

CLEARFIELD COUNTY
Commissioners' Office
1922
CONTRACT AND SPECIFICATIONS
For Building of Mahaffey Bridge
Over Susquehanna River
Mahaffey, Pa.

Commissioners: T. R. Weimer,
Jesse E. Dale,
M. L. Farrell,
County Clerk: L. C. Norris,
Solicitor: A. H. Woodward,

G. A. Flink, Consulting Engineer,
Harrisburg, Pennsylvania.

GENERAL INFORMATION

Sealed proposals, accompanied by certified check in the amount of \$1,000, will be received by the Commissioners of Clearfield County, Pennsylvania, until 12 o'clock noon, ~~Wednesday~~
August 24th 1922 at their office in the Court House in Clearfield, Pa., for the construction complete, as per drawings on file, of a 148'-0" Double Span Plate Girder Bridge over Susquehanna River, Mahaffey, Penna., and removing of the present structure and providing a temporary crossing.

Plans are to be seen in the Commissioners' Office at the Court House. Parties desiring copies of drawings can secure same at the price of One Dollar (\$1.00) by writing to G. A. Flink, Harrisburg, Pa.

Proposals must be made out upon blanks furnished by the County. All blank spaces must be properly filled in and no change in phraseology shall be made.

Bids which otherwise may be close but differ in time of completion will be compared on a basis of Ten Dollars (\$10.00) per day in favor of the shorter time.

The County Commissioners reserve the right to reject any and all bids.

The words: "PROPOSAL, MAHAFFEY BRIDGE", must be plainly marked on the outside cover of all proposals.

By order of the Commissioners of Clearfield County.

Attest

Geo. W. Thompson -1-

W. A. Flink

PROPOSAL

To the Board of County Commissioners,
Clearfield, Pennsylvania.

Gentlemen:

I hereby certify that I have personally examined the location of the work hereinafter proposed with reference to the full extent and nature of same, and that I have carefully read and examined the drawings and specifications and form of contract for same.

And having made such examinations, I hereby propose to furnish all materials and appliances, and to perform all work required for the complete construction of the Double Span Plate Girder Bridge over Susquehanna River, Mahaffey, Pa., in full accordance with the specifications and drawings on file, for the sum of _____
Dollars (\$ _____).

I further propose that in case the dimensions shown on the drawings are deviated from, the resulting additions and deductions shall be valued at the following unit prices:

Excavation.....	\$	3.00	per cu. yd.
Concrete (1-3-5 mixture).....	\$	2.00	per cu. yd.
Concrete (1-2-4 mixture).....	\$	2.00	per cu. yd.
Reinforcing Steel.....	\$	5.00	per pound
Bearing Piles.....	\$	1.00	per lin. ft.
Sheet Piles.....	\$	1.00	per sq. ft.

I further propose to have all the above work, including the masonry, finished, ready for acceptance not later than

days from the signing of the contract. I accompany this proposal with certified check in the amount of One Thousand Dollars (\$1,000.) conditioned upon acceptance of the contract if awarded to me.

Date 1922 Bidder _____

Address _____

SPECIFICATIONS

General

Scope of Work. These specifications contemplate the entire construction and erection of a double span plate girder bridge with abutments and pier as specified below, in accordance with the contract, drawings, specifications and proposals, and such further detail plans as may be furnished from time to time; including excavations, concreting, fabricating and placing of steel, hauling of all materials, removal of surplus and waste materials, and the disposition of same, and all other work incident to the building of the structure, and in case the river bottom so requires, all additional extra work such as carrying the excavation down to a depth satisfactory to the Engineer, or preparation of such artificial footings as may be designed by the Engineer, all such additional work to be paid for extra as per attached proposal. The exact amount of excavation and masonry work to be done on the abutments and wing walls is somewhat indeterminate owing to absence of data covering the old work, but it is considered that any experienced bidder can judge clearly enough from the dimensions and condition of the present structure as to the nature and amount of the work to be done, to enable him to bid on the work in an intelligent manner. The County has no data on the subject and it is understood that the contractor's bid covers this work in its entirety as well as all work set forth in detail. In short, the Contractor shall build the said bridge with all its appertaining parts in a workmanlike manner, complete, neat and ready for use, furnishing all materials, coffer-dams, falsework, scaffolding, implements and labor required, and shall leave the completed structure in a neat and finished condition.

X

Inspection. All work under these specifications shall be inspected by the Engineer's Inspector or his Assistant, who shall see that these specifications are complied with, but his presence shall in no way release the Contractor from any responsibility or obligation whatsoever, Final inspection and acceptance will be made by the County Commissioners.

Location. The Contractor shall accurately locate the two abutments and the pier, both as to alignment and levels, from the contract plans, together with bench marks placed by the Engineer.

Present Structure. The present bridge shall be moved by the Contractor to location best suited for his operations, and there securely shored and provided with such temporary approaches as will render it as fit and safe for public traffic as it is at present, all at the cost of the Contractor and subject to the approval of the Engineer. It shall be maintained in a safe condition by the Contractor from the time of the signing of this contract until acceptance of the new bridge, after which it shall be removed by the Contractor from the premises as his property and disposed of as he sees fit. The Contractor has the option of building an entire new temporary structure if he so considers best, but it, as well as the old steel bridge, must later be entirely removed as directed above.

Progress. If, in the opinion of the Engineer, the Contractor shall be prosecuting the work with an insufficient force of workmen, or with an insufficient supply of materials for the prompt completion of said work, or shall discontinue the performance of said work before completion, or shall be improperly performing the work, or shall neglect or refuse to supply acceptable materials or work, or shall refuse to remove such materials or work, or to perform anew such labor as shall be rejected by the

Engineer as defective or unsuitable, then in any such case it shall be lawful for the said Engineer, and he is hereby authorized and empowered to employ, with the approval of the County Commissioners, such other Builder or use such method as, in his opinion, shall be required for the proper completion of said work, at the cost and expense of the Contractor. In any such case, all payments to the Contractor under this contract shall cease, and all moneys otherwise due, or to become due, shall be retained by the County, and so much thereof as required shall be applied to payment of the costs and expenditures incurred in making good the default of the Contractor, and the balance, if any, shall be paid to him in accordance with the terms hereof.

Disputes. In case any questions or disputes arise between the parties hereto in relation to the plans, drawings, descriptions, specifications and general provisions, or to the terms of the contract respecting the quality, quantity or value of the work or labor done, or the materials furnished, or to be done or furnished, or any of the terms, stipulations, covenants and agreements contained herein, or respecting any claim for extra work, or respecting any matter pertaining to this work, or any part of same, or any dispute arising by reason thereof, said questions shall be referred to the Engineer, whose decision thereon, when approved by the County Commissioners and the County Solicitor, shall be final, binding and conclusive upon all parties without exception or appeal, and all right or rights of any action at law, or in equity, under and by virtue of this contract, and all matters connected with it and relative to same, are hereby expressly waived by the Contractor.

Extra Work. No extra work other than that particularly designated in the proposal or specifications, nor any deviation from the

X

planes, shall be done or permitted by the Contractor, without the written consent thereto of the County Commissioners through their Engineer, first had and obtained, and any extras or alteration otherwise effected shall be wholly at the risk and expense of the Contractor.

Damage to the Public. And it is further understood and agreed that during the progress of said work the Contractor shall properly safeguard against any injury or damage to the public, or to any property or thing, and shall alone be responsible for any such damages or injury resulting from this work, to any person or persons or thing connected therewith.

Lawsuits. The Contractor further agrees to save harmless and protect the County from all suite or actions at law of any and all kinds whatsoever in connection with this work, and shall, if required, show evidence of settlement of any such action before final payment is made by the County.

Bond. The Contractor shall furnish a corporate surety bond in half amount of the contract price, which will be held by the County for one year after final acceptance of the work as a guarantee against any defects in the structure due to faulty workmanship or effects of cold weather. If the Commissioners so decide, the Contractor shall load the bridge as specified by the Engineer, to demonstrate its carrying capacity.

Payments. Will be made according to 85% of monthly estimate, furnished by the Engineer, of work done, and final payment will be made after inspection of the finished work by the Engineer and acceptance of same by the Commissioners and Viewers appointed by the Court.

WORKMANSHIP.

Excavation. The Contractor shall do all excavating necessary for the building of the abutments and pier and shall furnish all timber,

piling, sheet piling, bracing, shoring, etc., necessary to locate, maintain in position during construction and complete the new work.

~~X~~ No concrete shall be placed in the excavations unless they have been approved by the Engineer. The pits shall be drained of all water prior to depositing concrete, and no timber or other bracing used in building the dams or forms will be permitted to project into the finished work.

~~X~~ Fills. All openings or pits about the abutments and pier shall be filled with material excavated or similar, such fills shall be well compacted and left approximately to the natural form of surface now existing, all to the satisfaction of the Engineer.

~~X~~ Approaches. The approaches if disturbed during the work shall be restored to their present condition.

~~X~~ Roadway. The roadway on the bridge shall be finished to grade as shown on the drawing, and shall consist of a 3" earth fill with a 3" layer of 1 $\frac{1}{2}$ " water bound macadam, well rolled.

~~X~~ Draining. Drains shall be placed as shown on drawings and 18" wide cobble gutters built around the ends of all wings and down their slopes. These gutters shall be flushed with 1 to 3 cement grout.

Name Plate. One suitable bronze name plate 18" by 24", bearing the names of the County Officials and date of erection, shall be placed as indicated on the drawings. It shall be of sand blast finish except for lettering and border, which shall be hand bushed and shall be free from flaws and imperfections.

Cleaning. After completion of the structure, the Contractor shall remove all rubbish, etc., leaving the stream and adjacent property clean and free from all obstructions.

~~X~~ Concrete. Concrete for footings shall be of 1-3-5 mixture with 2 $\frac{1}{2}$ " stone; concrete in other portions of the work shall be 1-2-4 mixture with 3/4" stone. It shall be mixed by machinery as

approved by the Engineer; where hand mixing is permitted, the sand and cement shall be thoroughly mixed dry until no streaks occur, then the wetted stone shall be added and the whole mass turned over with sufficient water until every fragment of stone is thoroughly coated with the cement mortar. All concrete shall be deposited immediately in the work and thoroughly rammed and spaded in place.

For massive concrete, the consistency shall be such as to form a quaky mass which flows slowly.

For reinforced concrete, the consistency shall be "wet" or such that it will readily flow around the reinforcing bars and thoroughly fill all forms without undue tamping. All concrete shall be used immediately after mixing and before the initial set shall have taken place, and no retempered concrete shall be used.

Placing. In placing concrete, the reinforcing bars must not be disturbed. The concrete shall be tamped and churned to remove all air pockets and to insure thorough bonding of steel and concrete. All concrete shall be thoroughly spaded to insure good surfaces upon the removal of forms.

Concrete shall not be dropped from a greater height than six feet; when it is required to deposit concrete from a greater height than six feet, it shall be deposited by means of a chute or other device satisfactory to the Engineer.

The mixing and placing of the concrete shall be, as far as practicable, a continuous operation. Where it is necessary to bond new concrete to concrete partially or wholly set, the surface of the old concrete shall be roughened, thoroughly rinsed off and a thin coat of rich mortar, one to one, shall be applied just before the new concrete is placed.

In joining new work to old, the Contractor shall take every

precaution to insure a satisfactory bond, as the Engineer may direct.

All concrete shall be deposited in horizontal layers and all operations shall be regularly terminated by suitable bulk-heads and marking strips located as directed by the Engineer.

Concretes must be kept wet at least a week after depositing, and in dry, hot weather must, in addition, be kept covered from exposure to the sun during this time.

Freezing. Concrete shall not be laid in freezing weather except by special arrangement with, and under the supervision of, the Engineer,

In case it becomes necessary to lay concrete in freezing weather, the following precautions shall be observed:

(1) The aggregate shall be heated and entirely free from frost.

(2) Ten percent excess of cement shall be used.

(3) The mixing water shall be heated.

(4) The amount of water shall not be more than is actually required for the placing of concrete.

(5) All concrete shall be protected, preferably by covering with a tarpaulin, straw or similar, until it has thoroughly set. When concrete is laid in freezing weather, great care must be taken to ascertain that the concrete has attained sufficient strength before the removal of centers, and no set rule for the removal of forms under these conditions can be followed.

Wherever possible, it is desirable that the concrete should be heated after placing by means of salamanders, steam jets or other arrangements for supplying artificial heat.

Placing Steel. All steel shall be placed in strict accordance with the position shown on the plans and thoroughly tied to prevent misplacement during the depositing of concrete. No steel shall

be nearer than 2" to the finished surface.

Sand. Only clean, coarse, silicious sand of uniform color, to be approved by the Engineer, shall be used. It shall contain not more than 5% of its weight of loam or other foreign matter, and the grains shall be sharp and of varying sizes.

X A crushed rock or washed river sand will be preferred to a pit or bank sand. It shall be subject to rigid inspection at all times.

Stone. Stone for concrete shall be a crushed screened trap, granite or other hard stone not subject to disintegration due to atmospherical or other influences to which the concrete must be subjected. All stone must develop a crushing strength of at least 10,000 pounds per square inch, and must break with a cubical fracture. All stone shall be wetted immediately before mixing with mortar.

When $3\frac{1}{2}$ " stone is specified, it shall mean all broken stone passing a two and one-half inch ($3\frac{1}{2}$ ") ring and none of which shall pass through a screen with one-half inch ($\frac{1}{2}$ ") round holes.

When $3/4$ " stone is specified, it shall mean all broken stone passing a three-quarter inch ($3/4$ ") ring, and be retained on a screen with $1/4$ " round holes.

Gravel. Gravel of corresponding sizes composed of clean pebbles of hard and durable stone, free from clay and other impurities, may be substituted for broken stone. When gravel contains sand in any appreciable quantity, it shall be screened in order that the proper proportions may be maintained in the concrete mixture. Gravel obtained from a pit or bank must be screened or washed if, in the opinion of the Engineer, such precautions are necessary.

Embedded Stones. Embedded stone may be used in foundation concrete or as bonding stone. All such stone shall be clean quarried rock

or boulders of derrick of one-man size.

Water. Water used in mixing concrete shall be clean and reasonably clear, free from oil, vegetable matter, sulphuric acid, strong alkalies or other foreign matter which might disintegrate or discolor the concrete.

Cement. The cement used in the work shall be of well-known tried and acceptable brand of Portland Cement, approved by the Engineer, which has successfully passed the Standard Test of the American Society for Testing Materials as adopted and amended to date. The cement shall be shipped in bags and each shipment shall be accompanied by the laboratory report of the Manufacturers furnishing it.

Stone Masonry. It is the intention to use the present masonry in the new parts of the abutments, supplementing same with additional new stone if required.

This stone masonry shall be Sandstone Ashlar, laid in suitable courses. The thickness of courses may be gradually diminished towards the top in order to accommodate the copings at the proper levels, but must not be less than 8". Beds and joints or builds shall be square with each other and dressed true and out of wind. Hollow beds will not be allowed. Exposed surfaces of the face stone shall be rock faced, and the edges shall be pitched to true lines and exact batter. The face shall not project more than three inches beyond the pitch line. Chisel drafts one and one-half inches wide shall be cut at the exterior corners. Stretchers shall not be less than two feet long, and have at least one and a quarter times as much bed as thickness of course. Headers shall not be less than two feet; shall occupy one-fifth of face work; shall not be less than 12" wide in face, and, where the course is more than 18" high, width of face shall not be less than height of course.

×

Headers shall hold in heart of work the same size shown in face, so arranged that a header in a superior course shall not be laid over a joint, and a joint shall not occur over a header; the same disposition shall occur through the work. Headers in both sides of the work shall interlock when thickness of work will admit. Where the work is two feet thick or less, the face stone shall pass entirely through. In such case, backing shall not be allowed. Backing, where permitted, shall be of spalls fully bedded in cement mortar. The mortar for this work shall be cement mixed dry with sand in small batches in the proportion of one cement to two sand, water shall then be added, and the whole mixed until the mass of mortar is thoroughly homogeneous and leaves the hoe clean when drawn from it. Mechanical mixing to produce the same results may be permitted. Mortar shall not be retempered after it has begun to set. Mortar shall be kept in a suitable box, free from foreign matter. The stone shall be of the best quality sandstone, and must be free from powder cracks, dry and incipient cracks, flaws and all other imperfections. Loose or coarse-grained stone shall not be used. It shall be cleansed and dampened before laying, and shall be laid on its natural bed and solidly settled into place in a good bed of mortar. Stone shall not be dropped or slid over the work but shall be placed without jarring stone already laid. Heavy hammering shall not be allowed on the work after a course has been laid. Stones working loose after the mortar is set shall be relaid with fresh mortar. Stone shall not be laid in freezing weather unless authorized by the Engineer. If laid, it shall be freed from ice, snow or frost by warming, and the sand and water used in the mortar shall be heated. Before the mortar has set in beds and joints, it shall be removed to a depth of not less than one inch. Pointing shall not be done until the

work is complete and mortar set, nor when frost is in the ground. Mortar for pointing shall consist of equal parts of Portland cement and sand sieved to meet the requirements. In pointing, the joints shall be wet and filled with mortar pounded in with a "set in" or calking tool, and shall be finished to a neat weather joint, sloping downwards.

Copings. Copings on abutments to be 1-2-4 concrete mixed as specified above. Copings and abutment caps shall have a wet rubbed finish, true to dimensions and present a surface smooth and of uniform color, free from blotches, cracks or impressions from the forms. The forms shall be removed and all rubbing done while the concrete is still friable.

Reinforcing Steel. The bars shall be medium open hearth steel, subject to Manufacturers Standard Specifications. The surfaces shall be free from oil or other organic matter. While a slight rust film is not objectionable, no scaled or pitted bars shall be used. The bars may be plain round or deformed or equivalent section.

Lumber in Forms. All lumber shall be sound mercantile quality, ship-lapped or tongued and grooved as may be required by the nature of the work on which it is used.

Surface Finish. All exposed surfaces shall be wet rubbed immediately after removal of forms and shall present a pleasing appearance, free from all discolorings and blemishes, such as form marks, honey-combing, bulging, cracks, sweating, streaks or scaling. All surfaces, whether exposed or otherwise, shall be of a hard and close water tight texture.

Piles. Bearing Piles shall be of sound white oak, yellow pine or other timber or concrete, acceptable to the Engineer. They shall not be less than seven inches (7") at the small end and eleven inches (11") at the cut off, and must be thoroughly straight and

trimmed of knots, etc. They must be driven vertically until the sinking under one blow of the hammer, as directed by the Engineer, shall be minimized to suit the Engineer. Piles damaged during driving or improperly driven, will be paid for in proportion to their lessened efficiency, of which the Engineer shall be the judge. If piles are too short, they must be spliced as directed by the Engineer.

In case the Engineer so decides, sheet piles shall be driven along the neat lines of the footing and the thus formed pits drained prior to placing of any concrete. No extra compensation shall be allowed for such piles unless they are left in place after completion of the structure. In such case they shall be neatly trimmed 12" below low water and well braced with wales and stringers.

SUPERSTRUCTURE.

The superstructure consists of two complete plate girder spans, with solid floor in roadway, as hereinafter specified. All steel in superstructure is subject to Manufacturers' Standard Specifications. The workmanship on superstructure shall be as follows:

Riveted Work, Punching. All riveted work shall be punched accurately with holes one-sixteenth of an inch larger than the size of the rivet, and when the pieces forming one built member are put together, the holes must be truly opposite; no drifting to distort the metal will be allowed; if the hole must be enlarged to admit the rivet it must be reamed.

Holes for Field Rivets. All holes for field rivets in floor beam and stringer connections and splices in tension members, shall be accurately drilled to an iron templet or reamed while the

connecting parts are temporarily put together.

Planing and Reaming. In medium steel over 3/4 of an inch thick, all sheared edges shall be planned, and all holes shall be drilled or reamed to a diameter of 1/3 inch larger than the punched holes, so as to remove all the sheared surface of the metal.

Rivets. The rivet heads must be of approved hemispherical shape, and of a uniform size for the same size rivets throughout the work. They must be full and neatly finished throughout the work, and concentric with the rivet hole. All heads when driven must completely fill the holes, and the heads be in full contact with the surface, or countersunk when so required.

Riveters. Wherever possible, all rivets shall be machine driven.

Power riveters shall be direct acting machines, worked by steam, hydraulic pressure, or compressed air.

Bolts. When members are connected by bolts which transmit shearing strains, such bolts must have a driving fit.

Neat Finish. The several pieces forming one built member must fit closely together, and when riveted shall be free from twists, bends or open joints. All portions of the work exposed to view shall be neatly finished.

Contact Surfaces. All surfaces in contact shall be painted before they are put together.

Machine Work, Facing. All abutting surfaces in compression members shall be truly faced to even bearings, so that they shall be in such contact throughout the work as may be obtained by such means. The end of riveted floor girders shall be faced true and square.

Pins. All pins shall be accurately turned to a guage, and shall be straight and smooth.

Play in Pin-holes. The clearance between pin and pin holes shall be one-fiftieth of an inch for pins up to 3 $\frac{1}{2}$ " in diameter, which

amount shall be gradually increased to one-thirty-second of an inch for pine 6" in diameter and over.

Workmanship. All workmanship shall be first-class in every particular.

Painting. All metal work before leaving the shop shall be thoroughly cleaned from all loose scale and dust, and painted as noted on drawings. Pine, pin holes, screw threads and other finished surfaces shall be coated with white lead and tallow before being shipped from the shop.

Inspection. All facilities for inspection of material and workmanship shall be furnished by the Contractor to competent Inspectors, and the Engineer and his inspectors shall be allowed free access to any part of the works in which any portion of the material is made. The Contractor shall furnish without charge such specimens (prepared) of the several kinds of material to be used as may be required to determine their character.

Walks - Curbs. The side-walk shall be 3" yellow pine planks as per plan.

ARTICLES OF AGREEMENT.

THIS AGREEMENT, made this _____ day of _____
A. D. 1923, between the County of Clearfield, through its Commissioners, hereinafter called the party of the first part, and
_____ of _____
his (their) heirs, executors, administrators, successors or assigns, hereinafter known as the party of the second part.

WITNESSETH: That for and in consideration of the payments and agreements mentioned in the proposal hereto attached, to be made and performed by the party of the first part, and according to the terms expressed in the bonds referring to these presents, the party of the second part agrees with said party of the first part, at his own proper cost and expense to do the proposed work and to furnish all material and all labor necessary for said work in accordance with the plans and specifications appertaining to said work, and in full compliance with this agreement and the orders of the Engineer under it.

It is further agreed that the plans and specifications appertaining hereto, each of which have been signed by the respective parties to this agreement, as well as the bonds and proposals hereto attached, are all essential documents of this agreement and form part hereof.

It is also understood and agreed that if the second party should fail to make settlement with laborers or material men promptly, when any payments or wages are due them, the first party shall have the right to make payment thereof of the moneys so due, and any amounts so paid shall be deemed and considered as payment to the second party on this contract and the first party shall not be again liable therefor.

No extra work other than that particularly designated in the specifications, nor any deviation from the plans, shall be done or permitted by the second party, without the written consent thereto of the Engineer, first had and obtained, and any extras or alterations otherwise effected shall be wholly at the risk and expense of the second party.

The party of the second part further agrees to save harmless and protect the party of the first part from all suits and actions for infringements of patents whether granted or applied for on any device or method used in connection with the structure referred to, and shall, if required, show evidence of settlement with patentee before final payment is made by the party of the first part.

And it is further expressly understood and agreed that during the progress of said work the party of the second part shall properly safeguard against any injury or damage to the public, and shall alone be responsible for any such damage or injury resulting from said work to any persons or anything connected therewith.

Wherever throughout this contract the word Engineer is used, it is mutually understood and agreed that G. A. Flink, of Harrisburg, Pa., is hereby intended.

This contract shall not go into effect until it and the bond accompanying it shall be approved by the proper Court of Clearfield County, whereupon it shall at once become operative.

IN WITNESS WHEREOF: The parties hereto have set their hands and seals on the date herein mentioned.

Contractor

(SEAL)

Board of Commissioners of
Clearfield County

(SEAL)

(SEAL)

Attest:

County Clerk.

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Meeting September 6, 1922.

Commissioneers all present. The minutes of the two previous meetings were read and approved, Mr. W. E. M. presiding, together with County Engineer Mr. Whitaker & Dethel.

It having developed that plans and specifications for building library bridge specified but one sidewall, and bids ~~each~~ represented only one sidewall. and it being the intention of the Commissioneers that a bridge sidewall bridge should be constructed, but the contract was also given to the bond required were delivered to the County Commissioneers and the contractors have started the work.

The bridge was let to Whitaker & Dethel after due advertisement over their bid on August 24; contractors agreed to also the bond required were delivered to the County Commissioneers and the contractors have started the work.

At this point the controller and Collector were recalled into the room and the matter was discussed at considerable length, both solicitors agreeing that the additional sidewall should be built, and be so done on a price not to exceed \$2500 for the building as an extra of an additional sidewall six feet in width not to exceed \$2500. The actual price of extra work based on the bid of Whitaker & Dethel except as to the extra of an additional sidewall \$2500 for the building as an extra of an additional sidewall six feet in width not to exceed \$2500. The actual price of extra work based on the bid of Whitaker & Dethel except as to the extra of an additional sidewall \$2500 for the building as an extra of an additional sidewall six feet in width not to exceed \$2500.

RESOLVED, that the Engineer of the County is hereby authorized to agree with the contractors Whitaker & Dethel on a price not to exceed \$2500 for the building as an extra of an additional sidewall six feet in width not to exceed \$2500. The actual price of extra work based on the bid of Whitaker & Dethel except as to the extra of an additional sidewall \$2500 for the building as an extra of an additional sidewall six feet in width not to exceed \$2500.

IN RE SIDEWALL
ON MACHAFEE BRIDGE.

Y. E. Hansen
E. L. Clark

Meeting adjourned.

was adopted.

of J. E. Dethel, seconded by H. L. Farrel, the resolution part of the lump sum of their bid on the bridge. On motion by the contractor, which form the basis of this bid in and railing, which are to be based on the estimates made on the bid of Whitaker & Dethel except as to the extra of an additional sidewall six feet in width not to exceed \$2500. The actual price of extra work based on the bid of Whitaker & Dethel except as to the extra of an additional sidewall \$2500 for the building as an extra of an additional sidewall six feet in width not to exceed \$2500.

RESOLVED, that the Engineer of the County is hereby

read:

item not to exceed \$2500, whereupon the following was read: under the item of extras, the cost of this particular the additional sidewall should be built, and be so done at considerable length, both solicitors agreeing that the additional sidewall should be built, and be so done on a price not to exceed \$2500, whereupon the following was read:

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Y. E. Hansen
E. L. Clark

Meeting adjourned.

