

*DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS*

1.00 ABBREVIATIONS

- 1.00.01 **AASHO**
The American Association of State Highway Officials

- 1.00.02 **AGC**
The Associated General Contractor of America, Inc.

- 1.00.03 **ARBA**
American Road Builders Association

- 1.00.04 **AREA**
American Railway Engineering Association

- 1.00.05 **ASA**
American Standards Association, Inc.

- 1.00.05 **ASTM**
American Society for Testing Materials

- 1.00.06 **AWWA**
American Water Works Association

- 1.00.07 **MDOT**
Michigan Department of Transportation

*DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS*

1.01 DEFINITIONS

1.01.01 American Lumber Standards

Rules for the grading classification and inspection of softwood timber as adopted at a conference of the lumber industry at Washington, D.C., May 1, 1925 with the cooperation of the U.S. Departments of Commerce and Agriculture, with subsequent revisions.

1.01.02 Angle of Crossing

The acute angle between the intersection centerlines of the street and the stream, highway, street or railway crossed.

1.01.03 Authorization

The written approval by authority of the Engineer or his duly authorized representative on regular forms, or changes in or extras to plans, or changes in the quantity of work.

1.01.04 Bidder

The individual, partnership or corporation formally submitting a proposal for the work contemplated, or any portion thereof, acting directly or through an authorized representative.

1.01.05 Bridge

A structure with a total clear span of more than 20 feet measured under bridge copings along the centerline of the street carrying traffic over a stream, watercourse or opening.

1.01.06 City

The City of Midland, Michigan.

1.01.07 Contractor

The individual, partnership or corporation undertaking the execution of the work under the terms of the contract and acting directly or through agents or employees.

1.01.08 Contract and Included Documents

The agreement covering the performance of the work as provided for in the specifications. The Contract includes the Agreement, Performance Bond, Payment Bond, the Proposal, the Advertisement, Bid Forms, Special Provisions, Specifications, General and detailed plans, and all Supplemental Agreements entered into pertaining to the work and materials.

1.01.09 Culvert

A structure not classified as a bridge, carrying traffic over a stream, water course or opening.

1.01.10 Engineer

The City Engineer of the City of Midland, acting either directly or through his duly authorized representative.

1.01.11 Field Observer

The authorized representative of the Engineer, assigned to make a detailed inspection of all or any portion of the work or the materials.

*DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS*

DEFINITIONS (Cont'd.)

1.01.12 Laboratory

The testing laboratory which may be designated by the Engineer to inspect and determine the suitability of materials.

1.01.13 MDOT Specifications

The current edition of the "Standard Specifications for Highway Construction" as prepared and published by the Michigan Department of Transportation.

1.01.14 Notice

In respect to the giving of any notice, such notice shall be deemed to have been given; as to the Owner, when written notice shall be delivered to the Engineer of the owner, or shall have been placed in the United States mail addressed to the chief executive officer of the Owner at the place where proposals for the contract were opened; as to the contractor, when a written notice shall be delivered to the chief representative of the Contractor at the site of the project or shall have been placed in the United States mail addressed to the Contractor at the place stated in the papers prepared by him to accompany his proposal as the address of his permanent place of business; as to the Surety of the performance bond when a written notice shall be placed in the United States mail addressed to the Surety at the home office of said Surety or to its agent who executed said bond on behalf of said Surety.

1.01.15 Outlawn Area

That portion of the right-of-way between the back of the curb and the property line.

1.01.16 Owner

The City of Midland, Michigan.

1.01.17 Plans

Approved drawings or reproductions of drawings pertaining to the construction or details of the work covered by the Contract.

1.01.18 Performance Bond

The statutory bond, executed by the Contractor and his surety, guaranteeing performance of the contract and payment of all lawful indebtedness pertaining thereto.

1.01.19 Progress Clause

That part of the Contract pertaining to the order of proceeding with the various items of work to be done and the rate of progress for completing said items of work.

1.01.20 Proposal Guaranty

The security designated in the proposal and furnished by the Bidder as a guarantee of good faith to enter into a contract for the work proposed.

1.01.21 Proposal

The written offer of the bidder, on the forms provided, for the work proposed.

*DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS*

DEFINITIONS (Cont'd.)

1.01.22 Regional Lumber Manufacturers Association

Trade associations of lumber manufacturers organized for the promotion of knowledge and use of lumber which they manufacture.

1.01.23 Right-of-Way

The entire area reserved for the construction and maintenance of the street and the improvement of the outlawn area.

1.01.24 Specifications

All requirements and provisions contained in this document and all written or printed agreements and instructions pertaining to the method and manner of performing the work or to the quantities and quality of the material to be furnished under the Contract.

1.01.25 Street Construction Area

That portion of the right-of-way required for construction, limited by the outside edge of the excavation for sand backfill.

1.01.26 Street Width

That portion of the street construction area between the faces of the curbs or the width to be paved when no curb and gutter is specified.

1.01.27 Sub-Contractor

The individual, partnership or corporation undertaking the execution of a part of the work under the terms of the Contract, by virtue of an agreement with the Contractor.

1.01.28 Sub-grade

That portion of the street construction area upon which the base course or the surface course, including curb and gutter are to be placed. In reference to grading operations it is that portion of the street construction area upon which the sub-base is to be placed when required.

1.01.29 Waiver of Lien

Partial Unconditional: This type of lien waiver operates as a waiver of liens to a certain date and for a certain amount. This waiver is used for the partial payment provision, if applicable, under sections 1.09.07.

Full Unconditional: This type of lien waiver operates as a complete waiver for all amounts due or payable under the contract.

DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS

1.02 BIDDING REQUIREMENTS AND CONDITIONS

1.02.01 Competency of Bidders

It is the intention of the City to award this contract to a bidder competent to perform and complete all work in a satisfactory manner.

Following the opening of bids the Engineer may require that each bidder under consideration submit a statement of his experience and financial status. Should such a statement be required, the bidder shall submit notarized statements pertaining to his financial resources, adequacy of plant and equipment, organization, prior experience, and other facts bearing on his qualification to enter into contract with and perform work for the city.

1.02.02 Contents of Proposal Form

Bidders will be furnished with proposal forms which will state the location and description of the work contemplated the approximate quantities of the work to be performed and materials to be furnished, the amount of the proposal guaranty, and the date, time and place of filing and of opening proposals. The form will also include any special provisions or requirements which vary from or are not contained in the standard specifications or on the plans.

1.02.03 Interpretation of quantities in Bid Schedule

The quantities appearing on the bid schedule are approximate only and are prepared for the comparison of bids. Payment to the Contractor will be made only for the actual quantities of work performed and accepted or materials furnished in accordance with the contract. The scheduled quantities of work to be done and materials to be furnished may each be increased, decreased, or omitted as hereinafter provided.

1.02.04 Examination of Plans, Specifications, and Site of the Work

Bidders shall carefully examine the proposal forms, plans and specifications and inspect the site of the proposed work in order to satisfy themselves, by examination, and as to all local conditions affecting the contract and as to the detailed requirements of construction. The submission of a bid shall be considered prima facie evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the plans, specifications, supplemental specifications, special provisions and contract. They shall also familiarize themselves with the requirements of all Federal, State and Local laws which may directly or indirectly affect the prosecution of the work and the furnishing of the necessary material

1.02.05 Preparation of Proposal

The proposal shall be legibly prepared with ink or typed on the form provided. The Bidder shall properly fill in all blank spaces provided in the proposal form, except for alternate items in which case the Bidder is not required to bid on more than one alternate for each item. The Bidder shall specify a unit price for each of the separate items listed except, where a lump sum bid is called for. Lump sum items shall be entered only in the "Amounts" column of the itemized bid sheet. The Bidder shall show the products of the respected quantities and unit prices in the column provided for that purpose and the sum for which he will perform the proposed work. If a unit price or a lump sum bid already entered by the Bidder on the proposal form is to be altered, it shall be crossed out with ink, the new unit price or lump sum bid entered above or below it and initialed by the Bidder, also with ink.

The City reserves the right to insert unit prices in the proposal for certain items in which case the inserted unit price shall become the contract unit price. The Bidder shall submit a list of subcontractors and value of work to be performed by each in excess of \$5,000.00 on the form provided in the bid documents.

DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS

1.02 BIDDING REQUIREMENTS AND CONDITIONS (Cont'd.)

1.02.06 Irregular Proposals

Proposals will be considered irregular and may be rejected for the following reasons:

- a. If the proposal is on a form other than that furnished by the City; or if the form is altered or any part thereof is detached.
- b. If there are unauthorized additions, conditional or alternate bids, or irregularities of any kind which may tend to make the proposal incomplete, indefinite or ambiguous as to its meaning.
- c. If the Bidder adds any provisions reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.
- d. If the proposal does not contain a unit price for each pay item listed.
- e. If the proposal does not contain a complete inventory of hazardous materials to be used on the jobsite.

1.02.07 Proposal Guaranty

No proposal will be considered unless accompanied by a certified or cashier's check payable at sight to the City Treasurer, on an open solvent bank, in an amount not less than 5% of the total bid, or a bid Bond from a reliable bonding company to the City Treasurer in an amount not less than 5% of the total bid as a guaranty that he will enter into contract. All checks or Bid Bonds except those on the three lowest Bidders will be returned as soon as the bids have been opened and tabulated. All checks or Bid Bonds of the three lowest Bidders will be held until the contract documents have been duly signed after which these remaining checks or Bid Bonds will be returned to the respective Bidders.

1.02.08 Delivery of Proposal

The proposal shall be submitted in an envelope, which shall be sealed and plainly marked with the same complete designation shown on the title sheet of the proposal and with the name and address of the Bidder on the outside of the envelope. When sent by mail the sealed proposal, marked as indicated above, shall be enclosed in an additional envelope. All proposals must be received by the City Clerk prior to the time and at the place specified in the advertisement. More than one proposal for the same project from an individual, partnership, or corporation will not be considered.

1.02.09 Withdrawal or Revision of Proposal

A Bidder will be permitted to withdraw his proposal unopened after it has been deposited, if the request, made in person or in writing, is received prior to the time set for opening proposals.

A Bidder will be permitted to revise his proposal after it has been deposited, if he appears in person to make a revision prior to the time set for opening proposals.

1.02.10 Public Opening of Proposals

Proposals will be opened publicly and read aloud at the time and place specified in the advertisement. Only the total amount of each bid will be read. After checking all bids, a tabulation will be prepared of all bids and the same shall be mailed to all Bidders.

*DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS*

1.03 AWARD AND EXECUTION OF CONTRACT

1.03.01 Consideration of Proposals

The proposals received will be compared on the basis of the summation of the products of the quantities of items listed and the unit prices bid. In case of discrepancy between the total shown in the proposal and that obtained by adding the products of the quantities of items and the unit prices, the unit prices as written in the proposal shall govern, and any errors found in said computations will be corrected.

1.03.02 Progress Clauses

In addition to any progress clause incorporated in the proposal, the successful Bidder will be required, prior to the return of the proposal guaranty and award of the contract, to submit an outline of his proposed order of work and to indicate the dates for completion of the major items of the work. This outline, when approved by the Engineer, will become part of the contract.

1.03.03 Execution of Contract

Acceptance of the proposal of the successful Bidder, and the rejection of the other proposals, will be made by the City as soon as practicable. The City will transmit to the successful Bidder, at the address given on his proposal, contract and bond form, which shall be fully executed and returned to the City within fifteen(15) days from the date of such transmission. In the event the contract is not executed by the City within forty (40) days after the opening of proposals, the successful Bidder shall have the right to withdraw his bid without penalty.

1.03.04 Return of Proposal Guaranty

The proposal guaranties of all except the three lowest Bidders will be returned promptly. The City will hold the proposal guaranty of the three lowest Bidders until the contract has been executed.

1.03.05 Requirements of Performance and Payment Bonds

The Contractor shall furnish a surety bond in an amount at least equal to 100% of the contract price a security for the faithful performance of the contract. The Contractor shall also furnish a surety bond in an amount at least equal to 100% of the contract price as security for payment of all persons performing labor and furnishing materials in connection with this contract. Surety bonds shall be through a firm on the US Treasury's Circular 570 list of approved providers.

1.03.06 Failure to Execute Contract

Failure on the part of the successful Bidder to execute a contract and file satisfactory bonds, as provided herein, may be considered cause for the annulment of the award and the forfeiture of the proposal guaranty to the City.

*DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS*

1.04 SCOPE OF THE WORK

- 1.04.01** The intent of the plans and specifications is to provide for the completion of the work in every detail, as shown thereon and as described herein. The Contractor shall furnish all labor, materials, equipment, tools, transportation and necessary supplies, and shall perform all operations required to complete the work in accordance with the specifications, and the lines and grades provided for on the plans, or by authorization.

The plans show the location of the project, profiles, approximate alignment of known underground pipes and structures and other information incidental to the construction of the project. However, some of the locations of underground pipes and structures may not be exact and the City does not assume responsibility for location, omission of pipe lines, or underground structures. The Contractor shall be responsible for obtaining full information on the location of all underground structures and shall proceed as specified under "Protection and Restoration of Property, 1.07.07".

1.04.02 Special Work

Proposed construction or requirements not covered by these specifications will be covered by supplemental specifications and special provisions in the proposal or on the plans.

1.04.03 Increased or Decreased Quantities

The City reserves and shall have the right under the contract to make such changes, from time to time, in the plans or in the character of the work and the terminus of the project, as may be necessary or desirable to insure the completion of the work in the most satisfactory manner.

Unless otherwise provided in these specifications, proposal or plans, adjustments in unit prices for increased or decreased quantities shall be governed by the following:

If the quantity of any item of work required to complete the project varies from the original estimate of said item of work by 20% or less, the payment for the quantity of said item shall be made at the contract unit price.

Should the quantity of any major item of work be increased more than 20% above the original quantity, the Contractor shall proceed with such additional work until a written agreement has been executed adjusting the unit price for the amount of work over the original contract quantity. Adjustments in the unit price for any major item of work, as provided above will not be made if the amount of the increase is less than five hundred dollars (\$500.00).

Should the quantity of any major item of work be decreased more than 20% from the original quantity, compensation will be made upon completion of the item involved based on the Contractor's actual extra cost by reason of such decrease below the original contract quantity. Such adjustment in unit price shall be made on the basis of labor, material and equipment cost plus a proportionate amount of overhead and plant charges, but in no case shall the product of the adjusted unit price and the number of units of work performed exceed the product of the contract unit price and 80% of the contract quantity. When the final contract cost, the sum of the regular and extra estimate is greater than the original contract price, overhead and plant charges will not be considered in arriving at the adjusted unit price. Adjustment in the unit price for any major item of work, as provided above, will not be made if the amount of decrease is less than five hundred dollars (\$500.00).

*DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS*

1.04 SCOPE OF THE WORK (Cont'd.)

1.04.03 Increased or Decreased Quantities (Cont'd.)

When the total cost of any item as determined by multiplying the proposal quantity and contract price is less than 5% of the total contract price it shall be considered a minor item. Items appearing as minor items in the original proposal shall be construed as becoming major items when increased to the extent that total cost of the item is equal to or greater than 5% of the total original contract cost.

A minor item of work will be paid for at the contract unit price for the quantity required to complete the work except when the quantity is increased to the extent that the minor item becomes a major item. Unit price adjustments shall then be in accordance with the specifications for adjustment of major items as described herein.

In case a satisfactory adjustment in price can not be reached for any such item, the City reserves the right to terminate the contract as it applies to the items in question and make such arrangements as the City Council may deem necessary to complete the work.

1.04.04 Extra Work

In connection with the work covered by the contract the City may, upon proper action by its governing body, at any time during the progress of the work, order other work or use of materials incidental thereto. All such work and materials which do not appear in the proposal and contract as a specific item, accompanied by a unit price, and are not included under the price bid for other items in the contract shall be designated ***Extra Work***. The Contractor shall perform this work whenever it is deemed necessary or desirable by the City to complete fully the project as contemplated, and such work shall be done in accordance with the intent of the specifications under the direction of the Engineer.

Prior to starting any extra work the Engineer shall furnish the Contractor a proposal, on a regulation form, stating the location, kind and estimated quantity of the extra work to be done. The Contractor shall indicate on this proposal the compensation (unit price or lump sum) for which he will perform the extra work and this proposal shall be submitted to the City for approval. The City may approve the proposal, in which case it shall constitute an authorization for doing the work and shall become part of the contract. If the City considers the unit price or lump sum price excessive, the City may disapprove the proposal and order the work done by force account.

1.04.05 Alteration in Character of the Work

Should the Contractor encounter or the Engineer discover, during the progress of the work physical conditions at the site differing materially from those shown on the plans, or unknown physical, conditions of a nature differing materially from those generally recognized as work of the character provided for in the contract, the Contractor, or as the case may be, the Engineer shall be promptly notified in writing before work progresses. The Engineer will promptly investigate the conditions and if he finds that they materially differ and cause an increase or decrease in the cost or the time required for performance of this contract, an equitable adjustment will be authorized. Unless such alterations and increases or decreases materially change the character of the work or the cost thereof, the altered work will be paid for at the contract unit prices. If, however, the character of the work or the unit cost thereof is materially changed, an allowance will be made on such basis as is agreed to in advance of the performance of the work. In case no such basis is agreed upon, the work shall proceed as specified under control of the work, 1.05.12. Any adjustments in the contract time because of such changes or alteration will be made as specified under prosecution and progress, 1.08.07.

*DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS*

1.04 SCOPE OF THE WORK (Cont'd.)

1.04.06 Removal, Relocation and Disposal of Structures and Obstructions

a. Structures

Unless otherwise provided, the Contractor shall remove at his expense any existing structure or a part of a structure which is to be replaced or rendered useless by new construction. Salvage material derived there from shall be disposed of by him except as otherwise provided in the specifications, on the plans or by authorization.

b. Utility Poles

All power, light, telephone and other service poles and all appurtenant structures that are located within the limits of any necessary excavation made for the contract will be moved and relocated at the instance of the City at no expense to the Contractor. For any pole or structure located outside of the above limits which the Contractor wishes to have moved to facilitate the use of his equipment or progress of the work, the Contractor shall make the necessary arrangements with the owner of the pole to have it moved and the Contractor shall pay all costs involved thereby.

In the event that there is any question as to whether or not any pole or structure is located within the limits of the excavation as defined heretofore, the Engineer shall decide and his decision shall be binding upon the City and upon the Contractor.

c. Underground Utilities

Any gas or water main, power, light, telephone or telegraph conduit or service connection thereto or any other subsurface structure that crosses or passes through the space occupied by any of the completed structures that are a part of this Contract, shall be moved, relocated and reconnected by the Contractor, or, at his request, by the owner of such service connection or structure. The Contractor shall be reimbursed by the City for his work and the amount to be paid by the City shall be as specified under payment for Extra Work 1.09.04. Wherever the replacement of a utility is detailed on the drawings as a component part of any structure, then the Contractor will receive no extra reimbursement for the work involved. For any of the above enumerated underground utilities or other structures that are located outside of the space occupied by the complete structures of this contract and which the Contractor wishes to have moved to facilitate the use of his equipment or progress of the work, the Contractor shall make the necessary arrangements with the Owner of such structure to have it moved and the Contractor shall pay any and all costs involved thereby.

In the event that there is any question as to whether any of the above enumerated underground utilities or other structures crosses or passes through the space occupied by the completed structures of this contract, the Engineer shall decide and his decision shall be binding upon the City and upon the Contractor.

d. Trees and Shrubbery

No trees or shrubbery of any kind shall be removed or destroyed by the Contractor without the written permission of the Engineer. The Contractor shall be fully responsible for any damages caused by his work to adjoining trees and shrubs. Ample precautions shall be taken by the Contractor to protect such trees and shrubs as are to remain in place by surrounding them with fences or other protection before construction work begins. Shrubbery that has to be removed shall be preserved and replaced in a manner acceptable to the Engineer.

*DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS*

1.04 SCOPE OF THE WORK (Cont'd.)

1.04.07 Use of Materials Found on the Work

Unless otherwise provided in the plans and specifications, and when approved by the Engineer, the Contractor may use in the construction of the work any suitable natural materials found in the excavation, but, if necessary, shall replace such materials so removed with approved materials at his own expense.

1.04.08 Final - Cleaning Up

Upon completion and before final acceptance of the work, the Contractor shall remove all false work, excavated or useless materials, rubbish and temporary buildings, bridges and approaches replace or renew any fences damaged and restore in an acceptable manner all property, both public and private, which may have been used or damaged during the prosecution of the work. All excavated material or false work placed in stream channels during construction shall be removed. The Contractor shall remove from the right-of-way all machinery and equipment and presentable condition satisfactory to the Engineer.

DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS

1.05 CONTROL OF THE WORK

1.05.01 Authority of Engineer

The Engineer shall decide all questions which may arise as to the quality and acceptability of materials furnished and work performed, as to the manner of performance and rate of progress of the work; all questions which may arise as to the interpretation of the plans and specifications; and all questions as to the satisfactory and acceptable fulfillment of the terms of the contract.

1.05.02 Plans and Working Drawings

Plans showing such details as are necessary to give a comprehensive idea of the construction contemplated will be furnished by the City. The Contractor shall submit to the Engineer for approval such shop plans and working drawings not furnished by the City, as may be required for any part of the finished structure, and he may be required to submit for the Engineer's information working drawings for any falsework, forms or other incidental details required in the construction and not part of the finished structure. The Contractor shall be fully responsible for the correctness of working drawings. Dimensions on the contract drawings which are omitted or needed to complete the work will, when available, be furnished by the Engineer. The Contractor shall be responsible for all scaled dimensions on the contract drawings.

The Contractor shall furnish the Engineer with such blueprint copies of the working drawings as may be required for approval, and upon completion of the work the City shall be furnished with satisfactory cloth reproductions.

1.05.03 Deviations from the Plans

Deviations from the plans for the work or the approved working drawings of structures will not be permitted without the written order of the Engineer.

1.05.04 Conformity with Plans and Specifications

All work performed and all materials furnished shall be in reasonably close conformity with the lines, grades, cross-sections dimensions, material requirements, including tolerances, shown on the plans or indicated on the specifications.

In the event the Engineer finds the materials or the finished product, in which the materials are used, not in reasonably close conformity with the plans and specifications but that reasonably acceptable work has been produced, he shall then make a determination if the work shall be accepted and remain in place. If the work is to remain in place, the Engineer will document the basis of acceptance by contract modification which will provide for an appropriate adjustment in the contract price for such work or materials as he deems necessary to conform to his determination based on Engineering judgment.

In the event the Engineer finds the materials, or the finished product in which the materials are used, or the work performed, are not in reasonably close conformity with the plans and unsatisfactory product, the work or materials shall be removed and replaced or otherwise corrected by and at the expense of the contractor.

1.05.05 Coordination of Specifications and Plans

In case of discrepancy, figured dimensions shall govern over scaled dimensions, plans shall govern over Standard Specifications, Supplemental Specifications shall govern over Standard Specifications and Plans, and special provisions shall govern over Supplemental Specifications. The Contractor shall not take advantage of any apparent error or omission in the plans and specifications, but the Engineer shall be permitted to make such corrections and interpretations as may be deemed necessary for the fulfillment of the intent of the plans and specifications.

*DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS*

1.05 CONTROL OF THE WORK (Cont'd.)

1.05.06 Cooperation by Contractor

The Contractor shall conduct his operations so as to interfere as little as possible with those of other contractors, utilities, or any public authority on or near the work as shown on the plans or in the proposal. The City reserves the right to perform other work by contract or otherwise, and to permit public utility companies and others to do work on or near the project during progress of the work. The Contractor shall conduct his work and cooperate with such other parties so as to cause as little interference as possible with their operations and as the Engineer may direct. Claims for delay or inconvenience due to operations of such other parties, or work indicated or shown on the plans or in the proposal, will not be considered.

The Contractor shall, at all times during his absence from the work, have a competent Superintendent or Foreman, as his agent on the work, who thoroughly understands the plans and specifications, and who shall receive instructions from the Engineer. The contractor shall furnish each sub-contractor, Superintendent and Foreman with a copy of that part of the plans and specifications pertaining to the work he is directing. These plans and specifications shall be kept on the work site at all times.

1.05.07 Construction Stakes

Unless otherwise noted in the special provisions, the general location, alignment, elevation and grade of the work will be determined by the Engineer who will set such stakes as are necessary to properly mark these elements. The contractor shall assume full responsibility for detailed dimensions and elevations measured from the lines, grades, and elevations so established.

The Engineer may require the Contractor, at the Contractor's expense to provide such masts, scaffolds, batter boards, straight-edges, templates or other devices as may be necessary to facilitate laying out, inspecting and constructing the work.

The Contractor shall exercise proper care in the preservation of all stakes set for his use and for the use of the Engineer, and if such stakes are injured, lost, or removed by the Contractor's operations, the cost of resetting may be charged to the Contractor.

If it so stated in the special provisions that it is the intent of the City that the Contractor be responsible for determining location, alignment, elevation and grade of the work, then the Contractor shall set his own stakes. In such case the Engineer will initially establish the centerlines and benchmarks. Maintaining bench marks and centerlines will be the Contractor's responsibility.

1.05.09 Authority and Duties of Field Observers

Field Observers may be appointed and directed to inspect all materials used and all work done. The inspection may extend to all parts of the work and to the preparation or manufacture of the materials for use in the work. The Field Observers will not be authorized to revoke, alter, enlarge or relax any of the provisions of these specifications nor to change the plans in any particular. The Field Observer on the work will inform the Engineer as to the progress of the work, the manner in which it is being done and the quality of the materials being used. He will also call to the attention of the Contractor any failure to follow the plans and specification that he may observe. In case of any dispute arising between the Contractor and the Field Observer as to the materials furnished or the manner of performing the work, the Field Observer shall have the authority to reject materials or suspend the work until the question at issue can be referred to and be decided by the Engineer. In no instance shall any action or omission on the part of the Field Observer relieve the Contractor of the responsibility of completing the work in accordance with the plans and specifications.

*DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS*

1.05 CONTROL OF THE WORK (Cont'd.)

1.05.10 Inspection

The Engineer and his representatives shall be allowed access to all parts of the work at all times and shall be furnished such information and assistance by the Contractor as may be required to make a complete and detailed inspection. Such inspection may include mill, plant or shop inspection of materials and workmanship.

Scales and weighting equipment may be inspected and checked at any time by the City. Claims by the Contractor for delays or inconvenience due to these operations will not be considered. The Field Observer will conduct his work so as to cause as little interference as possible with the Contractor's operations.

1.05.11 Removal of Defective and Unauthorized Work

Work done without lines and grades being given, work done beyond lines shown on the plans or as given, work done without required inspection, except as herein provided, or any extra work done without authority will be considered unauthorized and will not be paid for under the provisions of the contract. Work so done may be ordered removed or replaced at the Contractor's expense. All work which has been rejected or condemned shall be remedied, or, if necessary, removed and replaced in an acceptable manner by the Contractor at his expense.

1.05.12 Disputed Claims for Extra Compensation

In case the Contractor deems extra compensation is due him for work or materials not clearly covered in the contract or not ordered by the City as an extra, the Contractor shall notify the Engineer in writing of his intention to make claim for such extra compensation before he begins the work on which he bases the claim and shall afford the Engineer every facility for keeping actual cost of the work. Failure on the part of the Contractor to give such notification or to afford the Engineer proper facilities for keeping strict account of actual cost will constitute a waiver of the claim for such extra compensation. The filing of such notice by the Contractor and the keeping of the cost by the Engineer shall not in any way be construed to establish validity of the claim. When the work has been completed, the Contractor shall immediately file his claim for extra compensation with the Engineer, who will present it to the City Council for consideration.

1.05.13 Protection Against Accidents

The Contractor shall comply with all Federal, State, and Local laws and regulations governing the furnishing and use of all safeguards, safety devices, and protective equipment. He shall also take any other needed actions on his own responsibility or as directed by the Engineer as reasonably necessary to protect the life and health of employees on the job, the safety of the public, and to protect property during the construction of the project.

1.05.14 Water Supply and Use of Hydrants

The Contractor will be allowed the use of City Water for contract purposes at a lump sum charge of fifty dollars (\$50.00), but only so long as he complies with the following regulations:

- a. Lump sum charge to be paid to City Treasurer before use of any fire hydrant will be allowed.
- b. Contractor must obtain written permission from the Field Engineer before using any hydrant.
- c. At any time a hydrant is opened, it shall be opened completely.

*DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS*

CONTROL OF THE WORK (Cont'd.)

1.05.14 Water Supply and Use of Hydrants (Cont'd.)

- d. If the Contractor does not wish a full flow of water, he shall install a fitting with a globe valve to regulate the flow. This fitting shall remain on the hydrant at only such times as water is being used. When the Contractor leaves the street he shall remove the fitting and replace the regular hydrant cap, even if only overnight.
- e. When replacing a hydrant cap, the cap should be turned on by hand firmly. A wrench should not be used in replacing the cap.
- f. Only standard hydrant wrenches shall be used to open a hydrant. This prohibits the use of adjustable, monkey, pipe, open-end, and standard bow wrenches.
- g. For the first infraction of these rules, the Contractor shall be prohibited the further use of City water, without any recourse.
- h. Also any damages which may occur to any hydrant as a result of the Contractor's activities shall be entirely charged to the Contractor by the City.
- i. No Contractor may expect or obtain from the City any fire hose to be used in connection with the construction work. This equipment must be furnished by himself.
- j. Any fire hydrant that is used for any extended period of time must be reported as such to the Fire Chief so that an inspection of its condition can periodically be made.
- k. If in the opinion of the City Engineer, the Contractor allows excessive waste of water the City reserves the right to make an additional charge, over and above the amount stipulated to compensate for such waste.

1.05.15 Final Inspection

The Engineer shall make inspection of all work included in the contract, or such portions there of eligible for acceptance, as soon as possible after notification by the Contractor that the work is completed or after the Engineer's records show that the work is completed.

*DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS*

1.06 CONTROL OF MATERIALS

1.06.01 Source of Supply and Quality

Only materials conforming to requirements of the specifications and approved by the Engineer prior to use shall be used in the work. Immediately upon award of the contract, the Contractor on any work will be required to furnish a complete written statement of the origin, composition and manufacture of all materials required in the work. The Contractor will not be permitted to change the source of supply of materials without preliminary samples of the materials intended for use. If it is further agreed that all materials and supplies used in the construction work shall be purchased through dealers in the City insofar as practicable.

If it is found that a source of supply does not furnish a uniform product, or if for any reason the product from any source at any time proves to be unsatisfactory to the Department, the Engineer may require the Contractor to furnish acceptable material from other sources and the Contractor shall have no claim for increased cost on account of such requirement.

On all contracts where concrete sidewalk, concrete curb and gutter, concrete pavement or structural concrete is required the Contractor shall upon award of contract indicate to the Engineer the source of the concrete to be furnished and the mix design that is to be used to meet the requirements as hereinafter specified. The Engineer may require that concrete mix designs be furnished by an approved testing laboratory at the expense of the Contractor.

1.06.02 Hazardous Materials

The Contractor shall provide the City with Material Safety Data Sheets (MSDS's) for all hazardous materials to be used on the job site prior to the start of the work. The MSDS's shall conform to the standards adopted by MIOSHA. The Contractor shall not be allowed to move equipment or materials onto the job site until the MSDS's are made available to the City Purchasing Agent or applicable department head.

1.06.03 Indeterminate Estimate of Quantities

When the location and quantity of an item cannot be definitely determined until after construction has started, an indeterminate estimate of quantity will be included on the plans. If the item involves the purchase of materials, the Contractor shall not order the materials until the quantities can be determined by the Engineer.

1.06.04 Samples of Materials

Samples upon which acceptance or rejection of the material is based, shall be taken by a representative of the City, in accordance with the methods as designated in the specifications. The Contractor shall afford such facilities as the Engineer may require for collecting and forwarding samples and shall not use the materials represented by the sample until they have been found to satisfy the requirements of the specifications. The Contractor in all cases shall furnish the required samples without charge.

1.06.05 Tests of Materials

Test of materials will be made by and at the expense of the City unless otherwise provided. All materials proposed to be used may be inspected and tested at any time and at any place during their preparation, storage and use. All tests of material will be made in accordance with methods as described or designated in the specifications. Plant inspection may be made if the production for City Work is sufficient to warrant such inspections or is in the best interest of the City.

DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS

1.06 CONTROL OF MATERIALS (Cont'd.)

1.06.05 TESTS OF MATERIALS (Cont'd.)

Whenever reference is made to Standards of the American Association of State Highway Officials (A.A.S.H.O.), to the American Society for Testing Materials (A.S.T.M.) Specifications, to Standard Specifications of the American Wood-Preservers Association or to the American Lumber Standards, it shall be understood that the specifications, whether tentative or standard, current at the date of advertisement for bids, shall apply. If a tentative and a standard specification are existent at the same time, the tentative will have precedence over the standard.

All reference to tentative specifications of the American Society for Testing Materials shall mean Tentative Standard Specifications and shall not include Tentative Revisions of A.S.T.M. Standards which are printed with a view of eliciting criticism.

When a sieve number is designated in the specifications, it is to comply with the requirements of the current Specifications for Sieves for Testing Purposes, A.S.T.M. Designation: E-11.

Where strength requirements are specified for culvert pipe, sewer pipe or drain tile, the manufacturer will be required to provide a suitable standard testing machine for testing his product and shall keep this machine in good working condition and accurately calibrated. Labor and materials for performing all tests shall be furnished by the Manufacturer. When samples of pipe or tiles are sent to the Laboratory for testing, the Contractor or Manufacturer shall prepay all transportation charges for the samples.

Corrugated metal culvert pipe manufacturers may be required to furnish the City with a certified mill analysis of the base metal used or have a chemical analysis made of the base metal at a commercial testing laboratory designated by the City, and the Manufacturer shall bear the expense of such tests. A copy of this analysis shall be furnished to the City.

1.06.06 Storage of Materials

Materials shall be stored so as to facilitate inspection and in such a manner as to insure the preservation of their quality and fitness for the work. Stocked materials, even though approved before storage, shall be subject to test and shall meet requirements of the specifications at the time they are to be used in the work.

1.06.08 Defective (Nonspecification) Materials

All materials, which do not meet the requirements of the specifications at the time they are to be used, will be rejected, and unless otherwise permitted by the Engineer, shall be removed immediately from the work.

DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS

1.07 LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

1.07.01 Laws to be Observed

The Contractor is required to be familiar with all laws, Ordinances, and regulations which may in any manner modify these standard specifications or affect the equipment and materials used in the proposed construction, those employed on the work and the conduct of the work, and he shall save harmless and indemnify the City and its representatives against any claim arising from violation thereof.

Pursuant to the requirements of Section 4 of Act No. 251 Public Acts 1955 as amended, the Contractor agrees not to discriminate against any employee or applicant for employment, to be employed in the performance of the Contract, with respect to hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment because of age, except where based on a bona fide occupational qualification, or race color, religion, sex, national origin, or ancestry. The Contractor further agrees that every subcontract entered into for the performance of the contract will contain a provision requiring nondiscrimination in employment, as herein specified, binding upon each subcontractor. Breach of this covenant may be regarded as a material breach of the contract.

1.07.02 Permits and Licenses

The Contractor shall procure all permits and licenses and pay all charges and fees necessary and incident to the due and lawful prosecution of the work. This includes the Bond required by the MDOT for construction within its right-of-way.

1.07.03 Patented Processes and Materials

The Contractor shall defend any and all patent infringements suits resulting from the use of any design, device, material or process employed in the construction of any work provided for on the plans, and he shall save harmless and indemnify the City on account of such suits or claims for royalties, damages and costs.

Plans, not supplied by the City, which embody the use of any patented process, device or design, shall be accompanied by a written statement from the patentee or licensee setting forth the exact terms under which said plans are to be used and the definite and fixed price for which any responsible Contractor may use said plans, processes, devices, or designs without further liability of any character.

1.07.05 Sanitary Provisions

The Contractor must provide and maintain, in a neat and sanitary condition, facilities for the Contractor's employees to comply with the requirements and regulations of the federal, state, and local health authorities, and must take precautions to avoid creating unsanitary conditions.

The Contractor must remove temporary sanitary facilities from the project limits before final acceptance. The Contractor must construct, maintain, and remove temporary sanitary facilities at no additional cost to the Department.

1.07.06 Public Convenience and Safety

The Contractor shall at all times so conduct his work as to insure the least possible obstructions to traffic. The safety and convenience of the general public and the residents along the street, and the protection of persons and property, shall be provided for by the Contractor as hereafter specified.

*DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS*

1.07 LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC (Cont'd.)

1.07.07 Protection and Restoration of Property

The Contractor shall restore, at his own expense, any public or private property damaged or injured in consequence of any act or omission on his part or on the part of his employees or agents, to a condition similar and equal to that existing before such damage or injury was done. If the Contractor neglects to repair or make restorations, the City may, after 48 hours notice to the Contractor, proceed to make such repairs or restoration, and will deduct the cost thereof from any moneys that are or may become due the Contractor.

- a. Protection of Land Monuments and Property Stakes Land Monuments or stakes marking property corners shall not be moved or otherwise disturbed except as directed by the Engineer. When in the judgment of the Engineer, Land Monuments or Property Stakes can be saved, all such stakes shall be marked by the Contractor in a manner agreed to by the Engineer and Contractor, after which the Contractor shall protect such Land Monuments or Lot Stakes from injury.

If any Land Monuments or Lot Stakes are moved or disturbed by the Contractor after their location has been marked in a manner acceptable to the Engineer and contractor, then the Contractor agrees that \$50.00 for each and every Land Monument or Lot Stake so moved or disturbed may be deducted from any money due him as payment to the city for the cost of replacing said Land Monuments or Lot Stakes.

Prior to the starting of any clearing or excavation in any area where such work is required by contract, the Contractor or his agent shall meet with a representative of the Engineer for the purpose of determining the location of all monuments and lot irons. By failing to meet in advance of operations the Contractor thereby waives all argument as to claims regarding locations of monuments and lot irons and the Engineer becomes the sole arbiter as to monuments and lot irons existing prior to start of operations.

1.07.08 Damage Liability and Insurance

The Contractor shall save harmless and indemnify the City, its agents, elected and appointed officials, commission members and employees against all claims for damages to public or private property and for injuries, or death, to persons arising out of and during the progress of the work and until its completion, which may arise from operations under his contract, whether such operations be by himself or by a subcontractor or by anyone directly or indirectly employed by either of them.

The Contractor shall not commence work under his contract until he has obtained all insurance required under this paragraph and such insurance has been approved by the Owner, nor shall the contractor allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor has been so obtained and approved.

*DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS*

1.07 LEGAL REGULATIONS AND RESPONSIBILITY (Cont'd.)

1.07.08 Damage Liability and Insurance (Cont'd.)

a. Commercial General Liability Insurance

The Contractor shall take out and maintain during the life of his contract, Commercial General Liability Insurance on an occurrence basis with limits of liability not less than \$1,000,000.00 per occurrence and/or aggregate combined single limit, Personal Injury, Bodily Injury, and Property Damage. Coverage shall include the following: a) contractual liability; b) products and completed operations; c) independent contractors; d) broad form general liability extensions or equivalent; e) per contract aggregate.

The Contractor will request and provide a copy of the endorsement naming the City of Midland as an additional insured to this contract.

b. Professional and Public Liability Insurance

The Contractor shall take out and maintain during the life of this contract such Professional and Public Liability Insurance as shall cover the contractor, all employees, and/or volunteers and all independent contractors, subcontractors and professional contractual persons hired or retained by the service provider performing * work covered by this contract from claims for damages for personal injury, including accidental death, as well as from claims from property damages, (which may arise from operations under his contract, whether such operations be by himself or by a subcontractor or by anyone directly or indirectly employed by either of them) and the amounts of such insurance shall be as follows: Professional and Public Liability Insurance in an amount not less than \$1,000,000.00 per occurrence and \$2,000,000.00 aggregate combined single limit, for Bodily Injury, including accidental death and Property Damage and an amount of not less than \$100,000.00 to include the hazards of excavation.

*Construed as Including Contractor's Contingent or Protection Insurance if necessary to protect the Contractor from damage claims arising from operations under his contract.

The Contractor shall require Subcontractors, if any are not protected under the Contractor's Insurance Policies, to take out and maintain Professional and Public Liability Insurance in the amounts set forth above.

If this coverage contains a retroactive date it will be no later than the start of the contract.

The Contractor will request and provide a copy of the endorsement naming the City of Midland as an additional insured to this contract. Satisfactory proof of the required insurance coverage will be furnished by the Owner prior to the Contractor commencing work on this contract.

c. Automobile Liability

The contractor shall procure and maintain during the life of this contract, automobile liability insurance, including applicable No-Fault coverage, with limits of liability of not less than \$1,000,000.00 per occurrence combined single limit bodily injury and property damage. Coverage shall include all owned, non-owned, and hired vehicles.

*DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS*

1.07 LEGAL REGULATIONS AND RESPONSIBILITY (Cont'd.)

1.07.08 Damage Liability and Insurance (Cont'd.)

d. Workers Compensation Liability Insurance

The Contractor shall take out and maintain during the life of his contract, Workman's Compensation Insurance, including Employers liability coverage in accordance with all applicable statutes of the state of Michigan, Employer liability limits shall be at least \$500,000/\$500,000 for all of his employees employed at the site of the project; and in case any work is sub-let, the Contractor shall require the subcontractor similarly to provide Workman's Compensation Insurance for all of the latter's employees, unless such employees are covered by the protection afforded by the Contractor. In case any class of employees engaged in hazardous work under this contract, at the site of the statue, the Contractor shall provide, and shall cause each subcontractor to provide adequate insurance coverage for the protection of these employees not otherwise protected.

1.07.09 Contractors Responsibility for Work

The Contractor shall be responsible for any and all damages that the work may sustain prior to its acceptance, and shall rebuild, repair, restore and make good, at his own expense all injuries and damages to any portion of the work by the action of the elements or from any cause whatsoever prior to its acceptance.

If, within one year of acceptance of the work, or within such longer period of time as may be required by law or by the terms of any applicable special guarantee required by the Contract documents, any of the work performed as part of this contract is found to be defect in materials and/or workmanship, the Contractor shall promptly make corrections upon receipt of written notice from the Owner. The Owner shall give such notice promptly upon discovery of the condition.

1.07.11 Personal Liability of Public Officials

No claim whatsoever shall be made by the Contractor against any officer, employee, or agent of the City of Midland for, or on account of, anything done or admitted to be done in connection with this contract.

1.07.12 No Waiver of Legal Rights

The City shall not be precluded or estopped by any measurement, estimate, or certificate made either before or after the completion and acceptance of the work and payment therefore, from showing the true amount and character of the work performed and materials furnished by the Contractor, nor from showing that any such measurement, estimate or certificate is untrue or incorrectly made, nor that the work or materials do not conform in fact to the contract. The City shall not be precluded or estopped, notwithstanding any such measurement, estimate or certificate and payment in accordance therewith from recovering from the Contractor and the Surety such damages as it may have sustained by reason of his failure to comply with the terms of the contract. Neither the acceptance by the Engineer or by his representative, nor any payment for or acceptance of the whole or any part of the work, nor any extension of time, nor any possession taken by the City shall operate as a waiver of any portion of the contract or of any power herein reserved, or any right to damages herein provided. A waiver of any breach of the contract shall not be held to be a waiver of any other subsequent breach.

DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS

1.07 LEGAL REGULATIONS AND RESPONSIBILITY (Cont'd.)

1.07.18 Traffic Control Procedures

Prior to starting roadwork on any particular street, the Contractor will submit to the Traffic Engineer a detailed plan, conforming to The Michigan Manual of Uniform Traffic Control Devices, or temporary traffic control for that street. The plan will show placement location of any necessary barricades and signs, the wording of all proposed temporary signs and other such information as the Engineer may feel desirable. Traffic Engineer approval in writing and the filing of the temporary traffic control plan with the Engineering and Police Departments will be required before any further steps can be taken.

The Contractor shall furnish and erect all necessary temporary devices in accordance with the filed plan.

When all temporary devices are in place, the City Traffic Department will take down and store all permanent devices likely to interfere with construction. Following this step the Contractor can when proceed with construction.

Prior to reopening of any completed road section, the Traffic Department shall install any required control devices and the Contractor shall remove all temporary devices.

1.07.19 Opening of Street to Traffic

The Work under construction, or any section thereof, shall not be opened to traffic until so directed or authorized by the Engineer. Whenever, in the opinion of the Engineer, all of the work (project) or any section thereof is in suitable condition for travel it may be designated as "Accepted for Traffic" previous to completion of the whole project, and shall be opened to traffic as may be directed by the Engineer. Such acceptance will cover the gravel base and/or the surfacing material, as specified by the Engineer, and shall not constitute partial or final acceptance of the work or any part of it, or a waiver of any of the provisions of the contract, provided, however, that on such sections of the project as are "Accepted for Traffic", the Contractor shall not be required to assume any expense entailed in maintaining the street for traffic as a result of ordinary wear and tear.

Whenever all of the work (project) or any section of it is designated as "Accepted for Traffic" and opened to traffic prior to acceptance and final payment, the Contractor shall conduct the remainder of the construction operations so as to cause the least obstruction to traffic. Provisions for the safety of traffic shall be made as hereafter specified. Any damage to the street that may occur on such section not attributable to traffic, necessary repairs or renewals required due to defective materials or faulty workmanship, to natural causes other than ordinary wear, and to operations of the Contractor, shall be repaired by the Contractor at his expense.

1.07.20 Public Disclosure

Any documents that are provided to the City of Midland are subject to public disclosure and any person or entity providing the City of Midland with documents expressly consents to the City's reproduction of the documents in response to a Freedom Of Information Act (FOIA) request.

*DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS*

1.08 PROSECUTION AND PROGRESS

1.08.01 Subletting of Contract Work

The Contractor shall perform with his own organization, work amounting to not less than 50 percent of the total original contract value less the cost of any specialty items contained within that contract.

The Contractor shall not sublet any portion of the contract or of the work provided therein, except the furnishing of necessary materials, without the written consent of the City. Such consent shall not in any way relieve the Contractor of full responsibility for the performance of the contract. The Contractor shall not sell or assign any portion of the contract without the written consent of the City and the Surety.

The term "Subletting" shall be understood to mean the arrangement with any party or parties to execute a part of the contract work. Approval of the subletting of any portion thereof will not be given unless and until the subcontractor is qualified to bid on the work of the type and magnitude proposed, not until the Contractor shall have filed with the City a true copy of the subcontract, bearing the written consent of the Surety thereto.

If the amount of the subcontract or the nature of the work to be performed there under warrants, the City may require the subcontractor to furnish, for the benefit of the Contractor, bonds in an amount proportioned to the amount of his subcontract, and for the same purposes and under the same specifications as those of the general contract. The Surety on the general contract shall not be eligible to furnish such subcontract bonds.

The City reserves the right to remove from the job forthwith any subcontractor or his equipment operating in violation of these requirements and any costs or damages thereby incurred are assumed by the Contractor by the acceptance of the contract. It is further understood that the Contractor's responsibilities in the performance of his contract, in case of an approved subletting, are the same as if he had handled the work direct.

1.08.02 Prosecution of the Work

The Contractor shall begin the work within 10 days after being notified by the City of the award of the contract, unless this is inconsistent with the progress clause, in which case the progress clause shall govern. He shall prosecute the work in the order given in the progress clause, with force and equipment adequate to complete the major items, portions or sections within the time limit therein fixed for completion.

In case of failure to proceed with the work as rapidly as is provided in the progress clause, or if it appears at any time that such work is not being prosecuted in such manner as to insure its completion within the time specified, the City shall have the right to require the Contractor to furnish and place in operation such additional force and equipment as the City shall deem necessary to bring the work up to the progress schedule; and in case of the Contractor's neglect to do so the City may place such working force and equipment on the work and charge the Contractor the cost of the labor and such rental and depreciation rates for the plant and equipment as in the judgment of the City is reasonable, and for such time as the plant and equipment are in service.

1.08.03 Limitations of Operations

The Contractor shall begin work at such points as the Engineer may direct and shall thereafter prosecute the work as such points and in such order as may be prescribed from time to time by the Engineer, except as shall be otherwise provided in the progress schedule incorporated in the contract.

*DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS*

1.08 PROSECUTION AND PROGRESS (Cont'd.)

1.08.03 Limitations of Operations (Cont'd.)

The Contractor shall not carry on construction operations on Sundays without the permission of the Engineer except for the purpose of making emergency repairs and for the proper protection of the work such as the curing on concrete. The City reserves the right to require the Contractor to cease construction operations on legal holidays and the day before and the day after, if the Contractor's operations are of such a nature, the project is so located, or traffic is of such volume, that it is deemed expedient to do so.

In case of a dispute arising between two or more Contractors or others as to the respective rights of each under these specifications, the Engineer shall determine the matters at issue and shall define the respective rights of the various interests involved, in order to secure the completion of all parts of the work in general harmony and with satisfactory results, and his decision shall be final and binding on all parties concerned and shall not in any way be cause for a claim for extra compensation by any of the parties.

1.08.04 Competence of Workers

The Contractor shall at all times employ sufficient labor and equipment for prosecuting the several classes of work to full completion and the manner and time required by the specifications.

All workers shall have sufficient skill and experience to perform properly the work assigned to them. Workers engaged in special work of skilled work shall have sufficient experience in such work and in the operation of the equipment required to perform all work properly and satisfactorily.

Any person employed by the Contractor or by any subcontractor who, in the opinion of the Engineer, does not perform his work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the Engineer, be removed forthwith by the Contractor or subcontractor employing such person, and shall not be employed again in any portion of the work without the approval of the Engineer.

Should the Contractor fail to remove such person or persons as required above, or fail to furnish suitable and sufficient personnel for the proper prosecution of the work, the Engineer may suspend the work by written notice until such orders are complied with.

1.08.05 Adequacy of Methods and Equipment

All equipment which is proposed to be used on the work shall be of sufficient size and in such mechanical condition as to meet requirements of the work and to produce a satisfactory quality of work. Equipment used on any portion of the project shall be such that no injury to the roadway, adjacent property, or other highways will result from its use.

When the methods and equipment to be used by the Contractor in accomplishing the construction are not prescribed in the contract, the Contractor is free to use any methods or equipment that he demonstrates, to the satisfaction of the Engineer, will accomplish the contract work in conformity with the requirements of the contract.

When the contract specifies that the construction be performed by the use of certain methods and equipment, such methods and equipment shall be used unless others are authorized by the Engineer.

DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS

1.08 PROSECUTION AND PROGRESS (Cont'd.)

1.08.06 Temporary Suspension of the Work

The Engineer shall have authority to suspend the work wholly or in part, for such period or periods as he may deem necessary, due to unsuitable weather or such other conditions as are considered unfavorable for the prosecution of the work. The Contractor shall not suspend the work or remove there from equipment or materials without permission from the Engineer.

Upon suspension, the work shall be put in proper and satisfactory condition, carefully covered and properly protected as directed by the Engineer. In all cases of suspension of construction operations, the work shall not again be resumed until permitted by written order of the Engineer.

1.08.07 Extension of Time

If the Contractor finds that it will be impossible for him to complete the work on or before the completion date fixed by the contract, he shall at least 10 days prior to said date, make a written request to the City for an extension of time for completion. He shall set forth fully therein the reasons which he believes would justify the City in granting this request and shall also set forth a revised detailed progress schedule which shall provide that the remaining work shall be completed on or before the extended completion date therein requested. If the City finds that the work was delayed on account of unusual conditions beyond the control of the Contractor, or that the quantities of work done or to be done are sufficiently in excess of the estimated quantities to warrant additional time, they will, with notice to the Surety, grant an extension of time for completion to such date as appears to them to be reasonable and proper. This date shall thereafter be as binding upon the Contractor and Surety as if it appeared in the contract originally.

If the Contractor shall be prosecuting the work force, equipment or materials insufficient to complete the work on or before the contract completion date and according to the progress clause, the City may, with notice to the Surety, grant such extension of time as appears to them reasonable and proper. Such extension, if granted, shall be on condition that the City shall deduct from moneys due to the contractor on estimates the actual damage sustained by reason of such neglect, which shall include the cost of necessary additional engineering and supervision, maintenance of detours, and any other items which have required the expenditure of public funds.

Current estimates will not be paid to the Contractor unless the contract carries a completion date which is not in default at the time such estimates are due, but current and final estimates, if otherwise proper, may be paid after the contract completion date, if all items of work for which specific payments are provided in the contract have been finished prior to said completion date.

If an extension of time is not granted, the Contractor's right to proceed with the work under the contract may be considered by the City forfeited as of the date for completion originally provided in the contract or as previously extended and the City may proceed immediately to take over the work and the materials found thereon, and make settlement of costs incurred as provided under Termination of Contract, 1.08.08, except that in such it shall not be necessary to give the Contractor 10 days written notice of such forfeiture.

The City, by permitting the Surety to continue and finish all or any part of the work after the original or extended completion date, shall not be deemed to waive any of their rights under the contract, including the right to recover damages for additional costs made necessary by the Contractor's default.

DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS

1.08 PROSECUTION AND PROGRESS (Cont'd.)

1.08.08 Termination of Contract

If the Contractor shall be prosecuting the work with force, equipment or materials insufficient to complete the work by the date set for completion and according to the progress clause; or shall be performing the work improperly; or shall discontinue the performance of the work; or shall neglect or refuse to remove such materials or to perform a new such work as shall have been rejected as defective and unsuitable; or shall for any other reason, not carry on the work in accordance with the contract; the City may give the Contractor and Surety written notice, specifying the delay, neglect, or default, and the action to be taken by them; and if the Contractor or Surety, within a period of 10 days after such notice shall not proceed satisfactorily in accordance therewith, then the City shall have the full power and authority to take the work out of the hands of the Contractor and Surety; to appropriate and use any and all materials on the ground which may be suitable; or to enter into contract, or use such other methods as in their judgment may be required for the proper completion of the work; provided, if the Contractor commits any act of bankruptcy, or becomes insolvent or is declared bankrupt; if he shall allow any final judgment against him to remain unsatisfied for a period of five days; or if he shall make an assignment for the benefit of his creditors; then in any such case the City shall have full power and authority to proceed in any of the ways aforesaid, forthwith upon the delivery by the City to the Contractor and Surety of written notice, stating the reason for said action.

In case the City takes over the uncompleted work under any of the provisions of this section, all additional costs and damages and the costs and charges of completing the same, shall be deducted from moneys due or to become due the Contractor; and if the total of such damages, costs and charges exceeds the balance of the contract price which would have been payable to the Contractor and he completed the work, then the Contractor and Surety shall, on demand, pay to the City the amount of such excess.

*DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS*

1.09 MEASUREMENT AND PAYMENT

1.09.01 Measurement of Quantities

Quantities of work completed under the contract will be measured according to United States standard measures. When material is measured by weight in tons, the unit shall be the ton of 2000 pounds.

All longitudinal measurements for area of base course surface course and pavements will be made along the actual surface of the street. For all transverse measurements for area of base courses, surface course and pavements, the dimensions used in calculating the pay area shall be the neat dimensions provided on the plans or by authorization.

Structures will be measured according to neat lines provided on the plans or by authorization.

All materials which are specified for measurements by the cubic yard "Loose Measure" will be measured at the location where used on the project under construction, unless otherwise provided.

When required by the Engineer, the Contractor shall file original copies of paid freight bills trucking slips, bills of lading, and paid invoices for any or all materials used in the work.

1.09.02 Scope of Payment

The Contractor shall accept the compensation, as herein provided, in full payment for furnishing all necessary materials, labor, tools, equipment and incidentals and for performing all work under the contract; also for all loss or damage arising from the nature of the work, or from the action of the elements, or from any unforeseen difficulties which may be encountered during the prosecution of the work, until its final acceptance by the Engineer.

1.09.03 Payments for Increased or Decreased Quantities

Whenever the quantity of any item of work as given in the proposal shall be increased or decreased, payment for such item shall be made on the basis of the actual quantity completed at the unit price for such item named in the proposal, except as otherwise provided under Scope of the Work, 1.04.03, and in the detailed specifications for each class of work.

1.09.04 Payment for Extra Work

a. Unit Price or Lump Sum Basis

When work performed is to be paid for on a unit price or Lump Sum basis, payment will be made on the basis of previously approved prices as outlined under Scope of Work 1.04.04.

b. Force Account Basis

When work performed is to be paid for on a force account basis, the contractor shall furnish to the Engineer itemized reports of the cost of all force account work. These reports, together with all charges for labor, equipment, supervision, overhead, profit, etc., shall be itemized and prepared in the manner specified in Section 1.09.05 b, of the MDOT Specifications.

1.09.05 Payment for Idled Equipment and Labor

In the event that machinery or equipment is idled due to the failure of the City to properly provide for the Contractor to proceed with the prosecution of the work in accordance with the terms of his contract, payment may be allowed on a rental basis for the idled equipment as specified herein. Only machinery or equipment actually on the project site as required for that phase of construction work in question will be considered eligible for rental reimbursement. For this idled equipment or machinery, the Contractor shall receive half the applicable hourly rate for operating equipment as specified under payment for extra work, 1.09.05 b. Payment will be limited to 8 hours in any one day and 40 hours in any one week.

*DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS*

1.09 MEASUREMENT AND PAYMENT (Cont'd)

1.09.05 Payment for Idled Equipment and Labor (Cont'd.)

No provisions of these specifications shall entitle the Contractor to rental compensation for idle equipment as specified under "Temporary Suspension of the Work", 1.08.06.

In the event that labor is idled due to the failure of the City to properly provide for the Contractor to proceed with the prosecution of the work within the terms of his contract, payment may be allowed provided there is no other location within the project that the labor can be gainfully employed. Payment will be limited to a maximum amount of the Contractor's obligation as provided by his current labor agreement. No additional compensation for overhead will be allowed.

1.09.06 Eliminated Items

The City shall have the right at any time to eliminate the performance or the completion of any contract item, such action to be evidenced by the execution of regulation City Forms. In such case, a fair and equitable amount, representing all cost incurred on such items prior to such elimination, shall be agreed upon in writing and paid to the Contractor.

1.09.07 Partial Payments

The Contractor shall be entitled to two partial payments under this contract, the first occurring at such time as at least fifty percent of the work is complete and the second occurring at such time as eighty-five (85%) of the work is complete. No other payments except that for final and complete payment shall be made to the Contractor. The partial payments made by the City shall be made to the contractor within twenty (20) days of the invoicing by the contractor indicating the percentage of work completed. Along with the invoice a partial lien waiver must be signed and returned to the City. A sample invoice and lien waiver is attached to this contract for use by the contractor or the contractor may use an invoice and lien waiver substantially similar to the forms attached.

Ten percent (10%) of the value of work in place shall be retained on the first fifty percent (50%) of work in place. No further retainage shall be withheld.

1.09.08 Source of Supply and Carrier Rates on Construction Materials

Bidders must fully inform themselves to the source of supply of acceptable material needed for the work and in regard to the freight rates and transportation facilities for these materials before submitting proposals.

Inability to secure satisfactory materials from the source upon which the bid was based, or changes in freight rates or the alteration of transportation facilities for these materials during the life of the contract, shall not constitute cause for claim for extra compensation.

In the event the Contractor is unable to complete the project or portions thereof due to inability to obtain materials, or serious delays in their delivery, the Engineer may delete such portions of the contract as can not be completed in conformity with the progress schedule or reasonable extension thereof.

1.09.09 Special Emergency Provisions

If the contract is terminated, payment will be made for all completed or partially completed work at contract unit prices or force account basis as determined by the Engineer. Materials on hand will be paid for actual cost to the Contractor plus 15 percent. In the event portions only of the contract work are deleted, the department reserves the right to stop delivery of and payment for materials thereby made unnecessary. Mats will be incidental to the equipment or to the work.

DIVISION 1
GENERAL REQUIREMENTS AND COVENANTS

1.09 MEASUREMENT AND PAYMENT (Cont'd.)

1.09.10 Final Inspection Acceptance and Final Payment

Upon the satisfactory completion of any portion of the project; one mile or more in length, and upon written approval of same by the Engineer, the Contractor shall be relieved of any requirement for further work on such portions and from all responsibility therefore, except that he shall remove any obstructions and repair any damage caused by him subsequent to such approval and prior to final acceptance of the entire project.

When the work shall have been completed and the City shall have ascertained that each and every part of the work has been performed in accordance with the plans and specification or such modifications thereof as they may have approved, the same will be accepted and the Engineer will make a final estimate, as soon as practicable, for the completed work, and the total amount due the Contractor, less the total amount of all previous payments, will be paid.

Final payment will not be made until the Contractor shall have filed with the City the consent of the Surety to payment of the final estimate and satisfactory evidence by affidavit or otherwise that all his indebtedness by reason of the contract has been fully paid or satisfactorily secured. The contractor shall provide a full unconditional lien waiver at the time of final invoicing for final payment. Final payment shall be made within twenty (20) days of proper invoicing and the acceptance by the City of the full unconditional lien waiver. In case such evidence is not furnished, the City may retain out of any amount due said Contractor sums sufficient to cover all lienable claims unpaid. The filing of willfully false affidavits will disqualify the Contractor from bidding on future work for the City.