

REPORT OF DRAINAGE WORK
From ~~to~~ 1917
March 1, 1917 to July 1, 1917.

I have the honor to submit herewith a report of the work done by me as Specialist in Land Drainage for the four months, ^{Sept} March 1, 1917 to July 1, 1917. ^{at York 1917}

^{I was absent several months during the ~~entire~~ part of the}
After several months absence from the State on military duty I returned
to Virginia the first of March and resumed my work as specialist in land drainage. During my absence all requests for aid in drainage ^{that} came through this office was referred to the Drainage Division of the Office of Public Roads and Rural Engineering, who handled the work through their office. They made surveys and prepared reports for the following seven farmers: M. Seward, ^{15a} Manteo, Va.; E. M. Jordan, Norfolk, Va.; F. Stuart, ^{5a} Montross, Va.; Mr. Trumble, Staunton Experiment Station, Staunton, Va.; B. A. Garnett, ^{50c} Uno, Va.; A. K. Mann, ^{50a} Wise, Va.; I. T. Flanary, Norton, Va. ^{R. J. Fortz - 5a - R. W. Thompson 30a, C. D. Hunt - Northampton 5a}

I made a trip to Washington for the purpose of going over the work that the Washington office had done in Virginia during my absence, and have them to turn over what work they had planned in this State for the summer so that I could take up this work immediately. While there I also had a conference with the head of Farm Mechanics and Farm Buildings Department and arranged to cooperate with them when I take up this phase of the work.

The first couple of weeks in March was necessarily occupied in organizing the work for the summer and getting in touch with the County Agents that wanted work done during the spring and summer months. Letters were sent out to all county agents advising them of my return and of the nature of the drainage work to be undertaken.

On one of my trip to Eastern Shore to advise farmers on drainage I

took a party of representative farmers from Accomac County to Eastville, Va. to show them the traction ditching machine at work and hold a field demonstration on the construction of tile drainage system. This was a very valuable trip as I could explain to them and show them right in the field the important operation of installing drainage systems. Farmers were all very favorably impressed with the ditching machine which was doing excellent work. This machine belongs to the Hampton farmers that we persuaded to buy last year. The machine was bought on a cooperative basis by three men at Hampton. After tiling their own farms they organized the Peninsula Tile Drainage Company and went in to the contracting business. Up to the present time they have ditched several farms on Eastern Shore and have contracts ahead for several months work. This machine has been a big factor in developing farm drainage in this section of the State and have proven such a good investment for the owners that they have decided to buy a another machine. All of the men that saw this machine work have decided to put in drainage systems on their farms in Accomac County this fall. Dr. Holland, on whose farm the ditching machine was working at the time, stated to us that he was going to drain every acre of his land as his systems had demonstrated to him conclusively the value of under drainage as an investment.

This spring two new tile factories have been started and a third factory that had been making bricks has decided to make tile altogether. The tile situation in the State is becoming very acute as it is almost impossible to buy tile at a reasonable price. These factories will go a long way to solve this shortage in drain tile. I was instrumental in getting two of them started.

Trips were made to Accomac, Shenandoah, Spotsylvania, Stafford, Prince Edward, Nottoway, Hanover, Prince William, James City and Botetourt counties for the purpose of making drainage surveys and advising farmers on their drainage problems. In some of these counties the farmers were not ready to take up the drainage work

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until fall, but I was able to make surveys and lay off the work for them so that they will be able to start the work as soon as they are ready in the fall.

I helped a farmer in Botetourt County to buy a second-hand ditching machine, which he will use for ditching on his own farm and then to do contract work in his community.

The time spent in the office has been taken up in answering letters in regard to drainage, working on drainage maps, and writing bulletin on farm drainage in Virginia. This bulletin deals with the fundamental operations of tile drainage and the results of drainage in Virginia, which is shown by quotations from letters by farmers who have drained. The bulletin consists of thirty-seven pages and has 30 cuts and illustrations. I have long felt the need for some such bulletin in my drainage work.

Water works and soil at age eng. subject.

But

I have recently been admitted as a member to the American Society of Agricultural Engineering. The object of the Society is to promote the art and science of engineering as applied to agriculture. My membership in this Society entitles me to all the transactions and publications of the Society, which are of vital importance to agriculture.

Owing to the increased production and scarcity of labor very few farmers have been able to take up the actual drainage work this summer, but will do so in the fall.

The following will give a short summary of the work accomplished in the four months: during the year

Number of miles traveled, - - - - -	2609 6,026
Number of farmers helped on drainage, - - - - -	346 10-
Number of drainage maps made, - - - - -	7 245
Number of County Agents visited, * * * - - - - -	79
Number of Counties worked in, - - - - -	103

In Sept to left for Ames Ia. to take some
special work in Agricultural Engineering, which the I specialized
on the following subjects. Ag. power - Ag. surveying. Farm
machinery, ~~farm notes~~ gas engines & tractors. Farm sanitation.
Farm structures, concrete construction. I will handle all
these phases of Ag. engineering work in 1915.

Number of tile factories help to start, - - - - -	2
Number of ditching machines helped to buy, - - - - -	1
Number of letters written, - - - - -	257 360
Number of meetings attended, - - - - -	3 4
Number of bulletins published, - - - - -	1 2
Number of newspaper articles written, - - - - -	1 2
Number of field demonstrations held, - - - - -	1

" Exhibits displayed
 " 40 cases shipped to Wash Office during above
 " 24 cases in shipping dept
 Total no. of cases shipped for the year 625 @

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 10
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