

tions. Their certificate called for the alternate sections. The negotiations for the purchase of the alternate sections by the Trustees was commenced under the previous administration.

* * * * *

Very respectfully,

ALBERT W. GILCHRIST, *Governor.*

REPORT OF THE JOINT COMMITTEE OF THE FLORIDA LEGISLATURE FOR THE YEAR 1911, ON THE DRAINAGE OF THE EVERGLADES.

TALLAHASSEE, FLA., *May 31, 1911.*

To the Hon. Fred P. Cone, president of the senate, and the Hon. T. Albert Jennings, speaker of the house of representatives.

SIRS: Pursuant to senate concurrent resolution No. 2, we, your committee, beg to submit the following:

Under the provisions of said resolution we were required to visit and inspect the progress and conditions of the work of reclaiming the Everglades now being carried on by the Trustees of the Internal Improvement Fund, and to make a report of the conditions of said works, the condition of the Everglades, including the drained and undrained portions, the area actually drained, the area partially drained and the area contemplated to be drained, and the area, if any, not contemplated in the present drainage plans; also to report the number, size, width, depth, and length of canals now completed, and also the number, length, width, and depth of those in course of construction, and the portion of each completed, and the work done on any incompleated portions, and the number, length, width, and depth of those contemplated and not yet begun; also the cost up to the present time in money and lands, and the estimated cost to complete those under construction, and the estimated cost of those contemplated; also the value of the reclaimed lands as to money valuation, and any other matter, thing, or fact concerning the same of value, importance, or useful information.

Your committee viewed the North New River Canal, also South New River Canal, the Miami Canal, and the Hillsboro Canal, and examined the same both at their mouths where excavations had been made and at Lake Okeechobee, and we herewith submit and attach to this our report, Map A and Table A, showing the length of the various canals that have been excavated from the commencement of the work to May 1, 1911, distances given in miles, and also Table No. 1, showing the progress made on the canals, done by the Furst-Clark Construction Co., during the three months ending September, 1910; also Table No. 2, showing the work done by the Furst-Clark Construction Co. during the three months ending December 31, 1910; also Table No. 3, showing the work done by the Furst-Clark Construction Co. during the three months ending March 31, 1911.

As to the area actually drained, we are of the opinion that there will be no land completely drained until the canals now under construction are completed through to Lake Okeechobee, and the water in the lake is lowered, thereby making an immense reservoir, so that when the rainy season begins this reservoir will hold the excessive

rainfall, and by means of opening the canals the rainfall can be carried to the sea without the lake overflowing its banks.

There is an area that is partially drained, of about 15,000 acres, adjacent to the outlet of these canals in the vicinity of Fort Lauderdale and Miami that are still subject to overflow during the rainy season, but will permit of cultivation of early vegetables, as the rainy season is then over.

The drainage district created by the legislature contains 4,300,000 acres. It is our opinion that all of this land will be more or less benefited by the drainage operations as planned, and that at least three-fourths of this amount will be protected against overflow and be provided with good outlet canals so that when suitable laterals and field ditches are constructed it will be reclaimed for agriculture.

The scope of drainage planned includes other canals than those now under construction, particularly the one marked "EE" on the map, and possibly the one from Hillsboro Canal to West Palm Beach, and these two named may have to be constructed before all of the lands in the drainage district will be provided with suitable outlets and protection from overflow from Lake Okeechobee.

Of the canals now under construction, none are fully completed. We attach to this report tabulated statements for the work marked "A" and Tables 1, 2, and 3.

The last river and harbor bill passed by the United States Congress carried an appropriation of \$200,000 to make a survey of the Caloosahatchee River and the Kissimmee River, with a view of improving them for navigation in harmony with the plans of the State for draining the Everglades. Capt. Spalding, of the Jacksonville office, who has charge of this expenditure, is now having a comprehensive survey made of the Caloosahatchee River. We passed his surveying camps on the banks of the Caloosahatchee River on our way to Fort Myers. We feel confident that he will recommend that the United States Government improve this river, thereby relieving the State from any further expenditures on Caloosahatchee River.

The United States Government has consented to the lowering of Lake Okeechobee, but provides that there must be locks or controlling works at the upper ends of the drainage canals to control the amount of water taken out of the lake. In this connection we desire to call the attention of the legislature, and especially the Internal Improvement Board, to the necessity for locks at the lower ends of the canals and all along said canals at distances not exceeding 8 to 12 miles apart in order to control the water in the canals for navigation and for irrigation. This, in our opinion, is a matter of the utmost importance in this reclamation scheme; otherwise irrigation will be impaired and the navigation by boats almost made impossible.

Your committee found that there had been about 15 miles excavated on the lower end of the North New River Canal and on the upper end of said canal about 11 miles. Of the upper portion about one-half is completed and of the lower portion it is completed with the exception of a suction dredge that should go over and take out some mud that has settled in places, raising it above the required depth. We found that the dredge on the lower end was cutting at a rate of about a mile a month and that the dredge on the upper end was cutting at a rate of about 2 miles a month. It is believed that these dredges will meet about July, 1912.

Your committee first examined the lower end of the Miami Canal and found that there had been excavated about 10 miles, which were practically completed. We also found on the lower part of South New River there had been excavated about 16½ miles, practically completed. On this portion of the canal there was a lock being put in about 8 miles from the mouth of the canal and on the upper end of this canal we found there were about 8½ miles excavated and that this portion of the canal was completed, making a total of about 25 miles of completed canal on the South New River Canal.

On the North New River Canal we found on the southern portion something over 18 miles of canal which were practically completed and on the upper end of the canal, next to Lake Okeechobee, we found about 11½ miles excavated, one-half of which was practically completed.

On the Hillsboro Canal, next to Lake Okeechobee, we found there had been excavated about 4½ miles, one-half of which was completed.

The total miles of canals that we found completed amounted to about 62. The remaining portion to be completed amounts to about 125 miles. This remaining portion, as stated here, is under contract, and we find that there is about enough money at the disposal of the Internal Improvement Board to complete these canals.

Upon investigation we found that on January 1, 1905, the Internal Improvement Board owned 2,534,151.23 acres of Everglade lands, of which 118,276.67 acres were school lands. It will be noted that the Internal Improvement Board has no control over school lands. As to the lands that have been deeded by the Internal Improvement Board since January 1, 1905, we refer you to schedule marked "C," attached to this report.

The United Land Co., which had acquired the rights of the Atlantic & Gulf Coast Canal & Okeechobee Land Co., claimed 347,753.02 acres. This claim was settled December 15, 1908, for 68,818.60 acres. (See resolution of Trustees of Nov. 20, 1908, and Dec. 15, 1908. Also, the record of the Trustees, vol. 4, p. 269.) The minutes show that the Atlantic & Gulf Coast Canal & Okeechobee Land Co. reconveyed 68,821.77 acres of land back to the Trustees that had been conveyed to said canal company and the Trustees, by resolution adopted on this date, decided that they would deed a similar acreage of land back to the canal company, lying within the drainage district as then defined when the lands within said drainage district had been selected and patented.

We find that \$614,485.45 has been spent in cost of construction of dredges and drainage operations from the beginning up to the 1st day of July, 1910, the date work was begun by the contractors, Furst-Clark Construction Co. It is estimated that the cost of the work let to contractors will be in the neighborhood of \$2,000,000, of which amount \$281,563.82 has been accomplished by the contractors.

The cost of building and equipping the dredges *Everglades*, *Okeechobee*, *Miami*, and *Caloosahatchee* was \$203,570. The total cost of drainage operations, including the dredges, from the time of beginning of the drainage operations until the 1st day of July, 1910, was \$614,485.45. The Furst-Clark Co. took charge under their contract the 1st of July, 1910. The cost of superintendence of the drainage operations up to May 1, 1911, was \$13,857. We are of the opinion that much of the land adjacent to the canals, when the same are completed, will be sufficiently drained to cultivate, and with the cutting

of smaller or subsidiary canals into the completed canals and farm ditches, the land between the main completed canals will be drained sufficiently to cultivate. We do not, however, believe that the canals now being dug will suffice to drain all of the Everglades. It will be necessary to cut the canal to the Gulf of Mexico, as contemplated in the drainage operations. We find that there is an agreement by which the present contractors will cut this canal upon the same terms as those now being dug, should the Internal Improvement Board desire them to do so. When the Furst-Clark Co. took charge of the drainage operations, they contracted to pay the State for the State-owned dredges \$145,000.

The State receives taxes on the entire amount of land sold by the State, less 50,600 acres sold by the trustees on the 16th day of November, 1910, which land was not deeded, as were the other sales, but a contract for sale made, the purchaser paying so much cash and giving notes for the deferred payments. However, it was stipulated in the contract for sale that the purchaser was to pay the drainage taxes on the land, beginning with the year 1911. The State owns in the Everglades, north of an imaginary line running due west from Miami, 676,650 acres. Up to the present time the State has received \$834,730.35 from the sale of Everglade lands sold since January 1, 1905. Of this amount 25 per cent has been paid into the school fund under the constitutional provision providing that 25 per cent of all the proceeds arising from the sale of all public lands shall be paid into the school fund of the State.

On the 1st day of May, 1911, the Trustees of the Internal Improvement Fund and the board of drainage commissioners had \$439,993.95 in cash on hand and resources in the nature of amounts due by purchasers of land, dredges, etc., and drainage taxes to be due during the life of the present drainage contract of \$1,578,864, making a total of cash and valuable resources of \$2,018,857.

All the land in the Everglades drainage district is taxed 5 cents per acre per year. The State still owns about 1,200,000 acres of land in the Everglades.

We are advised that about 35,000 acres of land in the Everglades had been sold in small tracts by promoters at prices as high as \$80 per acre, under an agreement that the promoters would cut a canal at certain places which is supposed to be sufficient to carry off the water and make the lands suitable for cultivation. Parties buying the lands are fully advised, so far as we can ascertain, of the existing conditions and of the progress of the drainage operations.

We recommend that the Internal Improvement Board sell off tracts of land to bona fide settlers in tracts ranging in size from 5 acres and multiples thereof, at prices according to location, depth of soil, and other advantages determining its value, and that the same be sold when necessary upon the installment plan, the title remaining in the State until the last payment is made. We believe that this plan would yield much more into our treasury and would bring many immigrants into the State.

In our opinion there should be remaining to the State of Florida about 1,000,000 acres of Everglade land, exclusive of school lands, when the present drainage contract is completed. These lands, in our opinion, should not be worth less than \$25 per acre on an average, if sold on the plans above stated.

On November 16, 1910, 50,600 acres of land in the Everglades were sold to one E. C. Chambers for a sum of \$15 per acre. This is not listed in our report, for the reason that no deed was executed, the land being sold to Mr. Chambers on payments and a contract being drawn up between the Trustees and the said Chambers in lieu of a deed to the land. Most of the deeds listed were issued in amounts of from 5 to 80 acres and were issued to parties who had settled upon the lands several years prior to the issuance of the deeds, and who had made improvements thereon, and this fact, we are advised, was taken into consideration by the Trustees in making a price upon these lands. We here refer to those small tracts sold for from \$1.25 to \$1.50 per acre.

Your committee also crossed Lake Okeechobee, which covers approximately an area of 500,000 acres, and is situated in the north-west part of the drainage district. This lake, during heavy and continued rains, overflows its banks and overflows the land to the south and southeast, which lands are commonly called the "Everglades." The intention of the drainage operations is to lower the level of this lake about 6 feet, and by means of locks and dams control its flood waters and afford an outlet for draining the lands through which the canals pass, and also for means of transportation and irrigation. There are four of these canals now being constructed. The approximate location of these canals is shown on the accompanying map, although their entire course has not been definitely determined, except on the North New River Canal. They vary in width from 50 to 70 feet, and range in depth from 8 to 12 feet. The material that is dug from the canals is placed far enough back from the edge of the canals so as to not wash in again. This mud and rock may be leveled down and made into a fine roadbed, and we think that there is sufficient material to make a roadbed for a suburban line of motor cars, and we think that in the near future there will be a line of cars running from Fort Myers on the west to Miami and Fort Lauderdale on the east along the banks of these canals. We recommend that the Internal Improvement Board encourage the construction of the same by donating a right of way along the banks of the canals and giving this waste material for the construction of roadbeds. We know of nothing that would develop the Everglades more rapidly, except of course the drainage operations now in progress. We are advised that this waste material on one side of the canals has been given to the counties in which the canals are dug for road purposes.

All the canals under contract are to be completed within three years from July 1, 1910.

We find that the Internal Improvement Board has well in hand the drainage operations, and under J. O. Wright, supervising drainage engineer, there is a thorough check on all the proceedings, and that everything is well mapped out and planned, and we do not believe a more competent, honest, energetic, and thorough man could be found anywhere than Mr. Wright. So long as he is in charge of the actual construction, it is our opinion that the interests of the State will be thoroughly protected in every particular. At the same time, no mean advantage will be taken of the contractors.

Your committee believes that the lands are exceedingly fertile. With transportation facilities, irrigation, and climate, we believe that the Everglades would rank among the garden spots of the world.

For some 3 miles on the southeast side of Lake Okeechobee the tenderest plants survive without blight from cold. It is impossible for one not having seen that vast stretch of country to have a proper conception of its immensity. One can be on Lake Okeechobee and travel for hours out of sight of land, so vast is the surface of the lake. We find vegetation, especially such as grow in gardens, grown in profusion both at the mouths of the canals and on the banks of Lake Okeechobee. Every kind of vegetable and farm product that we saw under cultivation seemed to be grown successfully, with the exception of corn. We saw no cotton. On the banks of Lake Okeechobee we saw cabbage growing that were about 4 feet across, and were assured that fertilizer of no kind was used. We were told that they sold a cabbage the week before our visit that weighed 28 pounds, and which was grown on the south side of the lake without fertilizer. We found alfalfa growing most luxuriantly on the banks of the canal on the south shore of Lake Okeechobee. The soil is said to be as rich in ammonia as the highest class fertilizer, ranging from 2 to 4 per cent. Fertilizer containing potash and phosphate causes the soil to yield more abundantly, especially near the mouths of the canals, where the soil seems to be newer.

On the South New River Canal, some 4 to 5 miles out in the Glades, we found a settlement of some 8 or 10 families who have been conducting vegetable gardens for the season past, and they were well pleased. They had raised cabbage, tomatoes, beans, Irish potatoes, and all kinds of garden truck profitably. One person there stated that he had grown 126 hampers of beans on a half acre and sold them at an average price of \$3.25 per hamper; that the average crop of beans was about 300 hampers to the acre. They raise about 500 crates of tomatoes to the acre and have grown as high as 850 crates to the acre, which yielded them from \$1.50 to \$3.50 per crate.

We found one farm in the Glades consisting of about three sections, with lateral ditches running into the main canal about one-quarter of a mile apart and three-quarters of a mile long. At the time we were there, about 55 acres were in actual cultivation. The lands were new, having been cultivated about 15 months. We often found along the banks of the canal houses, boat landings, etc., that had been taken possession of by settlers. We recommend that the Internal Improvement Board at once take proper steps to secure the interest of the State in the same, so that these parties may not later claim it by right of their possession, and where it is deemed best that the State may lease to them the right to occupy the same for a given number of years at an annual rental.

Your committee is of the opinion that speed of power boats will have to be limited to 6 miles per hour in passing up and down the canals, as the swash from fast-moving boats washes down the banks and sucks rocks of great size into the canals.

We notice on the South New River Canal where the water mark was about 5 feet above the level of the land, caused by the great overflow from Lake Okeechobee during the last rainy season. This shows conclusively that the Glades can not be drained to prevent overflow until the lake is lowered and converted into a reservoir.

Your committee saw ditching machines that would move right along over the Glades and cut a mile of a ditch a day about 4 feet wide at the top and 3½ feet deep, and 3 feet wide at the bottom.

This machine could be operated, so we were informed, by one person. The dirt dug was placed in a row about 8 feet from the canal, and could be easily leveled down and made into a driveway.

Your committee is of the opinion that the drainage operation will ultimately be a great success and is one of the greatest undertakings of the age, and will convert the Everglades—once a watery waste—into one of the garden spots of the world. We believe, however, before it has reached perfection that individuals will have to spend for farm ditches and lateral canals a sum approximating \$2 per acre. When completed, the farmer need not fear cold, droughts, nor floods, and has the consciousness of knowing that he is tilling as rich a soil as is to be found within the bounds of the South.

There seems to be great doubt existing in the minds of many people throughout the State as to whether or not the lake can be lowered and the Everglades drained by means of canals. This is purely a matter of mathematics. That portion of the State from which the waters run to Lake Okeechobee is well defined and known. The average rainfall upon this territory is also known, as is also the rainfall upon the Glades. It is also known what per cent of the water is taken up by evaporation and what per cent goes into the ground. It is also known how many gallons of water per second pass through each of the canals at a given point. The canals are so constructed as to receive from the lake the excessive rainfall that pours into the lake over and above its capacity to hold the same when once lowered to 6 feet below its banks, which lowering will take place in the dry season—which season lasts about eight months—and as the canals pass through the Glades toward the sea and Gulf they are constantly widened and deepened, and even divided so as to carry off the extra water furnished by the Glades themselves. There is absolutely no occasion to doubt the practicability of the drainage operations. Of course, a canal will not drain a portion of the Everglades 5 to 10 miles away, as the lands are flat, unless there be lateral canals dug.

We highly indorse the drainage operations and recommend that the same be pushed with all vigor, and are in hopes that no obstacle will intervene to stop or delay the completion of the canals now contracted for and any others that may be found necessary to reclaim at least the more fertile parts of the glades.

We would further recommend, in case it is found that the canals now under construction and embraced in the plan of drainage are not sufficient to control the level of Lake Okeechobee, that a canal of proper dimensions be cut from some point on the east shore of the lake, north of Pelican Bay, in a southeast and easterly direction, along the most feasible route, if found most advisable by the engineer in chief, to Lake Worth in the vicinity of West Palm Beach, such a canal being, in our opinion, the most direct and nearest route to the ocean.

Respectfully submitted.

J. A. WILLIAMS,
Chairman of Senate Committee.
C. T. CULPEPPER.
GEO. W. WARD,
Chairman of House Committee.
SAMUEL A. ROBINSON.
JAS. E. CADE.

Statement showing length of the various canals that have been excavated from the commencement of the work to May 1, 1911, in the Everglades drainage canals.

Names of canals.	Beginning to Jan. 1, 1909.	Jan. 1, 1909, to July 1, 1910.	July 1, 1910, to May 1, 1911.	Total excavated.	Excavated to completed cross section.
	Miles.	Miles.	Miles.	Miles.	Miles.
North New River Canal.....	6.52	4.67	7.01	18.20	18.20
Upper North New River Canal.....			11.51	11.51	6.71
South New River Canal.....	6.72	6.92	2.77	16.41	16.41
Upper South New River Canal.....			8.55	8.55	8.55
Miami Canal.....		4.25	5.68	9.93	9.93
Upper Hillsboro Canal.....			4.52	4.52	2.27
Total miles of canal excavated to May 1, 1911.....				69.12	
Total miles of canal excavated to completed cross section May 1, 1911.....					62.07

Total yardage included under Furst-Clark Co.'s contract July 1, 1910, to complete these canals. 19,000,000
 Total yardage removed by Furst-Clark Co.'s contract July 1, 1910, to May 1, 1911..... 3,049,279
 Per cent of Furst-Clark Co.'s contract completed..... 16
 Approximate per cent of all the above canals completed May 1, 1911..... 30

J. O. WRIGHT, Chief Drainage Engineer.

TALLAHASSEE, May 12, 1911.

PROGRESS STATEMENT NO. 1.—Everglades drainage canals.

The following table shows the work done by the Furst-Clark Construction Co. during the three months ending September, 1910:

Names of canals.	July.		August.		September.		Total.	
	Earth.	Rock.	Earth.	Rock.	Earth.	Rock.	Earth.	Rock.
	Cu. yds.	Cu. yds.	Cu. yds.	Cu. yds.	Cu. yds.	Cu. yds.	Cu. yds.	Cu. yds.
South New River Canal AA.....	51,723	11,565	88,878	16,744	53,052	14,655	193,653	42,704
North New River Canal BB.....	18,419	9,282	46,009	28,975	46,654	32,115	111,082	70,372
Miami Branch Canal CC.....	36,675	22,841	41,206	34,216	28,645	50,589	106,526	107,646
Total.....	106,817	43,488	176,093	79,935	128,351	97,359	411,261	220,782

SUMMARY.

Earth and rock removed to date..... cubic yards.. 632,043
 New canal excavated to date..... miles.. 4.8
 Old canal enlarged to date..... do..... 5.0
 Per cent of entire contract completed..... 3.4

J. O. WRIGHT, Chief Drainage Engineer.

PROGRESS STATEMENT NO. 2.—Everglades drainage canals.

The following table shows the work done by the Furst-Clark Construction Co. during the three months ending December 31, 1910:

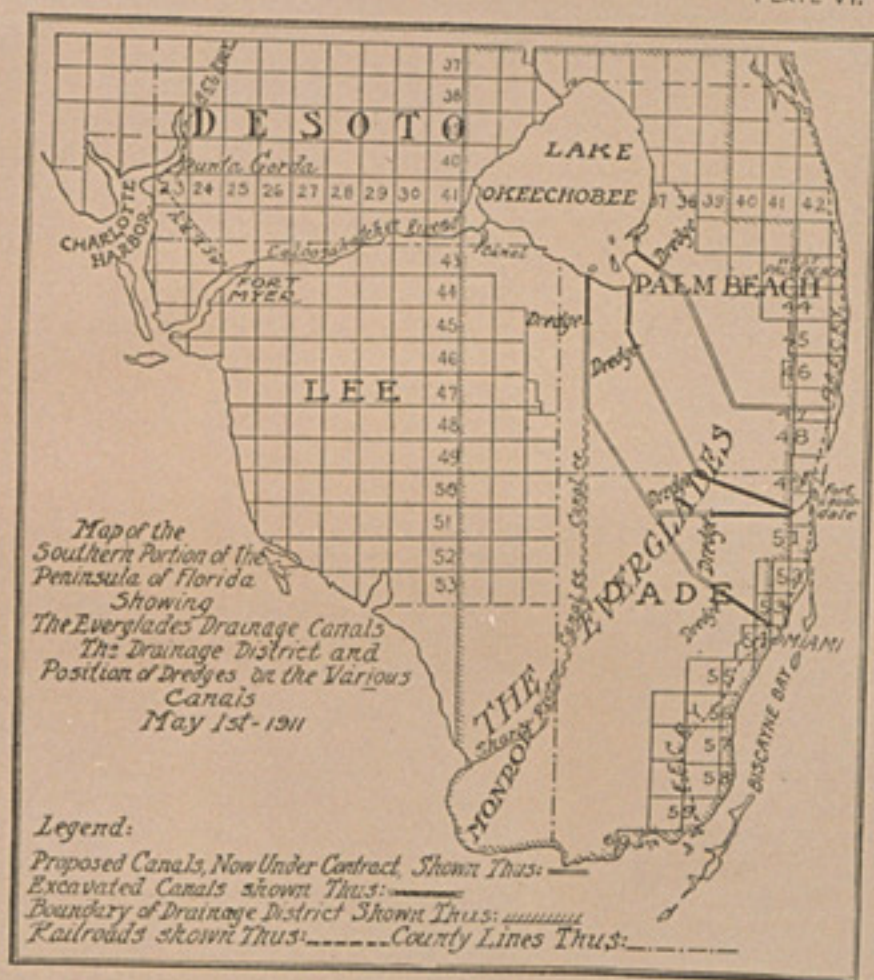
Names of canals	October.		November.		December.		Total.	
	Earth.	Rock.	Earth.	Rock.	Earth.	Rock.	Earth.	Rock.
	Cu. yds.	Cu. yds.	Cu. yds.	Cu. yds.	Cu. yds.	Cu. yds.	Cu. yds.	Cu. yds.
South New River Canal AA.....	47,031	17,575	75,509	9,877	81,012		203,552	27,452
North New River Canal BB.....	89,737	22,203	148,203	18,649	155,097	15,816	393,097	56,668
Miami Branch Canal CC.....	40,011	27,611	35,397	22,165	78,025	22,421	153,433	72,187
Hillsboro Canal DD.....	6,324		36,985		51,428		94,737	
Total.....	183,103	67,389	296,154	50,631	365,562	38,237	844,819	156,231

SUMMARY.

Earth and rock removed to date..... cubic yards.. 1,633,100
 New canal excavated to date..... miles.. 12.1
 Old canal excavated to date..... do..... 5.0
 Per cent of entire contract completed..... 8.6

J. O. WRIGHT, Chief Drainage Engineer.

TALLAHASSEE, FLA., Jan. 1, 1911.



The following
during the

South New River
North New River
Miami Branch
Hillbory Canal

Total

Earth and rock
New canal excavation
Old canal excavation
Per cent of total

TALLAHASSEE

The following
during the

South New River
North New River
Miami Branch
Hillbory Canal

Total

Earth and rock
New canal excavation
Old canal excavation
Per cent of total

TALLAHASSEE

The following
during the

South New River
North New River
Miami Branch
Hillbory Canal

Total

Earth and rock
New canal excavation
Old canal excavation
Per cent of total

TALLAHASSEE

PROGRESS STATEMENT NO. 3.—Everglades drainage canals.

The following table shows the work done by the Furst-Clark Construction Co. during the three months ending March 31, 1911:

Names of canals.	January.		February.		March.		Total.	
	Earth.	Rock.	Earth.	Rock.	Earth.	Rock.	Earth.	Rock.
	<i>Cu. yds.</i>	<i>Cu. yds.</i>	<i>Cu. yds.</i>	<i>Cu. yds.</i>	<i>Cu. yds.</i>	<i>Cu. yds.</i>	<i>Cu. yds.</i>	<i>Cu. yds.</i>
South New River Canal AA.....	71,042	.....	101,092	.....	134,615	12,309	306,749	12,309
North New River Canal BB.....	137,141	16,566	137,513	34,858	122,630	26,696	397,284	78,120
Miami Branch Canal CC.....	21,152	12,442	48,346	28,750	10,245	5,953	79,743	47,145
Hillsboro Canal DD.....	34,848	.....	33,000	.....	34,200	.....	102,048	.....
Total.....	264,183	29,008	319,951	63,608	301,690	44,958	885,824	137,574

SUMMARY.

Earth and rock removed to date.....	cubic yards..	2,656,517
New canal excavated to date.....	miles..	22.81
Old canal excavated to date.....	do.....	8.36
Per cent of entire contract completed.....	.....	13.98

TALLAHASSEE, FLA., April 1, 1911.

J. O. WRIGHT, Chief Drainage Engineer.

PROGRESS STATEMENT NO. 4.—Everglades drainage canals.

The following table shows the work done by the Furst-Clark Construction Co. during three months ending June 30, 1911:

Names of canals.	April.		May.		June.		Total.	
	Earth.	Rock.	Earth.	Rock.	Earth.	Rock.	Earth.	Rock.
	<i>Cu. yds.</i>	<i>Cu. yds.</i>	<i>Cu. yds.</i>	<i>Cu. yds.</i>	<i>Cu. yds.</i>	<i>Cu. yds.</i>	<i>Cu. yds.</i>	<i>Cu. yds.</i>
South New River Canal AA.....	29,817	8,348	.....	.....	5,127	5,367	34,944	13,715
North New River Canal BB.....	193,907	31,097	209,968	22,365	475,509	17,088	939,414	71,150
Miami Branch Canal CC.....	47,871	25,562	33,318	35,667	31,411	36,899	112,600	98,128
Hillsboro Canal DD.....	46,500	.....	67,520	.....	83,736	.....	197,816	.....
Total.....	318,155	65,607	370,836	58,032	505,783	59,354	1,284,774	182,993

SUMMARY.

Earth and rock removed to date.....	cubic yards..	4,124,284
New canal excavated to date.....	miles..	35.26
Old canal excavated to date.....	do.....	8.36
Per cent of entire contract completed.....	.....	25.2

TALLAHASSEE, FLA., July 1, 1911.

J. O. WRIGHT, Chief Drainage Engineer.

PROGRESS STATEMENT NO. 5.—Everglades drainage canals.

The following table shows the work done by the Furst-Clark Construction Co. during the three months ending September 30, 1911:

Names of canals.	July.		August.		September.		Total.	
	Earth.	Rock.	Earth.	Rock.	Earth.	Rock.	Earth.	Rock.
	<i>Cu. yds.</i>	<i>Cu. yds.</i>	<i>Cu. yds.</i>	<i>Cu. yds.</i>	<i>Cu. yds.</i>	<i>Cu. yds.</i>	<i>Cu. yds.</i>	<i>Cu. yds.</i>
South New River Canal AA.....	480,910	15,183	191,528	6,075	167,560	11,836	839,996	33,094
North New River Canal BB.....	48,687	16,842	73,224	.....	55,104	.....	176,415	16,842
Miami Branch Canal CC.....	86,592	.....	105,596	.....	311,500	.....	503,688	.....
Total.....	615,589	32,025	370,348	6,075	534,164	11,836	1,520,101	49,936

SUMMARY.

Earth and rock removed to date.....	cubic yards..	5,694,321
New canal excavated to date.....	miles..	49.99
Old canal excavated to date.....	do.....	8.36
Per cent of entire contract completed.....	.....	33.1

TALLAHASSEE, FLA., October 1, 1911.

J. O. WRIGHT, Chief Drainage Engineer.

