

REPORT AND ESTIMATE ON IRRIGATION POSSIBILITIES ON ISLAND OF ST. CROIX, VIRGIN ISLANDS, U. S. A.

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(Continued from yesterday's Avis.)

Irrigation Plan And Estimated Cost.

59. Jolly Hill Project. The plan here proposed is to provide a 2000 acre foot reservoir by the construction of a dam to a point locally known as Jolly Hill-See Plates "A" and 4. There is at present a small diversion structure at this point and an 18" concrete pipe leading therefrom to a small concretelined reservoir and thence on down to the lands of the La Grange Sugar Factory. A variable radius arch dam is proposed at this point with a maximum height from stream bed to spillway crest of about 90ft., or to elevation 250. A 400 ft. top radius would be required, and the crest length of the dam 890 feet. The maximum probable flow is estimated as a 100% runoff from a two inch per hour rainfall over a watershed of 2.08 sq. miles, or a flood of 2400 sec. ft. This would result in a depth of about 1.5 ft. over the spillway. There is solid rock exposed in the bottom of the wash at this point, and the soil is very shallow on the slopes. The rock is of the hardest variety of the older formation and appears quite suitable for the foundation of an arch dam. As a precaution against open seams, however, it is planned to excavate the foundation to an average depth of 10 feet, and to seal the cracks below this by drilling and cement grouting under pressure. Good concrete aggregate can be obtained at the dam site by crushing the local rock, or sand and gravel can be secured from the sea beach which is the usual source of supply for concrete work on the Island. The sea beach gravel is of good quality, but the sand would not stand a very high test though a fairly good grade concrete is made from it. A 24 inch cast iron pipe outlet is proposed through the dam at elevation 180, or under a maximum head of 70ft. This will be provided with a valve gate at the outlet end, and it will discharge into the natural rock channel. A short distance below the dam, or about opposite the present small reservoir, a small diversion structure is proposed. From this the J-1 and J-2 canals will divert, the former running to the south, as far as the center line road if necessary for the irrigation of a net area of 800 acres, and the J-2 canal running north to water a net area of 200 acres. These canals will be concrete lined throughout. See Table 12 for details of canals.

60. The area to be reclaimed by this project is 1,000 acres net or 1250 acres benefitted, and the estimated cost is \$507,600 or \$406.00 per acre for the area

benefitted. For details of cost see Table 13. An alternate plan of an earth and rock fill dam, the rock for the fill to be secured from the deep cut required for the spillway, was figured in an endeavor to reduce this cost, but the arch dam proved to be the cheaper.

61. The lands to be reclaimed by this project all, or practically all, belong to the La Grange Sugar Factory, and this company therefore is practically the only one interested in it. On the basis of a value of irrigation of \$120.00 per acre the project appears slightly within the feasible limit, or if figured in the \$310.00 per acre class it is well within the limit.

62. It should be explained that the estimates in this report are necessarily very preliminary in character as the meager data available are not sufficient for the preparation of a detailed and reliable estimate. Such necessary data are detailed surveys of the reservoirs, dam sites and canals and the testing of the dam foundations, and the preparation of detailed plans therefrom.

Such data and estimates should be worked up by a resident engineer and this data may then be submitted to some irrigation engineer of recognized ability for final consideration. It is not recommended however that any considerable expenditure be made at this time on the securing of such data, or until such time as the water supply shall have been more definitely determined by the securing of a reasonable period of runoff records, and then only in case these records are as favorable or nearly so as is estimated in this report.

(To be continued.)

Correspondence

June 19, 1924.

Mr. Chairman of the Road Commission,
Dear Sir:

Please let us know how soon we will be able to use the road around "La Reine", as it is very uncertain to drive in the night time through the range with a 1 ton truck. As one of the overburdened taxpayers I want at least a road to suit my ears for which I pay a tax of \$52 a year.

I don't mean any harm, but only want to know the date on which the regular road will be opened again.

Thanking you Mr. Editor for space,

Yours truly,

W. S. ABRAMSON.

The Fourth of July

The Red Cross will take an important part in the Festivities on National Holiday.

The Virgin Islands, youngest of Young Americans, will uncork all their patriotic

fervor on the Nation's birthday, the ever glorious Fourth of July.

Governor Williams has been reported as expressing the wish that the people of these islands may join with other Americans in festal observance of the day and it is certain that at some place and in some form or other public expression will be given to the spirit and sentiment of the day commemorating the birth of the great republic.

From present indications the greatest assemblage of holiday-makers will be found at the Manning's Bay race course, attending the races said to be planned for the day. From past experience, it is known that racing day crowds become very hungry and thirsty and need refreshment in those lines in order to keep interest and enthusiasm going full speed.

There is where the Red Cross comes in. The Home Service Committee of Christiansted and Frederiksted have joined forces for the Fourth of July for the purpose of supplying all the hungry and thirsty on the race course with the best in sandwiches, cakes and soft drinks and anyone who ever has seen a collection of cakes got together by the Red Cross needs not to be told that there will be an army on hand that would tempt John D. Rockefeller away from his bowl of oatmeal porridge, even if he knew he would suffer the pangs of indigestion for a week afterwards. Of course, all those with good, healthy appetites and digestions may partake ad libitum of these creations of the best cake-makers in St. Croix. —Com.

FACTS AND TRUTH MUST PREVAIL

By
E. E. BRYAN

An article appeared in the "St. Croix Tribune" on Wednesday 18 June. The article dealt with nothing but personality.

In reference to said article I wish to say that a person strays from a subject and gets personal when their argument and subject bear no weight and expression begins to fail.

The Tribune says that I am unknown in political circles; this statement is true for if one does not agree with the aims and views of the Tribune and its political circle you are considered dead.

Now as regards the politics and politicians of the Tribune, the street corners and gallery talk is the politics and the Tribune's atmosphere and one or two council members who go around talking a whole lot of foolish stuff and when in the chamber can do nothing else than second motions. That's the politics and political circles they belong to and talk about. They called me a political tool and turn around and say I am unknown in political circles is it not strange that one can be a political tool without a political circle? I wish that the Tribune will be a little more explicit