## VILLAGE OF ORLAND PARK, ILLINOIS

## **INVITATION TO BID**

## THISTLEWOOD PUMP HOUSE ROOF REPLACEMENT

## **ISSUED**

Thursday, April 22, 2010

## **BID OPENING**

Thursday, May 6, 2010 11:00 a.m.

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## I. INSTRUCTIONS TO BIDDERS

#### OVERVIEW

The Village of Orland Park requests Bids for the **Thistlewood Pump House Roof Replacement.** ("the Project") in the Village of Orland Park, Illinois ("Village"). See the Plans and Specifications prepared by the Village of Orland Park for details on the Project ("Plans and Specifications").

In order to be responsive, SEALED BIDS <u>must be</u> signed and received by the Village of Orland Park in the Office of the Village Clerk, 14700 South Ravinia Avenue, Orland Park, Illinois 60462, <u>not later than</u> 11:00 a.m., local prevailing time on Thursday, May 6, 2010. All sealed bids must be submitted to the Village Clerk, located at the above stated address. All sealed bids submitted properly will be opened publicly and read aloud immediately following the stated submission time for the Project which described in detail consists of the following:

## **DEMOLITION WORK:**

- REMOVE EXISTING ROOF SYSTEM TO CONCRETE SUBSTRATE AND DISPOSE INCLUDING ALL FLASHINGS
- REMOVE ALL EXISTING METAL COPING CAPS AND COUNTERFLASHINGS
- REMOVE EXISTING WOOD SIDING ON UPPER ROOF AREA AND DISPOSE

## **NEW ROOF SYSTEM:**

- 1/8" PER FOOT TAPERED POLYISOCYANURATE INSULATION ADHERED TO SUBSTRATE WITH 1/4" PER FOOT SADDLES FOR PROPER DRAINAGE
- ADHERED 60 MIL TPO MEMBRANE INCLUDING ALL FLASHINGS
- INSTALL TPO WALK WAY PAD AROUND ROOF HATCH AND A PATH TO AND AROUND ALL MECHANICAL EQUIPMENT
- INSTALL 24 GAUGE PRE-FINSHED STEEL COPING CAPS AND COUNTERFLASHINGS (SEE DRAWING)
- 20 YEAR MANUFACTURERS WARRANTY

Oral, telephonic, facsimile or electronically transmitted bids shall not be considered.

No oral comments will be made to any Bidder as to the meaning of the Plans and Specifications or other contract documents. Requests for comments shall be made in writing. Contact Frank Stec by fax at (708) 403-6289, if you have any technical questions on this project. Inquiries received in writing within seven (7) or more days prior to the bid opening will be given consideration and answers will be provided in writing to all potential bidders and will be available to the public. Bidders will not be relieved of obligations due to failure to examine or receive documents, visit the site or become familiar with conditions or

facts of which the Bidder should have been aware and the Village will reject all claims related thereto.

Information (other than in the form of a written Addendum issued by the Village) from any officer, agent, or employee of the Village or any other person shall not affect the risks or obligations assumed by the bidder or relieve him from fulfilling any of the conditions and obligations set forth in the bid and other contract documents. Before the bids are opened, all modification or additions to the Plans, Specifications or General Provisions, or other bid documents will be made in the form of a written Addendum issued by the Village. The Village will send copies of any such Addendum not less than four (4) calendar days before bids are opened to those persons who have received bid packages and provided sufficient contact information. In the event of conflict with the original contract documents, addenda shall govern all other contract documents to the extent specified. Subsequent addenda shall govern over prior addenda only to the extent specified.

The bidder shall be required to acknowledge receipt of the formal Addendum by signing the Addendum and including it with the bid quotation. Failure of a bidder to include a signed formal Addendum in its bid quotation shall deem its quotation non-responsive; provided, however, that the Village may waive this requirement in its best interest.

Any references in the Plans and Specifications to manufacturer's name, trade name, or catalog number (unless otherwise specified) is intended to be descriptive but not restrictive and only to indicate articles or materials that will be satisfactory. Bids on other makes and catalogs will be considered, provided each bidder clearly states on the face of their bid exactly what is proposed to be furnished. Unless so stated in the bid, it shall be understood that the bidder intends to furnish the item specified and does not propose to furnish an "equal." The Village hereby reserves the right to approve as an equal, or to reject as not being an equal any article the bidder proposes to furnish which contains minor or major variations from specification requirements, but which may comply substantially therewith.

## **BID SPECIFICATIONS FOR:**

Thistlewood Pump House Roof Replacement, located at 8800 Thistlewood Drive, Orland Park, Illinois.

## **SCOPE OF WORK:**

The Village of Orland Park, Illinois is requesting bids for:

## **DEMO WORK:**

- REMOVE EXISTING ROOF SYSTEM TO CONCRETE SUBSTRATE AND DISPOSE INCLUDING ALL FLASHINGS
- REMOVE ALL EXISTING METAL COPING CAPS AND COUNTERFLASHINGS
- REMOVE EXISTING WOOD SIDING ON UPPER ROOF AREA AND DISPOSE

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- INSTALL 24 GAUGE PRE-FINSHED STEEL COPING CAPS AND COUNTERFLASHINGS (SEE DRAWING)
- 20 YEAR MANUFACTURERS WARRANTY

See Section III - SECTION 07545 TPO THERMOPLASTIC SINGLE-PLY ROOFING for further details.

## **SPECIAL CONDITIONS:**

At no time shall the building be without protection from the elements in bad weather.

## **Bid Submission:**

Please provide a total bid price on the Bidders Summary Sheet located in Section II.

## **GENERAL PROVISIONS**

**Contract** – The Additional Information section includes a standard contract, subject to modifications, that the successful bidder will be required to enter into with the Village of Orland Park within ten (10) business days of notice of bid award (hereinafter referred to as the "Contract").

**Period of Performance** - Actual work cannot begin until the Village issues a written Notice to Proceed to the Contractor. In order to receive said Notice, the Contractor shall submit to the Village for its approval all the necessary contracts, bonds, and insurance. Village approval of the contracts, bonds and insurance, shall be evidenced by its issuance of the signed contract by the Village and the Notice to Proceed. The Village reserves the right to terminate the relationship with the successful bidder if these documents are not submitted to and approved by the Village within ten (10) days of notice of bid award.

**Payments** – Payment terms shall be pursuant to the provisions of the Local Government Prompt Payment Act (50 ILCS 505/1 *et seq.*) after receipt by the Village of Contractor's Dated Invoice, Contractor's Sworn Statement, and Lien Waiver for the amount being requested. Invoices should include the following information:

- Name and address of contractor
- Purchase order number
- Dates of service
- Current invoice amount
- Invoices from subcontractors
- Lien Waivers from subcontractors

The Village may exercise its right to request photocopies of cancelled checks from the Contractor to his subcontractors, manufacturers, and suppliers, etc. Copies of these cancelled checks along with all applicable Lien Waivers shall accompany each pay request and shall be submitted for the month previous to the amount shown on the pay request.

Upon the Village's request, invoices for progress payments must include supporting documentation such as packing slips, subcontractor's invoice and material invoices.

**Changes in the Scope of Work -** Changes in the contractual scope of work shall be preceded by a duly executed Change Order itemizing any change in the Contract sum or terms and conditions and, if required by the Village, approved by the Village Board of Trustees prior to acceptance of the Change Order.

**Assignment** – Successful bidder shall not assign the work of this Project without the prior written approval of the Village.

**Compliance with Laws** – The bidder shall at all times observe and comply with all laws, ordinances and regulations of the federal, state, local and Village governments, which may in any manner affect the preparation of bids or the performance of the Contract.

Bidder hereby agrees that it will comply with all requirements of the Illinois Human Rights Act, 775 ILCS 5/1-101 et seq., including the provision dealing with sexual harassment and that if awarded the Contract will not engage in any prohibited form of discrimination in employment as defined in that Act and will require that its subcontractors agree to the same restrictions. The contractor shall maintain, and require that its subcontractors maintain, policies of equal employment opportunity which shall prohibit discrimination against any employee or applicant for employment on the basis of race, religion, color, sex, national origin, ancestry, citizenship status, age, marital status, physical or mental disability unrelated to the individual's ability to perform the essential functions of the job, association with a person with a disability, or unfavorable discharge from military service. Contractors and all subcontractors shall comply with all requirements of the Act and of the Rules of the Illinois Department of Human Rights with regard to posting information on employees' rights under the Act. Contractors and all subcontractors shall place appropriate statements identifying their companies as equal opportunity employers in all advertisements for workers to be employed in work to be performed.

Not less than the Prevailing Rate of Wages as found by the Village of Orland Park or the Department of Labor shall be paid to laborers, workmen, and mechanics performing work under the Contract. If awarded the Contract, contractor must comply with all provisions of the Illinois Prevailing Wage Act, including, but not limited to, providing certified payroll records to the Village Clerk. Contractor and subcontractors shall be required to comply with all applicable federal laws, state laws and regulations regarding minimum wages, limit on payment to minors, minimum fair wage standards for minors, payment of wage due employees, and health and safety of employees. Contractor and subcontractor are required to pay employees all rightful salaries, medical benefits, pension and social security benefits pursuant to applicable labor agreements and federal and state statutes and to further require withholdings and deposits therefore.

Any contractor doing work in the Village must obtain a Contractor's license from the Village of Orland's Building Department, as may be required by Village code.

**Guarantees and Warranties** - All guarantees and warranties required shall be furnished by the bidder if awarded the Contract and shall be delivered to the Finance Department before final payment on the Contract is issued. Information describing such guarantees and warranties shall be included as part of the bid.

The bidder shall also specify any guarantees or warranties which are available for purchase by the Village and shall transfer the same in writing upon completion of the work, along with a Bill of Sale as may be appropriate.

By submitting a bid, bidder expressly warrants that materials furnished under the contract will be of good quality and new unless otherwise expressly required or permitted by the contract documents, that the work will be free from defects for one (1) year from the issuance of the final payment by the Village and deficiencies shall be corrected by the contractor under its warranty immediately upon notification from the Village.

**Alternates** - Materials are specified. Alternate material other than those outlined within this packet will need to be specified with a cut sheet within the contractor's bid. If for any reason and at the sole discretion of the Village of Orland Park any alternate materials are deemed to be unacceptable the entire bid maybe disregarded.

Indemnification - The selected contractor shall indemnify and hold harmless the Village of Orland Park ("Village"), its trustees, officers, directors, agents, employees, representative and assigns, from lawsuits, actions, costs (including attorney's fees), claims or liability of any character, incurred due to the alleged negligence of the Contractor, brought because of any injuries or damages received or sustained by any person, persons or property on account of any act or omission, neglect or misconduct of said Contractor, its officers, agents and/or employees arising out of, or in performance of any of the provisions of the Contract Documents, including any claims or amounts recovered for any infringements of patent, trademark or copyright; or from any claims or amounts arising or recovered under the "Worker's Compensation Act: or any other law, ordinance, order or decree. In connection with any such claims, lawsuits, actions or liabilities, the Village, its trustees, officers, directors, agents, employees, representatives and their assigns shall have the right to defense counsel of their choice. The Contractor shall be solely liable for all costs of such defense and for all expenses, fees, judgments, settlements and all other costs arising out of such claims, lawsuits, actions or liabilities.

The Contractor shall not make any settlement or compromise of a lawsuit or claim, or fail to pursue any available avenue of appeal of any adverse judgment, without the approval of the Village and any other indemnified party. The Village or any other indemnified party, in its or their sole discretion, shall have the option of being represented by its or their own counsel. If this option is exercised, then the Contractor shall promptly reimburse the Village or other indemnified party, upon written demand, for any expenses, including but not limited to court costs, reasonable attorneys' and witnesses' fees and other expenses of litigation incurred by the Village or other indemnified party in connection therewith.

## **BID SUBMISSION REQUIREMENTS**

Bidder must submit three (3) complete, sealed, signed and attested copies of the bid, two (2) of which shall be complete bound copies and one (1) of which shall be a complete, identical, unbound copy of the bid, and shall have provided all requested information, and submitted all appropriate forms, certificates, affidavits and addendum acknowledgements in each copy in order to be considered responsive. All copies shall contain the forms with the original signatures (we only need one original Bid Bond, not bound to any copy. Please include a photocopy of the bid bond in each bid packet).

Once submitted, no bid may be withdrawn without the Village's consent, but it may be superseded by a subsequent timely bid. Any bid received after the time and date specified for opening, or any postponement thereof, will not be considered. Bids shall be irrevocable for a period of sixty (60) calendar days after the Village opens them.

Each bidder is responsible for reading the bid documents and determining that the Plans and Specifications describe the work to be performed in sufficient detail. Failure of a bidder to do so shall not relieve the bidder of any obligation with respect to said bid. Bidders shall notify the Village of any inappropriate service, brand name, component, or equipment called for by the Village in the Plans and Specifications and shall note in its bid the adjustments made to accommodate such deficiencies in the Plans and Specifications. After bids have been opened, no bidder shall assert that there was a misunderstanding concerning the nature of the work to be done or the quantities and specifications of the materials/items to be delivered, and no such claim shall relieve a bidder from its obligation to perform. All bids must be made only on the forms provided by the Village and must be made in accordance with this Invitation to Bid and Plans and Specifications, (Project manual) all of which are on file and may be obtained for examination in the Clerk's Office at the above address and are made part of this notice as though fully set forth herein.

**Bidder Summary Sheet** – Section II includes the Bidder Summary Sheet that must be completed and submitted with the bid package.

Bid Deposit - Each bid must be accompanied by a bid deposit, as earnest money, in the form of a bid bond, a certified check or cashier's check, drawn on a responsible bank, made payable to the order of the Village of Orland Park for 10% of the total amount of the base bid price. As soon as the bid prices have been compared, the Village will return the deposit of all except the three lowest bidders. NOT REQUIRED.

**References** – Bidders shall provide the Village with the names and contact information of three (3) references for which they have performed similar work. The bidders grant Village permission to contact said references and ask questions regarding prior work performance. Village shall use the information gained from bidder's references to further evaluate the bidders.

**Insurance** – Contractor shall purchase and maintain, at all times during the performance of the work under this Contract, insurance coverage and endorsements, including Worker's Compensation, Automobile Liability, Comprehensive General Liability and Excess Liability, in the amounts set forth in the Village's Insurance Requirements attached in Section II. Bidders must sign and submit with the bid, the Insurance Requirements page, as recognition of the insurance coverages and amounts (hereinafter referred to as "coverage(s)") that will be required to be in place before the commencement of any work by the successful bidder. By signing this form, the bidder is certifying that in the event the bidder does not already have the required insurance coverages in place, that the bidder has checked with their insurance carrier and verified that the coverages and endorsements requested will be able to be obtained by the bidder within ten (10) days after the date of the Notice of Award of the Contract. The bidder has the sole responsibility of verifying that the coverages and endorsements will be available for purchase and has made any and all inquiries necessary to satisfy this requirement and fully inform themselves in regards to any additional policy premiums the successful bidder may incur as a result of obtaining said required coverage's. The bidder also represents that they have taken the insurance requirements into account and at the bidders' sole discretion, has factored this into the bid prices submitted. The successful bidder is solely and entirely responsible for the payment of policy premiums and in no event will the Village of Orland Park be obligated to incur any additional expense, nor will the Village increase the amount of the Contract above the amount bid, as a result of any expense the successful bidder may incur to satisfy the obligations required herein.

## <u>Please submit with the bid, a current policy Specimen Certificate of Insurance showing the insurance coverages the bidder currently has in force.</u>

Upon award of the contract, any insurance policies providing the coverages required of the Contractor shall be <a href="specifically endorsed">specifically endorsed</a> to identify "The Village of Orland Park, and their respective officers, trustees, directors, employees and agents as Additional Insureds on a primary/non-contributory basis with respect to all claims arising out of operations by or on behalf of the named insured." If the named insureds have other applicable insurance coverage, that coverage shall be deemed to be on an excess or contingent basis. The policies shall also contain a "Waiver of Subrogation in favor of the Additional Insureds in regards to General Liability and Workers Compensation coverage's." The certificate of insurance shall also state this information on its face and endorsements will be required to be submitted if awarded the contract. Certificates of insurance must state that the insurer shall provide the Village with thirty (30) days prior written notice of any change in, or cancellation of required insurance policies. The words "endeavor to" and "but failure to do so shall impose no obligation or liability of any kind upon the insurer, its agents or representatives" must be stricken from all Certificates of Insurance submitted to the Village, but failure of the insurer to strike this reference shall not be a waiver of the obligation to provide any written notice.

Performance Bond -When the Contract is executed with the final successful bidder, the

deposits of the other remaining unsuccessful bidders will be returned or otherwise caused to be cancelled. The bid deposit of the successful bidder will be retained until Payment and Performance Bonds and Insurance Certificates have been received and approved, at which time the bid bond will be returned. A Payment and Performance Bond, in the amount of one hundred percent (100%) of the contract price, with a corporation surety satisfactory to the Village, will be required to assure performance of the Contract. Any attorney-in-fact who signs any bond must attach to each bond an effective copy of his power of attorney, the date of the bond specifically including such date within the authority conferred thereby.

Payment and Performance Bonds must be provided by a company listed in Federal Register Circular 570, latest revision, Surety Companies Acceptable on Federal Bonds, and a Financial Rating of V or better as published by Best's Key Rating Guide, latest edition. Additionally, the bonding firm must be registered to do business in Illinois by the State of Illinois Department of Insurance.

In case of failure of the bidder to timely provide the Payment and Performance Bonds and Certificate of Insurance, the Village may at its option, declare the bidder in default of the Contract, in which case the bid deposit accompanying the bid shall be forfeited to, and shall become the property of the Village. The Village may elect either to accept the next lowest responsible bid, or re-advertise for new bids and take such other actions as are provided for under the default termination provisions of the Contract.

Execution of the Contract by the Village will be contingent upon provision of the required bonds and insurance certificates. A "Notice to Proceed" will not be issued and work may not commence until required payment and performance bonds are in place. NOT APPLICABLE.

**Bid Price** - The submitted bid price shall include all permits, insurance, bonds, goods/materials, plant facilities, work and expense necessary to perform the work in accordance with the Plans and Specifications included in this bid package. The submitted bid price shall not include any amount for sales or use taxes, or any other tax from which the Village is exempt.

The Plans and Specifications describe the standards of construction and are not intended to describe a particular manufacturer's product.

## **EVALUATION OF BIDS/BIDDERS**

The Village reserves the right to accept any bid, any part or parts thereof, or to reject any and all bids.

The Village reserves the right to waive minor informalities or irregularities in the bids received, to accept any bid deemed advantageous to the Village, or to reject any and all bids submitted. Conditional bids, or those which take exception to the Contract documents without prior written approval from the Village, may be considered non-responsive and may be rejected.

The Village may make such investigations as it deems necessary to determine the ability of the bidder to perform the work in conformity with the Contract documents, and the bidder shall furnish to the Village all such information and data for this purpose as the Village may request.

The Contract shall be awarded to the lowest responsive, responsible bidder. In determining the lowest responsive and responsible bid, consideration will be given to several factors, including but not limited to price, financial responsibility of the bidder, completion date, responsiveness to the specifications, and the experience of the Village and other purchasers with the bidders.

Award of the contract is subject to Village of Orland Park Board approval.

By submitting its bid, the bidder agrees to furnish, upon request from the Village, all information (including a list of subcontractors and suppliers and their prices) reasonably necessary for analysis. Furthermore, the Village may request that the bidder show, in detail, the kinds, quantities, and prices of direct material and direct labor used to develop prices/costs submitted in the bid. In addition, the Village reserves the right to request and receive information explaining the estimating process, including the judgmental factors and methods used to project from known data, and the contingencies used. The Village may require the bidder to show how it computes and applies indirect costs, and to show trend and budgetary data.

The Village may also conduct a pre-award facility survey of the bidder. This survey may include, but is not limited to, determining if the bidder has the experience, capability, necessary facilities and financial resources to complete the contract in a satisfactory manner within the required time.

The Village award will be made within sixty (60) calendar days after the date of the bid opening, or any mutually agreed extension thereof.

## **BID SUBMITTAL CHECKLIST**

In order to be responsive, the bidder must submit all of the following items:

- Sealed Bid Envelope Addressed to the Village of Orland Park, Attn: Village Clerk's Office, 14700 S. Ravinia Ave., Orland Park, IL 60462, and labeled: Thistlewood Pump House Roof Replacment Bid, in the lower left hand corner.
- Bid Bidder must submit three (3) complete, sealed, signed and attested copies of the bid, two (2) of which shall be complete bound copies and one (1) of which shall be a <u>complete, identical, unbound</u> copy of the bid, and shall have provided all requested information, and submitted all appropriate forms, certificates, affidavits and addendum acknowledgements <u>in each copy</u> in order to be considered responsive. All copies shall contain the forms with the original signatures (We only need one original Bid Bend, unbound to any bid packet. Please include a photocopy of the bid bond in each packet). Note: only need to include those required documents listed in Section II and Section III in the bid submission.
- All forms completed from Section II:
  - Bidder Summary Sheet
  - Business Organization
  - o Certificate of Eligibility to Enter into Public Contracts
  - Equal Employment Opportunity
  - o Certification of Compliance With the Illinois Prevailing Wage Act
  - o Contractor's Certification Sexual Harassment, Tax & Substance Abuse
  - Apprenticeship and Training Program Certification
  - o References
  - Insurance Requirements

## II - REQUIRED BID SUBMISSION DOCUMENTS

## **BIDDER SUMMARY SHEET**

## Thistlewood Pump House Roof Replacement Project Name

IN WITNESS WHEREOF, the parties hereto have executed this Bid as of date shown below.

Firm Name:
Address:
City, State, Zip Code:
Contact Person:
FEIN #:
Phone: () Fax: ()
E-mail Address:
Signature of Authorized Signee:
Title: Date:
TOTAL BID PRICE: \$

## **BUSINESS ORGANIZATION:**

Sole Proprietor: An individual whose	e signature is affixed to this bid.
•	e full names, titles and address of all responsible ownership and a copy of partnership agreement.
Corporation: State of incorporation: Provide a disclosure of all officers and principle incorporation and indicate if the corporation is	cipals by name and business address, date of
In submitting this bid, it is understood that the any or all bids, to accept an alternate bid, and	Village of Orland Park reserves the right to reject to waive any informalities in any bid.
In compliance with your Invitation to Bid, and offers and agrees, if this bid is accepted, to fur	subject to all conditions thereof, the undersigned rnish the services as outlined.
Business Name	(Corporate Seal)
Signature	Print or type name
Title	Date

## CERTIFICATION OF ELIGIBILITY TO ENTER INTO PUBLIC CONTRACTS

## **IMPORTANT**: THIS CERTIFICATION MUST BE EXECUTED.

l,	, being first duly sworn certify
and say that I am	
(insert "sole	owner," "partner," "president," or other proper title)
contracting with any unit of state	posal, and that the Prime Contractor is not barred from or local government as a result of a violation of either Section criminal Code, or of any similar offense of "bid-rigging" or "bid-nited States.
	Signature of Person Making Certification
Subscribed and Sworn To Before Me This Day of, 2010.	
Notary Public	

## **EQUAL EMPLOYMENT OPPORTUNITY**

**Section I**. This EQUAL EMPLOYMENT OPPORTUNITY CLAUSE is required by the Illinois Human Rights Act and the Rules and Regulations of the Illinois Department of Human Rights published at 44 Illinois Administrative Code Section 750, et seq.

**Section II.** In the event of the Contractor's noncompliance with any provision of this Equal Employment Opportunity Clause, the Illinois Human Right Act, or the Rules and Regulations for Public Contracts of the Department of Human Rights (hereinafter referred to as the Department) the Contractor may be declared non-responsible and therefore ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and this agreement may be canceled or avoided in whole or in part, and such other sanctions or penalties may be imposed or remedies involved as provided by statute or regulation.

During the performance of this Agreement, the Contractor agrees:

- **A**. That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin or ancestry; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
- **B.** That, if it hires additional employees in order to perform this Agreement, or any portion hereof, it will determine the availability (in accordance with the Department's Rules and Regulations for Public Contracts) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.
- **C.** That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, marital status, national origin or ancestry, age, or physical or mental handicap unrelated to ability, or an unfavorable discharge from military service.
- **D.** That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and Department's Rules and Regulations for Public Contract.
- **E.** That it will submit reports as required by the Department's Rules and Regulations for Public Contracts, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and Department's Rules and Regulations for Public Contracts.
- **F.** That it will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and Department for purposes of investigation to

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ascertain compliance with the Illinois Human Rights Act and Department's Rules and Regulations for Public Contracts.

**G.** That it will include verbatim or by reference the provisions of this Equal Employment Opportunity Clause in every subcontract it awards under which any portion of this Agreement obligations are undertaken or assumed, so that such provisions will be binding upon such subcontractor. In the same manner as the other provisions of this Agreement, the Contractor will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the contracting agency and the Department in the event any subcontractor fails or refuses to comply therewith. In addition, the Contractor will not utilize any subcontractor declared by the Illinois Human Rights Department to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

**Section III.** For the purposes of subsection G of Section II, "subcontract" means any agreement, arrangement or understanding, written or otherwise, between the Contractor and any person under which any portion of the Contractor's obligations under one or more public contracts is performed, undertaken or assumed; the term "subcontract", however, shall not include any agreement, arrangement or understanding in which the parties stand in the relationship of an employer and an employee, or between a Contractor or other organization and its customers.

BY:			
ATTEST: _		 	
DATE:			

**ACKNOWLEDGED AND AGREED TO:** 

## CERTIFICATION OF COMPLIANCE WITH THE ILLINOIS PREVAILING WAGE ACT (820 ILCS 130/0.01, et seq.)

It is hereby stipulated and certified to the Village of Orland Park, that the undersigned Contractor shall pay not less than the prevailing hourly rate of wages, the generally prevailing rate of hourly wages for legal holiday and overtime work, and the prevailing hourly rate for welfare and other benefits as determined by the Illinois Department of Labor and as set forth in the schedule of prevailing wages for this contract to all laborers, workers and mechanics performing work under this contract. The undersigned Contractor further stipulates and certifies that he/she/it has maintained a satisfactory record of Prevailing Wage Act compliance with no significant Prevailing Wage Act violations for the past three (3) years. In accordance with Public Act 94-0515, the Contractor will submit to the Village certified payroll records (to include for every worker employed on the project the name, address, telephone number, social security number, job classification, hourly wages paid in each pay period, number of hours worked each day and starting and ending time of work each day) on a monthly basis, along with a statement affirming that such records are true and accurate, that the wages paid to each worker are not less than the required prevailing rate and that the Contractor is aware that knowingly filing false records is a Class B Misdemeanor.

	Contractor:		
	Ву:		
	-	(Authorized Officer)	
Subscribed and Sworn to before me thisday of, 20			
Notary Public			

## VILLAGE OF ORLAND PARK CONTRACTOR'S CERTIFICATION SEXUAL HARASSMENT, TAX & SUBSTANCE ABUSE

icer or Owner	, having been first duly sworn deposes and states as follows: of Company)
	, having submitted a proposal for:
	(Name of Company)
	(PROJECT)
to the V	Village of Orland Park, Illinois, hereby certifies that the undersigned Contractor:
1.	has a written sexual harassment policy in place in full compliance with 775 ILCS 5/2-105(A)(4)
2.	is not delinquent in the payment of any tax administered by the Illinois Department of Revenu or if:
	a. it is contesting its liability for the tax or the amount of tax in accordance wi procedures established by the approved Revenue Act; or
	b. it has entered into an agreement with the Department of Revenue for payment of a taxes due and is currently in compliance with that agreement.
3.	is in full compliance with the Federal Highway Administration Rules on Controlled Substances and Alcohol Use and Testing, 49 CFR Parts 40 and 382 and that is/are currently participating
	(Name of employee/driver or "all employee drivers") in a drug and alcohol testing program pursuant to the aforementioned rules.
4A	has in place a written program which meets or exceeds the program requirements of the Substance Abuse Prevention on Public Works Projects Act (Public Act 95-0635), and has provided a written copy thereof to the Village of Orland Park; or
4B.	has in place a collective bargaining agreement which deals with the subject matter of the Substance Abuse Prevention on Public Works Projects Act (Public Act 95-0635).
	(Check either 4A or 4B, depending upon which certification is correct.)
	By: Officer or Owner of Company named above
scribed and	
ore me this	
/ of	, 2010.
Notary	Public

## **APPRENTICESHIP AND TRAINING PROGRAM CERTIFICATION**

Ι,		, having been first duly sworn depose
and st	ate as follows:	
	<u>I,</u>	, am the duly authorized
	agent for	, which has
	submitted a bid to the V	Village of Orland Park for
		and I hereby certify of Project)
	that	
	(Name o	of Company)
	participates in apprentic	ceship and training programs approved and registered with
	the United States Depar	tment of Labor Bureau of Apprenticeship and Training.
		By:
		Title:
Befor	eribed and Sworn to the me this of, 20	
	Notary Public	

## **REFERENCES**

Please type)	
DRGANIZATION	
ADDRESS	
CITY, STATE, ZIP	
PHONE NUMBER	
CONTACT PERSON	
DATE OF PROJECT	
DRGANIZATION	
ADDRESS	
CITY, STATE, ZIP	
PHONE NUMBER	
CONTACT PERSON	
DATE OF PROJECT	
DRGANIZATION	
ADDRESS	
CITY, STATE, ZIP	
PHONE NUMBER	
CONTACT PERSON	
DATE OF PROJECT	
Bidder's Name:	
Signature & Date:	

## **INSURANCE REQUIREMENTS**

Please submit a policy Specimen Certificate of Insurance showing bidder's current coverage's

## **WORKERS COMPENSATION & EMPLOYER LIABILITY**

\$500,000 – Each Accident \$500,000 – Policy Limit \$500,000 – Each Employee Waiver of Subrogation in favor of the Village of Orland Park

## **AUTOMOBILE LIABILITY**

\$1,000,000 – Combined Single Limit
Additional Insured Endorsement in favor of the Village of Orland Park

#### **GENERAL LIABILITY (Occurrence basis)**

\$1,000,000 – Each Occurrence \$2,000,000 – General Aggregate Limit \$1,000,000 – Personal & Advertising Injury \$2,000,000 – Products/Completed Operations Aggregate Additional Insured Endorsement & Waiver of Subrogation in favor of the Village of Orland Park

## EXCESS LIABILITY (Umbrella-Follow Form Policy)

\$2,000,000 – Each Occurrence \$2,000,000 – Aggregate EXCESS MUST COVER: General Liability, Automobile Liability, Workers Compensation

Any insurance policies providing the coverages required of the Contractor, shall be <u>specifically endorsed</u> to identify "The Village of Orland Park, and their respective officers, trustees, directors, employees and agents as Additional Insureds on a primary/non-contributory basis with respect to all claims arising out of operations by or on behalf of the named insured." If the named insureds have other applicable insurance coverage, that coverage shall be deemed to be on an excess or contingent basis. The policies shall also contain a Waiver of Subrogation in favor of the Additional Insureds in regards to General Liability and Workers Compensation coverage's. The certificate of insurance shall also state this information on its face. Certificates of insurance must state that the insurer shall provide the Village with thirty (30) days prior written notice of any change in, or cancellation of required insurance policies. The words "endeavor to" and ", but failure to do so shall impose no obligation or liability of any kind upon the insurer, its agents or representatives" must be stricken from all Certificates of Insurance submitted to the Village. Any insurance company providing coverage must hold an A VII rating according to Best's Key Rating Guide. Permitting the contractor, or any subcontractor, to proceed with any work prior to our receipt of the foregoing certificate and endorsement however, shall not be a waiver of the contractor's obligation to provide all of the above insurance.

The bidder agrees that if they are the selected contractor, within ten days after the date of notice of the award of the contract and prior to the commencement of any work, you will furnish evidence of Insurance coverage providing for at minimum the coverages and limits described above directly to the Village of Orland Park, Denise Domalewski, Contract Administrator, 14700 S. Ravinia Avenue, Orland Park, IL 60462. Failure to provide this evidence in the time frame specified and prior to beginning of work may result in the termination of the Village's relationship with the selected bidder and the bid will be awarded to the next lowest bidder or result in creation of a new bid.

ACCEPTED & AGREED THIS DA	Y OF, 2010
Signature	Authorized to execute agreements for:
Printed Name & Title	Name of Company

## III – ADDITIONAL INFORMATION (EXHIBITS)

## **SAMPLE**

## VILLAGE OF ORLAND PARK (Contract for Small Construction or Installation Project)

	•			• ,	
This Contrac	ct is made this	day of		, 2010 by and between	n the
Village of C	Orland Park (herei	nafter referred	to as the "VILLA	GE") and	
(hereinafter r	referred to as the "C	CONTRACTOR	").		
		WITN	ESSETH		
In considera	ation of the promi	ses and cove	enants made herei	n by the VILLAGE and	the
CONTRACT	OR (hereinafter refe	erred to collecti	vely as the "PARTIE	ES"), the PARTIES agree	as
follows:					
documents ( takes prece DOCUMENT agreement b CONTRACT	(hereinafter referred edence and contro FS. The Contract, in petween the PARTII TOOCUMENTS, to TOOCUMENTS und	I to as the "CC ols over any including the C ES and where the Contract's	ONTRACT DOCUMI contrary provision CONTRACT DOCUI it modifies, adds to provisions shall	ract shall include the follo ENTS") however this Cor in any of the CONTR MENTS, expresses the e or deletes provisions in prevail. Provisions in in full force and effect in	tract ACT entire other the
The T The V The B All Ce Certifi <del>Perfor</del> <b>SECT</b>	ILLAGE'S Project No. The Invitation The Instruction The Instruction The Instruction The Instruction Instruction Instruction Instruction Instrument Instrum	Manual for the Non to Bid tions to the Bid responsive to to the Bid the VILLAGE of the WORK A	ders he VILLAGE's bid re SE red by the VILLAGE	n Section 2 hereunder equirements  The CONTRACTOR agre	es to

(hereinafter referred to as the "WORK") as described in the VILLAGE'S Project Manual (Bid Documents) and the VILLAGE agrees to pay the CONTRACTOR pursuant to the provisions

of the Local Government Prompt Payment Act (50 the WORK:	) ILCS 505/1 et seq.) the following amounts for
Unit Prices (if any):	
Alternates chosen:	
	_ _
TOTAL:	UM.") The CONTRACT SUM shall not be
<b>SECTION 3: ASSIGNMENT:</b> CONTRACT involved in the performance of the WORK excep Village, which approval shall not be unreasonably	
WORK of this Contract upon receipt of a Notice the WORK of this Contract by TIME.") Failure to meet the CONTRACT TIME sh the CONTRACT DOCUMENTS. The CONTRACT express written consent of the VILLAGE. Final properties of the WORK, completion of any punch waiver of liens in accordance with the requirement Contract may be terminated by the VILLAGE for	, (hereinafter referred to as the "CONTRACT all be considered an occasion of default under CT TIME shall not be increased without the payment shall be made by the VILLAGE upon a list items and after receipt of final release and ents of the CONTRACT DOCUMENTS. This convenience or by either of the PARTIES for
default in the performance of the duties of the DOCUMENTS upon thirty (30) day's written notice	PARTIES as described in the CONTRACT

SECTION 5: INDEMNIFICATION AND INSURANCE: The CONTRACTOR shall indemnify and hold harmless the VILLAGE, its trustees, officers, directors, agents, employees and representatives and assigns, from lawsuits, actions, costs (including attorneys' fees), claims or liability of any character, incurred due to the alleged negligence of the CONTRACTOR, brought because of any injuries or damages received or sustained by any person, persons or property on account of any act or omission, neglect or misconduct of said CONTRACTOR, its officers, agents and/or employees arising out of, or in performance of any of the provisions of the CONTRACT DOCUMENTS, including any claims or amounts recovered for any infringements of patent, trademark or copyright; or from any claims or amounts arising or recovered under the "Worker's Compensation Act" or any other law, ordinance, order or decree. In connection with any such claims, lawsuits, actions or liabilities, the VILLAGE, its trustees, officers, directors, agents, employees, representatives and their assigns shall have the right to defense counsel of

their choice. The CONTRACTOR shall be solely liable for all costs of such defense and for all expenses, fees, judgments, settlements and all other costs arising out of such claims, lawsuits, actions or liabilities.

The Contractor shall not make any settlement or compromise of a lawsuit or claim, or fail to pursue any available avenue of appeal of any adverse judgment, without the approval of the Village and any other indemnified party. The Village or any other indemnified party, in its or their sole discretion, shall have the option of being represented by its or their own counsel. If this option is exercised, then the Contractor shall promptly reimburse the Village or other indemnified party, upon written demand, for any expenses, including but not limited to court costs, reasonable attorneys' and witnesses' fees and other expenses of litigation incurred by the Village or other indemnified party in connection therewith.

The indemnification obligation under this paragraph shall not be limited in any way by any limitations on the amount or type of damages, compensation or benefits payable by or for the benefit of Subcontractor or any indemnities under any Worker's Compensation Act, Occupational Disease Act, Disability Benefits Act, or any other employee benefits act. The Subcontractor further agrees to waive any and all liability limitations based upon the Worker's Compensation Act court interpretations or otherwise.

Execution of this Contract by the VILLAGE is contingent upon receipt of Insurance Certificates provided by the CONTRACTOR in compliance with the CONTRACT DOCUMENTS.

**SECTION 6: COMPLIANCE WITH LAWS:** CONTRACTOR agrees to comply with all federal, state and local laws, ordinances, statutes, rules and regulations including but not limited to all applicable provisions of the Illinois Human Rights Act (775 ILCS 5/1-101 *et seq.*) and the Illinois Prevailing Wage Act (820 ILCS 130/1 *et seq.*)

SECTION 7: FREEDOM OF INFORMATION ACT COMPLIANCE: The Illinois Freedom of Information Act (FOIA) has been amended and effective January 1, 2010. This amendment adds a new provision to Section 7 of the Act which applies to public records in the possession of a party with whom the Village of Orland Park has contracted. The Village of Orland Park will have only a very short period of time from receipt of a FOIA request to comply with the request, and there is a significant amount of work required to process a request including collating and reviewing the information.

The undersigned acknowledges the requirements of FOIA and agrees to comply with all requests made by the Village of Orland Park for public records (as that term is defined by Section 2(c) of FOIA) in the undersigned's possession and to provide the requested public records to the Village of Orland Park within two (2) business days of the request being made by the Village of Orland Park. The undersigned agrees to indemnify and hold harmless the Village of Orland Park from all claims, costs, penalty, losses and injuries (including but not limited to, attorney's fees, other professional fees, court costs and/or arbitration or other dispute resolution costs) arising out of or relating to its failure to provide the public records to the Village of Orland Park under this agreement.

**SECTION 8: NOTICE:** Where notice is required by the CONTRACT DOCUMENTS, it shall be considered received if it is 1) delivered in person, 2) sent by registered United States mail, return receipt requested, 3) delivered by messenger or mail service with a signed receipt, 4) sent by facsimile with an acknowledgment of receipt, or 4) by e-mail with an acknowledgment of receipt only if the PARTIES agree separately to use e-mail for providing notice. Notice shall be sent to the following:

To the VILLAGE:

Denise Domalewski, Contract
Administrator
Village of Orland Park
14700 South Ravinia Avenue
Orland Park, Illinois 60462

Telephone: 708-403-6173

Facsimile: 708-403-9212

e-mail: ddomalewski@orland-park.il.us

Telephone: Facsimile: e-mail:

or to such other persons or to such other addresses as may be provided by one party to the other party under the requirements of this Section.

**SECTION 9: LAW AND VENUE:** The law of the State of Illinois shall apply to this Agreement and venue for legal disputes shall be Cook County, Illinois.

**SECTION 10: MODIFICATION:** This Contract may be modified only by a written amendment signed by both PARTIES.

**SECTION 11: COUNTERPARTS:** This Contract may be executed in two (2) or more counterparts, each of which taken together, shall constitute one and the same instrument.

This Contract shall become effective on the date first shown herein and upon execution by duly authorized agents of the PARTIES.

FOR: THE VILLAGE		FOR: THE CONTRACTOR
Ву:		Ву:
Print name:		Print name:
Its:	Village Manager	lts:
Date:		Date:



## **SECTION 07545**

#### TPO THERMOPLASTIC SINGLE-PLY ROOFING

## PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Thermoplastic single-ply roofing.
- B. Insulation.

## 1.2 RELATED SECTIONS

- A. Section 06100: Rough Carpentry: Roof blocking installation and requirements.
- B. Section 07620: Sheet Metal Flashing and Trim: Metal flashing and counter flashing installation and requirements.
- C. Section 15430: Plumbing Specialties: roof drains, scuppers, gutters and downspout installation and requirements.

## 1.3 REFERENCES

- A. Factory Mutual (FM Global) Approval Guide.
  - 1. Factory Mutual Standard 4470 Approval Standard for Class 1 Roof Covers.
- B. Underwriters Laboratories (UL) Roofing Systems and Materials Guide (TGFU R1306).
- C. American Society for Testing and Materials (ASTM) Annual Book of ASTM Standards.
  - ASTM C 1289 Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board.
  - 2. ASTM D 4263 Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method.
- D. Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA) Architectural Sheet
- E. National Roofing Contractors Association (NRCA).
- F. American Society of Civil Engineers (ASCE).
  - 1. ASCE 7 Minimum Design Loads for Buildings and Other Structures.

## 1.4 DEFINITIONS

A. Roofing Terminology: Refer to ASTM D1079 and the glossary of the National Roofing Contractors Association (NRCA) Roofing and Waterproofing Manual for definitions of roofing terms related to this section.

## 1.5 PERFORMANCE REQUIREMENTS

- A. Provide an installed roofing membrane and base flashing system that does not permit the passage of water, and will withstand the design pressures calculated in accordance with the most current revision of ASCE 7.
- B. GAFMC shall provide all primary roofing materials that are physically and chemically compatible when installed in accordance with manufacturers current application requirements.

## 1.6 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. [Product Data]: Provide [Product Data] sheets for each type of product indicated in this section.
- C. Shop Drawings: Provide manufacturers standard details and approved shop drawings for the roof system specified.
- D. Samples: Provide samples of insulations, fasteners, membrane materials and accessories for verification of quality.

## 1.7 QUALITY ASSURANCE

- A. Manufacturer Qualifications: GAFMC shall provide a roofing system that meets or exceeds all criteria listed in this section.
- B. Installer Minimum Qualifications:
  - Installer shall be classified as a Master Select Contractor as defined and certified by GAFMC.
- C. Source Limitations: Components listed shall be provided by a single manufacturer or approved by the primary roofing manufacturer.
- D. Final Inspection: Manufacturer's representative shall provide a comprehensive final inspection after completion of the roof system. All application errors shall be addressed and final punch list completed.

## 1.8 PRE-INSTALLATION CONFERENCE

A. Prior to scheduled commencement of the roofing installation and associated work, conduct a meeting at the project site with the installer, architect, owner, GAFMC representative and any other persons directly involved with the performance of the work. The installer shall record conference discussions to include decisions, agreements, and open issues and furnish copies of recorded discussions to each attending party. The primary purpose of the meeting is to review foreseeable methods and procedures related to roofing work.

## 1.9 REGULATORY REQUIREMENTS

A. Work shall be performed in a safe, professional manner, conforming to federal, state and local codes.

## 1.10 DELIVERY, STORAGE, AND HANDLING

- A. Deliver roofing materials to the site in original containers, with factory seals intact. Products shall carry either a GAFMC or BMCA label.
- B. Store pail goods in their original undamaged containers in a clean, dry location within their specified temperature range.
- C. Do not expose materials to moisture in any form before, during, or after delivery to the site. Reject delivery of materials that show evidence of contact with moisture.

- D. Remove manufacturer supplied plastic covers from materials provided with such. Use "breathable" type covers such as canvas tarpaulins to allow venting and protection from weather and moisture. Cover and protect materials at the end of each work day. Do not remove any protective tarpaulins until immediately before the material will be installed.
- E. Materials shall be stored above 55 degrees F (12.6 degrees C) a minimum of 24 hours prior to application.
- F. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

## 1.11 PROJECT CONDITIONS

## A. Weather:

- 1. Proceed with roofing only when existing and forecasted weather conditions permit.
- 2. Ambient temperatures shall be above 45 degrees F (7.2 degrees C) when applying hot asphalt or water based adhesives.

#### 1.12 WARRANTY

- A. Provide manufacturer's standard Diamond Pledge Guarantee with single source coverage and no monetary limitation where the manufacturer agrees to repair or replace components in the roofing system, which cause a leak due to a failure in materials or workmanship.
  - 1. Duration: Twenty (20) years from the date of completion.

## PART 2 PRODUCTS

## 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: GAF Materials Corporation, Commercial Roofing Products Division, which is located at: 1361 Alps Rd.; Wayne, NJ 07470; Toll Free Tel: 800-ROOF-411; Tel: 973-628-3000; Fax: 973-628-3451; Email: cfontenot@gaf.com; Web: www.gaf.com
- B. Requests for substitutions will be considered in accordance with provisions of Section 01600.

## 2.2 INSULATION

- A. Rigid polyisocyanurate board, with a strong white or black fibrous glass facer conforming to or exceeding the requirements of ASTM C 1289 / FS HH-I-1972, EnergyGuard Polyiso, with the following characteristics:
  - 1. Board Thickness: min 1.5 / 1/8in tapered
  - 2. Thermal Resistance (LTTR value): 9+

## 2.3 MEMBRANE MATERIALS

A. A smooth type, polyester scrim reinforced thermoplastic polyolefin membrane with a nominal 0.060 inch (1.5 mm) thickness, for use as a single ply roofing membrane. Meets or exceeds the minimum requirements of ASTM D-6878. Each full roll contains approximately 1000 sf (93 sqm) of roofing material, 10 feet by 100 feet (3.1 m by 30.5 m) weighing 322 lb (146 kg) EverGuard TPO 60 mil thermoplastic single-ply roofing membrane by GAFMC.

## 2.4 FLASHING MATERIALS

A. A smooth type, polyester scrim reinforced thermoplastic polyolefin membrane with a nominal 0.060 inch (1.5 mm) thickness, for use as a single ply roofing membrane. Meets or exceeds the minimum requirements of ASTM D-6878. Each full roll contains approximately 1000 sf (93 sqm) of roofing material, 10 feet by 100 feet (3.1 m by 30.5 m) weighing 322 lb (146 kg) EverGuard TPO 60 mil

thermoplastic single-ply roofing membrane by GAFMC.

## 2.5 ADHESIVES, SEALANTS AND PRIMERS

- A. Solvent-based Bonding Adhesive: Solvent based adhesive for use with EverGuard TPO membranes, EverGuard Bonding Adhesive, by GAFMC.
- B. One part polyurethane sealant suitable for sealing the upper lip of exposed termination bars and penetrations, and around clamping rings. Meets or exceeds ASTM C-920-87, Type S, Grade NS, Class 25, EverGuard Caulking, by GAFMC.
- C. One part butyl based high viscosity sealant suitable for sealing between flashing membrane and substrate surface behind exposed termination bars and for sealing between roofing membrane and drain flange. EverGuard Water Block, by GAFMC.
- D. Insulation Adhesive: Oly-Bond 500 distributed by BMCA.

## 2.6 ACCESSORIES

- A. 0.075 inch (1.9 mm) thick molded TPO membrane sized to accommodate most common pipe and conduits, (1 inch to 6 inches (25 mm to 152 mm) diameter pipes), including square tube. Hot-air welded directly to EverGuard TPO membrane, supplied with stainless steel clamping rings, EverGuard TPO Preformed Vent Boots by GAFMC.
- B. 0.065 inch (1.7 mm) thick molded TPO membrane designed to accommodate both inside and outside corners of base and curb flashing. Hot-air welds directly to EverGuard TPO membrane. Size 4 inches (102 mm) by 4 inches (102 mm) with 4 inches (102 mm) flange, EverGuard TPO Preformed Corners by GAFMC.
- C. 1/8 inch (3 mm) thick extruded and embossed TPO pads 30 inches (762 mm) by 36 inches (914 mm), heat welds directly to roofing membrane. Unique herringbone traction surface, EverGuard TPO Walkway Pads, by GAFMC.
  - 1. Color: Gray.

## PART 3 EXECUTION

#### 3.1 EXAMINATION

- A. Verify that the surfaces and site conditions are ready to receive work.
- B. Verify that the deck is supported and secured.
- C. Verify that the deck is clean and smooth, free of depressions, waves, or projections, and properly sloped to drains, valleys, eaves, scuppers or gutters.
- D. Verify that the deck surfaces are dry and free of ice or snow.
- E. Verify that all roof openings or penetrations through the roof are solidly set, and that all flashings are tapered.

## 3.2 SUBSTRATE PREPARATION

- A. Structural Concrete Deck:
  - 1. Minimum deck thickness for structural concrete is 4 inches (102 mm).
  - 2. Only poured in place concrete decks that provide bottom side drying are acceptable.
  - 3. The roof deck shall be properly cured prior to application of the roofing system. Curing agents shall be checked for compatibility with roofing materials. Prior to the installation of the roof assemblies, evaluation of the surface moisture and deck's dryness by the use of ASTM D 4263

- or hot bitumen test procedures shall be conducted.
- 4. The deck shall be smooth, level and cannot be wet or frozen.
- 5. Treat cracks greater than 1/8 inch (3 mm) in width in accordance with the deck manufacturer's recommendations.
- 6. Sumps for the roof drains shall be provided in the casting of the deck.
- 7. When insulation or roofing is to be adhered with hot asphalt, prime the deck with asphalt/concrete primer, ASTM D 41 at the rate of one gallon per 100 square feet (0.4 l/sm). Allow the primer to dry prior to the application of the roofing system.
- 8. With retrofit roof applications, it is required that the deck be inspected for defects. Defects are to be corrected per the deck manufacturer's recommendations prior to the roofing application.

## 3.3 INSTALLATION - GENERAL

- A. Install GAFMC's EverGuard TPO roofing system according to all current application requirements in addition to those listed in this section.
- B. GAFMC EverGuard Specification #: T-FA-T-I-60
- C. Start the application of membrane plies at the low point of the roof or at the drains, so that the flow of water is over or parallel to, but never against the laps.

#### 3.4 INSULATION - GENERAL

- A. Do not apply roof insulation or roofing until all other work trades have completed jobs that require them to traverse the deck on foot or with equipment. A vapor retarder coated lightly with asphalt may be applied to protect the inside of the structure prior to the insulation and final roofing installation. Before the application of the insulation, any damage or deterioration to the vapor retarder shall be repaired.
- B. Do not install wet, damaged or warped insulation boards.
- C. Install insulation boards with staggered board joints in one direction (unless taping joint).
- D. Install insulation boards snug. Gaps between board joints shall not exceed 1/4 inch (6 mm). All gaps in excess of 1/4 inch (6 mm) shall be filled with like insulation material.
- E. Wood nailers shall be 3-1/2 inches (89 mm) minimum width or 1 inch (25 mm) wider than metal flange. They shall be of equal thickness as the insulation with a minimum 1 inch (25 mm) thickness. All nailers shall be securely fastened to the deck.
- F. Do not kick insulation boards into place.
- G. Miter and fill the edges of the insulation boards at ridges, valleys and other changes in plane to prevent open joints or irregular surfaces. Avoid breaking or crushing of the insulation at the corners.
- H. Insulation shall not be installed over new lightweight insulating concrete.
- I. Roof tape, if required over insulation joints, shall be laid evenly, smoothly and embedded in a uniform coating of hot steep asphalt with 4 inches (102 mm) end laps. Care shall be taken to assure smooth application of tape, and full embedment of the tape in the asphalt.
- J. Do not install any more insulation than will be completely waterproofed each day.

#### 3.5 INSULATION - BASE LAYER

- A. The substrate shall be free of debris, dust, dirt, oil, grease, and standing water before applying the adhesive.
- B. Install insulation layers applied with beads of Oly Bond 500 spaced 12 inches (305 mm) O.C.

Approximate coverage rate is one (1) gallon per 100 square feet (0.42 l/sm), depending on the substrate. Allow the foam to rise 1/2 inch to 3/4 inch (13 mm to 19 mm). Press each board firmly into place. Stagger the joints of additional layers in relation to the insulation joints in the layer(s) below by a minimum of 6 inches (152 mm) to eliminate continuous vertical gaps.

## 3.6 MEMBRANE APPLICATION

## A. Fully Adhered:

- 1. Place membrane so that wrinkles and buckles are not formed. Any wrinkles or buckles shall be removed from the sheet prior to permanent attachment. Roof membrane shall be fully adhered immediately after it is rolled out, followed by welding to adjacent sheets.
- 2. Overlap roof membrane a minimum of 3 inches (150 mm) for side laps and 3 inches (150 mm) for end laps.
- 3. Install membrane so that the side laps run across the roof slope lapped towards drainage points.
- 4. All exposed sheet corners shall be rounded a minimum of 1 inch (25 mm).
- 5. Use full width rolls in the field and perimeter region of roof.
- 6. Use appropriate bonding adhesive for substrate surface, applied with a solvent-resistant roller, brush or squeegee.
- 7. Fully adhere membrane sheets with bonding adhesive at a rate resulting in 60 square feet/gallon (1.4 sqm/l) of finished roofing material for solvent-based bonding adhesives, and at a rate of 125 square feet/gallon (3 sqm/l) of finished roofing material for water-borne bonding adhesive. Apply bonding adhesive to both the underside of the membrane and the substrate surface at 120 square feet per gallon (2.8 sqm/l) (Solvent Based) and 250 square feet per gallon (6 sqm/l) (Water Based). A greater quantity of bonding adhesive may be required based upon the substrate surface condition.
- 8. Prevent seam contamination by keeping the adhesive application 2 inches (51 mm) back from the seam area.
- 9. Adhere approximately one half of the membrane sheet at a time. One half of the sheet's length shall be folded back in turn to allow for adhesive application. Lay membrane into adhesive once the bonding adhesive is tacky to the touch.
- Roll membrane with a weighted roller to ensure complete bonding between adhesive and membrane.
- 11. Membrane laps shall be heat-welded together. All welds shall be continuous, without voids or partial welds. Welds shall be free of burns and scorch marks.
- 12. Weld shall be a minimum of 1-1/2 inches (38 mm) in width for automatic machine welding and a minimum 2 inches (51 mm) in width for hand welding.
- 13. All cut edges of reinforced membrane shall be sealed with EverGuard TPO Cut Edge Sealant.
- 14. Supplemental membrane attachment is required at the base of all walls and curbs, and where the angle of the substrate changes by more than ten (5) degrees (1 inches in 12 inches) (75 mm in 1000 mm). Roofing membrane shall be secured to the structural deck with appropriate Drill-Tec screws and plates spaced every 12 inches (305 mm) o.c. The screws and plates shall be installed no less than 1/2 inch (13 mm) from the membrane edge. Alternatively, the roofing membrane may be turned up the vertical plane a minimum of 3 inches (76 mm) and secured with screws and termination bar fastener spacing is the same as is used for in-lap attachment. The termination bar shall be installed within 1-1/2 inches (38 mm) to 2 inches (51 mm) of the plane of the roof membrane, with a minimum of 1 inch (25 mm) of membrane extending above the termination bar.
- 15. Supplemental membrane attachment to the structural deck is required at all penetrations unless the insulation substrate is fully adhered to the deck. Roofing membrane shall be secured to the deck with appropriate Drill-Tec screws and plates.
- 16. Fasteners shall be installed to achieve the proper embedment depth. Install fasteners without lean or tilt.
- 17. Install fasteners so that the plate or termination bar is drawn down tightly to the membrane surface. Properly installed fasteners will not allow the plate or termination bar to move (underdriving), but will not cause wrinkling of the membrane (overdriving).

## 3.7 FLASHINGS

## A. General:

- 1. All penetrations must be at least 24 inches (610 mm) from curbs, walls, and edges to provide adequate space for proper flashing.
- 2. Flash all perimeter, curb, and penetration conditions with coated metal, membrane flashing, and flashing accessories as appropriate to the site condition.
- All coated metal and membrane flashing corners shall be reinforced with preformed corners or non-reinforced membrane.
- 4. Hot-air weld all flashing membranes, accessories, and coated metal. A minimum 2 inch (51 mm) wide (hand welder) weld is required.
- 5. All cut edges of reinforced membrane must be sealed with EverGuardSYMBOL 226 TPO Cut Edge Sealant.
- 6. Consult the EverGuardi¿½ Application and Specifications Manual or GAFMC Contractor Services for more information on specific construction details, or those not addressed in this section.

## B. Roof Edges:

- 1. Roof edge flashings are applicable for gravel stop and drip edge conditions as well as for exterior edges of parapet walls.
- 2. Flash roof edges with metal flanges nailed 4 inches (102 mm) O.C. to pressure-treated wood nailers. Where required, hot-air weld roof membrane to coated metal flanges.
- 3. When the fascia width exceeds 4 inches (102 mm), coated metal roof edging must be attached with a continuous cleat to secure the lower fascia edge. The cleat must be secured to the building no less than 12 inches (305 mm) O.C.
- 4. Alternatively, roof edges may be flashed with a 2-piece snap on fascia system, adhering the roof membrane to a metal cant and face nailing the membrane 8" on center prior to installing a snap-on fascia.
- 5. Flash roof edge scuppers with a coated metal insert that is mechanically attached to the roof edge and integrated as a part of the metal edging.

## C. Parapet and Building Walls:

- 1. Flash walls with EverGuard TPO membrane adhered to the substrate with bonding adhesive, loose applied (Less than 18 inches (457 mm) in height) or with coated metal flashing nailed 4 inches (102 mm) on center to pressure-treated wood nailers.
- 2. Secure membrane flashing at the top edge with a termination bar. Water Block shall be applied between the wall surface and membrane flashing underneath all exposed termination bars. Exposed termination bars shall be mechanically fastened 8 inches (203 mm) on center; termination bars that are counter flashed shall be fastened 12 inches (305 mm) on center.
- 3. Roof membrane must be mechanically attached along the base of walls with screws and plates (deck securement) or screws and inverted termination bar (wall securement) at the following rate:
  - a. Mechanically Attached Systems: Per in-lap on center spacing, with a 12 inch (305 mm) maximum
  - b. Fully / Self Adhered Systems: 12 inches (305 mm) on center
  - c. Ballast Applied Systems: 8 inches (203 mm) on center
- 4. All coated metal wall flashings and loose applied membrane flashings must be provided with separate metal counterflashings, or metal copings.
- 5. Metal counterflashings may be optional with fully adhered flashings depending on guarantee requirements. Exposed termination bars must be sealed with EverGuardi, ½ caulking.
- 6. Flash wall scuppers with a coated metal insert that is mechanically attached to the wall and integrated as part of the wall flashing.

#### D. Curbs and Ducts:

1. Flash curbs and ducts with EverGuard TPO membrane adhered to the curb substrate with bonding adhesive, loose applied (Less than 18 inches (457 mm) in height) or with coated metal

- flashing nailed 4 inches (102 mm) on center to pressure-treated wood nailers.
- 2. Secure membrane flashing at the top edge with a termination bar. Water Block shall be applied between the curb/duct surface and membrane flashing underneath all termination bars. Exposed termination bars shall be mechanically fastened every 8 inches (2.3 mm) o.c.; termination bars that are counter flashed shall be fastened 12 inches (305 mm) on center.
- Roof membrane must be mechanically attached along the base of walls with screws and plates (deck securement) or screws and inverted termination bar (wall securement) at the following rate:
  - a. Mechanically Attached Systems: Per in-lap on center spacing, with a 12 inches (305 mm) maximum
  - b. Fully / Self Adhered Systems: 12 inches (305 mm) on center
  - c. Ballast Applied Systems: 8 inches (203 mm) on center
- 4. All coated metal curb flashings and loose applied membrane flashings must be provided with separate metal counterflashings, or metal copings.
- 5. Metal counterflashings may be optional with fully adhered flashings depending on guarantee requirements. Exposed termination bars must be sealed with EverGuardi 1/2 caulking.

#### E. Roof Drains:

- Roof drains shall be fitted with compression type clamping rings and strainer baskets. Originaltype cast iron and aluminum drains, as well as retrofit-type cast iron, aluminum or molded plastic drains are acceptable.
- 2. Roof drains shall be provided with a minimum 36 inches (914 mm) by 36 inches (914 mm) sump. Slope of tapered insulation within the sump shall not exceed 4 inches (102 mm) in 12 inches (305 mm).
- 3. Extend the roofing membrane over the drain opening. Locate the drain and cut a hole in the roofing membrane directly over the drain opening. Provide a 1/2 inch (13 mm) of membrane flap extending past the drain flange into the drain opening. Punch holes through the roofing membrane at drain bolt locations.
- 4. For cast iron and aluminum drains, the roofing membrane shall be set in a full bed of water block on the drain flange prior to securement with the compression clamping ring. Typical water block application is one 10.5 ounce (315 g) cartridge per drain.
- 5. Lap seams shall not be located within the sump area. Where lap seams will be located within the sump area, a separate roof membrane drain flashing a minimum of 12 inches (305 mm) larger than the sump area shall be installed. The roof membrane shall be mechanically attached 12 inches (305 mm) on center around the drain with screws and plates. The separate roof drain flashing shall be heat welded to the roof membrane beyond the screws and plates, extended over the drain flange, and secured as above.
- 6. Tighten the drain compression ring in place.

## 3.8 TRAFFIC PROTECTION

- A. Install walkway pads/rolls at all roof access locations and other designated locations including roof-mounted equipment work locations and areas of repeated rooftop traffic.
- B. Walkway pads shall be spaced 2 inches (51 mm) apart to allow for drainage between the pads.
- C. Fully adhere walkway pads/rolls to the roof membrane with solvent-based bonding adhesive, applied at the rate of 1 gal per 100 sf (0.42 l/sm) to both the walkway and roof membrane surfaces. Press walkway in position once adhesive is tacky to the touch.
- D. Alternatively, walkway pads/rolls may be hot-air-welded to the roof membrane surface continuously around the perimeter of the pad/roll.

## 3.9 ROOF PROTECTION

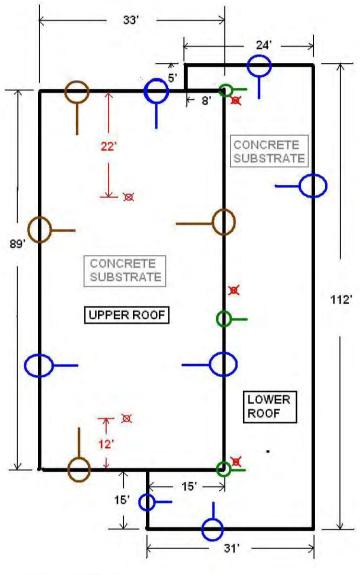
A. Protect all partially and fully completed roofing work from other trades until completion.

- B. Whenever possible, stage materials in such a manner that foot traffic is minimized over completed roof areas.
- C. When it is not possible to stage materials away from locations where partial or complete installation has taken place, temporary walkways and platforms shall be installed in order to protect all completed roof areas from traffic and point loading during the application process.
- D. Temporary tie-ins shall be installed at the end of each workday and removed prior to commencement of work the following day.

## 3.10 CLEAN-UP

- A. All work areas are to be kept clean, clear and free of debris at all times.
- B. Do not allow trash, waste, or debris to collect on the roof. These items shall be removed from the roof on a daily basis.
- C. All tools and unused materials shall be collected at the end of each workday and stored properly off of the finished roof surface and protected from exposure to the elements.
- D. Dispose of or recycle all trash and excess material in a manner conforming to current EPA regulations and local laws.
- E. Properly clean the finished roof surface after completion, and make sure the drains and gutters are not clogged.
- F. Clean and restore all damaged surfaces to their original condition.

**END OF SECTION** 

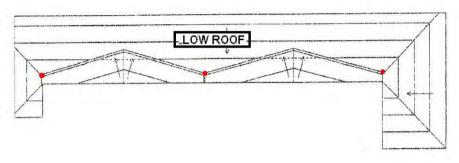




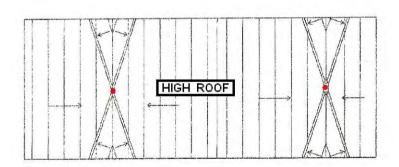
PROJECT:

CLIENT:

VILLAGE OF ORLAND PARK



1/8" PER FOOT TAPERED POLYISOCYANURATE INSULATION WITH 1/4" PER FOOT SADDLES



PROJECT:

Pump House

CLIENT:

VILLAGE OF ORLAND PARK