

**Drain:** WILLIAM BAKER  
**Improvement:** GEORGE STARRETT  
**Operator:** J. LIVINGSTON  
**Date:** 10-8-03

### GIS Drain Input Checklist

- Digitize & Attribute Tile Drains 10-8-03
- Digitize & Attribute Storm Drains N/A
- Digitize & Attribute SSD N/A
- Digitize & Attribute Open Ditch 10-8-03
- Sum drain lengths & Validate 10-8-03
- Enter Improvements into Posse N/A
- Enter Drain Age into Posse N/A
- Sum drain length for Watershed in Posse N/A
- Stamp Plans 10-8-03
- Pull Source Documents for Scanning 10-8-03



In the Matter of Report of Viewers George Steritt Ditch

Comes now the Viewers heretofore appointed to view a ditch or drain Petitioned for by George Steritt et al. and submit their report as such Viewers, which said report is in the following words and figures to wit: -

Here I insert.

The said report includes the lands benefited by the construction of said ditch as well as the Assessed Benefits against each tract or parcel of land, so benefited as follows to wit.

Names of Owners	Sec. of Land	Sec.	Ab.	Rg.	Acers.	Benefits	Assessments
C. M. M <sup>rs</sup> Connell	pt S <sup>r</sup> N <sup>r</sup>	NE	1	19	3 76	10.69	10.69
J. B. Foulkes	SW	NE	1	19	3 15	79.41	141.17
	N <sup>r</sup> N <sup>r</sup>	SW	1	19	3 70	61.76	
Lydia Kassebaum	pt E	NW	1	19	3 67	787.34	787.34
Lindley Reagan	pt	NW	1	19	3 49	764.69	764.69
J. D. Baker	W <sup>r</sup> W <sup>r</sup>	NW	1	19	3 37	185.78	185.78
Sarah J. Baker	E pt E <sup>r</sup>	NE	r	19	3 35	755.87	755.87
Gardner & Christlewhite	pt E	NE	r	19	3 33 66	194.11	414.68
	pt N	SE	r	19	3 60	770.57	
J. B. Baker	pt W	NE	r	19	3 48	776.16	790.78
	pt E NE	NW	r	19	3 9	14.17	
Anthony Baker heirs	pt NE	NW	r	19	3 33	50.95	50.95
J. C. Wright	SW	NW	r	19	3 31	74.33	795.34
	SE	NW	r	19	3 40	711.75	
	pt SE	NE	3	19	3 6	9.76	
Myrtle Hancock	pt NE	SE	3	19	3 7	10.81	10.81
W. R. Hiatt	NW	SW	r	19	3 40	138.96	138.96
O. Holt	SW	SW	r	19	3 40	176.83	176.83
W <sup>ms</sup> Norman	NE	SW	r	19	3 40	711.75	379.39
	SE	SW	r	19	3 40	167.64	
Emma Hodson Etal	pt	SE	r	19	3 50	141.17	141.17
Hannah J. Barnes	pt W	SW	1	19	3 8	16.76	16.17
E. A. Mundy	pt S	SE	r	19	3 17	31.37	31.37
J. L. Mundy	Wend N <sup>r</sup> NE NE		11	19	3 4	13.73	13.73
Ruth L. Benson	pt W S <sup>r</sup>	SE	r	19	3 14	74.11	74.11
O. C. Edwards	pt E S <sup>r</sup>	SE	r	19	3 75	1.10	35.15
	pt E S <sup>r</sup>	SE	r	19	3 7	37.05	
N. S. Mundy	pt E	NE	11	19	3 44	184.67	141.17
						43.50	

a. for work done.

Station	Elevation	Notes	Station	Elevation	Notes	Quantity	Unit	Estimated Cost
10	3.80		10	4.00	\$471 3.70'			
11	3.57		10	4.00	B.M. (3.63) 17713			
12	4.17		10	4.40	6 338	19		3.80
13	4.75'		15'	3.00	6 5/6 303 same stake as 9+43 (10)			100
<u>Arms No. 4.</u>								<u>Estimated Cost.</u>
0	3.04							
0+57	4.94							
1	3.70		18	3.60				
B.M.	5.47	Elev 3844	Beechtree	10'	Co of Sta 1			
1+41	3.49							
2	3.67		19	3.80				
2+60	3.77							
3	3.73		21	4.00				
3+96	3.18							
4	3.11		19	3.80				
B.M.	4.37	Elev 3388						
5	3.77		18	3.60				
5+60	3.74							
6	3.95'		18	3.60				
7	3.18		17	3.40				
B.M.	3.86	Elev 3986						
7+83	3.90							
8	3.77		18	3.60				
9	3.39		19	3.80				
9+43	3.03							
10	3.31		19	3.80				
11	4.11		21	4.00				
B.M.	4.33	Elev 3433	Elus at 11+45'					
11+78	4.38							
12	6.07		28	5.60				
12+99	4.60		30	6.00				
<u>Arms No. 5'</u>								
0	3.04							
B.M.	3.77	Elev 3501	Coffee mt @ 0+13					
1	3.36		18	3.60				
1+33	4.93							
2	4.94		23	4.60				
3	3.11		23	4.60				
4	3.35'		18	3.60				
4+38	3.34							
5	3.710		10	3.80				
								<u>Continued Estimated Cost.</u>
								Grubbing & Clearing 100.00
								Filling 100.00
								<u>Grand Total \$ 3813.79</u>
								A. B. Good
								Wm. J. Flinn
								E. M. Slaughter



Geo Swarms Ditch

Wm. B. Burford, Blank Book Mfr., Indianapolis.

Share No.	From Station No.	To Station No.	Feet Long	NAME TO WHOM APPORTIONMENT IS MADE	DESCRIPTION OF LAND BENEFITED	Section	Town	Range	ACRES BENEFITED		AMOUNT OF BENEFIT	
									Acres	Hund.	Dols.	Cts.

State of Indiana }  
Hamilton County } SS

In Commissioners Court,

In the Matter of the petition  
of Geo Swarms et al,  
for Repair of Geo Sterrett Drain

Report of Drainage Commissioners and Engineers,

To the Honorable Board of Commissioners Hamilton County,

We the undersigned Commissioners of Drainage and the Engineers, to whom the above entitled petition for drainage of certain lands in Adams Township Hamilton County, Indiana, was referred,

We would respectfully report that we met on the line of said proposed Geo Swarms Drain, on the 15th day of November, 1926 qualified and proceeded to Review said Drain and Lands affected thereby.

After a careful investigation of the conditions of said Drain, we are of the opinion that Arm No. 1, of said Drain should be repaired and in a manner set out in this report and that

The same when completed will improve the public health and will reclaim certain lands, and will be public utility, and will benefit highways, also that the cost of Constructing and repair damages and expense of effecting said Drain will be less than the benefits to the Lands effected by said Drainage.

That we have definitely determined the best & cheapest method of effecting the Drainage of such Lands, we have fixed the route, location and character of said proposed, descriptions and guides and Bench Marks, for a complete outlet for the Drainage of said lands effected by said proposed work; that we divided the Ditch into sections of not more than 100 feet in length by setting stakes at each 100 feet.

The work will be staked out by the Engineer and his stakes must be carefully preserved and followed. The digging of each and every portion of the ditch must be at its outlet or its juncture with an other tile drain toward its upper end.

The ditch to be dug along one side of the line of survey stakes, and sufficient distance from to not disturb them, and shall be dug in a straight and clean manner. In taking out the last draft the blade of the spade must not go deeper than the grade line. The ditch must be dug accurately & true to the grade at the depth indicated by the figures given by the Engineer.

## ORIGINAL SPECIFICATIONS

Width at  
TopDepth of  
CutWidth at  
Bottom

## DESCRIPTION OF THE MANNER IN WHICH THE WORK SHALL BE DONE

measured from the grade stakes. The laying of the tile must begin at the lower end and proceed up stream. The tile must be laid as closely as practicable and in a line free from crooks, the pieces being turned about until the upper closes, unless there is sand or fine silt which is likely to run into the tile, in which case the lower edge must be laid close and the upper side covered with clay or other material. When making or by other unavoidable reasons a crack of one-fourth ( $\frac{1}{4}$ ) inch or more is necessarily left, it must be securely covered to with broken pieces of tile, or by other indestructible material, junctions with branch lines must be carefully and securely made.

After the tile have been laid and inspected by the Engineer or his representatives, they must be covered with the earth excavated from the trench, or borrowed clay or soil.

Where said trench does not afford sufficient material, and in no case less than two (2) feet in depth over the tile in new cuts, and where said drain is an open channel, the filling shall be to a depth of not less than two (2) above the top of the tile, for the full width of said channel, in no place must the tile be covered with sand without other material being first used and in no case will boulders or heavy rock be allowed in the filling if they may in time come in contact with the tile.

The ditch contractor must assume all risk from caving in of the ditch, and when each drain is completed it must be free from sand and mud before it will be received and paid for in full. In case it is found impracticable, by reason of bad weather or other unlooked for trouble in digging the ditch or properly laying the tile, to complete the work specified in the Contract, the time may be extended as mutually agreed upon by the Contractor and the Engineer. The contractor shall use all necessary precaution to secure his work from injury while he is constructing the drain.

All tile and material used in the construction of this drain and its tributaries thereto, included in the requirements of these Specifications, shall be first class in every respect and subject to rigid inspection by the Engineer. The Engineer shall have authority to layout and direct the work, and to inspect and supervise the same during the construction and completion to see that it is properly done in accordance with the specifications and contract, and his instructions shall be fully carried out.

# Apportionment for Keeping in Repair the

DK4,232

Wm. B. Burford, Blank Book Mfr., Indianapolis.

Share No.	From Station No.	To Station No.	Feet Long	NAME TO WHOM APPORTIONMENT IS MADE	DESCRIPTION OF LAND BENEFITED	Section	Town.	Range	ACRES BENEFITED		AMOUNT OF BENEFIT	
									Acres	Hund.	Dols.	Cts.

## Concrete Work.

Unless otherwise specified all concrete work included in these Specifications shall be a mixture of 1-2-3, One part Portland Cement, two parts sand, and ~~four~~<sup>three</sup> parts gravel. The sand and gravel to be free from dirt, loam or other foreign matter. The cement, sand and gravel to be thoroughly mixed while dry until it presents an even shade of coloring throughout, then made into a moderately wet mortar, and be immediately placed in the forms for moulding the concrete into shape.

The forms for all concrete work shall be neatly constructed from strong materials, and shall be true to lines, dimensions, and shape given for the different structures.

## Description and Location Arm No One

### Arm No. 1.

Begin at a point five (5) rods south of the center of the N.E. 1/4 of section eleven (11) Township nineteen (19) North, Range three (3) East. Run thence North 65° West to stake 1, thence North thirty-five and one-half (35 1/2) degrees West to stake Eleven plus fifty (11+50); thence North 18° West to stake 23; Thence North 30° West to stake 25+50; thence North 42 1/4 degrees West to stake 28+42.

## Requirements

Arm No. 1. Said arm to consist of one row of 12" tile from station 0 to station 18; also from station 25 to station 28+42 to be repaired by removing all roots and replacing all broken 12" tile with new ones, also a station 16+11 to be an inlet connected with said Arm No. 1.

Sta	Hub cut	cu yds.	Profile		
			Sta	Hub cut	cu yds
0	3.32		15	4.30	32
1	2.99	23	16	4.41	32
2	3.26	23	17	4.57	33
3	3.05	23	18	4.70	34
4	3.18	23	25	4.09	31
5	3.45	24	26	2.60	25
6	3.48	26	27	2.77	20
7	3.38	26	28	2.75	20
8	3.26	27	28+42	2.90	10
9	3.82	28			
10	3.96	29			
11	4.04	30			
12	3.88	30			
13	3.91	29			
14	4.36	31			

May-18-1953.

We the undersigned land owners  
interested in the "Geo Stavert" ditch  
hereby petition the Hamilton County  
Surveyor to open the ditch to a point  
about 300 feet west of the highway  
on the Hal Coffin farm.

M. H. Foulke

Hollas Tickett

Hal W. Coffin

L. W. Shupe

Marion Churchill

Stanley W. Foutch

Carl Norman

Harry B. [unclear]

Eldora Crase

Bert Crase

Harmon E. Witt



DIRECTIONS: Elevate the metal points—a THE GLOBE-WERNICKE LEGAL WRAPPER—Patented Feb. 11, 1890—FIRST QUALITY—  
the manuscript—then bend the points down flat—damp the gummed flap and stick it down—this fastens the papers and hides the metal.

Plans & Specifications  
for repair of

Geo. Starrett et al  
Drain

SPECIFICATIONS FOR THE REPAIR OF THE GEORGE STARRETT ET AL. DRAIN.

These specifications contemplate the repair of the above named drain in accordance with an article of agreement heretofore written and signed by all parties whose lands are affected by said drain and assessment to meet the cost of said repair to be borne by the interested parties as provided in said article of agreement.

Tile.

At places hereinafter set out where tile have broken down the contractor shall replace the broken pieces with new ones of the proper sizes. All tile required to be furnished shall be first grade tile.

At station <u>52 + 00</u>	<u>8</u>	feet of	<u>15</u>	inch drain tile. <i>Arm I</i>
At station <u>60 + 00</u>	<u>20</u>	feet of	<u>15</u>	inch drain tile. " <i>I</i>
At station <u>62 +</u>	<u>30</u>	feet of	<u>15</u>	inch drain tile. " <i>I</i>
At station <u>49 + 10</u>	<u>12</u>	feet of	<u>18</u>	inch drain tile. <i>Main D.</i>

*at " near 60 +*  
Sewer tile already on the ground at the old concrete wall shall be used to connect the ditch into the new concrete wall required to be built by these specifications.

Filling.

At all places where repairs are required to be made the contractor will be required to cover the new tile laid to a depth to conform to the common level of the ground and at other places where tile are uncovered but in otherwise in good condition the contractor shall cover same with earth as above required for new tile.

Catch Basins.

Location.

Standard catch basins shall be built in the line of the ditch and shall be located as follows:-

1. In south side ditch of highway running east and west east of Ruth Benson's house and near Station \_\_\_\_\_ on Arm No.1.
2. To be located where said Arm No.1 crosses East and West highway near sta. 51
3. To be located where Main Ditch Crosses the highway running North and South on west side of section 1 Twp. 19. Range 3 East ( Near Station 20+50)
4. To be located where Main ditch crosses North and South highway running through center of section 1. Twp19. Range3. ( Near station 49)

Construction.

All the above named catch basins to be built from hard burnt brick laid up in mortar made from one part Portland cement to three parts clean, sharp sand and covered with an iron ring and open cover of the Elwood Iron Works or Bellfountain pattern. Dimention of covers to be not less than 18 inches in diameter. Catch basin to be 36 inches in diameter, inside measurement, with walls 9 inches in thickness and to extend to a depth of 18 inches below the grade of the ditch and to a height to conform to the surface of the ground. The bottoms of the catch basins to be floored over with one layer of brick and plastered with a thick coat of cement plaster over bottom and

SPECIFICATIONS FOR THE REPAIR OF THE GEORGE STARRETT ET AL, DRAIN.

These specifications contemplate the repair of the above named drain in accordance with an article of agreement heretofore written and signed by all parties whose lands are affected by said drain and assessment to meet the cost of said repair to be bourn by the interested parties as provided in said article of agreement.

Tile.

At places hereinafter set out where tile have broken down the contractor shall replace the broken pieces with new ones of the proper sizes. All tile required to be furnished shall be first grade tile.

At station 52 + 00 8 feet of 15 inch drain tile. *Arm I*

At station 60 + 00 20 feet of 15 inch drain tile. " *I*

At station 62 + 30 feet of 15 inch drain tile. " *I*

At station 49 + 10 12 feet of 18 inch drain tile. *Main D.*  
*at " near 60 + 1* 6 " " 18 " " " *Main D.*

Sewer tile already on the ground at the old concrete wall shall be used to connect the ditch into the new concrete wall required to be built by these specifications.

Filling.

At all places where repairs are required to be made the contractor will be required to cover the new tile laid to a depth to conform to the common level of the ground and at other places where tile are uncovered but in otherwise in good condition the contractor shall cover same with earth as above required for new tile.

Catch Basins.

Location.

Standard catch basins shall be built in the line of the ditch and shall be located as follows:-

In south side ditch of highway running east and west east of Ruth Benson's house and near Station \_\_\_\_\_ on Arm No.1.

To be located where said Arm No.1 crosses East and West highway near sta.

To be located where Main Ditch Crosses the highway running North and South west side of section 1 Twp. 19. Range 3 East ( Near Station 20+50)

To be located where Main ditch crosses North and South highway running rough center of section 1. Twp19. Range3. ( Near station 49)

Construction.

All the above named catch basins to be built from hard burnt brick laid in mortar made from one part Portland cement to three parts clean, sharp sand and covered with an iron ring and open cover of the Elwood Iron Works or Bellfountain pattern. Dimention of covers to be not less than 18 inches in diameter. Catch basin to be 36 inches in diameter, inside measurement, with walls 9 inches in thickness and to extend to a depth of 18 inches below the grade of the ditch and to a height to conform to the surface of the ground. The bottoms of the catch basins to be floored over with one layer of brick and plastered with a thick coat of cement plaster over bottom and

Sides to a height of one foot above the top of the tile. All inlet and outlet tile to the catch basins to be securely and neatly set in the walls of the catch basin.

( At the option of the parties having the work in charge the catch basins may be built of concrete.)

#### Stone Retaining Wall.

At or near station 64+85 where line of the Main ditch crosses the line between the lands of John B. Foulke and C.M. McConnell to be built a concrete retaining wall, said wall to be constructed of concrete made from one part Portland cement to (5) five parts clean sharp sand and gravel thoroughly mixed and made as wet as is consistent with satisfactory placing and spaded and tamped into place in layers not to exceed 10 inches in thickness in suitable forms made from straight matched lumber. Forms to be rigidly constructed so that no spreading or bulging may occur. The base of the wall to be set to such grade as will receive the tile at proper grade 18 inches above the base of the wall and built to conform to the lines and dimensions as shown on the attached drawing. Where angles are shown on the plan of the wall same to be reinforced with iron bars ( such as old buggy tire iron) said bars to be spaced not less than one foot apart and laid horizontally in the wall. *For specifications of Apron see plat.*

#### Wall to prevent wash.

On the line between <sup>McConnell</sup> the lands of Foulke and McConnell and west of the mouth of the tile of the Main Ditch where the line of the old open ditch crosses said line to be constructed a retaining wall 50 feet by one foot in thickness, said wall to be set in ground to a depth of 18 inches and built to a height to conform with the ~~lay~~ <sup>grade</sup> of the ground before the wash was made. Wall to be built of field rock laid up in mortar made from one part Portland Cement to three parts clean, sharp sand.

Also where the old channel of the Starrett drain crosses said line between Foulke & McConnell to be built a retaining wall of the same character of the above except the length shall be 35 feet.

#### Removing Old Retaining Wall.

At or near station 66 the old retaining wall of concrete which has been undermined by floods shall be broken up and removed from the channel of the ditch.

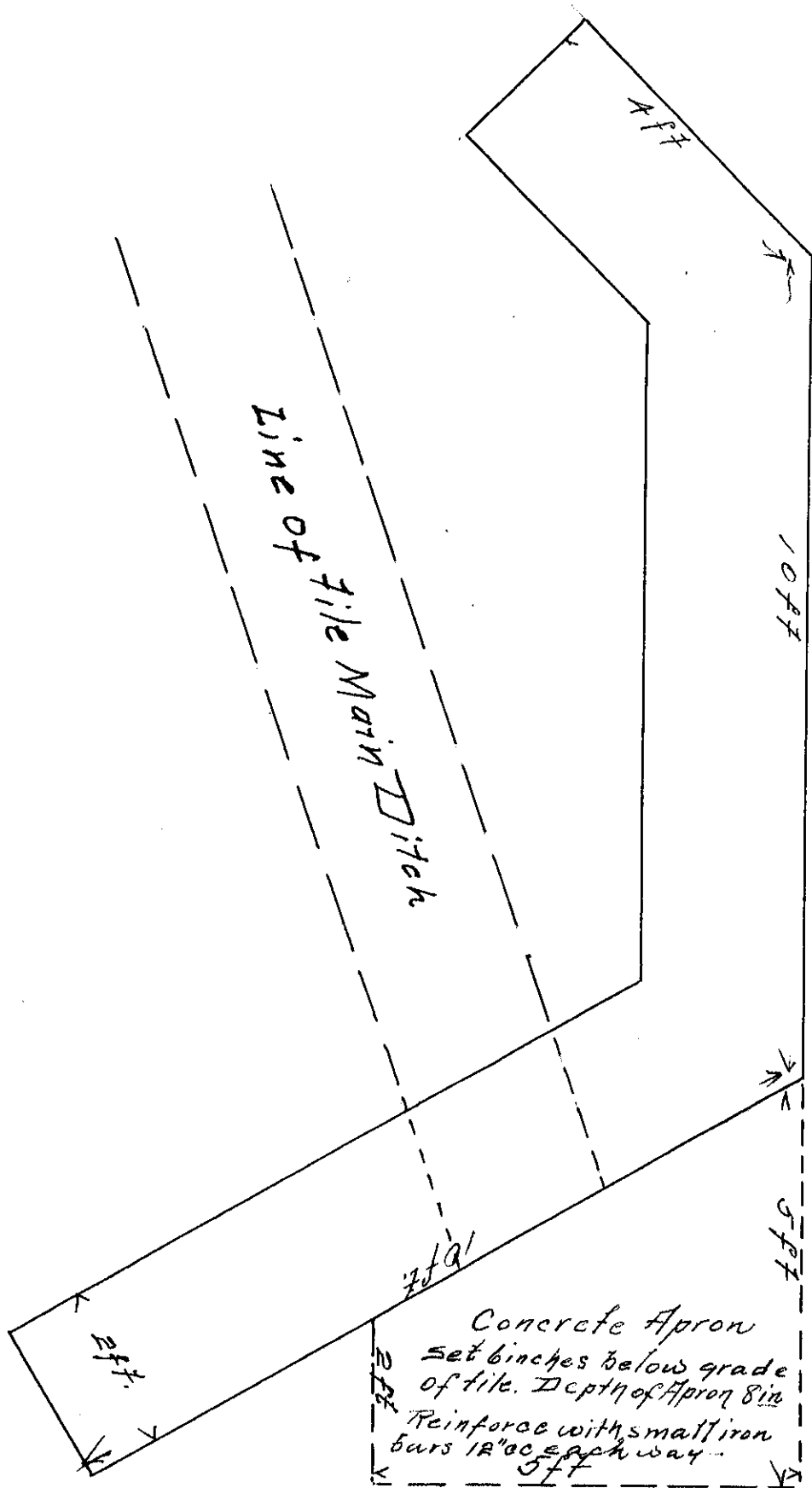
#### Cleaning Open Drain.

The open portion of the drain from the new retaining wall heretofore provided to the terminus of the drain shall be cleaned out to its original depth and width and all earth and trash removed shall be deposited not nearer than two feet from the break of the banks.

#### Other Repairs.

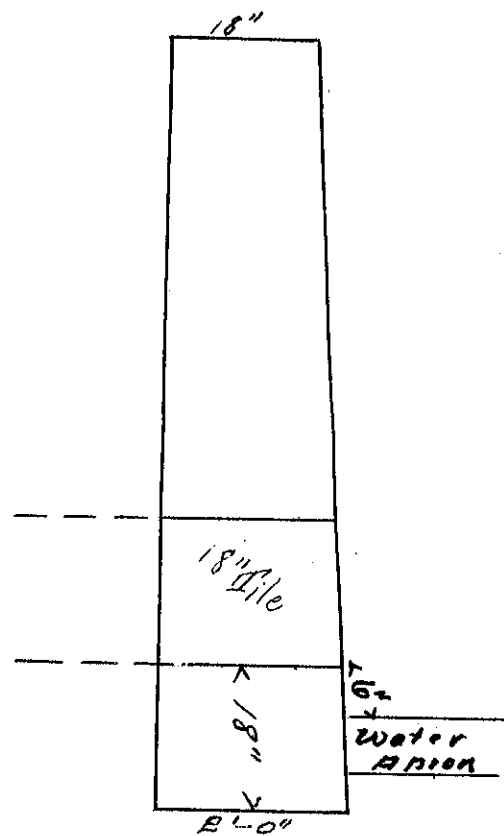
On the land of John Foulke and on the line of the Main Ditch where holes are to be found caused by wash or cave over the ditch the contractor will be required to make thorough examination as to the cause of said caves and make whatever repairs are necessary to put the ditch in first class condition.

All work to be done in a first class and workmanlike manner and to the full satisfaction of the parties in charge of the work



Concrete Apron  
 Set 6 inches below grade  
 of tile. Depth of Apron 8 in  
 Reinforce with small iron  
 bars 18" oc each way  
 5 ft

Old channel open ditch here →



Height of wall to conform to common level of ground  
 Foundation Plan Concrete  
 Retaining Wall & Apron