Date Due: November 8, 2018

DUE NO LATER THAN 2:00 P.M.

LOCAL TIME IN HOUSTON, TEXAS

Proposals received later than the above date and time will not be considered.

# YES Prep Public Schools

REQUEST FOR PROPOSAL Cover Sheet

REQUEST FOR PROPOSAL: White Oak Roof Replacement

NOTE TO PROPOSERS!!! Carefully read all instructions, requirements, and specifications. Fill out all forms properly and completely. Submit your proposal with all appropriate supplements and/or samples and return as instructed in Special Requirements/Instructions.

**RETURN PROPOSAL TO:** 

**Cheris Kotalik** 

Construction Manager 5515 S Loop E, Suite B Houston, Texas 77033

For additional information, contact Cheris Kotalik at cheris.kotalik@yesprep.org or 346-235-5776.

You must sign below in INK; failure to sign WILL disqualify the proposal. All prices must be typewritten or printed in ink.

Vendor Name:		
Vendor Address:		
City, State, Zip Code:		
Taxpayer Identification Number (T.I.N.):		
Telephone No.:	Fax No.: _	
Email:		
Print Name:		

[Your signature attests to your proposal to provide the goods and/or services in this proposal according to the published provisions of this Request for Proposal unless modifications or alterations are clearly noted in your proposal submission.]

#### TABLE OF CONTENTS – REQUEST FOR PROPOSAL PACKAGE

The items below represent components which comprise this Request for Proposal (hereinafter "RFP") package. Suppliers are asked to review the package to be sure that all applicable parts are included. If any portion of the package is missing, please notify Cheris Kotalik, Construction Manager, immediately at cheris.kotalik@yesprep.org or 346-235-5776.

It is the Vendor's responsibility to be thoroughly familiar with all Requirements and Specifications. Be sure you understand the following before you return your proposal packet.

#### 1. Cover Sheet

Your company name, address, and your signature (IN INK) should appear on this page.

#### 2. Table of Contents

This page is the Table of Contents.

#### 3. General Requirements

You should be familiar with all of the General Requirements.

#### 4. Special Requirements/Instructions

This section provides information you must know in order to make a complete and proper proposal.

#### 5. Specifications

This section contains the detailed description of the products/services sought.

#### 6. Attachments

- A. Submittals 1 4
- B. Questionnaire
- C. Workers' Compensation Certification
- D. Insurance Coverage Requirements
- E. Financial Statement
- F. Proposed Exceptions, Alterations, Additions, or Modifications to RFP (if any)
- G. Scoring Rubric

#### INTRODUCTION

YES Prep Public Schools is a free, open-enrollment public school system that serves 6,600 students across thirteen (13) schools in the Houston area. YES Prep has been ranked as among the top 100 public high schools in the nation by Newsweek and U.S. News & World Report. Every year, 100 percent of YES Prep's graduating seniors have been accepted into four-year colleges, including Harvard, Yale, Columbia, Rice, and Stanford. YES Prep combines a highly successful 6th-12th grade model along with high standards for student achievement.

#### **GENERAL REQUIREMENTS**

Proposals will be accepted by Yes Prep Public Schools no later than 2:00 p.m. (local time), **November 8, 2018**. Every proposal must be enclosed in an envelope clearly marked "Northline Campus Drainage", and shall include two (2) copies.

All questions, requests, responses, and proposals shall be submitted to:
Cheris Kotalik-Construction Manager
Yes Prep Public Schools
5515 S Loop E, Suite B
Houston, TX 77033
cheris.kotalik@yesprep.org

Questions and responses regarding this RFP will be posted to the Yes Prep Public Schools web site during the RFP phase so all interested parties will have access to the same information. Web site is located at: <a href="http://www.yesprep.org/notices">http://www.yesprep.org/notices</a>

The appropriate committee shall review all timely responses, and if necessary, the full Board of Trustees prior to acceptance/bid award. Responses may be hand delivered. Any response or proposal received after the above deadline shall be considered late, and will not be opened or considered.

#### **Time Frame**

The timeframe for all responses must be complete and in possession of YES Prep Public Schools by 2:00 p.m. (local time) on **November 8, 2018.** Each submission/proposal must be complete. Any incomplete responses may be rejected. All respondents will comply with this RFP as a basis for the award of the proposal.

#### Approval

The actual acceptance of any proposal may be delayed. Therefore, all responses must remain valid for a period of no less than one hundred and twenty (120) days. It is intended that proposals will be recommended to the Board of Trustees at an upcoming board meeting. The Board of Trustees reserves the right to reject any and all proposals.

#### **ACCESS TO RECORDS**

Proposer (hereinafter "Vendor") may be required to allow duly authorized representatives of YES Prep Public Schools (hereinafter "YES"), and local, state, and federal governments, access to contracts, books, documents, and records necessary to verify the nature, extent, and cost of services provided by the Vendor.

#### **AWARD**

YES reserves the right to reject any and all proposals, and reserves the sole right at its discretion to accept any proposal(s) it considers most favorable to the interest of YES and waive any and all minor irregularities in any proposal(s). YES further reserves the right to reject any proposal(s) and seek new proposals through the issuance of a new or amended Request for Proposal (hereinafter "RFP") if such action is deemed in the best interest of YES.

#### OFFER COMPLETION

Fill out and return to Cheris Kotalik, Construction Manager, one complete proposal form, and one complete copy, as instructed under the Special Requirements section of this document. An authorized Vendor representative should sign the Cover Sheet. Completion of these forms is intended to verify that the Vendor has submitted the proposal, is familiar with its contents, and has submitted the material in accordance with all requirements.

The submission of a response shall be prima facie evidence that the Vendor has full knowledge of the scope, nature, quantity, and quality of work to be performed, the detailed requirements of the project, and the conditions under which the work is to be performed. All terms, conditions, specifications, stipulations, and Vendor requirements stated in the RFP, any attached Appendices to the RFP, and any and all Addenda issued shall become part of the contract entered into between YES and the Vendor.

#### **OFFER RETURNS**

Vendors must return all completed proposals to the office of Cheris Kotalik as indicated on the Cover Sheet of this package. Late proposals will not be accepted. It is the responsibility of the responding Vendor to assure that the response is received prior to the date and time indicated on the Cover Sheet of this package.

#### **DIGITAL FORMAT**

If Vendor obtained the proposal specifications in digital format in order to prepare a response, the proposal must be submitted in hard copy according to the instructions contained in this package. If, in its response, Vendor makes any changes whatsoever to the YES published RFP specifications, the RFP specifications as published by YES shall control. Furthermore, if an alteration of any kind to the RFP specifications as published is discovered after the contract is executed, the contract is subject to immediate cancellation at the sole option of YES.

#### **DISQUALIFICATION OF VENDOR**

Upon signing this RFP, Vendor certifies that the proposal has not violated the antitrust laws of this state codified in §15.01, *et seq.*, Business & Commerce Code, or the federal antitrust laws, and has not communicated directly or indirectly the proposal made to any competitor or any other person engaged in such line of business. Any or all proposals may be rejected if YES believes that collusion exists among the Vendors. Proposals in which the prices are obviously unbalanced may be rejected.

#### **EVALUATION**

In evaluating the proposals submitted, YES will apply the "Best Value" process in selecting the Vendor to be awarded a contract for this project. **Purchase price is not the only criteria that will be used in the evaluation process**. The selection process will include, but not be limited to, the following considerations:

1. The quality and range of goods and/or services the Vendor proposes to

provide;

- 2. The extent to which the goods and/or services meet YES needs;
- 3. The Vendor's overall experience, reputation, expertise, stability, and financial responsibility;
- 4. The Vendor's past relationship, if any, with YES;
- 5. The experience and qualifications of the Vendor staff (i.e. drivers, supervisors, dispatchers, mechanics, etc.) that will be assigned to service the YES account:
- 6. The ability to provide service in a safe, reliable, expedient, and efficient manner:
- 7. Facilities and business processes and practices (computerized information systems, access to industry facilities, quality and range of management reports, etc.) that will be used in servicing the YES account;
- 8. The Vendor's financial terms offered to YES;
- The total long-term cost to YES to acquire the Vendor's goods or services; and/or
- 10. Any other relevant factor(s) specifically listed in the RFP.

YES reserves the right to contact references from the Vendor's client list, or any other persons considered relevant by YES. YES reserves the right to conduct personal interviews of any or all potential Vendors prior to selection.

YES will not be liable for any costs incurred by the Vendor in connection with such interviews or with the submission of any response.

#### **DOCUMENT INTERPRETATION**

In the event of any conflict of interpretation of any part of this overall document, the interpretation of YES shall govern.

#### **GOVERNING LAW**

Any agreements resulting from this RFP shall be governed by, construed, and enforced in accordance with the laws of the State of Texas applicable to contracts made and wholly performed within such state (without regard to the conflicts or choice of law principles thereof). The parties irrevocably consent to the jurisdiction of the State of Texas, and agree that any court of competent jurisdiction sitting in the County of Harris, State of Texas, shall be an appropriate and convenient place of venue, and shall be the sole and exclusive place of venue, to resolve any dispute with respect to any such agreements.

#### HOLD HARMLESS AGREEMENT

The successful Vendor(s) shall indemnify, hold harmless, and defend YES, its directors, officers, and employees (paid or volunteer) from and against any and all claims, demands, and

causes of action of whatever kind or nature arising out of error, omission, misrepresentation, negligent act, conduct, or misconduct of the Vendor and its subcontractors, agents, and employees (paid or volunteer) in the provision of goods or the performance of services arising out of the preparation of this proposal and execution and performance of any contracts resulting therefrom. Such indemnification shall also include reasonable attorneys' fees, court costs, and expenses.

#### **INSPECTIONS**

YES reserves the right to inspect any item(s) or service location for compliance with specifications, requirements, and needs of YES. If a Vendor cannot furnish a sample of a proposed item, where applicable, for review, or fails to satisfactorily show an ability to perform, YES can reject the Vendor as inadequate.

#### **TESTING**

YES reserves the right to test equipment, supplies, materials, and goods proposed for quality, compliance with specifications, and ability to meet the needs of YES. Demonstration units must be available for review. Should the goods or services fail to meet requirements and/or be unavailable for evaluation, the proposal is subject to rejection.

#### **INVOICES AND PAYMENTS**

YES standard payment terms are Net 30 days after receipt of invoice.

Invoices should be provided to YES in a timely manner. Vendors are requested to invoice YES within 30 days of providing goods and/or services to YES. Vendors who continuously invoice YES in a manner that is outside of generally accepted business practices may affect their continuing relationship with YES.

In the event a Vendor presents YES with invoices, statements, reports, etc. that are incomplete or inaccurate, YES may be required to perform substantial research which could result in delay of payment. YES will not be responsible for any interest charges and/or late fees as a result of delayed payment due to time delays caused by inadequate, incomplete, or inaccurate information provided in invoices by Vendor.

#### **PRICING**

Prices for all goods and/or services shall be negotiated to a firm amount for the duration of this contract or as agreed to in terms of time frame and/or method of determining price escalations, if any, by Vendor. All prices and methods of determining prices must be written in ink or typewritten. Where unit pricing and extended pricing differ, unit pricing prevails.

#### **SCANNED OR RE-TYPED RESPONSE**

If in its response, Vendor either electronically scans, re-types, or in some way reproduces the YES-published RFP package, then in the event of any conflict between the terms and provisions of the published RFP package, or any portion thereof, and the terms and provisions of the response made by the Vendor, the RFP package *as published* by YES shall control. Furthermore, if an alteration of any kind to the YES-published RFP package is only discovered after the contract is executed, the contract is subject to immediate cancellation at the sole option of YES.

#### **SEVERABILITY**

If any section, subsection, paragraph, sentence, clause, phrase, or word of these requirements or the specifications shall be held invalid, such holding shall not affect the remaining portions of these requirements and the specifications, and it is hereby declared that such remaining portions would have been included in these requirements and the specifications as though the invalid portion had been omitted.

#### **SUPPLEMENTAL MATERIALS**

Vendors are responsible for including all pertinent product data in the returned offer package. Literature, brochures, data sheets, specification information, completed forms requested as part of the offer package, and any other facts which may affect the evaluation and subsequent contract award should be included. Materials such as legal documents and contractual agreements, which the Vendor wishes to include as a condition of the proposal, must also be in the returned proposal package. Failure to include all necessary and proper supplemental materials may be cause to reject the entire proposal.

#### **TAXES**

YES is exempt from federal, state, and local taxes. In the event that taxes are imposed on the goods or services purchased, YES will not be responsible for payment of the taxes. The Vendor shall absorb the taxes entirely. Texas Limited Sales Tax Exemption Certificates will be furnished to Vendors upon written request to YES.

#### **TERM CONTRACTS**

The successful Vendor, as determined by YES, shall be required to execute a contract to furnish all goods and/or services and other deliverables required for successful completion of the proposed project. No Vendor shall obtain any interest or right in any award until YES has executed a contract, and any such interest and rights shall be subject to the terms and conditions as contained in such contract.

The successful Vendor may not assign, sell, or otherwise transfer its interest in the contract award, or any part thereof, without prior written consent from the YES.

#### **QUANTITY**

There is no guaranteed amount of business, expressed or implied, to be purchased or contracted for by YES. However, the Vendor(s) awarded the contract shall furnish all required goods and/or services to YES at the stated price, when and if required.

#### **CONTRACT TYPE**

The preferred contract type to be awarded is a fixed fee contract. However, if a Vendor has reason to believe a better (more cost effective) method is practical, then the Vendor is encouraged to offer that better pricing option as an alternative in its submitted proposal. YES will consider that type of contract as it compares with other recommended contract options.

#### **TERMINATION**

YES reserves the right to terminate the contract without cause with 60 days prior written notice for convenience and with 30 days prior written notice for cause if Vendor breaches any of the terms therein, including warranties of Vendor or if the Vendor becomes insolvent or commits acts of bankruptcy. Such right of termination is in addition to and not in lieu of any other remedies which YES may have in law or equity. Cause may be construed as, but not limited to, failure to deliver the proper goods and/or services within the proper amount of time, and/or to properly perform any and all services required to YES's satisfaction, and/or to meet all other

obligations and requirements.

If the Vendor breaches any provision of the proposal stipulations, becomes insolvent, enters voluntary or involuntary bankruptcy, or receivership proceedings, or makes an assignment for the benefit of creditors, YES will have the right (without limiting any other rights or remedies that it may have in the contract or by law) to terminate any contract with 30 days prior written notice to the Vendor.

YES will then be relieved of all obligations, except to pay the reasonable value of the Vendor's prior performance (at a cost not exceeding the contract rate). The Vendor will be liable to YES for all costs exceeding the contract price that YES incurs in completing or procuring the service as described in the proposal. YES's right to require strict performance of any obligation in this contract will not be affected by any previous waiver, forbearance, or course of dealing.

#### **FUNDING OUT OPTION**

Any contract resulting from this RFP is contingent upon the continued availability of budget appropriations and is subject to cancellation, without penalty to YES, either in whole or in part, if funds are not appropriated by the YES Board of Directors or otherwise not made available to YES.

#### **WARRANTIES**

Vendors shall furnish all data pertinent to warranties or guarantees which may apply to items in the proposal. Vendors may not limit or exclude any implied warranties.

#### **ASSOCIATION**

Vendors may not use the YES official logo(s), or any phrase associated with YES, without written permission from YES.

#### **DISCLOSURE**

All information and documentation related to this RFP submitted by Vendors may be subject to public disclosure under the Texas Public Information Act (Texas Government Code Section 552.001, et seq.).

#### **EXCEPTIONS, ALTERATIONS, ADDITIONS, and MODIFICATIONS**

If any exceptions, alterations, additions, or modifications are submitted by Vendor to any portion of this RFP, the Vendor must clearly indicate the exceptions, alterations, additions, and modifications and include a full explanation as a separate attachment to the proposal. The failure to identify exceptions, alterations, additions, or modifications will constitute acceptance by the Vendor of the RFP as proposed by YES. YES reserves the right to reject a proposal containing exceptions, alterations, additions, or modifications.

#### PROPOSAL PREPARATION COSTS

All costs related to the preparation and submission of this proposal shall be paid by the Vendor. Issuance of this RFP does not commit YES, in any way, to pay any costs in the preparation and submission of the proposal, nor does the issuance of the RFP obligate YES to award a contract or purchase any goods and services stated in the RFP.

#### RETENTION OF PROPOSAL DOCUMENTATION

All proposal materials and supporting documentation that is submitted in response to this proposal becomes the permanent property of YES.

#### MODIFICATION/WITHDRAWL OF PROPOSAL

Proposals may be modified in writing at any time prior to the due date. Proposals may be withdrawn in writing, by facsimile written transmission or in person, before the response date.

#### **PAYMENT TERMS**

Invoices that are submitted by the awarded contractor are required to provide accurate and current addresses including any discounts for early payment. Payment of undisputed invoices will be paid monthly provided that the invoices are received by dates provided to the winning bid. Disputed portions of invoices will be held until the dispute is resolved.

#### PROPOSAL REQUIREMENTS

- Vendor is required to provide evidence of a valid State of Texas Business License
- Vendor is required to provide an insurance certificate with Yes Prep named as an additional insured

The entity legally responsible for fulfilling this agreement shall be identified in the proposal response.

#### Right to Seek a New Proposal

Yes Prep Public Schools reserves the right to receive, accept, or reject any and all proposals for any or all reasons.

Proposals will be awarded to the best overall respondent as determined to be in the best interests of Yes Prep. In comparing the responses to this RFP and making awards, Yes Prep may consider such factors as quality and thoroughness of a proposal, the record of experience, the references of the respondents, and the integrity, performance and assurances in the proposal in addition to that of the proposal price.

It is the responsibility of the vendor to ensure that the equipment proposed is fully functional with existing two-way radio equipment: handheld radios, base stations and school bus radios.

#### Applicable Law

The successful Contractor(s) agrees that they shall comply with all local, state and federal laws, statutes, rules, and regulations including, but not limited to, the Rehabilitation Act of 1973 and the Americans with Disabilities Act. In the event that any claims should arise with regards to this contract, for a violation of any such local, state, or federal law, statues, rules, or regulations, the provider will indemnify and hold Huntington County Community School Corporation harmless for any damages, including court costs or attorney fees which might be incurred.

#### Dispute resolution

It is expected that any conflicts or disagreements can be settled through face-to-face meetings. Unresolved disputes will require mediation before filing litigation. Both parties will split the cost of mediation.

#### **SCORING RUBRIC**

#### SPECIAL REQUIREMENTS/INSTRUCTIONS

#### **EVALUATION AND AWARD**

This RFP in no manner obligates YES to the eventual rental, lease, or purchase of any equipment or service described, implied, or which may be proposed, until confirmed by a written contract. Progress toward this end is solely at the discretion of YES and may be terminated at any time prior to the signing of the contract.

YES may initiate discussions with Vendor personnel authorized to contractually obligate the Vendor. Discussions will develop into negotiating sessions with the successful Vendor(s). If YES is unable to agree to contract terms, YES reserves the right to terminate contract negotiations with a Vendor and initiate negotiations with another Vendor. YES reserves the right to select services and products from any number of Vendors if, in its sole discretion, it is in the best interest of YES to do so.

Evaluation will consider the Vendor(s) best meeting the needs and requirements of YES and such evaluation and determination of best value shall be solely at the discretion of YES. Purchase price is not the only criteria that will be used in the evaluation process.

Submission of qualifications implies the Vendor's acceptance of the evaluation criteria and Vendor's recognition that subjective judgments can and will be made by those individuals evaluating qualifications.

References, site visits, and product inspections may be used to make judgments directly affecting the award of this contract.

#### NON-PERFORMANCE BY VENDOR

Performance, before and during the contract term, will be a major consideration of current contract award, renewals, and future award considerations. Failure to perform, in any sense relative to this contract, may result in the probation and/or termination of this agreement by YES on the basis of nonperformance. Non-performance shall be determined as follows:

- 1. Failure to meet and maintain all qualifications required in this RFQ/RFP;
- 2. Failure to meet required personnel standards and operating performance standards;
- 3. Failure to maintain appropriate and/or necessary personnel licenses and certifications:
- 4. Failure to meet all vehicle inspections and certifications which are needed to comply with federal, state, and/or local requirements;
- 5. Failure to keep and maintain all required insurance coverage; and/or
- 6. Failure to cure deficiencies within a reasonable amount of time as stated herein.

#### **INSURANCE**

All Vendors must provide evidence of insurance or insurability and a Workers' Compensation Certificate (see Attachments C and D).

#### **GOVERNMENT VIOLATIONS**

Vendor shall notify YES of all health and safety violations, OSHA violations, wage and hour violations, or labor violations assessed by any city, state, or federal government department or agency.

#### NON-COMPLIANCE NOTIFICATION

In the event a Vendor is determined by YES to have failed to perform services in accordance with the requirements listed herein, YES will forward a written notification specifying the violation or the area of non-compliance to the Vendor. The Vendor in non-compliance shall immediately remedy all violations as determined by YES. Any violations not so remedied shall be grounds for termination of the contract, in whole or in part.

#### **OWNERSHIP**

YES shall retain ownership rights to all materials or any other product produced in conjunction with the work described herein.

#### **SPECIFICATIONS**

YES Prep Public Schools is a free, open-enrollment public school system that serves 6,600 students across eleven (11) schools in the Houston area. YES Prep has been ranked as among the top 100 public high schools in the nation by Newsweek and U.S. News & World Report. Every year, 100 percent of YES Prep's graduating seniors have been accepted into four-year colleges, including Harvard, Yale, Columbia, Rice, and Stanford. YES Prep combines a highly successful 6th-12th grade model along with high standards for student achievement.

YES Prep is seeking a Vendor to provide materials and installation roof tear-off and replacement including gutters and downspouts. A complete proposal shall include the following:

- Demolition and protection of existing roof.
- Replace insulation as needed (must carry a sf allowance in proposal).
- New TPO roof system.
- Flashing around scuppers, roof drains, mechanical curbs, vents and parapets as required with a new TPO system.
- Remove and reinstall mechanical unit cages.
- Gutter and downspout replacement on the West Side of the building.
- All equipment necessary to perform work.
- Debris removal off-site (Owner will not provide a dumpster).
- Portable toilet for workers to use (Owner will not provide a portable toilet).
- Schedule must be included with your proposal.
- Replace parapet cap.
- Demo existing runs not being used anymore.
- Flash in curbs for units that will remain. Complete curb removal is not required.

Base Bid—Tear off to the insulation and replace insulation as needed. Call out your SF allowance in the proposal.

Alternate #1—Tear off down to the deck.

### REQUIRED SUBMITTALS (Attachment A)

#### Submittal 1

**Experience in Project Management** 

Vendor shall provide a statement of its qualifications to provide the specific materials and services requested herein.

#### **Submittal 2**

Staffing Plan

Vendor shall submit a staffing plan that provides the qualifications of your employees.

#### **Submittal 3**

References

Vendor shall supply a list of three (3) references for which Vendor has experience in the scope of work that the proposal is submitted for.

#### Submittal 4

Customer Feedback

Vendor shall provide a description of its formal customer feedback system, provide sample tools used to gather data, and describe how results were shared with customers and used to improve service.

All submittals must be included in the RFP package returned on November 8, 2018 by 2:00 PM. It is recommended that each submittal be typed on a separate sheet of paper with the heading "Response to Submittal #\_\_\_ for YES RFP" at the top and the name of the Vendor underneath.

### QUESTIONNAIRE (Attachment B)

All Vendor must provide answers to the following questions, typed on 8 ½ x 11 inch paper, in the order below. Attachments to the questionnaire answers should reference the question number.

- 1. Provide the full name and address of your organization.
- 2. Provide contact person(s) for information concerning this offer: name, title, phone, fax, email address.
- 3. What form of business is your organization (e.g. proprietorship, partnership, corporation) and is your organization local only, statewide, or nationwide?
- 4. List all the names under which this Vendor has operated in the last ten (10) years in the State of Texas.
- 5. Provide a copy of your insurance coverage.
- 6. Multi-part question:
  - a. Do you currently have any investigations pending by or on behalf of a government entity or other licensing entity?
  - b. Have you had investigations by or on behalf of a government entity or other licensing entity in the past?
    - 1. If the answer to either question is yes, please provide copies of relevant paperwork.
- 7. Do you have any relevant experience or projects in the past with education institutions? If so, please provide a high-level overview of these projects.

### WORKERS' COMPENSATION CERTIFICATE (Attachment C)

YES requires Vendor to provide workers' compensation as per state law requirements. The Vendor shall sign and submit the following certificate with the written proposal:

- Minimum Workers' Compensation and Employer's Liability Limits
  - o Each Accident \$1,000,000
  - o Disease Each Employee \$1,000,000
  - o Disease Policy Limit \$1,000,000

Vendor Name
Signature of Authorized Agent
Date Signed

Note: Vendor may attach current certificate of coverage with a signed statement that if awarded the contract, they will obtain said aforementioned coverage if the current coverage does not meet the stated minimum requirements.

## INSURANCE COVERAGE REQUIREMENTS (Attachment D)

#### **General and Excess Liability Minimum Coverages**

• General Liability: \$1,000,000

•	Umbrella Liability: \$1,000,000	
Vendo	or Name	
Signa	ature of Authorized Agent	
 Date :	Signed	

YES will be named as Additional Insured on the Certificate of Insurance if the Vendor is awarded a contract.

## FINANCIAL REQUIREMENTS (Attachment E)

Complete this form or provide audited financial statements and include with your proposal package.

#### **FINANCIAL STATEMENT**

Condi	tion of Vendor at clos	e of business Month	,		_, 2014.
ASSE	тѕ				
1.	Cash on hand		\$		
	In Bank		\$		
	Elsewhere		\$		\$
2.		e from completed cor not approved for pa			
3.	Accounts receivable	e from other sources	than abo	ve	
4.	(not included in Iten	uncompleted contra n 3) (Contract price o ted contracts less to	n comple		
5.	Deposits for bids or	other guarantees			
6.	Notes receivable	Past due Due 90 days Due Later	\$ \$ \$		
7.	Interest earned				
8.	Real Estate Business Property Other property	, Present value	\$ \$		
9.	Stocks and Bonds Listed on exchang Unlisted	ge	\$ \$ \$		
10.	Equipment, machine Less Depreciation		\$ \$		
11.	Other Assets				
				TOTAL ASSETS	S \$

## FINANCIAL REQUIREMENTS (Attachment E, Cont.)

#### **LIABILITIES AND NET WORTH**

1.	Notes Payable To banks regular	\$
	(For certified check)	
	Equip. Obligations	
	Others	 \$
2.	Accounts Payable Current	\$
	Past Due	 
3.	Real Estate Mortgages	
4.	Other Liabilities	
5.	Reserves	
6.	Capital Stock Paid up Common	
	Preferred	 
7.	Surplus	
TOTA	L LIABILITIES AND NET WORTH	\$

## Proposed Exceptions, Alterations, Additions, or Modifications to RFP (Attachment F)

Vendor should submit as Attachment F, any and all proposed exceptions, alterations, additions, or modifications to the YES RFP for WO Roof Replacement.

### SCORING RUBRIC (ATTACHMENT G)

YES will utilize the following RFP Evaluation Rubric for evaluation of all WO Roof Replacement Proposals:

#### 1. Charges/Cost to YES PREP: 30 Points.

- a. Favorable = 30 Points. Unfavorable = 0 points.
- b. Evaluate the Overall Value of proposed materials and services to be provided.

#### 2. Technical and Education Experience: 17.5 Points.

- a. Favorable = 17.5 Points. Unfavorable = 0 points.
- b. Proposal demonstrates the Vendor's ability to deliver quality services to schools.
- c. Includes references, Vendor staff, and/or Vendor's or certifications, qualifications, experience, expertise, and resumes.

#### 3. Proposed Operational Delivery: 17.5 Points.

- a. Favorable = 17.5 Points. Unfavorable = 0 points.
- b. Proposal defines services and scope in enough detail that YES can confidently determine that the proposed services will be met.

#### 4. Design and Technical Execution: 17.5 Points.

- a. Favorable = 17.5 Points. Unfavorable = 0 points.
- b. Proposal includes information about the Vendor's ability to provide an efficient and cost-effective solution. Please include resources available to achieve the project and any concepts or innovations in design that have proven effective in the past that would be applicable to this model.

#### 5. Project Understanding and Methodology: 17.5 Points.

- a. Favorable = 17.5 Points. Unfavorable = 0 points.
- b. Proposal addresses the project in terms of the scope of work and substantive issues essential to proper service and care of YES facilities. Proposal includes a detailed description of services to be provided and any constraints as to procedure, time, personnel, or equipment that needs to be communicated to YES for use during contract negotiations.

## **END OF YES RFP PACKAGE FOR Northline Campus Drainage**

#### SECTION 07 01 50

#### PREPARATION FOR REROOFING

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including the General and Supplementary Conditions, if any, apply to work of this Section.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Full tear-off of existing roofing to deck.
  - 2. Removal of base flashings.
  - 3. Temporary roofing.
- B. Related Sections: Work of all sections, including Division 01 Sections, if any, as required to properly execute the work and as necessary to maintain satisfactory progress of the work.
  - 1. Related Sections include:
    - a. Division 07 Section "Thermoplastic Polyolefin (TPO) Roofing".

#### 1.3 DEFINITIONS

- A. Roofing Terminology: Definitions in ASTM D 1079 and glossary of NRCA's "The NRCA Roofing and Waterproofing Manual" apply to work of this Section.
- B. Full Roof Tear-Off: Removal of existing roofing system from deck.

#### 1.4 ADMINISTRATIVE REQUIREMENTS

- A. Coordination: Coordinate removal of existing roofing with new roofing operations that may impact installation of new roofing work.
- B. Reroofing Conference: Conduct conference at Project site.
  - 1. Meet with Owner; Architect; Owner's insurer if applicable; testing and inspecting agency representative; roofing system manufacturer's representative; roofing Installer, including project manager, superintendent, and foreman; and installers whose work interfaces with or affects reroofing, including installers of roof deck, roof accessories, and roof-mounted equipment.
  - 2. Review methods and procedures related to roofing system tear-off and replacement, including, but not limited to, the following:
    - a. Reroofing preparation, including roofing system manufacturer's written instructions.

- b. Temporary protection requirements for existing roofing system components that are to remain.
- c. Existing roof drains and roof drainage during each stage of reroofing, and roof-drain plugging and plug removal, as applicable.
- d. Construction schedule and availability of materials, Installer's personnel, equipment, and facilities needed to avoid delays.
- e. Existing roof deck conditions requiring notification of Architect.
- f. Existing roof deck removal procedures and Owner notifications.
- g. Condition and acceptance of existing roof deck and base flashing substrate for reuse.
- h. Structural loading limitations of roof deck during reroofing.
- i. Base flashings, special roofing details, drainage, penetrations, equipment curbs, and condition of other construction that affect reroofing.
- j. Discovery of asbestos-containing materials (ACM) and notification to Owner and Architect.
- k. Governing regulations and requirements for insurance and certificates if applicable.
- 1. Existing conditions that may require notification of Architect before proceeding.

#### 1.5 SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Include plans, sections, and details.
- C. Temporary Roofing Submittal: Product data and description of temporary roofing system. If temporary roof remains in place, include surface preparation requirements needed to receive permanent roof, and submit a letter from roofing manufacturer, stating acceptance of the temporary roof and that its inclusion does not adversely affect the roofing system's resistance to fire and wind or its UL or FM Global rating, as applicable.
- D. Qualification Data: For Installer.
- E. Fastener pull-out test report.
- F. Photographs or Videotape: Show existing conditions of adjoining construction and site improvements, including exterior finish surfaces that might be misconstrued as having been damaged by reroofing operations. Submit before Work begins.
- G. Landfill Records: Indicate receipt and acceptance of demolished roofing materials by a landfill facility licensed to accept them.

#### 1.6 QUALITY ASSURANCE

A. This Section outlines only <u>minimum</u> standards and requirements. Refer to the Drawings and other sections of the specifications for additional requirements. Bring all conflicts and discrepancies to the attention of the Architect and do not start work until such conflicts and discrepancies are clarified and corrected.

B. Regulatory Requirements: Comply with governing EPA notification regulations before beginning roofing removal. Comply with hauling and disposal regulations of authorities having jurisdiction.

#### 1.7 CONTRACTOR'S RESPONSIBILITIES

- A. As scope and performance documents, the Drawings and Specifications do not necessarily indicate or describe all the work required for the performance and completion of the Work. Contracts will be let on the basis of such documents with the understanding that the Contractor shall furnish and install the items required for proper completion of the Work without adjustment to price or schedule. Work shall be of sound, quality construction and the Contractor shall be solely responsible for the inclusions of adequate labor and materials to cover the proper and timely preparation for reroofing work indicated, described, or implied.
- B. As a performance specification, the criteria for the solution of the preparation for reroofing work indicated on the Drawings or specified herein are for the sole purpose of defining the design intent and performance requirements for this Project. To avoid any misunderstanding or lack of interpretation, the Contractor is hereby advised that the responsibility for preparation for reroofing work are totally his and that designs and resolutions proposed in the Contractor's shop drawings, calculations, and related documentation shall be demonstrated throughout the Work and warranty period specified or required.
- C. Design proposal submissions which follow exactly the details indicated on the Drawings, will not relieve the Contractor of his responsibility for the performance of the work of this Section.
- D. In the event of a controversy over the work required, the decision of the Architect will take precedence.

#### 1.8 FIELD CONDITIONS

- A. Protect building to be reroofed, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from reroofing operations.
- B. Maintain access to existing walkways and other adjacent occupied or used facilities.
- C. Conditions existing at time of inspection for bidding are maintained by Owner as far as practical.
- D. Limit construction loads on existing roof deck and building structure and distribute loads for stored or demolished materials on roof to prevent overloading. Confer with Structural Engineer for roof loading requirements.
- E. Weather Limitations: Proceed with reroofing preparation only when existing and forecasted weather conditions permit Work to proceed without water entering existing roofing system or building.

- 1. Remove only as much roofing in one day as can be made watertight in the same day.
- F. Hazardous Materials: It is not expected that hazardous materials, such as asbestoscontaining materials (ACM), will be encountered in the Work.
  - 1. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.

#### PART 2 - PRODUCTS

#### 2.1 TEMPORARY PROTECTION MATERIALS

- A. Plywood: DOC PS1, Grade CD Exposure 1.
- B. OSB: DOC PS2, Exposure 1.

#### 2.2 TEMPORARY ROOFING MATERIALS

A. Design and selection of materials for temporary roofing are Contractor's responsibilities.

#### 2.3 REROOFING MATERIALS

A. Refer to Division 07 Section "Thermoplastic Polyolefin (TPO) Roofing".

#### **PART 3 - EXECUTION**

#### 3.1 PREPARATION

- A. Shut off rooftop utilities and service piping before beginning the Work.
- B. Test existing roof drains, if any, to verify that they are not blocked or restricted. Immediately notify Architect of any blockages or restrictions.
- C. During removal operations, have sufficient and suitable materials on-site to facilitate rapid installation of temporary protection in the event of unexpected rain.
- D. Maintain roof drains, if any, in functioning condition to ensure roof drainage at end of each workday. Prevent debris from entering or blocking roof drains and conductors. Use roof-drain plugs specifically designed for this purpose. Remove roof-drain plugs at end of each workday, when no work is taking place, or when rain is forecast.
  - 1. If roof drains are temporarily blocked or unserviceable due to roofing system removal or partial installation of new roofing system, provide alternative drainage method to remove water and eliminate ponding. Do not permit water to enter into or under existing roofing system components that are to remain.

#### 3.2 ROOF TEAR-OFF

- A. Full Roof Tear-Off: Remove existing roofing and other roofing system components down to the deck.
  - 1. Remove substrate board, roof insulation, and cover board, as applicable.
  - 2. Remove wood blocking, curbs, and nailers.
  - 3. Bitumen and felts that are firmly bonded to decks are permitted to remain if felts are dry. Remove unadhered bitumen, unadhered felts, and wet felts.
  - 4. Remove excess asphalt from steel deck. A maximum of 15 lb/100 sq. ft. of asphalt is permitted to remain on steel decks.
  - 5. Remove fasteners from deck.

#### 3.3 DECK PREPARATION

- A. Inspect deck after tear-off of roofing system.
- B. If deck surface is unsuitable for receiving new roofing or if structural integrity of deck is suspect, immediately notify Architect and Structural Engineer. Do not proceed with installation until directed by Architect.

#### 3.4 TEMPORARY ROOFING

- A. Install approved temporary roofing over area to be reroofed.
- B. Remove temporary roofing before installing new roofing.

#### 3.5 BASE FLASHING REMOVAL

- A. Remove existing base flashings. Clean substrates of contaminants, such as asphalt, sheet materials, dirt, and debris.
- B. Do not damage metal counterflashings that are to remain. Replace metal counterflashings damaged during removal with counterflashings specified in Division 07 Section "Sheet Metal Flashing and Trim".
- C. Inspect wood blocking, curbs, and nailers for deterioration and damage. If wood blocking, curbs, or nailers have deteriorated, immediately notify Architect.

#### 3.6 FASTENER PULL-OUT TESTING

- A. Perform fastener pull-out tests according to SPRI FX-1, and submit test report to Architect and roofing manufacturer before installing new roofing system.
  - 1. Obtain roofing manufacturer's approval to proceed with specified fastening pattern. Roofing manufacturer may furnish revised fastening pattern commensurate with pull-out test results.

YES Prep Public Schools -White Oak Campus 5620 West Tidwell Houston, Texas 77091 3.7 DISPOSAL

- A. Collect demolished materials and place in containers. Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
  - 1. Storage or sale of demolished items or materials on-site is not permitted.
- B. Transport and legally dispose of demolished materials off Owner's property.

**END OF SECTION** 

#### SECTION 07 54 00

#### THERMOPLASTIC POLYOLEFIN (TPO) ROOFING

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes furnishing and installing a thermoplastic polyolefin (TPO) roofing roofing system, including the following, as applicable:
  - 1. Thermoplastic Polyolefin Single-Ply Roofing Membrane.
  - 2. Thermoplastic Polyolefin Flashings.
  - 3. Thermoplastic Polyolefin Accessories.
  - 4. Insulation.
  - 5. Other roofing-related items specified or indicated on the drawings or otherwise necessary to provide a complete weatherproof roofing system.
- B. Legal disposal of construction waste from site.
- C. Related Sections: Work of all as required to properly execute the work and as necessary to maintain satisfactory progress of the work.

#### 1.2 DEFINITIONS

A. Roofing Terminology: Refer to ASTM D 1079 and the glossary of the National Roofing Contractors Association (NRCA) Roofing and Waterproofing Manual for definitions of roofing terms related to this Section.

#### 1.3 SUBMITTALS

- A. Product Data: Provide product data sheets for each type of product indicated in this Section.
- B. Shop Drawings: Provide manufacturers standard details and approved shop drawings for the roof system specified.
- C. Samples: Provide samples of insulations, fasteners, membrane materials and accessories for verification of quality.
- D. Certificates: Installer shall provide written documentation from the manufacturer of their authorization to install the roof system, and eligibility to obtain the warranty specified in this section.

#### 1.4 QUALITY ASSURANCE

A. Manufacturer Qualifications: GAF shall provide a roofing system that meets or exceeds all criteria listed in this Section.

- B. Installer Qualifications:
  - 1. Installer shall be classified as a Master Select<sup>TM</sup> Contractor as defined and certified by GAF.
- 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.

#### 1.5 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, roofing contractor, GAF representative and other persons directly involved with the performance of the work. The installer shall record conference discussions to include decisions and agreements reached (or disagreements), and furnish copies of recorded discussions to each attending party. The main purpose of this meeting is to review foreseeable methods and procedures related to roofing work.

#### 1.6 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. GAF shall provide all primary roofing materials that are physically and chemically compatible when installed in accordance with manufacturers current application requirements.

#### 1.7 REGULATORY REQUIREMENTS

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

#### 1.8 DELIVERY, STORAGE AND HANDLING

- A. Deliver all roofing materials to the site in original containers, with factory seals intact. All products are to carry either a GAF label.
- B. Store all 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 a minimum of 24 hours prior to application.

#### 1.9 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 when applying hot asphalt or water based adhesives.

#### 1.10 WARRANTY

- A. Provide Manufacturers standard EverGuard® 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: 20 years

\*Materials and workmanship of listed products within this section when installed in accordance with current GAF application and specification requirements. Contact GAF Contractor Services for the full terms and conditions of the guarantee.

#### PART 2 - PRODUCTS

#### 2.1 ACCEPTABLE MANUFACTURER

A. GAF<sup>®</sup>, 1 Campus Drive, Parsippany, NJ 07054

#### 2.2 INSULATION (As indicated or required)

- 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<sup>TM</sup> Polyiso Insulation, with the following characteristics:
  - 1. Thickness: As indicated on Drawings or required. Replace with same thickness as existing.
  - 2. Thermal Resistance (LTTR value of): 5.7 per inch of thickness.
- 2.3 ROOF BOARD (As indicated or required)
  - A. Fiber-reinforced gypsum panel with an integral water-resistant core. Securock® Gypsum Fiber Roof Board by US Gypsum.
    - 1. Board Thickness: 5/8 inch

2. Thermal Resistance (R value) of: 0.6

#### 2.4 MEMBRANE MATERIALS

A. A fleece-backed, polyester scrim reinforced thermoplastic polyolefin membrane with a nominal 0.060 inch (60 mil) 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 sq.ft. of roofing material, 10 feet X 100 feet, weighing 350 lbs. Each half sheet roll contains approximately 500 sq.ft. of roofing material, 5 feet X 100 feet, weighing 175 lbs. EverGuard<sup>®</sup> TPO 60 mil Fleece-Back Membrane thermoplastic single-ply roofing membrane by GAF.

#### 2.5 FLASHING MATERIALS

A. A smooth type, polyester scrim reinforced thermoplastic polyolefin membrane with a nominal 0.060 inch (60 mil) thickness, for use as a single ply roofing membrane. Meets or exceeds the minimum requirements of ASTM D-6878. UL Listed, FM Approved, Dade County Product Approval, Florida Building Code Approved. White membrane is Energy Star Listed, CRRC Listed and Title 24 Compliant. Each full roll contains approximately 1000 sq.ft. of roofing material, 10 feet X 100 feet, weighing 322 lbs. Each half sheet roll contains approximately 500 sq.ft. of roofing material, 5 feet X 100 feet, weighing 162 lbs. EverGuard® TPO 60 mil thermoplastic single-ply roofing membrane by GAF.

#### 2.6 ADHESIVES, SEALANTS AND PRIMERS (As indicated or required)

- A. Solvent-based Bonding Adhesive: Solvent based rubberized adhesive for use with EverGuard TPO membranes, EverGuard® 1121 Bonding Adhesive, by GAF.
- B. Solvent based liquid, required to protect field cut edges of EverGuard TPO membranes. Applied directly from a squeeze bottle, EverGuard<sup>®</sup> TPO Cut Edge Sealant, by GAF.
- C. Solvent based primer for preparing surfaces to receive butyl based adhesive tapes, EverGuard® TPO Primer, by GAF.
- D. Solvent based seam cleaner used to clean exposed or contaminated seam prior to heat welding, EverGuard® TPO Seam Cleaner, by GAF.
- E. Solvent based, trowel grade synthetic elastomeric sealant. Durable and UV resistant suitable for use where caulk is typically used. Available in 10 oz. tubes, FlexSeal<sup>TM</sup> Caulk Grade Roof Sealant by GAF.
- F. Commercial grade roofing sealant suitable for sealing the upper lip of exposed termination bars and penetrations and around clamping rings and comes with a 20 year limited warranty against leaks caused by manufacturing defects. Meets the performance criteria of ASTM D412, ASTM D2196, ASTM D1475 and ASTM D1644, FlexSeal<sup>TM</sup> Roof Sealant, by GAF.
- G. Low VOC solvent based primer for preparing surfaces to receive butyl based adhesive

tapes, EverGuard® TPO Low VOC Primer, by GAF.

- H. Low VOC TPO cleaner designed to clean exposed or contaminated seams prior to heat welding to remove any residual soap or revitalize aged membranes. Contains only 50 grams per liter of Volatile Organic Content and has been formulated using a blend of primarily VOC-exempt ingredients to be in compliance with air quality regulations for single ply roofing products. EverGuard® CleanWeld® Cleaner by GAF®.
- I. 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 GAF.
- J. 100% solids epoxy based two-part sealant suitable for filling sealant pans at irregularly-shaped penetrations. Epoxy is part A. Polyamide is part B. EverGuard® 2-Part Pourable Sealant, by GAF.
- K. One-part, moisture-cure, self-leveling sealant designed for use in pitch pans on single ply roof systems. EverGuard® One-Part Pourable Sealant.
- L. Two component fast-acting, low-rise polyurethane foam adhesive. The "A" and "B" components are dispensed from two pre-pressurized disposable cylinders. OlyBond500<sup>®</sup> Equipment Free Canister System distributed by GAF<sup>®</sup>

#### 2.7 ACCESSORIES (As indicated or required)

#### A. Mechanical Fasteners:

- 1. Drill•Tec<sup>TM</sup> Standard Screws: Standard duty alloy steel insulation fastener with CR-10 coating with a 0.215 inch diameter thread. Factory Mutual Standard 4470 Approved, #3 Phillips head for use on steel and wood decks.
- 2. Drill•Tec<sup>TM</sup> Insulation Plates: Galvalume, 3 inch diameter, suitable for use with Drill•Tec<sup>TM</sup> Standard and HD screws, and Drill•Tec<sup>TM</sup> Spikes. Special design available for use with Drill•Tec<sup>TM</sup> Polymer Screws.

#### B. Flashing Accessories:

- 1. A smooth type, unreinforced thermoplastic polyolefin based membrane for use as an alternative flashing/reinforcing material for penetrations and corners. Required whenever preformed vent boots cannot be used, available in White, Tan, Gray, Regal Red, Regal Blue, and Hartford Green as selected by Architect, 0.055 inches (55 mils) nominal thickness and sheet size: 24in x 50 ft. EverGuard® TPO Detailing Membrane, by GAF.
- 2. An 8 inch wide smooth type, polyester scrim reinforced thermoplastic polyolefin membrane strip for use as a cover strip over coated metal and stripping-in coated metal flanges and general repairs: 0.045 inches (45 mils) nominal thickness with 100 foot length, available in White, Tan, Gray, Regal Red, Regal Blue, and Hartford Green as selected by Architect, EverGuard® TPO Flashing Membrane, by GAF.
- 3. Extruded aluminum termination bar with angled lip caulk receiver and lower leg

bulb stiffener. Pre-punched slotted holes at 6 inches on center or 8 inches on center. 3/4 inch x 10 feet with 0.090 inch cross section, Drill-Tec<sup>TM</sup> Termination Bar, by GAF.

- 4. A 6 inch wide, smooth type, heat-weldable polyester scrim reinforced thermoplastic polyolefin membrane strip. Designed for use as a cover strip over non-coated metal edges and flanges. Each full roll contains approximately 100 Lineal Ft. of material, 6 inches X 100 feet. EverGuard® TPO Heat-Weld Cover Tape, by GAF.
- 5. 0.045 inch reinforced TPO membrane with pressure sensitive adhesive, to be installed on horizontal surfaces using plates and fasteners as a base attachment in fully adhered systems. Size 6 inches x 100 feet, EverGuard® RTA (Roof Transition Anchor) Strip<sup>TM</sup>, by GAF.
- 6. 24 gauge steel with 0.025 inch thick TPO based film as required for fabrication into metal gravel stop and drip edge profiles, metal base and curb flashings, sealant pans, and scupper sleeves. Standard sheet size 4 feet x 10 feet, sheet weight 47 lbs. Custom sizes available, EverGuard® TPO Coated Metal, by GAF.

#### C. Wall & Curb Accessories:

- 1. 55 mil TPO membrane and 24 gauge coated metal prefabricated into standard and custom size thru wall scuppers. Available in two sizes: 4 inches x 6 inches x 12 inches (1 x w x d) with a 5.75 inches x 3.75 inches opening and 8 inches x 10 inches x 12 inches (1 x w x d) with a 9.75 inches x 7.75 inches opening, EverGuard® TPO Scupper, by GAF
- 2. 0.045 inch thick reinforced TPO membrane fabricated corners. Available in four standard sizes to flash curbs. Four corners are required to flash the curb, EverGuard® Corner Curb Wraps, by GAF.
- 3. 0.045 inch thick molded TPO membrane outside corners of base and curb flashing. Hot-air welds directly to EverGuard TPO membrane. Size 4 inches x 4 inches with 6 inch flange, EverGuard® TPO Universal Corners by GAF.
- 4. 0.055" molded TPO membrane inside corners of base and curb flashing. Hot-air welds directly to Everguard TPO membrane. Size 6 inches x 6 inches x 5.5 inches high EverGuard® TPO Preformed Corners by GAF.
- 5. 8 inch diameter, nominal 0.050 inch vacuum formed unreinforced TPO membrane for use in flashing outside corners of base and curb flashings, EverGuard® TPO Fluted Corner, by GAF.

#### D. Penetration Accessories:

- 1. 0.075 inch thick molded TPO membrane sized to accommodate most common pipe and conduits, (1 inch to 6 inch diameter pipes), including square tube. Hotair welded directly to EverGuard TPO membrane, supplied with stainless steel clamping rings, EverGuard® TPO Preformed Vent Boots by GAF.
- 2. 0.045 inch thick molded TPO membrane preformed boots are split to accommodate most common pipes and conduits and available in three standard sizes, EverGuard® TPO Split Pipe Boots, by GAF.
- 3. 0.045 inch thick molded TPO membrane preformed square boots are split to accommodate most common square penetrations and conduits and available in

three standard sizes, EverGuard® TPO Square Tube Wraps, by GAF.

- 4. 0.070 inch thick molded penetration pocket to provide structure and foundation for the application of a pourable sealant for a variety of roof penetrations, weldable and 9 inch x 6 inch x 4 inch (1 x w x h). EverGuard® TPO Pourable Sealer Pocket
- 5. 0.055 inch thick smooth type, unreinforced thermoplastic polyolefin membrane designed for use as a conforming membrane seal over T-joints in 60 and 80 mil membrane applications. EverGuard® TPO Drain by GAF.
- 6. Aluminum drain unit coated with a weldable TPO compound. TPO membrane can be heat welded directly to the drain body, resulting in a strong, secure installation. Each drain is fitted with a BlueSeal® mechanical drain seal for a secure, tight seal into the building drain system. Available in two sizes (3 inches and 4 inches), and custom sizes are available. Everguard® TPO Coated Metal Drain by GAF®

#### E. Roof Edge Accessories:

- 1. Three piece fascia system with continuous galvanized steel spring cant, exterior decorative snap-on fascia and available in 10 foot lengths in standard or custom colors, EverGuard<sup>®</sup> Snap-on Fascia by GAF<sup>®</sup>.
- 2. Two piece fascia system with rigid terminator base plate and exterior decorative fascia cover available in 10 foot lengths in standard or custom colors for use with 45 mil and 60 mil only, EverGuard® EZ Fascia by GAF®.
- 3. Two piece fascia system with rigid extruded terminator base plate and exterior decorative snap-on fascia cover available in 10 foot lengths in standard or custom colors, EverGuard® EZ Fascia EX by GAF®.

#### F. Field of Roof Accessories:

- 1. Pre-manufactured expansion joint covers used to bridge expansion joint openings in a roof structure. Fabricated to accommodate all roof to wall and roof to roof applications, made of 0.060 inch reinforced TPO membrane, available in 5 standard sizes for expansion joint openings up to 8 inches wide. EverGuard® TPO Expansion Joint Covers, by GAF.
- 2. 0.055 inch thick smooth type, unreinforced thermoplastic polyolefin membrane designed for use as a conforming membrane seal over T-joints in 60 and 80 mil membrane applications. EverGuard® T-Joint Patches, by GAF.
- 3. 1/8 inch thick extruded and embossed TPO roll 34 inches x 50 feet, heat welds directly to roofing membrane. Unique herringbone traction surface. Available in gray or yellow, EverGuard® TPO Walkway Rolls, GAF.

#### 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, as applicable.
- 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 (As indicated or required)

#### A. Plywood Deck:

- 1. Plywood sheathing must be exterior grade, minimum 4 ply, and not less than 15/32 inch thick.
- 2. Preservatives or fire retardants used to treat the decking must be compatible with roofing materials.
- 3. The deck must be installed over joists that are spaced 24 inches o.c. or less.
- 4. The deck must be installed so that all four sides of each panel bear on and are secured to joist and cross blocking. "H" clips are not acceptable.
- 5. Panels must be installed with a 1/8 inch to 1/4 inch gap between panels and must match vertically at joints to within 1/8 inch.
- 6. Decking should be kept dry and roofed promptly after installation.

#### B. Steel Deck:

- 1. Metal decks must be a minimum uncoated thickness of 22 gauge and shall have a G-90 galvanized finish on all panels. FM requirements may supersede those set forth in this section. Consult the current FM Guide for more information.
- 2. Decks must comply with the gauge and span requirements in the current Factory Mutual FM Approval Guide and be installed in accordance with Loss Prevention Data Sheet 1-28 or specific FM approval.
- 3. When re-roofing over steel decks, surface corrosion shall be removed, and repairs to severely corroded areas made. Loose or inadequately secured decking shall be fastened, and irreparable or otherwise defective decking shall be replaced.

#### 3.3 INSTALLATION. GENERAL

- A. Install GAF's EverGuard® TPO roofing system according to all current application requirements in addition to those listed in this Section.
- B. 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. All gaps in excess of 1/4 inch shall be filled with like insulation material.
- E. Wood nailers shall be 3-1/2 inches minimum width or 1 inch wider than metal flange. They shall be of equal thickness as the insulation with a minimum 1 inch 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. Roof tape, if required over insulation joints, shall be laid evenly, smoothly and embedded in a uniform coating of hot steep asphalt with 4 inch end laps. Care shall be taken to assure smooth application of tape, and full embedment of the tape in the asphalt.
- I. Do not install any more insulation than will be completely waterproofed each day.

#### 3.5 INSULATION - BASE LAYER

A. Loose apply the base layer of insulation for subsequent layers to be simultaneously attached. Minimal fastening should be performed to avoid movement of the boards.

#### 3.6 INSULATION - SECOND LAYER

- A. The insulation must be securely attached to the roof deck. Field: 16 fasteners per 4 feet x 8 feet board, Perimeter: 24 fasteners per 4 feet x 8 feet board & 32 fasteners per 4 feet x 8 feet board.
- B. Multiple layers of insulation of the same, non-tapered insulation material may be simultaneously mechanically fastened with approved fasteners and plates through the top layer of insulation to the structural deck.
- C. Use only fasteners with a minimum 3 inch stress plate when mechanically attaching insulation. Do not attach insulation with nails.

#### 3.7 INSULATION - SUBSEQUENT LAYERS

A. The substrate must be free of and debris, dust, dirt, oil, grease, and standing water before applying the adhesive.

- B. OlyBond 500 must be applied using the specially designed PaceCart dispenser. OlyBond 500 SpotShot shall be applied using one of the specially designed dual cartridge dispensers. OlyBond 500 Equipment Free Canister System dispenses with 25 feet hose and gun assembly included with product.
- C. Install insulation layers applied with bands of Oly Bond 500 spaced 12 inches O.C. Approximate coverage rate is 1/2 to 1 gallon per 100 square feet, depending on the substrate. Allow the foam to rise 3/4 inch to 1 inch. Walk 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 to eliminate continuous vertical gaps.
- D. Do not install any more insulation than will be completely waterproofed each day.

#### 3.8 MEMBRANE APPLICATION

#### A. Fully Adhered:

- 1. Place membrane so that wrinkles and buckles are not formed. Any wrinkles or buckles must 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 for side laps and 3 inches 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.
- 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. Apply OlyBond500<sup>®</sup> Equipment Free Canister System in a "spatter pattern" onto the substrate by dispensing the adhesive in a spray pattern similar to the action required when hand watering a flower bed, with a 50 percent substrate coverage rate
- 8. Prevent seam contamination by keeping the adhesive application a few inches 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.
- 10. 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 in width for automatic machine welding and a minimum 2" in width for hand welding.
- 13. All cut edges of reinforced membrane must be sealed with EverGuard<sup>®</sup> 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 five (5) degrees (1 inch

in 12 inches). Roofing membrane shall be secured to the structural deck with appropriate Drill-Tec<sup>®</sup> screws and plates spaced every 12 inches o.c. The screws and plates must be installed no less than 1/2 inch from the membrane edge. Alternatively, the roofing membrane may be turned up the vertical plane a minimum of 3 inches and secured with screws and termination bar Fastener spacing is the same as is used for in-lap attachment. The termination bar must be installed within 1-1/2 inches to 2 inches of the plane of the roof membrane, with a minimum of 1 inch 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 must 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).

#### 3.9 FLASHINGS

#### A. General:

- 1. All penetrations must be at least 24 inches 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.
- 3. 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 wide (hand welder) weld or minimum 1 1/2 inch automatic machine weld is required.
- 5. All cut edges of reinforced membrane must be sealed with EverGuard® TPO Cut Edge Sealant.
- 6. Consult the EverGuard® *Application and Specifications Manual* or GAF Contractor Services for more information on specific construction details, or those not addressed in this section.

#### B. Coated Metal Flashings:

- 1. Coated metal flashings shall be formed in accordance with current EverGuard construction details and SMACNA guidelines.
- 2. Coated metal sections used for roof edging, base flashing and coping shall be butted together with a ¼" gap to allow for expansion and contraction. Hot-air weld a 6 inch wide reinforced membrane flashing strip to both sides of the joint, with approximately 1 inch on either side of the joint left un-welded to allow for expansion and contraction. 2 inch wide aluminum tape can be installed over the joint as a bond-breaker, to prevent welding in this area.

- 3. Coated metal used for sealant pans, scupper inserts, corners of roof edging, base flashing and coping shall be overlapped or provided with separate metal pieces to create a continuous flange condition, and pop-riveted securely. Hot-air weld a 6 inch wide reinforced membrane flashing strip over all seams that will not be sealed during subsequent flashing installation.
- 4. Provide a 1/2 inch hem for all exposed metal edges to provide corrosion protection and edge reinforcement for improved durability.
- 5. Provide a 1/2 inch hem for all metal flange edges whenever possible to prevent wearing of the roofing and flashing membranes at the flange edge.
- 6. Coated metal flashings shall be nailed to treated wood nailers or otherwise mechanically attached to the roof deck, wall or curb substrates, in accordance with construction detail requirements.

#### C. Reinforced Membrane Flashings:

- 1. The thickness of the flashing membrane shall be the same as the thickness of the roofing membrane.
- 2. Membrane flashing may either be installed loose or fully adhered to the substrate surface in accordance with "Construction Detail Requirements".
- 3. Where flashings are to be fully adhered, apply bonding adhesive at a rate resulting in 60 square feet/gallon of finished roofing material for solvent-based bonding adhesives, and at a rate of 125 square feet/gallon 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 (Solvent Based) and 250 square feet per gallon (Water Based). A greater quantity of bonding adhesive may be required based upon the substrate surface condition. The bonding adhesive must be allowed to dry until tacky to the touch before flashing membrane application.
- 4. Apply the adhesive only when outside temperature is above 40 degrees F. Recommended minimum application temperature is 50 degrees F to allow for easier adhesive application.
- 5. The membrane flashing shall be carefully positioned prior to application to avoid wrinkles and buckles.

#### D. Un-reinforced Membrane Flashings:

- 1. Un-reinforced membrane is used to field-fabricate penetration or reinforcement flashings in locations where preformed corners and pipe boots cannot be properly installed.
- 2. Penetration flashings constructed of un-reinforced membrane are typically installed in two sections, a horizontal piece that extends onto the roofing membrane and a vertical piece that extends up the penetration. The two pieces are overlapped and hot-air welded together.
- 3. The un-reinforced membrane flashing shall be adhered to the penetration surface. Apply bonding adhesive at a rate resulting in 60 square feet/gallon of finished roofing material for solvent-based bonding adhesives, and at a rate of 125 square feet/gallon 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 (Solvent Based) and 250 square feet per gallon (Water Based). A greater quantity of bonding adhesive may be required based upon the substrate surface condition. The bonding adhesive must be allowed to dry until tacky to the touch before flashing membrane application.

#### E. 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 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, 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 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 inches 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.

#### F. Parapet and Building Walls:

- 1. Flash walls with EverGuard TPO membrane adhered to the substrate with bonding adhesive, loose applied (Less than 24 inches in height) or with coated metal flashing nailed 4 inches 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 on center; termination bars that are counter flashed shall be fastened 12 inches 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:

Fully / Self Adhered Systems

12 inches 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 Flexseal® roofing cement or Flexseal® caulk grade.

#### G. 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 in height) or with coated metal flashing nailed 4 inches 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 o.c.; termination bars that are counter flashed shall be fastened 12 inches 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:

Fully / Self Adhered Systems 12 inches 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 Flexseal® roofing cement or Flexseal® caulk grade.

#### H. Roof Drains:

- 1. Roof drains must be fitted with compression type clamping rings and strainer baskets. Original-type cast iron and aluminum drains, as well as retrofit-type cast iron, aluminum or molded plastic drains are acceptable.
- 2. Roof drains must be provided with a minimum 36 inch x 36 inch sump. Slope of tapered insulation within the sump shall not exceed 4 inch in 12 inches.
- 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 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 must 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 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 larger than the sump area must be installed. The roof membrane shall be mechanically attached 12 inches 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.

#### 3.10 TRAFFIC PROTECTION

- A. Install walkway 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 must be spaced 2 inches apart to allow for drainage between the pads.

- C. Heat-weld walkway rolls to the roof membrane surface continuously around the perimeter of the roll.
- D. Walkway rolls may be installed with TPO primer and 3 inch seam tape.
  - 1. Roll or brush the TPO primer on the back of the TPO pad along the edges and down the middle length of the pad.
  - 2. Clean and prime the roof membrane where the pad will be installed.
  - 3. Install tape to the back of the cleaned area of the pad and roll in with a silicone hand roller.
  - 4. Remove release paper and install the tapes pads directly onto the roof membrane. Roll pads to secure in place

#### 3.11 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.

#### 3.12 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 must 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.

#### END OF SECTION



STRIP EXISTING ROOF FINISH DOWN TO INSULATION. INSPECT EXISTING INSULATION AND REPLACE AS NEEDED. INSTALL NEW TPO ROOF SYSTEM INCLUDING NEW FLASHING AROUND SCUPPERS, ROOF DRAINS AND PARAPET FLASHING, PROVIDE NEW ROOF DRAIN FLANGES AND COVERS IF NEEDED. RE: SPECS.



STRIP EXISTING ROOF FINISH DOWN TO INSULATION. INSPECT EXISTING INSULATION AND REPLACE AS NEEDED. INSTALL NEW TPO ROOF SYSTEM INCLUDING NEW FLASHING AROUND MECHANICAL CURBS, VENTS AND PARAPETS. RE: SPECS.



\_ REPLACE ALL EXISTING
GUTTERS ON WEST SIDE OF ROOF 'B'



EXISTING SCUPPER ON ROOF 'B'

SCALE: N.T.S.

OVERVIEW OF ROOF 'B'

SCALE: N.T.S.

STRIP EXISTING ROOF FINISH DOWN TO INSULATION. INSPECT

AROUND MECHANICAL CURBS AND

PARAPETS. RE—INSTALL CAGES AROUND LOWER ROOF UNITS. RE: SPECS.

EXISTING INSULATION AND REPLACE AS NEEDED. INSTALL NEW TPO ROOF SYSTEM INCLUDING NEW FLASHING

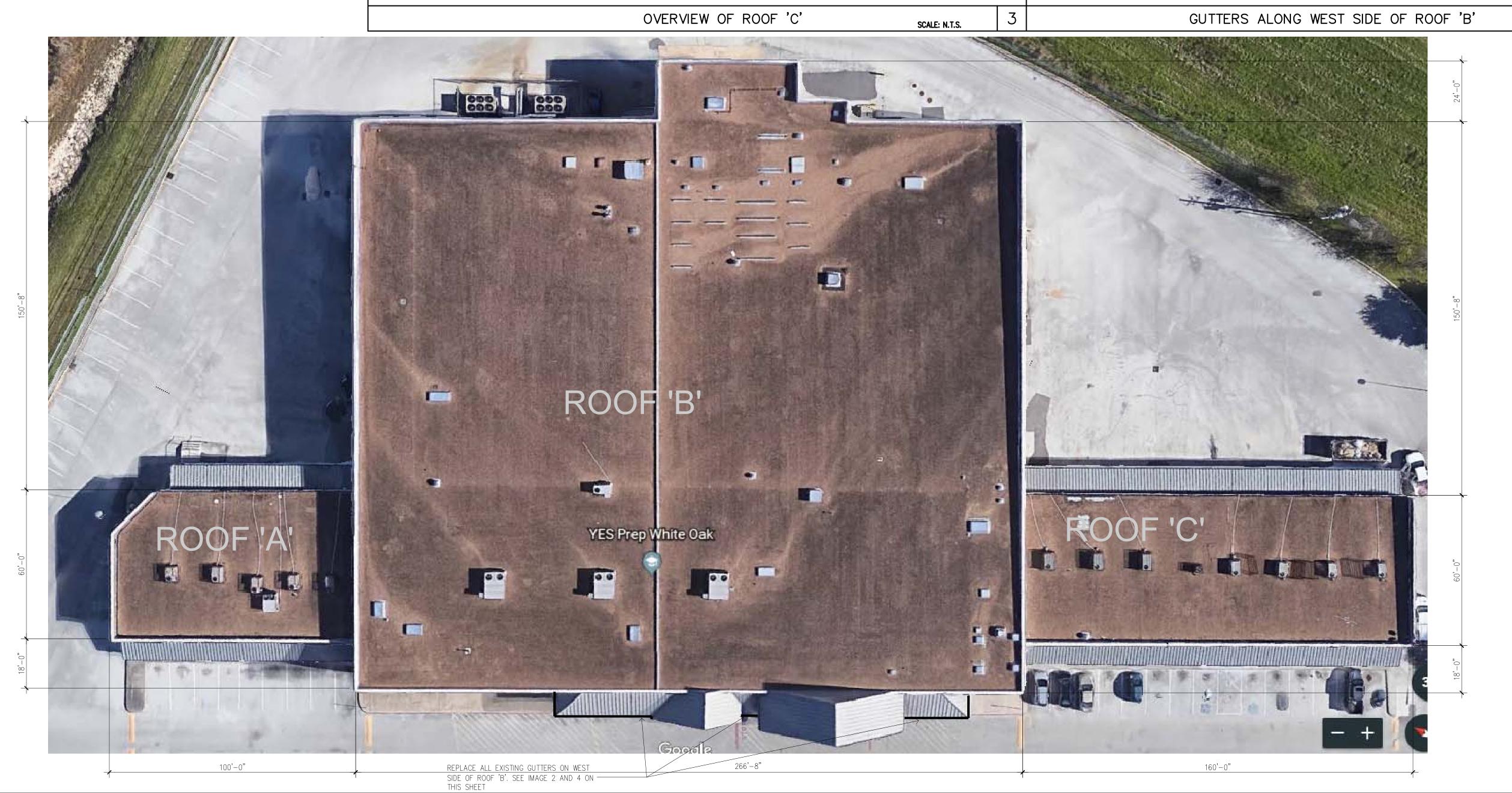
FRONT ELEVATION SHOWING WEST SIDE OF ROOF 'B'

REPLACE ALL EXISTING
GUTTERS ON WEST SIDE OF
ROOF 'B'

SCALE: N.T.S.

Date

Description



YES PREP PUBLIC SCHOOLS

WHITE OAK CAMPUS

5620 WEST TIDWELL HOUSTON, TX 77091

# ROOF REPAIRS / REPLACEMENT

Project Number	XXXXX
Date	OCT.11,2018
Drawn By	
Checked By	
A100	

ROOF PLAN SCALE: N.T.S.