**RFB NO. 108060** 



# CONSTRUCTION DOCUMENTS PROJECT MANUAL

DANE COUNTY DEPARTMENT OF PUBLIC WORKS, HIGHWAY AND TRANSPORTATION

PUBLIC WORKS ENGINEERING DIVISION 1919 ALLIANT ENERGY CENTER WAY MADISON, WISCONSIN 53713

# REBID - REQUEST FOR BIDS NO. 108060 FENCING & DAM REPAIRS STEWART LAKE DAM 3106 CTY HWY JG MT HOREB, WISCONSIN

Opening Date: TUESDAY, JUNE 10, 2008

Performance / Payment Bond: 100% OF CONTRACT AMOUNT

Location: PUBLIC WORKS OFFICE

Time: 2:00 P.M.

Bid Deposit: 5% OF BID AMOUNT

FOR INFORMATION ON THIS REQUEST FOR BIDS, PLEASE CONTACT:

JOHN SCHRAUFNAGEL, PROJECT ENGINEER TELEPHONE NO.: 608/266-4798 FAX NO.: 608/267-1533 E-MAIL: SCHRAUFNAGEL@CO.DANE.WI.US

#### **DOCUMENT INDEX FOR RFB NO. 108060**

#### PROCUREMENT AND CONTRACTING REQUIREMENTS

Project Manual Cover Page Documents Index and Dane County Vendor Registration Program Invitation to Bid (Legal Notice) Instructions to Bidders Bid Form Fair Labor Practices Certification Sample Public Works Contract Sample Bid Bond Sample Performance Bond Sample Payment Bond Conditions of Contract Supplementary Conditions

#### **DIVISION 1 - GENERAL REQUIREMENTS**

- 01000 Basic Requirements
- 01090 Definitions
- 01151 Unit Prices
- 01508-Recycling
- 01510 Temporary Facilities and Controls

#### **DIVISION 2 - SITE CONSTRUCTION**

02075 - Removal of Existing Concrete and Surface Preparation 02821 - Chain Link Fences

#### **DIVISION 3 - CONCRETE**

03730 - Patching of Structural Concrete

#### **DIVISION 7 - THERMAL AND MOISTURE PROTECTION**

07900 - Crack and Joint Sealants

#### DRAWINGS

To print Drawings to correct scale, plot sheets on 24" x 36" (D) paper. Drawing 1 - Site Plan Drawing 2 - Details

#### DANE COUNTY VENDOR REGISTRATION PROGRAM

All bidders / proposers wishing to submit a bid / proposal should be registered with Dane County Purchasing before bid / proposal opening & must be registered before award of contract. Complete a Vendor Registration Form at www.danepurchasing.com, or obtain one by calling 608/266-4131.

#### LEGAL NOTICE

#### **INVITATION TO BID**

Dane County Public Works, Highway & Transportation Dept., 1919 Alliant Energy Center Way, Madison, WI 53713, will receive sealed Bids until:

#### 2:00 P.M., TUESDAY, JUNE 10, 2008

#### **REBID**

**REQUEST FOR BIDS NO. 108060** 

#### FENCING & DAM REPAIRS

#### STEWART LAKE DAM

#### MT HOREB, WISCONSIN

Dane County is inviting Bids for construction services. Work includes providing repairs to deteriorated dam concrete. Work may also include providing new fencing, metal dam stop logs, a 19-foot ladder, and a manhole access hatch.

Request for Bids package may be obtained after **2:00 p.m. on Thursday, May 22, 2008** at Dane County Public Works, Highway & Transportation Dept., 1919 Alliant Energy Center Way, Madison, WI 53713, by calling 608/266-4018, or downloading it from <u>www.countyofdane.com/pwht/bid/logon.aspx</u>. Please call John Schraufnagel, Project Engineer, at 608/266-4798, for any questions or additional information.

A bidders facility tour will be held on June 3, 2008 at 9:00 AM at Stewart Lake Dam, 3106 Cty Hwy JG, Mt Horeb, WI. This tour will take place at the dam, which is located on the north end of Stewart Lake. This tour will go until approximately 10:00 AM. Bidders are strongly encouraged to attend this tour, however attendance is optional.

All Bidders wishing to submit Bids should be registered vendor with Dane County Purchasing & prequalified as Best Value Contractor before bid opening & must be registered & prequalified before award of contract. Complete Vendor Registration Form at <u>www.danepurchasing.com</u> or obtain one by calling 608/266-4131. Complete Prequalification Application for Contractors at <u>www.co.dane.wi.us/pwht/pwengineer.aspx</u> or obtain one by calling 608/266-4018.

# PUBLISH: THURSDAY, MAY 22 & 29, 2008 - WISCONSIN STATE JOURNAL MONDAY, MAY 26 & JUNE 2, 2008 - WESTERN BUILDER

#### **INSTRUCTIONS TO BIDDERS**

Fencing & Dam Repairs Stewart lake Dam 3106 Cty Hwy JG Mt Horeb, Wisconsin

#### **1. SECURING DOCUMENTS**

 A. Construction Documents may be obtained at: Dane County Department of Public Works, Highway & Transportation 1919 Alliant Energy Center Way, Madison, Wisconsin 53713 608/266-4018

or at:

www.countyofdane.com/pwht/bid

- B. If Construction Documents are obtained from the Dane County web site, Bidder is responsible to check back regularly at the web site for Addenda.
- C. Deposit for Drawings and Specifications is not required.

#### 2. BID REQUIREMENTS

- A. Bidder shall submit lump sum bid for providing all labor, equipment, tools and materials necessary to perform all Work described in Construction Documents.
- B. Envelope containing Bid shall be clearly marked as for this project (note title at top of page). Bids shall be delivered to:
   Dane County Department of Public Works, Highway & Transportation 1919 Alliant Energy Center Way
   Madison, Wisconsin 53713
- C. One (1) Bid Form shall be submitted with your Bid. Bid Form is provided with Construction Documents; no other form or letter shall be accepted.
- D. Bidders shall not add any conditions, escalator clauses of qualifying statements to Bid Form.
- E. Erasures or other changes to Bid must be explained or noted, and shall be accompanied by initials of bidder.
- F. Legally authorized official of bidder's organization shall sign Bids.
- G. Bidder's organization shall submit completed Fair Labor Practices Certification form, included in these Construction Documents.
- H. Bid Bond shall be made payable to Dane County in amount of five percent (5%) of bid amount. Bid Bond shall be either certified check or bid bond issued by surety licensed to conduct business in the State of Wisconsin. Successful bidder's Bid Bond shall be retained until Contract is signed and required Performance / Payment Bond is submitted.

Bids shall be binding on bidder for sixty (60) days after Bid Opening. Bid Bond must be submitted with Bid.

I. Successful bidder shall furnish and pay for Performance / Payment Bond as called for in Conditions of Contract.

## **3. INQUIRIES**

- A. Written inquiries regarding intent of Construction Documents should be directed to: John Schraufnagel, Project Engineer Dane County Department of Public Works, Highway & Transportation 1919 Alliant Energy Center Way, Madison, Wisconsin 53713 Fax: 608/267-1533 Email: schraufnagel@co.dane.wi.us
- B. Bidders shall bring questions, discrepancies, omissions, conflicts or doubt as to meaning of any part of Construction Documents to attention of Department of Public Works, Highway & Transportation at least ten (10) days before due date for Bids. Prompt clarification of intent of Construction Documents shall be made available to bidders in form of Addendum. Bidder shall acknowledge all Addenda on Bid Form.
- C. Failure to request clarification of interpretation of Construction Documents shall not relieve bidders of their responsibilities to perform Work.

#### 4. EXAMINATION OF SITE

- A. Coordinate site access activities with John Schraufnagel, Project Engineer, 608/266-4798.
- B. Bidder shall carefully examine project site. Investigate all site conditions that may affect execution of Work as detailed in Construction Documents.
- C. A bidders facility tour will be held on June 3, 2008 at 9:00 AM at Stewart Lake Dam, 3106 Cty Hwy JG, Mt Horeb, WI. This tour will take place at the dam, which is located on the north end of Stewart Lake. This tour will go until approximately 10:00 AM. Bidders are strongly encouraged to attend this tour, however attendance is optional.

#### 5. ALTERNATES

- A. Each bidder shall carefully read requests for alternate bids. Thoroughly examine Drawings and Specifications to determine to what extent various changes and conditions affect Bids. Base Bid shall be considered void if alternate bids are not submitted in space available on Bid Form. Award of Contract shall be based on amount of lowest qualified Base Bid and additive Owner accepted alternates.
- B. Bidders shall state amount to be added or deducted from Base Bid for making changes, including all incidentals, omissions, additions, and adjustments as may be necessary of required by stated alternates.

#### 6. WITHDRAWAL OF BIDS

A. Any bidder may withdraw their Bid any time prior to Bid Opening. Withdrawn Bids shall be returned unopened.

# 7. BID OPENING

A. See Legal Notice (advertisement).

# 8. COMMENCEMENT AND COMPLETION OF WORK

- A. Work shall commence by August 4, 2008.
- B. Work shall be completed by September 19, 2008.

# 9. RESERVATION

A. Dane County reserves the right to reject any or all Bids, to waive any informalities in the Bid, and to accept any Bid which shall be in the best interest of Dane County.

#### **BID FORM**

#### BID NO. 108060 PROJECT: FENCING & DAM REPAIRS STEWART LAKE DAM

TO:DANE COUNTY DEPARTMENT OF PUBLIC WORKS, HIGHWAY &<br/>TRANSPORTATION PROJECT ENGINEER<br/>1919 ALLIANT ENERGY CENTER WAY<br/>MADISON, WISCONSIN 53713

#### **BASE BID - LUMP SUM:**

Work includes providing repairs to deteriorated dam concrete as described and detailed in Construction Documents. The undersigned, having examined the site where the Work is to be executed and having become familiar with local conditions affecting the cost of the Work and having carefully examined the Drawings and Specifications, all other Construction Documents and Addenda thereto prepared by Dane County Department of Public Works, Highway & Transportation hereby agrees to provide all labor, materials, equipment and services necessary for the complete and satisfactory execution of the entire Work, as specified in the Construction Documents, for the Base Bid stipulated sum of:

	an	d/1	100 Doll	ars
Written Price				

\$

Numeric Price

#### **UNIT PRICE BIDS**

Provide unit pricing to add to or deduct from base bid. Unit Price Bids refer to Work as described in Construction Documents. Contractor must provide all materials, labor, equipment and services necessary to complete Work. Engineer will determine areas to be added or deducted.

Item	n Type of Work	<u>Unit</u>	Unit <u>Price Bid</u>
1	Removal and replacement of unsound concrete	Sq. Ft.	\$
2	Seal concrete cracks and joints	Lin. Ft.	\$

The undersigned further agrees to add the alternate(s) portion of the Work as described, for the following addition(s) to or subtraction(s) from the Base Bid stipulated below. They further agree to honor the alternate(s) bid for 60 days from date of Award of Contract.

#### ALTERNATE BID 1 - LUMP SUM:

Perform the Work as specified and detailed in Construction Documents package. Provide galvanized steel, stainless steel, or aluminum dam stop logs, 19-foot ladder, and manhole access hatch, as shown on Drawings and described in Specification Section 01000. All other Work to remain the same as Base Bid.

	and	/100	Dollars
Written Price			

Numeric Price (circle: Add or Deduct)

## ALTERNATE BID 2 - LUMP SUM:

Perform the Work as specified and detailed in Construction Documents package. Provide new chain link fencing as shown on Drawings and described in Specification Sections 01000 and 02821. All other Work to remain the same as Base Bid.

and \_\_\_\_/100 Dollars

\$

\$

Numeric Price (circle: Add or Deduct)

#### ALTERNATE BID 3 - LUMP SUM:

Perform the Work as specified and detailed in Construction Documents package. Draw down water to facilitate some concrete patching and to expose two underwater drainage tile discharge pipes for Engineer inspection. All other Work to remain the same as Base Bid.

Written Price

\_\_\_\_\_ and \_\_\_\_/100 Dollars

\$

Numeric Price (circle: Add or Deduct)

Receipt of the following addenda and inclusion of their provisions in this Bid is hereby acknowledged:

Addendum No(s). \_\_\_\_\_ through\_\_\_\_\_

Dated \_\_\_\_\_

Dane County Department of Land and Water Resources must have this project completed by September 19, 2008. Assuming this Work can be started by August 4, 2008, what dates can you commence and complete this job?

Commencement Date:	Completion Date:
Name of Bidder:	
Address:	
Telephone No.:	_ Fax No.:
Contact Person:	
SIGNATURE:(Bid is invalid	without signature)
<b>BID CHECK LIST:</b> These items <b>must</b> be included with Bid or complete	ed <b>before</b> bidding

□ Bid Form □ Bid Bond □ Fair Labor Practices Certification □ Vendor Registration

## FAIR LABOR PRACTICES CERTIFICATION

The undersigned, for and on behalf of the BIDDER, APPLICANT or PROPOSER named herein, certifies as follows:

- A. That he or she is an officer or duly authorized agent of the above-referenced BIDDER, APPLICANT or PROPOSER, which has a submitted a proposal, bid or application for a contract with the county of Dane.
- B. That BIDDER, APPLICANT or PROPOSER has (check one):

\_\_\_\_\_ not been found by the National Labor Relations Board ("NLRB") or the Wisconsin Employment Relations Commission ("WERC") to have violated any statute or regulation regarding labor standards or relations in the seven years prior to the signature date of this Certification.

\_\_\_\_\_\_ been found by the National Labor Relations Board ("NLRB") or the Wisconsin Employment Relations Commission ("WERC") to have violated any statute or regulation regarding labor standards or relations in the seven years prior to the signature date of this Certification.

Officer or Authorized Agent Signature

Date

Printed or Typed Name and Title

Printed or Typed Business Name

**NOTE:** You can find information regarding the violations described above at: <u>www.nlrb.gov</u> and <u>werc.wi.gov</u>.

For reference, Dane County Ordinance 25.11(28)(a) is as follows:

(28) BIDDER RESPONSIBILITY. (a) Any bid, application or proposal for any contract with the county, including public works contracts regulated under chapter 40, shall include a certification indicating whether the bidder has been found by the National Labor Relations Board (NLRB) or the Wisconsin Employment Relations Committee (WERC) to have violated any statute or regulation regarding labor standards or relations within the last seven years. The purchasing manager shall investigate any such finding and make a recommendation to the committee, which shall determine whether the conduct resulting in the finding affects the bidder's responsibility to perform the contract.

If you indicated that the NLRB or WERC have found you to have such a violation, you must include copies of any relevant information regarding such violation with your proposal, bid or application.

## **COUNTY OF DANE**

#### PUBLIC WORKS CONTRACT

Contract No. \_\_\_\_\_ Bid No. \_108060

Authority: Res. \_\_\_\_\_, 2008-09

**THIS CONTRACT**, made and entered into as of the date by which authorized representatives of both parties have affixed their signatures, by and between the County of Dane (hereafter referred to as "COUNTY") and \_\_\_\_\_\_ (hereafter, "CONTRACTOR"), and

#### WITNESSETH:

WHEREAS, COUNTY, whose address is c/o Associate Public Works Director, 1919 Alliant Energy Center Way, Madison, WI 53713, desires to have CONTRACTOR provide FENCING & DAM REPAIRS at Stewart Lake Dam, 3106 Cty Hwy JG ("the Project"); and

WHEREAS, CONTRACTOR, whose address is \_\_\_\_\_\_\_ is able and willing to construct the Project, in accordance with the Construction Documents;

**NOW, THEREFORE,** in consideration of the above premises and the mutual covenants of the parties hereinafter set forth, the receipt and sufficiency of which is acknowledged by each party for itself, COUNTY and CONTRACTOR do agree as follows:

1. CONTRACTOR agrees to construct, for the price of \$\_\_\_\_\_\_\_ the Project and at the CONTRACTOR'S own proper cost and expense to furnish all materials, supplies, machinery, equipment, tools, superintendence labor, insurance, and other accessories and services necessary to complete the Project in accordance with the conditions and prices stated in the Bid Form, Conditions of Contract, the drawings which include all maps, plats, plans, and other drawings and printed or written explanatory matter thereof, and the specifications therefore as prepared by \_ Dane County Department of Public Works, Highway & Transportation (hereinafter referred to as "the Architect / Engineer"), and as enumerated in the Project Manual Document Index, all of which are made a part hereof and collectively evidence and constitute the Contract.

**2.** COUNTY agrees to pay the CONTRACTOR in current funds for the performance of the Contract subject to additions and deductions, as provided in the Conditions of Contract, and to make payments on account thereof as provided in Article entitled, "Payments to Contractor" of the Conditions of Contract.

**3.** During the term of this Contract, CONTRACTOR agrees to take affirmative action to ensure equal employment opportunities. The CONTRACTOR agrees in accordance with Wisconsin Statute 111.321 and Chapter 19 of the Dane County Code of Ordinances not to discriminate on the basis of age, race, ethnicity, religion, color, gender, disability, marital status, sexual orientation, national origin, cultural differences, ancestry, physical appearance, arrest record or conviction record, military participation or membership in the national guard, state defense force

or any other reserve component of the military forces of the United States, or political beliefs. Such equal opportunity shall include, but not be limited to, the following: employment, upgrading, demotion, transfer, recruitment, advertising, layoff, termination, training, rates of pay, and any other form of compensation. CONTRACTOR agrees to post in conspicuous places, available to all employees and applicants for employment, notices setting forth the provisions of this paragraph.

**4.** CONTRACTOR shall file an Affirmative Action Plan with the Dane County Contract Compliance Officer in accord with Chapter 19 of the Dane County Code of Ordinances. CONTRACTOR must file such plan within fifteen (15) days of the effective date of this Contract. During the term of this Contract CONTRACTOR shall also provide copies of all announcements of employment opportunities to COUNTY'S Contract Compliance Office, and shall report annually the number of persons, by race, ethnicity, gender, and disability status, which apply for employment and, similarly classified, the number hired and number rejected.

**5.** During the term of this Contract, all solicitations for employment placed on CONTRACTOR'S behalf shall include a statement to the effect that CONTRACTOR is an "Equal Opportunity Employer."

**6.** CONTRACTOR agrees to furnish all information and reports required by COUNTY'S Contract Compliance Officer as the same relate to affirmative action and nondiscrimination, which may include any books, records, or accounts deemed appropriate to determine compliance with Chapter 19, Dane County Code of Ordinances, and the provisions of this Contract.

7. CONTRACTOR agrees that all persons employed by CONTRACTOR or any subcontractor shall be paid no less than the minimum wage established under Chapter 40, Subchapter II, Dane County Code of Ordinances. CONTRACTOR agrees to abide by and comply with the provisions of Chapter 40, Subchapter II of the Dane County Code of Ordinances, and said Subchapter is fully incorporated herein by reference.

8. This Contract is intended to be a Contract solely between the parties hereto and for their benefit only. No part of this Contract shall be construed to add to, supplement, amend, abridge or repeal existing rights, benefits or privileges of any third party or parties including, but not limited to, employees of either of the parties.

**9.** The entire agreement of the parties is contained herein and this Contract supersedes any and all oral agreements and negotiations between the parties relating to the subject matter hereof. The parties expressly agree that the express terms of this Contract shall not be amended in any fashion except in writing, executed by both parties.

**IN WITNESS WHEREOF**, COUNTY and CONTRACTOR, by their respective authorized agents, have caused this Contract and its Schedules to be executed, effective as of the date by which all parties hereto have affixed their respective signatures, as indicated below.

#### \* \* \* \* \* \* \*

#### FOR CONTRACTOR:

Signature	Date
Printed or Typed Name and Title	
Signature	Date
Printed or Typed Name and Title	
NOTE: If CONTRACTOR is a corporation, Secretary should attest Regulations, unincorporated entities are required to provide either t Employer Number in order to receive payment for services rendered with the contract is not valid or effectual for any purpose until approve designated below, and no work is authorized until the CONTRACT proceed by COUNTY'S Associate Public Works Director. <b>FOR COUNTY:</b>	heir Social Security or d. d by the appropriate authority
Kathleen M. Falk, County Executive	Date

Robert Ohlsen, County Clerk

Date

# THE AMERICAN INSTITUTE OF ARCHITECTS



AIA Document A310

Bid Bond

Bond No.

KNOW ALL MEN BY THESE PRESENTS, that we

(Here insert full name and address or legal title of Contractor)

as Principal, hereinafter called the Principal, and

(Here insert full name and address or legal title of Surety)

a corporation duly organized under the laws of the State of WI as Surety, hereinafter called the Surety, are held and firmly bound unto

(Here insert full name and address or legal title of Owner)

as Obligee, hereinafter called Obligee, in the sum of ( ) Percent of total amount bid Dollars (\$ Percent of attached bid). For the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for Project No.: (Here insert full name, address, and description of project)

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this	day of	, 20 .
	(P	Principal) (Seal)
(Witness)	T	Title)
	(S	Surety) (Seal)
(Witness)		ATTORNEY-IN-FACT

AIA DOCUMENT A310 \*BID BOND \* AIA \* Feb. 1970 ED. \* THE AMERICAN INSTITUTE OF ARCHITECTS 1735 N.Y. AVE, N.W., WASHINGTON, D.C. 20006

# THE AMERICAN INSTITUTE OF ARCHITECTS



Bond No.

AIA Document A312

# **Performance Bond**

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

SURETY (Name and Principal Place of Business):

OWNER (Name and Address):		
CONSTRUCTION CONTRACT Date: Amount: \$ Description (Name and Location):		
BOND Date (Not earlier than Construction Contract Date): Amount: <b>\$</b> Modifications to this Bond:	[]None	[] See Page 3
CONTRACTOR AS PRINCIPAL COMPANY: (Corporate Seal)	SURETY COMPANY:	(Corporate Seal)
Signature: Name and Title:	Signature: Name and Title:	Attorney-in-Fact
(Any additional signatures appear on page 3)		
FOR INFORMATION ONLY-Name, Address and Telepho AGENT OR BROKER:	ne OWNER'S REPRESENTAT Engineer or other party):	TIVE (Architect,

1. The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

**2.** If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except to participate in conferences as provided in Subparagraph 3.1.

**3.** If there is no Owner Default, the Surety's obligation under this Bond shall arise after:

**3.1** The Owner has notified the Contractor and the Surety at its address described in Paragraph 10 below that the Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with the Contractor and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Construction Contract. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default; and

**3.2** The Owner has declared a Contractor Default and formally terminated the Contractor's right to complete the contract. Such Contractor Default shall not be declared earlier than twenty days after the Contractor and the Surety have received notice as provided in Subparagraph 3.1; and

**3.3** The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Construction Contract or to a contractor selected to perform the Construction Contract in accordance with the terms of the contract with the Owner.

**4.** When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

**4.1** Arrange for the Contractor, with consent of the Owner, to perform and complete the Construction Contract; or

**4.2** Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors; or

**4.3** Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and the contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by the Owner resulting from the Contractor's default; or

**4.4** Waive its rights to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances: **1.** After investigation, determine the amount for

which it may be liable to the Owner and, as soon as practicable after the amount is determined, tender payment therefor to the Owner; or **2.** Deny liability in whole or in part and notify the Owner citing reasons therefor.

**5.** If the Surety does not proceed as provided in Paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Subparagraph 4.4, and the Owner refuses the payment tendered or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

6. After the Owner has terminated the Contractor's right to complete the Construction Contract, and if the Surety elects to act under Subparagraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. To the limit of the amount of this Bond, but subject to commitment by the Owner of the Balance of the Contract Price to mitigation of costs and damages on the Construction for:

6.1 The responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

**6.2** Additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 4; and

**6.3** Liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

7. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, or successors.

8. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

**9.** Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

**10.** Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page.

**11.** When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted here from and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

#### **12 DEFINITIONS**

**12.1** Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other

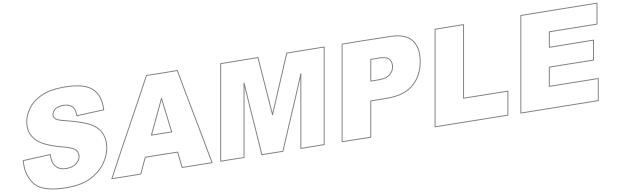
claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

**12.2** Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.

**12.3** Contractor Default: Failure of the Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract.

**12.4** Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

#### MODIFICATIONS TO THIS BOND ARE AS FOLLOWS:



(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL Company: (Corporate Seal) SURETY Company:

(Corporate Seal)

Signature: <u>Name and Title:</u> Address: Signature: \_\_\_\_\_ Name and Title: Address:

# THE AMERICAN INSTITUTE OF ARCHITECTS



Bond No.

AIA Document A312

# **Payment Bond**

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

SURETY (Name and Principal Place of Business):

OWNER (Name and Address):		
CONSTRUCTION CONTRACT Date: Amount: \$ Description (Name and Location):		
BOND Date (Not earlier than Construction Contract Date): Amount: <b>\$</b> Modifications to this Bond:	[]None	[] See Page 6
CONTRACTOR AS PRINCIPAL COMPANY: (Corporate Seal)	SURETY COMPANY:	(Corporate Seal)
Signature: Name and Title:	Signature: Name and Title:	Attorney-in-Fact
(Any additional signatures appear on page 6)		
FOR INFORMATION ONLY-Name, Address and Telepho AGENT OR BROKER:	ne OWNER'S REPRESENTAT Engineer or other party):	ΠVE (Architect,

1. The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference.

**2.** With respect to the Owner, this obligation shall be null and void if the Contractor:

**2.1** Promptly makes payment, directly, or indirectly, for all sums due Claimants, and

**2.2** Defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity whose claim, demand, lien or suit is for the payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, provided the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 12) of any claims, demands, liens, or suits and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety, and provided there is no Owner Default.

**3.** With respect to Claimants, this obligation shall be null and void if the Contractor promptly makes payment, directly or indirectly, for all sums due.

4. The Surety shall have no obligation to Claimants under this Bond until:

**4.1** Claimants who are employed by or have a direct contract with the Contractor have given notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.

**4.2** Claimants who do not have a direct contract with the Contractor:

 Have furnished written notice to the Contractor and sent a copy, or notice thereof, to the Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed; and
 Have either received a rejection in whole or in part from the Contractor, or not received within 30 days of furnishing the above notice any communication from the Contractor by which the Contractor has indicated the claim will be paid directly or indirectly; and

**3.** Not having been paid within the above 30 days, have sent a written notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the Contractor.

**5.** If a notice required by Paragraph 4 is given by the Owner to the Contractor or to the Surety, that is sufficient compliance.

6. When the Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:

**6.1** Send an answer to the Claimant, with a copy to the Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.

**6.2** Pay or arrange for payment of any undisputed amounts.

7. The Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

8. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any Construction Performance Bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and the Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

9. The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.

**10.** The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

**11.** No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the work or part of the work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by Subparagraph 4.1 or Clause 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

**12.** Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page. Actual receipt of notice by Surety, the Owner or the Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

**13.** When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

**14.** Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor

shall promptly furnish a copy of this Bond or shall permit a copy to be made.

#### **15. DEFINITIONS**

**15.1** Claimant: An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's

#### MODIFICATIONS TO THIS BOND ARE AS FOLLOWS:

subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

**15.2** Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.

**15.3** Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL Company: (Corporate Seal) SURETY Company:

(Corporate Seal)

Signature:

Name and Title: Address: Signature:

Name and Title: Address:

# CONDITIONS OF CONTRACT

## **TABLE OF CONTENTS**

1. BIDS AND QUOTATIONS	1
2. GUARANTEE AND BOND	
3. SHOP DRAWINGS, PRODUCT DATA AND SAMPLES	3
4. AWARDS	4
5. CONTRACT PROVISIONS	5
6. GENERAL GUARANTEE	10
7. IDENTICAL BIDDING	10
8. BINDING CONTRACTS	11
9. AFFIRMATIVE ACTION PROVISION AND MINORITY / WOMEN /	
DISADVANTAGED BUSINESS ENTERPRISES	11
10. COMPLIANCE WITH FAIR LABOR STANDARDS	12
11. INSURANCE REQUIREMENTS	12

## 1. BIDS AND QUOTATIONS

- A. Addressing of Bids. Bids shall be addressed to the attention of Public Works Engineering Division and received at the Dane County Department of Public Works, Highway & Transportation, 1919 Alliant Energy Center Way, Madison, WI 53713, on or before the local time and date specified herein for the Bid Opening. Seal all bids in envelopes and clearly mark the front with bid number and a reference to the specified contents of the bid. All uses of the term "County" in the Construction Documents shall mean Dane County.
- B. **Only One Copy Required.** Unless otherwise specified, only one copy of a bid or quotation on prescribed Bid Form will be required.
- C. Additional Data with Bid. Bidder may submit, on the firm's letterhead only, additional data and information deemed advantageous to the County. The County shall hold optional the consideration of such data and information.
- D. More than One Bid. Bidders desiring to submit more than one bid may do so provided such additional bid or bids are properly submitted on the Dane County Department of Public Works, Highway & Transportation's Bid Form. Obtain extra sets of Construction Documents from the Dane County Department of Public Works, Highway & Transportation. All uses of the term "Department" in the Construction Documents shall mean the Department of Public Works, Highway & Transportation, which is a unit of Dane County government.
- E. **Withdrawal or Late Bids.** The County will not accept formal bids, amendments thereto, or requests for withdrawal of a bid or any part thereof, after the time of Bid Opening.
- F. **Preparation and Submission.** All written bids, unless otherwise provided for, must be submitted on and in accordance with forms provided by the County properly signed in ink. Bids not signed by hand are not accepted. Bidders must register in advance with the Purchasing Division.
- G. **Products by Name.** Intention of Specifications of products by name is to be descriptive of quality, workmanship, finish, function and approximate characteristics desired; intention is not necessarily restriction. Consideration of products substitution for those named is possible, provided the substitute offered is, in the opinion of the Dane County Public Works

Project Engineer, equal or superior in quality, workmanship, finish, function and approximate characteristics to that specified in the Project Manual Specifications listed herein.

- H. **Visitation of Sites.** Bidder shall visit the site(s) that will receive the intended work or installation, and in so doing, be held responsible for a job deemed satisfactory by the County after completion of the Work or installation. No additional compensation shall be allowed for any condition of which bidder could have been informed.
- I. **Completeness.** Supply all information required by Construction Documents to constitute a regular bid. This shall include:
  - 1. Completed Bid Form.
  - 2. Completed Fair Labor Practices Certification.
  - 3. Completed Best Value Contracting Compliance Form
  - 4. Completed Bid Bond.
- J. **Bids Binding Sixty (60) Days.** Unless otherwise specified all formal bids submitted shall be binding for sixty (60) calendar days following Bid Opening date.
- K. Conditional Bids. Qualified bids are subject to complete rejection, or partial rejection.
- L. All or Part. Bids or quotations may be considered and award made for all or any part of total quantities as specified in the Construction Documents.
- M. **Errors.** Unit bid price shall govern when extending total prices has errors.. Carelessness in quoting prices or in preparation of bid otherwise, will not relieve the bidder. Explain all erasures in bids and include signature of bidder.
- N. **Regulation by State Statutes.** The bidding and letting of contracts are subject to provisions of Wisconsin Statutes 59.52(29) and 66.0901 and all subsequent sections and amendments thereof.
- O. **Bidders Present.** The Bid Opening is the time fixed for the opening of formal bids. The Bids' contents will be made public for the information of bidders and others properly interested, who may be present either in person or by representative. Bidders are encouraged to attend all openings, and to offer constructive suggestions for improvements to bid format or ways in which County can realize greater savings.
- P. Taxes. Contractor shall pay applicable State and local sales taxes.

# 2. GUARANTEE AND BOND

A. **Bid Bond / Guarantee.** A Bid Bond shall accompany Bids, which shall be either a flat sum or a percentage figure as shown on the Project Manual Cover. This Bid Bond shall serve as a warrant that the successful bidder will fulfill the terms of the bid within the time limit as indicated in the bid after notice of award by the Dane County. The Bid Bond may be a certified bank check (note: uncertified checks will not be acceptable), a cashier's check or a United State money order payable to the order of the Treasurer of Dane County; or on a Bid Bond with corporate surety authorized to do business in the State of Wisconsin and a warranty of attorney to confess judgment thereon attached thereto. The County will return negotiable Bid Bonds to unsuccessful bidders after awarding of bid. The County shall return

a check held from a Contractor after satisfactory completion of the Contract or after receipt by the County of a Performance Bond from the Contractor, if one is required. Surety Bid Bonds will not be returned unless specifically requested by individual bidders.

- B. **Guarantor Liability.** When guarantee is required, failure of bidder to furnish an acceptable Performance Bond (Article 2.C.) within twenty (20) days after receipt of notice of award shall render the guarantor liable to the County. Bids covered by certified check or bond such security shall become the absolute property of the County and shall be deposited with the County Treasurer for the benefit of the County as liquidated damages. The County shall forthwith proceed to collect on the Bid Bond.
- C. **Performance / Payment Bond.** When required, file a guarantee that the successful bidder will faithfully perform the obligations of the bid as accepted. Such guarantee must be a bond complying with Wisconsin Statute 779.14 with corporate surety authorized to do business in this State, and that the Contractor or subcontractors will be responsible for all claims for injuries to persons or damages to property or premises arising out of or in connection with their operations prior to the acceptance of the finished work or supplies, and that they will promptly make payments to all persons supplying them with labor or materials in the execution of the Work provided for in the Contract; guarantee to indemnify, hold harmless and defend Dane County, its boards, commissions, agencies, officers, employees and representatives from all costs, damages and expenses growing out of or by reason of the successful bidder's failure to comply and perform the Work and complete the Contract in accordance with the Construction Documents; attach thereto a warrant of attorney authorizing the confession of judgment thereon for the benefit of the County.

## 3. SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

- A. Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a subcontractor, sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.
- B. Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.
- C. Samples are physical examples that illustrate materials, equipment or workmanship and establish standards to compare the Work.
- D. Shop Drawings, Product Data, Samples and similar submittals are not Construction Documents. The purpose of their submittal is to demonstrate for those portions of the Work for which submittals are required the way the Contractor proposes to conform to the information given and the design concept expressed in the Construction Documents.
- E. The Contractor shall review, approve and submit to the Public Works Project Engineer Shop Drawings, Product Data, Samples and similar submittals required by the Construction Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the County or of separate contractors. Submittals made by the Contractor not required by the Construction Documents, may be returned without action.
- F. The Contractor shall perform no portion of the Work requiring submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the Public Works Project Engineer has approved the respective submittal. Such Work shall be in accordance with approved submittals.

- G. By approving and submitting, Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Construction Documents.
- H. The Contractor shall not be relieved of responsibility for deviations from requirements of the Construction Documents by the Public Works Project Engineer's approval of Shop Drawings, Product Data, Samples and similar submittals unless the Contractor has specifically informed the Public Works Project Engineer in writing of such deviation at the time of submittal and the Public Works Project Engineer has given written approval to the specific deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Sample or similar submittals by the Public Works Project Engineer's approval thereof.
- I. The Contractor shall in writing direct specific attention to revised and / or resubmitted Shop Drawings, Product Data, Samples or similar submittals that were not requested by the Architect / Engineer or the Public Works Project Engineer on previous submittals.
- J. Unless specified otherwise, Contractor shall submit three (3) copies of all Shop Drawings, Product Data, Samples or similar submittals for each submission, until receiving final approval. After final approval, provide five (5) additional copies for distribution and such other copies as may be required.

# 4. AWARDS

- A. Lowest Responsible Bidder. Award will be to the lowest responsible bidder conforming to Construction Documents or on the most advantageous bid to the County.
- B. **Other Considerations.** Quantities involved, time of delivery, purpose for which required, competency of bidder, the ability to render satisfactory service and past performance will be considered in determining responsibility.
- C. **Rejection of Bids.** The County reserves the right to reject any or all bids or quotations in whole or in part and to award by items, parts of items, or by any aggregate group of items specified. The County reserves also the right to waive technical defects when in its judgment the best interests of the County thereby will be served.
- D. Notice of Acceptance. Sufficient notification of acceptance of bid will be written notice of award to a bidder in the form of a Purchase Order or similar, mailed or delivered to the address shown on the Bid Form.
- E. **Tie Bids.** If two or more bidders submit identical bids, the decision of the County to make award to one or more of such bidders shall be final. Cash discount will be taken into consideration determining an award. Also, see Article 7.A. IDENTICAL BIDDING, Antitrust Laws.
- F. **Qualifying Bidders.** Prior to solicitation and / or awarding of bid, the County may require submission by bidder of complete financial statement and questionnaire describing bidder's financial ability and experience in performance of similar work. Refer to Instructions to Bidders.

- G. **Disqualification.** Awards will not be made to any person, firm or company in default of a Contract with the County, or to any bidder having as its sales agent or representative or as a member of the firm, any individual previously in default or guilty of misrepresentation.
- H. **Bid Results.** Bidders may secure information pertaining to results of bids by visiting the County Purchasing Division Office Monday through Friday, between 7:45 a.m. and 4:30 p.m.

## 5. CONTRACT PROVISIONS

- A. Acceptance Constitutes Contract. Written acceptance by the Public Works Project Engineer of a proposal for services shall constitute a Contract, which shall bind the bidder to perform the Work as detailed in the Construction Documents, for the bid amount and in accordance with all conditions of said accepted bid. A formal Contract containing all provisions of the Contract signed by both parties shall be used when required by the Public Works Project Engineer.
- B. Local Restrictions and Permits. All work shall be done according to applicable laws, ordinances and codes. The Contractor shall procure and pay for all required permits for permanent or temporary work.
- C. Payment of Invoices. Payment may be made only after inspection and acceptance by the using agency and approval by the Dane County Public Works Project Engineer, and, where required by ordinances, approval by the Dane County Board of Supervisors. If materials or equipment were delivered, constructed, erected, installed or tested on site, payment shall be made based on ninety-five percent (95%) of the value of all Work performed up to fifty percent (50%) of scheduled values less the total of previous payments. Authorized extra work will be included in progress payments. Payment of balances will be made only after approval and final acceptance by the County in consideration and elimination of the possibilities of imperfect work, faulty materials or equipment, liens that have been filed, or if evidence indicates the possible filing of claims.
- D. **Contract Alterations.** No alterations or variables in the terms of a contract shall be valid or binding upon the County unless made in writing and signed by the Purchasing Agent or authorized agent.
- E. Assignments. No contract may be assigned, sublet or transferred without written consent of the Public Works Project Engineer.
- F. **Cancellations.** A contract may be canceled or voided by the Public Works Project Engineer upon non-performance or violation of contract provisions, and an award made to the next low bidder or articles specified may be purchased on the open market. In either event, the defaulting contractor (or their surety) shall be liable to Dane County for costs to the County in excess of the defaulting contractor's contract prices.

#### G. Right of the Department to Terminate Contract.

1. In the event that the Contractor or any subcontractors violate any of the provisions of this Contract, the County may serve written notice upon the Contractor and the Surety of its intention to terminate the Contract. Such notice to contain the reasons for such intention to terminate the Contract, and unless within ten (10) days after the serving of such notice upon the Contractor, such violation or delay shall cease and satisfactory arrangement or correction be made, the Contract shall, upon the expiration of said ten (10) days, cease and terminate.

- 2. In the event of any such termination, the County shall immediately serve notice thereof upon the Surety and the Contractor, and the Surety shall have the right to take over and perform the Contract subject to County's approval. However, if the Surety does not commence performance thereof within ten (10) days from the date of the mailing to such Surety of notice of termination, the County may take over the Work and prosecute the same to completion by Contract or by force account for the account and at the expense of the Contractor. The Contractor and Surety shall be liable to the County for any excess cost occasioned the County thereby, and in such event the County may take possession of and utilize in completing the Work, such equipment, materials and / or supplies as may be on the site of the Work and therefore necessary.
- H. Non-Liability. The Contractor shall not be liable in damages for delay in shipment or failure to deliver when such delay or failure is the result of fire, flood, strike, the transporting carrier, act of God, act of government, act of an alien enemy or by any other circumstances which, in the Public Works Project Engineer's opinion, is beyond the control of the Contractor. Under such circumstances, however, the Public Works Project Engineer may in the discretion, cancel the Contract.
- I. **Quality Assurance.** Inspection of equipment, materials and / or supplies shall be made by or at the direction of the County or the Agency to which the goods are delivered, and any articles supplied that are defective, or fails in any way to meet Specifications or other requirements of the Contract, will be rejected. The Public Works Project Engineer shall direct all required laboratory tests. The decision of the Public Works Project Engineer on acceptance shall be final.
- J. **Time for Completion.** The Contractor agrees that the Work shall be prosecuted regularly and diligently and complete the entire project as stated in the Construction Documents.

#### K. Changes in the Work.

- 1. Except in cases of emergency, no changes in the Work covered by the approved Construction Documents shall be made without having prior written approval of the Department. Charges or credits for the work covered by the approved change shall be determined by one of the following methods:
  - a) Unit bid prices previously approved.
  - b) An agreed lump sum based on actual cost of:
    - 1) Labor, including foremen, and all fringe benefits that are associated with their wages;
    - 2) Materials entering permanently into the Work;
    - 3) The ownership or rental cost of construction plant and equipment during the time of use on the extra work;
    - 4) Power and consumable supplies for the operation of construction or power equipment;
    - 5) Workmen's Compensation Insurance, Contractor's Public Liability and Property Damage Insurance, and Comprehensive Automobile Liability Insurance;
    - 6) Social Security, pension and unemployment contributions;
    - 7) To the cost under K.1.b) 2), there shall be added a fixed fee to be agreed upon, but not to exceed fifteen percent (15%) of the actual cost of the Work performed with their own labor force; the fee shall be compensation to cover the cost of supervision, overhead, bond, profit and any other general expense;
    - 8) On that portion of the work under K.1.b) 2) done under subcontract, the Contractor may include not over seven and one-half percent (7½%) for supervision, overhead, bond, profit and any other general expense; and

- 9) The Contractor shall keep and present in such form as directed, a correct amount of the cost together with such supporting vouchers as may be required by the Department.
- c) Cost-Plus Work, with a not-to-exceed dollar limit, based on actual cost of:
  - 1) Labor, including foremen, and all fringe benefits that are associated with their wages;
  - 2) Materials entering permanently into the Work;
  - The ownership or rental cost of construction plant and equipment during the time of use on the extra work. (Rental cost cannot exceed fifty percent (50%) replacement value of rented equipment);
  - 4) Power and consumable supplies for the operation of construction or power equipment;
  - 5) Workmen's Compensation, Contractor's Public Liability and Property Damage Insurance, and Comprehensive Automobile Liability Insurance;
  - 6) Social Security, pension and unemployment contributions;
  - 7) To the cost under K.1.c) 3) there shall be added a fixed fee to be agreed upon, but not to exceed fifteen percent (15%) of the actual cost of the Work performed with their own labor force; the fee shall be compensation to cover the cost of supervision, overhead, bond, profit, and any other general expense;
  - 8) On that portion of the work under K.1.c) 3) done under subcontract, the Contractor may include not over seven and one-half percent (7½%) for supervision, overhead, bond, profit, and any other general expense; and
  - 9) The Contractor shall keep and present in such form as directed, a correct amount of the cost together with such supporting vouchers as may be required by the Department.
- 2. If the Contractor claims that by any instructions given by the Architect / Engineer, the Department, by drawings or otherwise, regarding the performance of the Work or the furnishing of material under the Contract, involves extra cost, the Contractor shall give the Department written notice thereof within two weeks after the receipt of such instructions and in any event before proceeding to execute the work, unless delay in executing the work would endanger life or property.
- 3. No claim for extra work or cost shall be allowed unless the same was done in pursuance of a written order of the Architect / Engineer and approved by the Department, as previously mentioned, and the claim presented with the payment request submitted after the changed or extra work is completed.
- 4. Negotiation of cost for a change in the Work shall not be cause for the Contractor to delay prosecution of the Work if the Contractor has been authorized in writing by the Public Works Project Engineer to proceed.

# L. Payments to Contractor.

- 1. The County will make partial payments to the Contractor for the value, proportionate to the amount of the Contract, of all labor and material incorporated in the work during the preceding calendar month upon receipt of approved Application and Certificate of Payment from the Architect / Engineer and approval of the Department.
- 2. The Contractor shall submit to the Architect / Engineer an Application and Certificate of Payment. The Architect / Engineer will review and approve this before sending it to the Public Works Project Engineer. Evidence may be required, and supplied on demand, that supports the request and the Contractor's right to the payment claimed.

- 3. Request for payment for preparatory work and materials delivered and suitably stored at the site to be incorporated into the Work at some future period, will be given due consideration. Requests involving materials stored off the site, may be rejected; however, if deemed essential for reasons of job progress, protection, or other sufficient cause, requests will be considered conditional upon the submission by the Contractor of bills of sale and such other procedures as will adequately protect the County's interest such as storage in a bonded warehouse with adequate coverage. If there is any error in a payment, the Contractor is obligated to notify the Department immediately, but no longer than ten (10) days from receipt of payment.
- 4. Payments by the County will be due within forty-five (45) days after receipt by the Department of a certified request.
- 5. Five percent (5%) of each request for certification will be retained until final completion and acceptance of all the Work covered by the Contract. However, anytime after fifty percent (50%) of the Work has been furnished and installed at the site, the remaining payments will be made in full if the Architect / Engineer and Public Works Project Engineer find that the progress of the Work corresponds with the construction progress schedule. If the Architect / Engineer and Public Works Project Engineer find that the progress of the Work does not correspond with the construction progress schedule, up to ten percent (10%) of each request for payment may be retained for the Work completed.
- 6. All material and work covered by partial payments made shall become the sole property of the County. This provision shall not be construed as relieving the Contractor from the sole responsibility for the care and protection of materials and work upon which payments have been made or the restoration of any damaged work, or as a waiver of the right of the County to require the fulfillment of all of the terms of the Contract.
- 7. Final payment will be made within sixty (60) days after final completion of the Work, and will constitute acceptance thereof.
- 8. On completion and acceptance of each separate division of the Contract, on which the stated price is separated in the Contract, payment may be made in full, including retained percentages thereon, less authorized deductions.
- 9. Every contractor engaged in performance of any contract for Department of Public Works, Highway & Transportation shall submit to this Department, as requested and with final application for payment for work under said contract, affidavit(s) as required to prove that all debts and claims against this Work are paid in full or otherwise satisfied, and give final evidence of release of all liens against the Work and County. If Wisconsin Prevailing Wage Rate Determination is required for this Work, use "Prime Contractor Affidavit of Compliance With Prevailing Wage Rate Determination" and "Agent or Subcontractor Affidavit of Compliance With Prevailing Wage Rate Determination" (if applicable). If Wisconsin Prevailing Wage Rate Determination is not required for this Work, use "Dane County, Wisconsin Contractor Wage Affidavit". Forms of such affidavits are included in Supplementary Conditions.

#### M. Withholding of Payments.

1. The County, after having served written notice on the said Contractor, may either pay directly any unpaid bills of which the Department has written notice, or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged. Then payment to the Contractor shall be resumed

in accordance with the terms of this Contract, but in no event shall these provisions be construed to impose any obligations upon the County to either the Contractor or the Contractor's Surety.

- 2. In paying any unpaid bills of the Contractor, the County shall be deemed the Agent of the Contractor, and any payment so made by the County, shall be considered as a payment made under the Contract by the County to the Contractor and the County shall not be liable to the Contractor for any such payment made in good faith.
- 3. Contractor shall indemnify, hold harmless and defend Dane County, its boards, commissions, agencies, officers, employees and representatives from all claims growing out of the lawful demands of subcontractors, laborers, workmen, mechanics, material men, and furnishers of machinery and parts thereof, equipment, power tools, and all supplies, including commissary, incurred in the performance of this Contract.
- 4. At the Department's request, the Contractor shall furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged or waived.

#### N. Acceptance of Final Payment as Release.

- 1. The making of final payment shall constitute a waiver of all claims by the County except those arising from:
  - a) Unsettled lien;
  - b) Faulty or defective work appearing after substantial completion;
  - c) Failure of the work to comply with the requirements of the Construction Documents; or
  - d) Terms of any special guarantees required by the Construction Documents.
- 2. The acceptance of final payment shall constitute a waiver of all claims by the Contractor.
- O. Lien Waivers. The Contractor warrants that title to all work covered by an application for Payment will pass to the County no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all work for which Certificates for Payment have been previously issued and payments received from the County shall, to the best of the Contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, subcontractor, material suppliers, or other persons or entities making a claim by reason of having provide labor, materials and equipment related to the Work.
- P. Use and Occupancy Prior to Acceptance. The Contractor agrees to the use and occupancy of a portion or unit of the project before formal acceptance by the Department, provided the Department:
  - 1. Secures written consent of the Contractor; except when in the opinion of the Department's Public Works Project Engineer, the Contractor is chargeable with unwarranted delay in final cleanup of punch list items or other Contract requirements;
  - 2. Secures endorsement from the insurance carrier and consent of the Surety permitting occupancy of the building or use of the project during the remaining period of construction, or, secures consent of the Surety;
  - 3. Assumes all costs and maintenance of heat, electricity and water; and
  - 4. Accepts all work completed within that portion or unit of the project to be occupied, at time of occupancy.

#### Q. Correction of Work.

- All work, all materials whether incorporated in the Work or not, and all processes of manufacture shall at all times and places be subject to the inspection of the Architect / Engineer and the Public Works Project Engineer who shall be the judge of the quality and suitability of the work, materials, and processes of manufacture for the purposes for which they are used. Should they fail to meet the Architect / Engineer's and the Public Works Project Engineer's approval they shall be reconstructed, made good, replaced or corrected, as the case may be, by the Contractor at the Contractor's expense. Rejected material shall immediately be removed from the site.
- 2. If the Contractor defaults or neglects to carry out the Work in accordance with the Construction Documents or fails to perform any provision of the Contract, the Department may, after ten (10) days written notice to the Contractor and without prejudice to any other remedy the County may have, make good such deficiencies. In such case, an appropriate Change Order shall be issued deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies, including the cost of the Architect / Engineer's additional services made necessary by such default, neglect or failure.

## 6. GENERAL GUARANTEE

- A. Neither the final certificate of payment nor any provision in the Construction Documents nor partial or entire occupancy of the premises by the County shall constitute an acceptance of work not done in accordance with the Construction Documents or relieve the Contractor of liability in respect to any expressed warranties or responsibility for faulty materials or workmanship.
  - 1. In no event shall the making of any payment required by the Contract constitute or be construed as a waiver by County of any breach of the covenants of the Contract or a waiver of any default of Contractor and the making of any such payment by County while any such default or breach shall exist shall in no way impair or prejudice the right of County with respect to recovery of damages or other remedy as a result of such breach or default.
- B. The Contractor shall remedy and make good all defective workmanship and materials and pay for any damage to other work resulting therefrom, which appear within a period of one year from the date of substantial completion, providing such defects are not clearly due to abuse or misuse by the County. The Department will give notice of observed defects with reasonable promptness.
- C. Guarantee on work executed after certified date of substantial completion will begin on the date when such work is inspected and approved by the Architect / Engineer and the Public Works Project Engineer.
- D. Where guarantees or warrantees are required in sections of Construction Documents for periods in excess of one year, such longer terms shall apply; however, the Contractor's Performance / Payment Bond shall not apply to any guarantee or warranty period in excess of one year.

# 7. IDENTICAL BIDDING

A. Antitrust Laws. All identical bids submitted to the County because of advertised procurement for materials, supplies, equipment or services exceeding \$1,000,000.00 in total

amount shall be reported to the Attorney Generals of the United States and the State of Wisconsin for possible violation and enforcement of antitrust laws.

# 8. BINDING CONTRACTS

A. **Contract Commitment.** Any contracts resulting from this bid shall be binding on a successful bidder(s) to its conclusion and on its assigns, heirs, executors, administrators or successors.

# 9. AFFIRMATIVE ACTION PROVISION AND MINORITY / WOMEN / DISADVANTAGED BUSINESS ENTERPRISES

- A. Affirmative Action Provisions. During the term of its Contract, Contractor agrees not to discriminate on the basis of race, religion, color, sex, handicap, age, sexual preference, marital status, physical appearance, or national origin against any person, whether a recipient of services (actual or potential), an employee, or an applicant for employment. Such equal opportunity shall include but not be limited to the following: employment, upgrading, demotion, transfer, recruitment, advertising, layoff, termination, training, rates of pay, and any other form of compensation or level of service(s). Contractor agrees to post in conspicuous places, available to all employees, service recipients and applicants for this paragraph. The listing of prohibited bases for discrimination shall no be construed to amend in any fashion state or federal law setting forth additional bases and exceptions shall be permitted only to the extent allowable in state or federal law.
- B. Contractor is subject to this paragraph only if Contractor has ten (10) or more employees and receives \$10,000.00 or more in annual aggregate contracts with County. Contractor shall file an Affirmative Action Plan with the Dane County Contract Compliance Officer in accord with Chapter 19 of the Dane County Code of Ordinances. Contractor must file such plan within fifteen (15) days of the effective date of this Contract and failure to do so by that date shall constitute grounds for immediate termination of the Contract. During the term of this Contract, Contractor shall also provide copies of all announcements of employment opportunities to the County's Contract Compliance Office, and shall report annually the number of persons, by race, sex and handicap status, which apply for employment and, similarly classified, the number hired and the number rejected.
- C. Contact the Dane County Contract Compliance Officer at Dane County Contract Compliance Office, 210 Martin Luther King, Jr. Blvd., Room 421, Madison, WI 53703, 608/266-4114.
- D. In all solicitations for employment placed on Contractor's behalf during the term of this Contract, Contractor shall include a statement to the effect the Contractor is an "Equal Opportunity Employer."
- E. Contractor agrees to furnish all information and reports required by County's Contract Compliance Officer as the same relate to affirmative action and nondiscrimination, which may include any books, records, or accounts deemed appropriate to determine compliance whit Chapter 19, Dane County Code of Ordinances, and the provision of this Contract.
- F. Minority / Women / Disadvantaged / Emerging Small Business Enterprises. Chapter 19.508 of the Dane County Code of Ordinances is the official policy of Dane County to utilize Minority Business Enterprises (MBEs), Women Business Enterprises (WBEs), Disadvantage Business Enterprises (DBEs) and Emerging Small Business Enterprises (ESBEs) fully.

G. The Contractor may utilize MBEs / WBEs / DBEs / ESBEs as subcontractors or suppliers. A list of subcontractors will be required of the low bidder as stated in this Contract. The list shall indicate which subcontractors or suppliers are MBEs / WBEs / DBEs / ESBEs and what percentage of subcontract is awarded, shown as a percentage of the total dollar amount of the bid.

## 10. COMPLIANCE WITH FAIR LABOR STANDARDS

- A. During term of this Contract, Contractor shall report to County Contract Compliance Officer, within ten (10) days, any allegations to, or findings by National Labor Relations Board (NLRB) or Wisconsin Employment Relations Commission (WERC) that Contractor has violated statute or regulation regarding labor standards or relations. If investigation by Contract Compliance Officer results in final determination that matter adversely affects Contractor's responsibilities under this Contract, and which recommends termination, suspension or cancellation of this Contract, County may take such action.
- B. Contractor may appeal any adverse finding by Contract Compliance Officer as set forth in Dane County Ordinance 25.015(11)(c) through (e).
- C. Contractor shall post this statement in prominent place visible to employees: "As condition of receiving and maintaining contract with Dane County, this employer shall comply with federal, state and all other applicable laws prohibiting retaliation or union organizing."

# **11. INSURANCE REQUIREMENTS**

- A. Contractor shall indemnify, hold harmless and defend Dane County, its boards, commissions, agencies, officers, employees and representatives from and against all claims, damages, losses and expenses including attorneys' fees arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting there from, and is caused in whole or in part by any act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a part indemnified hereunder.
- B. In any and all claims against Dane County, its boards, commissions, agencies, officers, employees and representatives or by any employee of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Contract shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any subcontractor under worker's compensation acts, disability benefits or other employee benefit acts.
- C. The obligations of the Contractor under this Contract shall not extend to the liability of the Architect / Engineer, its agents or employees arising out of (1) the preparation or approval of maps, drawings, opinion, reports, surveys, change orders, designs or specifications; or (2) the giving of or the failure to give directions or instruction by the Architect / Engineer, its agents or employees provided such giving or failure to give is the primary cause of the injury or damage.

- D. The County shall not be liable to the Contractor for damages or delays resulting from work by third parties or by injunctions or other restraining orders obtained by third parties.
- E. **Contractor Carried Insurance.** In order to protect itself and the County, the Contractor shall not commence work under this Contract until obtaining all the required insurance and the County has approved such insurance. The Contractor shall not allow any subcontractor to commence work on the subcontract until the insurance required of the subcontractor has been so obtained and approved.
  - 1. Worker's Compensation Insurance

The Contractor shall procure and shall maintain during the life of this Contract, Worker's Compensation Insurance as required by statute for all of its employees engaged in work at the site of the project under this Contract and, in case of such work sublet, the Contractor shall require the subcontractor similarly to provide Worker's Compensation Insurance for all of the latter's employees to be engaged in such work unless such employees are covered by the protection afforded by the Contractor's Worker's Compensation Insurance.

- 2. Contractor's Public Liability and Property Damage Insurance The Contractor shall procure and maintain during the life of this Contract, Contractor's Public Liability Insurance and Contractor's Property Damage Insurance in an amount not less then \$1,000,000.00 per occurrence for bodily injury and death, and Contractor's Property Damage Insurance in an amount not less than \$1,000,000.00 and shall be primary with Dane County as an "Additional Insured".
- 3. Auto Liability Insurance

The Contractor shall procure and maintain during the life of this Contract, Comprehensive Automobile Liability Insurance covering owned, non-owned and hired automobiles for limits of not less than \$1,000,000.00 and shall be primary with Dane County as an "Additional Insured".

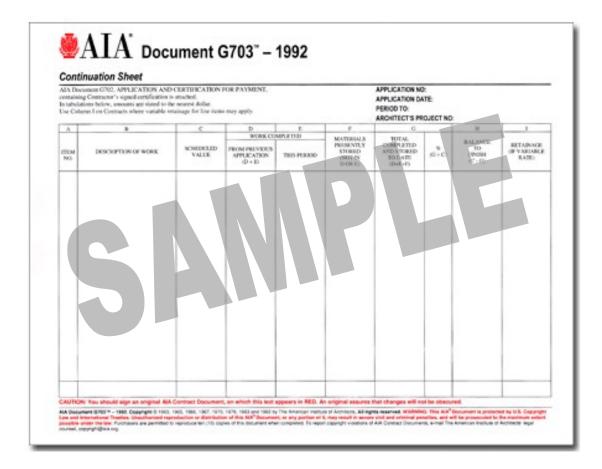
- F. The Contractor either (1) shall require each of the subcontractors to procure and to maintain during the life of the subcontract, subcontractor's Public Liability Property Damage Insurance, and Comprehensive Automobile Liability Insurance of the type and in the same amount specified in the preceding paragraphs; or (2) insure that activities of the subcontractors in their own policy.
- G. The Contractor shall furnish the County with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of policies. Such certificates shall also contain substantially the following statement: "The insurance covered by this certificate will not be canceled or materially altered, except after ten (10) days written notice has been received by the County."
- H. **County Provided Protection.** The County shall provide a Builder's Risk policy when applicable to the project. The County's Risk Manager, upon the Contractor's request, will make available the terms of this policy. By executing this contract, the Contractor warrants it is familiar with the terms of said policy.

#### SUPPLEMENTARY CONDITIONS

#### 1. APPLICATION & CERTIFICATE FOR PAYMENT

A. Every contractor engaged in performance of any contract for Department of Public Works, Highway & Transportation shall submit partial and final Application & Certificate for Payment for work under said contract. Form shall provide similar information as shown on AIA G702<sup>TM</sup> and G703<sup>TM</sup> forms (samples shown below). Forms shall be submitted to Public Works Project Engineer for approval.

Application and Certificate for P	ayment			
TO OWNER:	PROJECT:		APPLICATION NO:	Distribution
			PERIOD TO:	OWNER
			CONTRACT FOR:	ARCHITECT
FROM CONTRACTOR:	VIA ARCHIT	ECT:	CONTRACT DATE:	CONTRACTOR
			PROJECT NOS: /	I FELD
				OTHER
1. ORGINAL CONTRACT SUM 2. Not change by Change Orders 3. Contract sum To DATE (Line 1 ± 2) 4. Contract sum To DATE (Line 1 ± 2) 5. Contract Sum To DATE (Line 1 ± 2) 5. Estat Natural D ± 10 A, (7010) 5 G Second Reserved (Change C ± 000 R	= G-10) 5 5		which parriase Cetall, alex for Paparet were insued of the centre present theorem in some day. CONTRACTOR: %:	the: AYMENT In site observations and the data competi- ta to the box of the Acchiance's knowledge
8. BALANCE TO FINISH, INCLUDING RETAINAGE			AMOUNT CERTIFIED	
(Line 3 leve Line 6)	5		Uthack explanation if amount certified differs from the Application and on the Continuation Short that are cho	concurs opplied, beind off Japares on the
CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS	Application and in the Continuation Meet that are the ARCHTECT:	radice in codinant can be marine teacher
Total changes approved in previous months by Owner		5	BE	Date
Total approved this Month	5	5		Contractor Stationary and the second
			This Certificate is not negatiable. The AMOUNT CERTIFIED is payable only to named herein. Douanter, provident and acceptance of payment are without prejudice	
TOTALS	3	5		



# 2. CONTRACTOR WAGE AFFIDAVIT

A. Every contractor engaged in performance of any contract for Department of Public Works, Highway & Transportation shall submit to this Department, as requested and with final application for payment for work under said contract, affidavit in form as hereinafter set forth in this section. Affidavit affirms that all persons employed by contractor or by any of contractor's subcontractors on such contract have been paid no less than minimum wages established under Dane County Ordinances, Chapter 40, Subchapter II (Minimum Wage Ordinance) and in effect at date of execution of contract, that full payment of wages earned has been made, and that no rebates either directly or indirectly have been made. Form of such affidavit is included in this section.

# DANE COUNTY, WISCONSIN CONTRACTOR WAGE AFFIDAVIT

COMPANY NAME:	
ADDRESS:	
CONTRACT NO.: DIVISIO	N(S) OF WORK:
AFFIDAVIT	
STATE OF WISCONSIN )	
) ss. DANE COUNTY )	
I,	, being
first duly sworn at	
on oath, depose and say that with respect to the	
contractor compositi pama	, subcontractors on the
, at t	he
that during the period commencing	he
all persons employed on said project have been	paid the full wages earned, that no rebates have
been or will be made either directly or indirectly	y by said contractor or subcontractor from the full
weekly wages earned by any person, and that ne	o deductions have been made either directly or
indirectly from the full weekly wages earned by	any person, other than authorized legal
deductions (including taxes such as Federal Inc	ome Withholding and Social Security, State and
state any other legal deductions such as union dues, unemployment insurance, 401k c and that there is full compliance with the provis	
County Ordinances, Chapter 40, Subchapter II	(Minimum Wage Ordinance). This affidavit is
made to induce Dane County to approve the app	plication for payment to which this affidavit is
attached.	
Contractor Company Name	
Signature	Title
Sworn to before me this day of	, 20
	_ My Commission expires
Notary Public	Date

#### BASIC REQUIREMENTS

#### PART 1 GENERAL

#### 1.1 SECTION SUMMARY

- A. Section Includes:
  - 1. Section Summary
  - 2. Summary of the Work
  - 3. Contractor Use of Premises
  - 4. Applications for Payment
  - 5. Coordination
  - 6. Cutting and Patching
  - 7. Conferences
  - 8. Progress Meetings
  - 9. Submittal Procedures
  - 10. Proposed Products List
  - 11. Shop Drawings
  - 12. Product Data
  - 13. Samples
  - 14. Manufacturers' Instructions
  - 15. Manufacturers' Certificates
  - 16. Quality Assurance / Quality Control of Installation
  - 17. References
  - 18. Protection of Installed Work
  - 19. Parking
  - 20. Progress Cleaning
  - 21. Products
  - 22. Transportation, Handling, Storage and Protection
  - 23. Product Options
  - 24. Substitutions
  - 25. Contract Closeout Procedures
  - 26. Final Cleaning
  - 27. Adjusting
  - 28. As-Built Drawings and Specifications

# 1.2 SUMMARY OF THE WORK

- A. Project Description:
  - 1. <u>Base Bid:</u>

Perform the Work as specified and detailed in Construction Documents package. Perform repairs to deteriorated dam concrete, which includes approximately 150 square feet of concrete replacement and approximately 50 LF of deteriorated joint sealant. These quantities are only approximations. Payment will be for Work actually completed, and unit pricing will be used to add to or deduct from the Base Bid price.

Owner will draw down water to facilitate some concrete patching and to expose two underwater drainage tile discharge pipes for Engineer inspection. Coordinate Contractor Work with Owner Work.

2. <u>Alternate Bid 1:</u>

Perform the Work as specified and detailed in Construction Documents package. Provide galvanized, stainless steel, or aluminum dam stop logs, 19-foot ladder, and manhole access hatch, as shown on Drawings. All other Work to remain the same as Base Bid.

3. <u>Alternate Bid 2:</u>

Perform the Work as specified and detailed in Construction Documents package. Provide approximately 60 LF of 5' high galvanized steel chain link fencing, and remove approximately 50 LF of 3' high chain link fence fabric from existing posts in the woods along the east edge of the dam. Reuse the existing fence posts and install approximately 50 LF of 5' high galvanized steel chain link fence fabric, top rail, and hardware.

Install approximately 375 LF of 42" high galvanized steel chain link fencing, as shown on Drawings. Remove and dispose of existing fence in areas where new 42" fence will be placed. Cut existing fence posts flush with adjacent surface and fill the base of the poles with non-shrink grout. In areas where the 42" fence follows curved walls, the fence may be a series of 6' long straight fencing sections set at varying angles to closely follow the curved walls.

Fence lengths are only approximations. It is solely the Contractor's responsibility to verify these quantities. All other Work to remain the same as Base Bid.

4. <u>Alternate Bid 3:</u>

Instead of Owner, Contractor will draw down water to facilitate some concrete patching and to expose two underwater drainage tile discharge pipes for Engineer inspection. Pump used to draw down water must be capable of discharging at least 2 cubic feet per second of water. Contractor may also use stop logs to lower water level downstream. However, these efforts must be approved by Project Engineer and coordinated with lake dredging operations being performed by others. All other Work to remain the same as Base Bid.

- B. Work by Owner:
  - 1. Owner will provide erosion control and brush clearing to allow Contractor access to Work areas. Owner will clear all brush and trees that are within 3' of the proposed Work areas. Contractor is responsible for additional clearing, as may be necessary for Work. Contractor brush work may include clearing brush and trees more than 3' from the proposed fence location to allow for moving equipment and materials, as Contractor deems necessary.

- 2. Owner will clean out sediment from the catch basin, once the water in the catch basin has been drawn down. Contractor to coordinate Owner's Work with Contractor's operations.
- Owner will draw down water to facilitate some concrete patching and to expose two underwater drainage tile discharge pipes for Engineer inspection. Coordinate Contractor Work with Owner Work. All other Work to remain the same as Base Bid.
- C. Permits: Not applicable.

#### 1.3 CONTRACTOR USE OF PREMISES

A. Limit use of premises to allow work by Contractors or Subcontractors and access by Owner.

#### 1.4 APPLICATIONS FOR PAYMENT

- A. Submit two (2) copies of each application on AIA G702<sup>TM</sup> and G703<sup>TM</sup> forms or approved contractors invoice form.
- B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.
- C. Payment Period: Bi-weekly.

### 1.5 COORDINATION

- A. Coordinate scheduling, submittals, and work of various sections of Specifications to assure efficient and orderly sequence of installation of interdependent construction elements.
- B. Verify utility requirement characteristics of operating equipment are compatible with building utilities.
- C. Coordinate space requirements and installation of mechanical and electrical work that are indicated diagrammatically on Drawings.

#### 1.6 CUTTING AND PATCHING

- A. Employ a skilled and experienced installer to perform cutting and patching new work; restore work with new Products.
- B. Submit written request in advance of cutting or altering structural or building enclosure elements.
- C. Fit work tight to adjacent elements. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.

D. Refinish surfaces to match adjacent finishes.

# 1.7 CONFERENCES

- A. Dane County Department Public Works, Highway & Transportation will schedule a preconstruction conference after Award of Contract for all affected parties.
- B. When required in individual Specification section, convene a pre-installation conference at project site prior to commencing work of the section.

#### 1.8 PROGRESS MEETINGS

- A. Owner shall schedule and administer meetings throughout progress of the Work at minimum of one (1) per week.
- B. Owner shall preside at meetings, record minutes, and distribute copies within two (2) days to those affected by decisions made.

#### 1.9 SUBMITTAL PROCEDURES

- A. Submittal form to identify Project, Contractor, Subcontractor or supplier; and pertinent Construction Documents references.
- B. Apply Contractor's stamp, signed or initialed, certifying that review, verification of Products required, field dimensions, adjacent construction work, and coordination of information is in accordance with requirements of the Work and Construction Documents.
- C. Identify variations from Construction Documents and Product or system limitations that may be detrimental to successful performance of completing the Work.
- D. Revise and resubmit submittals as required; identify all changes made since previous submittal.

#### 1.10 PROPOSED PRODUCTS LIST

A. Within fifteen (15) days after date of Award of Contract, submit complete list of major Products proposed for use, with name of manufacturer, trade name, and model number of each Product.

#### 1.11 SHOP DRAWINGS

A. Submit number of copies that Contractor requires, plus two (2) copies that shall be retained by Public Works Project Engineer.

#### 1.12 PRODUCT DATA

A. Submit number of copies that Contractor requires, plus two (2) copies that shall be retained by Public Works Project Engineer.

B. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturer's standard data to provide information unique to this Project.

#### 1.13 SAMPLES

- A. Submit samples to illustrate functional and aesthetic characteristics of the Product.
- B. Submit samples of finishes from the full range of manufacturers' standard colors, textures, and patterns for Public Works Project Engineer's selection.

# 1.14 MANUFACTURERS' INSTRUCTIONS

A. When specified in individual Specification sections, submit manufacturers' printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, in quantities specified for Product Data.

# 1.15 MANUFACTURERS' CERTIFICATES

- A. When specified in individual Specification sections, submit manufacturers' certificate to Public Works Project Engineer for review, in quantities specified for Product Data.
- B. Indicate material or Product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

# 1.16 QUALITY ASSURANCE / QUALITY CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply fully with manufacturers' instructions.
- C. Comply with specified standards as minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

#### 1.17 REFERENCES

- A. Conform to reference standard by date of issue current as of date for receiving bids.
- B. Should specified reference standard conflict with Construction Documents, request clarification from Public Works Project Engineer before proceeding.

#### 1.18 PROTECTION OF INSTALLED WORK

A. Protect installed work and provide special protection where specified in individual Specification sections.

# 1.19 PARKING

A. Arrange for temporary parking areas to accommodate construction personnel. Parking shall be available at the Work site. The north parking lot may be used for Contractor parking and staging.

# 1.20 PROGRESS CLEANING

A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in clean and orderly condition.

#### 1.21 PRODUCTS

- A. Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work, but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components specifically identified for reuse.
- B. Do not use materials and equipment removed from existing premises, except as specifically identified or allowed by Construction Documents.

# 1.22 TRANSPORTATION, HANDLING, STORAGE AND PROTECTION

- A. Transport, handle, store and protect Products in accordance with manufacturer's instructions.
- B. A boom truck or mobile crane may be placed on the earthen embankment of the dam and used to transport materials across the span of the dam. Contractor must obtain approval from Project Engineer before moving any heavy equipment on the dam.

#### 1.23 PRODUCT OPTIONS

- A. Where definite material is specified, it is not intention to discriminate against "equal" product made by another manufacturer. Intention is to set definite standard of material quality.
- B. Requests for substitutions that result in minor variations in specification may be accepted if, in the opinion of Dane County, they do not adversely affect the quality, maintenance or performance of the items.
- C. Should bidder choose to bid materials other than those specified, bidder shall submit said materials specifications to Project Engineer for approval at least seven (7) days prior to Bid Opening. Public Works Project Engineer shall consider requests for Substitutions up to seven (7) days prior to date of Bid Opening.
- D. Products and materials that are not specified, but have been approved for use by Public Works Project Engineer shall be identified in addenda to all bidding contractors.

E. Requests for material or product substitutions submitted up to fifteen (15) days after Bid Opening may be considered, but Project Engineer is not required to consider them. Dane County reserves right to approve or reject substitutions based on Specification requirements and intended use.

# 1.24 SUBSTITUTIONS

- A. Document each request with complete data substantiating compliance of proposed Substitution with Construction Documents.
- B. Submit three (3) copies of requests for Substitution for consideration. Limit each request to one (1) proposed Substitution.
- C. Substitutions shall not change contract price established at Bid Opening.

# 1.25 CONTRACT CLOSEOUT PROCEDURES

- A. Submit written certification that Construction Documents have been reviewed, the Work has been inspected, and the Work is complete in accordance with Construction Documents and ready for Public Works Project Engineer's inspection.
- B. Submit final Application for Payment identifying total adjusted Contract Sum / Price, previous payments, and amount remaining due.

#### 1.26 FINAL CLEANING

- A. Execute final cleaning prior to final inspection.
- B. Clean interior and exterior surfaces exposed to view.
- C. Remove waste and surplus materials, rubbish, and construction facilities from site.
- D. If there are any areas of disturbed soil or damage to the facilities as a result of this Work, return damaged areas to original condition.

#### 1.27 ADJUSTING

A. Adjust Products and equipment to ensure smooth and unhindered operation.

#### 1.28 AS-BUILT DRAWINGS AND SPECIFICATIONS

A. Contractor shall furnish Public Works Project Engineer with one set of as-builts drawings in AutoCAD 2007 (or lower) or in manually drafted format.

# DEFINITIONS

# PART 1 GENERAL

# 1.1 DEFINITIONS

- A. CONTRACT DOCUMENTS The contract documents for this project include but are not limited to:
  - 1. These specifications entitled specifications for the "Fencing & Dam Repairs, Stewart Lake Dam."
  - 2. Architectural and Structural Drawings prepared by Mead, Ward & Hunt, Inc. on the original construction dated May 1938.
  - 3. Architectural and Structural Drawings prepared by Dane County Public Works for this project.
- B. UNSOUND CONCRETE Concrete which contains internal and/or surface cracking or loss of density and which, in the judgment of the Engineer, is detrimental to the strength and serviceability of the structure. Unsound concrete is also associated with concrete surface spalling and crumbling, infiltration of moisture and salts, corrosion of reinforcement, rust staining, increased porosity and reduced strength.
- C. DELAMINATION Planar cracking of concrete usually initiated by bursting stresses due to expansion of corrosion by-products of embedded reinforcing.
- D. SOUND CONCRETE Firm, dense, homogeneous concrete which contains in the judgment of the Engineer no significant detriments to its strength or serviceability.
- E. REMOVAL Removal of unsound and sound concrete, epoxy patches and asphalt using chipping hammers or other means.
- F. SCARIFYING The process of making numerous cuts into a concrete surface, which results in fracturing the cement paste and aggregate, exposing a new roughened surface free of contaminants.
- G. SLAB Flat, horizontal or ramped layers of reinforced concrete.
- H. SUPPORT BARS Reinforce bars used to support the main reinforcing bars and not shown on the original drawings as main reinforcing bars themselves.
- I. DRAWINGS Graphical description of the work to be performed, designated.
- J. SPECIFICATIONS Written description of the work to be performed, designated.
- K. ORIGINAL DRAWINGS Graphical description of the existing structure as designed. See above.

#### UNIT PRICES

#### PART 1 GENERAL

#### 1.1 PAYMENT

A. Work is to be paid for on a Unit Price basis and Base Bid is to be submitted on estimated quantities. The work items and basis of payment are listed in abbreviated form below. These work items are to be installed and completed per specifications and as shown on the drawings.

<u>ltem</u>	<u>Type of Work</u>	Unit Price
1	<u>Removal and replacement of unsound concrete</u> includes removal of concrete to a maximum depth of 6" from outer surface, sandblasting or wire brushing and compressed air spraying of the newly exposed concrete surface and reinforcing steel, placing supplemental and replacement reinforcing steel as needed, and placing "ready-mix" concrete fill (pre-packaged concrete at Contractor's option). Fill flush with existing adjacent surface. Refer to Specification Sections 02075 and 03730. Payment based on area removed at top surface, vertical surface, angled surface, and underslab surface.	\$/Sq. Ft.
5	<u>Seal concrete cracks and joints</u> including routing and sealing of random cracks and deteriorated joints and installation of sealant in cracks and joints as detailed and per Specification Section 07900. Payment based on length of sealant installed	\$/Lin. Ft.

#### 1.2 MEASUREMENT OF QUANTITIES

- A. Work to be performed on a unit price basis shall be measured according to the quantities described above. Payment will be made for work actually performed, based on quantities recorded by the Contractor and approved by the Engineer. Unless otherwise stated, the Engineer will verify the accuracy of the record by visual examination of the work performed and by measuring the quantities.
- B. The Contractor shall notify the Owner and the Engineer at once in writing of any unit price work that deviates materially from the prescribed basis for bidding and for which an adjustment in Unit Price is desired. The Contractor shall measure and quantify all such deviations, subject to the Engineer's verification, prior to any repair work which might make verification impossible. No adjustments in Unit Prices will be considered unless supporting field measurements are provided, and subject to the Owner's prior approval.

Adjustments will only be considered if all repairs of a given type have been measured and all deviations, both plus and minus have been included in the determination of the average deviation from the Unit Price basis.

- C. Removal of slab concrete.
  - 1. The Contractor shall maintain a record of the location and quantity of concrete removed, identified by unit price item.
- D. Placing replacement and supplemental reinforcing.
  - 1. The Contractor shall maintain a record of the location and quantity of reinforcement placed. This record shall show the quantity and size placed.
- E. Rout and seal random cracks and reseal selected existing cracks.
  - 1. The Contractor shall maintain a record of the location and quantity of cracks sealed.

#### RECYCLING

# PART 1 GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Waste Management Goals
  - 2. Waste Management Plan
  - 3. Reuse
  - 4. Recycling
  - 5. Materials Sorting and Storage On Site
  - 6. Lists of Recycling Facilities Processors and Haulers
  - 7. Waste Management Plan Form
- B. Related Sections:
  - 1. Section 01000 Basic Requirements

# 1.2 WASTE MANAGEMENT GOALS

- Dane County requires that as many waste materials as possible produced as result of this project be salvaged, reused or recycled in order to minimize impact of construction waste on landfills and to minimize expenditure of energy and cost in fabricating new materials. Additional information may be found in The Dane County Green Building Policy, Resolution 299, 1999-2000.
- B. Contractor shall develop, with assistance of Public Works Project Engineer and Architect / Engineer, Waste Management Plan (WMP) for this project. Outlined in RECYCLING section of this specification are examples of materials that can be recycled or reused as well as recommendations for waste sorting methods.

## 1.3 WASTE MANAGEMENT PLAN

- A. Contractor shall complete WMP and include cost of recycling / reuse in Bid. WMP will be submitted to Public Works Project Engineer within fifteen (15) days of Notice to Proceed date. Copy of blank WMP form is in this Section. Submittal shall include cover letter and WMP form with:
  - 1. Information on:
    - a. Types of waste materials produced as result of work performed on site;
    - b. Estimated quantities of waste produced;
    - c. Identification of materials with potential to be recycled or reused;
    - d. How materials will be recycled or reused;
    - e. On-site storage and separation requirements (on site containers);
    - f. Transportation methods; and
    - g. Destinations.

# 1.4 REUSE

A. Contractors and subcontractors are encouraged to reuse as many waste materials as possible. Salvage should be investigated for materials not reusable on site.

# 1.5 RECYCLING

- A. These materials can be recycled in Dane County area:
  - 1. Wood.
  - 2. Wood Pallets.
  - 3. Fluorescent Lamps.
  - 4. Foam Insulation & Packaging (extruded and expanded).
  - 5. PVC Plastic (pipe, siding, etc.).
  - 6. Concrete.
  - 7. Corrugated Cardboard.
  - 8. Metal.
  - 9. Carpet Padding.
  - 10. Gypsum Drywall.
  - 11. Barrels & Drums.
  - 12. Solvents.

# 1.6 MATERIALS SORTING AND STORAGE ON SITE

- A. Contractor shall provide separate containers for recyclable materials. Number of containers will be dependent upon project and site conditions.
- B. Contractor shall provide on-site locations for subcontractors supplied recycling containers to help facilitate recycling.

#### 1.7 LISTS OF RECYCLING FACILITIES PROCESSORS AND HAULERS

A. Web site <u>www.countyofdane.com</u> has recycling symbol (link) near top of page that lists current information for Dane County Recycling Markets. Contractors can also contact Dane County's Recycling Manager at 608/267-8815, or local city, village, town recycling staff listed in above referenced web site. Statewide listings of recycling / reuse markets at available from Wisconsin Department of Natural Resources, <u>www.dnr.state.wi.us/org/aw/wm/markets</u>.

#### 1.8 WASTE MANAGEMENT PLAN FORM

Contractor Information: А.

Phone No.: \_\_\_\_\_ Recycling Coordinator: \_\_\_\_\_

MATERIAL	ESTIMATED QUANTITY	DISPOSAL METHOD (CHECK ONE)	RECYCLING / REUSE COMPANY OR DISPOSAL SITE
Salvaged & reused building materials	cu. yds.	RecycledReused LandfilledOther	Name:
Glass	cu. yds.	Recycled Reused	Name:
Wood	cu. yds.	RecycledReusedOther	Name:
Wood Pallets	units	RecycledReusedOther	Name:
Fluorescent Lamps	cu. ft. lbs.	RecycledReusedOther	Name:
Foam Insulation	cu. ft. lbs.	RecycledReusedLandfilledOther	Name:
Asphalt & Concrete	cu. ft. lbs.	RecycledReusedLandfilledOther	Name:
PVC Plastic	cu. ft. lbs.	RecycledReusedLandfilledOther	Name:
Corrugated Cardboard	cu. ft. lbs.	RecycledReusedLandfilledOther	Name:
Metals	cu. yds.	RecycledReusedLandfilledOther	Name:
Carpet Padding	cu. ft. lbs.	RecycledReusedLandfilledOther	Name:
Gypsum / Drywall	cu. yds.	RecycledReusedLandfilledOther	Name:
Barrels & Drums	units	RecycledReusedLandfilledOther	Name:

Solvents	gallons	Recycled Reused	Name:
Other		Recycled     Reused       Landfilled     Other	Name:
Other		Recycled     Reused       Landfilled     Other	Name:
Other		Recycled     Reused       Landfilled     Other	Name:
Other		Recycled Reused	Name:
Other		Recycled Reused	Name:

# PART 2 PRODUCTS

Not Used.

# PART 3 EXECUTION

Not Used.

#### TEMPORARY FACILITIES AND CONTROLS

#### PART 1 GENERAL

#### 1.1 TEMPORARY FACILITIES

#### A. TEMPORARY UTILITIES

1. The Contractor shall arrange for, obtain and pay for all temporary utilities necessary to complete the work except as stated otherwise in these specifications.

#### B. TELEPHONE

1. The Contractor shall provide temporary telephone service. This service shall consist of at least a cellular phone for the Contractor's and Owner's use.

#### C. TOILETS

- 1. The Contractor may use the toilet facilities located at the south end of the lake. Owner will provide Contractor with a key to the toilet facilities. If it is found that the toilet facilities are not being maintained and are being abused by the Contractor, the use of the facilities by the Contractor will end. As an option, the Contractor may provide and maintain suitable, weather tight, painted sanitary toilet facilities for all workers during construction period. When toilet facilities are no longer required, promptly remove from site, disinfect, and clean or treat the area as required.
- 2. General Contractor shall keep all toilet facilities clean and supplied with toilet tissue at all times. Maintain facilities in accordance with requirements of applicable building codes.

#### D. PROJECT SIGN

1. No individual advertising signs, plaques or credits, temporary or permanent, will be permitted on the premises, except the name of each contractor at the entrance or on the Contractor's office or material shed.

## E. EXPLOSIVES

1. Use of explosives, for any purpose, is prohibited.

#### F. FIRST AID

1. The Contractor shall provide temporary first-aid facilities on the site.

#### 1.2 CONTROLS

#### A. TRAFFIC/DUST/DEBRIS CONTROL

 The Contractor shall provide personnel, signs, barricades, lights and warning devices to control the orderly flow of traffic at the site, where needed, and prevent pedestrians and cars from entering areas of the Contractor's operations. This is especially critical when permanent fences and pit covers are not in place. The traffic devices shall meet the requirements of the U.S. Department of Transportation Manual on Uniform Traffic Control Devices.

- 2. The Contractor shall use crack router with vacuum attachment to eliminate dust from this process. Water or similar measures shall be used when sawing. The Contractor shall provide adequate protection to prevent damage to damage and pollution from flying debris.
- 3. Plywood or other suitable material must be placed below compressors to protect the substrate from grease, oil, and other debris.
- 4. All Contractors shall comply with applicable OSHA regulations.
- B. PARKING
  - 1. Parking of vehicles and equipment required for construction purposes shall be in the Contractor's designated work areas.
  - 2. All Contractors and their employees shall cooperate with the General Contractor and others in the parking of vehicles to avoid interference with normal construction activities.
- C. SECURITY
  - 1. The Contractor shall provide for the security of materials and equipment stored at the site. The Contractor may store equipment and materials in areas in which the Contractor is working; otherwise, they shall be removed from the site. Special care shall be taken to secure all materials, new and removed, and equipment.

# 1.3 SPECIAL CONTROLS

- A. NOISE CONTROL
  - 1. The Contractor shall confine hours of operations to those required by State, County and City laws and ordinances. Work shall be limited to the hours between 7:00 a.m. and 7:00 p.m., Monday through Friday.
- B. WATER CONTROL
  - 1. Owner will pump down lower ponds for access to retaining walls that need concrete patching and for inspection of drain tile discharge pipes. The pump used must be capable of pumping water at the rate of 2 cubic feet per second. Stop logs may also be used to lower the water level, but this activity must be coordinated with Contractor and Project Engineer to maintain lowered lake level and to not interfere with dredging that may be ongoing.
  - 2. All concrete Work and grouting must be protected from water and weather damage until properly cured (generally 3 days).
  - 3. The Owner will meet the DNR waste water regulations for construction site runoff requirements.
- C. POLLUTION CONTROL
  - 1. All internal combustion engines used in the work and operating in a fixed location while running shall have their exhaust directed so as to prevent accumulation of fumes or carbon stains on the surfaces of the structure.

# REMOVAL OF EXISTING CONCRETE AND SURFACE PREPARATION

# PART 1 GENERAL

1.1 Applicable provisions of Division 01 shall govern work of this section.

#### 1.2 SUMMARY

- A. Include all materials, labor, services and incidentals necessary for the completion of this section of the work.
- B. Include the removal of unsound concrete, examination of all exposed reinforcing, sandblasting or wire brushing of acceptable reinforcing, replacement of unacceptable reinforcing with new, and cleaning of the newly exposed underlying sound concrete prior to casting new fill concrete.

# 1.3 RELATED WORK

- A. Related work specified elsewhere:
  - 1. Temporary Facilities and Controls Section 01510
  - 2. Patching of Deteriorated Concrete Section 03730

#### PART 2 PRODUCTS

#### 2.1 EQUIPMENT

#### A. CHIPPING HAMMERS:

- 1. Use chipping hammers with a total weight not to exceed 60 pounds and equipped with flat chisel-type points with a cutting edge not less than 3/4" or greater than 2-1/2" in width.
- 2. Use the lightest chipping hammer capable of removing all defective or loose concrete.
- B. SANDBLASTING EQUIPMENT: Sandblasting equipment shall be capable of removing rust from the exposed reinforcement and laitance from newly exposed concrete surfaces.
- C. COMPRESSED AIR EQUIPMENT: Compressed air equipment shall be capable of removal of dust and dirt from concrete repair areas.

# PART 3 EXECUTION

# 3.1 CONCRETE REMOVAL

- A. Provide shoring of the structure as required. Shoring design, supply, and installation is the responsibility of the Contractor.
- B. Prior to any removal, the Contractor shall submit the Contractor's plan for confining dust and collecting and disposing of broken concrete, steel reinforcement and other waste material as a result of the Contractor's removal operations. This plan shall be submitted to the Engineer and the Owner prior to start of construction.
- C. Areas which require removal of unsound concrete will be identified and marked by the Engineer. The unsound concrete shall be removed by chipping to sound concrete. The marking by the Engineer in the field does not guarantee that unsound concrete is not present in areas beyond those marked. Additional concrete removal may be required after the Contractor's initial removal. The Engineer will review the removal areas prior to concrete replacement.
- D. Do not feather edges, but chip edges square or slightly undercut.
- E. At topside of slab repair, where possible, the areas removed shall be rectangular in shape in plan view.
- F. During the chipping process in these deteriorated concrete areas, care shall be exercised to avoid cracking of the underlying sound concrete.
- G. During the removal of unsound concrete, if more than half of the reinforcing bar diameter is exposed or if the bar is not firmly bonded to the surrounding concrete, then the remaining concrete around the bar shall be removed. The clearance between the bar and the concrete shall be a minimum of 3/4". Support bars for the main reinforcing steel shall not be exposed provided there is no corrosion on these bars.
- H. The newly exposed sound concrete shall be cleaned by blowing away loose material with a deep sandblast or a wire brushing and followed by cleaning with a compressed air jet.
- I. Coordinate with the Engineer before performing this Work to allow for the Engineer to inspect properly prepared concrete surfaces and reinforcement, before the scheduled concrete placement.

#### 3.2 REINFORCEMENT CLEANING AND/OR REPLACEMENT

A. Exposed reinforcing shall be thoroughly cleaned by sandblasting or wire brushing to remove all rust and unsound concrete.

- B. Bars that are damaged or that have lost more than 10% of their original area at any point along the length shall be considered unacceptable and shall be removed and replaced with an equivalent new bar of equal length. No. 8 bars and smaller that have lost between 5% and 10% of their original area at any point can be blast-cleaned ore wire brushed clean and reused as long as a new full-length #4 bar is used as supplemental steel next to the old cleaned bar.
- C. All exposed or supplemental reinforcing bars shall be no closer than 3/4" measured radially from existing concrete. The elevation of all exposed or supplemental reinforcing shall be maintained at the original height.
- D. Where portions of reinforcing bars are exposed, the Engineer will determine if the embedded portion of the bar is soundly bonded to the remaining concrete. If, in the Engineer's judgement, the bar is not soundly bonded, the Contractor shall remove concrete around and under the bar for a length as determined by the Engineer.

# 3.3 CLEAN UP

- A. Contractor shall remove all loose concrete from the site and leave the area broom clean.
- B. Debris shall not be flushed into the stream.

# CHAIN LINK FENCES

#### PART 1 GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Chain link fence framework, fabric, and accessories.
  - 2. Excavation for post bases.
  - 3. Concrete foundation for posts.

#### 1.2 REFERENCES

- A. ASTM International:
  - 1. ASTM A123/A123M Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
  - 2. ASTM A153/A153M Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
  - 3. ASTM A392 Standard Specification for Zinc-Coated Steel Chain-Link Fence Fabric.
  - 4. ASTM F567 Standard Practice for Installation of Chain-Link Fence.
  - 5. ASTM F1043 Standard Specification for Strength and Protective Coatings on Metal Industrial Chain Link Fence Framework.
  - 6. ASTM F1083 Standard Specification for Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures.
- B. Chain Link Fence Manufacturers Institute:
  - 1. CLFMI Product Manual.

#### 1.3 SYSTEM DESCRIPTION

A. Summary:

All Work in this Section is included in Alternate Bid 2, as shown on drawings and described in Specification Section 01000.

- B. Line Post Spacing:
  - 1. 5' high fence: 8 feet o.c.
  - 2. 42" high fence: 6 feet o.c.
- C. Fence Post and Rail Strength: Conform to ASTM F1043 Light Industrial Fence quality.

## 1.4 SUBMITTALS

A. Shop Drawings: Indicate plan layout, spacing of components, post foundation dimensions, hardware anchorage, and schedule of components.

- B. Product Data: Submit data on fabric, posts, accessories, fittings and hardware.
- C. Samples: Submit one 12 x 12 inch sample of fence fabric, illustrating construction and colored finish.
- D. Manufacturer's Installation Instructions: Submit installation requirements and post foundation anchor bolt templates.

# 1.5 QUALITY ASSURANCE

- A. Supply material in accordance with CLFMI Product Manual.
- B. Perform installation in accordance with ASTM F567.
- C. Perform Work in accordance with State of Wisconsin standards.
- D. Rail and fencing system shall be able to withstand a lateral thrust of 300 lbs per square foot.

#### 1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing Products specified in this section with minimum three years experience.
- B. Installer: Company approved by manufacturer and specializing in performing work of this section with minimum three years experience.

#### 1.7 DELIVERY, STORAGE AND HANDLING

- A. Deliver fence fabric and accessories in packed cartons or firmly tied rolls.
- B. Identify each package with manufacturer's name.
- C. Store fence fabric and accessories in secure and dry place.

# PART 2 PRODUCTS

# 2.1 MATERIALS

- A. Framing (Steel): ASTM F1083 Schedule 40 galvanized steel pipe, welded construction, minimum yield strength of 25 ksi; coating conforming to ASTM F1043 Type A on pipe exterior and interior.
- B. Fabric Wire (Steel): ASTM A392 galvanized steel.
- C. Concrete for Posts Set in Soils: ASTM C-150, Type I normal-weight, air-entrained, ready-mix concrete with reinforcing fibers at 3 lbs / cu yd, a maximum aggregate size of 3/4", and a minimum 28-day compressive strength of 3000 psi.

D. Non-Shrink Epoxy Grout for Posts Set in Existing Concrete Structures.

# 2.2 COMPONENTS

- A. Line Posts: 2" outside diameter schedule 40 pipe.
- B. Corner and Terminal Posts: 2" outside diameter schedule 40 pipe.
- C. Top and Brace Rail: 1-1/2" outside diameter tube with a minimum 0.065 wall thickness.
- D. Fabric: 2 inch diamond mesh interwoven wire, 9 gauge thick, top knuckle end closed, bottom selvage knuckle end closed.
- E. Tension Wire: 12 gauge smooth class III single strand tension wire attached to bottom of fence fabric with 9 gauge aluminum hog rings spaced 24" o.c.
- F. Tie Wire: 6-1/2" 9 gauge aluminum pre-tie tie wire.

# 2.3 ACCESSORIES

- A. Caps: die cast aluminum dome cap, sized to post diameter, set screw retainer.
- B. Galvanized Steel Fittings: Beveled brace band and carriage bolt and nut, pressed steel rail end, pressed steel loop cap, 3/16" x 3/4" tension bar, and beveled tension band and carriage bolt and nut.

#### 2.4 FINISHES

- A. Components, Hardware, and Fabric: Galvanized to ASTM A123/A123M for components; ASTM A153/A153M for hardware; ASTM A392 for fabric.
- B. Galvanized Finish: Clean welds, mechanical connections, and abraded areas and repair galvanizing to comply with ASTM A 780.
- C. Accessories: Same finish as framing and fabric.

#### PART 3 EXECUTION

#### 3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for site clearing, earthwork, construction layout, and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

# 3.2 PREPARATION

- A. Owner will clear site of trees and brush within 3' of proposed fence location. Contractor may have to perform minor clearing of brush, logs, and other debris. Contractor is responsible for additional clearing, as may be necessary for Work.
- B. Project Engineer will stake locations of fence lines and terminal posts.

# 3.3 INSTALLATION

- A. Install framework, fabric, and accessories in accordance with ASTM F567.
- B. Post Excavation: Drill or hand-excavate holes for posts in firm, undisturbed soil or existing concrete.
- C. Post Setting: Set posts in concrete at indicated spacing into firm, undisturbed soil, solid rock, or existing concrete.
  - 1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or grout.
  - 2. Space posts uniformly.
  - 3. Install posts with 6 inches maximum clear opening from end posts to buildings, fences and other structures
  - 4. Place concrete or non-shrink epoxy grout around posts, as specified, and vibrate or tamp for consolidation.
  - 5. Posts Set in Soil or Bedrock:
    - a. Option A:
      - 1) Excavate holes to a diameter of not less than 16" and a depth of not less than 36 inches.
      - 2) Crown concrete 2 inches above grade to assure drainage away from post. If a minimum of 8" of solid rock is encountered in a hole, it is adequate to drill the hole and seal it as if the post is being set in existing concrete.
      - 3) Extend post to within 6 inches of specified excavation depth, but not closer than 3 inches to bottom of new concrete.
      - b. Option B (Only if there is 4' of binding soil without bedrock or boulders):
        - 1) Drive post into the ground at least 36".
        - 2) Drive 24" long steel anchors in the ground at 40 degrees. Attach these anchors to the posts to secure the posts into place.
  - 6. Posts Set into Existing Concrete:
    - a. Form or core drill holes not less than 1/8 inch larger than outside diagonal dimension of post and to a depth of not less than 8 inches.
    - b. Clean holes of loose material, insert posts, and fill space between post and concrete with non-shrink epoxy grout, mixed and placed to comply with grout manufacturer's written instructions. Finish and slope top surface of grout to drain water away from post.
    - c. Seal hole with a non-shrink epoxy grout with a raised finish to assure drainage away from post.
  - 7. Posts Strapped Along Side of Concrete Walkway:

- a. Attach with straps as shown on drawings.
- b. Each 6" x 6" x 3/8" thick strap to have a minimum of four 3/8" x 4" galvanized bolts into expandable brackets. Embed bolts and anchorments full depth into concrete.
- c. Extend posts 9" below walkway surface.
- D. Brace each corner post to adjacent line post with horizontal center brace rail. Install brace rail one bay from end posts.
- E. Install top rail through line post tops and splice with 6 inch long rail sleeves.
- F. Place fabric on outside of posts and rails.
- G. Stretch fabric between terminal posts or at intervals of 100 feet maximum, whichever is less.
- H. Position bottom of fabric 2 inches above finished grade.
- I. Fasten fabric to top rail, line posts, braces, and bottom tension wire with tie wire at maximum 15 inches on centers.
- J. Attach fabric to end, and corner posts with tension bars and tension bar clips.
- K. Install bottom tension wire stretched taut between terminal posts.
- L. Connect to existing fence at new terminal post where indicated on Drawings.
- M. Allow footings to cure minimum 7 days before installing fabric and other materials attached to posts.

#### 3.4 ERECTION TOLERANCES

- A. Maximum Variation From Plumb: 1/4 inch.
- B. Maximum Offset From Indicated Position: 1 inch.

# PATCHING OF STRUCTURAL CONCRETE

#### PART 1 GENERAL

A. Applicable provisions of Division 01 shall govern work of this section.

#### 1.1 SUMMARY

- A. Include all materials, labor, services and incidentals necessary for the completion of this section of the work.
- B. Furnish labor, material, equipment and tools for repair of topside and underside spalled concrete slabs and vertical wall surfaces as indicated on the drawings and as specified.
- C. Contractor shall assume Total Responsibility Guarantee for Material and Labor.
- D. A pre-construction meeting will be required with the Contractor in order to coordinate the work schedule and inspection required by the Engineer.

#### 1.2 RELATED WORK

- A. Related work specified elsewhere:
  - 1. Removal of Existing Concrete and Surface Preparation Section 02075
  - 2. Concrete Section 03340

#### 1.3 REFERENCES

- A. AMERICAN CONCRETE INSTITUTE (ACI)
  - 1. ACI 305 Recommended Practice for Hot Weather Concreting
  - 2. ACI 306 Recommended Practice for Cold Weather Concreting

#### PART 2 PRODUCTS

# 2.1 ACCEPTABLE PRODUCTS

- A. Overhead and Vertical Patching Materials
  - 1. "SikaRepair SHB" by Sika Corporation
  - 2. "HBA" by ThoRoc
  - 3. "Emaco S88 CI" by BASF
  - 4. Or approved equal with corrosion inhibitor
- B. Grout
  - 1. Shall consist of Type I Portland cement and sand.
  - 2. Grout shall consist of equal parts by weight of cement and sand. It shall be mixed with sufficient water to form a stiff slurry. The consistency of this slurry shall be such that it can be applied with a stiff brush or broom to the old concrete

in a thin, even coating that will not run or puddle in low spots. For use on vertical joints, this grout shall be thinned to paint consistency.

- C. Consult with manufacturers for product limitations.
- D. All patch materials whether noted or not shall be less than 50,000 ohm cm in resistivity. Contractor shall submit manufacturer's test data stating such.

#### PART 3 EXECUTION

#### 3.1 PREPARATION OF SURFACES TO RECEIVE PATCHING CONCRETE

- A. Remove all unsound material, dirt, oil, grease and other bond-inhibiting materials. Continue removal until there are no offsets in the cavity which will cause an abrupt change in thicknesses of the patching concrete. Remove concrete around exposed reinforcing steel to provide a minimum 3/4" clearance between the bar and the concrete.
- B. Remove rust on exposed reinforcing steel by sandblasting or wire brushing. Loose concrete should be removed from reinforcing bars.
- C. The concrete substrate shall be saturated surface dry with no standing water prior to application.
- D. The concrete substrate shall be saturated for a minimum of two hours prior to application
- E. Conform to additional specific preparation requirements specified by the manufacturer or ACI Standard for each patching product as applicable.
- F. Prime all existing concrete with an acryl 60 bonding agent grout mixture.
- G. Immediately before applying grout, in preparation for placement of the replacement concrete, the surface shall be cleaned with air blasting or wire brushing. If necessary to remove rust, oil or other foreign material, chipping, sandblasting, or wire brushing followed by air blasting will be required. Existing concrete shall not be presaturated with water before grout and replacement concrete is placed. The prepared surface shall be dry to allow some absorption of the grout.
- H. After the structural concrete surface has been cleaned and immediately before placing concrete, a thin coating of acryl 60 bonding grout mixture shall be scrubbed into the dry, prepared surface. Care shall be exercised to insure that all surfaces receive a thorough even coating and that no excess grout is permitted to collect in pockets. The rate of progress in applying grout shall be limited so that the grout does not become dry before it is covered with new concrete.
- I. Before placing concrete, all equipment for mixing and transporting concrete shall be cleaned, vibrators shall be checked for workability, all frost, ice, mud, debris and water shall be removed from forms, forms shall be thoroughly wetted or oiled, and reinforcement shall be securely tied in place and thoroughly cleaned of ice and other coatings which may destroy or reduce bonding with concrete. No concrete shall be placed until Engineer has inspected and approved the concrete removal areas per

Specification Section 02075 and the Drawings. Conveying the concrete from mixer to place of deposit shall not cause separation or loss of materials.

- J. Screed guides may be placed and fastened in position to assure finishing the concrete to the required final grade. Supporting rails upon which the finishing machine travels shall be placed outside the area to be concreted. Anchorage of supporting rails shall provide horizontal and vertical stability. A hold-down device shot into concrete shall not be permitted unless the concrete is to be subsequently resurfaced. Plans for anchoring support rails shall be submitted to the Engineer for approval.
- K. Transverse and/or longitudinal bulkheads, equal in depth to the thickness of the concrete shall be installed to the required grade and profile prior to placing concrete. Provisions for anchorage of supporting rails or strips shall provide horizontal or vertical stability.
- L. The Contractor shall make every reasonable effort to secure a smooth surface. Prior to placement operations, he shall review his equipment, procedures, personnel and previous results with the Engineer in order to assure that concrete shall be produced and placed within the specified time limits, continuously and with uniformity.

#### 3.2 MIXING, APPLICATION, AND FINISHING

- A. Conform to manufacturer's specifications or ACI Standard for each patching product, as applicable.
- B. Finished surface shall be struck off flush with existing surfaces. Finish shall match existing or be lightly brushed.

#### 3.3 CURING

- A. Concrete shall be maintained above 50°F and in a moist condition for at least the first 3 days after placing.
- B. Curing shall be accomplished by burlap covers kept continuously wet, continuous waterproof paper or 4 mil polyethylene sheeting conforming to ASTM C-171 with edges lapped and tightly sealed by sand, wood planks, pressure-sensitive tape, mastic or glue.
- C. For concrete surfaces receiving no overlay a spray applied curing compound may be used in accordance with ASTM C-309. Two applications shall be made; the second shall be within an hour of the first application.
- D. The concrete shall be sounded by the Contractor in the presence of the Engineer with a chain drag after the curing time. Any hollowness shall be corrected by the Contractor by removing the concrete at these locations and recasting at no extra cost to the Owner.
- E. Adequate protection shall be provided for concrete during freezing or near freezing weather. All concrete materials, reinforcement, forms, filler and ground with which concrete is to come in contact shall be free of frost, ice and snow. Whenever air temperature is below 40°F, the minimum temperature of concrete when discharged shall be 65°F and concrete during the required curing period shall be maintained at a temperature not less than 50°F. Throughout heating period concrete shall be kept moist

as specified. Placement and curing of concrete during cold weather shall conform to requirements of ACI 306R.

F. Placement and curing of concrete during hot weather shall be in conformance with the requirements of ACI 305R.

#### 3.4 TESTING OF CONCRETE

- 1. Two (2) standard 6" x 12" cylinders will be fabricated, cured and tested in accordance with ACI 301 except as noted in this specification.
- 2. A set of concrete field specimens consisting of two (2) 6" x 12" cylinders shall be taken according to ASTM C-31.
- 3. All cylinders shall be made and tested by a qualified approved test laboratory which meets the requirements of ASTM E-329 and their reports will be sent to the Engineer and the Contractor. Costs for these tests shall be paid by the Owner.
- 4. The two cylinders shall be cured under field conditions for 1 day of moisture curing. One cylinders shall then be transported to the testing agency's laboratory and moist cured. The remaining cylinder shall be field cured. The two cylinders shall be strength tested at 28 days.
- 5. For each set of cylinders made, a slump and air content test shall also be made. The temperature of the concrete shall be taken at the same time cylinders are made. Slump tests shall be made in accordance with ASTM C-143. Air content tests shall be made in accordance with ASTM C-231. Following sampling of the discharge or normally mixed material, the commencement of tests shall be delayed from 2 to 4 minutes. These results shall be sent to the Engineer and the Contractor.
- 6. Testing of cylinders shall be in accordance with ASTM C-39. Each test report shall contain the following information for each set of cylinders:
  - Individual test specimen strength, type of failure.
  - Slump.
  - Air content.
  - Concrete and air temperature.
  - Specimen number.
  - Portion of structure represented by the concrete tested.
  - Date cast.
  - Date tested.
  - Concrete properties specified.
  - Notice if tests indicate concrete is not in conformance with specifications.
- 7. Cost of additional field cured cylinders if tests indicate compliance with specifications at the required 28-day compressive strength, shall be paid for by Owner.

- 8. Strength of concrete shall be considered satisfactory if average of two 28-day tests in each set of cylinders equals or exceeds the specified 28-day strength and neither of the 28-day tests is 500 PSI or more below specified 28-day strength.
- 9. Should results of cylinder tests not meet preceding requirements, the Contractor shall submit revised mix design data for concrete which will conform to the specifications. In the event of failure of test cylinder specimens for any portion of work, the Contractor at the Contractor's expense shall have sample cores cut from that portion of structure represented by unsatisfactory test specimens.
- 10. Three cores shall be taken from each area in question according to ASTM C-42. Concrete in the area represented by core tests will be considered structurally adequate if the average of the three cores is equal to at least 85% of required 28-day strength. If these strength acceptance criteria are not met by core tests, the Contractor shall remove and replace all questionable areas of concrete at the Contractor's expense.

# END OF SECTION

03730-5

# CRACK AND JOINT SEALANTS

# PART 1 GENERAL

A. Applicable provisions of Division 01 shall govern work of this section.

# 1.1 WORK INCLUDED

- A. Include all materials, labor, services and incidentals necessary for the completion of this section of the work.
- B. Sealants are required at, but are not necessarily limited to the following general locations:
  - 1. Routed random cracks, deteriorated concrete control joints and deteriorated construction joints.
  - 2. Joints at penetrations of walls, decks and floor by piping and other services and equipment.
  - 3. Areas determined by Project Engineer.

# 1.2 SUBMITTALS

# A. MANUFACTURER'S DATA

1. Submit three copies of manufacturer's specifications, recommendations and installation instructions for each type of sealant, caulking compound and associated miscellaneous material required. Include manufacturer's published data, letter of certification or certified test laboratory report indicating that each material complies with the requirements and is intended generally for the applications shown. Show by transmittal that one copy of each recommendation and instruction has been distributed to the installer.

#### B. SAMPLES

1. Submit samples of each color required for each type of sealant or caulking compound exposed to view. Compliance with all other requirements is the exclusive responsibility of the Contractor.

#### 1.3 GUARANTEE

- A. The sealant manufacturer shall furnish the Owner with a written single-source performance guarantee agreeing to repair or replace sealants which fail to perform as airtight and watertight joints or fail in joint adhesion, cohesion, abrasion resistance, weather resistance, extrusion resistance, migration resistance, stain resistance or general durability or appear to deteriorate in any other manner not clearly specified by submitted manufacturer's data as an inherent quality of the material for the exposure indicted. Sealant must be installed per manufacturer's installation requirements.
- B. Guarantee period shall be five years from the date of substantial completion.

## 1.4 APPLICATOR QUALIFICATIONS

A. The Contractor shall have a minimum of three years of experience in performing work similar to that shown in the drawings and specifications.

# PART 2 PRODUCTS

# 2.1 SEALANT

- A. Type II, class A, unmodified polyurethane sealant containing no asphalt, fillers or plasticizers. Follow all manufacturer's previously submitted recommendations for type required at joints. Sealants shall conform to Federal Specification TT-S-00227E.
- B. Acceptable Productions and Manufacturers:
  - 1. "Sikaflex-2C NS" by Sika
  - 2. "Sonolastic NP1" by Sonneborn
  - 3. Or Approved Equal

# 2.2 JOINT CLEANER

A. Provide the type of joint cleaning compound recommended by the sealant or caulking compound manufacturer for the joint surfaces to be cleaned.

#### 2.3 JOINT PRIMER/SEALER

A. Joints must be primed for this project. Provide the type of joint primer/sealer recommended by the sealant manufacturer for the joint surfaces to be primed or sealed.

#### 2.4 BOND BREAKER TAPE

A. Polyethylene tape or other plastic tape as recommended by the sealant manufacture to be applied to sealant-contact surfaces where bond to the substrate or joint filler must be avoided for proper performance of sealant. Provide self-adhesive tape wherever applicable.

#### 2.5 SEALANT BACKER ROD

A. Compressible rod stock polyethylene foam, polyethylene jacketed polyurethane foam or other flexible, permanent, durable non-absorptive material as recommended for compatibility with sealant by the sealant manufacturer which will control the joint depth for sealant placement, break bond of sealant at bottom of joint, form optimum shape of sealant bead on back side and provide a highly compressible backer to minimize the possibility of sealant extrusion when joint is compressed. Backer rod shall be at least <sup>1</sup>/<sub>4</sub>" larger than width of joint.

## PART 3 EXECUTION

#### 3.1 WEATHER CONDITIONS

A. Do not proceed with installation of sealants under adverse weather conditions or when temperatures are below or above manufacturer's recommended limitations for installation. Proceed with the work only when forecasted weather conditions are favorable for proper cure and development of high early bond strength. Coordinate time schedule with Contractor to avoid delay of project.

## 3.2 JOINT SURFACE PREPARATION

- A. Clean joint surfaces immediately before installation of sealant or caulking compound. Remove dirt, insecure coatings, moisture and other substances which would interfere with bond of sealant or caulking compound.
- B. The installer must examine the joint surfaces, backing and anchorage of units forming sealant rabbet and conditions under which the sealant work is to be performed and notify the Contractor in writing of any conditions detrimental to the proper and timely completion of the work and performance of the sealants. Do not proceed with the sealant work until unsatisfactory conditions have been corrected in a manner acceptable to the installer.

# 3.3 INSTALLATION

- A. Comply with sealant manufacturer's printed instructions except where more stringent requirements are shown or specified and except where manufacturer's specific recommendations directs otherwise.
- B. The Contractor shall saw and grind the surface of all cracks and control joints a depth of at least 3/8" and a width at the surface of at least 5/8". Edges of cracks or joints to be sealed shall be of sound substrate. Prior to installing sealant, surfaces shall be cleaned of foreign debris and the edges ground.
- C. Prime and seal the joint surfaces wherever shown. Do not allow primer/sealant to spill or migrate onto adjoining surfaces.
- D. Install sealant backer rod for sealants except where specifically noted to be omitted or recommended to be omitted by sealant manufacturer for the application shown.
- E. Install bond breaker tape wherever required by manufacturer's recommendations to ensure that elastomeric sealants will perform properly.
- F. Employ only proven installation techniques which will ensure that sealants will be deposited in uniform, continuous ribbons without gaps or air pockets, with complete "wetting" of the joint bond surfaces equally on opposite sides. Except as otherwise indicated, fill sealant rabbet to a slightly concave surface slightly below adjoining surfaces. Where horizontal joints are between a horizontal surface and a vertical surface, fill joint to form a slight cove so that joint will not trap moisture and dirt.
- G. Install sealant to depths as recommended by the sealant manufacturer.

# 3.4 CURE AND PROTECTION

- A. Cure sealants and caulking compounds in compliance with manufacturer's instructions and recommendations to obtain high early bond strength, internal cohesive strength and surface durability.
- B. The installer shall advise the Contractor of procedures required for the curing and protection of sealants and caulking compounds during the construction period so that they will be without deterioration or damage (other than normal wear and weathering) at the time of Owner's acceptance.

