

New Jersey Court of Errors and Appeals

MAX MILLER,

Prosecutor-Appellant,

vs.

THE MAYOR AND COUNCIL OF
THE CITY OF HOBOKEN, DANIEL
A. HAGGERTY, Clerk, and
WILLIAM T. S. CRICHFIELD,
Defendants-Respondents.

*On Appeal
from Supreme
Court.*

Brief for Respondents.

Statement of the Case.

A writ of certiorari was allowed on May 20, 1916, to review a resolution of the Board of Commissioners of the City of Hoboken, passed May 3, 1916, awarding to the defendant, Crichfield, a contract "for grading and paving with asphalt on a concrete foundation" of Madison street and certain other streets in the City of Hoboken. Crichfield was the lowest bidder for this work. The prosecutor, Miller, is a property owner in Hoboken (pp. 1-2).

The writ was heard before the Supreme Court on June 19, 1916. On June 30, 1916, a *per curiam* opinion was filed as follows:

"We think the specifications furnished a common standard for bidding. We must assume that the power reserved for the engineer will be fairly exercised and we see no reason to think it is not reserved for the purpose of enabling the engineer to save the city's money by avoiding such changes of grade as might lead to actions for damages.

“We think the contract contemplated is a single contract for repair work and is not to be regarded as so many separate and distinct contracts for each street.

“Assuming that the contention of the prosecutor is correct and that Crichfield and the Uvalde Company are indetical in interest, we would not be justified in setting aside the contract. Upon that assumption, there was but one bidder and the commissioners might have been justified in rejecting both bids, but they might also in the exercise of their discretion, have been justified in awarding the contract. It cannot be said as a matter of law that it is improper to award a contract when there is only one bid.

There must be judgment for the defendants.”

It is from this decision that the present appeal is taken. The reasons urged in this Court for reversal are the same as those urged in the Supreme Court.

Argument.

We shall follow the logical order of the objections covered by the “reasons” instead of their numerical order.

I.

The fact that there were only two bidders for the work in question does not invalidate the award of the contract to the lowest bidder.

The return to the writ shows that there were two bidders, Uvalde Asphalt Paving Company and William T. S. Crichfield (p. 13, l. 40). Each submitted a unit bid, that is, so much per lineal

foot, or so much per square yard, or so much per cubic yard, as the case might be. The bid of the company when extended amounted to about \$125,770 (p. 77, ll. 15-20). The bid of Crichfield when extended amounted to about \$121,106 (p. 77, ll. 10-15). This objection as we understand it, is that there was no actual or real competition, and that by reason of an agreement whereby Crichfield was to act as general superintendent of the Uvalde Asphalt Paving Company, that company had a secret interest in his bid, and that by reason of this agreement Crichfield's bid was excessive and exorbitant. The mere fact that there were only two bidders can in no way affect the validity of the proceedings. It is not unusual in cases where work must be given to the "lowest responsible bidder" to find only one bidder. A recent case is *Ruby v. Freeholders of Hudson*, 97 Atl. 289. In that case bonds had to be sold in order to pay for the proposed improvement of the Newark Turnpike road. The statute required bonds to be sold to the highest bidder; there was only one bidder and the bonds were sold to that bidder. The case was decided on another point, but this question was not referred to by the court and indeed it was not even raised by counsel, except in considering another point upon which it had some bearing. No objection could be made because only one bid was submitted, for if more than one person will not bid that is no reason why if the person who does bid submits a bid that is satisfactory to the municipality, it should not be accepted. Further, it is no reason why the municipality should hold up the repair of a large number of streets that need repair very badly (p. 200, ll. 20-30).

In the present case we have two bidders, but the contention is that the successful bidder being the salaried employee of the other bidder and the other bidder being, as alleged, secretly interested in the successful bidder's proposal that therefore the successful bidder bid higher than he otherwise would. There is no evidence supporting the statement that the Uvalde Asphalt Paving Company was actually or secretly interested in the bid of Crichfield, and there is no evidence that Crichfield's bid was excessive or exorbitant. The testimony shows that this point was not made when counsel for the prosecutor argued the application for the writ and he admits on the record that at that time he had no evidence to substantiate it (p. 78, ll. 25-30). In view of the fact that we permitted counsel for the prosecutor to take testimony before he served his reasons (for the writ was allowed on condition that it be argued at the next ensuing term of the Supreme Court, June, 1916), we impliedly understood that he would limit himself to the points made on the application for the writ.

When it came time to take the testimony counsel for prosecutor went on a "fishing expedition," so to speak, and thinking that he has disclosed something worth while in regard to the bidders, he inserts it in his reasons—which were not served until June 7, 1916. (See p. 70, ll. 30-40). However, there is nothing in this point for the testimony shows the following arrangement between the two bidders:

Mr. Crichfield is the general superintendent of the Uvalde Asphalt Paving Company. The contract showing the relations existing between the Uvalde Asphalt Paving Company and Mr. Crichfield was offered in evidence and consisted of three papers each of which was marked as a

separate exhibit (Exhibits P. 1, 2 and 3, pp. 237-247). These three documents must be read together in order to have the complete contract (p. 74, ll. 25-35).

Exhibit P. 1 is an agreement dated May 5, 1910, appointing Mr. Crichfield resident manager of the Uvalde Asphalt Paving Company in Havana, Cuba (p. 237).

Exhibit P. 2 is an agreement dated April 2, 1912, cancelling the agreement contained in Exhibit P. 1 and appoints Mr. Crichfield general superintendent of the Uvalde Asphalt Paving Company in the United States for a term of five years, commencing January 1, 1912 (p. 240).

Exhibit P. 3 is an amendment to the agreement of April 2, 1912 (Exhibit P. 2) giving Mr. Crichfield the right to bid on his own account, but under no circumstances must he ask any official of the company to assist him in making out his figures or to give him any data—"to the end that there must be no collusion of any kind."

Exhibit P. 3 shows clearly the relation existing between the Uvalde Asphalt Paving Company and Mr. Crichfield (p. 246). These three exhibits which were called for by the prosecutor and offered in evidence on his behalf show conclusively that the Uvalde Asphalt Paving Company had absolutely no interest in the bid of Mr. Crichfield. The evidence likewise shows this to be so.

Mr. Crichfield testified that during the pendency of these contracts he has taken a great amount of street paving work in his own name and performed it himself. He has performed about 66,000 square yards of bituminous concrete work in Jersey City. He now has a contract for 79,000 square yards of sheet asphalt paving work which is in process of construction in Bayonne. He also at the present time has about 25,000 square

yards of sheet asphalt paving work in course of construction in the City of Newark. He also in his own name did some paving work on the Hudson Boulevard under contract with the City of Bayonne, amounting to \$225,000. He also had a contract for the repair of asphalt streets of Jersey City amounting to \$25,000 or \$26,000; and also another contract in Bayonne to repair certain pavements out of guaranty. The work he has performed in his own name would amount to the sum total of approximately \$450,000 (p. 87, ll. 1-30). The Uvalde Asphalt Paving Company has had no interest whatever in any of these contracts. In all of these contracts, except one, the Uvalde Asphalt Paving Company was a bidder and all of the work in question was done since April 12, 1912, the date of Exhibit P. 3, which gives Mr. Crichfield the right to perform work in his own behalf and to bid in his own name (p. 85, ll. 30-40).

Mr. Crichfield explains the three documents offered in evidence, Exhibits P. 1, 2 and 3. He testified that, although he had made the contract with the Uvalde Asphalt Paving Company offered in evidence as Exhibit P. 1, to act as resident agent or manager of that company in Havana, Cuba, it did not take effect, due to his inability to leave his own work in the United States; that, therefore, another contract (Exhibit P. 2) was substituted for the first contract on April 2, 1912. This second contract was drawn by Judge Clark of New York and left at the New York office of the Uvalde Asphalt Paving Company for his signature. He objected to executing the contract until such time as the company would confirm his verbal understanding that he should be permitted to bid upon work in his own name and for his own account; and on the assurances of Mr. Rokeby, the president of

that company, that such an agreement would be forwarded to him at once, he executed the contract marked Exhibit P. 2. About ten days thereafter he called at the office of the president of the company (Mr. Rokeby) and received the confirmation of the agreement between them which is expressed in the letter of April 12, 1912, offered in evidence as Exhibit P. 3, and since April 12, 1912, he has been working under the agreement contained in these documents (p. 88, ll. 1-35).

Mr. Crichfield testified that the Uvalde Asphalt Paving Company had absolutely no interest of any kind in any of his personal contracts except that he might buy some of the asphalt that he would use from that company, provided it sold the asphalt to him at the same price that he could buy it in the open market; if not, he would purchase it in the open market or from the agents and sellers of the General Asphalt Company, the owner and manufacturer of the asphalt, which company is in no way connected either with him or with the Uvalde Asphalt Paving Company. He further testified that it was his intention on this contract to purchase the stone for the foundation from the New York Trap Rock Company, the sand from the Goodwin Sand & Gravel Company, the cement from the Edison Portland Cement Company and the manholes from the Fagan Iron Works, of Hoboken (p. 89, l. 30 to p. 90, l. 25).

At the time Mr. Crichfield prepared his bid for the contract in question he had absolutely no knowledge that the Uvalde Asphalt Paving Company was going to submit a bid (p. 90, ll. 20-30). He had no idea who was going to bid (p. 90, l. 25). He did not prepare the bid that the company submitted for the work in question and

he has not, since the contract of April 2, 1912, prepared any of the bids of the company. Mr. Rokeby, the president of that company, makes out the bids and executes them most of the time; sometimes Mr. Brown, the treasurer of that company, performs the same work. Mr. Crichfield is never consulted in regard to the preparation of the bids of the company and he never sees that company's bid before it is submitted. He did not in the present case see the bid of the company either before it was submitted or since. He has not even seen a copy of it (p. 90, l. 30, to p. 91, l. 20). The only thing that he knows about the company's bid in the present instance is that the company bid higher than he did (p. 90, l. 25).

Reference was made by counsel for the prosecutor in his examination of Mr. Crichfield to the fact that at times he uses the plant of the Uvalde Asphalt Paving Company in Jersey City, including its automobile trucks and other appliances, but he stated he paid \$125 a day for the use of the plant and this amount is only for the use of the factory and does not include the rolling stock, which he has to pay extra for. When he uses the company's automobiles he pays for them at the rate of \$2.50 an hour and as a working day usually constitutes ten hours, he pays \$25 a day (p. 92, ll. 10-25).

It is clear from the testimony of Mr. Crichfield that he never bought any of the material used by him from the Uvalde Asphalt Paving Company unless he could buy it from them just as cheap as he could in the open market; and that he never used that company's plant unless he paid for it. This does not show any secret arrangement whereby the Uvalde Asphalt Paving Company was to reap any secret benefit from the fact that Mr. Crichfield was bidding.

What difference does it make whether he buys some of the material that goes into a certain improvement from the Uvalde Asphalt Paving Company, or from any other company so long as he pays for it, and gets it just as cheap as he would get it if he bought it in the open market. This is the only evidence that has been adduced in this case to show that the Uvalde Asphalt Paving Company has an interest in Mr. Crichfield's bid. It will be noted that counsel for the prosecutor is very careful not to charge fraud or collusion of any kind, for there is not a scintilla of evidence to justify any such assertion. Although there is no evidence of fraud or collusion, it is rather unusual to find that counsel for the prosecutor has thus restrained himself, for it will be remembered that in the Mueller case, 87 N. J. L., 702, where both Crichfield and the Uvalde Company were bidders and the contract was awarded to the Uvalde Company because it was the lowest bidder, he closes his brief (p. 55) in the Court of Errors with the following statement:

“In conclusion we wish to voice it as our opinion that these specifications were deliberately framed to prevent competition and for the purpose of awarding this work to Uvalde Asphalt Paving Company. The systematic rejection of samples of outside bidders—the destruction of rejected samples—the tests made with the instruments of Uvalde Asphalt Paving Company and finally the refusal to reject all bids and open the specifications to fair competition, and the deliberate election to spend *thirty-eight thousand three hundred and sixty-five dollars more than appears necessary* for this pavement when the board had full power to reject all bids, plainly

points to a conspiracy to award this work *at any price* to Uvalde Asphalt Paving Co.”

Notwithstanding that statement by counsel, the Court of Errors, after a very careful consideration of that case, affirmed the decision of the Supreme Court for the reasons there assigned. It is unfair thus to attack a contractor when there is no evidence of any kind to support the attack, but on the contrary, the evidence shows, without dispute, that there is a perfectly lawful and justifiable business arrangement between two contractors whereby neither knows what the other bids and neither has any interest in the other's contract.

We may also call the court's attention to the fact that the only evidence offered in behalf of the contentions made by the prosecutor is that of Joseph Murphy, who is general superintendent of the Clinton Contracting Company, a rival contractor. His assertions are in no way corroborated; the company of which he is general superintendent is a very small concern with only \$1,000 of paid-up capital and with inconsiderable assets.

The prosecutor Miller had previously failed in a chancery proceeding with Mr. Richard Doherty as his solicitor, against the City of Hoboken, and having lost that suit, he had to pay the taxed costs of the defendants when he had been informed by Mr. Doherty that there would not be any costs of any kind, that is, no charge for the services of Mr. Doherty; and he was very much surprised when he had to pay the taxed costs of the defendants upon losing the suit (p. 138, ll. 1-40). He also admitted that Mr. Doherty did not render him any bill for the services performed in that case. However, he says that in

the present case his interest is that of a taxpayer and a citizen and that he is bringing this suit of his own volition, and that nobody asked him to bring it. Mr. Miller admitted that he knew his counsel is also counsel for Mr. Murphy.

The evidence further shows that on May 3, when bids were received for the work in question by the City of Hoboken, bids were also received by that city for the repair of seven other streets (all in one proceeding) and that the plans, specifications and contracts in each case were identical, with the exception that one specification calls for a top surface of asphalt while the other calls for a top surface of stone block. Both contracts provide for a concrete base, for excavation and fill in identical language, and the plans are prepared in the same way and the provision with regard to old and new curb is identical. In other words, the two contracts are exactly the same except for the difference in the kind of material to be used on the surface. The contract for the stone block surface has not been attacked, that contract having been awarded to a Mr. Cavanagh, who testified in the present proceeding.

It is odd that Mr. Miller should single out one of two contracts for attack when they are identical, containing exactly the same provisions; and claim that in the one case the plans, contract and specifications did not furnish prospective bidders a common standard for bidding and prevented fair competition while he leaves the other contract to be performed without any complaint of any kind. If the one contract does not furnish to prospective bidders a common standard, the other does not; and if Mr. Max Miller had a bona-fide desire to protect the city's interest, we cannot understand why he attacks only one of the two.

The final answer to the contention here made is that under the act providing for the award of this contract to the "lowest responsible bidder" the municipality has the right in its discretion to reject any and all bids. The statute in question (P. L. 1912, Ch. 342, p. 593) provides that such a contract shall be awarded to the "lowest responsible bidder; provided, however, that said public body may nevertheless reject any and all bids." This is the remedy of a municipality in the event that it should come to the conclusion that it is being charged too much for the work to be done, or that there was not enough competition. In other words, if only one bid is submitted a municipality has a perfect right to reject it and readvertise. This was done in the Ruby case referred to *supra*, when bonds were first advertised for, and when after the second bidding only one bidder put in a bid, it then gave the contract to that bidder. In the present case we have two bidders and there is no evidence in the case to show that the bid of the successful bidder, Mr. Crichfield, is excessive or exorbitant, or that there was any collusion between the two bidders.

It may be claimed that the requirement for the submission of samples of materials five days in advance of the opening of the bids gave an opportunity for collusion.

The provision in question in the specifications is as follows (p. 43, ll. 15-44):

"Bidders must deposit with the city clerk five days before presentation of bids, samples of material which they propose to use on the work."

and then follows a list of samples required.

A requirement of bidders to furnish samples of the material to be used, particularly where an asphalt pavement is under competition, is common and has often been judicially sustained. A requirement that the sample shall be furnished in advance of the bidding is less common, but is equally reasonable. An adjudged case directly in point is *Case v. Trenton*, 76 N. J. L., 696—a unanimous judgment of the Court of Errors and Appeals reversing the Supreme Court—whose opinion is not reported, but which went on the ground of waiver. This court held that the requirement could not be waived.

Such requirement was:

“No bid shall be considered unless samples of the material to be used, and a sample of the wearing surface, have been deposited with the city engineer, and a receipt given therefor at least twenty-four hours before the time fixed for the opening of the bids.”

Bidders were cautioned as follows:

“Bidders will carefully study specifications and form before submitting proposal and will not forget to deliver samples required, at least twenty-four hours before the time fixed for opening bids.”

This requirement was upheld, and the contract awarded to the lowest bidder was set aside because of its failure to comply therewith. Justifying the requirement, Reed, *J.*, said.

“The insistence upon the deposit of these samples with the engineer indicates the importance attached to their presence. One purpose of the deposit of these samples was obviously to enable the engineer to ascertain whether they conformed to the description contained in the proposal; but another purpose was that they should remain as

standards by which all materials furnished in executing the work could be compared."

This decision disposes adversely of any claim that to require samples to be furnished before bidding would disclose who were competing. Other cases in which similar provisions will be found are *Dixey v. Atlantic City*, 71 N. J. L., 20; *McGovern v. Trenton*, 84 N. J. L., 237, 242. Of course, there would be no publicity when the engineer alone presumably would be the only one to know who furnished the samples, and the time for analysis of the samples was not limited to a time preceding the opening of bids. Furthermore, there is no evidence that anyone knew who had submitted samples in this particular case, but on the contrary the successful bidder testified that he does not know to this day who, in fact, did submit samples, (p. 93, l. 20). It is to be remembered that the requirement is not being attacked by a prosecutor desiring to bid, but by a taxpayer. No prospective bidder claims that he was deterred from bidding because of this requirement.

At the request of Mr. Walscheid, counsel for the prosecutor, we stipulated on the record (p. 102), subject to our objection that it was immaterial, that Mr. Hobart (of counsel for Crichfield) telephoned to the office of Mr. Walscheid on the 2d day of May, 1916, and asked him whether he intended to apply for a writ of *certiorari* to review the proceedings in question. The award was to be made on May 3, 1916. We do not see how this is material. Having received information that Mr. Walscheid intended to attack the proceedings in question, we deemed it prudent to ascertain whether our information was correct, and if so, to request notice of the time when the application would be made so that

we might also be heard. In these days of preparedness, having received the information that an attack would be made, there was no reason why we should not prepare to meet it.

Counsel for the prosecutor made a similar argument on behalf of the prosecutor in the case of *Mueller v. Boulevard Commissioners of Hudson County*, 87 N. J. L., 702, as follows:

“There are other unfair provisions in the specifications at bar; provisions detrimental to the taxpayer in that they deter competitive bidding without reason. Thus the requirement of the deposit by prospective bidders of samples five days before the letting can serve no useful purpose and is usually indulged in where there is collusion with some favored bidder.” (See brief of Appellant in that case, p. 54).

The Supreme Court in deciding the *Mueller* case, adopting Justice Swayze's opinion denying the application for the writ said, that this point did not even “seem to require mention,” and this Court approved the decision. It will be noted that the specification in the *Mueller* case provided the same period of time in which to submit samples as the specification in the case at bar, viz., five days.

The *Mueller* case is direct authority and controlling. On authority and principle the provision is legal, just and reasonable.

The rule is well settled that this Court on *certiorari* will not review the determination of a municipal board where there exists a rational basis to support it. In the absence of fraud or palpable abuse of discretion the only question for the court is whether there has been any violation of legal principles or neglect to prescribe

formalities in the award of the contract. If there is not then the award will not be disturbed.

McGovern v. Trenton, 57 N. J. L., 580.

Van Reipen v. Jersey City, 58 N. J. L., 262.

Moreland v. Passaic, 63 N. J. L., 208, 215.

Schwitzer v. Board of Education, 79 N. J. L., 342.

The Supreme Court's conclusion with regard to this phase of the case is undoubtedly sound. That Court said:

“Assuming that the contention of the prosecutor is correct and that Crichfield and the Uvalde Company are identical in interest, we would not be justified in setting aside the contract. Upon that assumption, there was but one bidder, and the Commissioners might have been justified in rejecting both bids; but they might also in the exercise of their discretion have been justified in awarding the contract. It cannot be said as a matter of law that it is improper to award a contract when there is only one bid.”

No fraud or palpable abuse of discretion is charged in this case, and therefore the only question left for the Court to decide is whether there has been any neglect of prescribed formalities.

II.

The fact that the improvement of several streets has been included in the one proceeding does not invalidate the proceeding.

The resolution of May 17, 1916, awarding the contract in question to Mr. Crichfield provides for the re-improvement of several streets as follows (p. 19, l. 20.):

“Resolved, that the contract for the repaving and reimprovement with asphalt on a concrete foundation of Madison street from Ferry street to about 225' north of Second street, Adams street from Newark to Second street, Clinton street from Newark to First streets, Willow avenue from Ferry to Third streets, Park avenue from Ferry to Fourth streets, Bloomfield street from Ferry to Newark streets, and from First to Fourth streets, Second street from Bloomfield street to Willow avenue, in the City of Hoboken in accordance with the plans and specifications prepared therefore by Joseph G. Whittemore, City Engineer and Surveyor, approved by the Board of Commissioners of the City of Hoboken, April 12, 1916, be and is hereby awarded to W. T. S. Crichfield, the lowest responsible bidder therefor, at the unit prices mentioned in his proposal, or bid, submitted to the Board of Commissioners of the City of Hoboken at a meeting of said body, held May 3, 1916.”

The objection made to this method of procedure is that the City of Hoboken had no right to include in one contract the reimprovement of several streets, but that the City should have made a separate contract for the reimprovement of each street. The proceeding in question is authorized by Chap. 210 of the Laws of 1907 (P. L. 1907, p. 466); Sec. 1 of this statute provides:

“Whenever any street, avenue, road or highway in any city of this State has been heretofore improved, and an assessment for benefits for making such improvements has been heretofore levied and imposed upon the

property specially benefited by said improvement, and such street, avenue, road or highway, or any portion thereof, has become out of repair, and has fallen in such condition that in the opinion of the governing body of such city it would be of greater advantage to such city to remake and reimprove such street, avenue, road or highway, or any portion thereof, it shall be lawful for the governing body of such city to cause the same to be repaved with stone, brick, asphalt, macadam or other suitable material, and to cause the sidewalks thereof to be relaid and the curbs thereof to be reset with some proper material."

It will be noted that the statute provides that it shall be lawful for any city to cause any street to be repaved, providing it comes within the other conditions set forth. The evidence shows that the streets in question come within the provisions of the statute (p. 118, ll. 10-40), and therefore the city would have the right to pave any one of the streets.

The question then is whether under this statute several streets can be combined in one proposal and one contract. Under the statute the cost and expense of making any such reimpvement is borne and paid by the city at large, and not by the owners of property specially benefited by the improvement. If we examine the act relative to statutes (4 Comp. Stat. 4972, pl. 9; Rev. 1877, p. 1121) we find that the following construction should be given to a word importing the singular number:

"That whenever, in describing or referring to any person, party, matter or thing, any word importing the singular number or masculine gender is used in any statute,

the same shall be understood to include, and shall apply to several persons and parties, as well as one person or party, and females as well as males, and bodies corporate as well as individuals, and several matters and things as well as one matter or thing, unless it be otherwise provided, or there be something in the subject or context repugnant to such construction."

The act of 1907 will be examined in vain for any provision repugnant to the incorporation of more than one street within the terms of one contract. If the cost of the reimprovement was to be assessed against property benefited then there might be some cause for complaint, for in that event it might not be possible to ascertain how much benefit a property owner received from the improvement when the cost for any particular street was not shown. See *Beechwood v. Summit*, 78 N. J. L., 182; *Worth v. Westfield*, 81 N. J. L., 301, 304. The Illinois cases cited in the first case *supra* were both cases of original improvements where the cost was to be assessed against property specially benefited. This objection cannot prevail here because, first, the cost is not assessed against the property benefited, but against the city in general; and, second, the specification for the work does not call for a lump sum bid for the entire work, but on the contrary a bidder is compelled to bid on a unit basis (p. 60, ll. 20-40). For example, the sheet asphalt had to be bid for at so much per square yard; for the concrete base the bidder had to bid so much per cubic yard and for curb so much per lineal foot (p. 42, ll. 1-10; p. 60, ll. 20-40). Since a bidder had to bid so much per square yard or per lineal foot as the case might be, the cost for any certain

block or street could very easily be ascertained by finding out how long the block or street was.

It is impossible to suggest any hardship or any difficulty that would be sustained by anybody by reason of the fact that the reimprovement of several streets are included within the one proposal and contract. On the other hand, the combining of several streets that have to be repaired in one proceeding gives this result: First, that it expedites the repair of streets that need repair, and in this case the streets in question are in very bad condition; and, second, it saves the municipality a great deal of expense. If this court should hold that it is necessary for the municipality to provide for the repairing of each street by a separate contract, plan and specification it would mean, first, that the city would have to provide seven separate contracts, plans and specifications, and it would have to advertise seven separate and distinct proposals and after the work is awarded the city would have to advertise the resolution awarding each contract in each case. This would involve a great amount of expense. Of course, it would be proper to require this expenditure if it was necessary, but when no reason of any kind exists why separate proceedings should be taken for the improvement of each street it is unreasonable and unjust to demand such an expenditure of money. Then again, it is obvious that if a municipality has to authorize the repair of each street by a separate proceeding, the probabilities are that it will have to pay more for the work. If a bidder has to bid on small quantities of work with a prospect of only getting a contract for the repair of one street, his bid would probably be higher than if he were bidding on several streets.

It will be remembered that competitive offers or bids have no other object but to insure economy and exclude favoritism. If this is the sole or principal object of competitive bidding then the combining of the improvement of several streets within one contract or proposal is clearly within the object and reason of such bidding. Dillon on Municipal Corporations, Sec. 802, p. 1199, has the following to say in this regard:

“Competitive offers or bids have no other object but to insure economy and exclude favoritism and corruption in the furnishing of labor, services, property, and materials for the uses of the city. This is the only purpose of the statutes, and when this effect is given to them, nothing further is needed.”

On the one hand we have no good reason in logic or on principle why several streets should not be combined in one contract, and our act concerning statutes clearly provides that the singular shall import the plural unless such a construction is repugnant to the subject or context of the statute. The combining of several streets tends to economy in the expenditure of the public money; while on the other hand the failure to combine several streets in the one proceeding leads to a large expenditure of money by the municipality, with the probability that it would have to pay more for the work than it would if they were combined.

It will also be remembered that on May 3, 1916, when the contract in question was awarded, a contract for the repair of seven other streets was awarded by the City of Hoboken. All of these streets were incorporated in one proceeding and only one contract was awarded for their repair. If the prosecutor was sincere in his effort to protect the municipality's interests, he

would have attacked both proceedings. He gives no reason explaining this inconsistency, and in the absence of explanation the inference necessarily arises that some ulterior reason prompts the prosecutor in his present attack.

The Supreme Court held that the contract was a "single contract" for the repair of several streets and this conclusion is undoubtedly sound.

We therefore submit that the combination of several streets in one proceeding does not invalidate the award of the contract.

III.

The contract, plans and specifications are definite and certain as to the grades of the different streets to be improved, and therefore it was possible to ascertain the amount of fill, excavation or concrete required.

(a)

The grades of the streets in question were definitely and accurately fixed by the plans and specifications.

The specifications provide (p. 38, l. 35):

"The work to be done under this specification consists in taking up and removing the present stone block pavement, and such curb as may be condemned by the City Surveyor-in-Charge, furnishing new asphalt pavement and such other material as may be required for laying the same, furnishing such filling as may be needed and doing such excavation and grading as may be required to permit the new pavement on a concrete foundation *to conform to the lines and grades required by the plans*, straightening, regulating and resetting the present

curb where directed, setting new curb where considered necessary by the City Surveyor-in-Charge; resetting at a higher or lower grade receiving basins and gutter stones and sewer manhole heads, and doing such other work as is necessary and incidental to the improvement of the above mentioned streets; in accordance with the plans signed by J. O. Whittemore, City Surveyor, and dated April 12th, 1916, and such other plans and detail drawings as may be furnished from time to time for the proper execution of the work and which must be taken as a part of these specifications."

It will be noted that the above provision of the specifications provides that the new pavement is to conform to the lines and grades required by the plans. Upon referring to the plans we find that red lines and figures indicate the established grades for each of the several streets involved (Exhibit P. 4). These grades were established by ordinance of the City of Hoboken passed in the year 1888, and the grade maps for the several streets are on file in the City Hall (p. 191, l. 35, to p. 192, l. 20). Since the ordinance was passed the streets have settled somewhat so that at the time the plans in question were prepared and bids called for the actual physical grades of the several streets were lower than the established grades. The plans indicate the present surface or actual grade of the several streets by means of black lines and figures. In order that the established and the present grades might not become confused by a prospective bidder the following legend was inserted on the plan in the lower right-hand corner (Exhibit P. 4):

“Red lines and figures indicate established grades. Black lines and figures indicate present surfaces.”

Up to this point there is no dispute of any kind; it is admitted that the plans and specifications are perfectly clear. The only witness who in any way attacks the plans and specifications, because of the alleged claim that no grade is shown, is Joseph Murphy, general superintendent of the Clinton Contracting Company, a rival concern. He, however, admitted that thus far the plans and specifications were perfectly clear, and that therefore the grade to which the streets in question would be brought would be the “established grade;” or, in other words, the grades fixed by the ordinance of the City of Hoboken. Mr. Murphy testified that if there was *nothing* on the plans indicating that the extent of the grade would be determined by the Director of Streets and Public Improvements, then he would have had no difficulty in knowing to what grade to improve the streets (p. 133, ll. 15-35). The clause to which Mr. Murphy referred is on the plan and is as follows:

“The extent to which present grades shall be raised will be determined by the Director of Streets and Public Improvements during the progress of the work.”

This is the clause which Mr. Murphy says makes it impossible for him to determine to what grade the streets are to be improved. In other words, if this legend had not been on the plan he would have improved to the established grades as fixed by the ordinance (p. 133, ll. 25-35). The city engineer who drew the plans was called as a witness on behalf of the defendants, and he testified that he has been a civil engineer

for about 28 years; that for 19 years (since the first concrete foundation was laid in Hoboken) he has been laying this kind of pavement in Hoboken and has been in charge and supervision of the work during that period of time, first being associated with his brother, and for the last 4 years on his own behalf he has been drafting the plans and specifications for that city (p. 185, ll. 1-30). During the past four years practically all of the streets in Hoboken have been laid on a concrete foundation, and of this kind of work during that period Mr. Whittemore, the city engineer, has supervised about 200,000 square yards (p. 184, ll. 1-30). He prepared the present plans and specifications and he indicated the different grades on the plans. He testified that the established grades as shown on the plans in question are the same as those on the grade map of the City of Hoboken, which was authorized by ordinance in 1888 (p. 185, ll. 15-40). He testified that most of the streets in question are not at the present time up to the established grade, and therefore he thought it proper on the plans to state the variances between the established grade and the actual grade. The established grade, as shown on the plans, was only so fixed after Mr. Whittemore had thoroughly gone over and inspected the line of the work and examined the established grade by taking levels thereof (p. 186, ll. 1-20).

The clause objected to by Mr. Murphy as to the extent to which the actual grades shall be raised is explained by Mr. Whittemore, the engineer, as follows (p. 191, l. 35, to p. 192, l. 20):

“The grades in Hoboken, the established grades, were made in 1888, and if, during the progress of a street improvement, it would be necessary to lower the grade per-

haps two inches from the established grade in order to fit a man's entrance to a store, or to a house, especially if that house or store had been built previous to 1888, to save the city possibly a damage suit, and that has been done, and that is the reason for that provision in the plans."

This clause on the plans giving the Director of Streets and Public Improvements the right not to have the actual grade raised to the established grade, if for some reason it is deemed advisable, as set for in Mr. Whittemore's testimony, *supra*, has been inserted on all of the plans for the improvements of streets in the City of Hoboken for the last 19 years (p. 192, ll. 20-30). The contractor has to improve a street for which he secures the contract to the established grade (p. 192, ll. 30-40). It would be unlawful for either the Director of Streets and Public Improvements or for the engineer or any other city official to have it improved to any other grade under ordinary circumstances. But if, as testified to by Mr. Whittemore, it would be necessary to lower the grade a trifle in order to better fit a man's entrance to his store or house, the circumstances justify and demand, in order to avoid a damage suit, that the grade be lowered accordingly. The clause in question is nothing more or less than a saving clause, giving the right to the Director of Streets and Public Improvements to deviate, if necessary, from the established grade, when circumstances reasonably demand such deviation. Without it, the Director of Streets and Public Improvements would have no right to require the contractor to lower the grade a trifle in the event that that should prove necessary. The city engineer further testified that before the provision in question was

inserted he and the Director of Streets and Public Improvements together went over the line of the proposed improvement to see what the actual grades were, and how much of them would have to be changed, and that they conferred frequently in regard to the matter, and it was only after a very thorough examination of the streets that the plans and specifications were put in their final form (p. 193, ll. 1-40).

The method adopted by the city engineer to express the established and actual grades is the method usually adopted by engineers for this kind of work. Of course, the established grade represents the limit to which the grade can be raised. It cannot possibly go over the established grade (p. 194, ll. 20-30). If an intending bidder did not care to rely on the plan as prepared by the city engineer, the grade maps were accessible to him if he cared to examine them. The plans also indicate the typical cross section, and the grade is given on each block of the several streets at three different points, namely, the centre of each block and at each end thereof. There were two bidders for this work, and neither of these bidders had any difficulty in ascertaining the grades.

On the same day that proposals were received for the work in question, proposals were received for the improvement of seven other streets with stone block and for that work there were four bidders. With the single exception that the contract in question calls for asphalt surface while the contract in the other case called for stone block, the contract plans and specifications prepared for the two sets of streets are identical, both pavements being laid on a concrete foundation. The plans in each case show the established and actual grades in the same way

(pp. 186-188). None of these bidders had any difficulty in ascertaining the grades to which they were to improve the streets in question. Two of the bidders testified, viz., Messrs. Cavanagh and Fellows.

Mr. Fellows testifies that although he was the unsuccessful bidder for the streets to be improved with stone block, nevertheless he had no difficulty in making up his bid from the plans and specifications submitted to him (p. 161, l. 35 to p. 162, l. 30). Mr. Cavanagh was the successful bidder for the stone block contract and he testified that he had no difficulty in bidding for the work in question and that the plans and specifications were perfectly clear (p. 104, l. 30 to p. 145, l. 10). The defendant, Crichfield, who was the successful bidder for the contract now being reviewed, also testified that he had no difficulty in making his bid because of any uncertainty or indefiniteness as to the grade to which the streets were to be improved (p. 222, ll. 1-20).

In other words, we have the testimony of Mr. Whittemore, the city engineer, and Messrs. Fellows, Cavanagh and Crichfield, that there was no doubt as to what grade the streets would have to be improved, for it was the established grade as fixed by the ordinances of the City of Hoboken; while on the other hand we only have the testimony of Mr. Murphy, general superintendent of the Clinton Contracting Co., not that the plans and specifications were not definite, clear and final, but that because of the clause that the Director of Streets and Public Improvements, during the progress of the work, might determine in any particular case the extent to which the present grade shall be raised, he was unable to determine to what grade he would have to pave the streets in question. It is clear that the clause

in question is nothing more or less than a saving clause to avoid damage suits that might accrue under the circumstances testified to by Mr. Whittemore.

If we carry Mr. Murphy's contention to its logical conclusion, we must assume that the Director of Streets and Public Improvements is authorized by this clause to violate the city ordinance fixing the established grades of the several streets.

Furthermore, Mr. Murphy's testimony does not satisfactorily show that he made any real effort to ascertain what the specifications in fact did provide. He testified that he did not go to the city hall to examine the plans and specifications, but that he sent his son; that the only information that he had as to what the plans contained was what his son told him (p. 120, ll. 20-40). He made no complaint to the city engineer, to the Director of Streets and Public Improvements, or to anybody, except Mr. McFeely, who was the Director of Public Safety, whom he saw only once and to whom he only talked casually about the matter (p. 122, ll. 1-40). He has never bid on any contract in Hoboken excepting one small contract many years ago.

In the last analysis the question narrows down to the simple proposition, whether when six bidders have no trouble in bidding according to plans and specifications, which show both the established and actual grades, and it is undisputed in the testimony that the only reason why the Director of Streets and Public Improvements is given the right to deviate from the established grade is in order to make the grade conform to the house line, if that is necessary, and the only objection to the contract and specifications in this regard is that the plans contain such a

provision and that otherwise they are clear, definite and final, and the person who makes this objection is a contractor who has not bid in Hoboken for many years and who did not even take the trouble to go to the city hall to examine the plans, this court can say that under such circumstances the plans and specifications do not show the grade to which the streets in question are to be improved. We submit that the plans and specifications do set forth the grades of the streets in question.

(b)

It was possible to ascertain the amount of fill, excavation and concrete required.

If the plans and specifications are definite and certain as to the grades of the different streets to be improved then it follows that it was possible to determine how much fill, excavation or concrete would be required. This we think will be conceded by counsel for the prosecutor, for the entire argument is that since the grade is not fixed, the engineer may improperly and illegally either raise or lower the grade and thus give a favorite contractor a chance to make more money than he would if the work was done according to the established grade. We believe that we have shown the fallacy of this argument in sub-division (a) of this point. A further answer to this argument is that a contractor is required under the specifications in question to submit *a unit bid*, that is, the amount he will charge per cubic yard for fill, how much he will charge per cubic yard for excavation, how much he will charge per cubic yard for concrete, and therefore whether he has to do 1,000 cubic yards or 10,000 cubic yards does not make any difference (p. 42, ll. 1-10; p. 60, ll. 20-40; p. 221, ll. 30-40).

The specifications further provide "bidders must examine the location of all the work proposed to be done under this specification, make their own estimate of quantities and extent of the work proposed, and the conditions to be met." In other words, a contractor was not bound to rely on the estimate of quantities made by the city engineer, but he had the right, and it was his duty to examine the location of the work proposed, to examine the plans, to examine the city engineer's estimated quantities and from all the data at his disposal decide for himself what the quantities were and the extent of the work (p. 60, ll. 1-40).

The city engineer testified that a paving contractor or any other person who knows anything about plans for street work would have no difficulty whatever in determining by reference to the plans both what the present grades and what the established grades of the streets are and could thereby readily ascertain, if he so desired, the amount of fill and the amount of excavation; further, even without examining or understanding the plans any person interested in the proposed work could determine the approximate quantity of the work by reading the surveyor's estimate attached to the specification (pp. 179-198). This estimate gives a statement of the approximate number of square yards of asphalt pavement, square yards of stone block to be removed, cubic yards of concrete and of filling and excavation (p. 59, ll. 25-40). In other words, bids were not called for in a lump sum, but for a certain price per square yard or cubic yard or lineal foot, as the case might be, and there is an express provision in the estimate forming part of the specifications that "any work or material exceeding the amount men-

tioned above, to be done at contract price and all omissions to be deducted in like ratio." Then again, without reference to the surveyor's estimate as attached to the specifications, any person who is familiar with the plans could by reference to the plans determine the amount of concrete by simply measuring the length and width of those parts of the streets which according to the plans and specifications are to be improved. It is a simple matter of arithmetic (p. 196, ll. 20-40). Likewise by examination of the plans, the quantity of filling and of excavation can be readily determined without regard whatever to the surveyor's estimate. It will be remembered that the surveyor's estimate was made up after he had been over the line of proposed improvements, with the Director of Streets and Public Improvements, and after he had taken levels as to the actual grade of the street immediately prior to advertising for proposals (p. 193, ll. 15-20).

To sum up, we have the actual grade of the street, the established grade, and an examination of the streets; and from this data an estimate of the quantities of fill, excavation and concrete. We have unit bids according to the square yard or per cubic yard, or per lineal foot, and a bidder must bid so much for each of these units. We have a requirement that the bidder must examine the line of the improvement. We also have the provision that any work or material exceeding the amount of the engineer's estimate of quantities shall be done at contract price and all omissions shall be deducted in like ratio.

In other words, the defendant municipality ascertained in every possible way the quantity of work that might be necessary as nearly as it

could be ascertained. Six bidders had no difficulty in bidding on these specifications, that is two bidders on the work in question and four bidders on other work, the specifications and plans of which were identical with the plans and specifications in the case at bar and for which proposals were requested and submitted on the same day that proposals were requested and submitted for the work in question.

The Supreme Court had the following to say in regard to this objection:

“We think the specifications furnished a common standard for bidding. We must assume that the power reserved for the engineer will be fairly exercised and we see no reason to think it is not reserved for the purpose of enabling the engineer to save the city’s money by avoiding such changes of grade as might lead to actions for damages.”

We submit that it was possible for intending bidders to ascertain the amount of fill, excavation or concrete required.

IV.

The provision of the specifications with regard to old and new curb is reasonable and lawful.

The provision of the specification in question is as follows (p. 38, ll. 30-40).

“The work to be done under this specification consists in taking up and removing the present stone block pavement, and such curb as may be condemned by the City Surveyor-in-Charge, furnishing new asphalt pavement and such other material as may be required for laying the same, furnishing such filling

as may be needed and doing such excavation and grading as may be required to permit the new pavement on a concrete foundation *to conform to the lines and grades required by the plans*, straightening, regulating and resetting the present curb where directed, setting new curb where considered necessary by the City Surveyor-in-Charge; resetting at a higher or lower grade receiving basins and gutter stones and sewer manhole heads, and doing such other work as is necessary and incidental to the improvement of the above mentioned streets; in accordance with the plans signed by J. O. Whittemore, City Surveyor, and dated April 12th, 1916, and such other plans and detail drawings as may be furnished from time to time for the proper execution of the work and which must be taken as a part of these specifications."

The objection made is that it is impossible for an intending bidder to determine how much new or old curb will be used and that the engineer has control of the amount. No evidence of any kind has been adduced by the prosecutor on this point. In the nature of things it is impossible to determine how much new curb will be required until the old curb is excavated, redressed and examined. The fact of the matter is that no one can determine how much new curb may be necessary or how much old curb may be in such condition as to be available for resetting *until the payment itself has been taken up* (p. 198, ll. 20-40).

It may be argued that a favored contractor would be allowed by the engineer to put in a large quantity of new curb, and thus make a greater profit, while if a contractor who was not

avored secured the contract he would be compelled to use all of the old curb and in that way he would not make as large a profit as he might expect. This, of course, is possible but not probable, and in the present case we shall show conclusively that it would make no difference to a contractor whether he used old or new curb. This idea of a favored contractor making a larger profit than a contractor who is not favored can be carried too far. No matter how stringent a specification may be drawn it is possible for a crooked or dishonest contractor by bribery and fraud to evade its terms and gain a profit that he would not be lawfully entitled to. The criminal law provides an adequate remedy for such a case. We cannot assume in construing specifications for municipal work that the municipal authorities and a successful contractor are going to be dishonest and defraud the municipality. Some discretion must be reposed in the engineer in charge of the work, or both the municipality and the contractor will be put in positions from which they cannot extricate themselves by reason of a hard and fast specification which compels performance of certain terms of the specification when such performance would either be needless or harmful to the best interests of the municipality.

In the present case we can demonstrate that the provision in question so far as the curb is concerned cannot possibly benefit a favored contractor. Examination of the specifications shows that a bidder is allowed so much per lineal foot for old curb reset, including the work specified and all work incidental thereto, and also so much per lineal foot for new curb furnished and set, including the work specified and all work incidental thereto (p. 60, ll. 30-40). When a new pavement is being laid the old curb must be ex-

cavated and before it can be reset it must be redressed so that it can be reset (p. 151, l. 40; p. 223, ll. 1-40). Likewise, new curb must be dressed before it can be set and it costs just as much to dress and set new curb as it does old curb (p. 223, ll. 20-30). So that so far as the treating of the curb is concerned both old and new curb must be trimmed upon and dressed and the cost of either is about the same. The only difference so far as the two kinds of curb is concerned is that the contractor must buy the new curb, and that cost is additional. Take the bid of the successful bidder in the present case; he bid for new curb 95c. per lineal foot, and for old curb 55c. per lineal foot and the difference between the two bids, viz. 40c., represented the cost of the new curb (p. 15, ll. 30-40). It will be noted that a contractor had to bid so much *per lineal foot* for the curb in question, so that it made no difference how much curb had to be bought; he knew how much he could buy it for and he was to be paid by the municipality on a unit basis. Or in other words, he submitted what is known as a unit bid as distinguished from what is called a lump sum bid for the entire contract (p. 42, ll. 1-10).

It is impossible, as stated above, to determine what portion of the old curb can be used until it is removed from the earth. It may look fair, and as though it might be used when examined from the top or from the sides, but when it is taken out of the ground it frequently falls to pieces, especially if it is very old curb, and in hammering, redressing or rejoining, it frequently splits and cannot be used and therefore no one can tell how much old curb can be re-used until it has been taken out, axed, dressed and joined. These facts were testified to by several witnesses.

Counsel for the prosecutor upon cross examination of the witness Cavanagh asked the following question: "But if the specification provides that when this job was done only good, clean curb without cracks or spalls, of twenty inches deep and five inches wide should be used then you could tell, couldn't you?" (p. 149, ll. 5-15), meaning thereby that then it would be possible to tell in advance what old curb could be re-used. This question is absurd, for "good, clean curb" means nothing, and without cracks of twenty inches deep and five inches wide is indefinite and impracticable, for it would be necessary to employ a large number of men to measure each crack and every piece of curb to determine whether it came within the 20 by 5, and then again when the curb is taken out the cracks in it may not measure the depth and width specified and yet after it goes through one or more of the processes given above, fitting it to be re-used, it may crack and such a specification in regard to such an item would cause more trouble than it would be worth. But even such a specification, if it can be in any sense regarded as a reasonable one, would not determine before the curb was excavated how much of it could be used and therefore it would not assist materially in solving the question of how much new curb a contractor would have to have in mind when he prepared his bid. All of the witnesses for the defendants testified that the specification in question is the usual specification when curb is provided for. There is nothing unusual about it; it has been used in the City of Hoboken for the last nineteen years.

It is not possible to conceive of any specification that would be any more definite. The old curb must go through the same process as the

new and it costs about as much to dress new curb as it does old; and so far as the buying of new curb is concerned the contractor knows that he is to be paid for it at so much per lineal foot so that if the amount should differ he loses nothing by the transaction, for every foot of curb is paid for, and everyone concedes that it is impossible to tell before the curb is excavated how much of it can be used.

We submit that the provision in regard to the curb is lawful.

V.

The fact that the specifications provide that no machine mixing of concrete will be allowed except by permission of the City Surveyor-in-Charge does not make the specifications indefinite or uncertain or prevent prospective bidders from bidding according to a "common standard."

The provision in the specifications in regard to machine mixing of concrete which is objected to by the prosecutor is as follows (p. 50, ll. 30-40):

"The concrete to be mixed in a clean, tight box, first mixing the sand and cement then adding the broken stone with sufficient water to make a proper mixture, thoroughly incorporated by repeated turning and mixing in the box, deposited when freshly made and thoroughly rammed to fill all spaces and to flush the mortar on the surface. No machine mixing will be allowed except by permission of the city surveyor in charge."

So far as concerns the method of mixture of the concrete the specifications provide in detail the formula for the concrete as follows (p. 50, ll. 15-30):

“This concrete shall be composed of one part cement, three parts clean sharp sand and six parts clean broken stone, all by measure.

“The cement shall be of the best quality of American Portland cement of the Alpha, Vulcanite or Lehigh brands, or of other brands equally good and satisfactory to the city surveyor.

“If the cement in bags is used four bags of cement as packed at the mill of one hundred pounds each shall be equivalent to one barrel of cement.

“The broken stone shall be sound, hard and angular, of such size that it may pass in any direction through a two inch ring, and shall be crushed and screened before brought on the work and shall be free from dirt or dust when put into the concrete.”

The only testimony in the case attacking this part of the specifications is that of Mr. Joseph Murphy, general superintendent of the Clinton Contracting Company. Mr. Murphy's contention is that if he had been the successful bidder for this work the city surveyor could compel him to mix the concrete by hand and refuse to allow him to mix it by machine and that in that event it would cost him three times as much as it would if he could mix it by machine. If the specifications had provided only for mixture by hand he would have no complaint (p. 105, ll. 1-40). In other words, Mr. Murphy claims that because he did not know whether he would be required to mix the concrete by hand or machine he could not formulate an intelligent bid.

It will be remembered that Mr. Murphy has not for many years bid for work in Hoboken, and that in this case he did not even take the

trouble to go to the city hall to examine the plans and specifications himself and that he made no inquiry of anybody in regard thereto. This objection of course has no substance if the cost of mixing the concrete base is the same whether it is mixed by hand or machine, and Mr. Murphy's contention therefore is that the cost of mixing by machine is only one-third of the cost of mixing by hand. Mr. Murphy testified that this statement as to the relative cost of mixing concrete made by him was based on an accurate computation made while mixing the concrete by hand and machine and that such computation was as follows: That using a mixing machine 22 men men working 10 hours could mix 1,300 square yards of concrete *five inches* deep. Twenty of these men would cost \$2.00 for their time; one of the men would have to be an engineer and the cost of his labor would be \$4.00 and the other man would have to be a foreman and the cost of his labor would be \$3.00. In other words, the cost of labor would be \$47.00. Without a machine 24 men working 10 hours a day would mix 400 square yards of concrete *six inches* deep. The cost of labor in this instance would be 23 men at \$2.00 a man and a foreman at \$4.00, making \$50. In comparing the cost of mixing by hand and machine this is all that Mr. Murphy took into consideration. No other elements went into the result, in his estimation. In the computation given above Mr. Murphy had in mind what is known as a continuous mixer which we shall hereinafter show will not mix according to the formula of the specifications (pp. 126-127). Mr. Murphy, however, admitted that a continuous mixing machine would cost \$1,700 and that the cost of the fuel to operate it would be at least \$2.50 per day, but he seemed to think that the

machine would last forever, and that it would never break down while on the job (pp. 129-130). He did admit, however, that he spent about \$50 a year to repair a machine that he has in his possession. The foregoing is the only testimony in the case showing that the cost by machine is less than the cost by hand. It is self-evident that the witness did not take into consideration all of the elements that go into the cost of mixing by machine.

Opposed to this testimony we have that of Messrs. Whittemore, Manly, Fellows, Cavanagh and Crichfield, all of whom testified that the cost of mixing by hand is about the same as the cost of mixing by machine. Mr. Whittemore testified that he supervised the laying of over 200,000 square yards of concrete base within the last four years while he has been city engineer of the City of Hoboken, in that city alone (p. 184, ll. 20-40). He testified that in this class of work he has never noticed any difference in the cost or the time in doing a certain piece of work, whether it was mixed by hand or machine. In either event the concrete must necessarily be mixed in accordance with the formula given in the specifications. He cited a particular instance of the North German Lloyd foundation in Hoboken where he stated that a machine showed up to the best advantage and yet that it was found that hand mixing was just about as cheap. He further testified that he had never known of a case where hand mixing cost three times as much as it would cost to mix by machine (pp. 199-200). A continuous mixer will not mix in accordance with the formula of the specifications (pp. 200-201).

Mr. Cavanagh, who has been in the contracting business for over 40 years and who during

that period of time has laid a great many thousand yards of concrete base, testified that he had mixed to date all of the concrete base that he laid by hand because he thought it was cheaper (p. 144, ll. 10-30). Two years ago he had a contract in the City of Hoboken for concrete base about 17,000 square yards and it was all mixed by hand (p. 144, ll. 25-35).

Mr. Fellows testified that he has been in the street paving business for the last three years, and during that time he has had occasion to examine into the relative cost of mixing by hand or machine and after figuring it both ways he came to the conclusion that it was just about as cheap to mix by hand as it was by machine. He testified that concrete mixed by machine, figuring in the upkeep of the machine, first cost of the machine, depreciation, engineer's wages, and like items, would cost just about the same as it would by hand for these additional items of cost would about equalize what it would cost to have a few extra men to mix by hand. Not long ago Mr. Fellows had a contract involving the mixing of concrete amounting to about \$8,000; at that time he had occasion to estimate the cost of mixing by machine and found that it would cost more on that particular job for mixing by machine than by hand, for a large proportion of the concrete had to go under the curb and would necessarily have to be mixed by men for only a small amount could be used at one time and if a great amount was mixed it would settle and be unusable (p. 160-161).

Counsel for the prosecutor tried to show on cross examination of this witness that the concrete under the curb could be mixed by machine just as well as by hand but a concrete example showed the failure of this contention.

Assuming a city block to be 300 feet in length, it would take one set of men one day to curb both sides of the street in that block. Counting both sides of the street there would be 600 feet of curb that would be laid by one set of men. Half of a cubic foot of concrete must be allowed to each lineal foot of curb and there would be therefore 300 cubic feet of concrete or 11 cubic yards. If an ordinary mixing machine were to be used it would mix about 150 cubic yards of concrete. By one set of men is meant two men and their helpers. More curb setters could not be employed at one time in one block for they would all be working for one or two hours a day and have nothing to do for the balance of the day, although they would nevertheless have to be paid. Also, specifications in general do not permit more than one or two blocks to be opened at one time (p. 40, ll. 20-30). It is, therefore, necessary to keep the men working continually. If a large amount of concrete was mixed at one time it could not all be placed under the curb before it would set. Therefore, in order to use the machine for the purpose of turning out 11 square yards of concrete to go under the curb the machine would only be going a very small part of the day—half an hour perhaps. For the balance of the day the men whose duty it was to run the machine would have nothing to do, but nevertheless would have to be paid and under such circumstances it would be much more expensive to mix concrete by machine than it would be by hand, and the practical working out of this problem shows beyond a doubt that this is so (p. 174-175).

Mr. Manly, who has been a supervisor of street improvements in Hoboken for many years, had occasion to watch the time it took to mix concrete by hand or machine. In 1913 the Stand-

ard Bitulithic Company was paving some streets in Hoboken upon which Mr. Manly was inspector. They started to mix the concrete to be used between First and Second streets by hand and between Second and Third streets by machine. The two blocks in question were about the same length, each block being about 400 feet. It took three days for 18 men to mix the concrete by hand for the first block and it took a like period of time for the same number of men to mix the same amount of concrete by machine. In other words, even with the machine it took the same number of men the same period of time to mix the same amount of concrete (p. 176-177).

Mr. Crichfield testified that during his 32 years of experience as a street paving contractor he has on many occasions observed the cost of mixing either by machine or hand and there is no difference between the two. So far as practical results are concerned one method is about as good as the other. He stated that some machines are absolutely useless for mixing concretes for they do not guage the quantities and materials required to be mixed in accordance with the formula of the specifications. Mr. Crichfield has even known cases where the cost of labor in mixing the concrete by hand was less than the cost of mixing by machine. He has never known of a single case where the cost of mixing by hand was three times more expensive than machine mixing. It will take more men to operate a high grade concrete mixer and produce concrete thereby in accordance with the formula of the specifications than it will to operate a gang mixing concrete by hand. Mr. Crichfield from experience has found that using a concrete mixer the cost would be 25 men at

a salary of \$2.00 each, a foreman at \$4.00, time-keeper at \$3.00, fireman at \$2.50, fuel \$2.50, rental of machine \$15, or a total of \$77. These men with the mixing machine would turn out 1,000 square yards of concrete in one day. From experience he has also found that not using a machine mixer but mixing the concrete by hand it would take 35 men at \$2.00 a day, a foreman at \$4.00, a timekeeper at \$3.00, making total cost of labor \$77, to mix 1,000 square yards of concrete in one day (pp. 224-226). Often a machine cannot be operated for some time while it is being moved along the line of the work while it is in progress and during that time the gang of men who are supposed to run the machine are idle. Also a machine will at times break down and be of no use for several hours until it is repaired and during that time the men are idle (pp. 226-227).

To sum up, we have the testimony of five witnesses, all practical men, that the cost of mixing concrete by hand is about the same as the cost of mixing by machine. In some instances it may be a little bit more, in some instances it might not be as much, but in any event there is no substantial difference between the cost of the two. The only witness who says otherwise is Mr. Murphy and he does not allow anything for the cost of the machine, its depreciation, or fuel, or breakages, or for any of the other like items of cost that necessarily accrue in the use of a mixing machine.

We submit that if there is any doubt as to the relative cost it must be decided in favor of the defendants because of the overwhelming weight of the evidence that the cost is substantially the same. If the cost of the different mixtures is the same then it follows that there

is no substance in this objection and there would be no real difficulty in making up a bid whether a prospective bidder knew or did not know whether a machine could be used. Some discretion must be left to the engineer in charge of the work. As a practical matter it is absurd to insist upon hard and fast rules as to the method of mixing materials that are to go into the work, for under such a specification both parties to the contract would find themselves in positions from which they could not extricate themselves without violating the terms of such a contract. There must be saving clauses in every contract to provide for emergencies, and if such saving clauses do not deprive bidders of a common standard they cannot be said to be illegal.

VI.

Other provisions of the specifications objected to are reasonable and in the nature of saving clauses.

Two other clauses of the specifications objected to are as follows:

“The Board of Commissioners reserves the right to omit any of the items bid on in this specification in whole or in part if deemed for the best interest of the city to do and to alter, vary or extend the work without recourse on the part of the successful bidder for any claims or damages therefor” (p. 40, ll. 10-25).

“The contractor will be required to do all additional work beyond that described and bid for, which is necessary to make the roadway complete in every respect according to the intent and meaning of the plans and specifications if ordered to do so by the

Board of Commissioners or city surveyor in charge and will be paid for at actual cost plus 10% added thereto for profit in compliance with the laws governing such work" (p. 46, ll. 30-46).

These provisions must be read in connection with other provisions of the specifications with which they are closely connected. These other provisions are as follows:

"Bidders must examine the location of all the work proposed to be done under this specification, make their own estimate of quantities and extent of the work proposed and the condition to be met."

"Bidders must bid on each and every item herein called for, giving a separate price per unit of quantity" (pp. 41-42).

"Any work or material exceeding the amount mentioned above to be done at contract price and all omissions to be deducted in like ratio" (p. 60, l. 10).

Keeping in mind that a prospective bidder is compelled by the specifications to submit his bid on a unit basis, that is, so much for curb lineal foot, so much for concrete per cubic yard, etc., as the case may be, we cannot conceive how the first clause above stated can be objected to. If any particular item should be omitted by the Board of Commissioners the other items would still remain and would have to be paid for under the contract according to the bid of the lowest bidder to whom the contract was awarded. Any alteration or extension of the contract would have to bear some reasonable relation to the estimate of quantities given by the engineer in the specification and if it did not, under the settled law throughout the country, the contrac-

tor could not be compelled to do such additional work. This clause is a mere saving clause which gives the municipality the right to provide for unforeseen happenings or contingencies and to put it in a position from which it can extricate itself without doing violence to the terms of the contract if some unforeseen happening should occur. Such a provision is a common one to be found in almost every municipal contract. It does not deprive bidders of a "common standard." It cannot be said that such provision changes the express provisions of the contract and if any work is to be done it must be done in accordance with the terms of the contract and the price is therein stated on a unit basis. If every bidder bids on each and every item called for in accordance with the requirement of the specification giving a separate price per unit of quantity for each item we do not see how such a bidder can be injured. It would be different perhaps if a lump sum bid was called for and the specification contained such provision for then it might be argued that a contractor might be compelled under the specification to do more work than he was originally required to do for the amount bid and in that event he would sustain a loss but this is not so in the present case for he is paid for the amount of work that he does. Since any work or material exceeding the amount mentioned in the estimate of quantities of the city surveyor contained in the specification is to be done at the contract price and all omissions are to be deducted in like ratio he will receive a proper compensation for the work done whatever it may be. Furthermore, the estimate of quantities of the city surveyor which is contained in the specifications and made a part

thereof is controlling to a certain extent for the quantities of work that a successful bidder will have to do must in the nature of things bear some reasonable relation to the estimate of the surveyor.

A similar provision was contained in the specifications brought up for review in the case of *Browning v. Freeholders of Bergen*, 79 N. J. L. 494, *supra*. The provision in that case was as follows:

“The board of freeholders reserves the right to extend or diminish the amount of work to be done under this contract; and, therefore, no bid will be considered regular unless the bidder states a unit price as follows for any increase or decrease in the quantities of material required.”

This court in construing this specification, speaking through Garrison, *J.*, said:

“While there is nothing in the statute that expressly authorizes a call for these unit prices, the demand for them, as a protective measure to the public in the event of modifications of the work done by the contractor, is entirely unobjectionable. Clearly this was the only purpose of such demand as expressed in the present proposal.”

This provision of the specification was in no way condemned by this court. If the provision in question had met with this Court's disapproval, surely something would have been said to that effect. The Board of Freeholders in that case abandoned the competitive feature of the proposal and for that reason the proceedings were set aside.

Dillon in his work on Municipal Corporations, Vol. 2, Sec. 813, p. 1228, has the following to

say in regard to such provisions as that quoted first above:

“The customary provisions in such contracts that the corporation or its engineer may make any necessary or desirable alterations in the work, and that the contractors shall receive the contract price or a price fixed by the engineer for the work or materials required by the alteration, is limited in the same way, by the intention of the parties when the contract was made, to such modifications of the work described in the contract as do *not radically change* its nature or its cost.”

We do not know on what principle the second provision quoted above is objected to. On its face it appears to be a saving clause providing that if any additional work beyond that described and bid for is necessary “*to make the roadway complete in every respect according to the intent and meaning of the plans and specifications*” the contractor will be required to do such additional work if ordered by the Board of Commissioners and such additional work will be paid for “*at the actual cost plus 10 per cent. added thereto for profit.*”

It is clear that such provision is absolutely necessary in order to make certain that a municipality receives a completed pavement in every respect and merely provides that in the event that something has been forgotten that ought to be inserted in order to make the roadway complete, according to the intent and meaning of the plans and specifications, then a contractor will be required to do such work at the cost price thereof, plus 10 per cent. to cover a reasonable profit. Such a provision seems to be

perfectly reasonable and just and fully protects both the municipality and the contractor.

No objection was made to this provision on the argument of the application for the writ and no mention was made of it at any time during the taking of testimony; the first knowledge we had that it was objected to was when the prosecutor's reasons were served on June 7, 1916. However that may be, the provision is certainly a reasonable one and does not in any way destroy the "common standard" upon which all bidders have the right to rely. Such provision will be found in almost every contract and specification of this kind and has been contained in the specifications of the City of Hoboken for the last nineteen years, as also has the first provision above mentioned.

Dillon in his work on Municipal Corporations, Vol. 2, Sec. 813, p. 1226, has the following to say in regard to such provisions:

"The stipulation common to many corporation contracts, that contractors may be required to perform extra work at the price named in the agreement or fixed by an engineer, is *limited by the subject matter of the contract* to such proportionally small amounts of extra work as may become necessary to the completion of the undertaking contemplated by the parties when the contract was made; and work which does not fall within this limitation is new and different from that covered by the agreement, and the contractor may recover the reasonable value thereof notwithstanding the contract."

It is not necessary to apply a rule as broad as that given in Dillon to sustain the present provision for in the present case it will be remembered that a contractor is paid so much per

lineal foot or per cubic yard as the case may be and therefore there can be no doubt that he will be fully compensated for whatever work he does. Dillon also has the following to say in regard to such provision in Sec. 802:

“It has been held that a statutory requirement of competitive bidding does not prevent the city from providing in specifications and contracts that the contractor shall do such *extra work* as the officer in charge of the improvement shall direct, and that the compensation therefor shall be the reasonable cost to the contractor plus a percentage for profits, &c. The extra work does not require to be led by separate advertisement.”

It will therefore be seen that there is nothing unusual about either of the above provisions but that they are so common in specifications of this kind that they have already been passed upon by courts throughout the country and found to be reasonable.

Both of the provisions in question were contained in the other contract for which bids were received on May 3rd, at the same time that bids were received for this contract heretofore referred to and if the prosecutor is sincere in his objection we cannot see why he should attack one of two contracts and specifications which are identical and not the other. No prospective bidder claims that either of these provisions prevented him from submitting a bid but on the contrary we have six different bidders, three of whom have testified in this proceeding, none of whom have made any complaint of any kind while the three who have testified say that they had no difficulty in any way in arriving at their bids. Even Mr. Murphy does not object to either of these provisions for he has no doubt

seen them in many other contracts and knows that they are usual. We cannot assume without any evidence to support such a proposition that the officials of the municipality will act dishonestly in enforcing the provisions of the contract. So far as the present contract is concerned the municipality cannot compel any contractor to do any work without paying him for what he does, on a unit basis, and the total quantity of the work must bear some reasonable relation to the estimate made by the city surveyor, and a contractor could not be compelled to perform such work as might not bear a reasonable relation to the estimate of quantity. The common standard upon which all bidders have a right to rely in submitting a bid was not in any way violated by the two provisions of the specifications above set forth.

Conclusion.

We submit that the proceedings brought up for review should be affirmed with costs to the defendants.

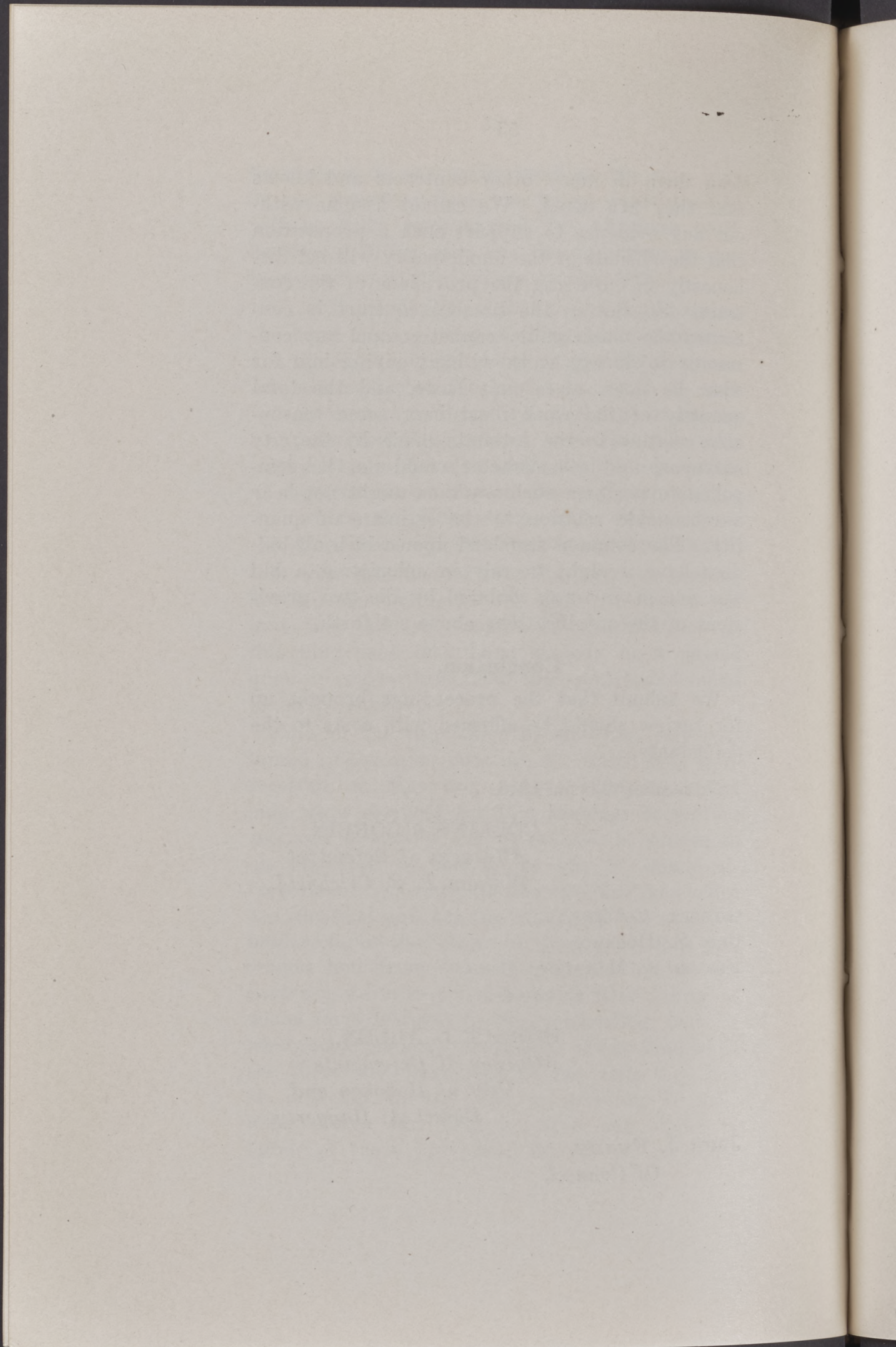
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New Jersey Court of Errors and Appeals

MAX MILLER,

Prosecutor-Appellant,

vs.

MAYOR and COUNCIL OF THE
CITY OF HOBOKEN, *et als.*,

Defendants-Respondents.

*On Appeal
from
Supreme
Court.*

Brief for Prosecutor-Appellant.

Statement.

This appeal brings up for review a judgment of the Supreme Court reviewing and affirming a municipal proceeding for the improvement of ten certain sections of streets in the City of Hoboken.

A writ of certiorari was allowed on May 20th, 1916, to review a resolution of the Board of Commissioners of the City of Hoboken, passed May 3rd, 1916, awarding to the defendant, William T. S. Crichfield, a single contract for the grading and paving with asphalt upon a concrete foundation of ten sections of ten streets in the City of Hoboken. The reasons for setting the proceedings aside urged upon the Supreme Court were three-fold, namely:

1. That the specifications and plans upon which the proposals were received did not furnish a common standard for bidding and prevented fair competition.
2. That the specifications and plans without lawful authority, provided for the making of several independent improvements in a single proceeding.

3. That there was no actual or real competition between the two bidders submitting proposals; the successful bidder being the salaried employe of the other, and the other being actually secretly interested in the performance of the successful bid which bid by reason of agreement between the two bidders was excessive and exorbitant.

The Supreme Court filed the following *per curiam*:

“We think the specifications furnished a common standard for bidding. We must assume that the power reserved for the engineer will be fairly exercised and we see no reason to think it is not reserved for the purpose of enabling the engineer to save the city’s money by avoiding such changes of grade as might lead to actions for damages.

“We think the contract contemplated is a single contract for repair work and is not to be regarded as so many separate and distinct contracts for each street.

“Assuming that the contention of the prosecutor is correct and that Crichfield and the Uvalde Company are identical in interest, we would not be justified in setting aside the contract. Upon that assumption, there was but one bidder, and the commissioners might have been justified in rejecting both bids; but they might also in the exercise of their discretion have been justified in awarding the contract. It cannot be said as a matter of law that it is improper to award a contract when there is only one bid.

“There must be judgment for the defendants.”

Upon this opinion a rule for judgment affirming the proceedings brought up for review was

entered and it is from this judgment that the prosecutor has appealed, advancing as reasons for his appeal the reasons urged upon the Supreme Court upon the argument below:

Argument.

Point I.

The specifications and plans upon which proposals were received do not furnish a common standard for bidding and prevent fair competition.

The power of the City to contract is limited and regulated by Chapter 342, Laws of 1912, p. 593, which provides that the City shall award a contract of this nature to the lowest responsible bidder after first advertising for proposals for the work.

In the recent case of *Johnson v. Atlantic City*, 85 N. J. L., 146, Mr. Justice Minturn, in speaking of this statute, says:

“The cases are uniform in holding that the legislature purpose of such language in a statute their requirement for competitive bidding) is to require as a condition precedent to an award of the contract to one or more of several bidders, a *uniform or common plan* of bidding, in order that competing bidders may be possessed of the *same* data and subjected to the *same* conditions.”

No contract can be upheld under proposals which do not require competition upon the same *definite* basis, and,

Bidders must have the opportunity to compete, and that can only be afforded by *definite* specifications to which all bidders can conform.

Van Riper v. Jersey City, 58 N. J. L., 262, at p. 271.

Case v. Trenton, 76 N. J. L., 696.

Browning v. Freeholders, 79 N. J. L., 494.

Tested by these rules, we contend that the specifications in this case must fail.

The contract covers ten distinct sections of different streets of the city. It is a re-improvement of the portions of the streets selected, pursuant to Chapter 210, Laws of 1907, p. 466 (p. 182, fol. 20). The original improvements still upon these streets consist of Belgian block pavement bound by stone gutters in the usual manner (p. 211, fol. 10).

The specifications are uncertain as to the quantity of the work to be done.

The work to be done consists in taking up and removing a stone block pavement, and *such* curb *as may be condemned* by the city-surveyor-in-charge, furnishing new asphalt pavement * * * furnishing *such* filling *as may be needed*, doing such excavation and grading *as may be required* to permit the new pavement on a concrete foundation *to conform to the lines and grades required by the plans* (when the plans furnish no such lines and grades (see plans), resetting present curb *where directed* and setting new curb *where considered necessary* by the city-surveyor-in-charge (p. 38, fol. 30; p. 39, fol. 1-120).

The specifications are uncertain as to the quality of the material to be used.

The specifications by the admission of the engineer who drew them, do not specify *what kind* of old curb would pass his inspection (p.

215, fols. 30-40) and this whole matter is left to his discretion (p. 216, fols. 1-10). although he could specify and could tell by looking at the old curb defects for which he would condemn (216, fol. 20). Curb which meet the requirement of new curb would, of course, be acceptable, but there is nothing in the specification to prevent him from passing any other curb (p. 215, fols. 30-40).

The plan of the work to which reference is made in the specification in dealing with excavation and fill necessary to permit the new pavement on a concrete foundation "*to conform to the lines and grades required by the plan*" show a black line and figures indicating existing street surfaces and a red line and figures indicating established grades. *But it does not show a grade to which the new pavement is to be laid.* In the absence of any further data, the presumption might be that the new pavement is to conform to the *established grade*. But this presumption is absolutely destroyed by a legend endorsed upon the plan which reads:

"Red lines and figures indicate the *established grade*; black lines and figures *indicate the present surface, the extent to which the present grade shall be raised is to be determined* by the director of streets and public improvement, *during* the progress of the work."

It is the contention of the prosecutor that this endorsement destroys *all grades and elevations upon the plan*.

It will be noted that the writer, in making this endorsement, is careful to distinguish between "established grade" and "present surface." He does not treat "present surface" *as a grade*, for if he did, he would use, instead of "present sur-

face," the expression "present grade" or "existing grade" or "actual grade." He uses the expression, "present surface" carefully and advisedly. That being so, to what does he refer when he says "the extent to which the 'present grade' shall be raised, etc.?" It is the contention of prosecutor that he refers to the *legal grade* upon the street,—the *only* grade to which he has referred,—the established grade,—and that he reserves to the director of streets and public improvements the right to raise the new pavement to any grade above the established grade during the progress of the work. But even though the reference is to the existing road surface as a grade, the extent to which this grade is to be raised remains uncertain, because in either event there is no limit placed upon the discretion of the director of streets. This being true, it follows that the amount of excavating and filling to be done by the contractor is not fixed by the specifications but is absolutely in the discretion of the director of streets.

And the engineer who drew the plan was forced to admit that a prospective bidder would know from the legend that the *grade* of the new pavement could be changed at *will* by the director of streets (208, fol. 20); that there is nothing on the plan to show the base line used by him in figuring the fill and excavation quantities estimated by him and set out in the specifications, and that the specifications merely show that he had, *in some manner*, arrived at these quantities (p. 207, fols. 10-30). The engineer considers this legend a sort of *saving clause* for the city (193, fol. 30), and claims that it was put upon the plan because, as he says: "If a man had constructed a house along the line of the improvements, that was built previous to 1888; that is, when the

grades were established, if by putting the street *up* to the established grade would put him *low* so that water would drain into his entrance cellar, etc., it would be—that discretion would be left to the director of streets and public improvements *to lower* that grade sufficiently to prevent this man from being damaged” (205, fol.30).

The engineer does not attempt to explain how the discretionary *raising* of the present grade, provided for in the legend, could serve the purposes of the individual who desired the grade *lowered*, nor does he know of any person along the line of these proposed improvements who would require to have the grade lowered for the reasons given by him (206, fol. 10).

The engineer further maintains that in figuring excavation and filling he calculated for a street laid to establish grade (205, fol. 20); that the established grades of all streets are recorded in a grade book in the city hall accessible to anybody (194, fol. 30); *but neither in the specifications nor plan does he make any reference to the existence of these grade maps or to the books in which they may be found* (211, fol. 10) and without such reference how can a prospective bidder be expected to look *beyond* the specifications for his data and if he desires to do so, where is he to look and how is he to know that he is looking in the right place?

It is true that the specifications contain a city surveyor's estimate and classification of the work required and on which a comparison of bids was based. But this estimate is not based on data open to inspection or examination by a prospective bidder *without seeking* that information from sources other than the plans and specifications. He must apply to the engineer for the information which in itself destroys the

specifications as a fixed standard for the comparison of bids.

This estimate is as follows:

- 32,700 sq. yds. asphalt pavement.
- 32,700 sq. yds. stone block pavement removed.
- 7,000 cubic yards concrete.
- 4,700 cubic yards filling.
- 2,000 cubic yards excavation.
- 10,000 lineal feet of new curb.
- 10,000 lineal feet of curb reset.
- 80 manholes reset.
- 80 noiseless manhole covers.
- 20 basins reset.

(59, fols. 20-40.)

But while the specification contains an estimate of quantities, "bidders are expected to examine carefully the plans and specifications, the location and character of the work to be done and make their own estimate of quantities, costs and difficulties incident thereto" (60, fol. 20).

It is the contention of the prosecutor, under these specifications, that *in the absence of a grade* at which the pavement is to be laid, and *in the absence of any fixed standard to guide a bidder to a decision as to what kind of curb is likely to be condemned, it is a physical impossibility for him to make up any estimate of the quantity of concrete, filling, excavation, or of old or new curb required or likely to be required for the work*, and that to a lesser degree financially, this also affects the price to be quoted upon manholes and basins to be reset since the grades of the finished pavement materially affects the cost of labor and material used in resetting the same. In fact, the only items of the estimate of quantities which a prospective bidder can measure are the items of asphalt pavement, stone block pave-

ment removed and eighty noiseless manhole covers.

There is also uncertainty as to what may be used as filling under the specifications.

They provide: The street shall be brought to the required sub-grade by excavating or filling with good, clean earth, sand or ashes, etc. (48, fol. 20), at cost of 85c per cubic yard (15 fol. 20). They also provide:

“When the sub-grade has been properly prepared, all mud removed, *and approved by the city surveyor*, there shall be laid a bed of concrete from curb to curb to a depth of *at least six inches for all pavement, and to such depth as may be necessary* to bring the surface of the concrete, after being well rammed, to a uniform distance, as shown on the plans (three inches) below the top of the finished pavement.”

(50, fols. 1-10.)

Figuring the new completed pavement in cross-section from the wearing surface downward, there would first be a depth of three inches of compressed binder and asphalt, then there would be at least six inches of concrete, or a total of nine inches; the block pavement to be removed seems to have an average depth of ten to twelve inches (212, fols. 1-40), so that even if the new pavement is to be laid to the grade of the existing present road surface there will be *some* fill necessary in all places at least three inches deep, to make up the difference between the nine inches of pavement and the existing sub-soil.

Will the difference in depth between the sub-soil leveled and cleaned and the bottom of the six inches of concrete *absolutely* called for by the specification be filled with filling so called at 85c (15, fol. 20) per cubic yard under the provision

governing filling (48, fols. 20-30), or may the contractor be allowed *to lay concrete at \$5.75 per cubic yard under the clause which provides that when the sub-grade has been properly prepared there shall be laid a bed of concrete to a depth of at least six inches for all pavement, and to such depth as may be necessary to bring the surface of the concrete * * * to a uniform distance (3 inches) * * * below the top of the finished pavement?*

It is the contention of the prosecutor that nothing in these specifications prevents the laying of concrete as filling under such circumstances if, in the discretion of the officials, they elect to do so.

And if, in addition, the *present grade* should be raised above the legal established grade or to such grade as may be fixed by the officials during the course of the work, what a harvest in concrete filling at \$5.75 per cubic yard may flow to the favored contractor.

And if for any reason the officials should be questioned for allowing concrete filling to be used instead of earth filling, they may in justification, refer to that portion of the specification which reserves to them the right *to omit any item bid on* in the specification in whole or in part, if deemed for the best interest of the city to do so (40, fol. 10).

While the quantity of concrete to be used cannot be determined, so also does the cost of installing it remain in doubt under this specification.

The specification provides that "no machine mixing will be allowed *except by permission of the city-surveyor-in-charge*" (50, fol. 30).

The engineer says of this provision that he inserted it to protect himself against the use of

improper machines, but he did not specify the machines which he considered improper because there are many concrete machines on the market and he did not wish to specify a certain machine that might be used. There might be some others which he did not know about. *He did not know of any specific machines which would be improper* (201, fols. 1-20). He says he has used some machines and knows that they are all right and that they give a proper mixture. But he did not specify *these* particular machines because he does not know all the machines and *because some machines may not mix properly, although he cannot name any machines which do not mix properly* and has never had any experience in mixing concrete from the contractor's standpoint and has only kept cost sheets of such mixing about twelve years ago (202, fols. 1-40). He does not know how many concrete mixing machines he knows, *but all the machines which he does know have done satisfactory work in mixing concrete* (203, fols. 1-30).

Mr. Murphy, superintendent of Clinton Contracting Company, in speaking of this clause of the specifications, says that there is a great difference in the cost of mixing concrete, between hand mixing and machine mixing; that in his experience with the machines owned by Clinton Contracting Company it is three times as expensive to mix concrete by hand as it is to mix it by machine. His experience has been that machine-mixed concrete costs him one cent per inch and that hand-mixed concrete costs him three cents per inch. These figures are based upon present prices (p. 106, fols. 1-10).

He did not bid upon the work because of this provision in the specifications, as he would have to know the mind of the engineer and perhaps

the plants of Clinton Contracting Company would not suit his ideas (p. 105, fols. 20-30). Mr. Cavanagh, a witness called by the City of Hoboken, and who bid for work involving the laying of concrete on the same day that Mr. Crichfield bid for the work in hand has had occasion to compare mixing concrete by hand with mixing it by machine in a rough manner (p. 144, fols. 10-20). He says if he had to lay concrete in a preparation of 1-3-6 as a sub-base for street improvements in the City of Hoboken at this time in large quantities, he would prefer to lay it by machine (p. 146, fols. 30-40). He would prefer to do it this way *because of the great scarcity of labor and the high cost of labor and that it would be of great financial advantage to him in the doing of that work to lay it by machine at this time* (p. 147, fols. 1-10). He has never worked a concrete machine, but he recognizes it as a labor saving device which tends to speed in the laying of concrete (p. 147, fols. 20-30). He has bid in a contract awarded to him on May 3rd, 1916. He bid upon a concrete sub-base six inches thick (p. 150, fols. 30-40) *and he is going to get a machine with which to lay this concrete* (p. 151, fols. 1-10). Opposed to this testimony as to speed and financial saving in the laying of concrete, we have the testimony of Mr. Crichfield, who, by example, shows that his experience has been that it is just as cheap to lay by machine as it is by hand. Of course, Mr. Crichfield is interested, being the successful bidder. And an examination of his figures will show that he arrives at the equation by charging to machine mixing *fifteen dollars per day for rental of the machine* or at the rate of \$5,525 per year, when machines cost \$1,800 (166, fol. 10) and have a life of at least five years (167, fol. 20) and when it is

usual for machines of this kind to be owned by all large contractors (p. 220, fols. 1-10).

Without this testimony, however, it seems to stand to reason that these machines, like all other machines, are devised as labor saving devices for the purpose of producing speed and economy. They are standard implements of street construction and the presumption must necessarily be that they do produce the result for which they are devised; namely, speed and economy. This being so, to place into the hands of the engineer the power to say that he may or may not allow machine mixing of concrete is to create an important uncertainty in the specification, and gives to him a peculiar power over the contractor. It enables him, if he so chooses, either to favor that individual or to injure him. It is, therefore, absolutely impossible for the prospective bidder, under these circumstances, to figure upon the cost of laying concrete, since he cannot know the engineer's mind and cannot determine whether or not he will be allowed to use the cheaper, more efficient and speedier method of doing his work, or will be forced to the old-fashioned hand-mixture of the material.

The Supreme Court in dealing with the point came to the conclusion that there was a common standard for bidding, but in order to do so, the court below was *forced to assume* "that the power reserved for the engineer will be *fairly* exercised. If they had *assumed* the opposite the result of their determination would undoubtedly have been different. While we concede that in all construction work there must be some power of control, direction, adjudication and acceptance and that in municipal work this is usually lodged in the engineer in charge, we submit that the power arbitrarily to compel a contractor to vary

the quantity and quality of the work, or at his pleasure to compel the contractor to use one of several methods of performance which differ in expense to the contractor, is not such a power as is usually given to an engineer under specifications used as standards for the comparison of municipal bids. The granting of such powers would mean that substitution of the mind and opinion *for the time being*, of the engineer for that fixed and practically rigid standard laid down by law. In fact, the very fact that the court below *was forced to assume* a certain line of conduct for the engineer to sustain the specifications indicates the looseness and elasticity of the same. It indicates that a prospective bidder must look *beyond* the specification; that a prospective bidder must *assume a course of conduct*, and that his bid must be based upon *this assumption* and not upon the specification. And if he makes a mistake in his assumption he suffers the consequence, for the prospective bidder is not in the same position of advantage occupied by the Supreme Court where *it* assumes a course of conduct. The bidder is taking chances but the Supreme Court is not. The Supreme Court by its assumption makes certain and fixes that which theretofore was uncertain, the bidder cannot do that. In short, such an assumption is altogether *beside the question*. It is not the test. The only test is—Are the specifications so drawn that all bidders relying thereon—and *relying upon nothing else*—are placed upon the same footing. So also, the finding of the Supreme Court that the powers adverted to were reserved for *the purpose* of enabling the engineer to save the people money constitutes no reason either for approving or disapproving of the specification. The prospective bidder and the Court in testing specifi-

cations governed by Chapter 342, Laws of 1912, is not interested in the reasons which actuated the introduction of any of the clauses into the specifications nor do such reasons shed any light upon the single test question which always must be, *are the specifications so drawn that all bidders are placed upon an equal footing?* If we are right in our contention and in our criticism of the opinion of the Court below, then the specifications in the case do not comply with the requirement of the law, and the judgment below should be reversed and the proceedings set aside.

Point II.

The specifications and plans, without lawful authority therefor provide for the making of several independent improvements in a single proceeding.

The authority for the making of the improvements in question concededly is Chapter 210, of the Laws of 1907, page 466. The title of this act is "An act providing for the re-improvement of any street, avenue, road or highway or a portion of *such street, avenue, road or highway* in any city which has been heretofore improved and for which improvement assessments for benefits have been heretofore levied and imposed and for the issue of bonds to pay for said improvement." The act is in the singular throughout. It speaks of *such* improvement, *such* street, and plainly shows that it is intended to apply to *single* streets or portions of streets which theretofore have been the subject of improvements for which assessments for benefits have been levied and imposed. The levy and imposition of an assessment for benefits is one of the jurisdictional facts required to permit the city to proceed under

the act. Improvements upon which assessments for benefits are thus levied are concededly made only in relation to *single* streets or *portions of single streets*. As to each of the single streets or portions of streets, the governing body must further, before the act can operate, declare that *such* street or avenue—i. e., one which has heretofore been improved, and for which improvement special benefits have been levied,—has fallen (in the singular) into such condition that, in the opinion of the governing body of such city, it would be of greater advantage to such city to remake and re-improve *such* street, avenue, road or highway or any portion *thereof*.

This whole procedure, to the mind of the prosecutor, plainly indicates that each street which has been improved and for which improvement assessments have been levied and imposed shall be *separately* submitted to the judicial scrutiny and decision of the municipal authorities as to need of repair under this act, and that this act never intended to provide for the repair of more than one street at one time and by one proceeding. If the intention of the act were different and more than one street might be thus repaired, there is absolutely no limit to the number of streets which might be brought into one proceeding, and all of the streets of a municipality might, under it, be repaired upon the adoption of a requisite resolution declaring the necessity for such repairs, provided always that assessments for benefits had been imposed because of the original improvement of said streets. We cannot believe that this was the intention of the act.

It is a cardinal rule of construction of legislation affecting municipalities that powers con-

ferred are to be strictly construed and when doubtful held not to exist.

Dill. Mun. Corp., 5th Ed., Sec. 237.

Hurley v. Trenton, 66 N. J. L., 538, aff'd 67 N. J. L., 350;

Meday v. Rutherford, 65 N. J. L., 645.

The question of putting more than one so-called improvement into a single proceeding was passed upon in this State in the case of *Beechwood Land Co. v. Summit*, 78 N. J. L., 182. The Court there said, "The accepted rule seems to be that inclusion in one proceeding of two or more improvements is illegal, but we are not prepared to say that the opening and working of a new street constitute more than one improvement. We think the rule refers to improvements in *more than one street*, as in *Church v. People*, 179 Ill., 205, and *People v. Latham*, 203 Ill., 9."

Point III.

There was no actual or real competition between the two bidders submitting proposals, the successful bidder being the salaried employee of the other, and the other being actually secretly interested in the performance of the successful bid, which bid, by reason of agreement of the two bidders, was excessive and exorbitant.

The specifications provide for the filing of samples five days before the letting in order to qualify bidders to submit proposals (p. 43, fols. 10-20).

Only two bidders submitted such samples, namely, Uvalde Asphalt Paving Co. and William T. S. Crichfield (p. 17, fols. 1-40).

Only two bids were received for the work: the one from Uvalde Asphalt Paving Co. (p. 13, fols.

1-40); the other from W. T. S. Crichfield (p. 14, fols. 1-40).

Attached to and forming part of each proposal was a declaration signed by the bidder which reads as follows:

I do declare that I am the only person interested in this proposal, and that no other person than myself has any interest in this proposal, or in the contract proposed to be taken.

I further declare that this proposal is made without any connection with any other person or persons making proposals for the same work, and is in all respects fair and without collusion or fraud.

The contract was awarded to William T. S. Crichfield as the lowest bidder.

At the time when these two bids were received Crichfield was the salaried employee of the Uvalde Asphalt Paving Company, the other bidder, under a written contract (Exhibit P. 2, page 242, fol. 10) which regulated the work of Crichfield as follows:

“To work for the party of the first part in the capacity of general superintendent for said period, and to give all of his time to the furtherance of the interests of the party, of the first part, and to do everything he can to successfully carry out all contract for paving in the best interests of the party of the first part.”

Under this agreement Crichfield is drawing a salary of \$10,000 per year (p. 241, fol. 20).

Crichfield testified that he has headquarters in the plant of Uvalde Asphalt Paving Co. at No. 2 Greene street, Jersey City; that he is there most of the time and receives his mail there (p. 76, fols. 20-40) that he has no teams, horses, or motor vehicles of his own and has no plant; that the

total of his bid amounted to \$121,106, while that of Uvalde Paving Co. was \$125,700 (p. 77, fols. 1-20); that he intended to use the plant of Uvalde Asphalt Paving Co., located at No. 2 Greene street, Jersey City, to do the work; that it could not be done without a plant; that he intended using the teams of the Uvalde Company for hauling purposes (p. 79, fols. 1-40), that he figured on doing the work from their factory (p. 79, fols. 1-10), that he has heretofore in the immediate past bid upon work in his own name (p. 79, fol. 20), that he purchased the material for these independent contracts from Uvalde Asphalt Paving Co. and intended to do the same thing on this Hoboken contract (p. 81, fols. 1-20), that he keeps separate books of account from Uvalde Company, some of which he keeps at home, others at his office in the plant of Uvalde Asphalt Paving Co., at No. 2 Greene street, Jersey City; that the entries in these books are made by himself and by one Keller, who is also employed by Uvalde Asphalt Paving Co. (p. 82, fols. 10-30), and that some of the same employees whom he personally employs work for the Uvalde Asphalt Paving Co. (p. 83, fols. 1-10).

The bids in question were received May 3rd, 1916 (p. 94. fol. 10).

On Monday, May 2nd, 1916, *and before the bids were received*, Mr. Walscheid, representing the prosecutor, was examining the specifications for the work in question, upon returning to his office he found a telephone call from Mr. Hobart, of the firm of Collins & Corbin, awaiting him. Upon calling Mr. Hobart in response to this message, Mr. Hobart told Mr. Walscheid that he *represented* Crichfield and asked him (Walscheid) not to make any applications for certiorari without notice to him (Hobart) as the representative of Crichfield (p. 102, fols. 1-30).

Mr. Crichfield admitting the existence of the contract with the Uvalde Company, claims to have a license to bid on and undertake asphalt paving contracts in his own name. This license is contained in a personal letter written to Mr. Crichfield by the president of Uvalde Asphalt Paving Co. (Exhibit P. 3, page 246, fol. 20), although his \$10,000 per annum is paid to him under the contract just as if no such license had been granted to him (p. 96, fols. 10-20).

Upon the same day that the bids were received for the work now before the Court, four proposals were received by the City upon another improvement (see Exhibits 5, 6, 7, 8; pp. 248-255).

This other improvement differs from the one before the Court *only in the surface mixture* to be laid and in the provision for maintenance of the finished pavement (p. 188, fols. 1-30).

The successful bidder upon this other work was Thomas Cavanagh.

A comparison of the two bids for the work *identical in both jobs* will disclose that the Crichfield bid is much higher than the Cavanagh proposal on every item. The two bids are:

	Crichfield	Cavanagh	Crichfield Plus
Cement	\$5.75	\$5.00	+\$.75
Excavation .....	.60	.45	+ .15
Filling .....	.85	.50	+ .35
Curb reset .....	.55	.32	+ .23
New curb .....	.95	.93	+ .02
	—————	—————	—————
	\$8.70	\$7.20	+\$1.30

The Crichfield bid on these items is 18% higher than the Cavanagh proposal.

The Board of Council under the provisions of chapter 342, laws of 1912, page 593, had the right to reject any and all bids.

Because samples were filed five days before the letting both Uvalde Asphalt Paving Co. and Crichfield knew *that they would be the only bidders five days before the receipt of bids.*

Uvalde Asphalt Paving Co. and Crichfield each signed the declaration forming part of the proposal just set out in which they each represented to the board that their respective proposals were made without any connection with any other person or persons making proposals for the same work, and is in all respects fair and without collusion or fraud.

Each of these written representations was false and was then known to be false to the party making the same, because they bore to each other the relation of master and servant in the particular line of business in which they were competing against each other.

Mr. Crichfield knew on Monday, May 2nd, 1916, one day before the bids were received and opened that he would be the low bidder because he had then already hired counsel to look after his interests in any prospective certiorari proceedings.

Mr. Crichfield's low bid was excessively high.

It is our contention that the declaration of Mr. Crichfield that he is the only person interested in his proposal, that no person other than he has any interest in the proposal or the contract proposed to be taken, that his proposal is made *without any connection* with any other person or persons *making proposals for the same work*, and that it is in all respects fair and without collusion or fraud (p. 64, fols. 10-20) *was a deliberate, fraudulent, misrepresentation of a material fact*, and that *if the facts as developed in the evidence in this case of the relationship existing between Crichfield and the Uvalde Asphalt Pav-*

ing Company had been truly present to the Board of Commissioners before the award of a contract, that the commissioners would undoubtedly have rejected the two bids and readvertised the work.

It is always difficult to establish a case of actual fraud; but we contend that in this case there has been made a *prima facie* case which is not rebutted by anything produced by the defendant Crichfield. The record shows that Mr. Crichfield is employed at a salary of ten thousand dollars per annum, that he is to give *all of his time to the furtherance of the interests of the party of the first part* (The Uvalde Asphalt Paving Company) and to do everything he can to successfully carry out *all contracts for paving* in the best interests of the party of the first part. Upon an examination of this language it will be noted that he is not to do everything he can to successfully carry out all contracts of *Uvalde Paving Company* in the best interests of the party of the first part, but that he is carry out *all contracts* in that manner. Under his contract with Uvalde Asphalt Paving Co. then, Crichfield was obliged to carry out *the contract awarded to him* in the best interests of the Uvalde Asphalt Paving Company. By his own admission he has in the past taken contracts in his own name, has performed these contracts from the plant of the Uvalde Asphalt Paving Company with the materials, tools and appliances of that company. His offices are the offices of the Uvalde Asphalt Paving Company. The books covering his personal contracts are kept by an employee of the Uvalde Asphalt Paving Company, and the whole relationship between this employee and his employer is so close and so intimate as *absolutely to rebut and destroy any contrary presumption which might arise out of the letter of license given to Mr. Crichfield by the president of the*

company and set forth in this case as Exhibit P. 3 (p. 246).

If Uvalde Asphalt Paving Company and Mr. Crichfield have collusively agreed between themselves to bid against each other under circumstances such as present themselves in this case, the most plausible method which they could adopt in attempting to retain the relationship of master and man and at the same time hide their collusive agreement, would be by means of just such a letter of license as is produced in this case. In other words, the very fact of the existence of such a letter under ordinary circumstances should create suspicion of the whole transaction between these parties *and should cause, as a matter of public policy, a reversal of the proceeding below.*

The Supreme Court in dealing with this point said:

“Assuming that the contention of the prosecutor is correct and that Crichfield and the Uvalde Asphalt Company are identical in interest, we would not be justified in setting aside the contract. Upon that assumption there was but one bidder and the commissioners might have been justified in rejecting both bids; but they might also in the exercise of their discretion have been justified in awarding the contract. It cannot be said as a matter of law that it is improper to award a contract when there is only one bid.”

We agree that the Supreme Court is correct when it says that an award of contract may be made when there is only one bid, but we think the Supreme Court erred when it held that it would not be justified in setting the contract aside if Crichfield and the Uvalde Company are identical in interest. The Supreme Court says

in relation to this identity of interests that the commissioners might have been justified in rejecting both bids and that they might also *in the exercise of their discretion* have been justified in awarding the contract. The fallacy of this reasoning rests upon the assumption that the commissioners *had an opportunity to exercise their discretion*. The commissioners *did not know* of the identity of interests, and secondly, could not exercise their discretion. The commissioners attempted to ascertain whether there was an identity of interest in requesting the bidders to state specifically whether there was such identity and both bidders in writing fraudulently denied the identity of interest. The harm to the public arises not out of the fact that there was but one bidder, but out of the fact that the commissioners, in ignorance of the real situation, without exercising their discretion, were induced to award a contract on the theory that there was actual competition between the bidders and in denying to the commissioners an opportunity to exercise their discretion upon the question of whether a contract should be awarded upon a single bid.

It must be remembered that the statute providing for competitive bidding was adopted for the protection of the public, and to bring about fair, honest and open competition between bidders for municipal work; and that anything done by any prospective bidder or bidders which has a tendency to destroy the objects sought to be attained by the legislative enactment runs counter to the policy of such an enactment and should avoid the proposal or proposals of the parties taking part therein.

Thus it is not necessary in a case such as this to inquire whether the effect of the agreement between the parties was in *fact* detrimental

to the municipality. The true inquiry is, is it the natural tendency of such an agreement to injuriously influence the public interests? The rule is that agreements which in their necessary operation upon the action of the parties to them tend to restrain their natural rivalry and competition and thus to result in the disadvantage of the public are against the principles of sound public policy.

Dillon on Municipal Corporations, 5th Ed., section 781, says:

“Arrangements and combinations among those prepared and expecting to become bidders at the letting of contracts by a municipality, to prevent competition between themselves and to bring about an award at a figure which is not the result of an honest competition are contrary to public policy, and void. Such contracts are illegal in their nature and tendency and for that reason no inquiry is necessary as to the particular effect of any one contract, because it would not alter the general nature of the contract or the force of the public policy which condemns them. These principles apply to all combinations and agreements between intending bidders which have the tendency or effect of restraining or limiting competition, whether such contracts be in the nature of an agreement between two or more bidders, that one bidder shall refrain from bidding in competition with the other, or that bids shall be put in upon terms previously arranged between the parties; and whether the consideration be an agreement to share the profits of the successful bidder, or a sum paid in hand to secure the withdrawal of the bid; all such contracts and agreements are in violation of public policy.”

And in *Atcheson v. Mallon*, 43 N. Y., p. 147; Mr. Justice Folger speaking for the Court of Appeals upon the objects of an act calling for competition, says, among other things (Italics ours):

“The object and policy of the statute was to be achieved only by exciting the rivalry and competition of men seeking this privilege. This competition was to be excited by calling by advertisement for sealed and secret proposals. Each bidder, ignorant of what his rival was about to offer would be under stimulus to make a bid at the best rate to the town which his judgment would sanction, as of profit to himself. Whatever made known to one bidder the views and proposals of another abated the stimulus and tended to weaken rivalry and deaden competition. And when an agreement was made between bidders to share in the acceptance of the offer of either, it is apparent that the competition must materially slacken. * * * Until it can be truthfully said that men’s actions will not be affected by a consideration of their self-interest, it cannot be maintained that the parties to this agreement were likely, after it was formed, to be as strong competitors as they were *before*. Such is the natural effect of agreements of this nature. And it is for this reason, *and not on account of the actual results upon the public or upon third persons, or particular contracts, that they are held void*. It is because men with these agreements in their hands relying upon them for their gain, *do not act towards the public and third persons as they would without them under the stimulus of competing opposition.*”

Conclusion.

It is respectfully submitted that the judgment brought up for review be reversed and that the proceedings brought up be reversed, set aside, and for nothing holden.

Dated November 21st, 1916.

Respectfully submitted,

J. EMIL WALSCHEID,
*Attorney for and of Counsel
with Prosecutor.*

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1886

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1888

1889

1890

1891

1892

1893

1894

1895

1896

1897

1898

1899

1900

INDEX

	Page
Notice of Appeal	i
Writ of Certiorari	1
Endorsement on Writ.....	2
Return to Writ	3
Reasons	69
Rule for Depositions	71
Certificate of Commissioner	236
Opinion	257
Rule for Affirmance	258

DEPOSITIONS.

Witnesses for Prosecution.

Wm. T. S. Crichfield—	
Direct	73
Cross	86
Re-Direct	94
Re-Cross	101
Jos. Murphy—	
Direct	103
Cross	111

Witnesses for Defendant.

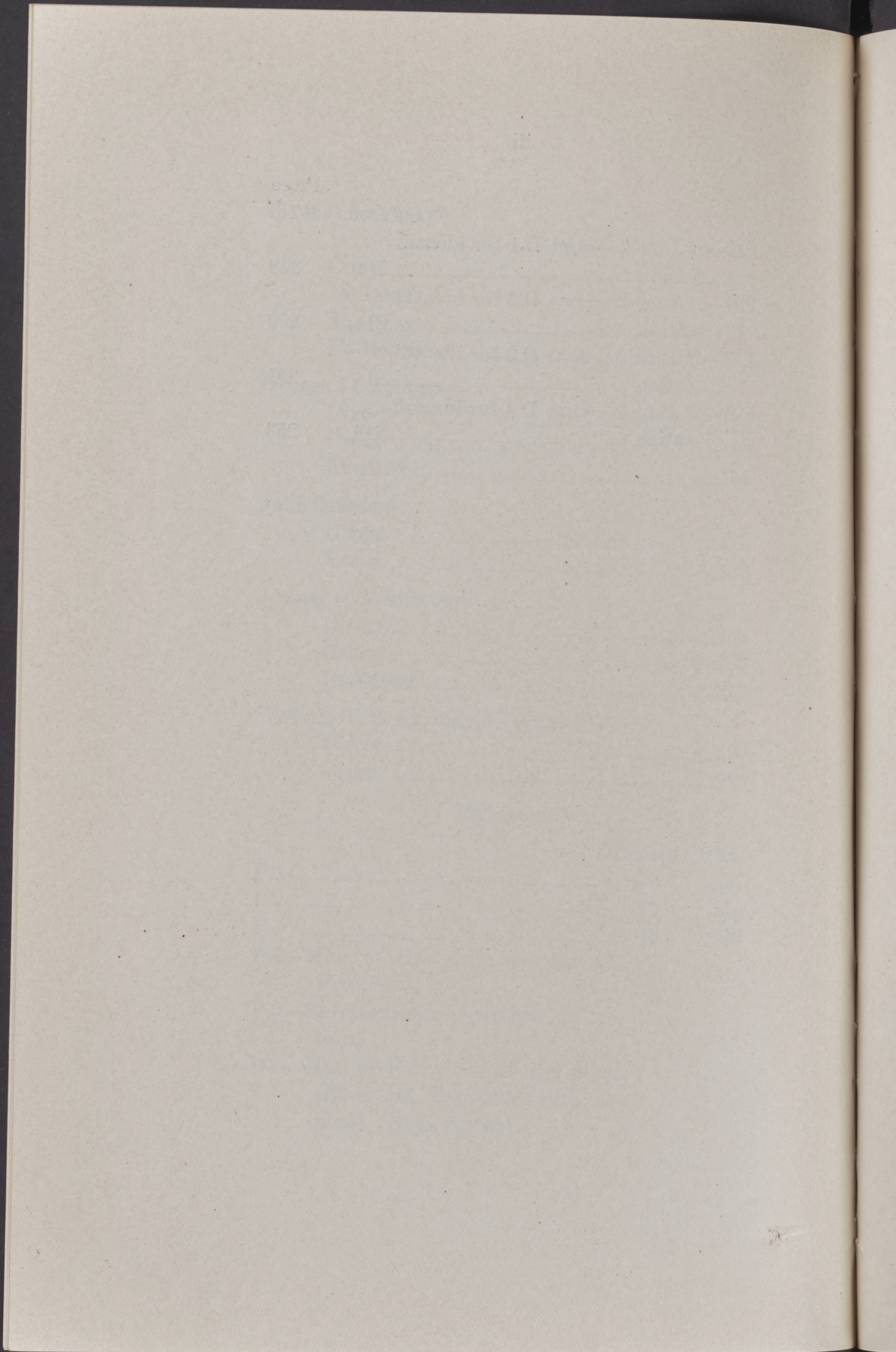
Max Miller—	
Direct	136
Cross	141

	Page
Thomas Cavanagh—	
Direct	143
Cross	146
Re-Direct	151
Re-Cross	153
Re-Re-Direct	157
George L. Fellows—	
Direct	159
Cross	162
Re-Direct	174
John Manly—	
Direct	175
Cross	178
Joseph O. Whittemore—	
Direct	183
Cross	200
Re-Direct	219
William T. S. Crichfield (Recalled)—	
Direct	220
Cross	233

EXHIBITS.

	Offered.	P'td.
P.1	74	237
P.2	75	240
P.3	75	246
P.4—Map of this improvement not Printed.		
P.5—Specifications (printed in re- turn)		
D.1—Map of Ferry Street and other street not improved with as- phalt. (Not printed)		

	Offered.	Page P'td.
P.5—of June 2—same D.1 for identification	214	248
P.6—of June 2—same D.2 for identification	214	250
P.7—of June 2—same D.3 for identification	214	251
P.8—of June 2—same D.4 for identification	214	253



Notice of Appeal.

(Filed July 24, 1916).

New Jersey Supreme Court.

<p style="text-align: center;">MAX MILLER, <i>Prosecutor,</i></p> <p style="text-align: center;">vs.</p> <p style="text-align: center;">MAYOR AND COUNCIL OF THE CITY OF HOBOKEN, Et. Als., <i>Defendants.</i></p>	}	<p>Notice of Appeal.</p>	10
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To John J. Fallon, Esq., Attorney for the City of Hoboken, and Daniel A. Haggerty, City Clerk; and Messrs. Collins & Corbin, Attorneys for William T. S. Crichfield: 20

Sirs:

PLEASE TAKE NOTICE that Max Miller, prosecutor in the above named case, appeals to the Court of Errors and Appeals from the judgment entered in this cause on the following grounds:

1. Because the Supreme Court refused to find that the specifications and plans upon which proposals were received for the contemplated improvement do not furnish to prospective bidders a common standard for bidding upon the work and prevent fair competition between them, since: 30
 - (a) The specifications provide for the taking up and removing of such curb as may be condemned by the City Surveyor in charge of the work without setting up any standard of what shall be considered bad curb, resetting the present 40

Notice of Appeal.

curb where directed, and setting new curb where considered necessary by the City Surveyor in Charge.

10 (b) The specifications provide for the furnishing of such filling as may be needed and doing such excavation and grading as may be required to permit the new pavement on a concrete foundation to conform to the lines and grades required by the plans when said plans show no such lines and grades.

(c) The specifications provide that the concrete to be used upon said work shall be mixed in a box by hand, but it provides that the City Surveyor in Charge may extend to the contractor permission to mix the same by machine.

20 (d) The Board of Commissioners reserves the right to omit any of the items bid on in this specification in whole or in part if deemed for the best interest of the City to do so, and to alter, vary or extend the work without recourse on the part of the successful bidder for any claims or damages therefor.

30 (e) The contractor will be required to do all additional work beyond that described and bid for, which is necessary to make the roadway complete in every respect according to the intent and meaning of the plans and specifications if ordered to do so by the Board of Commissioners or City Surveyor in Charge, and will be paid for at actual cost plus 10 per cent. added thereto for profit in compliance with the laws governing such work.

40 (f) The plans show no grades at which the finished pavement shall be laid, but instead bear an endorsement which reads as follows:

Notice of Appeal.

“Red lines and figures indicate the established grade; black lines and figures indicate the present surface, the extent to which the present grade shall be raised is to be determined by the Director of Streets and Public Improvements during the progress of the work.” 10

2. Because the Supreme Court refused to find that the specifications and plans without lawful authority therefor provided for the making of several independent improvements in a single proceeding.

3. Because the Supreme Court refused to find that there was no actual or real competition between the two bidders submitting proposals, the successful bidder being the salaried employee of the other bidder and the other bidder being actually secretly interested in the performance of the successful bid, which bid by reason of agreement between the two bidders was excessive and exorbitant. 20

4. Because the Supreme Court found that the specifications brought up for review furnished a common standard for bidding.

5. Because the Supreme Court found that the contract contemplated is a single contract and not to be regarded as so many separate and distinct contracts as there were streets to be repaired. 30

6. Because the Supreme Court found that assuming the contention of prosecutor to be correct and that Crichfield and the Uvalde Company are identical in interest, it would not be justified in setting the contract aside.

J. EMIL WALSCHEID, 40
Attorney for Appellant.

The first part of the report deals with the general situation of the country and the progress of the war. It is followed by a detailed account of the military operations in the various theaters of war. The author then discusses the political and economic conditions of the country and the impact of the war on the population. The report concludes with a summary of the findings and a list of recommendations.

The second part of the report contains a detailed analysis of the military operations in the various theaters of war. It discusses the tactics used by the different sides and the results of the various battles. The author also discusses the impact of the war on the economy and the political situation of the country.

The third part of the report discusses the political and economic conditions of the country and the impact of the war on the population. It discusses the various political parties and their policies, as well as the economic situation of the country and the impact of the war on the different sectors of the economy.

The fourth part of the report contains a summary of the findings and a list of recommendations. The author discusses the various issues that have arisen during the course of the war and offers suggestions for how to deal with them.

Writ.

NEW JERSEY, ss.:

(Seal)

THE STATE OF NEW JERSEY to Mayor and Council of the City of Hoboken, Daniel A. Haggerty, Clerk of said City, 10

Greeting:

We being willing for certain reasons to be certified of a certain resolution adopted by the Board of Commissioners of the City of Hoboken on the 3rd day of May, A. D. 1916, and finally passed and adopted by said Board of Commissioners on the 17th day of May, A. D. 1916, awarding a contract 20
for the grading and paving with asphalt or a concrete foundation of Madison Street, from Ferry Street to about two hundred and twenty-five (225') feet north of Second Street; Jefferson Street from Ferry Street to about two hundred and twenty-five (225') feet north of Second Street; Adams Street from Newark to Second Streets; Clinton Street from Newark to First Streets; Willow Avenue from Ferry to Third Streets; Park Avenue from Ferry to Fourth Streets; 30
Bloomfield Street from Ferry to Newark Streets and from First to Fourth Streets; Second Street from Bloomfield Street to Willow Avenue, in the City of Hoboken, together with all matters and proceedings of the Board of Commissioners of the City of Hoboken, touching and concerning the same, do command you that the said resolution together with all matters and proceedings touching and concerning the same to our Supreme 40

Writ.

Court of Judicature at Trenton, on the 25th day of May, A. D. 1916, you certify and send, together with this writ, that therein may be done what of right and according to the laws and the constitution of this State ought to be done.

10 WITNESS: William S. Gummere, Esquire, Chief Justice of our Supreme Court at Trenton, this 23rd day of May, in the year of Our Lord, One Thousand Nine Hundred and Sixteen.

WM. C. GEBHARDT,
Clerk.

J. EMIL WALSCHEID,
Attorney.

Endorsement on Writ.

20

NEW JERSEY SUPREME COURT.

MAX MILLER,
Prosecutor,

vs. •

MAYOR AND COUNCIL OF THE CITY OF
HOBOKEN, DANIEL A. HAGGERTY, Clerk,
and WILLIAM T. S. CRITCHFIELD,
Defendants.

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WRIT OF CERTIORARI.

Returnable, May 25, 1916.

J. Emil Walscheid,
Attorney for Prosecutor,
27 Bergenline Avenue,
Town of Union, N. J.

I allow this writ. Let it be sealed. To be argued orally at June Term 1916.

F. J. SWAYZE,
J. S. C.

40

Return to Writ.

New Jersey Supreme Court.

MAX MILLER,

Prosecutor,

vs.

MAYOR AND COUNCIL OF THE CITY
OF HOBOKEN, DANIEL A. HAG-
GERTY, CLERK, AND WILLIAM
T. S. CRITCHFIELD,*Defendants.*

On Certiorari. 10

Return to
Writ.

In obedience to the command of the writ of certiorari in the above-entitled cause, the Board of Commissioners of the City of Hoboken, for and in behalf of the Mayor and Council of the City of Hoboken, and Daniel A. Haggerty, City Clerk of the City of Hoboken, within named, do hereby certify and send to the Supreme Court of the State of New Jersey the resolutions adopted by the Board of Commissioners of the City of Hoboken on the third day of May, 1916, and finally passed and adopted by said Board of Commissioners on the seventeenth day of May, 1916, awarding a contract for the grading and paving with asphalt of a concrete foundation of Madison Street, from Ferry Street to about 225 feet north of Second Street; Jefferson Street from Ferry Street to about 225 feet north of Second Street; Adams Street from Newark to Second Streets; Clinton Street from Newark to First Streets; Willow Avenue from Ferry to Third Streets; Park Avenue from Ferry to Fourth Streets; Bloomfield Street from Ferry to Newark Streets, and from First to

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Return to Writ.

10 Fourth Streets; Second Street from Bloomfield Street to Willow Avenue, in the City of Hoboken, together with all matters and proceedings of the Board of Commissioners of the City of Hoboken, touching and concerning the same, as within com-
manded, as by the transcript under the seal of the City of Hoboken hereto annexed more fully ap-
pears.

BOARD OF COMMISSIONERS OF THE CITY
OF HOBOKEN,

By P. R. GRIFFIN,
Mayor.

ATTEST:

DANIEL A. HAGGERTY,
City Clerk.

20 (Seal)

NEW JERSEY, ss.:

(Seal)

THE STATE OF NEW JER-
SEY to Mayor and Council of
the City of Hoboken, Daniel A.
Haggerty, Clerk of said City,

30 Greeting:

We being willing for certain reasons to be cer-
tified of a certain resolution adopted by the Board
of Commissioners of the City of Hoboken on the
3rd day of May, A. D. 1916, and finally passed
and adopted by said Board of Commissioners on
the 17th day of May, A. D., 1916, awarding a con-
tract for the grading and paving with asphalt or
a concrete foundation of Madison Street, from
Ferry Street to about two hundred and twenty-five

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Return to Writ.

(225') feet north of Second Street; Jefferson Street from Ferry Street to about two hundred and twenty-five (225') feet north of Second Street; Adams Street from Newark to Second Streets; Clinton Street from Newark to First Streets; Willow Avenue from Ferry to Third Streets; Park Avenue from Ferry to Fourth Streets; Bloomfield Street from Ferry to Newark Streets and from First to Fourth Streets; Second Street from Bloomfield Street to Willow Avenue, in the City of Hoboken, together with all matters and proceedings of the Board of Commissioners of the City of Hoboken, touching and concerning the same, do command you that the said resolution together with all matters and proceedings touching and concerning the same to our Supreme Court of Judicature at Trenton, on the 25th day of May, A. D. 1916, you certify and send, together with this writ, that therein may be done what of right and according to the laws and the constitution of this state ought to be done.

WITNESS: William S. Gummere, Esquire, Chief Justice of our Supreme Court at Trenton, this 23rd day of May, in the year of Our Lord, One Thousand Nine Hundred and Sixteen.

WM. C. GEBHARDT,
Clerk.

J. EMIL WALSCHEID,
Attorney.

Return to Writ.

EXTRACTS FROM THE MINUTES OF A
REGULAR MEETING OF THE BOARD OF
COMMISSIONERS OF THE CITY OF HOBOKEN,
NEW JERSEY, HELD APRIL 12TH,
1916.

- 10 PRESENT, Commissioners Bach, Londrigan,
McFeely, Schmulling and Mayor Griffin.
ABSENT, None.

City Surveyor, Joseph O. Whittemore, also submitted plans and specifications for the grading and repaving with asphalt on a concrete foundation of Madison Street from Ferry Street to about 225' north of Second Street, Jefferson Street from Ferry Street to about 225' north of Second street,
20 Adams Street from Newark to Second Streets, Clinton Street from Newark to First Streets, Willow Avenue from Ferry to Third Streets, Park Avenue from Ferry to Fourth Streets, Bloomfield Street from Ferry to Newark Streets and from First to Fourth Streets, Second Street from Bloomfield Street to Willow Avenue, in the City of Hoboken, N. J.

Received and referred to the Director, Department of Streets and Public Improvements.

- 30 By Commissioner Londrigan

WHEREAS, Madison Street from Ferry Street to about two hundred and twenty-five feet north of Second Street; Jefferson Street from Ferry Street to about two hundred and twenty-five feet north of Second Street; Adams Street from Newark Street to Second Street; Clinton Street from Newark Street to First Street; Willow Avenue from Ferry Street to Third Street; Park Avenue from Ferry Street to Fourth Street; Bloom-

Return to Writ.

field Street from Ferry Street to Newark Street and from First Street to Fourth Street and Second Street from Bloomfield Street to Willow Avenue; in the City of Hoboken, have been heretofore paved and improved and assessments for benefits for such paving and the making of such improvements have been heretofore levied and imposed upon the property specially benefited thereby, and said streets have become out of repair, and have fallen in such condition, that in the opinion of the Board of Commissioners of the City of Hoboken, (the governing body of said City), it would be of greater advantage to said City to remake, repave and reimprove the aforesaid streets; therefore be it

RESOLVED, That the aforesaid streets be repaved and reimproved with asphalt pavement, laid on a concrete foundation as per plans and specifications to be prepared therefor as hereinafter mentioned, and that the curbs of said streets be reset, which said repavement and reimprovement, the Board of Commissioners of the City of Hoboken do hereby determine to be necessary; and be it further

RESOLVED, That Joseph O. Whittemore, City Surveyor, be and he is hereby directed to draw plans and specifications for the aforesaid repavement and reimprovement, and that after the drawing of said plans and specifications and the approval thereof by the Board of Commissioners of the City of Hoboken, such plans and specifications be filed with the City Clerk, who shall thereupon advertise according to law for proposals or bids for the making of such repavement and reimprovement, which advertisement is hereby directed to

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Return to Writ.

be made in accordance with the statute in such case made and provided.

Adopted by the following vote:

Yeas, Commissioners Bach, Londrigan, Mc-Feely, Schmulling and Mayor Griffin.

10 Nays, None.

The Director, Department of Streets and Public Improvements also submitted the following:

Hoboken, N. J., April 12th, 1916.

To the Honorable Board of Commissioners of the City of Hoboken:

Gentlemen:

I hereby respectfully report that I have examined the plans and specifications as submitted by
 20 Joseph O. Whittemore, City Surveyor, for the grading and repaving with asphalt on a concrete foundation of Madison Street from Ferry Street to about 225' north of Second Street, Jefferson Street, from Ferry Street to about 225' north of Second Street, Adams Street, from Newark to Second Streets, Clinton Street, from Newark to First Streets, Willow Avenue, from Ferry to Third Streets. Park Avenue from Ferry to
 30 Fourth Streets, Bloomfield Street, from Ferry to Newark Streets and from First to Fourth Streets, Second Street, from Bloomfield Street to Willow Avenue, and would recommend their approval and adoption.

Respectfully submitted,

(Signed) JAMES H. LONDRIGAN,
 Director of the Department of Streets and Public Improvements.

Return to Writ.

On motion of Commissioner Londrigan, the report of the Director was received and the plans and specifications were approved and adopted by the following vote:

Yeas, Commissioners Londrigan, McFeely and Mayor Griffin. 10

Nay, Commissioner Schmulling.

Absent, Commissioner Bach. (Excused.)

CITY OF HOBOKEN
COUNTY OF HUDSON, N. J.

NOTICE TO CONTRACTORS.

Notice is hereby given that the Board of Commissioners of the City of Hoboken, N. J., will receive sealed proposals at a meeting of said Board to be held on 20

WEDNESDAY, MAY 3, 1916,

at 10 o'clock A. M., at the City Hall, Hoboken, N. J., for the grading and repaving with asphalt on a concrete foundation of Madison Street from Ferry Street to about 225 feet north of Second Street; Jefferson Street, from Ferry Street to about 225 feet north of Second Street; Adams Street from Newark to Second Streets, Clinton Street, from Newark to First Streets; Willow Avenue, from Ferry to Third Streets; Park Avenue from Ferry to Fourth Streets, Bloomfield Streets from Ferry to Newark Streets and from First to Fourth Streets; Second Street from Bloomfield Street to Willow Avenue in the City of Hoboken, in accordance with plans and specifications on file in the office of the City Clerk. 30

All proposals must be made out on blanks furnished by the City Clerk and accompanied with a 40

Return to Writ.

certified check in the sum of \$5,000, order of Gustav Bach, City Treasurer, together with a sworn statement signed by a surety company (authorized to do business in this State) or by two responsible freeholders of Hudson County, that they will become surety for the bidder in a sum equal to the amount of the bid in case a contract is awarded to that bidder.

Proposals to be addressed to the Board of Commissioners of the City of Hoboken, endorsed "Proposals for grading and repaving with asphalt of Madison Street, Jefferson Street, Adams Street, Clinton Street, Willow Avenue, Park Avenue, Bloomfield Street, and Second Street," and handed to the Clerk in open meeting when called for in the regular order of business.

The Board of Commissioners reserve the right to reject any or all bids if deemed for the interest of the City so to do.

By order of the Board of Commissioners.

Dated April 15, 1916.

DANIEL A. HAGGERTY, City Clerk.

STATE OF NEW JERSEY, }
 COUNTY OF HUDSON, } ss.

William Faas being duly sworn according to law, upon his oath saith, that he is owner of the "Hudson County Post and Democrat," a public newspaper printed and published in the City of Hoboken, County of Hudson and State of New Jersey; that a notice, of which the annexed is a true copy, was published in said newspaper on the 15th day of April, 1916, and continued therein

Return to Writ.

for three weeks successively thereafter, at least once in each week to wit, on the 15th, 22nd and 29th April, making three publications in all.

(Signed) WILLIAM FAAS.

Sworn and subscribed before me this 10th day of May, A. D. 1916.

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(Signed) JOHN RICE,
Notary Public, N. J.

SEAL)

CITY OF HOBOKEN
COUNTY OF HUDSON, N. J.

NOTICE TO CONTRACTORS.

Notice is hereby given that the Board of Commissioners of the City of Hoboken, N. J., will receive sealed proposals at a meeting of said Board to be held on

20

WEDNESDAY, MAY 3, 1916,

at 10 o'clock A. M., at the City Hall, Hoboken, N. J., for the grading and repaving with asphalt on a concrete foundation of Madison Street from Ferry Street to about 225 feet north of Second Street; Jefferson Street, from Ferry Street to about 225 feet north of Second Street; Adams Street from Newark to Second Streets, Clinton Street, from Newark to First Streets; Willow Avenue, from Ferry to Third Streets; Park Avenue from Ferry to Fourth Streets, Bloomfield Streets from Ferry to Newark Streets and from First to Fourth Streets; Second Street from Bloomfield Street to Willow Avenue in the City of Hoboken, in accordance with plans and specifications on file in the office of the City Clerk.

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Return to Writ.

10 All proposals must be made out on blanks furnished by the City Clerk and accompanied with a certified check in the sum of \$5,000, order of Gustav Bach, City Treasurer, together with a sworn statement signed by a surety company (authorized to do business in this State) or by two responsible freeholders of Hudson County, that they will become surety for the bidder in a sum equal to the amount of the bid in case a contract is awarded to that bidder.

20 Proposals to be addressed to the Board of Commissioners of the City of Hoboken, endorsed "Proposals for grading and repaving with asphalt of Madison Street, Jefferson Street, Adams Street, Clinton Street, Willow Avenue, Park Avenue, Bloomfield Street, and Second Street," and handed to the Clerk in open meeting when called for in the regular order of business.

The Board of Commissioners reserve the right to reject any or ball bids if deemed for the interest of the City so to do.

By order of the Board of Commissioners.

Dated April 15, 1916.

DANIEL A. HAGGERTY, City Clerk.

30 STATE OF NEW JERSEY, }
COUNTY OF HUDSON, } ss.

Fred. A. Seide, being duly sworn according to law, upon his oath saith that he is Asst. Manager of the "Hudson Observer," a public newspaper printed and published in the City of Hoboken, County of Hudson and State of New Jersey; that a notice, of which the annexed is a true copy, was published in said newspaper on the 15th day of

Return to Writ.

April, 1916, and continued therein for 4 insertions thereafter April 18th, 21st, 26th and May 1st, 1916, making 5 publications in all.

(Signed)

FRED A. SEIDE.

Sworn and subscribed before me this 6th day of May A. D., 1916.

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(Signed) WILLIAM W. McQUEEN,
Notary Public of N. J.

EXTRACTS FROM THE MINUTES OF A REGULAR MEETING OF THE BOARD OF COMMISSIONERS OF THE CITY OF HOBOKEN, NEW JERSEY, HELD MAY 3RD, 1916.

PRESENT, Commissioners Bach, Londrigan, Schmulling and Mayor Griffin. 20

ABSENT, Commissioner McFeeley.

The Clerk at the direction of His Honor, Mayor Griffin, pursuant to advertisement, called for proposals for the grading and repaving on a concrete foundation with asphalt of Madison Street from Ferry Street to about 225' north of Second Street, Jefferson Street from Ferry Street to about 225' north of Second Street, Adams Street from Newark to Second Streets, Clinton Street from Newark to First Streets, Willow Avenue from Ferry to Third Streets, Park Avenue from Ferry to Fourth Streets, Bloomfield Street from Ferry to Newark Streets and from First to Fourth Streets, Second Street from Bloomfield Street to Willow Avenue, in the City of Hoboken, N. J., and two bids were received as follows:

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Return to Writ.

From Uvalde Asphalt Paving Co., 1 Broadway.
New York.

10	1. Per square yard for sheet asphalt paving including the work specified and all work incidental thereto the sum of one 75/100	\$1.75
	2. Per square yard for removing the present stone block pavement including the work specified and all work incidental thereto the sum of Twenty cents .....	.20
	3. Per cubic yard for concrete including the work specified and all work incidental thereto, the sum of Six Dollars.	6.00
20	4. Per cubic yard for filling including the work specified and all work incidental thereto, the sum of Seventy-Five cents.	.75
	5. Per cubic yard for excavation including the work specified and all work incidental thereto, the sum of Fifty cents .....	.50
	6. Per lineal foot for old curb reset including the work specified and all work incidental thereto, the sum of One Dollar	1.00
30	7. Per lineal foot for new curb furnished and set including the work specified and all work incidental thereto, the sum of forty-three cents .....	.43
	8. For each sewer manhole raised and reset including the work specified and all work incidental thereto, the sum of Five Dollars	5.00
40	9. For each corner basin raised and reset, including the work specified and all work incidental thereto, the sum of Five Dollars	5.00

Return to Writ.

10. For each noiseless manhole cover Eight 50/100 Dollars	8.50	
From W. T. S. Crichfield, 54 Fifth St., Ho- boken, N. J.:		
1. For sheet asphalt paving including the work specified and all work incidental thereto, per square yard, the sum of One Dollar, Fifty-Eight cent	1.58	10
2. For removing the present stone block pavement including the work specified and all work incidental thereto, per square yard, the sum of Twenty-five cents .....	.25	
3. For concrete including the work speci- fied, and all work incidental thereto, per cubic yard, the sum of Five Dollars and Seventy-five cents	5.75	20
4. For filling including the work specified and all work incidental thereto, per cu- bic yard, the sum of Eighty-Five cents.	.85	
5. For excavation including the work specified and all work incidental there- to, per cubic yard, the sum of Sixty cents .....	.60	
6. For old curb, reset including the work specified and all work incidental there- to, per lineal foot the sum of Fifty-five cents .....	.55	30
7. For new curb furnished and set includ- ing the work specified and all work in- cidental thereto per lineal foot, the sum of Ninety-five cents .....	.95	
8. For sewer manholes raised and reset including the work specified and all		40

Return to Writ.

	work incidental thereto, each the sum of Three Dollars, Fifty Cents	3.50
	9. For corner basins raised and reset including the work specified and all work incidental thereto, each the sum of Seven Dollars	7.00
10	10. For each noiseless manhole cover the sum of Five Dollars	5.00

Received and referred to the Director, Department of Streets and Public Improvements:

Stillman and Van Sielen Chemical Laboratory Co., Inc., submitted their report covering the tests made of the samples submitted for asphalt pavement which was as follows:

20 New York, May 2, 1916.

Mr. J. O. Whittemore, City Engineer,
1 Newark St., Hoboken, N. J.

Dear Sir:—

Enclosed please find report of tests of Bidder's samples which were submitted to us by the City Clerk on April 29th, 1916.

30 We are also returning herewith the certificates which were submitted by the contractors with these samples and samples of the finished pavement.

Yours very truly,

Stillman & Van Sielen Chemical Laboratory Co., Inc.,
Per James V. Van Sielen.

Return to Writ.

New York, May 2, 1916.

Mr. J. O. Whittemore, City Engineer,
1 Newark St., Hoboken, N. J.

Dear Sir:

The samples of asphalt paving materials submitted in connection with the bids which the City of Hoboken advertised to be received May 3rd, 1916, have been examined by us and we report as follows: 10

Uvalde Asphalt Paving Co., 1 Broadway, New York, N. Y.

Sample of Refined Bermudez Lake Asphalt.

Sample of Liquid Asphalt Flux.

Sample of Asphaltic Cement.

Sample of Crushed Stone. 20

Sample of Sand.

Sample of Powdered Inorganic Dust or Filler.

Sample of Finished Pavement as laid on 13th Street and other Streets in Hoboken, N. J., and manufactured at No. 2 Greene Street, Jersey City, N. J.

Certificates referring to all of the above samples.

The above samples have been tested by us and found to comply with your specifications. 30

W. T. S. Crichfield, 54 Fifth St., Hoboken, N. J

Sample of Refined Bermudez Lake Asphalt.

Sample of Liquid Asphalt Flux.

Sample of Asphaltic Cement.

Sample of Crushed Limestone.

Sample of Sand.

Sample of Powdered Inorganic Dust or Filler.

Return to Writ.

Sample of Finished Pavement as manufactured at No. 2 Greene St., Jersey City, and laid on Washington St., Hoboken, N. J.

Certificates referring to all of the above samples.

10 The above samples have been tested by us and found to comply with your specifications:

Respectfully submitted,

(Signed) Stillman and Van Sieten Chemical Lab. Co.

Received and referred to the Director, Department of Streets and Public Improvements.

20 The Director, Department of Streets and Public Improvements to whom was referred the communication and report of Stillman and Van Sieten Chemical Laboratory Co., Inc., on tests made of samples of asphalt paving materials, reported in favor of receiving and placing the report on file.

Commissioner Londrigan moved that the report of the Directory be received and the recommendation adopted.

Adopted by the following votes: Yeas, Commissioners Bach, Londrigan, McFeely, Schmulling and Mayor Griffin.

30 Nays, none.

By Commissioner Londrigan:

40 The Director of the Department of Streets and Public Improvements to whom was referred the several bids presented for the grading and repaving with asphalt on a concrete foundation of Madison Street from Ferry Street to about 225' north of Second Street, Jefferson Street from Ferry Street to about 225' north of Second Street, Adams Street from Newark to Second Streets, Clinton

Return to Writ.

Street from Newark to First Streets, Willow Avenue from Ferry to Third Streets, Park Avenue from Ferry to Fourth Streets, Bloomfield Street from Ferry to Newark Streets and from First to Fourth Streets, Second Street from Bloomfield Street to Willow Avenue, in the City of Hoboken in accordance with the plans and specifications prepared therefor by Joseph O. Whittemore, City Engineer and Surveyor, which said plans and specification were approved by the Board of Commissioners of the City of Hoboken, April 12, 1916, hereby reports that he has carefully examined the aforesaid bids and that W. T. S. Crichfield is the lowest responsible bidder for said work, and said Director therefore recommends the adoption of the following resolution. 10

RESOLVED, That the contract for the repaving and reimprovement with asphalt on a concrete foundation of Madison Street from Ferry Street to about 225' north of Second Street, Jefferson Street from Ferry Street to about 225' north of Second Street, Adams Street from Newark to Second Streets, Clinton Street from Newark to First Streets, Willow Avenue from Ferry to Third Streets, Park Avenue from Ferry to Fourth Streets, Bloomfield Street from Ferry to Newark Streets and from First to Fourth Streets, Second Street from Bloomfield Street to Willow Avenue, in the City of Hoboken in accordance with the plans and specifications prepared therefor by Joseph O. Whittemore, City Engineer and Surveyor, approved by the Board of Commissioners of the City of Hoboken, April 12, 1916, be and is hereby awarded to W. T. S. Crichfield, the lowest responsible bidder therefor, at the unit prices 20 30 40

Return to Writ.

mentioned in his proposal, or bid, submitted to the Board of Commissioners of the City of Hoboken at a meeting of said body held May 3, 1916; and be it further

10 RESOLVED, That the Corporation Attorney be and he is hereby directed to draw up the necessary bond and agreement to be executed by said W. T. S. Crichfield for the aforesaid work, and be it further

RESOLVED, That the City Clerk be and he is hereby directed to place on file all other bids submitted to the Board of Commissioners for the aforesaid work.

20 Commissioner Londrigan moved that the resolution be received and laid on the table for at least two weeks for the purpose of public inspection.

Adopted by the following vote:

Yeas, Commissioners Bach, Londrigan, McFeely and Mayor Griffin.

Nay, Commissioner Schmulling.

By Mayor Griffin and all the Commissioners:

30 AN ORDINANCE AUTHORIZING THE ISSUANCE of 205,000.00 STREET RE-IMPROVEMENT BONDS OF THE CITY OF HOBOKEN.

40 WHEREAS, Pursuant to Chapter 210 of the Laws of 1907, this Board of Commissioners of the City of Hoboken, being the governing body of said City, has, by resolution adopted on April 12, 1916, decided upon the necessity of the re-improvement of the following streets of said City, namely: Newark Street from Bloomfield Street to Park Avenue and from Willow Avenue west to the City line, Ferry Street, from Jefferson Street west to

Return to Writ.

the City line, Second Street, from Washington Street to Bloomfield Street, Grand Street from Fifth Street to Eighth Street, Sixth street from Clinton Street to about 100 feet west of Grand Street, Sixth Street, from about 100 feet west of Adams Street to about 100 feet west of Jefferson Street, Adams Street from Fifth Street to Sixth Street, Fifth Street from Adams Street to Jefferson Street and Fifth Street from Washington Street to Bloomfield Street; and by resolution adopted on said date has decided upon the necessity of the reimprovement of the following streets of said City, namely: Madison Street from Ferry Street to about two hundred and twenty-five feet north of Second Street; Jefferson Street from Ferry Street to about two hundred and twenty-five feet north of Second Street; Adams Street from Newark Street to Second Street; Clinton Street from Newark Street to First Street; Willow Avenue from Ferry Street to Third Street; Park Avenue from Ferry Street to Fourth Street; Bloomfield Street from Ferry Street to Newark Street and from First Street to Fourth Street and Second Street from Bloomfield Street to Willow Avenue; and had caused plans and specifications for the work to be done to be drawn and has advertised for proposals for bids for the making of such reimprovement, and has, by resolution introduced on May 3, 1916, and finally passed on May 17, 1916, let the contracts for such reimprovement and awarded the same, as provided in said Act; and

WHEREAS, The full contract price and all other expenses incidental to making such reimprovement and the bond issue authorized therein amounts to \$205,000.00.

Return to Writ.

NOW, THEREFORE, THE BOARD OF COMMISSIONERS OF THE MAYOR AND COUNCIL OF THE CITY OF HOBOKEN DO ORDAIN:

10 Section 1. Pursuant to said act and for the purpose of procuring funds wherewith to meet the cost and expense of making such reimprovement, including the full contract price, and of all other expenses incidental to making such reimprovement and the bond issue herein authorized, bonds of the City of Hoboken shall be issued in the aggregate principal amount of Two Hundred and Five Thousand Dollars (\$205,000.00). Said bonds shall be 205 in number, numbered from 1 to 205 inclusive; of the denomination of \$1,000 each, 20 shall be dated June 1, 1916, and shall be payable June 1, 1946. They shall bear interest at the rate of four and one-half per centum per annum, payable semi-annually on the first days of June and December in each year until maturity. Both principal and interest of said bonds shall be payable at the office of the City Treasurer of said city, in gold coin of the United States of America, of or equal to the present standard of weight and fineness. Said bonds shall be coupon bond, register- 30 able at the option of the holder either as to principal only or as to both principal and interest.

Section 2. Said bonds shall be in substantially the following form:

Return to Writ.

No. \$1,000

UNITED STATES OF AMERICA
STATE OF NEW JERSEY
CITY OF HOBOKEN

STREET RE-IMPROVEMENT BOND.

10

The Mayor and Council of the City of Hoboken, a municipal corporation of the State of New Jersey, for value received, promises to pay to the bearer, or if this bond be registered, to the person in whose name it is registered, the sum of One Thousand Dollars (\$1,000) on the first day of June, 1946, with interest thereon from the date hereof at the rate of four and one-half per centum per annum, payable semi-annually on the first days of June and December in each year, upon presentation and surrender of the annexed coupons as they respectively become due, or if this bond be converted into a registered bond to the person in whose name it is registered. Both principal and interest of this bond are payable in gold coin of the United States of America of or equal to the present standard of weight and fineness at the office of the Treasurer of said City. This bond may be registered as to principal by the holder in his name on the books of said City, kept in the office of the City Comtroller, and such registration shall be noted hereon, after which no valid transfer hereof shall be made except on said books until after registered transfer to bearer. Such registration shall not affect the negotiability of the coupons, which shall continue to pass by delivery. At the request of the holder this bond may be converted into a fully registered bond, and the coupons annexed hereto detached and canceled,

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Return to Writ.

and thereafter both principal and interest will be payable to the person in whose name it is registered. This bond is one of an issue of 205 bonds of like date and tenor, numbered from 1 to 205, inclusive, issued pursuant to an Act of the Legislature of the State of New Jersey entitled: "An
10 Act providing for the reimprovement of any street, avenue, road or highway, or the portion of such street, avenue, road or highway in any city which has been heretofore improved and for which improvement assessments for benefits have been heretofore levied and imposed, and for the issue of bonds to pay for said improvement," approved May 15, 1907, constituting Chapter 210
20 of the Laws of 1907, and the acts amendatory thereof and supplemental thereto, and an ordinance of the Board of Commissioners of said City entitled "An Ordinance authorizing the issuance of \$205,000.00 Street Reimprovement Bonds of the City of Hoboken," duly adopted May 17, 1916.

It is hereby certified and recited that all conditions, acts and things required by the Constitution and Statutes of the State of New Jersey to exist, to have happened and to be performed, precedent to and in the issuance of this bond, exist, have
30 happened and have been performed, and that the issue of bonds of which this is one, together with all other indebtedness of said City, is not in excess of any constitutional or statutory limit of indebtedness, and the faith and credit of said City are hereby irrevocably pledged to the punctual payment of the principal and interest of this bond, in accordance with its terms.

IN WITNESS WHEREOF, The Mayor and Council of the City of Hoboken has caused this
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Return to Writ.

bond to be signed by the Mayor and Comptroller of said City and the corporate seal of said City to be hereunto affixed and attested by the City Clerk, and the coupons hereto annexed to be authenticated by the fac-simile signature of said Comptroller, and this bond to be dated June 1, 1916. 10

.....
Mayor.

.....
Comptroller.

Attest:

.....
City Clerk.
(Registration Certificate.)

I hereby certify that at the request of the holder of the within bond for its conversion into a registered bond, I have this day cut off and destroyed coupons attached to said Bond numbered from to , inclusive, of the amount and value of twenty-two and 50/100 Dollars (\$22.50) each, amounting in the aggregate to dollars (\$) and that the within bond is hereby converted into a registered bond, with the principal thereof and semi-annual interest thereon payable to assignee or legal representative. 20

Dated 19

.....
Comptroller. 30

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Return to Writ.

Date of Registration.	Name of Registered Holder.	Registered by
		Comptroller.
		Comptroller.
		Comptroller.

(Form of Coupon)

The Mayor and Council of the City of Hoboken, New Jersey, will pay to the bearer on the first day of 19 , the sum of twenty-two and 50/100 Dollars (\$22.50) in gold coin of the United States of America, of or equal to the present standard of weight and fineness, at the office of the Treasurer of said City, being six months' interest then due on its Street Reimprovement Bond dated June 1, 1916, and numbered.

Comptroller.

Section 3. For the purpose of meeting the interest on said bonds after the same shall become due and the principal thereof at maturity, there shall be raised annually by tax, a sum sufficient to meet such interest and principal as they become due.

Section 4. The proceeds derived from the sale of said bonds shall be deposited in the office of the City Treasurer and shall be paid out only by him on warrant or order of the Board of Commissioners of the City of Hoboken.

Section 5. All ordinances and parts of ordinances inconsistent herewith are hereby repealed.

Return to Writ.

Section 6. This ordinance shall take effect ten days after its final passage.

Commissioner Londrigan moved that the ordinance pass its first reading as read and lay on the table for at least two weeks for the purpose of public inspection. Motion seconded by Commissioner Bach.

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Adopted by the following vote:

Yeas, Commissioners Bach, Londrigan, McFeely, Schmulling and Mayor Griffin.

Nays, None.

EXTRACTS FROM THE MINUTES OF A REGULAR MEETING OF THE BOARD OF COMMISSIONERS OF THE CITY OF HOBOKEN, NEW JERSEY, HELD MAY 17TH, 1916.

20

PRESENT, Commissioners Bach, Londrigan, McFeely, Schmulling and Mayor Griffin.

ABSENT, None.

Commissioner Londrigan moved that the resolution of award of contract to W. T. S. Crichfield, for the grading and repaving with asphalt on a concrete foundation of Madison Street, from Ferry Street to about 225' north of Second Street, Jefferson Street from Ferry Street to about 225' north of Second Street, Adams Street from Newark to Second Streets, Clinton Street from Newark to First Street, Willow Avenue from Ferry to Third Streets, Park Avenue from Ferry to Fourth Streets, Bloomfield Street from Ferry to Newark Streets and from First Streets, Second Street from Bloomfield Street to Willow Avenue in the City of Hoboken, received and laid on the table for two weeks at the meeting of the

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Return to Writ.

Board held May 3rd, 1916, be taken from the table for adoption. Motion seconded by Commissioner Bach.

Adopted by the following vote:

Yeas, Commissioners Bach, Londrigan, McFeely and Mayor Griffin.

10 Nays, Commissioner Schmulling.

By Commissioner Londrigan:

The Director of the Department of Streets and Public Improvements to whom was referred the several bids presented for the grading and repaving with asphalt on a concrete foundation of Madison Street from Ferry Street to about 225' north of Second Street, Jefferson Street from Ferry Street to about 225' north of Second Street, Adams Street from Newark to Second Streets, 20 Clinton Street from Newark to First Streets, Willow Avenue from Ferry to Third Streets, Park Avenue from Ferry to Fourth Streets, Bloomfield Street from Ferry to Newark Streets and from First to Fourth Streets, Second Street from Bloomfield Street to Willow Avenue in the City of Hoboken in accordance with the plans and specifications prepared therefor by Joseph O. Whittemore, City Engineer and Surveyor, which 30 said plans and specifications were approved by the Board of Commissioners of the City of Hoboken, April 12, 1916, hereby reports that he has carefully examined the aforesaid bids and that W. T. S. Crichfield is the lowest responsible bidder for said work, and said Director therefore recommends the adoption of the following resolution.

RESOLVED, That the contract for the repaving and reimprovement with asphalt on a con-

Return to Writ.

crete foundation of Madison Street from Ferry Street to about 225' north of Second Street, Jefferson Street from Ferry Street to about 225' north of Second Street, Adams Street from Newark to Second Streets, Clinton Street from Newark to First Streets, Willow Avenue from Ferry to Third Streets, Park Avenue from Ferry to Fourth Streets, Bloomfield Street from Ferry to Newark Streets and from First to Fourth Streets, Second Street from Bloomfield Street to Willow Avenue, in the City of Hoboken in accordance with the plans and specifications prepared therefor by Joseph O. Whittemore, City Engineer and Surveyor, approved by the Board of Commissioners of the City of Hoboken April 12, 1916, be and is hereby awarded to W. T. S. Crichfield, the lowest responsible bidder therefor, at the unit prices mentioned in his proposal or bid, submitted to the Board of Commissioners of the City of Hoboken at a meeting of said body held May 3rd, 1916, and be it further

RESOLVED, That the Corporation Attorney be and he is hereby directed to draw up the necessary bond and agreement to be executed by said W. T. S. Crichfield for the aforesaid work; and be it further

RESOLVED, That the City Clerk be and he is hereby directed to place on file all other bids submitted to the Board of Commissioners for the aforesaid work.

Commissioner Londrigan moved for the adoption of the resolution. Motion seconded by Commissioner Bach.

Return to Writ.

Adopted by the following vote:

Yeas, Commissioners Bach, Londrigan, McFeely and Mayor Griffin.

Nay, Commissioner Schmulling.

10 Commissioner Londrigan moved that the ordinance authorizing the issuance of \$205,000 Street Reimprovement Bonds of the City of Hoboken, be taken from the table for its second reading and read. Motion seconded by Commissioner McFeely.

Adopted by the following vote:

Yeas, Commissioners Bach, Londrigan, McFeely, Schmulling and Mayor Griffin.

Nays, None.

20 The ordinance authorizing the issuance of \$205,000 Street Reimprovement Bonds of the City of Hoboken, was then read.

Commissioner Bach moved that the ordinance pass its second reading as read. Motion seconded by Commissioner Londrigan.

Adopted by the following vote:

Yeas, Commissioner Bach, Londrigan, McFeely, Schmulling and Mayor Griffin.

Nays, None.

30 Commissioner Londrigan moved that the ordinance be taken up for its third and final reading and read. Motion seconded by Commissioner McFeely.

Adopted by the following vote:

Yeas, Commissioners Bach, Londrigan, McFeely, Schmulling and Mayor Griffin.

Nays, None.

Return to Writ.

By Commissioner Londrigan:

AN ORDINANCE AUTHORIZING THE ISSUANCE OF \$205,000 STREET REIMPROVEMENT BONDS OF THE CITY OF HOBOKEN.

WHEREAS, pursuant to Chapter 210 of the Laws of 1907, this Board of Commissioners of the City of Hoboken being the governing body of said City, has, by resolution adopted on April 12, 1916, decided upon the necessity of the re-improvement of the following streets of said City, namely: Newark Street from Bloomfield Street to Park Avenue and from Willow Avenue west to the City line, Ferry Street from Jefferson Street west to the City line, Second Street from Washington Street to Bloomfield Street, Grand Street from Fifth Street to Eighth Street, Sixth Street from Clinton Street to about 100 feet west of Grand Street, Sixth Street from about 100 feet west of Adams Street to about 100 feet west of Jefferson Street, Adams Street from Fifth Street to Sixth Street, Fifth Street from Adams Street to Jefferson Street and Fifth Street from Washington Street to Bloomfield Street; and by resolution adopted on said date has decided upon the necessity of the reimprovement of the following streets of said city, namely: Madison Street from Ferry Street to about two hundred and twenty-five feet north of Second Street; Jefferson Street from Ferry Street to about two hundred and twenty-five feet north of Second Street; Adams Street from Newark to Second Street; Clinton Street from Newark Street to First Street; Willow Avenue from Ferry Street to Third Street; Park Avenue from Ferry Street to Fourth Street;

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Return to Writ.

10 Bloomfield Street from Ferry Street to Newark Street and from First Street to Fourth Street and Second Street from Bloomfield Street to Willow Avenue; and has caused plans and specifications for the work to be done to be drawn and has advertised for proposals for bids for the making of such reimpovement, and has, by resolution introduced on May 3, 1916, and finally passed on May 17, 1916, let the contracts for such reimpovement and awarded the same, as provided in said Act; and

WHEREAS, The full contract price and all other expenses incidental to making such reimpovement and the bond issue authorized therein amounts to \$205,000.00.

20 NOW, THEREFORE, THE BOARD OF COMMISSIONERS OF THE MAYOR AND COUNCIL OF THE CITY OF HOBOKEN DO ORDAIN:

30 Section 1. Pursuant to said act and for the purpose of procuring funds wherewith to meet the cost and expense of making such reimpovement, including the full contract price, and of all other expenses incidental to making such reimpovement and the bond issue herein authorized, bonds of the City of Hoboken shall be issued in the aggregate principal amount of Two Hundred and Five Thousand Dollars (\$205,000.00). Said bonds shall be 205 in number, numbered from 1 to 205, inclusive, of the denomination of \$1,000 each, shall be dated June 1, 1916, and shall be payable June 1, 1946. They shall bear interest at the rate of four and one-half per centum per annum, payable semi-annually on the first days of June

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Return to Writ.

and December in each year until maturity. Both principal and interest of said bonds shall be payable at the office of the City Treasurer of said City, in gold coin of the United States of America, of or equal to the present standard of weight and fineness. Said bonds shall be coupons bond, registerable at the option of the holder either as to principal only or as to both principal and interest. 10

Section 2. Said bonds shall be in substantially the following form:

No. \$1,000

UNITED STATES OF AMERICA
STATE OF NEW JERSEY
CITY OF HOBOKEN

20

STREET RE-IMPROVEMENT BOND.

The Mayor and Council of the City of Hoboken, a municipal corporation of the State of New Jersey, for value received, promises to pay to the bearer, or, if this bond be registered, to the person in whose name it is registered, the sum of One Thousand Dollars (\$1,000) on the first day of June, 1946, with interest thereon from the date hereof at the rate of four and one-half per centum per annum, payable semi-annually on the first days of June and December in each year, upon presentation and surrender of the annexed coupons as they respectively become due, or if this bond be converted into a registered bond to the person in whose name it is registered. Both principal and interest of this bond are payable in gold coin of the United States of America of or equal to the present standard of weight and fineness at 30

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Return to Writ.

the office of the Treasurer of said City. This bond may be registered as to principal by the holder in his name on the books of said City, kept in the office of the City Comptroller, and such registration shall be noted hereon, after which no valid transfer hereof shall be made except on said books until after registered transfer to bearer. Such registration shall not affect the negotiability of the coupons, which shall continue to pass by delivery. At the request of the holder this bond may be converted into a fully registered bond, and the coupons annexed hereto detached and canceled, and thereafter both principal and interest will be payable to the person in whose name it is registered. This bond is one of an issue of 205 bonds of like date and tenor, numbered from 1 to 205, inclusive, issued pursuant to an Act of the Legislature of the State of New Jersey entitled: "An Act providing for the reimprovement of any street, avenue, road or highway, or the portion of such street, avenue, road or highway in any city which has been heretofore improved and for which improvement assessments for benefits have been heretofore levied and imposed, and for the issue of bonds to pay for said improvement," approved May 15, 1907, constituting Chapter 210 of the Laws of 1907, and the acts amendatory thereof and supplemental thereto, and an ordinance of the Board of Commissioners of said City entitled "An Ordinance authorizing the issuance of \$205,000.00 Street Reimprovement Bonds of the City of Hoboken," duly adopted May 17, 1916.

It is hereby certified and recited that all conditions, acts and things required by the Constitution and Statutes of the State of New Jersey to

Return to Writ.

exist, to have happened and to be performed, precedent to and in the issuance of this bond, exist, have happened and have been performed, and that the issue of bonds of which this is one, together with all other indebtedness of said City, is not in excess of any constitutional or statutory limit of indebtedness, and the faith and credit of said City are hereby irrevocably pledged to the punctual payment of the principal and interest of this bond, in accordance with its terms. 10

IN WITNESS WHEREOF, The Mayor and Council of Hoboken has caused this bond to be signed by the Mayor and Comptroller of said City and the Corporate seal of said City to be hereunto affixed and attested by the City Clerk, and the coupons hereto annexed to be authenticated by the fac-simile signature of said Comptroller, and this bond to be dated June 1, 1916. 20

.....
Mayor.

.....
Comptroller.

Attest:

.....
City Clerk. 30

(Registration Certificate.)

I hereby certify that at the request of the holder of the within bond for its conversion into a registered bond, I have this day cut off and destroyed coupons attached to said Bond, numbered from _____ to _____, inclusive, of the amount and value of twenty-two and 50/100 Dollars (\$22.50) each, amounting in the aggregate to _____ 40

Return to Writ.

dollars (\$) and that the within bond is hereby converted into a registered bond, with the principal thereof and semi-annual interest thereon payable to assignee or legal representative.

10

Dated 19 .

.....
Comptroller.

20

Date of Registration.	Name of Registered Holder.	Registered by
		Comptroller.
		Comptroller.
		Comptroller.

(Form of Coupon.)

30

The Mayor and Council of the City of Hoboken, New Jersey, will pay to the bearer on the first day of 19 , the sum of twenty-two and 50/100 Dollars (\$22.50) in gold coin of the United States of America, of or equal to the present standard of weight and fineness, at the office of the Treasurer of said City, being six months' interest then due on its Street Reimprovement Bond dated June 1, 1916, and numbered

.....
Comptroller.

Section 3. For the purpose of meeting the interest on said bonds after the same shall become due and the principal thereof at maturity, there

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Return to Writ.

shall be raised annually by tax, a sum sufficient to meet such interest and principal as they become due.

Section 4. The proceeds derived from the sale of said bonds shall be deposited in the office of the City Treasurer and shall be paid out only by him on warrant or order of the Board of Commissioners of the City of Hoboken. 10

Section 5. All ordinances and parts of ordinances inconsistent herewith are hereby repealed.

Section 6. This ordinance shall take effect ten days after its final passage.

Commissioner Londrigan moved that the ordinance pass its third and final reading as read. Motion seconded by Commissioner Bach.

Adopted by the following vote:

Yeas, Commissioners Bach, Londrigan, McFeeley, Schmulling and Mayor Griffin. 20

Nays, None.

By Commissioner Londrigan:

RESOLVED, That City Surveyor, Joseph O. Whittemore, be and he is hereby appointed Engineer in charge of the work of grading and repaving with asphalt on a concrete foundation and all work incidental thereto of Madison Street from Ferry Street to about 225' north of Second Street, Jefferson Street from Ferry Street to about 225' north of Second Street, Adams Street from Newark to Second Streets, Clinton Street from Newark to First Streets, Willow Avenue from Ferry to Third Streets, Park Avenue from Ferry to Fourth Streets, Bloomfield Street from Ferry to Newark Streets and from First to Fourth Streets, Second Streets from Bloomfield Street to Willow 30

Return to Writ.

Avenue, in the City of Hoboken, and to be paid for his services according to law.

Adopted by the following vote:

Yeas, Commissioners Bach, Londrigan, McFeely, Schmulling and Mayor Griffin.

10 Nays, None.

SPECIFICATIONS
FOR THE

Grading and repaving with asphalt on a concrete foundation of Madison Street from Ferry Street to about 225' north of Second Street, Jefferson Street from Ferry Street to about 225' north of Second Street, Adams Street from Newark to Second Streets, Clinton Street from Newark to First Streets, Willow Avenue from Ferry to Third Streets, Park Avenue from Ferry to Fourth Streets, Bloomfield Street from Ferry to Newark Streets and from First to Fourth Streets, Second Street from Bloomfield Street to Willow Avenue, in the City of Hoboken, N. J., in accordance with the ordinances and plans for said improvements and as provided for in the Charter and Laws governing the City.

20
30 No. 1 Newark Street,
Hoboken, N. J.

J. O. WHITTEMORE,
City Surveyor and Engineer-in-Charge.

The work to be done under this specification consists in taking up and removing the present stone block pavement, and such curb as may be condemned by the City Surveyor-in-Charge, furnishing new asphalt pavement and such other material as may be required for laying the same, 40 furnishing such filling as may be needed and do-

Return to Writ.

ing such excavation and grading as may be required to permit the new pavement on a concrete foundation to conform to the lines and grades required by the plans, straightening, regulating and resetting the present curb where directed, setting new curb where considered necessary by the City Surveyor-in-Charge; resetting at a higher or lower grade receiving basins and gutter stones and sewer manhole heads, and doing such other work as is necessary and incidental to the improvement of the above-mentioned streets; in accordance with the plans signed by J. O. Whittemore, City Surveyor and dated April 12th, 1916, and such other plans and detail drawings as may be furnished from time to time for the proper execution of the work and which must be taken as a part of these specifications.

All material furnished and work done are to be of the best quality and to be under the supervision and to the satisfaction of the Director of Streets and Public Improvements and the City Surveyor-in-Charge. The work will not be accepted by the Board of Commissioners, unless completed according to the plans and specifications and the whole work left clean and in good order.

RIGHTS RESERVED BY THE BOARD OF
COMMISSIONERS.

The Board of Commissioners reserves the right to reject any or all bids if deemed for the best interest of the City to do so.

Prior to or during the progress of the work the Board of Commissioners reserves the right to undertake any construction or reconstruction of, or making repairs to any sewer, basins, or any

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Return to Writ.

10 appurtenances thereof, in the streets in which the work is to be done, and for such purposes, the Board of Commissioners reserves the right of suspending work on any part of the street during the construction of the same, without other compensation to the Contractor for such suspension than extending the time for completing the work as it may, in the opinion of the Engineer-in-Charge, have been delayed by such suspension, and the Contractor shall not interfere with any person or persons who may be engaged therein.

20 The Board of Commissioners reserves the right to omit any of the items bid on in this specification in whole or in part if deemed for the best interest of the City to do so and to alter, vary or extend the work without recourse on the part of the successful bidder for any claims or damages therefor.

The Director of Streets and Public Improvements shall have entire control of the work and determine how much and what portion of the street may be taken up and closed to traffic by the Contractor in the prosecution of his work.

30 The work must be commenced at such points as the Director of Streets and Public Improvements shall determine and must be prosecuted in such a way as to leave room for pedestrians to pass up and down the sidewalks and over crossings, and to interfere as little as possible with the travel of ordinary vehicles and to permit the running of street cars with as little delay as possible and to permit those in charge of the gas pipes to arrange the appurtenances of their mains, where necessary, so as to conform to the new grades of the pavement.

Return to Writ.

In case the Contractor, in the opinion of the City Surveyor-in-Charge, unnecessarily delays the work or refuses to carry out any stipulation of his contract, or fails to pay promptly for work done or material furnished, he may be notified to do the work, furnish the materials, or pay for the same within a specified time by the said City Surveyor, and at the expiration of that time if the work be still not done or said payments not made, the Board of Commissioners and City Surveyor may notify said Contractor to discontinue his work under this agreement, and thereupon employ as many men and furnish such material as they may consider necessary, and do said work and settle said unpaid claims for labor and materials and deduct the expense thus incurred from any payments that may become due the Contractor under this agreement.

In case of failure of the Contractor to promptly pay for labor and materials, the Board of Commissioners hereby expressly reserves the right to make such payments out of any money due the contractor if such claims shall have been properly substantiated.

The contractor cannot make any assignment of his contract without the consent of the Board of Commissioners and of his bondsmen and until full security has been given for all claims for labor and materials.

REQUIREMENTS OF BIDDERS.

Bidders must examine the location of all the work proposed to be done under this specification, make their own estimate of quantities and extent of the work proposed and the condition to be met.

Return to Writ.

Bidders must bid on each and every item herein called for, giving a separate price per unit of quantity.

10 Bidders must accompany their bids with a certified check upon a National Bank, drawn to the order of and payable to the City of Hoboken, N. J., in the sum of five thousand dollars to be forfeited to the City as liquidated damages in the event the bidder refuses to enter into the contract and furnish the bond required in the event the contract is awarded to him. Said check to be filed in a separate envelope from the bid, so marked as to indicate the bid which it is filed with and unless each bid shall be accompanied with such check, the bid will not be opened or considered.

20 No checks will be returned to the person filing the same until after the contract is actually signed by the successful bidder to whom the contract may be awarded and until such time as the successful bidder has completed twenty-five hundred yards of pavement in accordance with the contract and the specifications.

Prices bid will include all maintenances required under the guarantee bond.

30 Bids must be made out on blanks furnished at the City Clerk's Office, all bids stated both in figures and in writing and handed to the City Clerk in open meeting when bids are called for in the regular order of business.

40 Each bid must be accompanied by a statement signed by a surety company or by two responsible Freeholders of Hudson County and attested by a Notary Public that they will become surety jointly in the sum equal to the amount of the bid for the

Return to Writ.

proper performance of that contract in case the same is awarded to that bidder.

Bids must include all labor and materials required on the work and its approaches. Also all losses and damages to persons or property arising from the nature of the work, or from the action of the elements or from unforeseen obstruction or difficulties encountered in the prosecution of the work, and all expense and work incidental to the same or growing out of it. 10

Bidders must deposit with the City Clerk five days before presentation of bid samples of material which they propose to use on the work.

Two samples of asphalt pavement of the required dimensions and quality giving the name and place of manufacture together with the following materials intended to be used. 20

a. A sample of not less than two pounds of refined natural asphalt, together with a certificate stating the name of the asphalt and where same was mined.

b. A sample of not less than two pounds of liquid asphalt flux, accompanied by a certificate stating where same is mined, and giving its fire and flash tests and its specific gravity.

c. A sample of not less than two pounds of asphaltic cement, together with a certificate stating the formula used in this composition, all quantities being expressed in pounds. 30

d. A sample of not less than two pounds of crushed stone to be used in the binder mixture.

e. A sample of not less than two pounds of sand to be used in the asphalt wearing surface, together with a certificate showing what proportion of same passes a two hundred (200), one hundred 40

Return to Writ.

(1003, eighty (80), forty (40), and ten (10) mesh screens.

10 f. A sample of not less than two pounds of powdered inorganic dust or filler to be used in the asphalt wearing surface mixture, together with a certificate stating the kind of material from which it is made, and the percentage of which passes a two hundred (200) mesh screen.

Bidders must give a statement attested by a Notary Public of dates and all places when and where within a radius of fifty miles of Hoboken, the materials of which he has furnished a sample have been used.

20 The filing of the above samples and statements are required to enable the Engineer-in-Charge to make tests of the same for the purpose of making comparisons of the actual wearing qualities of similar materials and work, done elsewhere and under similar traffic conditions, and no bids will be received unless the above requirements are fulfilled within the time herein specified.

30 All bidders are cautioned that in no case will they be permitted to use materials either in quantity or quality different from those herein specified and all bids containing proposals in any way different from what is called for in these specifications will be rejected as informal.

BONDS.

The Contractor must give a guarantee bond in the sum of one-third of the amount of his bid as determined by the estimate of the City Surveyor-in-Charge. The guarantee bond must be entered into by a surety company authorized and operating in accordance with the laws of the State

Return to Writ.

of New Jersey, guaranteeing the pavement for a period of ten (10) years from the date it is opened for traffic, and during said period all defects in the pavement due to its proper use as a roadway must be made good and repaired without additional expense to the City and to the satisfaction of the Board of Commissioners, except such portion of the street included in the railway area. 10

The contractor, during the period of said guarantee, shall also replace the pavement where it has been removed to make sewer, water, gas or any other connections or openings for which permits have been issued by the City and for which work the contractor shall receive the original price bid per square yard. The Contractor will receive no further compensation for the repair of any damaged or sunken pavement once laid by him over such openings, except as provided for in this contract for maintenance and repairs. 20

During the period of the contract the Contractor shall immediately restore to proper grade and replace such material which by reason of defective work or settlement may need such restoration.

Repairs made by the Contractor, but not caused by defective material or work shall be paid for at the price bid for such material in place. In case the Contractor fails to make such repairs the City shall have the right to make such repairs at the Contractor's expense. 30

Just previous to the expiration of the guarantee period the entire work shall be inspected and any defects or failure due to faulty material or workmanship shall be immediately repaired by the Contractor without expense to the City. 40

Return to Writ.

All bids not in conformity with the above requirements will be rejected as informal.

PAYMENTS.

10 Payments will be made as the work progresses in sums of not less than three thousand dollars (\$3,000.) by warrants based upon certificates issued by the City Surveyor-in-Charge of 80% of the work done and material furnished, measured in place.

The entire amount of money retained under this agreement will be paid on the acceptance of the work by the Board of Commissioners.

GENERAL DUTIES OF THE CONTRACTOR.

20 The Contractor must entirely complete all the work designated by the Director of Streets and Public Improvements at the rate of six hundred (600) square yards per working day.

Further provisions will be found in the agreement or contract of which these specifications form a part.

30 The contractor will be required to do all additional work beyond that described and bid for, which is necessary to make the roadway complete in every respect according to the intent and meaning of the plans and specifications if ordered to do so by the Board of Commissioners or City Surveyor-in-Charge and will be paid for at actual cost plus 10% added thereto for profit in compliance with the laws governing such work.

40 Surplus material shall be removed by the Contractor and deposited in such places and as may be directed by the Director of Streets and Public Improvements.

Return to Writ.

The Contractor must furnish such assistance as may be required by said Director of Streets and Public Improvements or City Surveyor-in-Charge, in examining the work done or material furnished. He must discharge immediately upon a written order from the City Surveyor-in-Charge, any employee whom the City Surveyor-in-Charge may deem incompetent or disorderly. He must protect his work by sufficient guards and lights. 10

The Contractor must strictly comply with these specifications and with the instructions given by the Director of Streets and Public Improvements, the Engineer-in-Charge, or of any inspector, and work done and material furnished which are not in accord with the specifications and instructions will not be accepted and no payments shall be due the Contractor therefor, until all work and materials are in compliance herewith. 20

The Contractor shall not in any way hinder or interfere with any work being done on the street by the Public Service or other companies or persons, in constructing subways or conduits which may be found necessary to construct or with any other work necessary to the proper making of a perfect improvement. 30

Any doubt as to the meaning of the plans and specifications or any obscurity as to the wording of them will be explained by the Engineer and all directions and explanations required, proper or necessary to complete or make more definite any of the provisions of said plans and specifications and give them due effect will be given by the Engineer and his decision will be considered final in any dispute that may arise in these matters. 40

GRADING, EXCAVATION, FILLING.

In advance of all grading the Contractor must take up and remove to a safe place all curbs, paving blocks and other materials which will be again used, until the grading is done. All other paving
10 blocks and crosswalks to be removed by Contractor to City Yard or as may be ordered not to exceed one mile from the place of removal. Proper opportunity shall be afforded the Railway Company to straighten, regulate and resurface their tracks, or to do such other work as may be necessary for their tracks to conform to the required grade. Ample notice and opportunity must be given by the Contractor to the Gas Company and other individuals and companies and the Water
20 Commissioners to alter their pipes or appurtenances, so as to conform to the required grade.

The street shall be brought to the required sub-grade by excavating or filling with good, clean earth, sand or ashes free from garbage, vegetable, animal or other deleterious matter.

The sub-grade or roadway to conform to the cross-section of the finished work and to be the proper distance below the top of the finished work before the concrete is laid on the street. Any
30 spongy places to be excavated and filled in with proper material. When grading is complete the entire roadway must be rolled with a ten ton roller.

The Railroad Company will be required to raise or lower their tracks to conform to the required grade.

The Contractor must readjust or reset all man-holes belonging to the City to the new grade, by
40 building them up with cement brick work. All

Return to Writ.

covers must be noiseless covers with asphalt filled tops. Any receiving basins along the street needing readjustment or raising must be raised with cement brick work and head and gutter stones reset and readjusted to grade.

Where the pavement is laid alongside of railroad tracks a row of wood block will be required along the rails, such blocks to be included in the price bid for asphalt in place. 10

In advance of laying the pavement excavate the old curbs and after the grading is done reset them after redressing them on face, and squaring ends; unsound or broken stone to be replaced by new stone, which must be first quality sound North river blue stone, sixteen (16") inches wide, five (5") inches thick, not less than four (4') feet long, square on ends. 20

All curb shall be bevelled $\frac{1}{2}$ inch in their width, the face for a depth of nine inches and the top shall be dressed to a surface which shall be out of wind and shall have no depressions measuring more than $\frac{1}{4}$ of an inch from a straight edge, the same length as the curbstone. The back for three (3) inches down from the top shall have no projection greater than $\frac{1}{4}$ of an inch. Where there are cement curbs, or curbs immediately in touch with vaults, the Contractor must use special care in resetting or in supporting same. Any curbs or other material broken through careless handling must be replaced by the Contractor with new material without cost to the City. 30

Curbs to be set to grade and backed in with clean, sharp cinders or sand well rammed and packed, curbs to be set on a six-inch base of concrete. Such concrete is included in the price bid for the setting. 40

CONCRETE.

When the sub-grade has been properly prepared, all mud removed, and approved by the City Surveyor, there shall be laid a bed of concrete from curb to curb to a depth of at least six inches
10 for all pavement and to such depth as may be necessary to bring the surface of the concrete, after being well rammed, to a uniform distance as shown on the plans below the top of the finished pavement.

This concrete shall be composed of one quart cement, three parts clean, sharp sand and six parts clean broken stone, all by measure.

The cement shall be of the best quality American Portland cement of the Alpha, Vulcanite or
20 Lehigh Brands, or of other brands equally good and satisfactory to the City Surveyor.

If the cement in bags is used four bags of cement as packed at the mill of one hundred pounds each shall be equivalent to one barrel of cement.

The broken stone shall be sound, hard and angular, of such size that it may pass in any direction through a two-inch ring, and shall be crushed and screened before brought on the work and shall be
30 free from dirt or dust when put into the concrete.

The concrete to be mixed in a clean, tight box, first mixing the sand and cement then adding the broken stone with sufficient water to make a proper mixture, thoroughly incorporated by repeated turning and mixing in the box, deposited when freshly made and thoroughly rammed to fill all spaces and to flush the mortar on the surface. No machine mixing will be allowed except by permission of the City Surveyor-in-Charge.

Return to Writ.

Where fresh concrete joins concrete that has become set, the old surface shall be cleaned and roughened with a pick to permit a proper contact.

Concrete to be rammed to a thoroughly compacted smooth and even surface as will be required to conform to the cross-section of finished base, which will be true and parallel to the finished surface of the pavement. The concrete must be allowed to set at least four days before any traveling is allowed on the same and before the paving is laid. 10

The concrete must be kept properly protected from the weather and from the heat of the sun by boards, canvas-covers, or sprinkling as may be required.

At joints of new pavement with abutting old pavement, set crib or header course using new five-inch curbs 20" deep for this purpose, all stone to be dressed on face, edges squared and all set with close joints and on six inches of concrete. 20

As much of the present block pavement outside of cribbing at intersections as may be necessary shall be taken up by the Contractor and after the new pavement, such pavement must be relaid with the same blocks, or if so directed such blocks shall be culled and poor blocks replaced by the Contractor with good blocks taken from those removed from the main work. All such repaving to be laid in sharp cinders and covered by clean sharp sand in proper manner. 30

SHEET ASPHALT.

1. On the concrete foundation shall be laid the asphalt pavement proper consisting of a binder course one (1) inch in thickness when compressed,

Return to Writ.

and an asphalt wearing surface two (2) inches in thickness when compressed.

2. The binder course shall be composed of

(a) Binder Stone.

(b) Sand.

10 (c) Asphaltic Cement.

The binder stone shall be composed of hard clean broken stone, all of which shall pass a screen having circular meshes one inch in diameter, and shall be graded in size from one inch down, so as to produce, when mixed with the proper proportion of sand and of asphaltic cement, the mesh composition as herein below specified for the binder mixture. If the binder stone does not contain the required amount of fine material, sound, clean, broken stone or 20 gravel, passing $\frac{1}{2}$ -inch diameter mesh screen and clean sharp sand passing a 10-mesh screen, shall be added in such proportions as will supply the deficiency.

The binder shall be composed of broken stone and sand as above specified, mixed with asphaltic cement complying with the requirements hereinafter described. The binder stone and sand shall be heated in suitable appliances, not higher than 30 325 degrees Fahr., and shall then be thoroughly mixed by machinery with asphaltic cement at 300 degrees to 325 degrees Fahr., in such proportions as to thoroughly coat the stone and all fine particles of the mineral aggregate and produce a homogeneous binder mixture having life and gloss without an excess of asphaltic cement.

The binder mixture, as laid, shall comply with the following requirements for percentage composition:—

Return to Writ.

Mineral Aggregate, Retained by 1-inch circular mesh, 0% of total mixture.	
Mineral Aggregate, Passing 1 inch circular mesh, and re- tained by 1/2-inch circular mesh, 35% to 65% of total mixture.	10
Mineral Aggregate, Passing 1/2-inch circular mesh, and re- tained by 10-mesh sieve, 10% to 35% of total mixture.	
Mineral Aggregate, Passing 10-mesh sieve, 20% to 35% of total mixture.	
Bitumen	5% to 8% of total mixture.
Penetration of asphaltic cement	50 to 65. 20

The binder mixture prepared as above described shall be hauled to the work, suitably covered with canvas while in transit so as to reach the street under construction at a temperature between 200 degrees and 325 degrees Fahr. The mixture shall then be promptly spread uniformly upon the foundation, to such thickness, that after being immediately and thoroughly compacted by ramming and rolling it shall have an average thickness of one (1) inch, and its upper surface shall be parallel to the surface of the pavement to be laid. 30

Before laying the binder course, the surface of the concrete foundation shall be thoroughly swept and cleaned, and all dirt, foreign matter and loose material shall be removed.

No traffic, except such as may be required in depositing the surface mixture, shall be allowed on the binder course. 40

Return to Writ.

10 Any part of the binder course that shows lack of bond or that is in any way defective or which may become loose or broken up before it is covered with the wearing surface must be taken up and removed from the street and replaced with good material, properly laid, in accordance with these specifications. Binder, when laid, shall be followed and covered with wearing mixture as soon as practicable and in all cases within twenty-four (24) hours after laying, in order to effect the most thorough bond between the binder and wearing surface. The binder course must be kept clean and as free from traffic as is possible under working conditions.

20 No placing of binder or wearing surface will be permitted in wet weather.

3. The asphalt wearing surface shall be composed of

(a) Asphaltic Cement.

(b) Clean, sharp sand.

(c) Finely powdered Inorganic Dust.

The asphaltic cement shall comply with the requirements hereinafter described.

30 The sand shall be hard grained, moderately sharp and clean. As used shall be so graded in size from coarse to fine as to produce in the finish surface mixture, the mesh composition herein named.

The inorganic dust, or filler, shall be finely powdered limestone, Portland cement or other satisfactory inorganic dust. The inorganic dust as used must be thoroughly dry, and of such a degree of fineness that the whole of it shall pass a 30-mesh sieve, and not less than 66% shall pass a 200-mesh sieve.

Return to Writ.

The inorganic dust shall be free from loam, clay or earth material, and no dust from weathered rock shall be used.

The wearing surface mixture shall be composed of sand, inorganic dust, and asphaltic cement, mixed as hereinafter specified in definite proportions by weight, depending upon their character; but whatever may be the character or the composition of the sand, dust and asphaltic cement used, the proportions of the mixture by weight shall be such as to produce in the finish pavement mixture, when laid, the percentage composition hereinafter specified. 10

The wearing surface mixture shall not exceed the maximum percentage nor contain less than the minimum percentage by weight of the total mixture, herein specified for mesh composition of the mineral aggregate and percentage of bitumen, as follows: 20

Retained by 10-mesh sieve.....	None.	
Passing 10-mesh sieve,		
Retained by 40-mesh sieve.....	10% to 35%.	
Passing 40-mesh sieve,		
Retained by 80-mesh sieve.....	20% to 55%.	
Passing 80-mesh sieve,		
Retained by 200-mesh sieve.....	10% to 30%.	30
Passing 200-mesh sieve.....	10% to 30%.	
Bitumen	9½% to 12½%.	
Penetration of Asphaltic Cement.....	50 to 65.	

The term "Mineral Aggregate" applied to the asphalt wearing surface mixture as used in these specifications shall signify the entire part or percentage thereof insoluble in carbon bisulphide, including collectively the sand, inorganic dust and 40

Return to Writ.

such native mineral matter and insoluble matter from the refined asphalt as may be contained in the asphaltic cement.

10 The sand and the asphaltic cement shall be heated separately, the sand to approximately 325 degrees Fahr. and the asphaltic cement to approximately 300 degrees Fahr. The maximum temperature of the sand as delivered at the mixing box shall in no case exceed 350 degrees Fahr. The maximum temperature of the asphaltic cement shall in no case exceed 350 degrees Fahr. The cold inorganic dust shall be thoroughly mixed with the hot sand and filler at the required temperature and in the proper proportions until a homogeneous mixture is produced, in which all
20 particles are thoroughly coated with asphaltic cement. The sand, dust and asphaltic cement comprising the charge for each batch mixed shall be proportioned by weight.

The surface mixture prepared on the manner above described shall be brought to the street at a temperature ranging from 250 to 325 degrees Fahr., and shall be suitably covered while in transit. The temperature of the mixture within the above limits shall be regulated according to the
30 temperature of the atmosphere and the character of the materials employed. It shall then be deposited roughly in place by means of hot shovels, and spread uniformly by means of hot iron rakes in such manner that, after having received its final compression by rolling, the finished pavement shall conform to the established grade and have a thickness of not less than two (2) inches. Before the surface mixture is placed, all contact
40 surfaces of curbs, manholes, etc., shall be well

Return to Writ.

painted with hot asphaltic cement. After raking the surface mixture shall at once be compressed by a light steam roler, and by tamping adjacent to the curbs, after which a small amount of Portland cement shall be swept over it. It shall then be thoroughly compressed by a steam roller weighing not less than ten (10) tons. The rolling being continued until no further compression is obtained. A space of 12 inches next the curb shall be coated with hot asphaltic cement and the same ironed into the pavement with hot irons. 10

Such portions of the completed pavement as are defective in finish, compression or composition, or that do not comply in all respects with the requirements of these specifications, shall be taken up, removed and replaced with suitable material properly laid in accordance with these specifications. 20

The price bid for sheet asphalt shall include the cost of all materials and labor necessary to furnish and lay the sheet asphalt pavement including the proper maintenance of the pavement for a period of ten (10) years from and after the completion and acceptance of same by the City.

4. The refined asphalt used in the binder course and wearing surface shall be obtained by refining crude natural asphalt at a temperature not greater than three hundred and fifty (350) degrees Fahr. until all water has been driven off and the product is homogeneous. The asphalt must be of a quality equal in purity, and in all other respects to refined Bermudez Lake asphalt. Asphalt obtained from the distillation of asphaltic oils will not be accepted or be permitted to be used on this work. The refined asphalt used must contain not 30 40

Return to Writ.

10 less than ninety (90) per cent of bitumen soluble in carbon bisulphide; not less than sixty-eight (68) per cent shall be soluble in Pennsylvania petroleum naphtha (boiling point from forty (40) to sixty (60) degrees centigrade) or if it does not contain sixty-eight (68) per cent thus soluble in naphtha, but is satisfactory in other respects, the deficiency may be supplied by fluxing the refined natural asphalt with such a percentage of viscious liquid asphalt, of proper quality, as will bring it up to the required standard.

20 5. The refined asphalt when mixed with the liquid asphalt flux in such quantities as will produce and asphaltic cement of fifty (50) penetration, at seventy-seven (77) degrees Fahr., shall have a ductility of not less than twenty (20) centimeters at seventy-seven (77) degrees Fahr. The tests for ductility shall be made in accordance with the specifications for same given in detail in the report of the "Operation of the Engineering Department of the District of Columbia for the year 1904." The asphaltic cement used in the binder and asphalt wearing surfaces shall have a penetration ranging from fifty (50) to sixty-five (65) at seventy-seven (77) degrees Fahr.

30 Dow Machine.

6. The liquid asphalt flux used in asphaltic cement shall comply with the following tests:

A. Flash test shall not be less than three hundred and twenty-five (325 degrees Fahr.) (The flash test shall be taken in a New York State closed oil tester.)

B. The fire test shall not be less than three hundred and fifty (350) degrees Fahr.

Return to Writ.

C. It shall contain no appreciable amount of light oils or matter volatile under two hundred and fifty (250) degrees Fahr.

D. Matter volatile at three hundred and fifty (350) degrees Fahr, in twenty-four (24) hours shall be less than eight (8) per cent. The test for matter volatile at three hundred and fifty (350) degrees Fahr. shall be made with approximately fifty (50) grams of oil, in an open flat bottom cylindrical dish $2\frac{1}{2}$ inches in diameter, and $1\frac{3}{8}$ inches high. The thermometer shall be applied so as to register the temperature of the oil. 10

E. The liquid asphalt shall be free from coke or any manner or form of adulteration.

7. As soon as the liquid asphalt flux is added to the refined asphalt, the entire mass shall be agitated by an air blast or other suitable appliance, and the agitation continued until a homogeneous asphalt cement is produced. The asphalt cement must not be heated to a temperature greater than three hundred and fifty (350) degrees Fahr. 20

SURVEYOR'S ESTIMATE.

The City Surveyor's estimate and classification of the work required, and on which a comparison of the bids will be based is as follows: 30

32,700 sq. yds. Asphalt pavement.	30
32,700 sq. yds. Stone Block removed.	
7,000 cu. yds. Concrete.	
4,700 cu. yds. Filling.	
2,000 cu. yds. Excavation.	
10,000 lin. ft. New Curb.	
10,000 lin. ft. Curb reset.	
80 Manholes reset.	
80 Noiseless manhole covers.	
20 Basins reset.	40

Return to Writ.

The above estimated quantities must be considered as approximate, the actual quantities to be determined after the completion of the work.

Any work or material exceeding the amount mentioned above to be done at contract price and all omissions to be deducted in like ratio.

10 All lines and grades to be given by the City Surveyor-in-Charge, and the quantity of the work done to be estimated by him.

At the completion of the work, a written acceptance by the Director of Streets and Public Improvements and the City Surveyor-in-Charge will be required by the Board of Commissioners.

20 Bidders are expected to examine carefully the plans and specifications, the location and character of the work to be done and make their own estimate of the quantities, cost and difficulties incident thereto. They will be required to state:

1. Their price per square yard for sheet asphalt paving including the work specified and all work incidental thereto.

2. Their price per square yard for removing the present stone block pavement including the work specified and all work incidental thereto.

30 3. Their price per cubic yard for concrete including the work specified and all work incidental thereto.

4. Their price per cubic yard for filling including the work specified and all work incidental thereto.

5. Their price per cubic yard for excavation including the work specified and all work incidental thereto.

6. Their price per lineal foot for old curb reset

Return to Writ.

including the work specified and all work incidental thereto.

7. Their price per lineal foot for new curb furnished and set including the work specified and all work incidental thereto.

8. Their price for each sewer manhole raised and reset including the work specified and all work incidental thereto. 10

9. Their price for each corner basin raised and reset including the work specified and all work incidental thereto.

10. Their price for each noiseless manhole cover.

These prices must include the furnishing of all material and labor required or necessary to complete the improvement according to the intent and meaning of the plans and specifications. 20

J. O. WHITTEMORE,
Engineer-in-Charge.

April 12, 1916.

(Endorsement)—Contract No. 47.—Asphalt Specifications.

Grading and repaving with asphalt on a concrete foundation of Madison St., from Ferry St., to about 225' n. of Second St., Jefferson St., from Ferry St., to about 225' n. of Second St., Adams St., from Newark to Second Sts., Clinton St., from Newark to First Sts., Willow Ave., from Ferry to Third Sts., Park Ave., from Ferry to Fourth Sts., Bloomfield St., from Ferry to Newark Sts., and from First to Fourth Sts., and other streets. 30

Return to Writ.

Received and referred to Director Sts. and
Pub. Improvements.

April 12, 1916.

Approved and Adopted.

D. A. Haggerty, City Clerk.

10 I hereby report the within specifications
for adoption.

James H. Londrigan, Director S. & P. I.

PROPOSAL.

To the Board of Commissioners of the City of
Hoboken:

20 For grading, repaving with asphalt on a con-
crete foundation of Madison Street from Ferry
Street to about 225' north of Second Street, Jef-
ferson Street from Ferry Street to about 225'
north of Second Street, Adams Street from New-
ark to Second Streets, Clinton Street from New-
ark to First Streets, Willow Avenue from Ferry
to Third Streets, Park Avenue from Ferry to
Fourth Streets, Bloomfield Street from Ferry to
Newark Streets and from First to Fourth
Streets, Second Street from Bloomfield Street to
Willow Avenue, in the City of Hoboken, N. J., in
30 accordance with the ordinances and plans for
said improvement and as provided for in the
Charter and Laws governing the City.

I will contract to perform the work above men-
tioned according to the advertisement, specifica-
tions and plans for the same in the office of the
Clerk of the City of Hoboken, for the following
price or prices:

Return to Writ.

work incidental thereto, each the sum
of Seven Dollars (\$7.00)

10. For each noiseless manhole cover the
sum of Five Dollars \$5.00)

10 1. I do declare that I am the only person inter-
ested in this proposal, and that no other person
than myself has any interest in this proposal, or
in the contract proposed to be taken.

2. I further declare that this proposal is made
without any connection with any other person or
persons making proposals for the same work, and
is, in all respects, fair and without collusion or
fraud.

20 3. I further declare that no member of the
Board of Commissioners, head of department,
chief of bureau, deputy thereof or clerk therein,
or any other office of the Corporation of the City
of Hoboken, is directly or indirectly interested
therein, or in the supplies or works to which it
relates, or in any portion of the profits thereof.

4. I further declare that the names of the per-
sons affixed to the consent agreement hereto an-
nexed were written by said persons respectively,
and that the said persons are freeholders in the
County of Hudson.

30 Hoboken, May 3, 1916.

W. T. S. Crichfield,

Residence, 54 Fifth Street, Hoboken, N. J.

AGREEMENT OF SURETIES ON THE OTHER SIDE.

The undersigned, AMERICAN FIDELITY
COMPANY, does hereby agree to become surety
in the sum of ONE HUNDRED TWENTY
THOUSAND AND NO/100 (\$120,000.00) DOL-
LARS, for the faithful and satisfactory perform-

Return to Writ.

ance of any contract based upon the proposal of W. T. S. CRICFIELD for grading and repaving of Madison Street and various other streets designated in this proposal to be submitted May 3rd, 1916, and furnish such ten years maintenance bond as may be required under the contract for grading and repaving of Madison Street and various other streets designated in this proposal to be submitted May 3rd., 1916, if such contract be so awarded, and it does hereby agree, that if a contract for grading and repaving of Madison Street and various other streets designated in this proposal to be submitted May 3rd, 1916, be awarded to W. T. S. CRICFIELD, and if said W. T. S. CRICFIELD shall omit or refuse to execute the same, it will pay to the Board of Commissioners of the City of Hoboken, any difference between the sum which they would be entitled to on its completion and any such amount as the said Board of Commissioners of the City of Hoboken may be obliged to pay any higher bidder to whom the contract may be awarded.

(L.S.) American Fidelity Company,
By Cecil Piatt.

.....
Resident Vice-President. 30

7808.

Attest:—
William H. MacPherson,
Resident Secretary.

Dated this 2nd day of May, 1916.

Return to Writ.

Justification Form—Resident Vice-Presidents and
Resident Secretaries.

American Fidelity Company.

Montpelier, Vermont.

10 County of New York. }
State of New York, } ss.

Branch Office at New York.

On this 2nd day of May, 1916, before me personally appeared William H. MacPherson to me known and known to me to be the Resident Secretary of the American Fidelity Company, who being by me first duly sworn did depose and say
20 that he resides in the City of New York, State of New York; that he is the Resident Secretary of the American Fidelity Company, the corporation described in and which executed the foregoing instrument; that he knows the corporate seal of said Company and that the seal affixed to said instrument is such corporate seal; that said Company is duly and legally incorporated under the laws of the State of Vermont and duly licensed and authorized to transact fidelity and surety
30 business in the State of New Jersey and in the State of New York and that the liabilities of said Company do not exceed its assets as ascertained in the manner provided in Section 183 of the Insurance Law of the State of New York.

He did further depose and say that he signed his name and affixed the corporate seal of said Company, as its act, to said instrument under authority given and conferred upon him by a certain power of attorney from said Company signed
40

Return to Writ.

by Charles H. Darling, the President of said Company, and attested by Ralph B. Denny, the Secretary of said Company, pursuant to a certain by-law of said Company relating to the authority of Resident Vice-Presidents and Attorneys, a copy of which, certified by the Secretary of said Company, is attached to said power of attorney and is as follows: 10

“Resident Vice-Presidents and Attorneys, when authorized and empowered by the President for that purpose, shall have full authority to approve of and execute bonds, contracts, insurances and undertakings which the Company under and by virtue of its charter has authority to execute,” and that said power of attorney is dated Jan. 26, 1916, and was in full force and effect at the time he signed said instrument, and is now in full force and effect. 20

He did further depose and say that he is acquainted with Cecil Piatt and knows him to be the Res. Vice-President of said Company and that the signature of said Cecil Piatt subscribed to said bond is in the genuine handwriting of said Cecil Piatt, and was subscribed thereto under authority given and conferred upon the said Cecil Piatt by the said power of attorney, and in the presence of him, the said deponent. 30

He did further depose and say that the following statement of the resources and liabilities of the Company as of December 31, 1915, is correct to the best of his knowledge:

RESOURCES.

Bonds at market value:		
\$100,000 Baltimore City	\$	98,250.00
10,000 Boston City		9,400.00

40

Return to Writ.

	50,000 Buffalo City	51,050.00
	50,000 Canton City	56,525.00
	100,000 Massachusetts State	91,362.50
	200,000 New York City	182,533.00
	<hr/>	
10	\$510,000	\$489,120.50
	Cash in Bank and Office.....	191,580.05
	Accrued Interest	7,812.48
	Premiums in Course of Collection (less than three month due)	76,471.09
	Due from Reinsuring Companies	86,819.44
	<hr/>	
		\$851,803.56

LIABILITIES.

	Loss Reserve	\$213,163.48
20	Legal Reserve	172,754.78
	Reserve for Commissions	24,096.96
	Reserve for Taxes	6,420.37
	Other Reserves except Capital	2,038.15
	Capital Stock	305,500.00
	Surplus	127,829.82
	<hr/>	
		\$851,803.56

(L.S.)

30

WILLIAM H. MacPHERSON,

S. Marks,

Commissioner of Deeds, etc.

(L.S.)

(Endorsement)—Proposal and bond of W. T. S. Critchfield, for the imp't of Madison, Jefferson and various other streets.—May 3, 1916—Presented, read and referred to Director of Streets and Public Impts.

D. A. Haggerty,

City Clerk.

40

Reasons.

Filed June 8, 1916.

The prosecutor files the following reasons upon which he will rely for a reversal of the proceedings brought up by this writ:

1. The specifications and plans upon which proposals were received for the contemplated improvement do not furnish to prospective bidders a common standard for bidding upon the work and prevent fair competition between them because: 10

(a) The specifications provide for the taking up and removing of such curb as may be condemned by the City Surveyor in charge of the work without setting up any standard of what shall be considered bad curb, resetting the present curb where directed, and setting new curb where considered necessary by the City Surveyor in Charge. 20

(b) The specifications provide for the furnishing of such filling as may be needed and doing such excavation and grading as may be required to permit the new pavement on a concrete foundation to conform to the lines and grades required by the plans when said plans show no such lines and grades.

(c) The specifications provide that the concrete to be used upon said work shall be mixed in a box by hand, but it provides that the City Surveyor in Charge may extend to the contractor permission to mix the same by machine. 30

(d) The Board of Commissioners reserves the right to omit any of the items bid on in this specification in whole or in part if deemed for the best interest of the City to do so, and to alter, vary or extend the work without recourse on the part of the successful bidder for any claims or damages therefor. 40

Reasons.

10 (e) The contractor will be required to do all additional work beyond that described and bid for, which is necessary to make the roadway complete in every respect according to the intent and meaning of the plans and specifications if ordered to do so by the Board of Commissioners or City Surveyor in Charge and will be paid for at actual cost plus 10% added thereto for profit in compliance with the laws governing such work.

(f) The plans show no grades at which the finished pavement shall be laid but instead bear an endorsement which reads as follows:

20 "Red lines and figures indicate the established grade; black lines and figures indicate the present surface, the extent to which the present grade shall be raised is to be determined by the Director of Streets and Public Improvements during the progress of the work."

2. The specifications and plans without lawful authority therefor provide for the making of several independent improvements in a single proceeding.

30 3. There was no actual or real competition between the two bidders submitting proposals, the successful bidder being the salaried employee of the other bidder and the other bidder being actually secretly interested in the performance of the successful bid which bid by reason of agreement between the two bidders was excessive and exorbitant.

J. EMIL WALSCHEID,
Attorney of Prosecutor.

Rule for Depositions.

NEW JERSEY SUPREME COURT.

<p style="text-align: center;">MAX MILLER, <i>Prosecutor,</i></p> <p style="text-align: center;">vs.</p> <p style="text-align: center;">MAYOR AND COUNCIL OF THE CITY OF HOBOKEN, et als., <i>Defendants.</i></p>	}	<p>On Certiorari.</p> <p>Rule for Depositions.</p>	<p>10</p>
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A writ of certiorari having been allowed in the above-named cause, it is hereby

ORDERED that either of the above-named parties have leave to take depositions for use upon the argument on the return of said writ of certiorari, provided, however, that two days' notice of the taking of said depositions be given by each party to the other. 20

On motion of J. Emil Walscheid,
Attorney for Prosecutor.

F. J. SWAYZE,
J. S. C. 30

Testimony.

	<p style="text-align: center;">MAX MILLER, <i>Prosecutor,</i></p> <p style="text-align: center;">vs.</p> <p style="text-align: center;">THE MAYOR AND COUNCIL OF THE CITY OF HOBOKEN, DANIEL A. HAGGERTY, City Clerk, and WILLIAM T. S. CRICHFIELD, <i>Defendants.</i></p>	<p style="font-size: 3em;">}</p> <p>On Rule to Show Cause On Certiorari. Depositions.</p>
10		

Depositions taken before me, William C. Asper, a Supreme Court Commissioner, at the offices of Messrs. Collins & Corbin, 243 Washington Street, Jersey City, New Jersey, this thirty-first day of
20 May, 1916, pursuant to agreement of counsel.

APPEARANCES:

J. EMIL WALSCHEID, Esq., Attorney for
Prosecutor;

JOHN J. FALLON, Esq., Attorney for City
of Hoboken and Daniel S. Haggerty, City
Clerk;

30 Messrs. COLLINS & CORBIN, by George S.
Hobart, Esq., Attorneys for William T. S.
Crichfield.

It is stipulated that the depositions be taken stenographically and the signatures of witnesses waived.

William T. S. Crichfield—Direct.

WILLIAM T. S. CRICHFIELD, Sworn:

Direct Examination by Mr. Walscheid:

Q. Mr. Crichfield, where do you reside? A. 54 Fifth Street, Hoboken, New Jersey.

Q. What business are you in? A. Contracting business. 10

Q. Are you employed by anybody? A. I am employed by the Uvalde Asphalt Paving Company to perform certain specific work.

Q. What business is the Uvalde Asphalt Paving Company in? A. Contracting.

Q. Are the terms of your employment with the Uvalde Asphalt Paving Company reduced to writing? A. Yes.

Q. Have you the contract with you? A. I have. 20

Q. Will you kindly produce it?

MR. HOBART: I advise the witness that it is not necessary for him to produce it unless he so desires on the ground that it is immaterial and irrelevant to this case.

MR. WALSCHEID: I desire to show from this contract, Mr. Hobart, that Mr. Crichfield, for a certain specified sum of money and for a certain term of years, entered the employ of the Uvalde Asphalt Paving Company, and agreed to devote all of his time to its service. Now, in view of the fact that there were but two bids received for this work, one from the Uvalde Asphalt Paving Company and the other from Mr. Crichfield, and that the specifications provide that samples of all prospective bidders must be filed at least five days before 30 40

William T. S. Crichfield—Direct.

10 the letting, and that samples were filed by the Uvalde Asphalt Paving Company and by Mr. Crichfield, only, and that it therefore became apparent five days before the letting that these two parties were the only persons who could bid, that the result is that the door is open for a fraudulent combination between these two bidders; and for these purposes I consider that the production of this contract is material and I now again ask Mr. Crichfield to produce the contract.

20 MR. HOBART: The contract to which reference has been made consists of three papers, all of which must be read together in order to have a complete contract. In view of Mr. Walscheid's statement of the purpose of the call, I now advise the witness to produce it and let it be received in evidence.

(The witness produces three certain paper writings).

MR. WALSCHEID: I offer in evidence the papers produced, as follows:

30 Paper No. 1.—Agreement between the Uvalde Asphalt Paving Company and William T. S. Crichfield, appointing him resident manager to have charge of paving and repaving streets in the City of Havana, Cuba, dated May 5, 1910.

(Agreement admitted and marked Exhibit P-1).

40 Paper No. 2.—Agreement made the 2nd day of April, 1912, between Uvalde Asphalt Paving Company and W. T. S. Crichfield,

William T. S. Crichfield—Direct.

cancelling agreement just mentioned, and appointing him General Superintendent of the Uvalde Asphalt Paving Company for a term commencing January 1, 1912, and ending January 1, 1917.

(Agreement admitted and marked Exhibit P-2.) 10

Paper No. 3.—Letter, without envelope, addressed to William T. S. Crichfield, Jersey City, N. J., signed R. T. Rokeby, Prest., and dated April 12, 1912.

(Letter admitted and marked Exhibit P-3).

It is stipulated that copies of Exhibits P-1, P-2 and P-3 be made and may be used in place of the original documents. 20

Q. Mr. Crichfield, did you bid upon the work for the grading and paving with asphalt on concrete foundation of Madison and other streets in the City of Hoboken? A. I did.

Q. Did you file samples? A. I did.

Q. As required by the specifications. A. Yes.

Q. And did you file those samples five days in advance of your bid, as required? A. I did.

Q. Were there any other bids received for that work? A. Yes. 30

Q. What other bids? A. Bid of the Uvalde Asphalt Paving Company.

Q. They also filed samples five days before? A. I am not aware whether they did or not; I assume they did but I am not sure.

Q. Well, you were interested in the letting; didn't you look? A. I was interested in my own bid; that is the extent of my interest. 40

William T. S. Crichfield—Direct.

Q. The extent of your interest was in your own bid. You knew that the specifications provided for the filing of samples five days before the letting, didn't you? A. I did.

10 Q. You also knew that nobody could bid unless he had thus filed samples five days before the letting? A. I would assume so, yes.

Q. You knew that from reading the specifications? A. Yes; there is a certain provision in the specifications about that.

Q. And you intended to become a bidder? A. I did become a bidder.

Q. And didn't you go to the trouble of investigating to see whom you had to bid against? A. I did not.

20 Q. Did you know? A. I did not.

Q. You have an office, haven't you? A. I have.

Q. An office as General Superintendent of the Uvalde Asphalt Paving Company? A. No, I have no such office as that.

Q. Haven't you any headquarters? A. Yes.

Q. Haven't you headquarters in the plant of the Uvalde Asphalt Paving Company? A. I have.

Q. At what address? A. No. 2 Greene Street, Jersey City.

30 Q. And isn't that your headquarters as General Superintendent? A. Well, I am there most of the time; however, I frequently spend my time at other factories of the Uvalde Company in checking mixtures.

Q. Then that is your headquarters? A. I receive my mail there.

40 Q. You receive your mail there and you do whatever work you have to do for the Uvalde Asphalt Paving Company from that point? A. Not necessarily, no.

William T. S. Crichfield—Direct.

Q. Well, you start out from there; that is your headquarters? A. No, not necessarily.

Q. Have you any teams, horses or motor vehicles of your own? A. No.

Q. You have no plant? A. No.

Q. You were the low bidder on this work, weren't you? A. I was. 10

Q. Do you know what the total amount of your bid was, when extended? A. Yes; it is \$121,106.

Q. You also know what the bid of the Uvalde Asphalt Paving Company was when extended? A. I don't recall, but it was higher than my bid.

Q. The figures are \$125,770? A. That is correct.

Q. In doing this work under your bid you intended to use the plant of the Uvalde Asphalt Paving Company, did you not? 20

MR. FALLON: May I ask what the reasons on certiorari are, so that I may know what is competent and material to this case?

MR. WALSCHEID: There are no reasons.

MR. FALLON: This is on a rule to take depositions, as I understand it, on a rule granted by the Court on the points raised before the Court. Now, if that is not so, I would like to be informed at this point. I do not consider the present question of counsel is competent or material to the matter, as I understand it. The only question that I thought was being raised was the fairness of the specifications. If there is any other question to be considered I would like to be informed of it at this 30 40

time, to have some reason assigned upon which counsel for the prosecutor intends to rely before the Court; otherwise I am not prepared to proceed.

10 MR. WALSCHEID: I have assigned a reason to Mr. Hobart a few moments ago. I have not as yet filed my reasons. The rule for depositions which was allowed in this case is not limited, but is a general rule for taking depositions on two days' notice, one party to the other.

MR. FALLON: May I ask counsel now to disclose what the reasons are that he intends to rely upon before the Court in this matter.

20 MR. WALSCHEID: The reason that I intend to rely upon insofar as this examination has gone is that there were only two bidders for this work, and there was a collusive combination for the work. Now, that would be a reason.

MR. MARKLEY: That point was not made on the argument.

30 MR. WALSCHEID: No, that point was not made on the argument because I did not have any evidence to substantiate it.

MR. FALLON: I want to say now that it is only fair to counsel for the City that I be apprised as to what the reasons are; otherwise I am not in a position to know what to object to and what to permit to be answered.

40 MR. HOBART: I think counsel for the other defendant is also entitled to know what the reasons are, otherwise we don't

William T. S. Crichfield—Direct.

know what is competent and what is not competent.

Q. (Last question repeated).

MR. FALLON: I object to that on the ground that it is immaterial and irrelevant. 10

A. I intended to use the plant of the Uvalde Asphalt Paving Company, provided that that plant was not engaged in that company's work at another point.

Q. And where is the plant of the Uvalde Asphalt Paving Company? A. The Jersey City factory of the Uvalde Asphalt Paving Company is at No. 2 Greene Street, Jersey City; Morris Canal Basin and Greene Street. 20

Q. You could not do this work without a plant, could you? A. No.

Q. What other plant could you have done the work from, if you did not use this plant? A. I could purchase a plant within ten days.

Q. You could purchase a plant? A. Yes.

Q. But there are no other existing plants in this vicinity that you could have used? A. No other permanent plant here.

Q. Did you intend to use the teams of the Uvalde Asphalt Paving Company for hauling purposes? A. If I had used their plant, yes; if I had purchased a plant on my own account, no. 30

Q. Then you would have to acquire teams, either by purchase or hiring?

Q. Using their plant, you would also have secured your asphalt through the Uvalde Asphalt Paving Company, would you not? A. Not necessarily, no. 40

William T. S. Crichfield—Direct.

Q. Well, wouldn't you? A. Not necessarily.

Q. I am not asking whether it is necessary; isn't that what you figured on doing? A. I figured on doing the work from that factory.

10 Q. With material purchased from the Uvalde Asphalt Paving Company? A. Not necessarily, no.

Q. Didn't you figure on purchasing it from them? A. I figured on this work at a certain price for asphalt, which I can obtain and which anyone else can obtain direct without the cooperation of anyone else.

20 Q. I am asking you whether you did not, as a matter of act, intend to purchase your material, your asphalts, from the Uvalde Asphalt Paving Company? A. I can answer that by saying no.

Q. You have heretofore, in the immediate past, put in bids in your own name? A. I have.

Q. And have performed those contracts? A. I have.

30 Q. Haven't you, in all instances where this was done, used the plant of the Uvalde Asphalt Paving Company located at Greene Street, Jersey City, and used their teams in the performance of that work, and obtained the material for the performance of the contract from the Uvalde Asphalt Paving Company? A. No, that is not a fact.

Q. In which instance was it not a fact? A. I have employed automobiles, hired automobiles entirely independent and outside of the Uvalde Asphalt Paving Company for transporting materials from that factory.

Q. Is that the exception? A. That is the only exception.

William T. S. Crichfield—Direct.

Q. You purchased the material on those independent contracts that you have done from or through the Uvalde Asphalt Paving Company? A. I paid the Uvalde Asphalt Paving Company the same price for asphalt as I could obtain it for through brokers or selling agents.

Q. But you obtained it from the Uvalde Asphalt Paving Company? A. For the reason that they gave it to me at the same price that I could purchase it for from other parties. 10

Q. You intended to do the same thing on this Hoboken contract? A. I figured on that, yes.

Q. Do you also buy, in the performance of these independent contracts, other materials besides asphalt from or through the Uvalde Asphalt Paving Company? A. Only when they quote the same price that I can obtain it for in the open market. 20

Q. And have they in the past been quoting you the same price on these other materials for these independent contracts? A. Generally speaking, I think they have.

Q. So that, generally speaking, whenever you obtained an independent contract, you obtained all the materials necessary for the performance of that independent contract from or through the Uvalde Asphalt Paving Company, and did your hauling with their vehicles? A. Only when they supplied those materials at the same price at which I can purchase them in the open market. 30

Q. And that has generally been the case? A. Yes, generally speaking, that has been the case.

Q. Do you also run your payrolls through the books of the Uvalde Asphalt Paving Company? A. I do not. 40

William T. S. Crichfield—Direct.

Q. Do you keep books? A. I do.

Q. Separate books? A. I do.

Q. Where do you keep those books? A. I keep them in my office—

Q. Where? A. Or in my residence, whichever the case may be.

10 Q. Where do you keep your books? A. I have part of them in my residence and part of them in my office.

Q. And that office you mean is with the Uvalde Asphalt Paving Company? A. In my office.

Q. Your office is in the plant of the Uvalde Asphalt Paving Company? A. Yes.

Q. At No. 2 Greene Street? A. Yes, sir.

20 Q. Do you mean entries in those books? A. I make them myself.

Q. Anybody else? A. No. I may qualify that—part of the work is done by a clerk which I have.

Q. What is his name? A. Keller.

Q. Is this Mr. Keller also in the employ of the Uvalde Asphalt Paving Company? A. He is.

30 Q. Doing the same work for the Uvalde Asphalt Paving Company? A. Not the same work; he is doing work for the Uvalde Asphalt Paving Company, but I pay Mr. Keller independently for any work he does for me, as a matter of convenience to myself.

Q. Does anybody else handle these books? A. Well, on my books, yes; I have a man on the street handling the time books.

Q. Who does that for you? A. A number of them; a number of employees that I have.

Q. That you have? A. Yes.

40 Q. Do not the same employees which you thus

William T. S. Crichfield—Direct.

personally employ also work for the Uvalde Asphalt Paving Company when they obtain contracts? A. When I have them on my work.

Q. No; but they do. A. If they work for me I pay them and if they work for the Uvalde Asphalt Paving Company they pay them.

Q. If the Uvalde Asphalt Paving Company is successful in obtaining a contract, then these same individuals who work for you under your contracts work for the Uvalde Asphalt Paving Company? A. No, that is not always the case. 10

Q. In which case is it not? A. I have men employed by me who have never worked for the Uvalde Asphalt Paving Company.

Q. There are such men? A. Yes, any number of them. 20

Q. But it is also true that some of these men are employed upon the work that the Uvalde Asphalt Paving Company does? A. A few of them, yes.

Q. Who, for instance? A. Well, there is a timekeeper in Newark on a contract which I am performing on Sussex Avenue, by the name of Bower, who is working for me, and when I have work for him to do he works for me.

Q. He is also one of the regular timekeepers of the Uvalde Asphalt Paving Company? A. No, he is not. 30

Q. Who else? A. Mr. Bower is foreman for the Uvalde Company and I have him for a timekeeper.

Q. When he is foreman what work does he do? A. As foreman for the Uvalde Asphalt Paving Company I think he does whatever is assigned to him, such as running our asphalt repair gangs, doing concrete cuts and work of that character, 40

William T. S. Crichfield—Direct.

wherever he is assigned by the Superintendent, Mr. O'Donnell.

Q. This Mr. O'Donnell mentioned by you, does he do work for you? A. He does not.

Q. Hasn't he ever done work for you? A. Never.

10 Q. Who else on your jobs, your personal jobs, works for the Uvalde Asphalt Paving Company?

A. I have, I believe, one young man that was a timekeeper.

Q. What is his name? A. By the name of Sullivan.

20 Q. What does he do for the Uvalde Asphalt Paving Company? A. He is not working for the Uvalde Asphalt Paving Company; he is working for me keeping time; I have selected him because I consider he is honest; for the Uvalde Asphalt Paving Company he had to do concrete cuts and repaving openings.

Q. When he is through with you he goes back to the Uvalde Asphalt Paving Company? A. I suppose he does whatever he wants to do.

Q. And who else? A. That is all that I recall.

30 Q. Who is in immediate charge of the construction work at Bayonne at present? A. Mr. Frank B. Eddy.

Q. He is your superintendent of construction on that job? A. He is.

Q. And that is your personal work? A. It is.

Q. And the Uvalde Asphalt Paving Company bid against you there? A. Yes; there were a number of bidders against me there.

Q. But they did? A. They were one of them, yes.

40 Q. Has this Mr. Eddy at any time worked for the Uvalde Asphalt Paving Company? A. I

William T. S. Crichfield—Direct.

believe, Mr. Eddy, I have known him for 15 years, and during that time I believe he has worked about four or five months for the Uvalde Company.

Q. When last has he worked for the Uvalde Company? A. That was in the summer of 1915, on work which that company had in Bergen County. 10

Q. He took charge of the work in Bergen County for the Uvalde Asphalt Paving Company? A. He did.

Q. Last summer? A. Yes.

Q. Since then, of course, the winter season closed down the work? A. Yes.

Q. Now, when you were ready to work at Bayonne you took him from the Uvalde Asphalt Paving Company, didn't you? A. I did not. 20

Q. You mean he was out of employment at that particular time? A. He was.

Q. If the Uvalde Asphalt Paving Company should get a job tomorrow, that particular work would be under your supervision, would it not—general supervision? A. Do I understand by that question that you mean that the work of the Uvalde Asphalt Paving Company would be under my jurisdiction? 30

Q. Yes. A. It would not.

Q. It would not be under your jurisdiction? A. Only insofar as asphalt mixtures go; the limit of my duties with the Uvalde Asphalt Paving Company is to supervise, check and formulate the asphalt mixtures; with the planning of the work I have nothing whatsoever to do.

Q. Do you know whether or not this Mr. Eddy expects to go back to the Uvalde Asphalt Paving 40

William T. S. Crichfield—Direct—Cross.

Company A. I am sure that he does not intend to do so.

Q. Can you tell me what your bid in Hoboken, when reduced to the cost or price of a square yard of pavement, amounts to? A. The figures speak for themselves.

10

Q. No; I mean the complete price, for making the excavation, filling in and laying of the concrete foundation, and the laying of the surface? A. That would take me some time to figure.

Cross-Examination by Mr. Hobart:

20

Q. Under the contracts that have been marked in evidence, have you, during the pendency of those contracts, taken other street paving work in your own name and performed it yourself? A. I have.

Q. Will you state generally what other work and the amount thereof that you have taken in your own name, as privileged by this contract?

MR. WALSCHEID: As privileged by that letter. The contract distinctly says that he shall devote all of his time to the work.

30

MR. HOBART: The letter is part of the contract, of course.

A. Do you wish to know what work I have performed since the contract was made between the Uvalde Company and myself pertaining to the Cuban work?

40

Q. Well, taking it from the date of the contract of April 2, 1912, as supplemented by the letter of April 12, 1912. A. I have performed about 66,000 square yards of bituminous concrete

William T. S. Crichfield—Cross.

work in Jersey City; I now have a contract for 79,000 square yards of sheet asphalt pavement work which is in process of construction in Bayonne, New Jersey; I have about 25,000 square yards of sheet asphalt paving work just now in course of construction by me in Newark, New Jersey; and I constructed a small amount of pavement work on the Hudson Boulevard under contract in Bayonne, New Jersey, amounting to \$255,000. Those are the only ones that I can recall for the moment. 10

Q. About what did they all amount to; state just in a general way, as near as you can remember that? A. To which add that I had a contract to repair asphalt streets in Jersey City out of guarantee, in 1915, amounting to about twenty-five or twenty-six thousand dollars; and also I have a contract in Bayonne to repair pavement there out of guarantee; all of which together would total about four hundred or four hundred and fifty thousand dollars. 20

Q. That was all done in your own name? A. Yes.

Q. The Uvalde Asphalt Paving Company has had no interest whatever in any of them? A. Absolutely none whatsoever. 30

Q. In some of those cases was the Uvalde Asphalt Paving Company one of the competing bidders? A. Yes.

Q. In practically all of those cases? A. All of them except in one case; that was the Broadway paving contract in Bayonne.

Q. Referring to the letter of April 12, 1912, marked Exhibit P-3, please state whether or not that letter was received by you on or about the day of its date? A. It was. 40

William T. S. Crichfield—Cross.

10 Q. State the circumstances under which it was written? A. I made a contract with the Uvalde Asphalt Paving Company which is in evidence, to act as resident agent or manager for that company in Havana, Cuba, which did not take effect, due to my inability to leave my own personal work in the United States. Another contract was substituted therefor, which is in evidence.

20 Q. Being the contract of April 2, 1912? A. Being the contract of April 2, 1912. That contract was drawn by Judge Clark of New York, and left at the office of the Uvalde Company for my signature. I objected to executing the contract until such time as the company confirmed my understanding with them, that I should be permitted to bid upon work in my own name, for my own account; on the assurance of Mr. Rokeby, the president of that company, that such an agreement would be forwarded to me at once, I executed the contract; and about ten days or two weeks after that I called at Mr. Rokeby's office and received the confirmation of the agreement between us, which is expressed in that letter of April 12, 1912.

Q. In the letter marked Exhibit P-3? A. Yes.

30 Q. And is it under that contract, as supplemented by this letter, that you have since been doing work for the Uvalde Asphalt Paving Company? A. Yes, sir; the term of my contract expires January 1, 1917.

40 Q. Now, reference has been made to various material that was purchased from time to time in connection with your personal contracts, or other material outside of asphalt; is there other material outside of asphalt that was purchased

for the purpose of carrying out such contracts?

A. Yes.

Q. And is other material besides asphalt necessary for the purpose of carrying out the Hoboken contract? A. Yes.

Q. Such as sand, curbing, concrete, stone, man-holes, etc.? A. Yes. 10

Q. As stated in the specifications? A. Yes.

Q. I call your attention to the Hoboken specifications where reference is made to the use of an asphalt equal in purity and in all other respects to refined Bermudez Lake asphalt. A. Yes.

Q. You were asked whether you intended to buy that from the Uvalde Asphalt Paving Company; who is the owner or manufacturer of that asphalt? A. The agents and sellers of that material are the General Asphalt Company. 20

Q. And they are not connected in any way with the Uvalde Asphalt Paving Company? A. No.

Q. And if they purchased Bermudez Lake asphalt they would have to purchase it from the General Asphalt Company? A. Either from them or some broker or authorized agent representing them.

Q. Was it your intention to use Bermudez asphalt on this work? A. Yes, although other asphalts could be used, my intention was and my bid was based on Bermudez Lake asphalt. 30

Q. From whom were you intending to purchase it? A. I was intending to purchase it from the Uvalde Asphalt Paving Company, provided they gave it to me at the same price that the agents of that product would give me, and in case they did not I would purchase it from the agents and not from them. 40

William T. S. Crichfield—Cross.

Q. And is that true as to the other materials which you have mentioned that would be necessary to carry out the contract? A. My intention was to purchase the stone for the foundation from the New York Trap Rock Company; the sand from the Goodwin Sand & Gravel Company.

10 Q. Are they connected with the Uvalde Asphalt Paving Company? A. No.

Q. What about the concrete? A. Those are the elements of the contract; my contract for the purchase of cement I have made with the Edison Portland Cement Company.

Q. And they are not connected with the Uvalde Asphalt Paving Company? A. In no way whatsoever.

20 Q. And manholes? A. I intended to purchase those from the Fagan Iron Works of Hoboken direct.

Q. Now, at the time you prepared your bid for the Hoboken contract, did you have any knowledge that the Uvalde Asphalt Paving Company was going to submit a bid? A. I had no idea who was going to bid.

30 Q. Did you prepare the bid of the Uvalde Asphalt Paving Company for the Hoboken contract? A. I did not.

Q. Or any other contract? A. I did not.

Q. Did you ever prepare a bid for the Uvalde Asphalt Paving Company since the date of this contract? A. I did not.

Q. Who does, in fact, prepare the bids, if you know, or if you can tell from your examination of them, if you have examined them? A. Mr. Rokeby, the president of the company, makes out its bids and executes them; and, I think, there

William T. S. Crichfield—Cross.

are times when Mr. Brown, the treasurer of that company, performs the same work.

Q. Are you ever consulted in connection with the preparation of the bids for the Uvalde Asphalt Paving Company? A. I am not.

Q. Did you ever see it before submitting your bid? A. No. 10

Q. Did you, in fact, see this bid for the Hoboken contract before submitting your bid? A. I did not.

Q. Have you ever seen it? A. I have never seen their bid, either before it was submitted or since.

Q. Have you ever seen a copy of it? A. I have not.

Q. Do you know anything about it, except what might have been reported in the newspapers? A. The only thing I know about their bid on this Hoboken contract is that they bid higher than I did and the contract has been awarded to me as the lowest bidder. 20

Q. At the time that you submitted your bid for the Hoboken contract did you know that the Uvalde Asphalt Paving Company was intending to bid? A. I did not know that, but I supposed that they were going to bid.

Q. Did you have any conversation or talk with anybody on behalf of the Uvalde Asphalt Paving Company in regard to the bid for this Hoboken contract? A. I never discussed this bid with anybody connected with the Uvalde Asphalt Paving Company at any time prior to or since the receipt of those bids. 30

Q. Reference has been made in your direct examination to the fact that you have at times used the plant of the Uvalde Asphalt Paving Company, 40

William T. S. Crichfield—Cross.

including its automobile trucks and other appliances; did you pay for them when you used them? A. I did.

Q. Have you any objection to stating how much you paid for them? A. Not the slightest.

10 Q. All right; state it. A. When I use the Uvalde Asphalt Paving Company's plant I pay them at the rate of \$125. a day.

Q. In cases when you have used the plant of the Uvalde Asphalt Paving Company for carrying out your personal contracts, have you paid that figure? A. I have; that is for the use of the factory only and does not include the rolling stock.

Q. Do you pay for that? A. Yes.

20 Q. How much do you pay for that, or does it vary from time to time? A. I pay the Uvalde Asphalt Paving Company for their automobiles at the rate of \$2.50 an hour, and a working day usually constitutes ten hours.

Q. \$25 a day, as a rule? A. \$25. \$2.50 an hour for their automobile trucks; for other automobiles which I hire I pay as high as \$27.50 for ten hours.

30 Q. Now, reference has been made to your having an office at 2 Greene Street; was that office there your personal office? A. Yes.

Q. And did you also have an office to carry on some of your business at your residence in Hoboken? A. Yes.

Q. Is there anyone in charge of the office at 2 Greene Street for the Uvalde Asphalt Paving Company beside yourself? A. The office is in charge of the treasurer of the company, Mr. Brown.

40 Q. And the head office of the Uvalde Asphalt

Paving Company is located where? A. At No. 1 Broadway, New York.

Q. Reference was also made to the submission of samples as required by the specifications for this Hoboken contract; did you submit samples? A. I did.

Q. Did you know whether or not the Uvalde Asphalt Paving Company had submitted samples after the samples were submitted? A. The Uvalde Asphalt Paving Company's bid was received, I know that, and I therefore assumed that they must have submitted samples. 10

Q. Did you know whether they did or not, in fact? A. I did not know anything about it.

Q. Did you inquire whether they did or not? A. I did not. 20

Q. The specifications require samples to be deposited with the City Clerk, you recall that from the specification? A. Yes.

Q. Did you make any inquiry of him whether the Uvalde Asphalt Paving Company, or any other bidder, had submitted samples? A. I did not.

Q. After the samples were submitted and before the bid were received and the contract awarded, did you have any knowledge or information that the Uvalde Asphalt Paving Company or anybody else had submitted samples under this specification? A. The only knowledge I had was that the bid of the Uvalde Asphalt Paving Company was received by the Board of Commissioners in my presence. 30

Q. That was on the date advertised for receiving them? A. Yes; that is the only knowledge I had. 40

William T. S. Crichfield—Cross—Re-Direct.

Q. Was that the first that you knew that the Uvalde Asphalt Paving Company was a bidder?
 A. That is the first I knew, yes.

Re-Direct Examination by Mr. Walscheid:

10 Q. Mr. Crichfield, what day were the bids received—do you remember the day? A. I would have to look at the record to determine that. I have put in many bids since then.

Q. I know you did; I just want to refresh your memory on the date; isn't it May 3d? A. Wednesday, May 3d, at ten o'clock.

20 Q. On Tuesday, May 2d, in the afternoon, you received a telephone communication from the City of Hoboken in reference to this work, and in reference to the fact that I was in the City Hall in the City of Hoboken, examining the plans and specifications for that work, did you not?

MR. FALLON: I object to that unless you are going to describe more fully whom you mean the telephone message came from as representing the City of Hoboken.

30 A. A telephone message from the City of Hoboken, or by the City of Hoboken?

Q. You received a message, didn't you? A. I was informed—I don't remember any dates—that you were there examining the proceedings, or had examined the proceedings, for the purpose of throwing the bids into the court for review; I don't recall who telephoned or whether it was a telephone message.

Q. Did you receive that message over the telephone? A. I don't recall whether I did or not.

William T. S. Crichfield—Re-Direct.

Q. From whom did you receive the communication? A. To the best of my memory—I live in Hoboken, and, to the best of my memory, I was in the City Hall when someone, I don't recall whom, said that Walscheid was on the job trying to knock out this improvement; I won't say who it was, I don't recall. 10

Q. Was this before the bids had been received? A. No.

Q. Yes, it was before the bids were received. A. No, after the bids were received.

Q. On the second of May? A. I knew nothing about it; it was after the bids had been received.

Q. On the second of May, and you then communicated with Mr. Hobart, did you not? A. I communicate with Mr. Hobart quite frequently. 20

Q. Don't let us quibble about this, Mr. Crichfield. You immediately communicated with Mr. Hobart in relation to the information which you had received, did you not? A. I don't recall that.

Q. Didn't you immediately communicate with Mr. Hobart in relation to the work which I was doing over there? A. Yes, and I also communicated with Judge Collins.

Q. And that was before the bids were received? A. After the bids were received. 30

Q. Before the bids were received? A. I don't recall that; it is possible I might have; I don't know.

Q. Isn't it a fact, Mr. Crichfield, that you did receive the communication on May 2d, the day before the bids were received. A. I don't recall; I don't think I did; I am not sure.

Q. Isn't it a fact that you received it over the telephone and from the City Hall in the City of 40

William T. S. Crichfield—Re-Direct.

Hoboken? A. I won't say, because I don't recall; I don't remember.

10 Q. And isn't it a fact that you immediately communicated with the office of Collins & Corbin in relation thereto? A. It is a fact that I frequently communicate with the office of Collins & Corbin in reference to various matters.

Q. Isn't it a fact that at that time you immediately communicated with Collins & Corbin's office in relation to it? A. I don't recall.

Q. Now, Mr. Crichfield, you draw the salary provided in Exhibit P-2 produced here, that is \$10,000. a year? A. Yes.

20 Q. And the writing of this letter to you has made no change in the salary which you draw? A. Not the slightest, no.

Q. On all of the work which you have heretofore done in your own name, the materials therefor have been bought from or through the Uvalde Asphalt Paving Company? A. No, that is not the case.

Q. In what instances haven't they? A. In construction work of this character.

30 Q. What instances; on what jobs haven't they? A. I refer to my job at Sussex Avenue, Newark, where I purchased my curbstone directly from the Erie Bluestone Association, through its agent.

Q. You purchased bluestone direct? A. Yes, from the Pennsylvania Bluestone Company.

Q. Is that all you purchased directly on that job? A. No.

40 Q. What else? A. I purchased direct the concrete, stone and cement, whatever ingredients are necessary to carry out the execution of that in accordance with the specification.

William T. S. Crichfield—Re-Direct.

Q. In other words, you purchased on that job the materials which they in turn have to go into the open market to purchase? A. Who in turn?

Q. The Uvalde Asphalt Paving Company. A. The Uvalde Asphalt Paving Company had nothing whatsoever to do with the purchase of the materials which I have. 10

Q. Didn't you get your asphalt from the Uvalde Asphalt Paving Company for the Sussex Avenue job? A. I am getting it at this time.

Q. Getting it at this time? A. Yes.

Q. What other materials are you getting from them? A. I am getting sand and binder stone.

Q. Getting sand and binder stone? A. Yes; that is for the surface—the bituminous surface.

Q. And you have always obtained that kind of material for all your jobs from the Uvalde Asphalt Paving Company? A. At the same price that I could obtain it for in the open market, yes. 20

Q. Well, you have obtained it from them? A. Yes, I testified to that.

Q. How many days during last year did you pay to the Uvalde Asphalt Paving Company the sum of \$125 per day for the use of its plant in Jersey City here? A. I cannot recall the number of days; during the past year I have constructed work from that plant on my own behalf, for my own use, about 100,000 square yards of pavement. 30

Q. During how many days would that be turned out? A. The output of the factory per day depends upon many conditions, such as weather, foundation not being prepared—

Q. How many days did you pay them for? A. I don't recall that.

Q. You don't know? A. I don't recall. 40

William T. S. Crichfield—Re-Direct.

Q. You don't know for how many days you have paid to the Uvalde Asphalt Paving Company \$125. per day for the use of its plant? A. I don't carry my books in my head.

10 Q. How much did you pay them, in round figures, for that use? A. Well, if you want an approximate estimate I can give that to you.

Q. Yes. A. I would say that the output of that factory would average 1,500 yards a day, finished work; that would be about sixty days.

Q. Sixty days last year? A. About that; that is approximate; I am not giving the exact number of days.

20 Q. And the year before? A. Well, I don't recall the year before; that is a good while back; I have had many other things in my mind since the year before.

Q. You have been doing this since 1912? A. I have enumerated the contracts I have performed since that period; I don't recall the dates of completion of each of them; I don't recall whether I performed work every year during the term of that contract.

30 Q. Do you figure there is any profit in this \$125. a day to the Uvalde Asphalt Paving Company? A. That depends entirely upon what may happen in the form of accidents.

Q. In the ordinary course of events do you figure there is any profit for them? A. If the Uvalde Company's plant should be damaged by accident they would perhaps lose.

40 Q. I am not talking about those contingencies. In the ordinary course of events is there any profit to this company in allowing you to use its plant at \$125. per day? A. I would think there

William T. S. Crichfield—Re-Direct.

would be, barring accidents and everything of that sort, yes.

Q. Is there any other profit to the Uvalde Asphalt Paving Company in any of the contracts which you do in your own name, or on your own initiative? A. Only so far as it applies to motor trucks; the Uvalde Company has eight trucks— 10

Q. They have a hauling profit? A. They have the motor trucks and whatever profit they make at the figures which I have testified to would be an additional profit.

Q. You say there is no profit to them in the material which they sell to you? A. There is not; none whatsoever.

Q. When you purchased materials from them, where do they deliver it to you, here at Greene Street? A. Yes. 20

Q. At No. 2 Greene Street? A. At the factory.

Q. At the factory they deliver to you the material at cost to them? A. Yes.

Q. They do most of their work with Bermudez asphalt, do they not? A. They do not.

Q. What other asphalts do they use? A. Well, they use whatever asphalts are prescribed under the specifications on which they bid; I am in a position to know that because I check their materials, the mixtures. 30

Q. None of that asphalt is manufactured, grown or produced at No. 2 Greene Street? A. No.

Q. All of that must be hauled? A. Wait. Except in cases where the natural material, such as Trinidad asphalt or Bermudez asphalt, in other words, natural asphalts, are made and manufac-

William T. S. Crichfield—Re-Direct.

tured into a form of asphaltic cement by the addition of asphaltic flux.

Q. All of those raw products must be brought to No. 2 Greene Street? A. For the use of that factory, yes.

10 Q. Does the Uvalde Asphalt Paving Company do its own hauling to that factory? A. On contracts which they are performing, yes.

Q. To the factory? A. To the factory.

Q. I mean to the plant. A. There is no hauling to be done to the plant.

Q. How is it shipped in there, by rail? A. It is supplied to us in boat load lots.

20 Q. I suppose when you thus purchase from the Uvalde Asphalt Paving Company, at cost to them, you pay them spot cash? A. I do, I pay them cash, yes.

Q. You pay them spot cash? A. Before delivery was made, you mean?

Q. At or before delivery. A. I pay them as frequently as they want pay.

Q. As frequently as they want to be paid; in other words, as frequently as they send you a bill? A. As frequently as they make demand for it they get a check.

30 Q. How often do they make demands for payment? A. Well, they are pretty close in making demands

Q. Well, that doesn't answer my question. A. You say how often?

Q. Yes. A. They are very close in making their collections.

Q. In sixty days, thirty days, or ninety days? A. Yes, and frequently oftener than that.

Q. What does that mean? A. I cannot tell you

William T. S. Crichfield—Re-Direct—Re-Cross.

the exact days; they often make demands; I receive their mail very promptly.

Q. How often is that? A. I suppose it is frequent enough that you can call it spot cash.

By Mr. Hobart:

Q. How soon after delivery, approximately? 10

By Mr. Walscheid:

Q. How soon after you receive the goods? A. Why, I am making payments to them on account continually.

Q. In other words you have a running account with them? A. I have a running account with them, yes.

Q. And you pay on that running account? A. 20 That is the idea.

Q. Do they allow you any discount on their bills for cash? A. No, and I never asked them for any.

Re-Cross Examination by Mr. Hobart:

Q. As I understand it, Mr. Crichfield, you did hear in some way (just how you don't now recall), that Mr. Walscheid was interested in the 30 Hoboken contract? A. Yes.

Q. And had been making some inquiry about it, or, at least, had been examining the papers in regard to it? A. That information reached me, I don't know just how or through what channel.

Q. And you then consulted your attorneys, Judge Collins, myself, Mr. Markley, or perhaps all of us? A. Yes.

William T. S. Crichfield—Re-Cross.

Q. You don't know whether that was before or after the bids were actually received, do you?
A. No.

10 MR. WALSCHEID: Subject to objection that the matter is immaterial, it is stipulated that on the second day of May, 1916, Mr. Hobart called up the office of Mr. Walscheid in the afternoon; that Mr. Walscheid was out; that Mr. Walscheid, about four o'clock in the afternoon, called up Mr. Hobart and asked him what he, Hobart, had called about; whereupon he, Hobart, informed Walscheid that Mr. Crichfield had informed him, Hobart, that he, Walscheid, was examining the specifications for the work in question in this proceeding for the purpose of applying for a writ of certiorari, and asked him, Walscheid, whether he had made such an application, whereupon Walscheid told him that he had not, whereupon the said Hobart asked him not to make such an application without giving him, Hobart, notice thereof for Mr. Crichfield, and Mr. Walscheid agreed not to make such application without giving him notice. At Mr. Fallon's request I add that, so far as I know, the City of Hoboken had no knowledge of Mr. Hobart calling me up, or of me calling Mr. Hobart in return.

20

30

RECESS UNTIL TWO O'CLOCK P. M.

Joseph Murphy—Direct.

AFTERNOON SESSION.

MR. WALSCHEID: I desire to offer in evidence map, Exhibit p-4, of improvements on Bloomfield Street, Park Avenue, Willow Avenue, Clinton Street, Adams Street, Jefferson Street, Madison Street, and Second Street, marked April 12, 1916, approved and adopted. Daniel A. Haggerty, City Clerk. 10

It is stipulated and agreed that the map which has been offered in evidence shall not be printed or copied in making up the record, but the original shall be produced by counsel for the City of Hoboken at the time of argument, for submission to the Court. 20

PROSECUTOR'S CASE CONTINUED.

JOSEPH MURPHY, sworn:

Direct Examination by Mr. Walscheid:

Q. Mr. Murphy, where do you live? A. 308 Charles Street, West Hoboken.

Q. What is your business? A. Contractor.

Q. What kind of contracting work do you do? A. Street work, street paving. 30

Q. And how long have you been in the contracting business? A. Twenty years.

Q. Are you connected with any corporation in that kind of work? A. Yes, sir.

Q. What corporation? A. The Clinton Contracting Company.

Q. And are you generally acquainted with the laying of asphalt streets? A. Yes, sir. 40

Joseph Murphy—Direct.

Q. With asphalt streets? A. Yes, sir.

Q. And do you make up bids for the Clinton Contracting Company, for bids on that kind of work? A. Yes, sir.

10 Q. Did you examine the plans and specifications for the improvements involved in this proceeding, with the intention of formulating a bid for the Clinton Contracting Company? A. I did.

Q. And after having examined the plans and specifications in question what did you decide on as to putting in a bid? A. I decided that we could not bid.

Q. Why could you not bid? A. Well, because the plans shows, or has got lines on them, black lines on them, showing the present grade.

20 Q. You say the plans have lines on them showing the grade; what have you reference to, kindly indicate? A. With reference to the profile.

(Witness uses Exhibit P-4.)

Q. Now, explain what you say is shown on the plan? A. Well, here are the lines (indicating on plan), I refer to the plans generally.

30 Q. What lines were you indicating then? A. The black lines; there are two lines, a black line and a red line, and I did not bid on it for the reasons that are noted there.

Q. Read it. A. It says "the red lines and the figures shall be the grades; black lines and figures indicate the present surface, the extent to which the present grade shall be raised will be determined by the Director of Streets and Public Improvements during the progress of the work."

40 Q. That is why you did not bid on it? A. Yes, sir.

Joseph Murphy—Direct.

Q. Is there any other reason why you did not bid on it? A. Yes, sir, in reference to the concrete specifications.

Q. What do you find there under the title of concrete? A. Yes, no machine mixing will be allowed except by the permission of the city surveyor in charge. 10

Q. Those were the things that you found in the specifications? A. Yes, sir; I would have to mix it by hand unless he gave me permission to use the machine, and in this case it would cost me three times as much as it would to mix it by machinery; I have put in four hundred yards on one job with twenty-four men; I put in a piece of a street twenty-five feet long with twenty-four men in ten hours, and I put in eight hundred yards with ten men with one machine that I have and I have put in as high as thirteen hundred yards of five inch concrete with twenty-two men with another machine that I have, so therefore I would have to know the mind of the engineer and perhaps the plants that we would have would not suit his ideas, our machines would not suit him and we would have to buy that we would not have; he would want a different kind of machine, therefore I didn't bid. 20 30

Q. What is the depth of concrete base required by these specifications, do you know what it is?

A. Yes, sir; six inches.

Q. And what ordinarily would it cost you to lay a yard of concrete six inches deep on these streets if allowed by hand, approximately? A. I have laid it for one cent an inch with labor; I have laid five inches of concrete for five cents by machinery. 40

Joseph Murphy—Direct.

Q. By machine? A. Yes, sir.

Q. One cent an inch by machine? A. Yes, sir.

Q. And what would the cost be if laid by hand? What would the raise be per yard? A. Three times that.

10 Q. So that same concrete would cost you fifteen cents to lay according to your estimate by hand? A. Yes, sir.

Q. And that is based upon present values in prices? A. Yes, sir.

Q. I suppose if the specifications had provided for anything but hand mixture you would have no complaint as to that? A. No, sir.

20 Q. Or if it provided for anything but machine mixture you would have no complaint? A. No, sir.

Q. How does the absence of the proper grade to which the street level is to be brought; how does that, to your mind, affect the bid or the certainty of the bid which you might submit?

MR. HOBART: I object to that question.

A. Very much.

30 Q. And in what way did it affect it? A. Well, you would have to know the man or men that had charge of the reestablishing of the grades to find out how much excavating you would have and how much filling you would have; now this has got a price for excavating and a price for filling, and it is a two way price; you excavate so much in one part and fill in with it in another; now it calls for, if I recollect, 2,500 yards of excavation.

Q. Wait and we will see what it does call for. (Mr. Walscheid examining specifications). It

Joseph Murphy—Direct.

calls for 2000 cubic yards of excavation? A. Yes; how much filling?

Q. And 4700 cubic yards of filling? A. Yes; now, that is approximately on this profile; now, if the chairman of streets, the commissioner, lowered that grade, he would give you more excavation and less filling, and this figure now will give a man whatever he bids for excavation plus whatever he charges for filling. 10

Q. Is there any certainty according to these plans, as you understand them, as to the amount of filling or excavation which is to be done? A. No, sir; if he lowers the grade it would cost you the excavating.

Q. And if he raised the grade the reverse would be the case? A. Yes, sir; exactly. 20

Q. Now, then, going back to the subject of concrete, the specifications provide when the subgrade has been properly prepared, all mud removed, and approved by the city surveyor, there shall be laid a bed of concrete from curb to curb to a depth of at least six inches for all pavement and to such depth as may be necessary to bring the surface of the concrete, after being well rammed, to a uniform distance as shown on the plans below the top of the finished pavement; is there anything from these plans, taken in connection with the absence of the grades, by which you could judge the quantity of concrete which is to go into this work? A. No, there ain't and in most work the concrete is charged for by the square yard finished pavement complete; in this case it is by the cubic yard in bulk, now the least you could put in is six inches; of course you would not know how much would be required. 30 40

Joseph Murphy—Direct.

Q. You would not know how much concrete would be required? A. No.

10 Q. There might be much more required according to the grade fixed by the engineer? A. Yes, there might be much more required according to the grade fixed by the engineer; a weak bottom or anything to strengthen the bottom; that clause is not unfair.

Q. What clause is not unfair? A. That clause.

Q. Well, taken in connection with this fact here that you have not any subgrade, and taking into consideration with this concrete clause, can you determine how much concrete would be allowed? A. He is getting paid by the cubic yard and the engineer can give him as much as he likes, the more he puts in it is the better for himself.

20

Q. He would not inform him? A. No, sir.

Q. How about the certainty of the quantity? A. There ain't any.

Q. So that under this specification he could put in as much concrete as the engineer allowed him to put in? A. Yes, sir; that is what he could.

30 Q. Mr. Murphy, I show you herewith the bid of William T. S. Crichfield, showing the prices which he had bid for the doing of this work; you have seen those figures before, have you not, that is that tabulation of figures? A. Yes, sir.

Q. Have you computed what the cost of this pavement would be to the City of Hoboken laid complete, per square yard? A. I figure about 3.14 a square yard.

Q. 3.14 a square yard? A. Yes, sir.

40 Q. What do you include in that 3.14 per square yard? A. The concrete, the top removing of the old pavement, the concrete bases, and the excavating and filling.

Joseph Murphy—Direct.

Q. That is on the figures which he has bid A.
Yes, sir.

Q. What, according to your experience, is a fair and reasonable value or price per square yard for the laying of this pavement in the City of Hoboken, covered by these specifications, complete? A. I would take the job if the plans and conditions were positive for sixty-five per cent of his bid. 10

Q. So that according to your idea his bid is 0.35 higher than what the fair value of pavement is per square yard? A. I do under those conditions.

Q. Is there any chance for favoritism to be shown to the contractor under these plans and specifications in the performance of the work? A. Yes, sir; positively there is. 20

Q. Will you tell us how and in what manner a contractor can be thus favored? A. Well, there is nothing in the grades, or in the concrete, or in any part of the work that is really holding; he has got a right to change the grades and it makes the whole thing uncertain; one man might get the whole lot the best of it and another man might get a whole lot the worst of it.

Q. Depending upon by whom the work is being done? A. Yes, sir; exactly. This is what might happen: I have got a Smith Mixer of Milwaukee and a Foot Mixer. I would go to the Engineer and say I want to mix this concrete by machinery, and the engineer would say what kind of machine have you got, and I would tell him, and the engineer, he might say, I don't want any of those plants, I want a Carey or a Ransom Mixer, or he might want some machine that I have not got. 30

Q. Or he might say to mix it by hand? A. Yes, 40

Joseph Murphy—Direct.

sir; he might say to mix it by hand; I would have to know his mind, he might be a good fellow and all that, but you had the holding line against you.

Q. You mean by that that he had a holding line against you under the specifications? A. Yes, sure; against any contractor.

10 Q. You are generally familiar with the bids for these asphalt pavements which have been made this year in the County of Hudson? A. Yes, sir.

Q. Do you know of any other places in the County where Mr. Crichfield has bid upon asphalt resurfacing such as this A. Yes, sir.

20 Q. Any? A. Well, he bid in Bayonne, he bid on Eighteenth Street and Tenth Street, ten year guarantee, five inches concrete is an inch less, he had to do the concrete facing, and his bid ran all the way from 1.70 to 1.91 complete, and the curb, where there is little competition he sets for 40 cents in Bayonne and up here in Hoboken, it is 55 cents to reset.

Q. The same kind of curb? A. The same kind of curb.

30 Q. And how did that compare with his bids in Jersey City this year A. Well, he had one job that he bid on and got it, if I remember right, it was seventy-six per cent of 2.30.

Q. How much is that, about 1.75? A. Yes.

Q. Was that complete? A. It was complete as far as the concrete was concerned.

40 Q. It was a complete pavement with the concrete included? A. Yes, sir; but he gets paid in Jersey City for the excavation added to that price, and he gets 76 per cent of 25 per cent on the same condition that he gets 55 in Hoboken, or about 19 cents.

*Joseph Murphy—Cross.**Cross Examination by Mr. Fallon:*

Q. Mr. Murphy, you say that you could not bid intelligently upon this specification and this plan and profile? A. Yes, sir.

Q. What is there in this plan and specification that gives you any idea that there was to be any excavation? A. I take it from those lines here (indicating) and from those quantities of excavation and filling called for in the specifications. 10

Q. One of your complaints against the plans and specifications is that you could not estimate the amount of excavation in order to conform with the City requirements A. Yes, sir; the amount of excavation and filling.

Q. Well, the plan and specifications has no reference to the excavation, it distinctly says that it all be raised? A. This is two inches; you get paid for excavating one price and then you get paid for dumping it at another price; Crichfield has 55 and 85 for filling which together make 140; now it would affect a man very much in making a bid; if the grade went down he would have much less excavation and you would have to have a two-way bid, make one good price. 20

Q. There is nothing in the plan or profile that there is not to be any excavation at all A. No, sir. 30

Q. Does it so read in yours? A. Well, I left all that off after I read it.

Q. You left all what off? A. All the figures and lines because it takes all the force out of it.

Q. Is it not a fact that the wording upon that plan and profile distinctly refers to the raising of the grade? A. You have got to excavate.

Joseph Murphy—Cross.

Q. Is there anything said that there is to be any excavation? A. No, that is right.

10 Q. Will you read again that wording upon the plans and profile which you say were objectionable and with respect to which you say that excavation was necessary and say whether or not there is anything said? A. The red lines and figures indicate the established grade; the black lines and figures indicate the present surface, the extent to which the present grade shall be raised, to be determined by the Director of Streets and Public Improvements during the progress of the work.

20 Q. Now, there is nothing in the plans and profile that would be objectionable to you with respect to your complaint about excavation, about your not being able to know how much excavation; did you mention anything about excavation, I am speaking about the plan and profile; I understand in an affidavit that you made heretofore that your principal complaint was with respect to this plan and profile, and also with respect to the manner in which the grade was to be determined; isn't that so? A. Yes, sir; there must be some excavation.

30 Q. You say, there must be, but there is nothing on this plan or profile; is there?

MR. WALSCHEID: Oh, yes; it is right here.

MR. FALLON: I object to Mr. Walscheid testifying.

A. Yes, sir.

40 Q. That refers to the specification, referring to excavation? A. That is right here.

Joseph Murphy—Cross.

Q. Now point out what part of the plan and profile?

MR. WALSCHEID: I object to that; that is so foolish; and ask all that he said be stricken out.

10

Q. Will you point out anything that indicates that there is to be any excavation on this work?

A. Yes, sir.

Q. Where. Point it out. A. Right there (indicating).

Q. Make a mark on what you have reference to. A. (Witness makes a cross mark on plan.)

Q. That is midway between Bloomfield and Garden Streets, on Second Street? A. On Second Street.

20

Q. What is there indicated where you have just marked? A. There is some excavation there.

Q. What is there? A. I could not bid on it at all, on the ground that this profile was changed, and it could be changed; there is nothing specific to go by, neither in reference to filling or excavation.

Q. You refused to bid on it because of the wording on the plan and profile? A. Yes, sir.

30

Q. And you had no other objection except that wording? A. I had, because it affected the whole plan and profile, because it could be changed.

Q. Point out on the plan and profile where there is any excavation required? A. Here (indicating with mark "X-1").

Q. Point out any other? A. Right here (indicating with mark "X-2").

Q. That is near Third Street? A. Yes, sir.

40

Joseph Murphy—Cross.

Q. Point out another? A. (Witness marks places with "X" over the numbers 3 to 15, inclusive.)

10 It is agreed that the locations indicated by the witness with cross marks and numbers are as follows:

X-1—On Second Street, between Bloomfield and Garden Street.

X-2—Between Second and Third Street, on Park Avenue, at the corner.

X-3—At the corner of Second Street and Park Avenue.

X-4—On the other side of the corner of Second Street and Park Avenue.

20 X-5—On the corner of Park Avenue and First Street.

X-6—Again, at the corner of Second Street and Park Avenue.

X-7—Second Street and Park Avenue.

X-8—Third Street and Park Avenue.

X-9—Fourth Street and Park Avenue.

X-10—First Street and Bloomfield Street.

X-11—On Second Street and Bloomfield Street.

30 X-12—At Second Street and Bloomfield Street.

X-13—At Bloomfield and Third Streets.

X-14—The same.

X-15—At Bloomfield and Fourth Streets.

All as indicated on Exhibit P-4.

40 Q. Now, Mr. Murphy, you being a practical man in the contracting line, would not say that

Joseph Murphy—Cross.

it is a fact that it would be hardly possible to estimate the amount of excavation that would be necessary at any of the points that you have indicated, without taking up the blocks on a street and estimate the depths of the blocks; in other words, the depths of the blocks would have something to do with the estimation of the amount of filling, would it not? A. Of course, that would be under the grade line. 10

Q. Then you did not know the sizes of the stones or blocks were that were on this line of work, did you? A. No, I did not.

Q. You did not endeavor to find out? A. No, but he is getting already paid for taking up the blocks.

Q. But until the blocks were taken up the engineer could not determine the amount of excavation that would be necessary? A. Well, he could, generally the blocks would be within an inch because they are Belgian blocks, the specifications is from six to eight inches. 20

Q. Well, if he could, why couldn't you? A. Well, because the specifications provides that the Commissioner may change or alter the grades. Now, how could I without I had an understanding with him? I would have to know. 30

Q. You did know that the stones were to be removed? A. No, sir.

Q. Then the engineer could not be expected to know? A. Yes, the engineer could.

Q. He could not do that work without removing the blocks? A. He could.

Q. How? A. By taking a few.

Q. You could do that by doing the same thing? A. It would not be up to me to do that because it 40

Joseph Murphy—Cross.

would not have any force, because it could be altered by the man higher up.

Q. But it would be giving you an estimation of the work upon which you were bidding? A. No, sir; it would not be safe.

10 Q. You say that it would not be safe? A. No, sir; you would not have anything to do at all; if I recollect the specifications, it says that he has the right to alter, it says, raise the grade.

Q. Whatever work was to be performed by the contractor on this job was to be paid for according to unit prices? A. Yes, sir.

Q. So it would make no difference to the contractor how work he was required to do? A. Yes, sir.

20 Q. What difference would it make? A. It would make a difference in the matter of excavating and filling; it would make a whole lot of difference to a man whether he got a certain percentage of excavation to help out his filling or whether he didn't; he would know how to go, and of course he would have to have a positive grade to work on to do that.

30 Q. If a contractor did a certain amount of excavation he would be paid for that according to the unit price? A. Yes, sir.

Q. If he did a certain amount of filling he would be paid for that work according to unit prices? A. Yes, sir.

Q. And whatever did happen under the furnishing of concrete or asphalt he would be paid according to unit prices? A. Well, it didn't work out that way.

Q. Well, he would be paid that way? A. Yes, but you could not bid that way.

Joseph Murphy—Cross.

Q. Why not? A. Well, if the Commissioner of Streets raised the grade you want more filling than you expected you would want: now, if he would lower the grade you have more excavation than you thought you were going to get and would have less chance to fill in and you would not have a place to put it, and it is a two-way price, you get paid both ways. 10

Q. Do you find anything in the specifications about lowering the grade? A. No, my understanding of it is this, it says that the Commissioner has the right to change the grade.

Q. You find nothing about lowering the grade? A. Yes, sir.

Q. Point out any part of the specifications that indicates that the Commissioner or engineer have the right to change the grade? A. I think there is a clause in the specifications. 20

Q. Well, point it out if there is such a clause? A. (Witness reading from specification) "The Board of Commissioners reserves the right to omit any of the items bid on in this specification in whole or in part if deemed for the best interests of the city to do so and to alter, vary or expend the work without recourse on the part of the successful bidder for any claims or damages therefor." 30

Q. Is that the clause that you had reference to when you said that the Commissioner might change the grade? A. That is the clause, here on the plan, sure.

Q. When you say that the Commissioner might change the grade what do you refer to? A. (Witness pointing to Exhibit P-4.) Here it is, on Exhibit P-4. 40

Joseph Murphy—Cross.

Q. What is there on the plan that indicates that which you have just mentioned? A. (Witness pointing to the words that he has heretofore read.)

10 Q. Now, this specification, with respect to the machinery mixing of concrete and so forth; it is worded similar to other specifications for like work, is it not; with respect to the use of the stones that are to be used? A. In that respect, yes, sir.

Q. In what other respects do you consider that the specifications would be unfair as to the concrete mixing? A. In reference to the right of the engineer to interpret whether you would mix it by hand or by machinery.

20 Q. And you say that the cost is three times as expensive to mix it by hand as by machinery? A. Yes, sir; I say it is three times as expensive to mix it by hand as by machinery; to me it has been that way.

Q. You stated that under certain circumstances you would do the work which Mr. Crichfield has been awarded the contract for at sixty-five per cent. of his bid? A. Yes, sir.

30 Q. Under what circumstances would you do that? A. Providing I got it.

Q. How could you estimate the percentage if you didn't know what you could figure on? A. Well, that is the reason I didn't figure; I thought the standard would fix it.

40 Q. How do you estimate that you would do it at sixty-five per cent. of his bid? A. Well, we would do it for that, or anywhere else and so does Mr. Crichfield, for he is doing some work in Bayonne, the difference between 3.14 and 1.80;

Joseph Murphy—Cross.

he has got a good price in Bayonne; that is what his bid is all over, 1.70 to 1.80.

Q. You did not seek any information from the engineer for this work, in order to enable you to bid intelligently? A. I did not.

Q. And you didn't seek any information for this work from the Department of Streets and Improvements in order to make the bid intelligently? A. I did not. 10

Q. Why didn't you speak to either one of them if the plans and specifications were not intelligent to you? A. Well, I didn't think I could get any information that would help me out, and those clauses were already on the plans, and the conditions in the specifications and plans and that would not alter anything, they would tell me, I would not trust any man on that kind of a thing. 20

Q. If the specifications were not intelligent to you didn't you think it was proper for you to apply to either the Commissioner, or to get some intelligent information on the matter? A. I understood it all right, and I understood to the effect that I would not be able to bid intelligently on that.

Q. And what reason do you give now for saying that you could not bid intelligently? A. Well, I did not know whether we could mix the concrete by machinery or hand, and I did not know what kind of a grade was going to be established. 30

Q. Why didn't you go to Mr. Whittemore and mention the kinds of machines that you had for mixing concrete, and say that if the contract were awarded you, you might use any of these machines? A. I did not know Mr. Whittemore and I would not take any man's word, I have been there 40

Joseph Murphy—Cross.

before, and men sometimes take another notion.

Q. You had no such notion that Mr. Whittemore would do that? A. No, sir.

10 Q. Did you ever bid on any plans or specifications for asphalt work prepared by Mr. Whittemore, City Engineer? A. I don't think he was the engineer on Ferry Street.

Q. Did you look at other streets which were to be improved by block pavement at the same time that the contract for this asphalt work was to be awarded or not? A. No, sir.

Q. You don't know whether the specifications were pretty much the same as the asphalt work, or not? A. No, I did not want to bid on that kind of work.

20 Q. When did you first see the specifications relating to this asphalt work? A. Oh, it must have been a couple of weeks before the 11th.

Q. Where did you see them? A. I saw them in my office.

Q. You don't mean that you saw the specifications that were on file in the City of Hoboken? A. No, Johnny went down and copied them.

Q. Who is he? A. He is my son, and he brought them to me.

30 Q. You never went to the City Hall to examine the specifications yourself? A. No, sir.

Q. You never went to the City Hall to look at this plan and profile? A. No, I never went to the City Hall to examine this plan and profile.

Q. So that any information that you had on the matter of the plan and profile was—you never went to the City Hall, did you? A. No, my son went and he is a competent man.

40 Q. If the plans and specifications were not in

Joseph Murphy—Cross.

your estimation sufficiently intelligible to warrant you in putting in an intelligent bid why didn't you make some complaint to the Commissioners of the City of Hoboken before the receipt of bids? A. Well, I didn't believe it would be respected if I did.

Q. Why didn't you make some complaint to the Engineer in charge of the work, Mr. Whittemore? 10

A. Well, Mr. Whittemore could not tell me anything only what he would like to do, it was written that he could do as he liked in this specification, and on this plan and of course anything that he would say to me, I know it would happen another time, it would not be any good some other day, and I would not believe any man in this kind of a matter unless it is on the plans and on the specifications. 20

Q. As a contractor, one who is desirous of bidding on this work, and if as you say that the plans and specifications were such that you could not intelligently bid, didn't you think it proper for you to make it known to the Board of Commissioners, so that you would know what the conditions were? A. I didn't think it would be taken notice of.

Q. What complaint did you make to the Board of Commissioners of Hoboken which would lead you to believe that any complaint that you made would not be respected, as a matter of fact, you never made any complaint to the Board of Commissioners? A. I did to individual members, although never to members of the Board as a whole, but they were not Engineers. 30

Q. Did you make any complaint to the members individually about the work that was being 40

Joseph Murphy—Cross.

done? A. Not on this particular letting, but on the letting before.

Q. Was that complaint about the unfairness of the plans and specifications? A. Yes, sir.

Q. What Commissioner did you speak to? A. Bernard McFeely.

10 Q. And was that in regard to street improvements, Mr. Murphy?

MR. WALSCHEID: How is that material in this case?

A. Yes, sir.

Q. Did you bid on that job? A. No, I could not.

Q. You made no complaint to the Commissioners as to the unfairness of these specifications?

20 A. I did not make any complaint.

Q. You knew that Mr. McFeely was not the Commissioner in charge of the streets? A. I did.

Q. You knew that he had charge of the police and fire department? A. I saw only one of them, I didn't go there.

Q. You have known Mr. Commissioner Londrigan, the Commissioner of Streets? A. Yes, sir.

Q. For a long time? A. Yes, sir.

30 Q. You never made any complaint to him about the specifications or about this plan? A. I don't believe he would respect any complaint I would make.

Q. Why do you say that? A. I just feel that way.

Q. Has he ever done anything to you since he was Commissioner of Streets that would actuate you in that belief, have you had any experience with him? A. I never had any conversation with

Joseph Murphy—Cross.

Commissioner Londrigan at all, I ain't even well acquainted with him.

Q. But still you had that feeling? A. Yes, but he didn't look good to me, that is if I want to describe it that way.

Q. You have known Mr. Londrigan to be the City Clerk for a good many years? A. Yes, sir. 10

Q. And you have known Mr. Londrigan to be a member of the Common Council of Hoboken? A. Yes, sir; he didn't look good to me, for anything I would like to get done.

Q. What do you mean by that? A. I mean that is the way I feel.

Q. You mean that he would be opposed to you? A. Yes, sir.

Q. But you didn't believe that upon anything that he said or did to you? A. No, but I believed he would be opposed to me. 20

By Mr. Markley:

Q. Mr. Murphy, how do you arrive at 3.14 for this work in Hoboken? A. Well, I figure it in this way, 1.58, the top, if I remember right, 96 cents a yard for concrete base, 25 cents for taking up the blocks, 60 cents for excavation and 85 cents for filling. 30

Q. Anything else? A. That is all.

Q. That totals 3.24? A. Yes, sir.

Q. Is it 3.14 or 3.24? A. 3.14 figured one third.

Q. Now, you say that it is 3.24 per square yard? A. It is 20 cents per square yard for excavating and filling.

Q. Twenty cents for both; you mean forty cents altogether? A. Yes, sir.

Q. You figure 20 cents for excavating and 20 40

Joseph Murphy—Cross.

cents for filling; is that what you mean? What is it, 20 cents for both of them? A. Yes; 20 cents for both of them.

Q. That makes the two 2.99? A. Well, that is what it is; I was giving him a little spare allowance to divide it up.

10 Q. In figuring that you were perfectly capable at arriving at a figure for excavating and filling, you could feel all right in the excavating and filling in making up Mr. Crichfield's bid? A. No, sir.

Q. Why? A. Well, that is what he is charging, I could not do it, that is what I swore to, I could not do it.

20 Q. Those are after Mr. Crichfield's figures 20 cents for both? A. Yes, sir; that is what it will work out according to my estimation.

Q. Show us how you estimate it? A. I am giving him 20 cents per square yard for grading that is my way of doing it.

Q. If he does it different from you then his estimate might not be the same? A. Well, it cannot be different because it will be on the total amount of the money.

30 Q. You never went to the City Hall to examine these plans? A. No, not me.

Q. You never went to the City Hall to examine the specifications? A. Not on this job, but I have been there on every other one; but not on this particular work.

Q. You made no inquiry of the city officials on this particular work? A. No, I knew it would be of no use.

Q. Do you know Max Miller? A. Yes, sir.

40 Q. How long have you known him? A. I don't know, about three years.

Joseph Murphy—Cross.

Q. Did you ask him to become the prosecutor in this case? A. No, sir.

Q. Do you know who did ask him? A. He asked himself.

Q. Do you know? A. No, I don't know.

Q. You don't know who asked him? A. No.

Q. Are you going to pay the fees of counsel in this case? A. I am not. 10

Q. Do you know who is going to pay them? A. I guess Max Miller is going to pay them.

Q. Is the Clinton Contracting Company going to pay those fees? A. No, sir.

Q. You are sure that the Clinton Contracting Company is not going to pay any of the fees to Mr. Walscheid or any other counsel? A. Yes, sir; I am sure of that. 20

Q. Do you know who is paying the expense of the present proceeding? A. No, I do not.

Q. You don't know anything about it? A. No, sir.

Q. And you do know that the Clinton Contracting Company is not? A. They are not paying a cent.

Q. Do you know whether they expect to pay anything? A. No, they are not.

Q. You know that they do not expect to pay anything? A. Yes, sir. 30

Q. And that none of the costs and expenses of this proceeding will be borne by the Clinton Contracting Company? A. No, sir.

Q. You know that? A. Yes, I know that.

Q. Are you personally bearing the expenses? A. No, sir.

Q. Did you not say that if Mr. Crichfield would draw off on the Jersey City proceeding that you 40

Joseph Murphy—Cross.

would call off this proceeding, have it dismissed?

A. No, sir.

Q. Do you know whether that has been said? A. I do not, I never heard tell of it.

Q. Do you know whether such a statement has been made? A. No, I never head tell of it.

10 Q. That if the Jersey City case would be dismissed that you would have this case dismissed?

A. No, I never heard that, I am willing to go in and fight him right over this table.

Q. You never made any such statement that if the Jersey City case was dismissed, you would have this case dismissed? A. No, I don't have to make any such compromise.

20 Q. If the cost of mixing by machine would cost the same as mixing by hand you would have no objection? A. I would break up such a machine if it would cost the same. I would not use such a machine if it would cost the same.

Q. You don't consider yourself an expert on the cost of machine mixing, do you? A. Well, I have been at it a good many years. I know something about it. I don't know it all.

30 Q. You testified here that the cost of mixing by machine is only one-third of the cost of mixing by hand? A. To me, yes, sir.

Q. Is that statement a guess, or is it based on an accurate computation? A. On an accurate computation.

Q. Will you give us an accurate computation upon which you make that per cent in detail? A. Well, if I mix thirteen hundred square yards of concrete base with twenty-two men.

Q. How deep? A. Five inches.

40 Q. Mixed with twenty-two men? A. Yes, twenty of those men cost two dollars a day.

Joseph Murphy—Cross.

Q. How would you mix it? A. With a machine, twenty men cost two dollars a day, that equals forty dollars.

Q. Yes. A. And the foreman and engineer cost seven dollars that is for two.

Q. Cost seven a day? A. Yes, one four dollars and one three dollars. 10

Q. They mix thirteen hundred square yards a day? A. Yes, sir.

Q. What kind of a machine would that be? A. That was done with a Foot Continuous Mixer on that job.

Q. That would cost you forty-seven dollars? A. Yes, sir.

Q. Well, now compare that with your other, is that an actual experiment? A. Yes, we have done that several times. 20

Q. You mean that twenty-two men have mixed thirteen hundred square yards of base, five inches thick, in ten hours a day, and the cost of your labor, and you have been doing that the same way several times with a Continuous Foot Mixer? A. Yes, sir.

Q. Now, tell us how many experiments you have had, if any? A. We have put in four hundred square yards with twenty-four men in ten hours. 30

Q. Four hundred square yards of concrete base? A. Yes, sir.

Q. How thick? A. Six inches.

Q. How many men? A. Twenty-four men.

Q. And what was the cost of that at ten hours a day? A. Well, it would be twenty-three men at two dollars and a foreman at four dollars in that case.

Joseph Murphy—Cross.

Q. A foreman at how much? A. A foreman at four dollars.

Q. Twenty-three men at two dollars a man and a foreman at four dollars, making the total cost of labor fifty dollars? A. Yes, sir.

10 Q. Is that all you figured in making your per cent, the respective totals, in making your per cent, between hand mixing and machine mixing? A. I could give you several others.

Q. What other elements went into it in arriving at your estimation? A. Nothing at all excepting the speed, the mere wording for the lost money, there was nothing else to go into it.

Q. Nothing else to go into it according to your idea? A. No, this is labor we are talking about now.

20 Q. Don't you know that a Continuous Foot Mixer could not mix concrete in accordance with the specifications? A. I know that a Continuous Foot Mixer, could, I know that it could.

Q. In accordance with the specifications a Foot Mixer could make it? A. Yes, sir; but this engineer won't stand for it.

Q. Do you know if a Foot Mixer will mix it in accordance with the specifications? A. No, sir.

30 Q. Why, won't it mix concrete in the proportions provided for in these specifications? A. Because the engineer objects to it; he objects to a continuous mixer, that is his idea.

Q. How was this concrete to be mixed, in what proportion? A. 1.3.6.

Q. Can a Foot machine mix 1.3.6? A. Yes, sir.

Q. How do you know that the engineer objects to the Foot Continuous Mixer; how do you know that? A. If I recollect the specifications, it is

Joseph Murphy—Cross.

from memory that I am talking about, and I think it does.

Q. You say that they prohibit a Foot Mixer? A. No, I think that it is a Foot Mixer.

Q. Then when you say that the Engineer objects you are mistaken? A. I am mistaken about that; I was thinking about another job. 10

Q. Have you ever tried to mix a 1.3.6 mixture with a Continuous Mixer? A. Yes, sir.

Q. Where, on what job? A. Yes, five hundred times, five hundred yards.

Q. Point out one where you have mixed a 1.3.6 mixture with a Continuous Mixer? A. Well, I can't recall, all the mixtures are for 1.3.5 or 1.3.6.

Q. You can't recall one? A. Yes, take Charles Street and High Street, West Hoboken. 20

Q. How much does a Foot Mixer cost? A. \$1,700.

Q. What is the ordinary life of a machine of that kind; if it is in use ten hours a day how long will it live? A. Well, we got a machine that is, I guess, six or seven years old.

Q. How much did you say that it would cost? A. \$1,700.

Q. And other machine mixers cost more than that? A. Some do and others don't. 30

Q. How do you operate that machine, by what kind of fuel? A. By coal.

Q. How much coal does that kind of mixer consume in ten hours? A. About \$2.50.

Q. How many tons? A. About half a ton.

Q. In ten hours? A. Yes, sir.

Q. About \$2.50 worth? A. Yes, sir.

Q. What else do you have to use? A. Nothing else. 40

Joseph Murphy—Cross.

Q. Nothing else? A. Just a little oil, the water is the same whether you mix it by hand or by machine.

Q. And those machines sometimes break down? A. Well, they break down with use.

10 Q. Well, they do break down? A. No, sir; they don't break down.

Q. You have not found it so? A. No, sir.

Q. How much would you say that a machine would depreciate in a year? A. Well, I have worked it seven years.

Q. How often do you have to repair it? A. Every fall.

Q. How much does it cost to repair it? A. Maybe fifty dollars.

20 Q. And it sometimes breaks down on a job? A. No, sir.

Q. Your machines never break down on a job? A. No, we have a good lot of men all the time.

Q. Have you ever had a job where a hand machine was used? A. Never, unless it was in some place where you could not apply the machine, where the place was not fit to put machinery up.

30 Q. The concrete under the curb, how must that necessarily be mixed? A. I have mixed it both ways.

Q. Isn't it a fact that you can only mix the concrete that goes under the curb by hand? A. No, not if you have the proper machine with you.

40 Q. What would you regard as the proper machine to mix the concrete that goes under the curb? A. Well, I have often mixed it by hand before the street was opened up, as you go along, but that is a very small amount of concrete and I have sent it in from the machine all ready mixed

Joseph Murphy—Cross.

after the ditch was opened and spread it right along, and put in a whole truck load and I have done it both ways.

Q. You think you could mix it in this case by machine; could you or not mix the concrete in this case by machine; that is the concrete that goes under the curb? A. Yes, sir. 10

Q. You could? A. Yes, sir.

Q. What machine would mix it? A. I have got a machine in West New York that would mix it.

Q. What kind of a machine is it? A. It is a Smith machine.

Q. Is that a continuous mixer? A. No, that is a batch mixer.

Q. Can you tell how many cubic feet of sand there is in a cubic yard of finished concrete mixture, the proportion of the mixture being one part cement, three parts sand and six parts stone? A. What has that got to do with this question? 20

Q. (Question repeated.) A. Well, for mine, the best of stone, six parts, that is the bulk; now I put half of this stone, which is three, and one of cement, that is 1.3.6; the stone is always the bulk; it won't be any larger or any smaller when you are done.

Q. That is your answer? A. Yes, sir. 30

Q. How many cubic feet of stone is there in a cubic yard of concrete mixture, mixed in the proportions as stated, 1.3.6? A. There are 27 feet in it, unless it is small stone; if it is inch and a half stone it will increase about ten per cent.

Q. How many cubic yards of cement with the same mixture, 1.3.6? A. 1 to 6.

Q. How many cubic yards of cement? A. 1 to 6.

Q. Is that your answer? A. Yes, sir. 40

Joseph Murphy—Cross.

Q. How many cubic feet of cement is there in one barrel? A. About ninety-six pounds in a bag.

Q. Don't you know, Mr. Murphy, that all of the grades on the streets involved in this proceeding are fixed by ordinance? A. I suppose they are.

10 Q. Do you know that, or don't you know that?
A. I suppose there is an established grade, sure there is an established grade.

Q. The established grade as shown on this plan is the grade as fixed by ordinance? A. I don't know, that grade ain't fixed.

Q. It has the established grade on it? A. I don't know.

Q. Doesn't it say here (indicating) that the red lines and figures indicate the established grade?

20 A. Yes, sir.

Q. It shows that? A. Yes, sir.

Q. And the established grade is indicated by red lines on the map? A. Yes, sir.

Q. The actual grades of the streets at the present time are given by the black lines? A. Yes, sir.

Q. To what grade would you pave any one of these particular streets; would it be to the established grade? A. It would be the grade the engineer would lay out.

30 Q. Wouldn't it be the established grade? A. That would be up to the engineer, I would have to pave to the engineer's grade.

Q. In the absence of the grade would you pave it to the street bed? A. I wouldn't pave it at all unless the engineer gave the grade.

Q. Is there any established grade on there? A. No, sir; there is nothing established on the map.

40 Q. The only thing that leads you—then to what grade would you improve the street? A. To the grade that the engineer in charge would give me.

Joseph Murphy—Cross.

Q. Then you pave up to the established grade under that condition? A. No, I would pave where the engineer would direct me.

Q. Suppose there was no direction on there? A. The engineer has got to give us the grade, I suppose.

10

MR. WALSCHEID: I object to this whole line of examination as absolutely immaterial.

Q. If there is anything on those plans indicating that the extent of the grade will be determined by the engineer in charge of the work, then you would have no difficulty in knowing to what grade to improve the street? A. No, sir; it would be something final.

20

Q. To what grade would you then pave this street, or any of these streets? A. I would pave it to the grades that the engineer would give me.

Q. That would be the established grade? A. Yes, I suppose it would be; I always work after the engineer.

Q. Do you know what the established grade is? A. Yes, sir; it is the final grade.

Q. And that is what you would pave to? A. Yes, sir, sure.

30

Q. And that final grade is shown on this plan? A. I don't think so.

Q. Assuming that it is not there, then you would pave to the established grade? A. Of course I would pave to the established grade.

Q. Do you know where Second Street is in Hoboken? A. Yes, sir.

Q. One of the streets to be improved in this case? A. Yes, sir.

40

Joseph Murphy—Cross.

Q. Is there any trolley track on Second Street, Hoboken? A. Yes, sir.

Q. Are you sure? A. There used to be.

10 Q. Assuming there is an area of about seven feet three inches on either side of the rails, could a machine mixer be used to advantage in a space to be covered with concrete of seven feet three inches; or would it be more advantageous to mix the concrete by hand? A. I can do it in there by machinery.

Q. Would it not be more advantageous to mix it by hand in that case? A. No, I don't believe it would.

Q. You do not think so? A. No, sir.

20 Q. Did you look at any of the grade maps in Hoboken in connection with this matter? A. No, sir.

Q. If the cost of mixing by hand was the same as mixing by machine, you would have no objection to the specifications, would you? A. No, of course if mixing by hand was the same as mixing by machinery, but it is three times dearer.

30 Q. You said on your direct examination that the concrete clause in the specifications is not unfair to any contractor; explain to us what you mean by saying that it is not unfair to any contractor? A. Because the contractor is putting it in there by the cubic yard, and he does not care how high it is or what thickness it is, whether it is eight or eighteen inches, he is putting it in by the cubic yard, and he is being paid by what he puts in.

Joseph Murphy—Cross.

By Mr. Walscheid:

Q. And is his price pretty good? A. Yes, it is pretty good, it is not unfair to the contractor.

Q. Did you submit a bid for any of these contracts down there? A. No, sir.

Q. Did your company submit any bid? A. No, 10
sir.

Q. Where did you get your information as to what was to be done down there by Mr. Crichfield? A. Because I sent down and asked the boss when they were getting ready.

Q. You sent down and asked the boss when they were getting ready? A. Yes, we kept posted on all those bids.

Q. Who did you send down there? A. I sent 20
our young fellow.

Q. Who? A. Bernard McCaffery.

Q. You didn't go down there yourself, did you? A. No, sir.

Q. You don't know of your own personal knowledge what was to be done in Bayonne; you were not down there yourself? A. No, I was not down there myself.

Q. And you did not examine the bids down there? A. I examined all the prices and I had a 30
competent man to take them and he took them as they were read.

Q. You didn't go down to Bayonne yourself? A. No, sir.

MR. MARKLEY: I move that the latter part of the witness' answer, "I had a competent man take them and he took them as they were read."

THE COMMISSIONER: Your motion will be noted. 40

Joseph Murphy—Cross.
Max Miller—Direct.

By Mr. Markley:

Q. When did you first examine the plans in Hoboken? A. Ten days or so before the letting, along in that neighborhood.

10 Q. You cannot give us the exact date? A. No, sir, I cannot give you any exact date.

Q. Was it in May? A. If it was let on the third of May, it would have to be in April if it was ten days before.

Q. When did you ever do any work in Hoboken, Mr. Murphy? A. I never done but one job.

Q. Your company did that? A. No, I did it personally.

20 Q. When did the Clinton Contracting Company ever do any work in Hoboken? A. Never.

Q. And you say you did one job? A. Yes, sir.

Q. And when was that? A. That was some years ago, that was paving.

Q. That was not asphalt? A. No, it was brick out on the heights.

MR. WALSCHEID: That closes the Prosecutor's case.

30

MAX MILLER, being duly sworn on his oath according to law and called on behalf of the defendants, testified as follows:

Direct Examination by Mr. Markley:

Q. How old are you, Mr. Miller? A. 29 years.

Q. Where do you reside? A. 1226 Bloomfield Street, Hoboken.

40 Q. What property do you own in Hoboken? A. 510 Park Avenue, a four-story building, and

Max Miller—Direct.

my interest in 614 Bloomfield Street; I have some houses there which were left me by my aunt, she left them to my brother and sister and I.

Q. Who requested you to be prosecutor in this case? A. I did, myself.

Q. When? A. Why, after I had a talk with Commissioner Schmulling in the early part of April. 10

Q. In the early part of April? A. Yes, sir.

Q. Where did you have that conversation? A. Over in Hoboken, I can't recollect just where.

Q. You don't recollect where? A. No, not exactly; I met him and he told me about some streets that were going to be improved, otherwise I said, "I am going to vote against you," because we were battling for lower prices on streets for over three years. 20

MR. FALLON: I object to that, and ask to have it stricken out.

Q. You don't know where you had this conversation with Mr. Schmulling? A. No, not exactly, it might have been down in his office.

Q. Where? A. In the Town Hall, because I go down there quite frequently.

Q. You mean the City Hall? A. Yes, sir. 30

Q. You only had one conversation with him? A. Oh, no, we had many on street improvements.

Q. And did you have any conversation with anybody else about bringing proceedings to attack these contracts? A. Nobody else, except when I met Mr. Murphy up on Park Avenue, where I have got some buildings.

Q. When did you meet him? A. It was around the 20th of April, I think about that time. 40

10 Q. What did you say to Mr. Murphy? A. I told him I would like to have him go down and look at the plans and specifications, I said I believed that they are closed, but I would like to have you go down and look at them, if you believe they are of interest to you; I never mentioned the matter to him otherwise, I think I telephoned previous, because it was taken up; I think Mr. Doherty mentioned that there would not be any cost, Mr. Doherty was the attorney at that time and I got a bill from the Corporation Attorney, and I mailed it over to my attorney and I asked him to verify it, and he let it lay on his desk, I think he put it in the pigeon hole of his desk, and then I heard about the street contract.

20 Q. Doherty was your counsel, you are now talking about the chancery suit in which you were the complainant? A. Yes, I got a bill from your office, and I think I paid that bill, I think I called up the Corporation Attorney of Hoboken, and asked him if that bill did not include the cost of your office, and he mentioned that he didn't think so; I understood that there was to be no cost whatever; I can't recollect exactly, and I paid the bill.

30 Q. Who paid the attorney's fees in that case? A. I did.

Q. You paid them personally? A. Yes, sir.

Q. How much did you pay? A. I paid attorney's fees of \$94.44 to your office and \$60.25 to

Q. What did you pay your attorney, Mr. Doherty? A. Mr. Doherty has never rendered a bill to me; I have employed him on other matters and he usually waits a long time to render a bill.

Max Miller—Direct.

Q. And that other case is disposed of? A. Yes, sir.

Q. You paid the costs? A. Yes, sir; I paid the costs.

Q. Who retained Mr. Walscheid in your behalf in this case? A. I did.

Q. When? A. When I went up to Mr. Doherty's office and he said, "I am too busy, Mr. Miller," I said, "Who is the best man for me to get?" and he said, "Mr. Walscheid has been handling a lot of the street paving matters." 10

Q. What is your interest in this matter? A. My interest is that of a taxpayer and a citizen.

Q. Did Mr. Murphy request you to bring this suit? A. He never did, absolutely no.

Q. He never approached you about it? A. Never, until I approached him. 20

Q. And he never asked you about being the initiative in this suit? A. No, not in this suit; the only man that did talk with me was Mayor Cooke in Hoboken and Commissioner Schmulling.

Q. I suppose you have paid Mr. Walscheid a retainer? A. No, but I will if he asks me for it.

Q. He has not asked you for it? A. No, not as yet.

Q. Did Mr. Walscheid ask you to become prosecutor in this case? A. He did not. 30

Q. You went to him voluntarily? A. I did.

Q. You went to his office? A. I did.

Q. How many times have you been to his office since the first time you were there? A. I guess I was there twice, when I arranged with him and then I went one time when he was not in.

Q. Did you make an affidavit? A. I did, yes.

Q. The first time? A. Yes, sir. 40

Max Miller—Direct.

Q. Was it drawn up when you got there? A. It was not, it was drawn up in my presence.

Q. Did you send Mr. Murphy to Mr. Walscheid? A. I did not.

10 Q. Do you know how Mr. Murphy came to go to Mr. Walscheid? A. He is his attorney, I understand.

Q. Did you give Mr. Walscheid any data as to the streets in Hoboken that were to be improved?

A. I did just roughly according to the advertisement that was in the paper; I told him I would not be surprised if the things were closed, only in a different way than before.

20 Q. What do you mean by that? A. Well, the others call for a ten-year guarantee, and I think the others call for the concrete mixing by hand, and I think when I looked upon this map there was no proper grade upon it, a man could make a bid and—

Q. Did you examine the plans? A. Yes.

Q. And the specifications? A. Yes, sir.

Q. Where did you examine them? A. In the City Hall.

Q. When? A. April 21st or 22nd.

Q. Where? A. In the City Clerk's office.

30 Q. Who did you see there at the time? A. I don't know whether it was Mr. Duffy or one of those men in there, he was in the Board of Council when I was there, they have always granted me that privilege.

Q. And then you retained Mr. Walscheid to prosecute the suit on your behalf? A. Yes, sir.

Q. And nobody in any way asked you to bring this suit? A. No, sir; because I brought one before and now this one.

Max Miller—Direct—Cross.

Q. You only brought two? A. Yes, sir.

Q. And both were prompted by your being a good citizen of the City of Hoboken? A. Yes, sir.

Q. And you wanted to have open specifications; that is the only reason that prompted you? A. Yes, sir; because I have been battling over three years for that. 10

Q. And nobody has requested you in any way to bring this proceeding? A. Nobody but myself.

Q. And you expect to pay Mr. Walscheid his bill? A. I do when the bill is presented.

Q. And you do not expect to be reimbursed by anyone? A. No, sir.

Q. You do not expect that you are getting these services as a gift, do you? A. No, sir.

Cross-Examination by Mr. Walscheid: 20

Q. You have been a Councilman in the City of Hoboken? A. Yes, sir.

Q. During what years? A. I was for three months. I was in office when the Commission Government was adopted and we were automatically driven out of office when the Commissioners took office.

Q. And while you were in office, did any of these street paving propositions come up? A. No, sir, because it was during the winter months. 30

Q. When did you first become interested in the street paving propositions? A. Oh, during the time that Commissioner Schmulling was in the Board of Councilmen with Taylor and Hueneke.

Q. Did any contracts come up during that time?

MR. FALLON: I object to that on the ground that it is immaterial and irrelevant.

Max Miller—Cross.

A. Yes, there were during the time that Mayor Cooke was there and I went over the different items of street improvement because he knew that I was building houses and he asked me different things and I went over them with him.

10 Q. And when you first examined these specifications you were not in favor of them as prepared? A. I believe that they were giving too much power to the engineer and Commissioner of Streets and Public Improvements whereby they might close out a contractor who might want to bid.

MR. WALSCHEID: I want to offer in evidence the specifications.

20 (Specifications marked Exhibit P-5 in evidence.)

The hearing was thereupon adjourned until Friday, June 2d, 1916, at ten o'clock in forenoon.

30 Continuation of the taking of depositions before me, William C. Asper, a Supreme Court Commissioner, at the offices of Messrs. Collins & Corbin, 243 Washington Street, Jersey City, New Jersey, this second day of June, 1916, at ten o'clock in the forenoon; in the presence of counsel for the respective parties.

Thomas Cavanagh—Direct.

THOMAS CAVANAGH, sworn.

Direct Examination by Mr. Markley:

Q. Mr. Cavanagh, where do you reside? A. In Weehawken.

Q. What business are you in? A. Contracting business. 10

Q. How old are you? A. Going on 70 years.

Q. How long have you been in the contracting business? A. About 40 years.

Q. In what particular line have you been? A. Well, I have been in the building business about four years; then I went in the contracting business about 35 years ago.

Q. What kind of contracting work have you done? A. I have built sewers, paved streets and all that kind of work. 20

Q. Can you give us any idea of how many square yards of street pavement work you have done? A. That would be hard to tell; I wouldn't like to walk over it; I done a whole lot of it; the first job I done was in Central Avenue, from Hoboken Avenue to Bowers Street; there was 23,500 yards on that job; that was the first job I done.

Q. Have you done street paving work for the last twenty years? A. Yes, sir. 30

Q. Have you done street paving work in the City of Hoboken? A. Yes, sir.

Q. How long ago did you receive a contract for street paving work in Hoboken? A. The last one, I guess, was about six weeks ago.

Q. Was that on May 3rd? A. Yes.

Q. What kind of work was it that you received at that time? A. It was taking off the old blocks, bringing that street to grade, and repaving it, 40

Thomas Cavanagh—Direct.

and putting in a concrete base and trimming the old blocks.

Q. A stone pavement? A. Yes.

Q. How many streets? A. Five or six, I guess.

Q. You were the successful bidder at that time?

10 A. Yes, sir.

Q. For that work? A. Yes, sir.

Q. Have you, during your experience, had occasion to compare mixing concrete by hand with mixing it by machine? A. Yes.

Q. Have you also had occasion to compare the cost of the two mixings? A. Yes, in a rough estimate.

Q. What have you to say as to the relative cost?
20 A. Oh, the work I done was scattered here and there and I done the mixing by hand and saw it would be cheaper to mix it by hand.

Q. You say it would be cheaper? A. I done it by hand; I thought it was cheaper or I wouldn't do it.

Q. Did you have a contract about two years ago in Hoboken? A. Yes, sir.

Q. For concrete base? A. Concrete base.

Q. How was the concrete mixed on that contract? A. By hand.

30 Q. All by hand? A. Yes.

Q. Can you give us any idea as to the number of square yards? A. About 17,000 square yards.

Q. Did you have any difficulty in bidding for the work that you were the successful bidder on, on May 3d?

MR. WALSCHEID: I object to that as immaterial and irrelevant.

Thomas Cavanagh—Direct.

A. No trouble at all; I was the lowest bidder and was awarded the contract.

Q. Were there any other bidders besides you?

A. Yes; I think there were four, if I ain't mistaken.

Q. Four bidders besides yourself? A. There were three, anyway; I think there were three besides myself. 10

Q. Have you had occasion to ascertain what the cost per square foot or cubic yard was for mixing concrete? A. Not in the last few years I didn't keep much track of it; I kept track of it but I couldn't tell you now. About 20 years ago I done a job up on Jefferson Street.

Q. About how long ago? A. About twenty years ago; I done that for about four cents, but it was only four inches. 20

Q. Four inches deep? A. Yes; a fellow over in Newark wanted to sub-contract it for five cents a square yard, so we done it ourselves.

Q. How much was it per square yard? A. Four cents.

Q. And the concrete was four inches deep? A. Yes.

Q. You mixed it all by hand? A. Yes, mixed it all by hand; I know the cost of that; I kept track of the cost of that. 30

Q. You kept track of that cost? A. On account of the other man offering five cents.

By Mr. Walscheid:

Q. Is that the last time you kept track of it?

A. No, that is the first time. I just kept track of it in that case.

Thomas Cavanagh—Direct—Cross.

By Mr. Markley:

Q. Do you know how many cubic yards or square yards there were at that time? A. Oh, I couldn't tell you now.

Q. Can you give us a rough estimate? A.
10 There were, probably there might be about 2000 square yards; there was only one block, on Jefferson Street; about 2000 square yards; around that; it was done in a couple of days.

Q. Do you recall, in mixing by machine, of any advantage over mixing by hand? A. Labor is so high now I would use a machine in preference to mixing by hand, now, at the present time.

Q. On account of the high cost of labor? A.
20 Yes, putting up a plant in order to mix it by machine.

Q. How about the difficulty in securing labor at the present time? A. Oh, it is hard to get labor.

Cross-Examination by Mr. Walscheid:

Q. Then, if you had a specification which provided, as to concrete, no machine mixing will be allowed except by permission of the City Surveyor in charge, you would want to mix that concrete by machine, wouldn't you? A. I don't understand that; what is that question, Mr. Walscheid?
30

Q. If you had to lay concrete, in the proportion of 1, 3 and 6, six inches thick, as a sub-base for a street improvement in the City of Hoboken at this time, in large quantities, you would prefer to lay it by machine? A. I would now, yes.

Q. You would now? A. Yes, sure.

Q. You would prefer to lay it by machine in

that manner because of the great scarcity of labor and the very high cost of labor? A. Yes, sir.

Q. That is so, undoubtedly, isn't it? A. Yes.

Q. So that it would be of great advantage to you in the doing of that work to lay it by machine, financially? A. Yes, now it would.

Q. And it would be of great disadvantage to you financially at this time to be forced to lay it by hand? A. Well, if they wanted it laid by hand I would have to lay it by hand, that is all.

Q. Of course you would. A. Sure.

Q. But it would not be nearly as profitable to you, would it? A. I didn't try a machine, you know; I don't know what I would make on it; I know what I could make on it by hand labor.

Q. You have never worked with a machine? A. No, never.

Q. You never laid a foot of concrete with a machine? A. No.

Q. Even without having laid any concrete with a machine, that is your opinion, because of the great cost of labor? A. Yes.

Q. In other words, you recognize in the machine a labor saving device? A. Yes.

Q. And a device which also tends to speed in the laying of that concrete; isn't that so? A. Well, yes.

Q. Mr. Cavanagh, you have worked on municipal work practically all the time, haven't you? A. Sure; all over.

Q. If you were put to work under a specification which provided that you were to remove curbing on an old improvement, which provided that you were to remove such curb as might be condemned either by the engineer in charge or by

10 the city officials, and there was nothing else in the specifications to indicate to you what would be considered by the City Engineer or by the officials bad curb and curb which would have to be condemned, you, of course, could not tell what curb was to be removed, could you, by the mere reading of the specification?

MR. MARKLEY: I object to that question on the ground that it is not cross examination and is not within the reasons of the prosecutor.

A. I could not tell what curb was to be removed until they threw it out.

Q. Until he actually threw it out of the trench?

20 A. Sure; you couldn't tell by looking at it.

Q. In other words, you couldn't tell what was in the minds of the parties, could you? A. No.

Q. And that, of course, would also affect curb which was to be taken out and which was to be reset, if there was nothing said in the specification about what kind of curb was to be reset, wouldn't it?

30 MR. MARKLEY: I make the same objection.

Q. In other words, the same reasoning would apply? A. I don't understand. If the curb is thrown out, if it was to be redressed again, if it was good enough to be redressed, it would be redressed, or else it would be thrown out.

Q. Who was to determine that? A. Anyone that seen it after it was thrown out.

40 Q. Anyone that saw it after it was thrown out?
A. Yes.

Thomas Cavanagh—Cross.

Q. The Engineer, in other words? A. Yes, or the man that is going to cut it.

Q. Or the man that is going to cut it? A. Sure.

Q. But if the specification provides that when this job was done only good clean curb, without cracks or spalls, of 20 inches deep and 5 inches wide, should be used, then you could tell, couldn't you? A. Yes, sure,; anyone could tell. 10

Q. Anyone could tell? A. Yes.

Q. You have done a lot of curb resetting, haven't you? A. Yes, quite some.

Q. What would you consider a fair market price for resetting old curb in the City of Hoboken at this time?

MR. MARKLEY: I object to that on the ground that it is not cross examination and is not within the reasons of the prosecutor. 20

A. I couldn't tell now.

Q. Well, didn't you bid on just that kind of work under your specification? A. Yes.

Q. What price did you put in?

MR. MARKLEY: I object to that as incompetent, immaterial and irrelevant, not cross examination, and not within the issues. 30

MR. WALSCHEID: Strike out that question.

Q. Didn't you bid on the resetting of old curb in the City of Hoboken on the 3d day of May last?

A. Yes.

Q. And it had that item in it, didn't it? A. Sure. 40

Thomas Cavanagh—Cross.

Q. What price did you bid for the old curb?

MR. MARKLEY: I object to that on the ground that it is immaterial, incompetent and irrelevant.

10 A. I couldn't tell you; I forget it; I don't remember.

MR. WALSCHEID: Mr. Whittemore, those bids are on file in the City of Hoboken, aren't they?

MR. WHITTEMORE: Yes, they are on file.

MR. WALSCHEID: Can they be produced within the morning if you telephone for them?

20

MR. WHITTEMORE: I presume so.

MR. WALSCHEID: Will you do so?

MR. WHITTEMORE: Yes.

Q. In the contract which you obtained on the 3d of May, was there an item which called for the removal of stone block pavement, and were you asked to bid upon that as a separate item

30

MR. MARKLEY: I object to that as immaterial and irrelevant.

A. I really don't know; I don't remember.

Q. Were you asked to bid upon concrete? A. Yes, sure.

Q. How thick a sub-base? A. Six inches, I guess.

Q. Do you know what price you bid on concrete? A. Well, I don't know; around five dollars, I think.

40

Thomas Cavanagh—Cross—Re-Direct.

Q. Five dollars a cubic yard? A. Around five; it was no less than five; it may be more; I couldn't remember now.

Q. Of course that is a fair price, isn't it? A. Well, I don't know; I don't think so; if I had to bid it over again I would put in more for it.

Q. You were going to lay this concrete by hand, weren't you, at five dollars? A. Yes. 10

Q. You haven't a machine? A. No, I have no machine; but I am going to get one now, unless I change my mind.

Q. How do you know you will be allowed to use it? A. Oh, yes; you can't stop me.

Q. They can't stop you? A. No; I don't see who can stop me.

Q. Why wouldn't they stop you? A. If I mix the concrete in proper proportions and put it down. 20

Q. In other words, you can mix concrete with a machine just as good as you can by hand? A. Oh, yes; sure.

Q. No doubt about that? A. I guess so.

Q. You have seen concrete mixed by machine? A. Yes, sure.

Q. And you couldn't tell any difference? A. No, you can mix with a machine fully as good. 30

Q. You can mix with a machine fully as good as by hand? A. Yes, fully as good.

Re-direct Examination by Mr. Markley:

Q. Can anybody tell before the old curb is taken up how much of it can be used? A. No; I don't think so; in my opinion they could not.

Q. Why not? A. Well, the old curb is all right there, but when you turn it over there it might be 40

Thomas Cavanagh—Re-Direct.

split right through, or when it was thrown out it might turn out that way.

Q. It might be brittle? A. Yes; nobody can tell before it is thrown out.

10 Q. And when you come to dress the curb it may then show up? A. Oh, yes, sure; in several places that they were dressing curb there on Fifth Street we had to abandon two or three pieces because it was half cut.

Q. Is this the usual way of bidding for curbing?

MR. WALSCHEID: I object to that as immaterial and irrelevant.

A. Yes, sure.

20 Q. Have you done it before? A. Sure.

Q. How many times? A. Several times.

Q. You have never used a machine, have you, in mixing concrete? A. No; only mixed it by hand.

Q. You say that you know that a machine will accomplish the same result, so far as the hand is concerned? A. I expect so and I hope to accomplish more. I expect so, anyhow; that was my intention in having a machine.

30 Q. In any event you would have to mix according to the specification? A. There, to put the regular quantities in.

Q. And the concrete that goes under the curb, how must that be mixed? A. The same as the other.

Q. As to machine or by hand? A. You could put it in whatever way you want to do it.

40 Q. Must not it necessarily be mixed by hand? A. Yes, because it is only a small quantity and

Thomas Cavanagh—Re-Direct—Re-Cross.

we mix it by hand always, the small quantity of it, to go under the curb; that is the first concrete they use around the curb.

Q. You bid, do you not, per unit price? A. Yes.

Q. And not a total amount for the work? A. No, no; unit.

Q. So much per unit? A. Yes.

10

Q. You had no difficulty in determining the amount of your bid per unit, did you? A. No.

Re-Cross Examination by Mr. Walscheid:

Q. You know what a balanced and unbalanced bid is, don't you? A. Well, sometimes I do and sometimes I don't; it depends on the circumstances.

Q. You mean sometimes you draw an unbalanced bid and don't succeed, is that it? A. Yes; it doesn't come out right.

20

Q. Well, you evidently do know what a balanced and unbalanced bid is. A. If you come out right it is all right; if it comes out wrong it is no good.

Q. Bidding upon the unit system allows you to unbalance your bid, doesn't it? A. Oh, yes; you can do it if you feel like it.

Q. If you feel like it? A. Yes.

30

Q. Now, Mr. Cavanagh, supposing that you had a contract in which you bid low upon old curb, and in which you had bid high upon new curb, and the specification provided that the engineer in charge could condemn such old curb as he wanted to condemn—(understand, there is no limitation upon his condemning the curb)—under those circumstances it would certainly be to your advantage to have him condemn all of the old

40

Thomas Cavanagh—Re-Cross.

curb on the work and let you set new, wouldn't it? A. I have never seen that done—

Q. I am asking you whether that would not be to your advantage. A. That would be a gamble if I did that; that would be a gamble, that is what it would be.

10 Q. That is it exactly; it would be a gamble? A. Yes.

Q. And if he then condemned the curb for you it would be a good venture? A. Yes.

Q. And if he did not condemn it for you it would be a bad venture? A. That is the idea.

Q. And you could protect yourself against the bad venture, couldn't you, by putting your old curb price at the fair market value of the old curb? A. Well, yes; you probably could.

20 Q. What do you say is the fair market price of old curb reset in Hoboken at this time? A. Well, the way labor is now I couldn't tell you.

Q. Couldn't you tell me? A. No, sir; the way labor is now I couldn't tell you. Labor has jumped twenty-five per cent since I got that job.

Q. You can't tell? A. No, I couldn't tell the way labor is now.

30 Q. (Answer of witness read, as follows: "No, sir; the way labor is now I couldn't tell you. Labor has jumped twenty-five per cent. since I got that job.") Since you got that job? A. Yes.

Q. In other words, since May 3d? A. Since May 3d.

Q. You could have told when you bid on May 3d, couldn't you? A. Yes, but now I couldn't tell you. And it will go up higher yet.

Q. Supposing, Mr. Cavanagh, that the specification that you are to work under does not give

Thomas Cavanagh—Re-Cross.

the grade to which the street improvement is to be laid; that it contains a provision under which you are allowed to be paid for excavation and for fill; and that the grade is to be fixed by the Engineer, the final grade of the street. A. Yes.

Q. That, of course, would affect the amount of excavation or fill which you would have to put in, wouldn't it? A. Yes. 10

By Mr. Hobart:

Q. What is the answer? A. The grades would run on the map.

By Mr. Walscheid:

Q. I am putting to you a hypothetical question; I am putting to you a suppositious question. Can you understand what I mean by that A. I do not. 20

Q. I am supposing that that is so. A. All right.

Q. (Question repeated, as follows: Supposing, Mr. Cavanagh, that the specification you are to work under does not give the grade to which the street improvement is to be laid; that it contains a provision under which you are allowed to be paid for excavation and for fill; and that the grade is to be fixed by the Engineer, the final grade of the street. That, of course, would affect the amount of excavation or fill which you would have to put in, wouldn't it?) A. Well, I don't know anything about that; I can't understand your question at all. 30

Q. Well, if there is no grade fixed to which a street is to be laid, and the Engineer has the right to fix that grade, doesn't that affect, or doesn't that make uncertain the amount of cut and fill that is to be done? A. I don't see what 40

Thomas Cavanagh—Re-Cross.

it would affect any at all, because you get so much a yard for filling and so much a yard for cutting.

Q. You get so much a yard for filling and so much a yard for cutting? A. Yes.

10 Q. Can you tell under the circumstances which I have given to you, how many yards of cut you would have to make? A. No.

Q. Or how many yards of filling you would have to do? A. No.

Q. If then you bid a high price on fill and a low price on cutting, under those circumstances the Engineer can again favor you, by laying the grade of that street in such a way that you could get the benefit of your high price for filling, can't he? A. He couldn't favor you a bit, because the cutting and filling is all the same price.

20 Q. You say it should be the same price? A. I say it is pretty near the same price, the cutting and filling; there isn't five cents' difference in the yard.

Q. Yet you could? A. Yes. Why, the Engineer could not favor me nothing at all, or nobody else.

30 Q. You say that there isn't any difference in the value of cutting and filling? A. Five cents, I think.

Q. About five cents? A. Yes.

Q. Which is the more valuable? A. The filling.

Q. The fill is about five cents more valuable? A. Yes; I think fill is 50 cents, and the cutting is 45, if I ain't mistaken; to the best of my knowledge.

Q. The value of cut is 45 cents, and the value of fill is 50 cents? A. Yes; that is as near as I can remember.

Thomas Cavanagh—Re-Cross—Re-Re-Direct.

Q. Well, you are in business, aren't you? A. Sure.

Q. And you are bidding on those things every day? A. Yes.

MR. HOBART: Yes, he says the price of labor is higher. 10

A. I know that it is.

Q. I am taking you back to the 3d of May, when you bid. Well, if a man then bid 85 cents for fill on the 3rd of May, you would think that he is getting a mighty good price, wouldn't you? A. Yes; it depended on how far he has to haul it, though.

Q. What? A. It depends on where he gets his material.

Q. Of course it does. I am talking about the City of Hoboken. A. I am talking about it, too; but if it is a long haul, he would want that much for hauling it extra. 20

Q. And if he is getting 60 cents for excavation, he is getting a mighty fine price, isn't he? A. He isn't getting too much.

Q. You would like to do it at that price every day, wouldn't you? A. If it was now I would get more.

Q. I am not talking about now; I am talking about the day that you figured; that is so, isn't it? A. That is a fair price. 30

Re-Direct Examination by Mr. Markley:

Q. Mr. Cavanagh, you say that since May 3rd the cost of labor has gone up about twenty-five per cent.? A. Yes, it has gone up twenty-five per cent sure.

Q. But on May 3d you think the cost of machine 40

Thomas Cavanagh—Re-Re-Direct.

mixing was about the same as hand mixing? A. Yes, there wasn't much difference, I don't think.

Q. Where does that fill for Hoboken have to be brought from? A. Oh, you may have to get it from New York on scows.

10 Q. You would get it from the boats? A. Yes, you may have to get it from there, if you want much of it.

Q. Do you consider that in making up a bid for Hoboken; do you consider that cost? A. Yes, sure; well, not in making up bids, but if there is much fill wanted you will have to get it in in scows, a big quantity of it.

20 Q. Mr. Walscheid was asking you some questions in regard to your having put in a whole lot of new curb and taking out a whole lot of old curb; or in the alternative of putting in a whole lot of old curb and not putting in new curb, and in that way getting an advantage; in order to do that you would have to have an understanding or agreement in advance, wouldn't you, with the engineer or somebody in charge? A. No, there wouldn't be any advantage to me whether he put in the old or new, not if I bid it in on my prices; it would not be any advantage.

30 *By Mr. Walscheid:*

Q. On your prices? A. On my prices; I can make as much resetting the old curb as the new.

By Mr. Markley:

40 Q. What is the fair price for fill in Hoboken, Mr. Cavanagh, if you have to bring the fill in by scows? A. Oh, about a dollar a yard would be a fair price at the present time; a dollar a yard; and you wouldn't get rich at that price, either.

George L. Fellows—Direct.

GEORGE L. FELLOWS, sworn:

Direct Examination by Mr. Markley:

Q. Mr. Fellows, what business are you in? A. Contracting and trucking.

Q. What kind of contracting business are you in? A. Why, building, street work, city and municipal work of all kinds. 10

Q. Are you associated with some company? A. I am president and treasurer of the Lester Fellows Company, a corporation.

Q. A corporation of this State? A. A corporation of this state.

Q. Located in Jersey City? A. Jersey City

Q. Have you done any work in Hoboken lately? A. Why, we completed a job there last fall and started a new one which we are just completing now. 20

Q. The contract last fall, for what kind of work was that? A. Street paving.

Q. What kind of street paving? A. Clipped block on a concrete base.

Q. Did it involve the mixing of concrete for the concrete base? A. It did.

Q. How many years' experience have you had in street work of this kind? A. In street work about three years; other kinds of work a lifetime. 30

Q. Have you done work in Jersey City? A. Yes.

Q. Street paving work? A. Yes.

Q. Where else have you done street paving work? A. Well, Jersey City and Hoboken is the only ones.

Q. This contract last fall in Hoboken, you say

George L. Fellows—Direct.

that there was concrete mixing for the concrete foundation? A. There was.

Q. Did you at that time have occasion to examine into the cost of mixing by hand and mixing by machine? A. Why, yes; we figured it out both ways.

10 Q. What conclusion did you arrive at? A. That it was about as cheap to mix it by hand as it was by machine.

Q. How did you— A. I would like to change that a little bit. We did not figure it as cheap at that time, but we found out afterwards that it would be cheaper to mix by machine, and bought one for that work.

20 Q. Then did you figure it out after that? A. We found afterwards that it would cost about the same.

Q. Can you give us a concrete example now of the respective cost for any certain number of yards? A. Why, the concrete mixed by machine, figuring in the upkeep and the first cost of the machine, depreciations, etc., engineer's wages, we figured that that only just about takes the place of the extra men that would be required to mix the mixture and the concrete, so that the labor cost
30 I think was about the same; and in these times when labor is scarce the concrete mixed by machine cost more than by hand, for the reason that the proportion of concrete mixed is less in proportion to the number of men working, where you had a full crew.

Q. How large a job was that that you had last fall in Hoboken? A. I couldn't tell you in yardage; it runs about \$19,000, I think.

40 Q. After you bought the machine you went back

George L. Fellows—Direct.

to hand mixing? A. No; we continued to use the mixer, because we had it on our hands.

Q. How did you come to the conclusion that you did not save anything by mixing by machine instead of by hand? A. Why, where we had small pieces to fill in, where we could not use the machine, why the labor runs about the same; then on other work before we had the mixer, why we knew about the cost. 10

Q. Now, you got another contract, you say, in Hoboken, for street paving work? A. Yes.

Q. How large a contract is that? A. Why, that runs about \$8,000.

Q. Does that involve mixing concrete also? A. It does.

Q. Have you had occasion on that contract to estimate the cost of mixing by machine? A. Yes, we have. 20

Q. And what conclusion have you come to with the relative cost of mixing? A. It would cost us more on this job by machine than by hand.

Q. Concrete that goes under the curb, how about the mixture of that concrete; is there any difference in regard to that? A. You use so little of that at a time that it would not pay you to use a mixer. 30

Q. In other words, it would be cheaper to mix it by hand? A. Well, it wouldn't be cheaper—well, it would be cheaper, yes, in proportion, yes, because there would be the extra cost of starting the machine up and to stop it.

Q. You heard Mr. Cavanagh testify this morning? A. I did.

Q. And that he had bid for work which was awarded to him on May 3d? A. I did. 40

George L. Fellows—Direct—Cross.

Q. Did you also bid for that work? A. We figured on it.

Q. Newark, Ferry and other streets in Hoboken? A. Yes

Q. You were unsuccessful? A. We were unsuccessful.

10 Q. Did you have any trouble in bidding on those specifications? A. None at all.

Q. Were there any other bidders besides you and Mr. Cavanagh? A. I think there were; yes, there were.

Q. Was there any uncertainty, so far as you were concerned, as to how much you should bid for concrete? A. The only thing was the question of labor.

20 Q. On account of the cost of labor going up? A. The cost of labor going up and the scarcity.

Q. But so far as the specifications were concerned, did you have any trouble in preparing your bid as to the concrete? A. None whatever.

Q. Or as to the curb? A. None whatever.

Q. Or as to the fill? A. None whatever.

Q. Or excavation? A. None whatever.

Q. Did you bid per unit? A. Bid per unit, yes.

30 Q. Are you connected with Mr. Crichfield in any way? A. None whatever.

Q. Is your company? A. No, sir.

Q. Is your company or yourself in any way connected with the Uvalde Asphalt Paving Company? A. In no way whatever.

Cross-Examination by Mr. Walscheid:

Q. Who asked you to come over here? A. Why, Mr. Whittemore.

40 Q. The Engineer? A. Yes.

George L. Fellows—Cross.

Q. Under whom you have done work in the past? A. Yes.

Q. In the City of Hoboken; and under whom you are doing this \$8,000 job? A. Yes, sir.

Q. You say you have been in the street improvement line for three years? A. Three years, yes.

Q. What particular branch of improvement work have you yourself pursued? A. Why, I don't quite understand the question. 10

Q. Have you a trade? A. I have no trade.

Q. When you were in the building line, when you started out, what did you start out at? A. I have been in business ever since I graduated from school.

Q. In what kind of building work did you start? A. Why, speculating in real estate, building houses, doing concrete walks, concrete foundations and retaining walls, etc. 20

Q. And who in your company is the active experienced man in relation to street improvements? A. I am.

Q. Prior to the time when you took your first job some three years ago you had had no experience with any other street contractors, working for them, had you? A. None whatever.

Q. Where did you take your first job? A. Why, experience is the best teacher. 30

Q. I know it is; where did you take your first job? A. Why, on Passaic Avenue, Jersey City, was my first job.

Q. How much was involved in that job? A. Why, that run about \$12,000.

Q. That runs about \$12,000? A. Yes, that was about it

George L. Fellows—Cross.

Q. What kind of work was it? A. That was Belgian block paving.

Q. On what kind of foundation? A. Sand base.

Q. No concrete involved in that, was it? A. None whatever.

10 Q. What was your next job? A. Passaic Avenue.

Q. You just mentioned that A. Terrace Avenue.

Q. In Jersey City? A. Yes.

Q. What kind of job was that? A. Grading and concrete work.

Q. Grading and laying of concrete work? A. Concrete sidewalks.

Q. Concrete sidewalks? A. Yes.

20 Q. How much was involved in that? A. Why, I think that was a ten or twelve thousand dollar job.

Q. Just for laying a concrete sidewalk and grading? A. Yes.

Q. What was your next job? A. Armstrong Avenue and this Hoboken job.

Q. The Armstrong Avenue job where? A. From Sterling Avenue to West Side Avenue.

Q. In Jersey City? A. Yes.

30 Q. How much was involved in that job? A. About \$15,000.

Q. What kind of work was it? A. Why, concrete curbs, Belgian block pavement, brick paving.

Q. On a sand base? A. No, on a concrete base.

Q. Then that was your first experience in laying concrete as a sub-base for street improvements, wasn't it, that Armstrong Avenue job? A. Hoboken was the first.

George L. Fellows—Cross.

Q. The Hoboken job was the first? A. Yes.

Q. And Armstrong Avenue came second? A. Well, they both worked together.

Q. They both worked together? A. Yes.

Q. When you say "the Hoboken job" you mean the \$19,000 job? A. The first, that was Grand, Madison and Adams Street. 10

Q. On your Hoboken job, what kind of work was that? A. That was a concrete base with clipped block surface.

Q. That was to take up the old blocks, clip them, and set them on a concrete base? A. On a new concrete base.

Q. And that, you say, was \$19,000? A. Around \$19,000.

Q. The only other municipal work that you did on street improvement work was this \$8,000 job which you received in Hoboken? A. That is all. 20

Q. Where is that job? A. That is Harrison, First and Third Streets.

Q. What kind of work was it? A. That is the same work, concrete base, clipped block surface.

Q. When you got this Hoboken \$19,000 job, you decided that you would try a machine? A. I thought I would try a machine. 30

Q. In the concrete mixing; you had heard, I suppose, in the trade, that machines were in common use for the mixing of concrete in large quantities, hadn't you? A. Well, I hadn't heard it; I seen machines and suppose that they must be a cheaper way to do it.

Q. Because it was machine mixing? A. Yes.

Q. What kind of machine did you get? A. I got a Kearing. 40

George L. Fellows—Cross.

Q. Is that a continuous or batch mixer? A. A batch mixer.

Q. How big a batch would it mix at a time? A. Eleven cubic feet.

Q. It would mix eleven cubic feet in a batch?

10 A. A little less than half a yard.

Q. How much did you pay for that batch mixer? A. \$1,800.

Q. And the only experience you have had in mixing concrete by machine is with this Kearing batch mixer? A. With this Kearing batch mixer.

Q. You know that there are continuous mixers?

A. Yes.

Q. You know that those continuous mixers are used on the larger jobs, for covering large surfaces? A. Well, the continuous and the batch are both used, well, about the same; you see both kinds.

20 Q. Well, isn't it a fact that the continuous mixer would be better as between the two for a very large job? A. Why—

Q. Where you keep the mixer mixing? A. Yes—well, I don't know, if I had the experience, but I should think that it was a little quicker.

30 Q. That the continuous mixer was a little quicker? A. But not quite as good a mixer.

Q. That is your opinion, without having used it? A. That is my opinion.

Q. You say that on the \$19,000 job you continued to use the mixer, even after you found out? A. Certainly.

40 Q. In making up your mind that the mixer was not a saving to you, you charged into the calculation the cost of the mixer, didn't you? A. No; I charged off on my gang; I have awarded that a

George L. Fellows—Cross.

life of so long and charged off each year so much on the life of the machine.

Q. What did you charge against this particular job? A. Why, we figured out \$20 a day for the machine.

Q. You mean you are charging there what it would cost you to rent a machine; isn't that so? 10
A. Well, I don't know what you could rent it for; we never tried.

Q. Isn't it a fact that the rental value of one of those machines is from twenty to twenty-five dollars a day? A. That I couldn't say.

Q. You don't know that? A. No.

Q. Upon what do you base your charge of \$20 a day? A. I figure the life of the machine is about five years' use on working a number of 20
days a year.

Q. How many days? A. Well, I couldn't tell you how many days.

Q. You never made that calculation? A. What is that?

Q. You never made that calculation? A. Oh, yes, I did.

Q. You, yourself? A. Yes, sir.

Q. Then you ought to know how many days? 30
A. Well, I don't.

Q. But you don't? A. No, sir.

Q. Well, approximately, how many days? A. Why, I think we figured—I figured somewheres in the neighborhood of——

Q. Two hundred days a year? A. Probably forty or fifty days a year.

Q. Forty or fifty days a year? A. Yes.

Q. So that you, with the amount of work that you had, would invest in a plant of this kind and 40

George L. Fellows—Cross.

use it no more than forty or fifty days a year for concrete mixing? A. That is all; well, of course, where you are bidding on work, it is an uncertain thing.

10 Q. Well, isn't it a fact for this concrete work that you expect to get in a year, that it could not be profitable for you to use a concrete mixer, because you would not use it enough? A. Well, I don't know about that.

Q. Isn't that a fact? A. I don't know about that.

Q. You consider yourself a small contractor, don't you? A. Yes.

Q. And the quantity of concrete which you have laid with the machine amounted to what yardage?

20 A. That I couldn't say.

Q. But approximately you can, in round numbers? A. Well, we will say 15,000 square yards.

Q. 15,000 square yards? A. On this job; there is 5,000 square yards.

Q. You haven't used it on this job? A. Yes, sir; we have.

Q. I thought you said you haven't? A. No, I didn't say we haven't.

30 Q. Are you going to use it on this job? A. We have used it on the job.

Q. Are you going to use it on this job in preference to laying the concrete by hand? A. We have used it and laid it all.

Q. Well, having done it, you have given the machine the preference, haven't you? A. Yes; the machine is idle now.

Q. You know that machinery has gone up in value, don't you? A. Not in concrete mixers.

George L. Fellows—Cross.

Q. All machinery; don't you know that? A. We are not in the machinery line; I don't know.

Q. You haven't attempted to sell it, have you? A. No.

Q. You don't want to sell it, do you? A. No—yes, I will sell it or keep it, either one; it is immaterial. 10

Q. It is immaterial to you? A. Yes.

Q. When you say that it would not pay to mix concrete to put under curbs and use a machine, you mean that it would not pay to use the machine for that purpose only; isn't that so? A. No, I mean that it would not pay us to use it anyway.

Q. Now, supposing that this were the case: Supposing that you had a block, a full length block open and ready to receive your sub-base of concrete, and also had the trenches, the gutter trenches, open, so that you could put the concrete into the sub-base and in the gutter trenches at the same time? A. Your concrete would set; you couldn't set your curb. 20

Q. Why couldn't you? A. Because it takes, to do a block would be in the neighborhood of from five to six hundred feet, and your curb setters only set three hundred feet in a day, so your concrete would be set before you could get your curb in. 30

Q. How many curb setters would only set three hundred feet? A. Two men and their helpers.

Q. Is that all that you employ? A. That is all you could work on one block.

Q. Is that all you could work on one block? A. On one block, yes. 40

George L. Fellows—Cross.

Q. Wouldn't you work both sides of the street, for instance? A. Certainly not.

Q. Why not? A. Because you couldn't hire the men to work two or three hours and knock them off for the rest of the day.

10 Q. You could not set your curb on both sides?
A. You could, if you had the job open and it was big enough to do that much.

Q. That is what I mean, if the job were big enough. A. Yes, but the specifications won't allow you to open up two or three blocks at a time.

Q. Which specification? A. Any of the specifications.

Q. You are not interested in any specification? A. No, sir; any of them that we take up.

20 Q. You are answering one question now; there is no limitation in that respect in these specifications? A. Well, I thought that we were talking about my job.

MR. FALLON: I object to counsel talking about that in these specifications, because my understanding is it is in these specifications.

30 Q. Then, if the street were sufficiently opened up and the job were big enough, you could mix your concrete in the mixer, put it in the curb trench and also put it in the sub-base, couldn't you? A. No, sir.

Q. Why couldn't you? A. Because it would be wrong policy for any man that knew how to do that work to do it that way.

40 Q. Why couldn't you? A. Because, as I said, you could not get men enough to lay it quickly enough, because you would have to lay them off before the day was up.

Q. How many feet of curb do you set in a day?
 A. Why, an extra good man lays about three hundred feet.

Q. An extra good man lays three hundred feet?
 A. When I say "a man" I mean a pair of men and their helpers.

Q. That is one set? A. Yes.

10

Q. And the average city block is about two hundred feet long?
 A. About two hundred feet long; that would be about four hundred feet on the two sides.

Q. You can work both sides of the street?
 A. Certainly you can work both sides of the street.

Q. Then what is in the objection to using the machine for that purpose, that the concrete sets too fast?
 A. The concrete would have set before you could get your curb in.

20

Q. How long does it take concrete to set?
 A. Why, it starts to set immediately; within an hour or two hours it has initially set.

Q. Now, supposing that you are mixing concrete on the street for your sub-surface?
 A. Yes.

Q. And as you need it, mind you, for your curb trench, you take it directly from the machine and put it in the curb trench; couldn't you do that?
 A. No; any contractor——

30

Q. Couldn't you do that? A. No.

Q. Why not? A. Because that would be against all rules of doing the work.

Q. You are not telling me anything when you tell me that; tell me the rule, and tell me why not?
 A. In the first place, you got to set your grade, no man could do it that wished to make good, and he has got to put the curb in to get the grade.

40

George L. Fellows—Cross.

Q. What? A. He has got to put the curb in to get the grade.

Q. He has to have the curb set in to get the grade? A. Yes, to get the correct grade.

Q. Haven't you the grade before you set the curb? A. We have, on paper.

10 Q. Haven't you it on the line of work by means of stakes and cords? A. No.

Q. You haven't? A. No, sir.

Q. Then you haven't any grade until your curb is actually set? A. Not until the curb is set.

Q. Then the grade does not affect the setting of the curb, does it, if you don't get it until after you set it? A. The grade of the street, no.

Q. Then tell me what else there is which would prevent the laying of the concrete as I have just indicated? A. What else is to hinder me?

Q. Yes. A. By setting the curb—

Q. No, the laying of concrete as I have just indicated, having your curb trench open, and as the men who are setting that concrete in that trench need it ask for it, mind you. A. Yes.

Q. You hand it to them from the machines, putting it in there fresh from the mixer; what is there to stop you from doing that? A. There is nothing to stop you from putting concrete into the ditch ready for your curb—

Q. Let us stop there a minute. And there is no difference in the value of that concrete as it comes from the machine or as it comes from the hand mixer, that is, one is as good as the other, isn't it? A. About the same.

Q. So that if you can get it as fresh from the machine mixer as you can from the hand-mixing batch, you can use it either way? A. Certainly.

*George L. Fellows—Cross.**By Mr. Fallon:*

Q. But one is no cheaper than the other, is it?

A. No, they are about the same cost.

By Mr. Markley:

Q. You were going to say something about 10
when you got it out of the machine; what were
you going to say about that; do you remember?

A. You can certainly start your machine up to
mix up a few yards and put it in, but it is worth-
less by the time you get to the end, in getting
your curb in on top of it, you couldn't get your
curb in fast enough.

By Mr. Walscheid:

Q. How many cubic yards would you need to 20
fill in a curb trench three hundred feet long? A.
You would need half a foot to the foot—

Q. Well, about how much? A. Approximately
six cubic yards.

Q. Now, getting back to those 1,000 yards
which you are mixing, supposing you mix that
1,000 cubic yards, and you lay 994 yards of that
into the sub-base, and at the same time take the
six yards that you need for the curb trench, put- 30
ting it in the curb trench; couldn't you do that?
A. Certainly not.

Q. Why not? A. I have explained it to you
before; you got to get your curb in to get the
grade, the arch to your street.

Q. What difference does it make where the
concrete comes from? A. Well, how can you get
your curb on the concrete until you have it mixed
and lay it over the street?

George L. Fellows—Cross—Re-Direct.

Q. You don't mix the concrete in the trench, do you? A. Certainly not.

Q. You put the concrete in the trench? A. Certainly.

10 Q. Then what difference does it make to you where that concrete comes from, provided it is fresh concrete, so long as it gets into that trench fresh? A. It does not matter where it comes from.

Re-Direct Examination by Mr. Markley:

Q. You said that one set of men could lay three hundred feet of curb in a day? A. I think that is what we figure.

20 Q. If you assume a block was three hundred feet long, that would be six hundred feet, if you counted both sides of the street? A. Yes.

Q. I believe you said half a foot of concrete to each foot of lineal curb? A. I think that is what we estimate.

Q. And therefore it would be three hundred feet of curb, would there not, for both sides of the street? A. Six hundred feet of curb, total length.

30 Q. Three hundred cubic feet of concrete? A. Yes.

Q. Or about eleven square yards of concrete? A. Yes.

Q. Or eleven cubic yards? A. Yes.

Q. If your machine was going all day, how many square yards of concrete would it turn out? A. It would turn out one hundred and fifty cubic yards or nine hundred square yards.

40 Q. And therefore, in order to use the machine for the purpose of turning out eleven square

John Manly—Direct.

yards that would be necessary to go under the curb, you would only take a very small part of the day, wouldn't you? A. An hour; about half an hour, probably.

Q. In the meantime the men that would be filling the machine with mixture, what would they be doing? A. They would be standing around eating their heads off. 10

Q. Then there would not be any doubt that it would be more expensive to mix such concrete that would have to go under the curb by machine? A. There is no question about that.

JOHN MANLY, sworn. 20

Direct Examination by Mr. Markley:

Q. Mr. Manly, what business are you in? A. City Inspector of Hoboken.

Q. Are you a City Inspector at the present time? A. Yes.

Q. How long have you been Inspector? A. About six years.

Q. A street improvement inspector? A. Yes.

Q. Inspector of street improvements? A. Yes, 30

Q. While work is going on?

Q. Did you inspect the job of the Bithulithic Company about last fall, was it?

MR. WALSCHEID: I object to that as immaterial and irrelevant.

A. No.

Q. Have you had occasion to examine the question of machine mixing and hand mixing of con- 40

John Manly—Direct.

crete on street improvements? A. Yes, I have saw both kinds done, both kinds of work.

Q. Well, now, when did you have occasion to examine and note the difference? A. Well, the Standard, they started to do—

10. Q. Who? A. The Standard Bithulithic Company, they started to do their work by hand.

Q. When was that? A. That was in 1913.

Q. Where? A. In Hoboken.

Q. On what work? A. They started on Jackson Street, to the lower end of the city, at Newark Street, I think it was.

20 Q. What work was done at that time? A. Well, they went all the length of the city, on different streets, it was four or five blocks, Jackson, Monroe and Clinton Streets, Willow Avenue, they went from one end of the city clean to the other.

Q. What was it, original work or reimprovement? A. It was new work, on concrete base with the bithulithic surface.

30 Q. Now, you were telling us how they started to use a machine. A. They started by hand, I guess they mixed two or three blocks by hand, and between First and Second they worked by hand, and between Second and Third they used a machine.

Q. Now, after they started to use a machine did they use it continually after that? A. No, they went back to hand work.

Q. Well, did they abandon the machine entirely? A. Yes, they did not use it after they got through that day; they finished up their work by hand.

40 Q. Did you have occasion at that time to see how fast the work was done by machine and how

John Manly—Direct.

fast it was done by hand? A. Yes, on those two blocks when they done the work by hand; the first block they done by machine, the distance was about—these blocks are relatively about the same distance—they done the work in about the same time.

Q. Well, take one day, for instance. A. Well, that block that they done between First and Second they done in about a little less than three days by hand.

10

Q. How many men? A. Why, they had eighteen men on that.

Q. That was by hand? A. Yes.

Q. And it took them a little less than three days? A. Yes.

Q. For one city block? A. Yes.

20

Q. About how many feet long? A. I think it is 400.

Q. Then the next day you say they used a machine on the next block? A. When they finished that block they went to the next block and had the machine, it was a new machine they got.

Q. How many men worked there? A. The same number of men.

Q. How many men did you say? A. About 18.

Q. About how long did it take them to complete that block by machine? A. It was less than three days.

30

Q. Using that machine, with 18 men, it took just as long as it did without the machine, to do about the same amount of work? A. About the same time.

Q. Have you, on other occasions, inspected work done by machine and by hand and noted the time that it took to do the work by either method? A. Yes.

40

John Manly—Direct—Cross.

Q. What conclusion did you come to about the time it took? A. Well, there was no great difference as to the amount of time it consumed; the difference wasn't very great.

Q. They did about the same amount of work by either method? A. Yes, by hand or machine.

10 Q. In the same length of time? A. Yes, about that.

Q. With the same number of men? A. Yes.

Q. Is this Standard Company that you referred to one of the largest companies that does this kind of work?

MR. WALSCHEID: I object to that as calling for a conclusion.

20 A. Yes.

Q. What is the company's name? A. The Standard Bithulithic Company.

Cross Examination by Mr. Walscheid:

Q. You have been a Street Inspector in Hoboken? A. Yes.

Q. For how many years? A. About six.

Q. Before that what did you do? A. Worked as bartender.

30 Q. Now, as Inspector of Streets, what are your duties in the City of Hoboken? A. To see that the proper mixture is put in, and that the grades are proper, that is, that the gutter is proper and the curb is properly dressed.

Q. Suppose you work under the Engineer? A. Yes.

Q. And from the Engineer you receive a set of the plans and specifications? A. The specifications; no plans.

40

John Manly—Cross.

Q. Not the plans? A. No.

Q. Then, when he stakes out the grades, he gives you those grades? A. Well, no; he does not give me the grades; he gives the grades to the contractor.

Q. You also get them, don't you? A. No, I don't get the grades. 10

Q. Isn't it your duty to check up the grades? A. No.

Q. The Engineer does that himself? A. The Engineer does that himself.

Q. So that all you have to do is to see that the material goes in in the proportions fixed by the specifications? A. Yes, sir.

Q. And to watch them and see that they use Portland cement where Portland cement is called for, and that they put in a full bag instead of half a bag; is that right? A. Yes, sir. 20

Q. You don't keep any records, do you? A. Why, I make a report to him, a verbal report, of anything that is wrong.

Q. That is all; you keep no written records? A. No.

Q. Of course you kept no records of the work done by the Standard Bithulithic Company? A. No. 30

Q. As to the time consumed? A. No.

Q. Or anything like that A. No.

Q. When you testified here about the time that it took the Standard Bithulithic Company to lay a block of concrete base, you testified purely from recollection? A. Well, the circumstance, of course, made me recollect.

Q. Yes, from your memory? A. I mean the conditions around about that time. 40

John Manly—Cross.

Q. How many years ago is that? A. That was 1913.

Q. Is that the only experience that you have had in the use of or in seeing these concrete mixers used? A. No; Mr. Fellows had a mixer.

10 Q. You saw his mixer A. Yes.

Q. What kind of mixer was it that the Standard Bithulithic Company used? A. It was a batch mixer, about the same size as Mr. Fellows'; not the same make machine, though.

Q. A small machine, then? A. Yes.

Q. It was a small machine A. Yes.

Q. Fellows' machine is a small machine, isn't it? A. Yes.

20 Q. When you say you saw 18 men laying concrete that was mixed by hand, you mean that 18 men were spreading it on the street and pounding it down? A. No, there were two boards, one on each side, and they worked two gangs of men.

Q. You mean to say nine men working on each side of the street? A. Yes.

Q. Nine men on each side A. Yes.

30 Q. How many men were they laying this mixture which was mixed on those boards in the street as a subsurface? A. They shovelled it from the boards right into the trench; they had the boards close up.

Q. How many men were there shovelling it into the roadway and how many men were there that spread it? A. Just two men.

Q. So that you saw 18 men mixing? A. Well, I saw about that many men.

Q. 18 men mixing and two spreading? A. Yes.

Q. When they were hand mixing? A. Yes.

40 Q. Then they stopped that? A. Yes.

John Manly—Cross.

Q. Then they put in the machine? A. Yes.

Q. When they put in the machine they had two men spreading? A. Yes; sometimes they had three.

Q. And they had 18 men around the machine?
A. No, they didn't.

Q. How many men were around the machine? 10
A. I think they used probably about eight men.

Q. Attending the machine? A. Yes.

Q. What did they do? A. Well, there was one man on the shovel; another man carrying cement to the shovel; an engineer and fireman; a man on the hopper standing by and opening and shutting off the concrete as it came out; a man working on the scoop gauging it; there was a long scoop.

Q. Now you have them all? A. That is one man on each side of that, three men. 20

Q. Eight men, you say; approximately eight men? A. Yes.

Q. And the engineer, he was at the boiler, wasn't he? A. Yes.

Q. They used that boiler for other purposes, too, didn't they? A. For other purposes?

Q. Yes, than this work, besides running this mixer? A. No. 30

Q. So that when the machine mixing was going on, they used about ten men, didn't they, as against twenty— A. No, I didn't say twenty.

Q. You said there were 18 men mixing concrete? A. By hand, yes.

Q. Nine to each board? A. Yes.

Q. And two men spreading it? A. Yes.

Q. That is 20. A. Two of the 18.

Q. Two of the 18 spreading it? A. Yes. 40

John Manly—Cross.

Q. Then there were only eight men to each board? A. Yes, about that.

10 Q. Then, when they used the machine there were eight men getting the mixture ready and two spreading it; is that right? A. Yes; as far as that goes, the other men were working, wheeling in the stone and cement and sand, filling the barrows up.

20 It is stipulated between the parties that the City of Hoboken has properly adopted an act entitled "An Act providing for the reimprovement of any street, avenue, road or highway, or portion of such street, avenue, road or highway, in any city, which has been heretofore made, and for which improvement assessments for benefits have been heretofore levied and imposed, and for the issuing of bonds to pay for said improvement," approved May 15, 1907 (Chapt. 210, P. L. 1907, p. 466); and that the proposed improvement in question is being prosecuted under said act.

30 It is further stipulated that the City of Hoboken, prior to the institution of any of these proceedings, adopted Chapter 221, Laws of 1911, page 462, and the supplements thereto and amendments thereof, and is being governed thereunder.

40 It is further stipulated and agreed that the streets covered by this proposed improvement have been heretofore paved and improved, and assessments for benefits for such paving and the making of such improvements have been heretofore levied and imposed upon the property specially benefited thereby.

Joseph O. Whittemore—Direct.

JOSEPH O. WHITTEMORE, Sworn.

Direct Examination by Mr. Fallon:

Q. What is your business, Mr. Whittemore? A. Civil engineer.

Q. How long have you been a civil engineer? A. Why, about 28 years. 10

Q. From what school or college did you graduate? A. I didn't graduate from a technical school.

Q. You have been practicing in the business of civil engineer for the last 28 years? A. Yes.

Q. You were connected with the office of Walter F. Whittemore in Hoboken for many years? A. Yes.

Q. What is his business or calling? A. Civil engineer. 20

Q. Walter F. Whittemore is your brother? A. Yes.

Q. In the course of your employment with your brother, were you engaged in municipal work? A. Yes.

Q. Have you engaged in municipal work on your own account as civil engineer? A. Yes.

Q. Since what period of time? A. Since 1912.

Q. Have you prepared plans and specifications for street improvements in the City of Hoboken for many years past? A. Yes. 30

Q. Did you prepare plans and specifications for the repaving with asphalt of Madison and other streets in Hoboken which are in issue in this case? A. Yes

Q. About how many years' experience have you had in taking charge of and supervision over street paving for municipalities? A. Well, I had charge of that kind of work while I was in the em- 40

Joseph O. Whittemore—Direct.

ploy of Mr. Brush and in the employ of my brother.

Q. What Brush have you reference to? A. Mr. Charles B. Brush.

Q. What was his business? A. Civil engineer

10 Q. Where was he engaged in business? A. Hoboken.

Q. Where was Walter F. Whittemore engaged in business? A. Hoboken.

Q. For the past four years and thereabouts have you had charge of street paving work directly? A. Yes.

Q. On your own account? A. Yes.

Q. During the time that you have been engaged in work as civil engineer? A. Yes, sir.

20 Q. On work in the City of Hoboken, about how many square yards, approximately, of paving have you supervised in that city? A. Oh, I should say 200,000 square yards, approximately.

Q. What sort of foundation is laid in the City of Hoboken for street paving work? A. Concrete.

Q. At the present time? A. Yes.

30 Q. Within what number of years past has the City resorted to concrete foundations? A. Why, the first concrete foundation they had was laid under my direction nineteen years ago on River Street; since then they did not lay any concrete foundations until practically when I had supervision of their work; that was in 1912.

Q. During the past four years or thereabouts was it practically all concrete foundation? A. Practically all concrete foundations.

Q. Are you familiar with the methods of laying such foundations? A. Yes.

Joseph O. Whittemore—Direct.

Q. And the mixing of the concrete for those foundations? A. Yes.

Q. Are you familiar also with the various other details of construction of asphalt and other forms of pavement—asphalt, Belgian block and the like? A. Yes.

Q. Are you familiar also with the different materials that go into a street improvement and re-improvement, such as curb, sand, concrete and the like? A. Yes.

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Q. Are you a member of any engineering society? A. Yes; American Society of Civil Engineers.

Q. Did you prepare the plan and profile for this work? A. Yes.

Q. And also the specifications for this work? A. Yes.

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Q. Did you indicate on the plan and profile the grades of the street? A. Yes.

Q. Did you distinguish in red lines and black lines as to the character of those grades? A. Yes.

Q. Are you familiar with the Grade Map of the City of Hoboken? A. Yes.

Q. When was that map made? A. In 1888.

Q. And these streets that are in question here, the street the specifications for which you prepared, are they up to the established grade? A. Yes.

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Q. Well, the streets themselves, over which the work is to be done, are they up to the established grade, or are they to be brought up to the established grade? A. Very few of them are; there may be one or two blocks that are, but the others are not.

Q. Your profile shows the variances, does it? A. Yes.

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Joseph O. Whittemore—Direct.

Q. Then the actual physical grades of those streets are, in many instances, below the established grade? A. Yes.

10 Q. Before you prepared the plan and the profile and the specifications, did you go over the line of work to see what the condition of the streets was, to examine the condition of the streets? A. Yes, took levels on them.

Q. And as a result of the information thus obtained did you prepare these plans and specifications? A. Yes.

Q. Did you also prepare the plans and specifications for street improvement on Ferry and other streets which were bid upon by Mr. Cavanagh and some others? A. Yes.

20 Q. Is the plan and specification that you prepared for the reimprovement of those streets similar to the plan and specification for those streets which were to be improved by asphalt pavements? A. It is; with the exception that one calls for asphalt and the other is for stone block.

Q. Were they exactly the same, with the exceptions that you just mentioned? A. Yes.

Q. Then both improvements provide for the laying of concrete base, do they? A. Yes.

30 Q. Did the plan that you prepared for Ferry and other street improvements contain a profile indicating the grades of the streets? A. Showing the present and established grades.

Q. The same as the plan for the streets which were to be improved by asphalt pavement? A. Identically the same matter.

Q. The same wording? A. Yes.

Q. The red lines and figures indicated the established grade and the black lines and figures

Joseph O. Whittemore—Direct.

the present surfaces? A. Yes, both jobs were the same.

Q. And do both plans contain the same provisions?

MR. WALSCHEID: I object to that unless the plan is produced. 10

Q. The same wording, which reads as follows: "Red lines and figures indicate established grades; black lines and figures indicate present surfaces; the extent to which present grades shall be raised will be determined by the Director of Streets and Public Improvements during the progress of the work?"

MR. WALSCHEID: I object to that as immaterial. 20

A. Yes.

MR. FALLON: I offer that map in evidence.

MR. WALSCHEID: I object to the offer on the ground that it is immaterial and irrelevant to the issues in this case; and I agree to waive the production of the map and agree that the wording which Mr. Fallon has just read into the record may be considered as the endorsement which appears upon the map now offered. 30

(The map was thereupon admitted, subject to the objections, and marked Exhibit P-5).

Q. And the specifications for this work, relating to Ferry and other streets, were they prac- 40

Joseph O. Whittmore—Direct.

tically the same as the specifications for the asphalt streets, with the exception that Ferry and other streets was for Belgian block pavement, as distinguished from the asphalt pavement? A. Yes, that is the only difference.

10 Q. Were they exactly the same, with the exception of the character of pavement? A. Yes.

By Mr. Walscheid:

Q. The character of surface and the names of the streets? A. Yes, that is the idea

MR. FALLON: I offer those specifications in evidence.

MR. WALSCHEID: Do you want all those printed?

MR. FALLON: No.

20 MR. WALSCHEID: Then it is agreed that the specifications in this case be considered the specifications which you are now offering, so far as the material, workmanship, mixture, method of bidding and everything is the same, except only that the streets are different, and that the surface mixture in the case at bar is an asphalt mixture, whereas in the other case it is a Belgian block pavement, and that

30 there is not the same provision for the maintenance of the pavement.

By Mr. Fallon:

Q. Do you recall how many bidders there were for the Belgian block work? A. Oh, I think three or four; the proposals will show.

Q. Tell us who they are? A. Curtin Brothers, Connell & Murtha, Thomas Cavanagh, and Lester Fellows Company.

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Joseph O. Whittemore—Direct.

The proposals were thereupon marked for identification as follows:

Proposals of Fellows Company marked Exhibit P-1 for identification of this date;

Proposal of Curtin Brothers marked Exhibit P-2 for identification of this date;

Proposal of W. A. Connell marked Exhibit P-3 for identification of this date; 10

Proposal of Thomas Cavanagh marked Exhibit P-4 for identification of this date.

Q. Mr. Whittemore, from your experience as an engineer, and from your experience in street improvement work, could you say that any paving contractor who wanted to bid on this improvement would have any difficulty in understanding the specifications so as to bid intelligently thereon? A. I should be very much surprised to find a contractor who had had much experience in not being able to render an intelligent bid on these plans and specifications. 20

Q. Could a contractor who intended to bid upon this specification determine, by reference to it, the present grades and also what the established grades were? A. Certainly, if he can read he could find that out. 30

Q. Could he, by reference to this specification and the plans and profile, ascertain the amount of filling and the amount of excavation? A. Approximately, yes.

Q. Could anyone, whether it be you or an intending bidder, ascertain with certainty the amount of excavation and filling, without taking up the street pavement? A. No.

Q. Does that apply generally on work of this 40

Joseph O. Whittemore—Direct.

kind, that that cannot be ascertained without taking up the street pavement? A. That is always the case.

10 Q. Why is that so? A. Because the depth of the blocks varies, some are four inches deep, some are as much as ten inches deep, and it is impossible to determine the amount of excavation or filling, except approximately, until the pavement is removed and levels are taken on the surface after the paving blocks have been removed.

Q. Did you estimate the approximate number of square yards of asphalt pavement in this contemplated work? A. Yes.

20 Q. Did you estimate the approximate number of square yards of stone block to be removed? A. Yes.

Q. Did you approximate also the number of cubic yards of concrete in the filling and excavation? A. Yes.

Q. Did you also approximate the number of lineal feet of new curb and of curb to be reset? A. Yes.

Q. And the number of manholes to be reset and the manhole covers? A. Yes.

30 Q. And the number of basins to be reset? A. Yes.

Q. All of that work was to be done under the plans and specifications which you prepared? A. Yes.

Q. In order to make that estimate, I understand that you examined the work, went over the line of the proposed improvement and examined the work? A. Yes, took levels on it.

40 Q. And is that your customary method of mak-

Joseph O. Whittemore—Direct.

ing your estimate of quantities in street work of that kind? A. Yes.

Q. Were bids for this work required to be submitted at unit prices, or a lump sum? A. Unit prices.

Q. Is that the customary way of making street improvements in Hoboken at the present time, and for some years past? A. Yes; always has been, in my opinion, for twenty years back. 10

Q. Bids were called for for a certain price per square yard, a cubic yard, or lineal foot, as the case might be? A. Yes.

Q. I note that you have an expression in the estimate forming part of the specifications, to the effect that any work or material exceeding the amount mentioned above—meaning the amount in the specification mentioned—to be done at the contract price, and all omissions to be deducted in like ratio; is that the customary way of making an insertion of that kind in the specifications? A. It is. 20

Q. And has it been so in the City of Hoboken in all street improvements that you had anything to do with? A. It was in one I had 19 years ago.

Q. The surface estimate, comparison of the bids will be based upon that estimate, that is the estimate as made by you? A. Yes. 20

Q. Is that the customary practice? A. Yes.

Q. And it has been for all the time you had anything to do with street improvements in the City of Hoboken? A. Yes.

Q. You have a provision in the plans which says, the extent to which the present grade shall be raised will be determined by the Director of Streets and Public Improvements during the 40

Joseph O. Whittemore—Direct.

10 progress of the work; to what does that have reference; what did you intend by that? A. Why, the grades in Hoboken, the established grades, were made in 1888, and if, during the progress of a street improvement, it would be necessary to lower the grade perhaps two inches from the established grade, in order to better fit a man's entrance to a store, or to a house, especially if that house or store had been built previous to 1888, to save the city possibly a damage suit; that has been done, and that is the reason for that provision in the plans.

Q. And has that same legend upon other plans for street improvements in Hoboken appeared for some years past?

20 MR. WALSCHEID: I object to that as immaterial.

A. That was on the plan we made for the improvement of River Street, 19 years ago, except then it was the Committee on Streets, or whatever it was.

Q. And has it been followed in other plans since that time? A. Yes.

30 Q. There is nothing unusual about this being in this particular plan? A. Nothing at all unusual.

Q. Before you prepared this plan and this specification did you confer with Mr. Londrigan, the Director of the Department of Streets and Public Improvements? A. Yes.

Q. When a contractor is doing street improvement work, is he ordinarily required to construct the pavement according to the established grade? A. Yes.

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Joseph O. Whittemore—Direct.

Q. And was it because of that that you inserted that provision which I have called your attention to a few moments ago, about the extent to which the grade might be raised would be determined by the Director of Streets and Public Improvements? A. Yes.

Q. Then the Director of the Department of Streets and Public Improvements was cognizant of the fact that you had gone over the line of the proposed improvement and investigated the situation? A. Yes.

Q. You had so informed him? A. Yes.

Q. Did you give the Director of the Department of Streets and Public Improvements the same information that you got by going over the line of this improvement? A. Yes, we went over it together.

Q. Did you confer with him in regard to the matter before you prepared your plans and specifications? A. Yes.

Q. And was it because of that conference and because of the investigation that you made that provision in your plan as to the possibility of the grade being changed at different places? A. Yes, and because it appeared on every plan that has ever been made for street improvements that I know of.

Q. It was a sort of saving clause? A. A sort of saving clause.

Q. For the city? A. For the city.

Q. Did the Director of the Department of Streets and Public Improvements direct you to prepare these plans and specifications? A. Yes.

Q. And was it at his request that you did prepare them? A. Yes.

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Joseph O. Whittemore—Direct.

Q. And after preparing them did you submit them to him? A. Yes.

Q. Did you confer with him in regard to them before their submission to the Board of Commissioners? A. Yes.

10 Q. These plans that you prepared do give a grade for the proposed improvement, don't they? A. Yes.

Q. Is that grade expressed on the plan the method usually adopted by engineers for work of that kind? A. Yes, sir.

Q. In the same manner as other work of like kind was previously done in Hoboken? A. Yes.

Q. And is the grade given on each block of the several streets, at different points? A. Yes.

20 MR. WALSCHEID: I object to that on the ground that the map speaks for itself.

Q. And is it the practice amongst civil engineers, Mr. Whittemore, to indicate on the plans for work of this kind the points in regard to the established grade? A. Yes. That represents the limit to which the grade can be raised.

30 Q. Now, the established grades of streets in the City of Hoboken are recorded in the so-called Grade Book, containing a number of maps, on file in the City Hall, are they not? A. Yes.

Q. And they are accessible to anybody? A. Yes.

Q. Does the established grade as you have it upon your plan correspond with the established grade as it appears in the Grade Book of Hoboken? A. Yes, it is taken from that book.

40 Q. Have you indicated on your plans for this work the typical cross sections indicating the details of the construction of the work? A. Yes.

Joseph O. Whittemore—Direct.

Q. That shows, does it, so many inches of concrete foundation and so many inches of binder, and the like? A. Yes.

Q. Does your plan show the width of the streets and the length of the streets? A. Yes, by scaling; not by numbers.

Q. Does it show the number of square yards of road surface on the streets to be improved? A. Yes, shown in colors. 10

Q. In your experience on municipal work, done in Hoboken, do you know of any instance in which the Clinton Contracting Company has put in a bid for street paving work? A. No, I do not.

Q. Did Joseph Murphy? You know Mr. Murphy, do you? A. Well, I knew him for the first time I saw him here the other day. 20

Q. Did that Joseph Murphy that you saw here bid on work in Hoboken during the number of years that you have been superintending street improvement work? A. Not to my knowledge.

Q. Did Mr. Murphy, or anyone in his behalf, ever make any inquiry from you as to the plans and specifications relating to this work? A. No.

Q. Where is your office in Hoboken? A. No. 1 Newark Street.

Q. And did anyone in behalf of the Clinton Contracting Company make inquiry of you as to the plans and specifications relating to this work? A. Not to my knowledge. They didn't say they were from the Clinton Contracting Company. 30

Q. Well, anyone that would come to you, you would readily give them any information that you could? A. Always.

Q. And if Mr. Murphy, or the Clinton Contracting Company, applied to you, you would have given them like information? A. Certainly. 40

Joseph O. Whittemore—Direct.

10 Q. It appears in this case that Mr. Walscheid, representing the Clinton Contracting Company, was examining these plans and specifications on the 2d day of May, the day before the bids were received; did Mr. Walscheid make any application to you for information regarding those plans and specifications? A. No.

MR. WALSCHEID: It does not appear that he was examining them for the Clinton Contracting Company.

Q. Then it appears that Mr. Walscheid was examining the plans and specifications on May 2d, for some purpose; did he make any inquiry of you regarding the plans and specifications? A. No.

20 Q. Should any competent contractor who has examined an estimate on municipal work and bid upon it, have any difficulty whatever in ascertaining the quantities for which he was to bid on this work? A. By figuring them himself, do you mean?

Q. Yes, by figuring or calculating it himself. A. Why, he could come at the quantities approximately just as well as I could.

30 Q. And could he approximate these quantities without any reference whatever to the surveyor's estimate? A. Yes, from the plans.

Q. Within what percentage would any person readily be able to ascertain those quantities by reference to the plans, without reference to your estimate? A. Well, it is possible to get within a small percentage of the actual quantities; of course that is a matter of guess, more or less.

40 Q. Simply a matter of arithmetic, isn't it? A. Simply a matter of arithmetic. In some quantities, such as filling and excavation, he could not

Joseph O. Whittemore—Direct.

tell until the paving was removed; no one could do it.

Q. By an examination of the plans might a competent man who was examining those plans ascertain the quantity of fill and excavation A. Approximately.

Q. Without regard to the surveyor's estimate? 10
A. Approximately.

Q. I note that the specifications in this case provide that bidders are expected to examine carefully the plans, location and character of the work to be done, and make their own estimate of quantities, cost and difficulties incident thereto; is that clause similar in all specifications relating to this kind of work in Hoboken? A. Not only in Hoboken, but I don't know of any specification that has not got that clause in there. 20

Q. Should a competent man who has examined these plans and specifications have any difficulty in ascertaining the items relating to the resetting of manholes and basins on this work? A. No.

Q. Would a bidder have any particular difficulty in determining how much brick work might be required in the building of the manholes and basins? A. No, the plans show the present elevation on the corner and the established grade. 30

Q. Are there any new manholes or new basins to be constructed on this work? A. No.

Q. About how many are the existing manholes, do you recall? A. I don't remember; I would have to look at the plans.

Q. Well, the plans indicate them clearly, do they? A. I think they do, the manholes; corner basins and manholes.

Q. Manholes and basins both? A. It indicates the basins all right; the manholes I don't think are indicated on here; they were counted up. 40

Joseph O. Whittemore—Direct.

By Mr. Markley:

Q. The surveyor's estimate shows? A. Oh, yes; the surveyor's estimate shows.

By Mr. Fallon:

10 Q. Would a competent man in examining these plans and specifications have any difficulty in determining how much curb would be required and how much of the existing curb will be allowed to remain? A. Well, that is impossible to determine, how much new curb will be required, or how much old curb will be redressed, until it has been excavated and examined.

20 Q. In preparing your plans and specifications in this case have you followed the usual practice and custom in street and road improvements? A. Yes, I followed what has been found to be the case in other work of this kind in Hoboken.

Q. What did you say it was impossible to determine? A. Why, the curb; you can't tell how much old curb can be used again until you excavate it and condemn or redress it; some of it can be redressed all right, but some of it cannot; it would be too brittle, it would break.

30 Q. Is it the invariable custom in street paving work to have a provision similar to that provision inserted in those specifications, whereby the City is given the right to condemn old curb and the contractor required to use new curb where the surveyor considers it necessary? A. It is usually put in in that way.

Q. Is there any practical difference in the cost, or any appreciable difference in the cost of redressing and resetting old curb, and that of dress-

Joseph O. Whittemore—Direct.

ing and setting new curb? A. Why, the cost price, I believe is about the same; I am not a contractor, so I cannot say exactly.

Q. From your experience have you observed there was any difference? A. No, I have not observed any difference.

Q. Now, some complaint has been made by the prosecutor in this case as to the unfairness of your specifications, with reference to the method prescribing for the mixing of the concrete, on account of the preference that might be given to one contractor as against another, whereby the surveyor or engineer might require one man to mix by hand and permit another to mix by machine; is there any appreciable difference, from your experience, as to the mixing of concrete such as would be used in this work, by hand as compared with machine? A. In this class of work I have never noticed any difference in the cost or the time of doing a certain piece of work, whether it was mixed—assuming that they used the same amount of labor—whether it was mixed by hand or machine, provided that the machine used would meet with my approval.

Q. Of course, you mean by that that you would not permit a contractor to use any old kind of machine that he might bring there that would be satisfactory to him? A. Certainly not; he would have to get the correct proportions as called for in the specifications in the mixture.

Q. Any contractor, then, who would have on his job a machine competent to fulfill the requirements of your specifications, you would have no objections to? A. None whatsoever; that has been done all the way; any machine that will give

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Joseph O. Whittemore—Direct—Cross.

the same results, just as good a result as hand mixing, we would allow it to be used.

10 Q. Have there been cases in your experience and from your observation when it was cheaper to mix by hand than it was to mix by machine, for instance? A. Oh, I can't say that it has been any cheaper; it has been just as cheap; even in large quantity work, such as the North German Lloyd foundations, where a machine shows up to the best advantage, it was found that hand mixing was about as cheap.

20 Q. Can you say from your experience and observation whether there was any such variance in the cost of mixing as between hand and machine, such as three to one; in other words, that it would cost three times as much to mix by hand as it would by machine? A. I know of no such case.

Q. In your examination of these streets, Mr. Whittemore, before you made your specifications and your plan, did you observe the condition of the streets? A. Yes.

Q. Were they in good or bad condition? A. Very bad condition; some of them almost impassable.

30 Recess until two o'clock in the afternoon.

AFTERNOON SESSION.

JOSEPH O. WHITTEMORE, recalled:

Cross-Examination by Mr. Walscheid:

40 Q. Mr. Whittemore, I understand you to say that you inserted this clause regarding the mixing of concrete by hand or machine in order to pro-

tect yourself against the use of improper machines? A. Right.

Q. Why then did you not specify the machines that you would allow to be used? A. Because there are many concrete machines on the market and I didn't wish to specify a certain number of them that may not be used; there may be some others which I did not know anything about. 10

Q. Which ones did you know about as not being proper? A. Well, I don't know as I can mention specifically the names; I don't recall the names of any, but continuous mixers in general.

Q. Then you would object to a continuous mixer? A. Not necessarily, but in general I would.

Q. Not necessarily? A. No.

Q. What does that mean, that you would, or would not? A. There are continuous mixers which I have permitted to be used. 20

Q. What specific objection would you have against any mixer? A. If the concrete was mixed properly and had the proper proportions, I would not object to any kind of a machine.

Q. Which machines would you think do not do that? A. Why, I cannot name any specific machine.

Q. You cannot name any specific machine? A. No. 30

Q. So that a man coming on the job to do this work, owning a concrete mixing machine which he may have used on many other works, might run up against the proposition that you, upon an examination of that machine, would decide that it was not a proper machine? A. No.

Q. You would reserve the right to object to the machine, wouldn't you? A. I would not object. 40

Joseph O. Whittemore—Cross.

to the machine, I would allow the machine to be used; I would object to the mixture if it was not proper.

10 Q. If that is so, why then did you not eliminate the proposition about the method of mixing altogether and stand upon your specification, which requires a 1, 3 and 6 mixture, since it was a result that you desired to obtain? A. Well, some machines I know, have used them and I know that they are all right, that they give the proper mixture, and if a man should happen to have that kind of machine why I would not object to him if he had used that.

20 Q. Mr. Whittemore, you laid down on your specification a certain concrete mixture, did you not? A. Yes.

Q. What was that concrete mixture? A. 1, 3 and 6.

Q. And if concrete mixed 1, 3 and 6 was laid on that job, that is all that you desired, and that should satisfy you, shouldn't it? A. If it is properly mixed.

Q. If it is properly mixed? A. Yes.

30 Q. Why then refer to the method of mixing it in any way? A. Because some machines may not mix it properly.

Q. Why didn't you specify the machines then? A. Because I don't know what machines—I don't know all the machines that may not do that.

Q. Tell me one machine which does not mix it properly? A. I can't mention any names.

Q. You can't mention any names? A. No.

Q. You haven't any experience in mixing concrete from the contractor's standpoint, have you? A. No.

Joseph O. Whittemore—Cross.

Q. Never kept any cost sheets? A. Oh, yes, I have.

Q. On mixing of concrete by machine? A. Yes.

Q. Where? A. Why, I have kept it on various work; I don't recall now; but that is the custom

Q. How long ago? A. Oh, I think, specifically, would be about 12 years ago. 10

Q. About 12 years ago; that is the last time? A. Any specific record.

Q. Yes. How many concrete mixing machines are there? A. I don't know.

Q. How many concrete mixing machines do you know? A. I know the Ransom.

Q. Is that satisfactory? A. That has proven satisfactory.

Q. What other do you know? A. The Caring; that has proven satisfactory. 20

Q. What other do you know? A. Oh, let me see—there are various of the Ransom type, but not that name, of that type; I don't recall them.

Q. They have been satisfactory? A. They have all been satisfactory.

Q. What others do you know; is that all? A. No, there is a machine that I designed myself; that was satisfactory.

Q. Of course it would be satisfactory. You estimated the quantity of excavation and the quantity of fill, did you not? A. Yes. 30

Q. And that is not a mere guess on your part? A. No.

Q. That is the result of actual measurements? A. Yes, approximate.

Q. With a level? A. Yes, with a level

Q. And in ascertaining this quantity of excavation and fill, you, of course, took two levels, an upper and lower level, didn't you? A. Yes. 40

Joseph O. Whittemore—Cross.

Q. And your upper level, I suppose, was the established grade of the street? A. No, that was the top of the curb.

Q. Your upper level was the top of the curb? A. Yes.

10 Q. What was your lower level? A. The gutter.

Q. The gutter? A. Yes.

Q. How much space is there in between that? A. It varies from four inches to six or seven inches.

Q. You did not tell anybody that you took your measurements that way, did you, any of the prospective bidders? A. No.

20 Q. How would that be, relating to the established grade? A. Why, the established grade would either be above or below the present elevation.

Q. Well, what you found then was really the present elevation? A. Yes.

Q. What did you take two levels for to find the present elevation? A. Why, the elevation of the grade and the elevation of the gutter, I just took that; that is not necessary, the elevation of the gutter.

30 Q. The elevation of the gutter was not necessary? A. No.

Q. You didn't take the elevation of the gutter, did you, to ascertain how much fill would be expected? A. In a measure.

Q. Don't say "in a measure"; tell me what you did? A. That could be measured by a foot rule just as well as by an instrument.

Q. How did you determine that there were to be 4,700 cubic yards of filling? A. The difference.

Joseph O. Whittemore—Cross.

between the present elevation and the established grade.

Q. That is what you did? A. Yes, sir.

Q. How did you determine that there were to be 2,000 cubic yards of excavation? A. Such parts of the street as are practically near, or were very nearly to established grade. 10

Q. But above it? A. No, that was near the established grade; maybe above, a little above or a little below, with an allowance made for the blocks removed and with the excavation necessary to make the proper sub-grades for the bottom of the concrete.

Q. Can you use the established grade as the base line for your calculation? A. Yes, sir.

Q. You used that, didn't you? A. Yes, sir. 20

Q. So that in figuring your excavation and in figuring your filling, you calculated a street to be laid to the established grade? A. Yes.

Q. Now, you say that you did intend to lay this street, or these streets, to the established grade?

A. That was the intention—that is the intention.

Q. That is the intention? A. Yes.

Q. And the only excavations which were to occur were to be in those few specific instances where a wagon entrance might bring about a variation? A. Not a wagon entrance. 30

Q. What else? A. Why, if a man had constructed a house along the line of the improvements, that was built previous to 1888, that is when the grades were established, if by putting the street up to the established grade would put him low so that water would drain into his entrance, cellar, etc., it would be—that discretion would be left to the Director of Streets and Pub-

Joseph O. Whittemore—Cross.

lic Improvements to lower that grade sufficiently to prevent this man from being damaged.

Q. Did you find any such instances? A. I didn't take any levels along the entrances, no.

Q. You didn't find any such instances? A. No.

10 Q. So that you know of no such situations?
A. No, I can't say that I know of any such; there may be, however.

Q. And you did not discuss this proposition that we have just discussed, about this variation from the established grade, with anybody, did you? A. With the Director of Streets.

Q. You and the Director of Streets? A. Yes.

20 Q. And you and he decided that it should be done that way in this case? A. That the same procedure would be taken in this as relating to that paragraph of the plans as in all others, that there should be a discretion left to the Director.

30 Q. You don't mean to contend, do you, Mr. Whittemore, that a bidder coming into the City of Hoboken and looking at nothing else but the specifications for this work and the plans—mind you, looking to nothing else—and finding upon the plans this endorsement, "red lines and figures indicate established grades; black lines and figures indicate present surfaces; the extent to which the present grade shall be raised will be determined by the Director of Streets and Public Improvements during the progress of the work," that he, from an examination of these specifications and these plans, and from nothing else, would be expected to determine that those streets were to be laid to the established grade, or to any other fixed grade, do you? A. Yes.

40 Q. You do? A. Yes.

Joseph O. Whittemore—Cross.

Q. Just from reading that? A. Yes, sir; the plans and specifications.

Q. Now, in what way would the specifications help him? A. Taking that and the engineer's estimate.

Q. How would that help? A. That would give the approximate amount of filling. 10

Q. How could he determine that, if he did not know at what levels you had taken them? A. Because it is shown on the plans.

Q. Where is it shown on the plans? A. All over the plans.

Q. Kindly indicate to me where on the plan it is shown that you have taken as your base line in figuring out your fill and your excavation any particular line? A. That does not show on the plans. 20

Q. Then if it does not show in the plan does it show in the specification? A. Except only in the engineer's estimated quantities.

Q. Only in that it shows that you, in some manner, have arrived at these quantities? A. That is it.

Q. And you expect him, then, by an examination of these plans and of these specifications, to determine from that fact alone what quantities are required; is that it? A. Approximately. 30

Q. That is what you want us to understand? A. Yes, sir; approximately.

Q. If you say that it was the intention of the city to lay these streets at established grades, and to vary them only in the instances which you have mentioned, why did you not, in your specification and in your plans, distinctly state that the streets were to be laid at established grades, 40

Joseph O. Whittemore—Cross.

but that those specific exceptions were to be made? A. Why, I concluded that that was plain on the plan.

Q. You concluded that that was plain? A. Yes.

10 Q. You concluded that what is written or endorsed upon this plan plainly conveyed to any prospective bidder that information? A. Yes.

Q. So that any prospective bidder coming in and reading this plan and this endorsement, would immediately come to the conclusion that the street is going to be laid to grade, only where a specific sunken spot is found, and only there must I change the grade? A. Occasionally the grade may be changed a little.

20 Q. For that purpose? A. Yes.

Q. And for that purpose only? A. Oh, I don't know that he would know for what purpose exactly; he wouldn't know.

Q. Isn't it a fact that he would know that the grade could be changed at the will of the Director of Streets? A. Yes.

30 Q. Now, where the black line on this plan runs above the red line, that means that excavation is necessary at that point, to bring the street down to the established grade? A. Yes, where the lines and the figures indicate it is above; a line which is made roughly may cross over the line, but the figures are accurate.

Q. You only have figures every half a block? A. And on the ends.

Q. In the middle and on the ends? A. Yes. The line in between may be drawn by free hand.

Q. Did you draw this yourself, or somebody in

Joseph O. Whittemore—Cross.

your office? A. No, I think I made that plan; I don't think I made it all myself.

Q. But you took part in the actual work of it?
A. Yes; I think it was colored or lettered by my assistant.

Q. You would say that this "X-1" which runs down to 6.0 is excavation, over the grade line, which is to be taken out? A. Yes, the established grade there is— 10

Q. 5.5, isn't it? A. Yes, that is 5.5, and the actual grade is 6.00.

Q. How much would have to be taken off there to bring it down? A. You would have to bring it down six inches to bring it to the established grade.

Q. You would have to bring it down six inches to the established grade? A. Yes, sir. 20

Q. Now, then, according to that endorsement, however, the endorsement reads that the grade shall be raised only; how would you expect—

A. It says the discretion of raising the grade—

Q. Read it. A. The extent to which the present grade shall be raised.

Q. Shall be raised. A. Yes.

Q. Will be determined? A. Yes.

Q. What would you expect a contractor to do in this specific situation, where the actual grade is six inches above the proper grade, where there is nothing to show that it shall be laid to any grade, and the only discretion given is that the grade may be raised? A. He would be expected to bring it to the established grade. 30

Q. You would expect it to be excavated?
A. Yes.

Q. Even if there is nothing in the specification about that? A. Yes. 40

Joseph O. Whittemore—Cross.

Q. The red figures on this map indicate the elevations to the established grade, do they not?

A. That is the elevation of the established grade.

Q. And the black figures indicate the elevation of the actual road surface? A. Yes.

10 Q. Above the mean high water mark? A. Yes.

Q. Here as "X-2" you again have to excavate down to grade, don't you, from 5— A. No, that scale is 5.50, that is exactly right.

Q. That is one of those cases that is right. Here, however, at "X-3" and "X-4" there is a difference of two points? A. No, that is 3.5 and 3.5.

20 Q. That is 3.7 right there? A. That is beyond it, that is the grade of the house line; here is 3.5 and 3.6, there is a difference of 1-10th.

Q. Which would mean what in inches? A. 1-10th is 1 1-4 inches.

Q. And here at "X-10" the actual elevation is 14.8 and the established elevation is 14.5, isn't it? A. Yes.

Q. A difference of three points; how many inches is that? A. That is about 3 3-4 inches.

30 Q. And that runs back to the middle of the block, doesn't it, practically? A. No, in the middle of the block you see it is exactly right.

Q. In the middle of the block it is exactly right? A. Yes.

Q. And it runs over the whole width of the street? A. Yes.

Q. So that would mean a distance of what? A. 225 feet.

Q. What is the width of the street? A. That street there?

Q. Yes. A. 28 feet.

Joseph O. Whittemore—Cross.

Q. 28 feet in width, 3 3/4 inches high at one end, and tapering off to nothing at the other?
A. Yes, sir.

MR. HOBART: That represents excavation.

Q. Excavation in order to bring your roadway to the established grade? A. Right.

Q. If, however, you did not use the established, it may be more or less, might it not? A. Yes.

Q. You make no reference in these specifications to the existence of any grade maps, do you?
A. No.

Q. Or to the existence of any book in which these grades are recorded? A. No.

Q. On these streets block pavements are now laid, aren't they? A. Yes, I think they are all block pavements.

Q. Specification blocks? A. No, Belgian block.

Q. Belgian blocks? A. Yes.

Q. What particular kind of Belgian block?
A. Well, they are large and small; they are all kinds.

Q. I know, but they run by different names; there is the specification Belgian block, isn't there? A. This is the long specification size.

Q. What is the average depth of these blocks?
A. Oh, I can't say; it varies exceedingly.

Q. The average depth varies? A. It is impossible to give an average depth; you would have to get the measure of each block, you would have to take a city block and measure each block in that block.

Q. How recently were they laid? A. Oh, I guess some of them 50 years ago.

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Joseph O. Whittemore—Cross.

10 Q. Now, supposing that you laid this street according to the established grade—I am going to lay it down with you now from the established grade—the first thing that would go down, from the top down, would be 2 1-2 inches of asphalt, isn't that right? A. Figuring from the established grade down?

Q. Yes. A. The first would be three inches.

Q. Three inches of asphalt? A. One inch of binder and two inches of top.

Q. That is in its compressed state? A. Yes.

Q. Then what would follow? A. Six inches of concrete, a total of nine inches.

Q. After that there would be what? A. Either filling or excavating—dressing.

20 Q. Either filling or excavating? A. Yes.

Q. These blocks that are laid there now are laid upon no concrete bed, are they? A. No, I don't think there is any concrete on those streets.

Q. In other words, they are laid either on a sand or a dirt bed? A. Yes—sand or ashes.

Q. Are any of those blocks, in your opinion, deeper than nine inches? A. Yes.

Q. Ten inches? A. I have seen some of them twelve inches deep.

30 Q. That is the deepest you have seen? A. I think it is, yes.

Q. And that is the exception? A. I think that is the exception, yes.

Q. Well, the average depth is eight inches, isn't it? A. Oh, no, I couldn't say what the average depth was at all; there may be a great quantity of blocks only five inches.

Q. I am not asking what there may be. A. I can't tell you the average.

Joseph O. Whittemore—Cross.

Q. That may be the short depth? A. I can't tell you the average.

Q. What is the average deepest depth that you say there is? A. I can't give you the average deepest depth.

Q. Well, you know that 12 inches is excessive? A. I believe it is. 10

Q. Is 10 inches excessive? A. Well, I don't know; I wouldn't say.

Q. You wouldn't say? A. No.

Q. Is eleven inches excessive? A. I don't know.

Q. Well, supposing that eleven inches is right; don't you know then if you laid this street to grade, Mr. Whittemore, that the depth of those blocks would make no difference to you, because they must all come out, because fully nine inches of that depth is taken up with the upper surface and the sub-base of this pavement? A. Oh, yes, it would make a great difference. 20

Q. That is so, isn't it? A. It would make a great difference. No, I don't know that at all.

Q. Why not? A. Because the crevices in between the block are filled with sand or ashes and after the blocks are removed——

Q. What has that to do with the depth to which your pavement goes? A. Because when the block is removed, the joint that is filled with sand or ashes may be large or small, and that filling remains when the blocks are removed. 30

Q. What has that to do with the depth to which the new pavement has to go; the new pavement has to go a depth of nine inches? A. Yes.

Q. He is supposed then to excavate to a depth

Joseph O. Whittemore—Cross.

of at least nine inches below the established grade? A. Right.

Q. And the excessive excavation would be below that point? A. The excavation or fill.

10 Q. You mean to say that you cannot, as an engineer, determine that? A. No, because you don't know how much material is in between the joints, to fill up that space, to make up the difference.

Q. Why didn't you take up these blocks to find out, A. That would make no difference at all; you would have to go and pick up all the blocks, for the reason that they vary so in depth, also in width of joints.

20 Q. I show you, Mr. Whittemore, four proposals that were heretofore identified as Exhibits D-1, D-2, D-3 and D-4, and ask you whether those are the proposals which were received on the job which has been heretofore referred to and which was awarded to Mr. Cavanagh? A. Yes, I think they are the proposals.

Q. They were received upon May 3d last, weren't they? A. Yes, I think that is the date.

30 Q. The same day as the bids for the job were received upon which an award was made to Mr. Crichfield? A. Yes.

MR. WALSCHEID: I offer those four proposals in evidence; I desire to offer particularly the bids contained in the proposals, and if it is satisfactory to counsel for the other side, we will print no more than the bids contained in said proposals.

40 (The proposals were thereupon marked Exhibits P-5, P-6, P-7 and P-8, and it is agreed that the title page of one exhibit be

Joseph O. Whittemore—Cross.

printed only in one case and the items only in the other cases.)

Q. You say that these blocks are all of different sizes? A. Yes, they vary greatly.

Q. I suppose the curbing, too, is of different sizes? A. Yes. 10

Q. And vary greatly? A. Well, not such a great difference as in the blocks.

Q. Well, they vary in thickness, do they not? A. Yes, they vary in thickness.

Q. And each piece of curb varies in length? A. Yes.

Q. They vary in depth? A. That I don't know until they are excavated.

Q. But you can tell that they vary in thickness and that they vary in depth? A. Not in depth, but in length. 20

Q. In length? A. Yes.

Q. What kind of curb did you specify as new curb? A. Five inches by 16 inches, not less than, I think I said, four feet long.

Q. Not less than four feet long? A. I think I said that.

Q. What kind of curb did you say would pass your inspection of the curb upon the job, of the old curb? A. I didn't specify it particularly. 30

Q. Didn't specify it at all, did you? A. No, the curb that meets that requirement, of course, would be sound.

Q. Curb which met the requirements for the new curb, if sound, would be passed? A. Oh, yes.

Q. There is nothing in the specifications themselves to prevent you from passing any other curb, is there? A. No; the curb may be 4 3-4 inches— 40

Joseph O. Whittemore—Cross.

Q. Just answer the question; there isn't anything in the specifications to prevent you from passing any other curb? A. No.

Q. So that the whole matter is left absolutely to your discretion? A. Yes.

10 MR. HOBART: And to his honesty.

Q. And to your honesty? A. Well, that is presumed, I guess.

Q. You cannot tell, you say, what curb would be condemned until after the excavation was made? A. No.

Q. You could tell by looking at the curb, or the exposed portions of them, whether you would condemn certain curb, wouldn't you? A. Oh, you
20 could pick out certain pieces that you know were bad, by just looking at the top, of course.

Q. In other words, you could pick out the curbs which showed splits? A. Yes.

Q. And you could pick out curbs which showed crumbling? A. Yes.

Q. And you could pick out curbs which were under dimensions? A. Yes.

Q. The only thing that you could not determine about it was what was hidden in the ground?
30 A. Whether the curb that may look all right would stand dressing; that is a big item.

Q. You did not say anything in this specification about redressing old curb? A. Oh, yes, I did.

Q. Find it? A. In advance of laying pavements excavate old curb, and after excavating is done reset them after redressing them on face.

Q. What does that mean, redress them? A.
40 Just what it says, redress them.

Q. How many different methods of redressing are there? A. I don't know how many methods there are.

Q. You don't know? A. No.

Q. Don't you know the different ways of redressing curb? A. The different manners of redressing them? 10

Q. Yes. A. Maybe you can redress them in any manner.

Q. What kind of instrument is used in redressing? A. Keene hammers, Bush hammers, different kinds of hammers, different sizes.

Q. Aren't they redressed according to certain edgings? A. The new curb there is specified, how it should be dressed.

Q. How shall they be dressed? A. Whatever it says there. 20

Q. Do you mean to say that you would expect these curbs to be redressed in conformity with the new curb? A. That is what I shall insist on.

Q. But you don't say so, do you? A. I think I have said so; I think I covered it there.

Q. You think that that covers it? A. Yes, I think so.

Q. Do you think that that covers the old and the new? A. Yes, I think so. 30

Q. Then this means that after you have determined what curb may remain on the job, that that curb shall be bevelled and dressed as required here? A. Yes, to correspond with new curb.

Q. But you are to determine what that curb is? A. Yes.

Q. Did you expect to draw any additional plans for this work? A. Why, I don't expect to; it 40

Joseph O. Whittemore—Cross.

may be necessary; I can't tell; in the progress of the work.

Q. What would these additional plans show?

A. Well, I can't say until I come to it; whatever may develop along the line of work that needs additional plans.

19 Q. What would you expect to develop? A. Just now I don't expect anything.

Q. Is there any reason for having inserted upon the first page of this specification that the work shall be done in accordance with the plans signed by J. O. Whittemore, City Surveyor, dated April 12, 1916, and such other plans and detailed drawings, as may be furnished from time to time for the proper execution of the work and which must be taken as part of the specification? A. If anything develops that requires a plan to illustrate to a contractor just how a certain part of the work should be done, that may be necessary.

Q. What is there in this work? A. I don't expect there is anything.

Q. You don't expect there is anything? A. No.

Q. You think this specification would have been just as complete without that, don't you? A. No, because there may be something, I don't know until the work progresses.

Q. You expected that a prospective bidder just looking at these plans and specifications, would take the same view of it? A. I expect they would, if they are conversant with this class of work.

Q. Is there any work in connection with these improvements which you think would be classed as extras and payable for at cost, plus ten per cent? A. I can't think of any.

Joseph O. Whittemore—Cross—Re-Direct.

Q. Why then should you have put that clause in the specification? A. Because there may be something of that kind develop.

Q. But you don't know of anything? A. I don't know of anything.

Re-direct Examination by Mr. Hobart:

10

Q. Will you give an example of any case that might require some detailed plan in addition to the plans that are on file? A. In some former work?

Q. No, in this particular work. A. I don't know as I understand you.

Q. Can you give us an illustration, can you think of any case in which it may be necessary to have some further detailed plan? A. No, I can't think of any case. 20

Q. Now, you have told us in some detail about the map, on which are indicated certain grades in red and black lines; I want to ask you again to state how a contractor who knew anything about street paving work could, by reference to that plan, and the specifications, determine the extent of the excavation and the fill? A. How could he determine it?

Q. Yes. A. By noting the difference between the established grade and the present grade, and noting the thickness of his pavement. 30

Q. In every case where there is a difference between the two grades is it so indicated on the plan? A. Yes.

Q. And was that the method by which you arrived at your estimate of the amount of fill and excavation, as stated in the specifications? A. Yes. 40

Joseph O. Whittemore—Re-Direct.
William T. S. Crichfield—Recalled—Direct.

Q. In other words then, anybody that knows arithmetic could determine that for himself? A. I should think so.

10 Q. These plans, so far as the figures and grade lines are concerned, are they drawn in the usual way for street paving plans? A. Yes; drawn in that way for 19 years back.

Q. Is there anything hidden or concealed or unusual about the grades or the method of indicating the grades? A. No. I know of none.

Q. And the map is drawn to a scale, a vertical scale and a horizontal scale? A. Yes.

Q. As indicated thereon? A. Yes.

20

WILLIAM T. S. CRICHFIELD, re-called:

Direct Examination by Mr. Hobart:

Q. Kindly state what experience you have had in street paving work? A. I have been engaged in street paving work for others and for myself for a period of about 32 years past.

Q. In what parts of the country? A. Throughout the United States, Mexico and Canada.

30 Q. And during the last few years have you been engaged more particularly in Hudson County, New York City and vicinity? A. Yes, New York and New Jersey; the State of New York and the State of New Jersey; for the past 20 years.

Q. Have you prepared bids from time to time for street paving contracts? A. Yes.

Q. And have you frequently examined plans and specifications for the same? A. I have.

40 Q. In what particular line of work have you had charge in the street paving construction that

William T. S. Crichfield—Recalled—Direct.

you have had to do with during the last 32 years?

A. Well, general construction work.

Q. Have you had charge of concrete work, curbing, and everything that is incidental to the different kinds of street pavements? A. Yes.

Q. You bid on this Hoboken contract in question in this proceeding; and did you, before you handed in your bid, examine the specifications?

10

A. I did.

Q. Being the plans and specifications that have been referred to from time to time by the witnesses in this proceeding? A. Yes.

Q. Did you have any difficulty in determining the approximate amount or the quantities of concrete, asphalt, etc.? A. I had no difficulty whatsoever.

20

Q. Referring particularly to the excavation and the filling, did you ascertain the quantity of the same? A. I ascertained that from the specifications and engineer's estimate.

Q. You based your bid primarily on the engineer's estimate of quantities A. I did.

Q. That is what is called a unit bid, is it not? A. It is.

Q. Please explain what that is? A. A unit bid is where a contractor is required to bid upon several items constituting the work required under the specifications, such as pavement per square yard, concrete per cubic yard and curbing per lineal foot; basin resetting per each basin, etc.

30

Q. As distinguished from what is called a lump sum bid for the entire contract A. Yes; a lump sum bid would be the total cost on those items upon which bids would be received; sometimes called a lump sum bid, or percentage bid.

40

William T. S. Crichfield—Recalled—Direct.

Q. Did you examine these plans that have been referred to upon which appeared these red and black lines? A. I did.

Q. And by reference to the same were you able to form any conclusion as to the amount of fill, excavation and concrete? A. Yes.

10 Q. How did you reach that conclusion? A. The plans indicate the present grade of the streets in question, and the established grade.

Q. Yes. A. Given the length of blocks to be improved, and I made examinations of them for the purpose of determining primarily where the excavation and fill was to be placed, whether or not it was to be placed in one location or scattered throughout the entire contract.

20 Q. Was there anything unusual about the method of indicating on these plans the quantity of fill and excavation? A. I know nothing unusual about it.

Q. Have you frequently seen similar plans? A. Yes, often.

Q. You have bid on some? A. Yes.

30 Q. I call your attention particularly to that part of the specifications which refers to the re-setting of manholes and of basins; how did you determine the amount of your bid for those items? A. Well, in the first place, it is a small item, and I know substantially what work of that kind is, having done a considerable amount of it before, and based my bid upon my knowledge of cost.

Q. And the number was stated in the specifications, of course? A. Yes.

40 Q. When you came to the question of new curb and old curb, how did you determine the amount of your bid for them? A. I did not determine

William T. S. Crichfield—Recalled—Direct.

any amount, except that I based my proposal upon the engineer's estimated amount.

Q. Is it possible, or was it possible, for anyone to tell in advance how much old curb or how much new curb there may be? A. Absolutely impossible.

Q. Why not? A. For the reason that when old curb is removed from the earth, it may look fair, as what may be used, examining it from the top or from the sides, but when it is taken out of the ground it very frequently falls to pieces, especially if it is very old curb, and in hammering it, redressing it or rejoining it, it very frequently splits and cannot be used; therefore, no one can tell how much old curb can be re-used until it has been taken out, axed, dressed and joined. 10

Q. So far as concerns the cost of the old curb and the new curb, is there any difference in the cost of redressing or resetting the same, that is, between the old and the new? A. That is substantially the same. 20

Q. The only difference between the old and the new would be what? A. Would be the cost of the new curb, plus hauling and plus breakage in dressing and trimming the joints.

Q. In this case your bid was for so much per lineal foot, so much for the old and so much for the new curb? A. Yes. 30

Q. The usual method of bidding for work of that kind? A. Yes.

Q. The engineer or surveyor is given certain discretion to determine what of the old curb was to be condemned; is there anything unusual about that? A. Nothing unusual about that; it is the ordinary requirement on the part of practically all of the engineers, for the doing of such work. 40

William T. S. Crichfield—Recalled—Direct.

Q. Are you familiar with the various methods of mixing concrete? A. I am.

Q. Have you had to do with that during the past 32 years? A. Very much to do with it, yes.

10 Q. Which of those two methods is the better, so far as affects the obtaining of a uniform result is concerned? A. I don't see that there is any difference between the two.

Q. In other words, so far as practical results are concerned one method is about as good as the other, isn't it? A. That is the point, exactly.

Q. Is there any practical difference in the kind of machines, in case of machine mixing? A. A very decided difference between the machines.

20 Q. That is, between different kinds of machines? A. Between different kinds of machines, yes.

Q. So, in stating that there was no practical difference in result as between hand mixing and machine mixing, I assume that it depends upon the machine, to some extent? A. There are machines which are absolutely useless for mixing concretes, and there are other machines with which you can gauge the quantities of materials required to be mixed in with substantial accuracy.

30 Q. And it was the latter class of machine that you had in mind when you said the results obtained by machine and hand mixing has practically the same results, so far as the uniformity is concerned? A. Yes; I meant, of course, a machine with which you could mix the concrete in the proportions required.

Q. Have you had experience both in hand mixing and machine mixing of concrete? A. I have.

40 Q. Is there any difference in the cost of doing the work in those two methods? A. The cost of

William T. S. Crichfield—Recalled—Direct.

labor is about the same; I have known of cases where the cost of labor in mixing concrete by hand was less than that mixed by machine, and vice versa.

Q. And in some cases it is more and in other cases it is less? A. Yes.

Q. Have you ever heard of a case, or known of a case where hand mixing was three times more expensive than machine mixing? A. I have never heard of such a case and I do not believe there ever has been such a case.

Q. It is one of those hypothetical cases that was discussed this morning? A. I can see where a hand mixer would cost more than a machine mixer, if a contractor was dishonest, for instance, in mixing by hand it is very easy for an inspector or engineer to know exactly the quantity of sand, stone and cement placed in the mixture, while with some kinds of machines you cannot determine accurately and correctly the proportions which constitute the finished concrete; in other words, many classes of machines, such as continuous mixers, permit a contractor to mix concrete by not using the proper proportions of cement, which is the most costly ingredient in the concrete.

Q. Now, in using a machine for the purpose of mixing the concrete, do you need as many men to accomplish the same physical result as if you were mixing by hand? A. No, that is, with certain kinds of machines. I am speaking now of the best grade of machines; it will take more men to operate the high grade concrete mixer and produce concrete thereby than it will to operate a gang mixing concrete by hand.

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William T. S. Crichfield—Recalled—Direct.

Q. How did you estimate that the labor cost of each method of mixing is practically the same as you have stated? A. Well, I have taken 25 men to mix by hand; I have taken 25 men at a salary of \$2 each, which would be \$50; plus the salary of a foreman at \$4, which would be \$54—this was
 10 by machine, I should say a timekeeper at \$3, making \$57, a fireman at \$2.50, making \$59.50; coal, \$2.50, making \$62, rental of a machine is \$15—a low price—that would be \$77.

Q. That would be the daily cost. A. That would be the daily cost of a gang operating a concrete mixer which would produce 1,000 square yards.

Q. How would that compare with the daily cost of mixing by hand? A. This would require the
 20 employment of a higher labor unit.

Q. That is to say, the men would receive higher wages? A. The men would be more competent and capable of doing heavier work to mix by hand; having a gang of 35 men at \$2 a day would be \$70, a foreman at \$4 would be \$74, a timekeeper at \$3 would be \$77. I have actually performed work under those conditions; and they would produce 1000 square yards of finished
 30 pavement in one day, six inches in depth, both gangs being constituted of a high labor unit, that is, men of the best quality that could be obtained.

Q. Paid the highest prevailing wages? A. Yes; that would bring the cost of labor in each case substantially the same.

Q. When you are mixing by hand is it practicable to keep the work proceeding constantly; that is, to keep the machine operating constantly, or are there breaks necessary? A. Yes, there
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William T. S. Crichfield—Recalled—Direct.

are times when the machine could not be operated; for instance, to move the machine along the line of the work which is in progress; during the moving of the machine, of course, the gang is lying idle.

Q. Is there any expense in the operation of the machine, aside from the labor cost? A. You mean in the upkeep of the machine? 10

Q. Yes, in the upkeep, fuel and oil and whatever supplies may be necessary. A. Yes; it usually costs about one-third of a ton of coal to operate a concrete mixer per day delivered on the work, which is about \$2.50; oil would cost about 50 cents a day—from 25 to 50 cents a day; occasionally breakages would occur; all of those things added together make quite an expense. 20

Q. Did you make any allowance for depreciation of the machine? A. When a man rents a machine he is supposed to return it in the same condition as when it was received, and if it is damaged he is supposed to mend the damage at his own expense.

Q. You observed the provision in these specifications in regard to mixing by hand and by machine? A. Yes.

Q. On which method did you base your bid for the concrete work? A. I based my bid on mixing by hand, because, as a matter of fact, it makes no difference, so far as cost is concerned; the only difference between the mixing by hand and mixing by machine is this: in mixing by hand it is necessary for the laborers with shovels to turn over the ingredients of the concrete in mixing them about three times; frequently laborers will shirk their work and they try to pass as com- 30

William T. S. Crichfield—Recalled—Direct.

10 plete mixture after turning the material twice, unless the foreman is very careful watching them very closely; in mixing with a machine the only advantage is that the machine is continually running and insures a thorough mixture whether the foreman is attentive to the mixing or not; that is the only difference.

Q. Does that apply to what has been termed here a continuous mixer, or a batch mixer, or both of them? A. It applies to any kind of a machine.

Q. Of course you examined the specifications with a view to fixing the amount of your bid for concrete; did you discover, when you examined them, the details as to the composition of the concrete? A. I did.

20 Q. Can the result required by the specifications be obtained either by hand mixing or by machine mixing? A. Yes.

Q. Have you ever figured out the cost of laying a yard of concrete six inches deep, speaking now of a square yard of that depth—or are your figures based entirely on a cubic yard? A. This figure here is based upon a cubic yard of concrete.

30 Q. Have you ever been able to lay concrete six inches deep at the rate of one cent an inch? A. Well, it would be more than that; it would be more than one cent per inch, depending upon the formulation of the mixture; on the basis of 1, 3 and 6 it would cost more than one cent per inch.

Q. What do you mean by "1, 3 and 6"? A. One part cement, three parts sand and six parts stone.

Q. On the figure that you have just given, is that for hand or machine mixing? A. It is for either way.

40 Q. Have you computed the cost per square yard

William T. S. Crichfield—Recalled—Direct.

of the pavement in question in this proceeding, based upon the amount of your bid? A. You mean the cost per square yard of the entire pavement based on my bid?

Q. Yes, paving alone. A. Yes.

Q. Please tell us the amount thereof? A. \$1.58 per square yard for the asphalt; \$5.75 a cubic yard for the concrete; \$2.54 a square yard for the pavement. 10

Q. That includes a pavement nine inches deep, with asphalt binder and asphalt three inches thick and six inches of concrete as required by the specifications? A. Yes, it includes six inches foundation or base, one inch binder and two inches laying surface, making a total of nine inches for the pavement. 20

Q. One of the witnesses in this case commented upon certain bids alleged to have been made by you in the City of Bayonne; will you state if there was any difference between those bids and the bid in Hoboken, and if so, what the difference is? A. You mean difference in construction or the difference in price?

Q. Well, both. A. In Bayonne I submitted a proposal for paving work, sheet asphalt paving work, which was called for, with five inches of concrete foundation, one inch of binder and 1½ inches wearing surface. 30

Q. What was the difference? A. The work in Hoboken calls for a six inch concrete foundation, one inch binder and two inches of asphalt wearing surface; the work in Bayonne is to be laid on a foundation of subsoil which is solid and compact and a small amount of rolling is needed, and it is well adapted to sustain the weight of that pave- 40

William T. S. Crichfield—Recalled—Direct.

ment; the pavement in Hoboken, the foundation is laid upon meadow land, which has an old foundation running all the way from 20 feet to 90 feet in depth; there is a very insecure subsoil in Hoboken and a very substantial soil in Bayonne.

10 Q. How does that affect the prices? A. That affects the price in this way: That the danger of repairs for a pavement laid on a marshy ground is much greater than where it is laid upon a secure foundation.

Q. And those repairs you would be responsible for under the maintenance clause, would you? A. Yes.

20 Q. Did the work in Bayonne include any items for removing the existing pavement? A. There are no existing pavements on any of the streets in Bayonne which have been awarded to me.

Q. Is there any item for removing existing pavement under the present contract? A. Yes, all the streets are paved with Belgian block, which must be removed before the concrete base can be laid.

Q. Your bid for that was 25 cents a square yard, wasn't it? A. Yes, it was.

30 Q. None of which work would have to be done in Bayonne? A. No.

Q. Do you recall on what date you submitted your proposal in Bayonne? A. To the best of my memory April 11th of this year.

Q. In the present case your proposal was submitted on the 3d of May? A. Yes.

Q. Was there any difference during that period in the cost of labor? A. Yes.

40 Q. It had advanced between the 11th of April and the 3rd of May? A. Yes.

William T. S. Crichfield—Recalled—Direct.

Q. To what extent? A. Around the 11th of April I was performing contracts which I have in Newark and was paying \$2.25 a day for men for nine hours; since that time it has advanced to \$2.50 per day for nine hours and they are now threatening to strike for more wages

Q. In preparing your proposal for Hoboken, the one in question in this case, did you take into consideration the increased cost of labor? A. I did.

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Q. Is that a necessary element to consider? A. A very necessary element to consider.

Q. Do you recall what your bid in Bayonne was for curb? A. My memory is that my bid there was 84 or 86 cents, I have forgotten which; the kind of curbstone in Bayonne is different from that required in Hoboken.

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Q. What is the difference? A. In Bayonne Pennsylvania bluestone was permitted, being a soft stone, easily dressed and jointed; and the contract and specifications in Hoboken call for North River bluestone, such as is used in Manhattan on streets with heavy traffic, which is a hard stone.

Q. More costly? A. More costly; more costly to dress and set.

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Q. On this item of 84 or 86 cents in Bayonne, that included both the price of the new curbstone and the setting of the same, did it not? A. Yes, on the concrete base under it.

Q. Reference is also made by this same witness to an alleged contract that you had in Jersey City, where he said your bid was 76 per cent. of \$2.30; was there any difference in the conditions in Jersey City as compared with Bayonne? A. I don't

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William T. S. Crichfield—Recalled—Direct.

know what he refers to; but the last bid submitted in Jersey City was 94 per cent. of \$2.30.

10 Q. Instead of 76 per cent as alleged by this witness? A. Yes. And the same witness, or his company, bid 95 per cent. of \$2.30 per square yard. The last bid submitted in Jersey City per square yard submitted by me was \$2.162 per square yard, with the excavation bid as a separate item, while that of the Clinton Contracting Company was \$2.18½ per square yard, with extra payment for any excavation or filling that might be required; that was on a five inch concrete base instead of six as provided in Hoboken.

20 Q. I call your attention to this part of the Hoboken specifications which relates to the resetting of the manholes and basins; you put in a unit bid for those as required by the specifications, did you not? A. Yes.

Q In putting in that bid did you take into consideration the quantity of brick work that would be required? A. Yes.

30 Q. If there was any variation in that quantity, due to any slight changes in the grade of the street for drainage purposes or anything of that kind, would there be any substantial difference in the actual cost of that work? A. No; a difference of such a matter as would probably require the mason who is doing the brick work to split a brick and reset the brick, taking probably ten minutes, under which it amounts to nothing.

Q. Would be a matter of a few cents only? A. A small matter, probably 15 or 20 cents; 25 cents at the outside.

Q. For each manhole, or for each basin? A. Yes.

William T. S. Crichfield—Recalled—Cross.

Cross-Examination by Mr. Walscheid:

Q. I understand you to say, Mr. Crichfield, that you had no trouble in ascertaining the amount of filling? A. Not the slightest.

Q. Or in ascertaining the amount of excavation necessary to do this job? A. No difficulty whatsoever. 10

Q. And the depth of the paving blocks that you would have to remove did not affect you any in ascertaining that, did it? A. I based my bid upon the Engineer's estimate of quantities which I checked from the plans, to determine as to whether they were reasonably close or not.

Q. You think they are reasonably close? A. I think so.

Q. According to that, spreading that quantity of excavation and fill over the work to be done, what would you say it would cost you per square yard to do the excavating in Hoboken, A. The excavation and filling? 20

Q. At the prices which you have given. A. I based my bid upon the idea of bringing in the fill—

Q. I don't care where you get it from. A. —from outside sources.

Q. I don't care where you get it from. A. I am trying to answer your question. 30

Q. I don't want that; that is not what I want. I want to know from you the cost per square yard of excavating and filling, as it enters into your price? A. At the price I bid?

Q. At the price you bid. A. Well, about 15¾ cents per square yard.

Q. For what? A. For the excavation and fill-

William T. S. Crichfield—Recalled—Cross.

ing, the cost spread over the entire area of pavement to be laid.

Q. Both together? A. Yes, about $15\frac{3}{4}$ cents per square yard.

Q. Well, call it 15 cents. A. Well, it is a little above that.

10 Q. According to that, the total cost of the resurfacing of a yard of pavement would consist of these items, would it not: 15 cents per square yard for excavating and filling; 25 cents for removing old pavement; 96 cents for concrete; and \$1.58 for three inches of binder and asphalt; is that right? A. That is correct.

Q. Making a total of \$2.94? A. Yes.

Q. You bid yesterday in Hoboken, didn't you? tract.

20 A. On Wednesday, on an asphalt repair con-

Q. How thick was the asphalt in that case? A. On this repair work? That varies in thickness; there are some of the streets in Hoboken laid with inch binder and $1\frac{1}{2}$ inches deep, others two inches deep, many of them are worn thinner than that from traffic.

Q. Did you bid on just one specification? A. Yes.

30 Q. What did the new specification call for? A. The new specification?

Q. Yes; what was the depth of the new specification, the one that you bid on? A. I can't carry all those specifications in the United States in my head; but my present impression is that the usual requirement was in the specification that the asphalt should be laid to such depth as would meet the adjoining pavement, the grade of the adjoining pavement.

William T. S. Crichfield—Recalled—Cross.

Q. There was no depth given? A. I don't recall; it is impossible for me to carry all those things in my head.

Q. What price did you bid over there for asphalt? A. That is difficult for me to answer; I don't carry my records in my head; my memory is that I bid \$1.86 per square yard. 10

Q. Including what? A. The cutting out of holes, carting away the worthless materials and restoring the holes in the pavement that were worn through by traffic as directed by the city authorities.

Q. That is your recollection? A. That is my memory, yes.

Q. Well, the circumstances would not be the same as in this contract if it includes all this other work mentioned? A. It is an entirely different class of work, repair work, scattered all over the city. 20

By Mr. Hobart:

Q. This question was overlooked by me on direct examination and by consent is asked now: The specifications in question in this proceeding call for concrete which you have previously described as 1, 3 and 6; what percentage of each ingredient would go into a cubic yard of such concrete? A. A cubic yard of concrete mixed in the proportions of one part cement, three parts sand and six parts of stone, would contain the following ingredients in cubic feet: 3.857 cubic feet of cement; 11.571 cubic feet of sand; 23.142 cubic feet of stone. 30

By Mr. Walscheid:

Q. What is it in percentage? A. Cement 14.3 40

William T. S. Crichfield—Recalled—Cross.

per cent; sand 43 per cent; stone 85.7 per cent; that is the percentage of a cubic yard.

By Mr. Hobart:

10 Q. Now explain how those totals amount to more than 100 per cent? A. Taking a basis of computing these percentages a cubic yard of solid stone crushed into stone ranging in size from 1½ inches to 2 inches, will produce 1½ cubic yards of crushed stone, therefore the percentage of solids in a cubic yard of crushed stone ranging in size from 1½ to 2 inches is 66 2-3 per cent, containing voids of 33 1-3 per cent or 1-3; a
20 cubic yard of sand, sharp, clean, coarse sand, contains one-third voids, therefore a certain percentage of the sand, in fact practically all of the sand, would be required to fill the voids in the crushed stone, and on the basis of one part cement, three parts sand and six parts stone, the quantity of cement is required for the purpose of filling the voids in the sand. This accounts for the total of the percentages above exceeding one hundred per cent.

TESTIMONY CLOSED.

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To the Chief Justice of the New Jersey Supreme Court:

I do hereby certify that the foregoing depositions were taken before me, in my immediate presence and hearing, at the times and place and under the stipulations hereinbefore mentioned.

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WILLIAM C. ASPER,
Supreme Court Commissioner.

Exhibit P-1.

THIS AGREEMENT between the UVALDE ASPHALT PAVING COMPANY, a corporation of the State of New York, party of the first part, and WILLIAM T. S. CRICFIELD, of the City of New York, party of the second part,

WITNESSETH:—

The party of the first part AGREES to employ the party of the second part for the term of five years as its Resident Manager, to have charge of its work in paving and repaving streets in the City of Havana, Cuba, at a salary of Ten Thousand Dollars (\$10,000.00) per year, payable monthly. Said Resident Manager is to have charge of the employing of all men during said work and of the purchase of all necessary materials and supplies not contracted for or supplied by the party of the first part, and is to have general charge and supervision over said work during said period. He is to have the right of inspection of all contracts, office papers and documents of the party of the first part relating to said work in the City of Havana, so that he may be fully conversant with all details of the work to be carried out by him.

The party of the second part AGREES to work for the party of the first part in said capacity for said period, and to give all of his time to the furtherance of the interests of the party of the first part, and to do everything he can to successfully carry out said contract for paving in the best interests of the party of the first part.

In addition to the said salary, the party of the second part shall be paid monthly on bills rendered by him to the party of the first part his current expenses incident to said employment.

Exhibit P-1.

When it shall be necessary for him, in carrying out his work, to be away from the City of Havana, said party of the first part shall pay to the party of the second part all of his traveling expenses. The party of the first part shall pay the expenses of the party of the second part from New York to Havana upon the beginning of the contract, and his expenses on return at the termination of it. The party of the second part shall be entitled, at his option, to a vacation of from three weeks to six weeks each year during the hot season of June, July and August. If the party of the second part comes to the United States on such vacations, the party of the first part agrees to pay transportation to and from the City of New York.

In case the work of the party of the first part in the City of Havana shall be stopped, due to revolution or inability to provide ample funds, or otherwise, the party of the first part shall have the right on two months' notice to transfer the party of the second part to any place in the United States, upon paying all traveling expenses to and from said place, and in that case the party of the second part agrees to work for the party of the first part in the United States upon any work of the party of the first part as General Superintendent of paving contracts at the same salary he is now receiving, viz: Fifty-two Hundred Dollars (\$5200.00) per year, payable monthly.

The party of the second part reserves the right to terminate this contract on six months' notice, if in his judgment it will be unsafe for him, in view of the condition of his health, to remain in the City of Havana.

Exhibit P-1.

In case the party of the second part shall, during the carrying out of this contract, become permanently ill or disabled, the party of the first part shall have the right to terminate this contract after said disablement shall have continued for six months.

In case the private business affairs of the party of the second part shall necessitate his coming to the United States during the period of this contract, he shall have the right to visit the United States for periods of not more than one month in extent on each occasion. In every such case he shall arrange matters so as to impede the work of the party of the first part the least possible amount, and shall not remain away from the work longer than is necessary. In case he is away from the work for this purpose his salary shall not run for the time during which he is away from Havana.

The term of this contract is to begin from the date of sailing of the party of the second part from the City of New York for the City of Havana about the middle of June, Nineteen Hundred and Ten.

IN WITNESS WHEREOF, the party of the first part has caused these presents to be signed by its president and attested by its secretary, and its corporate seal to be hereto affixed, and the party of the second part has hereunto set his hand and seal this Fifth day of May, Nineteen Hundred and Ten.

UVALDE ASPHALT PAVING CO.
By R. F. Rokeby, Prest.

(SEAL)

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Exhibit P-2.

Attest:

F. Storer Brown,
Secy.

W. T. S. CRICHFIELD.

Karl E. Keller,

10 Witness to signature of
W. T. S. Crichfield.**Exhibit P-2.**

AGREEMENT made this second day of April, Nineteen Hundred and Twelve, between the UVALDE ASPHALT PAVING COMPANY, a corporation of the State of New York, party of
20 the first part, and WILLIAM T. S. CRICHFIELD, of the City, County and State of New York, party of the second part;

WITNESSETH:

30 *Whereas*, on the fifth day of May, nineteen hundred and ten, a contract or agreement for service was entered into by and between the parties hereto, the said contract or agreement providing that the party of the second part should act in the capacity as Resident Manager in Havana, Cuba, on certain paving work there being performed by the party of the first part, and,

Whereas, it is the desire of the parties hereto that the aforesaid contract or agreement for services be terminated and a new and different contract or agreement be substituted for the unexpired term thereof.

Exhibit P-2.

NOW, THEREFORE, the parties thereto, in consideration of the sum of One Dollar, by each to the other paid, the receipt whereof is hereby acknowledged, agree to and with each other as follows:

THE PARTY OF THE FIRST PART AGREES: 10

1. To employ the party of the second part for a term of five years commencing January first, 1912, and ending January 1st, 1917, as General Superintendent, to have charge of its work in paving and repairing streets in the United States, at a salary of seven thousand two hundred (\$7,200.00) dollars for the first year ending January first, 1913; eight thousand four hundred (\$8,400.00) for the second year ending January first, 1914; nine thousand six hundred (\$9,600.00) dollars for the third year ending January first, 1915; and ten thousand (\$10,000.00) per year for each of the remaining two years ending January first, 1916, and January first, 1917, respectively, payable monthly. Said General Superintendent to have general charge of the employment of men necessary for the proper performance of all such work, and is to have charge and supervision over all said work during the period herein mentioned. 20

2. That in addition to the said payment as above stated to the party of the second part, payments will also be made monthly on bills rendered by the party of the second part to the party of the first part for all reasonable current expenses incident to said employment. That when it shall be necessary for the party of the second part in carrying out his work, to go to the City of Ha-

Exhibit P-2.

vana, Cuba, or elsewhere, said party of the first part agrees to pay to the party of the second part all of his traveling expenses.

THE PARTY OF THE SECOND PART
AGREES:

10 1. To work for the party of the first part in the capacity of General Superintendent for said period, and to give all of his time to the furtherance of the interests of the party of the first part, and to do everything he can to successfully carry out all contracts for paving in the best interests of the party of the first part.

20 2. To go to Havana, Cuba, as often as, in the discretion of the party of the first part it may be considered desirable and necessary to protect the interests of the party of the first part in the construction of paving work being performed by the party of the first part there during the period herein mentioned, it being mutually agreed, however, by and between the parties hereto, that the party of the second part will not be required to at any time remain in Havana, Cuba, longer than the party of the second part deems necessary to enable him to properly protect the interests of
30 the party of the first part.

MISCELLANEOUS COVENANTS.

The parties hereto agree:

1. That the services and duties to be performed by the party of the second part hereunder shall be of the character and description heretofore performed by him in said capacity for said company under the prior contract, and the party of the second part, shall also in all respects endeavor

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Exhibit P-2.

to promote the success of the company's business, and such employment hereunder shall be subject to the general supervision and control of the Board of Directors of said company and of the president of said company.

2. In case of the death of the said party of the second part at any time during the term of this contract, his salary shall be paid pro rata up to the time of such death. 10

3 This contract shall bind and run in favor of the legal representatives of each party hereto, except in so far as covenants for personal services of the party of the second part are concerned, which covenants shall terminate on the death or permanent disability of the party of the second part, and the salary shall be apportioned as above expressed. 20

4. Anything herein contained to the contrary in anywise notwithstanding, it is expressly agreed between the parties that the term of this contract may end prior to the date mentioned above upon the following conditions:

At the option of either party hereto, the term of this contract shall terminate on one year's written notice as herein provided.

Either party may, at its option, terminate this contract by serving written notice to that effect, signed by him or it, as the case may be, and served personally or by mail on the party of the other part. 30

Upon the service of such notice, the term of this contract shall expire one year from the date of the service of the same with the same force and effect as if such date had been mentioned as the

Exhibit P-2.

expiration of the term of service hereunder, and the salary shall be apportioned to that date.

10 5. It is further agreed between the parties that the contract between them bearing date the 5th day of May, 1910, whereby the Paving Company retained the services of Crichfield for the term of five years upon the conditions, covenants and con-
siderations therein expressed, shall be and the same hereby is definitely and finally cancelled and determined as of the date of the execution of this agreement, without recourse by either party over or against the other for or by reason of any act or thing theretofore done thereunder, and each of the said parties respectively acknowledges the full performance and satisfaction by the other
20 of any and all obligations of the other under said contract.

6. This agreement, although executed on or about the 2nd day of April, 1912, shall take effect on the first day of January, 1912, with the same force and effect as though it had been executed on the said date.

30 IN WITNESS WHEREOF the party of the first part has caused these presents to be signed by its president and attested by its Secretary, and its corporate seal to be hereto affixed, and the party of the second part has hereunto set his hand and seal this 2nd day of April, nineteen hundred and twelve.

UVALDE ASPHALT PAVING COMPANY,

per

R. S. Rokeby,

(Seal)

President.

Exhibit P-2.

Attest:

F. Storer Brown,
Secretary.

W. T. S. CRICHFIELD, (L. S.)

James F. McManus,

Witness

to signature of

W. T. S. Crichfield.

10

STATE OF NEW YORK, ss.:
COUNTY OF NEW YORK.

On this 6th day of April in the year one thousand nine hundred and twelve before me personally came RALPH T. ROKEBY, to me known, who being by me duly sworn did depose and say, that he resided in the City of New York, Borough of Richmond; that he is the President of the UVALDE ASPHALT PAVING COMPANY, the corporation described in and which executed the foregoing instrument; that he knew the seal of said corporation; that the seal affixed to said instrument was such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

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IN WITNESS WHEREOF I have hereunto set my hand and seal the day and year aforesaid.

(Seal)

JAMES F. McMANUS,
Notary Public (49)
New York County, N. Y.

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Exhibit P-2. Exhibit P-3.

STATE OF NEW YORK, }
 COUNTY OF NEW YORK. } ss.:

10 On this 6th day of April, in the year one thousand nine hundred and twelve before me personally came WILLIAM T. S. CRICHFIELD, to me known and known to me to be the individual described in and who executed the foregoing instrument, and he acknowledged to me that he executed the same for the uses, intent and purposes therein expressed.

(Seal)

JAMES F. McMANUS,
 Notary Public (49)
 New York County, N. Y.

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Exhibit P-3.

William C. Asper
 May 31, 1916.

UVALDE ASPHALT PAVING CO.,
 1 Broadway, New York,
 Tel. 2790 Rector.

30

April 12, 1912.

My dear Sherman:—

Referring to your contract with the Uvalde Company under date of the 2nd of April, 1912. This is to confirm the verbal understanding you and I have. You are at liberty to bid on and undertake asphalt paving contracts in your name and in your own behalf on the following conditions:—

40

Exhibit P-3.

Whenever a bid is advertised in the State of New Jersey or New York, we have no objection to your putting in a bid on your own account but under no circumstances must you ask me or any other official of the Uvalde Company to assist you in any way in making out your figures, neither will I or any officer of the Uvalde Company ask you for any data—to the end that there must be no collusion of any kind. 10

The stand I take in this matter is that I always put in the lowest figure that I care to take the work at and if any other bidder goes lower than my figure, he is welcome to the job. If that party should turn out to be yourself, there will be no hard feelings on my part, but quite the reverse. 20

Although it is stipulated in the contract that you are to have entire charge of all paving work carried on by the Company, it is now hereby agreed between us in view of the fact that much of your time will be taken up in supervising your own contracts, that I will take over from you the work of looking after the general work of the Company and you are to give your attention to supervising the making and laying of the asphaltting mixtures of our various plants in the United States and Cuba. 30

Yours truly, *R. S. Rohely*
Prest.

TO W. T. S. Crichfield, Esq.,
Jersey City, N. J.

Exhibit P-5 of June 2, 1916

PROPOSAL.

TO THE BOARD OF COMMISSIONERS OF THE CITY OF HOBOKEN.

FOR—The grading, paving & reimproving of Newark Str from Bloomfield Str to Park Ave. & from Willow Ave., west to the city line. Ferry Str from Jefferson Str. west to the city line. 10
Second Str from Washington to Bloomfield Str. Grand Str from 5th to 8th Str. 6th Str. from Clinton to about 100 feet west of Grand Str. 6th Str. from about 100 ft. west of Adams Str. to about 100 feet west of Jefferson Str. Adams Str. from 5th to 6th Str. 5th Str. from Adams Str. to Jefferson Str. and from Washington to Bloomfield Str. & the adjoining side Strs. to the extent necessary for a proper connection with the new work in the City of Hoboken in accordance with the ordinance and plans for said improvements, and as provided for in the Charter and Laws governing the city. 20

WE WILL CONTRACT TO—Execute the above proposed work, according to the advertisement, specifications and plans for the same in the office of the Clerk of the City of Hoboken, for the following price or prices:

30	#1	About 22500 sq. yds. stone paving, including cement grout, sand cushion, & re-dressing the blocks and all work specified, and incidental thereto, for	\$.95 per sq. yd.
	#2	About 3800 cu. yds. concrete,	5.25 " cu. "
	#3	About 4000 " " fill,	.40 " " "
	#4	About 1500 " " excavation,	.50 " " "
	#5	About 7000 lin. ft. curb reset,	.20 " lin. ft.

Exhibit P-5

- #6 About 7000 " " new curb, .97 " " "
 #7 About 58 basins reset, 10.00 " hd.

1. I do declare that I am the only person interested in this proposal, and that no other person than myself has any interest in this proposal, or in the contract proposed to be taken. 10

2. I further declare that this proposal is made without any connection with any other person or persons making proposals for the same work, and is, in all respects, fair and without collusion or fraud.

3. I further declare that no member of the Board of Commissioners, head of department, chief of bureau, deputy thereof or clerk therein, or any other office of the corporation of the city of Hoboken, is directly or indirectly interested therein, or in the supplies or works to which it relates, or in any portion of the profits thereof. 20

4. I further declare that the names of the persons affixed to the consent agreement hereto annexed were written by said persons respectively, and that the said persons are freeholders in the County of Hudson.

May 3rd. 1916.

Lester Fellows Company, 30
 Residence Lester Fellows, Pres.
 221 Varick Str., Jersey City, N. J.

AGREEMENT OF SURETIES ON THE OTHER SIDE.

May 8-1916

Received from Daniel A. Haggerty, certified check deposited with the above bid.

Lester Fellows Co.
 L. F., Pres.

Exhibit P-6 of June 2, 1916

PROPOSAL.

To the Board of Commissioners of the City of Hoboken.

For Grading, paving and reimproving of Newark St. from Bloomfield St. to Park Ave., etc., etc.

10 I will contract to do, all work and furnish all Material & labor according to the advertisement, specifications and plans for the same in the office of the Clerk of the City of Hoboken, for the following price or prices :

22,500 sq. yds. stone paving @ Seventy-nine cents	.79
3800 cu. yds. concrete @ Five dollars & twenty-five	\$ 5.25
1500 cu. yds. excavation @ Sixty cents	.60
4000 cu. yds. filling @ Fifty cents	.50
7000 lin. ft. curb reset @ Thirty-five cents	.35
7000 lin. ft. new curb @ Eighty-five cents	.85
58 Basins reset @ Ten dollars	\$10.00

20 1. I do declare that I am the only person interested in this proposal, and that no other person than myself has any interest in this proposal, or in the contract proposed to be taken.

2. I further declare that this proposal is made without any connection with any other person or persons making proposals for the same work, and is, in all respects, fair and without collusion or fraud.

30 3. I further declare that no member of the Board of Commissioners, head of department, chief of bureau, deputy thereof or clerk therein, or any other office of the corporation of the city of Hoboken, is directly or indirectly interested therein, or in the supplies or works to which it relates, or in any portion of the profits thereof.

4. I further declare that the names of the persons affixed to the consent agreement hereto annexed were written by said persons respectively,

Exhibit P-6. Exhibit P-7.

and that the said persons are freeholders in the County of Hudson.

May 3, 1916.

Curtin Bros.

James Curtin Timothy Curtin

Residence 45 Madison St., Guttenberg, N. J.

10

AGREEMENT OF SURETIES ON THE OTHER SIDE.

Endorsed:

Proposal of Curtin Bros. for the reimprovement of Newark St., and the various other streets in the City of Hoboken with block pavement.

May 3—1916.

Presented, read, received and referred to the Director, Dept. Streets and Public Improvements.

D. A. Haggerty, City Clerk.

20

Exhibit P-7 of June 2, 1916

PROPOSAL.

To the Board of Commissioners of the City of Hoboken.

For Grading, paving and re-improving of Newark Street, from Bloomfield Street to Park Ave., and from Willow Ave., West to the City line, Ferry Street, from Jefferson Street, West to the City Line, Second Street from Washington Street to Bloomfield St., Grand St. from Fifth St. to Eight St., Sixth St. from Clinton to about 100 ft. West Grand St. Sixth St. from about 100 West of Adams St. to about 100 ft. West of Jefferson St. Adams St. from 5th to Sixth Sts., Fifth St. from Adams to Jefferson St. and from Washington St. to Bloomfield St.

40

Exhibit P-7.

We will contract to grade, pave and reimprove said Streets according to the advertisement, specifications and plans for the same in the office of the Clerk of the City of Hoboken, for the following price or prices:

- 10 22,500 sq. yd. pavement @ 90¢ sq. yd. Ninety cents a sq. yd.
 3,800 cu. yds. concrete, 5.04 cu. yd. Five dollars and four cts.
 1,500 cu. yds. excavating .40 cu. yd. Forty cents cubic yd.
 4,000 cu. yds. filling .50 cu. yd. Fifty cents " "
 7,000 lineal ft. curb reset .25 lin. ft. Twenty-five cents lin. ft.
 7,000 " " new curb .90 " " Ninety cents " "
 58 Basin Heads 7.00 each Seven dollars each.

1. I do declare that I am the only person interested in this proposal, and that no other person than myself has any interest in this proposal, or in the contract proposed to be taken.

20 2. I further declare that this proposal is made without any connection with any other person or persons making proposals for the same work, and is, in all respects, fair and without collusion or fraud.

30 3. I further declare that no member of the Board of Commissioners, head of department, chief of bureau, deputy thereof or clerk therein, or any other office of the corporation of the city of Hoboken, is directly or indirectly interested therein, or in the supplies or works to which it relates, or in any portion of the profits thereof.

4. I further declare that the names of the persons affixed to the consent agreement hereto annexed were written by said persons respectively, and that the said persons are freeholders in the County of Hudson.

May 3rd, 1916.

W. A. Connell, M. V. Murtha,
 Residence 210 Monroe St., Hoboken, N. J.

40 AGREEMENT OF SURETIES ON THE OTHER SIDE.

Exhibit P-7. Exhibit P-8.

May 3, 1916.

Received from Daniel A. Haggerty, certified check for \$3,000. deposited with bid for the above improvement.

Michael J. Griffin,

Endorsed:

10

Proposal of W. A. Connell and M. V. Murtha, on the re-improvement of Newark St., and various other streets in the City of Hoboken.

May 3, 1916.

Presented, read, received and referred to the Director, Dept. of Streets and Public Improvements.

D. A. Haggerty,
City Clerk.

20

Exhibit P-8 of June 2, 1916

PROPOSAL.

To the Board of Commissioners of the City of Hoboken.

30

FOR the grading, paving and re-improving Newark St., Ferry St., Grand St., Sixth St., Adam St., and Fifth St.

I WILL CONTRACT to furnish all materials and labor according to the advertisement, specifications and plans for the same in the office of the Clerk of the City of Hoboken, for the following price or prices:

40

Exhibit P-8.

Stone paving @ Eighty-two cents per sq. yd.	(82)
Cements @ Five dollars per cu. yd.	(5.00)
Excavation @ Forty-five cents per cu. yd.	(45)
Filling @ Fifty cents per cu. yd.	(50)
Curb reset @ Thirty-two cents per lin. ft.	(32)
New Curb @ Ninety-three cents per lin. ft.	(93)
Corner basins reset @ Ten dollars	(10.00)
Manholes reset @ Five dollars each	(5.00)

10 1. I do declare that I am the only person interested in this proposal, and that no other person than myself has any interest in this proposal, or in the contract proposed to be taken.

2. I further declare that this proposal is made without any connection with any other person or persons making proposals for the same work, and is, in all respects, fair and without collusion or fraud.

20 3. I further declare that no member of the Board of Commissioners, head of department, chief of bureau, deputy thereof or clerk therein, or any other office of the corporation of the city of Hoboken, is directly or indirectly interested therein, or in the supplies or works to which it relates, or in any portion of the profits thereof.

30 4. I further declare that the names of the persons affixed to the consent agreement hereto annexed were written by said persons respectively, and that the said persons are freeholders in the County of Hudson.

May 3rd, 1916.

Thomas Cavanagh,
Residence 211 Highwood Ave., Weehawken, N. J.

AGREEMENT OF SURETIES ON THE OTHER SIDE.

Received check submitted with this proposal.

Thos. Cavanagh.

Exhibit P-8.

Endorsed:

Proposal of Thomas Cavanagh on the re-improvement of Newark Street and various other streets in the City of Hoboken.

May 3—1916

Presented, read, received and referred to the Director, Dept. Streets and Public Improvements. 10

D. A. Haggerty, City Clerk.

May 17 1916

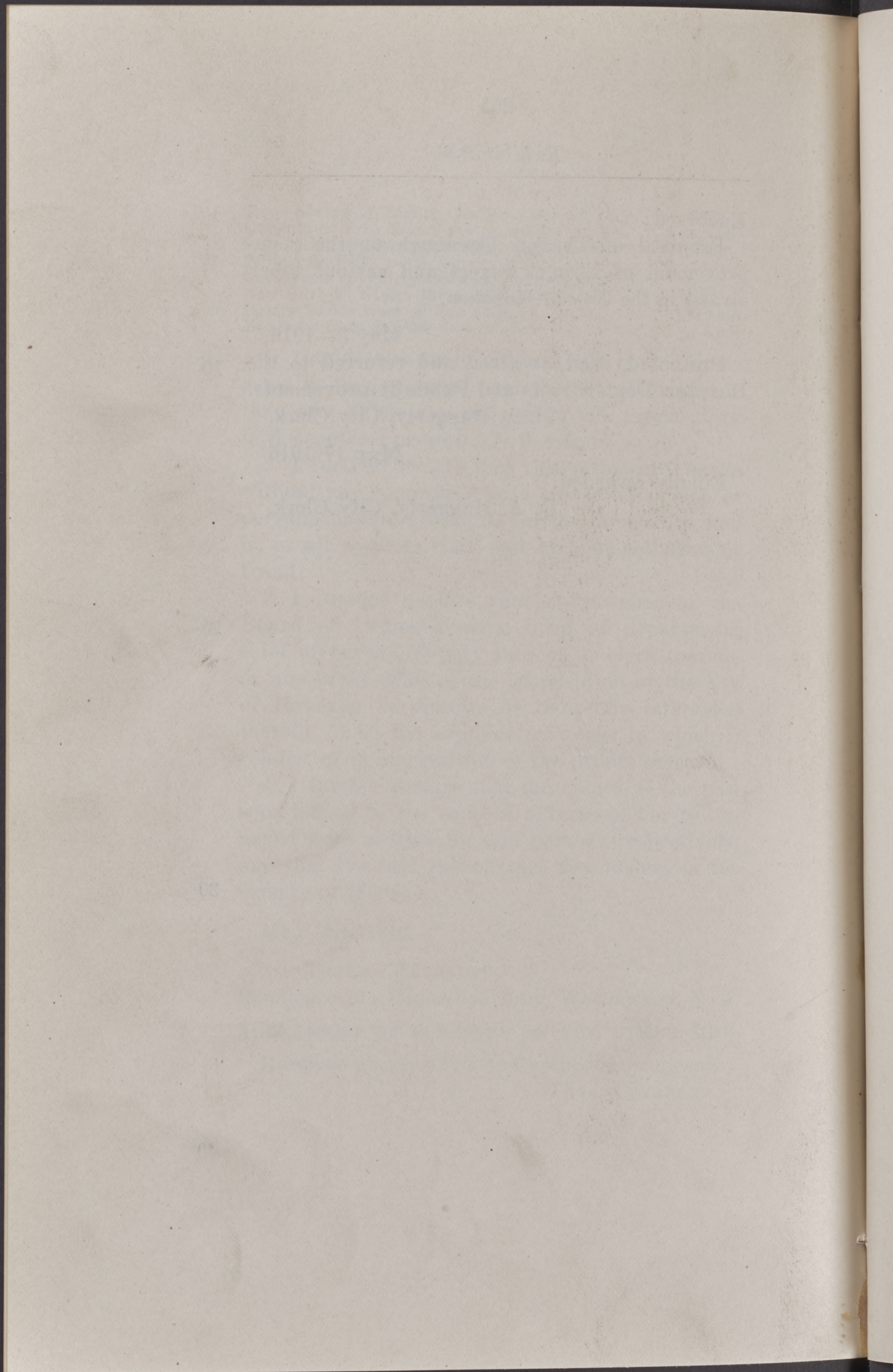
Finally awarded.

D. A. Haggerty, City Clerk.

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Opinion.

(Filed June 30, 1916).

NEW JERSEY SUPREME COURT.

June Term 1916.

<p style="text-align: center;">MAX MILLER,</p> <p style="text-align: center;">vs.</p> <p>MAYOR AND COUNCIL OF THE CITY OF HOBOKEN, and Others.</p>	}	<p>On</p> <p>Certiorari.</p>	10
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Argued June 24th, 1916; Decided June —, 1916.
 Before Justices Swayze, Minturn and Kalisch.
 Per Curiam:

We think the specifications furnished a common standard for bidding. We must assume that the power reserved for the engineer will be fairly exercised and we see no reason to think it is not reserved for the purpose of enabling the engineer to save the city's money by avoiding such changes of grade as might lead to actions for damages. 20

We think the contract contemplated is a single contract for repair work and is not to be regarded as so many separate and distinct contracts for each street. 30

Assuming that the contention of the Prosecutor is correct and that Crichfield and the Uvalde Company are identical in interest, we would not be justified in setting aside the contract. Upon that assumption, there was but one bidder, and the Commissioners might have been justified in rejecting both bids; but they might also in the exercise of their discretion have been justified in

Opinion.

awarding the contract. It cannot be said as a matter of law that it is improper to award a contract when there is only one bid.

There must be judgment for the defendants.

10 New Jersey Supreme Court. June Term, 1916.
Max Miller vs. Mayor and Council of the City of
Hoboken and Others. Per Curiam. Filed June
30, 1916.

WM. C. GEBHARDT,
Clerk.

Rule for Affirmance.

(Filed July 3, 1916).

20

NEW JERSEY SUPREME COURT.

MAX MILLER,
Prosecutor,

vs.

30 MAYOR AND COUNCIL OF THE CITY
OF HOBOKEN, DANIEL A. HAG-
GERTY, Clerk, and WILLIAM T.
S. CRICHFIELD,
Defendants.

On
Certiorari.
Rule for
Affirmance.

40 The Court having inspected the resolution
adopted by the Board of Commissioners of the
City of Hoboken on the third day of May, 1916,
and finally passed and adopted by said Board of
Commissioners on the seventeenth day of May,

Rule for Affirmance.

1916, awarding a contract for the grading and paving with asphalt on a concrete foundation of Madison Street, and other streets therein named, and all proceedings touching and concerning the same, as contained in the return to the writ of certiorari issued in this cause, the reason for setting aside the said resolution, the depositions of witnesses and exhibits, and the arguments and briefs of counsel for the respective parties, and having duly considered the same; 10

It is, on this thirtieth day of June, 1916, Ordered, that the aforesaid resolution and all proceedings thereunder, be and they are hereby affirmed, with costs.

Entered July 3, 1916. 20

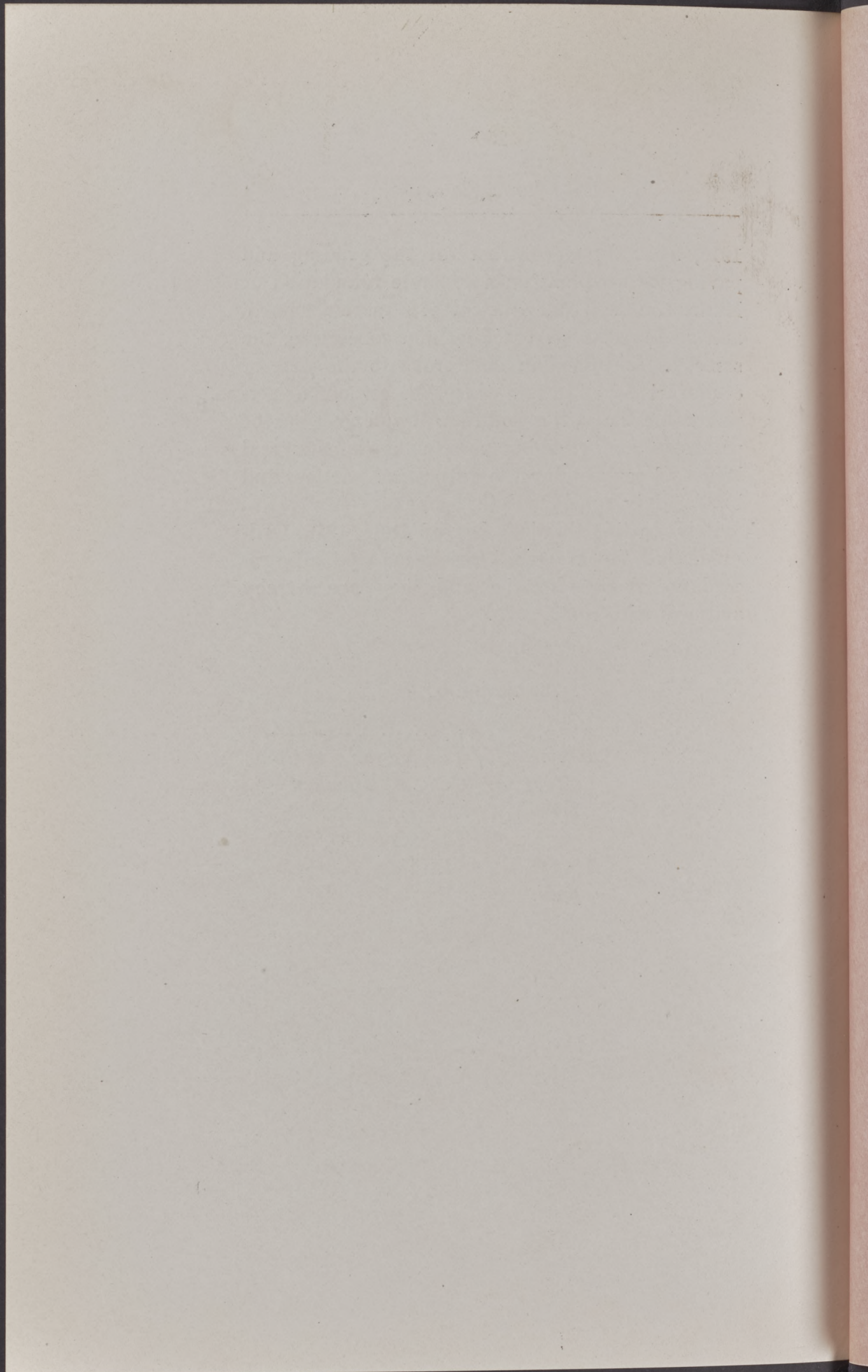
On motion of

JOHN J. FALLON,
Attorney for The Mayor and Council of the City of Hoboken and Daniel A. Haggerty, Clerk.

COLLINS & CORBIN,
Attorneys for William T. S. Crichfield.

30

40



BOND

