PROJECT MANUAL

For the following work:

Skylight & Roof Repairs at:

Atlantic City Convention Center

One Convention Boulevard Atlantic City, New Jersey 08401

Owner's Representative:

OVG360 Venue Management

2301 Boardwalk Atlantic City, New Jersey 08401

Consultant

Amtech Solutions, Inc.

2 White Horse Pike, Suite 1D Haddon Heights, New Jersey 08035 Phone: 856-888-3712

Amtech Solutions, Inc. Project No. NJE.2022.001013

Skylight & Roof Repairs at: Atlantic City Convention Center

One Convention Boulevard Atlantic City, New Jersey 08401

Amtech Solutions, Inc. Project No. NJE.2022.001013

Issued for Bids – July 21, 2023

SECTION		PAGE NO.
GENERAL DOCU	MENTS	
	Solicitation of Bids and Related Exhibits	1 to 92
	Proposal Form - Supplemental	1 to 3
	Special Conditions	SP 1 to 5
	Contractor's Guaranty	CG 1 to 3
	Enumeration of Drawings	ED 1
DIVISION ONE - 0	GENERAL REQUIREMENTS	
SECTION 010100	Summary of Work	010100-1 to 2
SECTION 010270	Applications for Payment	010270-1 to 2
SECTION 010280	Schedule of Values	010280-1 to 2
SECTION 010310	Unit Prices	010310-1
SECTION 012000	Project Meetings	012000-1 to 3
SECTION 013400	Submittals	013400-1 to 2
SECTION 014000	Quality Control	014000-1 to 3
SECTION 015010	Project Specific Safety Control	015010-1 to 5
	Contractor Health, Safety & Environmental Rules	TBD
SECTION 015050	Temporary Facilities	015050-1 to 3
DIVISION TWO -	SITE CONSTRUCTION	
SECTION 020700	Selective Demolition	020700-1 to 3
DIVISION THREE	E – CONCRETE	
SECTION 035200	Lightweight Insulating Concrete Repairs	035200-1 to 4
DIVISION SIX – W	VOOD AND PLASTICS	
SECTION 061000	Rough Carpentry	061000-1 to 4
DIVISION SEVEN	– THERMAL AND MOISTURE PROTECTIO	<u>N</u>
SECTION 075400	PVC Membrane Roofing	075400-1 to 12
SECTION 075600	Fluid-Applied Skylight Waterproofing	075600-1 to 11
SECTION 076200	Flashing and Sheet Metal	076200-1 to 5
SECTION 077120	Prefabricated Metal Copings	077120-1 to 3
DIVISION FIFTEI	EN - MECHANICAL	
SECTION 154200	Roof Drains	154200-1

END OF SECTION

INDEX Page:00010-1

OAKVIEW GROUP

SOLICITATION OF BIDS ATLANTIC CITY CONVENTION CENTER

For:	
	SKYLIGHT & ROOF REPAIRS
	at Atlantic City Convention Center

Event	Date	Time
Bidder's Question Due Date (Refer to BID Section 1.5 for more information.)	WEDNESDAY AUGUST 16, 2023	12:00 PM 1200 HOURS
Response To Questions	WEDNESDAY AUGUST 30, 2023	5:00 PM 1700 HOURS
Pre-bid Conference (Refer to BID Section 1.8 for more information.) ONE CONVENTION BOULEVARD, ATLANTIC CITY, NJ, 08401. EXECUTIVE CONFERENCE ROOM	WEDNESDAY AUGUST 9, 2023	10:00 AM 1000 HOURS
Site Visit (Refer to BID Section 1.9 for more information.) ONE CONVENTION BOULEVARD, ATLANTIC CITY, NJ, 08401. EXECUTIVE CONFERENCE ROOM	WEDNESDAY AUGUST 9, 2023	10:00 AM 1000 HOURS
Bid Submission Due Date (Refer to BID Section 1.3 for more information.) 2301 BOARDWALK, ATLANTIC CITY NJ 08401 CONFERENCE ROOM 150	WEDNESDAY SEPTEMBER 13, 2023	11:00 AM 1100 HOURS

Dates are subject to change. All changes will be reflected in Addenda to the bid posted on the Boardwalk Hall/Convention Center website at http://www.boardwalkhall.com/business-opportunities/rfps

<u>Issued By</u>

OVG360, as operator of Jim Whelan Boardwalk Hall and the Atlantic City Convention Center, as managing agent for Casino Reinvestment Development Authority 2301 Boardwalk

Atlantic city, New Jersey 08401

Phone: 609-348-7026

Date Issued: 7/28/23.

NOTICE TO BIDDERS

PUBLIC NOTICE IS HEREBY GIVEN that <u>sealed</u> bids will be received by OAKVIEW VENUE MANAGEMENT ("OVG360'), as operator of Jim Whelan Boardwalk Hall ("Boardwalk Hall") and the Atlantic City Convention Center (the "Convention Center"), as agent on behalf of the Casino Reinvestment Development Authority ("CRDA") for

SKYLIGHT & ROOF REPAIRS at Atlantic City Convention Center

Bid forms, contracts, drawings and specifications can be obtained from the OVG360 website http://www.boardwalkhall.com/business-opportunities/rfps

Sealed bids must be mailed, presented or delivered to OVG360, 2301 Boardwalk, Atlantic City, New Jersey 08401, Attn. Clark Hughes, Capital Projects/Procurement Manager. OVG360 accepts no responsibility for the timeliness of any bidder's delivery, mail, delivery or courier service.

Sealed bids shall be submitted in the manner prescribed in the bid specifications. The sealed envelopes must be labeled "SKYLIGHT & ROOF REPAIRS at ATLANTIC CITY CONVENTION CENTER" and contain the bidder's name and address and the bid opening date.

Bids will be received, opened and read aloud in public at OVG360 offices at 2301 Boardwalk, Atlantic City, New Jersey on Wednesday September 13, 2023 at 11:00 a.m. eastern prevailing time.

Bidders are required to comply with the requirements of <u>N.J.A.C.</u> 17:27 (Affirmative Action), Americans with Disabilities Act of 1990 (42 U.S.C. 12101, et.seq.), <u>N.J.S.A.</u> 52:32-44 (Business Registration), and <u>N.J.S.A.</u> 10:5-1 (Law Against Discrimination).

Dated: (7/28/23)

1.0 <u>INFORMATION FOR BIDDERS</u>

1.1 Background

The Atlantic City Convention Center ("Convention Center"), located at One Convention Boulevard, Atlantic City, NJ, has 486,000 square feet of continuous exhibit space. The exhibit hall is divisible into five separate halls, ranging in size from 29,400 square feet to 199,500 square feet.

The Convention Center's 45 meeting rooms on the third and fourth level of the Convention Center surround the expansive atrium lobby and total 109,100 square feet. Room dimensions range from 11,800 square feet to 672 square feet. The rooms' amenities include soundproof panels, assisted lighting systems and voice, video and data communications.

The Convention Center's ample pre-function space, more than 32,000 square feet, is well suited to registration, retail or dining needs. The building is served by 29 covered loading docks, four drive in roll-up doors, mechanical levelators and 1400 indoor parking spaces. The Convention Center is connected to the Atlantic City Rail Terminal that runs the Atlantic City line from Philadelphia to Atlantic City. A pedestrian bridge links the Convention Center to the adjoining Sheraton Hotel. Located within a few hours' drive of nearly one-third of the nation's population and 20 percent of the country's business addresses, the Convention Center is easily accessible for convention, tradeshow and meeting attendees.

Jim Whelan Boardwalk Hall ("Boardwalk Hall"), located on the boardwalk between Mississippi and Georgia Avenues, Atlantic City, NJ, is a major icon for Atlantic City. Boardwalk Hall has a maximum capacity of approximately 14,000 in the arena and the ballroom which seats up to 3,500. Boardwalk Hall hosts a wide range of events from concerts to family shows like Sesame Street, to sporting events and other entertainment.

The facilities have established as their primary goal the highest level of service to their customers and clients. All operating entities in each facility must adhere to the following objectives:

- a) Offer services according to the highest industry standards and in the best interest of each facility, the community and the State of New Jersey
- b) Operate in a manner consistent with the public interest, providing each facility with full accountability for, and accurate records of all transactions conducted within each venue.
- c) Provide the highest level of safety, service and cooperation to clients and attendees of the facilities.
- d) Hold and maintain in good standing all required applicable local, state and federal licenses and permits for the services required herein. Failure to maintain said licenses and permits may be cause for termination of contract.

1.2 Purpose and Intent

OVG360 is releasing this Bid for General Construction (the "Solicitation") to solicit bids to engage general construction services for "SKYLIGHT & ROOF REPAIRS at ATLANTIC CITY CONVENTION CENTER" as more fully set forth in the contract awarded from this Solicitation.

OVG360 intends to award a contract to the lowest responsible bidder whose bid conforms to these specifications. OVG360, however, reserves the right to separately procure individual requirements that are the subject of the contract during the term when deemed by OVG360 to be in OVG360's best interest. OVG360 reserves the right

to reject any and all bids when it is determined by OVG360 to be in its best interest. OVG360 further reserves the right to waive minor irregularities in bids submitted in response to this Solicitation.

All capitalized terms not otherwise defined in this Solicitation shall have the meaning ascribed to them in the contract awarded through this Solicitation.

IN ADDITION TO MEETING ALL OTHER REQUIREMENTS OF THIS SOLICITATION, ALL BIDDERS MUST MEET THE MINIMUM REQUIREMENTS OUTLINED IN SECTION 1.18 HEREIN.

1.3 Bid Submission

In order to be considered, a bid must be delivered, in a sealed envelope, to the following:

CLARK HUGHES
CAPITAL PROJECTS/PROCUREMENT MANAGER
OVG360
2301 BOARDWALK
ATLANTIC CITY, NEW JERSEY 08401

by the date and time located on the cover page. Bidders are cautioned to allow adequate delivery time to ensure timely <u>delivery</u> of bids. <u>THE EXTERIOR OF ALL BID PACKAGES ARE TO BE LABELED "BID FOR SKYLIGHT & ROOF REPAIRS at ATLANTIC CITY CONVENTION CENTER".</u>

Bids submitted by facsimile or electronically will not be considered.

1.4 Number of Bid Copies

The bidder must submit **two (2) complete ORIGINAL bids**, clearly marked as the "ORIGINAL" bids. The bidder should submit **three (3) full, complete, and exact copies** of the original bid.

1.5 Questions and Answers

Oakview Venue Management will accept questions and inquiries pertaining to this bid from all potential bidders electronically. Questions shall be directed to the staff person identified in Section 1.3 above, at the following email address:

ACRFP-QUESTIONS@GLOBAL-SPECTRUM.COM gregflorio@amtechsls.com

The cut-off date for electronic questions will be as indicated on the cover page.

The subject line of all emailed questions should say "BID FOR SKYLIGHT & ROOF REPAIRS at ATLANTIC CITY CONVENTION CENTER - Bid Inquiry".

Any requested exceptions to the Contract, appended as Exhibit J, shall be raised by the bidder as a question during the Question and Answers period through the same procedure set forth in this provision of the Solicitation. Any amendment to the Contract shall be determined by Oakview Venue Management, in its sole and absolute discretion, with such determination to be set forth in the Question and Answer addendum

issued, if any, after the Question and Answer deadline. OVG360 reserves the right to reject any and all proposed amendments to the Contract.

Bidders are not to contact Oakview Venue Management directly, in person or by telephone, concerning this bid. All questions and answers will be posted on the Boardwalk Hall/Convention Center's website at www.boardwalkhall.com/business-opportunities/rfps, as soon as practicable, after the question and answer deadline.

1.6 Addenda: Revisions to this Bid Solicitation

In the event that it becomes necessary to clarify or revise this Solicitation, such clarification or revision will be by addendum. Any addendum to this bid will become part of this bid and part of any contract award as a result of this bid. ALL BID ADDENDA WILL BE POSTED ON THE BOARDWALK HALL/CONVENTION CENTER WEBSITE at www.boardwalkhall.com/business-opportunities/rfps.

It is the sole responsibility of the bidder to be knowledgeable of all addenda related to this bid. There are no designated dates for release of addenda. Therefore interested bidders should check the Boardwalk Hall/Convention Center website on a daily basis from the time of bid issuance through bid opening.

1.7 Bidder Responsibility

The bidder assumes the sole responsibility for the complete effort required in submitting a bid in response to this Solicitation. No special consideration will be given after bids are opened because of a bidder's failure to be knowledgeable as to all of the requirements of this bid. OVG360 assumes no responsibility and bears no liability for cost incurred by a bidder in the preparation and submittal of a bid in response to this Solicitation.

The bidder will be required to be knowledgeable with respect to the construction industry and existing conditions at the project location, and to take same into account when submitting its bid.

1.8 Pre-Bid Conference

A Pre-bid conference for discussion of the project in general will be held at the date and time indicated on the cover page, in the offices of Spectra Venue Management at the Atlantic City Convention Center, One Convention Blvd., Atlantic City, New Jersey. At that time Global Spectrum and any consultants will provide prospective bidders with an overview of the project.

1.9 Site Visit

A site visit will be conducted on the date indicated on the cover page, immediately following the Pre-bid Conference. Contractors will be given access to the project area immediately following the pre-bid meeting. Bidders are urged to inspect the site where construction services are to be performed and to satisfy themselves regarding all general and local conditions that may affect the cost of contract performance, to the extent that the information is reasonably obtainable. In no event shall failure to inspect the site constitute grounds for a claim after contract award.

1.10 Bid Opening

On the date and time bids are due under this Solicitation, the names of the bidders submitting bids and the amount bid will be publicly announced. The bid opening will take place at the offices of Oakview Venue Management located at 2301 Boardwalk, Atlantic City, New Jersey 08401.

1.11 Price Alterations

Bid prices must be typed or written in blue ink. Any price change (including "white-outs") must be initialed. Failure to initial price changes shall preclude a contract award from being made to the bidder.

1.12 Bid Errors

A bidder may withdraw its bid as follows:

A bidder may request that its bid be withdrawn prior to bid opening. Such request must be made, in writing, to the staff person identified in Section 1.3 above. If the request is granted, the bidder may submit a revised bid as long as the bid is received prior to the announced date and time for bid opening and at the place specified.

If, after bid opening but before contract award, a bidder discovers an error in its bid, the bidder may make written request to the staff person identified in Section 1.3 above for authorization to withdraw its bid from consideration for award. Evidence of the bidder's good faith in making this request shall be used in making the determination. Some of the factors that may be considered are that the mistake is so significant that to enforce the contract resulting from the bid would be unconscionable; that the mistake relates to a material feature of the contract; that the mistake occurred notwithstanding the bidder's exercise of reasonable care; and that Oakview Venue Management will not be significantly prejudiced by granting the withdrawal of the bid.

All bid withdrawal requests must include the bid title and the final bid opening date and sent to the following address:

OVG360 2301 Boardwalk Atlantic City, New Jersey 08401 Attn: Staff person identified in Section 1.3 above BID WITHDRAWAL REOUEST

If during a bid evaluation process, an obvious pricing error made by a potential contract awardee is found, OVG360 shall issue written notice to the bidder. The bidder will have five (5) days after receipt of the notice to confirm its pricing. If the vendor fails to respond, its bid shall be considered withdrawn, and no further consideration shall be given it.

1.13 Joint Ventures

If a joint venture is submitting a bid, the agreement between the parties relating to such joint venture should be submitted with the joint venture's bid. Authorized signatories from each party comprising the joint venture must sign the bid. A separate Disclosure of Investigations and Actions Involving Bidder, Affirmative Action Employee Information Report, Disclosure of Political Contributions (c.51) and Business Registration or Interim Registration must be supplied for each party to a joint venture.

1.14 Contents of Bid - Open Public Records Act

Subsequent to bid opening, all information submitted by bidders in response to the bid solicitation is considered public information, except as may be exempted from public disclosure by the Open Public Records Act, <u>N.J.S.A.</u> 47:1A-1 <u>et seq.</u>, and the common law.

A bidder may designate specific information as not subject to disclosure when the bidder has a good faith legal/factual basis for such assertion. CRDA reserves the right to make the determination and will advise the bidder accordingly. The location in the bid of any such designation should be clearly stated in a cover letter. CRDA WILL NOT HONOR ANY ATTEMPT BY A BIDDER EITHER TO DESIGNATE ITS ENTIRE BID AS PROPRIETARY, CONFIDENTIAL AND/OR TO CLAIM COPYRIGHT PROTECTION FOR ITS ENTIRE BID.

1.15 Bid Bond

Any entity submitting a bid in response to this Solicitation must submit a guarantee payable to OVG360 so that if the contract is awarded to the bidder, the bidder will enter into a contract there for and will furnish any performance bond or other security required. The guarantee shall be in the amount of 10% of the bid amount, but not in excess of \$20,000. The guarantee can be submitted, at the option of the bidder, by certified check, cashier check or bid bond.

The Bid Bond must contain an Affidavit of Surety's Attorney-In-Fact (Power of Attorney). The Attorney-In-Fact must be an authorized agent of the surety to act for the surety and be authorized to bind the surety to pay the bid bond in a penal sum of 10% of the bid amount, not to exceed \$20,000.

Failure to provide a bid bond or a valid power of attorney, as specified, with the bid will result in rejection of the bid for noncompliance.

1.16 Payment and Performance Bond

The bidder shall submit with its bid a Consent of Surety or Surety Agreement, from a surety or sureties licensed to do business in the State of New Jersey and acceptable to Oakview Venue Management, stating that it will provide an **unconditional bond in an amount equal to 100% of the contract price (bid amount)**. Failure to provide the Consent of Surety or Surety Agreement will result in rejection of the bid as non-responsive.

The Consent of Surety or Surety Agreement shall be obtained for a bond for the faithful performance of all provisions of the specifications relating to the performance of the contract. The surety corporation bonds shall be furnished by only those sureties listed in the US Treasury Department Circular 570 and authorized to do business in the State of New Jersey. The bonds shall be accompanied by a certification as to authorization of the attorney-in-fact to commit the surety company, a Surety Disclosure Statement and Certification in compliance with N.J.S.A. 2A:44-143d and a true and correct statement of the financial condition of said surety company.

Failure to provide a Consent of Surety or Surety Agreement, a Surety Disclosure Statement and Certification and a valid power of attorney, as specified, with the bid will result in rejection of the bid for noncompliance.

1.17 Standards for Surety Bond Companies

The following requirements must be met for surety companies:

All surety companies must have the minimum capital and surplus or net cash assets required, pursuant to N.J.S.A. 17:17-6 or N.J.S.A. 17:17-7, whichever is applicable, at the time the invitation to bid is issued. A Financial Statement must be submitted.

- All surety companies must complete a Surety Disclosure Statement and Certification for all payment and performance bonds, regardless of project cost, pursuant to N.J.S.A. 2A:44-143d.
- All surety companies must be authorized to transact such business in New Jersey, pursuant to N.J.S.A. 17-17-10 or 17:32-1 et seq., as applicable.

THE DOCUMENTS REQUIRED TO BE SUBMITTED UNDER THIS PROVISION SHALL BE

THE BOCCIMENTS REQUIRED T	O DE SODMITTED	ONDER THIS TRO	VIDION DIMED DE
PLACED IN A SEPARATE SEALED	ENVELOPE AND A	TTACHED TO THE S	SEALED ENVELOPE
CONTAINING THE BID SUBMISSIO	ON.		

Minimum Requirements

1.18

a)	Construction experience involving three (3) related construction projects equal to or greater than the amount bid.
	Project Name & Location:
	Contract Value for this bidder: \$
	Project Name & Location:
	Contract Value for this bidder: \$
	Project Name & Location:
	Contract Value for this bidder: \$
b)	Minimum of ten (10) years related construction experience.
	Bidder should provide a company resume to document construction experience.
c)	Successful completion of at least three (3) substantially similar construction projects for public or
	private owners, completed in the past five (5) years.
	The Bidder must provide specific information that demonstrates the similarity of the work, and allows
	for evaluation of the submittal.
	Project Name & Location:
	Bidders contract value:
	Bidders scope of work on project:
	Project duration:
	Project completed on:
	Project Reference contact:
	Project Name & Location:
	Bidders contract value:
	Bidders scope of work on project:
	Project duration:
	Project completed on:
	Project Reference contact:
	Project Name & Location:
	Bidders contract value:
	Bidders scope of work on project:
	Project duration:
	Project completed on:
	Project Reference contact:
	-

d) The bidder must participate in an apprenticeship program, registered and approved by the United States Department of Labor, for each separate trade or classification for which it employs craft employees. All bidders and subcontractors must continue to participate in such apprenticeship programs for the duration of the project. In addition, the bidder will be required to show that such apprenticeship programs graduated apprentices to journeyperson status for three of the past five years.

1.19 Balanced Bid

Each pay item should reflect the actual cost, which the bidder anticipates incurring for the performance of that particular item, together with a proportional share of the bidder's anticipated profit, overhead and costs to perform work for which no Pay Item is provided. In no event will the Project Owner consider any claim for additional compensation arising from the bid on an item or group of items, inaccurately reflecting a disproportionate share of the bidder's anticipated profit, overhead and other costs.

2.0 SCOPE OF WORK

Briefly, the work on this project is summarized and consists of the following:

Removal and proper disposal of existing roof system assembly and installation of new adhered PVC roof system assembly, including all membrane & sheet metal components and related work as required and as indicated on Contract Documents. Preparation and installation of new elastomeric Skylight coating system assembly as required and as indicated on Contract Documents.

3.0 PROPOSAL PREPARATION AND SUBMISSION

3.1 Contract Schedule

OVG360 requires that all construction work undertaken pursuant to a contract award as the result of this bid shall be completed within 20 work weeks (150 calendar days) pending lead time of all critical material from the date of commencement of work as set forth in the Notice to Proceed. Contractor shall provide suitable labor force required to comply with specified durations, including utilizing multiple crew, as required.

3.2 REQUIRED BID SUBMITTALS AND COMPLIANCE INFORMATION

A) Signatory page

The bidder must complete and submit the signatory page attached as **Exhibit A**, which must be signed by an authorized representative of the bidder, evidencing the bidder's concurrence with all of the terms and conditions of this bid. If the bidder is a limited partnership, the signatory page must be signed by a general partner. If the bidder is a joint venture, the signatory page must be signed by a principal of each party to the joint venture. **Failure to comply will result in rejection of the bid.**

B) Disclosure of Investigations/Actions Involving Bidder

The bidder shall provide a detailed description of any investigation, litigation, including administrative complaints or other administrative proceedings, involving any public sector clients during the past five (5) years including the nature and status of the investigation, and, for any litigation, the caption of the action, a brief description of the action, the date of inception, current status, and, if applicable, disposition. The bidder shall use the Disclosure of Investigations and Actions Involving Bidder form attached as **Exhibit B**.

C) Business registration certificate from the Division of Revenue

As a condition of entering into a contract, pursuant to an amendment to N.J.S.A. 52:32-44, State and local entities (including the CRDA) are prohibited from entering into a contract with an entity unless the bidder and each subcontractor named in the bid has a valid Business Registration Certificate on file with the Division of Revenue.

The contractor and any subcontractor providing goods or performing services under the contract, and each of their affiliates, shall, during the term of the contract, collect and remit to the Director of the Division of Taxation in the Department of Treasury the use tax due pursuant to the "Sales and Use Tax Act, P.L. 1966, c. 30 (N.J.S.A. 54:32B-1 et seq) on all their sales of tangible personal property delivered into the State.

The bidder must be properly registered to do business with the State of New Jersey as of the date of contract award, and <u>provide</u> a copy of the bidder's NJ Business Registration Certificate with its bid. If not already registered with the New Jersey Division of Revenue, registration can be completed online at the Division of Revenue website: http://www.state.nj.us/treasury/revenue/index.html.

D) New Jersey Prevailing Wage Act, N.J.S.A. 34:11-56.25 et. seq. and Public Works Contractor Registration Act Certificate, N.J.S.A. 34:11-56.48 et seq.

The New Jersey Prevailing Wage Act requires the payment of minimum rates of pay to laborers, craftsman and apprentices employed on public works projects. Covered workers must receive the appropriate craft prevailing wage rate as determined by the Commissioner of Labor and Workforce Development. Prevailing wage rates are wage rates established for a particular craft or trade in the locality in which the public work is performed. In New Jersey, these rates vary by county and by the type of work performed.

THIS CONTRACT IS SUBJECT TO THE NEW JERSEY PREVAILING WAGE ACT. Anyone interested in bidding or engaging in any contract resulting from this bid must register with the Department of Labor and Workforce Development, Division of Wage and Hour Compliance as required by the Public Works Contractor Registration Act, N.J.S.A. 34:11-56.48 et seq. The New Jersey Department of Labor and Workforce Development makes official wage determination and debarment list information available on its website at www.nj.gov/labor/lsse/lspubcon.html. By accessing this website official New Jersey Prevailing Wage Rate Determinations may be obtained.

The bidder and subcontractors must be properly registered with the Department of Labor and Workforce Development under the Public Works Contractor Registration Act, N.J.S.A. 34:11-56.48 et seq., as of the bid opening date, and <u>must submit</u> a copy of the bidder's Public Works Contractor Registration Act certificate with its bid.

E) Notice to all Contracts Set-Off for State Tax Notice

Pursuant to L. 1995, c. 159, effective January 1, 1996, and notwithstanding any provision of the law to the contrary, whenever any taxpayer, partnership or S corporation under contract to provide goods or services or construction projects to the State of New Jersey or its agencies or instrumentalities, including the legislative and judicial branches of State government, is entitled to payment for those goods or services at the same time a taxpayer, partner or shareholder of that entity is indebted for any State tax, the Director or the Division of Taxation shall seek to set off that taxpayer's or shareholder's share of the payment die the taxpayer, partnership, or S corporation. The amount set off shall not allow for the deduction of any expenses or other deductions which might be attributable to the taxpayer, partner or shareholder subject to set-off under this act.

The Director of the Division of Taxation shall give notice of the set-off to the taxpayer and provide an opportunity for a hearing within thirty (30) days of such notice under the procedures for protests established under R.S. 54:49-18. No requests for conference, protest, or subsequent appeal to the Tax Court from any protest under this section shall stay the collection of the indebtedness. Interest that may be payable by the State, pursuant to P.L. 1987, c. 184 (c. 52-32-32 et seq.), to the taxpayer shall be stayed.

F) Notice of Intent to Subcontract

The bidder shall complete the attached Notice of Intent to Subcontract Form (**Exhibit C**) to advise Oakview Venue Management as to whether or not a subcontractor will be utilized to provide any goods or services under the contract.

G) Subcontractor Utilization Form

If the bidder intends to utilize subcontractor(s), the Subcontractor Utilization Form (**Exhibit D**) must be completed and submitted with the bid. The bidder must identify all subcontractors that the bidder intends to utilize to perform work required under this contract.

H) Affirmative Action

Each contractor shall submit to Oakview Venue Management, <u>after notification of award</u>, one of the following:

- Appropriate evidence that the contractor is operating under an existing federally approved or sanctioned affirmative action program.
- A certificate of employee information report approval, issued in accordance with <u>N.J.A.C.</u> 17:27-4
- o An employee information report (Form AA201), **Exhibit E**.

I) Requirements of N.J.S.A. 19:44A-20.13-25 (Formerly Executive Order 134)

The bidder is required to complete the attached Political Contributions Disclosure form. The requirement is a precondition to entering into a contract with Oakview Venue Management. The Political Contributions Disclosure form is attached as **Exhibit F**.

(i) Additional Disclosure Requirement of P.L. 2005, c. 271

Contractor is required to file an annual disclosure statement on political contributions with the New Jersey Election Law Enforcement Commission (ELEC), pursuant to P.L. 2005, c. 271, section 3 if the contractor receives contracts in excess of \$50,000 from a public entity in a calendar year. It is the contractor's responsibility to determine if filing is necessary. Failure to so file can result in imposition of financial penalties by ELEC. Additional information about this requirement is available from ELEC at 888-313-3532 or at www.elec.state.nj.us.

J) Insurance Certificates

The contractor shall provide Oakview Venue Management with documentation, including certificates and declaration pages, evidencing its current policies of insurance, and if the bidder is awarded hereunder, such policies of insurance shall name OVG360 as an "Additional Insured".

K) Schedule of Estimated Quantities, Unit Prices, and Lump Sum Items

The bidder must submit its pricing using the format set forth in the OVG360 supplied Schedule of Estimated Quantities, Unit Prices, and Lump Sum Items attached as **Exhibit G** to this Solicitation.

Failure to submit all information required in the Fee Schedule will result in the bid being considered non-responsive. Each bidder is required to hold its prices firm through issuance of contract.

L) Affidavit of Non-Collusion, Exhibit H.

The bidder must submit the affidavit attached as **Exhibit H** with its bid.

M) Compliance with Executive Order 151, dated August 28, 2009

<u>Small Business Enterprise Requirement</u>: It is the policy of the CRDA and as required by Executive Order 151 ("EO 151") that small businesses (each a "small business enterprise" or "SBE"), as determined and defined by the State of New Jersey, Division of Minority and Women Business Development ("Division") and the New Jersey Department of the Treasury ("Treasury") in N.J.A.C. 17:14 et seq. or other application regulation, should have the opportunity to participate in CRDA contracts.

To the extent the Contractor engages subcontractors or sub-consultants to perform services for Spectra pursuant to this Contract, the firm must demonstrate to the OVG360's satisfaction that a good faith effort was made to utilize subcontractors and sub-consultants who are registered with the Division as SBEs. Be advised that the CRDA shall be evaluated quarterly by the Division, based on its attainment of the Participation Goals set forth in the State of New Jersey Construction Services Disparity Study (October, 2005) and the State of New Jersey Disparity Study of Procurement in Professional Services, Other Services, and Goods and Commodities (June, 2005).

Evidence of a "good faith effort" includes, but is not limited to:

- 1. The Firm shall request listings of SBEs from the Division (609) 292-2146 and attempt to contact same.
- 2. The Firm shall keep specific records of its efforts, including records of all requests made to the Division, the names of SBEs contacted, and the means and results of such contacts, including without limitation receipts from certified mail and telephone records.

- 3. The Firm shall actively solicit and shall provide Oakview Venue Management with proof of solicitations of SBEs for the provision of services, including advertisements in general circulation media, professional service publications and small business, minority-owned business or women-owned business focus media.
- 4. The Firm shall provide evidence of efforts made to identify categories of services capable of being performed by SBEs.
- 5. The Firm shall provide all potential subcontractors and sub-consultants that the Firm has contacted pursuant to 2 or 3 above with detailed information regarding the scope of work of the subject contract.
- 6. The Firm shall provide evidence of efforts made to use the goods and/or services of available community organizations, consultant groups, and local, State, and federal agencies that provide assistance in the recruitment and placement of SBEs.

Furthermore, the Firm shall submit proof of its subcontractors' and/or sub-consultants' SBE registrations, and shall complete such other forms as may be required by Spectra Venue Management for State reporting as to participation.

Pursuant to Executive Order 151 the participants' goals for this Contract are African-Americans 2.47%, Asian-Americans 1.47%, Hispanics 1.1%, Native Americans .07% and Caucasian Females 3.74%.

N) Contract and Specification

The bidder shall **review and execute** the Contract and Specification attached hereto as **Exhibit I**. Exceptions taken, during the Question and Answer period, to the Contract may be considered as a factor in evaluating responsiveness of bids. Oakview Venue Management reserves all rights to reject any and all bids based upon exceptions taken to the Contract. Execution of the Contract is not to be construed as entering into a contract with Spectra Venue Management but rather as a submission of an offer to contract with Oakview Venue Management. **Failure to submit a signed contract shall result in the bid being deemed non-responsive.**

4.0 EXHIBITS

Signatory Page

Exhibit A

Exhibit B	Disclosure of Investigations/Actions Involving Bidder
Exhibit C	Notice of Intent to Subcontract
Exhibit D	Subcontractor Utilization Form
Exhibit E	Affirmative Action Forms
Exhibit F	Political Contributions Disclosure
Exhibit G	Schedule of Estimated Quantities, Unit Prices, and Lump Sum Items
Exhibit H	Affidavit of Non-Collusion
Exhibit I	Contract and Specification

Exhibit A SIGNATORY PAGE

BID:	SKYLIGHT & ROOF REPAIRS at ATLANTIC CITY CONVENTION CENTER
FOR INFORMATION	N: OVG360 2301 Boardwalk Atlantic City, New Jersey 08401 609-348-7026
Name, Address, Phon	e, Facsimile, Email and Contact person for Bidder:
SIGNATURE OF	THE BIDDER'S AUTHORIZED REPRESENTATIVE ATTESTS THAT THE
SET FORTH IN TO AGREES TO HOLE ANY CHALLENGE	D, UNDERSTANDS AND AGREES TO ALL OF THE TERMS AND CONDITIONS HE SOLICITATION, INCLUDING ADDENDA. BY SIGNING BELOW, BIDDER D ITS BID FIRM THROUGH THE NOTICE OF CONTRACT AWARD, DURING E TO THE AWARD, AND, IF AWARDED A CONTRACT, FOR THE DURATION
HOLD PRICES FI	T THROUGH SUBSTANTIAL COMPLETION. FAILURE OF THE BIDDER TO RM OR TO MEET OTHER TERMS AND CONDITIONS AS DEFINED IN THE IAY RESULT IN THE BIDDER BEING SUSPENDED OR DEBARRED FROM VITH CRDA.
Name and Title of Per Authorized to sign bid Signature:	

Exhibit B

DISCLOSURE OF INVESTIGATIONS AND ACTIONS INVOLOVING BIDDER

The bidder shall provide a detailed description of any investigation, litigation, including administrative complaints or other administrative proceedings, involving any public sector client during the past five (5) years including the nature and status of the investigation, and, for any litigation, the caption and docket number of the action, a brief description of the action, the date of inception, current status, and, if applicable, disposition.

Investigation(s)

Indicate "NONE" if no investigations were undertaken. Attach additional pages if necessary.

Person or	Date of	Brief	Disposition/Status	Bidder Contact Name and Telephone
Entity	Inception	Description	(if applicable)	for additional information

Litigation/Administrative Complaints

Indicate "NONE" if no Litigation/Administrative Complaints. Attach additional pages if necessary.

Person	Date of	Caption of	Brief	Current Status or	Bidder Contact Name
or Entity	Inception	the Action	Description of	Disposition (if	and Telephone for
			the Action	applicable)	additional information

Exhibit C

NOTICE OF INTENT TO SUBCONTRACT FORM

THIS FORM MUST BE COMPLETED AND INCLUDED AS PART OF EACH BIDDER'S BID. FAILURE TO SUBMIT THIS FORM MAY BE CAUSE FOR REJECTION OF THE BID AS NON-RESPONSIVE.

SOLICITATION TITLE:			
BID OPENING DATE:			
BIDDERS NAME AND ADDRESS:			
INSTRUCTIONS: PLEASE CHECK ONE	E OF THE STATEMEN	NTS BELOW	
If awarded this contract, I was goods and/or services.	ill engage subcontracto	ers to provide certain	
ALL BIDDERS THAT INTEND SUBCONTRACTOR UTILIZAT			SUBMIT A
If awarded this contract, I do provide any goods and/or set	5 5	subcontractors to	
ALL BIDDERS THAT DO NOT I SUBCONTRACTORS CERTIFY firm and if I determine at any time of certain goods and/or services, I we Management for approval, in advanced	AS FOLLOWS: I he during the course of the will submit the Subco	ereby certify that if the award is e contract to engage subcontract entractor Utilization Form to S	ors to provide
Authorized Signatory for Bidder	Title	Date	

Exhibit D

SUBCONTRACTOR UTILIZATION FORM

INSTRUCTIONS

Any bidder intending to subcontract any parts of a contract with Oakview Venue Management must complete a **Notice of Intent to Subcontract** and a **Subcontractor Utilization Form**.

Bidders are instructed to list <u>all</u> proposed subcontractors on the Form. Any bidder intending to subcontract that does not complete a Notice of Intent to Subcontract and a Subcontractor Utilization Form may be subject to rejection of its proposal as non-responsive.

IF BIDDER INTENDS TO UTILIZE SUBCONTRACTORS, FAILURE TO COMPLETE AND SUBMIT THIS FORM WITH BID MAY RESULT IN REJECTION OF THE PROPOSAL AS NON-RESPONSIVE. SOLICITATION TITLE: BID OPENING DATE: BIDDER NAME & ADDRESS: BIDDER CONTACT PERSON & PHONE: Instructions: List all businesses to be used as subcontractors. Attach copies for extended lists. Subcontractor's Name, Address, Type(s) of Goods or **Estimated Value of Subcontract(s) Hourly rates for subcontract(s)** Telephone and Vendor ID Services to be Provided Number I hereby certify that this Subcontractor Utilization Form is being submitted in good faith. I certify that each subcontractor has been notified that it has been listed on this Form and that each subcontractor has consented, in writing, to its name being submitted for this contract. Additionally, I certify that I shall notify each subcontractor listed on this Form, in writing, if the award is granted to my firm, and shall make all documentation available to OVG360 upon request. I further certify that all information contained in this Form is true and correct and I acknowledge that OVG360 will rely on the truth of the information in awarding the contract.

Date

Title

Authorized signatory for Bidder

Exhibit E GOODS, PROFESSIONAL SERVICES AND GENERAL SERVICE CONTRACTS

MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE N.J.S.A. 10:5-31 et seq., N.J.A.C. 17:27

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national, origin, ancestry, marital status, affectional or sexual orientation or sex. Except with respect to affectional or sexual orientation, the contractor will take affirmative action to ensure that such applicants are recruited and employed, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation or sex. Such action shall include, but not limited to the following: employment, upgrading, emotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other

forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation or sex.

The contractor or subcontractor, where applicable, will send to each labor union or representative or workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to **N.J.S.A. 10:5-31 et seq.** as amended and supplemented from time to time and the Americans with Disabilities Act.

The contractor or subcontractor agrees to make good faith efforts to employ minority and women workers consistent with the applicable county employment goals established in accordance with **N.J.A.C. 17:27-5.2**, or a binding determination of the applicable county employment goals determined by the Division, pursuant to **N.J.A.C. 17:27-5.2**.

The contractor or subcontractor agrees to inform in writing its appropriate recruitment agencies including, but not limited to, employment agencies, placement bureaus, colleges, universities, labor unions, that it does not discriminate on the basis of age, creed, color, national origin, ancestry, marital status, affectional or sexual orientation or sex, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

The contractor or subcontractor agrees to revise any of its testing procedures, if necessary, to assure that all personal testing conforms with the principles of job-related testing, as established by the statutes and court decisions of the State of New Jersey and as established by applicable Federal law and applicable Federal court decisions.

In conforming with the applicable employment goals, the contractor or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and layoff to ensure that all such actions are taken without regard to age, creed, color, national origin, ancestry, marital status, affectional or sexual orientation or sex, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions.

The contractor shall submit to the public agency, after notification of award but prior to execution of a goods and services contract, one of the following three documents: Letter of Federal Affirmative Action Plan Approval; Certificate of Employee Information Report; or Employee Information Report Form AA302.

The contractor and its subcontractor shall furnish such reports or other documents to the Division of Contract Compliance & EEO as may be requested by the Division from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Contract Compliance & EEO for conducting a compliance investigation pursuant to Subchapter 10 of the Administrative Code at N.J.A.C.17:27.

PLEASE CH	HECK THE APPROPRIATE BOX:
	I HAVE A CURRENT NJ AFFIRMATIVE ACTION CERTIFICATE (PLEASE ATTACH A COPY TO YOUR BID)
	I HAVE A VALID FEDERAL AFFIRMATIVE ACTION PLAN APPROVAL LETTER (PLEASE ATTACH A COPY TO YOUR BID)
	I HAVE COMPLETED AND ENCLOSED THE FORM AA201 INITIAL PROJECT WORKFORCE REPORT

Exhibit F

PUBLIC LAW 2005, CHAPTER 51 AND EXECUTIVE ORDER 117 (2008)

Chapter 51 Instr. - Rev. 4/17/15

Page 1 of 4

INFORMATION AND INSTRUCTIONS For Completing the "Two-Year Vendor Certification and Disclosure of Political Contributions" Form

Background Information

On September 22, 2004, then-Governor James E. McGreevey issued E.O. 134, the purpose of which was to insulate the negotiation and award of State contracts from political contributions that posed a risk of improper influence, purchase of access or the appearance thereof. To this end, E.O. 134 prohibited State departments, agencies and authorities from entering into contracts exceeding \$17,500 with individuals or entities that made certain political contributions. E.O. 134 was superseded by Public Law 2005, c. 51, signed into law on March 22, 2005 ("Chapter 51"). On September 24, 2008, then-Governor Jon S. Corzine issued E.O. 117 which is designed to enhance New Jersey's efforts to protect the integrity of procurement decisions and increase the public's confidence in government. The Executive Order builds upon the provisions of Chapter 51.

Two-Year Certification Process

Upon approval by the State Chapter 51 Review Unit, the Certification and Disclosure of Political Contributions form is valid for a two (2) year period. Thus, if a vendor receives approval on January 1, 2014, the certification expiration date would be December 31, 2015. Any change in the vendor's ownership status and/or political contributions during the two-year period will require the submission of new Chapter 51/Executive Order 117 forms to the State Review Unit. Please note that it is the vendor's responsibility to file new forms with the State should these changes occur.

State Agency Instructions: Prior to the awarding of a contract, the State Agency should first send an e-mail to CD134@treas.nj.gov to verify the certification status of the vendor. If the response is that the vendor is NOT within an approved two-year period, then forms must be obtained from the vendor and forwarded for review. If the response is that the vendor is within an approved two-year period, then the response so stating should be placed with the bid/contract documentation for the subject project.

Instructions for Completing the Form

<u>NOTE</u>: Please refer to pages 3 and 4 "USEFUL DEFINITIONS for the purposes of Chapter 51 and Executive Order 117" for guidance when completing the form.

Part 1: BUSINESS ENTITY INFORMATION

Business Name – Enter the full legal name of the vendor, including trade name if applicable.

Address, City, State, Zip and Phone Number -- Enter the vendor's street address, city, state, zip code and telephone number.

Vendor Email – Enter the vendor's primary email address.

Vendor FEIN – Please enter the vendor's Federal Employment Identification Number.

Business Type - Check the appropriate box that represents the vendor's type of business formation.

Listing of officers, shareholders, partners or members - Based on the box checked for the business type, provide the corresponding information. (A complete list must be provided.)

Public Law 2005, Chapter 51 and Executive Order 117 (2008) Chapter 51 Instr. - Rev. 4/17/15

Page 2 of 4

Part 2: DISCLOSURE OF CONTRIBUTIONS

Read the three types of political contributions that require disclosure and, if applicable, provide the recipient's information. The definition of "Business Entity/Vendor" and "Contribution" can be found on pages 3 and 4 of this form

Name of Recipient – Enter the full legal name of the recipient.

Address of Recipient – Enter the recipient's street address.

Date of Contribution - Indicate the date the contribution was given.

Amount of Contribution - Enter the dollar amount of the contribution.

Type of Contribution – Select the type of contribution from the examples given.

Contributor's Name - Enter the full name of the contributor.

Relationship of the Contributor to the Vendor - Indicate the relationship of the contributor to the vendor. (e.g. officer or shareholder of the company, partner, member, parent company of the vendor, subsidiary of the vendor, etc.)

NOTE: If form is being completed electronically, click "Add a Contribution" to enter additional contributions. Otherwise, please attach additional pages as necessary. Check the box under the recipient information if no reportable contributions have been solicited or made by the business entity. **This box must be checked if there are no contributions to report.**

Part 3: CERTIFICATION

Check Box A if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity. (No additional Certification and Disclosure forms are required if BOX A is checked.)

Check Box B if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity <u>and all</u> individuals and/or entities whose contributions are attributable to the business entity <u>with the exception</u> of those individuals and/or entities that submit their own separate form. For example, the representative is not signing on behalf of the vice president of a corporation, but all others. The vice president completes a separate Certification and Disclosure form. (Additional Certification and Disclosure forms are required from those individuals and/or entities that the representative is not signing on behalf of and are included with the business entity's submittal.)

Check Box C if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity only. (Additional Certification and Disclosure forms are required from all individuals and/or entities whose contributions are attributable to the business entity and must be included with the business entity submittal.)

Check Box D when a sole proprietor is completing the Certification and Disclosure form or when an individual or entity whose contributions are attributable to the business entity is completing a separate Certification and Disclosure form.

Read the five statements of certification prior to signing.

The representative authorized to complete the Certification and Disclosure form must sign and print her/his name, title or position and enter the date.

Public Law 2005, Chapter 51 and Executive Order 117 (2008) Chapter 51 Instr. - Rev. 4/17/15

Page 3 of 4

State Agency Procedure for Submitting Form(s)

The State Agency should submit the completed and signed Two-Year Vendor Certification and Disclosure forms either electronically to: cd134@treas.nj.gov or regular mail at: Chapter 51 Review Unit, P.O. Box 230, 33 West State Street, Trenton, NJ 08625-0230. Original forms should remain with the State Agency and copies should be sent to the Chapter 51 Review Unit.

Business Entity Procedure for Submitting Form(s)

The business entity should return this form to the contracting State Agency.

The business entity can submit the Certification and Disclosure form directly to the Chapter 51 Review Unit only when:

- The business entity is approaching its two-year certification expiration date and is seeking certification renewal;
- The business entity had a change in its ownership structure; OR
- The business entity made any contributions during the period in which its last two-year certification was in effect, or during the term of a contract with a State Agency.

Questions & Information

Questions regarding the interpretation or application of Public Law 2005, Chapter 51 (N.J.S.A. 19:44A-20.13) or E.O. 117 (2008) may be submitted electronically through the Division of Purchase and Property website at: https://www.state.nj.us/treas/purchase/eo134questions.shtml

Reference materials and forms are posted on the Political Contributions Compliance website at: http://www.state.nj.us/treasury/purchase/execorder134.shtml

USEFUL DEFINITIONS for the purposes of Chapter 51 and Executive Order 117

- "Business Entity/Vendor" means any natural or legal person, business corporation, professional services corporation, limited liability company, partnership, limited partnership, business trust, association or any other legal commercial entity organized under the laws of New Jersey or any other state or foreign jurisdiction. The definition also includes (i) if a business entity is a for-profit corporation, any officer of the corporation and any other person or business entity that owns or controls 10% or more of the stock of the corporation; (ii) if a business entity is a professional corporation, any shareholder or officer; (iii) if a business entity is a general partnership, limited partnership or limited liability partnership, any partner; (iv) if a business entity is a sole proprietorship, the proprietor; (v) if the business entity is any other form of entity organized under the laws of New Jersey or any other state or foreign jurisdiction, any principal, officer or partner thereof; (vi) any subsidiaries directly or indirectly controlled by the business entity; (vii) any political organization organized under 26 U.S.C.A. § 527 that is directly or indirectly controlled by the business entity, other than a candidate committee, election fund, or political party committee; and (viii) with respect to an individual who is included within the definition of "business entity," that individual's civil union partner and any child residing with that person. 1
- "Officer" means a president, vice president with senior management responsibility, secretary, treasurer, chief executive officer or chief financial officer of a corporation or any person routinely performing such functions for a corporation. Please note that officers of non-profit entities are excluded from this definition.
- "Partner" means one of two or more natural persons or other entities, including a corporation, who or which are joint owners of and carry on a business for profit, and which business is organized under the laws of this State or any other state or foreign jurisdiction, as a general partnership, limited partnership, limited liability partnership, limited liability company, limited partnership association, or other such form of business organization.

1Contributions made by a spouse, civil union partner or resident child to a candidate for whom the contributor is eligible to vote or to a political party committee within whose jurisdiction the contributor resides are permitted.

Public Law 2005, Chapter 51 and Executive Order 117 (2008) Chapter 51 Instr. - Rev. 4/17/15

Page 4 of 4

USEFUL DEFINITIONS for the purposes of Chapter 51 and Executive Order 117

- "Contribution" is a contribution, including an in-kind contribution, in excess of \$300.00 in the aggregate per election made to or received by a candidate committee, joint candidates committee, or political committee; or per calendar year made to or received by a political party committee, legislative leadership committee, or continuing political committee or a currency contribution in any amount.
- "In-kind Contribution" means a contribution of goods or services received by a candidate committee, joint candidates committee, political committee, continuing political committee, political party committee, or legislative leadership committee, which

contribution is paid for by a person or entity other than the recipient committee, but does not include services provided without compensation by an individual volunteering a part of or all of his or her time on behalf of a candidate or committee.

- "Continuing Political Committee" includes any group of two or more persons acting jointly, or any corporation, partnership, or any other incorporated or unincorporated association, including a political club, political action committee, civic association or other organization, which in any calendar year contributes or expects to contribute at least \$4,300 to aid or promote the candidacy of an individual, or the candidacies of individuals, for elective public office, or the passage or defeat of a public questions, and which may be expected to make contributions toward such aid or promotion or passage or defeat during a subsequent election, provided that the group, corporation, partnership, association or other organization has been determined by the Commission to be a continuing political committee in accordance with N.J.S.A. 19:44A-8(b).
- "Candidate Committee" means a committee established by a candidate pursuant to N.J.S.A. 19:44A-9(a), for the purpose of receiving contributions and making expenditures.
- "State Political Party Committee" means a committee organized pursuant to N.J.S.A. 19:5-4.
- "County Political Party Committee" means a committee organized pursuant to N.J.S.A. 19:5-3.
- "Municipal Political Party Committee" means a committee organized pursuant to N.J.S.A. 19:5-2.
- "Legislative Leadership Committee" means a committee established, authorized to be established, or designated by the President of the Senate, the Minority Leader of the Senate, the Speaker of the General Assembly, or the Minority Leader of the General Assembly pursuant to N.J.S.A. 19:44A-10.1 for the purpose of receiving contributions and making expenditures.
- "Political Party Committee" means:
 - 1. The State committee of a political party, as organized pursuant to N.J.S.A. 19:5-4;
 - 2. Any county committee of a political party, as organized pursuant to N.J.S.A. 19:5-3; or
 - 3. Any municipal committee of a political party, as organized pursuant to N.J.S.A. 19:5-2



Department of the Treasury

Division of Purchase and Property

Two-Year Chapter 51/Executive Order 117 Vendor Certification and Disclosure of Political Contributions

Chapter 51 - Rev. 4/17/15				Page 1 of 3	ş
]	FOR STATE AGENCY USE	ONLY		
Solicitation, RFP, or Contract No.		Awar	rd Amount		
Description of Services					
State Agency Name		Contact Person			
Phone Number		Contact Email			
Check if the Contract / Agreement is Being Fund	ded Usin	g FHWA Funds	Please	check if requesting	
			Trease	recertification	
Part 1: Business Entity Information					
Full Legal Business Name	tuada nam	ne if applicable)			
Address	trade nam	ie if applicable)			
City					
Vendor Email	Vendor I	FEIN (SS# if sole proprietor/na	tural person)		
		list below the required inforn			
Check of the business (MUST BE COMPLETED IN		e type of business selection	
 Corporation: LIST ALL OFFICERS and any 10 Professional Corporation: LIST ALL OFFICER Partnership: LIST ALL PARTNERS with any e Limited Liability Company: LIST ALL MEMB Sole Proprietor 	RS and A equity int	LL SHAREHOLDERS erest			
Note: "Officers" means President, Vice President with s corporation, or any person routinely performing such fur			ary, Treasure	er, Chief Executive Office	r or Chief Financial Officer of a
All Officers of a Corporation or PC		10% and greater sharehold or <u>all</u> shareholde		poration	
					ı
All Equity partners of a Partnership		All Equity memb	oers of a LL	c	
					[
	-				•

If you need additional space for listing of Officers, Shareholders, Partners or Members, please attach separate page.

IMPORTANT NOTE: You must review the definition of "contribution" and "business entity" on the Information and Instructions form prior to completing Part 2 and Part 3. The Information and Instructions form is available at: http://www.state.nj.us/treasury/purchase/forms.shtml#eo134

Chapter 51 - Rev. 4/17/15 Page 2 of 3

Part 2: Disclosure of Contributions by the business entity or any person or entity whose contributions are attributable to the business entity.

1. Report below all contributions solicited or made during the 4 years immediately preceding the commencement of negotiations or submission of a proposal to any:

Political organization organized under Section 527 of the Internal Revenue Code and which also meets the definition of a continuing political committee as defined in N.J.S.A. (See Information and Instructions form.)

2. Report below all contributions solicited or made during the 5 ½ years immediately preceding the commencement of negotiations or submission of a proposal to any:

Candidate Committee for or Election Fund of any Gubernatorial or Lieutenant Gubernatorial candidate State Political Party Committee County Political Party Committee

3. Report below all contributions solicited or made during the 18 months immediately preceding the commencement of negotiations or submission of a proposal to any:

Municipal Political Party Committee Legislative Leadership Committee

Full Legal Name of Recipient	
Address of Recipient	
•	
Date of Contribution Amount of Contribution	
Type of Contribution (i.e. currency, check, loan, in-kind)	
Contributor Name	
Relationship of Contributor to the Vendor	
If this form is not being completed electronically, please attach additional contributions on separate page.	
Click the "Add a Contribution" tab to enter additional contributions.	

□Check this box only if no political contributions have been solicited or made by the business entity or any person or entity whose contributions are attributable to the business entity.

Part 3: Certification

- i.
 ☐ I am certifying on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity as listed on Page 1 under Part 1: Vendor Information.
- ii.

 I am certifying on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity as listed on Page 1 under Part 1: Vendor Information, except for the individuals and/or entities who are submitting separate Certification and Disclosure forms which are included with this submittal.
 - (C) I am certifying on behalf of the business entity <u>only</u>; any remaining persons or entities whose contributions are attributable to the business entity (as listed on Page 1) have completed separate Certification and Disclosure forms which are included with this submittal.
 - (D) ☐ I am certifying as an individual or entity whose contributions are attributable to the business entity.

I hereby certify as follows:

- 1. I have read the Information and Instructions accompanying this form prior to completing the certification on behalf of the business entity.
- 2. All reportable contributions made by or attributable to the business entity have been listed above.

 Chapter 51 Rev. 4/17/15

 Page 3 of 3

- The business entity has not knowingly solicited or made any contribution of money, pledge of contribution, including in-kind contributions, that would bar the award of a contract to the business entity unless otherwise disclosed above:
 - Within the 18 months immediately preceding the commencement of negotiations or submission of a proposal for the contract or agreement
 - (i) A candidate committee or election fund of any candidate for the public office of Governor or Lieutenant Governor or to a campaign committee or election fund of holder of public office of Governor or Lieutenant Governor: OR
 - (ii) Any State, County or Municipal political party committee; OR
 - (iii) Any Legislative Leadership committee.
 - During the term of office of the current Governor or Lieutenant Governor to:
 - (i) A candidate committee or election fund of a holder of the public office of Governor or Lieutenant Governor;
 - (ii) Any State or County political party committee of the political party that nominated the sitting Governor or Lieutenant Governor in the last gubernatorial election.
 - Within the 18 months immediately preceding the last day of the sitting Governor or Lieutenant Governor's first term of office to:
 - (i) A candidate committee or election fund of the incumbent Governor or Lieutenant Governor; OR
 - (ii) Any State or County political party committee of the political party that nominated the sitting Governor or Lieutenant Governor in the last gubernatorial election.
- During the term of the contract/agreement the business entity has a continuing responsibility to report, by submitting a new Certification and Disclosure form, any contribution it solicits or makes to:
 - (a) Any candidate committee or election fund of any candidate or holder of the public office of Governor or Lieutenant Governor; **OR**
 - (b) Any State, County or Municipal political party committee; **OR**
 - (c) Any Legislative Leadership committee.

The business entity further acknowledges that contributions solicited or made during the term of the contract/agreement may be determined to be a material breach of the contract/agreement.

During the two-year certification period the business entity will report any changes in its ownership structure (including the appointment of an officer within a corporation) by submitting a new Certification and Disclosure form indicating the new owner(s) and reporting said owner(s) contributions.

I certify that the foregoing statements in Parts 1, 2 and 3 are true. I am aware that if any of the statements are willfully false, I may be subject to punishment.

Signed Name	Print Name	
Title/Position	Date	

Procedure for Submitting Form(s)

The contracting State Agency should submit this form to the Chapter 51 Review Unit when it has been required as part of a contracting process. The contracting State Agency should submit a copy of the completed and signed form(s), to the Chapter 51 Unit and retain the original for their records.

The business entity should return this form to the contracting State Agency. The business entity can submit this form directly to the Chapter 51 Review Unit only when it -

- Is approaching its two-year certification expiration date and wishes to renew certification;
- Had a change in its ownership structure; **OR**
- Made any contributions during the period in which its last two-year certification was in effect, or during the term of a contract with a State Agency.

Forms should be submitted either electronically to: cd134@treas.nj.gov, or regular mail at: Chapter 51 Review Unit, P.O. Box 230, 33 West State Street, Trenton, NJ 08625.

Exhibit GSchedule of Estimated Quantities, Unit Prices, and Lump Sum Items

	Description	Unit	Amount
1	Performance and payment bonds	L.S.	
2	Insurance	L.S.	
3	Permits	L.S.	
4	General Conditions	L.S.	
5	Labor – Roofing	L.S.	
6	Material - Roofing	L.S.	
7	Labor – Skylight repairs	L.S.	
8	Material - Skylight repairs	L.S.	
L.S. desi	gnates Lump Sum		
	gnates Lump Sum SUM CONTRACT PRICE (Num	nerically) \$	
L LUMP	SUM CONTRACT PRICE (Num		
L LUMP	SUM CONTRACT PRICE (Num SUM CONTRACT (IN WORDS)		
L LUMP	SUM CONTRACT PRICE (Num		
L LUMP S	SUM CONTRACT PRICE (Num SUM CONTRACT (IN WORDS)):	
L LUMP S Name:	SUM CONTRACT PRICE (Num SUM CONTRACT (IN WORDS)Dollars):	

Exhibit H NON-COLLUSION AFFIDAVIT

STATE OF)
: SS: COUNTY OF)
I,
of the City of,
in the County of,
and the State of,
of full age, being duly sworn according to law on my oath depose and say that:
I am (Title)
of (Bidder's name),,
Making a bid in response to OVG360's Solicitation of Bids for SKYLIGHT & ROOF REPAIRS at ATLANTIC CITY CONVENTION CENTER, and that I executed the said bid with full authority so to do; that the said Bidder has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competition, in connection with said bid; and that all statements contained in the said bid and in this Affidavit are true and correct, and made with full knowledge that Oakview Venue Management relies upon the truth of the statements contained in the said bid, in this Affidavit and in any statements requested by Oakview Venue Management showing evidence of qualifications in awarding a contract based upon said bid. I further warrant that no person or selling agency has been employed or retained to solicit or secure said bid upon an agreement or understanding for a commission, percentage, brokerage or contingent fee, except bona fide employees or bona fide established commercial or selling agencies maintained by the Bidder.
Authorized Signature
SWORN and SUBSCRIBED to me thisday of, 2023
NOTARY PUBLIC
COMMISSION EXPIRES

Exhibit I

CONTRACT AND SPECIFICATIONS FOR GENERAL CONSTRUCTION

PROJECT OWNER:

OVG360 as operator of Historic Boardwalk Hall and the Atlantic City Convention Center, as managing agent for Casino Reinvestment Development Authority 2301 Boardwalk

Atlantic City, New Jersey 08401

Phone: 609-348-7026

SKYLIGHT & ROOF REPAIRS at ATLANTIC CITY CONVENTION CENTER

Article I. 00500 Agreement

a. Contract

b. General Conditionsc. Payment Bond

[INSERT FULL CONTRACTOR NAME AND ADDRESS BELOW:]

(herei	nafter referred to as the "Contractor")
betwe AUT]	AGREEMENT (the "Agreement") is made as of this day of, 2023, by and the OVG360, as agent on behalf of CASINO REINVESTMENT DEVELOPMENT HORITY ("CRDA"), a public body corporate and politic constituting an instrumentality of that of New Jersey, and the Contractor identified above.
	Recitals
A. Contra Contra	Pursuant to a solicitation of bids issued of 2023 (the "Solicitation") and the actor's response thereto dated, 2023 (the "Bid"), OVG360 has selected the actor to provide construction services, as more fully described in this Contract.
B. Work	OVG360 desires to engage and the Contractor desires to accept the engagement to perform the (as hereinafter defined).
other	ONSIDERATION of the foregoing recitals, the mutual promises and agreements set forth herein, and good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the s hereto agree as follows:
1.	All capitalized terms not otherwise defined, shall have the meaning ascribed to them in Section 00700.2 herein.
2.	The Contractor will commence and complete the Project, and all other necessary and desirable work as approved in accordance with the terms and conditions of the Contract Documents.
3.	The Contractor will furnish all of the material, supplies, tools, equipment, labor and other services necessary and desirable for the completion of the Project.
4.	The Contractor will commence the work required by the Contract Documents within thirty (30) calendar days after the date of the Notice to Proceed and will substantially complete the same within 20 work weeks (150 Calendar days) pending lead time for all critical material, of the date of the Notice to Proceed.
5.	The Contractor agrees to perform all of the Work described in the Contract Documents and comply with the terms and conditions herein and therein for the Total Contract Price.
6	The term "Contract Documents" means and includes the following:

- d. Performance Bond
- e. Payment Application (as set forth in Attachment "A")
- f. Notice to Proceed (as set forth in Attachment "B")
- g. Change Orders (as set forth in Attachment "C")
- h. Construction Change Directive
- i. Progress Schedule (as amended)
- j. Supplementary Agreements
- k. Drawings prepared by the Engineer
- 1. Specifications prepared by the Engineer
- m. Written Addenda or Amendments as executed by the Owner and Contractor
- n. Any other written instructions or interpretations by the Engineer or Owner
- o. Owner's Bid Documents
- p. Contractor's bid dated ______, except for any provisions inconsistent with the Contract Documents, unless such inconsistency is accepted or waived, in writing, by the Owner.
- 7. In the event of a conflict between the Division 1 and Division 2 terms and conditions set forth in this contract and the Division 1 and Division 2 terms and conditions set forth on the Architect drawings, the Division 1 and Division 2 terms and conditions set forth in this contract shall prevail.
- 8. The Owner will pay to the Contractor in the manner and at such times as set forth in the General Conditions such amounts as required by the Contract Documents.
- 9. This Contract shall be binding upon all parties hereto and their respective successors and permitted assigns.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized representatives, this Contract in four (4) copies each, any of which shall be deemed an original, on the date first above written.

[SIGNATURES APPEAR ON NEXT PAGE]

Witness:	OVG360	
Ву:	By:	
Name:	Name:	
Title:	Title:	
[CONTRACTOR MUST FILL IN	N AND SIGN BELOW:]	
Witness:		
By:	By:	
Name:	Name:	
Title	Title	

ACKNOWLEDGEMENT AS TO CONTRACTOR

STATE OF	<u>:</u>		
COUNTY OF	:		
The foregoing	ng instrument was acknow	rledged before me this	day of
2023, by	, as the	of	
, a	company	, organized under the law	vs of, who
am satisfied, is the p	erson who, as such authoriz	zed person, signed, sealed	d and delivered the within
instrument made by	said company, and he did ac	cknowledge that he/she, a	as such authorized person
signed and delivere	d the same on behalf of said	id company for the uses	and purposes therein se
forth, and that said i proper resolution of	nstrument is the voluntary a	act and deed of said comp	pany duly authorized by a
proper resolution of	its governing body.		
Name:			
Notary Public of			
(NOTARY SEAL)			
My Commission Ex	pires:		

ACKNOWLEDGMENT AS TO OVG360

STATE OF NEW JERSEY: COUNTY OF ATLANTIC:

On thisday of, 2023 in the County and State aforesaid, before me, the subscriber, a Notary Public authorized to take acknowledgments and proofs in said County and State, personally appeared, the of Oakview Venue Management, L.P., a Delaware limited partnership, as operator of Jim Whelan Boardwalk Hall and the Atlantic City Convention Center, as managing agent for the Casino Reinvestment Development Authority, who I am satisfied, in the person who, a such officer of said entity, signed,
sealed and delivered the within instrument made by said entity, and he did acknowledge that he, as such officer, signed and delivered the same on behalf of said entity for the uses and purposes
therein set forth, and that said instrument is the voluntary act and deed of said entity duly
authorized by a proper resolution of the entity.

Name:
Notary Public
My Commission Expires:
(NOTARY SEAL)

Attachment "A" Application for Payment (Or Equivalent Owner Approved AIA G702)

NO.				
_				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
To: _				(CONTRACTOR)
	n: tract:			
	ect:			
Cont	tract No			
For V	Work accomplished through the date of	of:		
1.	Original Contract Price:			\$
2.	Net change by Change Orders and	d Written A	mendments (+ or -):	\$
3.	Current Contract Price (1 plus 2):			\$
4.	Total completed and stored to dat	e (See Invo	ice Summary):	\$
5.	Retainage (per Contract):			
	% of completed W	ork:	\$	
	% of stored materi		\$	
	Total Retainage			\$
6.	Total completed and stored to dat	e less retain	nage (4 minus 5):	\$
7.	Less previous Application for Pay	ments:		\$
8.	DUE THIS APPLICATION (6	MINUS 7):	;	\$
FOR THI	LIGATIONS INCURRED IN CONICE PAYMENT NUMBERED 1 THE SAPPLICATION FOR PAYMEND NOT DEFECTIVE.	OUGH _	INCLUSIVE; AND	(2) ALL WORK COVERED BY
the d	ompanying this Application for Paymoluly executed Partial Release and Waiv ocumentation of measurement of unit	er of Liens	of each of the Contractor's	subcontractors and/or suppliers, and
Date	d	Ву:		Contractor
State Cour Subs day o	e of			
	ary Public			
My (Commission expires:			

Attachment "A" - Continued (Or Equivalent Owner Approved AIA G703)

Invoice Summary Section 1.01

Pay Item	Description	Original Lump Sum	Change Orders	Revised Lump Sum	Percent Completed	Previously Billed	Current Billing	Total Billing
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
SUBT	TOTAL - Unit Price TOTAL – Lump Sun AL – All Items							

Attachment "B" Notice to Proceed

Dated:
TO:
(Contractor)
ADDRESS:
Contract: DATED AS OF
Project: Skylight & Roof Repairs at Atlantic City Convention Center
You are notified that the Contract Time under the above contract will commence to run on this date. You are now authorized to enter upon the Project site and start performing your obligations under the Contract Documents. The date of Substantial Completion is:
Before you may start any Work at the Site, Section 00620 of this Contract provides that you must deliver to the Owner (with copies to Engineer and other identified additional insureds) certificates of insurance along with the declaration pages, which are required to be purchased and maintained in accordance with the Contract Documents.
OVG360
By:
Name: Clark Hughes
Title: Capital Project Manager
Copy: Greg Florio

Attachment "C" Change Order

ATE OF ISSUANCE	EFFECTIVE DATE		
WNER			
ONTRACTOR			
ontract:			
roject:			
Contract No.			
NGINEER			
ou are directed to make the following changes in the Con-	tract Documents:		
eason for Change Order:			
-			
ttachments: (List documents supporting change)			
CHANGE IN CONTRACT PRICE:	CHANGE IN CONTRACT TIMES:		
Original Contract Price	Original Contract Times:		
	Substantial Completion:		
\$	Ready for final payment:		
	(days or dates) Net change from previous Change Orders No to		
Net Increase (Decrease) from previous Change Orders			
No to:	No:		
	Substantial Completion:		
\$	Ready for final payment:		
	(days)		
Contract Price prior to this Change Order:	Contract Times prior to this Change Order:		
\$	Substantial Completion: Ready for final payment:		
Φ	(days or dates)		
Net increase (decrease) of this Change Order:	Net increase (decrease) this Change Order:		
1.00 merease (decrease) of this change often.	Substantial Completion:		
\$	Ready for final payment:		
	(days)		
Contract Price with all approved Change Orders:	Contract Times with all approved Change Orders:		
	Substantial Completion:		
\$	Ready for final payment:		
	(days or dates)		
ECOMMENDED: APPROVED:	ACCEPTED:		
Econimization.	ACCLI ILD.		
y: By:	By:		
y: By: NGINEER (Authorized Signature) OWNER (Authorized S	By: By: CONTRACTOR (Authorized Signature)		
ate: Date:	Date:		

Attachment "C" - Continued

Partial Release and Waiver of Liens

WHEREAS, the undersigned is the Contractor furnishing work, services, materials or equipment upon real estate operated by OVG360, as operator of Jim Whelan Boardwalk Hall and the Atlantic City Convention Center, as managing agent for the Casino Reinvestment Development Authority in furtherance of that certain SKYLIGHT & ROOF REPAIRS at ATLANTIC CITY CONVENTION CENTER project (hereinafter referred to as "Owner").

00550 Notice to Proceed

Upon execution of the Contract by the Owner, a fully executed copy, together with a Notice to Proceed in the form attached hereto as Attachment "B", will be provided to the Contractor, provided however, that such Notice shall only be issued after Owner's receipt of all required approvals. Receipt of the executed Contract and Notice to Proceed shall constitute the Contractor's authority to enter upon the Project site, provided the Contractor has submitted to the Owner, and the Owner has accepted, the insurance certificates and declaration pages required under Subsection 00620 and a preconstruction conference has been held pursuant to Subsection 01310.5(1). Construction operations shall not begin until the Contractor has supplied, and the Engineer and/or Owner has accepted, Insurance Certificates, the Progress Schedule, bonds and certifications, forms, schedules, and any other reasonable request by Oakview Venue Management or submittals required by the Contract Documents.

Construction operations shall begin within thirty (30) calendar days of the Notice to Proceed. The Notice to Proceed is the first day of the Contract Time. Failure of the Contractor to begin operations within thirty (30) calendar days for any reason shall constitute a Contractor delay. Failure to begin operations within forty-five (45) calendar days shall constitute a default for which the Owner may take whatever action deemed appropriate under the Contract, in the Owner's sole and absolute discretion.

The Contractor is not entitled to additional compensation or extension of Contract Time for any delay, hindrance, or interference caused by or attributable to commencement of Work before the twentieth day following the Notice to Proceed.

The Contractor shall give the Engineer at least 72 hours advance notice in writing of its intention to start operations.

00600 Bonds, Insurance and Representations

00610 Performance Bond and Payment Bond

Within ten (10) business days of the date of the Notice of Proceed, the Contractor shall complete and deliver a Performance Bond and a Payment Bond satisfactory to the Owner.

Each bond shall be the sum of not less than the Total Contract Price less the lump sum bid for the Pay Item "Performance Bond and Payment Bond" and shall be maintained by the Contractor until Acceptance. In the event of the insolvency of the surety or if the Performance Bond and Payment Bond have not been properly authorized or issued by the Surety company, the Contractor shall furnish and maintain, as above provided, other surety satisfactory to the Owner.

All alterations, extensions of Contract Time, extra and additional work, and other changes authorized by the Contract Documents may be made without securing the consent of the surety or sureties of the bonds.

The surety corporation bonds shall be furnished by only those sureties listed in the US Treasury Department Circular 570 and authorized to do business in the State of New Jersey. The bonds shall be accompanied by a certification as to authorization of the attorney-in-fact to commit the surety company and a true and correct statement of the financial condition of said surety company.

Payment for the Performance Bond and the Payment Bond will be made upon commencement of work on the basis of Pay Item No. 1 as set forth in The Fee Schedule or the actual cost (gross premium), whichever is less, upon submission of a paid bill and the report of execution issued by the Surety showing the gross premium of the bonds and the broker's fee. Upon Completion, the Owner's payment for the Performance

and Payment Bond will be adjusted to reflect any increase or decrease in the actual cost of the bonds. Any increase will be based upon the rate schedule certified by the Surety and submitted by the Contractor at the beginning of the Project. If the certified schedule and the paid bill are not submitted at the beginning of the Project, no adjustment will be made. Any increase or decrease in the actual cost of the bonds of less than one hundred dollars will be disregarded. The adjustment will be calculated on whichever of the following methods results in the lowest adjustment:

- 1. The difference between the actual cost paid by the Contractor before the commencement of work and the paid final bill submitted by the surety company or agent.
- 2. The difference between the actual cost paid by the Contractor before the commencement of work and the final amount as calculated by using the certified schedule submitted at the beginning of the Project.

If the amount of this final bill reflects an increase in the cost of the Performance and Payment Bonds, the Owner will pay the Contractor the amount as determined above in the final payment to be made to the Contractor after Acceptance. If the amount of the final bill reflects a decrease in the cost of the Payment and Performance Bonds, the Owner will deduct that amount from the final payment made to the Contractor after Acceptance.

Payment will be made under:

Pay ItemPay UnitPERFORMANCE BOND AND PAYMENT BONDLUMP SUM

00620 Insurance

The Contractor shall procure and maintain, until Acceptance and at all times thereafter when the Contractor may be correcting, removing, or replacing defective work, insurance for liability for damages imposed by law and assumed under the Contract, of the kinds and in the amounts hereinafter provided, with insurance companies authorized to do business in the State of New Jersey. Within five (5) business days of the Notice of Award, the Contractor shall furnish to the Owner a certificate or certificates of insurance together with declaration pages, in a form satisfactory to the Owner, showing that the Contractor has complied with this Subsection. Insurance binders are not acceptable as a form of insurance certificate. All of the policies of insurance required to be purchased and maintained and the certificates, declaration pages, or other evidence thereof shall contain a provision or endorsement that the coverage afforded is not to be canceled, materially changed, or renewal refused until at least 30 days prior written notice has been given to the Engineer and Owner by certified mail. All certificates, notices, or declaration pages shall be submitted to the Engineer (Attention: Greg Florio, Amtech Solutions, Inc., 2 White Horse Pike, Suite 1D, Haddon Heights, NJ 08035) and Owner (Attention: Clark Hughes, Oakview Venue Management, 2301 Boardwalk, Atlantic City, NJ 08401). Within five (5) days of commencing Work, the Contractor shall furnish the Owner with a certified copy of each policy of insurance, including the provisions establishing premiums.

Contractor shall obtain and maintain the types of insurance and minimum limits of liability as follows:

1. Comprehensive General Liability Insurance. The minimum limit of liability shall be \$5,000,000 per occurrence as a combined single limit for bodily injury and property. Any excess or umbrella policy obtained by the Contractor so that the minimum limit of liability is provided shall contain a clause stating that it takes effect (drops down) in the event the primary coverage is impaired or exhausted.

The above-required Comprehensive General Liability policy shall name the Owner, its officers, and employees, Casino Reinvestment Development Authority, its officers and employees, and the Casino Licensees and the City of Atlantic City, New Jersey, and their respective governing bodies, as additional insureds.

The coverage to be provided under this policy shall be at least as broad as that provided by the standard basic, unamended, and unendorsed comprehensive general liability coverage forms currently in use in the State of New Jersey, which shall not be circumscribed by an endorsement limiting the breadth of coverage. Moreover, such policy shall be endorsed so as to delete any exclusions applying to property damage liability arising from explosions or arising from damage to underground utilities and collapse of foundations.

The insurance policy shall be endorsed to include contractual liability coverage, premises/operations coverage, products/completed operations coverage, broad form property damage coverage, independent contractor's coverage, and personal injury coverage.

The Contractor shall provide documentation from the insurance company that indicates the cost, if any, of naming the Owner, its members, officers, employees, and other parties as additional insureds.

- 2. Comprehensive Automobile Liability Insurance. The policy shall cover owned, non-owned, and hired vehicles with minimum limits of liability in the amount of \$1,000,000 per occurrence as a combined single limit for bodily injury and property damage, together with excess coverage or umbrella coverage with the same terms and conditions as the primary underlying coverage (following form) in an amount such that the primary and excess coverage or primary and umbrella coverage together equals or is greater than \$5,000,000. Said excess or umbrella policy shall contain a clause stating that it takes effect (drops down) in the event the primary coverage is impaired or exhausted.
- **3. Owner's and Contractor's Protective Liability Insurance.** The Contractor shall provide a separate Owner's and Contractor's Protective Liability Insurance Policy. The minimum limit of liability shall be \$5,000,000 per occurrence as a combined single limit for bodily injury and property damage. The policy is to be written for the benefit of the Owner, its members, directors, officers and employees, and they are to be named as the insured. The Casino Licensees and the City of Atlantic City, New Jersey are to be additional insureds.
- 4. Workers Compensation and Employer's Liability Insurance. Workers Compensation Insurance shall be provided according to the requirements of the laws of the State of New Jersey, and shall include an all states endorsement to extend coverage to any State that may be interpreted to have legal jurisdiction. Employer's Liability Insurance shall be provided with the following minimum limits:
 - a. \$100,000 each accident
 - b. \$100,000 Disease each employee
 - c. \$500,000 Disease aggregate limit

Insurance coverage in the minimum amounts set forth herein shall not be construed to relieve the Contractor for liability in excess of such coverage, nor does it preclude the Owner from taking such other actions as are available to it under any other provisions of this Contract or otherwise at law.

All proof of insurance submitted to the Owner shall clearly set forth all exclusions and deductible clauses. Standard exclusions will be allowed provided they are not inconsistent with the requirements of this Subsection. Allowance of any additional exclusions is at the discretion of the Owner. Regardless of the allowance of exclusions or deductions, the Contractor shall be responsible for the deductible limit of the policy and all exclusions consistent with the risks it assumes under this Contract and as imposed by law.

In the event that the Contractor provides evidence of insurance in the form of certificates of insurance, valid for a period of time less than the period during which the Contractor is required by the terms of the Contract to maintain insurance, said certificates are acceptable, but the Contractor shall be obligated to renew its

insurance policies as necessary and to provide new certificates of insurance so that the Owner is continuously in possession of evidence of the Contractor's insurance according to the foregoing provisions.

In the event the Contractor fails or refuses to renew its insurance policy, or the policy is canceled, terminated, or modified so that the insurance does not meet the requirements of this Subsection, the Owner may refuse to make payment of any further monies due under this Contract or refuse to make payment of monies due or coming due under other contracts between the Contractor and the Owner. The Owner may use monies retained under this paragraph to renew the Contractor's insurance for the periods and amounts referred to above. Alternately, the Owner may default the Contractor and direct the Surety to complete the Project. During any period when the required insurance is not in effect, the Engineer may suspend performance of the Contract. If the Contract is so suspended, additional compensation or extension of Contract Time is not due on account thereof.

Payment for any of the required insurance for this Project is included in the Total Contract Price, and Contractor shall not be entitled to any further or additional compensation in regard to fulfilling the requirements of this Subsection.

00630 Representations

00630.1 RESERVED

00630.2 Summary of Work.

The Project consists of the construction of Skylight & Roof Repairs to Atlantic City Convention Center.

00630.4 Permits.

The Contractor shall secure and pay for all permits, approvals, government fees, licenses, and inspections necessary for the proper execution and performance of the Work. Contractor shall deliver to the Engineer all original licenses, permits and approvals obtained by the Contractor in connection with the Work prior to the final payment or upon termination of the Contract, whichever is earlier. (Permits are filed through the New Jersey Department of Community Affairs)

00630.5 Examination of Contract Documents and Site of Project

The Contractor has examined carefully the site of the proposed Project and the Contract Documents before execution of the Contract. The execution of this Contract is conclusive evidence that the Contractor has made such examination and is fully aware of the conditions to be encountered in performing the Work and is fully aware of the requirements of the Contract Documents and has considered the following:

1. **Investigation of subsurface and Surface Conditions.** Where the Owner has made investigations of subsurface conditions in areas where Work is to be performed under the Contract, or in other areas, some of which may constitute possible local material sources, such investigations are made only for the purpose of study, estimating and design. Where such investigations have been made, the records of the Owner as to such investigations have been made available to the Contractor, subject to and upon the conditions set forth herein. In the event the Contractor's site examination reveals that site conditions are inconsistent with the Contract Documents, the Contractor shall immediately notify the Engineer.

- 2. Project Areas and Access Location Availability. The Contractor shall consider the effect on its work schedule of any delays in Project Area and access availability. The execution of this Contract shall be considered conclusive evidence that the Contractor has considered such delays and made allowance for them in the Progress Schedule.
- **3. Utilities.** The Contractor shall consider the effect on its work schedule the existence and requirement to avoid or temporarily relocate utilities. The Contractor shall consider, in its fee schedule submission, the implementation of temporary utilities and permanent utilities required for performance of the Work.
- **4. Other Contractors.** The Contractor shall examine the Project site and adjacent areas so as to be fully aware of other contractors working on or adjacent to the site. The Contractor shall become fully aware of the operations of such contractors and how their operations may affect Contractor's progress. The Contractor shall also consider and allow for the right of the Owner at any time to contract for and perform other or additional work in, on or near the Project Area.
- 5. Existing Structures. The Contractor shall be familiar with existing structures located within the Project Area. However, all structures, as identified by the Engineer as "not to be disturbed," shall be avoided and protected by the Contractor in order to complete the Work. The Contractor must cooperate with the Owner of the structure to minimize conflict with the operation of the building. The Contractor must avoid disruption of utility service and life safety systems to the occupants of the building. The Contractor must also protect the owners and patrons of the retail operations within the building from injury resulting from construction operations, equipment installation and demolition activities.

00700 General Conditions

00700.1 General

The titles and headings of the Section, Subsections, and Subparts herein are intended for convenience of reference and shall not be considered as having bearing on their interpretation.

Working titles that have a masculine gender, such as "workman," "foreman," "materialman," and "flagman" are used in the Contract Documents for the sake of brevity, and are intended to refer to persons of either sex.

When a publication is specified, it refers to the most recent date of issue, including interim publications, before the date of the receipt of proposals for the Project unless the issue as of a specific date or year is provided for.

Whenever a slope is indicated in the Specifications, it is given in horizontal to vertical dimensions. The horizontal will be indicated with an "H" and the vertical will be indicated with a "V."

00700.2 Terms

When the following terms are used in the Contract Documents, the intent and meaning shall be as follows:

ACCEPTANCE. The term "Acceptance" means the formal written acceptance, by the Owner, of the Project that has been completed in all respects according to the Contract Documents.

- ACCEPTANCE TESTING. Testing conducted by the Engineer to measure the degree of compliance to the Contract Documents.
- ENGINEER. The term "Engineer" means Amtech Solutions, Inc. the Owner's professional Engineer acting directly or through the Engineers's duly authorized representatives, such representatives acting within the scope of the particular duties delegated to them.

To avoid repetition, unless otherwise stated, whenever the following words are used, it shall be understood as if they were followed by the words "to the Engineer" or "by the Engineer": "acceptable, accepted, added, allowed, applied, approved, assumed, authorized, awarded, calculated, charged, checked, classified, computed, condemned, conducted, considered, considered necessary, contemplated, converted, deducted, deemed, deemed necessary, deleted, designated, determined, directed, disapproved, divided, documented, established, evaluated, examined, excluded, furnished, given, granted, included, incorporated, increased, indicated, inspected, insufficient, issued, made, marked, measured, modified, monitored, notified, observed, obtained, opened, ordered, paid, paid for, performed, permitted, provided, received, recorded, reduced, re-evaluated, rejected, removed, required, reserved, retested, returned, sampled, satisfactory, scheduled, specified, stopped, submitted, sufficient, suitable, supplied, suspended, taken, tested, unacceptable, unsatisfactory, unsuitable, or used."

BY OTHERS. The term "by others" refers to a person, firm, or corporation other than the Contractor or its surety or persons, firms, or corporations in a contractual relationship with the Contractor or the surety, such as a subcontractor, supplier, fabricator, or consultant at any tier.

CALENDAR DAY. Each and every day shown on the calendar.

CASINO LICENSEE. The term "Casino Licensee" shall mean all casino licensees that contribute funding to the CRDA, and their respective directors, officers and employees.

CHANGE ORDER. The term "Change Order" means a written order issued by the Engineer and the Global Spectrum to the Contractor after execution of the Contract as set forth in Attachment "C" authorizing one or more of the following:

- 1. Changes in the Work.
- 2. Adjustments in the basis of payment for the Work affected by the changes.
- 3. Adjustments in the Contract Time.
- 4. Adjustments to the Scope of Work

CITY. The term "City" shall mean the City of Atlantic City, New Jersey.

COMPLETION. The term "Completion" means Completion of the Work. Completion shall occur when:

- 1. the Work has been satisfactorily completed in all respects according to the Contract Documents and punch list items are finalized and complete;
- 2. the Contractor has satisfactorily executed and delivered to the Engineer and/or Owner all documents, certificates, and proofs of compliance required by the Contract Documents, it being understood that the satisfactory execution and delivery of said documents, certificates, and proofs of compliance is a requirement of the Contract.

CONSTRUCTION CHANGE DIRECTIVE. A construction change directive is a written order prepared by the Engineer and signed by the Owner and Engineer, directing a change in the Work prior to the issuance of a Change Order.

- CONSTRUCTION OPERATIONS. Construction operations shall include mobilization, movement or installation of utilities, construction, punch list and final clean up of the site.
- CONTRACT. The term "Contract" means the entire and integrated agreement between the parties thereunder and supersedes all prior negotiations, representations, or agreements, either written or oral. The Contract Documents form the Contract between the Owner and the Contractor setting forth the obligations of the parties there-under, including, but not limited to, the performance of the Work and the basis of payment.
- CONTRACT DOCUMENTS. The term "Contract Documents" consist of the Contract between Owner and Contractor, Conditions of the Contract, Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Contract and Modifications issued after execution of the Contract.
- CONTRACT TIME. The term "Contract Time" means the number of Calendar Days including authorized adjustments allowed for Completion. This Calendar Day Contract shall be completed on or before the day indicated even when that date is a Saturday, Sunday, or holiday.
- CONTRACTOR. The term "Contractor" means the individual, firm, partnership, corporation, or any acceptable combination thereof contracting with the Owner for performance of the prescribed Work. Throughout the Contract Documents, the Contractor is referred to as if singular in number. The term "Contractor" means the Contractor or the Contractor's authorized representative.
- COUNTY. The term County means the County of Atlantic, New Jersey.
- CRDA. The term "CRDA" shall mean the Casino Reinvestment Development Authority.
- CURRENT CONTROLLING OPERATION OR OPERATIONS. The current controlling operation or operations is to be construed to include any feature of the Work, which, if delayed at the time in question, delays the overall time of Completion.
- DAYS. Unless otherwise designated, days, as used in the Contract Documents, means Calendar Days.
- DISPUTE. The term dispute is defined as a disagreement between the Owner and the Contractor with regard to the Work or Contract Documents.
- DRAWINGS. The Drawings are the graphic and pictorial portions of the Contract Documents prepared by the Engineer or Architect, showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules and diagrams.
- EQUIPMENT. Equipment means all machinery and equipment, together with the necessary supplies for upkeep and maintenance, and also tools and apparatus necessary for the proper construction of the Work.
- EXTRA WORK. The term "Extra Work" means new and unforeseen work found essential to the satisfactory completion of the Project, as determined by the Engineer, and not covered by any of the various Pay Items set forth in Exhibit "G". In the event portions of such work are determined by the Engineer to be covered by one of the various Pay Items set forth in Exhibit "G" or combinations of such items, the remaining portion of such work will be designated as Extra Work. Extra Work also includes work specifically designated as Extra Work in the Contract Documents.

- EXTREME WEATHER CONDITIONS. When, solely as a result of adverse weather, the Contractor is not able to work, the Contractor is entitled to claim that progress of the Work has been affected by extreme weather conditions and may seek an extension of Contract Time consistent with the provisions of Subsection 01310.11A.
- HOLIDAYS. The following days shall be considered holidays for use in determination of Working or Business Days:

New Year's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day
President's Day

- INSPECTOR. The Engineer's authorized representative assigned to inspect contract performance, methods, and materials related to the Work both on and off the site of the Project.
- ITS OWN ORGANIZATION. The term "Its Own Organization" shall be construed to include only workers customarily employed and paid directly by the Contractor and equipment owned or rented by the Contractor, with or without operators.
- MAJOR PAY ITEM. The term "Major Pay Item" means the following categories of the Work: payment and performance bond, site-work, general construction work, roofing & flashing and skylight repairs.
- MATERIALS. Any substances specified, and approved, for use in the performance of the Project.
- MINOR PAY ITEM. The term "Minor Pay Item" includes all categories of the Work that are not defined as a Major Pay Item.
- MODIFICATION. A modification is (1) a written amendment to the Contract signed by both parties; (2) a Change Order; (3) a Construction Change Directive or (4) a written order for a minor change in the Work issued by the Engineer.
- NOTICE TO PROCEED. The term "Notice to Proceed" means the written notice to the Contractor to begin Work, as set forth in Attachment "B".
- NIC. The term "NIC" means work that is not included in the contract. The work will be furnished and installed by the Owner.
- OWNER. The term "Owner" means the Oakview Venue Management L.P. as operator of Boardwalk Hall and the Atlantic City Convention Center, as managing agent for the CRDA, acting directly or through duly authorized representatives, such representatives acting within the scope of the particular duties delegated to them.
- PAY ITEM. The term "Pay Item" means a specifically described item of Work for which there is a per unit or lump sum price, as set forth in Exhibit "G".
- PERFORMANCE BOND AND PAYMENT BOND. The term "Performance Bond and Payment Bond" means the approved form of security, executed by the Contractor and its surety or sureties, guaranteeing complete performance of the Contract in conformity with the Contract Documents and the payment of all legal debts pertaining to the construction of the Project.

- PLANS. The approved plans, profiles, typical sections, cross-sections, working drawings, and supplemental drawings, or exact reproductions thereof, which show the location, character, dimensions, quantities, and details of the Work to be done.
- POLICE. The term "police" shall mean a person authorized to enforce the laws of the State of New Jersey and its political subdivisions, who has jurisdiction at the Project site or elsewhere.
- PRECONSTRUCTION MEETING AND PROJECT MEETINGS. The initial Project and on-going meetings conducted by the Engineer, held before the start of Work, and during the conduct of the Work, from time to time, as called for.
- PROGRESS SCHEDULE. The term "Progress Schedule" means the schedule or timeline prepared by the Contractor to conduct the Work, and which details the periods and milestones for completing the Work, as amended and as approved as provided in the Contract.
- PROJECT. The term "Project" means the construction of the Skylight & Roof Repairs at Atlantic City Convention Center and all other necessary and desirable work as approved in accordance with the terms and conditions of the Contract.
- PROJECT AREA. Atlantic City Convention Center Roof & Sklight}. The Project may include work by others under other contracts.
- PROJECT ACCESS LOCATION(S). The specific access points or locations identified on the Project Plans for ingress and egress to the Project Area.
- PROPERTY. The specific block and lot identified and as otherwise further delineated in the Specifications and Project Plans.
- RETAINAGE. The term, "Retainage" means from the total amounts ascertained as payable in accordance with the Contract, an amount equivalent to ten percent (10%) of the amount due under Contractor's invoice and Application for Payment deducted and retained by the Owner pending Final Payment.
- RIGHT-OF-WAY (ROW). A general term denoting all of the land, property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes or construction of a public improvement.
- ROADWAY. The portion of the highway, street, or road within the City that is used by the Contractor to haul, transport materials and equipment to/from the Project Area.
- SHALL. Designates an obligation of the Contractor, unless otherwise indicated.
- SHOP DRAWINGS. The drawings, diagrams, schedules and other data specifically prepared for the Work by the Contractor or a subcontractor, sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.
- SPECIFICATIONS. The compilation of provisions and requirements for the performance of prescribed work, or other information giving interpretations or revisions to them, any and all Supplementary Agreements, and whether expressly incorporated by reference or not, all applicable regulatory requirements, and best manufacturing practice standards.

- STANDARD WORKING HOURS. The term "Standard Working Hours" means Monday through Friday and times of 7:00 am to 5:00 pm eastern prevailing time.
- STATE. The "State" means the State of New Jersey.
- SUBCONTRACTOR. Subcontractor means an individual, firm, partnership, corporation, or any acceptable combination thereof, to which the Contractor subcontracts part of the Work.
- SUBMITALS. The documents required to be provided to the Engineer and/or Owner prior to and during the performance of the Work.
- SUBSTANTIAL COMPLETION. The term "Substantial Completion" means the point at which the performance of all Work on the Project has been completed but excluding final cleanup and repair of unacceptable Work, and provided the Owner and Engineer have solely determined that:
 - (i). the Project is safe and convenient for use by the public, and
 - (ii). failure to complete the Work and repairs excepted above does not result in the deterioration of other completed Work.
- SUPPLEMENTARY AGREEMENT. The term "Supplementary Agreement" means a bilateral agreement between the Owner and the Contractor, executed on a Change Order form, setting forth the negotiated terms and conditions whereunder changes are to be accomplished, including negotiated adjustments in compensation and time of Completion. The Supplementary Agreement shall be conclusive as to all questions of compensation and extensions of Contract Time relative to the subject of the agreement excepting only those instances wherein the agreement recites specific exceptions.
- SURETY. The corporate body bound with and for the Contractor for the full and complete performance of the Contract and for the payment of all debts and obligations pertaining to the Work.
- TOTAL ADJUSTED CONTRACT PRICE. The term "Total Adjusted Contract Price" means the Total Contract Price as it is adjusted through the issuance of Change Orders and Construction change directives and the calculation of as-built quantities, if applicable.
- TOTAL CONTRACT PRICE. The term "Total Contract Price" means the correctly determined summation of lump sum amounts and products of all quantities of unit price Pay Items multiplied by the unit prices set forth in Exhibit "G."
- TOWN, TOWNSHIP, CITY. A subdivision of the County used to designate or identify the location of the Project.
- TRAVELED WAY. The portion of the roadway for the movement of vehicles exclusive of shoulders and auxiliary lanes.
- UTILITY. A publicly, privately, or cooperatively owned agency or agencies operated by one or more persons or corporations for public service.
- WILL. Designates an action to be taken by the Owner, the Engineer, or any authorized representative, unless otherwise indicated.
- WORK. The term "Work" means the furnishing of any and all labor, services, materials, equipment, tools, transportation, supplies, and other incidentals necessary or convenient for the successful completion

by the Contractor of the construction described in the Contract Documents and the carrying out of any and all duties and obligations imposed by the Contract Documents on the Contractor.

WORKING OR BUSINESS DAY. Any Calendar Day, exclusive of:

- 1. Saturdays, Sundays, and holidays;
- 2. Days on which the Contractor is specifically required by the Contract Documents to suspend construction operations; and
- 3. Days on which the Contractor is prevented by inclement weather or conditions resulting immediately there-from adverse to the current controlling operation or operations, as determined by the Engineer, from proceeding with at least 75 percent of the normal labor and equipment force engaged on such operation or operations for at least 60 percent of the total daily time being currently spent on the controlling operation or operations.

Should the Contractor prepare to begin work at the regular starting time in the morning of any day on which inclement weather, or the conditions resulting from the weather, prevent the work from beginning at the usual starting time, and the crew is dismissed as a result thereof, and the Contractor does not proceed with at least 75 percent of the normal labor and equipment force engaged in the current controlling operation or operations for at least 60 percent of the total daily time being currently spent on the controlling operations or operations, the Contractor will not be charged for a Working Day whether or not conditions should change thereafter during said day and the major portion of the day could be considered to be suitable for such construction operations.

00700.3 Intent

The intent of the Contract Documents is to describe a functionally complete and aesthetically acceptable Project to be constructed and completed by the Contractor in every detail according to the Contract Documents. Any Work that may be reasonably inferred from the Contract Documents as being required to produce the intended result shall be supplied whether or not specifically called for. Where the Contract Documents describe portions of the Work in general terms, but not in complete detail, it is understood that only the best construction practice is to prevail and only materials and workmanship of the first quality are to be used. Only where the Contract Documents specifically describe a portion of the Project as being performed by others is the Work deemed not to constitute construction of the entire Project.

00700.4 Changes

The Owner, through the Engineer, reserves the right to make, in writing, at any time during the Work, such changes in quantities and such alterations in the Work as are necessary to satisfactorily complete the Project. Such changes in quantities and alterations do not invalidate the Contract nor release the surety, and the Contractor agrees to perform the work as altered.

If the alterations or changes in quantities significantly change the character of the Work under the Contract, whether such alterations or changes are in themselves significant changes to the character of the Work or, by affecting other work, cause such other work to become significantly different in character, an adjustment, excluding loss of anticipated profits, will be made to the Contract.

The adjustment to the cost resulting from a change in Work shall be determined by the lesser of:

- 1. By unit prices stated in the Contract Documents; or
- 2. By cost, defined below, properly itemized and supported by sufficient substantiating documentation to permit evaluation, plus a profit or no more than five percent (5%) of items 'a' through 'e' described below. Such costs shall be itemized by crafts as defined in the schedule of values and limited to the following items directly allocable to the change in the Work:

- a. Costs of materials, including cost of delivery;
- b. Fully-burdened cost of labor, including but not limited to, payroll taxes, social security, old age and unemployment insurance, vacation, fringe benefits required by agreement or routinely paid by Contractor, and worker's or workman's compensation insurance;
- c. Contractor Supervision/Overhead allowance not to exceed ten percent (10%) of 'a' plus 'b'; the parties agree that this mark-up shall fully cover all Contractor overhead;
- d. Rental value of equipment and machinery to be established by rental receipts and not to exceed reasonable and customary rates for the locale of the Work. For owned equipment, Contractor must prove reasonable rental rate pursuant to actual ownership costs.
- e. Cost of any subcontracted work subject to the above requirements and limitations.
- f. Insurance and bond premiums not to exceed a total of 1% of the change order amount.

Any dispute regarding the cost of the change, as calculated above, shall not relieve the Contractor from proceeding with the change as directed by the Owner or Engineer.

If the alterations or changes in quantities do not significantly change the character of the Work to be performed under the Contract, the altered work will be paid for as provided elsewhere in the Contract.

The term "significant change" shall be construed to apply only to the following circumstances:

- 1. When the character of the Work as altered differs materially in kind or nature from that involved or included in the original proposed construction, or
- 2. When the as-built quantity of a Major Pay Item, as defined herein, that is based on unit price is in excess of 120 percent or below 80 percent of the original Contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 120 percent of original Contract item quantity, or in case of a decrease below 80 percent, to the actual amount of work performed.

Changes that solely involve the increase or decrease in the quantity of Pay Items (not involving unit price adjustments pursuant to Subsection 00700.7), the elimination of Pay Items, the adjustment of the estimated quantities which are set forth in Attachment "A" as the result of as-built calculations, or minor changes in the Work as provided in 00700.5, may be affected by a Construction change directive or by a Change Order (in the form set forth in Attachment "C"), as determined by the Engineer. All other changes will be included in a Change Order that specifies, in addition to the Work to be done, an adjustment of Contract Time, if any, and the basis of compensation for such Work. A Change Order does not become effective until the Owner has approved the proposed Change Order submitted by the Engineer.

Upon receipt of a Construction change directive or Change Order, the Contractor shall proceed with the ordered Work. Where the changes involved require a Change Order, and a Change Order has not yet been issued, the Owner may direct, by Construction change directive, that the Contractor proceed with the desired Work, and the Contractor shall comply. In such cases, the Owner will, as soon as practicable, issue a Change Order for such Work.

When the compensation for an item of Work is subject to adjustment under the provisions of Subsections 00700.5 through 00700.11 the Contractor shall furnish the Engineer with adequate detailed cost data for such item of Work.

In addition to Construction change directives and Change Orders, the terms and conditions relating to changes may be negotiated with the Contractor. If the Contractor signifies acceptance of such terms and conditions by executing a Supplementary Agreement, and if such Supplementary Agreement is approved by the Owner and issued to the Contractor, payment according to the terms and conditions as to

compensation and adjustments in the Contract Time therein set forth constitutes full compensation and a mutually acceptable adjustment of Contract Time for all Work included therein or required thereby. The Contractor agrees that a proposed Supplementary Agreement that is not approved by the Owner or that is rejected by the Contractor shall have no effect and that neither may attempt to use it in any litigation that may result from the Contract.

The Contractor acknowledges and agrees that no claim for additional compensation shall be made because of any alteration, deviation, addition to, or omission from the Work required by the Contract, by reason of any variation between the approximate quantities as set forth in Exhibit "G" and subsequent owner approved schedule of values and the quantities of Work as done, by reason of Extra Work, by reason of elimination of Pay Items, or by reason of changes in the character of Work, except as allowed in this Section.

The Contractor acknowledges and agrees that no claim for additional compensation or extension of Contract Time within the scope of this Section will be allowed if asserted after Acceptance.

00700.5 Minor Changes in the Work.

The Engineer has the authority to order minor changes in the Work not involving an adjustment to the unit or lump sum prices, or an adjustment to Pay Items, or an extension of Contract Time, and not inconsistent with the intent of the Contract Documents. Such changes may be effected by Construction change directive and are binding on the Owner and the Contractor. Additional compensation or extension of Contract Time will not be allowed.

00700.6 Procedure and Protest.

A Construction change directive or Change Order may be issued at any time. Should the Contractor disagree with any terms or conditions set forth in a Construction change directive or a Change Order, the Contractor shall submit a written protest to the Engineer within 5 days after the receipt of such Construction change directive or Change Order on forms furnished by the Engineer as directed by the Owner. The protest shall state the points of disagreement, and, if possible, the specification references, quantities, and costs involved. The protest shall be a specific, detailed statement of the points of disagreement, and the Owner reserves the right to reject general protests. Rejected general protests that are not cured by the submission of a specific, detailed statement within five days of such rejection will not be considered. If a written protest is not submitted, payment will be made as set forth in the Construction change directive or Change Order and such payment constitutes full compensation for all Work included therein or required thereby and also is conclusive as to any Contract Time adjustments provided for therein or in establishing that no Contract Time adjustment was warranted.

Protests related to Work ordered by Construction change directive, but as to which a Change Order is required, shall be made within 5 days after receipt of the Construction change directive. Subsequent issuance of the Change Order shall not be the basis for a protest except to the extent that the Change Order differs materially from the Construction change directive.

Where the protest concerning a Construction change directive or a Change Order relates to compensation, the compensation payable for all Work specified or required by said Construction change directive or Change Order to which such protest relates, if later deemed appropriate by the Owner, will be determined as provided in Subsection 01450.5 through 01450.8. The Contractor shall keep full and complete records of the cost of such Work and shall permit the Owner and Engineer to have such access thereto consistent with Subsection 01290.9, as may be necessary to assist in the determination of the compensation payable for such Work.

Where the protest concerning a Change Order relates to the adjustment of Contract Time, the time to be allowed, if later deemed appropriate, will be determined as provided in Subsection 01310.11 (Extensions and Reductions of Contract Time).

00700.7 Increased or Decreased Quantities.

Increases or decreases in the quantity of a Pay Item will be determined by comparing the partial or total asbuilt quantity of such item of Work, as applicable, with the quantity set forth in Exhibit "G" and subsequent owner approved schedule of values or the Project Plans, as applicable. In making such a comparison, quantities that are the subject of Supplementary Agreements or Change Orders for Extra Work will not be considered.

Minor Pay Items are not eligible for any adjustment in unit price regardless of how much the total as-built quantity varies from the quantity set forth in Exhibit "G" and subsequent owner approved schedule of values unless eligible for adjustment pursuant to Subsection 00700.9.

00700.8 Eliminated Items.

Should any Pay Item set forth in Exhibit "G" and subsequent owner approved schedule of values be found unnecessary for the proper completion of the Work, the Engineer may, upon written order to the Contractor, eliminate such item from the Contract. In such case compensation, if any is appropriate, will be made as provided in this Subsection.

If acceptable material is ordered by the Contractor for the eliminated item before the date of notification of such elimination and if orders for such material cannot be canceled, it will be paid for at the actual cost to the Contractor. In such case, the material paid for becomes the property of the Owner, and the actual cost of any further handling will be paid for. If the material is returnable to the vendor and if the Engineer so directs, the material shall be returned, and the Contractor will be paid for the actual cost or charges made by the vendor for returning the material. The actual costs of handling returned material will be paid for.

A reduction in the Contract Time may be made by the Engineer as a result of an eliminated item, if appropriate.

00700.9 Changes in Character of Work.

If the Owner determines that an ordered change in the work materially changes the character of the work of a Pay Item, or a portion thereof, and if the change substantially increases or decreases the actual cost of such changed item as compared to the actual or estimated cost of performing the work of said item according to the Contract Documents originally applicable thereto, in the absence of a Supplementary Agreement or un-protested Change Order specifying the compensation payable, an adjustment in compensation will be made according to the following:

- 1. The basis of such adjustment in compensation will be the difference between the actual cost to perform the work of said item or portion thereof involved in the change as originally planned or estimated and the actual cost of performing the work of said item or portion thereof involved in the change, as changed. Any such adjustment is to apply only to the portion of the work of said item actually changed in character.
- 2. If the compensation for an item of Work is adjusted under this Subsection, the costs recognized in determining such adjustment and quantity involved will be excluded from consideration in making an adjustment for such item of Work under the provision in Subsection 00700.7.

Failure of the Owner to recognize a change in character of the Work at the time a Construction change directive or Change Order is issued does not relieve the Contractor of the duty and responsibility of filing a written protest within the five-day limit as provided in Subsection 00700.6.

00700.10 Extra Work.

The Owner reserves the right to require Extra Work as needed for the satisfactory completion of the Project. Such Work will be designated as Extra Work when it is determined by the Engineer that such Work is not required according to the Contract Documents originally applicable thereto. In the event portions of such Work are determined to be required according to the Contract Documents originally applicable thereto, the remaining portion of such Work will be designated as Extra Work. Extra Work also includes Work specifically designated as Extra Work in the Contract Documents.

The Contractor shall do such Extra Work and furnish labor, material, and equipment therefor upon receipt of a Change Order, Construction change directive, or Supplementary Agreement. In the absence of such, the Contractor shall not perform, nor be entitled to payment for, such Extra Work.

If the Contractor and the Owner cannot agree on a Supplementary Agreement for Extra Work and the Engineer deems it inadvisable to have such Work completed by the Contractor, the Owner may elect to have such Work completed by others, and the Contractor shall not interfere therewith nor have any claim for additional compensation as the result of such election.

00700.11 Notification of Changes.

The Contractor shall promptly report to the Engineer changes that the Contractor believes constitute a change to the Contract. Except for changes identified as such pursuant to Subsections 00700.4 and 00700.5 the Contractor shall promptly notify the Engineer in writing within five (5) days from the date that the Contractor identifies any Changes, which the Contractor regards as a change to the Contract terms and conditions. In no event shall the Contractor begin Work or incur any expenses with relation to the claimed change before giving notice.

The notice shall state the following on the basis of the most accurate information available to the Contractor:

- 1. The date, nature, and circumstances of the conduct or circumstances regarded as a change.
- 2. The name, function, and activity of each person involved in or knowledgeable about such conduct or circumstances.
- 3. The identification of any documents and the substance of any oral communication involved in such conduct or circumstances.
- 4. In the instance of alleged Extra Work, the basis for the Contractor's claim that the Work is extra
- 5. The particular elements of Contract
 - a. What Pay Items have been or may be affected by the alleged change.
 - b. What labor or materials or both performance for which the Contractor may seek additional compensation under this Section including: have been or may be added, deleted, or wasted by the alleged change and equipment idled, added, or required for additional time.
 - c. To the extent practicable, what delay and disruption in the manner and sequence of performance and effect on continued performance have been or may be caused by the alleged change.
 - d. What adjustments to Contract price, delivery schedule, and other provisions affected by the alleged change are estimated.

Following submission of the notice, the Contractor shall diligently continue performance of the Contract to the maximum extent possible according to the Contract Documents, unless such notice results in a direction by the Engineer, in which event the Contractor shall continue performance in compliance therewith, provided, however, that if the Contractor regards such direction itself as a change, notice shall be given as

provided above. All directions, orders, and similar actions of the Engineer will be reduced to writing and copies thereof furnished to the Contractor.

The Engineer will promptly and in any event within ten (10) days after receipt of notice, respond thereto in writing. In such response, the Engineer will do one of the following:

- 1. Confirm that the conduct or circumstance of which the Contractor gave notice constitutes a change, and when necessary direct the mode of further performance.
- 2. Revise or rescind any communication regarded as a change.
- 3. Deny that the conduct or circumstance of which the Contractor gave notice constitutes a change, and when necessary direct the mode of further performance; or
- 4. In the event the Contractor's notice information is inadequate to make a decision under Items 1, 2, or 3 of this paragraph, advise the Contractor as to what additional information is required, and establish the date by which it should be furnished and the date thereafter by which the Owner will respond.

If the Engineer confirms that conduct or circumstances effected a change as alleged by the Contractor, and such conduct or circumstances causes an increase or decrease in the cost of, or the time required for performance of any part of the Work under the Contract, an adjustment in compensation will be made according to the provisions of this Section, and the Contract will be modified in writing accordingly. In the case of drawings, designs, or specifications that are defective and for which the Owner is responsible, the adjustment will be made to include the cost and extension of Contract Time for delay reasonably incurred by the Contractor in attempting to comply with such defective drawings, designs, or specifications before the Contractor identified, or reasonably should have identified, such defect. When the cost of materials made obsolete or excess as a result of a change confirmed by the Engineer pursuant to this Subsection is included in the adjustment in compensation, the Engineer has the right to prescribe the manner of disposition of such materials. Adjustments will not be made that include increased costs or extensions of Contract Time for delay resulting from the Contractor's failure to provide adequate notice or to continue performance as provided above. Any adjustments of Contract Time will be made pursuant to Subsection 01310.11.

The failure of the Contractor to give notice pursuant to the provisions of this Subsection shall constitute a waiver of any and all claims and damages that could have been avoided or mitigated had such timely notice been given. Moreover, no action or inaction of any person shall constitute a waiver of the Owner's absolute right to receive written notice of an alleged claim pursuant to this Subsection.

DIVISION 1 - GENERAL REQUIREMENTS

01100 Summary

01110 Summary of Work

The Project consists of the construction of the Skylight & Roof Repairs at Atlantic City Convention Center.

01140 Work Restrictions

01140.1 PROPERTY OWNER OCCUPANCY

A. The Property Owner(s) intend to occupy the Project during the construction period for the conduct of normal operations.

- B. Cooperate with Property Owner to minimize conflict, and to facilitate Property Owner's operations.
- C. Protect the building and patrons of the establishment involved/affected by the construction operations from injury resulting from all construction operations, equipment, installations or demolition.
- D. Schedule the Work to accommodate building occupancy and operation.

1140.2 RESERVED

01140.3 Work Time.

The Contractor is limited to working the Standard Working Hours. However, if the Contractor so requests, the Owner may consider seeking approval for the Contractor to work outside of the Standard Working Hours. No work is to be progressed outside of Standard Working Hours unless approved in writing by the Owner.

01140.4 Consideration and Safety of, and Coordination with Oakview Venue Management Operation.

The Contractor is aware that the Project Area is a Convention Center which may result in the public being attracted to the construction activity. As such, the Contactor shall take care and be cognizant at all times of pedestrians within right-of-ways and persons that may be attracted to the Work activities. At all times, the Contractor must take all necessary and desirable measures to protect equipment and materials used in performance of the Work from accessibility by third parties. The Contractor shall not be entitled to additional compensation or an extension of time in the Contract due to such pedestrian traffic conditions.

If in the opinion of the Owner, in consultation with the Engineer, the Contractor is not abiding by applicable public safety laws and regulations, or determines that the Project Area has not been secured after work hours to prevent the injury to third parties, the Owner will instruct the Engineer to halt the Project in accordance with Subsection 01310.14 (Temporary Suspension of Work) and contract with the local authorities or take whatever measures necessary and desirable to protect public safety. The Owner will be entitled to reimbursement of all reasonable costs and expenses from the Contractor associated with such determination, in accordance with Subsection 01360.14 (Recovery of Monies by the Owner).

01140.5 Damage to Property.

The Contractor shall protect all local roadways, and private property from damage. Any damage caused by the Contractor shall be considered part of the Contractor's risk and included as part of the Contractor's costs for the Project. The Contractor's obligation in this Subsection is in addition to other similar obligations of the Contract, including those set forth in Sections and Subsections 00630.5 (Examination of Contract Documents and Site of Project), 11020 (Site Restoration and Final Cleanup), 01450.16 (Load Restrictions), 01450.17 (Maintenance During Construction), 01450.18 (Failure to Maintain Project Area, Surroundings and Roadway). A failure by the Contractor to repair any of the above mentioned items in a prompt and timely manner, as determined by the Owner, in its sole discretion, shall be cause for the Owner to contract with a separate contractor to repair the damage and be reimbursed by the Contractor in accordance with Subsection 01360.14 (Recovery of Monies by the Owner). An exception to requiring immediate repair may be approved by the Owner, if the damage is expected to be repetitive due to the nature of the vehicle traffic, is not a danger to the public, and not required by the owner of the right-of-way or

other public property, or the private landowner impacted. However, all such approvals must be issued in writing by the Owner and the City. The Contractor shall also be responsible for repairing the damage allowed to remain until Substantial Completion at the Contractor's cost or reimburse the Owner in accordance with Subsection 01360.14 (Recovery of Monies by the Owner).

01140.6 Use of Site.

The use of the Project Area is limited to the construction needed for the completion of the Project. The Project Area shall not be used to store equipment or materials other than that to perform the Work called for under the Contract. In addition, at the end of the work day, unless in a location that would prove difficult logistically to move equipment, all machinery and purchased materials shall be stored outside of the Project Area.

01200 Price and Payment Procedures

01210 Allowances

Allowance shall include cost to Contractor of specific products and materials ordered by Owner under allowance and shall include taxes, freight, and delivery to Project site.

Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner under allowance shall be included as part of the Contract Sum and not part of the allowance. All other costs will be reimbursed at actual with supporting documentation.

01270 Measurement of Quantities

Measurements will be made according to the United States customary English units.

The method of measurement and computations to be used in determination of quantities of Work performed under the Contract are those methods generally recognized as conforming to good Engineering practice. The method of measurement chosen must be consistent and unchanging through the life of the Project.

The term "lump sum" when used as a basis of payment means complete payment for the Work of that item, and that item will not be measured.

When the unit price Pay Items set forth in Exhibit "G" and subsequent owner approved schedule of values are specified to be the pay quantity, either the Engineer or the Contractor may request that the quantity be measured. If the Contractor makes such a request, it shall be accompanied by drawings, calculations, or other information indicating that the quantity in Exhibit "G" and subsequent owner approved schedule of values is not correct.

01290 Payment Procedures

01290.1 Scope of Payment.

The Contractor shall receive and accept the compensation provided for in the Contract as full payment for furnishing all labor, materials, tools, equipment, and incidentals necessary to complete the Work, and for performing all Work contemplated and embraced under the Contract in a complete and acceptable manner. Except where specifically provided elsewhere in the Contract Documents, compensation shall encompass full payment for all risk, loss, damage, or expense of whatever character arising out of the nature of the

Work or the prosecution thereof, or for the action of the elements, or for any unforeseen difficulties that may be encountered during the prosecution of the Work until Acceptance.

The payment for the various Pay Items set forth in Exhibit "G" and subsequent owner approved schedule of values encompasses all compensation for work essential to each Pay Item. Work essential to each Pay Item will not be measured or paid for under any other Pay Item in the Contract Documents.

01290.2 Payment for Contractor's Expenses During Delays.

The Contractor is expected to be familiar with the type of work being progressed under this Contract. Therefore, no delays due to, for example, weather, flooding, coordination with subcontractors, and adjacent work by others will be compensated by the Owner. The Contractor shall take any and all necessary and desirable steps to be familiar with all aspects of the Project, including, without limitation, the Project Area, the contemplated Work, and the Project Plans and Specifications.

01290.3 Partial Payments.

The Owner will make monthly estimated payments to the Contractor based on the approximate quantities of Work satisfactorily performed according to the Contract Documents during the preceding month. Partial payments on account of such monthly estimate will be made based on the prices set forth in Exhibit "G" and subsequent owner approved schedule of values or as provided by Construction change directive, Change Order, or Supplementary Agreement. The Owner will also pay the Contractor for materials delivered according to Subsection 01290.4.

Before the issuance of each monthly payment before Substantial Completion, the Contractor shall present an invoice along with a fully completed Application for Payment in the form set forth in Attachment "A." The Application for Payment shall include a Partial Release and Waiver of Liens executed by the Contractor and by any subcontractor or supplier who has provided work, services, material or equipment to the Project and is requesting payment for any of the Work encompassed by the Application for Payment, waiving the Contractor's, subcontractor's and/or supplier's right to assert a construction lien in regard to the Project pursuant to N.J.S.A. 2A:44A-1 to the extent of payments actually received for work, services, materials or equipment provided or to be provided.

Pay Items that are on a lump sum basis will not be measured. However, payment for such items will be included in partial payments consistent with the provisions of the Subsection describing the Work under the lump sum Pay Item. Where the method of payment is not described under the Subsection describing the Work of the lump sum Pay Item, partial payment will be made based on an approximation of the proportionate value of the Work satisfactorily performed to date.

When an Application for Payment includes an application for payment of any unit price pay item, the Application shall include a certification by the Contractor of the quantity of units applied for, along with all necessary documentation, as determined by the Engineer, of the measurement of the quantity of unit price items.

From the total amounts ascertained as payable, Owner will retain the Retainage in accordance with the Contract.

Such estimate or payment will not be made when, in the judgment of the Engineer, the Work is not proceeding according to the Contract Documents or following the Owner giving the Contractor and surety notice of delay, neglect, or default under Subsection 01310.16 (Default and Termination of Contractor's Right to Proceed).

Such estimate or payment shall not be construed to be an approval of any defective or improper Work. The Engineer upon determining that any payment under a previous monthly estimate was improper or unwarranted for any reason may deduct the amount of such payment from the subsequent monthly estimate and partial payments made to the Contractor.

The Owner will deduct from any monthly estimate and payment and/or the final payment such amounts as are required to be deducted pursuant to provisions of the Contract Documents.

01290.4 Materials Payments.

Before including payments for Items that include materials, the Engineer must be satisfied that:

- 1. The materials have been properly stored, insured and protected along or upon the Project Area or have been stored at locations owned or leased by the Contractor or the Owner; and
- 2. The materials have been inspected and appear to be acceptable based upon available supplier's certification and/or materials test reports; and
- 3. The Contractor has provided the Engineer with proof of good credit standing with the material supply company; and
- 4. The materials, if stored on property not belonging to the Owner, are fenced in with access limited to the Owner, Engineer and the Contractor, and the fenced-in materials are clearly identified in large letters as being without encumbrances and for use solely on the Project.

The Contractor assumes full responsibility for the safe storage and protection of the materials and nothing in this Subsection alters the provisions of Subsections 01360.12 (Risks Assumed by the Contractor) and 00620 (Insurance). If materials paid for under this Subsection are damaged, stolen, or prove to be unacceptable, the payment made therefor shall be deducted from subsequent estimates and payments.

Payment for materials as provided in this Subsection shall not be deemed to be an approval of such materials, and the Contractor shall be responsible for and must deliver to the Project Area and properly incorporate in the Work only those materials that comply with the Contract Documents.

The Contractor shall pay any and all costs of handling and delivering materials to and from the place of storage to the Project Area, as well as any storage rental. Any taxes levied by any government against the materials shall be borne by the Contractor.

01290.5 Payments Following Substantial Completion.

Following Substantial Completion of the Contract according to Subsections 00700.3 (Intent) and 01450.20 (Substantial Completion) payments to the Contractor will be made only upon certification by the Contractor to the Engineer and Owner that:

- 1. Each subcontractor or supplier has been paid all amounts due from all previous progress payments and shall be paid all amounts due from the current progress payment; or
- 2. There exists a valid basis under the terms of the subcontractor's or supplier's contract to withhold payment from the subcontractor or supplier, and therefore payment is withheld.

The Owner shall not be responsible for any interest payment to material suppliers, no matter what circumstance arises; either through delays in payment by the Owner or delays in payment by the Contractor.

All monies retained subsequent to Substantial Completion shall be released at final payment. Ninety-five percent of the Retainage shall be paid at final payment, with the balance retained in an interest bearing account by the Owner until such time as the Contractor satisfies its obligations under this Contract after which time, such balance will be paid to the Contractor.

01290.6 Payment Following Acceptance.

After Acceptance as provided in Subsection 01450.21 (Completion and Acceptance), the Engineer will make an estimate of the total amount of Work done under the Contract and the Owner will make a final monthly payment. The Owner will pay the balance found to be due after deduction of all previous payments and such further amounts as the Engineer determines to be necessary and proper under the Contract

(including those required under Subsection 01290.5) pending issuance of the Final Certificate and payment. Retainage is released with this estimate except where the Engineer determines to continue to retain them under the provisions of Subsections 01290.5 and 01290.7.

01290.7 As-Built Quantities.

Following Substantial Completion, the Engineer will finalize as-built quantities for all unit price Pay Items and for Extra Work that has been authorized and incorporated into the Project. The Contractor shall assume the positive obligation of assisting the Engineer in the preparation of such as-built quantities at no extra cost. If the Contractor disagrees with the final as-built quantities, the Contractor must submit, together with a notice of disagreement, the proposed changes and supporting calculations within five (5) days. Where the Contractor fails to respond or fails to provide supporting calculations, together with a notice of disagreement, within the aforesaid 5-day period, such failure will be construed to be acceptance of the asbuilt quantities. However, the Engineer will review supporting calculations properly received from the Contractor according to this Subsection, within five (5) days, and will accept or reject, in part or in whole, the proposed changes to the as-built quantities. The Engineer has the discretion to extend the Contractor's 5-day response period, but only upon receipt of a written request from the Contractor, submitted within the aforesaid 5-day period. After the Contractor's acceptance, expiration of the aforesaid 5-day period and any properly granted extensions, or after review of any properly submitted proposed changes; final as-built quantities will be incorporated into a proposed Final Certificate. A claim based upon proposed changes to the as-built quantities that have not been accepted by the Engineer, but which were supported by calculations and submitted within the aforesaid 5-day period, may be reserved by the Contractor according to Subsection 01290.8. In addition, the provision of Section 01270 (Measurement of Quantities) shall also govern.

The Engineer may from time to time, before Completion, prepare as-built quantities and incorporate these quantities into monthly estimate certificates through an appropriate Field Order or Change Order. Such interim as-built quantities are subject to recalculation following Completion. However, nothing contained in the Contract Documents shall be construed to place on the Engineer the obligation of providing the Contractor with as-built quantities for the Work performed before the issuance of the proposed Final Certificate, nor to provide more than rough, approximate quantities of the Work done for use in the preparation of monthly estimates.

Should it appear to the Engineer at the time of Acceptance that the calculation of as-built quantities might result in the Contractor being obliged to return money to the Owner, the Engineer may refuse to release Retainage pending issuance of the proposed Final Certificate. Where the estimate reveals that an overpayment has been made, the Contractor shall immediately return the amount of the overpayment. If the Contractor fails to remit the overpayment, the Owner will avail itself of other funds held against the Retainage, and then if necessary proceed against the Contractor or its surety. Where the proposed Final Certificate reveals that no overpayment has been made, the Contractor shall be entitled to payment thereunder and the release of Retainage in accordance with the Contract, but the Contractor shall have no claim of any kind for additional compensation as a result of the Engineer's decision to withhold Retainage or other monies pending issuance of the proposed Final Certificate.

01290.8 Final Payment.

The Final Certificate shows the total amount payable to the Contractor, including therein an itemization of said amount segregated as to Pay Item quantities, Extra Work, and any other basis for payment, and also shows therein all deductions made or to be made for prior payments and as required pursuant to the provisions of the Contract Documents. All prior estimates and payments are subject to correction in the Final Certificate.

Within 30 days after said Final Certificate has been issued to the Contractor, the Contractor shall either submit to the Engineer a written acceptance of the Final Certificate without exception or a written acceptance of the Final Certificate with exception or reservation. The Contractor's failure to submit any written acceptance within said 30 days will be construed as an acceptance of the Final Certificate without exception or reservation. Final payment will be made to the Contractor in the amount set forth in the Final Certificate, and the Contract will be complete as of the date on which such payment is issued. Failure of the Contractor to accept the tendered Final Payment shall not affect completion of the Contract.

If the Contractor submits to the Engineer its written acceptance of the Final Certificate without exception or reservation, the acceptance shall contain a release signed by the Contractor in a form satisfactory to the Owner.

Upon receipt of such written approval and release, the Owner will pay the entire sum due and owing hereunder, and the Contract will be complete as of the date on which that payment is issued, subject to the provisions of 01290.5 (Payments Following Substantial Completion).

Any claims the Contractor may have that cannot be resolved with the Engineer or Owner at Final Payment will be submitted to non-binding mediation in accordance with Subsection 01360.2 (Process for the Resolution of Contract Disputes). No action of any kind arising under this Contract shall be brought before the matter at issue is submitted to non-binding mediation in accordance with Subsection 01360.2.

01290.9 Audits.

All claims filed under non-binding mediation are subject to audit at any time following the filing of such claim. The audit may be performed by the Owner or by an auditor under contract with the Owner. The audit may begin on ten (10) days notice to the Contractor or its subcontractor. The Contractor, subcontractor, or supplier shall provide adequate facilities that are acceptable for such audit during normal business hours. The Contractor, subcontractor, or supplier shall make a good faith effort to cooperate with the auditors. Failure of the Contractor, subcontractor, or supplier to maintain and retain sufficient records to allow the Owner's auditor to verify all or a portion of such claim to the books and records of the Contractor, subcontractor, or supplier shall constitute a waiver of such claim and shall bar any recovery thereunder.

At a minimum, the auditors shall have available to them the following documents:

- 1. Daily time sheets and foreman's daily reports.
- 2. Insurance, welfare, and benefits records.
- 3. Payroll registers.
- 4. Earnings records.
- 5. Payroll tax forms.
- 6. Material invoices and/or requisitions.
- 7. Material cost distribution worksheet.
- 8. Equipment records (list of company equipment and rates).
- 9. Vendors', rental agencies', and subcontractors' contracts and invoices.
- 10. Subcontractors' payment certificates.
- 11. Canceled checks (payroll and vendors).
- 12. Job cost report.
- 13. Job payroll ledger.
- 14. General ledger.
- 15. Cash disbursements journal.
- 16. Financial statements for all years reflecting the operations on the Project.
- 17. Income tax returns for all years reflecting the operations on the Project.
- 18. Depreciation records on all company equipment whether such records are maintained by the company involved, or its accountant, or others.

- 19. If a source other than depreciation records is used to develop costs for the Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all such other source documents.
- 20. All documents which reflect the Contractor's actual profit and overhead during the years the Project was being performed and for each of the five years before the commencement of the Project.
- 21. All documents related to the preparation of the Contractor's Bid including the final calculations on which the bid was based.
- 22. All documents that relate to each and every claim together with all documents which support the amount of damages as to each claim.
- 23. Worksheets used to prepare the claim establishing the cost components for items of the claim including, but not limited to, labor, benefits and insurance, materials, equipment, subcontractors, and all documents which establish the time periods, individuals involved, and the hours and rates for these individuals.

01290.10 Warranty Against Defective Work.

In addition to any other rights or remedies the Owner may have against the Contractor, its officers, employees, agents, subcontractors, fabricators, and suppliers under other provisions of the Contract Documents or as are otherwise allowed in law or equity, the following rights, remedies, and obligations are imposed by this Subsection:

- 1. On all Projects, all subcontractors', manufacturers', fabricators', and suppliers' warranties, express or implied, respecting any work or materials shall, at the direction of the Engineer, be enforced by the Contractor for the benefit of the Owner. The Contractor shall obtain any warranties that subcontractors, manufacturers, fabricators, and suppliers would give in normal commercial practice. If directed, the Contractor shall require any such warranty to be executed in writing to the Engineer. The Engineer may direct the Contractor to undertake litigation to enforce any warranty. Litigation directed to be brought during the life of the Contract and until two year following Acceptance (whether actually instituted within this period or not) shall be at the Contractor's expense.
- 2. The Contractor warrants that work performed conforms to the Contract requirements and is free of any defect of equipment, material or design furnished, or workmanship performed by the Contractor or any of its subcontractors, fabricators, or suppliers at any tier. Such warranty shall continue for a period of two years following Acceptance. Under this warranty, the Contractor shall remedy at its own expense any such failure to conform or any such defect. In addition, the Contractor shall remedy at its own expense any damage to Owner or Property Owner owned or controlled real or personal property, when that damage is the result of the Contractor's failure to conform to Contract requirements or any such defect of equipment, material, workmanship, or design. The Contractor shall also restore any work damaged in fulfilling the terms of this clause. The Contractor's warranty with respect to work repaired or replaced hereunder shall run for the greater of: (i) the balance of the original two year term or (ii) one year from the date of such repair or replacement, whichever is longer.

The Engineer will notify the Contractor in writing of the discovery of any failure, defect, or damage. Should the Contractor fail to remedy any failure, defect, or damage described in the paragraph above, within 45 days after receipt of notice thereof, the Engineer, on the Owner's behalf, will have the right to replace, repair, or otherwise remedy such failure, defect, or damage at the Contractor's expense.

3. Notwithstanding any other provision of this Subsection, the Contractor shall not be liable, hereunder, to the extent of any defects of material or design furnished by the Owner nor for the repair of any damage that results from any such defect in Owner furnished material or design.

01300 Administrative Requirements

01310 Project Management and Coordination 01310.1 Assignment.

The performance of the Contract may not be assigned, except upon the written consent of the Owner. Consent will not be granted to any proposed assignment that would relieve the original Contractor or its surety of their responsibilities under the Contract nor will the Owner consent to any assignment of a part of the Work under the Contract.

01310.2 Subcontracting.

The Contractor shall make application to the Owner, through the Engineer, of the names of persons or entities, not listed on the subcontractor utilization form, that the Contractor proposes to engage as subcontractors under this contract. The Owner will reply to the Contractor in writing promptly with any objections to the proposed person or entity. The contractor shall not contract with anyone that the Owner has made timely and reasonable objection. It is understood, however, that any consent of the Owner for the subcontracting of any Work of the Contract in no way relieves the Contractor from its full obligations for all Work under the Contract, nor the surety of its obligations under the bond. The Contractor shall at all times give its personal attention to the fulfillment of the Contract and shall keep the Work under control. The Contractor shall be responsible for all work of subcontractors which work shall conform to the provisions of the Contract Documents. The consent to the subcontracting of any part of the Work shall not be construed as an approval of the said subcontract or of any of its terms, but is to operate only as an approval of the Contractor's request for the making of a subcontract between the Contractor and its chosen subcontractor.

Application for subcontracting any part of the Work shall be made by the Contractor in writing to the Owner. The Contractor shall attach to that application a certified copy of the proposed subcontract between the Contractor and the subcontractor. After review of the application, the consent of or rejection by the Owner of the subcontracting will be provided to the Contractor in writing. Before the receipt of the written consent from the Owner, Work shall not be performed on the Project under the subcontract.

The subcontractor shall look only to the Contractor for the payment of any claims of any nature whatsoever arising out of the subcontract. Nothing contained in this Contract shall create any contractual relationship between any subcontractor and the Owner. The Contractor shall insert appropriate clauses in all subcontracts to bind subcontractors to the terms and conditions of this contract insofar as they are applicable to the work of subcontractors.

The Owner will not consent to the making of any subcontract unless the proposed subcontractor furnishes a statement to the effect that the subcontractor is acquainted with and expressly understands all of the provisions of the Contract.

01310.3 Commencement of Work.

Upon execution of the Contract by the Owner, a fully executed copy together with a Notice to Proceed will be provided to the Contractor. Receipt of the executed Contract and Notice to Proceed shall constitute the Contractor's authority to enter upon the Project Area, provided the Contractor has submitted to the Owner, and the Owner has accepted and approved, the insurance certificates required under Subsection 00620 and a preconstruction conference has been held. Construction operations shall not begin until the Contractor

has supplied, and the Engineer has accepted, the Progress Schedule and other certifications, forms, schedules, and any other Submittals required by the Contract Documents.

The Contractor is not entitled to additional compensation or extension of Contract Time for any delay, hindrance, or interference caused by or attributable to commencement of Work within 30 days following the Notice to Proceed.

The Contractor shall give the Engineer at least 72 hours advance notice in writing of its intention to start construction operations.

01310.4 Progress Schedule and Prosecution of the Work.

Upon bid award, the Contractor should furnish a proposed Progress Schedule showing the order in which the Contractor proposes to prosecute the Work; the dates on which the various work stages, operations, and principal items of Work including procurement of materials will begin; the quantity and kinds of equipment and character of the labor force; and the contemplated dates for completing the same.

Construction operations shall not begin until the Progress Schedule has been approved. Five Working Days will be required for review and approval of progress. Once the Progress Schedule has been approved, the Contractor shall not deviate from it without first notifying the Engineer in writing.

In scheduling and executing the Work, the following shall be considered:

- 1. Mobilization and Staging. The Contractor shall schedule the Work using such procedures and staging as may be specified in the Contract Documents. The Contractor is responsible for obtaining a construction trailer, if needed, and a site location for the trailer. The contractor shall also obtain facilities for storage of materials and equipment.
- **2. Prosecution of the Work.** The Contractor shall provide sufficient materials, equipment, and labor to guarantee the completion of the Project according to the Contract Documents and within the time set forth under Subsection 01310.10 (Time of Completion).

If the Contractor falls ten percent or more of the total project time behind the submitted schedule, the Contractor shall submit a revised schedule for approval.

Should the Contractor discontinue the prosecution of the Work for any reason, it shall notify the Engineer, in writing, before discontinuing work and at least 24 hours before resuming operations.

The Contractor shall arrange and prosecute the Work so that each successive construction operation at each location shall follow the preceding operation as closely as the requirements of the various types of construction permit to facilitate the efficient and effective completion of the Project in accordance with the Progress Schedule.

Compensation for additional expense to the Contractor and allowance of additional time for completion of the Work shall be as set forth in a Change Order or Supplementary Agreement or according to Subsection 01310.11 (Extensions and Reductions of Contract Time).

3. Intent, Responsibility and Time. Scheduling of construction is the responsibility of the Contractor. Therefore, it is the Contractor's responsibility to determine the most feasible order of Work commensurate with the Contractor's abilities and the Contract Documents. The requirement for the Progress Schedule is included to ensure adequate planning and execution of the Work, to assist the Engineer in appraising the Contractor's compliance with the Contract Documents, and to evaluate progress of the Work. The Progress Schedule will be used for determining extensions or reductions of Contract Time pursuant to Subsection 01310.11.

It is not intended that the Engineer, by approving the Progress Schedule, agrees that it is reasonable in all respects or that following the Progress Schedule can result in timely completion of the Project. Only the approved Progress Schedule is a part of the Contract.

If, in the preparation of the Progress Schedule, the Contractor projects a completion date that is different than that specified under Subsection 01310.10, this in no way voids the date set therein. The date as specified in that Subsection governs. Where the Progress Schedule reflects a completion date that is earlier than that specified as the Contract Time, the Engineer may approve the schedule with the Contractor specifically understanding that no claim for additional Contract Time or compensation shall be brought against the Owner as the result of failure to complete the Work by the earlier date shown on the Progress Schedule.

4. Acceleration and Default. If, in the opinion of the Engineer, the Contractor falls behind its Progress Schedule, and cannot complete the Work within the time prescribed under Subsection 01310.10, as modified pursuant to Subsection 01310.11, the Contractor shall take such steps as may be necessary to improve its progress. The Engineer may require the Contractor to increase the number of shifts, begin overtime operations, work extra days including weekends and holidays, or supplement its equipment and materials, and to submit for approval such supplementary schedule or schedules, as may be deemed necessary to demonstrate the manner in which the agreed rate of progress shall be regained, all at no cost to the Owner.

Failure of the Contractor to comply with the requirements of the Engineer under this Subpart is grounds for the determination that the Contractor is not prosecuting the Work with such diligence as to ensure Completion within the time specified. Upon such determination, the Engineer may terminate the Contractor's right to proceed with the Work or any separable part thereof according to Subsection 01310.14 (Temporary Suspension of Work).

- **5. Types of Progress Schedules.** All Progress Schedules shall comply with the foregoing provisions of this Subsection. Regardless of the type of progress schedule used, the Contractor shall supply the Engineer with a weekly work schedule indicating the Contractor's planned work, the subcontractors' planned work, and the dates when materials are to be delivered.
- 6. Cost Savings Opportunities. During the prosecution of the Work, Contractor shall identify and present to the Engineer and Owner cost saving opportunities, if any, to reduce the Total Contract Price. To incent Contractor to diligently work to identify such opportunities, if Owner agrees to implement such opportunities, the savings actually realized by the Owner shall be shared equally by and between the Owner and Contractor, and the Total Contract Price shall be reduced accordingly. If during the prosecution of the Work, Owner identifies cost savings opportunities, the savings actually realized from the execution thereof shall be shared by the Owner and Contractor, as the parties mutually agree, with such sharing agreement to account solely for the direct costs that Contractor has incurred and paid that the Contractor cannot receive credit, obtain reimbursement or otherwise avoid. Contractor's claim for cost sharing under this subpart shall be accompanied by sufficient documentation so that the Engineer can validate the request. Prior to Owner's execution of the Contract, Owner may identify cost saving opportunities that reduce or eliminate costs, and the Owner shall not be responsible to the Contractor for any costs and shall receive one-hundred percent of the benefit of all such pre-execution opportunities that Owner identifies, and the Total Contract Price shall be reduced accordingly.

01310.5 Project Meetings.

1. Pre-Construction Meeting at Owner's Office

Prior to the issuance of the Notice to Proceed, a pre-construction meeting will be coordinated by the Engineer. In attendance shall be an authorized representative of the Owner, the Engineer, and the Contractor's Project Manager. The agenda of the meeting will include without limitation, the following topics:

- Introductions:
- The Engineer's role on the Project and respective duties to the Owner and Contractor;
- Mobilization, Staging Areas, and Equipment Storage;
- Responsibility for the safety of the public;
- Working Hours;
- Coordination between contractors (if applicable);
- Discussion of structure buffers within the Project Area (if applicable);
- Notification procedures in emergencies. Preparation of list of contacts and telephone numbers for notification during emergencies;
- Municipal approvals, if any;
- Project Access Locations, and visits to each such location;
- Project schedule and procedures for written correspondence to alert of delays due to weather or other impacts outside of the Contractors controls;
- Identification of the Project Team and meeting frequency.

2. Weekly to Bi-Weekly Project Meetings

During the execution of the Work, project meetings shall be held every other week with the Project Team to discuss the Project's progress. Specifically, these meetings will address the progress of the Work, with an emphasis on ensuring that the Work is consistent with the Project Plans, discussions of the Progress Schedule and any adjustments that may need to be made to the preliminary schedule prepared as part of these Specifications, Change Orders, unforeseen conditions, discussions regarding payment schedule and any other issues of concern. As the Work progresses and at the discretion of the Owner, these meetings may be extended to bi-weekly meetings. This meeting will be held at the Owner's Office or at such location as the Owner may agree.

3. Minutes of Meetings

The Contractor is required to attend all meetings outlined in the Contract, or as reasonably requested by the Engineer. The Engineer shall record and maintain the Minutes of all meetings outlined in the Contract, and provide copies thereof to the parties in attendance prior to the next scheduled meeting.

01310.6 Limitation of Operations.

The Contractor shall conduct the Work at all times in such a manner and in such sequence that shall ensure the least interference with the surrounding community, pedestrian traffic, and other contractors, if any. The Contractor shall conduct Work during Standard Working Hours. If the Contractor is expecting to work hours greater than this specified time period, written permission from the Owner must be obtained prior to commencement of such work

01310.7 Character of Workers, Methods, and Equipment.

The Contractor shall at all time employ sufficient labor and equipment for prosecuting the Work to full completion in the manner and time required by the Contract Documents.

All workers shall have sufficient skill and experience to properly perform the work assigned to them. Workers engaged in special work or skilled work shall have sufficient experience in that work and in the operation of the equipment required to perform the Work satisfactorily, in accordance with the best practices in the industry.

Any person employed by the Contractor or by any subcontractor who, in the opinion of the Engineer, does not perform Work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the Engineer, be promptly removed by the Contractor or subcontractor employing the person and shall not be again employed in any portion of the Work without approval. Should the Contractor fail to remove such person or persons as required, or fail to furnish suitable and sufficient personnel for the proper

prosecution of the Work, the Engineer may suspend the Work by written notice until compliance with such orders, and if so suspended and in the absence of such compliance, the Owner shall have all its rights and remedies as outlined in the Contract.

All equipment that is proposed to be used on the Work shall be of sufficient size and in such mechanical condition as to meet the requirements of the Work and to produce a satisfactory quality of Work, in accordance with best practices in the industry. Equipment used on any portion of the Project shall not cause damage to, adjacent property or the ROW for which the Contractor shall be solely responsible.

When the methods and equipment to be used by the Contractor in accomplishing the construction are not specified, the Contractor is free to use any methods or equipment that accomplishes the Work. When the use of certain methods and equipment is specified, the specified methods and equipment shall be used unless otherwise authorized according to Subsection 01451.12 (Substitutes or "Or Equal" Items).

01310.8 Working Site.

Except as otherwise provided, any space that the Contractor may require for plant, equipment, storage, or other purposes in addition to that available at the Project Area, shall be procured by the Contractor, and the cost thereof shall be borne by the Contractor with no increase to the Total Contract Price. In the event of default as set forth in Subsection 01310.16, the Owner has the right to take over and occupy such space, or cause it to be occupied, for the purpose of completing the Project, at the Contractor's expense.

01310.9 Unusual Site Conditions.

During the progress of the Work, if latent physical conditions are encountered at the Project Area differing materially from those indicated in the Contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the Contract are encountered at the site, the party discovering such conditions shall promptly notify the Engineer in writing of the specific differing conditions before they are disturbed and before the affected work is performed.

Upon written notification, the Engineer will investigate the conditions, and if the Engineer determines that the conditions materially differ and could not have been discovered by the Contractor pursuant to Subsection 00630.5 (Examination of Contract Documents and Site of Project) and if they cause an increase or decrease in the cost or time required for the performance of any work under the Contract, an adjustment, excluding loss of anticipated profits, will be made and the Contract modified in writing accordingly. The Engineer will notify the Contractor of the Engineer's determination whether or not an adjustment of the Contract is warranted. Adjustments in Contract Time will be made pursuant to Subsection 01310.11. Adjustments in compensation will be made pursuant to Subsections 00700.4, 00700.5, 00700.7, 00700.8, and 00700.10.

No Contract adjustment that results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice herein. No Contract adjustment will be allowed under this clause for any effects caused on unchanged work.

01310.10 Time of Completion.

The Contractor shall complete all or any portion of the Project called for under the Contract in all parts and requirements within the time or times for completion outlined in the Specification. Time is of the essence as to all time frames stated in the Contract Documents; therefore, all time frames shall be strictly enforced.

Contract Time is Calendar Days counting from the date of the Notice to Proceed, including all Saturdays, Sundays, holidays, and non-work days.

01310.11 Extensions and Reductions of Contract Time.

A. Basis for Extension. Where appropriate under the provisions of this Subsection, extensions or reductions to the Contract Time may be provided by Change Order, however, such extensions or reductions will be allowed only to the extent that, the increase or decrease in the Work, or delays of the types indicated below affect current controlling operations and the overall Completion. Increases or decreases in Work or such delays that do not affect the overall Completion are not to be the basis for reduction or extension of Contract Time. Extensions of Contract Time will not be granted under this Subsection where it is determined that the Contractor could have avoided the circumstances that caused the request for extension.

If the Contractor is delayed in completion of the Work by reason of changes made under Subsection 00700.4 (Changes), or by failure of the Owner to acquire easements, permits or other approvals, or by any act of other contractors consistent with Subsection 01450.10 (Cooperation Between Contractors), or the discovery of hazardous substances, or by any act of the Engineer or of the Owner not contemplated by the Contract, an extension of Contract Time commensurate with the delay in overall completion of the Contract thus caused will be granted, and the Contractor is relieved from any claim for liquidated damages or the Engineer and inspection charges.

Additionally, the Contractor may be granted an extension of Contract Time and not be assessed liquidated damages or the costs of the Engineer and inspection for any portion of the delay in overall completion of the Work beyond the time provided in Subsection 01310.10 caused by the following reasons:

- 1. acts of civil or military authorities, war, or riot;
- 2. fire:
- 3. floods, tidal waves, earthquakes, cyclones, tornadoes, hurricanes, or other cataclysmic natural phenomenon;
- 4. extreme weather conditions;
- 5. epidemics or quarantine restrictions;
- 6. strikes or labor disputes beyond the control of the Contractor which prevent work on the construction operations which are critical to the completion of the Project;
- 7. shortages of materials [Subpart 01310.11(B)(1)] or freight embargoes;
- 8. acts of the State in its sovereign capacity;
- 9. failure of the Engineer to furnish interpretations of the Contract Documents [Subpart 01310.11(B)(2)].
- **B.** Criteria for Evaluation. Extension of Contract Time for the reasons set forth in this Subsection will not be granted unless the Contractor has notified the Engineer in writing of the causes of delay within 5 days from the beginning of any such delay. The Engineer will evaluate the facts and the extent of the delay, and upon approval, will extend the Contract Time one day for each approved day of delay.
 - 1. Extensions of Contract Time will not be granted for a delay caused by a shortage of materials unless the Contractor furnishes:
 - a. documentary proof that it has diligently made every effort to obtain such materials from all known sources within reasonable distance from the Work, and
 - b. further proof in the form of a supplementary Progress Schedule, as required in Subsection 01310.4, showing that the inability to obtain such materials when originally planned, did, in fact, cause a delay in completion of the Contract which could not be compensated for by revising the sequence of the

Contractor's operations. The term "shortage of materials" applies only to raw and fabricated materials, articles, parts, and equipment that are standard items and does not apply to materials, parts, articles, or equipment, which are processed, made, constructed, fabricated, or manufactured to meet the specific requirements of the Contract. Only the physical shortage of materials and not the cost of materials will be considered.

2. Extensions of Contract Time will not be granted for failure of the Engineer to furnish interpretations of the Contract Documents until 10 days after receipt of such demand in writing as required by Subsection 00700.9 (Changes in Character of Work), and not then unless such request for an interpretation of the Contract Documents is reasonable and made in good faith, and the failure to respond was unwarranted.

Except where specifically provided in the Contract Documents, the Contractor shall not make any claim for damages or additional compensation for any delay in or hindrance to the performance of the Contract occasioned by any act or omission to act by the Owner or any of its representatives, or for any of the reasons enumerated in this Subsection, and agrees that any such claim shall be fully compensated for by an extension of Contract Time to complete performance of the Work.

Extensions of Contract Time will not be granted due to delays caused by, or in any way related to, the financial condition of the Contractor, subcontractors, sub-subcontractors, materialmen, fabricators, or suppliers. The Contractor and its surety assume full responsibility for ensuring that the financial condition of any of the above does not delay completion of the Contract.

If, as a result of modifications made under Subsection 00700.4, 00700.7, 00700.8, or 01310.9, the Work required is reduced or altered so that the time required for Completion is reduced, the Engineer may reduce the Contract Time provided under Subsection 01310.10. The Engineer will evaluate the facts and the extent of the reduction. The Engineer's findings thereon will be final and conclusive.

The Contractor and surety are not relieved of liability for liquidated damages or the Engineer and inspection charges for any period of delay in Completion in excess of that expressly provided for in this Subsection.

01310.12 **RESERVED**

01310.13 Suspension of Work for Convenience of the Owner.

The Engineer may order the Contractor, in writing, to suspend, delay, or interrupt all or any part of the Work for such period of time as the Engineer may determine to be appropriate for the convenience of the Owner.

If the performance of all or any portion of the Work is suspended, delayed, or interrupted by the Engineer in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the Contractor believes that additional compensation or Contract Time or both are due as a result of such suspension, delay, or interruption, the Contractor shall submit to the Engineer in writing a request for adjustment within five (5) Calendar Days of receipt of the notice to resume Work. The request shall set forth the reasons and support for such adjustment.

Upon receipt, the Engineer will evaluate the Contractor's request. If the Engineer agrees that the cost or time or both required for the performance of the Contract have increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the Contractor, its suppliers, or subcontractors, and not caused by weather, the Engineer will make an adjustment (excluding profit) and prepare the written modification of the Contract accordingly. The Engineer will determine and notify the Contractor whether or not an adjustment of the Contract is warranted. Adjustments in Contract Time will be made pursuant to 01310.11.

Adjustments in compensation will be made pursuant to 00700.4, 00700.5, 00700.7, 00700.8, and 00700.10.

No Contract adjustment will be considered unless the Contractor has submitted the request for adjustment within the time prescribed.

No Contract adjustment will be allowed under this clause to the extent that performance would have been suspended, delayed, or interrupted by any other cause, or for which an adjustment is provided for or excluded under any other term or condition of the Contract.

The failure of the Engineer to consider the Work suspended and to allow for an adjustment in the compensation or in the Contract Time will not bar recovery under the foregoing provisions, provided the Contractor gives written notice to the Engineer within ten (10) days of the start of the alleged suspension. The failure of the Contractor to give such notice pursuant to the provisions of this Subsection shall constitute a waiver of any and all claims and damages which would have been avoided or mitigated had such timely notice been given.

01310.14 Temporary Suspension of Work.

The Engineer has the authority to suspend the Work, wholly or in part, for such period as deemed necessary due to unsuitable weather, or for such time as deemed necessary due to the failure on the part of the Contractor to carry out orders given or to perform any provision of the Contract. The Contractor shall promptly comply with the written order of the Engineer to suspend the Work wholly or in part. The suspended work shall be resumed when conditions are favorable and methods are corrected, as ordered or approved in writing.

In the event that a suspension of Work is ordered as provided above, and should such suspension be ordered by reason of the failure of the Contractor to carry out orders or to perform any provision of the Contract; or by reason of weather conditions being unsuitable for performing any item or items of Work, which work, in the sole opinion of the Engineer, could have been performed before the occurrence of such unsuitable weather conditions had the Contractor diligently prosecuted the Work when weather conditions were suitable; the Contractor, at its expense, shall do all the work necessary to provide a safe, smooth, and unobstructed passageway through the construction area for use by public traffic during the period of such suspension. In the event that the Contractor fails to perform the work above specified, the Owner will perform such work and the cost thereof will be deducted from any monies due or that may become due the Contractor. In the event that a suspension of Work is ordered by the Engineer due to unsuitable weather conditions and, in the sole opinion of the Engineer, the Contractor has prosecuted the Work with energy and diligence before the time that operations were suspended, the cost of providing a smooth and unobstructed passageway through the Work will be paid for as Extra Work, or, at the option of the Engineer, such work will be performed by the Owner or different Contractor working for the Owner at no cost to the Contractor.

If the Engineer orders a suspension of all of the Work or a portion of the Work, which is the current controlling operation or operations, due to unsuitable weather, the days on which the suspension is in effect are not considered Working Days on Working Day contracts. If a portion of Work at the time of such suspension is not a current controlling operation or operations, but subsequently does become the current controlling operation or operations, the determination of Working Days will be made on the basis of the then current controlling operation or operations. Similarly, on Calendar Day and specified completion date contracts, extensions of Contract Time will be granted only if the suspension affects the overall completion of the Contract and the other requirements of Subsection 01310.11are satisfied.

If a suspension of Work is ordered by the Engineer due to the failure on the part of the Contractor to carry out orders given or to perform any provision of the Contract, the days on which the suspension order is in effect are to be considered Working Days if such days are Working Days within the meaning of the definition set forth in Subsection 00700.2 (Terms). On Calendar Day and specified completion date contracts, extensions of Contract Time will not be granted due to such suspension.

The Contractor shall have no claim for additional compensation as a result of suspension ordered for the reasons set forth in this Subsection.

01310.15 Failure to Complete on Time.

The Contractor and the Owner recognize that delay in Completion results in damages to the Owner in terms of the effect of the delay on the use of the Project, upon the convenience of the Property Owners, and also results in additional costs to the Owner for Engineer, inspection, and administration of the Contract. Because it is difficult or impossible to accurately estimate the damages incurred, and not intended as a penalty or fine but rather as an agreed-upon estimate of actual damages, the parties agree that if the Contractor fails to complete the Contract within the time stated in the Specification, or within such further time as may have been granted according to the provisions of the Contract, the Contractor shall pay the Owner liquidated damages in the amount of \$1,000 per day for each day beginning on the first day after the approved date of Completion. Such liquidated damages shall be paid for each and every day, as hereafter, defined that the Contractor is in default to complete the Contract.

01310.16 Events of default.

The following shall constitute events of default under this Agreement:

- 1. Contractor fails to begin the Work under the Contract within the time specified in Subsection 01310.3 (Commencement of Work); or
- 2. Contractor fails to perform the Work with sufficient workers and equipment or with sufficient materials to ensure its completion within the Contract Time specified, or any extension thereof; or
- 3. Contractor fails to complete the Contract within the Contract Time specified, as extended; or
- 4. Contractor performs the Work unsuitably or neglects or refuses to remove materials or to again perform such Work as may be rejected as unacceptable and unsuitable; or
- 5. Contractor discontinues the prosecution of the Work; or
- 6. Contractor fails to resume Work which has been discontinued within a reasonable time after notice to do so; or
- 7. Contractor becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency; or
- 8. Contractor allows any final judgment to stand against it unsatisfied for a period of ten (10) days; or
- 9. Contractor makes an assignment for the benefit of creditors; or
- 10. Contractor fails to acquire or maintain the required insurance; or
- 11. Contractor fails to comply with applicable laws and regulations governing its conduct of business in the State of New Jersey and under this Contract; or
- 12. Contractor is a party to fraud; or
- 13. Contractor for any other cause whatsoever, fails to carry out the Work in an acceptable manner;

01310.17 OWNER REMEDIES UPON EVENT OF DEFAULT.

The Engineer will give written notice to the Contractor of Event of Default under Section 01310.16 and demanding the immediate elimination of such event of default. The Contractor, shall correct said event of default within a period of ten (10) days after such notice. If the contractor fails to cure said event of default the Owner shall, in its sole discretion, have the following remedies:

- a. Issue a Notice of Default to the Contractor and Surety.
- b. Appropriate any or all materials and equipment on the site as may be suitable and acceptable and may direct the Surety to complete the Contract.

- c. Appropriate any or all materials and equipment on the site as may be suitable and acceptable and enter into an agreement for the completion of the Contract according to the terms and provisions thereof with another contractor
- d. Use such other methods required for the completion of the Contract, including completion of the Work by the Owner.

The Contractor and Surety are not relieved of the assessment of liquidated damages under Subsection 01310.15 because of the Contractor's default.

All costs and charges incurred by the Owner, together with the cost of completing the Work, will be deducted from any monies due or that may become due the Contractor and Surety. If such expense exceeds the sum that would be available from such monies, then the Contractor and the Surety shall be liable and shall pay to the Owner the amount of such excess.

The rights and remedies of the Owner herein are in addition to any other rights and remedies provided by law or under the Contract and the Bonds.

If, after notice of default under the provisions of this Subsection, it is determined for any reason that the Contractor was not in default or that the delay was excusable, the rights and obligations of the parties are the same as if the notice of termination for convenience had been issued pursuant to Subsection 01310.18.

Where the Owner's default of the Contractor pursuant to the provisions of this Subsection is found by a court to be legally improper, the Contract will be treated as if terminated for convenience pursuant to Subsection 01310.18 and such termination is to be compensated for according to provisions of Subsection 01310.18.

01310.18 Termination of Contract for convenience of Owner.

The Owner may, by written order, terminate the Contract or any portion thereof for convenience after determining that for reasons beyond the Contractor's control, the Contractor is unable to proceed with or complete the Work as contracted for, or that termination is in the Owner's interest.

Upon receipt of an Order of Termination for convenience, the Contractor shall not proceed with any item of Work that is not specified in the Order of Termination. The Contractor shall complete all items of Work specified in the termination order. Such Work shall include punch list items and all Work necessary to ensure the safety of the public, to properly secure existing work already constructed or partially constructed, and to secure the Project Area. This work so ordered shall be performed according to the Contract Documents and may include items of work not in the original Contract. The Contract shall be considered substantially complete upon completion and acceptance of all items of Work specified in the Order of Termination, except punch list items. After completion of the punch list items and all documents required by the Contract, the Contract shall terminate upon issuance of a Final Certificate and payment. The Owner reserves the right to declare in default a Contractor who fails to carry out the conditions set forth in an Order of Termination for convenience.

When the Owner orders termination of the Contract for convenience, all completed items of Work as of that date will be paid for based on the number of units completed and the Contract unit price, or for items of work performed on a lump sum basis, based on the percentage of the lump sum item of work performed. Items that are eliminated in their entirety by such termination will not be paid for.

Materials obtained by the Contractor for the Work but which have not been incorporated therein may, at the option of the Engineer, be purchased from the Contractor at actual cost delivered to a prescribed location or otherwise disposed of as mutually agreed.

Within 45 days of the effective termination date, the Contractor shall submit claims for additional costs actually incurred not covered above or elsewhere in the Specifications. Such claims may only include 1) reasonable mobilization efforts, 2) subcontractor costs not otherwise paid for, and 3) guaranteed payments

for private land usage as part of the original Contract. Claims shall not include lost profits or expectation profits from work eliminated by the termination for convenience.

In terminating a Contract pursuant to this Subsection:

- 1. The Contractor shall make cost records available to the extent necessary to determine the validity and amount of each item for which it seeks compensation.
- The Contractor shall not be relieved of contractual responsibilities for the Work completed, nor shall the surety be relieved of its obligations for and concerning any just claim arising out of the Work performed.
- 3. The Contractor shall, if so directed by the Engineer, remove promptly any or all of its equipment and supplies from the Project Area or other property of the Owner. If the Contractor fails to remove the equipment and supplies as directed, the Engineer may remove such equipment and supplies at the expense of the Contractor.

01310.19 TERMINATION OF CONTRACT FOR CAUSE.

The Owner may also, by written order, terminate the Contract or any portion thereof for cause after determining that reasons for default as stated in Subsection 01310.16 exist. The decision whether to terminate for cause or declare the Contractor in default will be made in the sole discretion of the Owner acting in its own best interest. Before the issuance of an Order of Termination for cause, the Engineer will give written notice to the Contractor and Surety of the causes for the proposed termination. The notice will demand the elimination of such causes.

If the Contractor or Surety, within a period of ten days after such notice, does not proceed in accordance therewith, the Owner may terminate the Contract for cause.

The Order of Termination for cause will terminate the Contractor's right to proceed with any items of Work except as specified in the termination order. Such work will include punch list items and all work necessary to ensure the safety of the public, to properly secure existing work already constructed or partially constructed, and to secure the Project Area. This work so ordered shall be performed according to the Contract Documents and may include such items of Work not in the original Contract. Substantial Completion shall occur when all Work specified in the termination order, except for punch list items, is complete and accepted by the Engineer. After the completion of all punch list items and all documents required by the Contract, the Contract shall terminate upon issuance of a Final Certificate and payment.

When the Owner terminates the Contract for cause, all completed items of Work as of that date will be paid for at the Contract price. Payment for partially completed work will be made based on the unit prices or portion thereof provided that such payment does not exceed the Contract price of the Pay Item under which the Work was performed. Items that are eliminated in their entirety by such termination will not be paid for. No other costs will be allowed to the Contractor.

In terminating a Contract for cause, the Owner does not waive its right to sue the Contractor for any costs incurred by the Owner as a result of the termination, including the additional costs of completing the Project. The Owner reserves the right to declare in default a Contractor who fails to carry out the conditions set forth in an Order of Termination for cause.

Where the Owner's termination of the Contract for cause pursuant to the provisions of this Subsection is found by a court to be legally improper, the termination of the Contract for cause will be treated as if it had been a termination for convenience, and such termination is to be compensated for according to the provisions of this Subsection governing terminations for convenience.

In terminating a Contract pursuant to this Subsection:

- 1. The Contractor shall make cost records available to the extent necessary to determine the validity and amount of each item for which it seeks compensation.
- 2. The Contractor shall not be relieved of contractual responsibilities for the Work completed, nor shall the surety be relieved of its obligations for and concerning any just claim arising out of the Work performed.
- 3. The Contractor shall, if so directed by the Engineer, remove promptly any or all of its equipment and supplies from the Project Area or other property of the Owner. If the Contractor fails to remove the equipment and supplies as directed, the Engineer may remove such equipment and supplies at the expense of the Contractor.

01330 Submittals RESERVED

01360 Additional Legal Provisions

01360.1 Legal Jurisdiction and Governing Law.

Any action or proceeding arising hereunder shall be brought in the Courts of the State of New Jersey; provided, that if any such action or proceeding arises under the Constitution, the laws or treaties of the United States of America, or if there is a diversity of citizenship between the parties hereto, so that it is to be brought in a United States District Court, it shall be brought in the United States District Court for the District of New Jersey or any successor court thereto.

This Contract shall be governed by the laws of the State of New Jersey.

01360.2 Process for the Resolution of Contract Disputes.

In an effort to resolve any conflicts that arise during the construction of the Project or following the completion of the Project, before any action or proceeding is commenced, the Contractor and Owner agree that all disputes between them arising out of or relating to this Contract or the Project shall be submitted to nonbinding mediation unless the parties mutually agree otherwise. The parties agree to use a professional mediator from the American Arbitration Association, the International Institute for Conflict Prevention and Resolution (CPR Institute), or like organization selected by agreement or, absent agreement, through selection procedures administered by the CPR Institute. Within a period of forty-five (45) days after the request for mediation, the parties agree to convene with the Mediator, with business representatives present, for at least one session to attempt to resolve the dispute. In no event shall mediation delay commencement of an action or proceeding for more than 70 days, absent agreement of the parties, or interfere with the availability of emergency relief.

The Contractor and Owner further agree to include a similar mediation provision in all agreements with independent contractors and consultants retained for the Project and to require all independent contractors and consultants also to include a similar mediation provision in all agreements with their subcontractors, sub-consultants, suppliers and fabricators, thereby providing for mediation as the primary method for dispute resolution between the parties to all those agreements. All parties agree that they can be joined as a party in any mediation proceedings conducted pursuant to this Subsection.

01360.3 Laws to be Observed.

The Contractor shall keep fully informed of all Federal, State, and local laws, ordinances, and regulations, and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the Work, or which in any way affect the conduct of the Work. The Contractor shall at all times observe and comply with, and shall cause its agents and employees to observe and comply with, all such laws, ordinances, regulations, orders, and decrees and shall defend, protect, indemnify and save harmless the Owner, the Casino Licensee, and their respective members, directors,

officers, and employees against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by the Contractor or the Contractor's agents or employees, subcontractors of any tier, suppliers, or materialmen. If any discrepancy or inconsistency is discovered between the Contract Documents and any such law, ordinance, regulation, order, or decree, the Contractor shall immediately report the same to the Engineer in writing.

01360.4 Permits, Licenses, and Taxes.

The Contractor shall procure all permits, grants, and licenses, pay all charges, fees, and taxes, and give all notices necessary and incidental to the due and lawful prosecution of the Work except where the Owner has procured such permits, grants, or licenses for temporary or permanent construction. The Contractor shall advise the issuing agency or party of its proposed operations and obtain their cooperation and such supplemental permission as may be necessary. Before submitting its bid, the Contractor should obtain from the Owner all available information on the permits, grants, and licenses the Owner has obtained. Charges incurred by the Contractor for permits, grants, and licenses in connection with the Work shall be paid by the Contractor and shall be included in the Total Contract Price.

01360.5 Patented Devices, Materials, and Processes.

If any design, device, material or process covered by letters of patent or copyright is used in the Work, the Contractor shall provide for such use by suitable legal agreement with the patentee or owner. The Contractor shall assume all costs arising from the use of patented materials, equipment, devices, or processes used on or incorporated in the Work. The Contractor shall defend, indemnify, and save harmless the Owner, the Casino Licensee, any affected third party, or political subdivision (the "Indemnitees") from any and all claims for infringement by reason of the use of any such patented design, device, material, or process, or any trademark or copyright, and shall indemnify the Indemnitees for any costs, expenses, and damages which it may be obliged to pay by reason of an infringement, at any time during the performance of the Work or after Acceptance.

01360.6 Public Convenience and Safety.

The Contractor shall at all times conduct the Work to ensure the least possible obstruction to traffic in right-of-ways. The safety and convenience of the general public along the Project Area, and the protection of persons and property shall be provided for as specified under applicable laws and regulations.

The Contractor shall exercise precaution at all times for the protection of persons and property. The safety provisions of applicable laws, OSHA regulations, international building and construction codes, and the rules and regulations of the New Jersey Department of Labor shall be observed at all times.

01360.7 Barricades and Warning Signs.

In public right-of-ways, the Contractor shall provide, erect, and maintain all necessary barricades, suitable and sufficient lights, danger signals, signs, and other devices according to applicable laws and regulations, and shall take all necessary precautions for the protection of the Work and safety of the public. Within the Project Area, the Contractor shall take all necessary precautions to mitigate public access during non-working hours.

01360.8 RESERVED

01360.9 Independent Contractor.

The relationship of the Contractor to the Owner is that of an independent contractor, and Contractor, according to its status as an independent contractor, covenants and agrees that it shall conduct itself consistent with such status, that it shall neither hold itself out as nor claim to be an officer or employee of the Owner by reason hereof. The Contractor shall not, by reason hereof, make any claim, demand, or application to or for any right or privilege applicable to an officer or employee of the Owner, including, but

not limited to, workers compensation coverage, unemployment insurance benefits, social security coverage, or retirement membership or credit.

01360.10 Third Party Beneficiary Clause.

It is specifically agreed between the parties executing the Contract that no provision of the Contract is intended to make the public or any member thereof a third party beneficiary hereunder, or to authorize anyone not a party to the Contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of the Contract.

It is the further intent of the Owner and the Contractor in executing the Contract that no individual, firm, corporation, or any combination thereof, that supplies materials, labor, services, or equipment to the Contractor for the performance of the Work becomes thereby a third party beneficiary of the Contract.

01360.11 Assignment of Contract Funds and Claims.

The Contractor shall not transfer or assign to any party any contract funds, due or to become due, or claims of any nature it has against the Owner, without the written approval of the Owner having first been obtained.

01360.12 Risks Assumed by the Contractor.

The Contractor assumes the following distinct and several risks, whether they arise from acts or omissions, whether negligent or not, of itself, its subcontractors, suppliers, materialmen, employees, agents, and all others working for the Contractor on the Project, and whether such risks are within or beyond the control of the Contractor as described in Subparts 1 through 4 below. The risks are as follows:

1. Risks of Loss or Damage to the Permanent Construction. Until Acceptance, and within the limits of the Project Area, the Contractor shall bear the risk of all loss or damage to all permanent construction and temporary construction performed under this Contract and to materials, whether or not it has received payment for such construction or materials. The Contractor shall take every precaution, as allowed by the Contract against injury or damage to any part of the construction or to materials and equipment by the action of the elements, the traveling public, vandalism, or from any other cause, whether arising from the execution or the non-execution of the Work. The Contractor shall promptly repair, replace, and make good any such damage or loss without cost to the Owner. The Contractor shall not bear such risk of loss or damage, which arises from acts of war or floods, tidal waves, earthquakes, cyclones, tornadoes, hurricanes, or other cataclysmic natural phenomenon unless such loss or damage is covered by insurance.

The Contractor shall, in furtherance of the above paragraph, but not by way of limitation, at the Contractor's expense, erect such temporary structures where necessary to protect the Work from damage. The Contractor shall assume the risks for failure to take such actions.

In case of suspension of the Work from any cause whatever, the Contractor shall continue to be responsible for the Project as provided above and shall take such precautions as may be necessary to prevent damage to the Project, and shall erect any necessary temporary structures, signs, or other facilities. If ordered by the Engineer, the Contractor shall properly store, during such suspension of the Work, materials which have been partially paid for or furnished by the Owner. The Owner will be entitled to the possession of such materials, and the Contractor shall promptly return the same to the Project site when requested. The Contractor shall not dispose of any of the materials so stored except on written authorization. The Contractor shall be responsible for the loss of or damage to such materials.

2. Risks of Claims on Account of Injury, Loss, or Damage. The Contractor shall bear the risk of claims, just or unjust, by third persons, including, without limitation, the Property Owners, made against the Contractor or the Owner, on account of injuries (including wrongful death), loss, or damage of any kind whatsoever arising or alleged to arise out of or in connection with the

performance of the Work, except if the injury, loss or damages is caused by or results from the sole negligence of the Owner. The risk of claims, whether or not actually caused by or resulting from the performance of the Work or out of or in connection with the Contractor's operations or presence at or in the vicinity of the Project Area or Owner premises, whether such claims are made and whether such injuries, loss, and damages are sustained, applies at any time both before and after Acceptance.

- 3. Risks of Loss to Property of Those Performing the Work. The Contractor shall bear the risk of loss or damage to any property of the Contractor, and of claims made against the Contractor or the Owner for loss or damage to any property of subcontractors, materialmen, workers, and others performing the Work, and to Property Owners or Tenants. Said risk occurs at any time before completion of removal of such property from the Project Area or the Owner's premises, or the vicinity thereof.
- **4. Risks of Claims Related to the Contractor's Safety and Health Program.** The Contractor shall bear the risk of any action from or alleged to arise from the Contractor's Safety and Health Program.

The Contractor shall indemnify and save harmless the Owner and Engineer from any and all claims or alleged claims described in Subsections 2, 3, and 4 herein-above, and for all expense incurred by the Owner or Engineer in the defense, including legal and related costs, settlement, or satisfaction thereof. If so directed, the Contractor shall at its own expense defend against such claims, in which event it shall not, without obtaining express advance permission from the Owner or Engineer, raise any defense involving in any way jurisdiction of the tribunal, immunity of the Owner or Engineer, or the provisions of any statutes respecting suits against the Owner or Engineer.

The provisions of this Subsection are also for the benefit of the Casino Licensee, and all officers, agents, and employees of the Owner and Casino Licensee so that they have all the rights which they would have under this Subsection if they were named at each place under this Subsection at which the Owner is named, including a direct right of action against the Contractor to enforce the foregoing indemnity.

Neither Acceptance nor the making of final payment releases the Contractor from its obligations under this Subsection. Moreover, neither the enumeration in this Subsection nor the enumeration elsewhere in this Contract of particular risks assumed by the Contractor or of particular claims for which it is responsible shall be deemed:

- 1. To limit the effect of the provisions of this Subsection or of any other provision of the Contract relating to such risks or claims, or
- 2. To imply that the Contractor assumes or is responsible for risks or claims only of the type enumerated in this Subsection or in any Contract, or
- 3. To limit the risks that the Contractor would assume or the claims for which the Contractor would be responsible in the absence of such enumerations.

The Contractor expressly understands and agrees that any insurance protection required by the Contract, or otherwise provided by the Contractor, in no way limits the Contractor's responsibility to defend, indemnify, and save harmless the Owner or Engineer as herein provided. Such insurance requirements are designed to provide greater assurance to the Owner that the Contractor is financially able to discharge its obligations under this Subsection and as to the risks assumed elsewhere in the Contract, and are not in any way construed as a limitation on the nature and extent of such obligations.

01360.13 Personal Liability of Officers, Members and Agents of Owner.

As between the Contractor and Owner, there shall be no liability upon the members, directors, officers, employees, and any other designated agent or representative, either personally or as officials of the Owner

in carrying out any of the provisions of the Contract nor in exercising any power or authority granted to them by or within the scope of the Contract, it being understood that in all such matters they act solely as agents and representatives of the Owner.

01360.14 Recovery of Monies by the Owner.

Whenever it is provided in the Contract Documents that the Owner or Engineer is to withhold or deduct money from any monies due or that may become due the Contractor, or that the Contractor is to pay or return monies for any reason, or that the Owner or Engineer can charge against the Contractor certain costs or assessments, or that the Owner or Engineer can recover any sum for any reason from the Contractor, it is understood that the Owner has available to it any monies due or that may become due the Contractor under the Contract and on other contracts between the Contractor and the Owner. Such other contracts shall include joint ventures in which the Contractor is a participant but only to the extent of its participation. The right to recover against the Contractor as herein provided is in addition to and does not affect the right of the Owner to seek recovery against the Contractor or Surety under the Contract, bonds, or as otherwise allowed by law. The Engineer shall provide the Contractor with sufficient documentation to reasonably outline the basis for such withholding or deduction prior to the Owner withholding or deducting any such sums, as provided under the Contract.

01360.15 No Waiver of Legal Rights.

Notwithstanding any other provision of the Contract and provided that the Owner has conducted a diligent review of Contractor invoices during the prosecution of the Project, for a period of six months after Acceptance, all estimates and payments made pursuant to Section 01200, including the Final Certificates and Final Payment, are subject to correction and adjustment for clerical or other errors in the calculations involved in the determination of quantities and payments. The Contractor and the Owner agree to pay to the other any sum due under the provisions of this Subsection, provided, however, if the total sum to be paid is less than \$100, payment will not be made.

A waiver on the part of the Owner of any breach of any part of the Contract is not to be held as a waiver of any other or subsequent breach.

The Contractor, without prejudice to the terms of the Contract, shall be liable to the Owner at any time both before and after Acceptance for latent defects, fraud, such gross mistakes as may amount to fraud, or actions affecting the Owner's rights under any warranty or guarantee.

01360.16 Limitations of Liability.

In any event, whether under the provisions of the Contract, as a result of breach of contract, tort (including negligence), or otherwise, the Owner and the Contractor will not be liable to each other for any special, consequential, incidental, or penal damages including, but not limited to, loss of profit or revenues, loss of rental value for contractor-owned equipment, damages to associated equipment, cost of capital, or interest of any nature, loss of use, loss of business, loss of reputation, loss of management or employee productivity or of the services of such persons, principal office expense including the compensation of personnel stationed there, and loss of financing. Nothing in this Subsection shall be deemed to preclude an award of liquidated direct damages, when applicable, in accordance with the requirements of the Contract Documents. Nothing in this Subsection shall be deemed to preclude or limit in any way the Contractor's liability for direct or indirect claims for injury, loss or damages of any kind whatsoever asserted by third party owners of property adjacent to or in the Project Area, including, without limitation the Property Owners, except if the claimed injury, loss or damage is caused by or results from the sole negligence of the Owner.

01360.17 RESERVED

01400 Quality Requirements

01420 References

All materials, products and work methods shall meet industry best practice standards and applicable regulatory requirements of contractors performing similar work in the State of the New Jersey.

01450 Quality Control - Work

01450.1 Authority of the Engineer.

The Engineer will decide all questions that may arise as to the quality and acceptability of the Work and as to the rate of progress of the Work, all questions that may arise as to the interpretation of the Contract Documents, all questions as to the acceptable fulfillment of the Contract on the part of the Contractor, and all questions as to compensation. All questions as to the interpretation of the Contract Documents shall be submitted to the Engineer in writing.

The Engineer has the authority to suspend the Work wholly or in part pursuant to 01310.13 or 01310.14 and to suspend partial payments under Subsection 01290.3 due to the failure of the Contractor to correct conditions unsafe for the workers or the general public, for failure to carry out provisions of the Contract, or for failure to carry out orders. The Engineer may also suspend the Work wholly or in part for such periods as deemed necessary due to unsuitable weather, for conditions considered unsuitable for the prosecution of the Work, or for any other condition or reason deemed to be in the Owner's interest.

01450.2 Communications.

Unless otherwise directed, all communications with the Owner shall be sent to the Engineer. Where communications are directed to persons other than the Engineer, a clear copy shall be sent to the Engineer.

01450.3 Plans and Specifications.

The Plans consist of general drawings and show such details as are necessary to give a comprehensive idea of the construction contemplated. The Contractor shall keep one set of Plans available on the Project site at all times. All alterations affecting the requirements and information given on the Plans will be authorized in writing.

Omissions from the Plans or Specifications of details of Work which are manifestly necessary to carry out the intent of the Contract Documents, or which are customarily included, shall not relieve the Contractor from including such omitted details of Work, but they shall be included as if fully and correctly set forth and described.

The Contractor will receive two (2) copy of the latest Project Manual and three (3) sets of Drawings.

01450.4 Reserved.

01450.5 Conformity with Contract Documents.

In the event the Engineer finds the Work not in conformance with the Contract Documents but that reasonably acceptable Work has been produced, the Engineer will determine if the Work is to be accepted and remain in place. In this event, the Engineer will document the basis of the acceptability of the Work and provide for an appropriate adjustment in the contract price for such Work as deemed necessary. If an appropriate adjustment cannot be negotiated, the Work shall be removed and replaced or otherwise corrected at no cost to the Owner.

In the event the Engineer finds the Work not in conformance with the Contract Documents, resulting in an inferior or unsatisfactory product, the Work shall be removed and replaced or otherwise corrected at no cost to the Owner.

Neither the observations of the Engineer in the administration of the Contract, nor inspections, tests, or approvals by persons other than the Contractor relieve the Contractor from its obligation to perform the Work according to the Contract Documents.

01450.6 Special Inspection, Testing, or Approval.

Whenever the Engineer considers it necessary or advisable to ensure the proper implementation of the Contract Documents, the Engineer has authority to require special inspection or testing of the Work in addition to that required elsewhere in the Contract Documents, whether or not such Work is then fabricated, installed, or completed. However, neither the Engineer's authority to act under this Subsection, nor any decision made by the Engineer either to exercise or not to exercise such authority, creates a duty or responsibility of the Engineer to the Contractor, any subcontractor, or any of their agents or employees performing any of the Work.

If after commencement of the Work the Engineer determines that any Work requires special inspection, testing, or approval not provided for elsewhere in the Contract Documents, the Engineer will perform such inspection, testing, or approval using Owner facilities, by contracting with others for such services, or by instructing the Contractor by Construction change directive to order special inspection, testing, or approval. If such special inspection or testing reveals a failure of the Work to comply with the requirements of the Contract Documents or, with respect to the performance of the Work, with laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction, the Contractor shall bear all costs thereof, including the Engineer's additional services made necessary by such failure. If tests reveal no such failure, the Owner will bear such costs, and a Supplementary Agreement will be negotiated.

01450.7 Coordination of Contract Documents.

The Contract Documents are essential parts of the Contract, and a requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a functionally complete Project.

In case of discrepancy, calculated dimensions will govern over scaled dimensions; Specifications will govern over Plans. Division 1 and Division 2 terms and conditions in the Contract will prevail over conflicting Division 1 and Division 2 terms and conditions contained in the Plans.

As the Work progresses, it is anticipated that the Contractor shall frequently request information from the Engineer relative to the interpretation and coordination of the Contract Documents. Such applications shall be in writing. Should it appear that the Work to be done or any of the matters relative thereto are not sufficiently detailed or explained in the Contract Documents, the Contractor shall request from the Engineer such further explanations as may be necessary and shall conform to them as part of the Contract.

Both parties realize that in performing the Work, field conditions may require modifications in the Plans and quantities of Work involved. Work under all Pay Items must be carried out to meet these field conditions to the satisfaction of the Engineer and according to its directions and the Contract Documents.

The Contractor shall not take advantage of any apparent error or omission in the Contract Documents. In the event the Contractor discovers any discrepancy, error, or omission in the Plans, Specifications, or other Contract Documents, or if there is any doubt or question as to the intent or meaning of the Plans, Specifications, or other Contract Documents, the Contractor shall immediately notify the Engineer in writing. The Engineer will promptly make, in writing, such corrections and interpretations as deemed necessary.

01450.8 Cooperation by Contractor.

The Contractor shall give the Work the constant attention necessary to facilitate the progress thereof, and shall cooperate with the Engineer, the Engineer's inspectors, and other contractors in every way possible.

When the Contractor is comprised of two or more persons, firms, partnerships, or corporations functioning on a joint venture basis, said Contractor shall designate in writing, before starting Work, the name of one individual who shall have the authority to represent and act for the joint venture.

The Contractor shall designate in writing before starting Work, a competent, English-speaking superintendent capable of reading and thoroughly understanding the Contract Documents, and thoroughly experienced in the type of construction being performed. The superintendent shall have the authority to represent and act for the Contractor. An alternate to the superintendent, with equal authority and qualifications, may also be designated.

The superintendent or the alternate shall be present at the site of the Project at all times while Work is actually in progress on the Contract irrespective of the amount of Work subcontracted. The superintendent or the alternate shall have full authority to execute orders or direction from the Engineer, without delay, and to promptly supply such materials, equipment, tools, labor, and incidentals as may be required. When Work is not in progress and during periods when Work is suspended, arrangements acceptable to the Engineer shall be made for any emergency Work that may be required.

Whenever the superintendent or the alternate is not present on the site or at the location of any particular part of the Work where it may be desired to give direction, the Engineer may suspend all of the Work or the particular Work in reference until the superintendent or the alternate is present. Such suspension shall not be the basis of any claim against the Owner.

01450.9 **RESERVED.**

01450.10 Cooperation Between Contractors.

The Owner reserves the right at any time to contract for and perform other or additional work in, on or near the Project Area.

When separate contracts are let within the limits of the Project Area, or in areas adjacent thereto, the Contractor shall conduct its Work so as not to interfere with or hinder the progress or completion of the work being performed by other contractors. Moreover, the Contractor assumes the positive obligation of cooperating with such other contractors and coordinating its activities with theirs. If there is a difference of opinion as to the respective rights of the Contractor and others doing work within the limits of or adjacent to the Project Area, the Engineer will decide as to the respective rights of the various parties involved in order to secure the completion of the Owner's Work in general harmony and in a satisfactory manner. The decision of the Engineer is final and binding and is not cause for claims by the Contractor for additional compensation.

The Contractor shall assume all liability, financial or otherwise, in connection with its Contract, and, provided that Owner affords reasonable access to the Project Area during the Contract Time, hereby waives any and all claims against the Owner for additional compensation that may arise because of inconvenience, delay, or loss experienced by it because of the presence and operations of other contractors working within the limits of or adjacent to the Project Area.

The Contractor shall arrange its Work and shall place and dispose of the materials being used so as not to interfere with the operation of the other contractors within the limits of the Project Area or adjacent thereto. The Contractor shall join its Work with that of the others in an acceptable manner and shall perform it in proper sequence to that of the others.

The Contractor is not responsible for damage to Work performed on the Contract or on other contracts within or adjacent to the site of the Project that may be caused by or on account of the work of other

contractors. The Contractor is responsible for any damage done or caused by its Work or forces to the work performed by other contractors within or adjacent to the site of the Project, and the Contractor shall repair or make good any such damage in a manner satisfactory to the Engineer and at no cost to the Owner.

The provisions of this Subsection also apply to utilities and their contractors working in the Project Area or adjacent thereto.

01450.11 **RESERVED**.

01450.12 Authority and Duties of the Engineer.

As the direct representative of the Owner, the Engineer has immediate charge of the technical details of the Project. The Engineer is responsible for the administration of the Contract. This responsibility includes the authority to reject defective material and to suspend any or all of the Work according to Subsection 01310.13 and 01310.14.

01450.13 Duties of the Inspector.

Inspectors employed by the Engineer are authorized to inspect all Work. Such inspection may extend to all or any part of the Work and to the preparation, fabrication, or manufacture of the materials to be used. The inspector is not authorized to alter or waive the provisions of the Contract. The inspector is not authorized to issue instructions contrary to the Contract Documents or to act as foreman for the Contractor; however, the inspector has the authority to reject Work subject to confirmation by the Engineer.

01450.14 Inspection of Work.

Each part or detail of the Work is subject to inspection by the Engineer. The Engineer shall be allowed access to all parts of the Work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection. When the Engineer is in or about the site of the Work in the course of its duties, the Engineer is deemed conclusively to be an invitee of the Contractor. If the Contractor is not the owner of the place where fabrication, preparation, or manufacture is in progress, the owner thereof shall be deemed to be the agent of the Contractor with respect to the obligation assumed hereunder. The Contractor or its agent shall be responsible for the payment of claims for injuries to the Engineer due to negligence on the part of the Contractor or its agent.

At the direction of the Engineer, the Contractor, at any time before Acceptance, shall remove or uncover specified portions of the finished Work that the Engineer had previously inspected. After examination, the Contractor shall restore said portions of the Work to the standard required by the Contract Documents. Should the Work so exposed or examined prove acceptable, the uncovering, or removing, and the replacing of the covering, or making good of the parts removed, will be paid for as Extra Work; however, should the Work so exposed or examined prove unacceptable, the uncovering, or removing, and the replacing of the covering, or making good of the parts removed, will be at no cost to the Owner.

The Engineer may order any Work done without the Engineer's inspection to be removed and replaced at the Contractor's expense. Payment for the Work will be made and the uncovering, or removing, and the replacing of the covering, or making good of the parts removed, of the un-inspected Work will be paid for as Extra Work only if all of the following conditions are met:

- 1. The Work removed, uncovered, and/or replaced proves to have been acceptable according to the Contract Documents; and
- 2. The Contractor gave reasonable notice in writing to the Owner that the un-inspected work was to be performed; and
- 3. The Contractor, in performing the un-inspected work, did not do so in the face of a directive from the Owner that such work not be performed.

The Contractor is responsible for carrying out the provisions of the Contract at all times and for control of the quality of the Work regardless of whether an authorized inspector is present or not. This obligation to perform the Work according to the Contract Documents is not relieved by the observations of the Engineer in the administration of the Contract, nor by inspections, tests, or approvals by others. Work not meeting the Contract requirements shall be made good, and unsuitable Work may be rejected, notwithstanding that such Work had been previously inspected and approved by the Engineer or that payment therefor has been included in a monthly estimate certificate.

01450.15 Removal of Unacceptable and Unauthorized Work.

All Work that does not conform to the requirements of the Contract is unacceptable unless otherwise determined acceptable under the provisions in Subsection 01450.5 (Conformity with Contract Documents). Unacceptable Work, from any cause, found to exist before Acceptance, shall be remedied in an acceptable manner at no cost to the Owner

Work done contrary to the instructions of the Engineer, or any Extra Work done without authority is considered as unauthorized and will not be paid for under the provisions of the Contract. Work so done may be ordered remedied at no cost to the Owner.

If the Contractor fails to comply promptly with any order of the Engineer made under the provisions of this Subsection, the Engineer will have authority to cause unacceptable Work to be remedied by others and to deduct the costs thereof from any monies due or that may become due the Contractor.

01450.16 Load Restrictions.

Within or on Roadways used for transportation of Equipment the operation of Equipment of such weight or so loaded as to cause damage to structures or the Roadway or to any other type of construction will not be permitted. In no case shall legal load limits be exceeded when Equipment is used for hauling to and from the Project Area unless permitted in writing by the appropriate governmental authorities. The Contractor shall be responsible for all damage done by it or its subcontractors' hauling Equipment.

Without limiting any other obligation set forth in the Contract, the Contractor shall be solely responsible for complying with legal load limits.

If the Engineer becomes aware of repeated violations of roadway load limits, the Engineer may suspend operations until the condition is remedied to the satisfaction of the Engineer. The Owner may not make payment for any Materials in excess of the legal truck load limit.

01450.17 Maintenance During Construction.

Except as provided for below, the Contractor shall be responsible for maintenance within the Project Area until Acceptance. This maintenance shall consist of continuous and effective work prosecuted day by day, with adequate Equipment and forces to the end that the Project Area, surroundings, Roadways, shall be kept in satisfactory condition at all times.

On any section of haul route used on paved or unpaved roadways, whether provided for in the Contract Documents or opened as directed, any damage to the roadways due to the Contractor's operations shall be repaired at no cost to the Owner. Nothing in this Subsection shall be construed to limit or change the risks assumed by the Contractor pursuant to 01360.12.

01450.18 Failure to Maintain Project Area and Surroundings.

If the Contractor at any time fails to comply with the provisions of Subsection 01450.17, the Engineer will immediately notify the Contractor of such noncompliance. If the Contractor fails to remedy unsatisfactory maintenance within 24 hours after receipt of such notice, the Engineer may proceed to maintain the Project and deduct the entire cost of this maintenance from any monies due or that may become due the Contractor.

01450.19 Partial Acceptance.

If at any time during the prosecution of the Project the Contractor completes a unit or portion of the Project, the Contractor may request the Engineer to make final inspection of that unit. If the Engineer finds upon inspection that the unit has been satisfactorily completed in compliance with the Contract, the Engineer may accept that unit as being completed, and the Contractor may be relieved of the responsibility of doing further Work on or maintaining that unit or portion of the Project. The Engineer reserves the right to reject the request made by the Contractor, if the Engineer determines that the unit or portion of the Project should not be the subject of a partial acceptance. Such partial acceptance shall in no way void or alter any of the terms of the Contract, including Subsections 01360.12 (Risks Assumed by the Contractor) and Subsection 00620 (Insurance), nor shall it be construed as relieving the Contractor of full responsibility for making good defective work or materials found at any time before Acceptance pursuant to Subsection 01450.21 (Completion and Acceptance).

01450.20 Substantial Completion.

When the Contractor determines that the Work is substantially complete, the Contractor shall prepare a written notice thereof for submission to the Engineer listing the items remaining to be completed or corrected. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work according to the Contract Documents. If the Engineer determines that the Work is substantially complete, the Engineer will then prepare a letter which states the date of Substantial Completion and establishes a reasonable time within which the Contractor shall perform the final cleanup and repair unacceptable Work, which time may be before Contract Time as modified. The letter will be submitted to the Contractor for its prompt compliance therewith.

If, however, the inspection discloses that the Work is not substantially completed to the Engineer's satisfaction, the Engineer will give the Contractor the necessary instructions for completion and correction of same, and the Contractor shall immediately comply with and execute such instructions. Upon completion and correction of the Work, the Contractor shall re-notify the Engineer and another inspection will be made.

01450.21 Completion and Acceptance.

Upon receipt by the Engineer of written notice from the Contractor that the Work has reached Completion and is ready for final inspection and Acceptance, the Engineer will promptly make such inspection. When such inspection indicates that the Work is in compliance with the Contract, the Engineer will promptly begin the process to issue a Certificate of Completion stating that, to the best of the Engineer's knowledge, information, and belief, and on the basis of observations and inspections, the Work has been completed according to the terms and conditions of the Contract. If, however, the final inspection discloses that the Work has not reached Completion, the Engineer will give the Contractor the necessary instructions for the correction of deficiencies, and the Contractor shall immediately comply with and execute such instructions. Upon correction of the deficiencies, the Contractor shall re-notify the Engineer, and another inspection will be made. This procedure is to be repeated until a Certificate of Completion is issued.

At the request of the Contractor, the Engineer may issue a Certificate of Completion without receiving all required documents, certificates, or proofs of compliance. The Contractor's request must satisfactorily establish that the Contractor could not reasonably and in good faith provide some of the required documents, certificates, or proofs of compliance at a time contemporaneous with Completion and with the Project being ready for use by the Property Owners to the degree contemplated by the Contract. In such instances where a Certificate of Completion is issued, the Contractor shall expeditiously attempt to provide the exempted document, certificate, or proofs of compliance. Final payment will not be made, however, until all such documents, certificates, and proofs of compliance have been satisfactorily executed and delivered to the Engineer.

The Certificate of Completion is issued establishing Completion as of the date of the notice or re-notice from the Contractor. If the Owner concurs in the Certificate of Completion, the Contractor will be notified of Acceptance and the date thereof.

After Acceptance, the Contractor is relieved of the duty of maintaining and protecting the Work as a whole, and is not required to perform any further Work thereon. In addition, the Contractor is relieved of its responsibility for damage to the Work that may occur after Acceptance. However, nothing herein shall be construed to limit the provisions of 01360.12 (Risks Assumed by the Contractor), 00620 (Insurance), 01360.15 (No Waiver of Legal Rights), and 01290.10 Warranty Against Defective Work).

01451 Quality Control - Materials

01451.1 Source of Supply and Quality Requirements.

All Materials for the Project shall be furnished by the Contractor and shall be new, unless otherwise specifically prescribed in the Contract Documents. The Materials shall conform to the requirements of the Contract Documents and shall be from approved sources. Only Materials that have been approved by the Engineer shall be used.

Within 12 hours after receiving a shipment of Materials, the Engineer shall be notified of the kind, size, quantity, and location thereof.

In any item of construction, the sources, brands, or types of Materials shall not be changed without the consent of the Engineer. Request for such changes shall be filed with the Engineer the number of days in advance of such changes as required above. The request shall state the name and address of the owner, the location of the proposed source, the method of shipment, and the intended use of the Material.

The foregoing provisions shall apply with regard to requests by subcontractors for the sources of the Materials they propose to use, such requests to be submitted through the Contractor.

The notice provisions of this Subsection shall not be so construed as to relieve the Contractor of its obligation to ensure that all Materials required for the construction of the Project shall be available at the time and place necessary for their incorporation into the Work in order that the completion date set forth in Subsection 01310.10 is met. If any doubt exists as to the timely availability of any material, the Engineer shall be immediately informed, in writing, of the potential problem and of the action to be taken to guarantee the availability of such material. Stockpiles of materials whose availability is or may be problematical shall be established at an early date.

01451.2 RESERVED

01451.3 Materials, Inspections, Tests, and Samples.

All Materials will be inspected, tested (where applicable), and approved before incorporation in the Work. Unapproved Materials may be used only with written permission of the Engineer. In the absence of such written permission, unapproved materials will not be paid for and shall be removed at no cost to the Owner.

All Materials being used are subject to inspection, testing, or rejection at any time before Acceptance.

Nothing in this Subsection shall be construed to limit the right of the Engineer to order special inspection or tests as provided in Section 01450.6.

Except as otherwise provided, all Materials will be tested at the expense of the Contractor.

Certain materials as specified will be accepted on the basis of Certifications of Compliance according to 01451.4.

Samples shall be required whenever, in the opinion of the Engineer, additional tests are required to determine the quality and suitability of Materials for their respective uses.

01451.4 Certification of Compliance.

Materials will be accepted on the basis of Certificates of Compliance stating that such materials fully comply with the requirements of the Contract. The Engineer must approve the form of Certificates of Compliance.

Materials used on the basis of Certificates of Compliance may be sampled and tested at any time. Materials, if found not to be in conformance with Contract requirements, will be rejected whether in place or not. The Contractor shall require the manufacturer or supplier to furnish two copies of Certificates of Compliance with each delivery of Materials and manufactured items that are acceptable by certification. One copy shall be furnished to the Engineer and one copy shall be retained by the Contractor.

Certificates of Compliance shall contain the following information:

- 1. Project to which the material is consigned.
- 2. Name of the Contractor to which the material is supplied.
- 3. Kind of material supplied.
- 4. Quantity of material represented by the certificate.
- 5. Means of identifying the consignment, such as label marking, seal number, etc.
- 6. Date and method of shipment.
- 7. Statement that the material has been tested and found in conformity with the pertinent Contract requirements stated in the certificate.
- 8. Signature of a person having legal authority to bind the supplier.
- 9. Signature attested to by a notary public or other properly authorized person.

Payments will not be made for Materials specified to be accepted on the basis of Certificates of Compliance until the Engineer has received the required Certificate of Compliance.

01451.5 Product requirements.

01451.5.1 PRODUCTS

Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work, but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components specifically identified for reuse.

Do not use materials and equipment removed from existing premises, except as specifically identified or allowed by the Contract Documents.

Provide interchangeable components of the same manufacture for components being replaced.

01451.5.2 PRODUCT OPTIONS

Products Specified by Reference Standards or by Description Only: Any Product meeting those standards or description.

Products Specified by Naming One or More Manufacturers: Products of manufacturers named and meeting specifications, no options or substitutions allowed.

Products Specified by Naming One or More Manufacturers with a Provision for

Substitutions: Submit a request for substitution for any manufacturer not named.

01451.5.3 PRODUCT DELIVERY, STORAGE AND HANDLING REQUIREMENTS

Transport, handle, store, and protect Products in accordance with manufacturer's instructions.

01451.6 **RESERVED.**

01451.7 **RESERVED.**

01451.8 **RESERVED.**

01451.9 Storage and Handling of Materials.

Materials shall be stored to ensure the preservation of their quality and fitness. Stored Materials, even though approved before storage, may again be inspected before their use on the Project. Stored Materials shall be located so as to facilitate their prompt inspection. The Contractor shall be responsible for obtaining locations for storage of equipment and materials. Materials shall be handled to ensure the preservation of their quality and fitness.

01451.10 Unacceptable Materials.

All Materials, whether in place or not, which do not conform to the requirements of the Contract Documents shall be considered as unacceptable, and such materials will be rejected and shall be removed immediately from the site of the Work unless otherwise directed. Rejected material, the defects of which have been corrected, shall not be used until approval has been given.

01451.11 RESERVED.

01451.12 Substitutes or "Or Equal" Items.

Whenever Materials or Equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular supplier, the naming of the item is intended to establish the type, function, and quality required. Unless the name is followed by words indicating that no substitution is permitted, materials or equipment of other suppliers may be accepted if sufficient information is submitted by the Contractor to allow the Engineer to determine that the material or equipment proposed is equivalent or equal to that named. Requests for review of substitute items of material or equipment will not be accepted from anyone other than the Contractor. If the Contractor wishes to furnish or use a substitute item of material or equipment, the Contractor shall make written application to the Engineer for approval thereof, certifying that the proposed substitute performs adequately the functions and achieves the results called for by the general design, is similar and of equal substance to that specified, and is suited to the same use as that specified. The application shall state that the evaluation and approval of the proposed substitute does not prejudice the Contractor's achievement of Completion on time. It shall also state whether or not approval of the proposed substitute for use in the Work requires a change in any of the Contract Documents (or in the provisions of any other direct Contract with the Owner for Work on the Project) to adapt the design to the proposed substitute, and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified shall be identified in the application, and available maintenance, repair, and replacement service shall be indicated, as applicable. The application shall also contain an itemized estimate of all costs that result directly or indirectly from approval of such substitute, including costs of redesign, all of which will be considered in evaluating the proposed substitute. The Engineer may require the Contractor to furnish additional data about the proposed substitute.

If a specific means, method, technique, sequence, or procedure of construction is indicated in or required by the Contract Documents, the Contractor may furnish or use a substitute means, method, technique,

sequence, or procedure of construction which is acceptable, if the Contractor submits sufficient information to allow the Engineer to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents. The procedure for review by the Engineer is to be similar to that described in the previous paragraph.

The Engineer is to be allowed a reasonable time within which to evaluate each proposed substitute. The Engineer will be the sole judge of acceptability, and no substitute shall be ordered, installed, or used without an approved cut sheet from the manufacturer. If approval is given, it is on the condition that the Contractor is fully responsible for producing Work in conformity with Contract requirements.

The Contract Sum shall be reduced by Change Order to compensate the Owner for the Cost of the Engineer and his consultants review the merits of the proposed substitution as well as for time to redesign the system, if required, to accommodate it. The substitution request should also include the cost of any new or extra equipment, or any change in the any hardware or methods required to accommodate the proposed substitute.

If, after trial use of the substituted materials, equipment, means, method, technique, sequence, or procedure of construction, the Engineer determines that the Work produced does not meet Contract requirements, the Contractor shall discontinue the use of the substitute and shall complete the remaining Work with the specified materials, equipment, means, method, technique, sequence, or procedure of construction. The Contractor shall remove the deficient Work and replace it as specified, or take such other corrective action as the Engineer may direct. Changes will not be made in the basis of payment for the Pay Items involved, nor in the Contract Time as a result of authorized substitutes. The Engineer may require the Contractor to furnish at no cost to the Owner a special performance guarantee or other surety with respect to any substitute. When the Contract Documents permit the use of more than one type of material, equipment, or product, only one type is to be used throughout the Project.

01500 TEMPORARY FACILITIES AND CONTROLS

01510 Temporary Utilities

The Contractor shall be solely responsible for the installation, removal and approvals for any temporary utility that the Contractor should require for Project related activities, including but not limited to electric powered generators or pumps (any phase type) and lighting. The costs for purchasing, installing, protecting and obtaining approvals are not to be charged to the Owner and shall be included in the Total Contract Price.

01520 Construction Facilities

Temporary Sanitary facilities: Provide and maintain chemical type toilet facilities and enclosures. Do not use Owner's existing facilities. Maintain in clean and sanitary condition.

01550 Vehicular Access and Parking

During the course of the Project, the Contractor shall ensure that all employees' and subcontractors' automobiles are parked in a manner that does not interfere with local traffic, block pedestrian traffic or cause an unsafe situation.

The following provisions augment the requirements of this Subsection: Subsections 01140 (Work Restrictions), 01360 (Additional Legal Provisions), 01450.8 (Cooperation by the Contractor), and 01450.10 (Cooperation between Contractors).

01560 Temporary Security

If the Contractor requires security from theft or vandalism or to protect the public, such security measures shall be at the Contractors expense. The Contractor acknowledges and agrees that the Owner is not

responsible for the damage or theft of any equipment, or injury to the public as a result of the breach or lack of security measures implemented by the Contractor.

01560 Barriers

The Contractor shall provide barriers to prevent unauthorized entry to construction areas to allow for residents and retail owners and patrons use of the site and to protect existing facilities and adjacent properties from damage from construction operations and demolition. The Contractor will provide barricades and covered walkways required by governing authorities for public rights-of-way.

01600 EXECUTION AND CLOSEOUT REQUIREMENTS

01600.1 EXAMINATION

Verify that existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.

Verify that services are available, of the correct characteristics and in the correct location.

01600.2 PREPARATION

Clean substrate surfaces prior to applying next material or substance.

Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

01600.3 FIELD ENGINEERING

Employ an experienced instrument technician to locate a reference datum and protect survey control and reference points.

Establish elevations, lines, and levels and certify that elevations and locations of the Work conform to the Contract Documents.

Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.

01600.4 EXECUTION - CUTTING AND PATCHING

Employ a skilled and experienced installer to perform cutting and patching new Work; restore Work with new Products.

Submit written request in advance of cutting or altering structural or building enclosure elements.

Execute cutting, fitting, and patching including excavation and fill, to complete Work, and to: Fit the several parts together, to integrate with other Work.

Uncover Work to install or correct ill-timed Work.

Remove and replace defective and nonconforming Work.

Remove samples of installed Work for testing.

Provide openings in elements of Work for penetrations of mechanical and electrical Work.

Cut masonry and concrete materials using masonry saw or core drill. Restore Work with new Products in accordance with requirements of Contract Documents.

Fit Work tight to adjacent elements. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.

Fit Work tight to pipes, sleeves, ducts, conduit, and other surface penetrations.

Refinish surfaces to match adjacent finishes.

01600.5 CLEANING AND WASTE MANAGEMENT

01600.5.1 PROGRESS CLEANING AND WASTE REMOVAL

Maintain site in a clean and orderly condition. Dispose of all waste in accordance with all governing Federal, State, and Local regulations.

Collect and maintain areas free of waste materials, debris, and rubbish on a daily basis.

01600.5.2 FINAL CLEANING

Execute final cleaning prior to final inspection.

Clean interior and exterior surfaces exposed to view. Vacuum carpeted and soft surfaces.

Clean debris from site, roofs, gutters, downspouts, and drainage systems.

Replace filters of operating equipment.

Remove waste and surplus materials, rubbish, and construction facilities from the site.

01600.6 STARTING AND ADJUSTING

01600.6.1 STARTING SYSTEMS

Provide seven days notification prior to startup of each item.

Ensure that each piece of equipment or system is ready for operation.

Execute start up under supervision of responsible persons in accordance with manufacturers' instructions.

Submit a written report that equipment or system has been properly installed and is functioning correctly.

01600.6.2 ADJUSTING

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

01600.7 PROTECTING INSTALLED CONSTRUCTION

01600.7.1 PROTECTION OF INSTALLED WORK

Protect installed Work and provide special protection where specified in individual specification sections.

Prohibit traffic or storage upon newly waterproofed or roofed surfaces without protection that is acceptable in writing by the Engineer.

01600.8 CLOSEOUT SUBMITTALS

01600.8.1 PROJECT RECORD DOCUMENTS

Maintain on site one set of Contract Documents to be utilized for record documents.

Record actual revisions to the Work. Record information concurrent with construction progress.

Specifications: Legibly mark and record at each Product section a description of actual Products installed.

Record Documents and Shop Drawings: Legibly mark each item to record actual construction.

Submit documents to Engineer/Engineer with final Application for Payment.

01600.9 OPERATION AND MAINTENANCE DATA

Submit two sets prior to final inspection, bound in 8-1/2 x 11 inch text pages, three D side ring binders with durable covers.

Cover: Prepare binder cover with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS" and title of project.

Organization: Internally subdivide binder contents with permanent page dividers, logically organized, with tab titles clearly printed under reinforced laminated plastic tabs.

Contents:

Part 1: Directory, List names, addresses, and telephone numbers of Engineer/Engineer, Contractor, Subcontractors, and major equipment suppliers.

Part 2: Operation and maintenance instructions, arranged by system.

Part 3: Project documents and certificates.

01600.10 SPARE PARTS AND MAINTENANCE MATERIALS

Provide Products, spare parts, maintenance and extra materials in quantities specified in individual specification sections.

Deliver to Project site and place in location as directed; obtain receipt prior to final payment.

01600.11 WARRANTIES

Provide duplicate notarized copies.

Execute and assemble transferable warranty documents from Subcontractors, suppliers, and manufacturers. Place in operations and maintenance binder (see above).

Submit prior to final Application for Payment.

92

Supplemental Proposal Form

5.

Owner	's Representative:			
	Oakview Venue Management			
	2301 Boardwalk			
	Atlantic City, New Jersey 08401			
Propos	eal of:			
Addres				
radio.				
C11	Dide most be assisted an archafter.			
Searea	Bids must be received on or before: Date: As noted on Solicitation of Bids			
	Time: As noted on Solicitation of Bids			
	to:			
	Oakview Venue Management c/o Clark Hughes			
_				
1.	Pursuant to and in accordance with advertisement for the following work:			
	SKYLIGHT & ROOF REPAIRS			
	At ATLANTIC CITY CONVENTION CENTER			
	One Convention Boulevard			
	Atlantic City, New Jersey 08401			
	Amtech Solutions Project No. NJE.2012.001013			
	and in accordance with the instructions to bidders, relating hereto, the undersigned agrees to furnish all labor, materials, supplies, and equipment necessary, proper for, incidental to, or required by the Contract Documents as prepared by:			
	Amtech Solutions, Inc. 2 White Horse Pike, Suite 1D Haddon Heights, New Jersey 08035			
	along with all other addenda issued to the undersigned prior to the date of opening proposals.			
2.	It is hereby certified that the undersigned is the only person(s) interested in this proposal as Principal and that the proposal is made without collusion with any person, firm or corporation.			
3.	ontractor shall state manufacturer of products to be used: em 1: Roof System Assembly:			
4.	In submitting this proposal, I have received and included in this proposal, the specifications and drawings, and the following addenda and/or bulletins:			
	Addenda or Bulletin No. Date			

Supplemental Proposal Page: 1

Having carefully examined the Contract Drawings, General Conditions, and Technical Sections

for this project, and having examined all conditions affecting the work, the undersigned proposes to complete the work as set forth therein and to furnish all equipment, supervision, transportation,

labor, materials and services required to execute the work in accordance with the Contract Drawings and Documents at the following prices:

						Dolla	ars (\$)
		<u>Base Bid #2 – Skylight Repair:</u> All labor, materials, services and equipment necessary for completion of the work shown on the drawings and described in the specifications as Skylight Repairs:							
						Dolla	ars (\$)
				Patching & Repair	rs Dollars (\$		_) Per 50 lb	. bag	of LWIC
	Repair Mortar. (Add or Delete from Amount in Contract.)								
		Unit P	Price #2 – Skyligh only from Amoun	t Repairs – at nor	n-Roof Related v Dollars (\$	vertical surfa	ices) Per Lump S	Sum.	
6. Additional Proposal Content									
A	λ. :	List of items of work which Contractor intends to sublet and name of proposed Sub-contractor.							
	1	a. b.					ΓRACTOR		
В		c. Qualif	ication of Roofing	g Contractor	 				
	i	a.	List number Name:	of continuous	years in the	e business	under pre	sent	Company
	1	b.	List oldest Proje Client #1:	ect of similar natu	re installed.				
			Address: Telephone: Project:		_ Contact				
			Dollar Value: Manufacturer: Material:		Comple	etion:			
	,	c.	List (2) Projects	of similar nature	performed with	in past 3 yea	ars.		
			Client #2: Address:						
			Telephone:		Contact:				

Supplemental Proposal Page: 2

	Project:			
	Dollar Value:	\$	Completion:	
	Manufacturer:			
	Material:			
	Client #3:			
	Address:			
	Telephone:		Contact:	
	Project:			
	Dollar Value:		Completion:	
	Manufacturer:			
	Material:			
Under the law	vs of the State of _		having its principal office at	
BY:				
	Signature of Inc	lividual, Pa	rtner or Officer signing the Proposal	
	Name (printed)			
	Title		Date	
Seal (Seal is requi	red if bidder is a c	orporation)		

END OF FORM

Supplemental Proposal Page: 3

SPECIAL CONDITIONS PART 1 - GENERAL

1.1 USE OF ASBESTOS CONTAINING MATERIALS

A. The installation of asbestos containing materials for any portion of the work is prohibited, regardless of whether products are or are not labeled as such.

1.2 VERIFICATION OF SITE CONDITIONS

A. The Contractor shall verify, by their own observations, field measurements and additional methods as appropriate, all existing conditions, including subsurface roof system conditions and materials. Information provided in the documents regarding existing construction is for "bidder information" only and the Owner does not warrant the accuracy of the information nor will claims for additional compensation or time be accepted based upon deviations from the information provided. It shall be the sole responsibility of the Contractor to perform any testing or investigation deemed appropriate to confirm any existing conditions having an impact on the project cost prior to bidding.

1.3 PARKING

- A. The Owner will designate limited parking areas for the Contractor's use at the site set-up area, which may not be used for workers' vehicles; Additional parking for all workers and additional work vehicles is to be the contractor's responsibility. Owners of vehicles parked outside the designated areas without parking permits or owner's permission shall be responsible for all parking costs, fees, etc. and shall be subject to all fines, towing costs, etc. resulting from illegal parking.
- B. The Contractor shall be responsible for maintaining any designated parking areas and shall restore the areas to original pre-construction condition prior to project closeout if necessary.

1.4 MATERIAL DELIVERY

- A. Schedule delivery of materials, dumpsters and equipment to minimize number and frequency of construction vehicles.
- B. Schedule delivery of materials to minimize long term storage and prevent overcrowding of the site and designated construction spaces.
- C. Cranes, delivery trucks, and all other gas or diesel engines shall be located sufficient distance from the building so that exhaust is not allowed to enter the building. Contractor shall provide metal duct or flex lines and fans as required to extend the exhaust fumes to a distance acceptable to Owner in order to accomplish this requirement.

1.5 TEMPORARY FENCING

- A. The Contractor shall furnish and install a lockable chain link fence, 6 ft. high, enclosing all construction areas, including material storage area, sanitary facilities, dumpsters, tool area, equipment area, employee area, etc., including gates as required for worker and vehicle access.
- B. Contractor shall also furnish a construction fence, (such as snow fencing) to be installed approximately 8' from the edge of all related building perimeters so as to restrict access from pedestrian traffic areas at or below active work on all roofs, walls and overhead areas in this scope.

1.6 SANITARY FACILITIES

- A. The Contractor shall provide, prior to the start of any work, suitable temporary toilets at an approved location on site away from the building itself to avoid odors from entering the building. Temporary toilets shall comply with Department of Health requirements and be of the portable chemical type, each having a urinal, water closet and waterless hand washing system.
- B. Toilet facilities in Owner's buildings shall not be utilized by the Contractor's workforces, including subcontractors, suppliers, etc.

1.7 STORAGE AREA, TOOL AREA, EMPLOYEE AREA

- A. The Contractor shall be responsible for providing for his own requirements within the areas of the site designated for use by the Owner. Contractor shall locate his activities within the designated area to suit project requirements, subject to Owner's approval. Contractor shall not leave tools or materials unprotected and all items shall always be secured within closed &/or locked fencing.
- B. The Contractor shall be responsible to bring to the roof & work area any flammable materials required for that shift's work each day, and to lower to the ground and properly store and protect all flammable materials off of the roof and building at the end of each days' shift. Flammable materials are not permitted to be stored on the building including, but are not limited to propane, adhesives, primers, cleaning solutions, etc.

1.8 TEMPORARY ELECTRIC

A. The Contractor may make use of building electric service only to the extent available, provided such use does not interfere with building operations. The Contractor shall be responsible for determining his electrical needs and power available from the designated building source. The Contractor shall be responsible for providing additional electric sources, such as generators, at his own cost and expense if available building electric is insufficient or will present an inconvenience to the Owner.

1.9 TEMPORARY WATER

A. It is the Contractors responsibility to provide all water necessary for installation of the work and other project requirements, by whatever means and cost necessary. The Contractor may make use of the water source(s) designated by the Owner, provided such use does not interfere with building operations. However, if water sources made available by the Owner are insufficient for the project needs, the Contractor must arrange for and provide water from other sources at no cost to the Owner.

1.10 EQUIPMENT & UTILITY SHUT DOWNS AND TIE-INS

A. The Contractor shall make no mechanical equipment or utility shutdowns or tie-ins which affect the operations of the building or any building utility system, including fire alarm system, without requesting the Owner's permission at least two (2) days - (48 hours) - prior to the proposed shutdown. Shutdown duration shall be held to the minimum possible to accomplish required work and must be pre-approved by the Owner.

1.11 REPAIR OF DAMAGES

- A. Prior to project closeout, or sooner as required by the Owner, the Contractor shall repair or replace any materials or equipment damaged during the project, including but not limited to trees, shrubs, ground cover, sidewalks, paving, light fixtures, etc. All damage shall be repaired or replaced as necessary to restore items to their pre-construction condition or better. Repair or replacement costs to restore damage shall have no dollar limit and be non-prorated.
 - 1. If the Contractor fails to complete repairs/replacement in a timely manner, as requested and determined by the Owner, the Owner may have repairs/replacement performed by others and deduct the cost of repairs/replacement from the Contract amount.

1.12 ROOF ACCESS

- A. Access to the roof through the building interior shall be permitted, as directed and coordinated in advance with Owner's personnel and their representatives. The Contractor must keep the work access clear and available for use by Owner's personnel at all times during the construction, except as otherwise permitted by the Owner's Representative.
- B. The Contractor may not use any interior stairs, hatches, elevators, etc. to access the work area, except as specifically designated by the Owner for use by the Contractor's personnel, subcontractors and others required to access the work on the Contractor's behalf, for the full duration of the project.
 - 1. Any scaffolding for access, if used, shall comply with all applicable code requirements and safety regulations, including but not limited to the following:
 - a. When scaffolding is utilized, the scaffolding installation must be inspect-ed/accepted by owners representative.
 - 2. Access to scaffold shall be contained within the Contractor's work area and protected against use by unauthorized persons at all times, including after work hours, weekends and any other time the Contractor is not on site.

1.13 HOT WORK PERMIT PROGRAM

- A. The Contractor must obtain a required "Hot Work Permit" for all operations involving any open flames or work producing sparks, including, but not limited to, brazing, cutting, grinding, soldering, thawing pipe, roofing and/or welding.
 - 1. Prior to the start of any hot work operations, contact Owner's Project Manager to notify them of a hot work operation and to request issuance of the "Hot Work Permit".

- a. The owner's representative will report to the project site, will inspect the area for code compliance, will review safety procedures and will issue the "Hot Work Permit".
- 2. The "Hot Work Permit" has a "Fire Watch Signoff" requirement. The "Hot Work Permit" form was developed to be issued and returned on a daily basis, however, for the Contractor's convenience on this project, the "Hot Work Permit" may be issued on a weekly basis. The Contractor must hand write the date for each day of the week on the bottom of the form and sign the bottom of the form each day, next to the corresponding date for that day. When no hot work operations are performed on a particular day, the Contractor shall indicate "No Hot Work" next to the appropriate date at the bottom of the form.
 - a. Failure to comply with the required "Hot Work Permit" procedures may subject the Contractor to fines, determined by the Department of Emergency Services in accordance with State guidelines, for each occurrence.
 - b. Failure to comply with the required "Hot Work Permit" procedures may result in the permits being required on a daily, rather than weekly, basis.
- 3. The permit, with <u>daily</u> fire watch sign off, is to be left at the project site, in a location approved by the issuing agent. The issuing agent will return to periodically check the certified permit and retrieve it following the completion of each week's hot work.

1.14 DEBRIS CONTAINERS

A. All debris containers on site, including dumpsters, dump trailers, trucks, etc., must be covered at the end of each work shift or the onset of inclement weather, whichever is sooner. All containers are to be covered, regardless of quantity of debris inside the container, including when empty. Covers must be waterproof and of sufficient size to fully cover the top to the container and turn down on all sides a minimum of one foot. Covers must be adequately elevated/supported in the center of the container to shed water to the outside of the container and not allow the cover to "sag" or collect/hold water.

1.15 WORK HOUR/SHIFT LIMITATIONS

- A. In addition to any other requirements, restrictions or limitations noted in other portions of the Contract Documents, the Contractor shall accommodate the following requirements at no additional cost to the Owner. The roofing removal work is limited to between the hours of 6:00 am and 5:00 pm unless otherwise authorized by the Owner in writing.
 - 1. All roofing and related work performed within any twenty-four (24) hour period shall be performed by the same roofing company's crews, under the supervision of the roofing foreman and superintendent and within a continuous work shift.
 - a. Roofing and related work shall include, but is not necessarily limited to, removal of existing roofing materials and installation of new roof system and flashings.
 - b. Portions of the work performed by subcontractors, including electricians, plumbers, carpenters, HVAC mechanics and sheet metal workers, must be completed within the same work shift as roofing and related work, except as otherwise permitted by Owner.
 - 1) When any work by subcontractors is permitted outside the same shift as roofing and related work, a roofing foreman or superintendent, as a minimum, must be present on site for the full duration of the subcontractor's work.

1.16 SPECIAL ROOFING REMOVAL/INSTALLATION LIMITATIONS

- A. The Contractor shall only remove as much existing roofing material as can be replaced with the new roof system materials, as a minimum to include the membrane ply and all associated membrane flashings, by the end of the work shift or the onset of inclement weather, whichever is sooner. If at any time the Contractor fails to fully complete the installation of any part of the new roof system, including but not limited to all associated flashings, the Owner and/or Design Consultant may prohibit the Contractor from removing any additional existing roofing material until such time as the new roof system is fully complete on all areas of prior roof system removals.
- B. In the event that the Owner and/or Design Consultant prohibit roof removals and/or installation as described above, the Contractor shall NOT be entitled to any additional compensation or extension of contract time.

1.17 PROJECT-SPECIFIC SAFETY CONTROL PLAN

A. Prior to the start of any work, including but not limited to delivery of materials, equipment, containers, fencing or scaffolding to the project site, the Contractor must prepare, submit, re-submit as/if required and obtain approval from Owner of the Contractor's "Project-Specific Safety Control Plan".

PART 2 - N/A

PART 3 - N/A

END OF SECTION

CONTRACTOR'S GUARANTEE

WHEREAS, _	,, whose address is	
	(company)	
necessary for	led "Contractor", has provided, or caused to have provided, all equipment, labor the completion of all Skylight & Roof Repairs and Related Work required by for the project described as follows:	
Project:	Skylight & Roof Repairs at: Atlantic City Convention Center One Convention Boulevard Atlantic City, New Jersey 08401	
	REAS, the Work was accepted by the Owner in writing on the of, 20	

NOW, THEREFORE, the Contractor hereby guarantees to the Owner, for a period of two (2) years from the date Work was accepted by the Owner, all Work performed under the contract, as follows:

- Against all faulty or imperfect materials, all faulty, imperfect, careless or unskilled workmanship and against all against all work not in strict conformance with the requirements of the Contract Documents, regardless of whether the Work was previously accepted by the Owner.
- 2. Against damage by exposure to foreseeable weather, damage from leaks in the roof system or related components and damage by intrusion of foreseeable wind-borne water and/or snow. Damage shall be understood to include the accumulation of subsurface roof system moisture (i.e. wet insulation or blisters), even if no other visible interior damage or moisture exists.)
- 3. Against defacements, such as uncontrolled cracking and peeling of factory or field applied finishes such as paint and special coatings, and from adhesive or cohesive failure of all adhesives and sealants installed.
- 4. That all of the mechanical and electrical equipment, machines, devices, etc. that were disturbed as a result of the roofing related work shall be restored to proper operation (with ordinary care and attention) in a satisfactory, quiet and efficient manner as determined by the Owner, and that all of the same shall perform duties specified or which can reasonably be expected.
- 5. Against injury or undue deterioration from proper and usual use of the Work.

This Guarantee shall be subject to the following terms and conditions:

A. <u>INSPECTION AND REPAIRS</u>

- 1. Upon notification of the Contractor by the Owner of the need remedy a guaranteed condition, the Contractor shall inspect the condition within twenty-four (24) hours of notification.
- 2. If permanent repairs and/or replacement of the guaranteed condition cannot be made immediately, due to weather conditions, availability of appropriate labor and/or materials, building occupancy, etc., the Contractor shall make, or cause to be made, immediate temporary repairs to prevent any further damage, deterioration or unsafe conditions. Permanent repairs and or replacement of the guaranteed condition shall be scheduled as soon thereafter as practical, and with the Owner's consent and approval.
- 3. In the event that (a)the Owner notifies the Contractor of the need to correct a guaranteed condition, and (b)an emergency condition exists that requires immediate attention to prevent potential injury or damage, and (c)the Contractor cannot or does not promptly inspect and repair same, either permanently or temporarily, then the Owner may make, or cause to be made, such temporary repairs as may be essential and the Contractor shall reimburse the Owner for the cost of such repairs. Such action shall not relieve the Contractor of his obligation to perform any necessary permanent repairs and this Guarantee shall remain in full force and effect for the remaining portion of its original term.
- 4. The Contractor shall provide all equipment, labor and material required to remedy any and all guaranteed conditions, including repair and/or replacement of damage to other work resulting therefrom, and removal and replacement of other work required to access the guaranteed condition, all at the Contractor's sole expense for the full term of the Guarantee.
- 5. The Contractor agrees to perform a thorough inspection of the roof system and all other work, in the 12th, 24th and 36th months of the Guarantee period, as defined below, in the presence of a manufacturer's representative and an Owner's representative. If there are any guaranteed conditions encountered at either, or both, of these inspections, the Contractor shall make, or cause to be made, any necessary repairs and/or replacement to remedy the conditions under the terms of this Guarantee, within thirty (30) days of the date of inspection or as otherwise agreed by Owner, even if such time extends beyond the guarantee period.

a.	The 12 th month inspection shall be performed between the day of 20 and the day of, 20
b.	The 24 th month inspection shall be performed between the day of 20 and the day of

B. EXCLUSIONS FROM COVERAGE

- 1. Damages which result from occurrences beyond the control of the Contractor or mistreatment in excess of normal wear and tear, including the following:
 - a. Defects or failure of the structural roof deck or building's structural system, except when installed as part of the Work.
 - b. Unusual weather and natural phenomena, including lightning (except upon failure of lightning protection systems installed as part of the work), hailstorms, windstorms in excess of the specified wind speed, including hurricanes and tornados, and earthquakes.
 - c. Damage caused by improper repairs or modifications to the Skylight and Roof systems performed by someone other than the Contractor, or an approved applicator for the roof system manufacturer, during the guarantee period.

IN WITNESS HEREOF, and intending to be legally bound hereby, the Contractor has caused this document to be executed by the undersigned duly authorized officer.

		Corporate Seal:
	(Contractor)	•
By:		
·	(signature)	
	(name)	
Subscri	bed and Sworn to before me this day of,20	
Notary	Public of	
My con	nmission expires	

ENUMERATION OF DRAWINGS

The following drawings are included in the Contract Documents for these projects:

Skylight & Roof Repairs at Atlantic City Convention Center, Atlantic City, NJ

Drawing No.	<u>Drawing Title</u>	<u>Date</u>
C-1	Cover Sheet	7/21/2023
A-1	Wind Attachment Plan & Assemblies	7/21/2023
A-2	Partial Roof Plan	7/21/2023
A-3	Partial Roof Plan	7/21/2023
A-4	Partial Roof Plan	7/21/2023
A-5	Partial Roof Plan	7/21/2023
A-6	Partial Roof Plan	7/21/2023
A-7	Skylight Plans	7/21/2023
A-8	Roof Details	7/21/2023
A-9	Roof Details	7/21/2023
A-10	Roof Details	7/21/2023
A-11	Skylight Repair Details	7/21/2023
A-12	Skylight Repair Details	7/21/2023

The above list does not include drawings that may be issued or revised by way of addenda or Change Order, subsequent to printing of the Project Manual, but which are also included in the Contract Documents.

SECTION 010100 – SUMMARY OF THE WORK

PART ONE - GENERAL

1.01 PROJECT/WORK IDENTIFICATION

A. Project Name and Location

Skylight & Roof Repairs at:

Atlantic City Convention Center One Convention Boulevard Atlantic City, New Jersey 08401

2. Consultant:

Amtech Solutions, Inc. 2 White Horse Pike, Suite 1D Haddon Heights, New Jersey 08035

Phone: 856-888-3712

Contact: Greg Florio, email: gregflorio@amtechsls.com

Amtech Solutions, Inc. Project No. NJE.2022.001013

Owner's Representative: 3.

Oakview Venue Management 2301 Boardwalk Atlantic City, New Jersey 08401

Contact: Clark Hughes

1.02 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including but not limited to General Conditions, Special Conditions and other Division 1 Specification Sections apply to this Section.

1.03 ABBREVIATED SUMMARY

- A. Without limiting the scope or requirements of the Contract Documents, or dictating the sequence of construction, the Work can briefly be described as follows:
 - 1. Roof and Skylight areas included in this project are identified on the Overall Roof Plan on and individual Partial Roof & Skylight Plans on drawings.
 - 2. Base Bid #1 Roof Repairs: Remove and dispose of all existing roofing, flashings and related accessories as indicated down to the existing Lightweight Insulating Concrete roof substrate and flashing substrates (except if specifically noted otherwise). Provide and install all indicated roofing and flashing related work as indicated and as required.
 - 3. Remove and dispose of existing sheet metal flashings and related accessories and install new sheet metal copings, flashings and counterflashings, etc., including all related fasteners and accessories as indicated in the Contract Documents and as required.
 - 4. Patch & repair any areas of damaged or deteriorated LWIC roof substrate.

SUMMARY OF THE WORK 010100-1

- 5. Replace existing roof drain and overflow components as indicated.
- 6. Base Bid #2 Skylights Repairs: Provide cleaning, preparation, priming and installation of liquid-applied skylight waterproofing and coating assembly to the existing skylight assemblies and related adjacent surfaces (including vertical surfaces rising above roof areas included in the scope of work) as indicated and as required.
- 7. Contractor shall be responsible to obtain & pay for all required Construction Permits.
- 8. Bid Bond and Payment & Performance Bonds are required for this project.

1.04 CONTRACT TYPE

A. The Work will be constructed under a single prime contract.

1.05 WORK SEQUENCE

- A. The Contractor is responsible for determining the sequence of the Work, in coordination with the Owner, as required to install all work in conformance with the requirements of the Contract Documents and, in addition, must accommodate the following special sequencing requirements.
 - 1. Except if shown otherwise in the drawings, all new wood blocking, decking repairs, drain and other related modifications must be completed prior to or simultaneously with the installation of the new roof membrane assembly.
- B. Special sequencing requirements specified above do not relieve the Contractor of responsibility for maintaining the building in a watertight condition by the end of each work shift or the on-set of inclement weather, whichever is sooner.

1.06 PROJECT SCHEDULE

- A. It is anticipated that the successful bidder will be able to complete all submittal requirements, obtain materials, mobilize at the site and commence construction in accordance with the timeframes in the General Conditions exhibit in the Solicitation of Bids document.
- B. All roofing and related work is to be complete, including removal from the site of all related materials, equipment, scaffolding, fencing, etc., no later than 20 weeks (150 calendar days) from the start of construction. Contractor must provide suitable consistent manpower and resources to comply with this requirement.

PART TWO - PRODUCTS Not Applicable

PART THREE - EXECUTION Not Applicable

END OF SECTION

SUMMARY OF THE WORK 010100-2

SECTION 010270 - APPLICATIONS FOR PAYMENT

PART ONE – GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including the General Conditions exhibit of the Solicitation of Bids, Special Conditions and other Division #1 Specification Sections, apply to this Section.

1.02 SUMMARY

B. This Section specifies administrative and procedural requirements governing the Contractor's Applications for Payment.

1.03 PRE-APPLICATION REVIEW

- A. Prior to submitting an Application for Payment, the Contractor shall submit a preliminary draft for review and approval by the Consultant and Owner's Project Manager. This draft will be based on the Base Bid award and any Alternate Bids, if applicable. Separate line item breakouts must be provided for all work in Alternate Bids, if any.
 - 1. The contractor shall submit the preliminary draft to the Consultant and Owner's Rep., at least twenty-four (24) hours before any regularly scheduled Progress Meeting preceding the intended submission of the application for payment. An email transmission is acceptable for this purpose, providing all information is clear and legible to the satisfaction of the recipient.
 - 2. At the Progress Meeting, the preliminary draft will be reviewed by the Contractor, Consultant and Owner's Rep.
 - 3. A determination will be made by the Consultant and Owner's Rep. regarding approval of the requested payment amount, including retainage withheld, based on the progress of work and other applicable considerations. If the Consultant and Owner's Rep. determine that the requested amount is inappropriate, an acceptable approved amount will be determined, and the Contractor will be advised of same.
- B. The Contractor shall prepare an Application for Payment based on the amounts approved by the Consultant and Owner's Rep.

1.04 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by the Consultant and paid for by the Owner.
- B. Payment-Application Forms: Use AIA Document G702 and Continuation Sheets G703 as the form for Applications for Payment.
- C. Application Preparation: Complete every entry on the form. Include notarization and execution by a person authorized to sign legal documents on behalf of the Contractor. The Consultant will return incomplete applications without action.
- D. Entries shall match data on the Schedule of Values. Use updated schedules if revisions were made.

- E. Include amounts of approved Change Orders issued prior to the last day of the construction period covered by the application.
- F. Waivers of Mechanics Lien: When requested by the Owner, submit waivers of mechanics liens from subcontractors and suppliers.
 - 1. Waiver Forms: Submit waivers of lien on forms, and executed in a manner, acceptable to the Owner.
- G. Invoicing for materials delivered and stored on the project site may not be billed as stored materials; material costs are to be invoiced at the percentage of completion along with labor cost as they are installed as part of the specified assembly, unless specifically requested by the contractor and approved in writing in advance by the Owner.
- H. Initial Application for Payment: Administrative actions and submittals, that must precede or coincide with submittal of the first Application for Payment, include the following:
 - Certificates of insurance and insurance policies.
 - Payment and performance bonds.
 - Initial report of roof drain testing and pre-existing deficiencies (to be performed prior to start of work).
 - Initial report of mechanical equipment testing and pre-existing deficiencies (to be performed prior to the start of work).
 - List of subcontractors and principal suppliers.
 - Schedule of Values.
 - Contractor's Construction Schedule
 - Transportation and disposal manifests for any removed asbestos containing roof materials included in the application if present.
 - Certified weekly payrolls and monthly manning reports from the Contractor and applicable subcontractors for the period covered by the application.
- I. Intermediate Applications for Payment: Administrative actions and submittals, that must precede or coincide with the submittal of intermediate Application(s) for Payment, include the following:
 - Transportation and disposal manifests for all removed asbestos containing roof materials included in the application if present.
 - Certified weekly payrolls and monthly manning reports from the Contractor and applicable subcontractors for the period covered by the application.
- J. Final Payment Application: Administrative actions and submittals that must precede or coincide with submittal of the final Application for Payment include the following:
 - Transportation and disposal manifests for all removed asbestos containing roof materials included in the application if present.
 - Certified weekly payrolls and monthly manning reports from the Contractor and applicable subcontractors for the period covered by the application.
 - Completion of Project closeout requirements, including required submittals.

PART TWO - PRODUCTS (Not Applicable)

PART THREE - EXECUTION (Not Applicable)

END OF SECTION

SECTION 010280 - SCHEDULE OF VALUES

PART ONE - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including the General Conditions exhibit of the Solicitation of Bids, Special Conditions and other Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

A. This Section specifies administrative and procedural requirements governing the Contractor's Schedule of Values.

1.03 SCHEDULE OF VALUES

- A. Format and Content: Prepare the Schedule of Values on AIA Document G702/G703; Application and Certificate for Payment and Continuation Sheet.
- B. Identification: Include the following Project identification on the Schedule of Values:
 - Project name and location.
 - Name of the Consultant.
 - Owner's project number.
 - Contractor's name and address.
 - Date prepared.
- C. Arrange the Schedule of Values in with separate columns to indicate the following for each item listed (Round amounts to nearest whole dollar; the total shall equal the Contract Sum).
 - Item number.
 - Description of item.
 - Approximate quantity or measurement.
 - Scheduled dollar value
- D. Provide a breakdown of the Contract Sum in sufficient detail to facilitate continued evaluation of Applications for Payment and progress reports, with the following line items required as a minimum:
 - Bonds and Construction Permit fees.
 - Submittals.
 - Mobilization.
 - Roofing demolition; equipment, containers & fees.
 - Roofing demolition; labor.
 - Roof drain modifications; material.
 - Roof drain modifications; labor.
 - Rough carpentry; materials.
 - Rough carpentry; labor.
 - LWIC repairs; material.
 - LWIC repairs; labor.
 - Roofing membrane and flashings, material.
 - Roofing membrane and flashings; labor.
 - Roof protection pads, material.

SCHEDULE OF VALUES 010280 - 1

- Roof protection pads; labor.
- Miscellaneous sheet metal flashing and trim; material.
- Miscellaneous sheet metal flashing and trim; labor.
- Metal copings; material.
- Metal copings; labor.
- Misc. curb demo & modifications; material.
- Misc. curb demo & modifications; labor.
- Skylight repairs; materials.
- Skylight repairs; labor.
- Punchlist and final cleaning.
- Demobilization
- Contract closeout.
- Guarantees/Warrantees
- Other; Temporary facilities and major cost items that are not direct cost of actual work-inplace may be shown either as additional line items in the Schedule of Values or distributed as general overhead expense, at the Contractor's option.

1.04 ACCEPTANCE OF SCHEDULE

- A. The Owner may request supporting back-up for any items that the Owner feels have an excessive dollar amount. Back-up may include detailed labor estimates, material cost data, etc. The Owner shall have the right to require changes to the dollar amount allocation between specific items that are judged inappropriate, providing the total of all items remains equal to the Contract Sum.
- B. Acceptance of a Schedule of Values does not constitute the Owner's agreement that the values necessarily represent the actual costs for items shown. In the event of changes to the Contract scope of work, particularly when the Owner is entitled to credit for work deleted, amounts shown on the Schedule of Values will not necessarily determine, and will not in any way limit, the actual amount due the Owner.
- C. Acceptance of a Schedule of Values does not constitute the Owner's agreement that the quantities or measurements show are correct or accurate. The Contractor is responsible for providing all labor and materials in sufficient quantities required for full completion of the work, even where the Schedule of Values may indicate lesser quantities.

PART TWO - (Not Applicable)

PART THREE - (Not Applicable)

END OF SECTION

SCHEDULE OF VALUES 010280 - 2

SECTION 010310 - UNIT PRICES

PART ONE - GENERAL

- 1.01 A unit price is an amount proposed by bidders which will be added to or deducted from the contract amount for work described in the Schedule of Unit Prices below in the quantities listed. The actual amount added to or deducted from the contract will be determined by multiplying the proposed unit price per quantity listed by the actual quantity of work performed or deleted. Change order requests for quantities of work that are significantly greater than the quantities in the unit prices may be subject to the Owners review and negotiation.
- 1.02 Each proposed unit price shall include all labor, material, disposal, miscellaneous devices, appurtenances and similar items required for a complete installation whether or not mentioned as part of the description in the Schedule of Unit Prices.
- 1.03 The Contractor shall coordinate related work and modify or adjust work as required to insure that work affected by each accepted unit price items is complete and fully integrated into the project.
- 1.04 Work performed for each unit price item shall be done in conformance with the requirements of the corresponding specification section referenced in the Schedule of Unit Prices.
- 1.05 All Bidders shall submit unit prices on the proposal form corresponding to each of the Items described in the Schedule of Unit Prices below.

1.06 Schedule of Unit Prices:

- 1. Unit Price #1 LWIC repairs
 - a. Description: Prep and patch areas of damaged or deteriorated Lightweight Insulating Concrete roof substrated with specified LWIC repair mortar materials (beyond the amount of repairs specifically indicated in the specification in the Scope of Work), and in addition to or deducted from the additional quantity indicated to be provided in the Scope of Work in the LWIC Repair Specification Section 035200).
 - b. Unit of Measure: \$_____Per 50 lb. bag of LWIC repair mortar (add or delete from amount in Contract.)
- 2. Unit Price #2 Skylight Repairs (at non-Roof Related vertical areas)
 - a. Description: Prep, prime and treat with Elastomeric Skylight coating assembly all existing vertical surfaces of skylight assembly that are not included in Base Bid #2. Scope of work in Unit Price #2 consists of vertical skylight assemblies that are not rising above the roof areas that are in the Scope of Work: at East end of Skylight Area "J" and at the southwest end of Skylight Area "J1". All work shall be in conformance with similar details indicated for Base Bid #2 Skylight Repairs Scope of Work and with Specification Section 075600 and shall include applicable lifts or swing stages to perform work.
 - b. Unit of Measure: \$______Per Lump Sum. (add only)

END OF SECTION

UNIT PRICES Page: 010310-1

SECTION 012000 - PROJECT MEETINGS

PART ONE - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including the General Conditions exhibit of the Solicitation of Bids, Special Conditions and other Division #1 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. This Section specifies administrative and procedural requirements for project meetings, including, but not limited to, the following:
 - Project "Kick-off" meeting.
 - Roofing & Skylight Repair pre-installation meeting.
 - Progress meetings.
 - Special meetings.

1.03 PROJECT "KICK-OFF" MEETING

- A. The Owner will schedule a meeting, as soon as possible after notice of award to Contractor, convenient to all concerned parties.
- B. Attendees: In addition to the Owner and Contractor representatives required for execution of Contract Documents, the following shall also be present:
 - Owner's Representative; designated to be the Owner's primary point of contact for the duration of the project.
 - Owner's Project Consultant.
 - Contractor's Project Manager; designated to be the Contractor's primary point of contact for the duration of the project.
 - Other representatives involved with the project as determined appropriate by the Owner or Contractor.
- C. Submittals: Submittals, that must precede or coincide with the meeting, include the following:
 - Certificates of insurance.
 - Payment and performance bonds.
 - List of subcontractors and principal suppliers.
 - Schedule of Values.
 - Contractor's preliminary Construction Schedule.
- D. Agenda: Execute documents as required, introduce parties involved in the project and discuss issues pertinent to the project, including, but not limited to, the following:
 - Tentative construction schedule, and coordination of facility schedule.
 - Procedures for UCC Building Permit Application.
 - Procedures for processing submittals and schedules.
 - Special lead-time requirements for material or equipment.
 - Special construction sequencing requirements.
 - Pre-installation meetings.

PROJECT MEETINGS 012000 - 1

1.04 ROOFING & SKYLIGHT REPAIRS PRE-INSTALLATION MEETING

- A. A pre-installation meeting must be held before starting removal and replacement of the existing roof system. The meeting shall be scheduled at a time convenient to the Owner and the Consultant, not less than five (5) days, but not more than ten (10) days, prior to the anticipated start of construction. The meeting will be held at the Project Site or another location on the Owner's campus as determined by the Owner.
- B. <u>Attendees:</u> Owner's Project Manager, Project Consultant, and the Owner's construction inspector; the Contractor and/or Contractor's Project Manager and roofing superintendent; any subcontractors; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work. The Contractor shall be responsible for notification, scheduling and insuring the attendance of all necessary subcontractors, manufacturers and suppliers.
- C. <u>Submittals</u>: Submittals, that must precede or coincide with the meeting, include the following:
 - Copy of completed and submitted UCC Building Permit Application
 - Product data, shop drawings and/or samples for all materials and equipment scheduled for installation during this phase.
 - Contractor's Construction Schedule, revised as necessary since prior submission.
- D. <u>Agenda:</u> Discuss items of significance that could affect progress, including, but not limited to, the following:
 - Construction schedule.
 - Critical work sequencing.
 - Designation of responsible personnel.
 - Procedures for directing and processing changes in the Work, including parties authorized to make decisions.
 - Procedures for processing Applications for Payment.
 - Status of Shop Drawings, Product Data, Samples and other submittal items.
 - Status of material and equipment availability and delivery.
 - Use of the site and premises, including staging, storage, temporary facilities & parking areas.
 - Safety, first aid and security procedures.
 - Working hours.
- E. The Owner's representative or Consultant will record significant discussions, agreements, disagreements and the approved schedule, and will forward one copy of the Minutes of the meeting to the Contractor and all other attendees and interested parties.
- F. Do not proceed with the work if all requirements or issues addressed at the meeting cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of Work and reconvene the conference at the earliest feasible date.

1.05 PROGRESS MEETINGS

A. Progress Meeting requirements are provided in the General Conditions, with supplemental requirements provided in this Article; generally progress meetings will be held bi-weekly or as required due to special considerations.

PROJECT MEETINGS 012000 - 2

- B. Attendees: The Contractor's Project Manager or superintendent must attend all progress meetings. The Contractor's foreman must attend the meetings, but is not an acceptable sole representative of the Contractor.
- C. <u>Agenda</u>: Review and correct or approve minutes of the previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to the status of the Project, including, but not limited to, the following:
 - Status of outstanding submittals.
 - Status of Change Order requests.
 - Work completed since the previous meeting (look-behind schedule).
 - Work anticipated for completion prior to the next meeting (look-ahead schedule).
 - Overall project schedule.
 - Determine where each activity is in relation to the Contractor's Construction Schedule, whether on time or ahead or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to insure that current and subsequent activities will be completed within the Contract Time.
 - Status of Applications for Payment.
 - Correction of defective or non-conforming work.
 - Status of "as-built" documentation.
- D. <u>Reporting:</u> The Owner's representative will record significant discussions, agreements, disagreements and the approved schedule, and will forward one copy of the Minutes of the meeting to the Contractor and to all other attendees and interested parties.

1.06 SPECIAL MEETINGS

- A. Special project meetings may be required by the Owner at any time from award through project close-out, to address Owner's concerns relative to the performance of the Work. Special project meetings are in addition to specific meetings held for other purposes, such as pre-construction meetings and progress meetings.
- B. All parties pertinent to the topic of the special meeting will be required to attend. All required parties must provide appropriate representation at no additional cost to the Owner. The format, requirements and recording of special meetings will be similar to progress meetings.

PART TWO - PRODUCTS (Not Applicable)

PART THREE - EXECUTION (Not Applicable)

END OF SECTION

PROJECT MEETINGS 012000 - 3

SECTION 013400 - SUBMITTALS

PART ONE - GENERAL

1.01 DESCRIPTION OF REQUIREMENTS

- A. General: The contractor is required to submit various types of submittals specified in this section or other sections of the contract documents. Some submittals, such as material data, samples, shop drawings, schedules, etc., are required prior to the start of work. Other items, such as AsBuilt Drawings, guarantees, etc., are required prior to project close-out. This section is intended as a summary of submittals required prior to the start of construction. Any submittals specified by other sections of the contract documents may also be required even if not discussed in this section. Submittals specified in this section are required even if not mentioned elsewhere in the contract documents.
- B. Submittal Types: The following are definitions of the most common types of required submittals, but does not limit the other types of submittals which may be required.
 - Shop drawings include specially-prepared technical data for this project, including drawings, diagrams, performance curves, data sheets, schedules, templates, patterns, reports, calculations, instructions, measurements and similar information not in standard printed form for general application to a range of similar projects.
 - 2. Product data include standard printed information on materials, products and systems; not specially-prepared for this project, other than the designation of selections from among available choices printed therein.
 - 3. Safety Data Sheets (SDS) for all products used on or during construction contain information regarding hazards, proper use and emergency treatment.
 - 4. Samples include both fabricated and unfabricated physical examples of materials, products and units of work; both as complete units and as smaller portions of units of work; either for limited visual inspection or for more detailed testing and analysis. Samples of manufacturer's standard products are NOT required to be submitted on this project (unless specifically requested).
 - 5. Certificates of conformance or compliance are documents attesting that a product complies with a specified standard.
- C. Submission Schedules: The contractor is responsible to prepare and deliver all required submittal items within 14 calendar days of Award of Contract, to allow for review and approvals without extending the completion of the project beyond the specified time period. Any items which are missing or rejected must be re-submitted in a time period which will not delay completion of the contract.

The Design Consultant shall check and approve or otherwise act upon submittals / shop drawings for conformity with the construction documents. The Design Consultant has the authority to reject shop drawings that are not in conformity with the contract documents. If there are exceptions or rejections taken, the Design Consultant shall identify the areas of non-compliance.

One (1) digital copy (in .pdf file format) of all submittals shall be provided by the contractor, with the exception of samples which shall include only one (1) of each. If submittals are returned

SUBMITTALS Page: 013400-1

stamped by the Design Consultant "REJECTED" or "REVISE AND RESUBMIT", the contractor shall resubmit them to the Design Consultant until an "NO EXCEPTIONS NOTED" or "MAKE CORRECTIONS NOTED" stamp is affixed by the Design Consultant. If the drawings are returned by the Design Consultant stamped "MAKE CORRECTIONS NOTED", without "REVISE AND RESUBMIT" no further return submittal is necessary. The submittals will be reviewed by the Design Consultant and one copy will be electronically returned to the contractor and one forwarded to the Owner.

D. Project Schedule:

- Within 14 calendar days of the Notice of Award of Contract, the Contractor shall submit a complete bar chart construction schedule for the entire project and its Unit Schedule Breakdown (Schedule of Values) for review.
- Contractor shall provide a detailed listing of "day by day" activities in a "two-week lookahead" schedule, with related small scale roof plan indicating anticipated work areas, updated every two weeks and at any Job Progress Meetings.

PART TWO - PRODUCTS Not Used

PART THREE - EXECUTION Not Used

END OF SECTION

SUBMITTALS Page: 013400-2

SECTION 014000 - QUALITY CONTROL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including the General Conditions exhibit of the Solicitation of Bids, Special Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Quality-control services include inspections, tests, and related actions, including reports performed by Contractor, by independent agencies, and by governing authorities. They do not include contract enforcement activities performed by the Consultant, Owner or Owner's representatives.
- B. Quality-control services are required to verify compliance with requirements specified or indicated, or to verify that portions of the work are functioning as intended.
- C. Quality-control services specified in this section do not limit the Contractor's responsibility to provide quality-control services specified in other sections or portions of the Contract Documents. Specified quality-control services do not limit the Contractor's quality control procedures that facilitate compliance with Contract Document requirements.
- D. This Section includes administrative and procedural requirements for quality-control services not specified in other sections, including the following:
 - 1. Roof Drain Testing
 - 2. Rooftop Equipment Survey/Testing

1.3 ROOF DRAIN TESTING

- A. Pre-Construction Testing: Prior to the start of any work on the roof, the Contractor shall water-flow test all roof drains, to determine if any full or partial drain clogs exist in the drainage system.
 - 1. The results of the testing shall be reported to the Owner, in writing, prior to the start of work.
 - a. Report any leaking drainage components observed during testing to the Owner.
 - 2. The Owner will be responsible for correction of any drainage problems reported by the Contractor prior to the start of work.
- B. Post-Construction Testing: When all work reaches substantial completion, the Contractor shall water-flow test all roof drains, in the presence of the Owner or Owner's representative, to determine if any full or partial drain clogs exist in the drainage system.
 - 1. Report the results of testing to the Owner in writing prior to preparation of the final punchlist.

QUALITY CONTROL 014000 - 1

2. Any drains, piping or other components, whether exposed, concealed, below grade, etc., found to be clogged shall be cleared, repaired or replaced as required to restore full drainage capacity. All work shall be performed by the Contractor at no additional cost to the Owner, including patching, repair or replacement of any materials, finishes, landscaping, etc., disturbed in gaining access to drainage components.

1.4 ROOFTOP EQUIPMENT SURVEY/TESTING

A. Pre-Construction Testing:

- 1. Prior to the start of any work on the roof, the Contractor shall inspect all existing rooftop equipment and conditions, including but not limited to the following:
 - a. Exhaust fans and ventilators and other HVAC units, including related ductwork, power and control wiring/conduit, skylight glazing, etc.
- 2. The Owner will provide personnel, familiar with the building's mechanical systems, to assist the Contractor or Contractor's subcontractor, in the operational verification of existing equipment.
- 3. The Contractor shall report any damage, improperly functioning or non-functioning items to the Owner, in writing, prior to the start of work. Photographic or video documentation of damaged items is to be included with the report.
- 4. The Owner will be responsible for correction of any equipment problems reported by the Contractor prior to the start of work.
- B. Post-Construction Testing: When all work reaches substantial completion, the Contractor shall re-inspect all rooftop equipment in accordance with paragraph above, in the presence of the Owner or Owner's representative, to determine if any damages occurred since the preconstruction inspection.
 - 1. Report the results of testing to the Owner in writing prior to preparation of the final punchlist.
 - 2. Any damage, improperly functioning or non-functioning rooftop equipment, not reported to the Owner in writing prior to the start of work, shall be repaired or replaced at no cost to the Owner.
 - a. Current age, current value and/or original value of existing equipment shall not limit the Contractor's responsibility for cost of necessary repairs or replacement. Repair or replacement of aged equipment shall be non-prorated.
 - b. Where repair of existing equipment exceeds the cost of replacement with equal or similar equipment acceptable to the Owner, the Contractor may provide replacement equipment.
 - c. Where damage occurs to equipment or components that cannot be repaired, due to age or availability of components, said equipment shall be replaced with new equipment of similar type and capacity, as approved by the Owner.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 ROOF DRAIN TESTING

QUALITY CONTROL 014000 - 2

- A. Notify the Consultant and Owner at least twenty-four (24) hours before the anticipated testing.
- B. Provide 3/4" diameter (min.) hose in sufficient length as required to utilize water source designated by the Owner.
- C. Run water at full volume, for a period not less than thirty (30) minutes, into each drain.
- D. Report any leaking drainage components observed during testing to the Owner.
- E. Re-test after any corrective work and repeat all procedures as necessary until achieving full drainage capacity.

3.2 ROOFTOP EQUIPMENT SURVEY/TESTING

- A. Notify the Consultant and Owner at least seventy-two (72) hours before the anticipated survey/testing.
- B. Owner shall repair or replace equipment, necessary for building operation, comfort or safety of occupants, immediately upon discovery of improper or non-function identified during preconstruction testing.

3.3 REPAIR AND PROTECTION

- A. General: Upon completion of inspection, testing, sample taking and similar services, repair damaged construction and restore substrates and finishes.
- B. Protect construction exposed by or for quality-control service activities, and protect repaired construction.
- C. Repair and protection is Contractor's responsibility, regardless of the assignment of responsibility for inspection, testing, or similar services.

END OF SECTION

QUALITY CONTROL 014000 - 3

SECTION 015010 - PROJECT-SPECIFIC SAFETY CONTROL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including the General Conditions exhibit of the Solicitation of Bids, Special Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for the preparation and submission of a Project-Specific Safety Control Plan, to be provided for the Owner's information, prior to the start of work.
 - 1. It is hereby understood that the Contractor, in conjunction with any/all subcontractors, suppliers, representatives, etc., is responsible for the implementation of procedures, practices and controls to safeguard the health, safety and welfare of all workers at the project site. Nothing in this section shall be construed to limit the Contractor's safety procedures. Nothing in this section shall be construed to direct or determine the Contractor's safety procedures, except that where requirements specified herein exceed the minimum requirements established by Federal, State or local regulations, or require the Contractor to implement a more stringent of allowable options, then the requirements specified herein shall govern.
 - 2. It is understood that the Contractor, in conjunction with any subcontractors, suppliers, representatives, etc., is responsible for the implementation of procedures, practices and controls to safeguard the health, safety and welfare of building occupants, visitors and the public in and around the project site. However, since the Owner shares an interest in the safety of the Owner's staff, patients and visitors, the Owner requires that the Contractor submit a Project-Specific Safety Control Plan for the Owner's review and possible comment.

1.3 REGULATORY REQUIREMENTS

- A. Safety practices, procedures, equipment and controls, including all training and reporting, shall be performed and provided in accordance with all applicable Federal, State and local regulations, including but not limited to:
 - 1. Occupational Safety and Health Administration (OSHA) Standard 29 CFR, Part 1926 "Safety and Health Regulations for Construction", Subpart M "Fall Protection", including all standards and appendices contained therein.
 - a. For the purpose of complying with these standards and the Owner's minimum project-specific requirements, the following definitions, interpretations and parameters shall be utilized for this project:

- 1) This project involves "Roofing work" on a "Low slope roof", with "Unprotected sides and edges" around the entire perimeter of all roof areas (ref. 1926.500(b)).
- 2) All unprotected sides and edges are greater than 6 feet above a lower level (ref. 1926.501(b)(1)).
- 3) All portions of all roof areas shall be considered to have a width greater than 50 feet.
- 4) For "...each employee engaged in roofing activities on low-slope roofs, with unprotected sides and edges...", OSHA permits the option of a combined "warning line system and safety monitoring system" for protection from falling (ref. 1926.501(b)(10)). However, although this option is considered permissible for all other roofing activities, unless specifically prohibited elsewhere (i.e. employees in a "hoist area" per 1926.501(b)(3)), this option is not acceptable on this project for the protection of employees performing the following tasks:
 - a) Removal of existing roof membrane edge flashing, metal fascia/gravel stop and/or perimeter wood blocking at the roof edge.
 - b) Installation of perimeter wood blocking, including re-fastening of existing perimeter wood blocking at the roof edge.
 - c) Installation of all new metal fascia / coping system components and all related roof membrane and membrane flashing plies at the roof edge.
- 5) For the purpose of this project, it is a presumption that it is feasible and will not create a greater hazard to implement at least one of the remaining options permitted by 1926.501(b)(10), for the protection of workers performing the tasks identified above. Accordingly, the Contractor has the burden of establishing, for the consideration of the Owner, that the combination "warning line system and safety monitoring system" is the <u>only</u> feasible method of protecting the employees performing these particular tasks from falling.
 - After establishing that the "warning line system and safety monitoring system" is the only feasible option provided under 1926.501(b)(10), the Contractor shall prepare a separate, alternative plan to protect employees from falling, such as perimeter scaffolding with integral guard rail system, weighted carts, etc., for the Owners consideration. Such alternative plan shall be incorporated into the overall Project-Specific Safety Control Plan.
- B. For the purpose of complying with applicable OSHA standards, in particular when determining whether a fall protection system is "infeasible" for this project, the Contractor shall not use the cost of a particular method or system as a factor in such a determination.
- C. Additional requirements specified in this section are intended to supplement and/or exceed current Federal, State and local requirements, but do not relieve the Contractor of responsibility for complying with all current regulations. Any requirements specified in this section that inadvertently diminish the requirements or intent of Federal, State or local regulations shall be brought to the attention of the Owner and Consultant and shall be superseded by the more stringent requirements of the appropriate regulation(s), at no additional cost.
- D. Nothing contained in this specification shall be construed to relieve or replace the Contractor's obligation to prepare any/all plans as may be required to satisfy the requirements of any Federal, State or local regulatory agency having authority over the Contractor's safety procedures and requirements.

1.4 SUBMISSION OF PROJECT-SPECIFIC SAFETY CONTROL PLAN

- A. Within seven (7) calendar days following the "Project Kick-Off Meeting", and in no case less that fourteen (14) days prior to the "Roofing Pre-Installation Meeting", whichever is sooner, the Contractor shall simultaneously submit copies of the Project-Specific Safety Control Plan to the following parties:
 - 1. Owner's Representative
 - 2. Design Consultant
- B. The Owner shall review the Contractor's plan, to determine if the plan addresses the general conditions and concerns identified in this section or as otherwise may affect the safety of workers or students, faculty, staff and visitors at or in the vicinity of the project.
 - 1. Failure of the Owner and/or Consultant to provide comment or to recognize or identify flaws, errors, omissions or potential hazards in the Contractor's Project-Specific Safety Control Plan shall not relieve the Contractor from full responsibility for the plan and any events or consequences resulting there from.
- C. The Owner shall have the right to reject the Contractor's plan and require revisions and resubmission as required until the plan appropriately, in the sole opinion of the Owner, addresses all conditions and concerns identified in this section or as may otherwise be raised by the specific content of the plan submitted for review.

1.5 MANDATORY (MINIMUM) ELEMENTS OF PROJECT-SPECIFIC SAFETY CONTROL PLAN

- A. The Contractor's Project-Specific Safety Control Plan shall describe specific methods and procedures proposed, including related devices, equipment and apparatus to be utilized, to address the following mandatory minimum elements of safety concern:
 - 1. Protection of building occupants and visitors entering and exiting the buildings.
 - a. It shall be a minimum requirement of this project that all building entrances in the vicinity of the project area have covered protection, sufficient to prevent injury from falling objects, extending a minimum of 8 feet from the building wall.
 - b. Provide a schematic plan/diagram, showing the location of all applicable building entrances and proposed protection elements.
 - 2. Protection of ground level pedestrians traveling adjacent to the buildings.
 - a. Pedestrians shall be protected from the potential of falling objects, including but not limited to roofing related debris/materials.
 - b. Provide a schematic plan/diagram, showing the location of all proposed barricades, fences, warning lines and/or other proposed protection elements.
 - 3. Protection of ground level pedestrians from Contractor's equipment, both idle and in use, including but not limited to cranes, lifts, hoists, chutes, debris containers, stored materials, portable toilet(s), ladders, etc.
 - a. As specified elsewhere, it is a project requirement that all of the Contractor's equipment and materials be enclosed by chain link fencing, to prevent unauthorized persons from entering the project site. The Contractor shall provide any additional protective procedures and/or equipment required to safeguard pedestrians adjacent to the project site.

- b. Provide a schematic plan/diagram, showing the location of all proposed equipment, including but not limited to the items described above, along with all barricades, fences, warning lines and/or other proposed protection elements.
- 4. Protection of employees working at ground level.
 - a. Employees must be protected from overhead hazards, including but not limited to those working under and/or in the vicinity of cranes, hoists, chutes and work being performed on the roof above.
- 5. Fall protection of employees working in a hoist area.
 - a. Identify procedures and equipment as required to comply with 1926.501(b)(3), including the proposed procedures to address any employees who may be required to lean through the hoist access opening.
- 6. Fall protection of employees performing removal of existing stone ballast or gravel -if present.
 - a. For the purpose of this project, removal of existing stone ballast or gravel, even when performed by a subcontractor, shall be considered a "roofing activity", governed by 1926.501(b)(10).
- 7. Fall protection of employees performing regular roofing or skylight activities, other than specific work on the unprotected sides and edges of the roof.
 - a. Identify procedures and equipment as required to comply with 1926.501(b)(10).
- 8. Fall protection of employees performing (at the minimum) the following work:
 - a. Removal of existing roof membrane edge flashing and related work, metal fascias and/or perimeter wood blocking at the roof edge.
 - b. Installation of perimeter wood blocking, including re-fastening of existing perimeter wood blocking at the roof edge.
 - c. Installation of all new metal fascia or coping system components and all related roof membrane and membrane flashing plies or coatings at the roof edge or skylights.
 - d. Identify procedures and equipment as required to comply with 1926.501(b)(10), except as limited by these specifications in Article 1.3 above.
- B. The Contractor's Project-Specific Safety Control Plan shall <u>include a section providing manufacturer's product data</u>, or other documentation as appropriate, to confirm/demonstrate that proposed Fall Protection Systems meet or exceed the requirements of OSHA Standard 1926.502, as a minimum to include the following:
 - 1. "Guardrails", if proposed, shall have all components designed and manufactured and/or constructed to meet or exceed all provisions of 1926.502(b). 1926 Subpart M, Appendix B may be referenced for guidelines on compliance with 1926.502(b).
 - 2. "Personal Fall Arrest Systems", if proposed, shall have all components designed and manufactured and/or constructed to meet or exceed all provisions of 1926.502(d). 1926 Subpart M, Appendix C may be referenced for guidelines on compliance with 1926.502(d).
 - 3. "Warning Line Systems", if proposed, shall have all components designed and manufactured and/or constructed to meet or exceed all provisions of 1926.502(f).
- C. The Contractor's Project-Specific Safety Control Plan shall include a section providing a copy of the "Certification of Training" for each employee who will be at the project site, as evidence that each worker has had fall protection training provided by the Contractor and/or subcontractor(s) in accordance with the provisions of 1926.503.
 - 1. Each "Certification of Training" shall conform to the requirements of 1926.503(b)(1), including the employee's name, date(s) of training, and the signature of the employer or person who conducted the training.

1.6 PROJECT CONDITIONS

A. It is understood that the buildings will remain occupied throughout the entire duration of this project. It should be expected that at all times, both while the contractor is on site and off site, occupants and visitors will be entering and exiting the building. In addition, it is expected that throughout the entire duration of the project, there will be pedestrian foot traffic adjacent to the buildings.

PART 2 - PRODUCTS

A. All products shall meet or exceed the provisions of the appropriate provisions of 1926.502 or as otherwise required to comply with Federal, State and local regulations.

PART 3 - EXECUTION

3.1 ADHERENCE TO PROJECT-SPECIFIC SAFETY CONTROL PLAN

- A. The Contractor shall be responsible for ensuring that all employees and subcontractors at the project site follow all procedures and utilize all safety equipment, including but not limited to all fall protection systems, as described in the Project-Specific Safety Control Plan.
- B. If at any time during the project, any employee does not adhere to the Project-Specific Safety Control Plan, it will be the responsibility of the Contractor to remove the employee from the project site.
 - 1. Prior to the employee being permitted to return to the project site, the Contractor must perform "retraining" per 1926.503(c) and must submit to the Owner a new "Certification of Training" for the employee.

3.2 ADHERENCE TO OWNER'S CONTRACTOR REGULATIONS

A. The Contractor shall also be responsible for ensuring that all employees and subcontractors at the project site follow site specific requirements described in Owner's "Contractor Health, Safety and Environmental Rules and Regulations", or similar information included in this document or provided in writing to the Contractor.

END OF SECTION

SECTION 015050 - TEMPORARY FACILITIES

PART ONE – GENERAL

1.01 DESCRIPTION OF REQUIREMENTS

A. Definitions: Specific administrative and procedural minimum actions are specified in this section, as extensions of provisions in other contract documents. These requirements have been included for special purposes as indicated. Nothing in this section is intended to limit types and amounts of temporary work required, and no omission from this section will be recognized as an indication that such temporary activity is not required for successful completion of the work and compliance with requirements of contract documents. Provisions of this section are applicable to, but not by way of limitation, utility services, construction facilities, security/protection provisions, and support facilities.

1.02 JOB CONDITIONS

- A. General: Establish and initiate use of each temporary facility at time first reasonably required for proper performance of the work. Terminate use and remove facilities at earliest reasonable time, when no longer needed or when permanent facilities have, with authorized use, replaced the need.
- B. Conditions of Use: Install, operate, maintain and protect temporary facilities in a manner and at locations which will be safe, non-hazardous, sanitary and protective of persons and property, and free of deleterious effects.
- C. Existing Equipment on Site: Cover equipment that is to remain in place within the area of contract operations and protect it against damage or loss. Store equipment that is removed in performance of work where directed or reuse in work as required by drawings and specifications. Equipment temporarily removed shall be protected, cleaned and replaced equal to its condition prior to starting work. Security for equipment or material that is to be reused and is removed for temporary storage shall be the sole responsibility of the Contractor.

D. Weather Protection:

- 1. Submit weather protection plan to the Design Consultant for review. Any changes to submitted plan must be accepted by the Design Consultant.
- 2. Provide protection for all work areas affected by moisture and cold, such as interior building areas, by covering, enclosing and/or temporary roof cutoffs, to maintain a completely dry interior work area. Any damage to building interior or contents due to construction-related leakage during the construction period will be responsibility of the contractor.
- 3. Provide the names and home (after working hours) telephone numbers of the project superintendent and the on-site foreman to the Design Consultant and the Owner prior to the start of work.

PARTS TWO AND THREE - PRODUCTS AND EXECUTION

2.01 TEMPORARY UTILITY SERVICES

A. The types of services required include, but not by way of limitation, water, electrical power and telephones. When connecting to existing franchised utilities for required services, comply with

TEMPORARY FACILITIES Page: 015050-1

service companies' recommendations on materials and methods, or engage service companies to install services. Locate and relocate services (as necessary) to minimize interference with construction operations.

- B. Water: Premises are supplied with water and electrical services which may be used in this work, subject to regulations of the Owner. Contractor shall make his own arrangements for such services if required. Where non-potable water is used, mark each outlet with health hazard warning signs.
- C. Temporary Power: Provide service with ground-fault circuit interrupter features, as necessary for work to be performed.
- D. Temporary Telephone Service: The Contractor shall, at his own expense, provide his own field telephone service.

2.02 TEMPORARY CONSTRUCTION FACILITIES

- A. The types of temporary construction facilities required include, but not by way of limitation, water distribution, drainage, enclosure of work, ventilation, electrical power distribution, hoisting facilities, and ladders. Provide facilities reasonable required to perform construction operations properly and adequately.
- B. Enclosures: The Contractor shall provide and include in his bid the cost of erecting and maintaining all temporary enclosures, barricades, barriers, fences, and other protection necessary or required by the Owner, or by OSHA, or by the State for weatherproofing, and for the safety and protection of all persons, property, and vehicular traffic. No holes, or entrance-ways shall ever remain unprotected, and temporary covering or closure will be required. Contractor shall provide temporary chain link fencing, six (6) feet high, with locking gate completely around work area.
- C. Electrical Facilities: Furnish and install all temporary electrical facilities, including lamps and tools, required for construction and safety operations. Remove all such equipment when permanent connections have been completed. Where it is determined during construction that the temporary facilities, as installed, interfere with Owner operations or other construction operations and, when notified by the Design Consultant, relocate said facilities in an approved manner at no cost to the Owner. No wire, bus or electrical equipment which is part of any of the permanent electrical systems may be used for temporary electrical service for construction operations, unless specifically approved by the Owner. Temporary connections shall be in accordance with NEC and OSHA requirements. The Contractor shall be responsible for any damage or injury to equipment, materials, or personnel caused by improperly protected temporary installations. All costs for materials and installation for temporary electrical facilities and energy for their operation shall be at the expense of the Contractor.
- D. Access Provisions: Provide ramps, scaffold-stairs, ladders and similar temporary access elements as reasonably required to perform the work and facilitate its inspection during installation. All access to the roof shall be by owner approved / contractor supplied means, etc.

2.03 SECURITY PROVISIONS

- A. General: Provide necessary services such as to achieve 24- hour, 7 days per week protection from theft, vandalism, personal injury and property damage.
- B. Fire Protection: Provide fire protection on the roof and work areas and make ready for emergency use, and instruct personnel at site on availability and proper use. Minimum protection shall consist of two appropriately labeled fire extinguishers and a 5 gallon bucket of water available within 25

TEMPORARY FACILITIES Page: 015050-2

feet of any hot work in use. Perform fire watch for 1 hour minimum after extinguishing any torches or hot work.

2.04 MOVING MATERIALS AND/OR EQUIPMENT

A. If it becomes necessary at any time during the execution of the work to move materials or equipment to facilitate the work, the Contractor shall, when so directed by the Design Consultant, move them or cause them to be moved and/or reinstalled without additional charge.

2.05 PROTECTION OF BUILDINGS

- A. The Contractor shall protect all existing and new roofs, and all finished surfaces such as walls, sidewalks, paving, curbs, over or through which materials are handled, against any possible damage resulting from the conduct of work.
- B. All finished surfaces, including roofs, skylights, walls, slabs, floors, roadways, sidewalks and curbs, or landscaping or plantings, etc. shall be clean and not marred upon acceptance of the finished project by the Owner. The Contractor shall, without extra compensation, refinish, restore or replace all such proved to have been inadequately protected and damaged.
- C. Special roof, skylight, or wall protection as required shall be furnished by the Contractor and set in place prior to entering and placing of any material or equipment by the Contractor or his Subcontractors.

2.06 ROOF LOADING

A. The Contractor shall conduct his operations so as not to overload the roof structure, roof slabs, joists, or girders or any substrates from storage of materials or from the weight of equipment. The Contractor shall be solely responsible for any structural problem or damage whatsoever from overloading the structure, and shall completely repair and restore any damage or failure as a result of his operations, either to the roof structure, the floor below, or any roof appurtenances, parapets, vents, drains, or other facility without cost to the Owner.

2.07 LINES, SLOPES, ELEVATIONS, AND MEASUREMENT

- A. The Contractor shall be responsible for setting and verifying all dimensions, lines, slopes, elevations, verifications and location of existing structural framing members, and measurements in the field as required by his work and by the project. Roof slopes shall be laid out by the Contractor, who will be held solely responsible for its correctness; and all expenses in connection with this work shall be paid for by the Contractor.
- B. The Contractor shall satisfy himself of the correctness of dimensions, lines, slopes, elevations, verification and location of existing structural framing members, and dimensions prior to starting work. At the start of work, the Contractor shall be responsible for verifying all measurements and dimensions in the field before preparing any shop drawings or ordering any materials. The Contractor shall be solely responsible for proper sizes, dimensions, and fits of material, fixtures, fittings, components, structures, and appurtenances.

END OF SECTION

TEMPORARY FACILITIES Page: 015050-3

SECTION 020700 - SELECTIVE DEMOLITION

PART ONE - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including the General Conditions exhibit of the Solicitation of Bids, Special Conditions and Division I Specification Sections, apply to this Section.

1.02 SUMMARY

- A. This Section includes the following:
 - 1. Removal and disposal of existing roof system and related accessory items.

1.03 DEFINITIONS

- A. Remove: Remove and legally dispose of items except those indicated to be reinstalled, salvaged, or to remain the Owner's property.
- B. Remove and Reinstall: Remove items indicated; clean, service, and otherwise prepare them for reuse; store and protect against damage. Reinstall items in the same locations or in locations indicated.
- C. Existing to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by the Consultant, items may be removed to a suitable, protected storage location during selective demolition and then cleaned and reinstalled in their original locations.

1.04 MATERIALS OWNERSHIP

A. Except for items or materials indicated to be reused, salvaged, reinstalled, otherwise indicated to remain the Owner's property or otherwise specified, demolished materials shall become the Contractor's property and shall be removed from the site with further disposition at the Contractor's option.

1.05 SUBMITTALS

- A. General: Submit each item in this Article according to the Conditions of the Contract and Division I Specification Sections, for information only, unless otherwise indicated.
- B. Submit sufficiently detailed listing with photographs or video, of existing conditions of adjoining construction and site improvements that might later be misconstrued as damage caused by the Contractor during the course of the project.

1.06 QUALITY ASSURANCE

A. Regulatory Requirements: Comply with governing EPA notification regulations before starting selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

SELECTIVE DEMOLITION 020700-1

1.07 PROJECT CONDITIONS

- A. Owner will occupy portions of the building immediately below and adjacent to selective demolition area. Conduct selective demolition so that Owner's operation will not be disrupted. Provide not less than 72 hours notice to Owner of activities that will affect Owner's operations.
- B. Owner assumes no responsibility for actual condition of buildings to be selectively demolished.
 - 1. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- C. Storage or sale of removed items or materials on-site will not be permitted.

1.08 SCHEDULING

- A. Arrange selective demolition schedule so as not to interfere with Owner's on-site operations.
- B. Coordinate with the Owner regarding areas of interior protection (if any) to be installed below areas in the scope of work in this project prior to the start of roofing work.

PART TWO - PRODUCTS

2.01 REPAIR MATERIALS

- A. Use repair materials identical to existing materials.
 - 1. Where identical materials are unavailable or cannot be used for exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
 - 2. Use materials whose installed performance equals or surpasses that of existing materials.

PART THREE - EXECUTION

3.01 EXAMINATION

- A. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- B. Inventory and record the condition of items to be removed and reinstalled.
- C. When unanticipated mechanical, electrical, or structural elements that conflict with the intended function or design are encountered, investigate and measure the nature and extent of the conflict. Promptly submit a written report to the Owner & Consultant.
- D. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

3.02 PREPARATION

SELECTIVE DEMOLITION 020700-2

- A. Conduct demolition operations and remove debris to ensure minimum interference with roads, streets, walks and other adjacent occupied and used facilities.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.
- B. Conduct demolition operations to prevent injury to people and damage to adjacent buildings and facilities to remain. Ensure safe passages of people around selective demolition area.
 - 1. Erect temporary protection, such as walks, fences, railings, canopies and covered passageways, where required by authorities having jurisdiction.
 - 2. Protect existing site improvements, appurtenances and landscaping to remain.

3.03 ROOFING REMOVAL

- A. Remove only as much roofing as can be replaced with new membrane assembly, including related flashings, the same day or before the onset of precipitation, whichever is sooner.
- B. Do not tear-off any additional roofing on any work-day subsequent to any day where flashings were not fully completed, as a result of an unforeseen situation (and therefore are made watertight temporarily), until such time as the permanent flashings are fully complete.
- C. Promptly remove all removed materials from the roof as soon as possible, but no later than the end of the work shift each day. Do not overload the structural capacity of the roof deck with excessive debris.
- D. Remove mechanical fasteners in a manner that avoids damage to the roofing substrates.

3.04 PATCHING AND REPAIRS

- A. Promptly patch and repair holes and damaged surfaces caused to adjacent construction by selective demolition operations.
- B. Where repairs to existing surfaces are required, patch to product surfaces suitable for new materials.
- C. Restore exposed finishes of patched areas and extend finish restoration into adjoining construction to remain in a manner that eliminates evidence of patching and refinishing.

3.05 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

END OF SECTION

SELECTIVE DEMOLITION 020700-3

SECTION 035200 - LIGHTWEIGHT INSULATING CONCRETE REPAIRS

Part 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including the General Conditions exhibit of the Solicitation of Bids, Special Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes repairs to cast-in-place lightweight insulating concrete (LWIC) roof substrate, incorporating cellular aggregate and embedded polystyrene rigid insulation board.
- B. An approved LWIC applicator shall furnish all labor, materials and equipment required for the patching application.
- C. The LWIC patching application shall become an integral part of the deck system.
- D. Project shall include approximately fifty 50-lb. bags of LWIC patching repair mortar in the base Scope of Work to address the repair of significant (3/4 inch or more deep x 1 inch or more wide) spalls, &/or damaged & deteriorated LWIC substrate.
 - 1. Extras for additional patching or repairs to the existing LWIC or credits for use of less than the quantity noted above will be dealt with on an add or delete Unit Price basis.

1.3 SUBMITTALS

- A. Product Data: For lightweight insulating concrete repair mortar, including system components, including portland cement, foaming agent and rigid insulation board (as required). Submit manufacturer's instructions for proper mixing and placement of the lightweight insulating concrete repair system.
- B. Safety Data Sheets (SDS); For repair mortar, portland cement, foaming agent and rigid insulation board.
- D. Lightweight insulating concrete repair mortar mix design.

1.4 QUALITY ASSURANCE

- A. Installer Qualification: An experienced installer who has completed lightweight insulating concrete roof installation similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
 - 1. Installer shall be approved in writing by lightweight insulating concrete material manufacturer and membrane manufacture prior to submitting a bid.

1.5 GENERAL

- A. LWIC repair mortar is a non-hazardous, non-corrosive cement modifier developed to be used to make repairs or detail LWIC roof decks.
- B. LWIC repair mortar is added to high cement factor mixes placed in thin applications.

- C. LWIC repair mortar is added to concrete mixtures to prevent rapid drying, powdering, chalking and/or severe cracking as may occur in non-modified mixtures.
- D. LWIC repair mortar is added to insure adequate bond to the parent surface and to lower the modulus of elasticity in high cement factor mixtures causing the repair material to be less brittle.
- E. LWIC repair mortar serves as a plasticizer allowing reductions in the water to cement ratio of from 10 to 15 percent over non-modified mixtures.
- F. In situations where LWIC repair mortar is used to cap or repair a cementitious deck, its use should be communicated to the roof membrane manufacturer. Although LWIC repair mortar has been tested by several roofing manufacturers for bond and uplift resistance, there may be special condition that the roof membrane manufacturer may want to confirm by test or verbally with LWIC repair mortar manufacturer.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in manufacturer's original unopened, undamaged packages, fully identified as to manufacturer, brand or other identifying data and labels.
- B. Store packaged materials to protect them from physical damage and exposure to the elements, in a dry location.
- C. Do not use materials that shows indications of moisture damage, caking, or other deterioration.
- D. Familiarize every member of the application crew with the manufacturer's safety data sheets and with all fire and safety regulations required by governing codes and regulations.

1.7 PROJECT CONDITIONS

- A. When air temperatures of 40°F (4.4°C) or above are predicted to occur within the first 24 hours after placement, normal mixing and application procedures may be used. Do not install the lightweight insulating concrete repair mortar system when air temperatures are below 32°F or predicted to be below freezing for the next 24 hours.
- B. Do not place lightweight insulating concrete repair mortar during rain or snow or on surfaces covered with standing water, snow, or ice.

1.8 WARRANTY / GUARANTEE

- A. The lightweight concrete roof insulation is considered one component of the total roof system and shall not be excluded from the "total system" warranty/guarantee issued by the roof system manufacturer. Refer to Section 07552; SBS Modified Bituminous Membrane Roofing and Section 01740; Warranties/Guaranties.
- B. In addition to coverage specified elsewhere, specific lightweight concrete insulation items covered during the original term of its installation warranty included:
 - 1. The actual resistance to heat flow through the roof insulation will be at least 80% of the design thermal resistance, provided the roof membrane is free of leaks.
 - 2. The roof insulation system will remain in a re-roofable condition, capable of retaining fasteners similar to and with pull-out resistance equal to or exceeding the original installation, excluding damage to the insulation caused by removal of the original roof

membrane.

3. The roof insulation system will not cause structural damage to the building as a result of expansion from thermal or chemical action.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. LWIC Patching Repair Mortar: Basis of Design: Thinpatch Admixture by Celcore Incorporated of Black Mountain, North Carolina. Acceptable alternate: Zonopatch by Siplast.
 - 1. Containers of Thinpatch Admixture shall be clearly identifiable by labeling. Thinpatch admixture is a free flowing, redispersible powder which shall be kept in dry storage to avoid caking.
- B. Portland cement used may be of various brands however must be identified as either Types I, IP, II, or III, and labeled as meeting the requirements of ASTM C-150.
- C. Water for mixing shall be clean, fresh, and free from injurious quantities of acid, alkali, salt, oil, organic matter or other impurities. Installation in cold weather may require the use of heated water.
- D. Aggregates, if utilized, may be conventional concrete aggregates (limited however to fines) meeting the requirements of ASTM C-33, perlite lightweight concrete aggregate meeting ASTM C-322, Group 1, or preformed foam for cellular concrete meeting ASTM C-796. The use of vermiculite is not permitted

2.3 MIXTURES

- A. Repairs having thicknesses 1/8" or less.
 - 1. Thinpatch Admixture modified neat cement slurry mixtures are recommended.
 - 2. Thinpatch modified neat cement slurry mixture proportions.
 - a. Portland cement: 94 lbs.
 - b. Water: 56 lbs or 6.7 gallons.
 - c. Thinpatch Admixture: 3 lbs.
 - 3. After thoroughly mixing the ingredients using a high shear mixing tool, allow the mixture to stand idle for several minutes to allow adequate wetting of the cement. Then re-mix to assure uniform dispersion. Begin application immediately.
- B. Repairs having thickness greater than 1/8", but less than 3/4".
 - 1. Thinpatch Admixture modified cement / aggregate mixtures are recommended.
 - 2. For repairs to a non-nailed decks, use perlite or fine sand aggregate. For repairs to a deck that will be nailed, use perlite concrete aggregate only.
 - 3. Thinpatch modified cement / aggregate mixture proportions.
 - a. Use [1] part portland cement to [1 or 2] parts [by volume] of aggregate.
 - b. Water content shall be sufficient to allow an easy flow for placement.
 - c. Thinpatch Admixture shall be used at a rate equal to 3 lbs per 100 lbs of
 - 4. Upon thorough mixing of the ingredients, begin placement immediately.
- C. Repairs having thicknesses greater than 3/4 inches.
 - 1. Thinpatch Admixture modified perlite or cellular concretes are recommended.
 - a. Perlite concrete mixtures shall consist of 1 part portland cement and 6 parts perlite concrete aggregate.
 - b. Thinpatch Admixture shall be used at a rate of [6] lbs per cubic yard of perlite

concrete.

- c. Water content shall be sufficient to allow an easy flow for placement.
- D. Cellular concrete mixtures shall be proportioned to a minimum 40 lbs/ft³ cast density.
- E. Thinpatch Admixture shall be used at a rate of 6 lbs per cubic yard of cellular concrete.
- F. Upon thorough mixing of the ingredients, begin placement immediately

PART 3 - EXECUTION

3.1 PREPARATION

- A. Before placement of the selected Thinpatch mixture, the surface area shall be thoroughly cleaned of loose debris. The preferred method of deck preparation is sweeping, vacuuming or blowing.
- B. The deck surface may be moistened to receive thin applications particularly in hot weather. A covering of standing water however, is not permitted.
- C. Any portion of the parent deck determined to be un-bonded or otherwise unsound, shall be removed prior to placement.
- D. Inspect and repair the surface of the waterproof vapor barrier as required to ensure that the membrane, flashing and flashing terminations are completely watertight.

3.2 PLACEMENT

- A. Repairs having thicknesses 1/8" or less.
 - 1. Thinpatch modified cement slurry may be applied by troweling, squeegee or other method resulting in the desired smoothness of the finished surface.
- B. With the exception of those repairs having thicknesses of less than 1/8", screeds should be set when capping to provide a true surface. Smaller repairs may be accomplished by troweling.
- C. The placement crew shall be of sufficient size to handle the batch volume. Placement time for any size batch shall not exceed one hour.
- D. In no case shall batches be re-tempered with water after placement begins. Materials which have exceeded the time limitation or have lost desired work ability shall be discarded.
- E. Protect the repairs from traffic until sufficient set has occurred.

END OF SECTION

SECTION 061000 - ROUGH CARPENTRY

PART ONE - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including the General Conditions exhibit of the Solicitation of Bids, Special Conditions and Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. This Section includes the following:
 - Wood nailers, blocking and/or plywood sheathing as indicated on the Contract Documents.

1.03 DEFINITIONS

A. Rough Carpentry: Carpentry work not specified in other Sections and not exposed, unless otherwise specified.

1.04 SUBMITTALS

- A. General: Submit each item in this Article according to the Conditions of the Contract and Division 1 Specification Sections.
- B. Product Data for the following products:
 - 1. Lumber and Plywood sheathing.
 - 2. Anchors for attachment of plywood or blocking to decking, masonry and wood blocking substrates.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Keep materials under cover and dry. Protect from weather and contact with damp or wet surfaces. Stack lumber, plywood, and other panels. Provide for air circulation within and around stacks and under temporary coverings.
 - 1. For lumber and plywood pressure treated with waterborne chemicals, place spacers between each bundle to provide air circulation.

PART TWO - PRODUCTS

2.01 LUMBER, GENERAL

- A. Lumber Standards: Comply with DOC PS 20, "American Softwood Lumber Standard," and with applicable grading rules of inspection agencies certified by ALSC's Board of Review.
- B. Inspection Agencies: Inspection agencies, and the abbreviations used to reference them, include the following:
 - 1. NLGA National Lumber Grades Authority (Canadian).
 - 2. SPIB Southern Pine Inspection Bureau.
 - 3. WCLIB West Coast Lumber Inspection Bureau.

- 4. WWPA Western Wood Products Association.
- C. Grade Stamps: Provide lumber with each piece factory marked with grade stamp of inspection agency evidencing compliance with grading rule requirements and identifying grading agency, grade, species, moisture content at time of surfacing, and mill.
- D. Where nominal sizes are indicated, provide actual sizes required by DOC PS 20 for moisture content specified. Where actual sizes are indicated, they are minimum dressed sizes for dry lumber.
 - 1. Provide dressed lumber, S4S, unless otherwise indicated.
 - 2. Provide lumber with 19 percent maximum moisture content at time of dressing for 2-inch nominal thickness or less, unless otherwise indicated.

2.02 WOOD-PRESERVATIVE-TREATED MATERIALS

- A. General: Where lumber or plywood is indicated as "P.T.", "pressure treated", "treated" or is specified herein to be treated, comply with applicable requirements of AWPA C2 (lumber) and AWPA C9 (plywood). Mark each treated item with the Quality Mark Requirements of an inspection agency approved by ALSC's Board of Review.
 - 1. Do not use chemicals containing chromium or arsenic.
- B. Pressure treat above-ground items with waterborne preservatives to a minimum retention of 0.25 lb/cu. Ft. After treatment, kiln-dry lumber and plywood to a maximum moisture content of 19 and 15 percent, respectively. Treat indicated items and the following:
 - 1. Nailers, blocking and stripping in connection with roofing and flashing.
 - 2. Nailers, blocking and stripping in contact with masonry or concrete.
- C. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Wood-Preservative-Treated Materials:
 - a. Baxter: J.H. Baxter Co.
 - b. Chemical Specialties, Inc.
 - c. Continental Wood Preservers, Inc.
 - d. Hickson Corp.
 - e. Hoover Treated Wood Products, Inc.
 - f. Osmose Wood Preserving, Inc.
- D. If cut after treatment, apply field treatment complying with AWPA M4 to cut surfaces. Inspect each piece of lumber or plywood after drying and discard damaged or defective pieces.

2.03 NAILERS AND BLOCKING

- A. General: Provide lumber for support bases, nailers, blocking, stripping and similar members.
- B. Grade: For dimension lumber and board sizes, provide Southern Pine No. 2 per SPIB, Douglas Fir-Larch No. 2 per WWPA/WCLIB/NLGA or better.

2.04 PLYWOOD

A. Plywood Sheathing: Provide plywood panels complying with DOC PS 1, "U.S. Product Standard for Construction and Industrial Plywood".

- 1. C-D Exposure 1, thicknesses as indicated or required to comply with intent of details (3/4" thick where not specifically indicated otherwise).
- B. Trademark: Factory mark plywood panels with APA trademark evidencing compliance with grade requirements.

2.05 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this Article for material and manufacture. Carbon steel, aluminum, and electro-plated galvanized steel fasteners shall <u>NOT</u> be used in contact with treated wood. Generally, hot-dipped galvanized fasteners are acceptable for wood to wood connections, and stainless steel fasteners are required wherever the fastener must penetrate through any additional rigid material, such as a sheet metal flange, etc.
- B. Nails: Common wire nails conforming to FS FF-N-105 with hot-dipped galvanized coating per ASTM A153, (where specifically noted) or type 304/316 stainless steel (unless noted otherwise).
 - 1. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view, will receive finish materials or opposite side substrate materials will not permit proper penetration for countersinking of head.
- C. Wood Screws: Course thread, hot-dipped galvanized coating per ASTM A153, (where specifically noted) or type 304/316 stainless steel (unless noted otherwise).
 - 1. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view, will receive finish materials or opposite side substrate materials will not permit proper penetration for countersinking of head.
- D. Concrete / masonry anchors: One-piece unit with a hex or phillips head and a coated steel threaded shank. (Unless noted otherwise).
 - 1. Acceptable fasteners include, 3/16" Tapcon Concrete Screw Anchor" by ITW Buildex or approved equal.
- E. Expansion anchors: One-piece anchor body and an expansion mechanism, which consists of a pair of interlocking independent wedges. Anchor components, including anchor body, nut, washer, and expansion mechanism shall be manufactured from type 316 stainless steel. (Unless noted otherwise).
 - 1. Acceptable fasteners include, "Stainless Steel Power-Stud Anchor" by Powers Fastening, Inc. or approved equal meeting the following criteria (ultimate load capacities based on ASTM E488 using 4000 psi concrete):
 - a. Diameter: 1/4"
 - b. Miniumum embedment: 1-1/2"
 - c. Tension: 2,380 lbs. Shear: 2,070 lbs.
- F. Self-Drilling Screws: Corrosion resistant, stainless steel, #14 Phillips Flat Head screw, designed for attachment of 1-1/2" (min.) thick wood blocking to ¼" thick steel members, with wood boring wing reamers and self-drilling point. Model "S-ww 14-20x 2-3/4PFH #4 wings" by Hilti.

PART THREE - EXECUTION

3.01 INSTALLATION, GENERAL

- A. Discard units of material with defects that impair quality of rough carpentry and that are too small to use with minimum number of joints or optimum joint arrangement.
- B. Set rough carpentry to required levels and lines, with members plumb, true to line, cut and fitted.
- C. Fit rough carpentry to other construction; scribe and cope as required for accurate fit. Correlate location of nailers, blocking and similar supports to allow attachment of other construction.
- D. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated.
- E. Make tight connections between members. Install without splitting wood; predrill as required.

3.02 WOOD NAILERS AND BLOCKING

- A. Attach to substrate to support applied loading.
 - 1. Wood substrate:
 - a. Fasten wood to wood with nails or wood screws at 12" o/c staggered. unless noted otherwise or required by code requirements.
 - b. Countersink all fastener heads to prevent damage to, or proper seating of, subsequently applied materials.
 - c. Provide 1" minimum embedment of fastener(as recommended by manufacturer) into wood substrate material.
 - 2. Masonry substrate:
 - a. Fasten wood to masonry with anchors at 12" o/c staggered unless noted otherwise or required by code requirements.
 - b. Countersink all fastener heads to prevent damage to, or proper seating of, subsequently applied materials.
 - c. Provide minimum embedment as recommended by manufacturer of fastener into concrete or masonry substrate.

3.03 PLYWOOD ATTACHMENT

- A. Fasten plywood to substrates with appropriate mechanical fastener for that substrate, at 6" o/c at all plywood edges and at 12" o/c spacing at all intermediate structural framing member supports, as well as at 12" o/c spacing in rows not more than 24" apart where plywood is secured to solid substrate (such as masonry wall), unless noted otherwise or required by code requirements.
- B. Countersink all fastener heads to prevent damage to, or proper seating of, subsequently applied materials.
- C. Provide 1" minimum embedment of fastener into substrate material, or as recommended by the fastener &/or substrate material manufacturer.

END OF SECTION

SECTION 075400 - PVC THERMOPLASTIC MEMBRANE ROOFING

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:

- 1. Fully adhered single ply membrane roofing assembly.
- 2. Membrane & liquid-applied flashings.
- 3. Walkway and protection pads.

1.2 REFERENCES

A. ASTM International (ASTM):

- 1. C1549 Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer.
- 2. D4434 Standard Specification for Poly (Vinyl Chloride) Sheet Roofing.
- 3. E108 Standard Test Methods for Fire Tests of Roof Coverings Class A assembly.
- 4. E1980 Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces.

B. Factory Mutual Insurance Co. (FM)

1. 4470 - Approval Standard for Class 1 Roof Covers.

1.3 PERFORMANCE REQUIREMENTS

- A. General: Install a watertight, PVC membrane roofing and base flashing system with compatible components that will not permit the passage of liquid water and will withstand wind loads, thermally induced movement, and exposure to weather without failure.
- B. Provide roof membrane system evaluated by an approved testing entity as part of an approved or accepted roof assembly which includes all other roofing assembly related materials for this project.
- C. Design criteria: Roof assembly design criteria for this project that the required roof assembly must be tested and approved for a minimum Wind Uplift Ratings to comply with the specified criteria refer to "Wind Design Criteria" and other attachment information on the drawings for additional information.
- D. It is a requirement of this project that the roof system, including membrane, substrate, and adhesives, be a part of an approved assembly listed in the FM Approval guide, RoofNav, DORA, UL, or other similar documentation.

1.4 SUBMITTALS

A. Submittals for Review:

- 1. Shop Drawings: Indicate:
 - a. Special details or proposed deviations from Contract Document details or criteria. It is not required or desired to submit roofing shop drawings that duplicate, simplify, or regurgitate the roof detail information in the contract documents.
 - b. Adhesive and fastener types and attachment patterns.
- 2. Product Data: Manufacturer's product specifications, installation instructions, and general recommendations for each product used.

- 3. Safety Data Sheets for all products to be utilized on the project.
- 4. Samples: If required coordinate with Consultant and Owner prior to submission.
- 5. Warranty: Submit sample document from roof system manufacturer, including addendum as required, indicating compliance with all specified requirements.

1.5 QUALITY ASSURANCE

- A. Installer Qualification: Applicator of roofing system must be pre-qualified as an approved applicator for the membrane manufacturer, eligible to install the roof system and obtain the specified warranty upon completion of the project. Contractor must have minimum 5 years experience as an applicator with the manufacture prior to bidding.
- B. The roofing manufacturer's technical representative must visit the project site a minimum of three (3) times during the course of work for the purpose of verifying the adequacy of work practices and results. The inspections must occur during the first ten (10) squares of membrane installation, at the mid-point of the installation, and at substantial completion of the membrane assembly. At each inspection, submit a report signed by the manufacturer's technical representative to the Owner and the Consultant within three (3) working days. At a minimum, the report shall indicate the overall quality of work, deficiencies, and any other concerns, and recommended corrective actions.
- C. The Owner's Consultant will inspect the project at intervals in accordance with the Owner / Consultant agreement.
- D. Pre-Installation Conference:
 - 1. Convene at site prior to beginning work of this Section.
 - 2. Attendance: Owner, Consultant, Contractor, roofing manufacturer's representative, and any related trades.
 - 3. Review and discuss: Contract Documents, roofing system manufacturer's literature, project conditions, scheduling, and other matters affecting application.
 - 4. Tour representative areas of roofing substrates; discuss substrate construction, related work, work and site conditions, and materials compatibility.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Delivery materials in the manufacturer's original unopened, undamaged packaging, fully identified as to manufacturer, brand or other identifying data.
- B. Delivery materials in sufficient quantities and/or at sufficient frequency to allow continuity of application. Minimize site deliveries to the greatest extent possible.
- C. Store materials out of direct exposure to the elements, in a dry, well-ventilated, location to ensure no moisture pickup and maintain at a temperature exceeding roofing system manufacturer's written instruction. When stored outdoors, cover all material with breathable canvas tarps. Manufacturer's polyethylene wrapping and polyethylene or other non-breathable plastic tarps or covering are not acceptable. Any materials that are improperly covered overnight or during inclement weather will be marked by the Owner's representative and must be removed from the jobsite by the Contractor and replaced with new material at no additional cost to the Owner.
 - 1. Store rolls of membrane and other sheet materials on pallets or other raised surfaces. Do not double-stack rolls.

- 2. Store materials such as solvents, adhesives and similar products away from open flames, sparks or excessive heat. Maintain adhesives at temperatures as recommended.
- 3. Handle and store roofing materials and place equipment in a manner to avoid significant or permanent damage to deck or structural supporting members.
- 4. Do not leave unused materials on the roof overnight or when roofing work is not in progress unless stored on pallets, protected from weather and moisture.
- D. As a general rule all adhesives shall be stored at temperatures between 60° F and 80° F or as recommended in writing by the manufacturer. Read instructions contained on adhesive canister for specific storage instructions. The Contractor is responsible to maintain suitable conditions for all materials to be utilized.

1.7 PROJECT CONDITIONS

- A. Proceed with roofing membrane installation only after substrate preparation is complete. Roofing Applicator must accept substrate before proceeding with membrane installation.
- B. Only as much of the new roof membrane as can be applied and made water tight each day, including all flashing and detail work, shall be installed. All seams and flashings shall be hot-air welded watertight before leaving the job site that day. All liquid-applied membrane flashings shall be installed as soon as the related membrane is installed and secured.
- C. All work shall be scheduled and executed without exposing the interior building areas to the effects of inclement weather. The existing building and its contents shall be protected against all risks.
- D. All surfaces to receive new membrane or flashings shall be clean and dry. Should surface moisture occur on the substrate, the Applicator shall provide the necessary equipment to dry the surface prior to application. Insulation or underlayment / cover boards that have been exposed to moisture prior to (or subsequent to) the installation of the roof membrane shall be removed, discarded and replaced with new undamaged materials.
- E. All new and temporary construction, including equipment and accessories, shall be secured in such a manner as to preclude wind blow-off and subsequent roof or equipment damage.
- F. Uninterrupted waterstops shall be installed at the end of each day's work and shall be completely removed before proceeding with the next day's work. Waterstops shall not remain in contact with the finished roof as the installation progresses. Contaminated, wet or damaged membrane or substrate assembly shall be removed and replaced at no cost to the Owner.
- G. The Applicator is cautioned that certain membranes are incompatible with asphalt, coal tar, heavy oils, roofing cements, creosote and some preservative materials. Such materials shall not remain in contact with membranes without manufacturer's approval. Install asphalt compatible flashing materials or fully adhered separation layers at all contaminated locations, in accordance with manufacturers' recommended installation procedures without additional costs to the owner.
- H. Arrange work sequence to avoid use of newly constructed roofing as a walking surface or for equipment movement and storage. Where such access is absolutely required, the Applicator shall provide all necessary protection and barriers to segregate the work area and to prevent

- damage to adjacent areas. A substantial protection layer consisting of plywood over protection felt or plywood over insulation board shall be provided for all new and existing roof areas that receive rooftop traffic during construction.
- I. Prior to and during application, all dirt, debris and dust shall be removed from surfaces either by vacuuming and/or sweeping, or similar approved methods.
- J. The Applicator shall follow all safety regulations as required by OSHA, contractor's safety plan and any other applicable authority having jurisdiction.
- K. All roofing, insulation, flashings and metal work removed during construction shall be immediately taken off site to a legal dumping area authorized to receive such materials. Hazardous materials if present are to be removed and disposed of in strict accordance with applicable specifications and all applicable local, State and Federal requirements.
- L. All new roofing waste material (i.e., scrap roof membrane, release paper, empty cans of adhesive) shall be immediately removed from the site by the Applicator and properly transported to a legal dumping area authorized to receive such material. Recycle all possible materials.
- M. The Applicator shall take precautions that storage and/or application of materials and/or equipment does not overload the roof deck or building structure.
- N. The Applicator shall verify that all roof drain lines are functioning correctly (not clogged or blocked) before starting work. Applicator shall report any such blockages in writing to the Owner's Representative for corrective action prior to installation of the roof system if identified prior to start of any work; after start of any work, any blockages are the responsibility of the Contractor to maintain open.
- O. Applicator shall immediately stop work if any unusual or concealed condition is discovered and shall immediately notify Owner of such condition in writing.
- P. Site cleanup, including both interior and exterior building areas that have been affected by construction, shall be completed by the Applicator to the Owner's satisfaction at no additional cost to the Owner.
- Q. All landscaped areas damaged by construction activities shall be repaired at no cost to the Owner.
- R. All possible precautions shall be taken when working at or near rooftop vents or air intakes. Coordinate with the owner regarding the operation of vents and air intakes in such a manner as to avoid the intake of any odors while ventilating the building. Contractor shall provide fans with flexible ducts, installation of carbon filters, and/or other methods at the work areas in order to avoid any odors from entering the building. Keep lids on cans and containers when not in active use. This is a critical issue for the Owner's operation of the facility, and is to be enforced at all times.
- S. Do not apply roofing to damp or frozen substrate.

T. Do not apply roofing during inclement weather or at temperatures outside the manufacturer's acceptable application range or if freezing weather is anticipated within 24 hours after application. Do not use wet or frozen materials.

1.8 WARRANTIES

- A. This Section includes administrative and procedural requirements for warranties/guaranties required by the Contract Documents, including manufacturer's standard and special warranties.
- B. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties/guaranties do not relieve the Contractor of the warranty/guarantee on the Work that incorporates the products. Manufacturer's disclaimers and limitations on product warranties/guaranties do not relieve suppliers, manufacturers, and subcontractors required to countersign special warranties/guaranties with the Contractor.

C. Definitions

- 1. Standard warranties/guaranties are preprinted documents published by individual manufacturers for particular products and installations and are specifically endorsed by the manufacturer to the Owner.
- 2. Special warranties/guaranties are written documents required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties/guaranties or to provide greater rights for the Owner.

D. Warranty / Guarantee Requirements

- 1. Related Damages and Losses: When correcting failed or damaged warranted/guaranteed construction, remove and replace construction that has been damaged as a result of such failure or must be removed and replaced to provide access for correction of warranted construction.
- 2. Replacement Cost: Upon determination that Work covered by a warranty/guarantee has failed, replace or rebuild the Work to an acceptable condition complying with requirements of the Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.
- 3. Owner's Recourse: Expressed warranties made to the Owner are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available under the law. Expressed warranty periods shall not be interpreted as limitations on the time in which the Owner can enforce such other duties, obligations, rights, or remedies.
 - a) Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
- 4. Where the Contract Documents require a special warranty, or similar commitment on the Work or part of the Work, the Owner reserves the right to refuse to accept the Work, until the Contractor presents evidence that entities required to countersign such commitments are willing to do so.
- E. Schedule: Provide warranties/guaranties on products and installations as follows and as specified in other portions of the Contract Documents:

- 1. Total Roof System Warranty/Guarantee, issued by the roof system manufacturer, for minimum period of twenty (20) years.
- a) Provide manufacturer's standard warranty/guarantee with addendum as required to incorporate special requirements, including warranting up to 100 mph winds.
- b) Warranty/guarantee shall have no dollar limit (NDL) and be non-prorated for the entire term.
- c) Warranty/guarantee shall cover defects in materials or workmanship on all components of the roof system, including all roof membrane and membrane flashings, fasteners & adhesives, insulation and all other materials supplied by the manufacturer. This guarantee shall not exclude minor random areas of ponding water from coverage.
- d) Warranty must not contain exclusions for photovoltaic system installations, which may be planned for installation on this roof following completion of the roofing system.
- F. Submittals: When the Contract Documents require the Contractor, or the Contractor and a subcontractor, supplier or manufacturer to execute a special warranty, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the Owner, through the Consultant, for approval prior to the start of work.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: All products provided under this Section shall be manufactured, supplied or approved in writing (provided with product data submittals) as acceptable to one of the specified roofing manufacturers, included in the manufacturer's total roof system warranty/guarantee and specifically listed as part of an approved assembly, and as modified to accommodate special conditions as noted in the design criteria. Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include the following:
 - 1. Acceptable Manufacturer(s) / Product(s): Subject to compliance with specified requirements and as part of the specified assembly:
 - a. Basis of Design: Adhered PVC membrane assembly by Carlisle SynTec
 - b. Acceptable alternates include products and systems meeting or exceeding specified criteria by Sika Sarnafil, Soprema or Johns Manville.

2.2 MATERIALS

A. Roof Membrane:

- 1. Type: ASTM D4434, plasticized polyvinyl chloride (PVC), ultraviolet resistant, reinforced, with fleeceback.
- 2. Size: Maximum sheet size permitted by application and job conditions.
- 3. Thickness: 60 / 115 mils minimum thickness.
- 4. Color: White.
- 5. Basis of Design: FleeceBACK PVC by Carlisle Syntec Systems.
 - a. Acceptable alternates include products meeting or exceeding specified criteria by

Sika Sarnafil (G 410-60 Feltback), Soprema (Sentinel P150 HSB) or Johns Manville (JM PVC 60-FB 60 mil MIN).

- B. Flashing Sheet: Manufacturer's standard bareback flashing sheet, color to match membrane.
- C. Liquid Flashing: Reinforced, 2 part liquid-applied membrane flashing system assembly supplied by membrane manufacturer.
- D. Metal Flashings: Minimum 24 gage galvanized steel sheet metal laminated with 20 mil PVC membrane as noted.

2.3 ACCESSORIES

- A. Adhesive: A polyurethane adhesive used to fully adhere / secure membrane to substrates.
 - a. Basis of design: Flexible Fast or Cav-Grip adhesive by Carlisle SynTec.
 - b. Acceptable alternates include products meeting or exceeding specified criteria by Sika Sarnafil (Sarnacol OM Feltback Membrane Adhesive), Soprema (Duotack SPF HFO Adhesive) or Johns Manville (2-part Urethane Adhesive);
 - c. Or as required by membrane manufacturer to meet or exceed the wind uplift requirements on the drawings provide documentation of compliance, including pull-test results as required.
- B. Accessories: By manufacturer of roofing system, including primers, tapes, cleaner, sealants, water cutoff mastic, and prefabricated corners and pipe flashings.
- C. Walkway Pads: Used as a protection layer from rooftop traffic and rooftop accessories, as supplied by the membrane manufacturer.

PART 3 EXECUTION

3.1 EXAMINATION & PREPARATION

- A. Examine substrates, area, and conditions under which roofing will be applied for compliance with requirements.
- B. Verify that the surface of the roof insulation assembly is acceptable for application of finished roof system.
- C. The substrate shall be clean, smooth, dry, free of flaws, sharp edges, loose and foreign material, oil and grease. Roofing shall not start until all defects have been corrected.
- D. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction.
- E. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 INSTALLATION - GENERAL

A. Install roofing system according to roofing system manufacturer's written instructions or as otherwise specified or indicated by the contract documents, whichever is more stringent in the opinion of the Owner & Consultant.

- B. The overall aesthetic appearance of the finished roof application is a standard requirement for this project. Make all necessary preparations, utilize recommended application techniques, apply the specified materials and exercise care in insuring that the finished product is acceptable to the Owner & Consultant.
- C. Cooperate with inspecting and testing agencies engaged or required to perform services for installing roofing system.
- D. Coordinate installation of roofing system components to prevent moisture from entering under installed portions of new roofing.
 - 1. Provide cutoffs at end of each day's work to cover exposed edges of installed insulation and membrane assembly with an acceptable method to seal the roofing and prevent moisture from entering the newly installed assembly.
 - 2. Complete terminations, base flashings and counter flashings associated with each day's work, prior to the end of the day's work, to prevent water from entering the roof system.
 - 3. Remove and discard temporary seals before beginning work on adjoining roofing.
- E. Broken, delaminated, wet or damaged insulation & cover boards shall be removed and replaced prior to installation of the roof membrane.

3.3 INSTALLATION OF ROOF MEMBRANE

- A. Position sheets without stretching; minimize wrinkles. Allow membrane to relax before proceeding.
- B. Provide minimum recommended width laps at joints between adjacent sheets.
- C. Splice sheets by hot-air welding method.
- D. Bond membrane to substrate with full adhesive bed in accordance with manufacturer's current requirements in a butterfly manner, (half sheet at a time). Adhere membrane in full spray, or splatter application (at 1 gal. per square, minimum), or with 1" wide continuous ribbons at 4" o/c maximum spacing.
 - 1. The remaining un-bonded half of the sheet shall be folded back and the procedure repeated. Once the membrane is installed in accordance with the manufacturer's recommendations it shall be pressed firmly in place with a minimum 150 lb. linoleum roller by rolling in two directions.
 - a) The Applicator shall count the amount of containers of adhesive used per area per day to verify conformance to the specified adhesive rate.
 - b) No adhesive shall be applied in seam areas. All membrane shall be applied in the same manner.

3.4 HOT AIR WELDING OF SEAM OVERLAPS

A. General

- 1. All seams shall be <u>hot-air welded</u>. Seam overlaps should be 3 inches wide when hot-air welding with automatic machine-hot-air welding and 4 inches wide when hot-air welding by hand, unless noted otherwise.
- 2. Hot air welding equipment shall be provided by or approved by membrane manufacturer. All mechanics intending to use the equipment shall have successfully completed a training course provided by a manufacturer's Technical Service Representative prior to hot-air welding.
- 3. All membrane to be hot air welded shall be clean and dry.
- B. Hand Hot-Air Welding: Hot-air hand-welded seams shall be completed in two stages. Hot-air welding equipment shall be allowed to warm up for at least one minute prior to hot-air welding.
 - 1. The back edge of the seam shall be hot-air welded with a narrow but continuous weld to prevent loss of hot air during the final hot-air welding.
 - 2. The nozzle shall be inserted into the seam at a 45 degree angle to the edge of the membrane. Once the proper hot-air welding temperature has been reached and the membrane begins to "flow", the hand roller is positioned perpendicular to the nozzle and rolled lightly. For straight seams, the 1-1/2 inch wide nozzle is recommended for use. For corners and compound connections, the 3/4 inch wide nozzle shall be used.

C. Machine Hot-air Welding

- 1. Machine hot-air welded seams are achieved by the use of manufacturer's automatic hot-air welding equipment. When using this equipment, manufacturer's instructions shall be followed and local codes for electric supply, grounding and over current protection observed. Dedicated circuit house power or a dedicated portable generator is recommended. No other equipment shall be operated simultaneously off the generator.
- 2. Metal tracks should be used over the membrane and under the machine hot-air welder to minimize or eliminate wrinkles.
- D. Quality Control of Hot-air Welded Seams. The Applicator shall check all hot-air welded seams for continuity using a rounded screwdriver or probe. Visible evidence that hot-air welding is proceeding correctly is smoke during the hot-air welding operation, shiny membrane surfaces, and an uninterrupted flow of dark gray material from the underside of the top membrane. On-site evaluation of hot-air welded seams shall be made daily by the Applicator at locations installed &/or as directed by the Owner's Representative or manufacturer's representative. One inch wide cross-section samples of hot-air welded seams shall be taken at least three times a day from the field installed seams or applied to adjacent membrane sections. Correct hot-air welds display failure from shearing of the membrane prior to separation of the hot-air weld. Any test cuts shall be patched by the Applicator at no extra cost to the Owner.

3.5 INSTALLATION OF FLASHINGS

- A. Construct in accordance with Contract Documents and roofing system manufacturer's standards, whichever is more stringent. Coordinate with the membrane manufacturer for any specific criteria regarding separation layer / membrane flashing criteria prior to bidding.
- B. All flashings shall be installed concurrently with the roof membrane as the job progresses. No temporary flashings shall be allowed without the prior written approval of the Owner's Representative and Manufacturer. Approval, if granted, shall only be for specific locations on specific dates. If any water is allowed to enter under the newly completed roofing, the affected area shall be removed and replaced at the Applicator's expense. Flashing shall be adhered to compatible, dry, smooth, and solvent-resistant surfaces. Use caution to ensure adhesive fumes are not drawn into the building.

C. Adhesive for Membrane Flashings

- 1. Over the properly installed and prepared flashing substrate, adhesive shall be applied according to instructions found on the Product Data Sheet. The adhesive shall be applied in smooth, even coats with no gaps, globs or similar inconsistencies. Only an area which can be completely covered in the same day's operations shall be flashed. The bonded sheet shall be pressed firmly in place with a hand roller.
- 2. No adhesive shall be applied in seam areas that are to be hot-air welded. All panels of membrane shall be applied in the same manner, overlapping the edges of the panels as required by hot-air welding techniques.
- D. Install termination details according to the contract documents and manufacturer's details with approved fasteners into the base of parapets, walls, curbs and at roof edges. Termination detail is required at the base of all tapered edge strips and at transitions, peaks, and valleys according to manufacturer's details.
- E. Manufacturer's requirements and recommendations and the specifications shall be followed. All material submittals shall have been approved by the Consultant prior to installation.
- F. All flashings shall extend a minimum of 8 inches above roofing level, or as detailed, unless otherwise accepted in writing by the Consultant and manufacturer's technical department.
- G. All flashing membranes shall be consistently adhered to substrates. All interior and exterior corners and miters shall be cut and hot-air welded into place. No bitumen shall be in direct contact with the standard flashing membrane.
- H. All flashing membranes shall be mechanically fastened along the counter-flashed top edge with termination bar at 6 to 8 inches on center.
- I. All flashings shall be terminated according to specified and manufacturer's details, whichever is more stringent.
- J. All flashings that exceed manufacturer's recommended height shall receive additional securement as required. Coordinate manufacturer's technical department for specific criteria.

K. Roof Drains:

1. Installed bareback membrane target ply as indicated around drains to provide smooth transition from roof surface to drain bowl and clamping ring.

2. Seal between membrane and drain with water cutoff mastic.

3.6 CLAD METAL FLASHINGS

- A. PVC clad metal flashings shall be formed and installed per the Detail Drawings.
 - 1. All metal flashings shall be fastened into solid wood nailers or other substrates with two rows of s.s. flat head annular ring nails (or other appropriate fasteners approved by the Consultant & Manufacturer), 3 inches on center staggered. Fasteners shall penetrate the nailer a minimum of 1 inch.
 - 2. Metal shall be installed to provide adequate resistance to bending and allow for normal thermal expansion and contraction.
- B. Adjacent sheets of clad metal shall be spaced 1/4 inch apart. The joint shall be covered with 2 inch wide aluminum tape. A 4 inch minimum wide strip of flashing membrane shall be hot-air welded over the joint.

3.7 INSTALLATION OF WALKWAY PADS

- A. Roof Protection pads: Install protection product, adhere (except edges) to deck sheet, and hot-air weld edges in accordance with the manufacturer's instructions.
- B. Install roof protection layer under all items to set upon the roof membrane. Provide roof protection pads as detailed in the base scope of work.
- C. Install roof walkway pads at all roof access locations, at transitions between roof levels, in paths between all roof access locations and around the perimeters of all serviceable rooftop equipment. Gap sections 2" min at 4' o/c and at locations that may block drainage.
 - 1. Include in the <u>base Scope of Work 600 linear feet</u> of roof protection walkway pad paths (3' nominal width) as per paragraph above at locations to be coordinated with the Design Consultant and Owner in the future.

3.9 FIELD QUALITY CONTROL

- A. Final Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation periodically during the project and on completion to prepare a final punchlist.
 - 1. Notify Owner and Consultant at least 1 week in advance of the date and time of final inspection.
 - 2. Submit written copy of the final punchlist to the Owner and Architect.

3.10 PROTECTING AND CLEANING

A. Protect membrane roofing from damage and wear during remainder of construction period. When remaining construction will not affect or endanger roofing, inspect roofing for deterioration and damage, describing its nature and extent in a written report, with copies to Design Consultant and Owner.

B. Correct deficiencies in or remove roofing that does not comply with requirements, repair substrates, reinstall roofing, and repair base flashing to a condition free of damage and deterioration at the time of Substantial Completion and according to warranty requirements.

3.11 SPECIAL ROOFING INSTALLATION LIMITATIONS

- A. The Contractor shall only install as much roofing material as can be made watertight, as a minimum to include the membrane ply and all associated base flashings and tie-ins, by the end of the work shift or the onset of inclement weather, whichever is sooner. If at any time the Contractor fails to fully complete the installation of any part of the new roof system, including but not limited to all associated flashings, the Owner and/or Consultant may prohibit the Contractor from installing any additional new roofing material until such time as the new roof system is fully complete on all areas previously installed.
- B. In the event that the Owner and/or Consultant prohibit roof removals and/or installation as described above, the Contractor shall NOT be entitled to any additional compensation or extension of contract time.

END OF SECTION

Page: 075400-12

THERMOPLASTIC ROOF MEMBRANE

SECTION 075600 - FLUID-APPLIED SKYLIGHT WATERPROOFING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including the General Conditions exhibit of the Solicitation of Bids and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Provide a cold-fluid-applied reinforced polyurethane flashing membrane at skylight frames, mullions, battens, and other flashing conditions, and provide a cold fluid-applied clear aliphatic polycarbonate polyurethane coating over glass surfaces.
 - 1. Work includes all specified and manufacturer's recommended substrate preparation.
 - 2. a. Scope of Work includes addressing all skylight surfaces and related perimeter conditions on Skylights "J", "J1" & "J2", and includes the vertical skylight wall surfaces and related conditions rising above all roofs included in this scope of work.
 - b. Not included in the scope of work are the vertical skylight surfaces below the end parapet conditions (as detailed to be addressed) that do not rise above roofs included in this scope of work

1.3 PERFORMANCE REQUIREMENTS

- A. Cold fluid applied reinforced polyurethane flashing membrane installed with a clear aliphatic polycarbonate polyurethane coating is intended to perform as a continuous barrier against liquid water and to flash or discharge to the exterior incidental water. Membrane and coating system is expected to remain exposed and shall accommodate movements of building materials as required with accessory sealant materials at skylight frames and mullions.
- B. Installed flashing membrane and coating shall not permit the passage of water and will withstand the design pressures calculated in accordance with the wind criteria indicated on the contract documents.
- C. Manufacturer shall provide all primary flashing and clear coating materials that are physically and chemically compatible when installed in accordance with manufacturers current application requirements.

1.4 SUBMITTALS

- A. Submittals: Comply with project requirements for submittals as specified in Division 01.
- B. Product Data: For each product.
- C. Shop Drawings: Manufacturer's standard details and shop drawings for the specified system.

- D. Installer's Authorization: Installer shall provide written documentation from the manufacturer of their authorization to install the system, and eligibility to obtain the warranty specified in this section.
- E. Manufacturer' Certification: Certification showing full time quality control of production facilities and that each batch of material is tested to ensure conformance with the manufacturer's published physical properties.
- F. VOC Certification: Manufacturer's certification that all roofing/waterproofing system products meet current Volatile Organic Compound (VOC) regulations as established by the State in which they are being installed; and stating total VOC content, in grams per liter, for all system components (i.e. primers, adhesives, coatings, etc.).

1.5 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Manufacturer shall demonstrate qualifications to supply materials of this section by certifying the following:
 - 1. Membrane Flashing/Coating Manufacturer shall show evidence that the specified membrane and coating has been manufactured by the same organization or direct affiliate for fifteen years.
 - 2. Membrane Flashing/Coating Manufacturer shall have available an in-house technical staff to assist the contractor when necessary in the application of the products and site review of the assembly.
- B. Installer's Qualifications: The Contractor shall demonstrate qualifications to perform the Work of this Section by submitting certification or license by the membrane flashing/coating manufacturer as a trained and authorized applicator of the product the installer intends to use.
- C. Source Limitations: All components listed in this section shall be provided by a single manufacturer or approved by the primary membrane flashing/coating manufacturer.
- D. Materials Compatibility: All materials included in the membrane flashing/coating assembly, as well as associated materials applied beneath the membrane flashing/coating assembly shall have been tested and verified to be compatible.
- E. Final Inspection: Manufacturer's representative shall provide to the Design Consultant a comprehensive site visit report after the each site visit at least at the beginning, middle and at completion of the membrane flashing/coating system.
- F. Applicable Regulations: Comply with local code and requirements of authorities having jurisdiction. Do not exceed VOC regulations as established by the State in which they are being installed, including total VOC content, in grams per liter, for all system components (i.e. primers, adhesives, coatings, and similar items).
- G. Roofing Terminology: Refer to ASTM D1079 and the glossary of the National Roofing Contractors Association (NRCA) Roofing and Waterproofing Manual for definitions of roofing/waterproofing terms related to this section.

1.6 PRE-INSTALLATION CONFERENCE

A. Prior to scheduled commencement of the membrane flashing/coating installation and associated work, conduct a meeting at the project site with the installer, architect/consultant, owner, manufacturer's representative and any other persons directly involved with the performance of the Work. The Installer shall record conference discussions and 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 the Work.

1.7 DELIVERY, STORAGE AND HANDLING

- A. Deliver all membrane flashing/coating materials to the site in original containers, with factory seals intact.
- 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 workday. Do not remove any protective tarpaulins until immediately before the material will be installed.
- E. Materials shall be stored above 55°F a minimum of 24 hours prior to application.

1.8 PROJECT CONDITIONS

- A. Weather: Proceed with membrane flashing/coating only when existing and forecasted weather conditions permit. Membrane application can proceed when precipitation is forecast. Specified material is capable of curing in immersion immediately after application. Ambient/substrate temperatures shall be above 41°F when applying the membrane flashing/coating system.
- B. All surfaces to receive the membrane flashing/coating shall be free from visible water, dew, frost, snow and ice. Application of membrane flashing/coating shall be conducted in well ventilated areas.

C. Membrane Flashing and Coating:

- 1. Membrane flashing and coating is not intended to be exposed or in contact with a constant temperature below -22°F or in excess of 176°F. See technical data sheets for limitations.
- 2. Specified membrane flashing/coating is non-flammable and VOC compliant. Consult container, packaging labels and Safety Data Sheets (SDS) for specific safety information.
- 3. Specified membrane flashing/coating is resistant to gasoline, paraffin, fuel oil, mineral spirits, and moderate solutions of acids and alkalis, acid rain and detergents. Some low molecular weight alcohols can soften. Any exposure to foreign materials or chemical discharges shall be presented to membrane/coating manufacturer for evaluation to determine any impact on the waterproof membrane/coating assembly performance prior to warranty issuance.

D. Contractor shall ensure adequate protection during installation of the membrane flashing/coating system.

1.9 WARRANTY

- A. Warranty: Provide manufacturer's standard warranty. System warranty shall be for the following duration when installed in accordance with manufacturer's warranty requirements.
 - 1. Warranty Length: 10 years.

PART 2 - PRODUCTS

2.1 MANUFACTURER

A. Basis-of-Design Manufacturer: Sika Corporation, 201 Polito Avenue, Lyndhurst NJ 07071. No substitutions without prior written approval by the Design Consultant.

2.2 MEMBRANE FLASHING/COATING SYSTEM

- A. Fluid-Applied Membrane Flashing/Coating System, 10 Year Warranty: Sika Reemat Premium Reinforcement:
 - 1. Base Layer Membrane Flashing: Sikalastic 621 TC, 45 mils wet film thickness, 35 sf/gal coverage rate approx.
 - 2. Top Layer Membrane Flashing: Sikalastic 621 TC, 30 mils wet film thickness; 43 sf/gal coverage rate approx.
 - 3. Base Layer Coating: Sikalastic Clearglaze, 20 mils wet film thickness; 80 sf/gal coverage rate approx.
 - 4. Top Layer Coating: Sikalastic Clearglaze, 20 mils wet film thickness; 80 sf/gal coverage rate approx.

2.3 MEMBRANES AND COATINGS

- A. Base embedment coat and topcoat with reinforcement shall be Sikalastic 621 TC by Sika Corp, a single component, cold, fluid applied, moisture triggered, aliphatic, polyurethane base coat membrane.
- B. Base coat and topcoat membranes shall be low in VOC's and be a one component elastomeric polyurethane membrane that may be brush or roller applied. Membrane shall have the following physical properties and conforms to ASTM D7311-07: Standard Specification for Liquid Applied, Single Component, Moisture-Triggered, Aliphatic Polyurethanes used in Roofing.
- C. Liquid Property Requirements:
 - 1. Sikalastic 621 TC:
 - a. Viscosity, ASTM D2196: 5 to 20 Pa.s.
 - b. Volume Solids, ASTM D2697: 80% minimum.
 - c. Weight Solids: ASTM D1644: 86% minimum.
 - d. Sag Resistance, ASTM D4400: No sag at 700 micrometers (0.028 in. / 28 mil)

D. Film Physical Property Requirements:

- 1. Tensile Strength (Tension): ASTM D412: Minimum 1.86 MPa (270lb/in2)
- 2. Elongation: ASTM D412 : MIN 200%.
- 3. Accelerated Weathering FL/UV 5000 Hours, ASTM G 154, No cracking or checking.
- 4. Water Vapor Transmission, Permeability / Permeance: ASTM E96: Maximum 8.5 gms/m2/ day (0.033 perm-inches).
- 5. Flexibility Mandrel Bend, ASTM D522: Pass, no cracking or flaking.
- 6. Tear Resistance, ASTM D625: Minimum 5.8 kN/m (33 lbf/in)
- 7. Indentation Hardness, ASTM D2240: 82 Durometer Units (+/- 5 units)
- 8. Dynamic Puncture Resistance, ASTM D5635: Minimum 15 joules (357 ft.pounds)
- 9. Static Puncture Resistance, ASTM D5602: Minimum 20.7 kg. (45.5 lbs.)

2.4 MEMBRANE FLASHING REINFORCEMENT

A. Reinforcement for the membrane flashing shall be Sika Reemat by Sika Corp, a conformable, random strand fiberglass mat specifically designed to provide greater impact resistance and greater resistance to excessive thermal and structural movement while maintaining elasticity and membrane film integrity.

2.5 MEMBRANE FLASHING REINFORCEMENT – SUPPLEMENTAL

- A. Supplemental reinforcement of the membrane flashing shall be Sika Flexitape Heavy by Sika Corp, a nylon mesh specifically designed for local reinforcement of the membrane flashing at structural cracks, expansion joints, horizontal to vertical transitions, and transitions between dissimilar materials.
- B. Supplemental reinforcement of the membrane flashing shall be Sika Joint Tape SA by Sika Corp, a polymer backed self-adhering membrane with a polyester fleece facer specifically designed for local reinforcement of the membrane flashing at structural cracks, horizontal to vertical transitions, and transitions between dissimilar materials.

2.6 SKYLIGHT CLEAR COATING

- A. Skylight coating shall be Sikalastic Clearglaze, an aliphatic polycarbonate polyurethane clear coating specifically designed to be the skylight substrate primer for the membrane flashing, and to be a protective coating for glass skylight substrates.
- B. Film Physical Property Requirements (Typical):
 - 1. Tensile Strength (Tension): 350 psi
 - 2. Elongation: 250%.
 - 3. Accelerated Weathering UV/Condensation 5000 Hours, ASTM G 53: No deterioration, clarity retained.
 - 4. Tear Resistance: 2600 psi
 - 5. Dry Adhesion to Glass: Elcometer Bond: >425 psi

2.7 FILLET BEAD AND PENETRATION SEALANT

A. Sealant for fillet bead applications and membrane penetrations shall be Sikaflex 11FC by Sika Corp., a one-part polyurethane sealant suitable for fillet bead transition compound to be applied

- prior to the installation of the membrane system at changes in substrate direction, sealing cracks in the substrate and penetrations of the membrane flashing system.
- B. Exposed finish sealant shall be Sikaflex Hyflex 150 LM by Sika Corp., a one-part low modules hybrid sealant OR Sikasil WS-295. A one-part, low-modulus, weather sealing, silicone sealant suitable for finishing terminations at saw cuts and all UV exposed sealant terminations. SikaHyflex-150 LM is also suitable for fillet bead transition, changes in substrate direction, cracks in the substrate and penetrations of the roof before installation of the RoofPro membrane system

2.8 GLAZING SEALANT

A. Glazing sealant (where required) shall be Sikaflex Hyflex 150 LM by Sika Corp., a one-part low modules hybrid sealant suitable for sealing the skylight/frame and skylight/mullion interface.

2.9 PRIMERS

- A. Metal substrates shall be primed with Sikalastic EP Primer/Sealer by Sika Corp., a two-component, cyclo-aliphatic, amine cured material with a high level of corrosion resistance for metal, bleed blocking on stable asphaltic surfaces, and chemically treated wood or the faster curing version Sikalastic EP Primer Rapid by Sika Corp
- B. Primer for concrete and masonry shall be Sika Concrete Primer Lo-VOC by Sika Corp., a single component, rapid curing, high solids, moisture cured primer designed for sealing cementitious and masonry substrates.
- C. Membrane over-coating primer shall be Sika Reactivation Primer by Sika Corp., a single component polyurethane-based primer specifically designed for the reactivation of existing Sikalastic waterproofing system applications prior to membrane over-coating.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that surfaces and conditions are ready to accept the Work of this section. Notify Architect in writing of any discrepancies. Commencement of the Work in an area shall mean Installer's acceptance of the substrate.
- B. Surfaces shall be sound, dry, clean and free of oil, grease, dirt, or other contaminants. Fill voids and gaps in substrate to provide an even plane.

3.2 SKYLIGHT PREPARATION

- A. Ensure all preparatory Work is complete prior to applying membrane flashing.
- B. Anchor loose and gapped flashing edges by appropriate means such as drilled anchors, non-asphaltic adhesives, and self-adhering butyl rubber tape with fleece upper surface to ensure a tight edge condition with no gapping. Seal all holes, cracks, joints and gaps in all flashing details flush with Sikaflex 11FC sealant or Sika Hyflex 150LM sealant.
- C. Power tool clean all metal flashings, cladding, mullions and batten caps to remove coatings and any loose oxide surface conditions leaving bare metal, per SSPC SP3 or SP11.

- D. As required, remove all mullion caps and torque the mullion screws/bolts to manufacturer's specifications, then reinstall the mullion caps.
- E. Remove all deteriorated wet or dry glazing as required and apply Sika Hyflex 150LM sealant along the skylight/frame and skylight/mullion interface to seal and provide a sealant coving for smooth membrane flashing application.
- F. Apply Sikalastic 11FC sealant over all protruding fastener heads to allow for a smooth membrane flashing application.
- G. Ensure that all skylight drainage systems are in working order, free of all debris.
- H. Clean all exposed surfaces to be coated with a biodegradable cleaner/degreaser to remove contaminants. Solvent wipe with denatured alcohol and allow surfaces to dry thoroughly.
- I. All surfaces shall be blown clean using an oil-less air compressor to remove any remaining loose debris.

3.3 SKYLIGHT MEMBRANE FLASHING APPLICATION

- A. Apply Sikalastic EP Primer or Sikalastic EP Primer Rapid by brush or roller onto all cleaned and prepared metal mullions and flashings to the edge of the previously applied Sika Hyflex 150LM sealant. Application shall be at a coverage rate not to exceed 250 sf/gallon on a smooth surface. Allow the primer to cure tack-free.
- B. Immediately remove any wet primer from skylight glass surfaces by means of a denatured alcohol solvent wipe.
- C. Tape off a clean straight line on the skylight glass out a minimum of 2" from the edge of the prepared, primed flashing/mullion. Apply a 20 mil WFT coat of Sikalastic Clearglaze by brush to the skylight glass as a primer for the Sikalastic membrane flashing and allow to cure tack-free. Remove tape immediately after Sikalastic Clearglaze application.
- D. Tape off a clean straight line on the skylight glass out a minimum of 2" from the edge of the prepared, primed flashing/mullion. Apply the Sikalastic resin embedment coat by brush or roller. Material shall be uniformly applied onto the clean, dry, sound and primed substrates to achieve a minimum wet film thickness of 50 mils at a coverage rate of 32 sf/gallon.
- E. Immediately lay in precut lengths of Reemat Premium reinforcement into the wet Sikalastic resin embedment coat and use a brush or roller to saturate and embed the reinforcement so that it conforms to the mullion/flashing profile without voids or air pockets. Add additional material if necessary, to ensure that the reinforcing is fully saturated without any visible pinholes or tenting. Minimum overlap of the reinforcement mesh shall be 2" for Reemat Premium.
- F. Reinforced membrane flashing shall extend 1-1/2" minimum onto the skylight glass surface, with the resin applied to the tape.
- G. For Reemat Premium applications, remove tape immediately and allow resin to dry tack-free, typically overnight. Retape off a clean straight line on the skylight glass along the edge of the membrane flashing. Apply the Sikalastic resin sealing coat by brush or roller. Material shall be uniformly applied onto the reinforced resin embedment coat to achieve a minimum wet film

- thickness of 20 mils at a coverage rate of 80 sf/gallon. Remove tape immediately following application of resin sealing coat.
- H. Immediately remove any wet resin from skylight glass surfaces by means of a denatured alcohol solvent wipe.

3.4 SKYLIGHT GLASS CLEARGLAZE APPLICATION

- A. All skylight glass surfaces to be coated shall be thoroughly cleaned and degreased with denatured alcohol. A vinegar wash may be necessary where silicone caulks have been present to ensure that all silicone residuals have been removed. Other methods of cleaning may be required to ensure that the glass is as clean as possible before the Clearglaze application.
- B. Apply the first Sikalastic Clearglaze coat using a foam roller at a wet film thickness of 20 mils at a coverage rate of 80 sf/gallon. The Sikalastic Clearglaze shall terminate onto the Sikalastic membrane flashing a minimum of 2" or until the Clearglaze to Sikalastic membrane flashing termination is in a vertical position, completely sealing the edge of the Sikalastic membrane flashing. Allow to cure tack-free.
- C. Solvent wipe the first Sikalastic Clearglaze coat with denatured alcohol and allow all solvent to flash off.
- D. Apply the second Sikalastic Clearglaze coat using a foam roller at a wet film thickness of 20 mils at a coverage rate of 80 sf/gallon. The Sikalastic Clearglaze shall terminate onto the Sikalastic membrane flashing a minimum of 2" or until the Clearglaze to Sikalastic membrane flashing termination is in a vertical position, completely sealing the edge of the Sikalastic membrane flashing. Allow to cure tack-free.

3.5 MEMBRANE FLASHING SUBSTRATE PREPARATION

- A. Where specified, extend the membrane flashing from the skylight frame onto the surrounding substrate. Acceptable substrates include concrete, concrete block, brick, solid wood and plywood sheathing, metal, and most existing roofing/waterproofing materials.
- B. At all inside corners, gaps or voids at the juncture of the deck and skylight curb apply a minimum 3/4 inch fillet bead of Sikaflex 11FC polyurethane sealant and allow to skin over prior to installing the membrane flashing.
- C. At all moving cracks, moving joints between dissimilar materials, and similar conditions, create a minimum 1 inch wide bond break utilizing bond breaker tape, centered over the crack or joint. Cracks shall be reinforced with Sika Flexitape Heavy set in Sikalastic resin following primer application.
- D. Membrane terminations shall be established prior to project start-up and documented in shop drawings. Terminations shall occur in raked-out mortar joints, saw cut terminations or under installed counter-flashing materials. Self-termination is also acceptable provided that Sikalastic resin extends \(\frac{1}{4}\)" \(\frac{1}{2}\)" beyond the reinforcement edge.
- E. Use tape lines to achieve a straight edge detail.
- F. Wood and Plywood Sheathing:

- 1. Solid wood sheathing shall be tongue & groove, or splined, or covered with a layer or plywood sheathing. Solid wood sheathing shall be not less than 3/4 inch (13 mm) thick.
- 2. Plywood sheathing shall be exterior grade, minimum 4 ply, and not less than 15/32 inch thick.
- 3. Secure all loose sheathing with screw-type fasteners driven flush to the sheathing surface.
- 4. Preservatives or fire retardants used to treat the decking shall be compatible with membrane flashing materials.
- 5. All joints in wood substrate shall be sealed with Sikaflex 11FC sealant, and shall be reinforced with Sika Flexitape Heavy set in Sikalastic resin or Sika Joint Tape SA following primer application.
- 6. Sheathing must be clean and dry prior to membrane flashing application.

G. Structural Concrete and Masonry Surfaces:

- 1. Concrete shall be rated at 3000 psi or greater. Gypsum-based fill is not acceptable. Mechanically prepare concrete surface in accordance with CSP 3-4. Moisture content shall be 4% or less when measured with a Tramex Concrete Moisture Encounter meter.
- 2. Concrete block and brick masonry joints shall typically be struck flush if joint depth exceeds 1/8".
- 3. Knock off any fins or protrusions to achieve a flush surface. Fill spalls, bugholes, areas of missing mortar, and other surface defects with Sikaquick 1000 repair mortar or Sikaflex 11FC sealant as appropriate.
- 4. Curing agents shall be completely removed from the substrate by grinding, scarifying, or other mechanical means.
- 5. Concrete and masonry surfaces shall be low-pressure (5,000 psi or less) power-washed in accordance with ICRI Guideline No. 03732: Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays to remove all dirt, debris or surface contamination that would compromise bonding of the specified roofing/waterproofing membrane system. Remove oil or grease with solvents, or detergent and water. Rinse surface clean of remaining cleaning agents.

H. Metal Surfaces:

1. Metal surfaces shall be cleaned by power tool cleaning (SSPC SP-3 or SP-11) to remove corrosion deposits back to a clean, bright metal followed by a solvent wipe prior to application of the specified primer.

I. Existing Membranes:

- 1. Generally, existing mineral-surfaced cap sheets and modified bitumen membranes, and existing EPDM, PVC and TPO single ply membranes are acceptable substrates when the appropriate primer is used.
- 2. Pressure wash the roof membrane to remove all dust, dirt and debris from the surface.
- 3. Conduct an adhesion peel test to confirm acceptable adhesion and to assist in the selection of the appropriate primer. An acceptable peel adhesion value is 8 pli or as accepted by the membrane flashing manufacturer.

3.6 SUBSTRATE PRIMING FOR MEMBRANE FLASHING

A. Concrete, Masonry, and Wood:

- 1. Mix and apply specified primer for concrete/masonry/wood surfaces by brush or roller at the application rate shown on the technical data sheet. Porous, rough or absorbent surfaces will decrease coverage rates.
- 2. Allow to cure and dry in accordance with manufacturer's technical data sheets.

B. Metal:

- 1. Mix and apply specified primer for metal surfaces to clean and prepared metal surfaces by brush or roller at the application rate shown on the technical data sheet to achieve an overall wet film thickness of 6-8 mils. High porosity and roughness of the substrate will decrease coverage rates.
- 2. Allow to cure and dry in accordance with manufacturer's technical data sheets.

C. Existing Membranes:

- 1. Mix and apply specified primer for existing membrane surfaces by brush or roller to clean and prepared existing membrane surfaces at a maximum coverage rate of 250 sf/gallon. Aggregate-surfaced membranes will decrease coverage rates by up to 50%.
- 2. Allow to cure and dry in accordance with manufacturer's technical data sheets.

3.7 MEMBRANE FLASHING LOCALIZED REINFORCEMENT

- A. Reinforcement of Cracks, Plywood Joints, and Base/Curb Flashing Transitions:
 - 1. For all locations where the specified membrane system is to be applied directly to the substrate surface, provide reinforcement of cracks and joints prior to applying the specified membrane system
 - 2. For all moving cracks and joints, create a minimum 1 inch wide bond break centered over the crack or joint by applying bond break tape centered over each crack or joint.
 - 3. For all non-moving cracks and joints, rout and seal with Sikaflex polyurethane sealant.
 - 4. For all horizontal-to-vertical transitions, provide a ¾" x ¾" Sikaflex polyurethane sealant cant.
 - 5. Following primer application, apply a minimum of a 3 inch wide strip of Sika Joint Tape SA directly to the substrate, or alternatively Flexitape Heavy membrane reinforcement set into a bed of Sikalastic liquid resin. Back roll reinforcement to fully embed reinforcement into the wet liquid resin. Add more liquid resin as needed to fully embed the reinforcement.
 - 6. Ensure reinforcement is not in tension during embedment.

3.8 COLD FLUID APPLIED MEMBRANE FLASHING APPLICATION

- A. Install membrane flashing in accordance with current technical data sheets and in accordance with Part 2 Section 2.2.
- B. Apply base embedment coat to horizontal deck and vertical wall surfaces by brush or with 1/2 inch 3/4 inch nap roller to achieve a continuous and uniform minimum wet film thicknesses as specified in Part 2 Section 2.2. For fleece application, approximately 2/3 of the total resin shall be applied as the base embedment coat.
- C. Immediately lay specified conformable membrane reinforcement into the wet base embedment coat. Reemat reinforcement is typically precut before application; Fleece reinforcement is typically precut at flashings only before application.

- D. Apply pressure to the membrane reinforcement with a roller to fully embed and saturate the membrane reinforcement into liquid roofing/waterproofing material. Remove air pockets from under the membrane by rolling them out.
- E. Apply additional liquid material as required to ensure the membrane reinforcement is fully embedded and has conformed to the substrate without tenting or visible pinholes.
- F. Overlap sheets of Reemat membrane reinforcement a minimum of 2 inches. Overlap sheets of Fleece membrane reinforcement a minimum of 3 inches.
- G. Extend membrane flashing a minimum of 6 inches onto adjacent wall/deck/existing membrane surfaces in accordance with project details and specifications.
- H. When using fiberglass mat reinforcement, allow the base embedment coat to fully cure dry prior to the placement of resin topcoat.
- I. When using polyester fleece reinforcement, immediately apply the resin topcoat wet-on-wet.
- J. Apply topcoat by nap roller or brush to achieve a continuous and uniform minimum wet film thickness as specified in Part 2 Section 2.2.
- K. Install all flashings in accordance with manufacturer's construction details.

3.9 FLASHING PENETRATIONS THROUGH MEMBRANE FLASHING

- A. Clean, prepare and prime penetration surfaces ready to receive membrane flashing applications. Ensure that penetrations are secured to prevent movement.
- B. Penetration flashings typically consist of two components. A vertical flashing component extends up the penetration and is torn (if Reemat reinforcement) or finger cut (if fleece reinforcement) at the bottom so that it can be extended horizontally onto the deck/substrate. A horizontal flashing component covers all of the tears/finger cuts and extends vertically up the penetration. The intent is to achieve a 2-3 inch overlap of the two flashing components.
- C. Install all penetration flashings in accordance with manufacturer's construction details.

3.10 CLEAN-UP

- A. Work areas are to be kept clean, clear and free of debris at all times. Trash, waste, and/or debris shall be removed from the work area on a daily basis.
- B. All tools and unused materials shall be collected at the end of each workday and stored properly and protected from exposure to the elements.
- C. Dispose of or recycle all trash and excess material in a manner conforming to current EPA regulations and local laws.
- D. Following project completion, clean and restore all damaged surfaces to their original condition. Make sure that any drains and gutters are not clogged.

END OF SECTION

SECTION 076200 - FLASHING AND SHEET METAL

PART ONE - GENERAL

1.01 DESCRIPTION OF WORK

- A. Related work specified elsewhere:
 - 1. Section 061000 Rough Carpentry
 - 2. Section 075400 PVC Roof Membrane
- B. Extent of each type of flashing and sheet metal Work is indicated on the drawings and by the provisions of this section and as required to provide a complete water-tight roof assembly.
- C. Preparation, cleaning and priming of substrate.
- D. Without restricting the volume or quantity, work included under this Section shall consist of but not be limited to:
 - 1. Shop-formed flashing and sheet metal work related to roofing terminations.
 - 2. Flashings and Counterflashing of rooftop equipment and penetrations.
 - 3. All other shop-formed sheet metal fabrications indicated on the Contract Documents.

1.02 APPLICABLE REFERENCES

- A. The following publications listed below, but referred to thereafter by basic designation only, form a part of this specification to the extent indicated by the references thereto:
 - 1. Sheet Metal and Air Conditioning Contractors National Association (SMACNA): Architectural Sheet Metal Manual (latest edition)
 - 2. Copper and Common Sense, Revere Copper.
 - 3. Fabricate and install flashings to comply with the recommendations of FM Loss Prevention Data Sheet 1-49.
 - 4. It is intended that the sheet metal and trim shall withstand wind loads, normal structural movement, thermally induced movement and exposure to weather without failing.

1.03 PRODUCT DATA - SUBMITTALS

- A. Samples; Flashing, Sheet Metal, Accessories: Submit 8" square samples of specified sheet materials to be exposed as finished surfaces, together with actual color samples, not printed color charts.
 - 1. Submit 8" long, completely finished units of specified fabricated products exposed as finished work.
- B. Shop Drawings; Flashing, Sheet Metal, Accessories: Submit shop drawings showing layout, joining, profiles, and anchorages of fabricated work, including major counterflashings, trim/fascia units, and scuppers, etc.; details at 3" scale.

1.04 JOB CONDITIONS

A. Coordinate work of this section with interfacing and adjoining work for proper sequencing of each installation. Ensure best possible weather resistance and durability of work and protection of materials and finishes.

1. The installation of flashing and sheet metal shall not proceed until substrate, curb, cant strips, blocking, expansion joint construction, reglets, and other construction to receive this work is completed.

1.05 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. All materials shall be delivered and stored to prevent twisting, bending, or abrasion.
- B. Prevent contact with materials during shipping and storage which may cause discoloration, staining, or damage.

1.06 QUALITY ASSURANCE

- A. Installer of sheet metal work shall be the installer of the roofing system specified in these documents, for undivided responsibility.
- B. Installer shall be specializing in sheet metal flashing work with five (5) years minimum experience.

PART TWO - PRODUCTS

2.01 MATERIALS

- A. Gauges of metal used in flashing and sheet metal work shall be as specifically designated on the Drawings. When the Drawings omit specifying a particular gauge, such shall be of the gauges set forth in the following descriptions of particular metals.
- B. Solder for sheet metal: Except as otherwise indicated or recommended by metal manufacturer, provide 50/50 tin/lead type (ASTM B32, Grade Sn50) for tinning and soldering joints; use rosin flux.
 - Solder Stainless Steel joints with 60/40 tin/lead type solder (ASTM B32, Grade Sn60); use acid-chloride flux, except use rosin flux on tinned surfaces.

C. Sheet Materials:

- 1. Aluminum Sheet: ASTM B209, Alloy 3003, Temper H14, .050 inch thick min (UNO); Kynar finish with color to be selected from standard color samples by the Owner.
 - a. Isolate aluminum from other materials, including treated wood, by a protective bituminous coating not less than 15 mils dry mil thickness; or, by membrane roofing similar to specified product or other techniques approved by Consultant.
- 2. Lead: ASTM B 749, Type L51121, Lead Sheet, minimum thickness of 0.0625 inch (4 lbs per square foot).
- 3. Stainless Steel: AISI Type 304 sheet or strip conforming to ASTM A167; soft annealed, No. 2D finish (except if harder temper is required for forming or performance), 0.0187 in. thick (26 gauge), unless noted otherwise.
- 4. Copper: Sheets shall conform to ASTM specifications B 370 or Federal Specification QQ-C-576; 16 oz. rolled copper.
- 5. All shop formed material shall be submitted to the Consultant for approval and shall meet all requirements set forth in this Section.

2.02 ACCESSORIES

A. Fasteners:

- 1. Fasteners Exposed: Stainless steel with soft EPDM gasketed washers at exposed fasteners unless otherwise noted. Finish exposed fasteners same as flashing metal where visible elements of fascia, etc.
- 2. Fasteners Not Exposed: Hot dipped galvanized conforming to ASTM A 153 where specifically noted; Use stainless steel if used to secure metal to treated wood blocking. Fastenings shall match particular sheet metal materials to which applied. Nails and screws shall have sufficient length to penetrate all metal and fabric materials and into wood support by 3/4" minimum and shall be capable of 40 lb. each minimum initial withdrawal.
- B. Underlayment: Specified membrane, or as indicated.
- C. Sealant: type specified in roofing specification section, if in contact with membrane flashings.
- D. Metal Accessories: Provide sheet metal clips, straps, anchoring devices and similar accessory units as required for installation of work, matching or compatible with material being installed, non-corrosive, size and gauge required for performance.

2.03 FABRICATION

A. General Metal Fabrication:

- Shop-fabricate work to greatest extent possible. Comply with details shown, and with applicable requirements of SMACNA "Architectural Sheet Metal Manual" and other recognized industry practices. Fabricate for waterproof and weather-resistant performance; with expansion provisions for running work, sufficient to permanently prevent leakage, damage or deterioration of the work. Form work to fit substrates. Comply with material manufacturer instructions and recommendations. Form exposed sheet metal work without excessive oil-canning, buckling and tool marks, true to line and levels as indicated, with exposed edges folded back to form hems.
- 2. Separations: Provide for separation of metal from non-compatible metal or corrosive substrates, or rain drainage over non-compatible metals, by coating concealed surfaces at locations of contact, with bituminous coating or other permanent separation as recommended by manufacturer/ fabricator.
- B. Formed metal work for roof membrane termination covers, gutters, downspouts, counter flashing, expansion joint covers, and other work, shall be fabricated and installed as shown in details, together with this Specification Section. Otherwise, all metal work shall be in accordance with best trade practices and as set forth in The SMACNA Manual and the membrane manufacturer's details.
 - 1. Formed metal drip edges and skirt flashings, etc. shall be formed from stainless steel, unless noted otherwise. Metal fabrications shall have 4 inch minimum flange, ½ inch crimped drip, and 4 inch minimum face, with hemmed edge kick-out, unless noted otherwise. Cleats shall be fabricated of the same metal and gauge as the exposed material, unless noted otherwise.
- C. Formed sections are to be true to shape, accurate in size, square, and free from distortion or defects.
- D. Fabricated cleats and butt plates shall be of the same material, interlockable with sheet.

- E. Form pieces in maximum 10 foot lengths or as detailed on the drawings.
- F. Hem exposed edges on underside ½ inch; rivet and seal all inside and outside corners unless noted to be soldered or welded miters or seams.
- G. Fabricated corners with minimum eighteen (18) inch long legs.
- H. Fabricated vertical faces with bottom edge formed outward ½ inch and hemmed to form drip.
- I. Fabricated flashings to allow toe to extend 4 inches over top of roofing base flashing.

PART THREE - EXECUTION

3.01 INSPECTION

- A. The installer shall examine the areas and conditions under which the flashing and sheet metal is to be installed and notify the Contractor in writing of conditions detrimental to the proper and timely completion of this phase of the Work. Do not proceed with this phase until the unsatisfactory conditions have been corrected. Commencement of work shall be construed as acceptance of the conditions.
- B. Workmanship shall conform to the best trade standards. Materials shall be the same and like materials. Do any soldering slowly with heavy well heated soldering coppers of blunt design, properly tinned before use. Tin edges of each item to be soldered with best grade pure metal, 1-½ inch on both sides, with rosin as flux. Heat surfaces to receive solder and flow solder into joint. (Do NOT solder with torches)
- C. Installation of items not shown in detail or not covered by specifications shall meet the applicable requirements of the Architectural Sheet Metal Manual of the Sheet Metal and Air Conditioning Contractors Association, Incorporated.
- D. Verify roof openings, curbs, pipes, sleeves, ducts, or vents through roof are solidly set, cant strips and reglets in place and nailing strips located.
- E. Verify membrane termination and base flashings are in place, sealed, and secure.
- F. Beginning of installation means acceptance of existing conditions.

3.02 INSTALLATION REQUIREMENTS

- A. General: Except as otherwise indicated, comply with manufacturer's installation instructions and recommendations, and with SMACNA "Architectural Sheet Metal Manual". Anchor units of work securely in place by methods indicated, providing for thermal expansion of metal units; conceal fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints and seams which will be permanently watertight and weatherproof.
- B. Bed flanges of work in a thick coat of mastic where required for waterproof performance as recommended by membrane manufacturer.
- C. Conform to drawing details or to AAMM, SMACNA and NRCA manual where not specified.

D. Repair and make water tight all existing metal covers, counterflashing corners, vent base corners and or seams that are split, cut or otherwise damaged during or prior to construction.

3.03 PREPARATION

- A. Field measure site conditions.
- B. Install starter and edge strips, and cleats before starting installation.
- C. Install surface mounted & cut reglet metal flashings true to lines and levels. Install sealant at top.
- D. Secure flashings in place using approved fasteners for the substrate encountered acceptable to the manufacturer of the installed membrane.
- E. Seam and solder all joints in wall flashing and similar materials, as indicated. Insert counterflashing laps and miters are to be riveted in sealant and need not be soldered (U.N.O.)
- F. Fit flashings tight in place. Make corners square, surfaces true and straight in planes, and lines accurate to profiles.

3.04 INSTALLATION

A. General:

- 1. Installation shall comply with "The SMACNA Manual" recommendations for installation.
- 2. It shall be required that the flashing and sheet metal work be permanently watertight and shall not deteriorate in excess of published limitations of the manufacturer.
- B. Thermal expansion shall be provided for in all exposed sheet metal work exceeding 15'-0" in running length, except where otherwise indicated:
 - 1. On flashing and trim, expansion capability shall be on 10'-0" maximum spacing, and located 2'-0" from corners and intersections.
- C. Fasteners and expansion provisions shall be concealed wherever possible.
- D. Install solder repairs to existing counterflashing receiver where damaged or split, etc. Lap new insert counterflashing pieces 2" minimum and lap & solder all corners watertight.

3.05 CLEANING AND PROTECTION

- A. Clean exposed metal surfaces, removing substances which might cause corrosion of metal or deterioration of finishes.
- B. Protection: Contractor shall be responsible for required procedures for protection of flashings and sheet metal work during construction, to ensure that work will be without damage or deterioration, other than natural weathering, at time of substantial completion.

END OF SECTION

FLASHING AND SHEET METAL

SECTION 077120 - PREFABRICATED METAL COPINGS

PART ONE GENERAL

1.01 SUMMARY

- A. Work included: Furnishing and installing factory fabricated and finished roof edging assemblies.
- B. Related Sections include the following:
 - 1. Section 061000; Rough Carpentry: contains requirements for wood blocking.
 - 2. Section 076200; Sheet Metal Flashing and Sheet Metal

1.02 REFERENCES

- A. Factory Mutual Research Corporation (FMRC), Norwood, MA
- B. SPRI, Needham, MA

1.03 SUBMITTALS

- A. Product Data: Provide manufacturer's product data and complete written installation data for all materials in this specification.
- B. Shop Drawings: Show profiles, joining method, location of accessory items, anchorage and flashing details, adjacent construction interface, and dimensions.
- C. Samples: 8" long representative of the specified assembly and configuration

1.04 QUALITY ASSURANCE

- A. High performance roof edge system shall be certified by the manufacturer to comply with ANSI/SPRI Standard ES-1. Roof edge shall meet performance design criteria according to the following test standards:
 - 1. ANSI/SPRI ES-1 Test Method RE-1 Test for Roof Edge Termination: The edge system shall be tested to secure the membrane to the listed design pressures in accord with the ANSI/SPRI ES-1 Test Method RE-1. Use the current edition of ANSI/SPRI ES-1 Wind Design Standard for Edge Systems Used with Low Slope Roofing Systems.
- B. The coping products shall be approved by Factory Mutual Research Corporation.

1.05 PRODUCT HANDLING

- A. All material shall arrive in the manufacturer's original sealed, labeled containers.
- B. Store materials in a dry, protected, well-vented area. The contractor shall report damaged material immediately to the delivering carrier and note such damage on the carrier's freight bill of lading.

Page: 077120-1

C. Remove protective plastic surface film immediately before installation.

1.06 JOB CONDITIONS

- A. Verify that other trades are complete before installing the roof edging.
- B. Mounting surfaces shall be straight and secure; substrates shall be of proper width.
- C. Refer to the construction documents, shop drawings and manufacturer's installation instructions.
- F. Coordinate installation with roof membrane manufacturer's installation instructions.
- G. Observe all appropriate OSHA safety guidelines for this work.

1.07 WARRANTY/GUARANTEE

- A. Provide a 20-year warranty for roof edge system, when installed per manufacturer's instructions, covering blow-off from winds up to 110 mph (min.) in accordance with the manufacture's standard warranty criteria.
- B. Provide a 20-year warranty for painted finish covering color fade, chalk, and film integrity.

PART TWO PRODUCTS

2.01 MANUFACTURES

- A. Basis of Design: Hickman Metals
- B. Acceptable manufacturer's products complying with all specified requirements include: Metal-Era, Inc., or the membrane manufacturer, or approved equal meeting or exceeding all specified criteria and physical properties of named products, subject to substitution requirements of the General Conditions.

2.02 PARAPET COPING SYSTEM:

- A. Coping: Prefabricated custom and standard Perma-Tite metal coping cap with galvanized steel anchor/support cleats for capping parapet wall. The system shall be watertight, maintenance free, and does not require/allow exposed fasteners. Shop formed copings are not allowable. Joints shall be a butt type with concealed splice plates.
- B. Performance Characteristics:
 - 1. Coping sections shall expand and contract freely while locked in place on anchor cleats.
 - 2. Coping sections shall lock to anchor cleats by mechanical pressure from hardened stainless steel springs factory attached to anchor cleats.
 - 3. All splice plates include factory applied dual non-curing sealant strips capable of providing a watertight seal.
 - 4. Coping system must be ANSI-SPRI ES-1 tested & approved and FM approved.
- C. Metal: .050" minimum aluminum with Kynar coatings from manufacturer's standard colors. Color to be selected by Owner's representative prior to ordering material.
- D. Coping cap: length to 12'-0", widths manufactured to job requirements.

- E. Coping sloped, outside face to be custom sized, manufactured to job requirements.
- F. Concealed splice plates: 8" wide. Finish to match finish of coping cap with factory applied dual non-curing sealant strips.
- G. Galvanized Anchor chair: 20 ga. galvanized steel, pre-punched, 12" wide and installed at 48" o/c max. spacing. Integrated with splice plates and sealant.
- H. Fasteners shall be provided by manufacturer. No exposed fasteners shall be permitted.

2.04 ACCESSORIES

- A. Miters, corners, transitions, extensions, expansion joint splices / caps, and end cap pieces, etc. shall be factory fabricated by manufacturer to match copings.
- B. Provide matching accessories as required custom made to match each specific condition, and other special fabrications as detailed or as required for complete installation.

PART THREE EXECUTION

3.01 INSPECTION

A. Verify that the roof edging installation will not disrupt other trades. Verify that the substrate is dry, clean and free of foreign matter. Report and correct defects prior to any installation.

3.02 INSTALLATION OF ROOF EDGING SYSTEM

- A. Submit product design drawings for review and approval to Design Consultant before fabrication.
- B. Installing contractor shall check as-built conditions and verify the manufacturer's roof edge details for accuracy to fit the wall assembly prior to fabrication. The installer shall comply with the roof edging manufacturer's installation guide when setting edging.
- C. Installer shall use provided fasteners supplied by manufacturer, suitable for the substrate to which it is being installed.
- D. Install heavy bed of mastic, as recommended by the membrane & metal manufacturers, under the anchors.
- E. Installer shall use mechanical fasteners with minimum 240# pull out resistance for parapet substrates.

END OF SECTION

PREFABRICATED METAL COPINGS Page: 077120-3

SECTION 154200 - ROOF DRAINS

PART ONE - GENERAL

1.01 MATERIAL AND EQUIPMENT

- A. All material and equipment provided for this contract shall be unused and of the latest model or design available.
- B. Equipment shall be installed in strict accordance with manufacturer's recommendations and details.
- C. Materials not specifically described but indicated or incidentally required must be acceptable to the Consultant.
- D. Materials shall be delivered, stored and handled so as to preclude injury by weather, dirt or abrasion.
- E. Submit all roof drain components for approval prior to installation.

PART TWO - PRODUCTS

2.01 ROOF DRAINS

- A. Contractor shall furnish and install all new roof drain and overflow drain components as indicated.
- B. Roof drains and overflow drains
 - 1. <u>Body</u>: Existing cast iron bowls to remain unless damaged.
 - 2. <u>Strainer</u>: New removable cast iron domes & overflow caps.
 - 3. <u>Accessories:</u> New membrane clamp with integral gravelstop, and hardware to suit conditions.
 - 4. Match new components to existing drains and overflow drains V.I.F.

PART THREE - EXECUTION

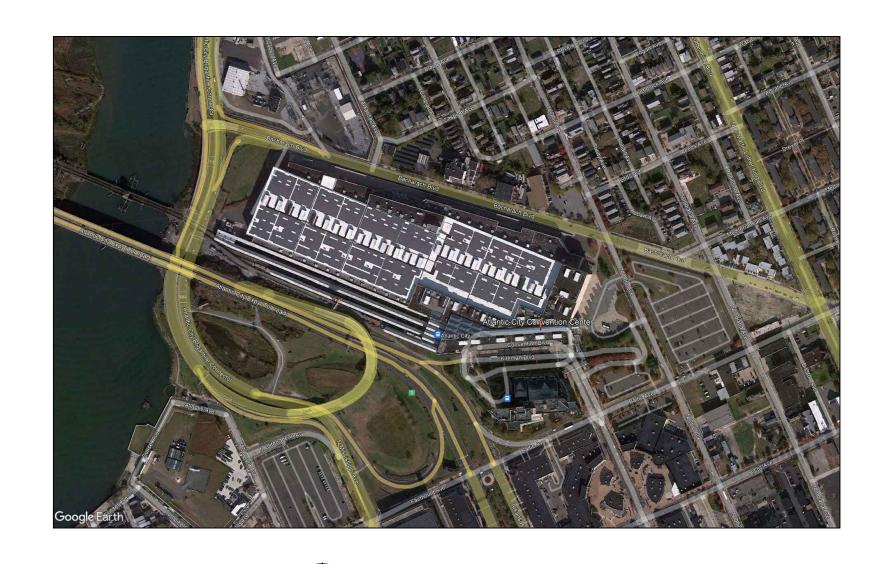
1. Roof drain and overflow drain replacement components, must be installed prior to or simultaneous with the installation of the roofing membrane assembly.

END OF SECTION

ROOF DRAINS Page: 154200-1

SKYLIGHT & ROOF REPAIRS at: ATLANTIC CITY CONVENTION CENTER





SITE MAP

ONE CONVENTION BLVD.
ATLANTIC CITY, NJ. 08401

OAKVIEW VENUE MANAGEMENT

2301 BOARDWALK
ATLANTIC CITY, NJ. 08401

ATLANTIC CITY CONVENTION CENTER

DRAWING INDEX

DRAWING NO.	TITLE
C-1	COVER SHEET
A-1	WIND ATTACHMENT PLAN & ASSEMBLIES
A-2	PARTIAL ROOF PLAN
A-3	PARTIAL ROOF PLAN
A-4	PARTIAL ROOF PLAN
A-5	PARTIAL ROOF PLAN
A-6	PARTIAL ROOF PLAN
A-7	SKYLIGHT PLANS
A-8	ROOF DETAILS
A-9	ROOF DETAILS
A-10	ROOF DETAILS
A-11	SKYLIGHT REPAIR DETAILS
A-12	SKYLIGHT REPAIR DETAILS

CODE SUMMARY

NJ UCC - REHABILITATION SUBCODE (5:23-6) - RENOVATION

IBC 2021 NEW JERSEY EDITION

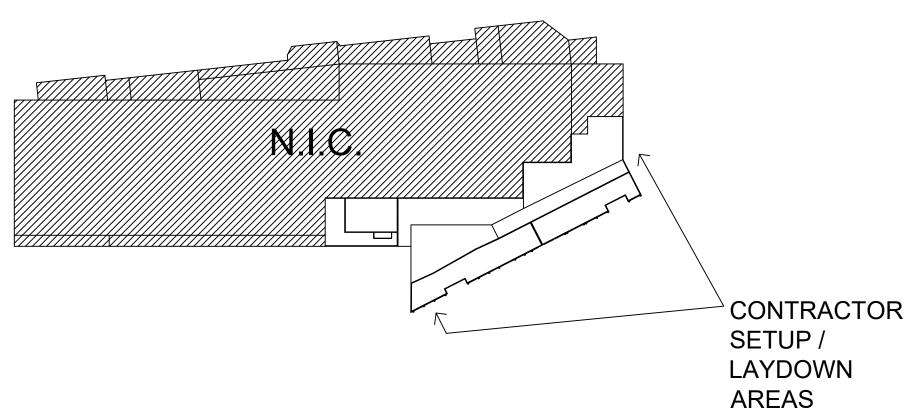
CONSTRUCTION TYPE: IA

BUILDING USE GROUP: A-3, ASSEMBLY

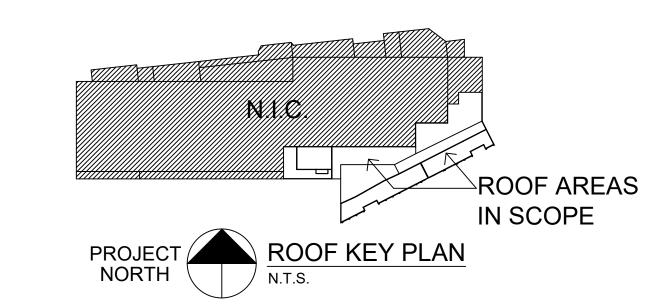
HEIGHT: APPROX. 75 FEET & 90 FEET

ASCE 7-16 DESIGN WIND SPEED = 135 MPH (3 SEC. GUST @ 33')

BLOCK 472, LOT 2



SETUP AREAS



REVISIONS:
1. DESIGN REVIEW SBM 02/28/2
2. CD REVIEW SBM 04/04/23

WAHID MANAWI, P.E.

SKYLIGHT AND ROOF REPAIRS @ ATLANTIC CITY CONVENTION CENTER ONE CONVENTION BLVD. ATLANTIC CITY, NEW JERSEY 08401



COVER SHEET

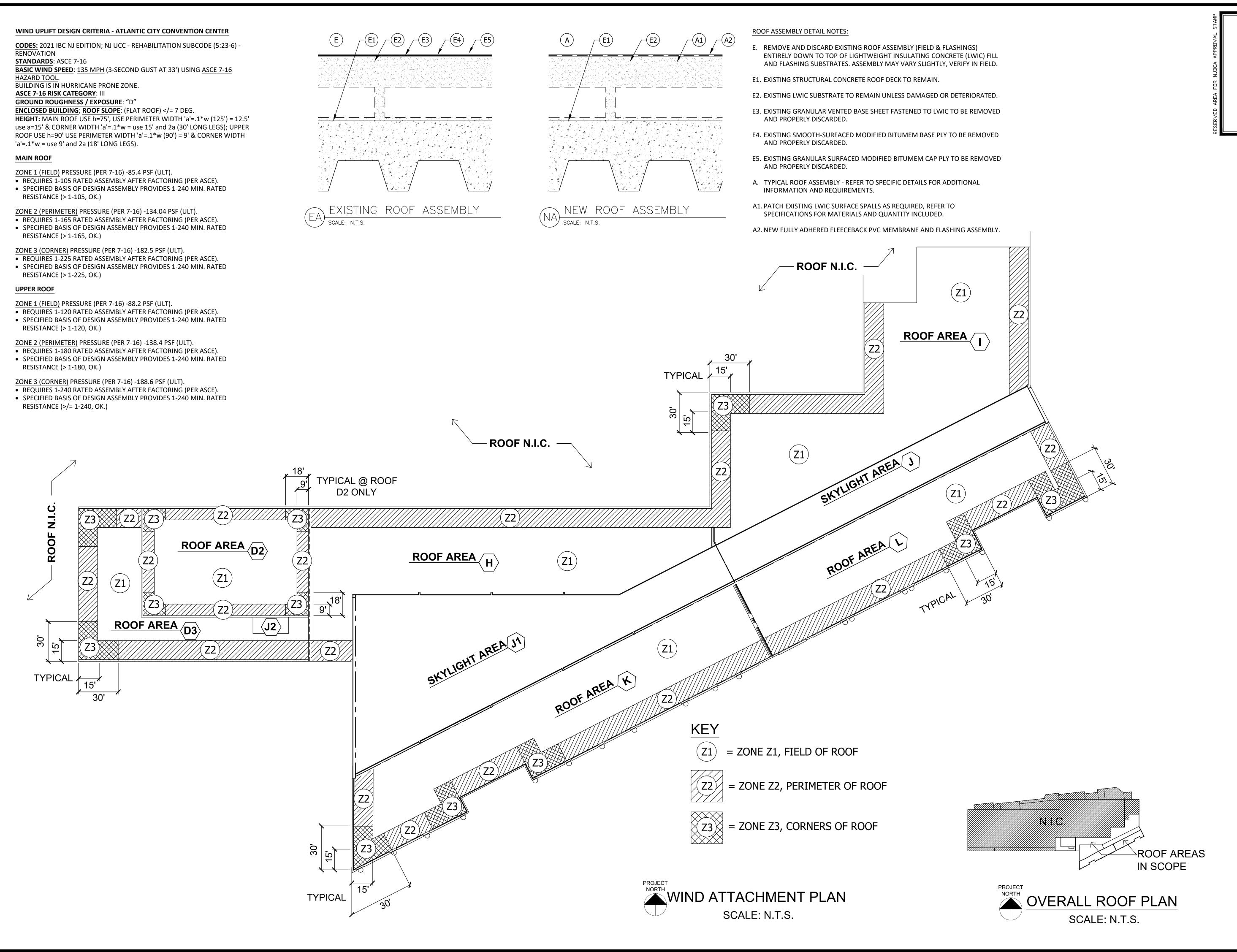
DRAWN BY: JG/CCG

CHECKED BY: GF/WM

JOB NO.: NJE.2022.001013

DATE: SCALE: AS NOTED

SHEET:



REVISIONS:

DESIGN REVIEW SBM 02/28/23
 CD REVIEW SBM 04/04/23
 ISSUED FOR PERMIT 4/28/23

4. ISSUED FOR BIDS 7/21/23

WAHID MANAWI, P.E.
NJ PROFESSIONAL ENGINEER No. GE55852
DATE: 07/21/2023

ATLANTIC CITY CONVENTION CENTE ONE CONVENTION BLVD.
ATLANTIC CITY, NEW JERSEY 0840:

SOLUTIONS
2 WHITE HORSE PIKE, SUITE 1D
HADDON HEIGHTS, NJ 08035

WIND ATTACHMENT PLAN

DRAWN BY: JG/CCG

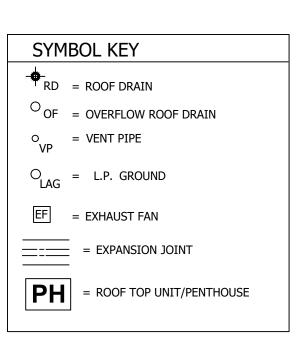
CHECKED BY: GF/WM

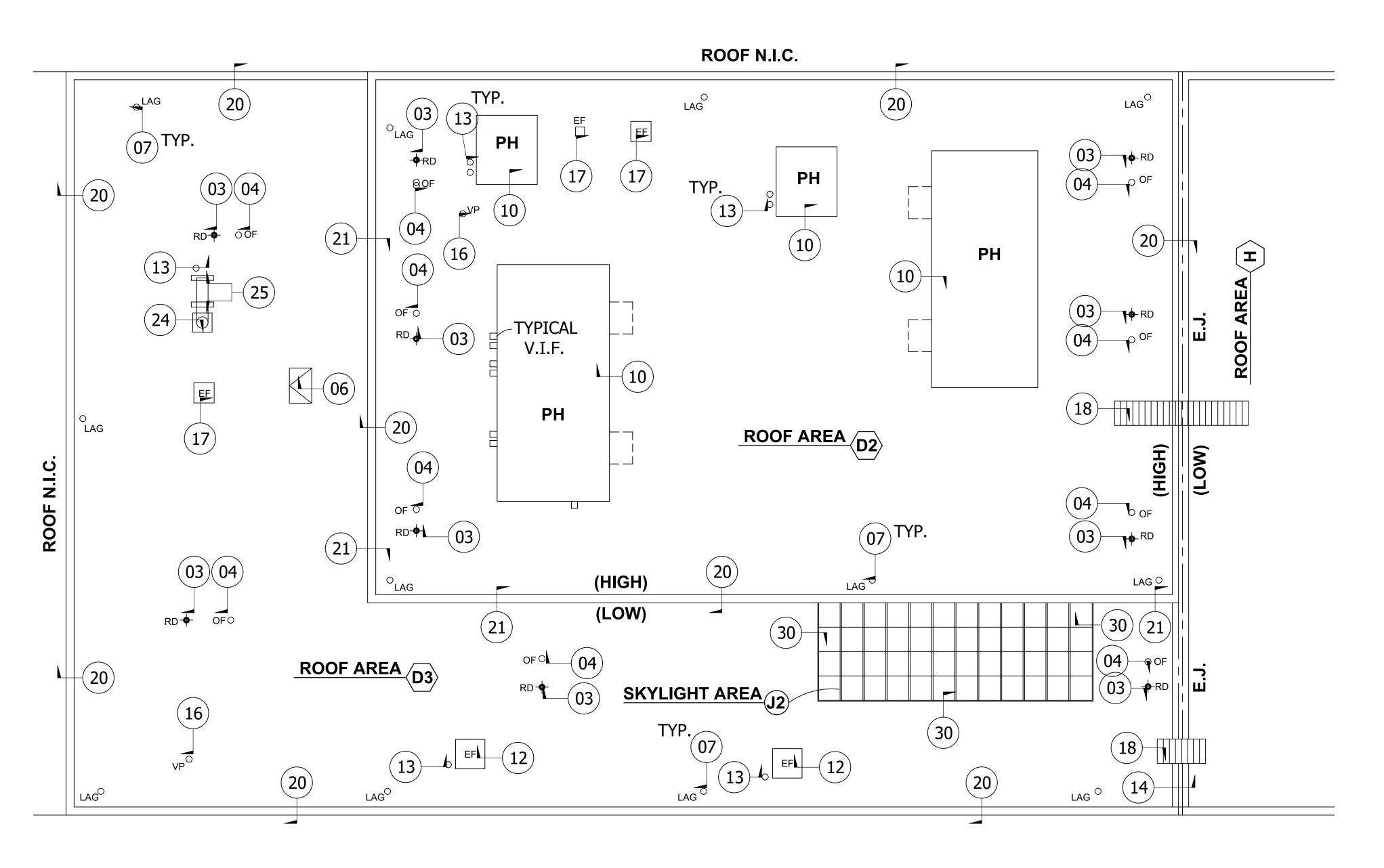
JOB NO.: NJE.2022.001013

DATE: SCALE: AS NOTED

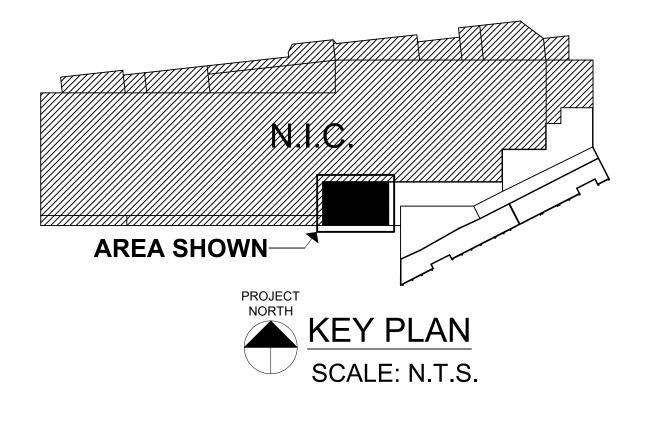
SHEET:

A-1









REVISIONS:

1. DESIGN REVIEW SBM 02/28/23

2. CD REVIEW SBM 04/04/23
 3. ISSUED FOR PERMIT 4/28/23
 4. ISSUED FOR BIDS 7/21/23

WAHID MANAWI, P.E.
NJ PROFESSIONAL ENGINEER No. GE55852
DATE: 07/21/2023

ATLANTIC CITY CONVENTION CENTER ONE CONVENTION BLVD.

ATLANTIC CITY, NEW JERSEY 08401

SOLUTIONS
2 WHITE HORSE PIKE, SUITE 1D
HADDON HEIGHTS, NJ 08035

PARTIAL ROOF PLAN

DRAWN BY: JG/CCG

CHECKED BY: GF/WM

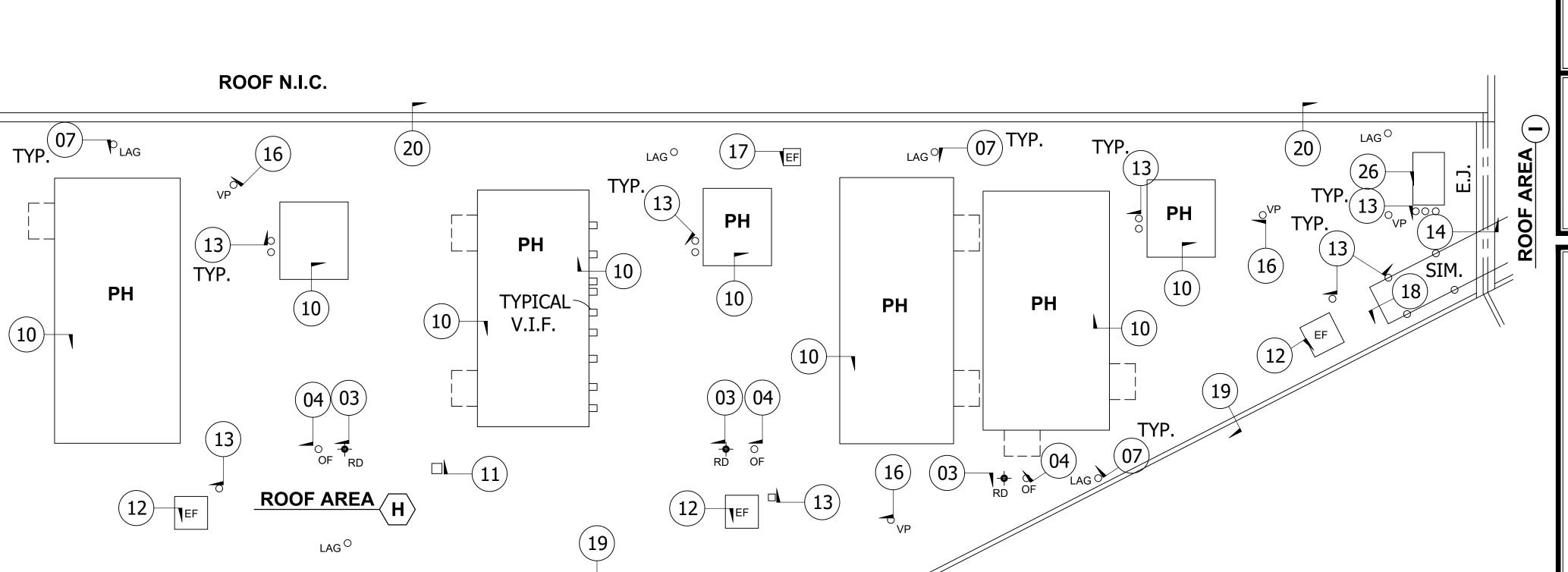
JOB NO.: NJE.2022.001013

JOB NO.: NJE.2022.001013

DATE: SCALE: AS NOTED

SHEET: A-2





ROOF PLAN - AREA H
SCALE: 3/32" = 1'-0"

SKYLIGHT AREA J1

REFER TO DRAWINGS NUMBERED A-8 TO A-10 FOR ROOF REPLACEMENT DETAILS

PH

TYP.(07)

(18)

(04)

29

29

(13)

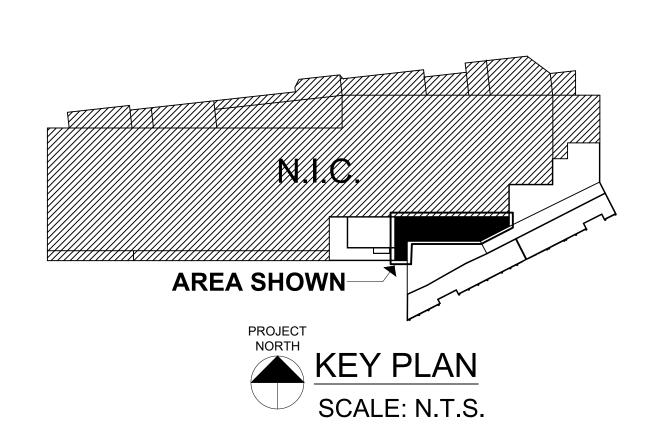
EF

(HIGH)

ROOF AREA D3

(LOW)

28)



REVISIONS:
1. DESIGN REVIEW SBM 02/28/
2. CD REVIEW SBM 04/04/23
3. ISSUED FOR PERMIT 4/28/23

3. ISSUED FOR PERMIT 4/28/23 4. ISSUED FOR BIDS 7/21/23

WAHID MANAWI, P.E.

J PROFESSIONAL ENGINEER No. GE55852
DATE: 07/21/2023

EPAIRS @
ON CENTER
3LVD.

SKYLIGHT AND ROOF REPAIR
ATLANTIC CITY CONVENTION CE
ONE CONVENTION BLVD.
ATLANTIC CITY, NEW JERSEY (

AMTECH SOLUTIONS 2 WHITE HORSE PIKE, SUITE 1D HADDON HEIGHTS, NJ 08035 At 856.888.3712

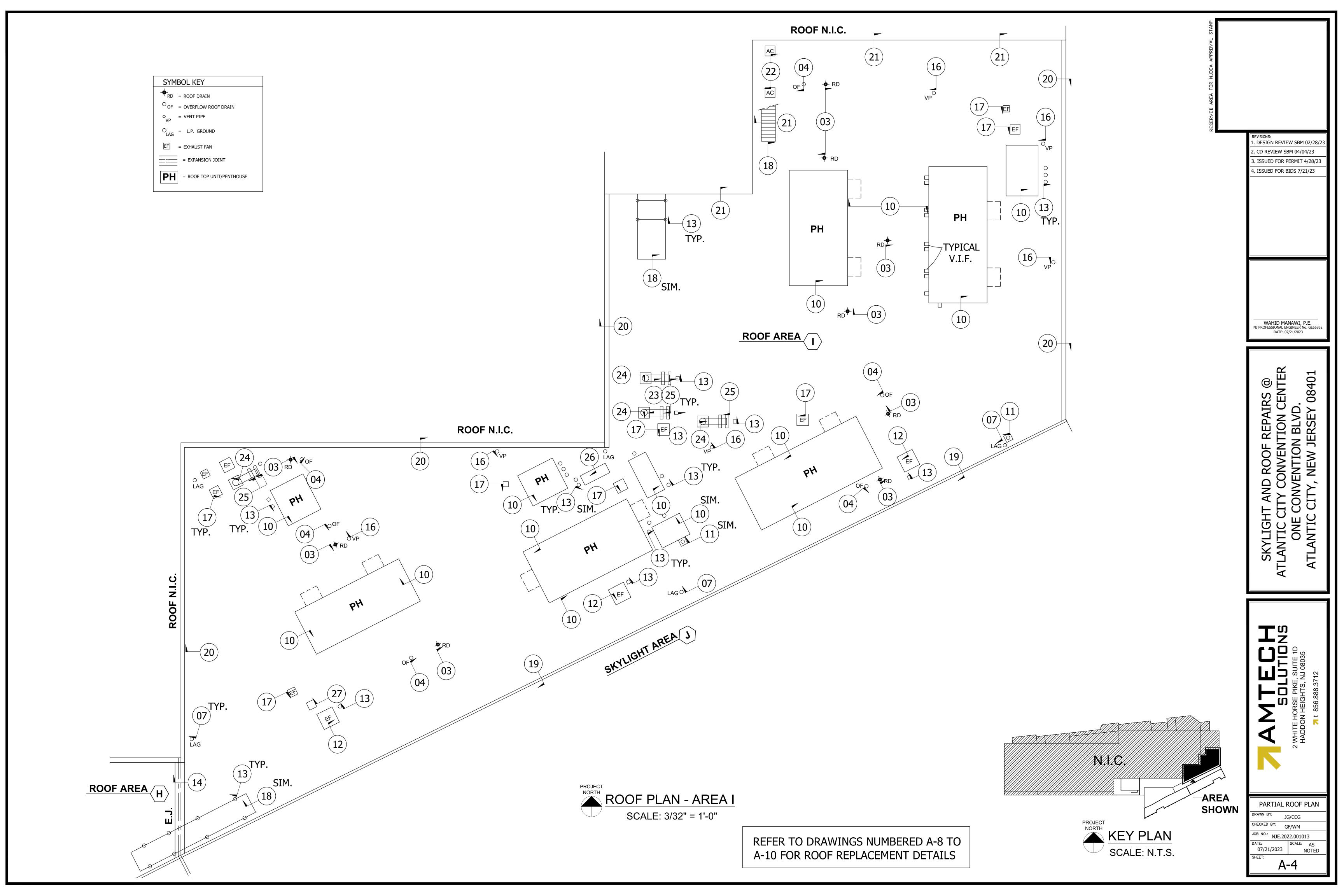
PARTIAL ROOF PLAN

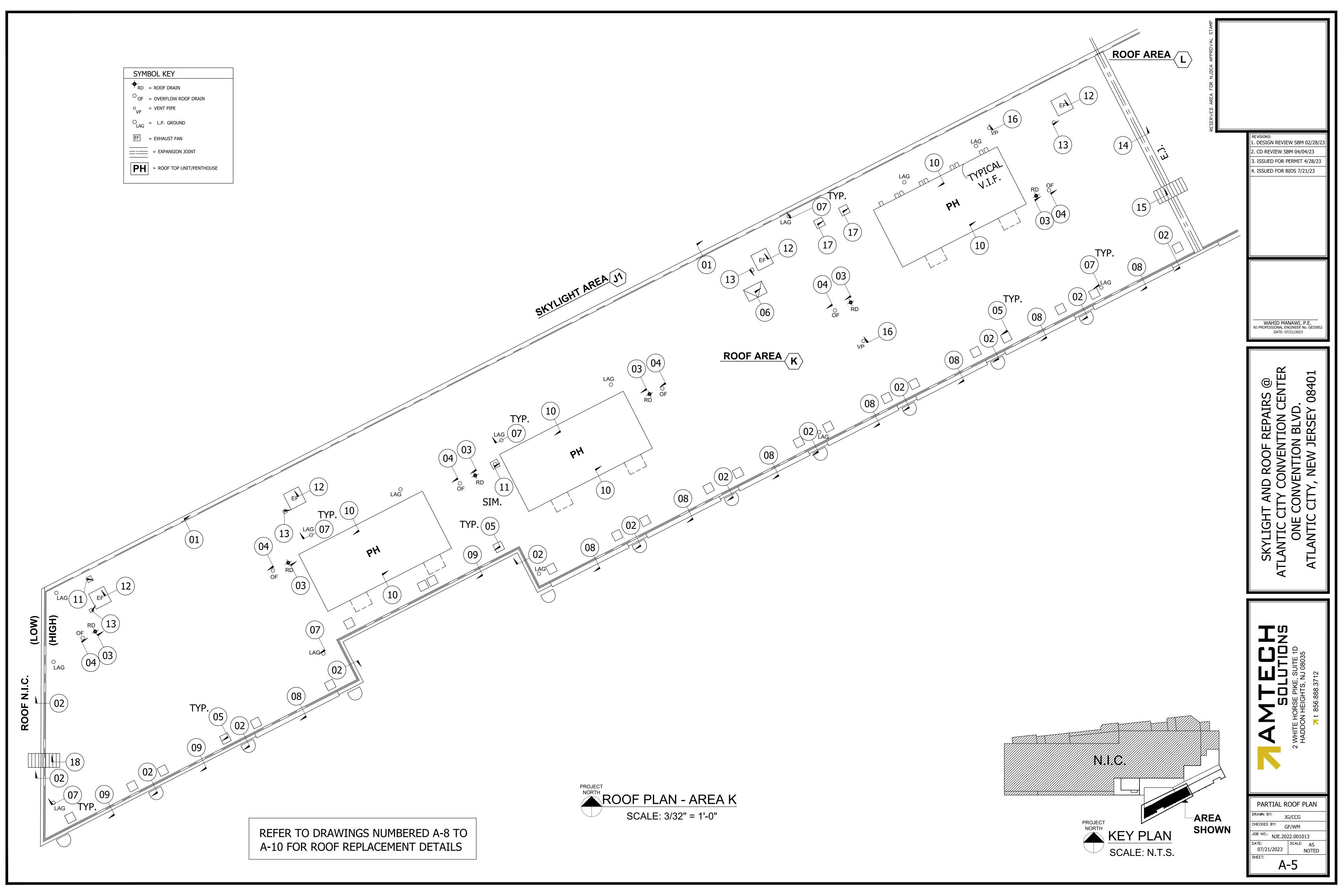
DRAWN BY: JG/CCG

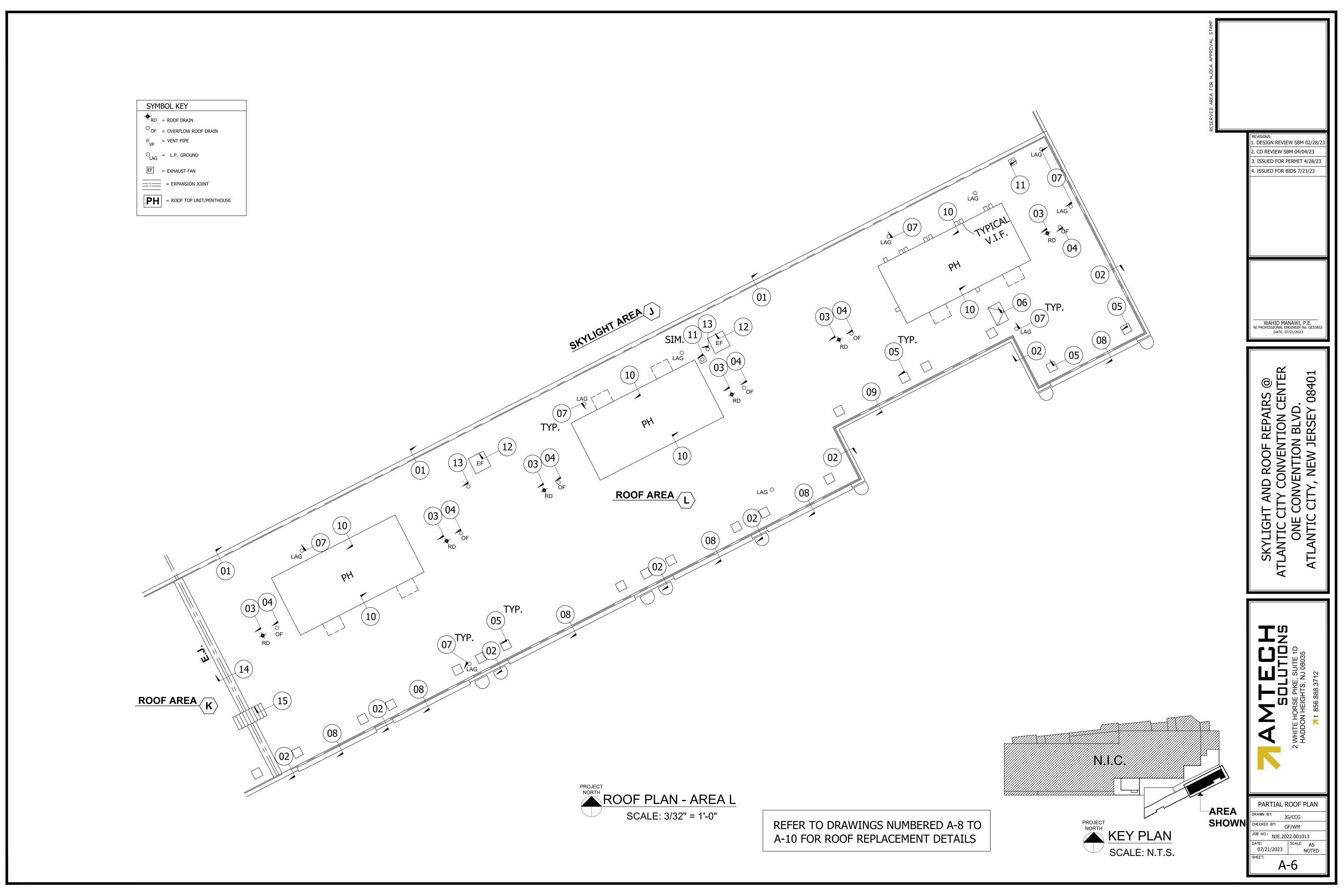
CHECKED BY: GF/WM

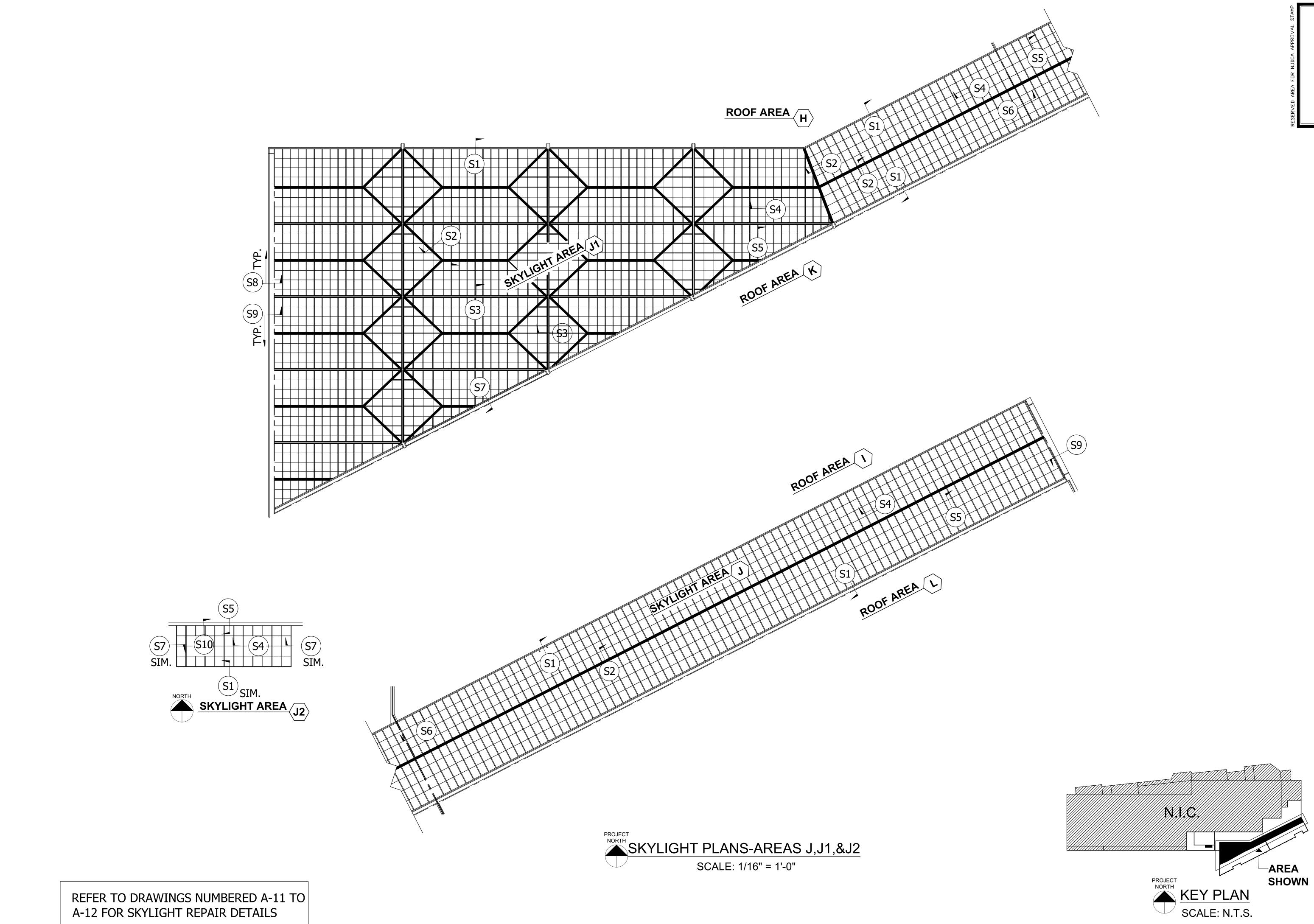
JOB NO.: NJE.2022.001013

DATE: SCALE: AS
07/21/2023 NOTED









REVISIONS:
1. DESIGN REVIEW SBM 02/28
2. CD REVIEW SBM 04/04/23

3. ISSUED FOR PERMIT 4/28/23
4. ISSUED FOR BIDS 7/21/23

WAHID MANAWI, P.E.
NJ PROFESSIONAL ENGINEER No. GE55852
DATE: 07/21/2023

ATLANTIC CITY CONVENTION CENTER
ONE CONVENTION BLVD.
ATLANTIC CITY, NEW JERSEY 08401

SOLUTIONS
2 WHITE HORSE PIKE, SUITE 1D
HADDON HEIGHTS, NJ 08035

SKYLIGHT PLANS

DRAWN BY: JG/CCG

CHECKED BY: GF/WM

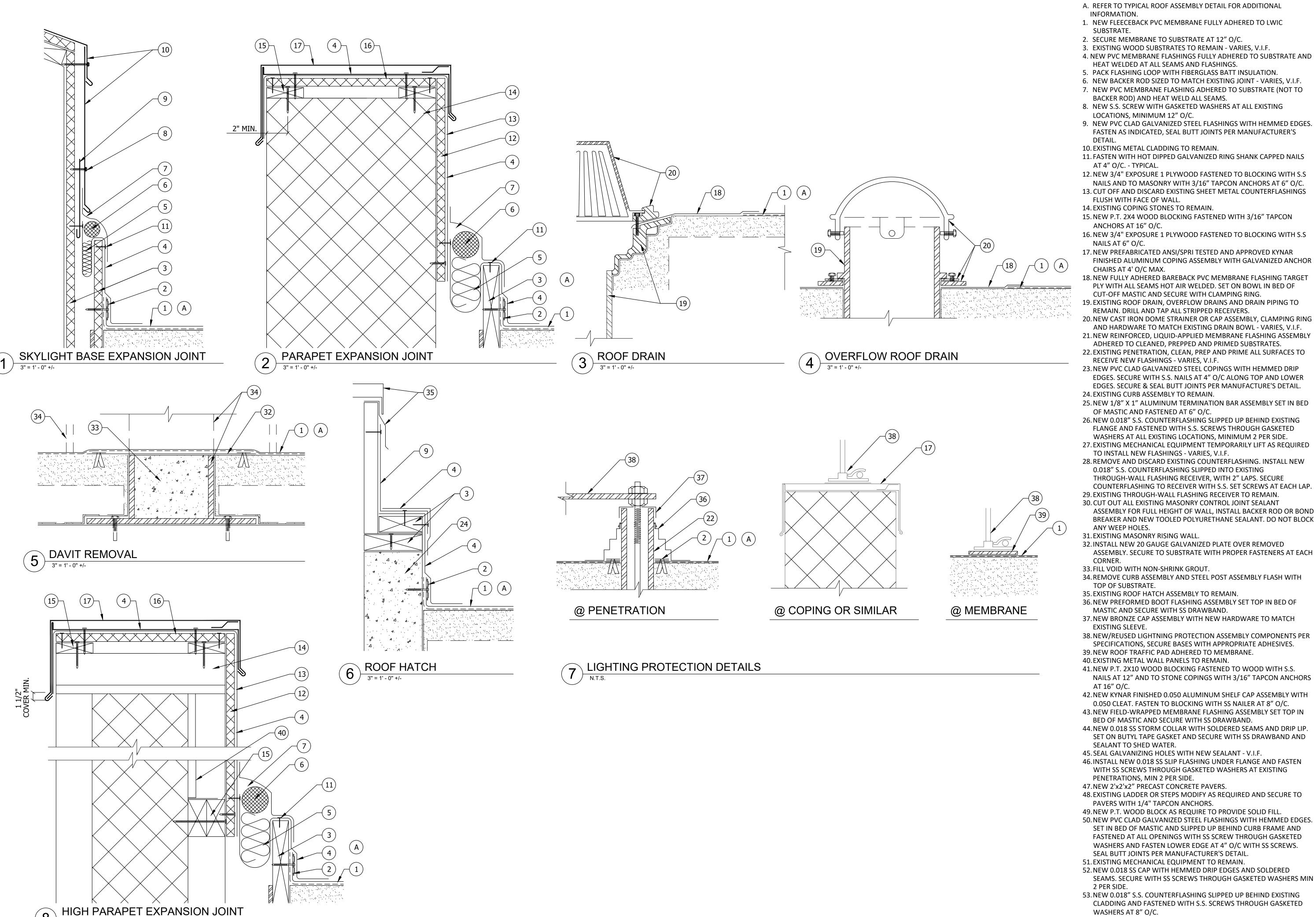
JOB NO.: NJE.2022.001013

DATE: SCALE: AS

07/21/2023

SHFET:

07/21/2023 NO
SHEET:
A-7



ROOF DETAIL NOTES:

- A. REFER TO TYPICAL ROOF ASSEMBLY DETAIL FOR ADDITIONAL
- 1. NEW FLEECEBACK PVC MEMBRANE FULLY ADHERED TO LWIC
 - SUBSTRATE.
 - 2. SECURE MEMBRANE TO SUBSTRATE AT 12" O/C.
 - 3. EXISTING WOOD SUBSTRATES TO REMAIN VARIES, V.I.F. 4. NEW PVC MEMBRANE FLASHINGS FULLY ADHERED TO SUBSTRATE AND
 - HEAT WELDED AT ALL SEAMS AND FLASHINGS. 5. PACK FLASHING LOOP WITH FIBERGLASS BATT INSULATION.
 - 6. NEW BACKER ROD SIZED TO MATCH EXISTING JOINT VARIES, V.I.F. 7. NEW PVC MEMBRANE FLASHING ADHERED TO SUBSTRATE (NOT TO BACKER ROD) AND HEAT WELD ALL SEAMS.
 - 8. NEW S.S. SCREW WITH GASKETED WASHERS AT ALL EXISTING
 - LOCATIONS, MINIMUM 12" O/C. 9. NEW PVC CLAD GALVANIZED STEEL FLASHINGS WITH HEMMED EDGES. FASTEN AS INDICATED, SEAL BUTT JOINTS PER MANUFACTURER'S
 - 10. EXISTING METAL CLADDING TO REMAIN.
 - 11. FASTEN WITH HOT DIPPED GALVANIZED RING SHANK CAPPED NAILS
 - AT 4" O/C. TYPICAL. 12. NEW 3/4" EXPOSURE 1 PLYWOOD FASTENED TO BLOCKING WITH S.S.
 - NAILS AND TO MASONRY WITH 3/16" TAPCON ANCHORS AT 6" O/C. 13. CUT OFF AND DISCARD EXISTING SHEET METAL COUNTERFLASHINGS FLUSH WITH FACE OF WALL.
 - 14. EXISTING COPING STONES TO REMAIN.
 - 15. NEW P.T. 2X4 WOOD BLOCKING FASTENED WITH 3/16" TAPCON ANCHORS AT 16" O/C.
 - 16. NEW 3/4" EXPOSURE 1 PLYWOOD FASTENED TO BLOCKING WITH S.S NAILS AT 6" O/C.
 - 17. NEW PREFABRICATED ANSI/SPRI TESTED AND APPROVED KYNAR FINISHED ALUMINUM COPING ASSEMBLY WITH GALVANIZED ANCHOR CHAIRS AT 4' O/C MAX.
 - 18. NEW FULLY ADHERED BAREBACK PVC MEMBRANE FLASHING TARGET PLY WITH ALL SEAMS HOT AIR WELDED. SET ON BOWL IN BED OF
 - CUT-OFF MASTIC AND SECURE WITH CLAMPING RING. 19. EXISTING ROOF DRAIN, OVERFLOW DRAINS AND DRAIN PIPING TO REMAIN. DRILL AND TAP ALL STRIPPED RECEIVERS.
 - 20. NEW CAST IRON DOME STRAINER OR CAP ASSEMBLY, CLAMPING RING AND HARDWARE TO MATCH EXISTING DRAIN BOWL - VARIES, V.I.F. 21. NEW REINFORCED, LIQUID-APPLIED MEMBRANE FLASHING ASSEMBLY
 - ADHERED TO CLEANED, PREPPED AND PRIMED SUBSTRATES. 22. EXISTING PENETRATION, CLEAN, PREP AND PRIME ALL SURFACES TO RECEIVE NEW FLASHINGS - VARIES, V.I.F.
 - 23. NEW PVC CLAD GALVANIZED STEEL COPINGS WITH HEMMED DRIP EDGES. SECURE WITH S.S. NAILS AT 4" O/C ALONG TOP AND LOWER EDGES. SECURE & SEAL BUTT JOINTS PER MANUFACTURE'S DETAIL.
 - 24. EXISTING CURB ASSEMBLY TO REMAIN. 25. NEW 1/8" X 1" ALUMINUM TERMINATION BAR ASSEMBLY SET IN BED
 - OF MASTIC AND FASTENED AT 6" O/C. 26. NEW 0.018" S.S. COUNTERFLASHING SLIPPED UP BEHIND EXISTING FLANGE AND FASTENED WITH S.S. SCREWS THROUGH GASKETED
 - WASHERS AT ALL EXISTING LOCATIONS, MINIMUM 2 PER SIDE. 27. EXISTING MECHANICAL EQUIPMENT TEMPORARILY LIFT AS REQUIRED TO INSTALL NEW FLASHINGS - VARIES, V.I.F.
 - 28. REMOVE AND DISCARD EXISTING COUNTERFLASHING. INSTALL NEW 0.018" S.S. COUNTERFLASHING SLIPPED INTO EXISTING
 - THROUGH-WALL FLASHING RECEIVER, WITH 2" LAPS. SECURE COUNTERFLASHING TO RECEIVER WITH S.S. SET SCREWS AT EACH LAP.
 - 29. EXISTING THROUGH-WALL FLASHING RECEIVER TO REMAIN. 30. CUT OUT ALL EXISTING MASONRY CONTROL JOINT SEALANT ASSEMBLY FOR FULL HEIGHT OF WALL, INSTALL BACKER ROD OR BOND
 - ANY WEEP HOLES. 31. EXISTING MASONRY RISING WALL.
 - 32. INSTALL NEW 20 GAUGE GALVANIZED PLATE OVER REMOVED ASSEMBLY. SECURE TO SUBSTRATE WITH PROPER FASTENERS AT EACH

 - 33. FILL VOID WITH NON-SHRINK GROUT. 34. REMOVE CURB ASSEMBLY AND STEEL POST ASSEMBLY FLASH WITH TOP OF SUBSTRATE.
 - 35. EXISTING ROOF HATCH ASSEMBLY TO REMAIN.
 - 36. NEW PREFORMED BOOT FLASHING ASSEMBLY SET TOP IN BED OF MASTIC AND SECURE WITH SS DRAWBAND.
 - 37. NEW BRONZE CAP ASSEMBLY WITH NEW HARDWARE TO MATCH EXISTING SLEEVE.
 - 38. NEW/REUSED LIGHTNING PROTECTION ASSEMBLY COMPONENTS PER SPECIFICATIONS, SECURE BASES WITH APPROPRIATE ADHESIVES. 39. NEW ROOF TRAFFIC PAD ADHERED TO MEMBRANE.
- 40. EXISTING METAL WALL PANELS TO REMAIN.
- 41. NEW P.T. 2X10 WOOD BLOCKING FASTENED TO WOOD WITH S.S. NAILS AT 12" AND TO STONE COPINGS WITH 3/16" TAPCON ANCHORS AT 16" O/C.
- 42.NEW KYNAR FINISHED 0.050 ALUMINUM SHELF CAP ASSEMBLY WITH 0.050 CLEAT. FASTEN TO BLOCKING WITH SS NAILER AT 8" O/C.
- 43. NEW FIELD-WRAPPED MEMBRANE FLASHING ASSEMBLY SET TOP IN BED OF MASTIC AND SECURE WITH SS DRAWBAND.
- 44.NEW 0.018 SS STORM COLLAR WITH SOLDERED SEAMS AND DRIP LIP. SET ON BUTYL TAPE GASKET AND SECURE WITH SS DRAWBAND AND SEALANT TO SHED WATER.
- 45. SEAL GALVANIZING HOLES WITH NEW SEALANT V.I.F.
- 46.INSTALL NEW 0.018 SS SLIP FLASHING UNDER FLANGE AND FASTEN WITH SS SCREWS THROUGH GASKETED WASHERS AT EXISTING
- PENETRATIONS, MIN 2 PER SIDE. 47. NEW 2'x2'x2" PRECAST CONCRETE PAVERS.
- 48.EXISTING LADDER OR STEPS MODIFY AS REQUIRED AND SECURE TO PAVERS WITH 1/4" TAPCON ANCHORS.
- 49.NEW P.T. WOOD BLOCK AS REQUIRE TO PROVIDE SOLID FILL
- 50. NEW PVC CLAD GALVANIZED STEEL FLASHINGS WITH HEMMED EDGES. SET IN BED OF MASTIC AND SLIPPED UP BEHIND CURB FRAME AND FASTENED AT ALL OPENINGS WITH SS SCREW THROUGH GASKETED WASHERS AND FASTEN LOWER EDGE AT 4" O/C WITH SS SCREWS. SEAL BUTT JOINTS PER MANUFACTURER'S DETAIL.
- 51. EXISTING MECHANICAL EQUIPMENT TO REMAIN.
- 52.NEW 0.018 SS CAP WITH HEMMED DRIP EDGES AND SOLDERED SEAMS. SECURE WITH SS SCREWS THROUGH GASKETED WASHERS MIN 2 PER SIDE.

54. EXISTING EPDM MEMBRANE FLASHING FLANGE TO REMAIN.

53. NEW 0.018" S.S. COUNTERFLASHING SLIPPED UP BEHIND EXISTING CLADDING AND FASTENED WITH S.S. SCREWS THROUGH GASKETED WASHERS AT 8" O/C.

. DESIGN REVIEW SBM 02/28/2 . CD REVIEW SBM 04/04/23

. ISSUED FOR PERMIT 4/28/2

I. ISSUED FOR BIDS 7/21/23

WAHID MANAWI, P.E.

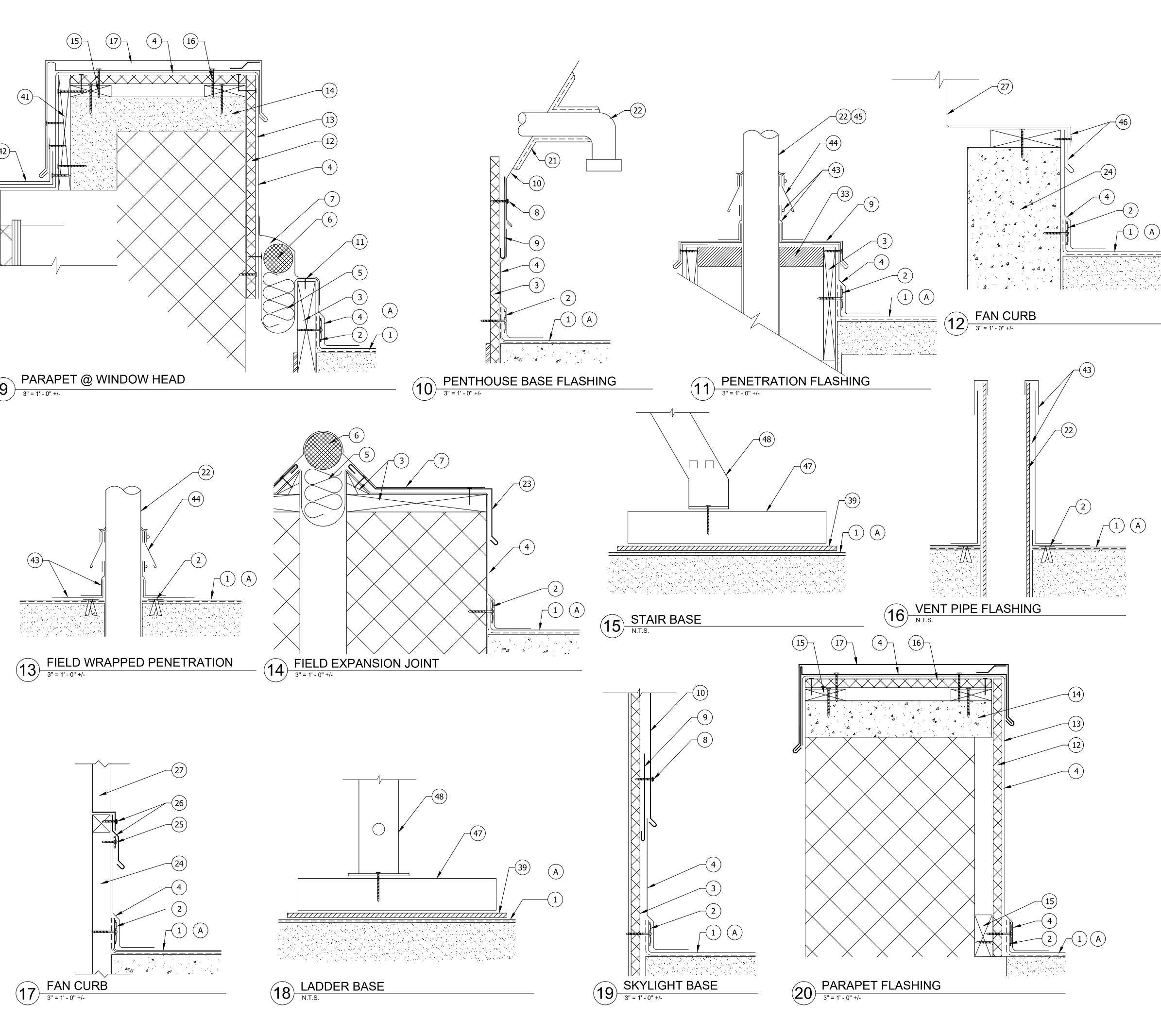
PROFESSIONAL ENGINEER No. GE55852

DATE: 07/21/2023

CONVENT AND P CC SKYLIGHT LANTIC CIT

ROOF DETAILS JG/CCG GF/WM

NJE.2022.001013 SCALE: AS 07/21/2023 NOTED



ROOF DETAIL NOTES

- A. REFER TO TYPICAL ROOF ASSEMBLY DETAIL FOR ADDITIONAL INFORMATION.
- NEW FLEECEBACK PVC MEMBRANE FULLY ADHERED TO LWIC SUBSTRATE.
- 2. SECURE MEMBRANE TO SUBSTRATE AT 12" O/C.
- 3. EXISTING WOOD SUBSTRATES TO REMAIN VARIES, V.I.F.
 4. NEW PVC MEMBRANE FLASHINGS FULLY ADHERED TO SUBSTRATE AND
- HEAT WELDED AT ALL SEAMS AND FLASHINGS.
- 5. PACK FLASHING LOOP WITH FIBERGLASS BATT INSULATION.
- 6. NEW BACKER ROD SIZED TO MATCH EXISTING JOINT VARIES, V.I.F.
- 7. NEW PVC MEMBRANE FLASHING ADHERED TO SUBSTRATE (NOT TO BACKER ROD) AND HEAT WELD ALL SEAMS.
- 8. NEW S.S. SCREW WITH GASKETED WASHERS AT ALL EXISTING LOCATIONS, MINIMUM 12" O/C.
- 9. NEW PVC CLAD GALVANIZED STEEL FLASHINGS WITH HEMMED EDGES. FASTEN AS INDICATED, SEAL BUTT JOINTS PER MANUFACTURER'S
- 10. EXISTING METAL CLADDING TO REMAIN.
- 11. FASTEN WITH HOT DIPPED GALVANIZED RING SHANK CAPPED NAILS AT 4" O/C. TYPICAL.
- 12. NEW 3/4" EXPOSURE 1 PLYWOOD FASTENED TO BLOCKING WITH S.S NAILS AND TO MASONRY WITH 3/16" TAPCON ANCHORS AT 6" O/C.
 13. CUT OFF AND DISCARD EXISTING SHEET METAL COUNTERFLASHINGS
- FLUSH WITH FACE OF WALL.

 14. EXISTING COPING STONES TO REMAIN.
- 15. NEW P.T. 2X4 WOOD BLOCKING FASTENED WITH 3/16" TAPCON
- ANCHORS AT 16" O/C.

 16. NEW 3/4" EXPOSURE 1 PLYWOOD FASTENED TO BLOCKING WITH S.S
- NAILS AT 6" O/C.

 17. NEW PREFABRICATED ANSI/SPRI TESTED AND APPROVED KYNAR
- 17. NEW PREFABRICATED ANSI/SPRI TESTED AND APPROVED KYNAR FINISHED ALUMINUM COPING ASSEMBLY WITH GALVANIZED ANCHOR CHAIRS AT 4' O/C MAX.
- 18. NEW FULLY ADHERED BAREBACK PVC MEMBRANE FLASHING TARGET PLY WITH ALL SEAMS HOT AIR WELDED. SET ON BOWL IN BED OF CUT-OFF MASTIC AND SECURE WITH CLAMPING RING.
- 19. EXISTING ROOF DRAIN, OVERFLOW DRAINS AND DRAIN PIPING TO REMAIN. DRILL AND TAP ALL STRIPPED RECEIVERS.
- 20. NEW CAST IRON DOME STRAINER OR CAP ASSEMBLY, CLAMPING RING AND HARDWARE TO MATCH EXISTING DRAIN BOWL VARIES, V.I.F.
- AND HARDWARE TO MATCH EXISTING DRAIN BOWL VARIES, V.I.F. 21. NEW REINFORCED, LIQUID-APPLIED MEMBRANE FLASHING ASSEMBLY
- ADHERED TO CLEANED, PREPPED AND PRIMED SUBSTRATES.

 22. EXISTING PENETRATION, CLEAN, PREP AND PRIME ALL SURFACES TO
- RECEIVE NEW FLASHINGS VARIES, V.I.F.
 23. NEW PVC CLAD GALVANIZED STEEL COPINGS WITH HEMMED DRIP
- EDGES. SECURE WITH S.S. NAILS AT 4" O/C ALONG TOP AND LOWER EDGES. SECURE & SEAL BUTT JOINTS PER MANUFACTURE'S DETAIL.
- 24. EXISTING CURB ASSEMBLY TO REMAIN.
 25. NEW 1/8" X 1" ALUMINUM TERMINATION BAR ASSEMBLY SET IN BED
- OF MASTIC AND FASTENED AT 6" O/C.
 26. NEW 0.018" S.S. COUNTERFLASHING SLIPPED UP BEHIND EXISTING FLANGE AND FASTENED WITH S.S. SCREWS THROUGH GASKETED
- WASHERS AT ALL EXISTING LOCATIONS, MINIMUM 2 PER SIDE. 27. EXISTING MECHANICAL EQUIPMENT TEMPORARILY LIFT AS REQUIRED
- TO INSTALL NEW FLASHINGS VARIES, V.I.F.

 28. REMOVE AND DISCARD EXISTING COUNTERFLASHING. INSTALL NEW
- 0.018" S.S. COUNTERFLASHING SLIPPED INTO EXISTING
 THROUGH-WALL FLASHING RECEIVER, WITH 2" LAPS. SECURE
 COUNTERFLASHING TO RECEIVER WITH S.S. SET SCREWS AT EACH LAP.
- 29. EXISTING THROUGH-WALL FLASHING RECEIVER TO REMAIN.
 30. CUT OUT ALL EXISTING MASONRY CONTROL JOINT SEALANT
- 30. CUT OUT ALL EXISTING MASONRY CONTROL JOINT SEALANT ASSEMBLY FOR FULL HEIGHT OF WALL, INSTALL BACKER ROD OR BOND BREAKER AND NEW TOOLED POLYURETHANE SEALANT. DO NOT BLOCK ANY WEEP HOLES.
- 31.EXISTING MASONRY RISING WALL.
- 32. INSTALL NEW 20 GAUGE GALVANIZED PLATE OVER REMOVED ASSEMBLY. SECURE TO SUBSTRATE WITH PROPER FASTENERS AT EACH CORNER.
- 33. FILL VOID WITH NON-SHRINK GROUT.
- 34. REMOVE CURB ASSEMBLY AND STEEL POST ASSEMBLY FLASH WITH TOP OF SUBSTRATE.
- 35. EXISTING ROOF HATCH ASSEMBLY TO REMAIN.
- 36. NEW PREFORMED BOOT FLASHING ASSEMBLY SET TOP IN BED OF MASTIC AND SECURE WITH SS DRAWBAND.
- 37. NEW BRONZE CAP ASSEMBLY WITH NEW HARDWARE TO MATCH EXISTING SLEEVE.
- 38. NEW/REUSED LIGHTNING PROTECTION ASSEMBLY COMPONENTS PER SPECIFICATIONS, SECURE BASES WITH APPROPRIATE ADHESIVES.
- 39. NEW ROOF TRAFFIC PAD ADHERED TO MEMBRANE.
- 40.EXISTING METAL WALL PANELS TO REMAIN.
- 41.NEW P.T. 2X10 WOOD BLOCKING FASTENED TO WOOD WITH S.S. NAILS AT 12" AND TO STONE COPINGS WITH 3/16" TAPCON ANCHORS AT 16" O/C.
- 42.NEW KYNAR FINISHED 0.050 ALUMINUM SHELF CAP ASSEMBLY WITH 0.050 CLEAT. FASTEN TO BLOCKING WITH SS NAILER AT 8" O/C. 43.NEW FIELD-WRAPPED MEMBRANE FLASHING ASSEMBLY SET TOP IN
- 43. NEW FIELD-WRAPPED MEMBRANE FLASHING ASSEMBLY SET TOP IN BED OF MASTIC AND SECURE WITH SS DRAWBAND.
- 44.NEW 0.018 SS STORM COLLAR WITH SOLDERED SEAMS AND DRIP LIP. SET ON BUTYL TAPE GASKET AND SECURE WITH SS DRAWBAND AND SEALANT TO SHED WATER.
- 45. SEAL GALVANIZING HOLES WITH NEW SEALANT V.I.F.
- 46.INSTALL NEW 0.018 SS SLIP FLASHING UNDER FLANGE AND FASTEN WITH SS SCREWS THROUGH GASKETED WASHERS AT EXISTING PENETRATIONS, MIN 2 PER SIDE.
- 47. NEW 2'x2'x2" PRECAST CONCRETE PAVERS.
- 48. EXISTING LADDER OR STEPS MODIFY AS REQUIRED AND SECURE TO PAVERS WITH 1/4" TAPCON ANCHORS.
- 49. NEW P.T. WOOD BLOCK AS REQUIRE TO PROVIDE SOLID FILL.
- 50. NEW PVC CLAD GALVANIZED STEEL FLASHINGS WITH HEMMED EDGES.
 SET IN BED OF MASTIC AND SLIPPED UP BEHIND CURB FRAME AND
 FASTENED AT ALL OPENINGS WITH SS SCREW THROUGH GASKETED
 WASHERS AND FASTEN LOWER EDGE AT 4" O/C WITH SS SCREWS.
- SEAL BUTT JOINTS PER MANUFACTURER'S DETAIL. 51. EXISTING MECHANICAL EQUIPMENT TO REMAIN.
- 51. EXISTING MECHANICAL EQUIPMENT TO REMAIN.
 52. NEW 0.018 SS CAP WITH HEMMED DRIP EDGES AND SOLDERED
 SEAMS. SECURE WITH SS SCREWS THROUGH GASKETED WASHERS MIN
- 53. NEW 0.018" S.S. COUNTERFLASHING SLIPPED UP BEHIND EXISTING CLADDING AND FASTENED WITH S.S. SCREWS THROUGH GASKETED WASHERS AT 8" O/C.
- 54. EXISTING EPDM MEMBRANE FLASHING FLANGE TO REMAIN.

REVISIONS:

REVISIONS:
1. DESIGN REVIEW SBM 02/28/2
2. CD REVIEW SBM 04/04/23

3. ISSUED FOR PERMIT 4/28/23

4. ISSUED FOR BIDS 7/21/23

WAHID MANAWI, P.E.

PROFESSIONAL ENGINEER No. GE55852
DATE: 07/21/2023

SKYLIGHT AND ROOF REPAIRS @ ATLANTIC CITY CONVENTION CENTER ONE CONVENTION BLVD. ATLANTIC CITY, NEW JERSEY 08401

SOLUTIONS
2 WHITE HORSE PIKE, SUITE 1D
HADDON HEIGHTS, NJ 08035

ROOF DETAILS

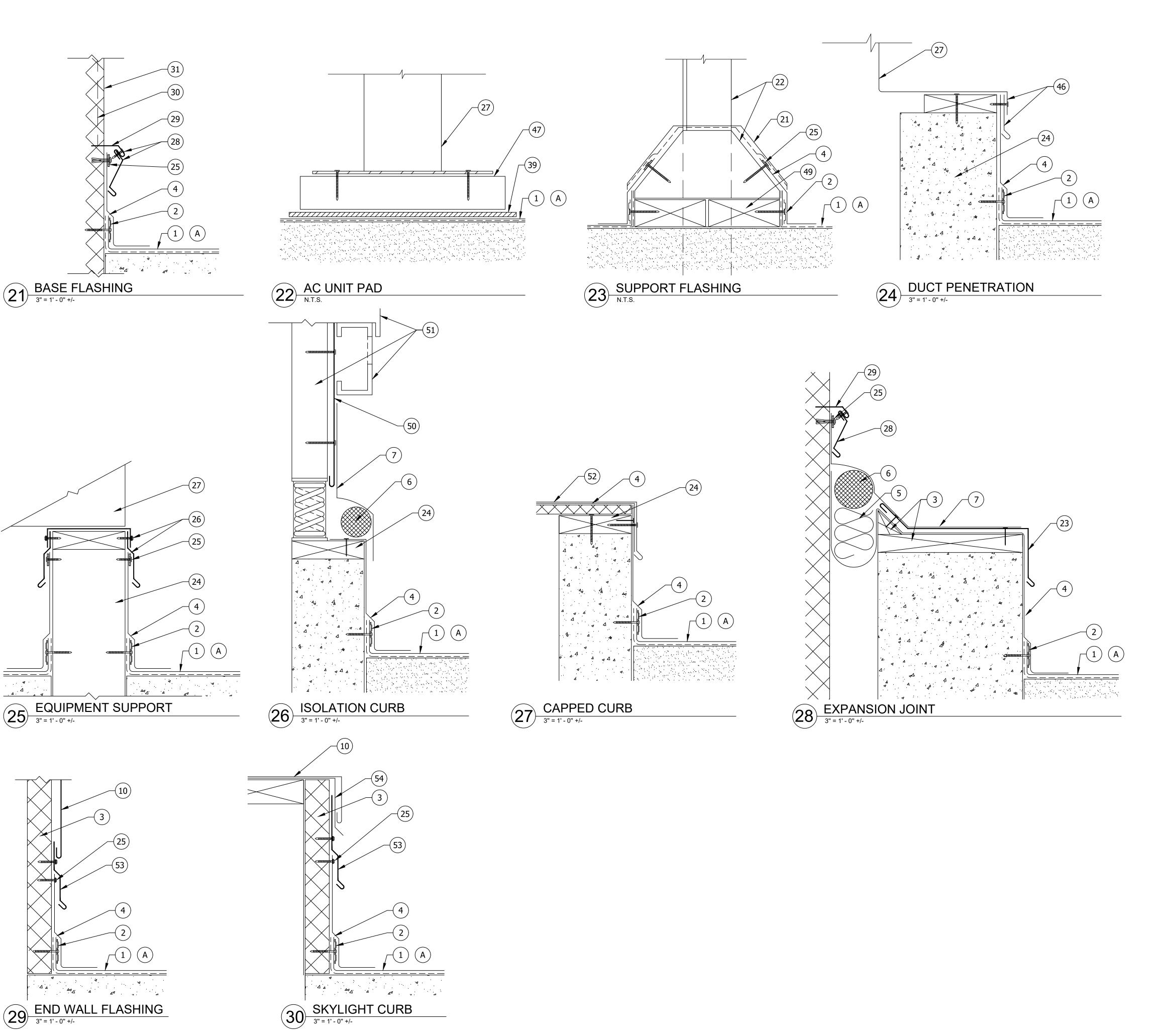
JG/CCG

JECKED BY: GF/WM

CHECKED BY: GF/WM

JOB NO.: NJE.2022.001013

DATE: SCALE: AS NOTED



ROOF DETAIL NOTES:

- A. REFER TO TYPICAL ROOF ASSEMBLY DETAIL FOR ADDITIONAL INFORMATION.
- 1. NEW FLEECEBACK PVC MEMBRANE FULLY ADHERED TO LWIC SUBSTRATE.
- 2. SECURE MEMBRANE TO SUBSTRATE AT 12" O/C.
- 3. EXISTING WOOD SUBSTRATES TO REMAIN VARIES, V.I.F.
- 4. NEW PVC MEMBRANE FLASHINGS FULLY ADHERED TO SUBSTRATE AND HEAT WELDED AT ALL SEAMS AND FLASHINGS.
- 5. PACK FLASHING LOOP WITH FIBERGLASS BATT INSULATION. 6. NEW BACKER ROD SIZED TO MATCH EXISTING JOINT - VARIES, V.I.F.
- 7. NEW PVC MEMBRANE FLASHING ADHERED TO SUBSTRATE (NOT TO
- BACKER ROD) AND HEAT WELD ALL SEAMS. 8. NEW S.S. SCREW WITH GASKETED WASHERS AT ALL EXISTING
- LOCATIONS, MINIMUM 12" O/C. 9. NEW PVC CLAD GALVANIZED STEEL FLASHINGS WITH HEMMED EDGES.
- FASTEN AS INDICATED, SEAL BUTT JOINTS PER MANUFACTURER'S DETAIL.
- 10. EXISTING METAL CLADDING TO REMAIN. 11. FASTEN WITH HOT DIPPED GALVANIZED RING SHANK CAPPED NAILS
- AT 4" O/C. TYPICAL. 12. NEW 3/4" EXPOSURE 1 PLYWOOD FASTENED TO BLOCKING WITH S.S NAILS AND TO MASONRY WITH 3/16" TAPCON ANCHORS AT 6" O/C.
- 13. CUT OFF AND DISCARD EXISTING SHEET METAL COUNTERFLASHINGS FLUSH WITH FACE OF WALL.
- 14. EXISTING COPING STONES TO REMAIN.
- 15. NEW P.T. 2X4 WOOD BLOCKING FASTENED WITH 3/16" TAPCON ANCHORS AT 16" O/C.
- 16. NEW 3/4" EXPOSURE 1 PLYWOOD FASTENED TO BLOCKING WITH S.S NAILS AT 6" O/C.
- 17. NEW PREFABRICATED ANSI/SPRI TESTED AND APPROVED KYNAR FINISHED ALUMINUM COPING ASSEMBLY WITH GALVANIZED ANCHOR
- CHAIRS AT 4' O/C MAX. 18. NEW FULLY ADHERED BAREBACK PVC MEMBRANE FLASHING TARGET PLY WITH ALL SEAMS HOT AIR WELDED. SET ON BOWL IN BED OF CUT-OFF MASTIC AND SECURE WITH CLAMPING RING.
- 19. EXISTING ROOF DRAIN, OVERFLOW DRAINS AND DRAIN PIPING TO REMAIN. DRILL AND TAP ALL STRIPPED RECEIVERS.
- 20. NEW CAST IRON DOME STRAINER OR CAP ASSEMBLY, CLAMPING RING AND HARDWARE TO MATCH EXISTING DRAIN BOWL - VARIES, V.I.F.
- 21. NEW REINFORCED, LIQUID-APPLIED MEMBRANE FLASHING ASSEMBLY
- ADHERED TO CLEANED, PREPPED AND PRIMED SUBSTRATES. 22. EXISTING PENETRATION, CLEAN, PREP AND PRIME ALL SURFACES TO
- RECEIVE NEW FLASHINGS VARIES, V.I.F. 23. NEW PVC CLAD GALVANIZED STEEL COPINGS WITH HEMMED DRIP EDGES. SECURE WITH S.S. NAILS AT 4" O/C ALONG TOP AND LOWER EDGES. SECURE & SEAL BUTT JOINTS PER MANUFACTURE'S DETAIL.
- 24. EXISTING CURB ASSEMBLY TO REMAIN. 25. NEW 1/8" X 1" ALUMINUM TERMINATION BAR ASSEMBLY SET IN BED
- OF MASTIC AND FASTENED AT 6" O/C. 26. NEW 0.018" S.S. COUNTERFLASHING SLIPPED UP BEHIND EXISTING FLANGE AND FASTENED WITH S.S. SCREWS THROUGH GASKETED
- WASHERS AT ALL EXISTING LOCATIONS, MINIMUM 2 PER SIDE 27. EXISTING MECHANICAL EQUIPMENT TEMPORARILY LIFT AS REQUIRED
- TO INSTALL NEW FLASHINGS VARIES, V.I.F. 28. REMOVE AND DISCARD EXISTING COUNTERFLASHING. INSTALL NEW 0.018" S.S. COUNTERFLASHING SLIPPED INTO EXISTING
- THROUGH-WALL FLASHING RECEIVER, WITH 2" LAPS. SECURE COUNTERFLASHING TO RECEIVER WITH S.S. SET SCREWS AT EACH LAP.
- 29. EXISTING THROUGH-WALL FLASHING RECEIVER TO REMAIN. 30. CUT OUT ALL EXISTING MASONRY CONTROL JOINT SEALANT ASSEMBLY FOR FULL HEIGHT OF WALL, INSTALL BACKER ROD OR BOND BREAKER AND NEW TOOLED POLYURETHANE SEALANT. DO NOT BLOCK
- ANY WEEP HOLES. 31. EXISTING MASONRY RISING WALL.
- 32. INSTALL NEW 20 GAUGE GALVANIZED PLATE OVER REMOVED ASSEMBLY. SECURE TO SUBSTRATE WITH PROPER FASTENERS AT EACH CORNER.
- 33. FILL VOID WITH NON-SHRINK GROUT.
- 34. REMOVE CURB ASSEMBLY AND STEEL POST ASSEMBLY FLASH WITH TOP OF SUBSTRATE.
- 35. EXISTING ROOF HATCH ASSEMBLY TO REMAIN. 36. NEW PREFORMED BOOT FLASHING ASSEMBLY SET TOP IN BED OF
- MASTIC AND SECURE WITH SS DRAWBAND. 37. NEW BRONZE CAP ASSEMBLY WITH NEW HARDWARE TO MATCH
- EXISTING SLEEVE. 38. NEW/REUSED LIGHTNING PROTECTION ASSEMBLY COMPONENTS PER
- SPECIFICATIONS, SECURE BASES WITH APPROPRIATE ADHESIVES.
- 39. NEW ROOF TRAFFIC PAD ADHERED TO MEMBRANE.
- 40. EXISTING METAL WALL PANELS TO REMAIN.
- 41. NEW P.T. 2X10 WOOD BLOCKING FASTENED TO WOOD WITH S.S. NAILS AT 12" AND TO STONE COPINGS WITH 3/16" TAPCON ANCHORS AT 16" O/C.
- 42. NEW KYNAR FINISHED 0.050 ALUMINUM SHELF CAP ASSEMBLY WITH 0.050 CLEAT. FASTEN TO BLOCKING WITH SS NAILER AT 8" O/C.
- 43. NEW FIELD-WRAPPED MEMBRANE FLASHING ASSEMBLY SET TOP IN BED OF MASTIC AND SECURE WITH SS DRAWBAND. 44. NEW 0.018 SS STORM COLLAR WITH SOLDERED SEAMS AND DRIP LIP.
- SET ON BUTYL TAPE GASKET AND SECURE WITH SS DRAWBAND AND SEALANT TO SHED WATER. 45. SEAL GALVANIZING HOLES WITH NEW SEALANT - V.I.F.
- 46.INSTALL NEW 0.018 SS SLIP FLASHING UNDER FLANGE AND FASTEN WITH SS SCREWS THROUGH GASKETED WASHERS AT EXISTING
- PENETRATIONS, MIN 2 PER SIDE.
- 47. NEW 2'x2'x2" PRECAST CONCRETE PAVERS. 48. EXISTING LADDER OR STEPS MODIFY AS REQUIRED AND SECURE TO
- PAVERS WITH 1/4" TAPCON ANCHORS. 49. NEW P.T. WOOD BLOCK AS REQUIRE TO PROVIDE SOLID FILL
- 50. NEW PVC CLAD GALVANIZED STEEL FLASHINGS WITH HEMMED EDGES. SET IN BED OF MASTIC AND SLIPPED UP BEHIND CURB FRAME AND FASTENED AT ALL OPENINGS WITH SS SCREW THROUGH GASKETED WASHERS AND FASTEN LOWER EDGE AT 4" O/C WITH SS SCREWS.
- SEAL BUTT JOINTS PER MANUFACTURER'S DETAIL. 51. EXISTING MECHANICAL EQUIPMENT TO REMAIN.
- 52. NEW 0.018 SS CAP WITH HEMMED DRIP EDGES AND SOLDERED SEAMS. SECURE WITH SS SCREWS THROUGH GASKETED WASHERS MIN
- 53. NEW 0.018" S.S. COUNTERFLASHING SLIPPED UP BEHIND EXISTING CLADDING AND FASTENED WITH S.S. SCREWS THROUGH GASKETED WASHERS AT 8" O/C.
- 54. EXISTING EPDM MEMBRANE FLASHING FLANGE TO REMAIN.

. DESIGN REVIEW SBM 02/28/2 . CD REVIEW SBM 04/04/23

. ISSUED FOR PERMIT 4/28/2 I. ISSUED FOR BIDS 7/21/23

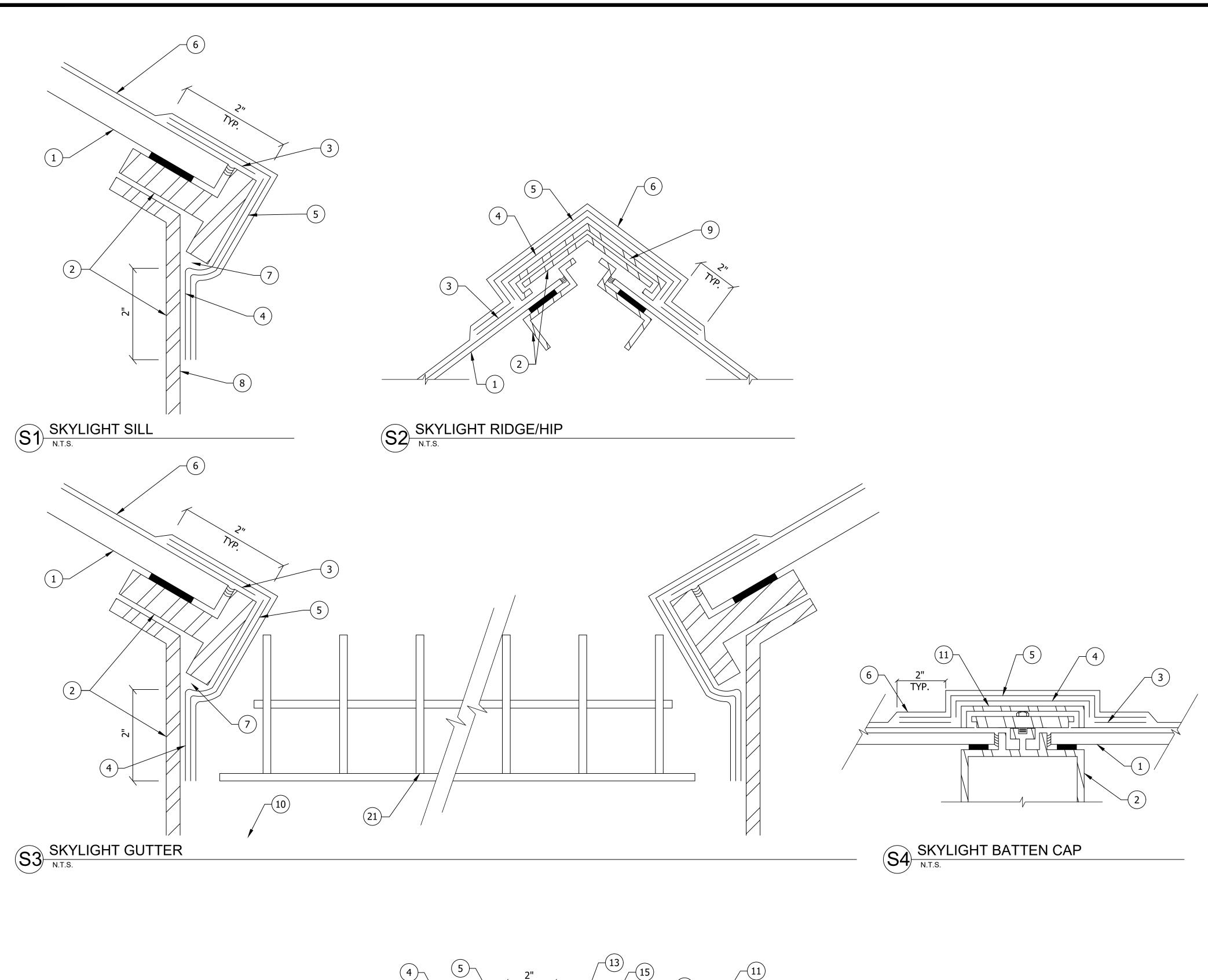
> WAHID MANAWI, P.E. PROFESSIONAL ENGINEER No. GE55852 DATE: 07/21/2023

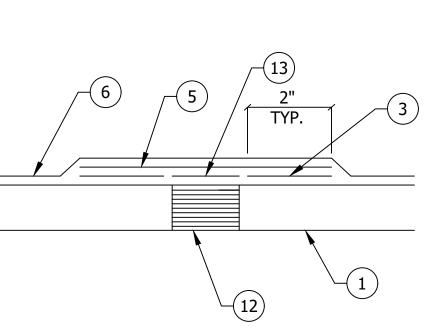
CONVENT SKYLIGHT LANTIC CI

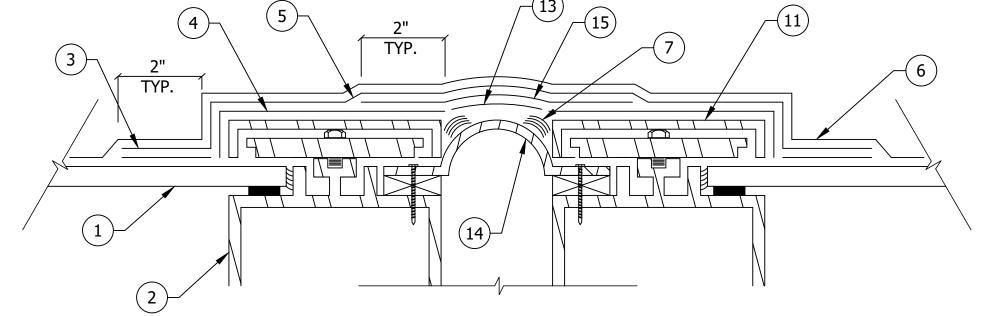


ROOF DETAILS JG/CCG

GF/WM NJE.2022.001013 SCALE: AS 07/21/2023 NOTED







S5 BUTT JOINT TREATMENT

SKYLIGHT EXPANSION JOINT N.T.S.

SKYLIGHT REPAIR DETAIL NOTES:

- EXISTING SKYLIGHT GLAZING TO REMAIN. CLEAN AND PREP ALL SURFACES.
- 2. EXISTING METAL SKYLIGHT SUPPORTS AND CLADDING TO REMAIN.
 CLEAN AND PREP ALL SURFACES TO RECEIVE THE COATING SYSTEM.

 2. PRETREAT WITH SIKALASTIC CLEARGE AZE.
- 2" PRETREAT WITH SIKALASTIC CLEARGLAZE.
 SIKA PRIMER ON ALL NON-GLASS SURFACES.
- 5. SIKALASTIC MEMBRANE ASSEMBLY WITH EMBEDDED REINFORCING FABRIC.
- 6. SIKALASTIC CLEARGLAZE ASSEMBLY OVER ALL CLEANED AND PREPPED
- SURFACES.
 7. SIKAFLEX SEALANT DETAILS.
- 8. STRIP IN ALL CLADDING LAPS AND SEAMS WITH 6" MINIMUM SIKALASTIC MEMBRANE ASSEMBLY WITH EMBEDDED REINFORCING FABRIC. CLEAN AND PREP ALL SURFACE TO RECEIVE MEMBRANE ASSEMBLY.
- 9. EXISTING METAL FLASHING CAPS TO BE CLEANED AND PREPPED PRIOR TO THE APPLICATION OF THE COATING SYSTEM.
- 10. EXISTING GUTTER ASSEMBLY PREVIOUSLY COATED WITH PMMA COATING PROTECT ALL SURFACES AND REPAIR DAMAGE AS
- 11. EXISTING BATTEN CAPS TO BE CLEANED AND PREPPED PRIOR TO THE APPLICATION OF THE COATING SYSTEM.
- 12. EXISTING STRUCTURAL SILICONE SEALANT JOINTS TO REMAIN. CLEAN AND PREP ALL SURFACES TO RECEIVE THE COATING SYSTEM.
- 13. NEW BOND BREAKER TAPE.
- 14. EXISTING EXPANSION JOINT BELLOWS ASSEMBLY TO REMAIN. CLEAN AND PREP ALL SURFACES TO RECEIVE THE COATING SYSTEM.
- 15. SIKA-FLEXITAPE HEAVY FLASHING EMBEDDED IN SIKALASTIC RESIN.
 16. EXISTING VERTICAL SKYLIGHT ASSEMBLY OVER ROOFS IN SCOPE OF WORK TO BE CLEANED, PREPPED AND TREATED WITH THE NEW SKYLIGHT COATING ASSEMBLY DOWN TO AND INCLUDING THE ENTIRE METAL SILL CONDITION AT THE BASE OF THE VERTICAL SKYLIGHT WALL. ALL DETAILS ON VERTICAL CONDITION TO BE SIMILAR TO THE
- SLOPED SKYLIGHT COATING SYSTEM.

 17. NEW QUARTERED BACKER ROD SIZED TO MATCH CONDITIONS V.I.F.

 18. EXISTING METAL PANEL CLADDING SYSTEM TO REMAIN. CLEAN AND
- PREP ALL SURFACES TO RECEIVE THE NEW COATING SYSTEM.

 19. EXISTING SEALANT JOINTS TO REMAIN. CLEAN AND PREP ALL
 - SURFACES TO RECEIVE THE NEW COATING SYSTEM.
 - 20. EXISTING SHEET METAL COUNTERFLASHING INSERT TO BE TEMPORARILY REMOVED TO EXPOSE METAL FLASHINGS TO RECEIVE THE NEW SKYLIGHT COATING SYSTEM AND THEN REINSTALLED INTO RECEIVER. SECURE WITH S.S. SET SCREWS AT EACH LAP.
 - 21. EXISTING GRATING PLATFORM TO BE TEMPORARILY REMOVED AS REQUIRED TO INSTALL NEW COATING SYSTEM AND REINSTALLED TO ORIGINAL CONDITION.

WAHID MANAWI, P.E.

NJ PROFESSIONAL ENGINEER No. GE55852

DATE: 07/21/2023

2. CD REVIEW SBM 04/04/23

I. ISSUED FOR BIDS 7/21/23

SKYLIGHT AND ROOF REPAIRS @ ATLANTIC CITY CONVENTION CENTER ONE CONVENTION BLVD. ATLANTIC CITY, NEW JERSEY 08401

AMTECH SOLUTIONS
2 WHITE HORSE PIKE, SUITE 1D
HADDON HEIGHTS, NJ 08035

SKYLIGHT REPAIR
DETAILS

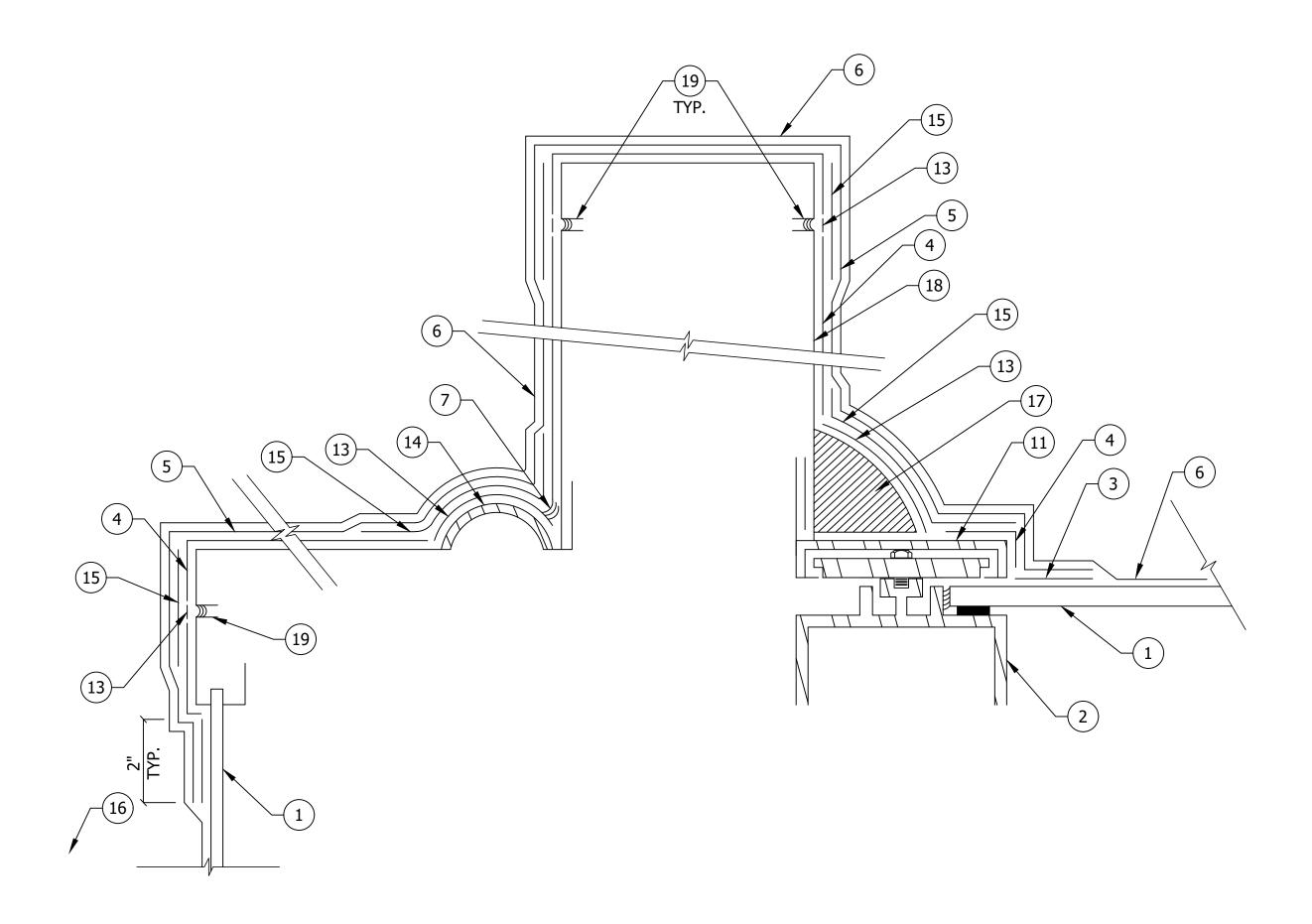
DRAWN BY: JG/CCG

CHECKED BY: GF/WM

JOB NO.: NJE.2022.001013

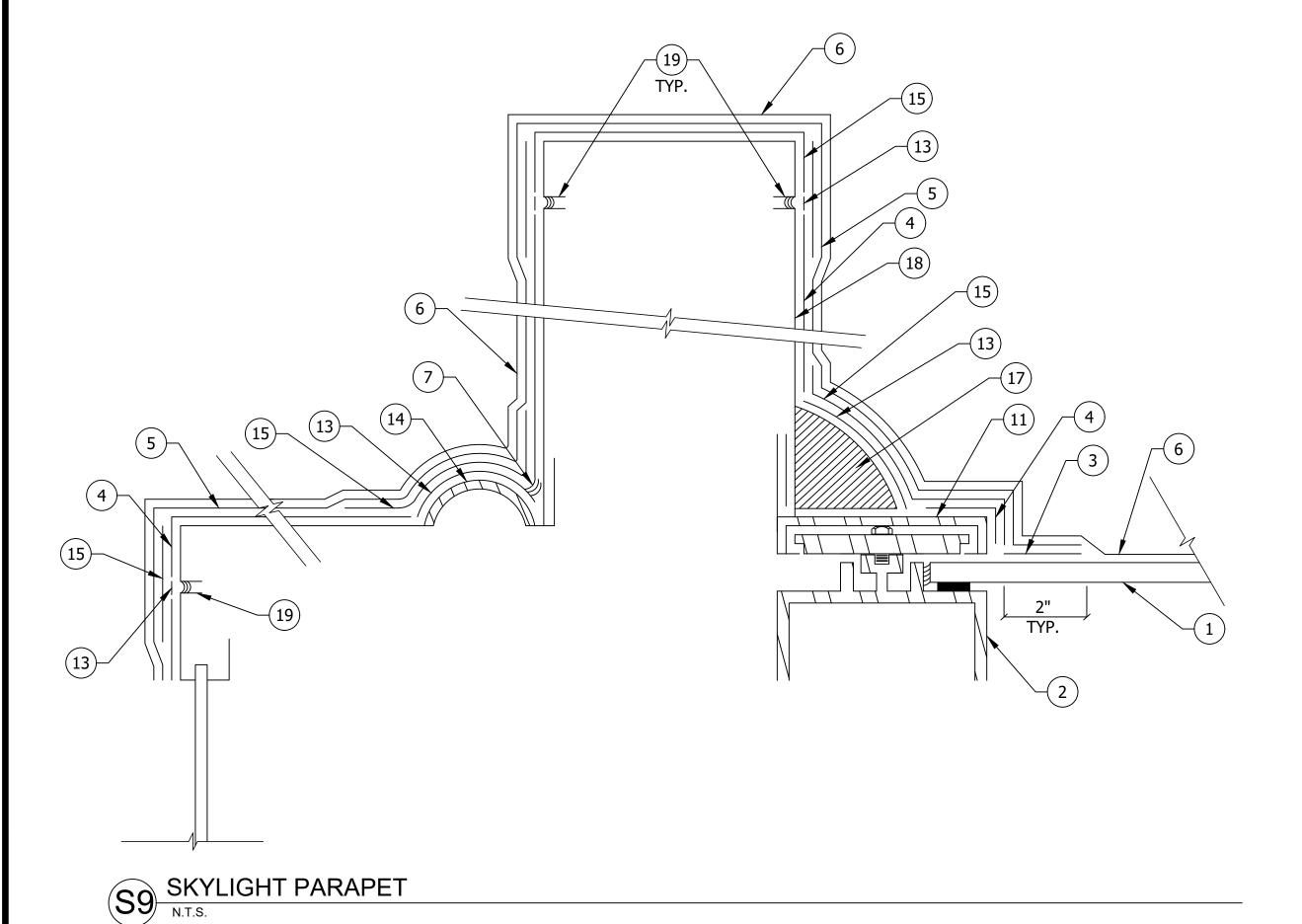
DATE: SCALE: AS
07/21/2023 NOTED

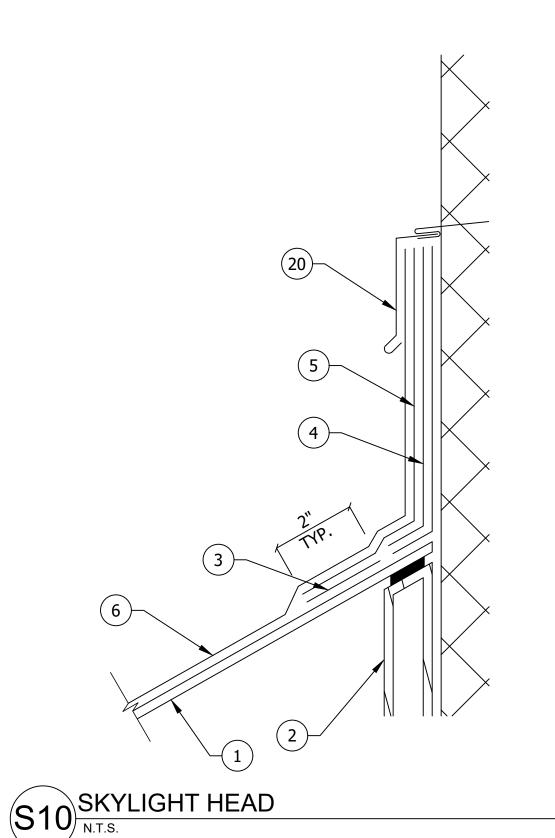




SKYLIGHT PARAPET

N.T.S.





SKYLIGHT REPAIR DETAIL NOTES:

1. EXISTING SKYLIGHT GLAZING TO REMAIN. CLEAN AND PREP ALL

SURFACES.

2. EXISTING METAL SKYLIGHT SUPPORTS AND CLADDING TO REMAIN. CLEAN AND PREP ALL SURFACES TO RECEIVE THE COATING SYSTEM.

3. 2" PRETREAT WITH SIKALASTIC CLEARGLAZE.

4. SIKA PRIMER ON ALL NON-GLASS SURFACES.

5. SIKALASTIC MEMBRANE ASSEMBLY WITH EMBEDDED REINFORCING

6. SIKALASTIC CLEARGLAZE ASSEMBLY OVER ALL CLEANED AND PREPPED

SURFACES.
7. SIKAFLEX SEALANT DETAILS.

8. STRIP IN ALL CLADDING LAPS AND SEAMS WITH 6" MINIMUM SIKALASTIC MEMBRANE ASSEMBLY WITH EMBEDDED REINFORCING FABRIC. CLEAN AND PREP ALL SURFACE TO RECEIVE MEMBRANE

9. EXISTING METAL FLASHING CAPS TO BE CLEANED AND PREPPED PRIOR TO THE APPLICATION OF THE COATING SYSTEM.

10. EXISTING GUTTER ASSEMBLY PREVIOUSLY COATED WITH PMMA

COATING - PROTECT ALL SURFACES AND REPAIR DAMAGE AS REQUIRED.

11. EXISTING BATTEN CAPS TO BE CLEANED AND PREPPED PRIOR TO THE

APPLICATION OF THE COATING SYSTEM.

12. EXISTING STRUCTURAL SILICONE SEALANT JOINTS TO REMAIN. CLEAN AND PREP ALL SURFACES TO RECEIVE THE COATING SYSTEM.

13. NEW BOND BREAKER TAPE.

14. EXISTING EXPANSION JOINT BELLOWS ASSEMBLY TO REMAIN. CLEAN
AND PREP ALL SURFACES TO RECEIVE THE COATING SYSTEM.

15. SIKA-FLEXITAPE HEAVY FLASHING EMBEDDED IN SIKALASTIC RESIN.
16. EXISTING VERTICAL SKYLIGHT ASSEMBLY OVER ROOFS IN SCOPE OF WORK TO BE CLEANED, PREPPED AND TREATED WITH THE NEW SKYLIGHT COATING ASSEMBLY DOWN TO AND INCLUDING THE ENTIRE METAL SILL CONDITION AT THE BASE OF THE VERTICAL SKYLIGHT WALL. ALL DETAILS ON VERTICAL CONDITION TO BE SIMILAR TO THE SLOPED SKYLIGHT COATING SYSTEM.

17. NEW QUARTERED BACKER ROD SIZED TO MATCH CONDITIONS - V.I.F. 18. EXISTING METAL PANEL CLADDING SYSTEM TO REMAIN. CLEAN AND

PREP ALL SURFACES TO RECEIVE THE NEW COATING SYSTEM.

19. EXISTING SEALANT JOINTS TO REMAIN. CLEAN AND PREP ALL SURFACES TO RECEIVE THE NEW COATING SYSTEM.

20. EXISTING SHEET METAL COUNTERFLASHING INSERT TO BE TEMPORARILY REMOVED TO EXPOSE METAL FLASHINGS TO RECEIVE THE NEW SKYLIGHT COATING SYSTEM AND THEN REINSTALLED INTO RECEIVER. SECURE WITH S.S. SET SCREWS AT EACH LAP.

21. EXISTING GRATING PLATFORM TO BE TEMPORARILY REMOVED AS REQUIRED TO INSTALL NEW COATING SYSTEM AND REINSTALLED TO ORIGINAL CONDITION.

2. CD REVIEW SBM 04/04/23

3. ISSUED FOR PERMIT 4/28/23

1. ISSUED FOR BIDS 7/21/23

WAHID MANAWI, P.E.

U) PROFESSIONAL ENGINEER No. GE55852
DATE: 07/21/2023

SKYLIGHT AND ROOF REPAIRS @ ATLANTIC CITY CONVENTION CENTER ONE CONVENTION BLVD. ATLANTIC CITY, NEW JERSEY 08401

AMTECH SOLUTIONS 2 WHITE HORSE PIKE, SUITE 1D HADDON HEIGHTS, NJ 08035

SKYLIGHT REPAIR DETAILS

DRAWN BY: JG/CCG

CHECKED BY: GF/WM

JOB NO.: NJE.2022.001013

DATE: SCALE: AS

07/21/2023

A-12

NOTED







TO: Bid Responders

FROM: Clark Hughes

DATE: July 28, 2023

SUBJECT: JIM WHELAN BOARDWALK HALL - GENERAL INFORMATION

Bidders should be aware that all submitted <u>sealed</u> bids are carefully reviewed for compliance, and non-compliant bids are rejected. Please carefully review your bid submissions for compliance. The following information is required but not limited to.

Documents that must be submitted at the time of the bid.

- 1. Section: 1.0, 1.13 **Must provide documentation.** Bidder to provide documentation evidencing that the firm meets the minimum requirements. (Sect 1.13).
 - The bidder must participate in an apprenticeship program, registered and approved by the United States Department of Labor, for each separate trade or classification for which it employs craft employees. All bidders and subcontractors must continue to participate in such apprenticeship programs for the duration of the project. In addition, the bidder will be required to show that such apprenticeship programs graduated apprentices to journeyperson status for three of the past five years.
- 2. Bidder and subcontractors must provide copies of the Business Registration Certificate, New Jersey Department of Labor & Workforce Development Certificate, and Public Works Contractor Registration Certificate.
- 3. Bidder's Insurance certificate showing evidence of coverage limits, and declaration pages for current policies.

The following Exhibits provided in the bid package must be completed and executed and provided with the bid.

Attachment 1 Signatory Page

Attachment 2 Professional Services Agreement

Contract must be signed with the submitted bid.

Attachment 3 Disclosure of Investigation and Actions Involving Respondent

Attachment 4 Notice of Intent to Subcontract
Attachment 5 Subcontractor Utilization Form

Attachment 6 N.J.S.A. 52:34-13.2 Certification Source Disclosure Certification Form

Attachment 7 Goods, Professional Services and General Services Contracts.

Attachment 8 Public Law 2005, Chapter 51 and Executive Order 117 (2008)

Part 3: Certification – One of the four options must be marked (i, ii, (C) (D)) off.

Attachment 9 Non-Collusion Affidavit Form

Attachment 10 Fee Schedule

Attachment 11 Disclosure of Investigation Activities in Iran

NOTE: Contract modification requests shall be presented during the Question and Answer period.