



**DANE COUNTY DEPT. OF  
PUBLIC WORKS, HIGHWAY &  
TRANSPORTATION**

1919 Alliant Energy Center Way  
Madison, Wisconsin 53713  
Office: 608/266-4018 ♦ Fax: 608/267-1533  
Public Works Engineering Division

# ADDENDUM

November 8, 2019

**ATTENTION ALL REQUEST FOR BID (RFB) HOLDERS**

**RFB NO. 318048 - ADDENDUM NO. 2**

**CITY-COUNTY BUILDING FAÇADE JOINT REPAIR AND POWERWASHING**

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**BIDS DUE:** TUESDAY, DECEMBER 3, 2019, 2:00 PM. DUE DATE AND  
TIME ARE NOT CHANGED BY THIS ADDENDUM.

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This Addendum is issued to modify, explain or clarify the original Request for Bid (RFB) and is hereby made a part of the RFB. Please attach this Addendum to the RFB.

**PLEASE MAKE THE FOLLOWING CHANGES:**

**Table of Contents**

TABLE OF CONTENTS: REPLACE with attached Table of Contents.

**Division 00 – Procurement And Contracting Requirements**

BID FORM: REPLACE with attached Bid Form.

**Specification**

1. Section 02 41 13
  - a. Page 1, RELATED SECTIONS, ADD: “Section 04 01 40 – Maintenance of Stone Assemblies.”
2. Section 02 82 13.23
  - a. Page 1, RELATED SECTIONS, ADD: “Section 04 01 40 – Maintenance of Stone Assemblies.”
3. Section 03 09 00
  - a. Page 1, Line 14-16, DELETE second sentence and ADD: “The general extent of the exterior concrete work includes localized concrete patching and epoxy injection at cracks, joint sealant removal and replacement, and comprehensive concrete cleaning.

Patching	750 sq. ft.
Injection	500 lin. ft.
Sealant	7,500 lin. ft.”

- b. Page 1, Line 21, REPLACE with “Section 02 82 13.23 – Asbestos Removal During Maintenance”.
- c. Page 1, Line 23, ADD: “UNIT PRICES - Work on this Section may be modified by unit prices per Instruction to Bidders.”
- d. Page 3, Line 47, REPLACE: “Architect/Engineer” with “Owner”.
- e. Page 4, DELETE Lines 1-6.
- f. Page 4, Line 8, ADD:

#### CLEANING CONCRETE SURFACES

The work shall consist of cleaning concrete surfaces by removing all stains, dirt, dust, deposits, pollution, leachates, oil, grease, efflorescence, calcium carbonate deposits and build-up, unauthorized paint marks, undifferentiated spills, tail pipe emission pollutants, moss, lichen and other invasive vegetation; animals and animal wastes, and any other discolorations from the exposed concrete surfaces; and to contain and dispose of the waste stream and all materials and solvents used in the cleaning process in a safe and approved manner. "Cleaning" shall also mean removing loose concrete surface material that has resulted from scaling and spalling.

The measurement for cleaning concrete surfaces shall be on a single lump sum basis, which lump sum shall include cleaning the soffits and recesses and the foundations (below concrete panels).

The objective of cleaning is to return the color of all exposed concrete surfaces to the original color, as closely as possible, of the newly built condition, recognizing that different structural elements had different original colors and architectural finishes.

The performance of the work shall clean all the exposed concrete surfaces without removing sound structural concrete, or diminishing in any way the existing structural sections of the structural members. The methods, techniques, and equipment used in the cleaning, and in the containment and disposal of waste processes shall at all times be at the discretion of the Owner.

The Contractor shall not use equipment, methods, or solvents that will cause spreading of existing stains, drive existing surface pollutants further into the concrete, or add new areas of discoloration.

The cleaning methods to be used shall be pressure water blasting; manual brushing; and automatic brushing.

The Contractor shall use fresh water from a potable water source.

The pressure water blasting equipment shall be capable of delivering nozzle pressures between 3,000 psi and 5,000 psi. The Contractor shall provide, and have on hand, a full range of nozzle types and stream patterns from a flat-fan to a straight jet tip. Nozzle pressures in excess of 5,000 psi will be considered to be too likely to cause damage to the concrete structural members and will not be allowed.

Brushes used to loosen dirt, pollutants, and calcium deposits shall have natural, nonferrous, or stainless steel bristles. Brushes having ferrous bristles shall not be used.

Both manual and automatic brushing will be allowed at the discretion of the Owner.

Surfaces to be cleaned shall be pressure water blasted. If discoloration persists on the surface, the surfaces shall be brushed and then the pressure water blasting procedure shall be repeated as many times as necessary to remove the dirt, pollution, rust stains and calcium deposits, or until the Owner directs otherwise.

After pressure water blasting, the surface shall be allowed to thoroughly dry before a final determination is made as to the necessity of repeating the procedure.

Once a surface has been cleaned, subsequent cleaning operations shall be conducted to not get the newly cleaned surface dirty. Working from bottom to top, prewet surface with fresh water. On vertical surfaces, keep lower areas wet to avoid streaks.

4. ADD Section 04 01 40 Maintenance of Stone Assemblies
5. Section 07 01 90
  - a. Page 1, Line 15, ADD: “Boundary and panel-to-panel joints of pre-cast concrete panels and poured in place concrete.”
  - b. Page 1, Line 18, ADD: “Sealant (Two-Stage) 7,500 lin. ft.”

## Drawings

1. DELETE all drawing sheets dated August 20, 2019, five (5) sheets.
2. ADD drawing sheets dated November 1, 2019, eighteen (18) sheets.

T100	TITLE SHEET
PRECAST CONCRETE PANELS	
A100	ROOF PLAN
A200	NORTH ELEVATION
A201	EAST ELEVATION
A202	SOUTH ELEVATION
A203	WEST ELEVATION
A204	BUILDING SECTION / ELEVATION
LIMESTONE & BLUESTONE PANELS	
A300	ROOF PLAN
A400	NORTH ELEVATION
A401	EAST ELEVATION
A402	SOUTH ELEVATION
A403	WEST ELEVATION
A404	BUILDING SECTION / ELEVATION
A405	BUILDING SECTION / ELEVATION
GRANITE PANELS	
A500	ROOF PLAN
A600	NORTH ELEVATION
A601	EAST ELEVATION
A602	SOUTH ELEVATION

## Clarifications

1. During the pre-bid it was stated that the building contains asbestos is the window perimeter sealant only. It was also stated that the sealant replacement scope of work excludes this area. Please confirm this is correct and that for bidding purposes the contractor should assume they will not be replacing sealant with asbestos containing material.

*Response:* Correct; however, additional testing of sealant not located at window perimeters continues, and the results will be available prior to Bidding.

2. The contractor will require power at the roof to operate our suspended scaffolds. Please confirm the roof has 220v – 30amp service.

*Response:* County Facility Management will provide required power at the roof to operate our suspended scaffolds; 220v service is available.

3. Is the contractor responsible to include cost for electrical connection for suspended scaffolds into the building or will this be performed by the owner?

*Response: County Facility Management will run the required electrical connection for suspended scaffolds and be responsible for the cost.*

4. Page BF-1 of the bid form states to include “approximately 19,000 LF of exterior joints” are to be replaced. What areas are these? Limestone, concrete or granite? For bidding purposes please provide a quantity for each joint type.

*Response: Refer to this Addendum for clarification.*

5. Page BF-1 of the bid form states to include “approximately 8,500 LF of concrete/stone joint repairs. Please clarify type of repair required and provide a repair detail.

*Response: Refer to this Addendum for clarification.*

6. During the pre-bid it was stated that the precast joint sealant is to be a 2 stage or double sealant joint or double sealant joint. The bidding document doesn't indicate this. Please clarify.

*Response: Section 07 01 90, \_age 4, Lines 9-10.*

7. Page BF-1 of the bid from states that the scope of work is to potentially include stone repairs. For bidding purposes please clarify the scope of work and quantify repairs.

*Response: Refer to this Addendum for clarification.*

8. Page BF-1 of the bid from states that the scope of work is to potentially include precast repairs. For bidding purposes please clarify the scope of work and quantify repairs.

*Response: Refer to this Addendum for clarification.*

9. Page BF-1 of the bid from states that the scope of work is to potentially include cleaning. For bidding purposes please clarify the scope of work and quantify area.

*Response: Response: Refer to this Addendum for clarification.*

10. Page BF-1 of the bid form has 3 unit prices for joint sealant replacement. This wouldn't apply because the unit prices is listed on page BF-2.

*Response: Refer to this Addendum for clarification.*

11. Page BF-2 of the bid form has a unit price for “concrete / masonry repairs in joints”. Please provide a repair detail.

*Response: Response: Refer to this Addendum for clarification.*

12. Page BF-2 of the bid form has a unit price for “areas of concrete / masonry repairs”. No quantity is listed in the bidding documents. For pricing purposes how many SF should be included in the base bid. Please also provide a repair detail.

*Response: Refer to this Addendum for clarification.*

13. During the pre-bid it was stated that precast sealant replacement is to include a 2 stage or double sealant joint. No unit price is listed for this. Please provide a unit price on page BF-2.

*Response: Refer to this Addendum for clarification.*

14. No sealant unit price is listed on page BF-2 for stone sealant replacement. Please provide a unit price on page BF-2.

*Response: Refer to this Addendum for clarification.*

15. Will Facility Engineering Inc. require access to the contractor's equipment? If so, how many hours should be included? Can you also add a unit price on page BF-2?

Response: Facility Engineering, Inc. will require the contractor's access equipment for observation up to twelve (12) hours.

16. Please provide a cleaning specification for the limestone.

Response: Refer to this Addendum for clarification.

17. Please provide a cleaning specification for the precast.

Response: Refer to this Addendum for clarification.

18. Division 2 of the project manual references asbestos removal. Please clarify what is to be included.

Response: Refer to Item 1, Clarifications, this Addendum.

19. Division 3 of the project manual references asbestos removal. Please clarify what is to be included.

Response: If sealant contains asbestos, Section 02 82 13.23 will apply. Refer to Item 1, Clarifications, this Addendum.

20. Page 03 09 00-2 of the project manual indicates a 5 year warranty requirement for material and labor. Specified manufactures will not provide a 5 year warranty and contractors bonding companies will not provide e a 5 year warranty. Please clarify.

Response: Guarantees, Warranties, and certificates shall be reviewed for applicability during submittal submissions, and determination of type and duration of assurance(s) will be deliberated then.

21. Division 4 of the project manual references asbestos removal. Please clarify what is to be included.

Response: If sealant contains asbestos, Section 02 82 13.23 will apply. Refer to Item 1, Clarifications, this Addendum.

22. Please clarify what the expectation of window cleaning will be required upon completion of the project. Is the contractor responsible to have the windows professionally cleaned upon completion of the project?

Response: Contractor is required to provide removal of construction related dust and debris, and when using water for façade washing, as well as general clean-up, glass shall be film and streak free.

23. Drawing pages A100, A200, A201A202 & A203 only indicate a portion of the building is within the projects "Work Limits". During the pre-bid it was discussed that there were additional areas and this doesn't seem to reflect what was discussed. Please clarify.

Response: Refer to this Addendum for clarification.

24. During the pre-bid it was stated that tuckpointing would be required. For bidding purposes please provide an estimated quantity.

Response: Refer to this Addendum for clarification.

25. During the pre-bid it was stated that stone repairs would be required. For bidding purposes please provide an estimated quantity.

Response: Refer to this Addendum for clarification.

26. No material warranty is listed in the sealant specification. For bidding purposes please provide.

Response: Section 07 01 90, Page 2, Lines 14-17.

27. Page 03 09 00-4 of the specification mentions coping repairs. No coping repairs are indicated or quantified. Please clarify.

Response: Refer to this Addendum for clarification.

28. Please quantify each type of sealant joint (one-stage versus two-stage) and provide unit prices.

Response: Refer to this Addendum for clarification.

29. Confirming the Asbestos report that Precast and Limestone sealant does not contain any. Only found at Window Perimeters.

Response: Refer to Item 1, Clarifications, this Addendum.

30. Will the County require a Pedestrian Canopy the full length of each elevation being worked on? IE all sidewalks and doors to remain open.

Response: All sidewalks and doors shall remain open. Consult City of Madison for requirements and regulations pertaining to sidewalk occupancy and public parking interruption.

31. The windows may be dirty after the cleaning. Will the County be taking care of the final window cleaning?

Response: Refer to Item 22, Clarifications, this Addendum.

32. Any restrictions on work hours.

Response: Work hours shall be Monday through Friday, excluding holidays, from 7:00 a.m. to 5:00 p.m. unless authorized otherwise in advance by Owner.

If any additional information about this Addendum is needed, please call Eric Urtes at 608/266-4798, [urtes.eric@countyofdane.com](mailto:urtes.eric@countyofdane.com).

Sincerely,  
*Eric Urtes, AIA*  
Project Manager

Enclosures:  
Table of Contents

Bid Form

Section 04 01 40 – Maintenance of Stone Assemblies

T100 TITLE SHEET

PRECAST CONCRETE PANELS

A100 ROOF PLAN  
A200 NORTH ELEVATION  
A201 EAST ELEVATION  
A202 SOUTH ELEVATION  
A203 WEST ELEVATION  
A204 BUILDING SECTION / ELEVATION

LIMESTONE & BLUESTONE PANELS

A300 ROOF PLAN  
A400 NORTH ELEVATION  
A401 EAST ELEVATION  
A402 SOUTH ELEVATION  
A403 WEST ELEVATION  
A404 BUILDING SECTION / ELEVATION  
A405 BUILDING SECTION / ELEVATION

GRANITE PANELS

A500 ROOF PLAN

A600 NORTH ELEVATION  
A601 EAST ELEVATION  
A602 SOUTH ELEVATION

## TABLE OF CONTENTS FOR RFB NO. 318048

### **DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS**

Project Manual Cover Page  
Table of Contents  
Advertisement for Bids (Legal Notice)  
Best Value Contracting Application  
Instructions to Bidders  
Bid Form  
Fair Labor Practices Certification  
Sample Public Works Construction Contract  
Sample Bid Bond  
Sample Performance Bond  
Sample Payment Bond  
General Conditions of Contract  
Supplementary Conditions  
Existing Conditions

### **DIVISION 01 - GENERAL REQUIREMENTS**

01 00 00 - Basic Requirements  
01 74 19 - Construction Waste Management, Disposal & Recycling

### **DIVISION 02 - EXISTING CONDITIONS**

02 41 13 – Selective Site Demolition  
02 82 13.23 – Asbestos Removal During Maintenance

### **DIVISION 03 - CONCRETE**

03 09 00 – Concrete Restoration

### **DIVISION 07 - THERMAL AND MOISTURE PROTECTION**

07 01 90 – Maintenance of Joint Sealants

### **DRAWINGS**

Figure 1 - Project Location & Site  
T100 TITLE SHEET  
A100 ROOF PLAN  
A200 NORTH ELEVATION  
A201 EAST ELEVATION  
A202 SOUTH ELEVATION  
A203 WEST ELEVATION  
A204 BUILDING SECTION / ELEVATION  
A300 ROOF PLAN  
A400 NORTH ELEVATION  
A401 EAST ELEVATION  
A402 SOUTH ELEVATION  
A403 WEST ELEVATION  
A404 BUILDING SECTION / ELEVATION  
A405 BUILDING SECTION / ELEVATION  
A500 ROOF PLAN  
A600 NORTH ELEVATION  
A601 EAST ELEVATION  
A602 SOUTH ELEVATION



**REFERENCE DRAWINGS**

- 5.20 – Elevations
- 5.21 – Elevations
- 5.22 – Building Sections
- 5.23 – Building Sections
- 5.26 – Wall Sections
- 5.27 – Wall Sections
- A18 – Elevations
- A19 – Longitudinal & Part Transverse Section
- A20 – Transverse Section
- A21 – Monona & Wilson Street Entrance Plans and Elevations
- A27 – Spandrel Details

**ATTACHMENTS**

City County Building Cladding Assessment - County of Dane, Wisconsin

Name of Bidding Firm: \_\_\_\_\_

**BID FORM**

**BID NO. 318048**

**PROJECT: CITY-COUNTY BUILDING FAÇADE JOINT REPAIR AND POWER-WASHING  
CITY-COUNTY BUILDING**

**TO: DANE COUNTY DEPARTMENT OF PUBLIC WORKS, HIGHWAY & TRANSPORTATION PROJECT MANAGER  
1919 ALLIANT ENERGY CENTER WAY  
MADISON, WISCONSIN 53713**

**NOTE: WISCONSIN STATUTE 77.54 (9M) ALLOWS FOR NO SALES & USE TAX ON THE PURCHASE OF MATERIALS FOR COUNTY PUBLIC WORKS PROJECTS.**

**BASE BID - LUMP SUM:**

Dane County is seeking to repair concrete panel-to-panel joint treatments, patch existing stone and cement surfaces, remove and replace sealant/backer rod in joints, and power washing of all stone and concrete panels on the building. Provide construction services for the replacement of approximately 38,000 linear feet of exterior joints on the building, including approximately 10,000 linear feet of removal and replacement of sealant backer rod and approximately 28,000 linear feet of mortar joint repairs. The undersigned, having examined the site where the Work is to be executed and having become familiar with local conditions affecting the cost of the Work and having carefully examined the Drawings and Specifications, all other Construction Documents and Addenda thereto prepared by Dane County Department of Public Works, Highway & Transportation hereby agrees to provide all labor, materials, equipment and services necessary for the complete and satisfactory execution of the entire Work, as specified in the Construction Documents, for the Base Bid stipulated sum of:

\_\_\_\_\_ and \_\_/100 Dollars  
Written Price

\$ \_\_\_\_\_  
Numeric Price

**UNIT PRICING / SEALANT & BACKER ROD (SINGLE-STAGE):**

Add price for providing additional removal and replacement of sealant and backer rod of 3/4" joint. Same

price shall be used for deducts if quantities are determined to be less than quantified in Base Bid.

- 0 to 500 ln. ft.: @ \$ \_\_\_\_\_ /ln.ft.
- 500 to 1000 ln. ft.: @ \$ \_\_\_\_\_ /ln.ft.
- greater than 1000 ln. ft.: @ \$ \_\_\_\_\_ /ln.ft.

**UNIT PRICING / SEALANT & BACKER ROD (TWO-STAGE):**

Add price for providing additional removal and replacement of sealant and backer rod of 3/4" joint. Same

price shall be used for deducts if quantities are determined to be less than quantified in Base Bid.

- 0 to 500 ln. ft.: @ \$ \_\_\_\_\_ /ln.ft.
- 500 to 1000 ln. ft.: @ \$ \_\_\_\_\_ /ln.ft.
- greater than 1000 ln. ft.: @ \$ \_\_\_\_\_ /ln.ft.

**UNIT PRICING / MASONRY REPAIRS:**

Add price for providing additional concrete / masonry repairs. Same price shall be used for deducts of quantities are determined to be less than quantified in Base Bid.

- Mortar repairs in joints:
- 0 to 250 sq. ft.: @ \$ \_\_\_\_\_ /sq.ft.
- Up to 500 sq. ft.: @ \$ \_\_\_\_\_ /sq.ft.
- Up to 1000 sq. ft.: @ \$ \_\_\_\_\_ /sq.ft.
  
- Sealant repairs in joints (single-stage):
- 0 to 250 sq. ft.: @ \$ \_\_\_\_\_ /sq.ft.
- Up to 500 sq. ft.: @ \$ \_\_\_\_\_ /sq.ft.
- Up to 1000 sq. ft.: @ \$ \_\_\_\_\_ /sq.ft.

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

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

Dated \_\_\_\_\_

Dane County Department of Administration must have this project completed by July 31, 2020. Assuming this Work can be started by December 2, 2019, what dates can you commence and complete this job?

Commencement Date: \_\_\_\_\_ Completion Date: \_\_\_\_\_  
(final, not substantial)

I hereby certify that all statements herein are made on behalf of:

\_\_\_\_\_  
(Name of Corporation, Partnership or Person submitting Bid)

Select one of the following:

1. A corporation organized and existing under the laws of the State of \_\_\_\_\_, or

2. A partnership consisting of \_\_\_\_\_, or

3. A person conducting business as \_\_\_\_\_;

Of the City, Village, or Town of \_\_\_\_\_ of the State of \_\_\_\_\_.

I have examined and carefully prepared this Bid from the associated Construction Documents and have checked the same in detail before submitting this Bid; that I have full authority to make such statements and submit this Bid in (its) (their) (my) behalf; and that the said statements are true and correct. In signing this Bid, we also certify that we have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of free competition; that no attempt has been made to induce any other person or firm to submit or not to submit a Bid; that this Bid has been independently arrived at without collusion with any other bidder, competitor, or potential competitor; that this Bid has not been knowingly disclosed prior to the Bids Due Date to another bidder or competitor; that the above statement is accurate under penalty of perjury.

The undersigned agrees to be qualified as a Best Value Contractor or will have proven their exemption before the award of this contract.

The undersigned further agrees to honor the Base Bid and the Alternate Bid(s) for sixty (60) calendar days from date of Award of Contract.

**SIGNATURE:** \_\_\_\_\_  
(Bid is invalid without signature)

Print Name: \_\_\_\_\_ Date: \_\_\_\_\_

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

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

Telephone No.: \_\_\_\_\_ Fax No.: \_\_\_\_\_

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

Contact Person: \_\_\_\_\_

**THIS PAGE IS FOR BIDDERS' REFERENCE AND NEED NOT BE SUBMITTED WITH BID FORM.**

**BID CHECK LIST:**

These items **must** be included with Bid:

Bid Form

Bid Bond

Fair Labor Practices Certification

**DANE COUNTY BEST VALUE CONTRACTING PRE-QUALIFICATION**

General Contractors & all Subcontractors must be pre-qualified as a Best Value Contractor with the Dane County Public Works Engineering Division before the award of contract. Qualification & listing is not permanent & must be renewed every 24 months. Obtain a *Best Value Contracting Application* by calling 608/266-4018 or complete one online at:

[countyofdane.com/pwht/BVC\\_Application.aspx](http://countyofdane.com/pwht/BVC_Application.aspx)

**DANE COUNTY VENDOR REGISTRATION PROGRAM**

All bidders are strongly encouraged to be a registered vendor with Dane County. Registering allows vendors an opportunity to receive notifications for RFBs & RFPs issued by the County and provides the County with up-to-date company contact information. Complete a new form or renewal online at:

[danepurchasing.com/Account/Login?](http://danepurchasing.com/Account/Login?)

**SECTION 04 01 40 - MAINTENANCE OF STONE ASSEMBLIES**

**PART 1 - GENERAL**

**CONDITIONS OF THE CONTRACT**

The conditions of the contract relating to the work specified herein also apply to this section. Applicable provisions of Division 00-Procurement and Contracting Requirements, and Division 01- General Requirements shall govern work under this section.

**WORK INCLUDED**

Section includes maintenance of stone assemblies consisting of stone restoration and cleaning as follows:

- Unused anchor removal.
- Repairing stone masonry, including resetting whole and partial units (Eight (8) required).
- Painting steel uncovered during the work.
- Repointing joints: mortar and sealant.
  - Mortar 28,700 lin. ft.
  - Sealant 2,000 lin. ft.
- Preliminary cleaning, including removing plant growth.
- Cleaning exposed stone surfaces.

Scope of Work excludes interface soft joints located at window frame perimeters.

Scope of Work excludes the following, until which time a Change Order is executed:

- Planter rehabilitation
- Stone replacement
  - Whole
  - Partial (Dutchman)
- Crack Injection
- Stone patching

**RELATED SECTIONS**

- Section 00 31 00 – Existing Conditions
- Section 02 41 13 – Selective Site Demolition
- Section 02 82 13.23 – Asbestos Removal During Maintenance

**UNIT PRICES**

- Work of this Section is affected by Unit Prices.
- Unit Prices apply to authorized work covered by quantity allowances.
- Unit Prices apply to additions to and deletions from Work as authorized by Change Orders.

**DEFINITIONS**

Very Low-Pressure Spray: Under 100 psi (690 kPa).

1 Low-Pressure Spray: 100 to 400 psi (690 to 2750 kPa); 4 to 6 gpm (0.25 to 0.4 L/s).

2  
3 Medium-Pressure Spray: 400 to 800 psi (2750 to 5510 kPa); 4 to 6 gpm (0.25 to 0.4 L/s).

4  
5 High-Pressure Spray: 800 to 1200 psi (5510 to 8250 kPa); 4 to 6 gpm (0.25 to 0.4 L/s).

6  
7 Stone Terminology: ASTM C 119.

8  
9 Face Bedding: Setting of stone with the natural bedding planes (strata) vertical and parallel to the wall plane rather  
10 than horizontal or "naturally bedded," which holds bedding planes together by gravity.

## 11 SUBMITTALS

12  
13  
14 Product Data: For each type of product indicated. Include recommendations for application and use. Include test  
15 data substantiating that products comply with requirements.

### 16 Shop Drawings:

17  
18  
19 Setting number of each new stone unit and its location on the structure in annotated plans and elevations.

20  
21 Provisions for flashing, lighting fixtures, conduits, and weep holes as required.

### 22 Samples for Initial Selection:

23  
24  
25 Pointing Mortar: Submit sets of mortar for pointing in the form of sample mortar strips, 6 inches (150 mm) long  
26 by 1/4 inch (6 mm) wide, set in aluminum or plastic channels.

27  
28 Have each set contain a close color range of at least three. Samples of different mixes of colored sands and  
29 cements that produce a mortar matching the cleaned stone when cured and dry.

30  
31 Submit with precise measurements on ingredients, proportions, gradations, and sources of colored sands  
32 from which each Sample was made.

33  
34 Include similar Samples of accessories involving color selection.

### 35 Samples for Verification:

36  
37  
38 Each type, color, and texture of pointing mortar in the form of sample mortar strips, 6 inches (150 mm) long by  
39 1/4 inch (6 mm) wide, set in aluminum or plastic channels.

40  
41 Include with each Sample a list of ingredients with proportions of each. Identify sources, both supplier and  
42 quarry, of each type of sand and brand names of cementitious materials and pigments if any.

43  
44 Sealant.

45  
46 Accessories: Each type of anchor, accessory, and miscellaneous support.

### 47 Cleaning Program.

## 48 QUALITY ASSURANCE

49  
50  
51 Restoration Specialist Qualifications: Engage an experienced stone restoration and cleaning firm to perform work of  
52 this Section. Firm shall have completed work similar in material, design, and extent to that indicated for this Project  
53



1 with a record of successful in-service performance. Experience installing standard unit masonry or new stone ma-  
2 sonry is not sufficient experience for stone restoration work.

3  
4 At Contractor's option, work may be divided between two specialist firms: one for cleaning work and one for  
5 repair work.

6  
7 Field Supervision: Restoration specialist firms shall maintain experienced full-time supervisors on Project site  
8 during times that stone restoration and cleaning work is in progress. Supervisors shall not be changed during  
9 Project except for causes beyond control of restoration specialist firm.

10  
11 Restoration Worker Qualifications: Persons who are experienced and specialize in restoration work of types  
12 they will be performing. When stone units are being patched, assign at least one worker among those perform-  
13 ing patching work who is trained and certified by manufacturer of patching compound to apply its products.  
14 Verify that manufacturers of products listed in Part 2 comply with requirements.

15  
16 Chemical-Cleaner Manufacturer Qualifications: A firm regularly engaged in producing masonry cleaners that have  
17 been used for similar applications with successful results, and with factory-trained representatives who are available  
18 for consultation and Project-site inspection and assistance at no additional cost.

19  
20 Source Limitations: Obtain each type of material for stone restoration (stone, cement, sand, etc.) from one source  
21 with resources to provide materials of consistent quality in appearance and physical properties.

22  
23 Cleaning and Repair Appearance Standard: Cleaned and repaired surfaces are to have a uniform appearance as  
24 viewed from 20 feet (6 m) away by Owner. Perform additional paint and stain removal, general cleaning, and spot  
25 cleaning of small areas that are noticeably different, so that surface blends smoothly into surrounding areas.

26  
27 Mockups: Prepare mockups of restoration and cleaning to demonstrate aesthetic effects and set quality standards for  
28 materials and execution and for fabrication and installation.

29  
30 Repointing: Rake out joints in two separate areas , each approximately 36 inches (900 mm) high by 48 inches  
31 (1200 mm) wide for each type of repointing required and repoint one of the areas.

32  
33 Cleaning: Clean an area approximately 100 sq. ft. for each type of stone and surface condition.

34  
35 Test cleaners and methods on samples of adjacent materials for possible adverse reactions. Do not use  
36 cleaners and methods known to have deleterious effect.

37  
38 Allow a waiting period of not less than seven (7) days after completion of sample cleaning to permit a study  
39 of sample panels for negative reactions.

40  
41 Approval of mockups does not constitute approval of deviations from the Contract Documents contained in  
42 mockups unless Owner specifically approves such deviations in writing.

43  
44 Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

45  
46 Preinstallation Conference: Conduct conference at Project site.

47  
48 Review methods and procedures related to stone restoration and cleaning including, but not limited to, the fol-  
49 lowing:

50  
51 Construction Schedule: Verify availability of materials, Restoration Specialist's personnel, equipment, and  
52 facilities needed to make progress and avoid delays.

1 Materials, material application, sequencing, tolerances, and required clearances.

2  
3 DELIVERY, STORAGE, AND HANDLING

4  
5 Deliver materials to Project site in manufacturer's original and unopened containers, labeled with manufacturer's  
6 name and type of products.

7  
8 Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious ma-  
9 terials that have become damp.

10  
11 Store sand where grading and other required characteristics can be maintained and contamination avoided.

12  
13 PROJECT CONDITIONS

14  
15 Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit stone  
16 restoration and cleaning work to be performed according to manufacturers' written instructions and specified require-  
17 ments.

18  
19 Repair stone units and repoint mortar joints only when air temperature is between 40 and 90 deg F (4 and 32 deg C)  
20 and is predicted to remain so for at least seven (7) days after completion of the Work unless otherwise indicated.

21  
22 Cold-Weather Requirements: Comply with the following procedures for stone repair and mortar-joint pointing un-  
23 less otherwise indicated:

24  
25 When air temperature is below 40 deg F (4 deg C), heat mortar ingredients, repair materials, and existing stone  
26 to produce temperatures between 40 and 120 deg F (4 and 49 deg C).

27  
28 When mean daily air temperature is below 40 deg F (4 deg C), provide enclosure and heat to maintain tempera-  
29 tures above 32 deg F (0 deg C) within the enclosure for 7 days after repair and pointing.

30  
31 Hot-Weather Requirements: Protect stone repair and mortar-joint pointing when temperature and humidity condi-  
32 tions produce excessive evaporation of water from mortar and patching materials. Provide artificial shade and wind  
33 breaks and use cooled materials as required to minimize evaporation. Do not apply mortar to substrates with temper-  
34 atures of 90 deg F (32 deg C) and above unless otherwise indicated.

35  
36 For manufactured repair materials, perform work within the environmental limits set by each manufacturer.

37  
38 Clean stone surfaces only when air temperature is 40 deg F (4 deg C) and above and is predicted to remain so for at  
39 least seven (7) days after completion of cleaning.

40  
41 COORDINATION

42  
43 Coordinate maintenance with public circulation patterns at Project site. Some work is near public circulation patterns  
44 . Public circulation patterns cannot be closed off entirely, and in places can be only temporarily redirected around  
45 small areas of work. Plan and execute the Work accordingly.

46  
47 SEQUENCING AND SCHEDULING

48  
49 Order replacement materials at earliest possible date to avoid delaying completion of the Work.

50  
51 Perform maintenance of stone assemblies work in the following sequence:

52  
53 Remove organic growth from all surfaces by preliminary cleaning.

1  
2 Inspect for open mortar joints and repair before cleaning to prevent the intrusion of water and other cleaning ma-  
3 terials into the wall.

4  
5 Clean all vertical surfaces.

6  
7 Repair stonework, including re-setting existing stone and, where approved, replacing existing stone with new  
8 stone.

9  
10 Rake out mortar from joints to be repointed.

11  
12 Point mortar and sealant joints.

13  
14 After repairs and repointing have been completed and cured, perform a final cleaning to remove residues from  
15 this work.

16  
17 Clean vertical surfaces.

18  
19 As scaffolding is removed, patch anchor holes used to attach scaffolding. Patch holes in stone to comply with "Stone  
20 Patching" Article. Patch holes in mortar joints to comply with "Repointing Stonework" Article.

## 21 22 **PART 2 - PRODUCTS**

### 23 24 **MORTAR MATERIALS**

25  
26 Portland Cement: ASTM C 150, Type I or Type II, white or gray or both where required for color matching of ex-  
27 posed mortar.

28  
29 Provide cement containing not more than 0.60 percent total alkali when tested according to ASTM C 114.

30  
31 Hydrated Lime: ASTM C 207, Type S.

32  
33 Mortar Sand: ASTM C 144 unless otherwise indicated.

34  
35 Color: Provide natural sand or ground marble, granite, or other sound stone of color necessary to produce re-  
36 quired mortar color.

37  
38 For pointing mortar, provide sand with rounded edges.

39  
40 Match size, texture, and gradation of existing mortar sand as closely as possible. Blend several sands if neces-  
41 sary to achieve suitable match.

42  
43 Mortar Pigments: Natural and synthetic iron oxides, compounded for mortar mixes. Use only pigments with a rec-  
44 ord of satisfactory performance in masonry mortars.

45  
46 Water: Potable.

### 47 48 **CLEANING MATERIALS**

49  
50 Water: Potable.

51  
52 Hot Water: Water heated to a temperature of 140 to 160 deg F (60 to 71 deg C).

1 Job-Mixed Detergent Solution: Solution prepared by mixing 2 cups (0.5 L) of tetrasodium polyphosphate, 1/2 cup  
2 (125 mL) of laundry detergent, and 20 quarts (20 L) of hot water for every 5 gal. (20 L) of solution required.

3  
4 Job-Mixed Mold, Mildew, and Algae Remover: Solution prepared by mixing 2 cups (0.5 L) of tetrasodium poly-  
5 phosphate, 5 quarts (5 L) of 5 percent sodium hypochlorite (bleach), and 15 quarts (15 L) of hot water for every 5  
6 gal. (20 L) of solution required.

7  
8 Nonacidic Liquid Cleaner: Manufacturer's standard mildly alkaline liquid cleaner formulated for removing mold,  
9 mildew, and other organic soiling from ordinary building materials, including polished stone, brick, aluminum, plas-  
10 tics, and wood.

11  
12 Products: Subject to compliance with requirements, available products that may be incorporated into the Work  
13 include, but are not limited to, the following manufacturers:

14  
15 Diedrich Technologies Inc.

16  
17 Dominion Restoration Products, Inc.

18  
19 Dumond Chemicals, Inc.

20  
21 Price Research, Ltd.

22  
23 PROSOCO

24  
25 Mild Acidic Cleaner: Manufacturer's standard mildly acidic cleaner containing no muriatic (hydrochloric), hydroflu-  
26 oric, or sulfuric acid; or ammonium bifluoride or chlorine bleaches.

27  
28 Products: Subject to compliance with requirements, available products that may be incorporated into the Work  
29 include, but are not limited to, the following manufacturers:

30  
31 ABR Products, Inc.

32  
33 Diedrich Technologies Inc.

34  
35 Dominion Restoration Products, Inc.

36  
37 PROSOCO

38  
39 One-Part Limestone Cleaner: Manufacturer's standard one-part acidic formulation for cleaning limestone.

40  
41 Products: Subject to compliance with requirements, available products that may be incorporated into the Work  
42 include, but are not limited to, the following manufacturers:

43  
44 ABR Products, Inc.

45  
46 Hydrochemical Techniques, Inc.

47  
48 Price Research, Ltd.

49  
50 PROSOCO

51  
52 Two-Part Limestone Cleaner: Manufacturer's standard system consisting of potassium or sodium hydroxide based,  
53 alkaline prewash cleaner and acidic afterwash cleaner that does not contain hydrofluoric acid.

1  
2 Products: Subject to compliance with requirements, available products that may be incorporated into the Work  
3 include, but are not limited to, the following manufacturers:

4  
5 ABR Products, Inc.

6  
7 Diedrich Technologies Inc.

8  
9 Hydrochemical Techniques, Inc.

10  
11 Price Research, Ltd.

12  
13 PROSOCO

14  
15 ACCESSORY MATERIALS

16  
17 Liquid Strippable Masking Agent: Manufacturer's standard liquid, film-forming, strippable masking material for pro-  
18 tecting glass, metal, and polished stone surfaces from damaging effects of acidic and alkaline masonry cleaners.

19  
20 Products: Subject to compliance with requirements, available products that may be incorporated into the Work  
21 include, but are not limited to, the following:

22  
23 ABR Products, Inc.; Rubber Mask.

24  
25 Price Research, Ltd.; Price Mask.

26  
27 PROSOCO; Sure Klean Strippable Masking.

28  
29 Stone Anchors and Pins: Type and size indicated or, if not indicated, to match existing anchors in size and type.  
30 Fabricate anchors and pins from Type 304 stainless steel.

31  
32 Sealant: Provide manufacturer's standard chemically curing, single-component elastomeric sealant(s) of base silicone  
33 polymer such as Spetrem II by Tremco, or approved equal.

34  
35 Joint-Sealant Backing:

36  
37 Cylindrical Sealant Backings: ASTM C 1330, Type C (closed-cell material with a surface skin) and of size and  
38 density to control sealant depth and otherwise contribute to producing optimum sealant performance.

39  
40 Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for prevent-  
41 ing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint where such  
42 adhesion would result in sealant failure. Provide self-adhesive tape where applicable.

43  
44 Setting Buttons: Resilient plastic buttons, nonstaining to stone, sized to suit joint thicknesses and bed depths of stone  
45 units without intruding into required depths of pointing materials.

46  
47 Masking Tape: Nonstaining, nonabsorbent material, compatible with pointing mortar, joint primers, sealants, and  
48 surfaces adjacent to joints; that will easily come off entirely, including adhesive.

49  
50 Antirust Coating: Fast-curing, lead- and chromate-free, self-curing, universal modified-alkyd primer complying with  
51 SSPC-Paint 20 or SSPC-Paint 29 zinc-rich coating such as...

1 Use coating requiring no better than SSPC-SP 3, "Power Tool Cleaning" surface preparation according to manu-  
2 facturer's literature or certified statement.

3  
4 Miscellaneous Products: Select materials and methods of use based on the following, subject to approval of a  
5 mockup:

6  
7 Previous effectiveness in performing the work involved.

8  
9 Little possibility of damaging exposed surfaces.

10  
11 Consistency of each application.

12  
13 Uniformity of the resulting overall appearance.

14  
15 Do not use products or tools that could do the following:

16  
17 Remove, alter, or in any way harm the present condition or future preservation of existing surfaces, includ-  
18 ing surrounding surfaces not in contract.

19  
20 Leave a residue on surfaces.

21  
22 **MORTAR MIXES**

23  
24 Measurement and Mixing: Measure cementitious materials and sand in a dry condition by volume or equivalent  
25 weight. Do not measure by shovel; use known measure. Mix materials in a clean, mechanical batch mixer.

26  
27 Mixing Pointing Mortar: Thoroughly mix cementitious materials and sand together before adding any water. Then  
28 mix again adding only enough water to produce a damp, unworkable mix that will retain its form when pressed into a  
29 ball. Maintain mortar in this dampened condition for 15 to 30 minutes. Add remaining water in small portions until  
30 mortar reaches desired consistency. Use mortar within one hour of final mixing; do not retemper or use partially  
31 hardened material.

32  
33 Colored Mortar: Produce mortar of color required by using specified ingredients. Do not alter specified proportions  
34 without Owner's approval.

35  
36 Mortar Pigments: Where mortar pigments are indicated, do not exceed a pigment-to-cement ratio of 1:10 by  
37 weight.

38  
39 Do not use admixtures in mortar unless otherwise indicated.

40  
41 Mortar Proportions: Mix mortar materials in the following proportions:

42  
43 Pointing Mortar for Stone: 1 part white portland cement, 2 parts lime, and 9 parts sand.

44  
45 Add mortar pigments to produce mortar colors required.

46  
47 Rebuilding (Setting) Mortar: Same as pointing mortar except mortar pigments are not required.

48  
49 - OR -

50  
51 Rebuilding (Setting) Mortar: Comply with ASTM C 270, Proportion Specification, Type O unless otherwise  
52 indicated, with cementitious material limited to portland cement and lime.

1 CHEMICAL CLEANING SOLUTIONS

2  
3 Dilute chemical cleaners with water to produce solutions not exceeding concentration recommended by chemical-  
4 cleaner manufacturer.

5  
6 **PART 3- EXECUTION**

7  
8 **PROTECTION**

9  
10 Protect persons, motor vehicles, surrounding surfaces of building being restored, building site, plants, and surround-  
11 ing buildings from harm resulting from stone restoration work.

12  
13 Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that  
14 must remain in service during course of restoration and cleaning work.

15  
16 Comply with chemical-cleaner manufacturer's written instructions for protecting building and other surfaces against  
17 damage from exposure to its products. Prevent chemical cleaning solutions from coming into contact with people,  
18 motor vehicles, landscaping, buildings, and other surfaces that could be harmed by such contact.

19  
20 Cover adjacent surfaces with materials that are proven to resist chemical cleaners used unless chemical cleaners  
21 being used will not damage adjacent surfaces. Use materials that contain only waterproof, UV-resistant adhe-  
22 sives. Apply masking agents to comply with manufacturer's written instructions. Do not apply liquid masking  
23 agent to painted or porous surfaces. When no longer needed, promptly remove masking to prevent adhesive  
24 staining.

25  
26 Keep wall wet below area being cleaned to prevent streaking from runoff.

27  
28 Do not clean stone during winds of sufficient force to spread cleaning solutions to unprotected surfaces.

29  
30 Neutralize and collect alkaline and acid wastes for disposal off Owner's property.

31  
32 Dispose of runoff from cleaning operations by legal means and in a manner that prevents soil erosion, undermin-  
33 ing of paving and foundations, damage to landscaping, and water penetration into building interiors.

34  
35 Prevent mortar from staining face of surrounding stone and other surfaces.

36  
37 Cover sills, ledges, and projections to protect from mortar droppings.

38  
39 Keep wall area wet below rebuilding and pointing work to discourage mortar from adhering.

40  
41 Immediately remove mortar in contact with exposed stone and other surfaces.

42  
43 Clean mortar splatters from scaffolding at end of each day.

44  
45 **UNUSED ANCHOR REMOVAL**

46  
47 Remove stone anchors, brackets, wood nailers, and other extraneous items no longer in use.

48  
49 Remove items carefully to avoid spalling or cracking stone.

50  
51 Where directed, if an item cannot be removed without damaging surrounding stone, do the following:

1 Cut or grind off item approximately 3/4 inch (20 mm) beneath surface and core drill a recess of same depth  
2 in surrounding stone as close around item as practical.

3  
4 Immediately paint exposed end of item with two coats of antirust coating, following coating manufacturer's  
5 written instructions and without exceeding manufacturer's recommended dry film thickness per coat. Keep  
6 paint off sides of recess.

7  
8 Patch or Plug the hole where each item was removed unless directed to remove and replace the stone unit.

#### 9 10 STONE REMOVAL AND RE-SETTING

11  
12 Where stone is obviously displaced (e.g. deviating from plumb), remove then re-set units.

13  
14 If necessary and approved in advance by Owner, remove stone that has deteriorated, is damaged beyond repair, or  
15 exhibits detachment, and replace it. Approval will be confirmed by Change Order.

16  
17 Carefully demolish or remove entire units from joint to joint, without damaging surrounding stone, in a manner that  
18 permits re-setting or replacement with full-size units.

19  
20 Support and protect remaining stonework that surrounds removal area. Maintain flashing, reinforcement, lintels, and  
21 adjoining construction in an undamaged condition.

22  
23 Notify Owner of unforeseen detrimental conditions including voids, cracks, bulges, and loose units in existing stone  
24 or unit masonry backup, rotted wood, rusted metal, and other deteriorated items.

25  
26 Remove in an undamaged condition as many whole stone units as possible.

27  
28 Remove mortar, loose particles, and soil from stone by cleaning with hand chisels, brushes, and water.

29  
30 Remove sealants by cutting close to stone with utility knife and cleaning with solvents.

31  
32 Store stone for reuse. Store off ground, on skids, and protected from weather.

33  
34 Deliver cleaned stone not required for reuse to Owner unless otherwise indicated.

35  
36 Clean stone surrounding removal areas by removing mortar, dust, and loose particles in preparation for replacement.

37  
38 Replace removed damaged stone with other removed stone in good quality, where possible, or with new stone match-  
39 ing existing stone, including size. Do not use broken units unless they can be cut to usable size.

40  
41 Do not allow face bedding of stone. Before setting, inspect to verify that each stone has been cut so that, when it is  
42 set in final position, natural bedding planes are essentially horizontal. Reject and replace stone with vertical bedding  
43 planes except as required for arches, lintels, and copings.

44  
45 Install replacement stone into bonding and coursing pattern of existing stone. If cutting is required, use a motor-  
46 driven saw designed to cut stone with clean, sharp, unchipped edges. Finish edges to blend with appearance of edges  
47 of existing stone.

48  
49 Maintain joint width for replacement stone to match existing joints.

50  
51 Use setting buttons or shims to set stone accurately spaced with uniform joints.



1 Set replacement stone with completely filled bed, head, and collar joints. Butter vertical joints for full width before  
2 setting and set units in full bed of mortar unless otherwise indicated. Replace existing anchors with new anchors of  
3 size and type indicated.

4  
5 Tool exposed mortar joints in repaired areas to match joints of surrounding existing stonework.

6  
7 Rake out mortar used for laying stone before mortar sets and point new mortar joints in repaired area to comply  
8 with requirements for repointing existing stone, and at same time as repointing of surrounding area.

9  
10 When mortar is sufficiently hard to support units, remove shims and other devices interfering with pointing of  
11 joints.

#### 12 13 PAINTING STEEL UNCOVERED DURING THE WORK

14  
15 Inspect steel exposed during stone removal. Where Owner determines that it is structural, or for other reasons cannot  
16 be totally removed, prepare and paint it as follows:

17  
18 Remove paint, rust, and other contaminants according to SSPC-SP 3, "Power Tool Cleaning, as applicable to  
19 meet paint manufacturer's recommended preparation.

20  
21 Immediately paint exposed steel with two coats of antirust coating, following coating manufacturer's written in-  
22 structions and without exceeding manufacturer's recommended rate of application (dry film thickness per coat).

23  
24 If on inspection and rust removal, the cross section of a steel member is found to be reduced from rust by more than  
25 1/16 inch (1.6 mm), notify Owner before proceeding.

#### 26 27 STONE PLUG REPAIR

28  
29 Remove cylindrical piece of damaged stone by core-drilling perpendicular to stone surface.

30  
31 Prepare a replacement plug by core-drilling replacement stone. Use a drill sized to produce a core that will fit into  
32 hole drilled in damaged stone with only minimum gap necessary for adhesive. Cut and install plug so that, when it is  
33 set in final position, natural bedding planes will match the orientation of bedding planes of the backing stone unless  
34 otherwise indicated.

35  
36 Apply stone-to-stone adhesive to comply with adhesive manufacturer's written instructions. Coat bonding surfaces of  
37 existing stone and plug, completely filling all crevices and voids.

38  
39 Apply plug while adhesive is still tacky and hold securely in place until adhesive has cured.

40  
41 Clean adhesive residue from exposed surfaces.

#### 42 43 CLEANING STONE, GENERAL

44  
45 Proceed with cleaning in an orderly manner; work from bottom to top of each staging width and from one end of  
46 each elevation to the other. Ensure that dirty residues and rinse water will not wash over cleaned, dry surfaces.

47  
48 Use only those cleaning methods indicated for each stone material and location.

49  
50 Do not use wire brushes or brushes that are not resistant to chemical cleaner being used. Do not use plastic-bris-  
51 tle brushes if natural-fiber brushes will resist chemical cleaner being used.

1 Use spray equipment that provides controlled application at volume and pressure indicated, measured at spray  
2 tip. Adjust pressure and volume to ensure that cleaning methods do not damage stone.

3  
4 Equip units with pressure gages.

5  
6 For water-spray application, use fan-shaped spray tip that disperses water at an angle of 25 to 50 degrees.

7  
8 For high-pressure water-spray application, use fan-shaped spray tip that disperses water at an angle of at least 40  
9 degrees.

10  
11 For heated water-spray application, use equipment capable of maintaining temperature between 140 and 160  
12 deg F (60 and 71 deg C) at flow rates indicated.

13  
14 For steam application, use steam generator capable of delivering live steam at nozzle.

15  
16 Perform each cleaning method indicated in a manner that results in uniform coverage of all surfaces, including cor-  
17 ners, moldings, and interstices, and that produces an even effect without streaking or damaging stone surfaces.

#### 18 19 Water Application Methods:

20  
21 Water-Soak Application: Soak stone surfaces by applying water continuously and uniformly to limited area for  
22 time indicated. Apply water at low pressures and low volumes in multiple fine sprays using perforated hoses or  
23 multiple spray nozzles. Erect a protective enclosure constructed of polyethylene sheeting to cover area being  
24 sprayed.

25  
26 Water-Spray Applications: Unless otherwise indicated, hold spray nozzle at least 6 inches (150 mm) from sur-  
27 face of stone and apply water in horizontal back and forth sweeping motion, overlapping previous strokes to pro-  
28 duce uniform coverage.

29  
30 Steam Cleaning: Apply steam to stone surfaces at the very low pressures indicated for each type of stonework. Hold  
31 nozzle at least 6 inches (150 mm) from surface of stone and apply steam in horizontal back and forth sweeping mo-  
32 tion, overlapping previous strokes to produce uniform coverage.

33  
34 Chemical-Cleaner Application Methods: Apply chemical cleaners to stone surfaces to comply with chemical-cleaner  
35 manufacturer's written instructions; use brush or spray application. Do not spray apply at pressures exceeding 50 psi  
36 (345 kPa). Do not allow chemicals to remain on surface for periods longer than those indicated or recommended by  
37 manufacturer.

38  
39 Rinse off chemical residue and soil by working upward from bottom to top of each treated area at each stage or  
40 scaffold setting. Periodically during each rinse, test pH of rinse water running off of cleaned area to determine  
41 that chemical cleaner is completely removed.

42  
43 Apply neutralizing agent and repeat rinse if necessary to produce tested pH of between 6.7 and 7.5.

44  
45 After cleaning is complete, remove protection no longer required. Remove tape and adhesive marks.

#### 46 47 PRELIMINARY CLEANING

48  
49 Removing Plant Growth: Completely remove visible plant, moss, and shrub growth from stone surfaces. Carefully  
50 remove plants, creepers, and vegetation by cutting at roots and allowing to dry as long as possible before removal.  
51 Remove loose soil or debris from open joints to whatever depth they occur.

1 Preliminary Cleaning: Before beginning general cleaning, remove extraneous substances that are resistant to clean-  
2 ing methods being used. Extraneous substances include paint, caulking, asphalt, and tar.

3  
4 Carefully remove heavy accumulations of material from surface of stone with sharp chisel. Do not scratch or  
5 chip stone surface.

6  
7 Remove caulking with alkaline paint remover.

8  
9 Comply with requirements in "Paint Removal" Article.

10  
11 Repeat application up to two times if needed.

## 12 PAINT REMOVAL

13  
14 Paint Removal with Alkaline Paste Paint Remover:

15  
16  
17 Remove loose and peeling paint and caulk using low pressure spray, scrapers, stiff brushes, or a combination of  
18 these. Let surface dry thoroughly.

19  
20 Apply paint remover to dry, painted and caulked stone with brushes.

21  
22 Allow paint remover to remain on surface for period recommended by manufacturer.

23  
24 Rinse with hot water applied by low-pressure spray to remove chemicals and paint residue.

25  
26 Repeat process if necessary to remove all paint and caulk.

27  
28 Apply acidic cleaner or manufacturer's recommended afterwash to stone, while surface is still wet, using low-  
29 pressure spray equipment or soft-fiber brush. Let cleaner or afterwash remain on surface as a neutralizing agent  
30 for period recommended by chemical-cleaner or afterwash manufacturer.

31  
32 Rinse with cold water applied by low-pressure spray to remove chemicals and soil.

## 33 CLEANING STONework

34  
35  
36 Where repointing work precedes cleaning of existing stone, allow mortar to harden at least 30 days before beginning  
37 cleaning work.

38  
39 Cold-Water Soak:

40  
41 Apply cold water by intermittent spraying to keep surface moist.

42  
43 Use perforated hoses or other means that will apply a fine water mist to entire surface being cleaned.

44  
45 Apply water in cycles with at least 30 minutes between cycles.

46  
47 Continue spraying until surface encrustation has softened sufficiently to permit its removal by water wash, as  
48 indicated by cleaning tests.

49  
50 Continue spraying for 72 hours.

51  
52 Remove soil and softened surface encrustation from stone with cold water applied by low-pressure spray.

1 Cold-Water Wash: Use cold water applied by low-pressure spray.

2  
3 Hot-Water Wash: Use hot water applied by low-pressure spray.

4  
5 Detergent Cleaning:

6  
7 Wet stone with hot water applied by low-pressure spray.

8  
9 Scrub stone with detergent solution using medium-soft brushes until soil is thoroughly dislodged and can be re-  
10 moved by rinsing. Use small brushes to remove soil from mortar joints and crevices. Dip brush in solution often  
11 to ensure that adequate fresh detergent is used and that stone surface remains wet.

12  
13 Rinse with cold water applied by low-pressure spray to remove detergent solution and soil.

14  
15 Repeat cleaning procedure above where required to produce cleaning effect established by mockup.

16  
17 Mold, Mildew, and Algae Removal:

18  
19 Wet stone with hot water applied by low-pressure spray.

20  
21 Apply mold, mildew, and algae remover by brush or low-pressure spray.

22  
23 Scrub stone with medium-soft brushes until mold, mildew, and algae are thoroughly dislodged and can be re-  
24 moved by rinsing. Use small brushes for mortar joints and crevices. Dip brush in mold, mildew, and algae re-  
25 mover often to ensure that adequate fresh cleaner is used and that stone surface remains wet.

26  
27 Rinse with cold water applied by low-pressure spray to remove mold, mildew, and algae remover and soil.

28  
29 Repeat cleaning procedure above where required to produce cleaning effect established by mockup.

30  
31 Nonacidic Liquid Chemical Cleaning:

32  
33 Wet stone with hot water applied by low-pressure spray.

34  
35 Apply cleaner to stone in two applications by brush or low-pressure spray. Let cleaner remain on surface for  
36 period indicated below:

37  
38 As recommended by chemical-cleaner manufacturer.

39  
40 As established by mockup.

41  
42 Two to three minutes.

43  
44 Rinse with cold water applied by low-pressure spray to remove chemicals and soil.

45  
46 Repeat cleaning procedure above where required to produce cleaning effect established by mockup. Do not re-  
47 peat more than once. If additional cleaning is required, use steam cleaning.

48  
49 Mild Acidic Chemical Cleaning:

50  
51 Wet stone with cold water applied by low-pressure spray.

1 Apply cleaner to stone in two applications] by brush or low-pressure spray. Let cleaner remain on surface for  
2 period indicated below:

3  
4 As recommended by chemical-cleaner manufacturer.

5  
6 As established by mockup.  
7 Two to three minutes.

8  
9 Rinse with cold water applied by [low] [medium] [high]-pressure spray to remove chemicals and soil.

10  
11 Repeat cleaning procedure above where required to produce cleaning effect established by mockup. Do not re-  
12 peat more than once. If additional cleaning is required, use steam cleaning.

13  
14 **One-Part Limestone Chemical Cleaning:**

15  
16 Wet stone with hot water applied by low-pressure spray.

17  
18 Apply cleaner to stone by brush or low-pressure spray. Let cleaner remain on surface for period recommended  
19 by chemical-cleaner manufacturer.

20  
21 Immediately repeat application of one-part limestone cleaner as indicated above over the same area.

22  
23 Rinse with cold water applied by medium-pressure spray to remove chemicals and soil.

24  
25 **Two-Part Limestone Chemical Cleaning:**

26  
27 Wet stone with hot water applied by low-pressure spray.

28  
29 Apply alkaline prewash cleaner to stone by brush or roller. Let cleaner remain on surface for period recom-  
30 mended by chemical-cleaner manufacturer unless otherwise indicated.

31  
32 Rinse with cold water applied by medium-pressure spray to remove chemicals and soil.

33  
34 Use only acidic cleaners that manufacturer recommends for use as afterwash for alkaline prewash cleaner.

35  
36 Apply acidic afterwash cleaner to stone in two applications, while surface is still wet, using low-pressure spray  
37 equipment, deep-nap roller or soft-fiber brush. Let neutralizer remain on surface for period recommended by  
38 manufacturer unless otherwise indicated.

39  
40 Rinse with cold water applied by medium-pressure spray to remove chemicals and soil.

41  
42 Repeat cleaning procedure above where required to produce cleaning effect established by mockup. Do not re-  
43 peat more than once.

44  
45 **REPOINTING STONEMWORK AND STONE COPING**

46  
47 Rake out and repoint joints to the following extent:

48  
49 Joints where mortar is missing or where they contain holes.

50  
51 Cracked joints where cracks can be penetrated at least 1/4 inch (6 mm) by a knife blade 0.027 inch (0.7 mm)  
52 thick.

1 Cracked joints where cracks are 1/16 inch (1.6 mm) or more in width and of any depth.

2  
3 Joints where they sound hollow when tapped by metal object.

4  
5 Joints where they are worn back 1/4 inch (6 mm) or more from surface.

6  
7 Joints where they are deteriorated to point that mortar can be easily removed by hand, without tools.

8  
9 Joints where they have been filled with substances other than mortar.

10  
11 Joints indicated as sealant-filled.

### 12 Coping Head Joint

13  
14  
15 Do not rake out and repoint joints where not required.

16  
17 Rake out joints as follows, according to procedures demonstrated in approved mockup:

18  
19 Remove mortar from joints to depth of 2 times joint width, but not less than 1/2 inch (13 mm) or not less than  
20 that required to expose sound, unweathered mortar.

21  
22 Remove mortar from stone surfaces within raked-out joints to provide reveals with square backs and to expose  
23 stone for contact with pointing mortar. Brush, vacuum, or flush joints to remove dirt and loose debris.

24  
25 Do not spall edges of stone units or widen joints. Replace or patch damaged stone units as directed by Owner.

26  
27 Cut out mortar by hand with chisel and resilient mallet. Do not use power-operated grinders without Owner's  
28 written approval based on approved quality-control program.

29  
30 Cut out center of mortar bed joints using angle grinders with diamond-impregnated metal blades. Remove re-  
31 maining mortar by hand with chisel and resilient mallet. Strictly adhere to approved quality-control program.

32  
33 Notify Owner of unforeseen detrimental conditions including voids in mortar joints, cracks, loose stone, rotted wood,  
34 rusted metal, and other deteriorated items.

### 35 Pointing with Mortar:

36  
37  
38 Rinse joint surfaces with water to remove dust and mortar particles. Time rinsing application so, at time of  
39 pointing, joint surfaces are damp but free of standing water. If rinse water dries, dampen joint surfaces before  
40 pointing.

41  
42 Apply pointing mortar first to areas where existing mortar was removed to depths greater than surrounding areas.  
43 Apply in layers not greater than 3/8 inch (9 mm) until a uniform depth is formed. Fully compact each layer thor-  
44 oughly and allow it to become thumbprint hard before applying next layer.

45  
46 After low areas have been filled to same depth as remaining joints, point all joints by placing mortar in layers not  
47 greater than 3/8 inch (9 mm). Fully compact each layer and allow to become thumbprint hard before applying  
48 next layer. Where existing stone has worn or rounded edges, slightly recess finished mortar surface below face  
49 of stone to avoid widened joint faces. Take care not to spread mortar beyond joint edges onto exposed stone sur-  
50 faces or to featheredge the mortar.

51  
52 When mortar is thumbprint hard, tool joints to match original appearance of joints as demonstrated in approved  
53 mockup.

1  
2 Remove excess mortar from edge of joint by brushing.

3  
4 Cure mortar by maintaining in thoroughly damp condition for at least 72 consecutive hours, including weekends  
5 and holidays.

6  
7 Acceptable curing methods include covering with wet burlap and plastic sheeting, periodic hand misting,  
8 and periodic mist spraying using system of pipes, mist heads, and timers.

9  
10 Adjust curing methods to ensure that pointing mortar is damp throughout its depth without eroding surface  
11 mortar.

12  
13 Hairline cracking within the mortar or mortar separation at edge of a joint is unacceptable. Completely remove  
14 such mortar and repoint.

15  
16 **Pointing with Sealant:**

17  
18 All coping head joints shall receive sealant via pointing.

19  
20 After raking out, keep joints dry and free of mortar and debris.

21  
22 Clean and prepare joint surfaces according to Division 07 Section 07 01 90 – Maintenance of Joint Sealants.

23  
24 Fill sealant joints with specified joint sealant according to Division 07 Section 07 01 90 – Maintenance of Joint  
25 Sealants and the following:

26  
27 Install cylindrical sealant backing beneath the sealant except where space is insufficient. There, install  
28 bond-breaker tape.

29  
30 Install sealant using only proven installation techniques that will ensure that sealant will be deposited in a  
31 uniform, continuous ribbon, without gaps or air pockets, and with complete wetting of the joint bond sur-  
32 faces equally on both sides.

33  
34 Fill joint flush with surrounding stonework and matching the contour of adjoining mortar joints.

35  
36 Install sealant as recommended by sealant manufacturer but within the following general limitations, meas-  
37 ured at the center (thin) section of the bead:

38  
39 Fill joints to a depth equal to joint width, but not more than 1/2 inch (13 mm) deep or less than 1/4 inch  
40 (6 mm) deep.

41  
42 Immediately after first tooling, apply ground-mortar aggregate to sealant, gently pushing aggregate into the  
43 surface of sealant. Retool sealant to form smooth, uniform beads, slightly concave. Remove excess sealant  
44 and aggregate from surfaces adjacent to joint.

45  
46 Do not allow sealant to overflow or spill onto adjoining surfaces, or to migrate into the voids of adjoining  
47 surfaces, particularly rough textures. Remove excess and spillage of sealant promptly as the work pro-  
48 gresses.

49  
50 Clean adjoining surfaces by the means necessary to eliminate evidence of spillage, without damage to ad-  
51 joining surfaces or finishes, as demonstrated in an approved mockup.

1 Where repointing work precedes cleaning of existing stone, allow mortar to harden at least 30 days before beginning  
2 cleaning work.

3  
4 FINAL CLEANING

5  
6 Where repointing work precedes cleaning of existing stone, allow mortar to harden at least 30 days before beginning  
7 cleaning work.

8  
9 After mortar has fully hardened, thoroughly clean exposed stone surfaces of excess mortar and foreign matter; use  
10 wood scrapers, stiff-nylon or -fiber brushes, and clean water, spray applied at low pressure.

11  
12 Do not use metal scrapers or brushes.

13  
14 Do not use acidic or alkaline cleaners.

15  
16 Wash adjacent metal work and other nonstone surfaces. Use detergent and soft brushes or cloths.

17  
18 Wash all window glass and frames for regions of work.

19  
20 Clean mortar and debris from roof. Rinse off roof.

21  
22 Sweep and rake adjacent pavement and grounds to remove mortar and debris. Where necessary, pressure wash pave-  
23 ment surfaces to remove mortar, dust, dirt, and stains.

24  
25 FIELD QUALITY CONTROL

26  
27 Owner's Project Representatives: Owner will assign Project Representatives to help carry out Owner's responsibili-  
28 ties at the site, including observing progress and quality of portion of the Work completed. Allow Owner's Project  
29 Representatives use of lift devices and scaffolding, as needed, to observe progress and quality of portion of the Work  
30 completed.

31  
32 Notify Owner's Project Representatives in advance of times when lift devices and scaffolding will be relocated. Do  
33 not relocate lift devices and scaffolding until and Owner's Project Representatives have had reasonable opportunity to  
34 make observations of work areas at lift device or scaffold location.

35  
36  
37  
38 -END OF SECTION -



# CITY-COUNTY BUILDING FACADE JOINT REPAIR AND POWERWASHING

210 MARTIN LUTHER KING, JR. BOULEVARD  
MADISON, WISCONSIN



- Maintenance Programming
- Architectural Engineering
- Consulting

101 Dempsey Road  
Madison, WI 53714  
phone: 608-240-9110  
fax: 608-240-9112



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## GENERAL NOTES

1. The contractor shall visit site and verify all conditions, dimensions, and quantities prior to bidding.
2. These drawings have been developed from limited available drawings and cursory measurements. Materials, dimensions, wall thicknesses, roof penetrations, patterns and the like are interpretations of these records and measurements and must be field verified by the contractor. Where conditions are found to be different from those noted, notify the architect/engineer before proceeding with the work.
3. All materials shall be new unless noted otherwise.
4. The contractor shall not stockpile materials on existing structure.
5. The contractor shall comply with Local, State and Federal rules and regulations related to the handling, removal and disposal of hazardous material.
6. The contractor is responsible for obtaining all requisite permits.
7. The contractor shall verify, design (P.E. Stamped) and install all temporary shoring and support as required to complete the Work.
8. Protect existing elements, components and surfaces to remain. Protect all existing work to remain from damage during selective removal and new construction activities. Protection shall be in place before any work commences.
9. Modifications to existing fall protection device(s) and/or device anchoring, including repositioning, shall restore to minimum tolerances the provided-service (benefit) rendered by said device(s) and their attachment.
10. The contractors shall be responsible to construct and maintain adequate temporary protection barriers such that the building remains weathertight and secure.
11. Contractor is responsible for the coordination & completion of all work. It is the contractor's responsibility to make the work fit within the existing dimensions field verified. Adjustments are to be approved by the architect/engineer prior to commencing work. All work shall be of high quality & craftsman-like character.

## SYMBOL LEGEND

- REFERENCE ELEVATION / VIEW CALLOUT
- SHEET NO. REVISION KEY
- NORTH SYMBOL
- WORK LIMITS
- LOCATION OF ROOF OVERHANG

## ABBREVIATIONS

- E&W East & West
- N&S North & South
- PCS Projecting Cap Stone
- PSS Projecting Sill Stone
- PC Precast
- VFP Vertical Fin Projection

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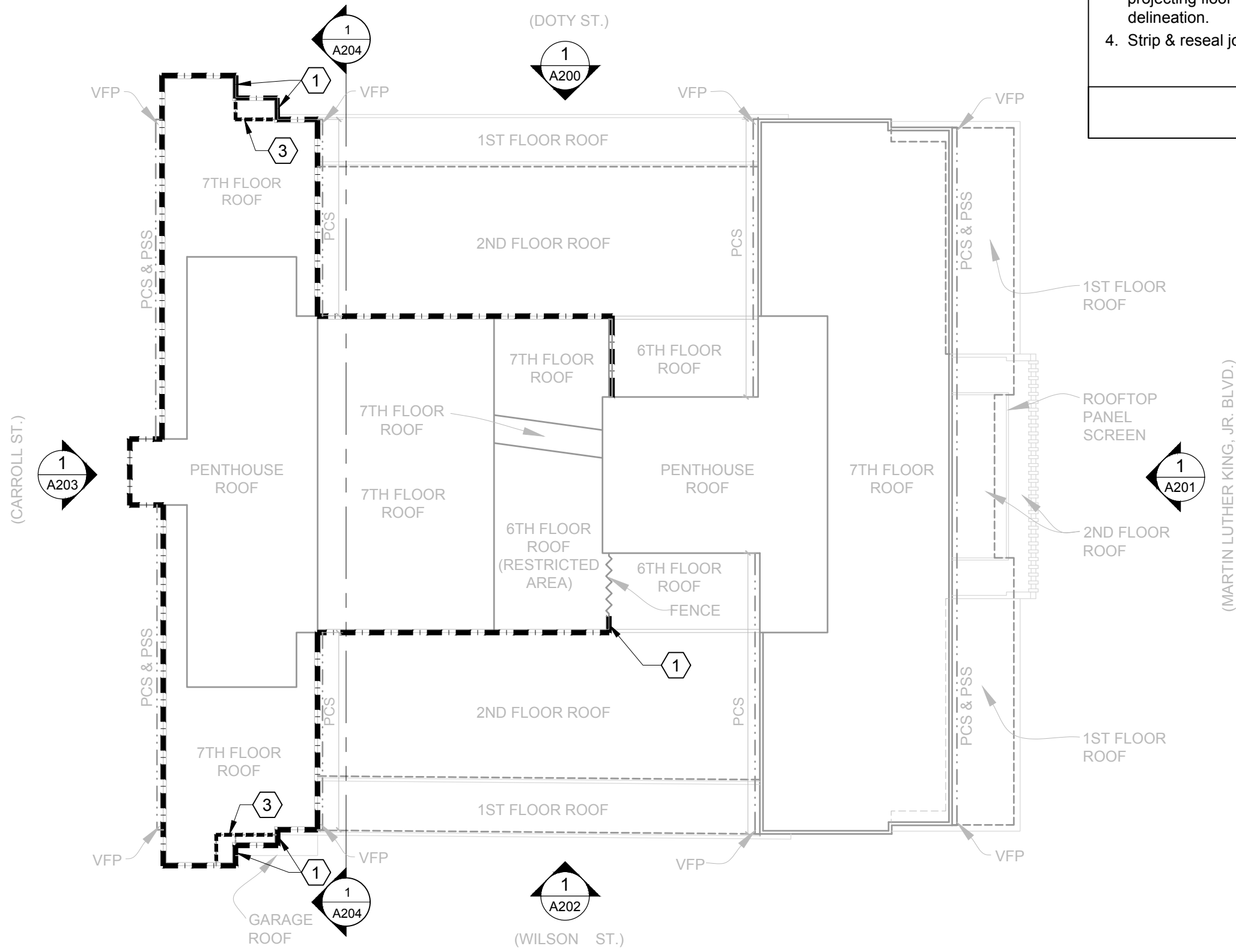
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TW	TW/DM	19A0058

Scale:	Date:
	11/08/2019

Sheet Name:  
**TITLE SHEET**

Sheet Number:  
**T100**

Addendum 2



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4. Strip & reseal joints at stainless steel panels.

WORK KEYNOTES #



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101 Dempsey Road  
Madison, WI 53714  
phone: 608-240-9110  
fax: 608-240-9112

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Sheet Name:  
**ROOF PLAN**

Sheet Number:  
**A100**

**ROOF PLAN**  
Not to Scale **1**

# Addendum 2

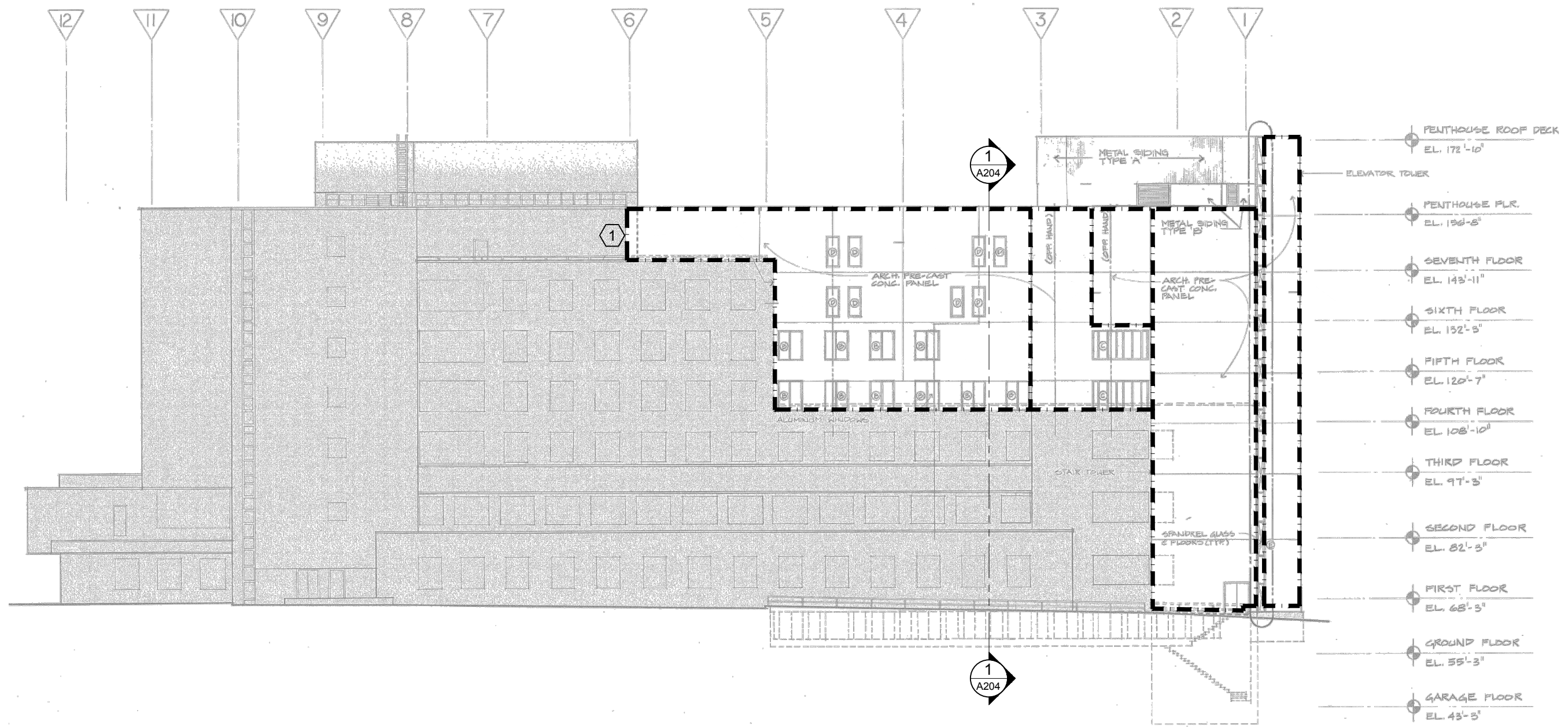
1. Include return wall in scope of Work. Refer to Building Section/Elevations or Roof Plan for further delineation.
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3. Work extends to grade. Verify in field.

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WORK KEYNOTES	#
Work Limits of PRECAST CONCRETE PANELS	
SYMBOL LINES	



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TW	TW/DM	19A0058

Scale:	Date:
AS NOTED	11/08/2019

Sheet Name:  
**NORTH ELEVATION**

Sheet Number:  
**A200**

**NORTH ELEVATION - DOTY STREET**  
Not to Scale

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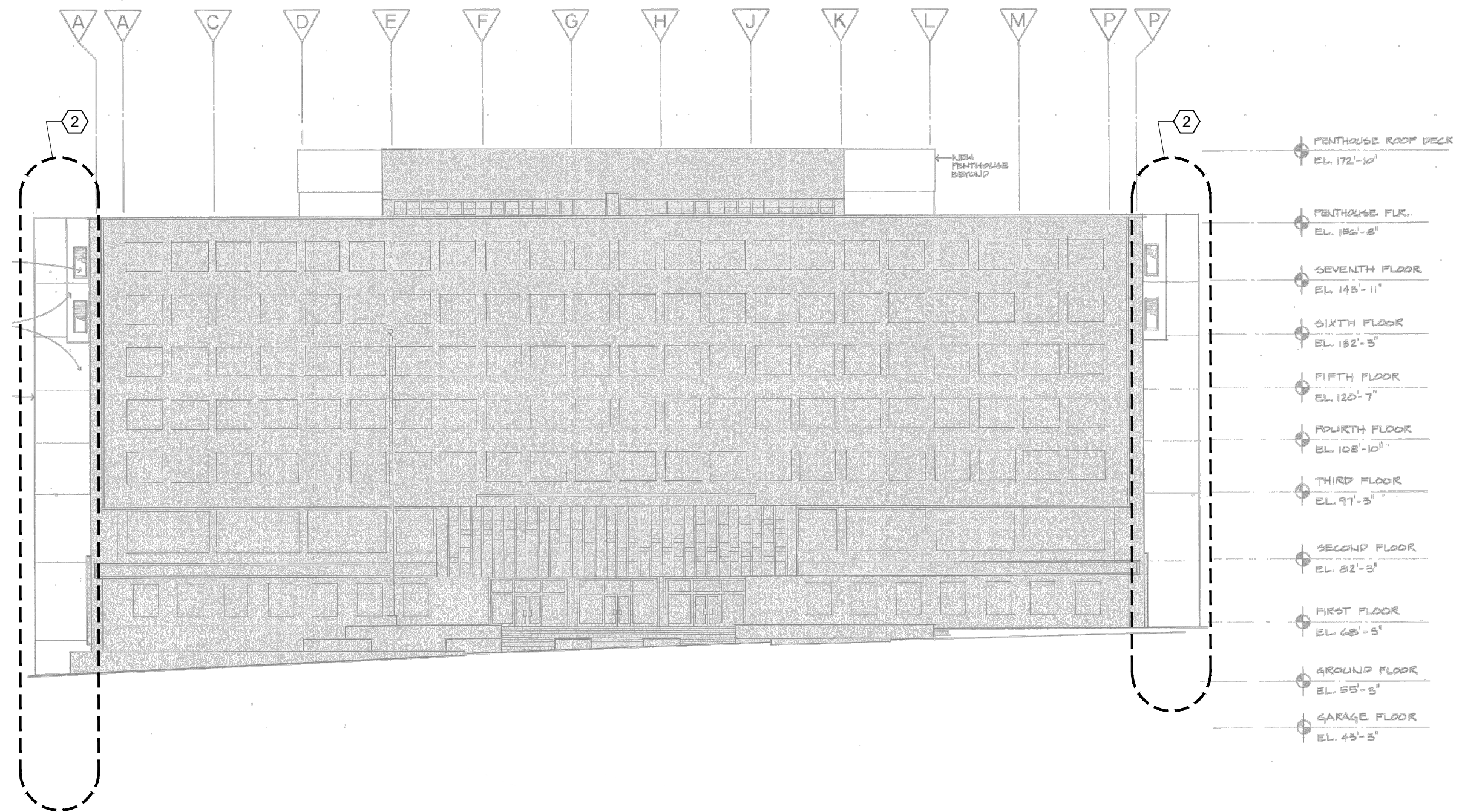
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Sheet Name:  
**EAST ELEVATION**

Sheet Number:  
**A201**

**EAST ELEVATION - MARTIN LUTHER KING, JR. BLVD.**  
Not to Scale

Addendum 2

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WORK KEYNOTES



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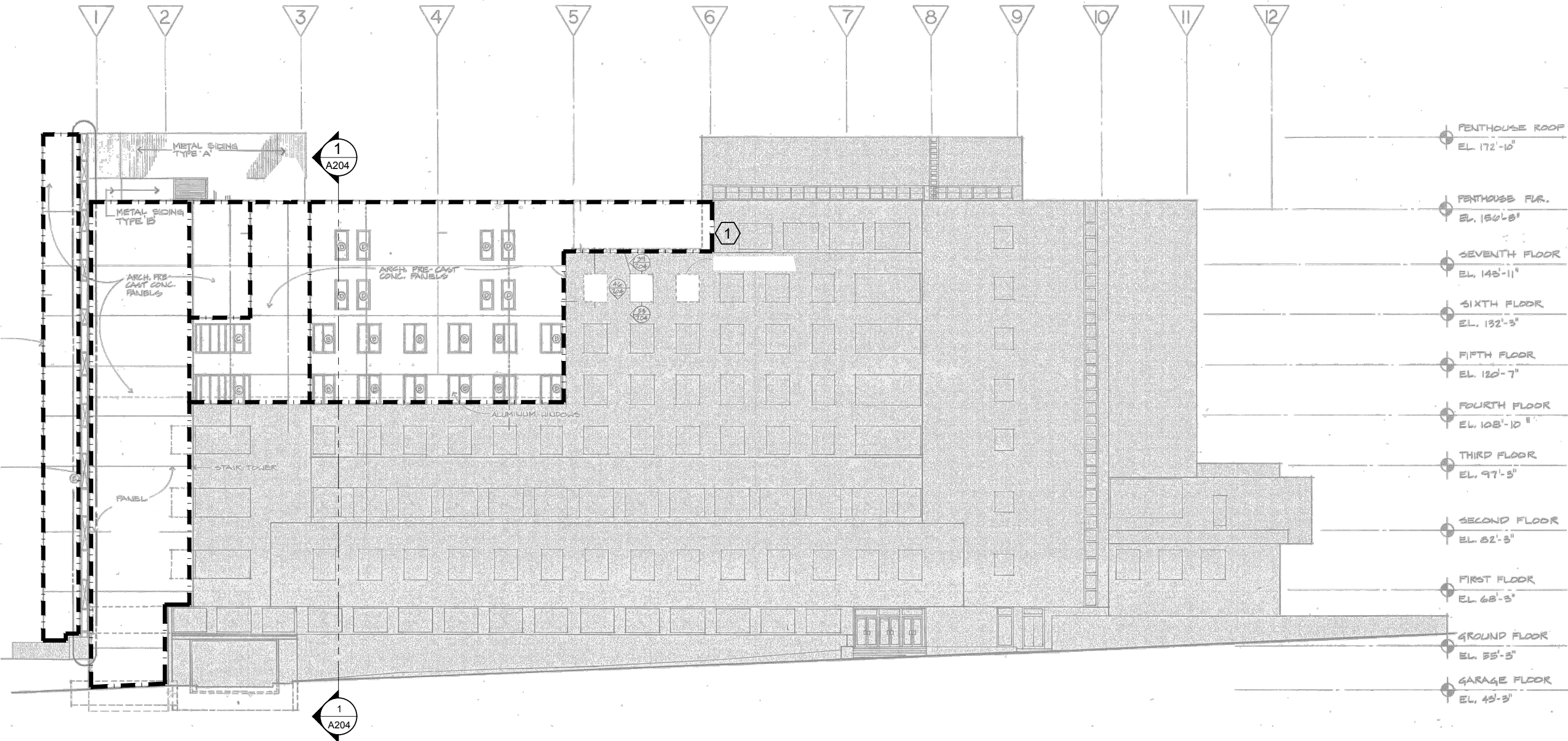
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Sheet Name:  
**SOUTH ELEVATION**

Sheet Number:  
**A202**



**SOUTH ELEVATION - WILSON STREET**  
Not to Scale

**1**

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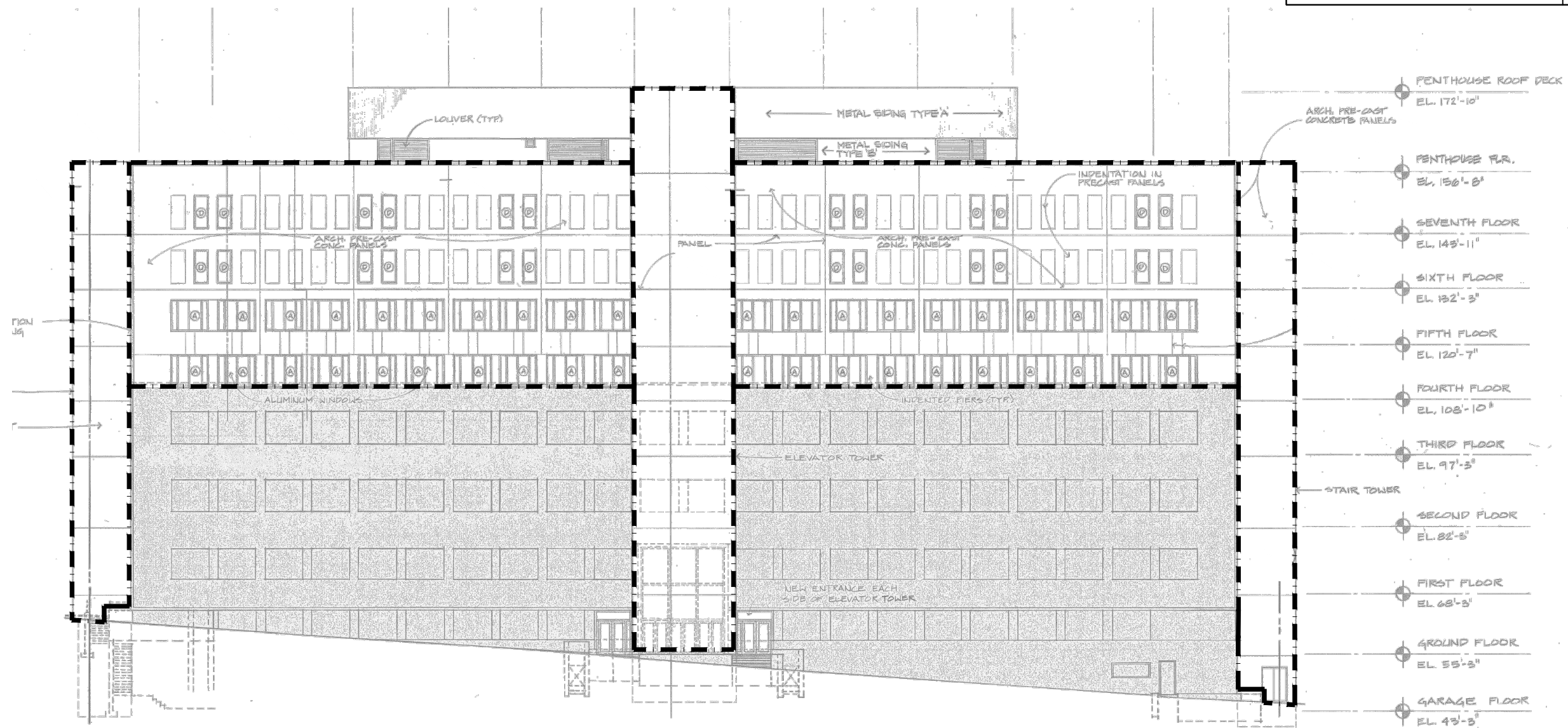
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Sheet Name:  
**WEST ELEVATION**

Sheet Number:

**A203**

**WEST ELEVATION - CARROLL STREET**  
Not to Scale

**1**

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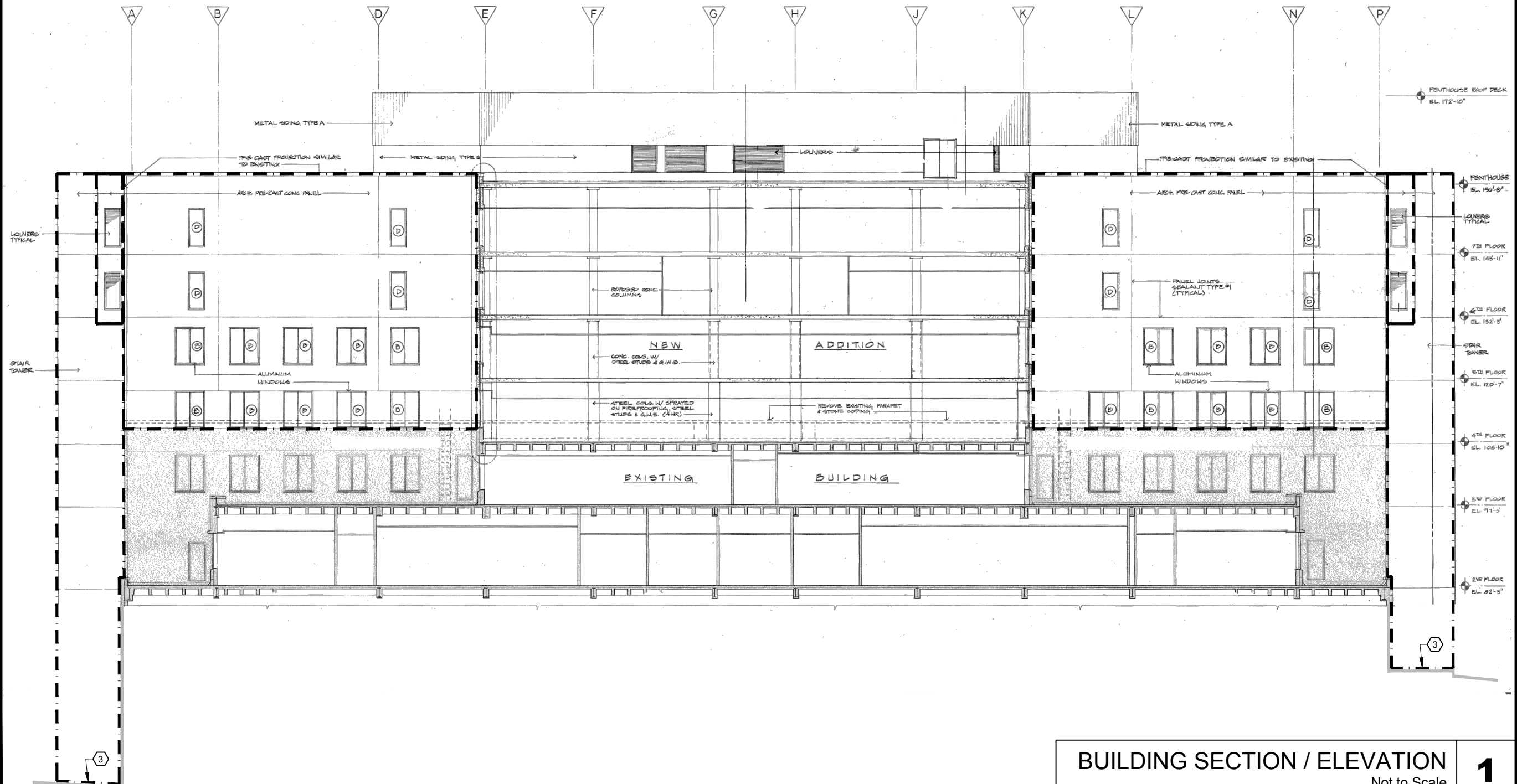
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WORK KEYNOTES



Work Limits of PRECAST CONCRETE PANELS

SYMBOL LINES



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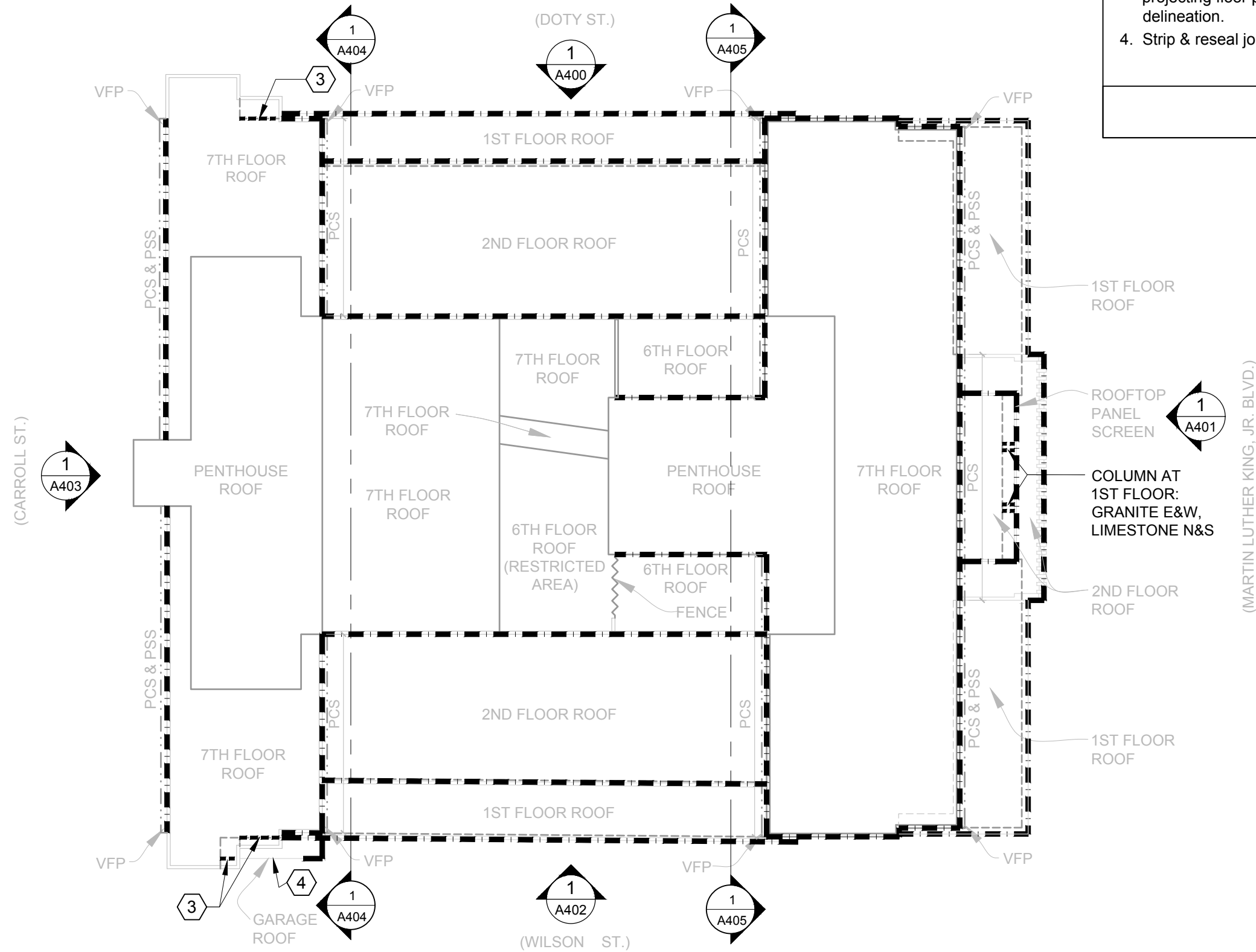
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**BUILDING SECTION / ELEVATION**

Sheet Number:  
**A204**

**BUILDING SECTION / ELEVATION**  
Not to Scale **1**

**A204**

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4. Strip & reseal joints at stainless steel panels.

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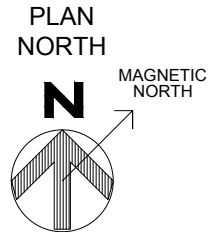
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Sheet Name:  
**ROOF PLAN**

Sheet Number:  
**A300**



**ROOF PLAN**  
Not to Scale **1**



# Addendum 2

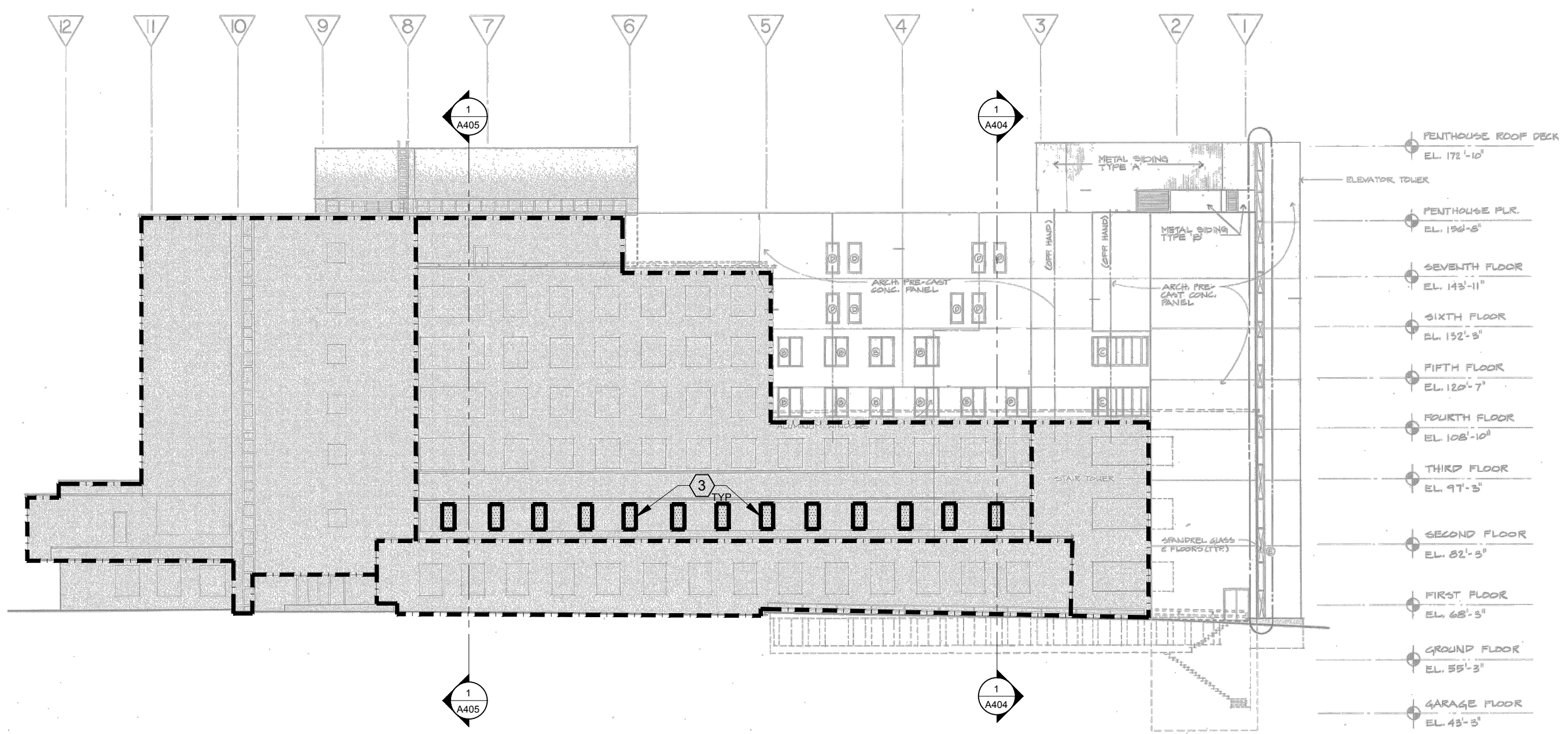
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4. Work relative to Limestone is located on north and south sides of column; granite appears at east and west faces only.



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WORK KEYNOTES	#
<p>--- Work limits of LIMESTONE &amp; BLUESTONE</p>	
SYMBOL LINES	



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Sheet Name:

**NORTH ELEVATION**

Sheet Number:

**A400**

**NORTH ELEVATION - DOTY STREET**  
Not to Scale

**1**

Addendum 2

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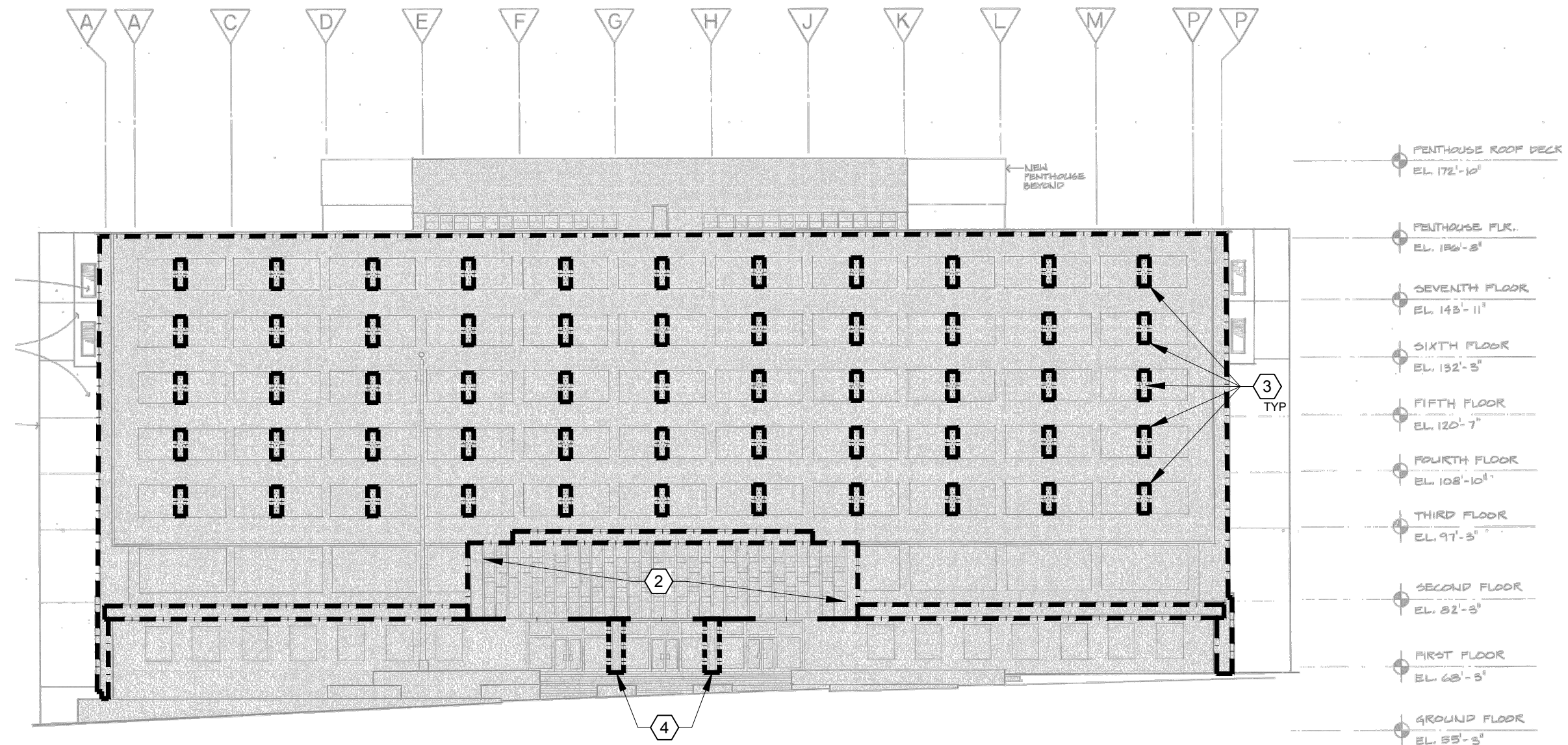
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WORK KEYNOTES



Work limits of LIMESTONE & BLUESTONE

SYMBOL LINES



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Date: 11/08/2019

Sheet Name:  
**EAST ELEVATION**

Sheet Number:  
**A401**

**EAST ELEVATION - MARTIN LUTHER KING, JR. BLVD.**  
Not to Scale

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Addendum 2

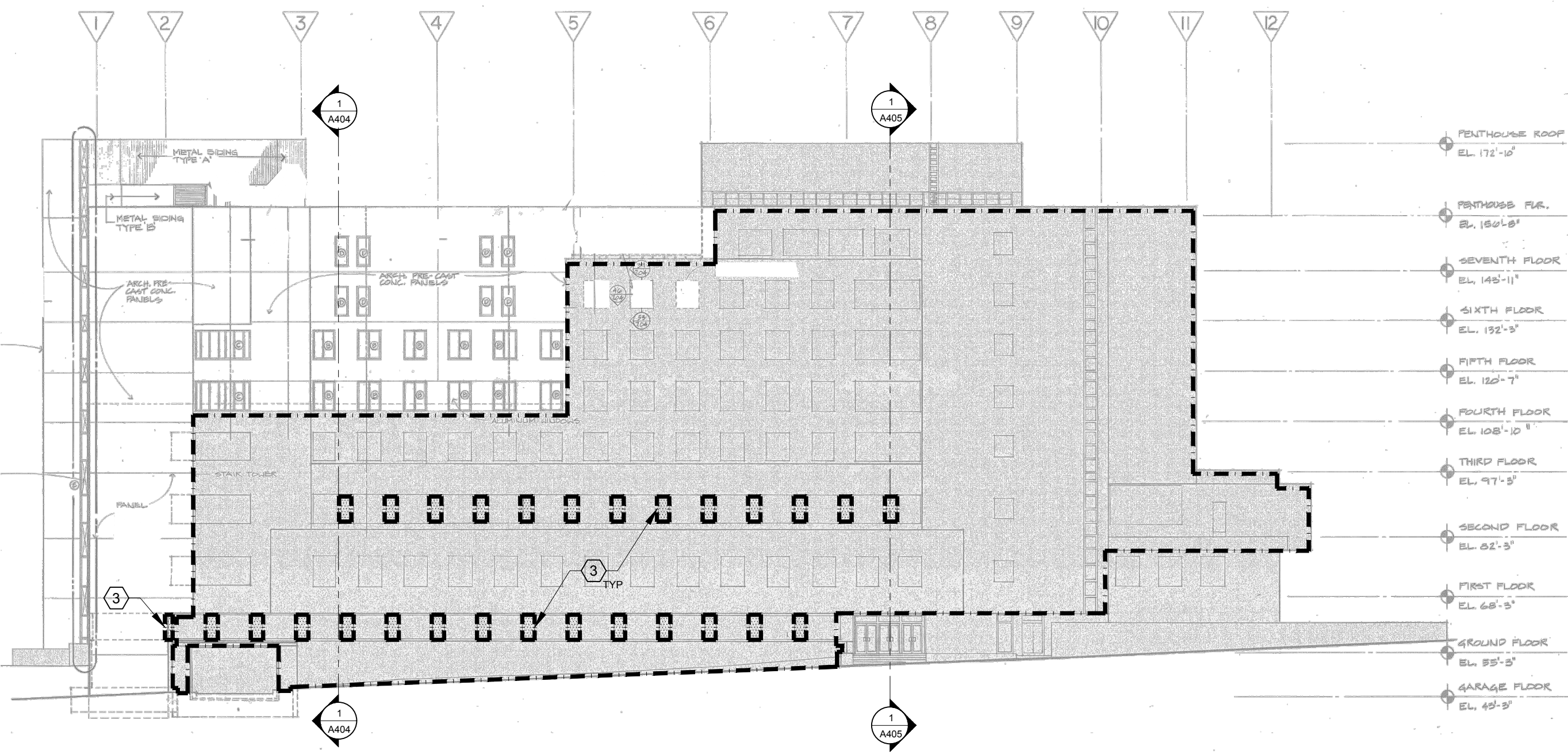
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Sheet Name:  
**SOUTH ELEVATION**

Sheet Number:  
**A402**

**SOUTH ELEVATION - WILSON STREET**  
Not to Scale

Addendum 2

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SYMBOL LINES



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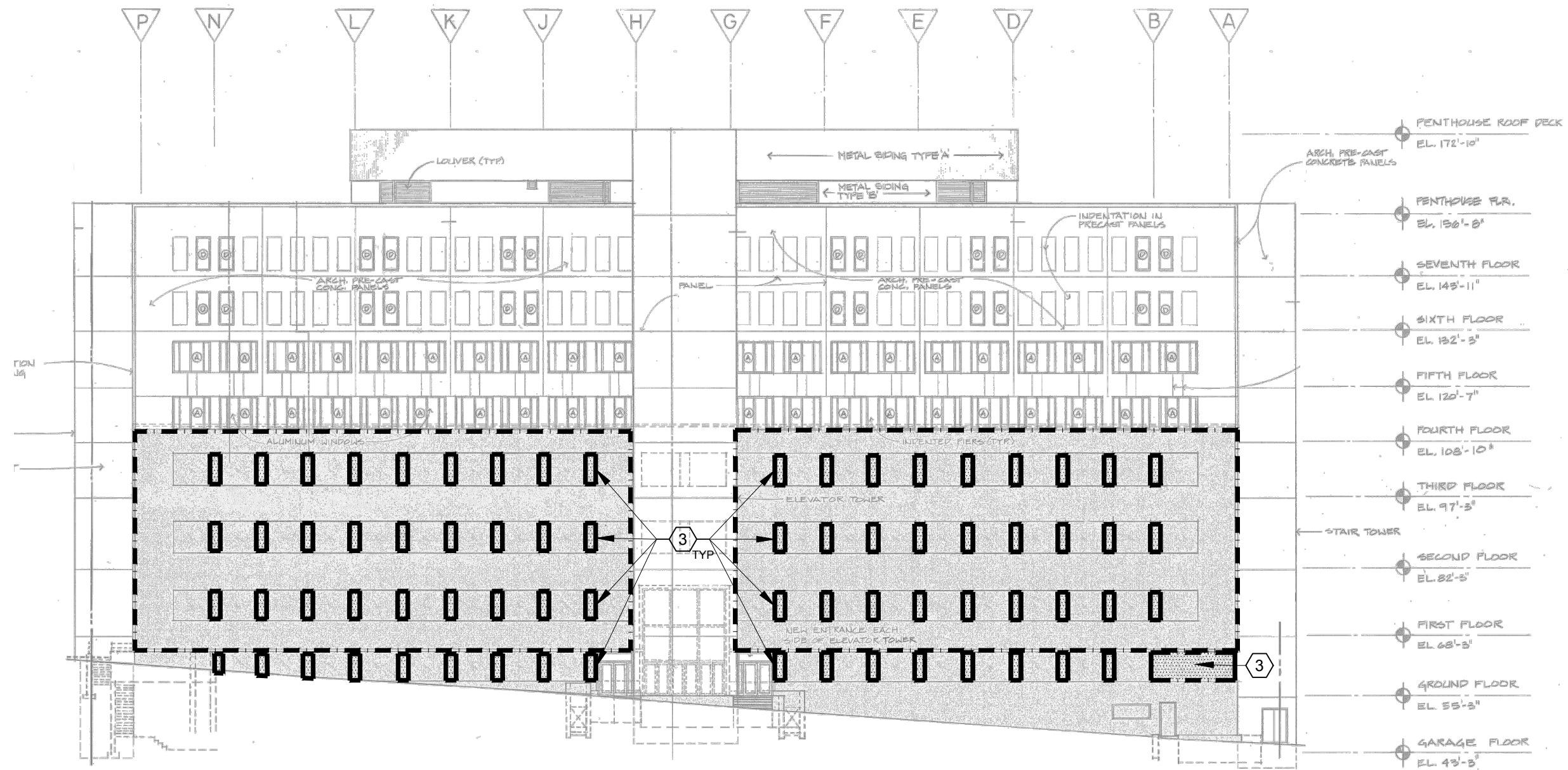
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Scale: AS NOTED  
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Sheet Name:  
**WEST ELEVATION**

Sheet Number:  
**A403**



**WEST ELEVATION - CARROLL STREET**  
Not to Scale

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Project:  
**CITY-COUNTY  
BUILDING FACADE  
JOINT REPAIR  
AND POWERWASHING**  
for  
**COUNTY OF  
DANE**  
210 Martin Luther King, Jr. Blvd.  
Madison, WI 53703

Tag	Issuance / Revision	Date
---	ADDENDA 2	11/8/19

Set Type:  
**BID DOCUMENTS**

Drawn By: TW  
Checked By: TW/DM  
Project Number: 19A0058

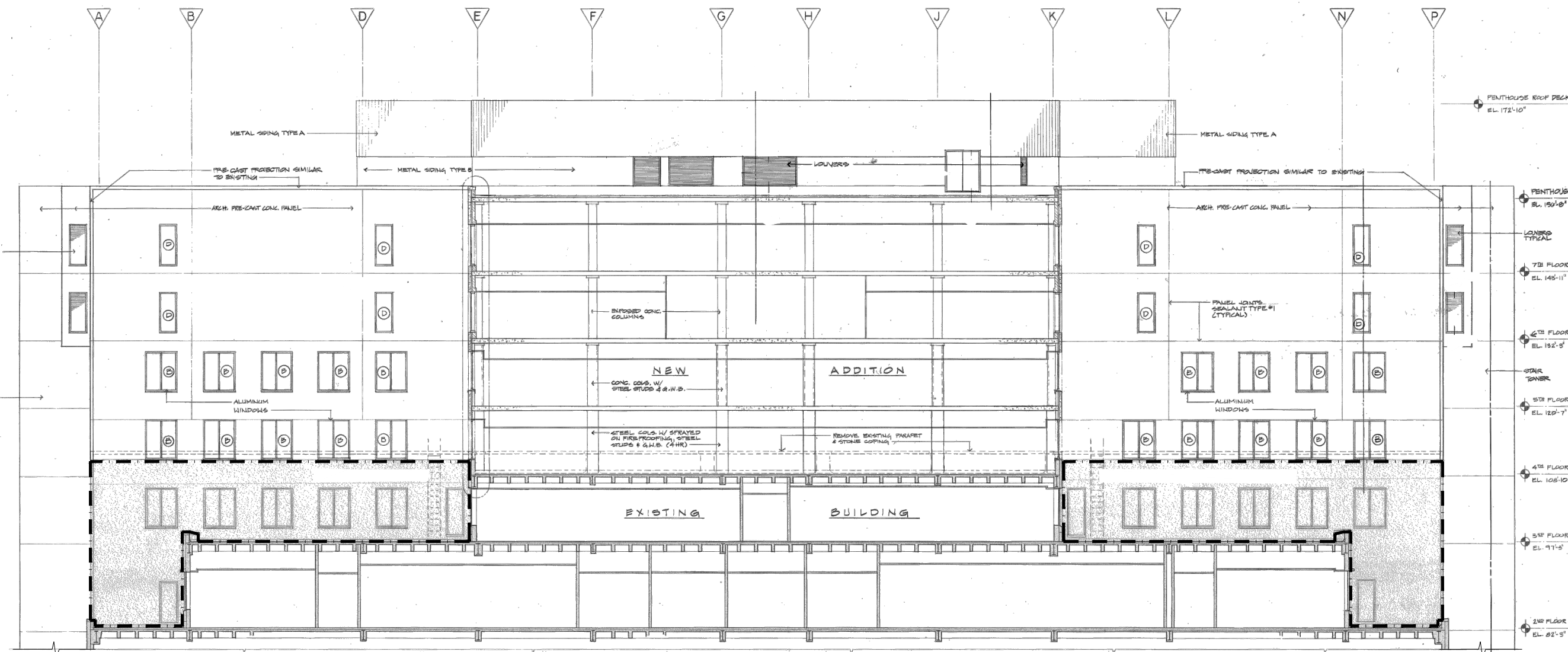
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Date: 11/08/2019

Sheet Name:

**BUILDING SECTION /  
ELEVATION**

Sheet Number:

**A404**



**BUILDING SECTION / ELEVATION**  
Not to Scale

**1**

# Addendum 2

1. Include return wall in scope of Work. Refer to Building Section/Elevations or Roof Plan for further delineation.
2. At recessed windows and building entrances, Work includes panels at head, jambs, and apron.
3. Bluestone are typically located between window units and along window band as indicated.
4. Work relative to Limestone is located on north and south sides of column; granite appears at east and west faces only.

WORK KEYNOTES



Work limits of LIMESTONE & BLUESTONE

SYMBOL LINES



- Maintenance Programming
- Architectural Engineering
- Consulting

101 Dempsey Road  
Madison, WI 53714

phone: 608-240-9110  
fax: 608-240-9112

Project:  
**CITY-COUNTY  
BUILDING FACADE  
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Drawn By: TW  
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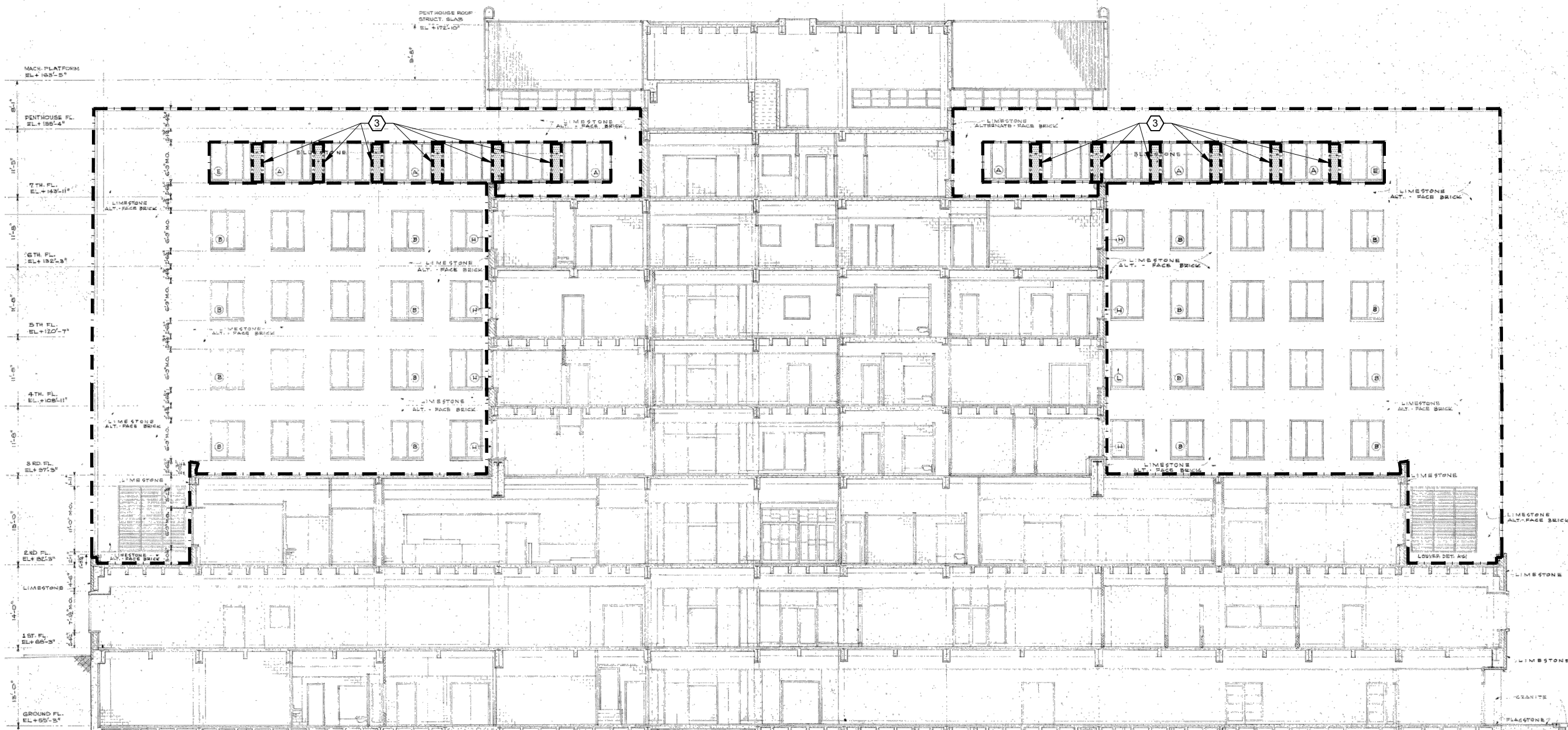
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Date: 11/08/2019

Sheet Name:

**BUILDING SECTION /  
ELEVATION**

Sheet Number:

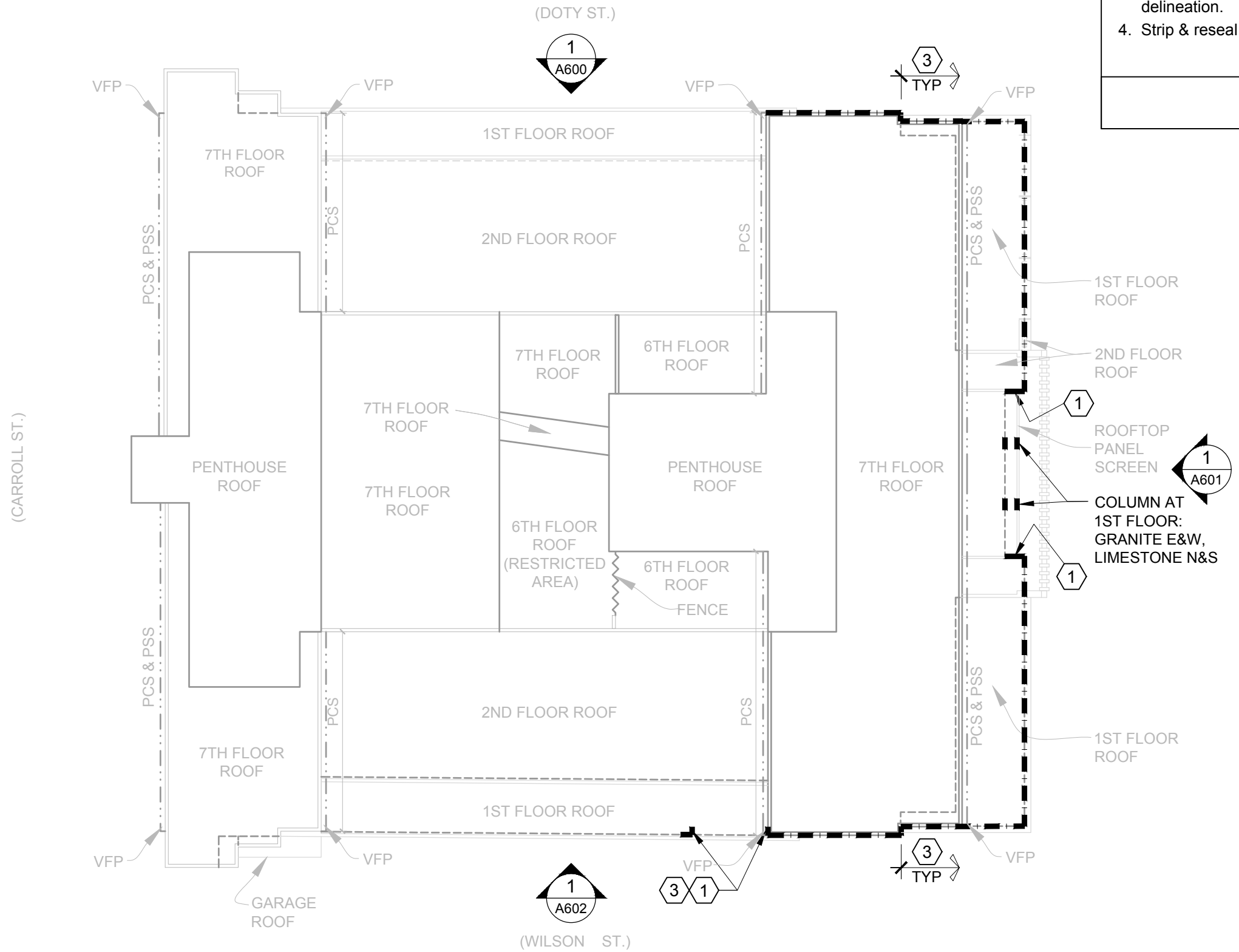
**A405**



**BUILDING SECTION / ELEVATION**  
Not to Scale

**1**

Addendum 2



1. Include return wall in scope of Work. Refer to Building Section/Elevations or Roof Plan for further delineation.
2. At recessed windows, Work applies to all precast panels at head, jambs, and apron.
3. Work applies to panels located below roof or projecting floor planes. See Elevations for further delineation.
4. Strip & reseal joints at stainless steel panels.

WORK KEYNOTES #



- Maintenance Programming
- Architectural Engineering
- Consulting

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Madison, WI 53714  
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fax: 608-240-9112

Project:  
**CITY-COUNTY BUILDING FACADE JOINT REPAIR AND POWERWASHING**  
for  
**COUNTY OF DANE**  
210 Martin Luther King, Jr. Blvd.  
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—	ADDENDA 2	11/8/19

Set Type:  
**BID DOCUMENTS**

Drawn By:	Checked By:	Project Number:
TW	TW/DM	19A0058

Scale:	Date:
AS NOTED	11/08/2019

Sheet Name:  
**ROOF PLAN**

Sheet Number:  
**A500**

**ROOF PLAN**  
Not to Scale **1**

# Addendum 2

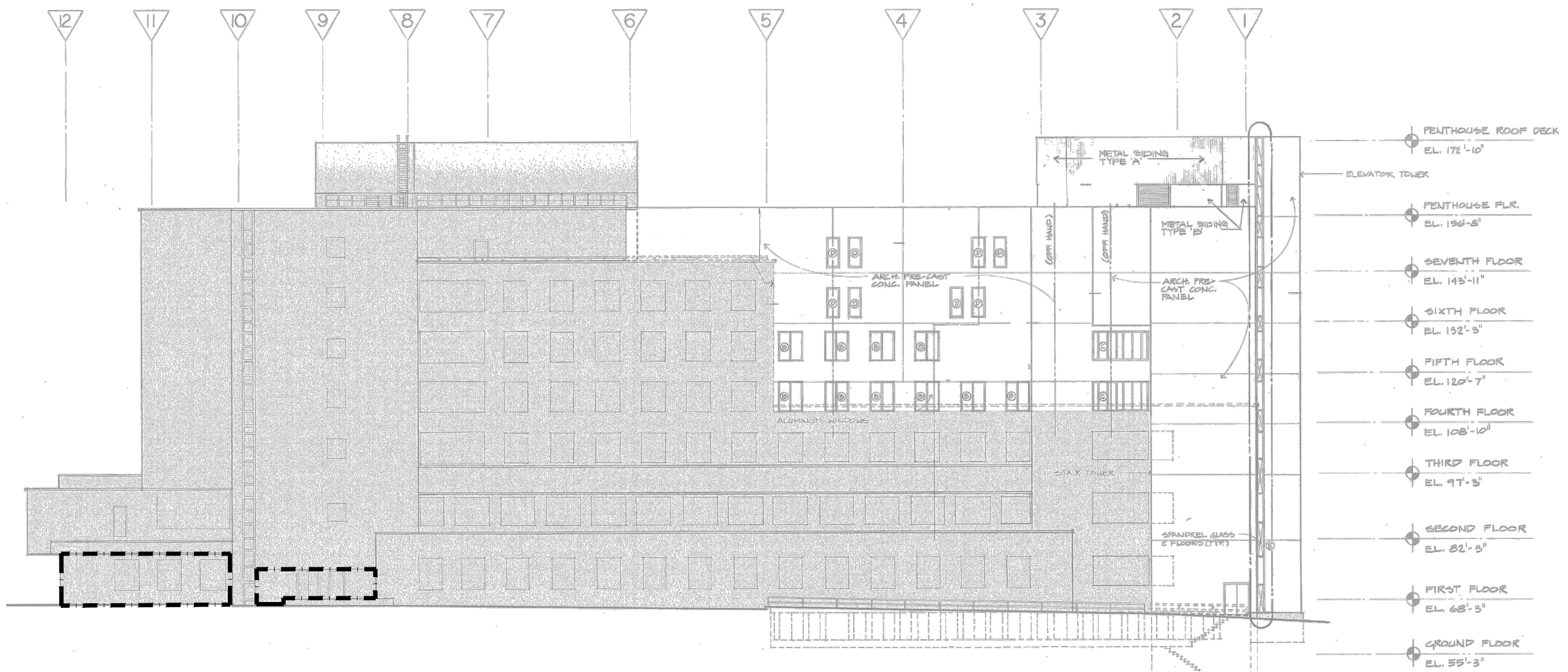
1. Include return wall in scope of Work. Refer to Building Section/Elevations or Roof Plan for further delineation.
2. Work relative to Granite is located only on east and west faces of column; precast concrete panels appear on north and south sides.



- Maintenance Programming
- Architectural Engineering
- Consulting

101 Dempsey Road  
Madison, WI 53714  
phone: 608-240-9110  
fax: 608-240-9112

WORK KEYNOTES	#
<p>Work limits of GRANITE</p>	
SYMBOL LINES	



Project:  
**CITY-COUNTY BUILDING FACADE JOINT REPAIR AND POWERWASHING**  
for  
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Tag	Issuance / Revision	Date
---	ADDENDA 2	11/8/19

Set Type:  
**BID DOCUMENTS**

Drawn By:	Checked By:	Project Number:
TW	TW/DM	19A0058

Scale:	Date:
AS NOTED	11/08/2019

Sheet Name:  
**NORTH ELEVATION**

Sheet Number:  
**A600**

**NORTH ELEVATION - DOTY STREET**  
Not to Scale



# Addendum 2

1. Include return wall in scope of Work. Refer to Building Section/Elevations or Roof Plan for further delineation.
2. Work relative to Granite is located only on east and west faces of column; precast concrete panels appear on north and south sides.



- Maintenance Programming
- Architectural Engineering
- Consulting

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Madison, WI 53714

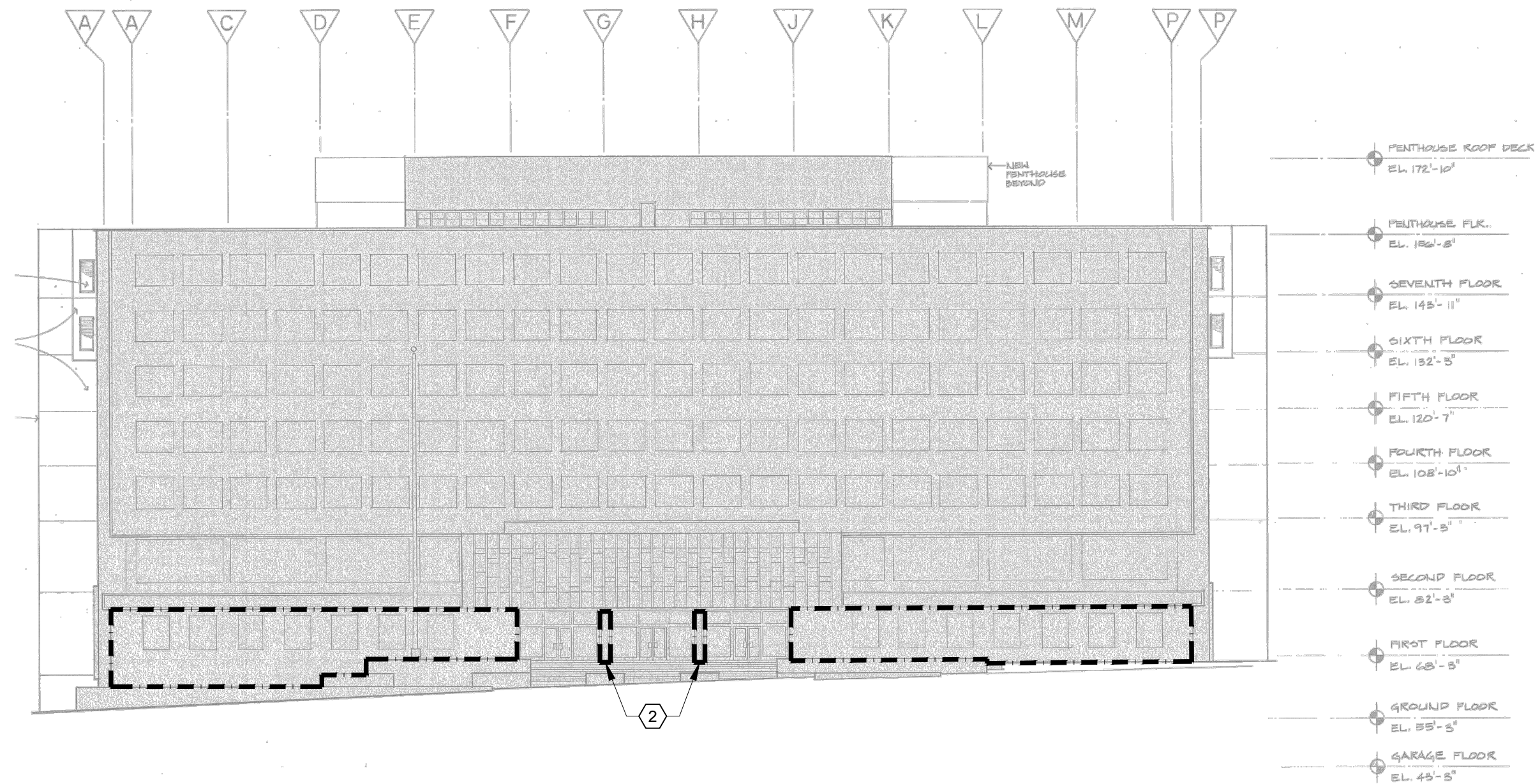
phone: 608-240-9110  
fax: 608-240-9112

WORK KEYNOTES



Work limits of GRANITE

SYMBOL LINES



Project:  
**CITY-COUNTY  
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---	ADDENDA 2	11/8/19

Set Type:  
**BID DOCUMENTS**

Drawn By: TW  
Checked By: TW/DM  
Project Number: 19A0058

Scale: AS NOTED  
Date: 11/08/2019

Sheet Name:  
**EAST ELEVATION**

Sheet Number:  
**A601**

**EAST ELEVATION - MARTIN LUTHER KING, JR. BLVD.**  
Not to Scale

# Addendum 2

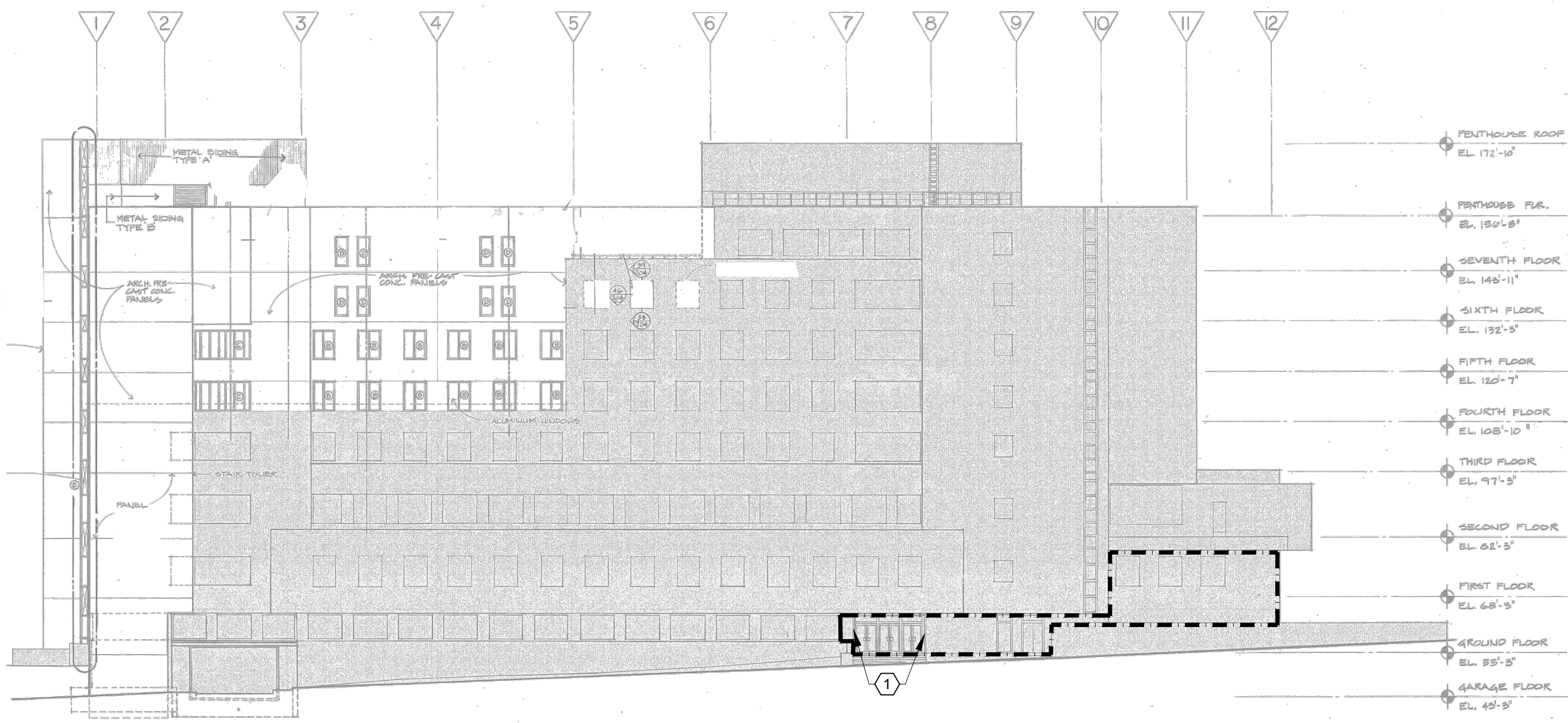
1. Include return wall in scope of Work. Refer to Building Section/Elevations or Roof Plan for further delineation.
2. Work relative to Granite is located only on east and west faces of column; precast concrete panels appear on north and south sides.



- Maintenance Programming
- Architectural Engineering
- Consulting

101 Dempsey Road  
Madison, WI 53714  
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fax: 608-240-9112

WORK KEYNOTES	#
<p>Work limits of GRANITE</p>	
SYMBOL LINES	



Project:  
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Tag	Issuance / Revision	Date
---	ADDENDA 2	11/8/19

Set Type: <b>BID DOCUMENTS</b>		
Drawn By: TW	Checked By: TW/DM	Project Number: 19A0058
Scale: AS NOTED	Date: 11/08/2019	
Sheet Name:		

**SOUTH ELEVATION**

Sheet Number:

**SOUTH ELEVATION - WILSON STREET**  
Not to Scale

**1**

**A602**