
SPECIFICATIONS

FOR

NORTH DOWNEY RESURFACING

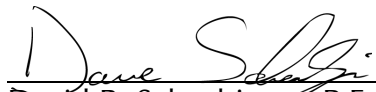
WEST BRANCH, IOWA

SPECIFICATIONS
FOR
NORTH DOWNEY RESURFACING
WEST BRANCH, IOWA

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Signed:

Date:



8/17/11

David R. Schechinger, P.E.

Iowa License No. 16538

My license renewal date is December 31, 2012



Detailed parts covered by this seal:

ALL

Prepared by
VEENSTRA & KIMM, INC.
West Des Moines,
Iowa

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NORTH DOWNEY RESURFACING
WEST BRANCH, IOWA

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NOTICE OF HEARING AND LETTING

NOTICE OF PUBLIC HEARING ON PROPOSED PLANS AND SPECIFICATIONS, PROPOSED FORM OF CONTRACT AND ESTIMATE OF COST FOR CONSTRUCTION OF NORTH DOWNEY RESURFACING FOR THE CITY OF WEST BRANCH, IOWA, AND THE TAKING OF BIDS THEREFOR

Notice is hereby given that the City Council of West Branch, Iowa will meet in the Council Chambers at the City Library, 110 North Poplar Street, West Branch, Iowa, on the 6th day of September, 2011 at 7:00 P.M. at which time a hearing will be held and said Council proposes to adopt plans, specifications, form of contract and estimate of cost for the construction of the North Downey Resurfacing and work incidental thereto for said City.

Sealed proposals will be received by the City Clerk of the City of West Branch, Iowa, at City Hall, 110 North Poplar Street, West Branch, Iowa, until 2:00 P.M. on the 14th day of September, 2011, for the construction of North Downey Resurfacing as described in the plans and specifications therefor, now on file in the office of the City Clerk. Proposals will be opened and the amount of the bids announced by the City Clerk at the time and date specified above. Proposals will be acted upon by said City at the September 19th City Council Meeting or at such later time and place as then may be fixed.

The location of the work to be done and the kinds and sizes of materials proposed to be used are as follows:

NORTH DOWNEY RESURFACING

Construct North Downey Resurfacing project including all labor, materials and equipment necessary for approximately 2,344 square yards of 2" mill and 3" HMA resurfacing, 151 tons granular shoulder and pavement markings for 856 linear feet of roadway and miscellaneous associated work.

All work and materials are to be in accordance with the proposed plans, specifications, form of contract and estimate of cost now on file in the office of the City Administrator of West Branch, Iowa, and by this reference made a part thereof as though fully set out and incorporated herein.

At said hearing, the City Council will consider the proposed plans, specifications, form of contract and estimate of cost for the project, the same now being on file in the office of the City Clerk, reference to which is made for a more detailed and complete description of the proposed improvements, and at said time and place the said Council will also receive and consider any objections to said plans, specifications and form of contract or to the estimate cost of said improvements made by any interested party.

NHL-1

36853

All proposals and bids in connection therewith shall be submitted to the City Clerk of said City on or before the time herein set for receiving bids. All proposals shall be made on official bidding blanks furnished by the City, and any alternations in the official form of proposal will entitle the Council, at its option, to reject the proposal involved from consideration. Each proposal shall be sealed and plainly identified.

Each proposal shall be made out on a blank form furnished by the municipality and must be accompanied in a sealed envelope by either (1) a certified or cashier's check drawn on a solvent Iowa bank or a bank chartered under the laws of the United States or a certified share draft drawn on a credit union in Iowa or chartered under the laws of the United States, in an amount equal to five percent (5%) of the bid, or (2) a bid bond executed by a corporation authorized to contract as a surety in the State of Iowa, in the penal sum of five percent (5%) of the bid.

The bid security should be made payable to the CITY OF WEST BRANCH, IOWA. The bid security must not contain any conditions either in the body or as an endorsement thereon. The bid security shall be forfeited to the City as liquidated damages in the event the successful bidder fails or refuses to enter into a contract within 10 days after the award of contract and post bond satisfactory to the City insuring the faithful fulfillment of the contract and the maintenance of said work, if required, pursuant to the provisions of this notice and other contract documents. Bidders shall use the bid bond form bound in the specifications.

By virtue of statutory authority, preference will be given to products and provisions grown and coal produced within the State of Iowa, and to Iowa domestic labor, to the extent lawfully required under Iowa Statutes.

The City Council reserves the right to reject any or all bids and to waive informalities or technicalities in any bid and to accept the bid which it deems to be in the best interest of the City.

The Council reserves the right to defer acceptance of any proposal for a period not to exceed thirty (30) calendar days from the date of Hearing and Letting.

The successful bidder will be required to furnish a bond in an amount equal to one hundred percent (100%) of the contract price, said bond to be issued by a responsible surety approved by the City Council and shall guarantee the faithful performance of the contract and the terms and conditions therein contained and shall guarantee the prompt payment for all materials and labor and protect and save harmless the City from claims and damages of any kind caused by the operations of the Contractor, and shall guarantee the work against faulty workmanship and materials for a period of two (2) years after its completion and acceptance by the City Council.

The work will commence within ten (10) days after written Notice to Proceed and shall be completed by November 11, 2011.

Liquidated damages in the amount of Two Hundred Dollars (\$200.00) per consecutive calendar day will be assessed for each day that work shall remain uncompleted after the end of the contract period, with due allowance for extensions of the contract period due to conditions beyond the control of the Contractor.

Payment to the Contractor for said improvements will be made in cash derived from the proceeds of the issuance and sale of such bonds and/or from such cash funds of the City as may be legally used for said purposes. Any combination of the above methods of payment may be used at the discretion of the City Council.

Payment to the Contractor will be on the basis of monthly estimates equivalent to ninety-five percent (95%) of the contract value of the work completed and payments made to material suppliers for materials ordered specifically for the project or delivered to the site during the preceding calendar month. Estimates will be prepared on the last day of each month by the Contractor, subject to the approval of the Engineer, who will certify to the City for payment each approved estimate on or before the tenth (10th) day of the following month. Such monthly payments shall in no way be construed as an act of acceptance for any part of the work partially or totally completed. Upon completion of the work and its acceptance by the Council, the Contractor will be paid an amount which, together with previous payments, will equal ninety-five percent (95%) of the contract price of the contract. Final payment of the remaining five percent (5%) will be made not less than thirty-one (31) days after completion and acceptance by resolution of the City Council of the completed contract, subject to the conditions and in accordance with the provisions of Chapter 573 of the Code of Iowa, as amended. No such partial or final payments will be due until the Contractor has certified to the City that the materials, labor and services involved in each estimate have been paid for in accordance with the requirements stated in the specifications.

The City will issue a sales tax exemption certificate applicable for all materials purchased for the project.

Plans and specifications governing the construction of the proposed improvements, and also the prior proceedings of the City Council referring to and defining said proposed improvements are hereby made a part of this notice and the proposed contract by reference and the proposed contract shall be executed in compliance therewith.

Notice of Hearing and Letting

Copies of said plans and specifications are now on file in the office of the City Administrator, for examination by bidders. Copies are available from **TECHNIGRAPHICS**, 125 South Dubuque Street, Iowa City, Iowa 52240. Contact Jill Chambers at 319-354-5950 or email jchambers@techiowa.com. A refundable deposit of \$30 is required. Please make checks to **Veenstra & Kimm, Inc.** Mail said deposit checks to Technigraphics, 125 South Dubuque Street, Iowa City, Iowa 52240, Attn: Jill Chambers. Upon receiving deposit check, plans and specifications will be mailed out. When plans and specifications are returned in good condition within 14 days of the award date of the project, deposit checks will be returned.

This notice is given by order of the Council of the City of WEST BRANCH, Iowa.

CITY OF WEST BRANCH, IOWA

Don Kessler, Mayor

ATTEST:

Matt Muckler, City Administrator

INSTRUCTIONS TO BIDDERS

NORTH DOWNEY RESURFACING WEST BRANCH, IOWA

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1. DEFINITION OF TERMS

- 1.1 "Owner", and "City" shall mean the City of West Branch, Iowa, acting through the City Council or an authorized representative of the City Council.
- 1.2 "Person" shall mean any individual partnership, society, association, joint stock company, corporation, estate, receiver, trustee, assignee or referee, whether appointed by a court or otherwise, and any combination of individuals.
- 1.3 "Bidder" shall mean any person who submits a proposal to furnish the work described in the Contract Documents.
- 1.4 "Contractor" shall mean the person with whom the Owner may enter into contract for the execution of the work specified.
- 1.5 "Subcontractor" shall mean the person supplying materials, labor, equipment and appurtenances for the work, such person having contractual relations with the Contractor, but not with the Owner.
- 1.6 "Engineer" shall mean VEENSTRA & KIMM, INC., with offices in West Des Moines and Coralville, Iowa.
- 1.7 "Standard Drawings" shall mean construction detail drawings bound with these specifications.

- 1.8 "Work" shall mean the work to be done and the equipment, supplies and materials to be furnished under the contract, unless some other meaning is indicated by the context.
- 1.9 "Station", "Sta." shall mean one hundred (100) linear feet measure.
- 1.10 "Or Equal" shall follow manufacturers' names used to establish standards and, if not stated, is implied.

2. CONTRACT DOCUMENTS

- 2.1 Contract Documents, sometimes referred to as the "plans and specifications", shall mean and include the following parts as used herein:
 - 2.1.1 Notice of Hearing and Letting
 - 2.1.2 Instructions to Bidders
 - 2.1.3 Proposal
 - 2.1.4 Contract
 - 2.1.5 Bond
 - 2.1.6 General Conditions
 - 2.1.7 Special Conditions
 - 2.1.8 Plans List
 - 2.1.9 Detailed Specifications
 - 2.1.10 Plans listed in the above specifications
 - 2.1.11 Numbered addenda issued to the foregoing.

3. METHOD OF BIDDING

- 3.1 Bidders shall submit unit and lump sum prices for the work covered by the plans and specifications. Prices shall cover complete work and include all costs incidental thereto, unless indicated otherwise.
- 3.2 Bids will be computed using quantities shown in proposal. Unit price quantities are approximate and only for comparison of bids. Engineer retains right to change location, quantities and combination of units as may be required during progress of construction. Compensation due Contractor will be computed on basis of final quantities of completed work.
 - 3.2.1 In the event of discrepancies between unit prices and unit price extensions listed in bidder's proposal, unit prices shall govern and unit price extensions and total bid shall be corrected, as necessary, for

agreement with unit prices. The total price will be determined on the basis of corrected extensions of the unit prices.

- 3.3 Unit prices for payment items included in the specifications, but not listed in the PROPOSAL, will be negotiated, if needed.

4. QUALIFICATIONS OF BIDDERS

- 4.1 Bidders shall be prepared to satisfy Owner as to integrity, experience, adequacy of equipment and personnel, and financial ability to perform work specified.
- 4.2 If successful bidder is a non-Iowa corporation, he shall submit proof to Owner prior to execution of contract that he has been authorized by Secretary of State to do business in Iowa.

5. SUBMISSION OF BIDS

- 5.1 Bidders shall submit the Proposal stamped "Official Bid" and the Proposal stamped "Engineer's Copy." The Proposal stamped "Official Bid" is considered the original Proposal and shall be used for bidding. The copy of the Proposal stamped "Engineer's Copy" is for the use of the Engineer only. The copy of the Proposal stamped "Bidder's Copy" is for the use of the Bidder only. Submit in a sealed envelope. Envelope shall bear return address of the bidder and shall be addressed as follows:

To:	Proposal for:
City Administrator City of West Branch 110 Poplar Street West Branch, Iowa 52358	North Downey Resurfacing

- 5.2 Bids shall be signed by a legally authorized representative of the bidder.

6. WITHDRAWAL OF BIDS

- 6.1 A bidder may withdraw his bid at any time prior to scheduled closing time for a receipt of bids, but no bid shall be withdrawn for a period of 30 calendar days thereafter.

7. BID SECURITY

- 7.1 Each bid shall be accompanied by bid security in the form and amount as set out in the Notice of Hearing and Letting.
- 7.2 Bid security shall be enclosed in the sealed envelope with the bid, or in a separate sealed envelope.
- 7.3 The bid security shall be forfeited and become the property of the Owner in case the bidder fails or refuses to enter into contract and to furnish bond within 10 calendar days after his proposal shall have been accepted.
- 7.4 Bid security of the unsuccessful bidders will be returned as soon as the successful bidder is determined and has entered into a contract; bid security of successful bidder will be returned upon execution of contract and furnishing of bond.
- 7.5 Bidders shall use bid bond form included with specifications.

8. EXAMINATION OF WORK

- 8.1 Bidders shall familiarize themselves with the specifications and with all conditions which will affect construction. It will be assumed that bidders have made a personal examination of the job and the physical conditions affecting the work.

9. EXECUTION OF CONTRACT

- 9.1 The successful bidder shall enter into a written contract with the Owner, within 10 days after acceptance of his proposal on the forms included with these specifications, for the performance of the work awarded to him.
- 9.2 The contract, when executed, shall be deemed to include the entire agreement between the parties hereto, and the Contractor shall not claim any modification thereof resulting from any representation or promise made at any time by any representative of the Owner or any other person.

10. CONTRACT TERMINATION

- 10.1 Provisions of law, as contained in Chapter 573A of the Code of Iowa shall apply to and be a part of this contract. Chapter 573A provides for termination of contracts for construction of public improvements when construction or work

thereon is stopped because of a national emergency. The provisions of Chapter 573A shall be binding upon all parties thereto, including subcontractors and sureties upon any bond given or filed in connection therewith.

12. PREFERENCE FOR LABOR AND MATERIALS

12.1 By virtue of statutory authority, preference will be given to products and provisions grown and coal produced within the State of Iowa, and to Iowa domestic labor, to the extent lawfully required under Iowa Statutes; provided that the award of contract will be made to the lowest responsible bidder submitting the lowest responsive bid.

13. PAYMENT

13.1 Payment will be made in accordance with the payment provisions set out in Notice of Hearing and Letting.

14. APPROVAL OF MATERIALS

14.1 Approval of substitutions of any materials or equipment other than that specified shall be obtained in writing from Engineer. Otherwise, it will be assumed Contractor will furnish materials or equipment specified.

15. SOIL BORINGS

15.1 Soil borings have not been made along the route of the proposed work.

16. PERIOD OF GUARANTEE AND BOND

16.1 Contractor shall guarantee work for a period of two (2) years from date of final acceptance. Surety bond furnished by Contractor shall run for a like period.

PROPOSAL

NORTH DOWNEY RESURFACING
WEST BRANCH, IOWA

Name of Bidder _____

Address of Bidder _____

To: City Council
City of West Branch
110 Poplar Street
West Branch, Iowa 52358

The undersigned bidder submits herewith bid security amounting to five percent (5%) of the total amount of the bid which shall become the property of the City of West Branch should the undersigned fail or refuses to execute a contract and to furnish bond as called for in the specifications within the time provided.

The undersigned bidder, having examined the Contract Documents, and having familiarized himself with the nature and location of the work to be done and the conditions under which the work will be performed, hereby proposes to provide the required labor, services and materials and to perform the work described in the specifications, and addenda __, __, __, __ and __, within the time and for the sum or sums stated hereinafter on attached proposal schedule, which proposal schedule is hereby made a part of this Proposal.

The undersigned bidder certifies that this proposal is made in good faith, without collusion or connection with any other person or persons bidding on the work.

The undersigned bidder states that this proposal is made in conformity with the specifications and agrees that in the event of any discrepancies or differences between any conditions of his proposal and the specifications prepared by VEENSTRA & KIMM, INC., that the provisions of the latter shall prevail.

Bidder _____

By _____

Title _____

PROPOSAL SCHEDULE

NORTH DOWNEY RESURFACING

1. Construct North Downey Resurfacing, for the following unit and lump sum prices:

<u>Description</u>	<u>Unit</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Extended Price</u>
1.1 Mobilization	LS	xxxxx	xxxxx	\$ _____
1.2 Traffic Control	LS	xxxxx	xxxxx	_____
1.3 Removal of HMA Surfacing (Milling), 2" Depth	SY	2,344	\$ _____	_____
1.4 HMA Pavement, 3"	Tons	384	_____	_____
1.5 Asphalt Binder, PG 64-22	Tons	23	_____	_____
1.6 Granular Shoulder	Tons	151	_____	_____
1.7 Pavement Marking	LS	xxxxx	xxxxx	_____
1.8 Excavation	CY	80	_____	_____
1.9 Signs	Ea.	1	_____	_____
TOTAL BID				
(Items 1.1 - 1.9)				\$ _____

2. The work will commence within ten (10) calendar days after the date set forth in written Notice to Proceed. All work on the project shall be completed by November 11, 2011.

3. Liquidated damages in the amount of Two Hundred Dollars (\$200.00) per consecutive calendar day will be assessed for each day that the work shall remain uncompleted after the end of the contract period, with due allowance for extensions of the contract period due to conditions beyond the control of the Contractor.

BID BOND

KNOW ALL MEN BY THESE PRESENTS: That we,

_____ of _____ as Principal and _____ of _____ as Surety, are held and firmly bound unto the City of West Branch, Iowa, hereinafter defined as Obligee, in the penal sum of five percent (5%) of the total amount of the bid (\$ _____), for which payment said Principal and Surety bind themselves, their heirs, executors, administrators, successors, and assigns jointly and severally, firmly by these presents.

The condition of the above obligation is such that whereas the Principal has submitted to the City of West Branch, Iowa, a certain bid, in a sealed envelope, and hereby made a part hereof to enter into a contract in writing, for: North Downey Resurfacing.

NOW THEREFORE, if the said bid by said Principal be accepted, and the Principal shall enter into a contract with the Obligee in accordance with the terms of such bid, and give such bond as may be specified in the contract documents with good and sufficient surety for the faithful performance of such contract, for the prompt payment of labor and material furnished in the prosecution thereof, and for the maintenance of said improvements as may be required therein, then this obligation shall become null and void or in the event of the failure of the Principal to enter such contract and give such bond, the Principal shall pay to the Obligee the full amount of the bid bond, together with court costs, attorney's fees, and any other expense of recovery.

Signed and sealed this _____ day of _____, 2011.

Principal

By _____
Contractor's Signature

Surety

By _____
Attorney-in-Fact

CONTRACT

THIS AGREEMENT, made and entered into this _____ day of _____, 2011, by and between the City of West Branch, Iowa, party of the first part, hereinafter referred to as the "Owner", and _____, party of the second part, hereinafter referred to as the "Contractor".

WITNESSETH: THAT WHEREAS, the Owner has heretofore caused to be prepared certain specifications and proposal blanks, dated the _____ day of _____, 2011, for North Downey Resurfacing, under the terms and conditions therein fully stated and set forth, and,

WHEREAS, said specifications and proposal blanks accurately and fully describe the terms and conditions upon which the Contractor is willing to perform the work specified:

NOW, THEREFORE, IT IS AGREED:

1. That the Owner hereby accepts the proposal of the Contractor for the work, as follows:

2. That this contract consists of the following component parts which are made a part of this agreement and contract as fully and absolutely as if they were set out in detail in this contract:

2.1 Contract Documents, including:

- 2.1.1 Notice of Hearing and Letting
- 2.1.2 Instructions to Bidders
- 2.1.3 Proposal
- 2.1.4 Bond
- 2.1.5 General Conditions
- 2.1.6 Special Conditions
- 2.1.7 Plans List
- 2.1.8 Detailed Specifications
- 2.1.9 Plans listed in the specifications
- 2.1.10 Numbered addenda issued to the foregoing.

2.2 This Instrument.

2.3 The above components are complementary and what is called for by one shall be as binding as if called for by all.

3. That payments are to be made to the Contractor in accordance with and subject to the provisions embodied in the documents made a part of this contract.

4. That this contract is executed in triplicate.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hand and seal the date first written above.

CONTRACTOR

CITY OF WEST BRANCH, IOWA

By _____

Mayor

Title _____

ATTEST:

ATTEST:

City Administrator

Title _____

BOND

KNOW ALL MEN: That we, _____,
of _____, hereinafter called the Principal, and
_____,
hereinafter called the surety, are held and firmly bound unto the City of West Branch,
Iowa, hereinafter called the Owner in the sum of _____
Dollars (\$ _____), for the payment whereof the Principal and Surety bind
themselves, their heirs, executors, administrators, successors and assigns, jointly and
severally, firmly, by these presents.

WHEREAS, the principal has, by means of a written Agreement dated _____,
2011, entered into a Contract with the Owner for North Downey Resurfacing Project,
which Agreement includes a guarantee of all work against defective workmanship and
materials for a period of two (2) years from the date of final acceptance of the work by the
Owner, a copy of which Agreement is by reference made a part hereof;

NOW, THEREFORE, the condition of this Obligation is such that, if the Principal shall
faithfully perform the Contract on his part and shall fully indemnify and save harmless the
Owner from all costs and damage which he may suffer by reason of failure so to do and
shall fully reimburse and repay the Owner all outlay and expense which the Owner may
incur in making good any such default,

And Further, that if the Principal shall pay all persons who have contracts directly with the
Principal for labor or materials, failing which such persons shall have a direct right of
action against the Principal and Surety under this Obligation, subject to the Owner's
priority,

Then this Obligation shall be null and void, otherwise it shall remain in full force and
effect.

Provided, however, that no suit, action or proceeding by reason of any default whatever
shall be brought on this Bond after three (3) years from the date of final acceptance of the
work.

And Provided, that any alterations which may be made in the terms of the Contract, or in
the work to be done under it, or the giving by the Owner of any extension of time for the
performance of the Contract, or any other forbearance on the part of either the Owner or
the Principal to the other shall not in any way release the Principal and the Surety, or
either of them, their heirs, executors, administrators, successors or assigns from their
liability hereunder, notice to the Surety of any such alteration, extension or forbearance
being hereby waived.

And Further Provided, the Principal and Surety on this Bond hereby agree to pay all
persons, firms, or corporations having contracts directly with the Principal or with
subcontractors all just claims due them for labor performed or material furnished, in the
performance of the Contract on account of which this Bond is given, when the same are
not satisfied out of the portion of the contract price which the Owner shall retain until
completion of the improvements, but the Principal and Surety shall not be liable to said
persons, firms, or corporations unless the claims of said complaints against said portions of
the contract price shall have been established as provided by law.

The Surety on this Bond shall be deemed and held, any contract to the contrary notwithstanding, to consent without notice:

- a. To the extension of time to the Principal in which to perform the Contract.
- b. To changes in the plans, specifications, or Contract, when such changes do not involve an increase of more than twenty percent (20%) of the total contract price, and shall then be released only as to such excess increase.
- c. That no provision of this Bond or of any other contract shall be valid which limits to less than three (3) years from the date of final acceptance of the work the right to sue on this Bond for defects in workmanship or materials not discovered or known to the Owner at the time such work was accepted.

The Bond is executed in triplicate.

Signed and Sealed this ____ day of _____, 2011.

PRINCIPAL:

Contractor

Signature

Title

SURETY:

Surety Company

Signature, Attorney-in-Fact

Name of Attorney-in-Fact

Company Name

Company Address (Including Zip Code)

Company Telephone Number

GENERAL CONDITIONS

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1. CONTRACT DOCUMENTS

- 1.1 All documents listed or identified as part of contract are each and all essential and component parts of agreement between Owner and Contractor.
- 1.2 Contract Documents shall be signed in triplicate by Owner and Contractor.
- 1.3 Contract Documents are complementary, and what is called for by any one shall be as binding as if called for by all. The intention of documents is to include all labor and materials, equipment and transportation necessary for proper execution of work. It is not intended that materials or work not covered by or properly inferable from any heading, branch, class or trade of the specifications shall be supplied unless distinctly noted. Materials or work described in words, which have a well known technical or trade meaning, shall be held to refer to such recognized standards.

2. SURETY BOND

2.1 Contractor shall furnish a good and sufficient surety bond in full amount of contract prior to signing contract. Surety bond shall guarantee faithful performance of all provisions of contract and payment of all bills and obligations arising from said contract. Should surety become irresponsible during time contract is in force, Owner may require additional and sufficient sureties. Contractor shall furnish said additional sureties to satisfaction of Owner within ten (10) days after written notice to do so. In default thereof, contract may be suspended as hereinafter provided.

3. CONTRACTOR'S RESPONSIBILITY

3.1 Contractor shall assume full responsibility for safekeeping of all materials and equipment and for all unfinished work until final acceptance by Owner. Materials and equipment which are damaged or destroyed from any cause shall be replaced at Contractor's expense.

3.2 Contractor shall indemnify and save harmless Owner against any liens filed for non-payment of Contractor's bills in connection with contract work. Contractor shall furnish Owner satisfactory evidence that all persons who have done work or furnished materials, equipment, or service of any type, under the contract have been fully paid prior to acceptance of work by Owner.

3.3 Contractor shall erect and maintain such barriers and lights as will prevent accidents as a consequence of its work. It shall indemnify and save harmless the Owner and its agents from all suits brought against Contractor for any injuries received or sustained by any person or persons by or through Contractor, its servants, or agents, in construction of work, or by or in consequence of any acts or omissions or negligence in performing contract work.

4. SUBCONTRACTS

4.1 Contractor shall not assign, sub-let or transfer the whole or any part of work herein specified without written consent of Owner. Assignment, sub-letting or transfer shall not relieve Contractor from its responsibilities set forth herein.

4.2 Detailed specifications are separated into titled parts for convenience or reference and to facilitate letting of contracts and subcontracts. Such arrangement shall not obligate Engineer to establish limits on contracts between Contractors and subcontractors.

5. CONTRACTOR'S EMPLOYEES

- 5.1 Contractor shall personally supervise its work or provide a capable superintendent satisfactory to Engineer. Superintendent shall be authorized to receive instructions from Engineer.
- 5.2 Incompetent or incorrigible employees shall be dismissed by the Contractor or its representative when requested by Engineer. Such dismissed persons shall not be permitted to return to work without written consent of Engineer.
- 5.3 Contractor shall give preference to local labor in execution of this contract, insofar as is practicable.

6. PERMITS AND REGULATIONS

- 6.1 In execution of work specified herein, Contractor shall conform to regulations and ordinances of any governmental body which may apply in execution of specified work. Contractor shall obtain such permits and licenses as may be required for construction of work.

7. PATENTS

- 7.1. All fees or royalties for patented inventions, equipment or arrangements used in construction or erection of work, or any part thereof, shall be included in contract price. Contractor shall protect and hold harmless Owner against any and all claims or litigation by reason of infringement of any patent rights on any materials, equipment of construction furnished by Contractor.

8. GUARANTEE

- 8.1 Contractor shall guarantee all work against faulty workmanship and materials for the period specified after date of final acceptance of work by Owner unless otherwise set out in "SPECIAL CONDITIONS" or "INSTRUCTIONS TO BIDDERS." Contractor shall repair or replace any defective workmanship and materials in a manner acceptable to Owner, without expense to Owner, within ten (10) days after written notification by Owner of such defect. If said repairs or replacements are not made within ten (10) days, Owner may make said repairs or replacements and charge the cost to Contractor.

8.2 Contractor shall provide Owner with a good and sufficient surety maintenance bond in the full amount of contract prior to signing contract. Maintenance bond shall run for the period specified from time of acceptance to protect Owner from faulty workmanship and materials as outlined in preceding paragraph.

9. SHOP DRAWINGS

9.1 Contractor shall provide Engineer with drawings, data and information regarding materials or equipment specified, or as may be called for by Engineer, for its review, within a reasonable time after award of contract. After review, Engineer shall return to Contractor one copy within a reasonable time after receipt.

9.1.1 Submit 5 copies of all shop drawing submittals.

9.2. Fabrication and shipment of materials or equipment prior to Engineer's review of drawings, data and information mentioned above shall be at Contractor's risk.

10. THE ENGINEER

10.1 Engineer shall make general observation of work as agent of Owner. Engineer's general observation shall not be construed that it shall direct or control operations of Contractor.

11. PLANS AND SPECIFICATIONS

11.1 Engineer shall provide Contractor with five sets of plans and specifications after execution of contract. If additional plans and specifications are required, Contractor shall compensate Engineer for costs of printing.

11.2 Engineer shall provide Contractor with additional and supplemental plans as may be required to show details of construction after approval of manufacturers' drawings and data on materials and equipment.

11.3 Engineer will provide Contractor with such revised plans and specifications as may be required to show any authorized changes or extra work.

12. INTERPRETATION OF PLANS AND SPECIFICATIONS

- 12.1 Plans and specifications shall be interpreted by Engineer. Its decision shall be final and binding on all parties concerned.
- 12.2 Contractor will not be allowed to take advantage of errors or omissions in plans and specifications. Engineer will provide full instructions when errors or omissions are discovered.

13. DECISIONS BY ENGINEER

- 13.1 Engineer shall make decisions, in writing, on claims between Contractor and Owner within a reasonable time after presentation. Such decisions shall be regarded as final except for appropriate legal recourse.

14. WORKMANSHIP AND MATERIALS

- 14.1 All work done and all materials and equipment furnished by Contractor shall conform to plans and specifications. Competent laborers and tradespersons shall be used on all work. Experienced manufacturers' representatives shall be used to supervise installation of equipment.
- 14.2 In absence of detailed specifications in other sections, all materials shall conform to standards of American Society for Testing Materials.
- 14.3 Wherever items of materials or equipment are specified by a manufacturer's name and type, or equal, it is the intent that materials or equipment of other manufacturers, equal in quality and performance, may be substituted. Such substitution may be made only with written authorization of Engineer.
- 14.4 Wherever items of materials or equipment are specified by a manufacturer's name and type, or equal, and additional features of items are specifically required by specifications, additional features specified shall be provided whether or not they are normally included in standard manufacturer's items listed.
- 14.5 Wherever items of materials or equipment are specified by a manufacturer's name and type, or equal, and specified items are or become obsolete and no longer available, Contractor shall provide acceptable equal items which are currently available at no change in contract price.

- 14.6 When proposing "or equal" items or substitutions, Contractor shall furnish general arrangement drawings, full descriptive data, manufacturer's specifications and such performance data as required to satisfy Engineer that materials or equipment proposed are equal to that specified. Burden of proof of equality shall be responsibility of Contractor.
- 14.7 Whenever items of materials or equipment are specified by a manufacturer's name and type and "or equal" is not listed, Contractor shall provide specified equipment without substitution, unless prior approval of Engineer is obtained for any substitution.
- 14.8 Contractor shall abide by Engineer's decision when proposed substitutes of material or equipment are deemed to be unacceptable and in such an event Contractor shall furnish items of equipment or materials specified.
- 14.9 Engineer reserves right to consider such factors as overall project arrangement, overall project cost, and similar factors in determining whether proposed substitutions will be acceptable.

15. ON-SITE REVIEW OR OBSERVATION

- 15.1 All materials used and all work done by Contractor shall be subject at all times to review, observation, tests and approval by Engineer. Contractor shall furnish samples of materials for observation and tests as requested by Engineer. Contractor shall furnish any information required concerning nature or source of any proposed materials or equipment.
- 15.2 Construction, fabrication and manufacture of equipment or materials specified herein may be observed by Engineer at plant or factory.
- 15.3 Materials, equipment or work which do not satisfactorily meet specifications may be condemned by Engineer by written notice to Contractor. Condemned materials, equipment or work shall be promptly removed and replaced.
- 15.4 Defective materials, equipment or work may be rejected by Engineer at any time prior to final acceptance by Owner even though said defective items may have been previously overlooked.

16. RESIDENT ENGINEER AND/OR ENGINEER TECHNICIANS

- 16.1 Resident engineer and/or engineer technicians may be appointed by Engineer or Owner to insure that work is performed in accordance with plans and specifications.
- 16.2 Resident engineer and/or engineer technicians shall have authority to notify Contractor in writing of work which is not being properly performed. Contractor shall be liable for any work determined by Engineer as not being properly performed.
- 16.3 Resident engineer and/or engineer technicians shall have no authority to permit deviation from plans and specifications and Contractor shall be liable for any deviations made without written order from Engineer.

17. TESTS

- 17.1 Tests shall be performed by Contractor upon materials and equipment specified, to determine if the materials and equipment meet requirements of specifications, conditions of operation and guarantees of Contractor.
- 17.2 Equipment shall be subject to factory tests specified herein. Certified evidence of tests shall be furnished when requested by Engineer.
- 17.3 Tests shall be made in accordance with standards of the American National Standards Institute (ANSI), American Society for Testing Materials (ASTM), and other recognized standards.

18. TIME

- 18.1 Contractor shall commence work within time specified and shall complete work within time specified in contract.

19. DELAYS

- 19.1 Delays caused by injunction or legal actions, damages by elements, or other causes beyond control of Contractor (of which Owner shall be sole judge) shall entitle Contractor to a reasonable extension of time within which to complete work.
- 19.2 Application for extension of time shall be made to Owner by Contractor and shall state reasons for request for extension of time.

19.3 No extension of time shall be valid unless made in writing by Owner.

19.4 Normal weather conditions shall not form the basis of request for extension of time. Abnormal weather conditions shall form basis of request for extension of time only to the delay in excess of that resulting from normal weather conditions.

20. CHANGES

20.1 Engineer shall have the right to make changes in location and quantities of work as may be deemed advisable with consent of Owner and without notice to sureties on Contractor's bond.

20.2 No change shall be made under this paragraph which will increase or decrease total contract amount more than twenty percent (20%) of original contract price and no changes shall be made in plan of improvement that would necessitate additional or different construction processes and equipment.

20.3 Amount due Contractor shall be adjusted for changes in following manner:

20.3.1 Where unit prices have been bid, these unit prices shall be used to compute adjustment in compensation.

20.3.2 Where no such unit prices have been bid, Engineer and Contractor shall negotiate a reasonable adjustment in Contractor's compensation. Limitations on compensation in 21.1 of "21. EXTRA WORK" shall apply to changes where compensation is negotiated.

20.3.3 No changes shall be authorized unless they are shown on revised plans or in written instructions of Engineer.

20.3.4 Authorized changes which require additional time to complete shall entitle Contractor to proportionate extension of time to completion which shall be determined by Engineer.

21. EXTRA WORK

- 21.1 Required extra work not specified under this contract shall be done at an agreed price satisfactory to Contractor and Owner, or on basis of actual cost of work plus not more than fifteen percent (15%) for Contractor's overhead and profit. Actual cost shall include expense for equipment, materials, and labor and shall include no overhead items or profit. Where extra work is done by a subcontractor, with approval of Owner, there may be included in Contractor's actual cost, ten percent (10%) for subcontractor's profit.
- 21.2 The term "extra work" as used herein shall not be construed to apply to changes described in "20. CHANGES".
- 21.3 No compensation shall be allowed Contractor for extra work unless such work has been authorized in writing by Engineer and approved by Owner.
- 21.4 Contractor shall submit a statement of costs to Engineer for approval when extra work is performed on an actual cost plus basis. After such a statement is approved, Engineer shall certify its correctness to Owner.

22. OWNERSHIP OF MATERIALS

- 22.1. All materials and work covered by partial payments shall become sole property of Owner, but this provision shall not be construed as relieving Contractor from sole responsibility for all materials and work for which payments have been made, for restoration of damaged work, or as a waiver of rights of Owner to require fulfillment of all terms of contract.

23. OTHER CONTRACTS

- 23.1 Owner reserves right to let other contracts in connection with this work. Contractor shall afford other contractors reasonable opportunity for introduction and storage of their materials and execution of their work, and shall properly connect and coordinate its work with theirs.
- 23.2 When proper execution of Contractor's work depends upon work of another contractor, it shall inspect other work and report any defects to Engineer. Contractor's failure to inspect and report shall constitute an acceptance of other contractor's work except for defects which may develop in work after completion.

23.3 To insure proper execution of its subsequent work, Contractor shall measure work already in place and shall at once report to the Engineer any discrepancy between the executed work and drawings.

24. OWNER'S RIGHT TO DO WORK

24.1 If Contractor neglects to prosecute work properly or fails to perform any provision of this contract, Owner, after three (3) days' written notice to Contractor, may, without prejudice to any other remedy it may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor, provided, however, that Engineer shall approve both such action and amount charged to Contractor.

25. OWNER'S RIGHT TO TERMINATE CONTRACT

25.1 Owner, upon certification of Engineer that there is sufficient cause to justify termination of contract, may, without prejudice to any other right or remedy, and after giving Contractor seven (7) days' notice may terminate employment of Contractor for any of following reasons:

25.1.1 Contractor makes a general assignment for benefit of its creditors, or if adjudged a bankrupt.

25.1.2 Receiver is appointed on account of Contractor's insolvency.

25.1.3 Contractor persistently or repeatedly fails or refuses, except when extension of time to complete is granted, to provide enough skilled workers or proper materials.

25.1.4 Contractor fails to make prompt payment to subcontractors for material or labor.

25.1.5 Contractor persistently disregards laws and ordinances or instructions of Engineer.

25.1.6 Contractor violates a provision of contract.

25.2 If Owner terminates employment of Contractor, it shall take possession of premises and all materials, tools and appliances thereon. It shall finish work by whatever method it may deem expedient. In such case Contractor shall not be entitled to receive any further payment until work is finished.

25.3 If unpaid balance of contract price exceeds expense of finishing the work including compensation for additional managerial and administrative services, excess shall be paid to Contractor. If expense exceeds unpaid balance, Contractor shall pay difference to Owner. Expense incurred by Owner as herein provided, and damage incurred through Contractor's default, shall be certified by Engineer.

26. CONTRACTOR'S RIGHT TO STOP WORK OR TERMINATE CONTRACT

26.1 If Engineer fails to issue any certificate for payment within fifteen (15) days after it is due, or if Owner fails to pay to Contractor within thirty (30) days of its maturity and presentation, any sum certified by Engineer, then Contractor may, upon seven (7) days simultaneous written notice to Owner and Engineer, stop work or terminate this contract. If Contractor elects to stop work by written notice, work shall be resumed promptly upon payment by Owner. If Contractor elects to terminate this contract by written notice it shall recover from Owner payment for all work executed to date of notice and any loss sustained upon any plant or materials plus a reasonable profit.

27. PAYMENTS WITHHELD

27.1 Engineer may withhold or nullify the whole or a part of payment certificate, on account of subsequently discovered evidence, to such extent as may be necessary to protect Owner from loss on account of:

27.1.1 Defective work not remedied.

27.1.2 Claims filed or reasonable evidence indicating probable filing of claims.

27.1.3 Failure of Contractor to make payments properly to subcontractors or for materials or labor.

27.1.4 A reasonable doubt that contract can be completed for balance then unpaid.

27.1.5 Damage to another contractor.

27.1.6 Claims of Owner for liquidated damages.

27.2. Payments shall be made for amounts withheld when above grounds are removed.

28. ACCEPTANCE AND FINAL PAYMENT

28.1 When work has been satisfactorily completed, Engineer will certify Contractor's final estimate stating that work has been completed in accordance with terms and conditions thereof with qualifications, if any, as stated. Balance found to be due Contractor according to the terms of payment shall be paid by Owner as provided in contract, provided, however, that any state laws which designate manner of final payment shall be followed in lieu of manner of final payment outlined above. Prior to receipt of final payment, Contractor shall file with Owner a receipt in full from each manufacturer, subcontractor, and dealer for all equipment and materials used on the work and a complete release of all liens, including tax liens, which may have arisen from this contract and required statements from Contractor and all subcontractors of sales and use tax paid. In lieu thereof, Owner, at its option, may accept from Contractor a statement showing balance due on all accounts.

28.2 Making and acceptance of final payment shall constitute a waiver of all claims by Owner, except those arising from unsettled liens, from faulty work or materials appearing after final payment or from requirements of the specifications, and of all claims by Contractor, except those previously made and still unsettled.

29. SUSPENSION OF WORK

29.1 Owner may suspend the work, or any part thereof, at any time, by giving ten (10) days' written notice to Contractor. The work shall be resumed by Contractor within ten (10) days after date fixed in written notice from Owner to Contractor to do so.

29.2 If work, or any part thereof, shall be suspended and if Owner does not give written notice to Contractor to resume work within one (1) year of date of suspension, Contractor may abandon suspended portion of work. Contractor will be entitled to estimates and payments for all work done on the portions so abandoned, if any.

30. CLEANING UP

30.1 Contractor shall keep premises free from accumulations of waste material or rubbish caused by its employees or work. After completion of work it shall remove all its rubbish and all its tools, scaffolding and surplus materials from work site. It shall leave its work "broom clean" or its equivalent, unless more

exactly specified. In case of dispute the Owner may remove rubbish and charge costs to Contractor as Engineer shall determine to be just.

31. HAZARDOUS MATERIALS

31.1 The use of Asbestos Construction Building Materials (ACBM) is specifically prohibited. The Contractor, suppliers, and subcontractors shall warrant that all products used are asbestos free. In the event that a specified product contains asbestos, it shall be the responsibility of the Contractor to notify the Owner so that an appropriate substitution can be made in a timely manner so as not to delay the project.

31.2 The Contractor shall provide the Owner a certificate that warrants that no materials, products, items or equipment contains any asbestos upon completion of the work of this Contract. If asbestos is found to exist in any of the materials, products, items or equipment provided as part of this Contract, the Contractor shall be financially responsible for all costs resulting from removal in accordance with an Owner approved method and replacement of an asbestos free condition to finished drawings and specifications. The financial responsibility of the Contractor shall not terminate with the end of the surety maintenance bond period, but shall continue through the life of the facility.

32. IOWA HAZARDOUS CHEMICAL RISKS RIGHT-TO-KNOW LAW

32.1 Owner's responsibility:

32.1.1 Owner shall provide to the Contractor a list of known hazardous chemicals within the project site to which their employees may be exposed and suggestions for appropriate protective measures.

32.2 Contractor's responsibility:

32.2.1 Contractor shall inform his/her employees of the Iowa Hazardous Chemical Risks Right-to-Know Law.

32.2.2 Contractor shall provide to the Owner a list of known hazardous chemicals that they anticipate will be used on site as well as all pertinent information relating to employee protection. Contractor's Material Safety Data Sheets (MSDS) shall be available to Owner upon request.

SPECIAL CONDITIONS

NORTH DOWNEY RESURFACING WEST BRANCH, IOWA

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1. INTENT

- 1.1 To supplement the provisions of the GENERAL CONDITIONS by outlining special conditions applicable to project.

2. LOCATION

- 2.1 Work is located in public right-of-way in the City of West Branch, Iowa.
- 2.2 Transportation facilities:
- 2.2.1 Interstate 80, County Highway X-30.

3. RIGHT-OF-WAY

- 3.1 Owner will provide easements for construction on private lands.
- 3.2 Contractor will be provided list of construction easement widths.
- 3.3 Confine movements of equipment and personnel, storage of materials, excavation, spoil banks, and all other construction operations within the right-of-way provided.
- 3.4 Contractor will be held liable by City and adjacent property owners for damages outside right-of-way and easements; failure of Engineer to warn Contractor about incidence of trespassing does not relieve liability.

4. ORDER OF CONSTRUCTION

- 4.1 Provide Engineer with proposed schedule of construction showing dates of starting and completing various portions of work.
- 4.2 Coordinate work with Owner and Engineer to assure orderly and expeditious progress of the work.
- 4.3 Contractor shall establish schedule of working hours for construction, subject to approval of Engineer.
- 4.4 Schedule construction to minimize use of street barricades and detours; clean up each portion of work as it is completed; provide temporary crushed rock access; cost of temporary surfacing is incidental to construction.
- 4.5 See PART 2 - SPECIAL CONSTRUCTION for additional requirements.

5. INTERRUPTIONS TO SERVICE

- 5.1 Existing utilities shall remain in substantially continuous operation during construction.

6. SERVICE FACILITIES

- 6.1 Water, electricity, compressed air, and other services shall be furnished by Contractor to meet his own requirements.

7. STORAGE OF MATERIALS AND EQUIPMENT

- 7.1 Limited storage space for materials and equipment will be available.
- 7.2 Storage areas shall be subject to approval of Engineer.
- 7.3 Store materials and equipment in manner which will preserve their quality and fitness.

8. CONSTRUCTION FACILITIES BY CONTRACTOR

- 8.1 Provide suitable storage buildings necessary for proper storage of materials and equipment.

- 8.2 Provide telephone at which Contractor can be reached by Owner or Engineer at all times during the working day; provide liaison between telephone and construction personnel for expeditious handling of messages.
 - 8.2.1 Provide Owner and Engineer with at least two telephone numbers where Contractor's representative can be reached evenings, weekends and holidays in event of emergency.
- 8.3 Location of all construction facilities, including project construction plant and yard, subject to approval by Engineer; remove all construction facilities upon completion of work.
- 8.4 Provide and maintain suitable sanitary facilities for construction personnel for duration of work; remove upon completion of work.
- 8.5 Provide fence, barricades, and/or watchmen to prevent access of unauthorized persons to site where work is in progress.

9. INSURANCE BY CONTRACTOR

- 9.1 Provide and maintain insurance throughout construction period in the following minimum amounts:
 - 9.1.1 Workmen's compensation and occupational disease insurance in accordance with the laws of the State of Iowa covering all employees who perform any obligations assumed under the contract.
 - 9.1.2 Public liability and property damage liability insurance covering all operations under the contract; limits of bodily injury or death not less than \$500,000 for one person and \$1,000,000 for each accident; for property damage, not less than \$250,000 for each accident and \$500,000 aggregate for accidents during the policy period.
 - 9.1.3 Automobile liability insurance on all self-propelled vehicles used in connection with the contract, whether owned, non-owned, or hired; public liability limits of not less than \$500,000 for one person and \$1,000,000 for each accident; property damage limit of \$500,000 for each accident.
- 9.2 Owner reserves right to approve insurance company.

Special Conditions

- 9.3 Owner shall have right at any time to require public liability insurance and property damage liability insurance greater than required in above paragraphs. Additional premiums payable solely as result of such additional insurance shall be added to bid price.
- 9.4 Furnish certificates of insurance to Engineer made in favor of Owner showing compliance with foregoing requirements.

10. POSITION, LINE AND GRADE

- 10.1 Construct to lines and grades shown on plans or as specified hereinafter.
- 10.2 Contractor shall provide detailed survey and staking for location, elevation and grade of construction.
- 10.3 Contractor shall provide, without extra compensation, all men and necessary tools to make all test holes and exploration, at any time, for purpose of determining location of existing structures beneath ground surface which might conflict with work of Contractor.
- 10.4 Contractor shall preserve all monuments, reference points, stakes and bench marks set by Engineer. In case of destruction by Contractor's negligence or carelessness, he will be charged with resulting expense of replacement, and responsibility for any mistakes or loss of time caused thereby.
- 10.5 These conditions supersede conflicting provisions of GENERAL CONDITIONS.

11. EMPLOYMENT PRACTICES

- 11.1 Contractor, or his subcontractors, shall not employ any person whose physical or mental condition is such that his employment will endanger the health and safety of himself or others employed on the project.

PLANS LIST

NORTH DOWNEY RESURFACING
WEST BRANCH, IOWA

1. PLANS

1.1 The work shall conform to the following drawings (attached at the end of specifications) which constitute the "plans" and are an integral part of the Contract Documents.

<u>Title</u>	<u>Drawing Number</u>	<u>Revision Number</u>
Index & Title Sheet	A.01	
Typical	B.01	
Quantities – Estimate Reference	C.01	
Tabulations	C.02	
Tabulations	C.03	
Tabulations	C.04	
Plan	D.01	
Traffic Control	J.01	
Pavement Markings	L.01	

DETAILED SPECIFICATIONS

NORTH DOWNEY RESURFACING
WEST BRANCH, IOWA

PART 1 - GENERAL REQUIREMENTS

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1. FORM

- 1.1 Detailed specifications are in outline form and include incomplete sentences. Omission of words or phrases is intentional. Supply omitted words or phrases by inference.

2. INTENT

- 2.1 To set forth requirements of performance, type of equipment or structure desired, and standards of materials and construction.
- 2.2 To describe work set out in Contract Documents, unless otherwise specifically indicated.
- 2.3 To require performance of complete work in spite of omission of specific reference to any minor component parts.
- 2.4 To provide for new materials and equipment, unless otherwise indicated.

3. INTERPRETATION

- 3.1 Report errors or ambiguities in specifications to Engineer as soon as detected; Engineer will answer questions regarding and interpret intended meaning of specifications; his interpretation shall be accepted as final.

4. WORK INCLUDED

- 4.1 Furnish all materials, labor and equipment to construct North Downey Resurfacing, as set out in Notice of Hearing and Letting.

5. STARTING AND COMPLETION TIME

- 5.1 Commence work within 10 calendar days after date set forth in written Notice to Proceed. Complete work within time set out in Notice of Hearing and Letting.

6. INFORMATION FOR ENGINEER

- 6.1 After award of contract submit five copies of following information and drawings for Engineer's review: manufacturer's specifications and catalog data for pipe, castings and such other data as requested by Engineer.

- 6.2 Within 15 days after award of contract, provide construction schedule showing dates of starting and completing various portions of work.

- 6.3 Provide 2 copies of following information:

6.3.1 All materials test reports.

6.3.2 Portland cement concrete and hot mix asphalt mix design; submit 8 days before proposed mix is to be used.

7. PLANS AND SPECIFICATIONS

- 7.1 Engineer will furnish up to 5 sets of plans and specifications after award of contract; Contractor shall compensate Engineer for printing costs for additional copies required.

- 7.2 Subcontractors and suppliers will be furnished copies only at request of Contractor; Engineer will be compensated for printing costs.

- 7.3 Provide one set of plans and specifications for each foreman or superintendent in charge of each crew on job.

8. STANDARDS AND CODES

- 8.1 Do work in accordance with best present-day installation and construction practices.
- 8.2 Conform to and test materials in accordance with applicable sections of latest revisions or tentative revisions of following codes and standards unless specifically noted to contrary:
 - 8.2.1 American Association of State Highway and Transportation Officials (AASHTO).
 - 8.2.2 American Concrete Institute (ACI).
 - 8.2.3 American Institute of Steel Construction (AISC).
 - 8.2.4 American National Standards Institute (ANSI).
 - 8.2.5 American Society for Testing and Materials (ASTM).
 - 8.2.6 American Water Works Association (AWWA).
 - 8.2.7 American Welding Society (AWS).
 - 8.2.8 Iowa Department of Transportation (IDOT); latest edition of standard specifications and addenda.
 - 8.2.9 Federal Specifications (FS).
 - 8.2.10 Manual of Accident Prevention in Construction by Associated General Contractors of America, Inc., (AGC).
 - 8.2.11 Occupational Safety and Health Act of 1970 (Public Law 91-596) (OSHA).
 - 8.2.12 Iowa Occupational Safety and Health Act of 1972 (Chapter 88, Code of Iowa 2011) (IOSHA).
 - 8.2.13 Standards and codes of the State of Iowa and applicable local standards, codes and ordinances of the City of West Branch.

- 8.2.14 Other standards and codes which may be applicable to acceptable standards of the industry for equipment, materials and installation under the contract.

9. MATERIALS TESTS

- 9.1 Submit to Engineer duplicate copies of reports by an independent testing laboratory showing compliance of construction materials with specifications. Selection of testing laboratory subject to approval by Engineer.
- 9.2 Pay cost of all tests including transportation charges on samples.
- 9.3 Provide samples of materials and forms for preparing concrete compression cylinders required for laboratory tests; sampling of materials at site and preparation of concrete compression cylinders shall be performed by Engineer.
- 9.4 Ship no materials to the job until laboratory tests have been furnished which show compliance of materials with the specifications.
- 9.5 All materials subject to sampling, testing, inspection and rejection at site by Engineer.
- 9.6 Laboratory tests specified herein include the following:
 - 9.6.1 Asphalt surfacing: minimum of 1 lab stability and density test consisting of at least 2 briquettes; minimum of 4 in-place density tests and 1 asphaltic extraction; see HOT MIX ASPHALT PAVEMENT for additional requirements.

10. RESPONSIBILITY OF CONTRACTOR

- 10.1 Protection of his work.
- 10.2 Protection of all property from injury or loss resulting from his operations.
- 10.3 Replace or repair objects sustaining any such damage, injury or loss to satisfaction of Owner and Engineer.
- 10.4 Without limiting GENERAL REQUIREMENTS of Contract Documents, protect flag poles, sidewalks, streets, pavements, alleys, pipe, conduit, utilities, trees and shrubs and structures not shown for removal.

General Requirements

- 10.5 Cooperate with Owner, Engineer and representative of utilities in locating underground utility lines and structures. Incorrect, inaccurate or inadequate information concerning location of utilities or structures shall not relieve Contractor of responsibility for damage thereto caused by his operations.
- 10.6 Keep cleanup current with construction operations.
- 10.7 Comply with all federal, state and City of West Branch laws and ordinances.
- 11. TEMPORARY WORK
 - 11.1 Make all temporary connections necessary for maintaining utility service during course of work.
 - 11.2 Construct temporary drains or bulkheads to keep work in the dry.
- 12. BARRICADES AND LIGHTS
 - 12.1 Erect and maintain barricades and lights and/or provide watchmen in conformance with current Manual of Uniform Traffic Control Devices (MUTCD), for protection and warning of pedestrians and vehicles. All barricades, lights and/or watchmen at expense of Contractor.
 - 12.2 Engineer will not allow work to proceed until all signs, barricades and lights are in place; requirements for type of signs and number of signs will be strictly enforced; improper signing during construction will constitute "improper work" and Engineer will cause Contractor to suspend work.
 - 12.3 All signs, barricades, and other traffic control devices used on the project shall be furnished, installed and maintained by Contractor; all traffic control devices shall be maintained in a state of good repair and shall be cleaned and washed periodically as needed.
 - 12.4 Notify City 48 hours prior to street closing.
- 13. FINAL REVIEW AND ACCEPTANCE
 - 13.1 Notify Engineer when project is considered to be complete and ready for final review.

General Requirements

- 13.2 Owner will accept work and make final payment to Contractor:
 - 13.2.1 When Engineer has certified that he has reviewed the work of Contractor and stated that it is complete and in substantial conformance with the plans and specifications.
 - 13.2.2 When Contractor has filed with Owner or Engineer documents called for in specifications.
 - 13.2.3 When all government agencies involved have indicated, in writing, that work is complete and acceptable.

PART 2 - SPECIAL CONSTRUCTION

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1. GENERAL

- 1.1 Procedures outlined below are not intended to fully cover all special procedures or emergencies which may arise during construction but are offered as an aid to Contractor in planning work; Contractor will cooperate with City and Engineer to minimize inconvenience, construction delays and interruptions to street traffic.
- 1.2 Determine location of underground utilities and piping before starting excavation work; locations of underground appurtenances are approximate and not guaranteed by City or Engineer.
- 1.3 Remove and replace all signs and other appurtenances which interfere with construction operations; replace damaged signs at no cost to Owner; signs not shown on drawings.
- 1.4 Limit construction operations to property, right-of-ways and easements provided by City; provide barricades, lights, signs and detours as necessary to reroute traffic around construction areas.
- 1.5 Arrange with operating utilities for relocation or temporary removal of utilities in conflict with construction and for services needed during construction at no cost to City.
- 1.6 Dispose of materials removed during construction at location secured by Contractor as approved by Engineer.
 - 1.6.1 Stockpile millings on the north side of south water tower. Coordinate with owner.
- 1.7 Notify businesses and residents two days in advance, when construction will disrupt or block access to property.

- 1.8 Submit complete detailed construction procedure schedule after award of contract for planning, scheduling and controlling construction of project.
- 1.9 Contractor will be expected to provide adequate personnel and equipment to perform work within specified time of construction.
- 1.10 Extensions of contract period will be given consideration upon written request of Contractor; request must include valid supporting data and bona fide reasons for requesting extension; City expects work to be complete and ready for final acceptance within completion time specified.
- 1.11 Protect survey markers of lot corners.

2. COOPERATION WITH OTHERS

- 2.1 Advise all utilities prior to excavating in area where construction might affect underground gas, electrical, telephone, cable or water service.
 - 2.1.1 Advise telephone company of proposed construction schedule as it relates to telephone service.
 - 2.1.2 Advise power company of proposed construction schedule as it relates to electrical power.
 - 2.1.3 Advise gas company of proposed construction schedule as it relates to gas service.
 - 2.1.4 Advise City Water Superintendent of proposed construction schedule as it relates to water service.
 - 2.1.5 Advise cable television company of proposed construction schedule as it relates to cable television.

3. CONTAMINATED SOIL FINDS

- 3.1 If during course of construction evidence of deposits of contaminated soils are found, cease operations affecting find and notify owner who will notify Iowa Department Of Natural Resources; no further disturbance of deposits will ensue until notification by owner that work may proceed. Owner will issue notice to proceed only after contaminated soils have been identified and procedures for remedial contaminated soils have been determined and approved by Iowa Department of Natural Resources and Owner; compensation to Contractor, if

any, for lost time or changes in construction due to changed conditions will be in accordance with change order provisions of specifications.

4. TRAFFIC CONTROL

- 4.1 Provide barricades, signs and lights to protect vehicular and pedestrian traffic during construction; comply with GENERAL REQUIREMENTS.
- 4.2 Maintain one way traffic during milling, overlay, shouldering, pavement markings, replacement and installation of curb. See IDOT Standard Road Plans TC-213 for traffic control.

5. MOBILIZATION

- 5.1 Preparatory work and operations for all items under the contract, including, but not limited to those necessary for:
 - 5.1.1 The movement of personnel, equipment, supplies, and incidentals to the project site,
 - 5.1.2 The establishment of all offices, buildings, and other facilities necessary for work on the project, and
 - 5.1.3 All other work or operations which shall be performed or costs incurred prior to beginning work in the various items in the project site.
- 5.2 Mobilization may include bonding, permit, and demobilization costs.
- 5.3 Nothing herein is to be construed to limit or preclude partial payments otherwise provided for by the contract.
- 5.4 A contract item for Mobilization will not be included for maintenance aggregate, materials, granular surfacing, or for any other minor projects.
- 5.5 When the proposal includes a lump sum item for Mobilization, the bidder shall indicate the bid price in dollars, and this is the contract price for this item. When the proposal does not include a lump sum item for Mobilization, all costs incurred by the Contractor for Mobilization are incidental to other work.

6. WEATHER LIMITATIONS

6.1 Owner expects paving of improvements during suitable weather within contract time period; contract time period includes calendar days for inclement weather; contract time period will not be extended for claims of wet weather or freezing weather.

7. PAYMENT

7.1 No separate payment will be made for work covered under this part of the specifications except as set forth below. Include all costs in appropriate unit prices.

7.2 Traffic Control, LS: Lump sum price includes furnishing signs, flagmen, barricades, flashers, channelizing devices and other miscellaneous traffic control items specified or required by City of West Branch during construction; includes set up, removal and miscellaneous associated work.

7.3 Mobilization, LS: Lump sum price includes:

7.3.1 Partial Payment

7.3.1.1 For projects exceeding \$500,000, a partial payment of mobilization will be made after receipt of a signed contract. This partial payment will be either 10% of the contract price for this item or 1% of the original project sum, whichever is less.

7.3.1.2 When 5% of the original project sum is earned, either 25% of the contract price for this item or 2.5% of the original project sum, whichever is less, will be paid.

7.3.1.3 When 10% of the original project sum is earned, either 50% of the contract price for this item or 5% of the original project sum, whichever is less, will be paid.

7.3.1.4 When 25% of the original project sum is earned, either 100% of the contract price for this item or 10% of the original project sum, whichever is less, will be paid.

7.3.2 Full Payment

7.3.2.1 Upon completion of all work on the project required by the contract, full payment will be made for this contract item, including any amount not paid as a partial payment.

PART 3 - EARTHWORK AND INCIDENTALS FOR PAVEMENT

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(MILLING) | 4. GRANULAR SHOULDERS |
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1. GENERAL

- 1.1 This part of the specifications includes earthwork, milling and incidentals to complete resurfacing and shoulder work.
- 1.2 Reference to percent maximum density shall mean a soil density not less than the stated percent of maximum density of optimum moisture content for soils as determined by ASTM D698 Moisture-Density Relations of Soils using 5.5-lb. Rammer and 12-in. Drop. (Standard Proctor Method).
- 1.3 Do work in accordance with best present-day installation and construction practices.

2. REMOVAL OF HMA SURFACING (MILLING)

- 2.1 Mill pavement surface to depth specified on plans to sound surface.
- 2.2 Mill existing surface to provide uniform cross section.
- 2.3 Equipment for milling asphaltic concrete: in accordance with IDOT 2531.03, A.
- 2.4 Mill surfacing according to IDOT 2531.03, B.
- 2.5 Surface cleaning: clean pavement prior to resurfacing with power broom to a clean hard surface.
 - 2.5.1 Clean milled areas which become dirty prior to surface placement at no additional cost to Owner.
 - 2.5.2 Thoroughly dry surface prior to application of tack coat and asphaltic concrete paving mixture.

- 2.6 It is anticipated that Contractor will mill surfaces shown for removal around manholes as a part of the overall milling process. Quantities milled in pavement removal areas will be paid for as pavement removal or as a part of manhole reconstruction or modification and shall be excluded from the milling areas. Milling through pavement removal areas is incidental to construction.

3. EXISTING UTILITIES

- 3.1 Locations of utility lines, mains, cables and appurtenances are in accordance with information provided by utility companies and from records of City; confirm locations of underground utilities by excavating ahead of work; Contractor fully responsible for damage to utilities during construction.
- 3.2 Conflicting utilities not shown on plans, except services: notify Engineer immediately.
- 3.3 Utility services are not generally shown on plans; protect services during construction.
 - 3.3.1 If gas services are in direct conflict with line and/or grade of new pipe, allow gas company to remove and replace service at no cost to Contractor; if Contractor wants other gas services removed, make own arrangements with gas company.
 - 3.3.2 Cut water services only if they conflict with line and grade of new work; if services are cut, use hose or other flexible connector to maintain service while new work is installed; reinstall permanent service; handling of services is incidental to construction.
- 3.4 Water main conflicts: notify City and Engineer immediately; provide all necessary shut-down, repair and relocation where conflicts occur; furnish labor, equipment, pipe and fittings; repair and relocation will be paid for as Extra Work; when broken due to carelessness, repair is incidental to construction.
- 3.5 Utility lines, poles and appurtenances, except water mains and sewer lines, in direct conflict with line and grade of work will be relocated by utility company before or during construction at no expense to Contractor; City will advise utility companies of lines, poles and appurtenances to be moved after award of contract; cooperate with utility companies in relocation of lines, poles and appurtenances.

- 3.6 Support and protect, by timbers or other means, all utility pipes, conduits, poles, wires and other apparatus not to be moved; protective measures subject to approval of Engineer.
- 3.7 No utility or utility service will be moved to accommodate equipment, method of operation or for convenience of Contractor when utility or utility services does not conflict directly with line and grade of work; arrange with utility company for relocation with approval of new location by Owner and Engineer; relocation is incidental to construction.

4. GRANULAR SHOULDERS

- 4.1 Provide granular shoulders as shown on plans and as directed by Engineer.
- 4.2 Material: Type A Granular Surface according to IDOT 2121.02.
- 4.3 Place and compact Type A Granular shoulders according to IDOT 2121.03,B.
- 4.4 Minimum thickness: 4".
- 4.5 Construction of earthen shoulders is incidental to construction.
- 4.6 Surface Preparation.
 - 4.6.1 Prepare the surface by one of the following methods:
 - 4.6.1.1 Earth Shoulder Fill.
 - 4.6.1.1.1 Construct a shoulder fill to an elevation below that of the pavement edge to allow for placement of granular shoulders as shown in the contract documents. Use select treatment materials of Article 2102.02, D, 1, if available and coordinated with the Engineer or use suitable soils of Article 2102.02, D, 2. Do not use unsuitable soils of Article 2102.02, D, 3 or topsoil.
 - 4.6.1.1.2 Spread and compact according to Articles 2107.03, D and E.
 - 4.6.1.1.3 Shape, smooth, and finish the fill. Correct

Earthwork and Incidentals for Pavement

shoulder fill elevation deviations exceeding 0.05 foot (15 mm).

4.6.1.1.4 When unpaved side roads, drives, or entrances extend through the shoulder area, excavate them or fill them with earth as necessary, and as directed by the Engineer, to provide a suitable approach.

4.6.1.1.5 Equivalent compaction with equipment specified in Article 2121.03, D, will be acceptable.

4.6.1.2 Trenching and Reshaping.

4.6.1.2.1 Remove the earth of the existing shoulder to the width and depth shown on the contract documents. Remove existing vegetation and deposit on the foreslope. Unless specified otherwise in the contract documents, remove excess excavated material from the project. Do not excavate for placement of shoulders at driveways and intersecting roads that have fillets or pavement of a higher type.

4.6.1.2.2 Correct shoulder fill elevation deviations exceeding 0.05 foot (15 mm). If placing earth backfill material is necessary in preparing the subgrade, thoroughly compact the earth backfill material by tamping or rolling in layers not exceeding 3 inches (80 mm) in depth.

4.6.1.2.3 For reshaping earth shoulders to the specified cross section adjacent to the granular shoulder, earth fill does not need to be rolled except for the 1 foot (0.3 m) adjacent to the granular shoulder.

4.7 Shoulder Construction.

- 4.7.1 Place granular shoulder material on the subgrade so no material is deposited on the adjacent pavement surface. Immediately remove material inadvertently spilled on the adjacent pavement using shovels and brooms.
- 4.7.2 Spread and compact the granular shoulder material so the finished elevation and width conform to the specified cross section.
- 4.7.3 Compact granular shoulder material with six complete coverages with a pneumatic tired roller or a steel vibratory roller, followed by at least one complete finish coverage with a steel tired roller. The Engineer may reduce the rolling when unstable subgrade is encountered, and may require additional finish rolling if needed to ensure a satisfactory surface finish. Shape concurrently with compaction. The tolerance for width of the completed shoulder is ± 0.2 foot (60 mm).
- 4.7.4 Maintain the required moisture content in the granular shoulder material until it has been satisfactorily spread, compacted, and finished to the required dimensions.
- 4.7.5 The Engineer will check the shoulder cross slope with a template furnished and used by the Contractor. Shoulder should be 4% cross slope.

5. PAYMENT

- 5.1 No separate payment will be made for work covered in this part of the specifications except as set forth below.
- 5.2 Removal of HMA Surfacing (Milling), 2" Depth, SY: Unit price includes furnishing all labor, equipment and incidentals necessary for milling existing asphaltic concrete surfacing as specified and shown on plan drawings. Includes milling, loading, hauling and removal of excess milling material from job site and delivery to city facility as directed by Owner.
- 5.3 Granular Shoulders, SY: Unit price includes equipment, labor, materials, compaction, and incidentals necessary for construction of granular shoulders as specified.
- 5.4 Unclassified Excavation – for shaping shoulders.

PART 4 - HOT MIX ASPHALT PAVEMENT

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| 4. JOB MIXING FORMULA | 10. JOINTS |
| 5. SURFACE PREPARATION | 11. SMOOTHNESS |
| 6. INTERMEDIATE AND SURFACE COURSES | 12. LIMITATIONS ON OPERATIONS |
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1. WORK INCLUDED

- 1.1 Hot mix asphalt leveling and surface mixtures of aggregate, mineral filler and asphalt binder; heated, mixed, spread and compacted to dimensions shown on plans.
- 1.2 Construction of hot mix asphalt pavement overlaid over pavement that has been milled.

2. MATERIALS

- 2.1 Asphalt binder:
 - 2.1.1 Petroleum asphalt binder, IDOT 4137.
 - 2.1.2 Performance grade asphalt PG 64-22.
- 2.2 Other materials: meet requirements of IDOT Section 2303.02.

3. PAVING PLANT AND EQUIPMENT

- 3.1 Meet requirements of IDOT Section 2303.02.F.

4. JOB MIXING FORMULA

- 4.1 Certify that sources of aggregates and binder are IDOT approved. Provide analyses of samples of materials to be used.
- 4.2 Surface course: Type A 1/2" mixture size, 1M ESAL, min. 60% crushed particles.

5. SURFACE PREPARATION

- 5.1 Remove all loose and foreign material from pavement surface; provide clean surface for placement of asphaltic concrete paving mixture.
- 5.2 Surface must be dry prior to application of tack coat and asphaltic concrete paving mixtures.
- 5.3 Set grade of fixtures to finished pavement grade or side slope grade.

6. INTERMEDIATE AND SURFACE COURSES

- 6.1 Spread with finishing machine in areas of uniform width.
- 6.2 Adjust forward speed of finishing machine as necessary to provide least amount of stopping.
- 6.3 Place in thicknesses as shown on plans.
- 6.4 Use string line to maintain edge alignment.
- 6.5 At exposed edges, slope base and surface courses at 45° from vertical; smooth and compress with finishing machine.
- 6.6 Make provisions for clean, sharp edges by sawing or other means.
- 6.7 Do not rake or disturb layer spread by machine; do all hand raking in area before placement with finishing machine.
- 6.8 Allow all courses to cool to air temperature before placing additional course.
- 6.9 Surfaces requiring three or more adjacent passes of finishing machine:
 - 6.9.1 Outer lanes laid first.
 - 6.9.2 Closure of surface made by interior lanes near centerline.
- 6.10 Surfaces requiring two adjacent passes of finishing machine; complete to full width within 24 hours.
- 6.11 Spread no more hot mix asphalt than can be finished in daylight hours.

- 6.12 If surface of layer becomes dirty, clean and reapply tack coat, at no expense to Owner.
- 6.13 Provide approved weight tickets for hot mix asphalt incorporated into pavement.

7. HANDLING AND DELIVERY

- 7.1 Control handling and manipulation of hot mix asphalt paving mixture from mixer to final spread to maintain uniform composition; prevent segregation of course particles.
- 7.2 Maintain continuous and uniform delivery rate to provide least amount of stopping of spreading unit.
- 7.3 Keep all trucks covered when delivering asphalt mixture to job site.
- 7.4 Do not use cleaning solutions such as kerosene, distillate or petroleum fractions over pavement surfaces.
 - 7.4.1 Do not carry such cleaning solutions on spreading unit.
 - 7.4.2 Wait 5 hours before using spreader unit after cleaning with above materials.
- 7.5 Keep hand tools clean by heating and scraping.

8. HAND SPREADING

- 8.1 Use hand method of spreading only in areas not accessible to finishing machine.
- 8.2 Do not dump truckloads of hot mix asphalt paving mixture on area to be hand spread.
- 8.3 Spread uniformly with hot rakes and shovels; smooth with lute.
- 8.4 Use hand rakes designated for use with asphalt mixtures.
- 8.5 Do not stand on loose mixture while raking.

9. ROLLING

- 9.1 Roll each layer to proper density.
- 9.2 Use power or driving roll for initial contact.
- 9.3 Begin at edge and work toward centerline; reverse trip lapping 2/3 to 3/4 of previous track.
- 9.4 Stagger ends of roller tracks not less than 3' in a manner that tracks will not hold water on surface.
- 9.5 Do not pass roller over end of course unless laying has been discontinued.
- 9.6 Following initial rolling, start intermediate rolling to close surface tears and voids.
 - 9.6.1 Roll entire area not less than four times.
 - 9.6.2 Roll until pavement has a density not less than 94% of density obtained in laboratory on mixture.
 - 9.6.3 Meet requirements of Class IC Compaction, IDOT Section 2303.03.D.

10. JOINTS

- 10.1 Separate longitudinal construction joints between courses at least 3".
- 10.2 Separate transverse construction joints at least 6'.
- 10.3 Pave along longitudinal joints to secure closure of joint and full compression of mixture with smooth surface after compaction.
- 10.4 Saw transverse joints at right angles to centerline of pavement.
- 10.5 Provide paper or burlap under ramp at end of day's run.

11. SMOOTHNESS

- 11.1 After second rolling, check base course and surface course with 10' straight edge in direction of rolling.

- 11.2 For variations greater than 1/4" in base and binder courses and 1/8" in surface course: heat bumps to soften mixture; smooth with rakes; roll to obtain proper density.
- 11.3 For depressions 1/2" and smaller: heat and loosen surface; add mixture free of coarse particles; lute to proper elevation and roll to obtain proper density.
- 11.4 For depressions greater than 1/2": remove asphaltic concrete paving mixture; replace with fresh mixture; compact and roll to proper density.
- 11.5 Pavement smoothness testing in accordance with IDOT Section 2316 is not required.

12. LIMITATIONS ON OPERATIONS

- 12.1 Do not apply asphaltic concrete paving mixtures at pavement temperatures of less than 40° F.; do not apply to wet or damp surface.
- 12.2 Place no asphaltic concrete paving mixtures between November 15 and April 15 of following year without written approval of Owner and Engineer.

13. SAMPLES

- 13.1 Provide and test uncompacted samples of each mixture at location designated by Engineer in accordance with IDOT Section 2303.04.D.; split sample with Owner not required.
- 13.2 Cut samples and test from any course or from finished pavement in accordance with IDOT Section 2303.04; cut additional samples as directed by Engineer if deficiencies occur in pavement thickness, density or stability.
- 13.3 Engineer will require changes in mix design, or placement and compaction procedures if asphalt mixture or pavement density fail to meet requirements specified.

14. PAYMENT

- 14.1 No separate payment will be made for work covered under this part of the specifications, except as set forth below.

Hot Mix Asphalt Pavement

- 14.2 If items, for which no unit prices are shown on Proposal, are required during construction, contract price shall be adjusted on basis of unit price negotiated with contractor.
- 14.3 Hot Mix Asphalt Pavement, Tons: Unit price includes furnishing labor, materials and equipment for pavement cleaning, tack coat, pavement, consolidation, testing, sampling and incidentals for constructing paving as shown on plans; measurement based on delivery tickets at job site.

PART 5 - PAVEMENT MARKING

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1. WORK INCLUDED

- 1.1 Cleaning and preparation of pavement surfaces for painting.
- 1.2 Measurement and layout of pavement markings: all painting for crosswalks, parking stalls, and stop bars.
- 1.3 Pavement marking: IDOT Section 2527 pavement marking, except payment.

2. MATERIALS

- 2.1 Pavement paint: IDOT Section 4183 traffic paints.

3. PAINTING

- 3.1 Clean all loose and foreign materials from pavement surface by brooming or other means.
- 3.2 Remove dirt, dust and miscellaneous objects from pavement surface by wetting and brooming areas to be painted.
- 3.3 Surface must be dry prior to application of paint.
- 3.4 Provide string lines or other means to ensure straight and uniform lines.
- 3.5 Paint line width: as shown on plans; provide 2 coats of paint.

4. LIMITATIONS ON OPERATIONS

- 4.1 Do not paint when stormy or inclement weather prevents good workmanship.
- 4.2 Do not apply paint at surface temperatures of less than 50°F.; do not apply to wet or damp surfaces.

5. PAYMENT

- 5.1 No separate payment will be made for work covered under this part of the specifications, except as set forth below.
- 5.2 Pavement Marking, LS: Lump sum price includes furnishing labor, materials, equipment and incidentals for cleaning and preparation of pavement surfaces, measurement and layout of markings and miscellaneous associated work, including cleanup.