

3x6x15 Ft. Extension on Concrete Culverts on Mile 1, Section L.  
 10x3.5x8 Ft. extension on Concrete Culverts on Mile 2, Section L.  
 9 ft. extension and wings to 2x3 Ft. Box Culvert on Mile 1, Section H.  
 4x4x26 Ft. Concrete Culvert on Mile 2, Section H.  
 5x7x3 Ft. extension on Concrete Culvert on Mile 3, Section H.  
 3x3x24 Ft. Concrete Culvert Mile 5, Section H.  
 8x4x37 Ft. Concrete Culvert, Mile 4, Section L.

The above reinforced concrete Culverts shall be constructed in strict accordance with the plans for each culvert. The concrete portion thereof shall be composed of Stone, sand and Portland Cement, in portion in volumn as follows, To-wit:-

- 1 part Portland Cement.
- 2 parts clean dredged course river sand.
- 4 parts clean broken lime stone.

The above material shall fulfil the following specifications.

STONE. The stone shall be clean broken lime stone free from dust, all passing a ring of  $1\frac{1}{2}$  inches in diameter, and all retained on a screne having  $1/2$  inch round holes.

SAND. The sand shall be clean, course dredged Arkansas River sand, free of all laam dirt or mud balls.

CEMENT. The cement shall be native Portland, capable of standing the test required by the society for testing materials, as approved by that body, 1916.

### 37. MIXING.

The concrete shall be mixed in a suitable batch mixer; each batch containing the proper proportions of all materials. The mixer shall then be turned until the concrete is thoroughly mixed, and becomes a homogeneous mass, and each stone or sand grain is covered with mortar; this mixing must be satisfactory to the Engineer or his representatives,

### 38. REINFORCING STEEL.

The reinforcing steel shall be placed, as shown on the plans and shall be maintained against displacement. When placing the concrete, the concrete shall be properly spaded, in and around the steel, such that all voids and air spaces shall be eliminated.

### 39. FORMS.

The Contractor shall furnish and put in place all forms at his expense, and shall not remove them from any work until given authority by the Engineer. All of the above culverts to be built in accordance with the standard plans and specifications of the Oklahoma Department of Highways, with such reasonable charges as may be determined and ordered by the Engineer of Tulsa County, and All of such work to be carried on in a manner as not to interfere with the grading of such roads upon which the above described culverts are located, and the said second party hereby agrees that such work will be carried on in such manner as he may be ordered by the Engineer, and to complete all of the said work in a satisfactory manner and to the acceptance of the party of the first party; on or before the 15th day of MAY, 1919.

THIS AGREEMENT made and entered into this 13th day of January, 1919, between Tulsa County, State of Oklahoma by the Board of County Commissioners, hereinafter called party of the first part, and J. K. Roach and John J. McNulty, parties of the second part, their successors, assigns, heirs or administrators, hereinafter called the contractor.

WITNESSETH, That the contractor for and in consideration of the payment herein specified and agreed to by the party of the first part, hereby covenants and agrees to furnish all equipment, team and labor, material, tools and machinery, and to do and perform all work in the building and completeing of all the above list of reinforced concrete culverts, in accordance with the plans and specifications, at their proper locations in all amounting to approximately (\$8900.00) Eighty Nine Hundred Dollars, and such other items as may be ordered in writing by the engineer. It is agreed and understood that the specifications herein are made a part of the contract and accepted as such by all parties in interest, in accordance to which the work is to be done.

It is further agreed and understood by each party being a part hereof, that the work shall be of the dimensions and at the locations set forth below, and shall be done for the unit price herein set forth. to-wit:-

4x6x23 Ft. Concrete Culverts, on Mile 6, Sec. D.	
Concrete @ - - - - -	\$17.50 per C. Y.
Reinforcing steel @ - - - - -	.06 $\frac{1}{2}$ per Lb.
4x3x 24 Ft. Concrete Culvert, on Mile 6, Section R.	
Concrete @ - - - - -	\$18.00 per C. Y.
Reinforcing steel @ - - - - -	.06 $\frac{1}{2}$ per Lb.
4x3x24 Ft. Concrete Culverts, on Mile 6, Section R.	
Concrete @ - - - - -	\$18.00 per C. Y.
Reinforcing steel @ - - - - -	.06 $\frac{1}{2}$ per Lb.
8x4x24 Ft. Concrete Culvert, on Mile 4, Section M.	
Concrete at - - - - -	\$17.00 per C. Y.
Reinforcing Steel at - - - - -	.06 $\frac{1}{2}$ per Lb.
6x4x42 Ft. Concrete Culvert, on Mile 4, Section L.	
Concrete @ - - - - -	\$17.00 per C. Y.
Reinforcing Steel @ - - - - -	.06 $\frac{1}{2}$ per Lb.
8x4x24 Ft. Concrete Culvert, on Mile 4, Section M.	
Concrete @ - - - - -	\$17.00 per C. Y.
Reinforcing steel at - - - - -	.06 $\frac{1}{2}$ per Lb.
6x4x42 Ft. Concrete Culvert, on Mile 4, Section L.	
Concrete @ - - - - -	\$19.00 per C. Y.
Reinforcing steel @ - - - - -	.06 $\frac{1}{2}$ per Lb.
3x6x15 Ft. Extension on <del>XXXX</del> Concrete Culvert on mile 1, Sec. L.	
Concrete @ - - - - -	\$18.00 per C. Y.
Reinforcing steel @ - - - - -	.06 $\frac{1}{2}$ per Lb.