

**CHAMPAIGN COUNTY BOARD  
FACILITIES COMMITTEE AGENDA  
County of Champaign, Urbana, Illinois**

Tuesday, September 7, 2021 at 6:30  
Shields-Carter Meeting Room  
Brookens Administrative Center  
1776 E. Washington St., Urbana, IL 61802

**Committee Members:**

Steve Summers – Chair      Emily Rodriguez  
Stan Harper – Vice Chair    Leah Taylor  
Jim Goss                              Jodi Wolken  
Jenny Lokshin

**Agenda**

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- I. Call to Order and Roll Call
- II. Approval of Agenda/Addenda
- III. Approval of Minutes – August 11, 2021 **1-3**
- IV. Public Participation
- V. Communications
- VI. New Business
  - A. Update on ILEAS Asphalt Shingle Replacement
  - B. Update on Courthouse Asphalt Shingle Replacement
  - C. Update on ITB#2021-007 Brookens POD's #300 & 400 EPDM Rubber Roof Membrane Replacement and Salt Dome Asphalt Shingle Replacement
  - D. Discussion and Approval of Salt Dome Asphalt Shingle Replacement Project Bid ITB#2021-010 (Attached) **4-89**
  - E. Update on ITB#2021-003 Satellite Jail HVAC Replacement
  - F. Update on ITB#2021-004 Hail Damaged HVAC Replacement
- VII. Other Business
- VIII. Presiding Officer's Report
  - A. Future Meeting – **Tuesday, October 5, 2021 @ 6:30pm**

IX. Designation of Items to be Placed on the Consent

Agenda

X. Adjournment

All meetings are at Brookens Administrative Center – 1776 E Washington Street in Urbana – unless otherwise noted. To enter Brookens after 4:30 p.m., enter at the north (rear) entrance located off Lierman Avenue.

Champaign County will generally, upon request, provide appropriate aids and services leading to effective communication for qualified persons with disabilities. Please contact Administrative Services, 217-384-3776, as soon as possible but no later than 48 hours before the scheduled meeting.

**CHAMPAIGN COUNTY BOARD  
FACILITIES COMMITTEE  
County of Champaign, Urbana, Illinois**

**MINUTES – Pending Approval**

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**DATE:** Wednesday August 11, 2021  
**TIME:** 6:30 p.m.  
**PLACE:** Lyle Shields Meeting Room  
Brookens Administrative Center, 1776 E. Washington St., Urbana IL 61802

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**Committee Members**

**Present:** Steve Summers, Jodi Wolken, Jenny Lokshin, Stan Harper.

**Absent:** Emily Rodriguez, Jordan Humphrey, Leah Taylor, Jim Goss.

**County Staff:** Dana Brenner (Facilities Director), Dan Busey (Recording Clerk)

**Others Present:** Sheriff Dustin Heurman, Captain Karee Voges, County Executive Darlene Kloepfel,  
Board Member Aaron Esry, Board Member Jim McGuire.

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**Agenda**

- I. Call to Order and Roll Call**  
Committee Chair Summers called the meeting to order at 6:30 P.M.
- II. Approval of Agenda/Addenda**  
**Moved** by Ms. Wolken to approve the agenda; seconded by Ms. Lokshin Upon Roll Call Vote, the **Motion Carried Unanimously.**
- III. Approval of Minutes – June 8, 2021**  
**Moved** by Ms. Lokshin to approve the minutes from June 8, 2021; seconded by Ms. Wolken. Mr. Harper pointed out a typo under section III of the June 8<sup>th</sup> minutes to be amended. Upon Roll Call Vote, the **Motion Carried Unanimously.**
- IV. Public Participation**  
**None.**
- V. Communications**  
**None.**
- VI. New Business**
  - A. Discussion of the Sheriff’s Office/Downtown Jail and Satellite Jail. Chair Summers asked Mr. Brenner to give an update on estimated costs of the possible project. Mr. Brenner contacted Reifsteck Reid Architectural Firm, who had done previous studies, for updated pricing. Prices have escalated 20 to 25 percent. Reifsteck Reid is going to provide updated pricing and will provide the baseline information to move things

forward. Mr. Summers said he was gratified that the County Board chose to form a special committee for the Sheriff's Office/Downtown Jail and Satellite Jail Project. Mr. Summers then asked Committee Members to weight in with their thoughts on the project. Ms. Lokshin spoke of her interest in making sure the facility is safe for the officers who work there and humane for the inmates who are housed there. Ms. Lokshin also stated that her main concern was to move forward with closing the Downtown Jail as soon as possible. Mr. Harper spoke to the fact that this is a crisis issue, and that action needs to be taken. He then asked Sheriff Heurman about the possibility of using the Brookens Gymnasium as space for the Sheriff's Office in lieu of a new office space to allow more funds to go towards construction of the jail facility. Sheriff Heurman thanked Mr. Harper and Committee Members for their votes regarding the special committee. The sheriff then went on to say that the office space is a priority, but not as much of a priority as consolidation. The Sheriff said that himself and Mr. Brenner had been going over viable options, including renting space, for the Sheriff's Office while the consolidation project would be ongoing. Mr. Harper continued that while he would hate to waste money on rent it may be the only option. Sheriff Heurman noted that he and the Facilities Director had been working with Reifsteck Reid to come up with several options to bring before the committee. Ms. Wolken shared her thoughts that the past price made it hard to get public support. She went onto say that even if the bare minimum was done it would be beneficial to close the Downtown Jail. County Board Member Esry spoke about the fact that the Tax Referenda failed due to it being last minute, that the board was not working to get the message out to the public, and that boarding inmates out of county is not a popular opinion of the public. Mr. Esry stated in these circumstances he is not against boarding inmates out of the county however it is not a long-term solution. Sheriff Heurman agreed with Mr. Esry on boarding inmates out of the county. The Sheriff went on to say that he believes there are two options at this point; one being continuing to house out of county long term, two being housing out of county during consolidation then getting inmates in the same building. County Board Member McGuire noted past plans and spoke about how to gradually move inmates out of the Downtown Jail. Mr. McGuire brought up the current climate of gun violence in Champaign County and that the public may see more of a need for this project. Mr. McGuire said that there is a need for a more secure jail for inmates and officers alike as well as resources within the jail. Violence, mental health, and COVID have created a bigger problem for the jail and ARPA Funds could help alleviate many of these issues. Mr. McGuire went on to say that the Circuit Clerk and the Courts technology also need an upgrade. Mr. Summers informed the committee that he will be reaching out to absent members to get their input. Mr. Summers spoke about his frustration regarding planning and messaging to the public about the original proposal. Mr. Summers urged members to choose their words carefully when speaking about the project. Mr. Summers also stressed that medical facilities and classroom spaces may help get public support and should not be overlooked as they are necessary components for the facility.

- B. Discussion of FY2022 Lease Revenue. Mr. Brenner gave updates on the counties lease revenue. The county is forecasting \$894,386.21 in lease revenue for Fiscal Year 2022. Mr. Brenner wen onto discuss reasons for increases and the status of upcoming contracts. The county deals with 10 leases on annual basis. Mr. Brenner and County Executive Kloeppe spoke about different options for the land currently occupied by Humane Society, as they are relocating. This included the possibility of relocating Animal Control to the Facility. Discussion followed about discrepancies in costs between entities leasing and the reasons for this.

**VII. Other Business**

Mr. Brenner spoke about the bidding process for ITB#2021-007 roof replacement for Brookens Pod 300 and 400 as well as the Salt Dome and Slat Brine roofs. The bids came back higher then expected. The adjuster is going to return with an engineer to walk the roofs with Cincinnati Insurance and Bailey Edward Architecture. In hopes to readjust the numbers, if the outcome is not positive Mr. Brenner said we may need to wait until the winter and re bid the project. A conversation ensued about the current inflated costs of building materials.

**VIII. Presiding Officer’s Report**

- A. Future Meeting – **Tuesday, September 7, 2021 @ 6:30pm**

**IX. Designation of Items to be Placed on the Consent Agenda**  
**None.**

**X. Adjournment**

The Meeting adjourned at 7:07 P.M.

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# **PROJECT MANUAL**

## **County Highway Salt Dome Roof Replacement Project**

FOR

CHAMPAIGN COUNTY, ILLINOIS  
101 E. Main Street  
URBANA, ILLINOIS 61801

### **ISSUED FOR BID**

Architect's Project # 20156

ITB # 2021-010

September 2, 2021

**Bailey Edward Design, Inc.**  
1103 S. Mattis Avenue  
Champaign, Illinois 61821  
217.363.3375

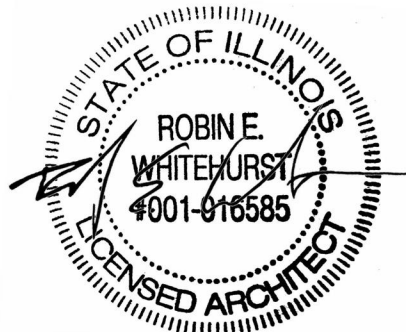


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SPECIFIER(S): Architectural: Todd Higginbotham, Bailey Edward Design, Inc.  
217.363.3375 Email: [thigginbotham@baileyedward.com](mailto:thigginbotham@baileyedward.com)

DIVISION 0 – BIDDING AND CONTRACT REQUIREMENTS  
Section 00 11 16 – Invitation to Bid

**INVITATION TO BID:**

1. SALT DOME ROOF REPLACEMENT  
327 ART BARTELL RD, URBANA, IL 61802

Sealed bids for the County Highway Salt Dome Roof Replacement Project will be received by the Champaign County at the Brookens Administrative Center, 1776 East Washington Street, Urbana, IL 61802. Bids will be opened publicly.

Work generally includes but is not limited to the following:  
Salt Dome

- Remove existing asphalt shingle system and underlayment completely down to roof deck.
- Remove existing EPDM single ply roofing at shed roof.
- Remove existing flashing where indicated on Drawings.
- Install roof underlayment and asphalt shingle system.
- Install 60 MIL EPDM single ply membrane at shed roof.
- Install metal flashings.
- Replacement of wood fascia.

Proposals must be submitted on the forms provided and shall contain no qualifications or interlineations. In submitting a bid, it is agreed that the bid may not be withdrawn for a period of thirty (30) days after Bid Date.

The Owner reserves the right to require from any bidder, prior to contract award, a detailed statement regarding the business and technical organization of the bidder that is available for the contemplated work, and a list of his proposed subcontractors. Information pertaining to financial resources may also be required.

A Bid Security in the form of a cashier's check, certified check, or acceptable bidder's surety bond, made payable to the Owner, in an amount that is not less than ten percent (10%) of the Bid proposal submitted, including all Alternates, shall accompany each Bid as a guarantee that: (1) the Bidder will not modify, withdraw or cancel the proposal for thirty (30) days after the bid date; and (2) the bidder, if awarded the contract, will promptly enter into a contract and execute such bonds and furnish such insurance certificates as may be required. Should the Bidder fail to honor these two (2) guarantees for any reason, the Owner shall total the damages and shall deduct the amount of such damages from the Bidder's Bid Security. Should the damages total less than the amount of the Bid Security, the difference shall be returned to the Bidder. However, all damages in excess of the Bid Security shall be borne by the Owner. Damages may include, but shall not be limited to, reasonable compensation for the Owner's additional time spent, additional Architect's fees, costs to the Owner for delays in completion of the Work based upon the Bidders proposed Contract Time and the Contract Time as Awarded including, but not limited to, interest expense and lost revenue, the difference between the Bidder's proposed Contract Sum and the Contract Sum as awarded and costs to re bid the Project should such action become necessary. Such bid securities will be returned to the unsuccessful bidders after execution of the Contract.

Sealed bids for the proposed work will be received up to the hour of 2:00 P.M. Central Daylight Time on Friday, **September x**, 2021 at the Shields-Carter Meeting Room, Brookens Administrative Center, 1776 East Washington Street, Urbana, IL 61802.

A pre-bid conference will be held in the Shields-Carter Meeting Room, Brookens Administrative Center, 1776 East Washington Street, Urbana, IL 61802, on Thursday, **September x**, 2021 at 2:00pm CDT.



A complete set of documents will be available from Eastern Engineering Supply, 404 E. University Ave., Champaign, IL. 61820, <https://easternengineering.com/champaign-il/>, 217.359.3261.

Refundable Plan Deposit: \$75 for each set of bid documents. Two (2) sets maximum, Additional sets may be purchased without refund. For Electronic sets, contact Bailey Edward at 217.363.3375 or [lcollett@baileyedward.com](mailto:lcollett@baileyedward.com)

Plan deposits will be refunded in full upon the return of the Bid Documents, in good condition, within ten (10) days after the bid opening. The deposits of General Contractors, who do not submit a bonafide bid or do not return the Bid Documents within ten (10) days after the bid opening, will not be refunded.

Contractor and Subcontractors shall include in bids, the cost for the current prevailing wage (Illinois Prevailing Wage Act - 820 ILCS 130/0.01 et seq.). The Contractor shall ensure that any Subcontractors shall comply with the Illinois Prevailing Wage Act.

The Owner reserves the right to reject any or all bids, to waive any irregularities in the bidding, or to accept the bids that in their judgment will be for their best interest.

Once awarded the contract, the Contractor will furnish a satisfactory performance bond, execute the contract and proceed with the work. The Contractor shall indicate the amount of the performance bond on the bid form.

END OF SECTION 00 11 16

DIVISION 0 – BIDDING AND CONTRACT REQUIREMENTS

PART 1 - Section 00 21 13 – Instructions to Bidders

1.1 INSTRUCTIONS TO BIDDERS

- A. AIA Document A701, "Instructions to Bidders," is hereby incorporated into the Procurement and Contracting Requirements by reference.
  - 1. A copy of AIA Document A701-2018, "Instructions to Bidders," is bound in this Project Manual.
  
- B. AIA Document A201 "General Conditions" is hereby incorporated into the Procurement.
  - 1. A copy of AIA Document A201-2017 "General Conditions" is bound in this project manual.

END OF DOCUMENT 00 21 13

DIVISION 0 – BIDDING AND CONTRACT REQUIREMENTS  
Section 00 22 13 – Supplementary Instructions to Bidders

1.1 INSTRUCTIONS TO BIDDERS

- A. Instructions to Bidders for Project consist of the following:
1. AIA Document A701 - 2018, "Instructions to Bidders" a copy of which is bound in this Project Manual.
  2. The following Supplementary Instructions to Bidders that modify and add to the requirements of the Instructions to Bidders.

1.2 SUPPLEMENTARY INSTRUCTIONS TO BIDDERS, GENERAL

- A. The following supplements modify AIA Document A701, "Instructions to Bidders." Where a portion of the Instructions to Bidders is modified or deleted by these Supplementary Instructions to Bidders, unaltered portions of the Instructions to Bidders shall remain in effect.

1.3 ARTICLE 2 - BIDDER'S REPRESENTATIONS

- A. Add Section 2.1.7:
1. 2.1.7 - The Bidder has investigated all required fees, permits, and regulatory requirements of authorities having jurisdiction and has properly included in the submitted bid the cost of such fees, permits, and requirements not otherwise indicated as provided by Owner.
- B. Add Section 2.1.8:
1. 2.1.8 - The Bidder is a properly licensed Contractor according to the laws and regulations of the local and state jurisdictions and meets qualifications indicated in the Procurement and Contracting Documents.
- C. Add Section 2.1.9:
1. 2.1.9 - The Bidder has incorporated into the Bid adequate sums for work performed by installers whose qualifications meet those indicated in the Procurement and Contracting Documents.

1.4 ARTICLE 3 - BIDDING DOCUMENTS

- A. 3.4 - Addenda:
1. Delete Section 3.4.3 and replace with the following:
    - a. 3.4.3 - Addenda may be issued at any time prior to the receipt of bids.

2. Add Section 3.4.4.1:
  - a. 3.4.4.1 - Owner may elect to waive the requirement for acknowledging receipt of 3.4.4 Addenda as follows:
    - 1) 3.4.4.1.1 - Information received as part of the Bid indicates that the Bid, as submitted, reflects modifications to the Procurement and Contracting Documents included in an unacknowledged Addendum.
    - 2) 3.4.4.1.2 - Modifications to the Procurement and Contracting Documents in an unacknowledged Addendum do not, in the opinion of Owner, affect the Contract Sum or Contract Time.

1.5 ARTICLE 4 - BIDDING PROCEDURES

- A. 4.1 - Preparation of Bids:
  1. Add Section 4.1.9:
    - a. 4.1.9 - Owner may elect to disqualify a bid due to failure to submit a bid in the form requested, failure to bid requested alternates or unit prices, failure to complete entries in all blanks in the Bid Form, or inclusion by the Bidder of any alternates, conditions, limitations or provisions not called for.
- B. 4.2 - Bid Security:
  1. Delete section 4.2.1 and replace with the following:
    - a. Each Bid shall be accompanied by a bid security in the form and amount required in the bid documents and noted in 00 41 06.
- C. 4.3 - Submission of Bids:
  1. Delete section 4.3.1 and replace with the following:
    - a. A Bidder shall submit paper copies its Bid, the bid security, and all other documents required by the bid documents.
  2. Add Section 4.3.2.1:
    - a. 4.3.2.1 - Include Bidder's Contractor License Number applicable in Project jurisdiction on the face of the sealed bid envelope.
- D. 4.4 - Modification or Withdrawal of Bid:
  1. Add the following sections to 4.4.1:
    - a. 4.4.1.1 - Such modifications to or withdrawal of a bid may only be made by persons authorized to act on behalf of the Bidder. Authorized persons are those so identified in the Bidder's corporate bylaws, specifically empowered by the Bidder's charter or similar legally binding document acceptable to Owner, or by a power of attorney, signed and dated, describing the scope and limitations of the

power of attorney. Make such documentation available to Owner at the time of seeking modifications or withdrawal of the Bid.

- b. 4.4.1.2 - Owner will consider modifications to a bid written on the sealed bid envelope by authorized persons when such modifications comply with the following: the modification is indicated by a percent or stated amount to be added to or deducted from the Bid; the amount of the Bid itself is not made known by the modification; a signature of the authorized person, along with the time and date of the modification, accompanies the modification. Completion of an unsealed bid form, awaiting final figures from the Bidder, does not require power of attorney due to the evidenced authorization of the Bidder implied by the circumstance of the completion and delivery of the Bid.

1.6 ARTICLE 5 - CONSIDERATION OF BIDS

A. 5.2 - Rejection of Bids:

1. Add Section 5.2.1:

- a. 5.2.1 - Owner reserves the right to reject a bid based on Owner's and Engineer's evaluation of qualification information submitted following opening of bids. Owner's evaluation of the Bidder's qualifications will include: status of licensure and record of compliance with licensing requirements, record of quality of completed work, record of Project completion and ability to complete, record of financial management including financial resources available to complete Project and record of timely payment of obligations, record of Project site management including compliance with requirements of authorities having jurisdiction, record of and number of current claims and disputes and the status of their resolution, and qualifications of the Bidder's proposed Project staff and proposed subcontractors.

1.7 ARTICLE 6 – POST-BID INFORMATION

A. 6.1 - Contractor's Qualification Statement:

1. Add Section 6.1.1:

- a. 6.1.1 - Submit Contractor's Qualification Statement no later than five days after the bid submittal.

1.8 ARTICLE 7 - PERFORMANCE BOND AND PAYMENT BOND

A. 7.1 - Bond Requirements:

1. Add Section 7.1.1.1:

- a. 7.1.1.1 – A Performance Bond will be required, in an amount equal to 100 percent of the Contract Sum.
    - B. 7.2 - Time of Delivery and Form of Bonds:
      1. Delete the first sentence of Section 7.2.1 and insert the following:
        - a. The Bidder shall deliver the required bonds to Owner no later than 10 days after the date of Notice of Intent to Award and no later than the date of execution of the Contract, whichever occurs first. Owner may deem the failure of the Bidder to deliver required bonds within the period of time allowed a default.
      2. Delete Section 7.2.3 and insert the following:
        - a. 7.2.3 - Bonds shall be executed and be in force on the date of the execution of the Contract.
- 1.9 ARTICLE 8 – ENUMERATION OF THE PROPOSED CONTRACT DOCUMENTS
- A. The form of agreement between Owner and Contractor is included in specifications and is bound in this project manual.
- 1.10 ARTICLE 9 - EXECUTION OF THE CONTRACT
- A. Add Article 9:
    1. 9.1.1 - Subsequent to the Notice of Intent to Award, and within 10 days after the prescribed Form of Agreement is presented to the Awardee for signature, the Awardee shall execute and deliver the Agreement to Owner, in such number of counterparts as Owner may require.
    2. 9.1.2 - Owner may deem as a default the failure of the Awardee to execute the Contract and to supply the required bonds when the Agreement is presented for signature within the period of time allowed.
    3. 9.1.3 - Unless otherwise indicated in the Procurement and Contracting Documents or the executed Agreement, the date of commencement of the Work shall be the date of the executed Agreement or the date that the Bidder is obligated to deliver the executed Agreement and required bonds to Owner.
    4. 9.1.4 - In the event of a default, Owner may declare the amount of the Bid security forfeited and elect to either award the Contract to the next responsible bidder or re-advertise for bids.

END OF DOCUMENT 00 22 13

DIVISION 0 – BIDDING AND CONTRACT REQUIREMENTS  
Section 00 22 44 - Additional Insurance Requirements

1.1 INSURANCE

The Contractor shall purchase and maintain insurance as required in the current edition of the Standard Form of Agreement Between Owner and Contractor where the Basis of Payment is a Stipulated Sum, AIA Document A101 and the General Condition of the Contract for Construction, AIA Document A201 as modified by these specifications, AIA General Conditions and Supplements to the AIA General Conditions, Article 11

- A. All of the above documents shall be thoroughly studied prior to purchases of an insurance policy to cover the Project.
- B. While not limited to the following requirements, the requirements listed below are brought to the Contractors Specific attention.
  - 1) Champaign County, and the Architect/Engineer shall be named as additional insureds on the Commercial General Liability Policy and the Umbrella Liability Policy.
  - 2) Waivers of Subrogation are required for both Property Insurance and for Liability Insurance.

1.2 ADDITIONAL LIABILITY INSURANCE REQUIREMENTS

In addition to the liability insurance requirements noted in Paragraph 1.01 above, the following requirements also apply:

- A. The Contractor shall purchase and maintain a Commercial General Liability Policy which shall include the following coverage areas:
  - 1) Operations of the Contractor - direct liability coverage for the Contractors activities at a permanent location and the Project Site;
  - 2) Operations of Subcontractors - Liability coverage for those entities for which the Contractor has a duty to supervise and stand legally responsible for their conduct;
  - 3) Completed Operations - Liability for property damage and bodily injury and death that occurs after Substantial Completion;
  - 4) Personal Injury - Including but not limited to, libel, slander, defamation of character, wrongful eviction, right of private occupancy, false arrest and detention and other similar personal injuries;
  - 5) Employees as Additional Insured - Include employees and their acts into the coverage;
  - 6) Explosion, Collapse, Underground - Liability coverage for the property of others to include, but not limited to, unknown utilities; and
  - 7) Contractual Liability - coverage for the assumption of others by Contract.
- B. The Commercial General Liability Policy shall name Champaign County, the Architect, the Architect's Consultants, their agents and employees as additional insured.
- C. The Contractor shall purchase and maintain Workers Compensation and Employees Liability Insurance.
- D. The Contractor shall purchase and maintain commercial Automobile Liability Insurance. This policy shall cover Owned, Non-owned and Hired vehicles.

- E. The Contractor shall purchase and maintain Umbrella Liability Coverage to provide higher limits of liability above those required for General Liability, Employers Liability and Automobile Liability.
- F. The Umbrella Liability Policy shall name Champaign County, the Architect, the Architect's Consultants, their agents and employees as additional insured.
- G. The Contractor shall purchase and maintain Owners Liability Insurance (Owners Protection Liability) which shall cover the Owners liability for all injuries and damages arising from the Project. This policy shall name the Architect and the Architect's Consultants, their agents and employees as additional insured.
- H. Liability limits shall be as specified herein or the maximum exposure as stated in the Government Tort Claims Acts as most recently amended, whichever is higher.
- I. The minimum amount of coverage and the limits of liability shall be as specified below:
  - 1) Claims under workers' or workman's compensation, disability benefit and other similar employee benefit acts which are applicable to the Work to be performed:
    - a. As required by law.
  - 2) Claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees:
    - a. \$1,000,000.00
  - 3) Claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees:
    - a. \$ 500,000.00
  - 4) Claims for damages insured by usual personal injury liability coverage which are sustained (1) by a person as a result of an offense directly or indirectly related to employment of such person by the Contractor, or (2) by another person:
    - a. \$1,000,000.00
  - 5) Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom:
    - a. \$ 500,000.00
  - 6) Claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle:
    - a. \$1,000,000.00
  - 7) Claims involving contractual liability insurance applicable to the Contractor's obligations under Paragraph 3.18 of the General Conditions for the Contract for Construction as modified:
    - a. \$ 500,000.00



1.3 SUBMITTAL REQUIREMENTS

- A. Submit ACORD 25-S form along with the signed Agreement Between Owner and Contractor.
- B. Champaign County shall be listed as Certificate Holder.
- C. Include the following sentence under Special Items:

**"The Certificate Holder is Champaign County, Architect, Architect's Consultants, including their Agents and Employees are named as additional insured's in both the General and Umbrella Liability Policy. Waivers of Subrogation are in effect for both liability and property insurance policies."**

1.4 LOSS OF USE INSURANCE

- A. The Owner, at the Owners option, may purchase and maintain such insurance that will protect the Owner against the loss of use of this property.

END OF SECTION 00 22 44

DIVISION 0 – BIDDING AND CONTRACT REQUIREMENTS  
Section 00 25 13 – Prebid Meeting

1.1 PREBID MEETING

- A. There will be a Prebid meeting as indicated below:
  - 1. Meeting Date: Thursday, June 24, 2021
  - 2. Meeting Time: 2:00 P.M. CDT.
  - 3. Location: Brookens Administrative Center, 1776 East Washington Street, Urbana, IL 61802, Shields-Carter Meeting Room.
  
- B. Bidder Questions: Submit written questions to be addressed at Prebid meeting a minimum of two business days prior to meeting.
  
- C. Agenda: Prebid meeting agenda will include review of topics that may affect proper preparation and submittal of bids, including the following:
  - 1. Procurement and Contracting Requirements:
    - a. Instructions to Bidders.
    - b. Bidder Qualifications.
    - c. Bonding.
    - d. Insurance.
    - e. Bid Form and Attachments.
    - f. Bid Submittal Requirements.
    - g. Notice of Award.
  
  - 2. Communication during Bidding Period:
    - a. Obtaining documents.
    - b. Bidder's Requests for Information.
    - c. Bidder's Substitution Request/Prior Approval Request.
    - d. Addenda.
  
  - 3. Contracting Requirements:
    - a. Agreement.
    - b. The General Conditions.
    - c. The Supplementary Conditions.
    - d. Other Owner requirements.
  
  - 4. Construction Documents:
    - a. Scopes of Work.
    - b. Temporary Facilities.
    - c. Use of Site.
    - d. Work Restrictions.
    - e. Unit Price.
    - f. Substitutions following award.

5. Schedule:
    - a. Project Schedule.
    - b. Contract Time.
    - c. Other Bidder Questions.
  6. Site/facility visit or walkthrough.
  7. Post-Meeting Addendum.
- D. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes to attendees of prebid meeting only. Minutes of meeting are issued as Available Information and do not constitute a modification to the Procurement and Contracting Documents. Modifications to the Procurement and Contracting Documents are issued by written Addendum only.
1. Sign-in Sheet: Minutes will include list of meeting attendees.

END OF DOCUMENT 00 25 13

**RETURN WITH BID**

DIVISION 0 - BIDDING & CONTRACT REQUIREMENTS  
Document 00 41 06 – Bid Bond

\_\_\_\_\_  
as Principal, and  
a corporation of the State of \_\_\_\_\_  
as Surety, are held and firmly bound unto the Champaign County the amount of ten percent (10%) of the amount of the base bid for the payment of which Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, to this agreement.

Principal has submitted to Obligee a bid to enter into a written contract, for

Project Number: \_\_\_\_\_ Division of Work: \_\_\_\_\_  
in accordance with bidding documents for the project, which contract is by reference made a part hereof and is hereinafter referred to as "the Contract".

THE CONDITION OF THIS OBLIGATION is that if Principal, upon acceptance by Obligee of its bid within the period of time specified for acceptance, shall comply with all post award requirements as required by the terms of the bid within the time specified after date of the Notice of Award, or in the event of the failure to comply with all post award requirements, if Principal shall pay Obligee (1) for all costs of procuring the work which exceeds the amount of its bid, or (2) shall pay Obligee the amount of this bond as liquidated damages in the event Principal is a sole bidder and after an attempt to secure other bids by re-advertising none can be obtained, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

Surety hereby agrees that its obligation shall not be impaired by any extensions of time for Obligee's acceptance or compliance with post award requirements. Surety hereby waives notice of such extensions.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
CONTRACTOR

\_\_\_\_\_  
SURETY

BY \_\_\_\_\_  
SIGNATURE

BY \_\_\_\_\_  
OFFICER OF THE SURETY

Title \_\_\_\_\_

Title \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
CORPORATE SECRETARY (Corporations only)

**JURAT (Notary's Statement Authenticating Signature)**

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

I, \_\_\_\_\_, a Notary Public in and for said county, do hereby certify that

**(Insert Name of Attorney-In-Fact for SURETY)**

who is personally known to me to be the same person whose name is subscribed to the foregoing instrument on behalf of SURETY, appeared before me this day in person and acknowledged respectively, that he/she signed, sealed, and delivered said instrument as his/her free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this \_\_\_\_\_ DAY OF \_\_\_\_\_ A.D. 20 \_\_\_\_\_

My commission expires \_\_\_\_\_

Notary Signature \_\_\_\_\_

DIVISION 0 – BIDDING AND CONTRACT REQUIREMENTS  
Section 00 41 13 – Bid Form – Stipulated Sum (Single-Prime Contract)

1.1 BID INFORMATION

- A. Bidder: \_\_\_\_\_.
- B. Project Name: Champaign County Salt Dome Roof Replacement
- C. Project Location:  
327 Art Bartell Road, Urbana, IL 61802
- D. Owner: Champaign County

1.2 CERTIFICATIONS AND BID

- A. **Base Bid, Single-Prime (All Trades) Contract:** The undersigned Bidder, having carefully examined the Procurement and Contracting Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, as prepared by Bailey Edward Design, Inc., 1103 S. Mattis Avenue, Champaign, IL 61821, and their consultants, having visited the site, and being familiar with all conditions and requirements of the Work, hereby agrees to furnish all material, labor, equipment and services, including all scheduled allowances, necessary to complete the construction of the above-named project, according to the requirements of the Procurement and Contracting Documents, for the stipulated sum of:

Bid Package 1: Salt Dome

\_\_\_\_\_ Dollars  
(\$ \_\_\_\_\_)

- B. **Unit Price No. 1:** Removal of deteriorated 5/8" plywood sheathing discovered upon removal of asphalt shingles.

1. Description: Replace deteriorated 5/8" plywood sheathing with exterior grade plywood sheathing of same thickness, in accordance with Section 06 10 00 – Rough Carpentry.

Unit Price 1:

\_\_\_\_\_ Dollars/Square Foot

(\$ \_\_\_\_\_)

**1.3 TIME OF COMPLETION**

- A. **Provided the contractor receives Notice to Proceed on or prior to October 15, 2021 the bidder agrees to be substantially complete with the Base Bid work on or before April 29, 2022, with Final Completion no later than May 6, 2022.**

**1.4 ACKNOWLEDGEMENT OF ADDENDA**

- A. The undersigned Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:

1. Addendum No. 1, dated \_\_\_\_\_.
2. Addendum No. 2, dated \_\_\_\_\_.

1.5 SUBMISSION OF BID

A. In submitting the Bid, the undersigned agree that this Proposal will not be withdrawn for a period of thirty (30) calendar days from the date of submission. It is understood the Owner reserves the right to reject any and all Bids and to waive informalities and irregularities.

1. Respectfully submitted this \_\_\_\_ day of \_\_\_\_\_, 2021.
2. Submitted By : \_\_\_\_\_  
(Name of bidding firm or corporation).
3. Authorized Signature : \_\_\_\_\_  
(Handwritten signature).
4. Signed By : \_\_\_\_\_  
(Type or print name).
5. Title : \_\_\_\_\_  
(Owner/Partner/President/Vice President).
6. Witness By : \_\_\_\_\_  
(Handwritten signature).
7. Attest : \_\_\_\_\_  
(Handwritten signature).
8. By : \_\_\_\_\_  
(Type or print name).
9. Title : \_\_\_\_\_  
(Corporate Secretary or Assistant Secretary).
10. Street Address: \_\_\_\_\_.
11. City, State, Zip: \_\_\_\_\_.
12. Phone: \_\_\_\_\_.
13. License No.: \_\_\_\_\_.
14. Federal ID No. : \_\_\_\_\_

(Affix Corporate Seal Here).

END OF DOCUMENT 00 41 13

**RETURN WITH BID**

**BIDDER'S / CONTRACTOR'S  
DISCLOSURE AFFIDAVIT**

STATE OF ILLINOIS )  
 ) SS  
COUNTY OF \_\_\_\_\_ )

**BUSINESS STATUS STATEMENT**

I, the undersigned, being duly sworn, do state as follows:

A. \_\_\_\_\_ (hereafter "Contractor") is a:  
Company Name

(Place a mark in front of appropriate type of business)

\_\_\_\_\_ Corporation (If a Corporation, complete B)

\_\_\_\_\_ Partnership (If a Partnership, complete C)

\_\_\_\_\_ Individual Proprietorship (If an Individual, complete D)

**B. CORPORATION**

The State of Incorporation is \_\_\_\_\_

The registered agent of the Corporation in Illinois is:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_

The Corporate officers are as follows:

President: \_\_\_\_\_

Vice President: \_\_\_\_\_

Secretary: \_\_\_\_\_

Treasurer: \_\_\_\_\_



**RETURN WITH BID**

C. PARTNERSHIP

The Partners are as follows (attach additional sheets if necessary):

_____	_____
Name	Address
_____	_____
Name	Address
_____	_____
Name	Address
_____	_____
Name	Address

The business address is: \_\_\_\_\_

D. INDIVIDUAL PROPRIETORSHIP

The business address is: \_\_\_\_\_

Business Telephone: \_\_\_\_\_

My home address is: \_\_\_\_\_

Home Telephone: \_\_\_\_\_

E. Under penalty of perjury \_\_\_\_\_

(Contractor's Name)

Certifies that \_\_\_\_\_ (FEIN / SSN)  
is its correct Federal Taxpayer Identification Number, or in the case of an individual or sole proprietorship, Social Security Number.

**NON-DISCRIMINATION STATEMENT**

The Contractor does not and will not engage in discriminatory practices; the Contractor does not and will not engage in discrimination because of race, sex, age, religion, national origin or sensory, mental, or

**RETURN WITH BID**

physical handicap in hiring or firing; and the Contractor is, in fact, an equal opportunity employer.

**NON-COLLUSION STATEMENT**

- A. That the only persons or corporations interested with \_\_\_\_\_  
(Name of Bidder)  
in the delivery of the materials and/or services bid upon under the Contract other than its officers,  
directors, shareholders and employees are:

_____ Name	_____ Address
_____ Name	_____ Address
_____ Name	_____ Address
_____ Name	_____ Address

- B. That the said Bid is made without any connection or common interest in the profits with any other persons making any Bid or Proposal for said Work except as listed above.
- C. That this Contract is in all respects fair and entered into without collusion or fraud.
- D. That no employee or any officer of the Owner has any financial interest, directly or indirectly, in the award of this Bid to Bidder except as listed above.
- E. That the Bidder is not barred from bidding on this Contract as a result of violation of either Section 33E-3 (Bid Rigging) or Section 33E-4 (Bid Rotating) of Chapter 38, Illinois Revised Statutes.
- F. The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

**NO DELINQUENT ILLINOIS TAXES STATEMENT**

The undersigned certifies that the Contractor is not delinquent in payment of any tax administered by the

**RETURN WITH BID**

Illinois Department of Revenue except that the taxes for which liability for the taxes or the amount of the taxes are being contested, in accordance with the procedure established by the appropriate Revenue Act; or the Contractor has entered into an agreement (2) with the Illinois Department of Revenue for the payment of all such taxes due and is in compliance with the agreement.

**FAMILIARITY WITH LAWS STATEMENT**

I, the undersigned, being duly sworn, do hereby state that

\_\_\_\_\_  
(Company Name)

is familiar with and will comply with all Federal, State and Local laws applicable to the Project, which include, but are not limited to, the Prevailing Wage Act and the Davis-Bacon Act.

**PENDING AND UNCOMPLETED WORK**

I, the undersigned, being duly sworn, do hereby declare that the following is a true and correct statement relating to **all** uncompleted contracts of the undersigned for Federal, State, County, City and private work, including **all** subcontract work; and all pending low BIDS not yet awarded or rejected:

Total Projects Under Contract

\_\_\_\_\_

Total Projects with Pending Low Bids

\_\_\_\_\_

Total Value of Projects Under Contract and Pending Low Bids

\_\_\_\_\_  
(Affiant's Signature)

\_\_\_\_\_  
(Print Name & Title)

\_\_\_\_\_  
(Company Name)

SUBSCRIBED and SWORN to before me this

\_\_\_\_\_ day of \_\_\_\_\_, 2021

Notary Public

My Commission Expires:

\_\_\_\_\_

(SEAL)

**RETURN WITH BID**

**INSTRUCTIONS:** This affidavit is to be completely filled out and executed by the chief officer of the Bidder authorized to submit the affidavit. Attach written explanation where applicable.

**RETURN WITH BID**

**DRUG FREE WORKPLACE CERTIFICATION**

STATE OF \_\_\_\_\_ )  
  )     **SS**  
COUNTY OF \_\_\_\_\_ )

**Note:** The Illinois Drug Free Workplace Act, effective January 2, 1992, requires the Owner to obtain this certification from each contractor with 25 or more employees or with contracts for \$5,000 or more.)

The Contractor certifies that it will:

- A.     Public a statement:
  - 1.     Notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance, including cannabis, is prohibited in the grantee’s or contractor’s workplace.
  - 2.     Specifying the actions that will be taken against employees for violations of such prohibitions.
  - 3.     Notifying the employee that, as a condition of employment on such contract or grant, the employee will:
    - a.     Abide by the terms of the statement; and
    - b.     Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than 5 days after such conviction.
  
- B.     Establish a drug free awareness program to inform employees about:
  - 1.     The dangers of drug abuse in the workplace.
  - 2.     The Contractor’s policy of maintaining a drug free workplace.
  - 3.     Any available drug counseling, rehabilitation and employee assistance program.
  - 4.     The penalties that may be imposed upon employees for drug violations.
  
- C.     Give a copy of the published statement referred to in paragraph A above to each employee engaged in the performance of the Owner’s contract and post the statement in a prominent place in the workplace.

**RETURN WITH BID**

- D. Notify the Owner within 10 days after receiving notice under paragraph A.3.b. above from an employee or otherwise receiving actual notice of such conviction.
- E. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program by any employee who is so convicted.
- F. Assist employees in selecting a course of action in the event drug counseling, treatment or rehabilitation is required and a trained referral team is in place.
- G. Make a good faith effort to continue to maintain a drug free workplace through implementation of the Drug Free Workplace Act.

If an individual, the Contractor certifies that it will not engage in the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance in the performance of the Owner's contract.

The Contractor shall, within 30 days after receiving notice from an employee of a conviction of a violation of a criminal drug statute occurring in the workplace:

- A. Take appropriate personnel action against such employee up to and including termination; and
- B. Require the employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State or local health, law enforcement or other appropriate agency.

**Contractor:**

By: \_\_\_\_\_

Title: \_\_\_\_\_

SIGNED and SWORN to before me this

\_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
Notary Public

**RETURN WITH BID**

DIVISION 0 - BIDDING & CONTRACT REQUIREMENT  
Section 00 43 43 – Prevailing Rate of Wages

1. PREVAILING WAGE ACT

- 1.1 Pursuant to Illinois Compiled Statutes 820 ILCS 130/0.01 et seq., these specifications list on the following pages, the Illinois Department of Labor prevailing rate of wages for the county where the contract is being performed and for each craft or type of worker needed to execute the contract.
- 1.2 Contractor shall submit certified payrolls with monthly application for payment.
- 1.3 A Project Labor Agreement is required for this project.

END OF SECTION 00 43 43



DIVISION 1 - GENERAL REQUIREMENTS  
Section 01 11 00 – Project Summary

1. GENERAL

1.1 WORK INCLUDED

A. Contractor shall provide all labor and materials associated with the work of this section, including:

1. Project information.
2. Work covered by Contract Documents.
3. Access to site.
4. Coordination with occupants.
5. Work restrictions.
6. Specification and drawing conventions.

1.2 PROJECT INFORMATION

A. Project Identification:

1. **SALT DOME ROOF REPLACEMENT**  
327 ART BARTELL RD, URBANA, IL 61802

B. Owner's Representative: Champaign County.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

A. Base Scope: The base bid work includes removal and replacement of the existing asphalt shingles and EPDM roof system. Existing sheet metal flashings and copings as indicated on Drawings to be removed and replaced.

2. PRODUCTS (NOT APPLICABLE)

3. EXECUTION (NOT APPLICABLE)

END OF SECTION 01 11 00

DIVISION 1 - GENERAL REQUIREMENTS  
Section - 01 22 00 – Unit Prices

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 DEFINITIONS

- A. Unit price is a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

1.3 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, overhead, and profit.
- B. Measurement and Payment: See individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: A schedule of unit prices is included in Part 3. Specification Sections referenced in the Part 3 "Schedule of Unit Prices" Article contain requirements for materials described under each unit price.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF UNIT PRICES

- A. Unit Price No. 1: Removal of deteriorated 5/8" plywood sheathing discovered upon removal of asphalt shingles.
  - 1. Description: Replace deteriorated 5/8" plywood sheathing with exterior grade plywood sheathing of same thickness, in accordance with Section 06 10 00 – Rough Carpentry.
  - 2. Unit of Measurement: Per square foot.

END OF SECTION 012200

DIVISION 1 - GENERAL REQUIREMENTS  
Section 01 32 00 - Construction Schedule

1. GENERAL

1.1 REQUIREMENTS INCLUDE:

- A. The General Contractor shall prepare and maintain a detailed project schedule as described below.
- B. The project schedule shall be the Contractor's working schedule; used to execute the work and record and report actual progress. It shall show how the Contractor plans to complete the work within the contract time and meet any contractually specified intermediate milestone dates.

1.2 RELATED REQUIREMENTS

- A. Specified Elsewhere:
  - 1. Section 01 11 00 - Project Summary
  - 2. Section 01 33 23 - Shop Drawings, Product Data and Samples

1.3 FORM OF SCHEDULE

- A. The schedule shall provide sufficient detail and clarity so that the General Contractor can plan and control the work and the Owner and the A/E can readily monitor and follow the progress of all portions of the work. The critical activities must be clearly shown. The degree of detail must be satisfactory to the A/E and the Owner.
- B. The project schedule shall be in the form of a Gantt chart, and shall indicate the critical path, including durations.

1.4 CONTENTS OF SCHEDULE

- A. The schedule must be inclusive of all installation tasks of the work.
- B. Submittal and approval of shop drawings and material samples as well as delivery dates of major equipment shall be included in the project schedule.
- C. Activity duration shall be in whole working days.
- D. There should be at least one activity for each specification section.

1.5 UPDATING

- A. The project schedule shall be updated monthly.
- B. Actual activity completion dates shall be reported and recorded on the schedule.
- C. Progress on uncompleted activities shall be reported.
- D. Projected completion dates and activities shall be reviewed and revised if necessary.

1.6 REPORTS AND SUBMITTALS

- A. Within 15 days of the Authorization to Proceed, the Contractor shall submit the project schedule to the A/E and the Owner.
- B. Five (5) days prior to the pay/progress meeting, the contractor shall submit the current updated schedule to the A/E and the Owner.

1.7 REVIEWS

- A. Payment and reduction of retainage may be denied by the Owner for failure to submit a proper schedule and maintaining work progress according to the project schedule.

2. PRODUCTS

(NOT APPLICABLE)

3. EXECUTION

(NOT APPLICABLE)

END OF SECTION 01 32 00

DIVISION 1 - GENERAL REQUIREMENTS  
Section 01 33 23 - Shop Drawings, Product Data & Samples

1. GENERAL

1.1 REQUIREMENTS INCLUDE

- A. The Sub-contractor shall make submittals to the General Contractor. The General Contractor shall maintain a master list of submittals.
- B. Submittals shall be complete and legible. Incomplete submittals will be returned and not reviewed.

1.2 GENERAL CONTRACTOR:

- A. Review Sub-contractor's submittals within 5 business days.
  - 1. Verify field dimensions.
  - 2. Verify compliance with Contract requirements.

1.3 RELATED REQUIREMENTS

- A. Specified elsewhere:
  - 1. Submittal specific to each section are further outlined within the technical submittals as such within submittal package. Submittals deemed incomplete or not indication supplied by separate sub, shall be returned without review.

1.4 DEFINITIONS

- A. Shop drawings: Shop drawings are original drawings prepared by Contractor, subcontractor, sub-subcontractor, supplier or distributor, which illustrated some portion of the work, showing fabrication, layout, setting or erection details.
  - 1. Prepared by qualified detailer.
  - 2. Identify details by reference to sheet and detail numbers shown on contract drawings.
  - 3. Maximum sheet size: 30" x 42"
  - 4. Submit a maximum of (5) copies. Electronic copies of submittals are preferred.
- B. Product data:
  - 1. Manufacturer's standard schematic drawings edited to fit this project.
  - 2. Manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations and other standard descriptive data.
    - a. Clearly mark each copy to identify pertinent materials, products or models.
    - b. Show dimensions and clearances.
    - c. Show wiring diagrams and controls.
- C. Samples: Physical samples to illustrate materials, equipment or workmanship. Approved samples establish standards by which complete work is judged. Maintain at site as directed. Protect until no longer needed.
  - 1. Office samples: Of sufficient size to clearly illustrate:
    - a. Functional characteristics of product or material.
    - b. Full range of color samples.
    - c. After review, samples may be used on construction of project.

2. Field samples and mock-ups:
  - a. Erect at project site at location approved by the Architect.
  - b. Construct each sample or mock-up complete, including work of all crafts required in finished work.
  - c. Remove as directed.

#### 1.5 SCHEDULE SUBMITTAL

- A. Submit schedule of all exhibits to Architect/Engineer within fifteen (15) business days after preconstruction meeting.

1. Prepare schedule in bar chart format, Include:

- a. Exhibit identification
- b. Specification section and page number
- c. Date of submittal to Architect/Engineer
- d. Latest date for final approval
- e. Fabrication time.
- f. Date of Installation

2. Architect/Engineer will review and comment on exhibit schedule and will advise the Contractor as to which submittals require longer review durations.

Submit number of copies of shop drawings, product data and samples which contractor requires for distribution plus (2) copies which will be retained by Architect/Engineer.

- B. Accompany submittals with transmittal letter, in duplicate, containing.

1. Date
2. Project title and number
3. Contractor's name and address.
4. The number of shop drawings, product data and samples submitted.
5. Notification of deviations from Contract.
6. Other pertinent data.

- C. Submittals shall include:

1. Date and revision
2. Project title and number
3. Name of:
  - a. Architect/ Engineer
  - b. Architect/ Engineer consultant
  - c. Subcontractor
  - d. Sub-subcontractor
  - e. Supplier
  - f. Manufacturer
  - g. Separate detailer when pertinent
4. Identification of product or material.
5. Relation to adjacent structure or material.
6. Field dimensions clearly identified as such.
7. Specification section and page number.

8. Specified standards, such as ASTM number or ANSI.
  9. A blank space, (5"x5"), for Architect/Engineer's stamp.
  10. Identification of previously approved deviation(s) from contract documents.
  11. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of field measurements and compliance with Contract.
  12. Space for Contractor's approval stamp.
- D. Electronic Submittals: All submittals may be submitted electronically except for those specifically listing a requirement for paper submittals or physical samples. Identify and incorporate information in each electronic submittal file as follows:
1. Assemble complete submittal package into a single file (pdf format) incorporating submittal requirements of a single Specification Section and transmittal form. Only complete submittals will be accepted.
  2. Name file with submittal number or other unique identifier, including revision identifier.
    - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g.; PROJNAME\_061000.01). Resubmittals shall include an alphabetic suffix after the decimal point (e.g.; PROJNAME\_061000.01A)
  3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Using Agency/ Architect/ Engineer.
  4. Transmittal Cover Sheet Form for Electronic Submittals: As described by the Architect and containing all information as indicated above for paper submittals.

#### 1.6 RESUBMISSION REQUIREMENTS

- A. Resubmit all shop drawings, product data, and samples as requested by the Contractor and/or A/E.

#### 1.7 RESPONSIBILITIES

- A. Review shop drawings, product data and samples prior to submission to the next level of authority. Review Subcontractor's submittals within five (5) business days. Certify review and transmit to Architect.
- B. Verify:
1. Field dimensions.
  2. Field construction criteria.
  3. Catalog numbers and similar data.
  4. Verify compliance with contract documents.
- C. Coordinate each submittal with requirements of:
1. The work.
  2. The contract documents.
  3. The work of other contractors.
  4. The existing conditions indicated to remain.
- D. Contractor's responsibility for errors, omissions or deviation from contract documents in submittals is not relieved by the Architect/Engineer's review of submittals.
- E. Prior to submission, notify the Architect/Engineer in writing of all proposed deviations in submittals from Contract requirements. Substitution of materials or equipment may only be approved by change order.
- F. Do not begin any work which requires submittals without Architect/Engineer's approval.

- G. After Architect/Engineer's review, make response required by A/E's stamp and distribute copies. Indicate by transmittal that copy of approved data has been delivered to installer.

1.8 ARCHITECT/ENGINEER'S RESPONSIBILITIES

- A. Review submittals within fourteen (14) calendar days.
- B. Review for:
  - 1. Design concept of project.
  - 2. Compliance with Contract Documents.
- C. Review all requests for proposed deviations.
- D. Affix stamp, date and initials or signature certifying review of submittal, and with instructions for the Contractor.
- E. Return submittals to sender for response or distribution.

2. PRODUCTS  
(NOT APPLICABLE)

3. EXECUTION  
(NOT APPLICABLE)

END OF SECTION 01 33 23



DIVISION 1 - GENERAL REQUIREMENTS  
Section - 01 35 16 - Remodeling Project Procedures

1. GENERAL

1.1 REQUIREMENTS INCLUDE

A. Each Contractor:

1. Coordinate work of employees and subcontractors.
2. Schedule elements of remodeling and renovation work to expedite completion.
3. Schedule noisy or hazardous work to avoid problems with Owner's operations.
4. In addition to demolition, cut, move or remove existing construction to provide access or to allow remodeling and new work to proceed. Include:
  - a. Repair or remove hazardous or unsanitary conditions.
  - b. Remove abandoned piping, conduit and wiring.
  - c. Remove unsuitable or extraneous materials not marked for salvage, such as rotted wood, brick paving, rusted metals and deteriorated concrete.
5. Patch, repair and refinish existing items to remain, to the specified condition for each material, with a neat transition to adjacent new or restored construction.
6. Note or record existing project conditions before beginning work to minimize later disputes.

1.2 RELATED REQUIREMENTS

A. Specified elsewhere:

1. 01 32 00 - Construction Schedules.
2. 01 51 50 - Use of Existing Facilities
3. 01 73 29 - Cutting & Patching
4. 01 74 13 - Construction Cleaning
5. 01 74 23 - Final Cleaning.

1.3 SEQUENCE AND SCHEDULES

- A. Submit separate detailed sub-schedule for alterations work, coordinated with Construction Schedule. Show:
1. Each stage of work; occupancy dates of areas.
  2. Date of Substantial Completion for each area of alteration work.
  3. Crafts and subcontractors employed in each stage.

1.4 ALTERATIONS, CUTTING AND PROTECTION

- A. Cut finish surfaces by methods to terminate surfaces in a straight line at a natural point of division.

2. PRODUCTS (NOT USED)

### 3. EXECUTION

#### 3.1 REMOVE EXISTING CONSTRUCTION

##### A. Temporary Removals:

1. Remove all items as noted on the drawings or otherwise required to complete the work shown.
2. Store all items as noted on the drawings or otherwise required to complete the work shown.
3. Recondition all existing items as noted on the drawings or otherwise required to complete the work shown.
4. Reinstall all as noted on the drawings or otherwise required to complete the work shown.

##### B. Remove and dispose of existing items as noted on Drawings.

3.2 PERFORMANCE. Patch and extend existing work using skilled craftsmen capable of matching existing quality of workmanship. For patched or extended work, provide quality equal to that specified for new work.

#### 3.3 DAMAGED SURFACES

##### A. Patch and replace all portions of existing finished surfaces found to be damaged, lifted, discolored or showing other imperfections, with matching material.

1. Provide adequate support prior to patching the finish.
2. Refinish patched portions of painted or coated surfaces in a manner to produce uniform color and texture over entire surface.
3. When existing surface cannot be matched, refinish entire surface to nearest intersections or change of direction.

#### 3.4 TRANSITION FROM EXISTING TO RESTORED WORK

##### A. When restored work abuts or finishes flush with existing work, make a smooth transition. Patched work shall match existing adjacent work in texture and appearance.

1. When finished surfaces are cut in such a way that a smooth transition with restored work is not possible, terminate existing surface in a neat manner along a straight line at a natural line of division, and provide trim appropriate to finished surface.

#### 3.5 CLEANING

##### A. Perform construction cleaning as specified in 01 74 13 and as follows:

1. Clean User occupied areas daily.
2. Clean all spillage, overspray or heavy dust collections in User occupied areas immediately.

##### B. At completion of work of each craft, clean area and make surfaces ready for work of successive crafts.

- C. At completion of alterations work in each area, provide final cleaning in accord with 01 74 23 and return space to a condition suitable for use of User.

END OF SECTION 01 35 16

DIVISION 1 – GENERAL REQUIREMENTS  
SECTION 01 54 00 – CONSTRUCTION AIDS

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDE

- A. Contractor shall provide all labor and material to install and maintain construction aids and equipment for all personnel use and to facilitate execution of the work:
  - 1. Ladders, working platforms and Scaffolding/Fall Protection.
  - 2. Heavy Equipment.
  - 3. Temporary enclosures, electrical power & water services, etc.
  - 4. Construction Barriers, and dust/noise/fume separations.
  - 5. Platforms.
  - 6. Stairs.
  - 7. Power and hand tools.
- B. Each Contractor must comply with OSHA regulations as they relate to these construction aids and all applicable standards.
- C. See respective specification sections for particular requirements.
- D. Provide and maintain for own forces all other construction aids required to complete his work.
- E. Remove all construction aids upon completion of the work, or as directed.

1.2 RELATED REQUIREMENTS

- A. Specified elsewhere:
  - 1. Section 01 10 00 - Project Summary.
  - 2. Section 01 51 00 - Temporary Utilities.
  - 3. Section 01 74 23 - Final Cleaning.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Materials may be new or used, suitable for purpose. Comply with specified codes, standards, and regulations.

2.2 CONSTRUCTION AIDS

- A. Maintain facilities and equipment in first class condition.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Consult with Architect and Owner, review site conditions and factors which affect construction procedures and construction aids, including adjacent occupied areas which may be affected by execution of the work.
- B. Coordinate with Owner for placement of barriers to maintain Owner operations, while protecting occupants from exposure to dust, noise, and fumes.

3.2 INSTALLATION

- A. Comply with respective Project Manual Specification Sections.
- B. Relocate construction aids as construction progresses to expedite storage or work and to accommodate legitimate requirements of the Owner and other contractors at the site.

3.3 REMOVAL:

- A. Completely remove temporary materials, equipment and services:
  - 1. When construction needs can be met by authorized use of permanent construction.
  - 2. At project completion.
- B. Clean and repair damage caused by installation or use of temporary facilities.
- C. Restore existing facilities used for temporary purposes to original condition.

END OF SECTION 01 54 00

DIVISION 1 – GENERAL REQUIREMENTS  
SECTION 01 56 00 - TEMPORARY BARRIERS AND ENCLOSURES

PART I - GENERAL

1.1 WORK INCLUDES

- A. Base Bid: Use of Barriers and Enclosures: The Contractor shall provide all labor and materials necessary to furnish, erect and maintain temporary barriers, barricades, enclosures, and temporary construction fencing as required for the following:
  - 1. To provide weather tight protection of building as roofing or deck is removed as part of the work in contract.
  - 2. To protect the health and safety of occupants and the general public from exposure to immediate physical harm as well as to noise, dust, and fumes. Note that this Section does not provide minimum requirements related to Indoor Air Quality.
  - 2. To protect new and pre-existing adjacent construction from exposure to physical damage, dust, dirt, and water.
  - 3. To provide security of valuable property.
  - 4. To protect trees and plants.

1.2 RELATED SECTIONS

- A. Section 01 54 00 - Construction Aids

PART 2 - PRODUCTS

2.1 GENERAL FABRICATION

- A. Substantial Construction: Barriers and enclosures shall be of adequately substantial construction to serve their purpose without failure throughout the duration of their use. Materials may be new or used, suitable for the intended purpose, but shall not violate requirements of applicable codes and standards.
- B. Rigid Fencing: The general public, as well as adjacent lawns and plantings, shall be protected from harm by the installation of continuous, durable, rigid fencing at the limit lines of each construction area.
- C. Tree Protection: Existing trees that are adjacent to a construction site shall be protected from damage by the installation of durable, rigid 6 foot high fencing at the drip line of each tree.
- D. Dust enclosures.

PART 3 - EXECUTION

3.1 BASIC REQUIREMENTS

- A. Install facilities of a neat and reasonable uniform appearance, structurally adequate for required purposes.
- B. Install barriers and enclosures so as to not create new hazards such as tripping or protrusions that might be a source of safety concern to pedestrians or passers by.
- C. Establish reasonable alternative access when necessary due to placement of barriers.

- D. Maintain barriers during entire construction period.
- E. Relocate barriers as required by progress of construction.

### 3.2 TREE AND PLANT PROTECTION REQUIREMENTS

- A. Preserve and protect existing trees and plants at site which are designed to remain, and those adjacent to site.
- B. Consult with the Owner for removal of agreed-on roots and branches which interfere with construction.
  - 1. Employ a qualified tree surgeon to remove, and to treat cuts.
- C. Provide temporary barriers to a height of six feet, around each, or around each group, of trees and plants. The barriers shall be placed at the drip line of each tree.
- D. Protect root zones of trees and plants:
  - 1. Do not allow vehicular traffic or parking.
  - 2. Do not store materials or products.
  - 3. Prevent dumping of refuse or chemically injurious materials or liquids.
  - 4. Prevent puddling or continuous running water.
- E. Carefully supervise excavating, grading and filling, and subsequent construction operations, to prevent damage.
- F. Replace, or suitably repair, trees and plants designated to remain which are damaged or destroyed due to construction operations. Any damage and any necessary replacements will be evaluated by the Owner.

### 3.3 DUST ENCLOSURES

- A. Dust enclosures shall be continuous barriers with a rigid frame, made of clean materials, which will prevent dust from leaving work areas. Additionally, they may be required to resist noise and fumes as necessitated by contractors work plan.

### 3.4 REMOVAL

- A. Completely remove barricades, including foundations, when construction has progressed to the point that they are no longer needed, and when approved by the Architect.
- B. Clean and repair damage caused by installation, fill and grade areas of the site to required elevations and slopes, and clean the area.

END OF SECTION 01 56 00

DIVISION 1 - GENERAL REQUIREMENTS  
Section 01 62 04 – Substitution Procedures

1. GENERAL

1.1 SUMMARY

A. Section Includes:

1. Administrative and procedural requirements for substitutions.

1.2 SUBSTITUTIONS

A. Base Bid shall be in accordance with the Contract Documents.

B. Substitution requests prior to bidding shall be submitted to Architect, in writing, a minimum of ten (10) days prior to bid date.

C. After the end of the bidding period, substitution requests will be considered only in case of:

1. Product unavailability
2. Other conditions beyond the control of the Contractor

D. Substitution Requests: Submit PDF electronic file of each request submitted for consideration. Identify product or fabrication or installation method to be replaced. Submit requests for substitutions on attached form. Submit a separate request form for each substitution. Include Specification Section number, title, and Drawing numbers and titles. Support each request with the following information:

1. Complete data substantiating compliance of proposed substitution with requirements stated in Contract Documents:
  - a. Product identification, including manufacturer's name and address.
  - b. Manufacturer's literature, identifying:
    - 1) Product description
    - 2) Reference standards
    - 3) Performance and test data
2. Itemized comparison of the proposed substitution with product specified, listing significant variations.
3. Data relating to changes in construction schedule.
4. Effects of substitution on separate contracts.
5. List of changes required in other work or products.
6. Accurate cost data comparing proposed substitution with product specified.
  - a. Amount of net change to Contract Sum
7. Designation of required license fees or royalties.
8. Designation of availability of maintenance services sources replacement materials.

E. Substitutions will not be considered for acceptance when:

1. A substitution is indicated or implied on shop drawings or product data submittals without a formal request from the Contractor.
2. Acceptance will require substantial revision of Contract Documents.
3. In judgment of the Architect, the substitution request does not include adequate information necessary for a complete evaluation.
4. Requested directly by a Subcontractor or supplier.



- F. Substitutions for Convenience: Not allowed
- G. Do not order or install substitute products without recommendation of the Architect and acceptance by the Owner/Using Agency.
- H. Architect will determine acceptability of proposed substitutions.
- I. No verbal or written approvals other than by Change Order will be valid.

1.3 CONTRACTOR'S REPRESENTATION

- A. In making formal request for substitution the Contractor represents that:
  - 1. The proposed product has been investigated and it has been determined that it is equivalent, or superior, in all respects to the product specified.
  - 2. The same warranties or bonds will be provided for the substitute product as for the product specified.
  - 3. Coordination and installation of the accepted substitution into the Work will be accomplished and changes as may be required for the Work to be complete will be accomplished.
  - 4. Claims for additional costs caused by substitution which may subsequently become apparent will be waived by the Contractor.
  - 5. Complete cost data is attached and includes related costs under the Contract, but not:
    - a. Costs under separate contracts.
    - b. Architect's costs for redesign or revision of Contract Documents.

1.4 REQUEST FOR SUBSTITUTION FORM

- A. 01 62 04.1 – Substitution Request Form
- B. Substitutions will be considered only when the substitution form is completed and included with the request for substitution submittal and back-up data.

2. PRODUCTS

(NOT APPLICABLE)

3. EXECUTION

(NOT APPLICABLE)

END OF SECTION 01 62 04

DIVISION 1 - GENERAL REQUIREMENTS  
Section 01 62 04.1 – Request for Substitution Form

REQUEST FOR SUBSTITUTION FORM

Note: Use separate form for each material, product, or equipment item.

Date: \_\_\_\_\_ Request No.: \_\_\_\_\_

Project: \_\_\_\_\_

Location: \_\_\_\_\_

Name of material, product, or equipment item submitted as substitution:

\_\_\_\_\_

Name of material, product, or equipment item specified:

\_\_\_\_\_

Specification Section \_\_\_\_\_, Article \_\_\_\_\_, Paragraph \_\_\_\_\_

Qualities that differ from specified product or system: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Name of Manufacturer/(Fabricator):

\_\_\_\_\_

Address

\_\_\_\_\_

City, State, and Zip

( \_\_\_\_\_ ) \_\_\_\_\_

Telephone

\_\_\_\_\_

Name of Vendor/Supplier

Address

\_\_\_\_\_  
City, State, and Zip (\_\_\_\_\_) \_\_\_\_\_  
Telephone

Reason for requesting substitution: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Substitution affects other materials or systems, such as dimensional revisions, redesign of structure, or modifications to other work:

\_\_\_\_\_ No

\_\_\_\_\_ Yes; describe requirements:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

If substitution requires modifications to dimensions indicated on drawings, are such modifications clearly indicated on attached data?

\_\_\_\_\_ Yes

\_\_\_\_\_ No; if no, explain: \_\_\_\_\_

Substitution has an effect on construction schedule:

\_\_\_\_\_ No

\_\_\_\_\_ Yes; describe effect on schedule:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Savings or credit to Contract Amount for accepting substitute:

---

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)  
Written Amount Amount in Figures

The attached data is furnished herewith for evaluation of the substitution:

Product Data \_\_\_\_\_, Drawings \_\_\_\_\_, Samples \_\_\_\_\_, Tests \_\_\_\_\_, Reports \_\_\_\_\_

Other Information \_\_\_\_\_

The undersigned hereby certifies:

1. The proposed substitution has been fully investigated and is equal or superior to specified product.
2. The same or better warranty will be furnished for proposed substitution as for specified material, product or equipment.
3. All changes in the work resulting from the use of this substitution, if approved, will be coordinated and completed in all respects and all costs, including, but not limited to, those for additional services rendered by the Architect are the responsibility of this Contractor at no additional cost to the Contract.

\_\_\_\_\_  
Contractor

\_\_\_\_\_  
Signed by

\_\_\_\_\_  
Address

\_\_\_\_\_  
City, State, and Zip

**For Use by Architect:**

- Recommend  
 Not Recommended  
 Insufficient Data  
 Recommend as Noted  
 Received Too Late

**For Use by Owner:**

- Approved  
 Not Approved  
 Approved as Noted

By: \_\_\_\_\_

By: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

END OF FORM

DIVISION 1 - GENERAL REQUIREMENTS  
Section - 01 66 00 - Storage & Protection

1. GENERAL

A. REQUIREMENTS INCLUDE

1. General Contractor make arrangements with Owner for storage of materials and equipment to be installed in project. Protection and security for stored materials and equipment, on and off site is solely contractor's responsibility.

B. OFF-SITE AUTHORIZATION. Payment for materials/equipment stored off-site will be permitted only on prior written authorization, proof of insurance is submitted, and the material is stored in an independent warehouse under the owner's name and paid for by the contractor.

C. SUBMITTALS.

1. In accordance with Section 01 33 23, submit:
  - a. Request for allocation of storage space.
  - b. List of materials and equipment to be stored.
  - c. Proposed location for storage.
  - d. Special storage requirements.
  - e. Schedule of anticipated storage dates.

2. PRODUCTS

A. PROTECTIVE MATERIALS

1. For duration of storage period, provide materials which will provide proper protection against the elements or other harmful environmental conditions.

3. EXECUTION

A. LOCATION

1. Where authorized by Owner.
2. Contractor will resolve conflicts in storage requirements of all subcontractors.

B. PROTECTION

1. Appropriate protection is required as necessary to maintain quality and intent of stored materials.

END OF SECTION 01 66 00

DIVISION 1 - GENERAL REQUIREMENTS  
Section - 01 73 29 - Cutting & Patching

1. GENERAL

1.1 REQUIREMENTS INCLUDE

- A. Unless noted otherwise, each contractor shall:
1. Execute cutting (including excavating), filling or patching of work to:
    - a. Install specified work.
    - b. Remove samples of installed work specified for testing.
    - c. Remove and replace defective work.
  2. In addition, upon written instructions of Architect/Engineer:
    - a. Uncover work to provide for observation of covered work.
    - b. Remove samples of installed materials for testing.
    - c. Remove work to provide for alteration of existing work.
  3. Do not cut or alter work of another contractor without written consent of Architect/Engineer.

1.2 SUBMITTALS

- A. Prior to cutting which affects structural members or work of another contractor, submit written notice to Architect/Engineer requesting consent to proceed with cutting, including:
1. Project identification.
  2. Description of affected work.
  3. Necessity for cutting.
  4. Effect on other work, on structural integrity of project.
  5. Description of proposed work. Designate:
    - a. Scope of cutting and patching.
    - b. Contractor and Crafts to execute the work.
    - c. Products proposed to be used.
    - d. Extent of refinishing.
  6. Alternatives to cutting and patching.
  7. Designation of party responsible for cost of cutting and patching.
- B. Prior to cutting and patching done on instruction of Architect/ Engineer, submit cost estimate.
- C. When conditions of work, or schedule, indicate change of materials or methods, submit recommendation to Architect/Engineer, including:
1. Condition indicating change.
  2. Recommendation for alternative materials or methods.
  3. Submittals specified for substitutions.
- D. Submit written notice to Architect/Engineer, designating time work will be uncovered, to provide for observation.

1.3 PAYMENT FOR COSTS

- A. Costs caused by ill-timed or defective work, or work not conforming to contract documents, including costs for additional services of Architect/Engineer: Party responsible for ill-timed, rejected or non-conforming work.
- B. Work done on instructions of Architect/Engineer (by change order only), other than defective or non-conforming work: Owner

2. PRODUCTS

- 2.1 MATERIALS. For replacement of work removed: Comply with specifications for type of work to be performed.

3. EXECUTION

3.1 INSPECTION

- A. Inspect existing conditions of work, including elements subject to movement or damage during:
  - 1. Cutting and patching.
  - 2. Excavating and backfilling.
- B. After uncovering work, inspect conditions affecting installation of new products.

3.2 PREPARATION

- A. Prior to cutting:
  - 1. Provide shoring, bracing and support to maintain structural integrity of project.
  - 2. Provide protection for other portions of the project.
  - 3. Provide protection from elements.

3.3 PERFORMANCE

- A. Execute fitting and adjustment of products to provide finished installation to comply with specified tolerances, finishes.
- B. Execute cutting and demolition by methods which will prevent damage to other work, and will provide proper surfaces to receive installation of repairs and new work.
- C. Restore work which has been cut or removed; install new products to provide completed work in accord with contract documents.
- D. Refinish entire surfaces to provide an even finish.
- E. Continuous surfaces: To nearest intersection(s).
- F. Assembly: Entire refinishing.

END OF SECTION 01 73 29

DIVISION 1 - GENERAL REQUIREMENTS  
Section - 01 74 13 - Construction Cleaning

1. GENERAL

1.1 REQUIREMENTS INCLUDE

A. General Contractor: Supervise and coordinate cleaning operations.

1.2 RELATED REQUIREMENTS

A. Specified elsewhere:

1. Individual Specification Sections: specific cleaning for product or work.
2. Section 01 35 16 – Remodeling Project Procedures

2. PRODUCTS

2.1 EQUIPMENT

A. As designated in individual specification sections.

3. EXECUTION

3.1 CLEANING

A. As designated in individual specification sections.

3.2 DISPOSAL

- A. Maintain individual disposal units for sorting of debris for recycling and general disposal.
- B. Properly dispose of all contents of dumpsters off site in an environmentally friendly manner and in compliance with local, state and federal regulations.
- C. No burning of debris or materials is acceptable on site.
- D. All hazardous materials shall be disposed of off-site in an EPA approved facility.

END OF SECTION 01 74 13



DIVISION 1 - GENERAL REQUIREMENTS  
Section - 01 74 23 - Final Cleaning

1. GENERAL

1.1 REQUIREMENTS INCLUDE

A. General Contractor: Provide final cleaning:

1. At completion of work, or at such other times as directed by the Contractor, remove all waste, debris, rubbish, tools, equipment, machinery and surplus materials. Clean all sight exposed surfaces; leave work clean and ready for occupancy.

1.1 RELATED REQUIREMENTS

A. Specified elsewhere:

1. Section 01 74 13 - Construction Cleaning.

2. PRODUCTS

- 2.1 All products shall be environmentally friendly "Green" cleaning products.

3. EXECUTION

3.1 FINAL CLEANING

A. Employ experienced workmen for final cleaning.

B. Remove grease, dust, dirt, stains, labels, fingerprints, protection and other foreign materials from sight-exposed finished surfaces; polish surfaces so designated to specified finish.

1. In preparation for substantial completion or occupancy, conduct final inspection of sight-exposed surfaces, and of concealed spaces to ensure performance.

C. Repair, patch and touch up marred surfaces to specified finish, to match adjacent surfaces.

D. Contractor soft broom clean all exposed concrete surfaces clean; other paved areas with soft or stiff broom as directed. Rake clean other surfaces on grounds.

E. Contractor to replace air handling filters if units were not protected during construction and shown to have construction dust/debris.

F. Contractor maintain finally cleaned areas until project, or designated portion thereof, is accepted by A/E.

END OF SECTION 01 74 23

DIVISION 1 - GENERAL REQUIREMENTS  
Section - 01 78 36 - Warranties & Bonds

1. GENERAL

1.1 REQUIREMENTS INCLUDE

- A. Each Contractor shall warrant their work in accordance with the Standard Documents for Construction. In addition, the following Warranties and Bonds shall be provided as specified.
- B. Champaign County will be the designated agent during the warranty period.

2. PRODUCTS

- A. Warranties and Bonds. Include the following:
  - 1. Warranty and/or bond.
  - 2. List of circumstances and conditions that would affect validity of warranty or bond.

3. EXECUTION (NOT APPLICABLE)

END OF SECTION 01 78 36

DIVISION 02 - EXISTING CONDITIONS  
Section 02 41 19 - Selective Demolition

PART 1 - GENERAL

1.1 WORK INCLUDES

- A. Contractor shall provide all labor, materials, equipment and supplies necessary.
  - 1. Demolition and removal of selected portions of building as noted on the drawings and as required to complete the work shown on the drawings.

1.2 RELATED SECTIONS

- A. Drawings.
- B. General provisions of the contract including General and Supplemental Conditions.
- C. Division 01 Specifications.

1.3 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and returned to owner or removed and reinstalled.
- B. Remove and Salvage: Carefully detach from existing construction, in a manner to prevent damage, and deliver to Using Agency/University cleaned and ready for reuse.
- C. Remove and Reinstall: Detach items from existing construction, clean and prepare for reuse, and reinstall where indicated.
- D. Existing to Remain: Existing items of construction that are not to be permanently removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

1.4 INFORMATIONAL SUBMITTALS

- A. Proposed Protection Measures: Submit report, including drawings, that indicates the measures proposed for protecting individuals and property for dust control and for noise control. Indicate proposed locations and construction of barriers.
- B. Schedule of Selective Demolition Activities: Indicate the following:
  - 1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity. Ensure Owner's building manager's on-site operations are uninterrupted.
  - 2. Interruption of utility services. Indicate how long utility services will be interrupted.
  - 3. Coordination for shutoff, capping, and continuation of utility services.
  - 4. Coordination on the use of elevator and stairs.

5. Coordination of Owner's continuing occupancy of portions of existing building and of Owner's partial occupancy of completed Work.
- C. Inventory: Submit a list of items to be removed and salvaged and deliver to Owner prior to start of demolition.
- D. Pre-demolition Photographs or Video: Submit before Work begins.
  1. Any damage not documented as pre-existing will be repaired by contractor.
- E. Warranties: Documentation indicated that existing warranties are still in effect after completion of selective demolition.
- F. Closeout Submittals
  1. Inventory: Submit a list of items that have been removed and salvaged

#### 1.5 QUALITY ASSURANCE

- A. Pre-demolition Conference: Conduct conference at Project site.
  1. Inspect and discuss condition of construction to be selectively demolished.
  2. Review structural load limitations of existing structure.
  3. Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.
  4. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.
  5. Review areas where existing construction is to remain and requires protection.

#### 1.6 PROJECT CONDITIONS

- A. Owner will occupy portions of building to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- C. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Storage or sale of removed items or materials on-site is not permitted.
- E. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
- F. Warranty: Existing Warranties. Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties. Notify warrantor before proceeding.
- G. If any suspected hazardous materials are encountered do not disturb; immediately notify Architect and Owner.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSE A10.6 and NFPA 241.
- C. Call the Fire Department and notify the Owner if the following systems will be disabled/ restricted at any time during construction/ renovation.
  - 1. Fire Alarm.
  - 2. Fire Suppression.
  - 3. Emergency exit and evacuation.
- D. Any construction/renovation that creates excessive dust (i.e. demolition of plaster, drywall, or flooring) must use dust barriers and negative pressure ventilation.
- E. Any construction/renovation that involves temporary loss of power or ventilation must be coordinated/scheduled with the Facility Manager and will be discussed and determined at the pre-construction meeting.
- F. Any construction/ renovation that creates excessive noise (i.e. jack hammering, use of power saws, power drills,) must be coordinated/ scheduled with the Facility Manager or Using Agency, which will be determined at the pre-construction meeting.
- G. Any construction/ renovation that breaches/ penetrates the building envelope (roof, window, and wall) must be protected from water damage and subsequent mold growth.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
- B. Review record documents of existing construction provided by Owner. Owner and Architect do not guarantee that existing conditions are same as those indicated in record documents.
- C. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- D. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Architect.
- E. Verify hazardous materials have been remediated prior to proceeding with building demolition operations.

### 3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL/PLUMBING SYSTEMS

- A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.
  - 1. Comply with requirements for existing services/systems interruptions specified in Division 01 Section "Summary."

### 3.3 PREPARATION

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
  - 1. Comply with requirements for access and protection specified in Division 01 Section "Temporary Facilities and Controls."
- B. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
  - 1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
  - 2. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
  - 3. Cover and protect furniture, furnishings, and equipment that have not been removed.
  - 4. Comply with requirements for temporary enclosures, dust control, heating, and cooling specified in Division 01 Section "Temporary Facilities and Controls."
- C. Temporary Shoring: Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
  - 1. Strengthen or add new supports when required during progress of selective demolition.
- D. Remove temporary barricades and protections where/when hazards no longer exist.

### 3.4 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
  - 1. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
  - 2. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  - 3. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain fire watch and portable fire-suppression devices during flame-cutting operations and for two (2) hours after operations cease.

4. Maintain adequate ventilation when using cutting torches.
  5. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
  6. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  7. Dispose of demolished items and materials promptly.
- B. Removed and Reinstalled Items:
1. Clean and repair items to functional condition adequate for intended reuse.
  2. Pack or crate items after cleaning and repairing. Identify contents of containers.
  3. Protect items from damage during transport and storage.
  4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- C. Unless otherwise indicated, demolition waste becomes the property of the Contractor.
- D. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and reinstalled in their original locations after selective demolition operations are complete.

### 3.5 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Except for items or materials indicated to be reused, returned to Owner, reinstalled, or otherwise indicated to remain Owner's property, remove demolished materials from Project site.
1. Do not allow demolished materials to accumulate on-site.
  2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
  3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

### 3.6 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 02 41 19

DIVISION 06 - WOOD, PLASTICS, & COMPOSITES  
Section 06 10 00 - Rough Carpentry

PART 1 - GENERAL

1.1. WORK INCLUDES

- A. Coordinating Contractor shall provide all labor, materials, equipment and supplies for:
  - 1. Carpentry work shown on the drawings for blocking.
  - 2. Composite wood fascia.

1.2. RELATED WORK

- A. Drawings.
- B. General provisions of the contract including General and Supplemental Conditions.
- C. Division 01 Specifications.

1.3. REFERENCES

- A. All references are the current editions unless noted otherwise.
- B. ALSC - American Lumber Standards Committee: Softwood Lumber Standards.
- C. APA - American Plywood Association: Grades and Standards.
- D. AWPA - American Wood Preservers' Association
- E. FS TT-W-571 - Wood Preservation: Treating Practices.
- F. NFPA - National Forest Products Association.
- G. SFPA - Southern Forest Products Association.
- H. WCLIB - West Coast Lumber Inspection Bureau: Standard Grading Rules for West Coast Lumber.
- I. WWPA - Western Wood Products Association.

1.4. QUALITY ASSURANCE

- A. Plywood Standard: Comply with DOC, PS 1.

1.5. PRODUCT HANDLING

- A. Delivery and Storage: Keep materials dry during delivery and storage. Protect against exposure to weather and store above ground on framework or blocking. Cover with protective waterproof covering. Stack plywood to provide air circulation within stacks.

PART 2 - PRODUCTS

2.1 MATERIALS



- A. Composite Wood Fascia: Wood plastic composite (WPC) material made up of recycled materials; size as indicated on Drawings.
- B. Wood sheathing for roofs shall be 5/8" thickness.
- C. 2 x 2 blocking will be straight and smooth with no knots or blemishes.
- D. Fasteners and Anchorages: Provide size, type, material and finish as recommended by applicable Standards for nails, staples, screws, bolts, nuts, washers and anchoring devices.
- E. Treated wood is not permitted.

### PART 3 - EXECUTION

#### 3.1 INSPECTION

- A. Examine the supporting structure and the conditions under which the carpentry work is to be installed. Notify the Architect in writing of conditions detrimental to the work. Do not proceed with the installation until unsatisfactory conditions have been corrected.

#### 3.2 INSTALLATION

- A. Basic requirements:
  - 1. Discard units of material with defects which might impair the quality of the work, and units which are too small to fabricate the work with minimum joints or the optimum joint arrangement.
  - 2. Set carpentry work accurately to indicated levels and lines, with members plumb and true and accurately cut and fitted.
  - 3. Securely attach carpentry work by anchoring and fastening as shown or by recognized standards. Countersink nail heads on exposed carpentry work and fill holes. Use common wire nails, except as otherwise indicated. Use finishing nails for finish work. Select fasteners of size that will not penetrate members where opposite side will be exposed to view or will receive finish materials.
  - 4. Make tight connections between members: Install fasteners without splitting of wood; predrill as required.
  - 5. Select fasteners of a size that will make tight all connections between members. Install fasteners without the splitting of wood; pre-drill as required.
- B. Wood blocking :
  - 1. Provide wherever shown and where required for screeding or attachment of other work or equipment / items requiring blocking. Form to shapes as shown and cut for true line and level of work to be attached. Coordinate location with other work involved.
  - 2. Attachment shall support applied loading. Countersink bolts and nuts flush with surfaces, unless otherwise shown.
- C. Installation of plywood:
  - 1. Comply with recommendations of the American Plywood Association (APA) for the installation of plywood.

END OF SECTION 06 10 00

DIVISION 7 - THERMAL AND MOISTURE PROTECTION  
SECTION 07 31 13 - ASPHALT SHINGLES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
  - 1. Glass-fiber-reinforced asphalt shingles.
  - 2. Underlayment materials.
- B. Related Requirements:
  - 1. Section 07 62 00 – Flashing and Sheet Metal

1.3 DEFINITIONS

- A. Roofing Terminology: See ASTM D1079 for definitions of terms related to roofing Work in this Section.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference:
  - 1. Contractor shall arrange conference at project site. Contractor, installation contractor project manager and site foreman, and Architect shall be in attendance.

1.5 ACTION SUBMITTALS

- A. Product Data: For the following:
  - 1. Asphalt shingles.
  - 2. Underlayment materials.
  - 3. Asphalt roofing cement.
  - 4. Elastomeric flashing sealant.
- B. Samples: For each exposed product and for each color and blend specified, in sizes indicated.
  - 1. Asphalt Shingles: Full size.
  - 2. Ridge and Hip Cap Shingles: Full size.

C. Samples for Verification: For the following products, in sizes indicated:

1. Asphalt Shingles: Full size for each type of shingle specified.
2. Ridge and Hip Cap Shingles: Full size.

#### 1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Product Test Reports: For each type of asphalt shingle and underlayment product indicated, for tests performed by manufacturer and witnessed by a qualified testing agency.
- C. Research Reports: For synthetic underlayment, from ICC-ES, indicating that product is suitable for intended use under applicable building codes.
- D. Sample Warranty: For manufacturer's materials warranty.

#### 1.7 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For asphalt shingles to include in maintenance manuals.
- B. Materials warranties.
- C. Roofing Installer's warranty.

#### 1.8 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  1. Asphalt Shingles: 100 sq. ft. (9.3 sq. m) of each type and in each color and blend, in unbroken bundles.

#### 1.9 QUALITY ASSURANCE

- A. Installer Qualifications: An authorized installer who is trained and approved by manufacturer.

#### 1.10 DELIVERY, STORAGE, AND HANDLING

- A. Store roofing materials in a dry, well-ventilated location protected from weather, sunlight, and moisture in accordance with manufacturer's written instructions.
- B. Store underlayment rolls on end, on pallets or other raised surfaces. Do not double-stack rolls.
- C. Protect unused roofing materials from weather, sunlight, and moisture when left overnight or when roofing Work is not in progress.

- D. Handle, store, and place roofing materials in a manner to prevent damage to roof deck or structural supporting members.

#### 1.11 FIELD CONDITIONS

- A. Environmental Limitations: Proceed with installation only when existing and forecasted weather conditions permit product installation and related Work to be performed in accordance with manufacturer's written instructions and warranty requirements.
  - 1. Install self-adhering, polymer-modified bitumen sheet underlayment within the range of ambient and substrate temperatures recommended in writing by manufacturer.

#### 1.12 WARRANTY

- A. Materials Warranty: Manufacturer agrees to repair or replace asphalt shingles that fail within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Manufacturing defects.
  - 2. Materials Warranty Period: 25 years from date of Substantial Completion, prorated, with first three years non-prorated.
  - 3. Wind-Speed Warranty Period: Asphalt shingles will resist blow-off or damage caused by wind speeds of up to 130 mph (58 m/s) for fifteen (15) years from date of Substantial Completion.
  - 4. Workmanship Warranty Period: Two years from date of Substantial Completion.

### PART 2 - PRODUCTS

#### 2.1 SOURCE LIMITATIONS

- A. Obtain each type of product from single source from single manufacturer.

#### 2.2 PERFORMANCE REQUIREMENTS

- A. Exterior Fire-Test Exposure: Provide asphalt shingles and related roofing materials identical to those of assemblies tested for Class A fire resistance in accordance with ASTM E108 or UL 790 by Underwriters Laboratories or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify products with appropriate markings of applicable testing agency.
- B. Wind Resistance: Provide asphalt shingles that comply with requirements of ASTM D3161/D3161M, Class F, and with ASTM D7158/D7158M, Class H.

#### 2.3 GLASS-FIBER-REINFORCED ASPHALT SHINGLES

- A. Laminated-Strip Asphalt Shingles: ASTM D3462/D3462M, laminated, multi-ply overlay construction; glass-fiber reinforced, mineral-granule surfaced, and self-sealing.

1. GAF "Timberline Ultra, Heather Blend"
2. Substitutions in accordance with 01 62 04 - Substitutions
3. Algae Resistance: Granules resist algae discoloration.
4. Color and Blends: Match Architect's samples.

B. Hip and Ridge Shingles: Manufacturer's standard units to match asphalt shingles.

## 2.4 UNDERLAYMENT MATERIALS

A. Organic Felt: Asphalt-saturated organic felts, nonperforated and complying with the following:

1. ASTM D226/D226M: Type II

## 2.5 ACCESSORIES

A. Asphalt Roofing Cement: ASTM D4586/D4586M Type II, asbestos free.

B. Elastomeric Flashing Sealant: ASTM C920, Type S, Grade NS, one-part, non-sag, elastomeric polymer sealant; of class and use classifications required to seal joints and remain watertight; recommended in writing by manufacturer for installation of flashing systems.

C. Roofing Nails: ASTM F1667, hot-dip galvanized-steel wire shingle nails, 11 gage minimum 0.120-inch- (3-mm-) diameter, sharp-pointed, with a 3/8" diameter flat head and of sufficient length to provide total penetration 3/4 inch (19 mm) into solid wood decking.

1. Where nails are in contact with metal flashing, use nails made from same metal as flashing.

D. Underlayment Nails: Aluminum, stainless steel, or hot-dip galvanized-steel wire nails with low-profile metal or plastic caps, 1-inch- (25-mm-) minimum diameter.

1. Provide with minimum 0.0134-inch- (0.34-mm-) thick metal cap, 0.010-inch- (0.25-mm-) thick power-driven metal cap, or 0.035-inch- (0.89-mm-) thick plastic cap; and with minimum 0.083-inch- (2.11-mm-) thick ring shank or 0.091-inch- (2.31-mm-) thick smooth shank of length to penetrate at least 3/4 inch (19 mm) into roof sheathing or to penetrate through roof sheathing less than 3/4 inch (19 mm) thick.

## 2.6 METAL FLASHING AND TRIM – See Section 07 62 00

## PART 3 - EXECUTION

### 3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

1. Examine roof sheathing to verify that sheathing joints are supported by framing and blocking or metal clips and that installation is within flatness tolerances.

2. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and completely anchored and that provisions have been made for flashings and penetrations through asphalt shingles.
  3. Verify that vent stacks and other penetrations through roofing are installed and securely fastened.
- B. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Remove all existing roofing down to the roof deck.
- B. Verify that the deck is dry, sound, clean and smooth. It shall be free of any depressions, waves, and projections.
- C. Cover with sheet metal, all holes over 1 inch (25mm) in diameter, cracks over 1/2 inch (12mm) in width, loose knots and excessively resinous areas.
- D. Clean deck surfaces thoroughly prior to installation of eaves protection membrane and underlayment.

### 3.3 INSTALLATION OF UNDERLAYMENTS General:

1. Install using methods in accordance with manufacturer's recommendations and local building codes. When local codes and application instructions are in conflict, the more stringent requirements shall take precedence.
- B. Eaves:
1. install ice/water shield up the slope from eaves edge a full 36 inches (914mm) or to at least 24 inches (610 mm) beyond the interior "warm wall" (whichever length is greatest). Lap ends 6 inches (152mm) and bond.
- C. Hips and Ridges:
1. Install ice/water barrier along entire lengths.
- D. Roof Deck Protection:
1. Install one layer of roofing felt over the entire area not protected by ice/water shield at the eaves or valley. Install sheets horizontally so water sheds and nail in place.
  2. On roofs sloped at more than 4:12, lap horizontal edges at least 2 inches (51mm) and at least 2 inches (51mm) over eaves protection membrane.
  3. Lap ends at least 4 inches (102 mm). Stagger end laps of each layer at least 36 inches (914 mm).
  4. Lap roofing felt over ice/water shield in valley at least 6 inches (152mm).
- E. Penetrations:
1. Vent pipes: Install a 24 inch (610 mm) square piece of eaves protection membrane lapping over roof deck underlayment; seal tightly to pipe.

2. Vertical walls: Install eaves protection membrane extending at least 6 inches (152mm) up the wall and 12 inches (305mm) on to the roof surface. Lap the membrane over the roof deck underlayment.
3. Rake Edges: Install metal edge flashing over eaves protection membrane and roof deck underlayment; set tight to rake boards; lap joints at least 2 inches (51mm) and seal with plastic cement; secure with nails.

### 3.4 INSTALLATION OF STARTER SHINGLES

#### A. General:

1. Install in accordance with manufacturer's instructions and local building codes. When local codes and application instructions are in conflict, the more stringent requirements shall take precedence.
2. Refer to application instructions for the selected starter strip shingles.

#### B. Placement and Nailing:

1. For maximum wind resistance along rakes & eaves, install any starter strip containing sealant or cement shingles to underlayment and each other in a 4" (102mm) width of asphalt plastic roof cement.
2. Place starter strip shingles 1/4" – 3/4" (6 – 19mm) over eave and rake edges to provide drip edge.
3. Nail approximately 1-1/2" – 3" (38 – 76mm) above the butt edge of the shingle.
4. Rake starter course should overlap eave edge starter strip at least 3" (76mm).

### 3.5 INSTALLATION OF SHINGLES

#### A. General:

1. Install in accordance with manufacturer's instructions and local building codes. When local codes and application instructions are in conflict, the more stringent requirements shall take precedence.
2. Minimize breakage of shingles by avoiding dropping bundles on edge, by separating shingles carefully (not by "breaking" over ridge or bundles), and by taking extra precautions in temperatures below 40 degrees F (4 degrees C).
3. Handle carefully in hot weather to avoid scuffing the surfacing or damaging the shingle edges.

#### B. Placement and Nailing: Secure with 4, 5, or 6 nails per shingle per manufacturer's application instructions or local codes

1. Placement of nails varies based on the type of shingle specified. Consult the application instructions for the specified shingle for details.
2. Nails must be driven flush with the shingle surface. Do not overdrive or under drive the nails.
3. Shingle offset varies based on the type of shingle specified. Consult the application instructions for the specified shingle for details.

#### C. Penetrations

1. All Penetrations are to be flashed according to manufacturer, ARMA and NRCA application instructions and construction details.

3.6 INSTALLATION OF METAL FLASHING AND TRIM

- A. Install metal flashings and trim to comply with requirements in Section 076200 "Sheet Metal Flashing and Trim."

3.7 PROTECTION

- A. Protect installed products from foot traffic until completion of the project.
- B. Any roof areas that are not completed by the end of the workday are to be protected from moisture and contaminants.

END OF SECTION 07 31 13



DIVISION 7 - THERMAL AND MOISTURE PROTECTION  
Section 07 53 23 - Ethylene-Propylene-Diene-Monomer (EPDM) Roofing

PART 1 - GENERAL

1.1 WORK INCLUDES

- A. Coordinating Contractor shall provide all labor, materials, equipment and supplies for:
1. Fully adhered ethylene-propylene-diene-terpolymer (EPDM) roofing system.
  2. Roof insulation.
  3. Cover board.

1.2 PREINSTALLATION MEETINGS

- A. Pre-installation Conference: Coordinating Contractor shall arrange conference at project site concurrent with Pre-Construction Meeting. General Contractor, installation contractor, project manager, site foreman, and Architect shall be in attendance. If the work impacts other trades, a representative from those contractors shall also be in attendance.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
1. For insulation and roof system component fasteners.
  2. Roof system components.
- B. Shop Drawings: Include roof plans, sections, details, and attachments to other work, including the following:
1. Layout and thickness of insulation.
  2. Base flashings and membrane terminations.
  3. Flashing details at penetrations.
  4. Insulation fastening patterns for corner, perimeter, and field-of-roof locations.
- C. Samples: For the following products:
1. Roof membrane and flashings.
- D. Wind Uplift Resistance Submittal: For roofing system, indicating compliance with wind uplift performance requirements.
- E. Roof System Manufacturer's Sample Warranty

#### 1.4 INFORMATIONAL SUBMITTALS

##### A. Manufacturer Certificates:

1. Performance Requirement Certificate: Signed by roof membrane manufacturer, certifying that roofing system complies with requirements specified in "Performance Requirements" Article.
  - A. Submit evidence of complying with performance requirements.
2. Special Warranty Certificate: Signed by roof membrane manufacturer, certifying that all materials supplied under this Section are acceptable for special warranty.

##### B. Product Test Reports: For components of roof membrane and insulation, for tests performed by a qualified testing agency, indicating compliance with specified requirements.

##### C. Research reports.

##### D. Field Test Reports:

1. Concrete internal relative humidity test reports.
2. Fastener-pullout test results and manufacturer's revised requirements for fastener patterns.

##### E. Field quality-control reports.

##### F. Sample warranties.

#### 1.5 CLOSEOUT SUBMITTALS

##### A. Maintenance data.

##### B. Certified statement from existing roof membrane manufacturer stating that existing roof warranty has not been affected by Work performed under this Section.

#### 1.6 QUALITY ASSURANCE

##### A. Manufacturer Qualifications: A qualified manufacturer that is UL listed for roofing system identical to that used for this Project.

##### B. Installer Qualifications: A qualified firm that is approved, authorized, or licensed by roofing system manufacturer (if required by manufacturer) to install manufacturer's product and that is eligible to receive manufacturer's special warranty.

#### 1.7 WARRANTY

##### A. Special Warranty: Manufacturer agrees to repair or replace components of roofing system that fail in materials or workmanship within specified warranty period.

1. Warranty Period: **20** years non-prorated from Date of Substantial Completion.
- B. Contractor's Warranty: Two (2) years on workmanship, non-prorated.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Accelerated Weathering: Roof membrane shall withstand 2000 hours of exposure when tested according to ASTM G 152, ASTM G 154, or ASTM G 155.
- B. Impact Resistance: Roof membrane shall resist impact damage when tested according to ASTM D 3746, ASTM D 4272, or the Resistance to Foot Traffic Test in FM Approvals 4470.
- C. Exterior Fire-Test Exposure: ASTM E 108 or UL 790, Class A for application and roof slopes indicated; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
- D. Fire-Resistance Ratings: Comply with fire-resistance-rated assembly designs indicated. Identify products with appropriate markings of applicable testing agency.
- E. Wind Uplift Resistance: Design roofing system to resist the following wind uplift pressures when tested according to FM Approvals 4474, UL 580, or UL 1897 (Basic wind speed – 90 MPH per ACSE):
  1. Zone 1 (Roof Area Field): 21 lbf/sq. ft.
  2. Zone 2 (Roof Area Perimeter): 36.2 lbf/sq. ft.
    - A. Location: From roof edge to 5.7' inside roof edge.
  3. Zone 3 (Roof Area Corners): 54.6 lbf/sq. ft.
    - A. Location: 56'-8" x 110'-8" in each direction from building corner.
- F. SPRI's Directory of Roof Assemblies Listing: Roof membrane, base flashings, and component materials shall comply with requirements in FM Approvals 4450 or FM Approvals 4470 as part of a roofing system and shall be listed in SPRI's Directory of Roof Assemblies for roof assembly identical for that specified for this Project.
  1. Wind Uplift Load Capacity: 105 psf

### 2.2 ETHYLENE-PROPYLENE-DIENE-TERPOLYMER (EPDM) ROOFING

- A. EPDM Sheet: ASTM D 4637/D 4637M, Type II, scrim or fabric internally reinforced.
  1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - A. Firestone Building Products.
    - B. GenFlex Roofing Systems.

- C. Johns Manville; a Berkshire Hathaway company.
  - D. Carlisle Roofing Systems
  - E. Versico Roofing Systems.
- 2. Thickness: 60 mils (1.5 mm) nominal.
  - 3. Exposed Face Color: Black.
  - 4. All accessories shall be by membrane manufacturer.

### 2.3 AUXILIARY ROOFING MATERIALS

- A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with other roofing components.
  - 1. Adhesive and Sealants: 250 grams/liter, or comply with VOC limits of State and local Authorities; whichever is lower.
- B. Sheet Flashing: 60-mil- (1.5-mm-) thick EPDM, partially cured or cured, according to application.
- C. Protection Sheet: Epichlorohydrin or neoprene nonreinforced flexible sheet, 55 to 60 mils (1.4 to 1.5 mm) thick, recommended by EPDM manufacturer for resistance to hydrocarbons, non-aromatic solvents, grease, and oil.
- D. Slip Sheet: Manufacturer's standard, of thickness required for application.
- E. Prefabricated Pipe Flashings: As recommended by roof membrane manufacturer.
- F. Bonding Adhesive: Manufacturer's standard.
- G. Modified Asphaltic Fabric-Backed Membrane Adhesive: Roofing system manufacturer's standard modified asphalt, asbestos-free, cold-applied adhesive formulated for compatibility and use with fabric-backed membrane roofing.
- H. Water-Based, Fabric-Backed Membrane Adhesive: Roofing system manufacturer's standard water-based, cold-applied adhesive formulated for compatibility and use with fabric-backed membrane roofing.
- I. Low-Rise, Urethane, Fabric-Backed Membrane Adhesive: Roof system manufacturer's standard spray-applied, low-rise, two-component urethane adhesive formulated for compatibility and use with fabric-backed membrane roofing.
- J. Seaming Material: Single-component, butyl splicing adhesive and splice cleaner.
- K. Lap Sealant: Manufacturer's standard, single-component sealant, colored to match membrane roofing.
- L. Water Cutoff Mastic: Manufacturer's standard butyl mastic sealant.
- M. Metal Termination Bars: Manufacturer's standard, predrilled stainless steel or aluminum bars, approximately 1 by 1/8 inch (25 by 3 mm) thick; with anchors.

- N. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening components to substrate, and acceptable to roofing system manufacturer.
- O. Miscellaneous Accessories: Provide pourable sealers, preformed cone and vent sheet flashings, molded pipe boot flashings, preformed inside and outside corner sheet flashings, reinforced EPDM securement strips, T-joint covers, in-seam sealants, termination reglets, cover strips, and other accessories.
  - 1. Provide white flashing accessories for white EPDM membrane roofing.

## 2.4 INSULATION ACCESSORIES

- A. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening roof insulation and cover boards to substrate, and acceptable to roofing system manufacturer.
- B. Insulation Adhesive: Insulation manufacturer's recommended adhesive formulated to attach roof insulation to substrate or to another insulation layer as follows:
  - 1. Modified asphaltic, asbestos-free, cold-applied adhesive.
  - 2. Bead-applied, low-rise, one-component or multicomponent urethane adhesive.
  - 3. Full-spread, spray-applied, low-rise, two-component urethane adhesive.
- C. Cover Board: ASTM C 1325, fiber-mat-reinforced cementitious board, 1/2-inch thick.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements and other conditions affecting performance of the Work.
  - 1. Verify that concrete substrate is visibly dry and free of moisture, and that minimum concrete internal relative humidity is not more than 75 percent, or as recommended by roofing system manufacturer when tested according to ASTM F 2170.
  - 2. Verify that joints in precast concrete roof decks have been grouted flush with top of concrete.

### 3.2 PREPARATION

- A. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing system installation according to roofing system manufacturer's written instructions. Remove sharp projections.

### 3.3 ROOFING INSTALLATION, GENERAL

- A. Install roofing system according to roofing system manufacturer's written instructions and SPRI's Directory of Roof Assemblies assembly requirements.

- B. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system at end of workday or when rain is forecast. Remove and discard temporary seals before beginning work on adjoining roofing.
- C. Install roof membrane and auxiliary materials to tie into existing roofing to maintain weathertightness of transition.

### 3.4 INSTALLATION OF COVER BOARDS

- A. Install cover boards over insulation with long joints in continuous straight lines with end joints staggered between rows. Offset joints of insulation below a minimum of 6 inches (150 mm) in each direction.
  - 1. Trim cover board neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.
  - 2. At internal roof drains, conform to slope of drain sump.
    - A. Trim cover board so that water flow is unrestricted.
  - 3. Cut and fit cover board tight to nailers, projections, and penetrations.
  - 4. Loosely lay cover board over substrate.
  - 5. Adhere cover board to substrate using adhesive according to SPRI's Directory of Roof Assemblies for specified Windstorm Resistance Classification, as follows:
    - A. Set cover board in a solid mopping of hot roofing asphalt, applied within plus or minus 25 deg F (14 deg C) of equiviscous temperature.
    - B. Set cover board in ribbons of bead-applied insulation adhesive, firmly pressing and maintaining insulation in place.
    - C. Set cover board in a uniform coverage of full-spread insulation adhesive, firmly pressing and maintaining insulation in place.
- B. Install slip sheet over cover board and immediately beneath roofing.

### 3.5 ADHERED ROOFING INSTALLATION

- A. Adhere roof membrane over area to receive roofing according to roofing system manufacturer's written instructions and SPRI's Directory of Roof Assemblies assembly requirements.
- B. Unroll membrane roof membrane and allow to relax before installing.
- C. Start installation of roofing in presence of roofing system manufacturer's technical personnel.
- D. Accurately align roof membrane, and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.
- E. Bonding Adhesive: Apply to substrate and underside of roof membrane at rate required by manufacturer, and allow to partially dry before installing roof membrane. Do not apply to splice area of roof membrane.

- F. Hot Roofing Asphalt: Apply a solid mopping of hot roofing asphalt to substrate at temperature and rate required by manufacturer, and install fabric-backed roofing. Do not apply to splice area of roof membrane.
  - G. Fabric-Backed Roof Membrane Adhesive: Apply to substrate at rate required by manufacturer and install fabric-backed roof membrane.
  - H. In addition to adhering, mechanically fasten roof membrane securely at terminations, penetrations, and perimeters.
  - I. Apply roof membrane with side laps shingled with slope of roof deck where possible.
  - J. Adhesive Seam Installation: Clean both faces of splice areas, apply splicing cement.
    - 1. Firmly roll side and end laps of overlapping roof membrane to ensure a watertight seam installation.
    - 2. Apply lap sealant and seal exposed edges of roofing terminations.
    - 3. Apply a continuous bead of in-seam sealant before closing splice if required by roofing system manufacturer.
  - K. Tape Seam Installation: Clean and prime both faces of splice areas, apply splice tape.
    - 1. Firmly roll side and end laps of overlapping roof membrane to ensure a watertight seam installation.
    - 2. Apply lap sealant and seal exposed edges of roofing terminations.
  - L. Factory-Applied Seam Tape Installation: Clean and prime surface to receive tape.
    - 1. Firmly roll side and end laps of overlapping roof membrane to ensure a watertight seam installation.
    - 2. Apply lap sealant and seal exposed edges of roofing terminations.
  - M. Spread sealant or mastic bed over deck-drain flange at roof drains, and securely seal roof membrane in place with clamping ring.
  - N. Adhere protection sheet over roof membrane at locations indicated.
- 3.6 BASE FLASHING INSTALLATION
- A. Install sheet flashings and preformed flashing accessories and adhere to substrates according to roofing system manufacturer's written instructions.
  - B. Apply bonding adhesive to substrate and underside of sheet flashing at required rate and allow to partially dry. Do not apply to seam area of flashing.
  - C. Flash penetrations and field-formed inside and outside corners with cured or uncured sheet flashing.
  - D. Clean splice areas apply splicing cement, and firmly roll side and end laps of overlapping sheets to ensure a watertight seam installation. Apply lap sealant and seal exposed edges of sheet flashing terminations.

- E. Terminate and seal top of sheet flashings and mechanically anchor to substrate through termination bars.

### 3.7 PROTECTING AND CLEANING

- A. Protect roofing system from damage and wear during remainder of construction period. When remaining construction does not affect or endanger roofing system, inspect roofing system for deterioration and damage, describing its nature and extent in a written report, with copies to Architect and Owner.
- B. Correct deficiencies in or remove roofing system that does not comply with requirements, repair substrates, and repair or reinstall roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION 07 53 23



DIVISION 7 - THERMAL & MOISTURE PROTECTION  
Section 07 62 00 - Flashing and Sheet Metal

PART 1 - GENERAL

1.1 WORK INCLUDES:

- A. Base Bid:
  - 1. General Contractor shall provide all labor and materials for:
    - a. Flashing and sheet metal as indicated on Drawings and specified herein.

1.2 RELATED WORK:

- A. Specified elsewhere:
  - 1. Section 07 31 13 – Asphalt Shingles
  - 2. Section 07 53 23 – Ethylene-Propylene-Diene-Monomer (EPDM) Roofing

1.3 QUALITY ASSURANCE

- A. Use skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. In addition to complying with pertinent codes and regulations, comply with pertinent recommendations contained in the current edition of "Architectural Sheet Metal Manual" published by the Sheet Metal and Air Conditioning Contractors National Association (SMACNA).
- D. Standard commercial items may be used for flashing, trim, reglets, and similar purposes provided such items meet or exceed the quality standards specified.

1.4 SUBMITTALS

- A. Submit:
  - 2. Product data:
    - a. Materials list of items proposed to be provided under this Section.
    - b. Manufacturer's specifications and other data needed to prove compliance with the specified requirements.
    - c. Manufacturer's recommended installation procedures which, when approved by the Architect, will become the basis for accepting or rejecting actual installation procedures used on the work.
  - 3. Shop drawings:
    - a. In sufficient detail to show fabrication, installation, anchorage, and interface of the work of this section with the work of adjacent trades.

1.5 WARRANTY

- A. Special Warranty on Finishes: Manufacturer agrees to repair finish or replace sheet metal flashing and trim that shows evidence of deterioration of factory-applied finishes within specified warranty period.
  - 1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:

- a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
  - b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
  - c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
2. Finish Warranty Period: 10 years from date of substantial completion

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Sheet metal flashing and trim assemblies, including cleats, anchors, and fasteners, shall withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Completed sheet metal flashing and trim shall not rattle, leak, or loosen, and shall remain watertight.
- B. Sheet Metal Standard for Flashing and Trim: Comply with NRCA's "The NRCA Roofing Manual: Architectural Metal Flashing, Condensation and Air Leakage Control, and Reroofing and SMACNA's "Architectural Sheet Metal Manual" requirements for dimensions and profiles shown unless more stringent requirements are indicated.
- C. SPRI Wind Design Standard: Manufacture and install copings and roof edge flashings tested in accordance with ANSI/SPRI/FM 4435/ES-1.
- D. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes to prevent buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
  1. Temperature Change: 120 deg F ambient;

### 2.2 SHEET METAL

- A. Protect mechanical and other finishes on exposed surfaces from damage by applying strippable, temporary protective film before shipping.
- B. Apron, Step, Cricket, and Backer Flashing: Fabricate from the following materials:
  1. Aluminum: .032" thick
- C. Coping:: Fabricate from the following materials:
  1. Aluminum: .032" thick
- D. Drip Edges: Fabricate from the following materials:
  1. Aluminum: .032" thick
- E. Eave, Rake, Ridge Flashing: Fabricate from the following materials:
  1. Aluminum: .032" thick

## 2.3 UNDERLAYMENT MATERIALS

- A. Felt: ASTM D226/D226M, Type II (No. 30), asphalt-saturated organic felt; nonperforated.
- B. Synthetic Underlayment: Laminated or reinforced, woven polyethylene or polypropylene, synthetic roofing underlayment; bitumen free; slip resistant; suitable for high temperatures over 220 deg F ; and complying with physical requirements of ASTM D226/D226M for Type I and Type II felts.
- C. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Atlas Molded Products; a Division of Atlas Roofing Corporation.
  - 2. Intertape Polymer Group.
  - 3. Kirsch Building Products, LLC.
  - 4. SDP Advanced Polymer Products Inc.
- D. Self-Adhering, High-Temperature Sheet Underlayment: Minimum 30 mils (0.76 mm) thick, consisting of a slip-resistant polyethylene- or polypropylene-film top surface laminated to a layer of butyl- or SBS-modified asphalt adhesive, with release-paper backing; specifically designed to withstand high metal temperatures beneath metal roofing. Provide primer in accordance with underlayment manufacturer's written instructions.
  - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. Carlisle WIP Products; a brand of Carlisle Construction Materials.
    - b. GCP Applied Technologies Inc.
    - c. Henry Company.
    - d. Metal-Fab Manufacturing, a Drexel Metals Company.
    - e. Owens Corning.
    - f. Polyglass U.S.A., Inc.
    - g. Protecto Wrap Company.
    - h. SDP Advanced Polymer Products Inc.
  - 2. Low-Temperature Flexibility: ASTM D1970/D1970M; passes after testing at minus 20 deg F (29 deg C) or lower.
- E. Slip Sheet: Rosin-sized building paper, 3 lb/100 sq. ft. (0.16 kg/sq. m) minimum.

## 2.4 MISCELLANEOUS MATERIALS

- A. Provide materials and types of fasteners solder, protective coatings, sealants, and other miscellaneous items as required for complete sheet metal flashing and trim installation and as recommended by manufacturer of primary sheet metal or manufactured item unless otherwise indicated.
- B. Fasteners: Wood screws, annular threaded nails, self-tapping screws, self-locking rivets and bolts, and other suitable fasteners designed to withstand design loads and recommended by manufacturer of primary sheet metal.

1. General: Blind fasteners or self-drilling screws, gasketed, with hex-washer head.
- C. Sealant Tape: Pressure-sensitive, 100 percent solids, polyisobutylene compound sealant tape with release-paper backing. Provide permanently elastic, nonsag, nontoxic, nonstaining tape 1/2 inch (13 mm) wide and 1/8 inch (3 mm) thick.
- D. Elastomeric Sealant: ASTM C920, elastomeric polyurethane polymer sealant; of type, grade, class, and use classifications required to seal joints in sheet metal flashing and trim and remain watertight.
- E. Butyl Sealant: ASTM C1311, single-component, solvent-release butyl rubber sealant; polyisobutylene plasticized; heavy bodied for hooked-type expansion joints with limited movement.
- F. Bituminous Coating: Cold-applied asphalt emulsion in accordance with ASTM D1187/D1187M.
- G. Asphalt Roofing Cement: ASTM D4586, asbestos free, of consistency required for application.
- H. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the contractor subject to the approval of the Architect.

## 2.5 FABRICATION, GENERAL

- A. Custom fabricate sheet metal flashing and trim to comply with details indicated and recommendations in cited sheet metal standard that apply to design, dimensions, geometry, metal thickness, and other characteristics of item required.
  1. Fabricate sheet metal flashing and trim in shop to greatest extent possible.
  2. Fabricate sheet metal flashing and trim in thickness or weight needed to comply with performance requirements, but not less than that specified for each application and metal.
  3. Verify shapes and dimensions of surfaces to be covered and obtain field measurements for accurate fit before shop fabrication.
  4. Form sheet metal flashing and trim to fit substrates without excessive oil-canning, buckling, and tool marks; true to line, levels, and slopes; and with exposed edges folded back to form hems.
  5. Conceal fasteners and expansion provisions where possible. Do not use exposed fasteners on faces exposed to view.
- B. Fabrication Tolerances:
  1. Fabricate sheet metal flashing and trim that is capable of installation to a tolerance of 1/4 inch in 20 feet on slope and location lines indicated on Drawings and within 1/8-inch (3-mm) offset of adjoining faces and of alignment of matching profiles.
  2. Fabricate sheet metal flashing and trim that is capable of installation to tolerances specified.
- C. Expansion Provisions: Form metal for thermal expansion of exposed flashing and trim.
  1. Form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with butyl sealant concealed within joints.
  2. Use lapped expansion joints only where indicated on Drawings.

- D. Sealant Joints: Where movable, nonexpansion-type joints are required, form metal in accordance with cited sheet metal standard to provide for proper installation of elastomeric sealant.
- E. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal.
- F. Fabricate cleats and attachment devices of sizes as recommended by cited sheet metal standard for application, but not less than thickness of metal being secured.
- G. Seams:
  - 1. Fabricate nonmoving seams with flat-lock seams. Tin edges to be seamed, form seams, and solder.
  - 2. Fabricate nonmoving seams with flat-lock seams. Form seams and seal with elastomeric sealant unless otherwise recommended by sealant manufacturer for intended use. Rivet joints where necessary for strength.

### PART 3 - EXECUTION

#### 3.1 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.

#### 3.2 WORKMANSHIP

- A. General:
  - 1. Form sheet metal accurately and to the dimensions and shapes required, finishing molded and broken surfaces with true, sharp, and straight lines and angles and, where intercepting other members, coping to an accurate fit and soldering securely.
  - 2. Unless otherwise specifically permitted by the Architect, turn exposed edges back 1/2 inch.
- B. Form, fabricate, and install sheet metal so as to adequately provide for expansion and contraction in the finished work.
- C. Weatherproofing:
  - 1. Finish watertight and weather tight where so required.
  - 2. Make lock seam work flat and true to line.
  - 3. Where lap seams are not soldered, lap according to pitch, in no case less than three (3) inches.
  - 4. Make flat and lap seams in the direction of flow.
- D. Joints:
  - 1. Join parts with stainless steel sheet metal screws where necessary for strength and stiffness.
- E. Nailing:
  - 1. Whenever possible, secure metal by means of clips or cleats, without nailing through the exterior metal.

2. In general, space nails, rivets, and screws not more than eight (8) inches apart and, where exposed to the weather, use stainless steel or neoprene washers.
  3. For nailing into concrete, use drilled plugholes and plugs.
- F. Separate dissimilar metals from each other by painting each metal surface in area of contact with a heavy application of bituminous coating, or by other permanent separation as recommended by manufacturers of dissimilar metals.
- G. Installation of Aluminum Items:
1. Where aluminum flashing is shown with contact to non-ferrous or ferrous metal, wood or cementitious materials, apply 15-mil bituminous coating or heavy trowel coating of roofing cement on substrate or as back-coating on flashing.
  2. Provide form flat-lock seams with epoxy seam sealer or other permanent sealer recommended by aluminum manufacturer except at expansion joints.
  3. Clean exposed aluminum surfaces of every substance, which is visible or might cause corrosion of metal or deterioration of finish.
- 3.3 EMBEDMENT
- A. Embed metal in connection with roofs in a solid bead of sealant, using materials and methods approved in advance by the Architect/Engineer.
- 3.4 TESTS
- A. Upon request of the Architect/Engineer, demonstrate by hose or standing water that the flashing and sheet metal are completely watertight.

END OF SECTION 07 62 00

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### ABBREVIATIONS

ACT	ACOUSTICAL CEILING TILE	L	LAVATORY
AD	AREA DRAIN	M	
AFF	ABOVE FINISHED FLOOR	MATL	MATERIAL
ALUM	ALUMINUM	MAX	MAXIMUM
ANOD	ANODIZED	MECH	MECHANICAL
APPROX	APPROXIMATE	MFR	MANUFACTURER
B		MIN	MINIMUM
BMT	BASEMENT	MO	MASONRY OPENING
BTTM	BOTTOM OF	MRGWB	MOISTURE-RESISTANT GYPSUM WALL BOARD
C		MTD	MOUNTED
C/C	CENTER TO CENTER	MTL	METAL
CIP	CAST IN PLACE	N	
CJ	CONTROL JOINT	NIC	NOT IN CONTRACT
CLG	CEILING	NO	NUMBER
CLR	CLEAR	NOM	NOMINAL
CMU	CONCRETE MASONRY UNIT	O	
CO	CLEAN OUT	OC	ON CENTER
COL	COLUMN	OH	OPPOSITE HAND
CONC	CONCRETE	OZ	OUNCE
CONST JT	CONSTRUCTION JOINT	P	
CONT	CONTINUOUS	PCC	PRE-CAST CONCRETE
CPT	CARPET	PLUMB	PLUMBING
CT	CERAMIC TILE	PNT	PAINT/PAINTED
D		PSI	POUNDS PER SQUARE INCH
DBL	DOUBLE	PT	PRESSURE TREATED
DEMO	DEMOLISH	PVC	POLYVINYL CHLORIDE
DIA	DIAMETER	R	
DIMS	DIMENSIONS	R	RADIUS
DN	DOWN	RBR	RUBBER
DTL	DETAIL	RCP	REFLECTED CEILING PLAN
DWG	DRAWING	RD	ROOF DRAIN
E		REINF	REINFORCED
EA	EACH	REQD	REQUIRED
EJ	EXPANSION JOINT	RM	ROOM
EL	ELEVATION	S	
ELEC	ELECTRICAL	SF	SQUARE FOOT
ELEV	ELEVATOR / ELEVATION	SIM	SIMILAR
EPDM	ETHYLENE PROPYLENE DIENE ROOFING	SOG	SLAB ON GRADE
EQ	EQUAL	SPEC	SPECIFIED OR SPECIFICATION
EXIST	EXISTING	SPK	SPRINKLER
EXT	EXTERIOR	SQ	SQUARE
F		SSTL	STAINLESS STEEL
FD	FLOOR DRAIN	STC	SOUND TRANSMISSION COEFFICIENT
FE	FIRE EXTINGUISHER	STL	STEEL
FEC	FIRE EXTINGUISHER CABINET	STRUCT	STRUCTURAL
FFE	FINISHED FLOOR ELEVATION	T	
FIN	FINISH	T&G	TONGUE & GROOVE
FLR	FLOOR	TI	TOP OF
FND	FOUNDATION	TID	TELEPHONE/DATA
FO	FACE OF	TELE	TELEPHONE
FTG	FOOTING	TLT	TOILET
G		TOC	TOP OF CONCRETE
GA	GAUGE	TOS	TOP OF STEEL / STRUCTURE
GALV	GALVANIZED	TOW	TOP OF WALL
GWB	GYPSUM WALL BOARD	TYP	TYPICAL
H		U	
HC	HOLLOW CORE	UNO	UNLESS NOTED OTHERWISE
HM	HOLLOW METAL	V	
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING	VIF	VERIFY IN FIELD
I		VIP	VISION PANEL
INSUL	INSULATION / INSULATED	W	
INT	INTERIOR	WI	WITH
IRGWB	IMPACT RESISTANT GYPSUM WALLBOARD	WD	WOOD
		WWF	WELDED WIRE FABRIC

# COUNTY HIGHWAY SALT DOME ASPHALT SHINGLE REPLACEMENT PROJECT

ITB # : 2021-010

PROJECT NO : 020156  
ISSUED FOR BID

### DRAWING MATRIX

Sheet Number	Sheet Name
GENERAL	
G100	COVER SHEET
G111	ARCHITECTURAL SITE PLAN - SALT DOME
ARCHITECTURAL	
D200	SALT DOME ROOF PLAN - EXISTING/DEMO
A200	SALT DOME ROOF PLAN - NEW WORK
A901	SALT DOME ARCHITECTURAL DETAILS



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### SCOPE OF WORK

WORK GENERALLY INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:

SALT DOME:

- REMOVE EXISTING ASPHALT SHINGLE SYSTEM AND UNDERLAYMENT COMPLETELY DOWN TO ROOF DECK
- REMOVE EXISTING FLASHING WHERE INDICATED ON DRAWINGS.
- INSTALL ROOF UNDERLAYMENT, ICE/WATER SHIELD, AND ASPHALT SHINGLE SYSTEM
- INSTALL METAL FLASHINGS.

BROOKEN CENTER:

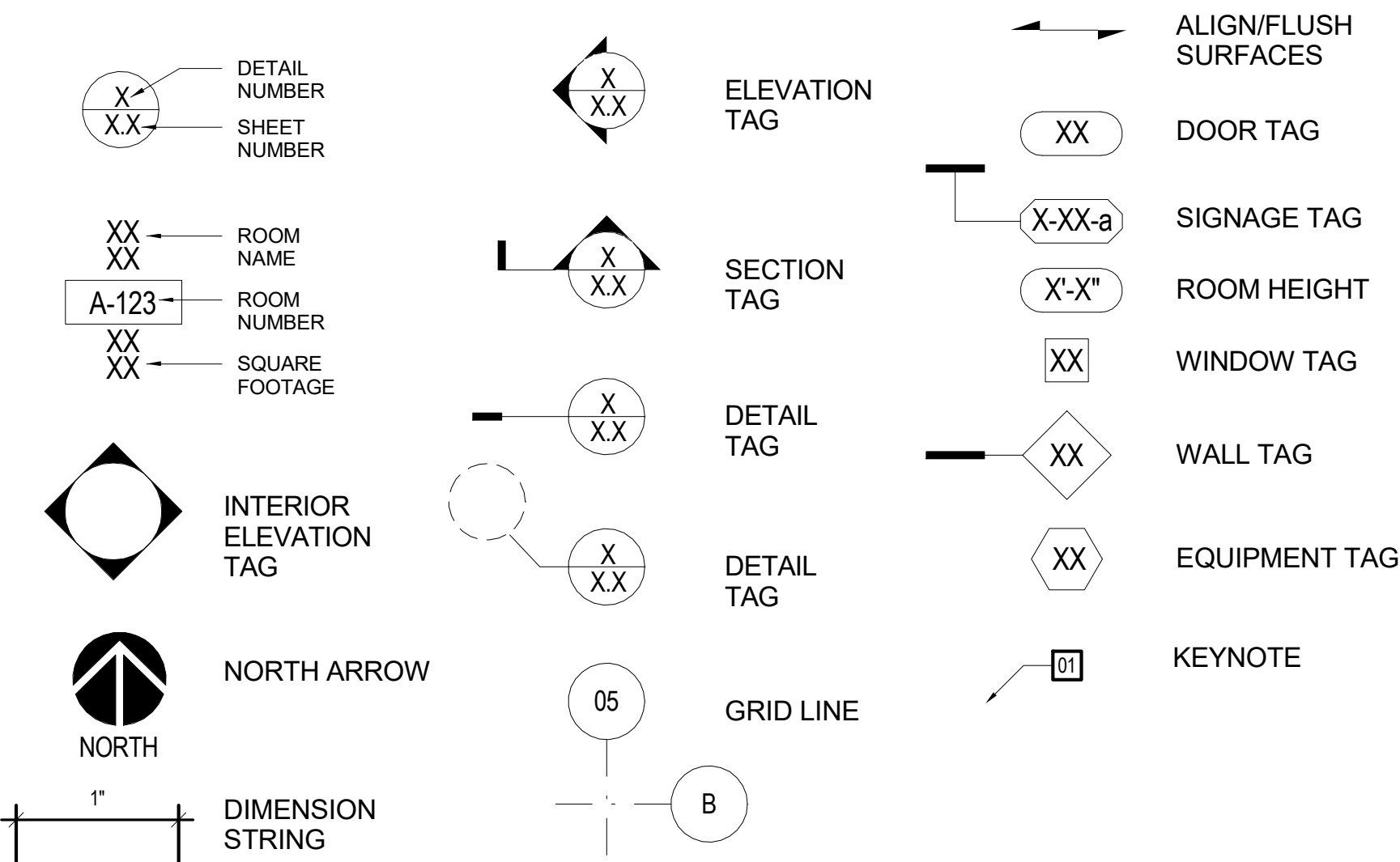
- REMOVE EXISTING EPDM SINGLE-PLY ROOFING COMPLETELY DOWN TO DECK.
- INSTALL .060 FULLY-ADHERED EPDM SINGLE-PLY ROOFING SYSTEM, TAPERED ROOF INSULATION.
- REMOVE AND REPLACE METAL FLASHINGS

### APPLICABLE BUILDING CODES

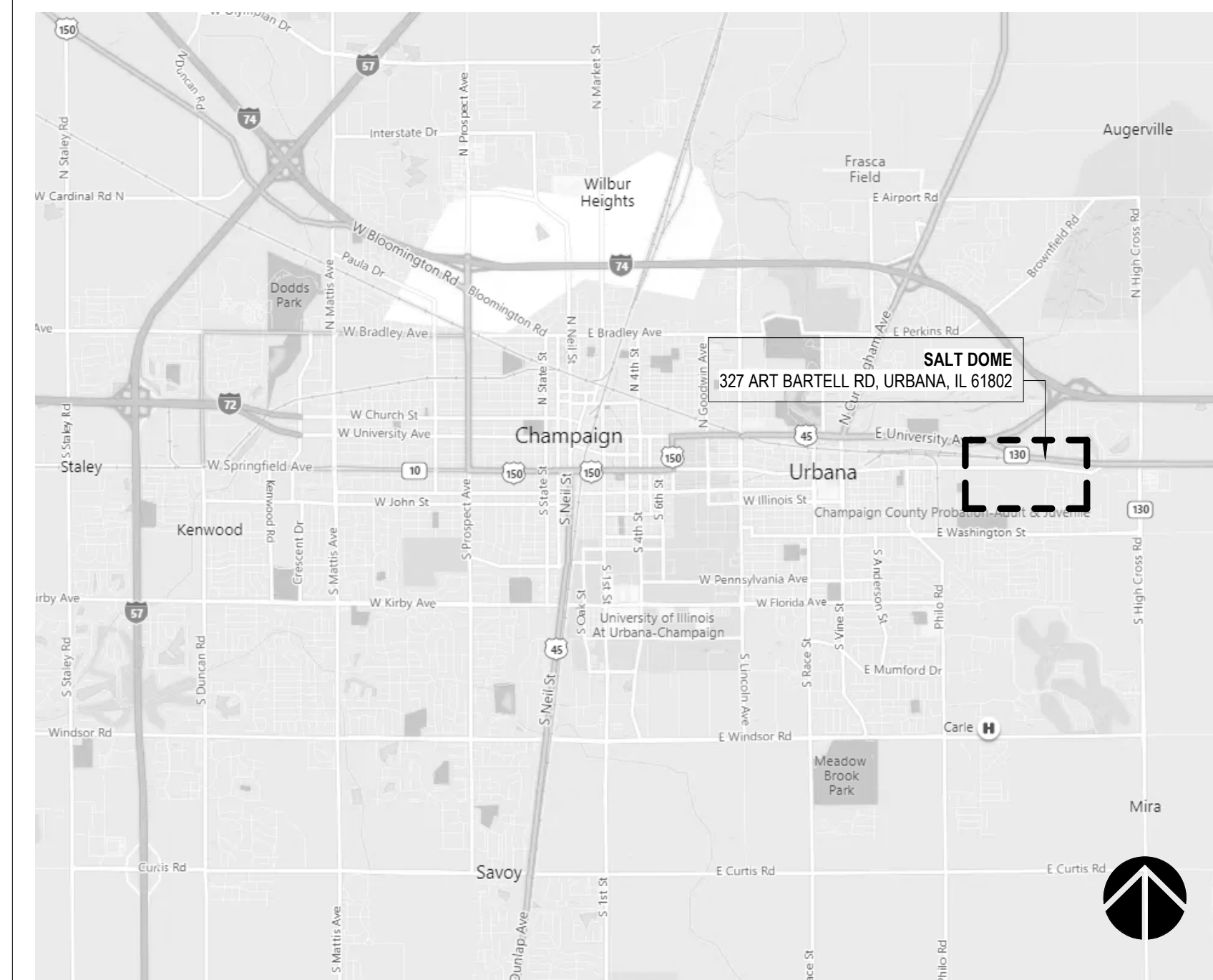
GOVERNING CODES:

- INTERNATIONAL BUILDING CODE 2009
- INTERNATIONAL FIRE CODE 2009
- ILLINOIS STATE PLUMBING CODE
- INTERNATIONAL MECHANICAL CODE 2009
- AMERICAN NATIONAL STANDARD INSTITUTE (ANSI)
- ANSI C2 - NATIONAL ELECTRICAL SAFETY CODE
- AMERICAN STANDARD TESTING MATERIALS (ASTM)
- NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) LIFE SAFETY CODE (LSC) NFPA 101
- NATIONAL FIRE CODE (NFC) 220
- SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA)
- UNDERWRITERS' LABORATORIES, INC. (UL)
- ICEA - STANDARDS FOR WIRE AND CABLE

### SYMBOLS LEGEND



### SITE LOCATION MAP



Issue Date	Drawing Set Title
9/2/2021	ISSUED FOR BID

ROOF REPLACEMENT ITB  
#2021-010

SALT DOME

COVER SHEET

Expiration Date of Seal: 11-30-2021

BE Project No. 020156

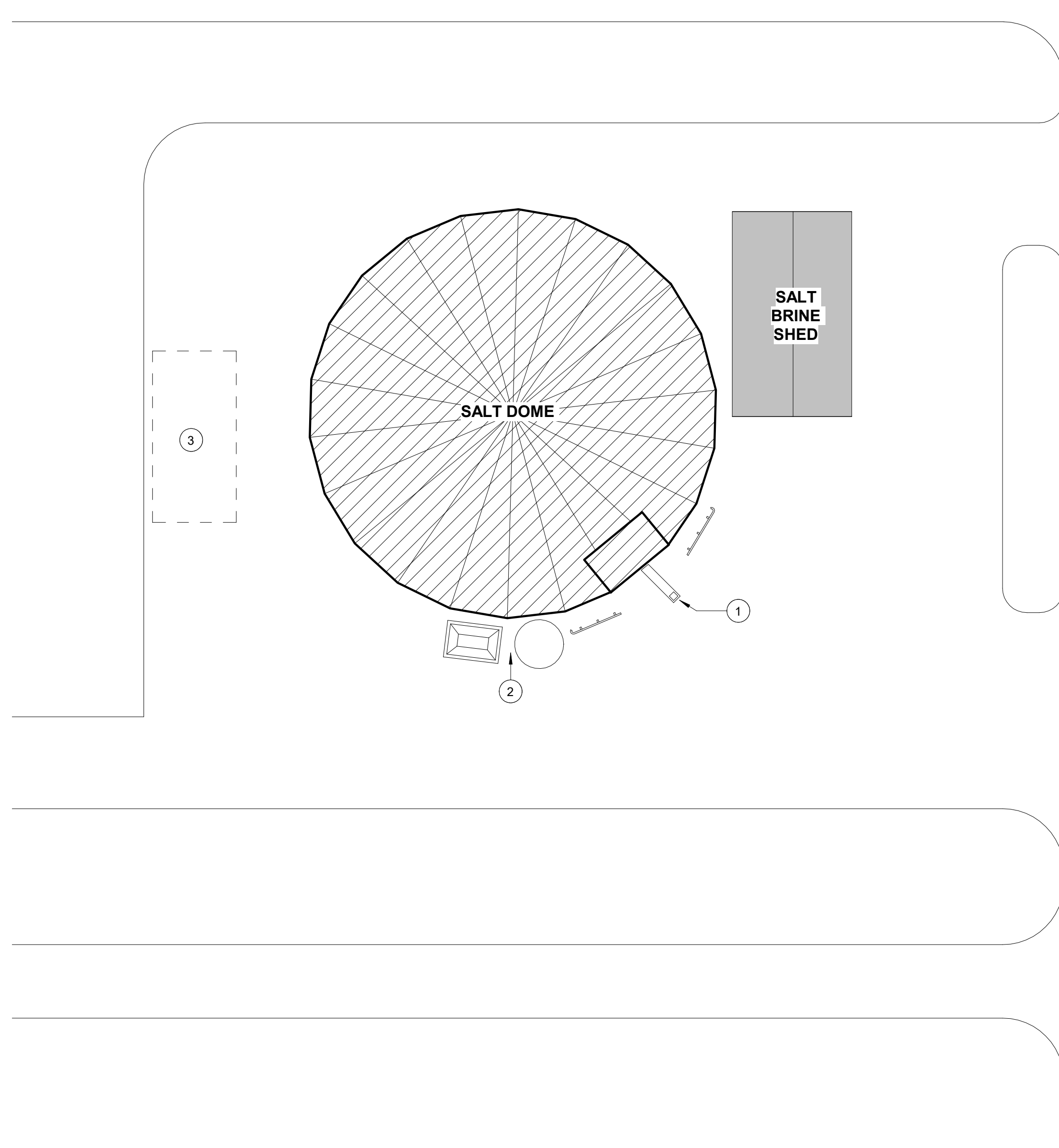
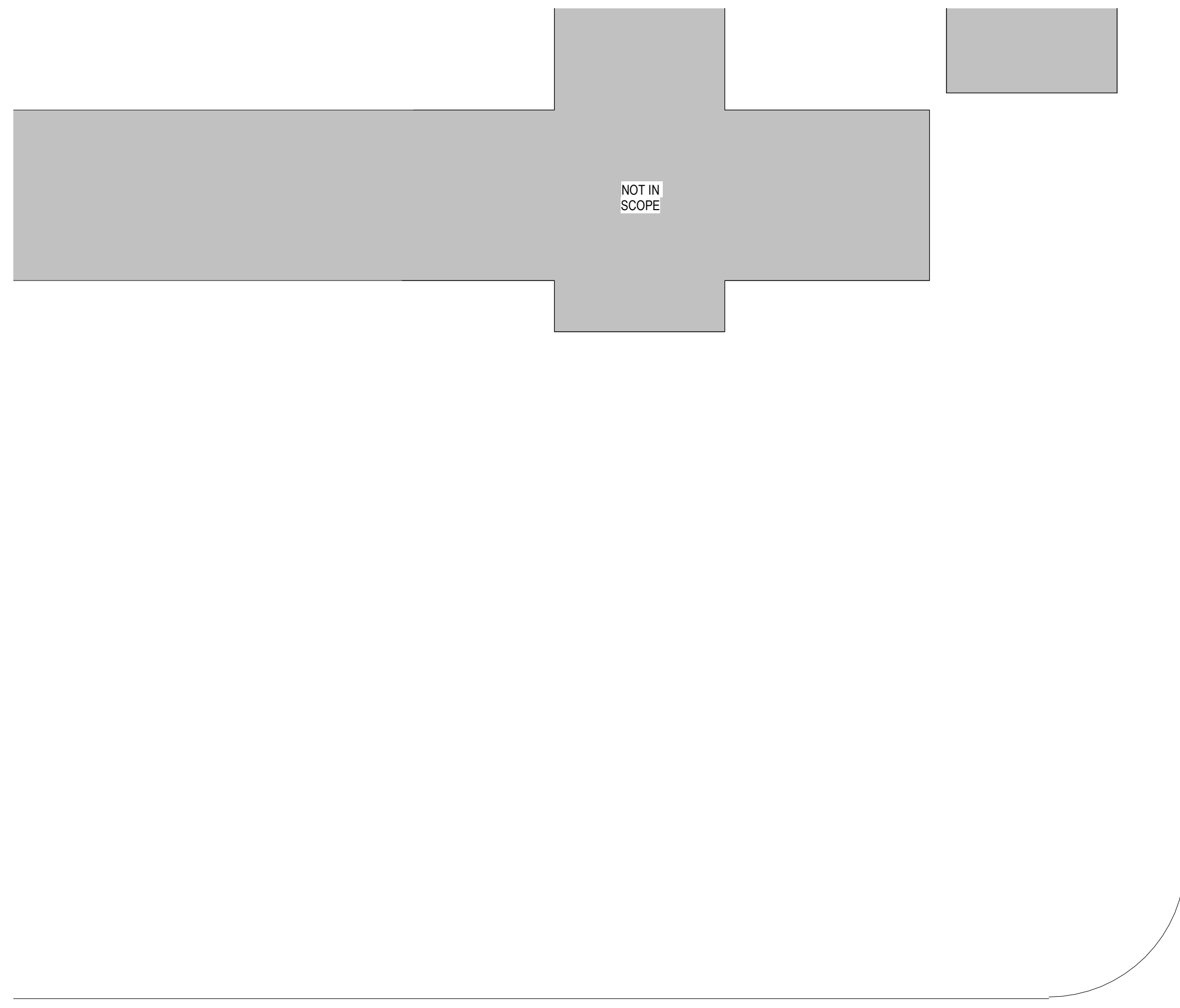
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Drawing No. G100

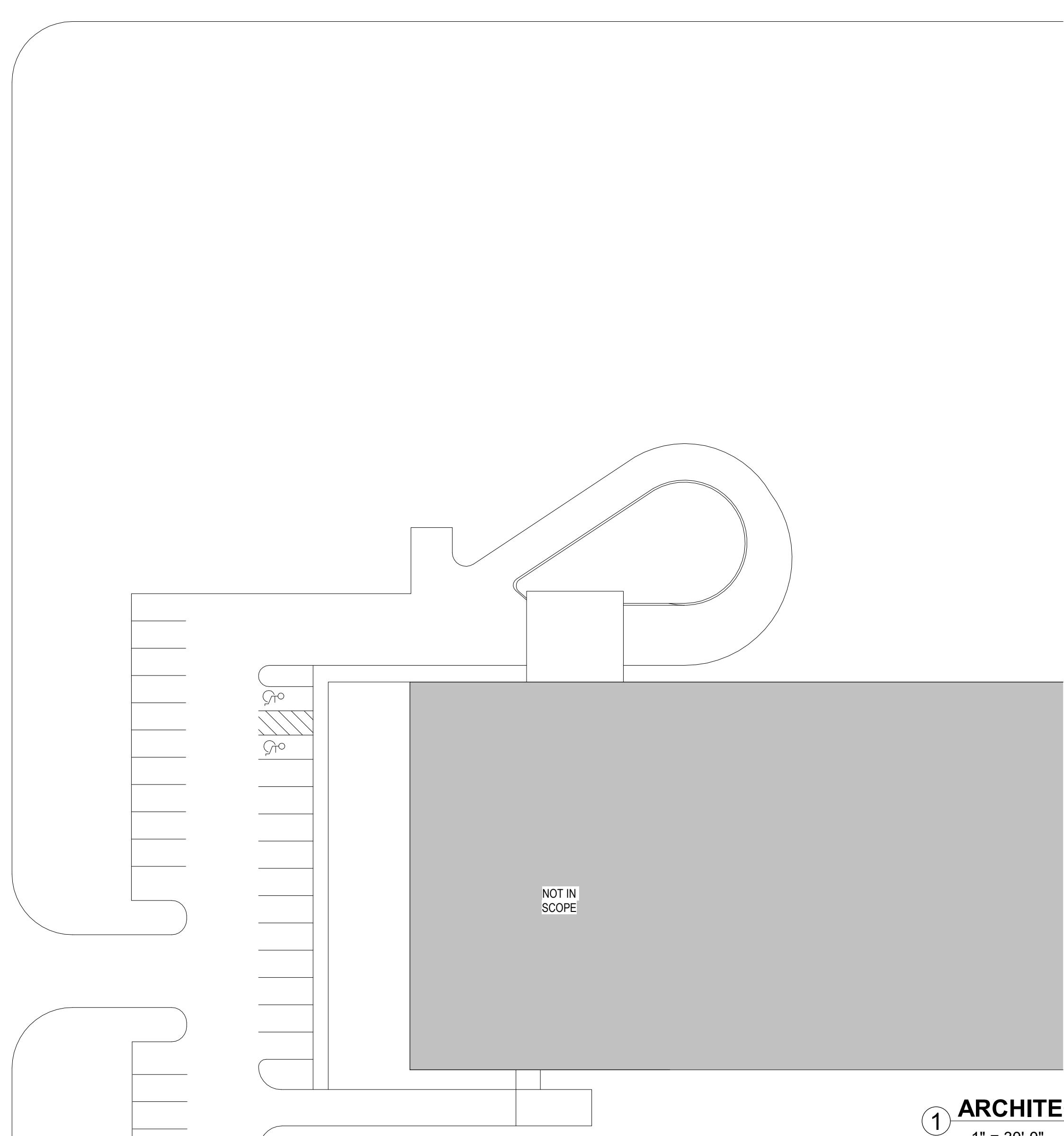
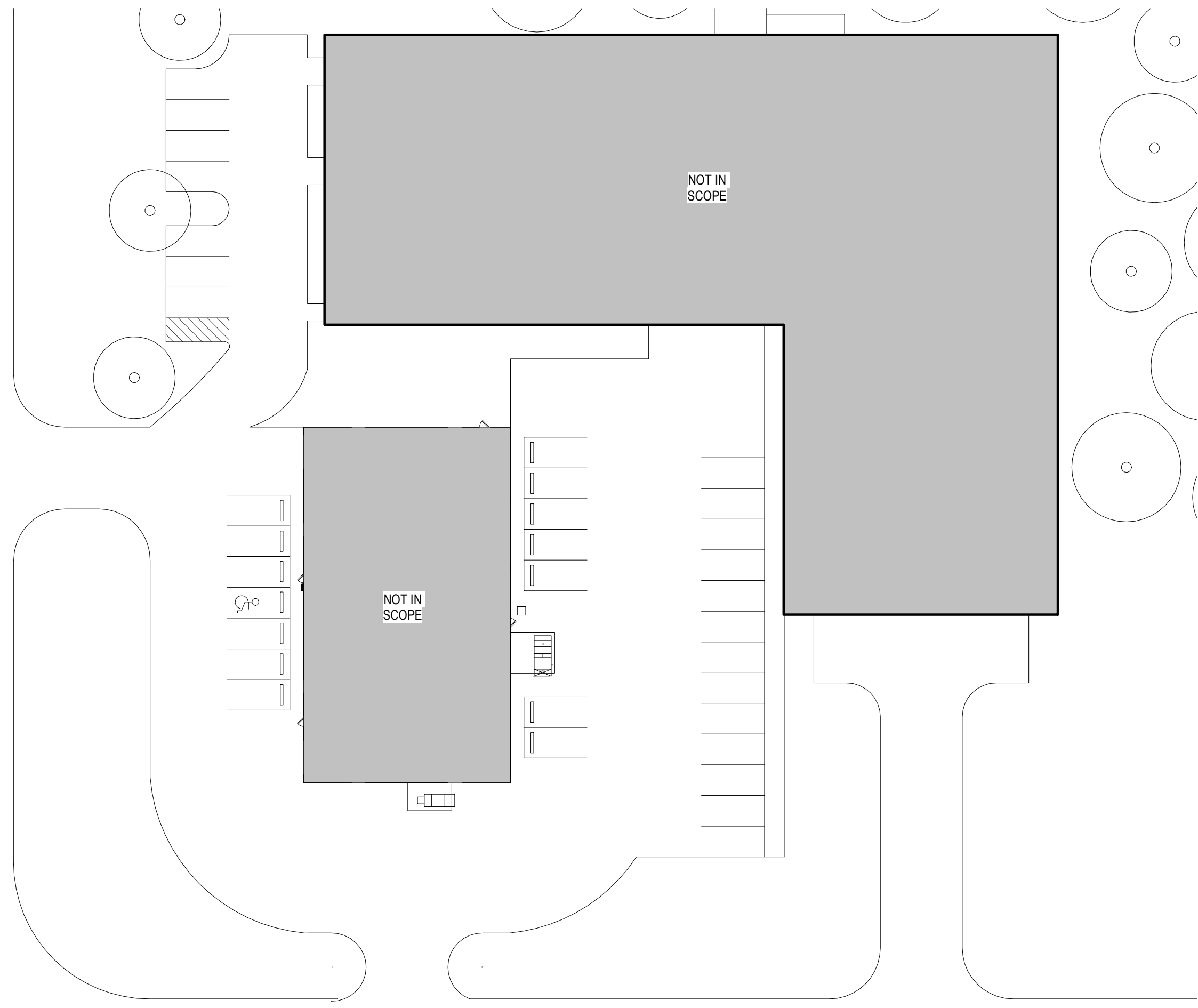
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ROBIN E. WHITEHEAD  
401-416585  
LICENSED ARCHITECT



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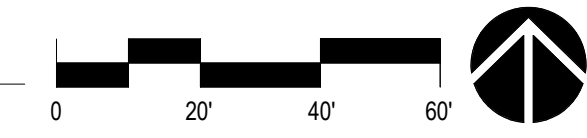
**SITE PLAN LEGEND**

 EXISTING TREE
  NOT IN SCOPE

 AREA OF WORK

- SITE PLAN NOTES**
1. EXISTING DOME OPENING, AND CONVEYOR SYSTEM.
  2. EXISTING STORAGE TANK AND EQUIPMENT.
  3. LAYDOWN AREA.

**1 ARCHITECTURAL SITE PLAN**  
1" = 30'-0"



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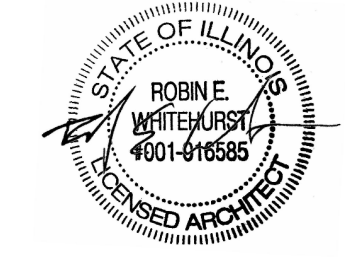
Issue Date	Issue Date	Title	Drawing Set Title
9/2/2021	9/2/2021	ISSUED FOR BID	ISSUED FOR BID

**ROOF REPLACEMENT ITB  
#2021-010**

SALT DOME

**ARCHITECTURAL  
SITE PLAN - SALT  
DOME**


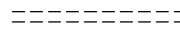

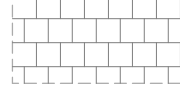
Expiration Date of Seal: 11-30-2021  
BE Project No: 020156


 Drawn By: JS  
 Drawing No: G111



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**DEMOLITION PLAN LEGEND**

-  AREA NOT IN SCOPE OF WORK
-  EXISTING TO BE DEMOLISHED
-  EXISTING TO REMAIN
-  SHINGLE ROOFING SYSTEM

**GENERAL NOTES**

1. PROTECT EXISTING CONSTRUCTION TO REMAIN FROM ANY / ALL DAMAGE.
2. TEMPORARILY REMOVE EXISTING SURFACE-MOUNTED ELECTRICAL CONDUIT AS REQUIRED TO PERFORM WORK.

**SHEET KEYNOTES**

- 02.01 REMOVE EXISTING SHINGLE ROOF SYSTEM IN ITS ENTIRETY.
- 02.02 REMOVE EXISTING EPDM ROOF SYSTEM IN ITS ENTIRETY.
- 02.03 REMOVE EXISTING METAL EDGE FLASHING, RIDGE FLASHING & WOOD FASCIA IN ITS ENTIRETY.
- 02.04 REMOVE EXISTING RIDGE SHINGLES SYSTEM IN ITS ENTIRETY.
- 02.05 EXISTING ROOF VENTS TO REMAIN.
- 02.06 REMOVE EXISTING 1X WOOD FASCIA

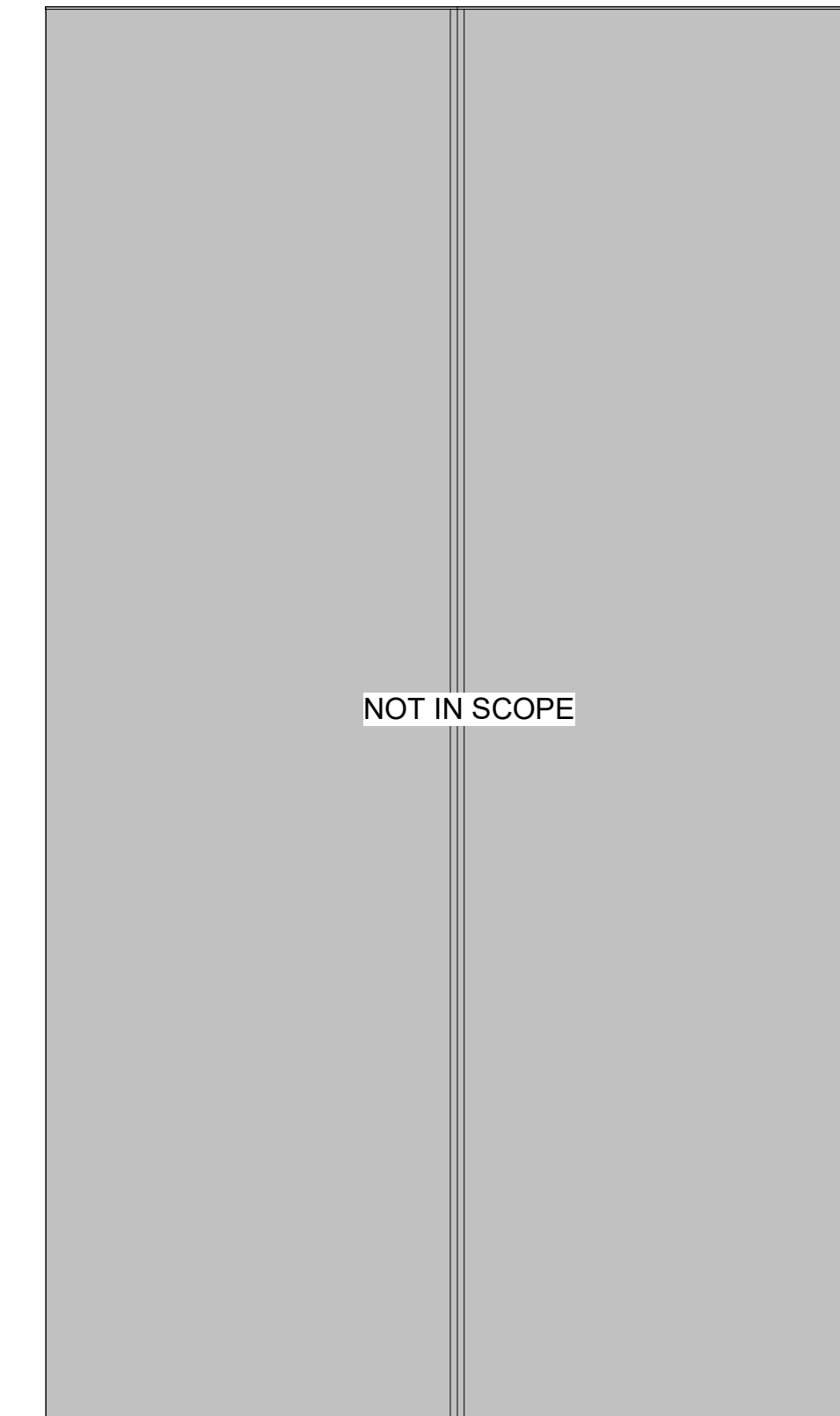
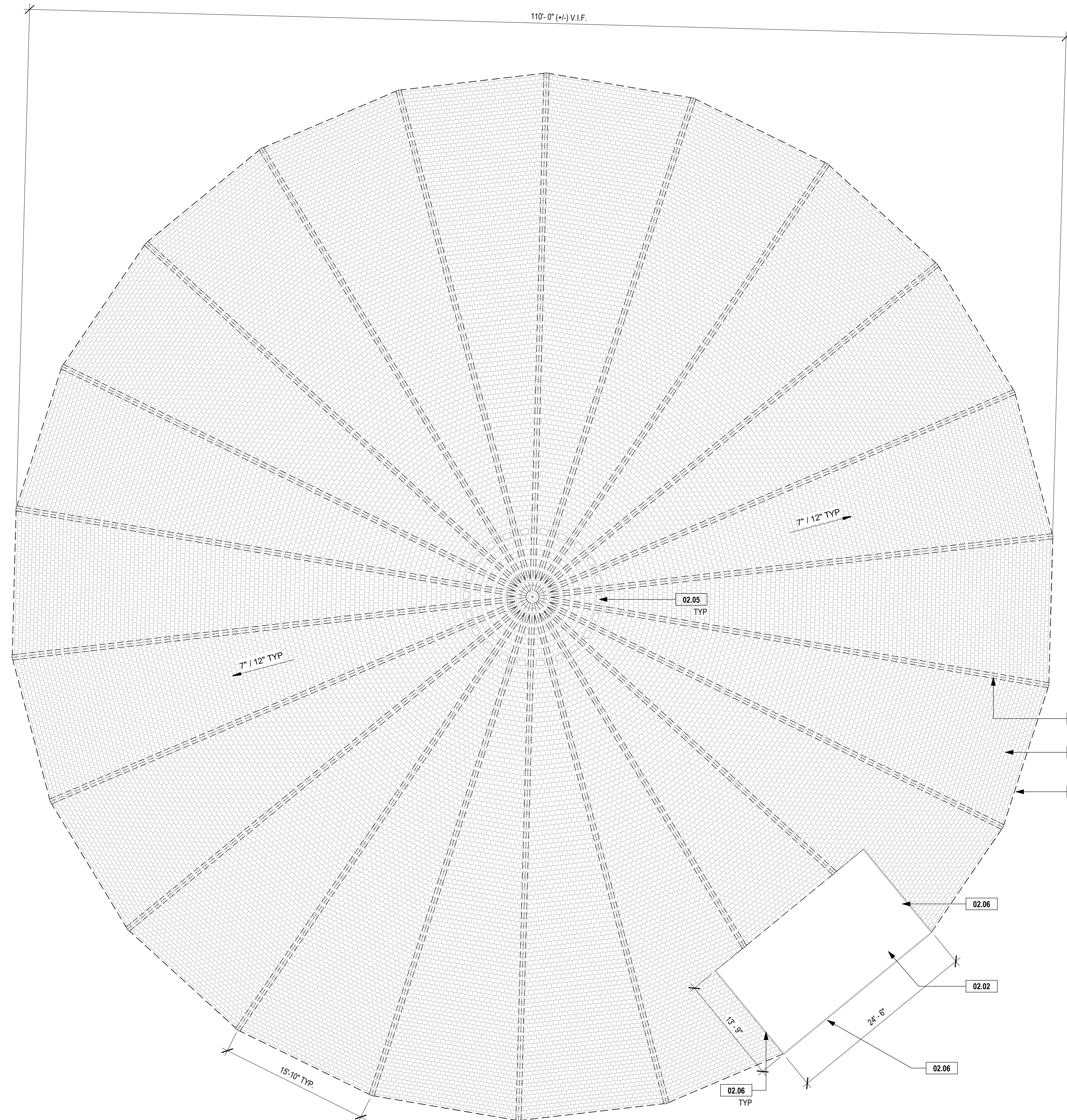


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**ROOF REPLACEMENT ITB  
 #2021-010**

SALT DOME

**SALT DOME ROOF  
 PLAN -  
 EXISTING/DEMO**

Expiration Date of Seal: 11-30-2021  
 BE Project No: 020156

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 #01-416585  
 LICENSED ARCHITECT




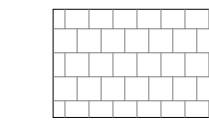
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 Drawing No: D200

**1 ROOF PLAN - EXISTING/DEMO**  
 1/8" = 1'-0"



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**NEW WORK PLAN LEGEND**

-  AREA NOT IN SCOPE OF WORK
-  EXISTING TO REMAIN
-  NEW WORK
-  SHINGLE ROOFING SYSTEM

**GENERAL NOTES**

1. PROTECT EXISTING CONSTRUCTION TO REMAIN FROM ANY / ALL DAMAGE.
2. TEMPORARILY REMOVE EXISTING SURFACE-MOUNTED ELECTRICAL CONDUIT AS REQUIRED TO PERFORM WORK.

**SHEET KEYNOTES**

- 02.05 EXISTING ROOF VENTS TO REMAIN.
- 07.01 INSTALL NEW SHINGLE ROOF SYSTEM.
- 07.02 INSTALL NEW EPDM ROOF SYSTEM.
- 07.03 INSTALL NEW METAL EDGE FLASHING, RIDGE FLASHING & WOOD FASCIA IN ITS ENTIRETY.
- 07.04 INSTALL NEW RIDGE SHINGLE SYSTEM.

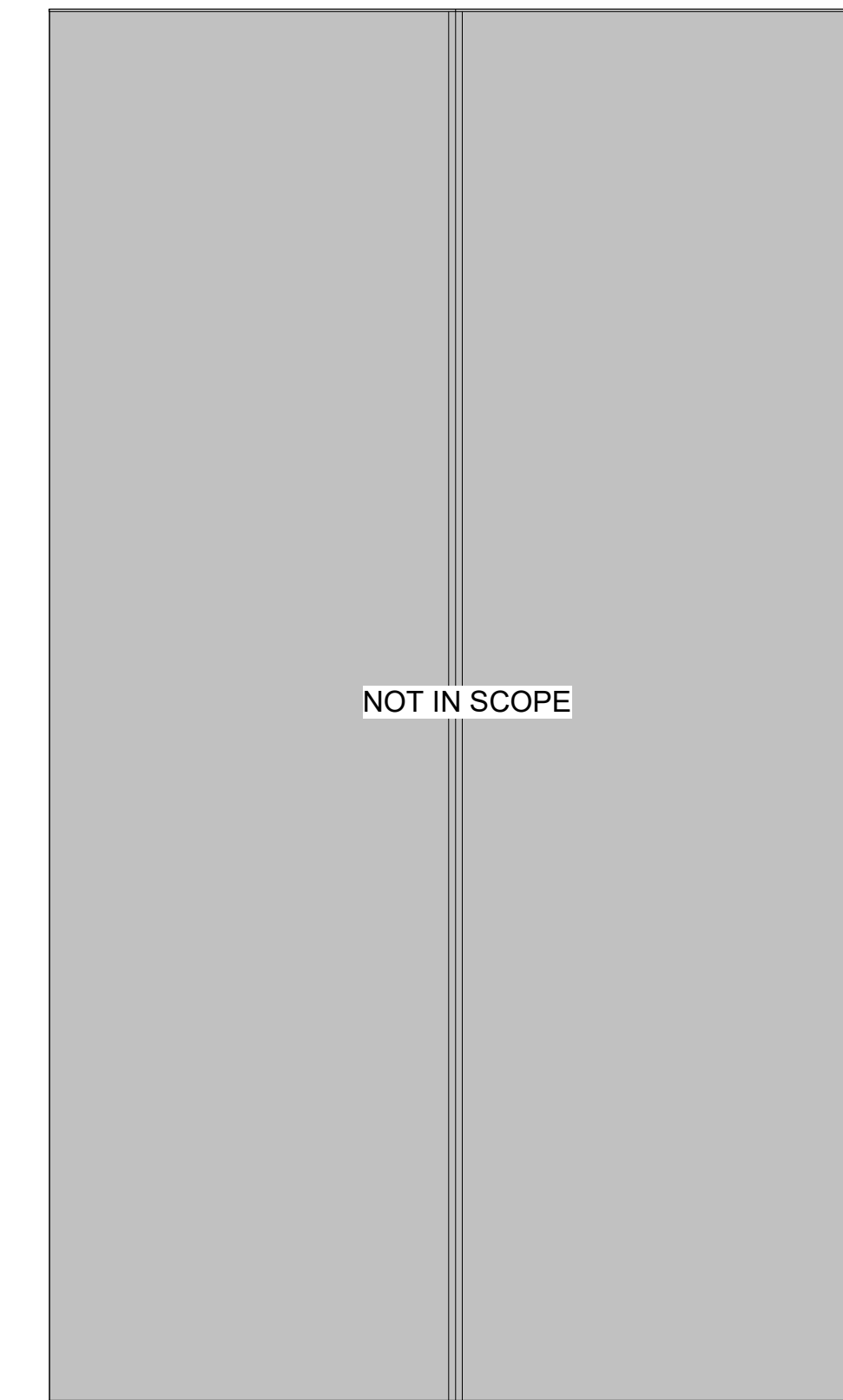
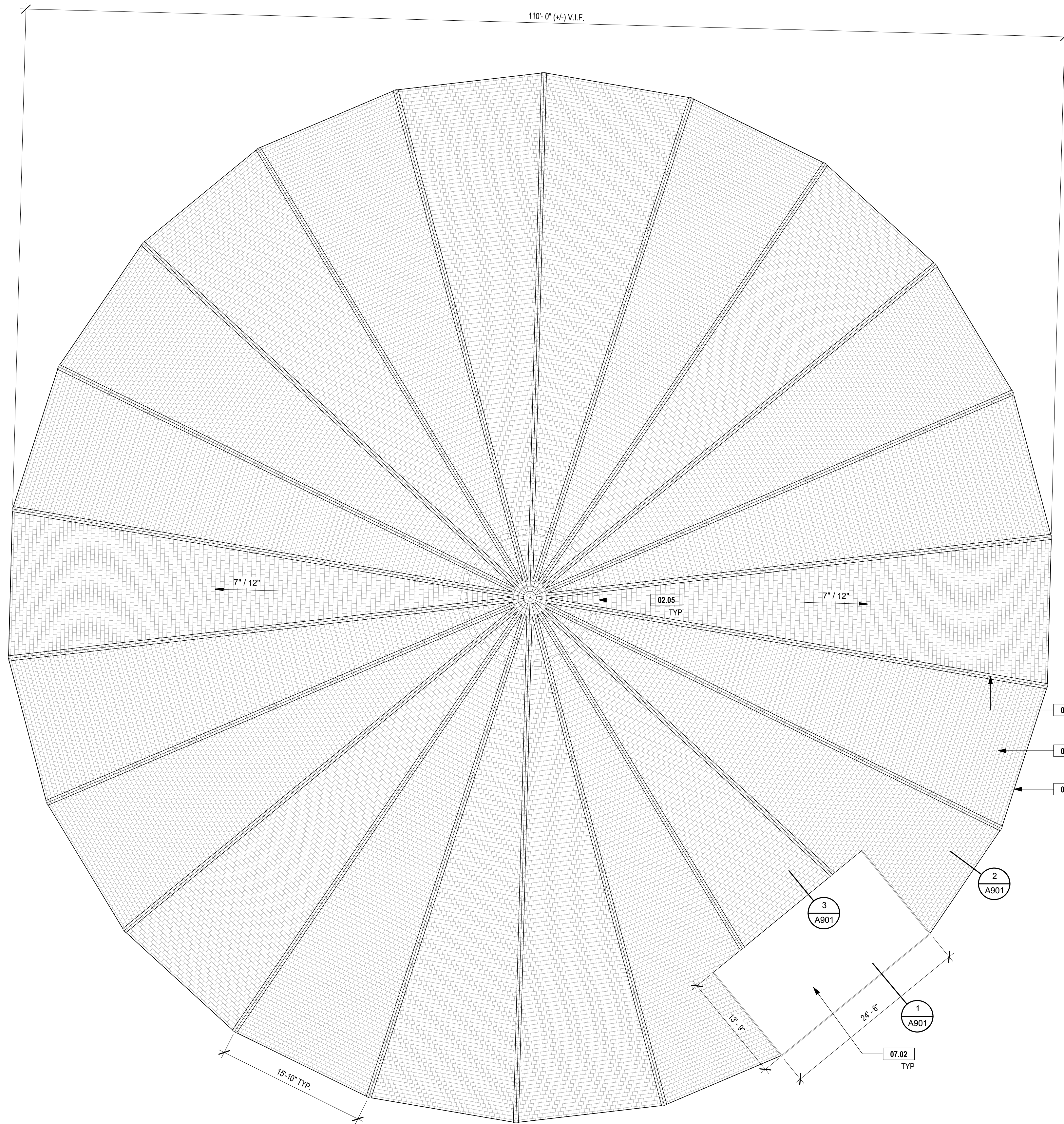


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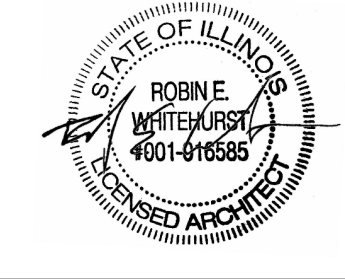
Issue Date	Issue Date	Title	Drawing Set Title
9/2/2021		ISSUED FOR BID	

**ROOF REPLACEMENT ITB  
#2021-010**

SALT DOME

**SALT DOME ROOF  
PLAN - NEW WORK**

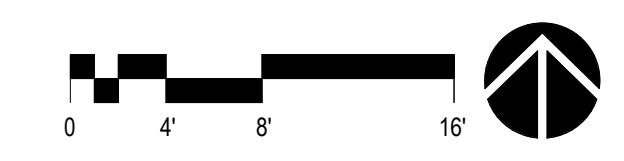
Expiration Date of Seal: 11-30-2021	BE Project No: 020156
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Drawn By: JS

Drawing No: A200

**1 ROOF PLAN - NEW WORK**  
1/8" = 1'-0"



V:\Project Files\021013-00-0000 STATE FARM HEADQUARTERS MODERNIZATION\02\_CAD\00\_REVIT\020156\_Champaign County Salt Dome-Shed\_R2020\_sankenbrandt.rvt  
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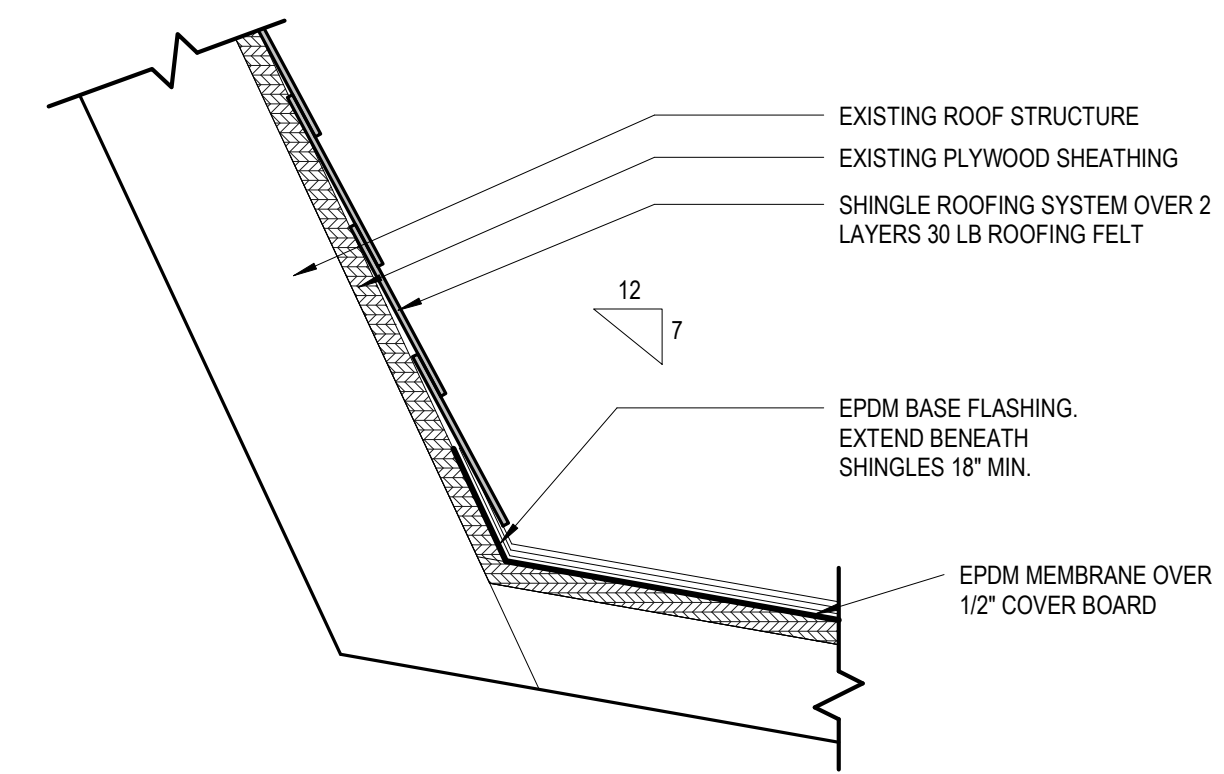


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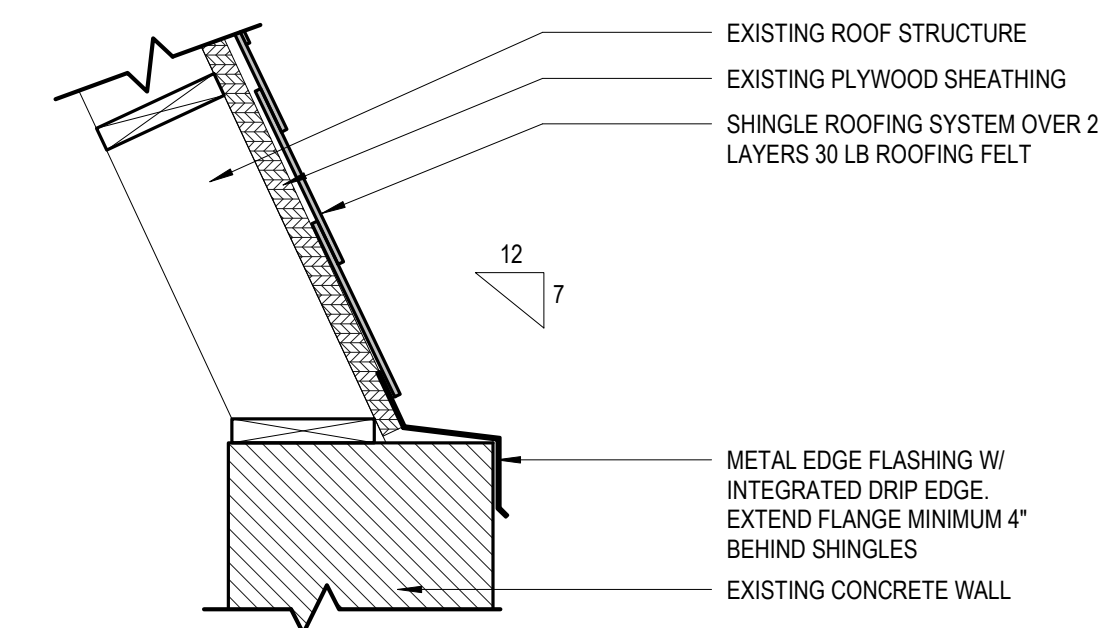
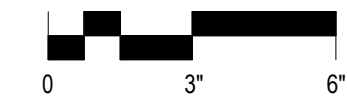
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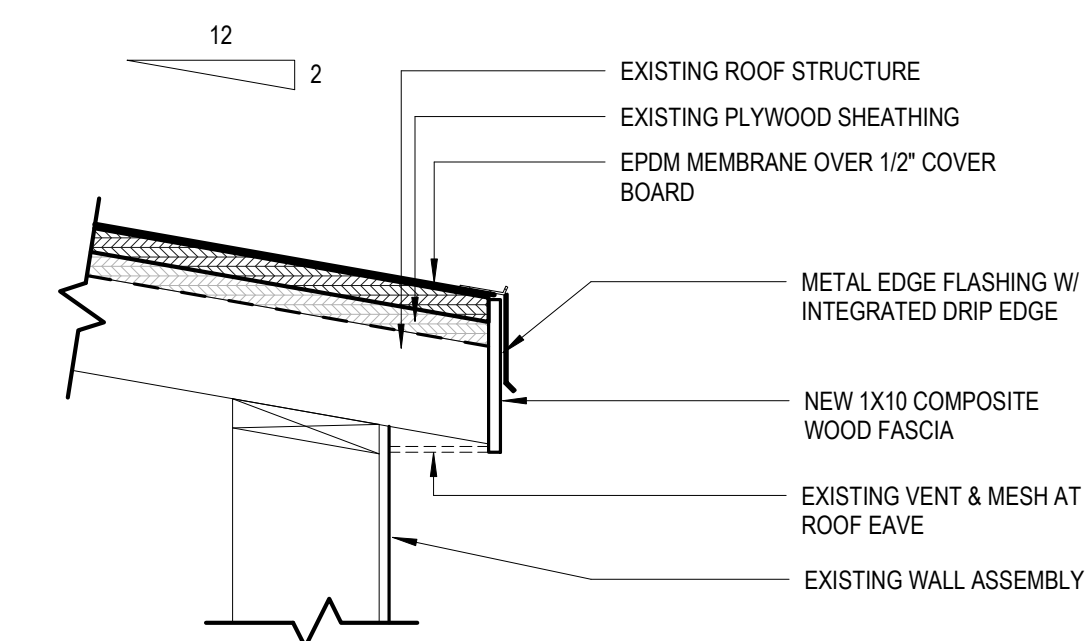
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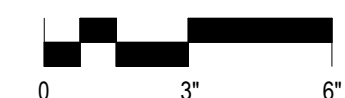
**③ SHINGLE TO EPDM TRANSITION**  
 3" = 1'-0"



**② EDGE FLASHING AT SHINGLE ROOFING**  
 3" = 1'-0"



**① FASCIA AT SHED ROOF**  
 3" = 1'-0"



Issue Date	Title
9/2/2021	ISSUED FOR BID

**ROOF REPLACEMENT ITB  
 #2021-010**

SALT DOME

**SALT DOME  
 ARCHITECTURAL  
 DETAILS**

Expiration Date of Seal: 11-30-2021 BE Project No: 020156

Drawn By: JS  
 Drawing No: A901