Commissioner of Public Roads, under the provisions of an act entitled "An act defining motor vehicles and providing for the registration of the same and the licensing of the drivers thereof; fixing rules regulating the use and speed of motor vehicles; fixing the amount of license and registration fees; prescribing and regulating process and the service thereof and proceedings for the violation of the provisions of the act and penalties for said violations," approved April twelfth, one thousand nine hundred and six, and the amendments thereof and supplements thereto.

Expenditure.

4. All acts and parts of acts inconsistent herewith are hereby repealed, and this act shall take effect immediately.

Repealer.

Approved April 9, 1910.

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### CHAPTER 322.

An act concerning roads.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

Repair and  
maintenance  
of roads.

1. Whenever any road or section of road which has been or shall be constructed by the board of chosen freeholders of any county, with or without state aid, shall lie within the corporate limits of any borough, town, township or other municipality, such borough, town, township or other municipality, except cities, may enter into an agreement, in writing, with said board of freeholders, whereby said borough, town, township or other municipality shall hereafter assume the repair and maintenance of said road or section of road, and from and after the making of said agreement, and the approval thereof by the State Commissioner of Public Roads, said road or section thereof shall cease to be a county road and shall be exclusively under the jurisdiction and control of said borough, town, township or other municipality, and shall thereafter be repaired and maintained by the same under the supervision of the "State Commissioner of Public Roads.

2. All acts and parts of acts inconsistent with the provisions of this act be and the same are hereby repealed.

3. This act shall take effect immediately.

Approved June 26, 1906.

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### CHAPTER 15.

An act to amend and to supplement an act entitled "An act to authorize the improvement of roads, streets and highways in towns, boroughs, villages and municipalities governed by boards of commissioners or improvement commissions, and to provide for the issuing of bonds for the payment of the expenses thereof," approved March sixteenth, one thousand eight hundred and ninety-one.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

Section 1  
amended.

1. Section one of an act entitled "An act to authorize the improvement of roads, streets and highways in towns, boroughs, villages and municipalities governed by boards of commissioners or improvement commissions, and to provide for the issuing of bonds for the payment of the expenses thereof," approved March sixteenth, one thousand eight hundred and ninety-one, is hereby amended so as to read as follows:

Bond issue  
when  
authorized  
by voters.

1. It shall be lawful for the governing body of any town, borough or village or of any municipality governed by a board of commissioners or improvement commission within this State, whenever authorized by a majority of the votes cast at an election held for the purpose as herein provided to issue bonds from time



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to time in the corporate name of such municipality in such amounts that there shall never be at one time outstanding bonds of such municipality issued under the authority of this act in excess of sixty thousand dollars, and to apply the proceeds of such bonds to the payment of the cost and expenses of improving the roads, streets and highways within such municipality.

Total issue.

2. Section two of said act is hereby amended so as to read as follows:

Section 2 amended.

2. Whenever in the judgment of the governing body of such town, borough, village or other municipality it shall be deemed advisable to issue bonds hereunder the said governing body may, by resolution adopted by a majority of the members thereof, fix the amount of bonds to be issued, direct a special election to be held, and designate the time and place or places for holding such election.

Special election.

Notice of such election shall be given by posting copies of such resolution in three public places in such town, borough, village or other municipality at least fifteen days before the date fixed for such election and by printing such resolution once in each week for two successive weeks in one or more newspapers published in such town, borough, village or other municipality, if any such exists, or if none, then in a newspaper published in the county. There shall be no registration for such election, but the board or boards of elections shall procure and use at such election a certified copy of the register of voters used at the last preceding general election, and no person shall be entitled to vote whose name does not appear on such register, unless such person shall appear before the board and satisfy said board by affidavit, which the said board hereby is authorized to take, that such person has acquired the right of suffrage in said election district since said registration was made. The polls shall be kept open for the time provided by law for general elections, and such election shall be in all respects conducted and the vote canvassed in the manner provided by law for general elections, except as herein otherwise provided. The ballots used at such election shall be unofficial, and shall have printed or written thereon either the words, "For the issue of bonds" or the words "Against the issue of bonds." No official envelopes shall be required.

Notice.

Registration.

Election, how conducted.

Ballots.

3. Section three of said act is hereby amended so as to read as follows:

Section 3 amended.

3. If at such election a majority of all ballots cast shall be "For the issue of bonds," it shall be lawful for such governing body from time to time to issue and sell bonds of such town, borough or village or other municipality in an aggregate principal sum not exceeding the amount mentioned in the resolution calling such election, and to apply the proceeds of such bonds to the improvement of roads, streets and highways in such town, borough or village or other municipality as they may by resolution determine. Such bonds shall be registered or coupon bonds, shall bear interest not exceeding five per centum per annum, payable semi-annually, shall be payable not more than twenty years from their date of issue, shall be executed and shall be sold at public sale for not less than par and accrued interest as such governing body shall by resolution provide. All such bonds shall recite that they are issued in pursuance of this act and of said election, and shall set forth the date of said election, which recital shall be conclusive evidence of their validity and the regularity of their issue.

Procedure if bond issue authorized.

Rate.

Time.

4. The powers conferred by this act and by the act hereby amended shall be deemed additional to and independent of any

Additional powers conferred.



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and all powers and authority conferred by, and not subject to any limitation contained in, any and all other law or laws.

5. This act shall take effect immediately.

Approved March 16, 1909.

## CHAPTER 239.

A Supplement to an act entitled "An act to provide for the permanent improvement of public roads in this State," approved April first, one thousand nine hundred and three.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey*:

Joint im-  
provement  
of roads.

Specifica-  
tions and  
proposals.

Awarding  
contract.

Apportion  
cost.

Advertising.

Pro-  
ceedings.

State aid.

Proviso.

1. Wherever any road in this State runs in or through two or more counties, and said counties engage in the maintenance and operation thereof in its entirety, at joint expense, it shall and may be lawful for the boards of chosen freeholders of such counties, by resolution, to be passed separately by each board, to declare their intention to cause such road, in its entirety, or any portion thereof, to be improved under the provisions of the above-entitled act, and the supplements thereto and amendments thereof, as well as this supplement; and to cause all necessary surveys to be made and specifications to be prepared; and after said specifications shall be approved by such boards of freeholders, by resolutions passed separately by each board, the said specifications shall be certified to the State Commissioner of Public Roads, for his approval or rejection, and if approved by him, such boards are authorized to appoint members from the board, to comprise a joint committee, to advertise for bids for said improvement, which bids shall be furnished in sealed envelopes and presented to the committee in open meeting, at the time called for in the advertisement, and the amount of each of said bills shall, in open meeting, be publicly announced, and thereafter the members of the committee from each county shall report the amount of the bids to their respective boards, with their recommendations, and the contract shall be awarded, on resolution of each board voting separately, to the lowest responsible bidder, who shall furnish satisfactory security, to be approved of by said boards; that the contract for such improvement shall specify the proportion of the cost that each county will bear of said improvement, as between themselves, and neither county shall be liable for a greater amount than the proportion so specified; and the joint committee shall advertise for bids in at least two daily newspapers, printed and circulating in each county, for the period of two weeks, or in at least two weekly newspapers, printed and circulating in each of said counties, for at least four weeks; and all proceedings touching and concerning the improvement of such road shall conform, as nearly as possible, to the proceedings mentioned in the act to which this is a supplement, or any supplement thereto or amendment thereof, except as modified by this act; and such counties taken together shall be entitled to receive one-third of the cost of the improvement set out in the specifications presented to the State Road Commissioner, as aforesaid, or as modified with his consent, in the manner specified in said act for the payment to any county for improving a road wholly within its limits; *provided, however*, that of said

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one-third so paid by the State each county shall receive the same proportion as it bears or is charged with on account of the cost of said improvement.

2. If, in the opinion of either of such boards, to place in the tax levy for any one fiscal year the moneys necessary to pay for the work aforesaid would be too burdensome on the taxpayers of such county, then, in order that each county may raise the funds wherewith to pay its share of the cost of such improvement, either board being of the opinion aforesaid may, by a resolution adopted by a vote of at least two-thirds of all its members, borrow such sum or sums of money as may be necessary for the payment of its share or proportion of such cost, by the sale of the bonds of such county, issued in the name of the board of chosen freeholders thereof, and in such sum as the board may deem proper, said bonds to bear interest at a rate not exceeding five per cent. per annum, and to be sold for not less than par, and said bonds shall not exceed in the aggregate the cost of the improvement to said board, and shall be so divided that one-tenth of the account of the bonds issued shall fall due in one year from their date and one-tenth each succeeding year thereafter, for the period of ten years from their date, and shall be either coupon or registered bonds, as the board of freeholders may determine; the principal and interest thereof shall be made payable at the office of the county collector of such county; said bonds shall be signed by the director of such board and the county collector, and shall be sealed with the seal of the county, and the county collector shall keep a record thereof; it shall be the duty of the board of chosen freeholders each year to place in the tax levy for such county, in each year, so long as said bonds shall run, a sufficient sum to pay the interest accruing thereon for said year and the principal of the bonds that shall mature in said year.

Meeting cost.

May issue bonds.

When payable.

Interest and principal.

Paving public roads.

3. Whenever the character of the soil or foundation of any road, or any part thereof, sought to be improved, and the traffic over the same, are such that in the opinion of any board seeking the same, if the road lies wholly within one county, or in the opinion of the boards jointly engaged in the maintenance and operation of a road in its entirety, running through two or more counties, ascertained by resolution passed by such boards separately for such purpose, it is necessary to build a foundation for such road and pave the same with a block or other substantial pavement other than that specifically mentioned in the first section of the act to which this is a supplement, it shall be lawful for such boards to include such work in the specifications for said work to be presented to the State Commissioner of Public Roads, as aforesaid.

4. This act shall take effect immediately.

Approved April 8, 1903.



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## CHAPTER 231.

Supplement to an act entitled "An act to provide for the permanent improvement of public roads in this State," approved April first, one thousand nine hundred and three.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

Cause portions of road to conform to altered grade.

1. Whenever any public road has been or shall hereafter be improved under the provisions of the act to which this is a supplement, in the course of improving such road the grade of the roadbed shall have been or shall be changed so that it shall not conform to the grade of the remaining portion of the road, including the sidewalks, it shall be lawful for the municipal authorities of each municipality through which such road passes to cause the remaining portion of such road within the limits of their several municipalities to be graded and formed so as to conform in grade to that established for the roadway constructed under the provisions of the act to which this is a supplement, and to cause such work to be done under the same proceedings and in the same manner as may be provided by law in their several municipalities for the grading of the streets of such municipalities.

Proceedings.

Municipalities may improve road.

2. The proper municipal authorities of any municipality through which any such road may run shall have full power and authority to make any municipal improvement upon or within any such road within the limits of their several municipalities which may be authorized by law to be made in any of the other public streets or roads of such municipalities; *provided, however*, no such improvement shall be made by such municipal authorities which may in any way interfere with or impair the roadway improved under the provisions of the act to which this is a supplement, without the approval and consent of the board of chosen freeholders of the county within which such road may be located.

Proviso.

Assessment for benefits.

3. The cost and expense of any of the public improvements authorized by this act shall, so far as the same can be, be assessed upon the lands and real estate specially benefited by the improvement in proportion to the benefit received; and no lot or parcel of land shall be assessed more than it is so specially benefited, and such assessment shall be made in the same manner and under the same procedure as is directed by law for the making of other assessments for street improvements within every such municipality.

Maintenance of road.

4. Nothing in this act contained shall be construed to in any way impose upon any such municipality therein referred to any part of the cost of the maintenance and repair of the roadway of any road improved under the provisions of the act to which this is a supplement.

5. This act shall take effect immediately.

Approved April 8, 1903.



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## CHAPTER 61.

An act to authorize the board of chosen freeholders of any of the several counties of this State to straighten, change the location of and vacate any portion of any public road or highway heretofore or hereafter acquired, constructed and improved in any such county by the board of chosen freeholders thereof, and to improve the portion included in such changed location; *provided*, any owner or owners of real estate along such portion is or are willing to contribute the whole cost and expense thereof; *and provided further*, every owner of land upon that part of said road proposed to be vacated under this act shall consent in writing to such change of location and vacation.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. The board of chosen freeholders of any of the several counties of this State shall have the power and authority to straighten, change the location of and vacate any portion of any public road or highway heretofore or hereafter acquired, constructed and improved in any such county by the board of chosen freeholders thereof, and to improve the portion included in such changed location; *provided*, any owner or owners of real estate along such portion is or are willing to contribute the whole cost and expense thereof; *and provided further*, every owner of land upon that part of such road or highway proposed to be vacated under this act shall consent in writing to such change of location and vacation.

Change and  
improve  
roads.

Proviso.

2. The property owner or owners desiring such straightening, change of location and vacation, and the improvement of the portion included in such changed location, may present to the board of chosen freeholders of any such county a petition therefor, which shall be accompanied by a map and specifications showing the proposed straightening, change of location and vacation, and in what manner the portion included in such changed location is to be improved, and offering to contribute the whole cost and expense thereof; and said board, if it approve of the same, and is satisfied that every owner of land upon that part of said road or highway proposed to be vacated consents thereto, shall authorize the same; and thereupon it shall be lawful for said board to acquire the land necessary for said change of location, by gift, grant for nominal consideration, or by exchange of said portion so vacated for said portion necessary to be acquired; and said board is empowered, if required in any such exchange, to make, execute and deliver a deed or deeds of conveyance, conveying in fee-simple the title, if any, of any such board to the land so conveyed by it; and it shall be further lawful for said board, upon such terms as it shall determine, or as shall be agreed upon with such owner or owners, either to proceed and make the said improvement itself, the whole cost and expense thereof to be paid by said owner or owners, or to allow the said owner or owners to make the same themselves, subject to the approval of said board, and after the completion of the same, the portion which shall be superseded by said changed location shall be deemed and taken as vacated as a part of said county or public road or highway.

Presentation  
by owners.

Map and  
specifications.

Powers of  
freeholders.

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### Repealer.

3. All acts and parts of acts inconsistent with this act be and the same are hereby repealed, and this act to be deemed and taken as a public act, to take effect immediately.

Approved March 24, 1903.

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### CHAPTER 264.

An act to enable boards of chosen freeholders to accept roads or sections of roads in cities, towns, townships or boroughs, and to maintain the same as county roads.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

Improved  
roads in dif-  
ferent mu-  
nicipalities  
accepted and  
maintained  
as county  
road.

1. Whenever any public road or street, or section of a road or street, located in any township, town, city, borough or other municipality in this State, runs to the boundary of such township or other municipality and is maintained as a township road, and at the boundary of such municipality meets and is continued as another road or street in another municipality in the same county, the board of chosen freeholders of such county may, upon the petition of the common council, township committee, or other governing body of such municipalities, respectively, accept such road and thereafter maintain the same as a county road and have exclusive jurisdiction thereof in the same manner as other county roads are maintained and cared for.

2. This act shall take effect immediately.

Passed October 10, 1907.

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## CHANGING LOCATION OR IMPROVING.

### CHAPTER 75.

An act to amend an act entitled "An act to provide for the permanent improvement of public roads in this State," approved March twenty-second, one thousand eight hundred and ninety-five.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

1. The eighteenth section of the said act shall be amended so as to read as follows:

18. That if any property owners or owner along any road in any county of this State which has not been improved or is not undergoing improvement under the previous sections of this act shall desire any section of any road in such county to be improved or to be changed in location and improved, and are or is willing to contribute the whole expense of such improvement, and provided every owner of land upon that part of the road proposed to be vacated under this act shall consent in writing to such vacation, the supervisor of roads of such county shall, upon a written request of such owners or owner, make a plan of such sections of roads so to be improved or changed in location and improved, in which shall be given the levels and distances, and also specifications stating the materials that may be used and the manner of using them; and a copy of such plan, location, change of location, specifications and of any bids to do such work shall then be submitted by such owners or owner to the board of chosen freeholders, and if such board shall approve them and any change of location which may be proposed, it shall then be lawful for such owners or owner to accept any bid or bids so approved from among the bidders, or at their own expense to proceed to build such section of road according to such plan, location and specifications, and such owners or owner shall have control of the expenditure of moneys used to make such improvements, subject to the approval and supervision of the supervisor of such county; and upon the completion of the improvements to the satisfaction of the said supervisor and said board of chosen freeholders, and upon the submission to said board of receipts showing full payment for materials furnished and work done under the plan and specifications, such section of road so improved shall, if the board of chosen freeholders shall so declare, thereafter be a county road, but otherwise shall remain an ordinary public highway, and any and all portions of any road now existing which may have been rendered unnecessary or be superseded by the new road so constructed shall be vacated and abandoned as a public road, without other action or proceedings than the approval of the board of chosen freeholders as hereinbefore provided; and the said supervisor shall be paid by the aforesaid owners or owner the sum of ten dollars for making the plan, the sum of five dollars for drawing the specifications, and the sum of five dollars for the supervision of the work, and in case such supervisor is not a civil engineer, and actual survey is necessary, then such owners or owner, at their

Property owners to contribute whole expense of improvement.

Owner to have control of expenditures.

Old road vacated.



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or his expense, shall procure a survey, which shall be subject to the approval of such supervisor, which survey shall take the place of the plan before mentioned, and shall include all the new roads proposed to be constructed and all the old roads proposed to be abandoned.

Approved March 23, 1896.

## CHAPTER 119.

An act providing for the widening of certain county roads.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

Freeholders  
may acquire  
lands to  
widen road.

1. It shall be lawful for the board of chosen freeholders of any county in this State to acquire by purchase lands adjoining any public road under the care of said board or any commission in said county, and running through two or more municipalities therein, for the purpose of widening said road at any point where such widening shall, in the judgment of said board, for any reason be desirable. In case such board shall be unable to agree with the owners of said lands for the purchase thereof, then it may acquire the same by condemnation in the manner provided in "An act to regulate the ascertainment and payment of compensation for property condemned or taken for public use (Revision of 1900)," approved March twentieth, one thousand nine hundred, and the supplements thereto.

Public road.

2. Said lands when so acquired shall be incorporated in and become a part of said public road.

Bonds to  
meet pay-  
ment.

3. Said board of chosen freeholders shall have power to pay for said lands, when purchased or condemned, by the issuance and sale, for not less than par, of temporary loan bonds, bearing interest at not exceeding four per centum per annum, payable half-yearly. The payment of said bonds, with interest, shall be provided for in the tax levy or budget next thereafter made.

4. The total limit of expenditure under this act in any county shall not exceed five thousand dollars.

Amount.

5. This act shall take effect immediately.

Approved April 6, 1905.

## CHAPTER 150.

An Act respecting the improvement of county roads in municipalities and providing for the issuance of bonds in payment of such improvement.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

Improve-  
ment of  
county road  
lying within  
municipality.

1. When any county road, whether constructed under the provision of a road board act or by virtue of authority conferred upon any board of chosen freeholders or otherwise, lies partly within the territory of any municipal corporation, and when, in the judgment of the governing body of such municipal corporation, or of the board in such municipal corporation having con-

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trol over the streets therein and authorized by law to grade, pave and otherwise improve said streets, it shall be proper to improve so much of such county road as lies within the territory of such municipal corporation by grading or changing the grade of such road, and by regulating or changing the width of the sidewalks thereon, and by setting curbing, and by paving the roadway from curb to curb, and by re-paving the roadway from curb to curb, or any part thereof, with any form or kind of street pavement; and when the board of chosen freeholders of the county in which such county road lies shall by resolution concur in such judgment of the proper authorities of such municipal corporation, then it shall be lawful for such governing body or board in such municipal corporation, and for such board of chosen freeholders, to enter into an agreement to determine what part or portion of the expense of making any such improvement shall be paid by and through each of the parties to such agreement. After the execution of such agreement it shall be lawful for the said governing body or board in such municipal corporation to proceed to make such improvement in the same manner in which similar public works are undertaken, contracted for and executed with respect to other streets in such municipal corporation, and on completion thereof the board of chosen freeholders shall pay the part or portion of the expense assigned to such board of chosen freeholders in the said agreement, and the remainder of said expense of such improvement shall be paid, assessed and collected in the same manner as the expense of other street improvement in such municipal corporation, or such municipal corporation may appropriate and borrow such sum or sums for the purpose or purposes aforesaid, and may secure the repayment of the sum or sums so borrowed, together with interest thereon at a rate not to exceed five per centum per annum, by the issue of bonds in the corporate name of such municipality; bonds so issued shall be designated "county road improvement bonds," may be registered or coupon or both, of such denomination as the governing body of such municipality may determine, and shall be made payable in not more than thirty years from the date thereof; shall be sold at public or private sale, and not for less than par and accrued interest; and such municipality shall in its annual tax levy raise money sufficient to pay the interest on said bonds, together with at least three and one-third per centum per annum of the principal thereof, to provide a sinking fund for the retirement of said bonds at maturity.

Expense divided.

Manner of making improvement.

Bond issue.

Rate.

Name.

Time.

Sinking fund.

2. This act shall take effect immediately.

Approved April 8, 1910.

## CHAPTER 63.

An act to provide for the extension and maintenance of public roads in this State.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. Whenever the common council, board of aldermen, town council, township committee or other governing body of any city, town, township, borough or other municipality in this State shall, by resolution in writing, consent to the extension of any

Extension of highways to become county roads.



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Rights of freeholders.	<p>public road, boulevard or highway constructed under the provisions of chapter ninety-seven of the laws of one thousand nine hundred and three, or any supplement thereto or amendment thereof, or by any board of freeholders or under the jurisdiction of any board of freeholders in this State, under any act authorizing such construction, and which lies partly within such municipality, and shall, in such resolution, request the further extension of such public road, boulevard or highway as a county road for the purpose of making and effectuating a complete and continuous county road in or through or partly in such municipality, then and in such case it shall be lawful for the board of chosen freeholders of the county wherein said city, town, township, borough or other municipality is situated, by resolution to lay out, open, construct, reconstruct, extend, improve and maintain an extension of any such public road in and through any such city, town, township, borough or other municipality; and for such purpose such board of chosen freeholders shall have the right to improve, reconstruct, take over, accept and maintain any public road, or section of road, already laid out in such city, town, township, borough or other municipality, in such manner as the said board of chosen freeholders shall deem necessary.</p>
Conditions of acceptance.	<p>Such extension of such public road can be authorized, accepted and adopted by said board of chosen freeholders only upon the following conditions:</p>
Necessary.	<p>(a) The extension must be, in the judgment of such board of chosen freeholders, of public importance.</p>
Approval by road commissioner.	<p>(b) The State Commissioner of Public Roads shall approve the resolution authorizing such extension before the same shall become effective.</p>
Certificate of consent.	<p>(c) The consent presented to such board of chosen freeholders by any such city, town, township, borough or other municipality must be accompanied by a certificate that the whole of the proposed road, or section of road, if any, which is to be used for the purpose of such extension, has been permanently improved without state or county aid by the construction thereon of a macadamized road, or telford or other stone road, so that the same is, or shall be, with reasonable repairs thereto, firm, smooth and convenient for travel at all seasons of the year; and accompanied by a map or survey of such road, or section of road, and a brief description of the specifications under which such improvements were made, together with evidence that full payment to the contractor or contractors for all work done has been made.</p>
Capable of repairs.	
Map.	
Freeholders to have exclusive jurisdiction.	<p>Any such extension of such county road, upon its acceptance by any such board of chosen freeholders, shall forever thereafter be a county road and subject to the exclusive jurisdiction of said board of chosen freeholders, except as hereinafter provided. It shall be constructed, reconstructed, laid out, improved and maintained under the provisions of chapter ninety-seven of the laws of one thousand nine hundred and three, or any supplement thereto or amendment thereof, and the duty of keeping the same in repair shall devolve exclusively upon such board of chosen freeholders.</p>
Lighted by municipality.	<p>2. Except for the purpose of maintaining such road in good repair for the purposes aforesaid, and for such other purposes as are set forth in chapter ninety-seven of the laws of one thousand nine hundred and three, or any supplement thereto or amendment thereof, such city, town, township, borough or other municipality in which such extension shall be constructed, reconstructed, laid out, improved and maintained, shall have the</p>



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right to light the same, as part of the system of streets in such city, town, township, borough or other municipality.

3. Chapter one hundred and twenty-nine of the laws of one thousand eight hundred and ninety-seven, and all other acts and parts of acts inconsistent with the provisions of this act are hereby repealed.

Repealer.

4. This act shall take effect immediately.

Approved March 28, 1905.

## CHAPTER 121.

An Act to authorize the board of chosen freeholders of any county in this State to acquire, improve and maintain roads lying within the corporate limits of any town, borough, township or village.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. The board of chosen freeholders of any county in this State is hereby authorized to acquire from time to time, in the manner hereinafter provided, any road or roads lying within or extending through the corporate limits of any town, borough, township or village, or lying in and extending through two or more towns, boroughs, townships or villages in such county.

Acquire roads.

2. Any board of chosen freeholders desiring to acquire any road or roads as provided and authorized by section one (1) hereof shall do so by the adoption of a resolution or resolutions, from time to time, as in the judgment of such board shall appear to be proper; such resolution shall designate the road or roads sought to be acquired, naming the municipality or municipalities within or through which such road or roads extend, and to such resolution or resolutions shall be attached a map or maps showing the road or roads sought to be acquired.

Proceed by resolution, indicating roads.

3. Upon the adoption of any such resolution two copies thereof, certified under the hand of the clerk and the seal of such board of chosen freeholders, shall be transmitted to the State Commissioner of Public Roads for his approval or disapproval.

Road commissioner advised.

4. The State Commissioner of Public Roads shall, within sixty days from the receipt by him of certified copies of resolutions required and provided for by section three (3) hereof, approve or disapprove thereof and certify his approval or disapproval upon the resolutions filed with him, transmitting one thereof to the clerk of such board of chosen freeholders and filing the other in his office.

Road commissioner to act.

If more than one road shall be designated in any resolution, the State Commissioner of Public Roads may approve of one or more thereof and disapprove as to the others, and certify his approval and disapproval accordingly.

5. Whenever the board of chosen freeholders shall by the adoption of a resolution as herein provided, approved by the State Commissioner of Public Roads, acquire any road or roads as a county road or roads, the duty of keeping the same in repair shall devolve exclusively upon the board of chosen freeholders, and all other powers and duties respecting such road or roads shall be imposed upon and vested in the said board of chosen freeholders to the exclusion of all township, town, borough

Maintenance.

Proviso.

and village officers; *provided, however*, that nothing herein shall divest the municipal authorities of any township, town, borough or village or their authority to light such road or roads, or of their power to construct, grade, curb, pave or repair the sidewalks and curbs along said roads, nor shall this power of said governing bodies divest the board of chosen freeholders of their right to construct across or under the sidewalks the necessary culverts or other provisions for the maintenance of such county roads; *and provided further*, that the board of chosen freeholders shall not grant any easement, right of way or use, in, under or over any such county road or roads unless the governing body of each municipality in said county through which said road or roads run or extend shall consent thereto, and that where the consent of property owners is required under any laws of this State, the same shall be also obtained before such grant of any such easement, right of way or use.

Proviso.

6. After acquiring any road or roads hereunder the board of chosen freeholders may, from time to time, and either in whole or in part, improve the same under the provisions of an act entitled "An act to provide for the permanent improvement of public roads in this State (Revision of 1905)," approved March twenty-seventh, one thousand nine hundred and five, and the acts amendatory thereof and supplemental thereto, for which purpose the board of chosen freeholders may issue bonds in the manner provided by the act herein recited.

Improvements.

Road act not affected.

7. This act shall take effect immediately, but nothing in this act contained shall be construed to modify or repeal any of the provisions of an act entitled "An act to provide for the permanent improvement of public roads in this State (Revision of 1905)," approved March twenty-seventh, one thousand nine hundred and five, or any of the acts amendatory thereof or supplemental thereto.

Approved April 8, 1910.

## CHAPTER 163.

An act to provide for the permanent improvement of regularly laid out roads in counties and providing for the issuance of bonds in payment of such improvement in this State.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

Agreement to improve road by municipality and county.

1. When any regularly laid out road lying in any municipality, and when, in the judgment of the committee, board or body having charge of the roads in such municipality it shall be proper to permanently improve any such road or portion thereof as lies within the said municipality with any form or kind of material capable of making a road of a permanent nature, and when the board of chosen freeholders of the county in which said road lies shall, by resolution, concur in such judgment of the said committee, board or body, then it shall be lawful for said committee, board or body, and for such board of chosen freeholders to enter into an agreement to determine what part or portion of the expense of making any such improvement shall be paid by and through each of the parties to such agreement. Such agreement shall also include the specifications for the improvement of

Nature of agreement.



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such road or roads, the plan under which the road is to be built, and if by contract, then such agreement shall provide for the advertising for proposals, the awarding of the contract, together with all other matters or things necessary to be done in connection therewith, and the board of chosen freeholders shall pay its proportion of the part or portion of the expense assigned to such board of chosen freeholders in the said agreement, and the remainder of such expense of improvement shall be paid, assessed and collected in the same manner as the expense of other road improvements in such municipality.

2. For the purpose of raising the money necessary to so permanently improve any road or roads, pursuant to the provisions of this act, the board of chosen freeholders or the committee, board or body having charge of such road or roads so improved or to be improved under the provisions of this act, may appropriate and borrow such sum or sums of money for the purpose aforesaid as may be necessary, and may secure the repayment of the sum or sums so borrowed, together with interest thereon, at a rate not to exceed five per centum per annum, by an issue of bonds in the name of such county or municipality, bonds so issued may be registered or coupon, or both, of such denomination as the board of chosen freeholders or said committee, board or body shall approve; they shall be made payable in not more than thirty years from the date thereof, and shall be sold at public or private sale, and not for less than par and accrued interest; such municipality shall in its annual tax levy raise money sufficient to pay the interest on said bonds, together with, at least, three and one-third per centum per annum of the principal thereof, to provide a sinking fund for the retirement of such bonds at maturity.

May issue bonds.

Rate.

Time.

Sinking fund.

3. This act shall take effect immediately.

Approved April 9, 1910.

## REPAIR OF COUNTY ROADS.

### CHAPTER 182.

A supplement to an act entitled "An act to enable boards of chosen freeholders to acquire, improve and maintain public roads," approved March nineteenth, one thousand eight hundred and eighty-nine.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. It shall be lawful for the boards of chosen freeholders in the several counties of this State that have heretofore acquired and improved, or that may hereafter acquire and improve, any road or roads under the act to which this a supplement, to keep and maintain such roads in repair in the same manner and to the same extent as state aid roads may now be repaired and maintained under the act entitled "An act to provide for the permanent improvement of public roads in this State (Revision of 1905)," and it shall not be necessary to advertise or contract for work or materials for such repair otherwise than as required for state aid road repairs in and by said last-mentioned act, its supplements and amendments.

Maintenance of county roads.



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Under county  
supervisor of  
roads.

2. It shall be lawful for the board of chosen freeholders of any county that has heretofore acquired and improved any road or roads under the act to which this is a supplement (and which has a county supervisor of state aid roads), by resolution, to place the repair and maintenance of all such roads, so acquired and improved, under the charge and supervision of such county supervisor of roads.

3. This act shall take effect immediately.

Approved May 13, 1907.

## CHAPTER 171.

An Act concerning the repair of county roads where the State Commissioner of Public Roads is authorized to use State funds in payment of the whole or part of such repairs, and authorizing the boards of chosen freeholders to issue bonds for their share of the cost of such repairs.

*BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:*

Extraordin-  
ary repairs  
made from  
State funds.

1. Wherever any county road in this State now is or hereafter may be in need of extraordinary repairs, and the board of chosen freeholders of such county desires that the cost or a portion thereof be paid out of State funds, it shall prepare specifications showing the repairs contemplated and forward the same to the State Commissioner of Public Roads, and said Commissioner is authorized, in his discretion, to approve of such specifications, and to state what amount of State moneys he will use for the purpose out of any State funds created for the repair of such roads, and so certify to such board; and thereafter such board may award a contract for the repair of such road under this act, on bids duly advertised for, with the approval of the State Commissioner of Public Roads, and such road shall be repaired under his supervision.

Contract.

May issue  
bonds.

2. If such board of chosen freeholders shall not have sufficient funds wherewith to pay its share of the cost of such repairs, then it shall and may be lawful for such board to issue the bonds of the county, in a sum not exceeding the sum to be advanced by the State Road Commissioner for and towards such repairs as stated in his certificate, to defray and pay its share of the cost; which bonds shall run not exceeding five years from their date, shall bear interest at not exceeding five per centum per annum, shall be executed in the manner that bonds of such county are usually executed, and may be sold at public or private sale for not less than par; and such board shall annually thereafter place in the tax levy a sufficient sum to pay the interest on said bonds as it matures, and a further sum which, with the accumulations thereof, will be sufficient to pay off and discharge said bonds at maturity.

Time.  
Rate.

3. This act shall take effect immediately.

Approved April 9, 1910.

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## CHAPTER 77.

An act concerning roads.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

1. The board of chosen freeholders in any county in this State that shall have improved any roads or streets in such county, and shall be charged with the repair of such roads or streets, shall have power, by resolution, to regulate or prohibit the tearing up or excavating in any such roads or streets for the laying, replacing or repairing of water, gas or sewer pipes, for making any drain or for any other purpose; to prevent the disturbing or tearing up of such roads or streets by the locking of wheels of any vehicle or attaching a drag to such vehicle; to prevent the filling up of gutters along such roads or streets, and to prevent obstruction and damage to such roads or streets by spilling or throwing stones, dirt or other materials on such roads or streets.

Freeholders  
to regulate  
use of im-  
proved streets  
or roads.

2. The board of chosen freeholders of any such county may prescribe a penalty by a fine not exceeding one hundred dollars for the violation of any such resolution or any section thereof, and that the court of justice before whom proceedings shall be instituted shall determine the amount of the fine, not to exceed the sum of one hundred dollars, and may commit the defendant to the county jail until the fine is paid, with costs.

Penalty for  
violation.

3. Complaint against any person violating said resolution, or any section thereof, may be made before a district court of any city in such county, or in case there shall not be any district court in such county, then before any justice of the peace of such county, and such court or justice shall issue process at the suit of such county in the nature of a summons, and the same procedure shall be had thereunder as is prescribed in the act entitled "An act concerning townships (Revision of 1899)," for the violation of any ordinance of a township.

Procedure  
for complaint  
and process.

4. Such resolution before it shall take effect shall be published at least once a week for two weeks in two newspapers published and circulated in such county.

Resolution  
advertised.

5. This act shall take effect immediately.

Approved April 16, 1907.

## CHAPTER 182.

An act concerning streets and highways in townships.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

1. The township committee of any township shall have power and authority by ordinance to lay out, open, widen, straighten, name, alter or vacate any street, avenue, road or highway, or any part or section of the same, and to take and appropriate for any of such purposes any lands and real estate, upon making compensation therefor in the manner now or hereafter provided by law for the taking of lands in townships for other public improvements, or by agreement with the owner.

Securing  
land for  
streets in  
townships.



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Public notice  
of intention.

2. No ordinance exercising the powers given by this act shall be adopted until ten days' notice of the time and place fixed for its consideration shall have been given by publication for one insertion in a newspaper printed in the county and circulating in the township. Such notice shall state in general terms the object of the proposed ordinance and the property to be affected.

Assessment  
for benefits.

3. Whenever a petition for any such improvement shall have been presented to the township committee, signed by twenty-five owners of property to be benefited thereby, then the expenses thereof, including the compensation, if any, paid for lands so taken, may be assessed upon the property benefited in proportion to the benefits received, but not to exceed the benefits so received.

How made.

Such assessment shall be made in the manner now or hereafter provided by law for assessing the benefits of any public improvements in townships, and shall include an assessment against every petitioner.

Act must be  
assented to.

4. This act shall take effect immediately, but its provisions shall not become operative in any township until assented to by a majority of the votes cast by the legal electors thereof at an election to be held in said township at any time to be fixed by the township committee thereof. No such election shall be called unless a petition for the same, signed by not less than one hundred taxpayers of said township, shall be filed with such township committee. The township clerk of said township shall cause public notice of the time and place of holding such election and the purpose thereof to be given by advertisements set up in at least five public places in said township and published for at least one insertion in one or more newspapers published in said county and circulating in said township, at least ten days previous to the date of such election. Said clerk shall provide for each elector voting at such election printed ballots, on which shall be either the words "for the adoption by this township of the provisions of an act to permit the township committee to lay out, open, widen, straighten, name, alter or vacate any street, avenue, road or highway, or any section of the same," or the words "against the adoption by this township of the provisions of an act to permit the township committee to lay out, open, widen, straighten, name, alter or vacate any street, avenue, road or highway, or any section of the same." The polls for such election shall be held at the usual places of holding elections therein, and shall be opened at one o'clock in the afternoon and close at seven o'clock in the evening, and such election shall be conducted by the proper election officers of said township for the time then being, and such officers shall return to the township committee of said township a true and correct statement, in writing, under their hands, of the result of said election, which shall be entered at large upon the minutes of said body.

Petition.

Ballots.

Polls.

Limitations  
to act.

5. Nothing in this act shall give authority to any township committee or other body to lay out, open, widen, straighten, name, alter or vacate any street, avenue, road or highway, or section of the same, in or through any portion of the grounds of any incorporated camp meeting association, nor to condemn any lands used for railroad purposes.

Approved April 20, 1905.



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## CHAPTER 188.

An Act concerning streets and highways in townships.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

1. The township committee of any township shall have power and authority, by ordinance, to lay out, open, straighten, extend, widen or otherwise change any street, road, avenue or highway, or any part or section thereof, and to take and appropriate, for any such purpose, any land and real estate in the following manner: A petition in writing setting forth the improvement desired, and that the signers thereof are owners of lands situate within the township which will be specially benefited by the proposed improvement, shall be presented to the township committee at a stated meeting thereof; if the township committee favors the proposed improvement, and if in its judgment the petition is signed by the owners of lands situate within the township which will be specially benefited by the improvement petitioned for, it may, at any stated meeting, adopt a resolution declaring that it favors the improvement petitioned for, and that in its judgment the persons signing the petition are owners of lands situate within the township which will be specially benefited by the improvement petitioned for, and referring it to three commissioners of assessment not interested in the improvement petitioned for, who shall be appointed for that purpose by the township committee, and who shall receive such compensation for their services as the township committee may designate; such commissioners of assessment shall proceed thereon in the manner hereinafter directed; said resolution shall also require the petitioners to deposit with the township treasurer such sum of money (to be therein stated) as the township committee shall deem necessary to cover the costs and expenses incurred by the township, if such an ordinance for such improvement shall not be thereafter adopted, which sum shall in such case be applied to the payments of such costs and expenses, and the excess, if any, shall be returned to the person or persons depositing the same; and, in case an ordinance for such improvement shall be thereafter adopted, such sum shall be returned in full, without interest, to the person or persons depositing the same, and the said commissioners of assessment shall not proceed in said manner until the township treasurer shall have certified to them that the sum specified in said resolution shall have been deposited with him; the commissioners of assessment shall be assisted in such manner as they shall require by a township surveyor, who shall be appointed for that purpose by the township committee; the said commissioners shall make, or cause to be made, a map or maps showing all the lands, real estate and improvements to be taken for the proposed improvement, and all the lots and parcels of land within the township which, in the judgment of said commissioners, will be specially benefited thereby, designating each lot and parcel on said map by a letter or number; said commissioners shall also ascertain, so far as practicable, the name of the owners of said real estate to be taken and property to be benefited, and the interest of each of the owners of real estate to be taken, and when such names or estates are not known they shall so report; they shall also appraise the value of the interest of each known owner of real estate to be taken and the

Township committee may take land for road improvements.

Petition.

Commissioners of assessment.

Manner of procedure.

Deposit to cover expense.

Township surveyor.

Maps, etc.

Commissioners to ascertain certain data.

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Assessments  
for benefits.

Report.

Meeting to  
consider  
objections.

Proviso.

Proviso.

damage to be done to such owner by taking the same; and where the estates in any plot of land are unknown they shall appraise the value of or the damage done to the fee simple; said commissioners shall also estimate all other expenses likely, in their judgment, to attend the completion of the improvement; said commissioners shall also estimate the amount likely to be realized from the sale of any buildings, or parts of buildings, required to be taken on account of said improvement, and shall also determine the probable net cost of making the improvement; this probable net cost they shall then assess upon the land to be specially benefited, in proportion to the benefit to be received; thereupon they shall, under their hands, make a report of the facts ascertained and of the appraisements, estimates, determination and assessments made by them concerning said improvement, and shall present such report and their map to the township committee at a stated meeting thereof, which body shall then, or at a stated meeting to be held thereafter, fix a time and place when and where it will meet to consider all objections in writing to said report, or to the proposed improvement, shall cause a notice of the filing of said map and report to be printed in the official newspaper in the township, or, if there be none, in a newspaper published in the county and circulating in the township, for two weeks successively next preceding the said time fixed by the township committee, at least once in each week, which notice shall contain a general description of the improvement intended, of the land to be taken and of the land to be assessed therefor, and shall state the time and place when and where the township committee will meet to hear and consider any objections to said report, or to the improvement, which may be presented in writing; said clerk shall also post copies of such notice in five public places of the township at least ten days prior to the said time fixed by the township committee for the hearing of objections, and shall also, at least five days prior to said time, serve a copy of such notice upon resident owners of real estate affected thereby, but the omission of the clerk to serve such notice shall not invalidate any of said proceedings; and all objections at such time and place, presented in writing, the township committee shall consider and adjudicate upon, and the township committee may alter, amend, adjust, increase or diminish any award without further or other notice to the person or persons interested therein; *provided, however*, that no resolution altering, amending, adjusting, increasing or diminishing any award or awards shall be passed or adopted except by or upon the affirmative votes of all the members of the township committee, nor shall any such resolution be passed or adopted at any other than a stated meeting; if the said township committee shall then determine to make said improvement, notwithstanding any objections to the same, the said township committee shall confirm said awards, as altered, amended, adjusted, increased or diminished, and pass an ordinance ordering said improvement to be made and completed in such manner as said township committee may direct, under the supervision of said commissioners of assessments; the said township committee shall also pass a resolution directing the several sums awarded to be paid to the persons to whom the awards are made for real estate taken and damages sustained in making said improvement, and upon the passage of such resolution the fee simple of said real estate to be taken shall be vested in the township; *provided*, that where the commissioners shall have reported the name or estates of the owners of any plot as unknown the said resolution shall direct



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the sum of the award on account of such plot to be paid to the owners thereof, when and as their interests may appear, and any such owner or person interested in said land may, by bill in chancery, according to the practice of that court, have the sum distributed or in whole or in part paid over to him as law and justice may require; after the completion of said improvement, the said commissioners shall ascertain and determine the actual net cost thereof, and shall assess, as provided by law, such actual net cost upon the lands especially benefited in proportion to the benefit received.

2. This act shall take effect immediately.

Approved April 9, 1910.

### INCREASED POWER TO BORROW.

An amendment to an act entitled "A supplement to an act entitled 'An act to enable boards of chosen freeholders to acquire, improve and maintain public roads,'" approved March nineteenth, one thousand eight hundred and eighty-nine, which supplement was approved April ninth, one thousand eight hundred and ninety-two.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

1. The first section of an act entitled "A supplement to an act entitled 'An act to enable boards of chosen freeholders to acquire, improve and maintain public roads,'" approved March nineteenth, one thousand eight hundred and eighty-nine, which supplement was approved April ninth, one thousand eight hundred and ninety-two, be amended so as to read as follows:

Section be amended.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

1. In counties of the second class it shall be lawful to raise a sum not to exceed four hundred thousand dollars for which bonds may be issued by the board of chosen freeholders of any such county, under the act to which this is a supplement, or any supplement or amendment thereof; *provided, however,* that if work under said act and supplements or amendments has already been done to an amount exceeding said sum, bonds under said act and supplements may be issued to an amount sufficient to raise and pay for such work; *and provided also,* that no county road bond shall be issued to such an amount as, in addition to existing debt, shall raise the debt of the county for all purposes above three per centum of the assessed value of the real estate therein; and in case any such bonds shall be issued in excess of the limit aforesaid, all such bonds so issued in excess shall be void in the hands of any person or party, notwithstanding any recitals therein or any representations that may be made concerning the same; in case application has already been made to the circuit court and a certificate shall have been recorded and filed, as required by said act, such application need not be repeated in case of any subsequent issue of such bonds where the original certificate on file shows that the new issue of bonds will not exceed three per centum of the assessed value of the real estate in said county as limited by this act.

Amount authorized to raise and bonds issued.

Proviso.

Proviso.



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Board not to use money raised except to grade, &c.

Proviso.

2. The second section of said act be amended so as to read as follows:

2. In any county of the second class wherein the board of chosen freeholders thereof shall heretofore or may hereafter issue bonds under said act and supplements, that such board of such county shall not use any of the money so raised for any other purpose except to grade, macadamize or improve any road in any such county, under the provisions of the act to which this is a supplement and the several supplements and amendments thereof; *provided*, nothing herein shall prohibit the doing of the necessary repair of any road heretofore graded, macadamized or improved by any such board or that may be hereafter graded, macadamized or improved under said act and supplements.

3. All acts and parts of acts inconsistent herewith be and the same are, so far only as they conflict herewith, repealed, and this act shall take effect immediately.

Approved March 24, 1897.

## CHAPTER 93.

### POWER OF FREEHOLDERS TO BORROW.

A supplement to an act entitled "An act in relation to county expenditures," approved April second, one thousand eight hundred and seventy-eight.

*BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:*

Repair of roads damaged by freshets.

1. In case of the injury or destruction by freshets or otherwise of any of the roads or sections of roads in this State that have become county roads under and by virtue of any law of this State whereby it shall be deemed necessary for the board of chosen freeholders, within the limits of whose county such roads or sections of roads so injured or destroyed may lie, to repair or rebuild the same, the said board of chosen freeholders may order and cause such roads or sections of roads to be repaired or rebuilt, notwithstanding the expense of repairing or rebuilding the same shall exceed the limit of the appropriations made for that year; and such board of chosen freeholders may borrow money on temporary loans for that purpose in anticipation of the next tax levy; and in the said tax levy there shall be incorporated a special appropriation under the head of "debts and interest, special deficiency," to pay for such temporary loans.

Special charge.

2. This act shall take effect immediately.

Approved April 2, 1902.

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## CHAPTER 132.

An act to provide for the acquirement of turnpike roads for free public use, and for the permanent improvement and maintenance of the same.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

1. Whenever there shall be presented to the State Commissioner of Public Roads a petition signed by the owners of at least two-thirds of the land and real estate fronting or bordering on any turnpike road, praying that said road may be acquired for free public use, and setting forth that they are willing that the peculiar benefits conferred on the lands fronting or bordering on said road shall be assessed thereon to an amount not exceeding ten per centum of the entire purchase price of the said road, together with the amount necessary to resurface, rebuild or improve the said road in the manner prescribed for other roads in the act entitled "An act to provide for the permanent improvement of the public roads in this State," approved March twenty-second, anno domini one thousand eight hundred and ninety-five, and the supplements thereto, said commissioner shall thereupon notify the Governor of such action, and the Governor shall thereupon appoint five commissioners from the county or counties through which the said road runs; the said commissioners, when appointed, shall take an oath or affirmation faithfully and fairly to perform their duties, and shall thereupon proceed to estimate and determine the fair and just value of the said road and of the portions thereof in each county in which the same is located, having given ten days' notice of the time and place when and where they will meet to hear any representation in behalf of the said corporation or of the board or boards of chosen freeholders of the various counties through which the said road runs, or of the applying freeholders in the said matter; said notice shall be served upon the president or other chief officer, of the turnpike company, upon the director of the said board or boards of chosen freeholders, and shall be published at least one week prior to the time of meeting in one newspaper published in each county through which said turnpike runs; such meeting shall be adjourned from time to time at the discretion of the said commissioners; when the said commissioners shall have arrived at a price or value of the said turnpike road satisfactory to themselves they shall report the same to the State Commissioner of Public Roads, who may thereupon ratify the same and report it to the board or boards of chosen freeholders of the counties through which the said road runs, which said board may thereupon purchase the same, or whenever the board of chosen freeholders of any county in this State shall agree with the owner or owners of any turnpike road or toll road within such county upon the price to be paid for such turnpike road or toll road, and shall, by resolution, accept the same, and said proceeding be approved by the State Commissioner of Public Roads in writing, said board may thereupon purchase the same and said road shall be paid for and maintained as a county road as hereinafter provided for; and they are hereby empowered to make temporary loans upon the credit of the said county or counties for the acquirement of the said roads as aforesaid.

2. One-third of the cost of all roads so acquired, together with one-third of the amount expended in improving the same as aforesaid, which improvement shall be made in the manner prescribed

Acquirement of turnpike road for free public use.

Appointment of commissioners by Governor.

Hearing.

Report to State Commissioner of Roads.

One-third paid from State appropriation.



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- Proviso.** for the roads under the aforesaid act, shall be paid for out of the state road appropriation; *provided*, that the amount so paid shall not in one year exceed the amount of forty thousand dollars. If one-third of such cost shall exceed the sum of forty thousand dollars, the said sum of forty thousand dollars shall be appropriated by the Governor and State Commissioner of Public Roads among the counties of this State in proportion to the cost of the roads acquired by them for such year, as shown by the statement of cost filed in the office of the State Commissioner of Public Roads. The Governor and the said commissioner shall, between December fifteenth and thirty-first in each year, certify to the State Comptroller the amount to be paid to each county for such year, and the State Comptroller shall thereupon draw his warrant in favor of the respective county collectors for the sum certified to as aforesaid upon the State Treasurer, who shall pay the same out of any moneys in the state treasury not otherwise appropriated; *provided further*, that the cost of all turnpike roads acquired under this act in any county in any one year, together with all roads built or repaired, shall not exceed one-half of one per centum of the ratables of such county for the last preceding year.
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- Duty of county board of assessors.** 3. On or before August first in each and every year it shall be the duty of the board of chosen freeholders to certify to the county board of assessors, either in the annual tax budget or separately, the two-thirds of the cost of purchasing and improving of all turnpike roads acquired and improved as aforesaid during the year, and the county board of assessors shall include the sum so certified in the county tax assessed for such year, and the same shall be assessed, collected and paid over to the county in the same manner and within the same time that other county taxes are assessed, collected and paid over. If a deficiency shall exist in consequence of the receipt of less than one-third of the cost from the state treasury, the board of chosen freeholders shall have authority to borrow on temporary loans to the amount of such deficiency until the next annual taxes shall be assessed, collected and paid over to the county.
- Loan to meet deficiency.**
- When turnpike in two or more counties.** 4. If the said road shall run through more than one county, the petition to the State Commissioner of Public Roads shall be signed by at least two-thirds of the owners of the land and real estate bordering on said road in each county before the Governor shall be required to appoint the five commissioners mentioned in the first section of this act; and each of the said counties shall bear the expense of the acquirement of the said road in proportion to the value thereof within the said counties, and all proceedings after the appointment of the said five commissioners that may be required by virtue of this act shall be had separately and independently in each of the said counties.
- Maintenance.** 5. Any road so acquired shall forever thereafter be a free county road, and shall be kept in good order and repair and in the same manner as are other county roads.
- Assessment of benefits.** 6. When the said turnpike roads shall have been so acquired and improved by petition as aforesaid, the board of chosen freeholders shall apply to the Circuit Court of the county for the appointment of commissioners to estimate and to assess the peculiar benefits conferred by such acquirement and improvement upon the lands and real estate bordering on the road so acquired and improved, of the time and place of which application notices shall be given by ten days' publication in two daily newspapers printed and circulated within the said counties, or by four weeks' publication in two weekly newspapers printed and circulating therein, at which time and place, or such other time and place as the court



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shall designate, shall, without unnecessary delay, appoint three commissioners, who shall be freeholders and residents of the county in which the application is made, to assess the benefits aforesaid. The said court shall have power to remove any commissioner and appoint another in his place, and also fill any vacancy that may occur in the office of any commissioner at any time.

7. The said commissioners shall then proceed in like manner as the commissioners appointed to assess the benefits conferred by the improvement of the public roads of this State under and by virtue of an act of the Legislature, entitled "An act to provide for the permanent improvement of the public roads of this State," approved March twenty-second, one thousand eight hundred and ninety-five, and supplements thereto, and the report of the said commissioners when filed and approved shall be a lien upon the properties assessed in like manner, and the said assessment shall be collected in like manner as the assessment in the said act last before mentioned.

Manner of assessment.

Report a lien.

Approved March 22, 1901.

## VACATION OF TURNPIKE.

### SUPPLEMENT.

Sec. 1. That whenever any turnpike company of this State shall execute to any city, township or other municipality of this State a deed of cession and transfer of all or any part of any turnpike road lying within the limits of any such city, township or other municipality, and shall have the same duly proven in the manner required for the proof of deeds or conveyances of lands, and shall deliver the same, together with a map or survey of the road, or of the part of road, so ceded and transferred to the common council, township committee or other governing board of such city, township or other municipality, and the said common council, township committee or other governing board shall accept the said deed of cession and transfer, by a writing indorsed thereon, the said deed, proof, map or survey and acceptance shall then be recorded in the office of the clerk of the county in which the road so ceded and transferred lies, in the book containing the records of public roads for said county, and after being so recorded shall be filed in the office of the Secretary of State; *provided*, that where the charter or act of incorporation of any city or other municipality prescribes the manner in which deeds of dedication of lands for public highways or streets shall be accepted, the proceedings for the acceptance of any deed of cession and transfer by a turnpike company as aforesaid shall, in any such city or other municipality, be the same as is required for the acceptance of a deed of dedication of lands for a public highway or street.

Deed of cession and transfer of turnpike road, how executed and filed.

Proviso.

Sec. 2. That any turnpike company making a cession and transfer of any part of their turnpike road in the manner aforesaid shall, from the date of filing the deed of cession and transfer in the office of the Secretary of State, be released and discharged from all authority and control over the part or parts of their road so ceded and transferred, and from all liability on account of the same, and the same shall thereafter be, to all intents and purposes, a public road or highway in such city, township or other municipi-

Company released from control, &c., of part of road ceded when deed is filed in office of Secretary of State.

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pality, and be subject to the same jurisdiction, authority and control by such city, township or other municipality as it has over other public roads or highways within the limits thereof.

Approved February 13, 1884.

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An act authorizing turnpike companies to vacate or dispose of a portion of its road and property.

When turnpike company may vacate or dispose of portion of road.

Sec. 1. That when any turnpike company in this State may deem it advisable to dispose or vacate any portion of their road, not in excess of one-half of its entire length, they shall hereby have the power and privilege of so doing at any time when the same may be favored by a vote represented by those owning two-thirds of the capital stock of said company, to be voted at a special meeting of said stockholders called by the officers of said company, and the notice of said meeting being published in at least one newspaper in each county where said road is located, for the space of thirty days, once in each week, said notice to state the time and object of said meeting. The said stockholders may, by a vote represented by those owning two-thirds of the capital stock of said company authorize and empower their president and secretary to sell or vacate to the freeholders of the county or counties the portion so desired; and if vacated without compensation, a committee of the board of freeholders of the county or counties may view the same and report to the said board upon what terms they have agreed to take said road, and the action of a majority of said board of freeholders in accepting or rejecting said report shall be final.

Approved April 20, 1885.

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An act to authorize turnpike companies to abandon a portion of their roads and property.

Turnpike companies may abandon portion of road.

Sec. 1. That any turnpike company in this State may abandon any portion of their road not exceeding two-thirds of the entire length of the road, when the same may be favored by a vote of those owning a majority of the capital stock of said company; the resolution to abandon a portion of said turnpike shall describe the part so abandoned, and shall be signed by the president and secretary of said turnpike company, duly acknowledged before an officer authorized to take the acknowledgment of deeds in this State, and shall thereupon be recorded in the office of the clerk of the county wherein such turnpike company is situated; *provided*, that the part of said turnpike so abandoned shall be in all respects in as good repair as when the said company began operating the same.

Passed June 1, 1886.



# COMMISSIONER OF PUBLIC ROADS.

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## CHAPTER 63.

A supplement to an act entitled "An act to provide for the acquirement of turnpike roads for free public use," approved May eleventh, one thousand eight hundred and ninety-seven.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

1. The pay of the commissioners heretofore or hereafter appointed under said act shall be a sum not exceeding five dollars per day, and necessary expenses not exceeding two dollars per day, for actual number of days employed in such service.

Compensation.

2. If the freeholders of the county or counties fail to accept the turnpike roads appraised under the act to which this is a supplement within twelve months after the commission have submitted their award to the State Road Commissioner, the bill of said commissioners, upon the approval of the State Road Commissioner and the signature of the Governor, shall be presented to the Comptroller of the State, who thereupon shall draw his warrant therefor upon the State Treasurer, who shall pay the same out of the annual state appropriation for roads.

Settlement when road not accepted.

3. This act shall take effect immediately.

Approved March 20, 1900.

## CHAPTER 133.

A supplement to an act entitled "An act to provide for the acquirement of turnpike roads for free public use, and for the permanent improvement and maintenance of the same," approved March twenty-second, one thousand nine hundred and one.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

1. When any commissioner heretofore or hereafter appointed under the act to which this act is a supplement shall die pending the proceedings under the said act to which this act is a supplement, or shall be disqualified or shall be unable to act or shall fail or refuse to act and perform the duties of his appointment, the other four commissioners appointed under said act shall proceed to perform the duties of their appointment with the same powers and effect as if all the commissioners were acting, and a report signed by the other four of said commissioners shall have the same force and effect as a report signed by all the commissioners appointed under the said act, and a majority of said commissioners shall have the power to adjourn their meeting from time to time.

2. When any commissioner heretofore appointed under the act to which this act is a supplement shall have died pending the proceedings under the said act, or shall have been disqualified or unable to act or shall have failed or refused to act and to perform the duties of his appointment or to attend the meetings of the commissioners appointed under the said act, all the proceedings heretofore had and acts heretofore performed by the other four of the commissioners appointed under the said act are hereby con-



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firmed and made valid, legal and effectual to the same extent that the same would have been valid, legal and effectual if all the commissioners appointed under the said act had taken part in all of said proceedings.

3. This act shall take effect immediately.

Approved March 28, 1904.

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### CHAPTER 138.

A further supplement to an act entitled "An act to provide for the control and operation of roads and bridges owned or claimed to be owned by any plank road company whose charter has expired or may expire," approved March twenty-second, one thousand nine hundred and one.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

Widening  
plank roads  
acquired by  
county.

1. After such road shall have been acquired and taken possession of by any board or boards of chosen freeholders of any county or counties in this State, such road may be widened to any width not exceeding one hundred feet, providing the board or boards of chosen freeholders of the county or counties in which said road may lie and be situate shall adopt a resolution determining that such widening is of public importance, and setting forth the width proposed and the location of said widening, and the points between which such widening is to be made; such resolution, in case said road lies in two or more counties, shall receive the approval of each of said counties before the same shall be valid and operative.

Acquirement  
of lands.

2. The title to the lands required for such widening may be acquired by gift, devise, purchase or condemnation, and shall vest in the county corporation of the county or counties within the territorial limits of which the lands acquired may lie, respectively, and the cost and expense of acquiring such lands shall be paid by the county within which the same shall lie, but nothing in this act contained shall be construed to alter or in anywise affect the provisions of law under which such road, including the bridges thereof, are or shall be constructed, renewed, repaired or maintained.

3. This act shall take effect immediately.

Approved March 28, 1904.

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## CHAPTER 173.

An act to provide for the purchase, by boards of chosen freeholders, of turnpike or toll roads, or portions thereof, which have been improved by the construction thereon of a macadam, telford, rubble or other stone road, for free public use as county roads, and for the repair, improvement and maintenance of the same.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. The board of chosen freeholders of any county may agree with the owner or owners of any turnpike or toll road, or portion thereof, lying within such county and being not less than one mile in length, which has been improved by the construction thereon of a macadam, telford, rubble or other stone road, upon the price to be paid for the same, and may by resolution agree to purchase the same for free public use at the price agreed upon, subject to the approval of the State Commissioner of Public Roads, and upon receiving the approval of said commissioner, in writing, the said board may thereupon purchase such turnpike or toll road, or portion thereof, at the price agreed upon, and the road or portion of road so purchased shall thereupon be and become a county road, and shall be cared for, repaired, improved and maintained for free public use in the same manner that other county roads are cared for, repaired, improved and maintained.

Freeholders may purchase turnpike and maintain same as county road.

2. The board of chosen freeholders may, before purchasing any such turnpike or toll road, or portion thereof, require as a condition of such purchase that each township or other municipality in which said road or any portion thereof intended to be purchased lies shall pay ten per centum of the cost of the part lying within such township or other municipality, said payment to be applied to the purchase price of the road or portion of road acquired under this act.

Require part cost paid by municipality.

3. One-third of the cost of any turnpike or toll road, or portion thereof purchased in accordance with the provisions of this act, shall be paid for out of the state road appropriation; *provided*, that the amount paid out of said appropriation for all turnpike or toll roads acquired pursuant to the provisions of this or any other act of the Legislature of this State now in force, shall not exceed in any year the sum of fifty thousand dollars. If one-third of the entire cost of the turnpike or toll roads so acquired in any year shall exceed the sum of fifty thousand dollars, the said sum of fifty thousand dollars shall be appropriated by the Governor and the State Commissioner of Public Roads first in payment of any deficiency remaining due from the State to any county or counties in any previous year, for one-third of the cost of turnpike or toll roads purchased as aforesaid, and afterwards among the several counties in proportion to the cost of the turnpike or toll roads acquired by each of them respectively during the current year pursuant to the provisions of this or any other act of the Legislature of this State now in force, as shown by the statements of cost filed in the office of the State Commissioner of Public Roads, the Governor and the said commissioner shall, between December fifteenth and thirty-first in each year, certify to the State Comptroller the amount to be paid to each county for such year for such deficiency, if any, and on account of the purchase of turnpike

State's portion.

Proviso.

Amount.

If deficiency.



Proviso.

or toll roads, or portions thereof, in such county, and the State Comptroller shall draw his warrant on the State Treasurer in favor of the county collector for the amount certified, and the State Treasurer shall thereupon pay the same; *provided further*, that the cost of all turnpike or toll roads or portions thereof acquired under this or any other act of the Legislature of this State now in force, by any county in any one year, together with all the roads built or repaired therein under the provisions of any act of the Legislature of this State providing for the permanent improvement of public roads in this State, shall not exceed one-half of one per centum of the ratables of such county for the last preceding year.

Notice to county assessors.

4. On or before the day fixed for the meeting of the county board of assessors in any county in each year, the board of chosen freeholders of such county shall certify to the said county board of assessors, either in the annual tax budget or separately, two-thirds of the cost of any turnpike or toll road or portion thereof purchased or agreed to be purchased pursuant to the provisions of this act since the day fixed by law for the meeting of the board of assessors in the year next preceding. The county board of assessors shall include in their assessment of county taxes the sum so certified, and the same shall be collected and paid over to the county in the same manner and at the same time that other county taxes are collected and paid over. If a deficiency shall exist, in consequence of the receipt of less than one-third of the cost from the State, the said board of chosen freeholders shall have authority to borrow, on temporary loans, such deficiency, until such time as the same shall be paid by the State, as provided by section three of this act.

Collection of assessment.

If deficiency temporary loan.

Turnpike acquired free of indebtedness.

5. Any board of chosen freeholders that shall enter into an agreement for the purchase of a turnpike or toll road or portion thereof, in accordance with the provisions of this act, shall, on or before making payment for the same, require the turnpike or toll road or portion thereof so purchased to be released and discharged from the lien of any mortgage given to secure a bonded or other indebtedness, and from any other lien or incumbrance whatsoever.

6. This act shall take effect immediately.

Approved April 18, 1905.

## CHAPTER 145.

An act to amend the title of and a supplement to an act entitled "An act to provide for the purchase, by boards of chosen freeholders, of turnpike or toll roads, or portions thereof, which have been improved by the construction thereon of a macadam, telford, rubble or other stone road, for free public use as county roads, and for the repair, improvement and maintenance of the same," approved April eighteenth, nineteen hundred and five.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

Title amended to read.

1. The title of the act to which this is a supplement is hereby amended to read as follows, to wit:

An act to provide for the purchase or condemnation, by boards of chosen freeholders, of turnpike or toll roads, or portions thereof, which have been improved by the construction thereon of



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a macadam, telford, rubble or other stone road, for free public use as county roads, and for the repair, improvement and maintenance of the same.

2. Whenever the board of chosen freeholders of any county shall be unable to agree with the owner or owners of any turnpike or toll road, or portion thereof, lying within such county and being not less than one mile in length, which has been improved by the construction thereon of a macadam, telford, rubble or other stone road, upon the price to be paid for the same, and shall by resolution adjudge it to be advisable that the same should be acquired for free public use, notwithstanding such inability to agree upon a price for the same, it shall and may be lawful, and such board of chosen freeholders is hereby authorized and empowered, upon receiving the approval, in writing, of the State Commissioner of Public Roads, to condemn such turnpike or toll road, or portion thereof, lying within such county, in the manner provided by the act of the Legislature entitled "An act to regulate the ascertainment and payment of compensation for property condemned or taken for public use" (Revision of 1900), approved March twentieth, one thousand nine hundred, and the acts amendatory thereof and supplemental thereto.

Condemnation of turnpikes by counties.

Action approved by road commissioner.

3. Upon the filing of the report of the commissioners, and the approval, in writing, of the State Commissioner of Public Roads, such board of chosen freeholders is hereby empowered to borrow temporarily, upon the credit of the county, such sum or sums of money as shall be necessary to pay, in the first instance, the amount awarded by said commissioners, but one-third of the cost of any turnpike or toll road, or portion thereof, condemned in accordance with the provisions of this act shall be paid out of the state road appropriation, as provided by the act to which this is a supplement, in case of the purchase thereof.

Borrow money to make payment.

State's share one-third.

4. Any board of chosen freeholders may, before commencing such condemnation proceedings, require that each township or other municipality in which such turnpike or toll road, or portion thereof, lies shall agree to assume and pay ten per centum of the cost of the part or portion of such turnpike or toll road lying within such township or other municipality.

Liability of subdivisions of county.

5. Two-thirds of the cost of any turnpike or toll road, or portion thereof, condemned in accordance with the provisions of this act, less the sum or sums assumed and paid by any township or other municipality as herein provided, shall be certified to the county board of assessors, and assessed and collected in the manner provided by the fourth section of the act to which this is a supplement.

Collection of county's share by taxation.

6. This act shall take effect immediately.

Approved April 20, 1906.

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### CHAPTER 140.

A supplement to an act entitled "An act to authorize the improvement of county roads by the board of chosen freeholders of any county where such road has been a toll road and purchased or condemned, and such boards are charged with the repair and maintenance of the same, and to provide for the payment of the expense of such improvement," approved April fifteenth, one thousand nine hundred and eight.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

Drainage  
included in  
road im-  
provement.

1. The cost of grading and construction of necessary drains for the drainage of such road and carrying off of surface water shall be included as part of the cost of such permanent improvement.

2. This act shall take effect immediately.

Approved April 17, 1909.

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### CHAPTER 101.

An act authorizing and directing the board of chosen freeholders of the counties of this State to light with electric lights certain public highways, leading from the main shore and across the meadow to any seaside resort.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

Freeholders  
may light  
certain  
highways.

1. It shall be lawful for and the board of chosen freeholders of the counties of this State are hereby directed to light with electric lights any public highway, which has, or hereafter shall be constructed, in part by the State and which leads from the main shore and across the meadow to any seaside resort and which is over one mile in length and has two or more bridges constructed thereon; *provided, however*, that no contract for lighting shall be made for a longer period than five years, or without having first advertised for bids for at least two weeks in three or more newspapers published and circulating in said county.

2. This act shall take effect immediately.

Passed April 15, 1909.

Proviso.

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## CHAPTER 102.

An act authorizing boards of chosen freeholders of counties of this State to issue and sell bonds for the purpose of providing funds for the acquisition of toll or turnpike roads by purchase or condemnation, and for resurfacing or otherwise improving such roads, and providing for the payment of the principal of and interest on said bonds.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. The board of chosen freeholders of any county which has heretofore purchased or contracted to purchase, or may hereafter purchase or contract to purchase, any turnpike or toll road, or which has heretofore taken, or may hereafter take, proceedings to acquire any toll or turnpike road by condemnation, or which has heretofore entered into, or may hereafter enter into any contract for the resurfacing or otherwise improving of any turnpike or toll road so purchased or contracted to be purchased, or condemned, may provide for the raising of moneys deemed by such board necessary for any or all of said purposes by the issuance and sale of bonds of said county. Such bonds shall be payable in not more than thirty years from their date, shall bear interest at a rate not exceeding five per centum per annum, payable semi-annually, shall be of such form and denomination and shall be executed by such officers as the said board shall determine, and shall be sold at not less than par, upon bids duly advertised for, and when so issued the full faith and credit of the county shall be pledged for the payment of the same.

2. It shall be the duty of the board of chosen freeholders of any county issuing bonds under the authority of this act to establish a sinking fund for the payment of the principal thereof at maturity, and for that purpose to include in the annual appropriations each year, until the maturity of the bonds, a sum not less than two per centum of the par value of the bonds so issued, to be levied and collected with the other taxes of such county, and paid into such sinking fund; and said board of chosen freeholders shall also each year, until the maturity of said bonds, include in their annual appropriations, and cause to be levied and collected with the other taxes of the county, an amount sufficient to pay the interest on said bonds falling due in such year.

3. This act shall take effect immediately.

Approved April 15, 1909.

Bond issue to acquire and improve turnpikes.

Time.

Rate.

Sinking fund.

Principal and interest raised by tax.



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## VIADUCT.

## CHAPTER 31.

An act to amend an act entitled "An act to enable the board of chosen freeholders of any county in this State to erect, construct and maintain a viaduct between two or more municipalities in such county, connecting streets or roads of such county or municipalities, and to extend roads to connect with such viaduct, and to acquire lands for the same, and to issue bonds for the payment of the cost of the erection, construction and acquisition thereof," approved March twenty-eighth, one thousand nine hundred and four.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

Section amended.

Lawful to construct connecting roads.

Use of street for elevated structure.

Care of diverted portion.

Section amended.

Freeholders may acquire lands.

Section amended.

1. Section two (2) of the act to which this is an amendment be and the same is hereby amended to read as follows:

2. If, in the judgment of such board, it is wise and expedient to erect such viaduct at a point where it does not connect at one or more ends with a public highway, then it shall and may be lawful for such board to construct and maintain a road or roads from either one or more ends of such viaduct, to connect with a street or streets, road or roads, of such county or municipalities; and such viaduct proper and the road or roads so constructed shall be considered and classed as a viaduct within the meaning of this act; and wherever in this act the word "viaduct" is used it shall be construed, treated and considered as referring to such viaduct proper as well as the road or roads which may be constructed at either one or more ends thereof as aforesaid. If in the construction of such viaduct it becomes necessary to construct the elevated portion thereof through a portion of the length of any street or road of any municipality, it shall be lawful for said board to take and use such portion of such street or road for such elevated structure, and divert and continue such street or road to and on either side of such elevated structure, and improve the portion so diverted and continued in the same manner that the said street or road was theretofore improved, and thereafter such portion of such street or road so diverted and continued shall become and be a road of the municipality, and under the care, custody and control thereof.

2. Section four (4) of the act to which this is an amendment be and the same is hereby amended to read as follows:

4. If it shall become necessary to acquire lands for the building of such viaduct, or for the diversion and continuance of a street or road on either side of the elevated portion of such viaduct, the board of chosen freeholders of such county is authorized to acquire such lands by gift, grant, purchase or in the manner set out under the act entitled "An act to regulate the ascertainment and payment of compensation for property condemned or taken for public use," approved March twentieth, one thousand nine hundred (Revision of 1900), and the supplements thereto and amendments thereof, and the title to the lands shall be taken in the name of such board.

3. Section five (5) of the act to which this is an amendment be and the same is hereby amended to read as follows:

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5. The total expense of viaducts contracted to be built under this act in any one year shall not exceed one-fourth of one per centum of the ratables of such county, as ascertained for the then current fiscal year; nor shall there be issued for the erection of viaducts under this act in any period of five years bonds in the aggregate to exceed one-fourth of one per centum of the ratables as aforesaid.

Total expenses allowable.

4. Section six (6) of the act to which this is an amendment be and the same is hereby amended to read as follows:

Section amended.

6. If, in the opinion of the board of chosen freeholders of such county, to place the entire cost of such viaduct, including the acquisition of lands authorized hereunder and the improvement of any street or road diverted and continued as aforesaid, in the tax levy for any one fiscal year would be too burdensome to the taxpayers of such county, it shall and may be lawful for such board to issue the bonds of such county to defray the expense thereof, which said bonds shall be of the denomination of one thousand dollars each, and be registered or coupon, as such board may determine, and shall bear interest at a rate not exceeding four per centum per annum, payable semi-annually, and shall run for a period not exceeding thirty years, and shall be signed by the director and clerk of such board and countersigned by the county collector, and shall be sold at public sale to the highest bidder for not less than par; and said county shall annually thereafter place in the tax levy a sum sufficient to pay the interest on such bonds as they mature, and shall likewise create a sinking fund for the payment of said bonds at maturity, and place in the tax levy annually thereafter a sum sufficient, with the accumulations thereof, to pay off and discharge said bonds at maturity; or the board, in its judgment, may, from time to time, place part of such cost in the tax levy year by year, and raise part only of said cost by the issue of the bonds aforesaid. If the board should at any time, or from time to time, pass a resolution or resolutions to place in the tax levy a certain sum to be used for the purposes authorized and mentioned in this act and the act amended hereby, such moneys shall be available forthwith, and the board may raise such sum by the issue of temporary loan bond or bonds, to run not exceeding two years, and to bear interest not exceeding the rate of five per centum per annum, in anticipation of the collection of such taxes; and at the time of making up the next tax budget of such county after the passage of such resolution or resolutions said board shall, pursuant to said resolution or resolutions, place therein a sum sufficient to pay off and discharge said temporary loan bond or bonds at maturity, with the interest thereon, as it accrues.

May issue bonds.

Rate; time.

Sinking fund.

Temporary loan bond.

How met.

5. This act shall take effect immediately.

Approved April 9, 1907.



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## CHAPTER 201.

An act for the better protection of travelers, pedestrians, vehicles and animals on the public streets and highways.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

Penalty for placing glass, bottles, &c., upon public highways.

1. Whoever places upon the surface of any public street, highway or other way customarily and lawfully used for public travel, or upon any sidewalk appurtenant to such way, any broken glass, bottle, metal, loose stones, earthenware, or other substance of a nature likely to cause injury to travelers or pedestrians, or to carriages, bicycles or other vehicles traveling or moving on said way, or which might wound, disable or injure any horse or other animal, or which might injure, cut or puncture any pneumatic tire, shall forfeit for each offense five dollars, to be sued for and recovered in an action of debt by any person who will sue for the same.

Broken stone of dimension one inch or more placed on highways to be covered.

2. Any overseer of the highways, committeeman, contractor, or other person whomsoever, who shall place or spread broken stone on any of the highways of this State, for the purpose of improving or repairing the same, shall, if such stone be of the dimensions of an inch and one-half or more in diameter, cause the same to be covered with fine stone, earth or screenings, within such period of time as it shall be possible to obtain such fine stone, earth or screenings after said broken stones are spread upon said road, unless prevented by causes beyond his control, under a penalty of twenty dollars for each offense, to be sued for in an action of debt and recovered, with costs, by any person who shall be injuriously affected by the willful neglect or failure to cover said stone as herein provided.

3. This act shall take effect immediately.

Approved May 12, 1896.

## CHAPTER 98.

Further supplement to an act entitled "An act concerning roads," approved April sixteenth, one thousand eight hundred and forty-six.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

Highway must be kept clear of weeds, &c.

1. The owner or occupant of land abutting on any highway in any township in this State shall, during the month of September of each year, cut and remove all brush, briars and weeds growing in or upon such portion of such highway as his or her lands abut upon, and in case such owner or occupant shall fail to perform the duties imposed hereby, the township committee of the township in which such lands abut as aforesaid shall cause such work to be done, and the owner of such lands shall pay the expense thereof, with costs, to be recovered in an action upon contract before any justice of the peace of the county at the suit of such township committee.

2. This act shall take effect immediately.

Approved March 23, 1900.



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**LAYING OUT ROADS.**

Receiving many inquiries how to proceed to lay out roads, change location, etc., to save correspondence we give the following quotations from the statutes:

*Laying Out Roads by Freeholders After General Election.*

It shall be lawful for the board of chosen freeholders of any of the several counties of this State, when said board deems it for the best interests of such county, to lay out, construct and maintain public roads extending through such county in any direction, to submit, by resolution, the question whether or not such public roads shall be laid out to the electors of said county, at an election to be held at the same time and place of holding the general election in and for said county for members of the General Assembly of this State, by the same officers, but in separate ballot-box, and if at such election a majority of the electors shall vote "against public roads," nothing in this act shall apply or be effective in said county; but if a majority of the electors vote "in favor of public roads," then the board shall proceed as directed by the act entitled "An act to authorize the board of chosen freeholders of any of the several counties of this State to lay out, open, construct, improve and maintain a public road therein," approved April 7th, 1888. P. L. 1888, page 397.

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LAYING OUT, VACATING OR ALTERING PUBLIC ROADS BY SURVEYORS OF HIGHWAYS. (Revised Statutes, page 2828-119, Sec. 1.)

That when ten or more persons, being freeholders, shall think a public road necessary, or any public road which hath been or shall be laid out unnecessary, or any alteration in such road necessary in any part of the county in which they reside, it shall be lawful for the said persons to make application, in writing, to the Inferior Court of Common Pleas of the said county, in open court, having given previous notice for at least ten days of such intended application, and also of the day on which such application is intended to be made, by advertisements, under their hands, and set up at three of the most public places in the township in which said road is proposed to be laid out, vacated or altered, and if there be more townships than one through which the said road may run, by advertisements, to be set up at three of the most public places in each township; and the said court, when applied to as aforesaid, on due proof being made that the advertisements have been set up according to law, on which the judgment of the court shall be final and conclusive, are hereby authorized and required to appoint six of the surveyors of the highways of the said county, ever having regard to the appointment of the surveyors of the highways of the township or townships where the said road shall be so applied for to be laid out, vacated or altered; *provided*, that no surveyor shall be appointed through whose land the road may run, or who for any other reason which the court in their discretion shall deem sufficient, think ought not to be appointed; and the said surveyors shall meet at such time and place as the said court shall direct, a copy of which appointment shall be served on each of the said surveyors at least six days prior to the time of their meeting; and two of

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the said applicants shall, at least twelve days prior to the said time, sign and set up advertisements at three of the most public places in the said township or townships, setting forth the time and place of the meeting of the surveyors agreeably to the directions of the court, and designating the points or places from and to which the said road is proposed to be laid out, vacated or altered. (See Secs. 138 and 168, *post.*)

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VACATING AND RELAYING OF PUBLIC ROADS BY FILING CONSENT WITH  
CLERK AND RECORDING.

138. Sec. 1. That whenever ten or more persons, being freeholders, shall think any alteration of any public road necessary in any part of the county wherein they reside, by having such road or a portion thereof vacated, and the same relaid or another road substituted therefor, they may make application in writing to the Inferior Court of Common Pleas of such county, or to one of the judges thereof, setting forth in writing the road or portion thereof as aforesaid which it is proposed to have vacated, describing the same by courses and distances, and also describing the road as it is to be relaid, or the road which is to be substituted therefor, to which description there shall be attached a map showing the location of the road or portion of the road to be vacated and the road as relaid, or the road which is to be substituted therefor; and if within ten days after such application shall have been made as aforesaid, or if at the time of making such application there shall be presented to said court or judge the consent in writing of the owners of all the lands intersected by such old road or portion thereof proposed to be vacated, and of all the property intersected by the road as proposed to be relaid, or by the road which it is proposed to substitute therefor, and also the written consent of the township committee of the township wherein such road or roads do lie, that said application shall be granted, then it shall be lawful for said court or judge to cause said application, with the accompanying survey, map and return, and the written consents of the owners of lands as aforesaid, and of the township committee, to be filed with the clerk of the county, to be by him recorded in the book of roads for said county; and when said application and other papers shall have been so filed, such old road or portion thereof shall thereupon and thereby deemed to be vacated, and the road as relaid, or the new road substituted therefor, shall thereupon and thereby be deemed and taken to be a public road.

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VACATION OF PUBLIC ROADS BY CONSENT AND FILING WITH COUNTY  
CLERK.

168. Sec. 1. That whenever ten or more persons, being freeholders, shall think the vacation of a part of any public road necessary in any part of the county wherein they reside, they may make application in writing to the Inferior Court of Common Pleas of such county or to one of the judges thereof, setting forth in writing the road or portion thereof which it is proposed to have vacated, describing the same by courses and distances, to which description there shall be attached a map showing the location



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of the road or portion thereof to be vacated, and if within ten days after such application shall have been made as aforesaid, or if at the time of making such application, there shall be presented to said court or judge the consent in writing of the owners of all the lands by such old road or portion thereof proposed to be vacated, and also the written consent of the township committee of the township wherein such lands do lie, that such application shall be granted, then it shall be lawful for said court or judge to cause such application, with the accompanying survey, map and return, and the written consents of the owners of lands as aforesaid, and of the township committee to be filed with the clerk of the county, to be by him recorded in the book of roads for said county, and when said application and papers have been so filed, such portion of such old road shall thereupon and thereby be deemed to be vacated; *provided*, that no portion of any old road proposed to be vacated under this act shall exceed one thousand yards in length.

## CHAPTER 86.

An act to further amend an act entitled "An act to amend an act entitled 'A further supplement to an act entitled "An act concerning townships"'" (Revision of 1899), approved March twenty-fourth, one thousand eight hundred and ninety-nine, approved April ninth, one thousand nine hundred and two, which amendment was approved April twenty-first, one thousand nine hundred and six.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. Section one of the act to which this is an amendment be and the same is hereby amended to read as follows:

1. The township committee shall have the power and authority by ordinance

(1) To accept any street, road, or public place when the same shall have been dedicated to the public use.

(2) To lay out, open, widen, straighten, name, rename, alter or vacate any street, avenue, road or highway, or any section of the same, whenever it shall deem it necessary, and to take and appropriate for any such purpose any lands and real estate upon making compensation to the owner or owners thereof at a price agreed upon; and whenever the Township Committee and the owner of any lands shall agree upon a price for the purchase thereof, then the Township Committee may borrow, in anticipation of the collection of the assessments and taxes for any said improvement, such sum of money as may be necessary to pay such purchase price, giving therefor obligations or improvement certificates, in the name of the township, payable at any time within five years from their date, signed by the chairman of the Township Committee, attested by the township clerk; and, in case the Township Committee cannot agree with the owner or owners of the lands and real estate necessary for any such purposes, then the same may be acquired by the payment of damages, as hereinafter mentioned and provided.

2. All acts and parts of acts inconsistent with this act are hereby repealed and this act shall take effect immediately.

Approved April 13, 1909.

Section amended.

Committee may accept streets;

lay out, improve, acquire, &c.

Committee may borrow money.

Repealer.



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## CHAPTER 216.

Supplement to an act entitled "An act concerning roads" (Revision), approved March twenty-seventh, one thousand eight hundred and seventy-four.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

All vehicles drawn by animals must display light at night.

1. Every vehicle drawn by horse, horses or other beasts shall carry, during the period from one hour after sunset to one hour before sunrise, at least one lighted lamp, showing a light visible at least two hundred and fifty feet. Said light shall be so displayed that it may be seen, either in the direction toward which or from which the vehicle is proceeding; and if any person shall offend against this provision, such person shall forfeit and pay the sum of one dollar for the use of the township, to be sued for and recovered by any person who shall sue for the same.

Motor vehicle law not affected.

2. This act shall not be construed to affect in any way legislation regarding motor vehicle lights.

Approved April 20, 1909.

## CHAPTER 225.

An Act to amend an act entitled "An act to amend an act entitled 'An act defining motor vehicles and providing for the registration of the same and the licensing of drivers thereof; fixing rules regulating the use and speed of motor vehicles; fixing the amount of license and registration fees; prescribing and regulating process and the service thereof and proceedings for the violation of the provisions of the act and penalties for said violations,' approved April twelfth, one thousand nine hundred and six," which amendatory act was approved April twenty-first, one thousand nine hundred and nine.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

Section 37 amended.

Use of moneys received from all sources.

1. Section thirty-seven of the act of which this act is amendatory is hereby amended so that the same shall read as follows:

37. Moneys received in accordance with the provisions of this act, whether from fines, penalties, registration fees, license fees or otherwise, shall be accounted for and forwarded to the Commissioner of Motor Vehicles and by him paid over to the Treasurer of the State of New Jersey, to be used by the Commissioner of Public Roads as a fund for the repair of such improved roads throughout the State as said commissioner shall designate, regard being had to the repair of the most important improved roads, and the distribution of the benefits of this act throughout the several counties of this State; *provided, however*, that there shall first be deducted from the moneys as aforesaid received the amount appropriated by the Legislature in any annual or supplemental

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bill for the maintenance of said department of motor vehicles, which said sum so deducted shall become a part of the general State fund.

2. This act shall take effect immediately.

Approved April 9, 1910.

## CHAPTER 124.

An Act making an appropriation for the use of the Commissioners of the Palisades Interstate Park in laying out and constructing a drive to be known as "Henry Hudson Drive," along the Hudson river in the Palisades Interstate Park and in carrying out the purpose and intent of the law and the amendments and supplements thereof creating the said Palisades Interstate Park.

WHEREAS, By chapter one hundred and ten of the laws of the State of New Jersey of the year one thousand nine hundred and nine, the Commissioners of the Palisades Interstate Park were authorized and directed to lay out, construct and maintain a drive through the Palisades Interstate Park, said drive to be known as the "Henry Hudson Drive," and also suitable spurs to connect said Henry Hudson Drive with the river and with the top of the palisades cliffs; and

Preamble.

WHEREAS, Hon. Charles E. Hughes, Governor of the State of New York, in a message transmitted to the Legislature of that State on January fifth, one thousand nine hundred and ten, announced a gift to the State of New York by Mary W. Harriman of a tract of ten thousand acres of land in Rockland and Orange counties, New York, for a State park, and of the sum of one million dollars in cash, to be used to purchase additional land intervening between such tract and the Hudson river and in the improvement of the whole; and

WHEREAS, Said Governor Hughes in his said message also announced gifts from several residents of the States of New York, New Jersey and Pennsylvania to the Commissioners of the Palisades Interstate Park, aggregating the sum of one million six hundred and twenty-five thousand dollars in cash, toward the carrying out of the comprehensive plan of a park along the west side of the Hudson river, from Fort Lee, in New Jersey, to Newburg, in New York, and extending westerly to comprise said tract given by Mrs. Harriman upon the following conditions:

(1) That the jurisdiction of the Commissioners of the Palisades Interstate Park be extended northward to the city of Newburgh and westward to include the Ramapo mountains, and that such gifts from Mrs. Harriman be accepted under the custody of such commission.

(2) That the State of New York appropriate two million five hundred thousand dollars to the use of the commission for acquiring land, building roads and general park purposes.

(3) That the State of New York abandon the State prison site now located within such area.

(4) That the State of New Jersey appropriate such an amount as the Commissioners of the Palisades Interstate Park shall deem to be its fair share; therefore,

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Appropriation.

BE IT ENACTED *by the Senate and General Assembly of the State of New Jersey:*

I. The sum of five hundred thousand dollars is hereby appropriated, payable in amounts of one hundred thousand dollars in each consecutive year for five years, commencing with the year one thousand nine hundred and ten, when included in the annual or supplemental appropriation bill for such respective years for the purpose of the use by the Commissioners of the Palisades Interstate Park as such commissioners may deem necessary or proper in carrying out the purposes and intent of said chapter one hundred and ten of the laws of one thousand nine hundred and nine, approved April sixteenth, one thousand nine hundred and nine, and of chapter eighty-seven of the laws of one thousand nine hundred, approved March twenty-second, one thousand nine hundred, as amended by chapter one hundred and twelve of the laws of one thousand nine hundred and one, approved March twenty-second, one thousand nine hundred and one, creating the said Palisades Interstate Park.

Act conditional.

2. This act shall be deemed a public act and shall take effect immediately, but shall be inoperative unless the conditions herein-before recited to make available the aforesaid private gifts shall be complied with.

Approved April 8, 1910.



## Appendix C.

### NUMBER OF TONS OF STONE PER MILE REQUIRED TO BUILD THE FOLLOWING DEPTHS AND WIDTHS.

For the information of intending road builders, we have compiled the following tables, which approximate the number of tons of thoroughly rolled stone necessary to construct each mile at the designated depths and widths.

The basis is 3,000 tons of loose stone or 3,500 tons of compressed stone for a road one mile long, sixteen feet wide and eight inches deep. A road eight inches deep, when finished, will have required at least ten inches of stone. It should be placed in two layers of five inches each, and each layer rolled down to four inches. Then the application of the three-quarter inch and screenings will bring the road to the prescribed depth; for other thickness the stone should be placed in proportion to the intended finished depths.

An observance of this rule will insure the contract thickness for the roadbed, and save the sometimes necessary expense of resurfacing before acceptance from the contractor.

A road 8 feet wide and 4 inches deep will require						875	tons of stone per mile			
"	8	"	"	6	"	"	1,312 $\frac{1}{2}$	"	"	"
"	8	"	"	8	"	"	1,750	"	"	"
"	8	"	"	10	"	"	2,187 $\frac{1}{2}$	"	"	"
"	8	"	"	12	"	"	2,625	"	"	"
"	9	"	"	4	"	"	984 $\frac{3}{8}$	"	"	"
"	9	"	"	6	"	"	1,476 $\frac{3}{8}$	"	"	"
"	9	"	"	8	"	"	1,968 $\frac{3}{8}$	"	"	"
"	9	"	"	10	"	"	2,460 $\frac{3}{8}$	"	"	"
"	9	"	"	12	"	"	2,953 $\frac{3}{8}$	"	"	"
"	10	"	"	4	"	"	1,093 $\frac{1}{2}$	"	"	"
"	10	"	"	6	"	"	1,640 $\frac{1}{2}$	"	"	"
"	10	"	"	8	"	"	2,187 $\frac{1}{2}$	"	"	"
"	10	"	"	10	"	"	2,734 $\frac{1}{2}$	"	"	"
"	10	"	"	12	"	"	3,281 $\frac{1}{2}$	"	"	"

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A road 11 ft. wide and 4 inches deep will require 1,203 $\frac{1}{8}$  tons of stone per mile

"	11	"	"	6	"	"	1,804 $\frac{1}{8}$	"	"	"
"	11	"	"	8	"	"	2,406 $\frac{1}{8}$	"	"	"
"	11	"	"	10	"	"	3,007 $\frac{1}{8}$	"	"	"
"	11	"	"	12	"	"	3,609 $\frac{1}{8}$	"	"	"

"	12	"	"	4	"	"	1,312 $\frac{1}{2}$	"	"	"
"	12	"	"	6	"	"	1,968 $\frac{1}{2}$	"	"	"
"	12	"	"	8	"	"	2,625	"	"	"
"	12	"	"	10	"	"	3,281 $\frac{1}{2}$	"	"	"
"	12	"	"	12	"	"	3,937 $\frac{1}{2}$	"	"	"

"	13	"	"	4	"	"	1,421 $\frac{7}{8}$	"	"	"
"	13	"	"	6	"	"	2,132 $\frac{3}{8}$	"	"	"
"	13	"	"	8	"	"	2,843 $\frac{1}{4}$	"	"	"
"	13	"	"	10	"	"	3,554 $\frac{1}{8}$	"	"	"
"	13	"	"	12	"	"	4,265 $\frac{1}{8}$	"	"	"

"	14	"	"	4	"	"	1,531 $\frac{1}{4}$	"	"	"
"	14	"	"	6	"	"	2,296 $\frac{1}{2}$	"	"	"
"	14	"	"	8	"	"	3,062 $\frac{1}{2}$	"	"	"
"	14	"	"	10	"	"	3,828 $\frac{3}{8}$	"	"	"
"	14	"	"	12	"	"	4,593 $\frac{1}{4}$	"	"	"

"	15	"	"	4	"	"	1,640 $\frac{5}{8}$	"	"	"
"	15	"	"	6	"	"	2,460 $\frac{1}{8}$	"	"	"
"	15	"	"	8	"	"	3,281 $\frac{1}{2}$	"	"	"
"	15	"	"	10	"	"	4,101 $\frac{3}{8}$	"	"	"
"	15	"	"	12	"	"	4,921 $\frac{1}{8}$	"	"	"

"	16	"	"	4	"	"	1,750	"	"	"
"	16	"	"	6	"	"	2,625	"	"	"
"	16	"	"	8	"	"	3,500	"	"	"
"	16	"	"	10	"	"	4,375	"	"	"
"	16	"	"	12	"	"	5,250	"	"	"

"	17	"	"	4	"	"	1,859 $\frac{3}{8}$	"	"	"
"	17	"	"	6	"	"	2,789 $\frac{1}{8}$	"	"	"
"	17	"	"	8	"	"	3,718 $\frac{1}{4}$	"	"	"
"	17	"	"	10	"	"	4,648 $\frac{7}{8}$	"	"	"
"	17	"	"	12	"	"	5,578 $\frac{1}{8}$	"	"	"

"	18	"	"	4	"	"	1,968 $\frac{1}{4}$	"	"	"
"	18	"	"	6	"	"	2,953 $\frac{1}{8}$	"	"	"
"	18	"	"	8	"	"	3,937 $\frac{1}{2}$	"	"	"
"	18	"	"	10	"	"	4,921 $\frac{1}{4}$	"	"	"
"	18	"	"	12	"	"	5,906 $\frac{1}{4}$	"	"	"

"	19	"	"	4	"	"	2,078 $\frac{1}{8}$	"	"	"
"	19	"	"	6	"	"	3,117 $\frac{3}{8}$	"	"	"
"	19	"	"	8	"	"	4,156 $\frac{1}{4}$	"	"	"
"	19	"	"	10	"	"	5,195 $\frac{1}{8}$	"	"	"
"	19	"	"	12	"	"	6,234 $\frac{1}{8}$	"	"	"

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A road 20 ft. wide and 4 inches deep will require	2,187½	tons of stone per mile
" 20 " " 6 " "	3,281½	" " "
" 20 " " 8 " "	4,375	" " "
" 20 " " 10 " "	5,468½	" " "
" 20 " " 12 " "	6,562½	" " "

## TABLES.

As many persons interested in the construction of stone roads are asking questions about their cost, we enclose a table to show at a glance the number of square yards at different widths in a mile of road; also the cost at different widths, and various prices per square yard. Any variations from these prices can be quickly ascertained by adding, subtracting, multiplying and dividing for a less or greater width. For example, a road eight feet wide has 4,693  $\frac{1}{3}$  square yards in one mile. To obtain the number of square yards in a road having a width of nine feet, add one-eighth to the foregoing figures, and in one having a width of seven feet, subtract one-eighth; in one of twice the width given in the table, multiply by two.

## SQUARE YARDS IN ONE MILE OF

8 feet in width.....	4,693½	square yards.
10 " .....	5,866½	"
12 " .....	7,040	"
14 " .....	8,213½	"
16 " .....	9,386½	"
18 " .....	10,560	"
8 feet wide, or 4,693½ square yards, at 25c. per sq. yd. ....	\$1,173.33½	
10 " 5,866½ " 25c. " .....	1,466.66½	
12 " 7,040 " 25c. " .....	1,760.00	
14 " 8,213½ " 25c. " .....	2,053.33½	
16 " 9,386½ " 25c. " .....	2,346.66½	
18 " 10,560 " 25c. " .....	2,640.00	
8 " 4,693½ " 30c. " .....	1,408.00	
10 " 5,866½ " 30c. " .....	1,760.00	
12 " 7,040 " 30c. " .....	2,112.00	
14 " 8,213½ " 30c. " .....	2,464.00	
16 " 9,386½ " 30c. " .....	2,816.00	
18 " 10,560 " 30c. " .....	3,168.00	
8 " 4,693½ " 35c. " .....	1,642.66½	
10 " 5,866½ " 35c. " .....	2,053.33½	
12 " 7,040 " 35c. " .....	2,464.00	
14 " 8,213½ " 35c. " .....	2,874.66½	
16 " 9,386½ " 35c. " .....	3,285.33½	
18 " 10,560 " 35c. " .....	3,696.00	



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8 feet wide, or	4,693 $\frac{1}{2}$	square yards at	40c.	per sq. yd.		\$1,877.33 $\frac{1}{2}$
10 "	5,866 $\frac{2}{3}$	"	40c.	"	.....	2,346.66 $\frac{2}{3}$
12 "	7,040	"	40c.	"	.....	2,816.00
14 "	8,213 $\frac{1}{2}$	"	40c.	"	.....	3,285.33 $\frac{1}{2}$
16 "	9,386 $\frac{2}{3}$	"	40c.	"	.....	3,754.66 $\frac{2}{3}$
18 "	10,560	"	40c.	"	.....	4,224.00
8 "	4,693 $\frac{1}{2}$	"	45c.	"	.....	2,112.00
10 "	5,866 $\frac{2}{3}$	"	45c.	"	.....	2,640.00
12 "	7,040	"	45c.	"	.....	3,168.00
14 "	8,213 $\frac{1}{2}$	"	45c.	"	.....	3,696.00
16 "	9,386 $\frac{2}{3}$	"	45c.	"	.....	4,224.00
18 "	10,560	"	45c.	"	.....	4,752.00
8 "	4,693 $\frac{1}{2}$	"	50c.	"	.....	2,346.66 $\frac{2}{3}$
10 "	5,866 $\frac{2}{3}$	"	50c.	"	.....	2,933.33 $\frac{1}{3}$
12 "	7,040	"	50c.	"	.....	3,520.00
14 "	8,213 $\frac{1}{2}$	"	50c.	"	.....	4,106.66 $\frac{2}{3}$
16 "	9,386 $\frac{2}{3}$	"	50c.	"	.....	4,693.33 $\frac{1}{3}$
18 "	10,560	"	50c.	"	.....	5,280.00
8 "	4,693 $\frac{1}{2}$	"	55c.	"	.....	2,581.33 $\frac{1}{2}$
10 "	5,866 $\frac{2}{3}$	"	55c.	"	.....	3,226.66 $\frac{2}{3}$
12 "	7,040	"	55c.	"	.....	3,872.00
14 "	8,213 $\frac{1}{2}$	"	55c.	"	.....	4,517.33 $\frac{1}{2}$
16 "	9,386 $\frac{2}{3}$	"	55c.	"	.....	5,162.66 $\frac{2}{3}$
18 "	10,560	"	55c.	"	.....	5,808.00
8 "	4,693 $\frac{1}{2}$	"	60c.	"	.....	2,816.00
10 "	5,866 $\frac{2}{3}$	"	60c.	"	.....	3,520.00
12 "	7,040	"	60c.	"	.....	4,224.00
14 "	8,213 $\frac{1}{2}$	"	60c.	"	.....	4,928.00
16 "	9,386 $\frac{2}{3}$	"	60c.	"	.....	5,632.00
18 "	10,560	"	60c.	"	.....	6,336.00
8 "	4,693 $\frac{1}{2}$	"	65c.	"	.....	3,050.66 $\frac{2}{3}$
10 "	5,866 $\frac{2}{3}$	"	65c.	"	.....	3,813.33 $\frac{1}{3}$
12 "	7,040	"	65c.	"	.....	4,576.00
14 "	8,213 $\frac{1}{2}$	"	65c.	"	.....	5,338.66 $\frac{2}{3}$
16 "	9,386 $\frac{2}{3}$	"	65c.	"	.....	6,101.33 $\frac{1}{3}$
18 "	10,560	"	65c.	"	.....	6,864.00
8 "	4,693 $\frac{1}{2}$	"	70c.	"	.....	3,285.33 $\frac{1}{2}$
10 "	5,866 $\frac{2}{3}$	"	70c.	"	.....	4,106.66 $\frac{2}{3}$
12 "	7,040	"	70c.	"	.....	4,928.00
14 "	8,213 $\frac{1}{2}$	"	70c.	"	.....	5,749.33 $\frac{1}{2}$
16 "	9,386 $\frac{2}{3}$	"	70c.	"	.....	6,570.66 $\frac{2}{3}$
18 "	10,560	"	70c.	"	.....	7,392.00
8 "	4,693 $\frac{1}{2}$	"	75c.	"	.....	3,520.00
10 "	5,866 $\frac{2}{3}$	"	75c.	"	.....	4,400.00
12 "	7,040	"	75c.	"	.....	5,280.00
14 "	8,213 $\frac{1}{2}$	"	75c.	"	.....	6,160.00
16 "	9,386 $\frac{2}{3}$	"	75c.	"	.....	7,040.00
18 "	10,560	"	75c.	"	.....	7,920.00
8 "	4,693 $\frac{1}{2}$	"	80c.	"	.....	3,754.66 $\frac{2}{3}$
10 "	5,866 $\frac{2}{3}$	"	80c.	"	.....	4,693.33 $\frac{1}{3}$
12 "	7,040	"	80c.	"	.....	5,632.00

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14	feet wide, or	8,213 $\frac{1}{2}$	square yards, at	80c. per sq. yard....		\$6,570.66 $\frac{1}{2}$
16	"	9,386 $\frac{3}{4}$	"	80c. " .....		7,509.33 $\frac{1}{2}$
18	"	10,560	"	80c. " .....		8,448.00
8	"	4,693 $\frac{1}{2}$	"	85c. " .....		3,989.33 $\frac{1}{2}$
10	"	5,866 $\frac{3}{4}$	"	85c. " .....		4,986.66 $\frac{3}{4}$
12	"	7,040	"	85c. " .....		5,984.00
14	"	8,213 $\frac{1}{2}$	"	85c. " .....		6,981.33 $\frac{1}{2}$
16	"	9,386 $\frac{3}{4}$	"	85c. " .....		7,978.66 $\frac{3}{4}$
18	"	10,560	"	85c. " .....		8,976.00
8	"	4,693 $\frac{1}{2}$	"	90c. " .....		4,224.00
10	"	5,866 $\frac{3}{4}$	"	90c. " .....		5,280.00
12	"	7,040	"	90c. " .....		6,336.00
14	"	8,213 $\frac{1}{2}$	"	90c. " .....		7,392.00
16	"	9,386 $\frac{3}{4}$	"	90c. " .....		8,448.00
18	"	10,560	"	90c. " .....		9,504.00
8	"	4,693 $\frac{1}{2}$	"	95c. " .....		4,458.66 $\frac{1}{2}$
10	"	5,866 $\frac{3}{4}$	"	95c. " .....		5,573.33 $\frac{1}{2}$
12	"	7,040	"	95c. " .....		6,688.00
14	"	8,213 $\frac{1}{2}$	"	95c. " .....		7,802.66 $\frac{1}{2}$
16	"	9,386 $\frac{3}{4}$	"	95c. " .....		8,917.33 $\frac{1}{2}$
18	"	10,560	"	95c. " .....		10,032.00
8	"	4,693 $\frac{1}{2}$	"	\$1.00 " .....		4,693.33 $\frac{1}{2}$
10	"	5,866 $\frac{3}{4}$	"	1.00 " .....		5,866.66 $\frac{3}{4}$
12	"	7,040	"	1.00 " .....		7,040.00
14	"	8,213 $\frac{1}{2}$	"	1.00 " .....		8,213.33 $\frac{1}{2}$
16	"	9,386 $\frac{3}{4}$	"	1.00 " .....		9,386.66 $\frac{3}{4}$
18	"	10,560	"	1.00 " .....		10,560.00

# TABLE FOR GRAVEL.

Table showing number of cubic yards of gravel required in the construction of one mile of gravel road, of widths varying from 6 feet to 20 feet, and depths from 6 to 12 inches. The within quantities should be multiplied by  $1\frac{1}{2}$  to give the number of cubic yards of loose gravel required to make the within depths of compact gravel.

ONE MILE IN LENGTH.	Number of feet in width.	Number of cubic yards in road 6 inches deep.	Number of cubic yards in road 7 inches deep.	Number of cubic yards in road 8 inches deep.	Number of cubic yards in road 9 inches deep.	Number of cubic yards in road 10 inches deep.	Number of cubic yards in road 11 inches deep.	Number of cubic yards in road 12 inches deep.
One mile. ....	6 feet wide. ....	586 $\frac{1}{2}$	684 $\frac{1}{2}$	782 $\frac{1}{2}$	880	977 $\frac{1}{2}$	1,075 $\frac{1}{2}$	1,173 $\frac{1}{2}$
One mile. ....	7 feet wide. ....	684 $\frac{1}{2}$	798 $\frac{1}{2}$	912 $\frac{1}{2}$	1,026 $\frac{1}{2}$	1,140 $\frac{1}{2}$	1,254 $\frac{1}{2}$	1,368 $\frac{1}{2}$
One mile. ....	8 feet wide. ....	782 $\frac{1}{2}$	912 $\frac{1}{2}$	1,042 $\frac{1}{2}$	1,173 $\frac{1}{2}$	1,303 $\frac{1}{2}$	1,434 $\frac{1}{2}$	1,564 $\frac{1}{2}$
One mile. ....	9 feet wide. ....	880	1,026 $\frac{1}{2}$	1,173 $\frac{1}{2}$	1,320	1,466 $\frac{1}{2}$	1,613 $\frac{1}{2}$	1,760
One mile. ....	10 feet wide. ....	977 $\frac{1}{2}$	1,140 $\frac{1}{2}$	1,303 $\frac{1}{2}$	1,466 $\frac{1}{2}$	1,629 $\frac{1}{2}$	1,792 $\frac{1}{2}$	1,955 $\frac{1}{2}$
One mile. ....	11 feet wide. ....	1,075 $\frac{1}{2}$	1,254 $\frac{1}{2}$	1,434 $\frac{1}{2}$	1,613 $\frac{1}{2}$	1,792 $\frac{1}{2}$	1,971 $\frac{1}{2}$	2,151 $\frac{1}{2}$
One mile. ....	12 feet wide. ....	1,173 $\frac{1}{2}$	1,368 $\frac{1}{2}$	1,564 $\frac{1}{2}$	1,760	1,955 $\frac{1}{2}$	2,151 $\frac{1}{2}$	2,346 $\frac{1}{2}$
One mile. ....	13 feet wide. ....	1,271 $\frac{1}{2}$	1,482 $\frac{1}{2}$	1,694 $\frac{1}{2}$	1,906 $\frac{1}{2}$	2,118 $\frac{1}{2}$	2,330 $\frac{1}{2}$	2,542 $\frac{1}{2}$
One mile. ....	14 feet wide. ....	1,368 $\frac{1}{2}$	1,597 $\frac{1}{2}$	1,825 $\frac{1}{2}$	2,053 $\frac{1}{2}$	2,281 $\frac{1}{2}$	2,509 $\frac{1}{2}$	2,737 $\frac{1}{2}$
One mile. ....	15 feet wide. ....	1,466 $\frac{1}{2}$	1,711 $\frac{1}{2}$	1,955 $\frac{1}{2}$	2,200	2,444 $\frac{1}{2}$	2,688 $\frac{1}{2}$	2,933 $\frac{1}{2}$
One mile. ....	16 feet wide. ....	1,564 $\frac{1}{2}$	1,825 $\frac{1}{2}$	2,085 $\frac{1}{2}$	2,346 $\frac{1}{2}$	2,607 $\frac{1}{2}$	2,868 $\frac{1}{2}$	3,128 $\frac{1}{2}$
One mile. ....	17 feet wide. ....	1,662 $\frac{1}{2}$	1,919 $\frac{1}{2}$	2,216 $\frac{1}{2}$	2,493 $\frac{1}{2}$	2,770 $\frac{1}{2}$	3,047 $\frac{1}{2}$	3,324 $\frac{1}{2}$
One mile. ....	18 feet wide. ....	1,760	2,053 $\frac{1}{2}$	2,346 $\frac{1}{2}$	2,640	2,933 $\frac{1}{2}$	3,226 $\frac{1}{2}$	3,520
One mile. ....	19 feet wide. ....	1,857 $\frac{1}{2}$	2,167 $\frac{1}{2}$	2,477 $\frac{1}{2}$	2,786 $\frac{1}{2}$	3,096 $\frac{1}{2}$	3,405 $\frac{1}{2}$	3,715 $\frac{1}{2}$
One mile. ....	20 feet wide. ....	1,955 $\frac{1}{2}$	2,281 $\frac{1}{2}$	2,607 $\frac{1}{2}$	2,933 $\frac{1}{2}$	3,259 $\frac{1}{2}$	3,585 $\frac{1}{2}$	3,911 $\frac{1}{2}$



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ROAD MAP  
OF  
THE STATE OF  
**NEW JERSEY**

From the original survey of the State of New Jersey  
made by the Surveyors General of the State of New Jersey  
under the authority of the Legislature of the State of New Jersey  
in the year 1811.

Scale of Miles  
1 inch = 10 miles  
1/2 inch = 5 miles  
1/4 inch = 2 1/2 miles  
1/8 inch = 1 1/4 miles  
1/16 inch = 3/4 mile  
1/32 inch = 3/8 mile  
1/64 inch = 3/16 mile  
1/128 inch = 3/32 mile  
1/256 inch = 3/64 mile  
1/512 inch = 3/128 mile  
1/1024 inch = 3/256 mile  
1/2048 inch = 3/512 mile  
1/4096 inch = 3/1024 mile  
1/8192 inch = 3/2048 mile  
1/16384 inch = 3/4096 mile  
1/32768 inch = 3/8192 mile  
1/65536 inch = 3/16384 mile  
1/131072 inch = 3/32768 mile  
1/262144 inch = 3/65536 mile  
1/524288 inch = 3/131072 mile  
1/1048576 inch = 3/262144 mile  
1/2097152 inch = 3/524288 mile  
1/4194304 inch = 3/1048576 mile  
1/8388608 inch = 3/2097152 mile  
1/16777216 inch = 3/4194304 mile  
1/33554432 inch = 3/8388608 mile  
1/67108864 inch = 3/16777216 mile  
1/134217728 inch = 3/33554432 mile  
1/268435456 inch = 3/67108864 mile  
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