

Sunrise Children's Services, Sanders Center Renovation

# Danville, Kentucky

# Addendum No. 1 November 20, 2023

The original specifications and drawings dated October, 2023 are amended as noted in this Addendum No.1. Receipt of this Addendum shall be acknowledged by inserting its number in the space provided on the Form of Proposal.

# **GENERAL**

- 1. Refer to Pre-Bid Sign-In Sheet attached. Pre-Bid Meeting Date/Time: November 17, 2023 at 10:00 a.m.
- 2. Refer to Pre-Bid meeting agenda attached.
- 3. REVISED Bidders shall submit questions or comments to the Architect by no later than 2:00pm on Wednesday, November 22, 2023, 12:00PM on Monday, November 27, 2023

# PRE-BID CLARIFICATIONS

- 4. Redefined Scope of Work clarification By Owner is outlined on Sheet A600
- 5. Bonding does apply and is required with Form of Proposal. Successful bidder must provide 100% Performance and Payment Bond of the full contract amount see Section 00 00 01.
- 6. Taxes are to be excluded on all owner direct purchase items (DPO) see Section 00 00 03.2.
- 7. Has the Design Team submitted to HBC and received a case number? This will be confirmed and issued as part of forthcoming Addendum 1. Case Number 2311-001393

# **SPECIFICATIONS**

- 8. Remove Section 08 41 13, "Aluminum-Framed Entrances and Storefront" in its entirety.
- 9. Remove Section 01 12 30, "Alternates" in its entirety.
- 10. Remove Section 01 21 00, "Allowances" in its entirety.
- 11. Add Section 08 83 00, "Mirrors". Shall adhere to 902 KAR 20:330 PRTF, 2., g)
- 12. Section 08 71 00, "Door Hardware", 2.7 "Door Closer", "A", Clarification: Per the regulations, door closers shall be within view of a staff workstation and located on the outside of the door.
- 13. Section 00 00 03, "Form of Proposal", revised.
- 14. Section 00 00 03.1, "Purchase Order Summary Form", revised.
- 15. Section 00 00 03.2, "Direct Material Purchase Instructions", revised.
- 16. Section 01 31 00, "Coordination", revised.
- 17. Section 01 40 00, "Quality Requirements", revised.
- 18. Section 01 50 00 "Temporary Facilities and Controls", revised.
- 19. Disregard all references in Specifications header to 'Bell County project'.

# DRAWINGS

20. Sheet A100, refer to required UL L521 fire rated assemblies for bedroom ceilings and floors. Bedroom areas must have a one-hour fire rating assembly for ceilings and floors. See plan graphic for rated walls.

Added Door Tags, 138, 121,119, 118A, 118B

FLOOR PLAN KEYNOTES, numbers 3., 6., 7., 9., 10., 12., 17., 27., 28. Remove references By Owner. number 11 - Appliances will remain By Owner.

GENERAL NOTES, A. Revise to be included in base bid - all new lighting and plumbing fixtures provided and installed.

GENERAL NOTES, C. Revise to be included in base bid, All door hardware by others (NIC).

21. Sheet A102, Room Schedule showing all Floor Finish by Owner, Base and Wall Finish to match existing per schedule, will be included in Base Bid as well as removal of all wallpaper

ELEVATION KEY NOTES, 10. 11. 12. 13. Remove all references to By Owner.

- 22. Mechanical Addendum 1. Sheets M100, M601, MD100.
- 23. Sheet A200, Keyed Elevation Notes, 10, 11, 12 and 13. Delete all reference to 'By Owner'.
- 24. Sheet A600, Door Schedule and Door Elevations. Refer to Door Schedule 1, all interior doors (with the exception of 125 and 139) will be solid core Flush Wood to match existing 6-panel stile and rail doors.

All door frames shall be Hollow Metal.

Door Type-6, Owner has one door. Total for Type-6 shall be 1.

Door Types 5 and 7 glazing will match existing.

7/A600, New Replacement Window, see Specifications 08 53 13

Note at Toilet Accessory Schedule, disregard reference to all fixtures provided and installed 'By Owner'. GC shall provide all Toilet Accessories.

General Notes - Toilet Accessories, Item D. delete reference to shower 'By Owner'.

Added Door Tags, 138, 121,119, 118A, 118B

# **ATTACHMENTS**

Pre-Bid Agenda, Pre-Bid Sign-In Sheet, MEP Addendum 1 Sheets M100, M601 and MD100, Sheets A100, A102, A200, A600, Specification Sections 00 00 03 Form of Proposal, 00 00 03.1 Purchase Order Summary Form, 00 00 03.2 Direct Material Purchase Instructions, 01 31 00 Coordination, 01 40 00 Quality Requirements, 01 50 00 Temporary Facilities and Controls, 08 83 00 Mirrors

END OF ADDENDUM NO. 1



SUNRISE CHILDREN'S SERVICES SANDERS CENTER Pre-Bid Meeting November 16, 2023– 10:00 a.m. THB

# Pre-Bid Meeting Agenda

# **Introductions**

Project Contacts:

•	Project Manager –	Teresa Hargett Brooks, Summit Architects + Engineers 859.264.9860 – <u>tbrooks@summit-ae.com</u>
•	Project Architect -	Sean Matthews, Summit Architects + Engineers
•	Project Engineer –	Matt Ellis, Technical Horizons 859.263.5983 - <u>cmellis@technicalhorizons.com</u>
•	Project Engineer –	Bryan Johnson, Poage Engineers 859.321.4204 <u>bjohnson@poageengineers.com</u>
Owner Inform	ation :	
•	Owner Rep –	Bob Martin, Eastern Maintenance Supervisor 859.502.538.1002 <u>RMartin@sunrise.org</u>

David Bourne, Chief Financial Officer

859.229.7750 DBourne@sunrise.org

# Attendees: (See Attached Sign-In Sheet)

# Project Information

- Current Bid Date: Wednesday, November 29, 2023 @ 2:00 p.m., Opening at the project site, 400 Cunningham Drive, Danville Kentucky.
- Probable Award Date: Following Owner acceptance of Bid.
- Approximate Start of Construction: Notice To Proceed will immediately follow acceptance of Bid.
- Substantial Completion: Within 120 days after Notice To Proceed.
- Access to Site Contractor shall have full access to the construction site at all times.
- Contractor will coordinate installation of flooring with owners flooring contractors (NIC).
- Addenda An Addendum will be issued on <del>Friday, November 17, 2023</del>. Tuesday, November 21, 2023.

3205 Summit Square Pl, Lexington, KY 40509 - 859-264-9860 • 160 Lank Branch, Suite 2, Pikeville, KY 41501 - 606-432-1447 300 Technology Drive, Suite 100, S. Charleston, WV 25309 - 304-744-6410

# Meeting Notes:

- Clarification of By Owner scope of work requested. To be included in forthcoming Addendum 1.
- Reference to allowances for appliances in Specifications shall be removed. See correction on Section 01 21 00. There are no appliances in the project scope.
- Progress Meeting will be held once per month, progress of work and pay apps will be reviewed at this time.
- All utilities shall remain in the Owner's name and are currently on.
- Taxes are to be excluded on all owner direct purchase items (DPO) See Section 00 00 03.2
- Project has been submitted to Housing, Buildings and Construction for review. Case number 2311-001393.
- Bonding does apply and is required with Form of Proposal. Successful bidder must provide 100% Performance and Payment Bond of the full contract amount see Section 00 00 01.

	- ) ]	
Sunrise Children's Services, Sanders Center Renovation Level 1 Psychiatric Residential Treatment Facility (PRTF) Danville, Kentucky Pre-Bid Meeting Sign-in Sheet Thursday, November 15, 2023, 10:00AM	ders Center Renovation eatment Facility (PRTF) ):00AM	
Name 1. Karne Mercinen	Organization Mercincon Heratines 24	email/phone 606-669-5/38
2. John Bellisaric	BCD, INC	JBELLISARIO @BARDSTUWNICOM JHARACT> @BARDSTUWNICOM
4. Jonda MCGUIRE	APEK	JMCGUIEE(2, APEKKY CORD. CON
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Sunrise Children's Services, Sanders

# SUMMIT ARCHITECTS + ENGINEERS

# FORM OF PROPOSAL

Project No. <u>2324</u>				
Date:	To: (C	)wner)		
Project Name:			Bid Package No	
City, County:				
Name of Contracto	r:			
Mailing Address:				
Business Address:			Telephone:	· · · · · · · · · · · · · · · · · · ·
Specifications, and materials, equipme	I Drawings, for the above re	eferenced project, the undersi prary devices required to comple	neral Conditions, Supplemental gned bidder proposes to furnis ete the work in accordance with	sh all labor,
Addendum	(Insert t	the addendum numbers receined.)	ved or the word "none" if no	addendum
BASE BID: For the the following lump s	•	nplete the work, in accordance	with the contract documents, I	/We submit
		Use Figures		
		Dollars &		Cents
Use Words fo	or both dollars and cents			
ALTERNATE BIDS	<u>:</u> (If applicable and denoted i	n the Bidding Documents)		
	or addition to those items, sen sum price will be added or de		in Bidding Documents by alterna	ate number,
Alternate Bid No.	Alternate Description	+ (Add to the Base Bid)	- (Deduct from the Base Bid)	No Cost Change (from the Base Bid)
Alt. Bid No. 1				
Alt. Bid No. 2				
Alt. Bid No. 3				
Alt. Bid No. 4				
Alt. Bid No. 5				
Alt. Bid No. 6				

A maximum of 10 Alternate Bids will be acceptable with each Base Bid. Do not add supplemental sheets for Alternate Bids to this document.

# LIST OF PROPOSED SUBCONTRACTORS:

List on the lines below each major branch of work and the subcontractor involved with that portion of work. If the branch of work is to be done by the Contractor, so indicate.

The listing of more than one subcontractor in a work category shall invalidate the bid.

# SUMMIT ARCHITECTS + ENGINEERS

The listing of the bidder as the subcontractor for a work category certifies that the bidder has in current employment, skilled staff and necessary equipment to complete that category. The architect/engineer will evaluate the ability of all listed subcontractors to complete the work and notify the owner. Listing of the bidder as the subcontractor may invalidate the bid should the architect's review indicate bidder does not have skilled staff and equipment to complete the work category at the time the bid was submitted.

## The bidder shall submit the list of subcontractors with the bid.

	BRANCH OF WORK (to be filled out by the Architect)	SUBCONTRACTOR (to be filled out by the contractor)
1.	Painting	
2.	Finish Carpentry	
3.	Electrical	
5.	Finish Carpentry	
6.	Mechanical	
7.	Plumbing	
8.	Casework	
9.	Site utilities	
10.	Site Concrete	
11.	Mechanical insulation	
12.	Fire Suppression	
13.	Test and Balance	
14.	Fire Alarm	

#### LIST OF PROPOSED SUPPLIERS AND MANUFACTURERS:

List on the lines below each major material category for this project and the suppliers and manufacturers involved with that portion of work. Listing the supplier below means the Contractor is acknowledging authorization from the Supplier to include the Supplier in this bid.

The listing of more than one supplier or manufacturer in a material category shall invalidate the bid.

#### The bidder shall submit the list of suppliers and manufacturers within one (1) hour of the bid.

	MATERIAL DESCRIPTION BYSPECIFICATION DIVISION ANDCATEGORY(to be filled out by the Architect or Contractor)	SUPPLIER (to be filled out by the Contractor)	MANUFACTURER (to be filled out by the Contractor)
4.	Casework		

6.		
	Door Hardware	
7.		
	Paint	
10.	Security Access Controls	
17.	Concrete	
19.	Plumbing Fixtures	
13.		
20.	HVAC Units	
21.	Wiring Devices	
22.	Lighting Control Systems	
23.	Fire Alarm System	

# UNIT PRICES:

Indicate on the lines below those unit prices to determine any adjustment to the contract price due to changes in work or extra work performed under this contract. The unit prices shall include the furnishing of all labor and materials, cost of all items, and overhead and profit for the Contractor, as well as any subcontractor involved. These unit prices shall be listed in units of work.

#### The bidder shall submit the list of unit prices within one (1) hour of the bid.

	WORK (to be filled out by the Architect)	<b>PRICE / UNIT</b> (to be filled out by the Contractor)	UNIT (to be filled out by the Contractor)
2.	Wall Sheathing Installed	/sheet	
12.	4" Concrete Pavement	/SY	

#### DIRECT MATERIAL PURCHASES:

Indicate on the lines below those materials to be purchased directly by the Owner with a Purchase Order to be issued by the Owner to the individual suppliers. The value of the direct Purchase Order cannot be less than **\$1,000**. Following the approval of bids, the Contractor shall formalize this list by completing and submitting the electronic Purchase Order Summary Form - 00 00 03.1. Listing the supplier below means the Contractor is acknowledging authorization from the Supplier to include the Supplier in this bid.

# A maximum of 20 POs will be acceptable with each bid. Do not add supplemental sheets for additional POs to this document.

#### The bidder shall submit the list of Purchase Orders within four (4) days of the bid.

	SUPPLIER (to be filled out by the Contractor)	PURCHASE ORDER DESCRIPTION (to be filled out by the Contractor)	PURCHASE ORDER AMT.   (to be filled out by the Contractor)
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# TIME LIMIT FOR EXECUTION OF CONTRACT DOCUMENTS:

In the event that a bidder's proposal is accepted by the Owner and such bidder should fail to execute the contract within ten (10) consecutive days from the date of notification of the awarding of the contract, the Owner, at his option, may determine that the awardee has abandoned the contract. The bidder's proposal shall then become null and void, and the bid bond or certified check which accompanied it shall be forfeited to and become the property of the Owner as liquidated damages for failure to execute the contract.

The bidder hereby agrees that failure to submit herein above all required information and/or prices can cause disqualification of this proposal.

Submitted by:

# SUMMIT ARCHITECTS + ENGINEERS

NAME OF CONTRACTOR / BIDDER: \_\_\_\_\_

AUTHORIZED REPRESENTATIVE'S NAME:\_\_\_\_\_

Signature

# AUTHORIZED REPRESENTATIVE'S NAME(printed): \_\_\_\_\_

AUTHORIZED REPRESENTATIVE'S TITLE:

NOTICE: Bid security must accompany this proposal if the Base Bid price is greater than \$100,000.

This form shall not be modified.

Project#	2324	C	elivery Met	hod	PO Certification Statement Phase				
Owner:	Sunrise Children's				GC		GESC	Initial Statement	Final Statement
Project Name:	Sanders Center R	enovation			СМ			Change Order Stmt.	

Contractor		Pack.	Specification				Change Order		
Name	PO Number	#	Section No.	Purchase Order Description	Vendor Name	Initial PO Amount	Amount To Date	Reason For Change	Final PO Amount
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			upon the appro	priate PO certification	Initial PO Total	\$-	\$-	Final PO Total	\$-
statement phase	e. (initial / Final)								
Initial Certificat	ion Statement					Final Certification St	atement		
		ertify the	at all materials li	isted within this document will				I materials listed within this do	ocument have been
be purchased in						purchased in accorda			
			-			,			

Owner's Signature	Date	Owner's Signature	Date
General Contractor's / Construction Manager's Sigr	Date	General Contractor's / Construction Manager's Signature	Date
Architect's Signature	Date	Architect's Signature	Date

Project#	Date Submitted	Deli	very Metho	t	PO Certification Statement Phase		
Owner:	Sunrise Children's Services	x	GC		GESC	Initial Statement	Final Statement
Project Name:	Sanders Center Renovation		СМ			Change Order Stmt.	

Contractor Name	PO Number	Bid. Pack. #	Specification Section No.	Purchase Order Description	Vendor Name	Initial PO Amount	Change Order Amount To Date	Reason For Change	Final PO Amount
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Project#	Date Submitted	Del	ivery Metho	bd	PO Certification Statement Phase		
Owner:	Sunrise Children's Services	x	GC		GESC	Initial Statement	Final Statement
Project Name:	Sanders Center Renovation		СМ			Change Order Stmt.	

Contractor Name	PO Number	Bid. Pack. #	Specification Section No.	Purchase Order Description	Vendor Name	Initial PO Amount	Change Order Amount To Date	Reason For Change	Final PO Amount
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All signatures belo statement phase.	ow are required (Initial / Final)	based u	pon the appropria	ate PO certification	Initial PO Total	\$-	\$-	Final PO Total	\$ -

#### Initial Certification Statement

To the best of my knowledge, I certify that all materials listed within this document will be purchased in accordance with 103 KAR 26:070 and 702 KAR 4:160.

Date	0

General Contractor's / Construction Manager's Signat

Architect's Signature

Owner's Signature

Date

Date

#### **Final Certification Statement**

To the best of my knowledge, I certify that all materials listed within this document have been purchased in accordance with 103 KAR 26:070 and 702 KAR 4:160.

Owner's Signature	Date	
General Contractor's / Construction Manager's Signature	Date	
Architect's Signature	Date	

# SECTION 00 00 03.2 – DIRECT MATERIAL PURCHASE INSTRUCTIONS

# PART 1 - GENERAL

# 1.1 SUMMARY

- A. This Section includes the following:
  - 1. Bidding.
  - 2. Preparations of Purchase Orders.

# 1.2 BIDDING

- A. Contractors, Sub-contractors and/or Material Suppliers must determine quantities of materials for which they intend to break out as a Purchase Order item. The Purchase Order may not be less than \$1,000.00, shall not include items such as consumables that are not a part of the finished work, tools, finance charges, sales tax, deposits, or labor performed on site.
- B. If a contractor, sub-contractor and/or material supplier intends on billing for items such as engineering, shop drawings, bonds, insurance, etc. prior to materials being delivered to the job site, these items MUST NOT be included as part of the Bid Breakout amount. These items should be included as part of the Contract amount, and shown on the Contractors Schedule of Values. Otherwise, these items can be incorporated into the Bid Breakout Items material cost and invoiced only when materials are delivered to the job site.
- C. Upon completion of the Bid Opening, the apparent successful Contractor will have four (4) working days to submit the Purchase Order Summary Form, Section 000003.1, as well as the Material Suppliers Authorization Forms. The successful Contractors' contract will be the sum of the Base Bid plus accepted Alternate, less the Bid Breakout amounts for the Base Bid and accepted Alternates. The Architects' office can provide master Material Supplier Authorization Forms electronically.

# 1.3 PREPARATION OF PURCHASE ORDERS

- A. The successful contractor shall prepare a list of required Purchase Orders including the name and mailing address of the Material Suppliers (company and address where checks will be mailed), and dollar amounts. This list shall be given to the architect for use in preparation of the Purchase Orders. There shall be one purchase order for each contractor/sub-contractor per material supplier. (Example: Contractor "A", Sub-Contractor "B" and Sub-contractor "C" all buy material from the same Supplier "D". There will be three separate Purchase Orders to Supplier "D".)
- B. Upon receipt of the list of purchase orders for the Contractor, the Architect will prepare the Purchase Orders, and deliver them to the Contractor for distribution to Material Suppliers and/or Sub-contractors with instructions to return executed Purchase Orders

to the Contractor. The Contractor shall deliver the Purchase Orders to the Architect who in turn will have the Purchase Orders executed by the Owner. The executed Purchase Orders will then be delivered to the Contractor for distribution.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 00 00 03.2

# SECTION 01 31 00 - COORDINATION

# PART 1 - GENERAL

## 1.1 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
  - 1. Coordination Drawings.
  - 2. Administrative and supervisory personnel.
  - 3. Project meetings.
  - 4. Requests for Information (RFIs).

# 1.2 **DEFINITIONS**

A. RFI: Request from Contractor seeking information or clarification of the Contract Documents.

# 1.3 COORDINATION

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection, and operation.
  - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
  - 2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
  - 3. Make adequate provisions to accommodate items scheduled for later installation.
  - 4. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
  - 1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other

COORDINATION

contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:

- 1. Preparation of Contractor's Construction Schedule.
- 2. Preparation of the Schedule of Values.
- 3. Delivery and processing of submittals.
- 4. Progress meetings.
- 5. Preinstallation conferences.
- 6. Project closeout activities.
- 7. Startup and adjustment of systems.

# 1.4 **PROJECT MEETINGS**

- A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
  - 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
  - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
  - 3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within three days of the meeting.
- B. Preconstruction Conference: Schedule a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 10 days after execution of the Agreement. Hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
  - 1. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  - 2. Agenda: Discuss items of significance that could affect progress, including the following:
    - a. Tentative construction schedule.
    - b. Critical work sequencing and long-lead items.
    - c. Designation of key personnel and their duties.
    - d. Procedures for processing field decisions and Change Orders.
    - e. Procedures for RFIs.
    - f. Procedures for testing and inspecting.
    - g. Procedures for processing Applications for Payment.
    - h. Distribution of the Contract Documents.
    - i. Submittal procedures.
    - j. Preparation of Record Documents.
    - k. Use of the premises and existing building.

- I. Work restrictions.
- m. Owner's occupancy requirements.
- n. Responsibility for temporary facilities and controls.
- o. Best Management Practices.
- p. Parking availability.
- q. Office, work, and storage areas.
- r. Equipment deliveries and priorities.
- s. First aid.
- t. Security.
- u. Progress cleaning.
- v. Working hours.
- w. Conduct.
- 3. Minutes: Architect will record and distribute meeting minutes.
- C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.
  - 1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect of scheduled meeting dates.
  - 2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
    - a. The Contract Documents.
    - b. Options.
    - c. Related RFIs.
    - d. Related Change Orders.
    - e. Purchases.
    - f. Deliveries.
    - g. Submittals.
    - h. Possible conflicts.
    - i. Compatibility problems.
    - j. Time schedules.
    - k. Weather limitations.
    - I. Manufacturer's written recommendations.
    - m. Warranty requirements.
    - n. Compatibility of materials.
    - o. Acceptability of substrates.
    - p. Temporary facilities and controls.
    - q. Space and access limitations.
    - r. Regulations of authorities having jurisdiction.
    - s. Testing and inspecting requirements.
    - t. Installation procedures.
    - u. Coordination with other work.
    - v. Required performance results.
    - w. Protection of adjacent work.
    - x. Protection of construction and personnel.

- 3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
- 4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
- 5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
- D. Progress Meetings: Conduct progress meetings monthly. Coordinate dates of meetings with preparation of payment requests.
  - 1. Attendees: In addition to representatives of Owner and Architect, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  - 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
    - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
      - 1) Review schedule for next period.
    - b. Review present and future needs of each entity present, including the following:
      - 1) Interface requirements.
      - 2) Sequence of operations.
      - 3) Status of submittals.
      - 4) Deliveries.
      - 5) Off-site fabrication.
      - 6) Access.
      - 7) Site utilization.
      - 8) Work hours.
      - 9) Hazards and risks.
      - 10) Progress cleaning.
      - 11) Quality and work standards.
      - 12) Status of correction of deficient items.
      - 13) Field observations.
      - 14) RFIs.
      - 15) Status of proposal requests.
      - 16) Pending changes.
      - 17) Status of Change Orders.

- 18) Pending claims and disputes.
- 19) Documentation of information for payment requests.
- 3. Minutes: Architect will record and distribute to Contractor the meeting minutes.
- 4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
  - a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

# 1.5 REQUESTS FOR INFORMATION (RFIs)

- A. Procedure: Immediately on discovery of the need for information, clarification or interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.
  - 1. RFIs shall originate with Contractor. RFIs submitted by entities other than Contractor will be returned with no response.
  - 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information and the following:
  - 1. Project name.
  - 2. Date.
  - 3. Name of Contractor.
  - 4. Name of Architect.
  - 5. RFI number, numbered sequentially.
  - 6. Specification Section number and title and related paragraphs, as appropriate.
  - 7. Drawing number and detail references, as appropriate.
  - 8. Field dimensions and conditions, as appropriate.
  - 9. Contractor's suggested solution(s). If Contractor's solution(s) impact the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
  - 10. Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing information.
    - a. Supplementary drawings prepared by Contractor shall include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments.
- C. Hard-Copy RFIs:
  - 1. Identify each page of attachments with the RFI number and sequential page number.

- D. Architect's Action: Architect will review each RFI, determine action required, and return it.
  - 1. The following RFIs will be returned without action:
    - a. Requests for approval of submittals.
    - b. Requests for approval of substitutions.
    - c. Requests for coordination information already indicated in the Contract Documents.
    - d. Requests for adjustments in the Contract Time or the Contract Sum.
    - e. Requests for interpretation of Architect's actions on submittals.
    - f. Incomplete RFIs or RFIs with numerous errors.
  - 2. Architect's action may include a request for additional information.
- E. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.
- F. RFI Log: The RFI Log shall be reviewed at each Progress Meeting.

# PART 2 - PRODUCTS (Not Used)

# PART 3 - EXECUTION (Not Used)

# END OF SECTION 01 31 00

# SECTION 01 40 00 - QUALITY REQUIREMENTS

# PART 1 - GENERAL

## 1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
  - 1. Specific quality-assurance and -control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
  - 2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
  - 3. Requirements for Contractor to provide quality-assurance and -control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

# 1.2 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect.
- C. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory, or shop.
- D. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- E. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
  - 1. Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that

requirements specified apply exclusively to tradespeople of the corresponding generic name.

F. Experienced: When used with an entity, "experienced" means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

# 1.3 CONFLICTING REQUIREMENTS

- A. General: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

# 1.4 SUBMITTALS

- A. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
  - 1. Specification Section number and title.
  - 2. Description of test and inspection.
  - 3. Identification of applicable standards.
  - 4. Identification of test and inspection methods.
  - 5. Time schedule or time span for tests and inspections.
  - 6. Entity responsible for performing tests and inspections.
  - 7. Requirements for obtaining samples.
  - 8. Unique characteristics of each quality-control service.
- B. Reports: Prepare and submit certified written reports that include the following:
  - 1. Date of issue.
  - 2. Project title and number.
  - 3. Name, address, and telephone number of testing agency.
  - 4. Dates and locations of samples and tests or inspections.
  - 5. Names of individuals making tests and inspections.
  - 6. Description of the Work and test and inspection method.
  - 7. Identification of product and Specification Section.
  - 8. Complete test or inspection data.
  - 9. Test and inspection results and an interpretation of test results.
  - 10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.

- 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
- 12. Name and signature of laboratory inspector.
- 13. Recommendations on retesting and re-inspecting.
- C. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

# 1.5 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this Article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- C. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar to those indicated for this Project in material, design, and extent.
- F. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 548; and with additional qualifications specified in individual Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.
  - 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
  - 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- G. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

# 1.6 QUALITY CONTROL

- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
  - 1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
  - 2. Costs for retesting and re-inspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor.
- B. Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
  - 1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
  - 2. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
  - 3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
  - 4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
  - 5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Division 01 Section "Submittal Procedures."
- D. Testing Agency Responsibilities: Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
  - 1. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
  - 2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
  - 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
  - 4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
  - 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
  - 6. Do not perform any duties of Contractor.

- E. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
  - 1. Access to the Work.
  - 2. Incidental labor and facilities necessary to facilitate tests and inspections.
  - 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
  - 4. Facilities for storage and field curing of test samples.
  - 5. Delivery of samples to testing agencies.
  - 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
  - 7. Security and protection for samples and for testing and inspecting equipment at Project site.
- F. Coordination: Coordinate sequence of activities to accommodate required qualityassurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
  - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.
- 1.7 SPECIAL TESTS AND INSPECTIONS
  - A. Special Tests and Inspections: Facility is designed with materials that will not require special inspections. Contractor shall coordinate concrete footing pours with the Engineer's office for a footing inspection prior to pouring.
- PART 2 PRODUCTS (Not Used)
- PART 3 EXECUTION
- 3.1 TEST AND INSPECTION LOG
  - A. Prepare a record of tests and inspections. Include the following:
    - 1. Date test or inspection was conducted.
    - 2. Description of the Work tested or inspected.
    - 3. Date test or inspection results were transmitted to Architect.
    - 4. Identification of testing agency or special inspector conducting test or inspection.
  - B. Maintain log at Project site. Post changes and modifications as they occur. Provide access to test and inspection log for Architect's reference during normal working hours.

# 3.2 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
  - 1. Provide materials and comply with installation requirements specified in other Specification Sections. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 01 40 00

# SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

## PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. Related Requirements:
  - 1. Section 011000 "Summary" for work restrictions and limitations on utility interruptions.

#### 1.2 USE CHARGES

- A. Water and Sewer Service from Existing System: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
- B. Electric Power Service from Existing System: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

# 1.3 INFORMATIONAL SUBMITTALS

- A. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire-prevention program.
- B. Moisture-and Mold-Protection Plan: Describe procedures and controls for protecting materials and construction from water absorption and damage and mold.

# 1.4 **PROJECT CONDITIONS**

#### PART 2 - PRODUCTS

#### 2.1 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
- B. HVAC Equipment: Unless Owner authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.

- 1. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.
- 2. Heating Units: Listed and labeled for type of fuel being consumed, by a qualified testing agency acceptable to authorities having jurisdiction, and marked for intended location and application.
- C. Telephone Service: Provide temporary telephone service in common-use facilities for use by all construction personnel. Install WiFi cell phone access equipment.
- D. Electronic Communication Service: Provide a desktop computer in the primary field office adequate for use by Architect and Owner to access Project electronic documents and maintain electronic communications.
  - 1. Printer: "All-in-one" unit equipped with printer server, combining color printing, photocopying, scanning, and faxing, or separate units for each of these three functions.
  - 2. Internet Service: Broadband modem, router and ISP, equipped with hardware firewall, providing minimum 2 Mbps upload and 50 Mbps download speeds at each computer.
  - 3. Internet Security: Integrated software, providing software firewall, virus, spyware, phishing, and spam protection in a combined application.
- E. Traffic Controls: Comply with requirements of authorities having jurisdiction.
  - 1. Protect existing site improvements to remain including curbs, pavement, and utilities.
  - 2. Maintain access for fire-fighting equipment and access to fire hydrants.
- F. Parking: Site is open for use for parking.
- G. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.
  - 1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties or endanger permanent Work or temporary facilities.
  - 2. Remove snow and ice as required to minimize accumulations.
- H. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with progress cleaning requirements in Section 017300 "Execution."
- I. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.
  - 1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

# 2.2 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.

- 1. Where access to adjacent properties is required in order to affect protection of existing facilities, obtain written permission from adjacent property owner to access property for that purpose.
- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- C. Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each workday.
- D. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- E. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
  - 1. Where heating or cooling is needed and permanent enclosure is incomplete, insulate temporary enclosures.

# 2.3 MOISTURE AND MOLD CONTROL

- A. Contractor's Moisture-Protection Plan: Describe delivery, handling, storage, installation, and protection provisions for materials subject to water absorption or water damage.
  - 1. Indicate procedures for discarding water-damaged materials, protocols for mitigating water intrusion into completed Work, and replacing water-damaged Work.
  - 2. Indicate sequencing of work that requires water, such as sprayed fire-resistive materials, plastering, and terrazzo grinding, and describe plans for dealing with water from these operations. Show procedures for verifying that wet construction has dried sufficiently to permit installation of finish materials.
  - 3. Indicate methods to be used to avoid trapping water in finished work.
- B. Exposed Construction Period: Before installation of weather barriers, when materials are subject to wetting and exposure and to airborne mold spores, protect as follows:
  - 1. Protect porous materials from water damage.
  - 2. Protect stored and installed material from flowing or standing water.
  - 3. Keep porous and organic materials from coming into prolonged contact with concrete.
  - 4. Remove standing water from decks.
- C. Partially Enclosed Construction Period: After installation of weather barriers but before full enclosure and conditioning of building, when installed materials are still subject to infiltration of moisture and ambient mold spores, protect as follows:
  - 1. Do not load or install drywall or other porous materials or components, or items with high organic content, into partially enclosed building.
  - 2. Keep interior spaces reasonably clean and protected from water damage.

- 3. Periodically collect and remove waste containing cellulose or other organic matter.
- 4. Discard or replace water-damaged material.
- 5. Do not install material that is wet.
- 6. Discard and replace stored or installed material that begins to grow mold.
- 7. Perform work in a sequence that allows wet materials adequate time to dry before enclosing the material in gypsum board or other interior finishes.
- D. Controlled Construction Period: After completing and sealing of the building enclosure but prior to the full operation of permanent HVAC systems, maintain as follows:
  - 1. Control moisture and humidity inside building by maintaining effective dry-in conditions.
  - 2. Use temporary or permanent HVAC system to control humidity within ranges specified for installed and stored materials.
  - 3. Comply with manufacturer's written instructions for temperature, relative humidity, and exposure to water limits.

#### 2.4 OPERATION, TERMINATION, AND REMOVAL

- A.
- At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Section 017700 "Closeout Procedures."

#### END OF SECTION 015000

# SECTION 088300 - MIRRORS

# PART 1 - GENERAL

# 1.1 SUMMARY

- A. Section Includes: Silvered flat glass mirrors.
- B. Related Requirements:
  - 1. Section 088000 "Glazing" for glass with reflective coatings used for vision and spandrel lites.
  - 2. Section 102800 "Toilet, Bath, and Laundry Accessories" for metal-framed mirrors.

# 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
  - 1. Mirrors: Include description of materials and process used to produce each type of silvered flat glass mirror specified that indicates sources of glass, glass coating components, edge sealer, and quality-control provisions.
- B. Shop Drawings: Include mirror elevations, edge details, mirror hardware, and attachment details.

# 1.3 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Product Certificates: For each type of mirror **and mirror mastic**.
- C. Preconstruction Test Reports: From mirror manufacturer indicating that mirror mastic was tested for compatibility and adhesion with mirror backing and substrates on which mirrors are installed.
- D. Sample Warranty: For special warranty.

# 1.4 CLOSEOUT SUBMITTALS

A. Maintenance Data: For mirrors to include in maintenance manuals.

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# 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Protect mirrors in accordance with mirror manufacturer's written instructions and as needed to prevent damage to mirrors from moisture, condensation, temperature changes, direct exposure to sun, or other causes.
- B. Comply with mirror manufacturer's written instructions for shipping, storing, and handling mirrors as needed to prevent deterioration of silvering, damage to edges, and abrasion of glass surfaces and applied coatings. Store indoors.

#### 1.6 FIELD CONDITIONS

A. Environmental Limitations: Do not install mirrors until ambient temperature and humidity conditions are maintained at levels indicated for final occupancy.

#### 1.7 WARRANTY

- A. Special Warranty: Manufacturer agrees to replace mirrors that deteriorate within specified warranty period. Deterioration of mirrors is defined as defects developed from normal use that are not attributed to mirror breakage or to maintaining and cleaning mirrors contrary to manufacturer's written instructions. Defects include discoloration, black spots, and clouding of the silver film.
  - 1. Warranty Period: Five years from date of Substantial Completion.

# PART 2 - PRODUCTS

# 2.1 SOURCE LIMITATIONS

- A. Source Limitations for Mirrors: Obtain mirrors from single source from single manufacturer.
- B. Source Limitations for Mirror Accessories: Obtain mirror-glazing accessories from single source.

# 2.2 SILVERED FLAT GLASS MIRRORS

- A. Annealed Monolithic Glass Mirrors: Mirror Glazing Quality, clear (low-iron) float glass with a minimum 91 percent visible light transmission.
  - 1. Nominal Thickness: **6.0 mm**
- B. Tempered Glass Mirrors: Mirror Glazing Quality for blemish requirements and complying with ASTM C1048 for Kind FT, Condition A, tempered float glass before silver coating is applied; clear
  - 1. Nominal Thickness: **6.0 mm**.

MIRRORS

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# 2.3 MISCELLANEOUS MATERIALS

- A. Fasteners: Fabricated of same basic metal and alloy as fastened metal and matching it in finished color and texture where fasteners are exposed.
- B. Anchors and Inserts: Provide devices as required for mirror hardware installation. Provide toothed or lead-shield, expansion-bolt devices for drilled-in-place anchors. Provide galvanized anchors and inserts for applications on inside face of exterior walls and where indicated.

#### 2.4 FABRICATION

A. Shop fabricates mirrors to greatest extent possible.

# PART 3 - EXECUTION

# 3.1 EXAMINATION

- A. Examine substrates, over which mirrors are to be mounted, with Installer present, for compliance with installation tolerances, substrate preparation, and other conditions affecting performance of the Work.
- B. Verify compatibility with and suitability of substrates, including compatibility of existing finishes or primers with mirror mastic.
- C. Proceed with installation only after unsatisfactory conditions have been corrected and surfaces are dry.

# 3.2 PREPARATION

A. Comply with mastic manufacturer's written installation instructions for preparation of substrates, including coating substrates with mastic manufacturer's special bond coating where applicable.

#### 3.3 INSTALLATION

- A. General: Install mirrors to comply with mirror manufacturer's written instructions and with referenced National Glass Association (NGA) publications. Mount mirrors accurately in place in a manner that avoids distorting reflected images.
  - 1. NGA Publications:,"Glazing Manual" and "Installation Techniques Designed to Prolong the Life of Flat Glass Mirrors."
- B. Provide a minimum airspace of 1/8 inch (3 mm) between back of mirrors and mounting surface for air circulation between back of mirrors and face of mounting surface.

MIRRORS

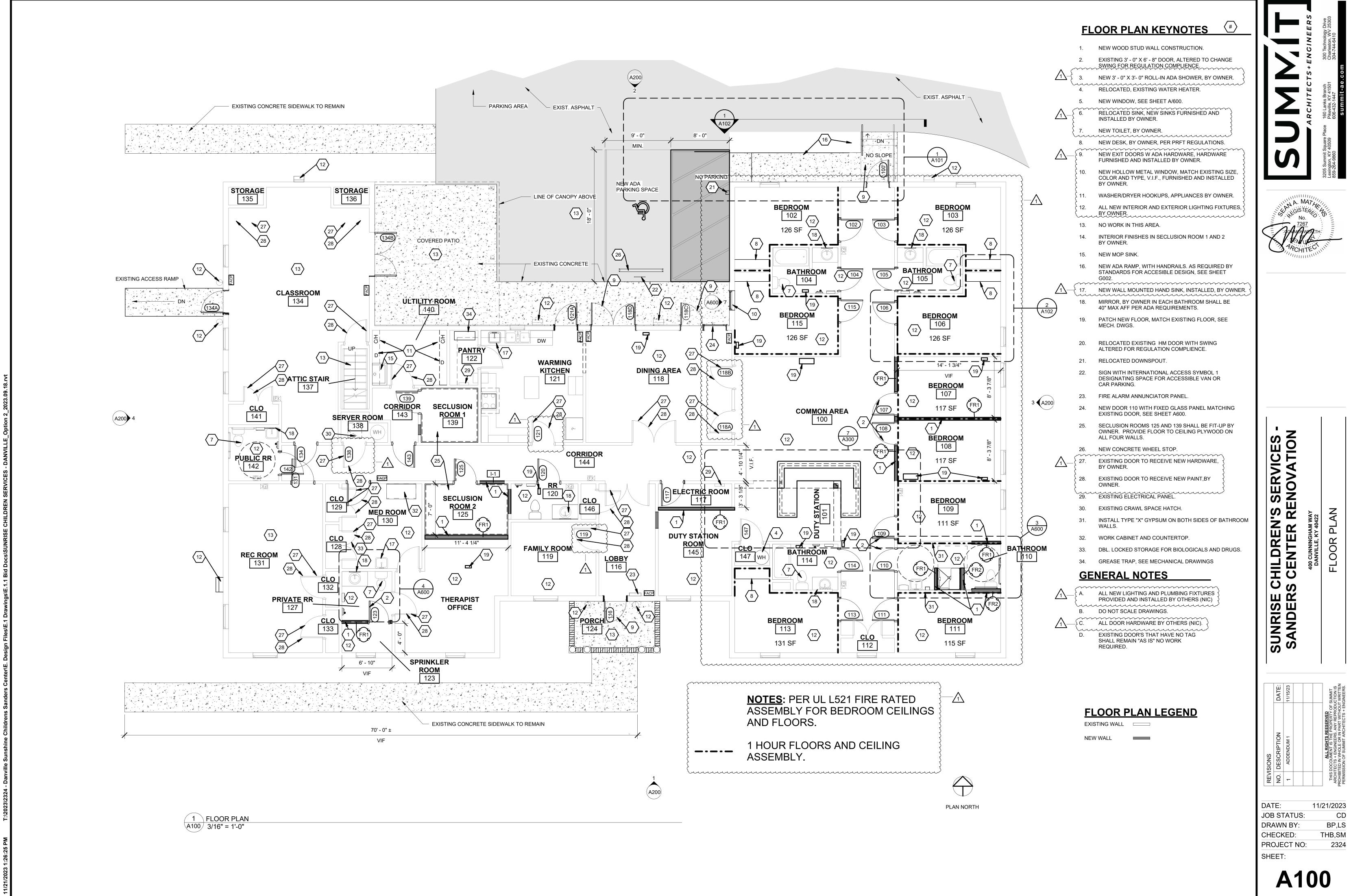
Sunrise Children's Services, Sanders Center Renovation Danville Kentucky

- C. Install mirrors with **mastic** mirror hardware. Attach mirror hardware securely to mounting surfaces with mechanical fasteners installed with anchors or inserts as applicable. Install fasteners so heads do not impose point loads on backs of mirrors.
  - 1. Install mastic as follows:
    - a. Apply barrier coat to mirror backing where approved in writing by manufacturers of mirrors and backing material.
    - b. Apply mastic to comply with mastic manufacturer's written instructions for coverage and to allow air circulation between back of mirrors and face of mounting surface.
    - c. After mastic is applied, align mirrors and press into place while maintaining a minimum airspace of 1/8 inch between back of mirrors and mounting surface.

#### 3.4 CLEANING AND PROTECTION

- A. Protect mirrors from breakage and contaminating substances resulting from construction operations.
- B. Do not permit edges of mirrors to be exposed to standing water.
- C. Maintain environmental conditions that prevent mirrors from being exposed to moisture from condensation or other sources for continuous periods of time.
- D. Clean exposed surface of mirrors not more than four days before date scheduled for inspections that establish date of Substantial Completion. Clean mirrors as recommended in writing by mirror manufacturer and NGA's publication "Proper Procedures for Cleaning Flat Glass Mirrors."

END OF SECTION 088300



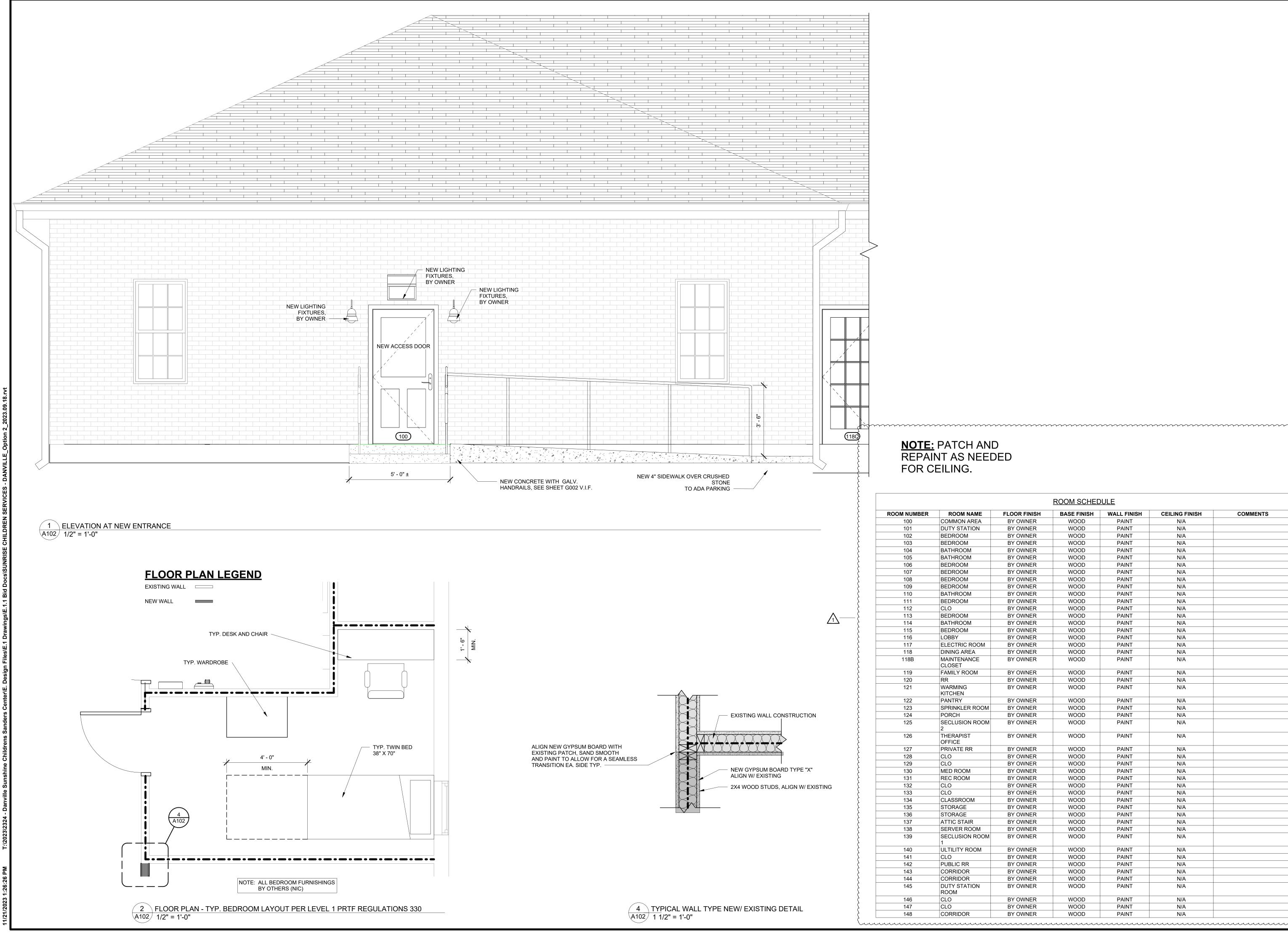
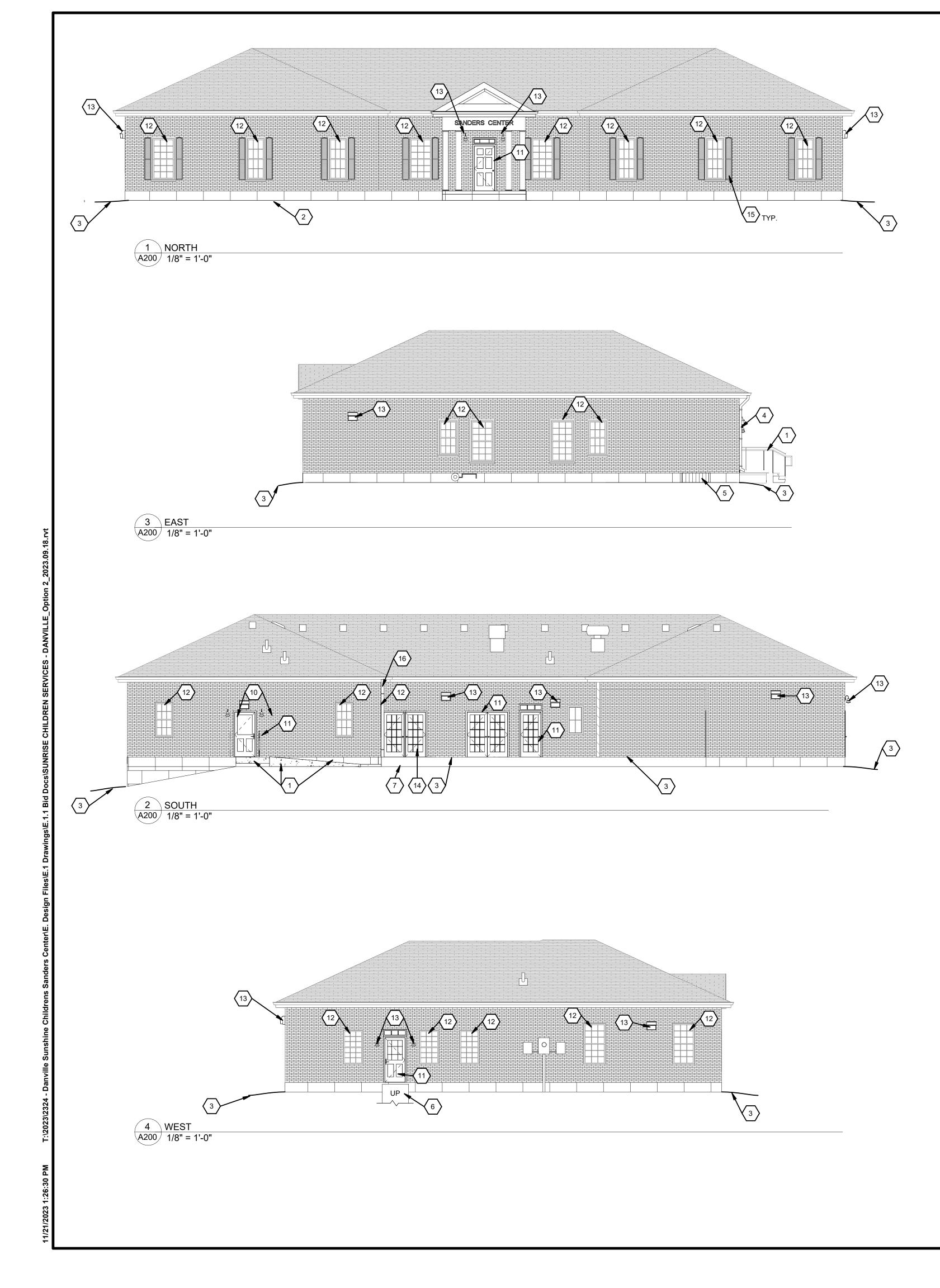


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2324 PROJECT NO: SHEET: A102

/MON AREA		BASE FINISH	WALL FINISH	CEILING FINISH	COMMENTS
	BY OWNER	WOOD	PAINT	N/A	
Y STATION	BY OWNER	WOOD	PAINT	N/A	
ROOM	BY OWNER	WOOD	PAINT	N/A	
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INKLER ROOM	BY OWNER	WOOD	PAINT	N/A	
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)	BY OWNER BY OWNER	WOOD	PAINT	N/A	





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# ELEVATION KEY NOTES

1. NEW RAMP W/ 1:12 RISE MAX. V.I.F. AND NO SLOPE ON THE LANDING W/ GALVANIZEDALUMINUM RAILING.

- 2. EXISTING CONCRETE SIDEWALK.
- 3. EXISTING GRADE
- 5. EXISTING CRAWL SPACE.
- 6. EXISTING CONCRETE RAMP.
  - ADA HANDICAP PARKING SPACE.
- INFILL DOOR OPENING FOR PLACEMENT OF NEW WINDOW. NEW WINDOW. SEE A/600
- NEW EXTERIOR LIGHT FIXTURE BY OWNER, PROVIDE NEW ELECTRICAL BOX.
- NEW 3'-0" x 6'-8" DOOR AND HOLLOW METAL DOOR FRAME. SEE DOOR SCHEDULE A/600. HARDWARE BY OWNER.
- 2 12. NEW WINDOWS BY OWNER.
- 13. NEW EXTERIOR LIGHT FIXTURES BY OWNER. ..... 14. NEW DOOR. SEE DOOR SCHEDULE A/600.
- 15. EXISTING SHUTTERS TO REMAIN. 16. RELOCATED DOWNSPOUT.



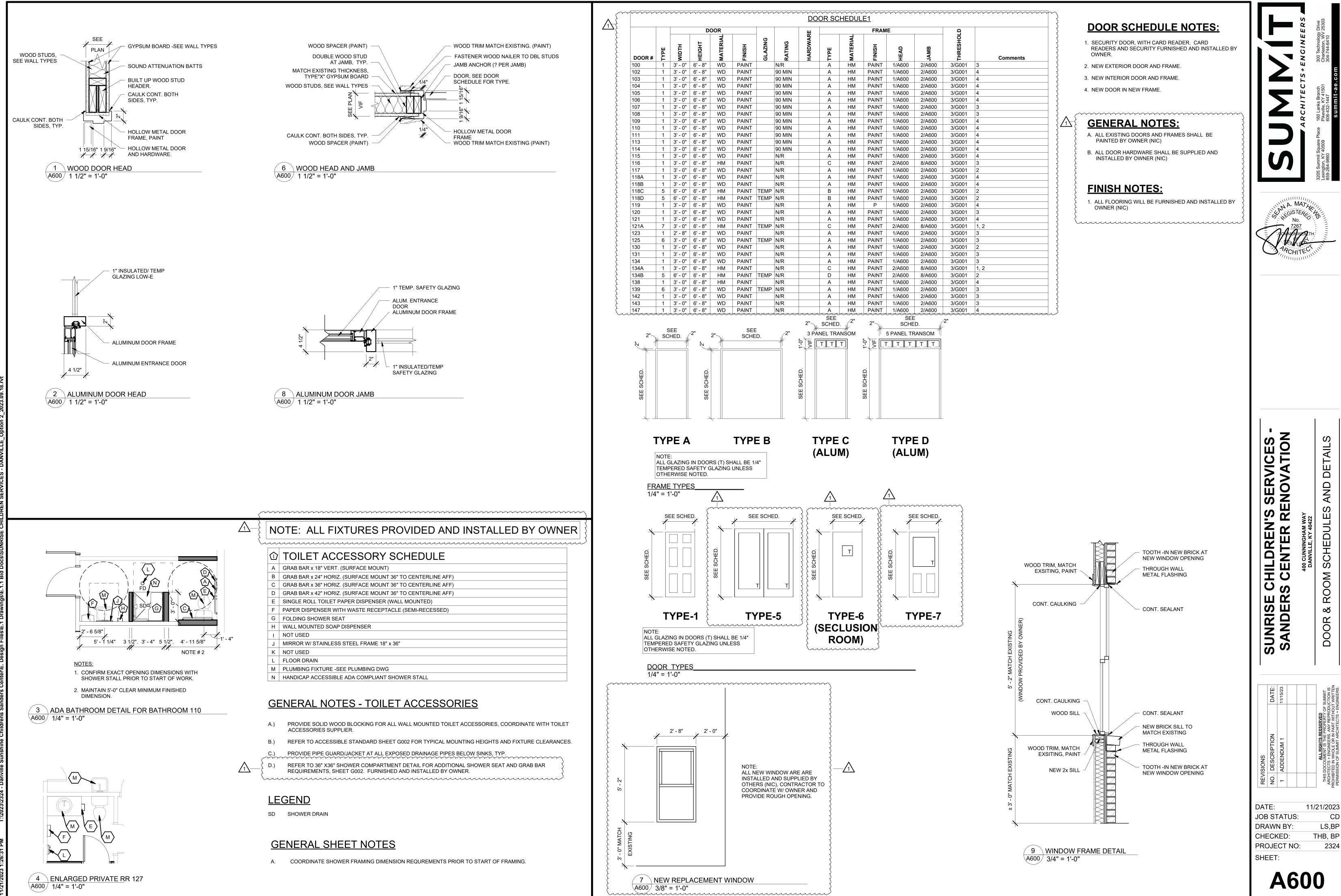
**VICES** -SUNRISE CHILDREN'S SER SANDERS CENTER RENOV ELEVATIONS OF SUMMIT ODUCTION IS IOUT WRITTEI DA ALL RIGHTS REESER THIS DOCOUMENT IS THE PROPE ARCHITECTS + ENGINEERS, ANY R PROHIBITED IN WHOLE OR IN PART PROHIBITED IN WHOLE OR IN PART REVISIONS NO. DESCF DATE: 11/21/2023 CD BP JOB STATUS: DRAWN BY: THB,SM CHECKED:

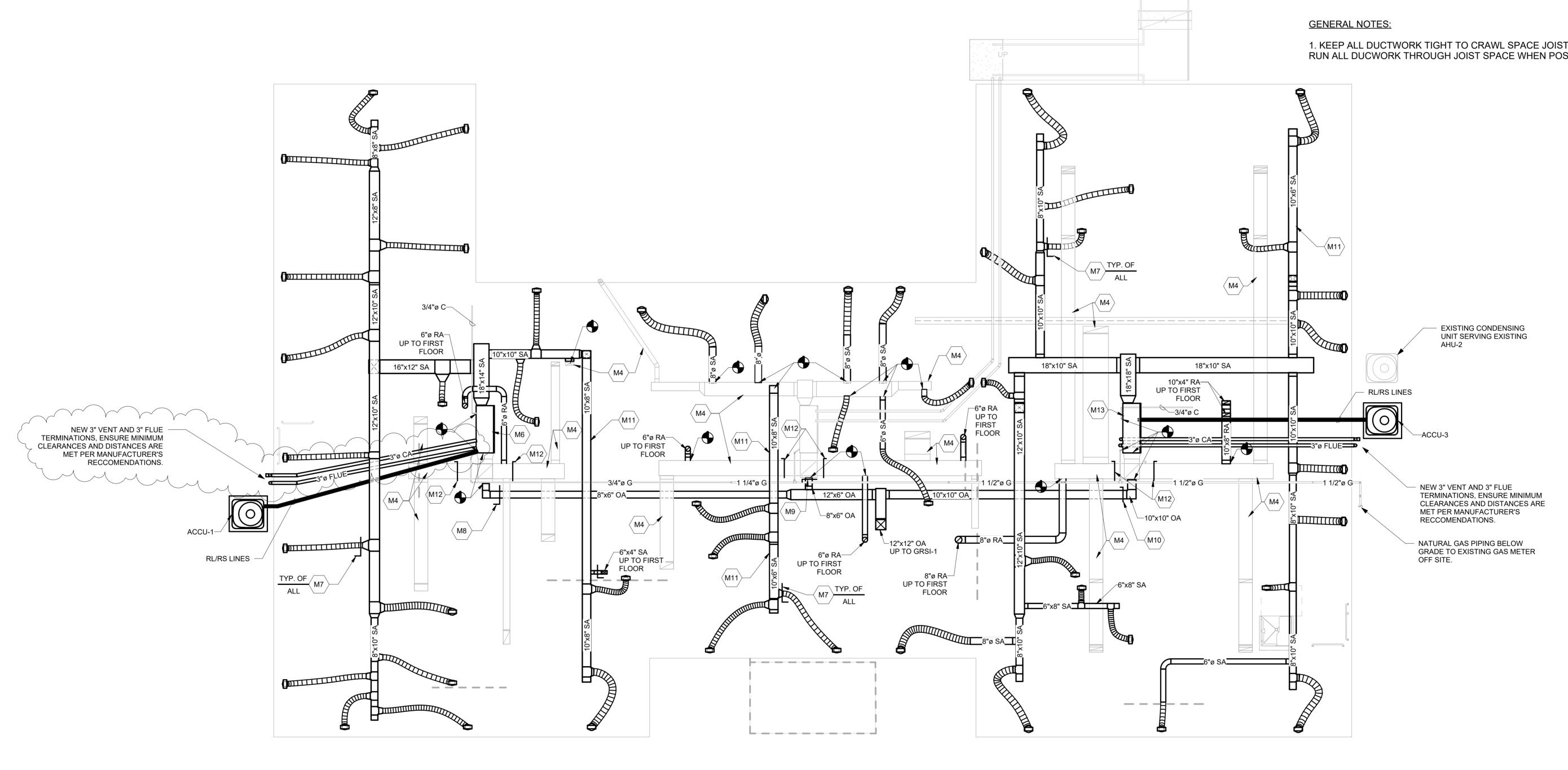


2324

PROJECT NO:

SHEET:







# KEY VALUE

M4	ENSURE ALL EXISTING DUCTWORK TO I
M6	CONNECT NEW AIR HANDLER TO EXIST EXISTING CONDENSATE DRAIN. CONTR SIZES FOLLOW AIR HANDLER MANUFAC
	AND DIRT LEG FOR EACH AIR HANDLER
M7	ALL BRANCH RUN-OUTS TO BE PROVIDE BRANCH DETAIL. TYPICAL FOR ALL SUP
M8	BALANCE AHU-1 OUTSIDE AIR DAMPER
M9	BALANCE AHU-2 OUTSIDE AIR DAMPER
M10	BALANCE AHU-3 OUTSIDE AIR DAMPER
M11	RUN DUCT BETWEEN JOISTS AND TAP F
M12	RETROFIT RETURN AIR DAMPERS IN RE
M13	CONNECT NEW AIR HANDLER TO EXIST FEILD VERIFY EXISTING PIPE SIZES, AN RECCOMENDATIONS. ENSURE GAS PIPI

# KEYNOTE LEGEND

## TEXT

REMAIN IS INSULATED PER SPECIFICATIONS WITH INTACT VAPOR BARRIER. TING 2" VENT, EXISTING 2" COMBUSTION AIR, EXISTING 3/4" GAS LINE, AND RACTOR TO FEILD VERIFY EXISTING PIPE SIZES, AND ENSURE EXISTING PIPE CTURER'S RECCOMENDATIONS. ENSURE GAS PIPING HAS SHUT-OFF VALVE

DED WITH SPIN-IN DAMPERS AT TAKE-OFF AS SHOWN IN ROUND SUPPLY AIR PPLY DIFFUSERS.

TO 150 CFM, AND RETURN AIR DAMPERS TO 1450 CFM TOTAL.

TO 140 CFM, AND RETURN AIR DAMPERS TO 1060 CFM TOTAL. TO 380 CFM, AND RETURN AIR DAMPERS TO 1620 CFM TOTAL.

FLEX DUCT CONNECTION FROM BOTTOM OF DUCT.

ETURN DUCTWORK TO ALLOW BALANCING OF OUTSIDE AIR DUCT. FING 3/4" GAS LINE, AND EXISTING CONDENSATE DRAIN. CONTRACTOR TO ND ENSURE EXISTING PIPE SIZES FOLLOW AIR HANDLER MANUFACTURER'S PING HAS SHUT-OFF VALVE AND DIRT LEG FOR EACH AIR HANDLER.

1. KEEP ALL DUCTWORK TIGHT TO CRAWL SPACE JOISTS. RUN ALL DUCWORK THROUGH JOIST SPACE WHEN POSSIBLE.

C Z WORK RVICES -NEW CHILDREN'S SEI S CENTER RENO PLAN UNDERFLOOR SUNRISE SANDER MECHANICAL DATE: 11/17 OF SUMMIT ODUCTION IS IOUT WRITTE ALL RIGHTS REESERVED IS DOCOUMENT IS THE PROPERTY HITECTS + ENGINEERS, ANY REPF IIBITED IN WHOLE OR IN PART WITI DATE: 10/23/2023

DATE.	10/20/2020
JOB STATUS:	CE
DRAWN BY:	JTS
CHECKED:	CME
PROJECT NO:	2324
SHEET:	

M100

# MECHANICAL SYMBOLS

ABOVE FINISHED GRADE FINISHED FLOOR ELEVATION ABOVE FINISHED FLOOR ACCESS DOOR TYPICAL NOT TO SCALE EXHAUST FAN ELECTRIC HEATER AIR HANDLING UNIT CONDENSING UNIT FIRE DAMPER SMOKE DAMPER TAGGED NOTE FIRE/SMOKE DAMPER
CARBON DIOXIDE SENSOR
CONDENSATE DRAIN LINE
INDICATES AIR DISTRIBUTION DEVICE SPECIFICATION L = LOUVER T = TRANSFER GRILLE S = SUPPLY DIFFUSER OR REGISTER, R = RETURN GRILLE OR REGISTER, E = EXHAUST GRILLE OR REGISTER) CFM IF INDICATED ON DWG.
SUPPLY AIR DUCT/DUCT DIM. 20'' HORIZ. X 12'' VERT. (ONE LINE)
RETURN AIR DUCT (ONE LINE) 20'' HORIZ. X 12'' VERT. (ONE LINE) EXHAUST AIR DUCT (ONE LINE) 12'' HORIZ. X 12'' VERT. (ONE LINE)
VOLUME DAMPER (MANUAL)
BOWDEN VOLUME DAMPER
U.L. LISTED PENETRATION
SUPPLY, RETURN, EXHAUST GRILLE
THERMOSTAT OR REMOTE SENSOR
DUCT MOUNTED SMOKE DETECTOR
MECHANICAL EQUIPMENT DESIGNATOR
SET OF REFRIGERANT LINES

## MECHANICAL GENERAL NOTES

1. EACH CONTRACTOR, PROPOSER, SUPPLIER AND/OR MANUFACTURER SHALL REFER TO ALL DOCUMENTS PERTAINING TO THIS PROJECT AND COORDINATE ACCORDINGLY SO AS TO ENSURE ADEQUACY OF FIT, COMPLIANCE WITH SPECIFICATIONS, PROPER VOLTAGE AND CURRENT CHARACTERISTICS TO AVOID CONFLICT WITH ANY OTHER BUILDINGS SYSTEMS.

2. ALL OFFSETS, TURNS, FITTINGS, TRIM-, DETAIL, ETC., MAY NOT BE INDICATED, BUT SHALL BE PROVIDED AS REQUIRED. ADDITIONAL ALLOWANCES SHALL BE INCLUDED FOR SAME IN EACH PROPOSERS BID.

3. INSTALL NO PIPING, CONDUITS, ETC., IN A LOCATION OR IN A MANNER WHICH WILL ALLOW FREEZING AND THE COLLECTION OF CONDENSATION THEREON.

4. OBSERVE ALL APPLICABLE CODES, RULES, AND REGULATIONS THAT MAY APPLY TO THE WORK UNDER THIS CONTRACT. (CITY, COUNCIL, LOCAL, FEDERAL, MUNICIPALITY, UTILITY COMPANY, OSHA, COMMONWEALTH OF KENTUCKY, ETC.)

5. UNLESS OTHERWISE SPECIFIED OR INDICATED, ALL EQUIPMENT AND/OR MATERIALS WITHIN OCCUPIED SPACES OR EXPOSED TO VIEW ON THE BUILDING EXTERIOR SHALL BE PRIMED AND FINISHED WITH COLOR AS CHOSEN BY ARCHITECT.

6. UNLESS OTHERWISE SPECIFIED OR INDICATED, INSTALL DIFFUSERS, REGISTERS, GRILLES, SMOKE DETECTORS AND OTHER CEILING MOUNTED APPURTENANCES IN A SYMMETRICAL PATTERN. UNLESS SPECIFICALLY INDICATED OTHERWISE, REFER TO THE ARCHITECT'S REFLECTED CEILING PLAN AS APPLICABLE.

7. ANY VIBRATING, OSCILLATING OR OTHER NOISE OR MOTION PRODUCING EQUIPMENT SHALL BE ISOLATED FROM SURROUNDING SYSTEMS IN AN APPROVED MANNER. NOISY OR STRUCTURALLY DAMAGING INSTALLATIONS SHALL BE SATISFACTORILY REPLACED OR REPAIRED AT THE INSTALLING CONTRACTORS' EXPENSE.

8. DEVIATIONS IN SIZES, CAPACITIES, FIT, FINISH, ETC., FOR EQUIPMENT FROM THAT PRIME SPECIFIED SHALL BE THE RESPONSIBILITY OF THE PURCHASER OF THAT EQUIPMENT. ANY PROVISIONS REQUIRED TO ACCOMODATE A DEVIATION, SHALL BE THE RESPONSIBILITY OF THE PURCHASER.

9. DO NOT SCALE FROM DRAWINGS, AS PRINTING DISTORTS SCALE. WORK SHALL BE LAID OUT FROM DIMENSIONED DRAWINGS, OR DIMENSIONS SUPP-LIED TO THE CONTRACTOR.

10. ALL ELECTRICAL COMPONENTS OR EQUIPMENT SHALL BE LABELED BY UNDERWRITER'S LABORATORIES, OR OTHER APPROVED LISTING AGENCY.

11. ALL SUPPORT FOR EQUIPMENT, DEVICES OR FIXTURES SHALL BE UNIQUE, FROM THE BUILDING STRUCTURE. DO NOT SUPPORT WORK FROM OTHER TRADES OR EQUIPMENT. HOLD ALL ABOVE CEILING EQUIPMENT TIGHT TO STRUCTURAL SUPPORTING ROOF DECK.

12. WHERE INTERRUPTING AN EXISTING UTILITY OR SERVICE DELIBERATELY OR ACCIDENTALLY, THE RESPONSIBLE CONTRACTOR SHALL WORK CONTINUOUSLY AS NEEDED TO RESTORE SAME PROVIDING PREMIUM TIME AS NEEDED.

13. WHERE PENETRATING ROOFING MEMBRANE OR OTHER MATERIALS USED FOR WEATHERPROOFING THE BUILDING, MAKE SUCH PENETRATIONS IN A WAY THAT WILL NOT VOID OR DIMINISH THE ROOFING WARRANTY OR INTEGRITY IN ANYWAY. COORDINATE ALL SUCH PENETRATIONS WITH THE ROOFING MANUFACTURER.

14. CONTRACTOR TO PROVIDE TURNING VANES IN ALL MAIN DUCT 45\90 DEGREE TURNS. THIS APPLIES TO ALL S.A. & R.A. DUCTS.

	GAS FURNACE - DX COIL															
MARK	DAIKIN MODEL	SUPPLY FAN				OA CFM	TOTAL COOLING	SENSIBLE COOLING	GAS INPUT	GAS OUTPUT	AFUE		ELECTRICA	_	REMARKS	
MARK	DAIRIN MODEL	CFM	TYPE	DRIVE	HP	E.S.P.	UA CFM	(MBH)	(MBH)			AFUE	MCA	MOP	VOLTS/ø	REMARNS
AHU—1	DM96VC1005	1600	MULTI	DIRECT	1	0.75	150	48	38.4	100	96.1	96	13.9	20	120/1	1,2,3,4,7
AHU-2	EXISTING UNIT	1200	MULTI	DIRECT	$\frac{3}{4}$	0.6	140	36	28.8	80	$\overline{}_{76}$	95	$\sim$			6
AHU-3	DM96VC1205	1990	MULTI	DIRECT	1	0.7	380	60	48	120	115.3	96 (	14.4	20	120/1	1,2,3,4,5,7
	$\sim$	•	•	•	•		•	•	•	•		•		,		

REMARKS:

1. FRONT ACCESS FILTER WITH 2 SPARE SETS OF FILTERS.

2. FACTORY PROGRAMMABLE SINGLE STAGE HEATING/COOLING THERMOSTAT WITH ON-OFF-AUTO FAN SWITCH AND HEAT/COOL AUTO-CHANGEOVER. 3. PROVIDE DX REFRIGERATION COIL MATCHED TO CAPACTLY OF SPECIFIED CONDENSING UNIT.

4. AIR HANDLER AND MATCHING COIL TO BE DESIGNED FOR HORIZONTAL ORIENTATION.

5. PROVIDE SMOKE SHUT-DOWN IN RETURN AIR DUCT BEFORE OUTSIDE AIR DUCT. 6. VERIFY EXISTING CONDENSING UNIT IS OPERATIONAL, AND CONSULT ENGINEER IF REPLACEMENT IS NEEDED.

7. AIR HANDLER TO BE RATED FOR 30 FEET OF VENT LENGTH WITH 4 ELBOWS.

	SPLIT SYSTEM CONDENSING UNIT									
MARK			NOMINAL	SEER RATING	TOTAL COOLING		ELECTRICA	REMARKS		
MARN	DAIKIN MODEL	SERVICE	TONNAGE	SEEK KATING	(МВН)	МСА	МОР	VOLTS/ø	REMARNS	
ACCU-1	DX9VCA481	AHU—1	4	19	48	30.1	35	230/1	1,2,3,4,5,6,7	
ACCU-2	EXISTING UNIT	AHU-2	3	16	36	20.3	35	230/1	8	
ACCU-3	DX9VCA601	AHU-3	5	19	60	31.1	35	230/1	1,2,3,4,5,6,7	

REMARKS:

COOLING CAPACITY IS BASED ON 95°F AMBIENT AIR TEMP & RATED IN ACCORDANCE WITH D.O.E. TESTS & A.R.I. STANDARDS.

2. PROVIDE UNIT WITH SUCTION AND DISCHARGE SERVICE VALVES.

3. PROVIDE CRANKCASE HEATER FILTER-DRIER, AND LOW PRESSURE SWITCH. 4. PROVIDE UNIT WITH ELECTRONIC EXPANSION VALVES AND HARD START KITS. 5. 5 YEAR COMPRESSOR WARRANTY.

6. PROVIDE HIGH EFFIECIENCY UNIT.

7. LOW AMBIENT HEAD PRESSURE CONTROL.

			EXH	IAUST	FAN	SCHE	DULE					
DESIGNATION	LOCATION	MANUFAC.	MODEL	CFM	ESP	H.P.	DRIVE	SONES	VOLT/Ø	FLA	WEIGHT (LBS)	REMARKS
EF-1	CEILING	GREENHECK	SP-A90	70	0.2	FRACT.	DIRECT	0.7	120/1	0.17	12	1,2,3,4
EF-2	CEILING	GREENHECK	SP-A70	50	0.2	FRACT.	DIRECT	0.6	120/1	0.14	12	1,2,3,4
EF-3	CEILING	GREENHECK	SP-A70	50	0.2	FRACT.	DIRECT	0.6	120/1	0.14	12	1,2,3,4
EF-4	CEILING	GREENHECK	SP-A110	100	0.2	FRACT.	DIRECT	0.8	120/1	0.19	17	1,2,3,4
EF-5	CEILING	GREENHECK	SP-A110	100	0.2	FRACT.	DIRECT	0.8	120/1	0.19	17	1,2,3,4
EF-6	CEILING	GREENHECK	SP-A110	100	0.2	FRACT.	DIRECT	0.8	120/1	0.19	17	1,2,3,4
EF-7	CEILING	GREENHECK	SP-A110	100	0.2	FRACT.	DIRECT	0.8	120/1	0.19	17	1,2,3,4
EF-8	CEILING	GREENHECK	SP-A70	50	0.2	FRACT.	DIRECT	0.6	120/1	0.14	12	1,2,3,4

## REMARKS:

1. PROVIDE WITH ALUMINUM GRILLE AND TAMPER PROOF SCREWS.

2. PROVIDE WITH APPROPRIATE BACK DRAFT DAMPER

3. PROVIDE STARTER AND DISCONNECT SWITCH

4. PROVIDE GOOSENECK TERMINATION ON ROOF

	GRAVITY INTAKE HOOD SCHEDULE										
MARK	MANUFACTURER	MODEL	E.S.P.	THROAT AREA (SQ. FT.)	THROAT VELOCITY (FT/MIN.)	THROAT SIZE	МАХ СГМ	WEIGHT	REMARKS		
GRSI-1	GREENHECK	GRSI-16	0.033	1.5	462	16"	670	16	1,2,3		

## **REMARKS:**

1. PROVIDE BIRDSCREEN

2. PROVIDE COUNTERBALANCED GRAVITY INTAKE DAMPER WITH BLADE AND JAMB SEALS. 3. PROVIDE INSULATED ROOF CURB

	GRAVITY RELIEF HOOD SCHEDULE									
MARK	MANUFACTURER	MODEL	E.S.P.	THROAT AREA (SQ. FT.)	THROAT VELOCITY (FT/MIN.)	THROAT SIZE	MAX CFM	WEIGHT	REMARKS	
GRSR-1	GREENHECK	GRSR-8	0.03	0.4	541	8"	170	7	1,2,3	
GRSR-2	GREENHECK	GRSR-10	0.01	0.6	135	8"	50	7	1,2,3	
GRSR-3	GREENHECK	GRSR-8	0.03	0.4	541	8"	200	7	1,2,3	
GRSR-4	GREENHECK	GRSR-8	0.03	0.4	541	8"	200	7	1,2,3	

**REMARKS:** 

1. PROVIDE BIRDSCREEN AND #12 INSECT SCREEN.

2. PROVIDE GRAVITY RELIEF DAMPERS WITH FELT TIPPED BLADES.

3. PROVIDE INSULATED AND SLOPED ROOF CURB.



8. VERIFY EXISTING CONDENSING UNIT IS OPERATIONAL, AND CONSULT ENGINEER IF REPLACEMENT IS NEEDED.

		R	EGISTERS,	GRILLES	S, AND	DIFFL	JSERS				
MARK	PRICE MODEL	ТҮРЕ	NOMINAL SIZE	MOUNTING	CFM MAX.	PD MAX.	THROW @ 100 FPS	OBD?	FINISH	NC MAX.	REMARKS
S-1	LBPH SERIES ALUMINUM	LINEAR BAR GRILLE	4"X12"	FLOOR	125	0.07	15' NO DEFL	YES	CHOSEN BY ARCHITECT	22	1,2,4
S-1A	LBPH SERIES ALUMINUM	LINEAR BAR GRILLE	4"X12"	FLOOR	125	0.07	15' NO DEFL	YES	CHOSEN BY ARCHITECT	22	1,2,3,4
S-2	LBPH SERIES ALUMINUM	linear bar grille	6"X12"	FLOOR	165	0.05	16' NO DEFL	YES	CHOSEN BY ARCHITECT	20	1,2,4
S-2A	LBPH SERIES ALUMINUM	linear bar grille	6"X12"	FLOOR	165	0.05	16' NO DEFL	YES	CHOSEN BY ARCHITECT	20	1,2,3,4
S-3	LBPH SERIES ALUMINUM	linear bar grille	4"X10"	SURFACE	50	0.02	8' NO DEFL	YES	CHOSEN BY ARCHITECT	18	1,2,4
S-3A	LBPH SERIES ALUMINUM	linear bar grille	4"X10"	SURFACE	50	0.02	8' NO DEFL	YES	CHOSEN BY ARCHITECT	18	1,2,3,4
S-4	MSRRP SERIES ALUMINUM	RISK RESISTANT PERFORATED GRILLE	6"X6"	SURFACE	50	0.03	10'	YES	CHOSEN BY ARCHITECT	15	1,2,3,4
R — 1	LBPH SERIES ALUMINUM	LINEAR BAR GRILLE	6"X16"	SURFACE	200	0.045	_	-	CHOSEN BY ARCHITECT	18	1,2
R-1A	LBPH SERIES ALUMINUM	LINEAR BAR GRILLE	6"X16"	SURFACE	200	0.045	_	_	CHOSEN BY ARCHITECT	18	1,2,3
R-2	LBPH SERIES ALUMINUM	linear bar grille	6"X16"	FLOOR	200	0.045	_	_	CHOSEN BY ARCHITECT	18	1,2
R-2A	LBPH SERIES ALUMINUM	linear bar grille	6"X16"	FLOOR	200	0.045	_	_	CHOSEN BY ARCHITECT	18	1,2,3
R-3	LBPH SERIES ALUMINUM	LINEAR BAR GRILLE	6"X30"	FLOOR	530	0.08	_	_	CHOSEN BY ARCHITECT	26	1,2,3
R-4	LBPH SERIES ALUMINUM	LINEAR BAR GRILLE	6"X30"	SURFACE	345	0.04	_	_	CHOSEN BY ARCHITECT	18	1,2,3
TG-1	MSRRP SERIES ALUMINUM	RISK RESISTANT PERFORATED GRILLE	6"X6"	SURFACE	50	0.03	_	_	CHOSEN BY ARCHITECT	15	1,2,3

## **REMARKS:**

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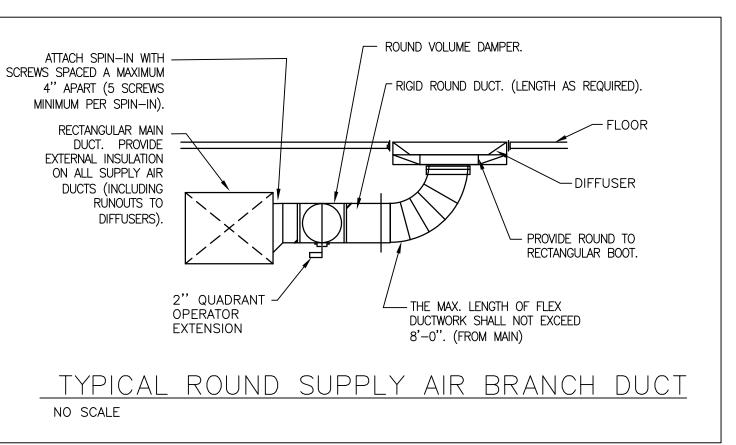
1. PROVIDE DUCT TRANSITION TO GRILLE/DIFFUSER AS REQUIRED.

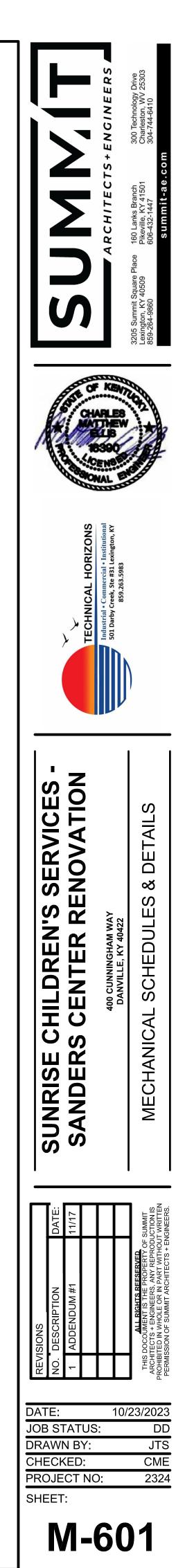
2. IF ARCHITECT DOES NOT CHOOSE A COLOR, THEN COLOR SHALL BE OFF-WHITE OR AS INDICATED ON PLANS.

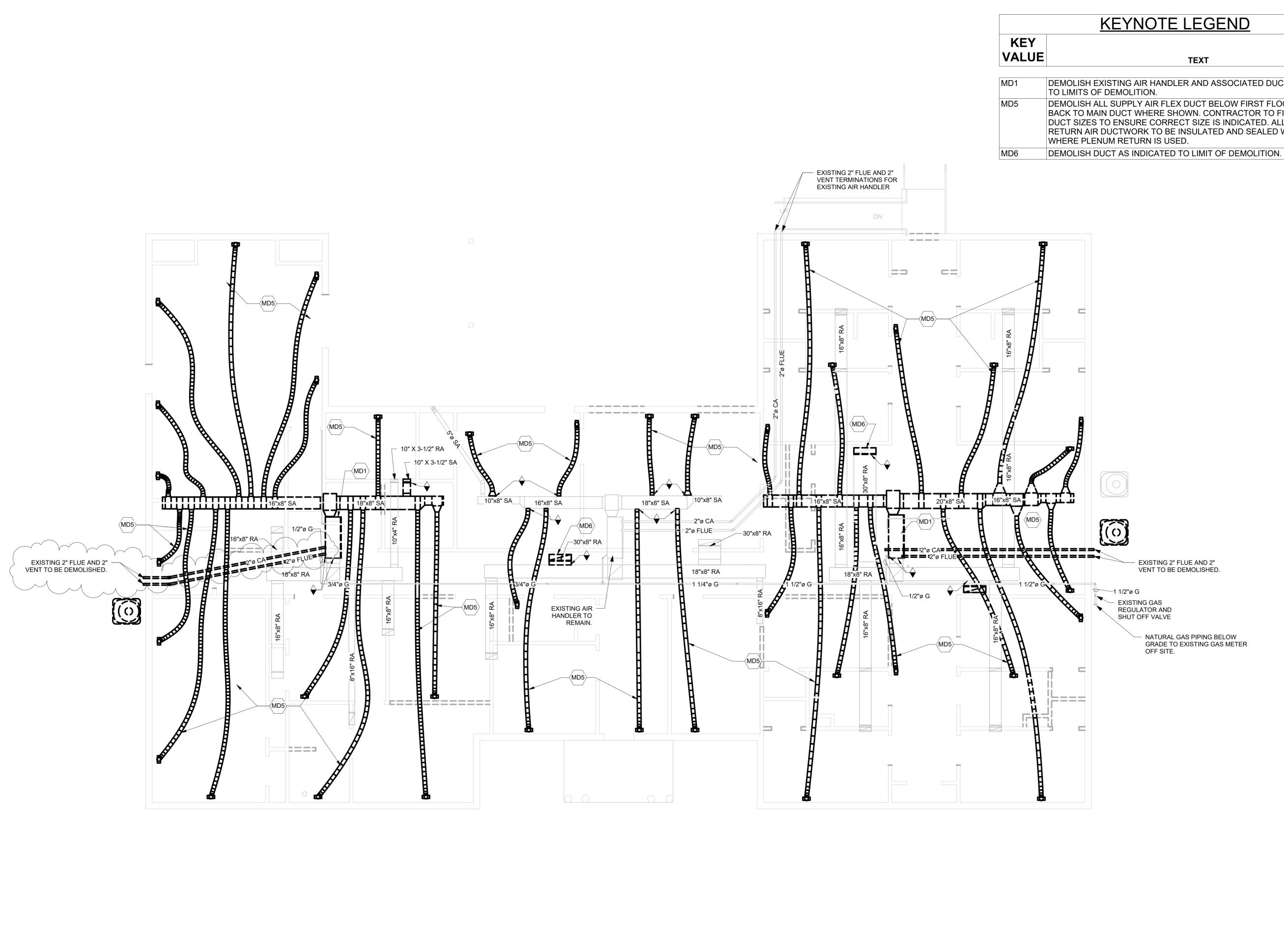
3. TAMPER PROOF HEAVY DUTY BAR GRILLE. PROVIDE TAMPER PROOF SCREWS.

4. PROVIDE MANUFACTURERS INTEGRAL BALANCING DAMPER IN DEVICE TO ALLOW BALANCING OF AIR DEVICE THROUGH FACE OF DEVICE.

# MECHANICAL SCHEDULES & DETAILS



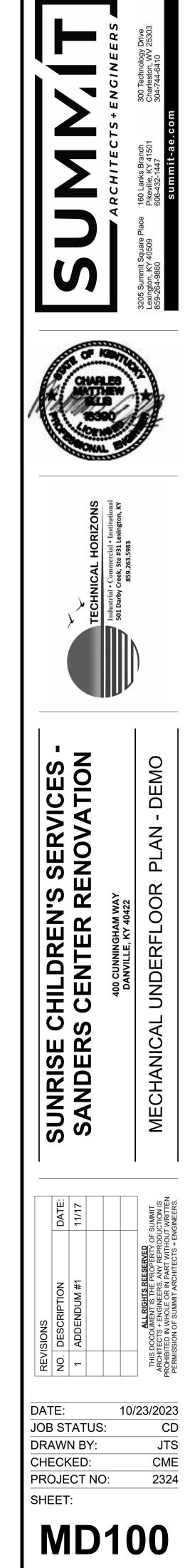






DEMOLISH EXISTING AIR HANDLER AND ASSOCIATED DUCTWORK BACK

DEMOLISH ALL SUPPLY AIR FLEX DUCT BELOW FIRST FLOOR, AND CAP BACK TO MAIN DUCT WHERE SHOWN. CONTRACTOR TO FIELD VERIFY ALL DUCT SIZES TO ENSURE CORRECT SIZE IS INDICATED. ALL EXISTING RETURN AIR DUCTWORK TO BE INSULATED AND SEALED WITH CAULKING





SUNRISE CHILDREN'S SERVICES SANDERS CENTER Pre-Bid Meeting November 16, 2023– 10:00 a.m. THB

## Pre-Bid Meeting Agenda

### **Introductions**

Project Contacts:

•	Project Manager –	Teresa Hargett Brooks, Summit Architects + Engineers 859.264.9860 – <u>tbrooks@summit-ae.com</u>
•	Project Architect -	Sean Matthews, Summit Architects + Engineers
•	Project Engineer –	Matt Ellis, Technical Horizons 859.263.5983 - <u>cmellis@technicalhorizons.com</u>
•	Project Engineer –	Bryan Johnson, Poage Engineers 859.321.4204 <u>bjohnson@poageengineers.com</u>
Owner Inform	ation :	
•	Owner Rep –	Bob Martin, Eastern Maintenance Supervisor 859.502.538.1002 <u>RMartin@sunrise.org</u>

David Bourne, Chief Financial Officer

859.229.7750 DBourne@sunrise.org

## Attendees: (See Attached Sign-In Sheet)

#### Project Information

- Current Bid Date: Wednesday, November 29, 2023 @ 2:00 p.m., Opening at the project site, 400 Cunningham Drive, Danville Kentucky.
- Probable Award Date: Following Owner acceptance of Bid.
- Approximate Start of Construction: Notice To Proceed will immediately follow acceptance of Bid.
- Substantial Completion: Within 120 days after Notice To Proceed.
- Access to Site Contractor shall have full access to the construction site at all times.
- Contractor will coordinate installation of flooring with owners flooring contractors (NIC).
- Addenda An Addendum will be issued on <del>Friday, November 17, 2023</del>. Tuesday, November 21, 2023.

3205 Summit Square Pl, Lexington, KY 40509 - 859-264-9860 • 160 Lank Branch, Suite 2, Pikeville, KY 41501 - 606-432-1447 300 Technology Drive, Suite 100, S. Charleston, WV 25309 - 304-744-6410

### Meeting Notes:

- Clarification of By Owner scope of work requested. To be included in forthcoming Addendum 1.
- Reference to allowances for appliances in Specifications shall be removed. See correction on Section 01 21 00. There are no appliances in the project scope.
- Progress Meeting will be held once per month, progress of work and pay apps will be reviewed at this time.
- All utilities shall remain in the Owner's name and are currently on.
- Taxes are to be excluded on all owner direct purchase items (DPO) See Section 00 00 03.2
- Project has been submitted to Housing, Buildings and Construction for review. Case number 2311-001393.
- Bonding does apply and is required with Form of Proposal. Successful bidder must provide 100% Performance and Payment Bond of the full contract amount see Section 00 00 01.

	- ) ]	
Sunrise Children's Services, Sanders Center Renovation Level 1 Psychiatric Residential Treatment Facility (PRTF) Danville, Kentucky Pre-Bid Meeting Sign-in Sheet Thursday, November 15, 2023, 10:00AM	ders Center Renovation eatment Facility (PRTF) ):00AM	
Name 1. Karne Mercinen	Organization Mercinen Heratines 24	email/phone 606-669-5/38
2. John Bellisaric	BCD, INC	JBELLISARIO @BARDSTUWNICOM JHARACT> @BARDSTUWNICOM
4. Jonda MCGUIRE	APEK	JMCGUIEE(2, APEKKY CORD. CON
6.		
9 œ       		
10.		
12.		

Sunrise Children's Services, Sanders

#### SUMMIT ARCHITECTS + ENGINEERS

## FORM OF PROPOSAL

Project No. <u>2324</u>							
Date:	To: (C	)wner)					
Project Name:		Bid Package No					
City, County:							
Name of Contracto	r:						
Mailing Address:							
Business Address:			Telephone:	· · · · · · · · · · · · · · · · · · ·			
Specifications, and materials, equipme	I Drawings, for the above re	eferenced project, the undersi prary devices required to comple	neral Conditions, Supplemental gned bidder proposes to furnis ete the work in accordance with	sh all labor,			
Addendum	(Insert t	the addendum numbers receined.)	ved or the word "none" if no	addendum			
BASE BID: For the the following lump s	•	nplete the work, in accordance	with the contract documents, I	/We submit			
		Use Figures					
		Dollars &		Cents			
Use Words fo	or both dollars and cents						
ALTERNATE BIDS	<u>:</u> (If applicable and denoted i	n the Bidding Documents)					
	or addition to those items, sen sum price will be added or de		in Bidding Documents by alterna	ate number,			
Alternate Bid No.	Alternate Description	+ (Add to the Base Bid)	- (Deduct from the Base Bid)	No Cost Change (from the Base Bid)			
Alt. Bid No. 1							
Alt. Bid No. 2							
Alt. Bid No. 3							
Alt. Bid No. 4							
Alt. Bid No. 5							
Alt. Bid No. 6							

A maximum of 10 Alternate Bids will be acceptable with each Base Bid. Do not add supplemental sheets for Alternate Bids to this document.

#### LIST OF PROPOSED SUBCONTRACTORS:

List on the lines below each major branch of work and the subcontractor involved with that portion of work. If the branch of work is to be done by the Contractor, so indicate.

The listing of more than one subcontractor in a work category shall invalidate the bid.

### SUMMIT ARCHITECTS + ENGINEERS

The listing of the bidder as the subcontractor for a work category certifies that the bidder has in current employment, skilled staff and necessary equipment to complete that category. The architect/engineer will evaluate the ability of all listed subcontractors to complete the work and notify the owner. Listing of the bidder as the subcontractor may invalidate the bid should the architect's review indicate bidder does not have skilled staff and equipment to complete the work category at the time the bid was submitted.

#### The bidder shall submit the list of subcontractors with the bid.

	BRANCH OF WORK (to be filled out by the Architect)	SUBCONTRACTOR (to be filled out by the contractor)
1.	Painting	
2.	Finish Carpentry	
3.	Electrical	
5.	Finish Carpentry	
6.	Mechanical	
7.	Plumbing	
8.	Casework	
9.	Site utilities	
10.	Site Concrete	
11.	Mechanical insulation	
12.	Fire Suppression	
13.	Test and Balance	
14.	Fire Alarm	

#### LIST OF PROPOSED SUPPLIERS AND MANUFACTURERS:

List on the lines below each major material category for this project and the suppliers and manufacturers involved with that portion of work. Listing the supplier below means the Contractor is acknowledging authorization from the Supplier to include the Supplier in this bid.

The listing of more than one supplier or manufacturer in a material category shall invalidate the bid.

#### The bidder shall submit the list of suppliers and manufacturers within one (1) hour of the bid.

	MATERIAL DESCRIPTION BYSPECIFICATION DIVISION ANDCATEGORY(to be filled out by the Architect or Contractor)	SUPPLIER (to be filled out by the Contractor)	MANUFACTURER (to be filled out by the Contractor)
4.	Casework		

6.		
	Door Hardware	
7.		
	Paint	
10.	Security Access Controls	
17.	Concrete	
19.	Plumbing Fixtures	
13.	Fidilibility Fixures	
20.	HVAC Units	
21.	Wiring Devices	
22.	Lighting Control Systems	
23.	Fire Alarm System	

#### UNIT PRICES:

Indicate on the lines below those unit prices to determine any adjustment to the contract price due to changes in work or extra work performed under this contract. The unit prices shall include the furnishing of all labor and materials, cost of all items, and overhead and profit for the Contractor, as well as any subcontractor involved. These unit prices shall be listed in units of work.

#### The bidder shall submit the list of unit prices within one (1) hour of the bid.

	WORK (to be filled out by the Architect)	<b>PRICE / UNIT</b> (to be filled out by the Contractor)	UNIT (to be filled out by the Contractor)
2.	Wall Sheathing Installed	/sheet	
12.	4" Concrete Pavement	/SY	

#### DIRECT MATERIAL PURCHASES:

Indicate on the lines below those materials to be purchased directly by the Owner with a Purchase Order to be issued by the Owner to the individual suppliers. The value of the direct Purchase Order cannot be less than **\$1,000**. Following the approval of bids, the Contractor shall formalize this list by completing and submitting the electronic Purchase Order Summary Form - 00 00 03.1. Listing the supplier below means the Contractor is acknowledging authorization from the Supplier to include the Supplier in this bid.

# A maximum of 20 POs will be acceptable with each bid. Do not add supplemental sheets for additional POs to this document.

#### The bidder shall submit the list of Purchase Orders within four (4) days of the bid.

	SUPPLIER (to be filled out by the Contractor)	PURCHASE ORDER DESCRIPTION (to be filled out by the Contractor)	PURCHASE ORDER AMT.   (to be filled out by the Contractor)
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2.		
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#### TIME LIMIT FOR EXECUTION OF CONTRACT DOCUMENTS:

In the event that a bidder's proposal is accepted by the Owner and such bidder should fail to execute the contract within ten (10) consecutive days from the date of notification of the awarding of the contract, the Owner, at his option, may determine that the awardee has abandoned the contract. The bidder's proposal shall then become null and void, and the bid bond or certified check which accompanied it shall be forfeited to and become the property of the Owner as liquidated damages for failure to execute the contract.

The bidder hereby agrees that failure to submit herein above all required information and/or prices can cause disqualification of this proposal.

Submitted by:

#### SUMMIT ARCHITECTS + ENGINEERS

NAME OF CONTRACTOR / BIDDER: \_\_\_\_\_

AUTHORIZED REPRESENTATIVE'S NAME:\_\_\_\_\_

Signature

## AUTHORIZED REPRESENTATIVE'S NAME(printed): \_\_\_\_\_

AUTHORIZED REPRESENTATIVE'S TITLE:

NOTICE: Bid security must accompany this proposal if the Base Bid price is greater than \$100,000.

This form shall not be modified.

Project#	2324	Date Submitted	 C	elivery Met	hod		PO Certification Statement Phase		
Owner:	Sunrise Children's			GC		GESC	Initial Statement	Final Statement	
Project Name:	Sanders Center R	enovation		СМ			Change Order Stmt.		

Contractor		Pack.	Specification				Change Order		
Name	PO Number	#	Section No.	Purchase Order Description	Vendor Name	Initial PO Amount	Amount To Date	Reason For Change	Final PO Amount
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			upon the appro	priate PO certification	Initial PO Total	\$-	\$-	Final PO Total	\$-
statement phase	e. (initial / Final)								
Initial Certificat	ion Statement					Final Certification St	atement		
		ertify the	at all materials li	isted within this document will				I materials listed within this do	ocument have been
be purchased in						purchased in accorda			
			-			,			

Owner's Signature	Date	Owner's Signature	Date
General Contractor's / Construction Manager's Sigr	Date	General Contractor's / Construction Manager's Signature	Date
Architect's Signature	Date	Architect's Signature	Date

Project#	Date Submitted	Delivery Method				PO Certification Statement Phase	
Owner:	Sunrise Children's Services	x	GC		GESC	Initial Statement	Final Statement
Project Name:	Sanders Center Renovation		СМ			Change Order Stmt.	

Contractor Name	PO Number	Bid. Pack. #	Specification Section No.	Purchase Order Description	Vendor Name	Initial PO Amount	Change Order Amount To Date	Reason For Change	Final PO Amount
Contractor Name	PO Nulliber	Fack. #	Section No.	Description	vendor Name	Initial PO Aniount	To Date	Reason For Change	
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Project#	Date Submitted	Del	very Metho	bd		PO Certification Statement Phase		
Owner:	Sunrise Children's Services	X	GC		GESC	Initial Statement	Final Statement	
Project Name:	Sanders Center Renovation		СМ			Change Order Stmt.		

Contractor Name	PO Number	Bid. Pack. #	Specification Section No.	Purchase Order Description	Vendor Name	Initial PO Amount	Change Order Amount To Date	Reason For Change	Final PO Amount
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All signatures belo statement phase.	ow are required (Initial / Final)	based u	pon the appropria	ate PO certification	Initial PO Total	\$-	\$-	Final PO Total	\$ -

#### Initial Certification Statement

To the best of my knowledge, I certify that all materials listed within this document will be purchased in accordance with 103 KAR 26:070 and 702 KAR 4:160.

Date	0

General Contractor's / Construction Manager's Signat

Architect's Signature

Owner's Signature

Date

Date

#### **Final Certification Statement**

To the best of my knowledge, I certify that all materials listed within this document have been purchased in accordance with 103 KAR 26:070 and 702 KAR 4:160.

Owner's Signature	Date
General Contractor's / Construction Manager's Signature	Date
Architect's Signature	Date

### SECTION 00 00 03.2 – DIRECT MATERIAL PURCHASE INSTRUCTIONS

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This Section includes the following:
  - 1. Bidding.
  - 2. Preparations of Purchase Orders.

#### 1.2 BIDDING

- A. Contractors, Sub-contractors and/or Material Suppliers must determine quantities of materials for which they intend to break out as a Purchase Order item. The Purchase Order may not be less than \$1,000.00, shall not include items such as consumables that are not a part of the finished work, tools, finance charges, sales tax, deposits, or labor performed on site.
- B. If a contractor, sub-contractor and/or material supplier intends on billing for items such as engineering, shop drawings, bonds, insurance, etc. prior to materials being delivered to the job site, these items MUST NOT be included as part of the Bid Breakout amount. These items should be included as part of the Contract amount, and shown on the Contractors Schedule of Values. Otherwise, these items can be incorporated into the Bid Breakout Items material cost and invoiced only when materials are delivered to the job site.
- C. Upon completion of the Bid Opening, the apparent successful Contractor will have four (4) working days to submit the Purchase Order Summary Form, Section 000003.1, as well as the Material Suppliers Authorization Forms. The successful Contractors' contract will be the sum of the Base Bid plus accepted Alternate, less the Bid Breakout amounts for the Base Bid and accepted Alternates. The Architects' office can provide master Material Supplier Authorization Forms electronically.

#### 1.3 PREPARATION OF PURCHASE ORDERS

- A. The successful contractor shall prepare a list of required Purchase Orders including the name and mailing address of the Material Suppliers (company and address where checks will be mailed), and dollar amounts. This list shall be given to the architect for use in preparation of the Purchase Orders. There shall be one purchase order for each contractor/sub-contractor per material supplier. (Example: Contractor "A", Sub-Contractor "B" and Sub-contractor "C" all buy material from the same Supplier "D". There will be three separate Purchase Orders to Supplier "D".)
- B. Upon receipt of the list of purchase orders for the Contractor, the Architect will prepare the Purchase Orders, and deliver them to the Contractor for distribution to Material Suppliers and/or Sub-contractors with instructions to return executed Purchase Orders

to the Contractor. The Contractor shall deliver the Purchase Orders to the Architect who in turn will have the Purchase Orders executed by the Owner. The executed Purchase Orders will then be delivered to the Contractor for distribution.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 00 00 03.2

### SECTION 01 31 00 - COORDINATION

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
  - 1. Coordination Drawings.
  - 2. Administrative and supervisory personnel.
  - 3. Project meetings.
  - 4. Requests for Information (RFIs).

#### 1.2 **DEFINITIONS**

A. RFI: Request from Contractor seeking information or clarification of the Contract Documents.

#### 1.3 COORDINATION

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection, and operation.
  - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
  - 2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
  - 3. Make adequate provisions to accommodate items scheduled for later installation.
  - 4. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
  - 1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other

COORDINATION

contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:

- 1. Preparation of Contractor's Construction Schedule.
- 2. Preparation of the Schedule of Values.
- 3. Delivery and processing of submittals.
- 4. Progress meetings.
- 5. Preinstallation conferences.
- 6. Project closeout activities.
- 7. Startup and adjustment of systems.

#### 1.4 **PROJECT MEETINGS**

- A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
  - 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
  - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
  - 3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within three days of the meeting.
- B. Preconstruction Conference: Schedule a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 10 days after execution of the Agreement. Hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
  - 1. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  - 2. Agenda: Discuss items of significance that could affect progress, including the following:
    - a. Tentative construction schedule.
    - b. Critical work sequencing and long-lead items.
    - c. Designation of key personnel and their duties.
    - d. Procedures for processing field decisions and Change Orders.
    - e. Procedures for RFIs.
    - f. Procedures for testing and inspecting.
    - g. Procedures for processing Applications for Payment.
    - h. Distribution of the Contract Documents.
    - i. Submittal procedures.
    - j. Preparation of Record Documents.
    - k. Use of the premises and existing building.

- I. Work restrictions.
- m. Owner's occupancy requirements.
- n. Responsibility for temporary facilities and controls.
- o. Best Management Practices.
- p. Parking availability.
- q. Office, work, and storage areas.
- r. Equipment deliveries and priorities.
- s. First aid.
- t. Security.
- u. Progress cleaning.
- v. Working hours.
- w. Conduct.
- 3. Minutes: Architect will record and distribute meeting minutes.
- C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.
  - 1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect of scheduled meeting dates.
  - 2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
    - a. The Contract Documents.
    - b. Options.
    - c. Related RFIs.
    - d. Related Change Orders.
    - e. Purchases.
    - f. Deliveries.
    - g. Submittals.
    - h. Possible conflicts.
    - i. Compatibility problems.
    - j. Time schedules.
    - k. Weather limitations.
    - I. Manufacturer's written recommendations.
    - m. Warranty requirements.
    - n. Compatibility of materials.
    - o. Acceptability of substrates.
    - p. Temporary facilities and controls.
    - q. Space and access limitations.
    - r. Regulations of authorities having jurisdiction.
    - s. Testing and inspecting requirements.
    - t. Installation procedures.
    - u. Coordination with other work.
    - v. Required performance results.
    - w. Protection of adjacent work.
    - x. Protection of construction and personnel.

- 3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
- 4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
- 5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
- D. Progress Meetings: Conduct progress meetings monthly. Coordinate dates of meetings with preparation of payment requests.
  - 1. Attendees: In addition to representatives of Owner and Architect, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  - 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
    - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
      - 1) Review schedule for next period.
    - b. Review present and future needs of each entity present, including the following:
      - 1) Interface requirements.
      - 2) Sequence of operations.
      - 3) Status of submittals.
      - 4) Deliveries.
      - 5) Off-site fabrication.
      - 6) Access.
      - 7) Site utilization.
      - 8) Work hours.
      - 9) Hazards and risks.
      - 10) Progress cleaning.
      - 11) Quality and work standards.
      - 12) Status of correction of deficient items.
      - 13) Field observations.
      - 14) RFIs.
      - 15) Status of proposal requests.
      - 16) Pending changes.
      - 17) Status of Change Orders.

- 18) Pending claims and disputes.
- 19) Documentation of information for payment requests.
- 3. Minutes: Architect will record and distribute to Contractor the meeting minutes.
- 4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
  - a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

#### 1.5 REQUESTS FOR INFORMATION (RFIs)

- A. Procedure: Immediately on discovery of the need for information, clarification or interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.
  - 1. RFIs shall originate with Contractor. RFIs submitted by entities other than Contractor will be returned with no response.
  - 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information and the following:
  - 1. Project name.
  - 2. Date.
  - 3. Name of Contractor.
  - 4. Name of Architect.
  - 5. RFI number, numbered sequentially.
  - 6. Specification Section number and title and related paragraphs, as appropriate.
  - 7. Drawing number and detail references, as appropriate.
  - 8. Field dimensions and conditions, as appropriate.
  - 9. Contractor's suggested solution(s). If Contractor's solution(s) impact the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
  - 10. Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing information.
    - a. Supplementary drawings prepared by Contractor shall include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments.
- C. Hard-Copy RFIs:
  - 1. Identify each page of attachments with the RFI number and sequential page number.

- D. Architect's Action: Architect will review each RFI, determine action required, and return it.
  - 1. The following RFIs will be returned without action:
    - a. Requests for approval of submittals.
    - b. Requests for approval of substitutions.
    - c. Requests for coordination information already indicated in the Contract Documents.
    - d. Requests for adjustments in the Contract Time or the Contract Sum.
    - e. Requests for interpretation of Architect's actions on submittals.
    - f. Incomplete RFIs or RFIs with numerous errors.
  - 2. Architect's action may include a request for additional information.
- E. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.
- F. RFI Log: The RFI Log shall be reviewed at each Progress Meeting.

### PART 2 - PRODUCTS (Not Used)

#### PART 3 - EXECUTION (Not Used)

#### END OF SECTION 01 31 00

### SECTION 01 40 00 - QUALITY REQUIREMENTS

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
  - 1. Specific quality-assurance and -control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
  - 2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
  - 3. Requirements for Contractor to provide quality-assurance and -control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

#### 1.2 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect.
- C. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory, or shop.
- D. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- E. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
  - 1. Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that

requirements specified apply exclusively to tradespeople of the corresponding generic name.

F. Experienced: When used with an entity, "experienced" means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

#### 1.3 CONFLICTING REQUIREMENTS

- A. General: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

#### 1.4 SUBMITTALS

- A. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
  - 1. Specification Section number and title.
  - 2. Description of test and inspection.
  - 3. Identification of applicable standards.
  - 4. Identification of test and inspection methods.
  - 5. Time schedule or time span for tests and inspections.
  - 6. Entity responsible for performing tests and inspections.
  - 7. Requirements for obtaining samples.
  - 8. Unique characteristics of each quality-control service.
- B. Reports: Prepare and submit certified written reports that include the following:
  - 1. Date of issue.
  - 2. Project title and number.
  - 3. Name, address, and telephone number of testing agency.
  - 4. Dates and locations of samples and tests or inspections.
  - 5. Names of individuals making tests and inspections.
  - 6. Description of the Work and test and inspection method.
  - 7. Identification of product and Specification Section.
  - 8. Complete test or inspection data.
  - 9. Test and inspection results and an interpretation of test results.
  - 10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.

- 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
- 12. Name and signature of laboratory inspector.
- 13. Recommendations on retesting and re-inspecting.
- C. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

#### 1.5 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this Article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- C. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar to those indicated for this Project in material, design, and extent.
- F. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 548; and with additional qualifications specified in individual Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.
  - 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
  - 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- G. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

#### 1.6 QUALITY CONTROL

- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
  - 1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
  - 2. Costs for retesting and re-inspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor.
- B. Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
  - 1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
  - 2. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
  - 3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
  - 4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
  - 5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Division 01 Section "Submittal Procedures."
- D. Testing Agency Responsibilities: Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
  - 1. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
  - 2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
  - 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
  - 4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
  - 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
  - 6. Do not perform any duties of Contractor.

- E. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
  - 1. Access to the Work.
  - 2. Incidental labor and facilities necessary to facilitate tests and inspections.
  - 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
  - 4. Facilities for storage and field curing of test samples.
  - 5. Delivery of samples to testing agencies.
  - 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
  - 7. Security and protection for samples and for testing and inspecting equipment at Project site.
- F. Coordination: Coordinate sequence of activities to accommodate required qualityassurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
  - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.
- 1.7 SPECIAL TESTS AND INSPECTIONS
  - A. Special Tests and Inspections: Facility is designed with materials that will not require special inspections. Contractor shall coordinate concrete footing pours with the Engineer's office for a footing inspection prior to pouring.
- PART 2 PRODUCTS (Not Used)
- PART 3 EXECUTION
- 3.1 TEST AND INSPECTION LOG
  - A. Prepare a record of tests and inspections. Include the following:
    - 1. Date test or inspection was conducted.
    - 2. Description of the Work tested or inspected.
    - 3. Date test or inspection results were transmitted to Architect.
    - 4. Identification of testing agency or special inspector conducting test or inspection.
  - B. Maintain log at Project site. Post changes and modifications as they occur. Provide access to test and inspection log for Architect's reference during normal working hours.

#### 3.2 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
  - 1. Provide materials and comply with installation requirements specified in other Specification Sections. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 01 40 00

#### SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. Related Requirements:
  - 1. Section 011000 "Summary" for work restrictions and limitations on utility interruptions.

#### 1.2 USE CHARGES

- A. Water and Sewer Service from Existing System: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
- B. Electric Power Service from Existing System: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

#### 1.3 INFORMATIONAL SUBMITTALS

- A. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire-prevention program.
- B. Moisture-and Mold-Protection Plan: Describe procedures and controls for protecting materials and construction from water absorption and damage and mold.

#### 1.4 **PROJECT CONDITIONS**

#### PART 2 - PRODUCTS

#### 2.1 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
- B. HVAC Equipment: Unless Owner authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.

- 1. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.
- 2. Heating Units: Listed and labeled for type of fuel being consumed, by a qualified testing agency acceptable to authorities having jurisdiction, and marked for intended location and application.
- C. Telephone Service: Provide temporary telephone service in common-use facilities for use by all construction personnel. Install WiFi cell phone access equipment.
- D. Electronic Communication Service: Provide a desktop computer in the primary field office adequate for use by Architect and Owner to access Project electronic documents and maintain electronic communications.
  - 1. Printer: "All-in-one" unit equipped with printer server, combining color printing, photocopying, scanning, and faxing, or separate units for each of these three functions.
  - 2. Internet Service: Broadband modem, router and ISP, equipped with hardware firewall, providing minimum 2 Mbps upload and 50 Mbps download speeds at each computer.
  - 3. Internet Security: Integrated software, providing software firewall, virus, spyware, phishing, and spam protection in a combined application.
- E. Traffic Controls: Comply with requirements of authorities having jurisdiction.
  - 1. Protect existing site improvements to remain including curbs, pavement, and utilities.
  - 2. Maintain access for fire-fighting equipment and access to fire hydrants.
- F. Parking: Site is open for use for parking.
- G. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.
  - 1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties or endanger permanent Work or temporary facilities.
  - 2. Remove snow and ice as required to minimize accumulations.
- H. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with progress cleaning requirements in Section 017300 "Execution."
- I. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.
  - 1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

#### 2.2 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.

- 1. Where access to adjacent properties is required in order to affect protection of existing facilities, obtain written permission from adjacent property owner to access property for that purpose.
- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- C. Security Enclosure and Lockup: Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each workday.
- D. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- E. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
  - 1. Where heating or cooling is needed and permanent enclosure is incomplete, insulate temporary enclosures.

#### 2.3 MOISTURE AND MOLD CONTROL

- A. Contractor's Moisture-Protection Plan: Describe delivery, handling, storage, installation, and protection provisions for materials subject to water absorption or water damage.
  - 1. Indicate procedures for discarding water-damaged materials, protocols for mitigating water intrusion into completed Work, and replacing water-damaged Work.
  - 2. Indicate sequencing of work that requires water, such as sprayed fire-resistive materials, plastering, and terrazzo grinding, and describe plans for dealing with water from these operations. Show procedures for verifying that wet construction has dried sufficiently to permit installation of finish materials.
  - 3. Indicate methods to be used to avoid trapping water in finished work.
- B. Exposed Construction Period: Before installation of weather barriers, when materials are subject to wetting and exposure and to airborne mold spores, protect as follows:
  - 1. Protect porous materials from water damage.
  - 2. Protect stored and installed material from flowing or standing water.
  - 3. Keep porous and organic materials from coming into prolonged contact with concrete.
  - 4. Remove standing water from decks.
- C. Partially Enclosed Construction Period: After installation of weather barriers but before full enclosure and conditioning of building, when installed materials are still subject to infiltration of moisture and ambient mold spores, protect as follows:
  - 1. Do not load or install drywall or other porous materials or components, or items with high organic content, into partially enclosed building.
  - 2. Keep interior spaces reasonably clean and protected from water damage.

- 3. Periodically collect and remove waste containing cellulose or other organic matter.
- 4. Discard or replace water-damaged material.
- 5. Do not install material that is wet.
- 6. Discard and replace stored or installed material that begins to grow mold.
- 7. Perform work in a sequence that allows wet materials adequate time to dry before enclosing the material in gypsum board or other interior finishes.
- D. Controlled Construction Period: After completing and sealing of the building enclosure but prior to the full operation of permanent HVAC systems, maintain as follows:
  - 1. Control moisture and humidity inside building by maintaining effective dry-in conditions.
  - 2. Use temporary or permanent HVAC system to control humidity within ranges specified for installed and stored materials.
  - 3. Comply with manufacturer's written instructions for temperature, relative humidity, and exposure to water limits.

#### 2.4 OPERATION, TERMINATION, AND REMOVAL

- A.
- At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Section 017700 "Closeout Procedures."

#### END OF SECTION 015000

#### SECTION 088300 - MIRRORS

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section Includes: Silvered flat glass mirrors.
- B. Related Requirements:
  - 1. Section 088000 "Glazing" for glass with reflective coatings used for vision and spandrel lites.
  - 2. Section 102800 "Toilet, Bath, and Laundry Accessories" for metal-framed mirrors.

#### 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
  - 1. Mirrors: Include description of materials and process used to produce each type of silvered flat glass mirror specified that indicates sources of glass, glass coating components, edge sealer, and quality-control provisions.
- B. Shop Drawings: Include mirror elevations, edge details, mirror hardware, and attachment details.

#### 1.3 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Product Certificates: For each type of mirror **and mirror mastic**.
- C. Preconstruction Test Reports: From mirror manufacturer indicating that mirror mastic was tested for compatibility and adhesion with mirror backing and substrates on which mirrors are installed.
- D. Sample Warranty: For special warranty.

#### 1.4 CLOSEOUT SUBMITTALS

A. Maintenance Data: For mirrors to include in maintenance manuals.

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#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Protect mirrors in accordance with mirror manufacturer's written instructions and as needed to prevent damage to mirrors from moisture, condensation, temperature changes, direct exposure to sun, or other causes.
- B. Comply with mirror manufacturer's written instructions for shipping, storing, and handling mirrors as needed to prevent deterioration of silvering, damage to edges, and abrasion of glass surfaces and applied coatings. Store indoors.

#### 1.6 FIELD CONDITIONS

A. Environmental Limitations: Do not install mirrors until ambient temperature and humidity conditions are maintained at levels indicated for final occupancy.

#### 1.7 WARRANTY

- A. Special Warranty: Manufacturer agrees to replace mirrors that deteriorate within specified warranty period. Deterioration of mirrors is defined as defects developed from normal use that are not attributed to mirror breakage or to maintaining and cleaning mirrors contrary to manufacturer's written instructions. Defects include discoloration, black spots, and clouding of the silver film.
  - 1. Warranty Period: Five years from date of Substantial Completion.

#### PART 2 - PRODUCTS

#### 2.1 SOURCE LIMITATIONS

- A. Source Limitations for Mirrors: Obtain mirrors from single source from single manufacturer.
- B. Source Limitations for Mirror Accessories: Obtain mirror-glazing accessories from single source.

#### 2.2 SILVERED FLAT GLASS MIRRORS

- A. Annealed Monolithic Glass Mirrors: Mirror Glazing Quality, clear (low-iron) float glass with a minimum 91 percent visible light transmission.
  - 1. Nominal Thickness: **6.0 mm**
- B. Tempered Glass Mirrors: Mirror Glazing Quality for blemish requirements and complying with ASTM C1048 for Kind FT, Condition A, tempered float glass before silver coating is applied; clear
  - 1. Nominal Thickness: **6.0 mm**.

MIRRORS

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#### 2.3 MISCELLANEOUS MATERIALS

- A. Fasteners: Fabricated of same basic metal and alloy as fastened metal and matching it in finished color and texture where fasteners are exposed.
- B. Anchors and Inserts: Provide devices as required for mirror hardware installation. Provide toothed or lead-shield, expansion-bolt devices for drilled-in-place anchors. Provide galvanized anchors and inserts for applications on inside face of exterior walls and where indicated.

#### 2.4 FABRICATION

A. Shop fabricates mirrors to greatest extent possible.

#### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine substrates, over which mirrors are to be mounted, with Installer present, for compliance with installation tolerances, substrate preparation, and other conditions affecting performance of the Work.
- B. Verify compatibility with and suitability of substrates, including compatibility of existing finishes or primers with mirror mastic.
- C. Proceed with installation only after unsatisfactory conditions have been corrected and surfaces are dry.

#### 3.2 PREPARATION

A. Comply with mastic manufacturer's written installation instructions for preparation of substrates, including coating substrates with mastic manufacturer's special bond coating where applicable.

#### 3.3 INSTALLATION

- A. General: Install mirrors to comply with mirror manufacturer's written instructions and with referenced National Glass Association (NGA) publications. Mount mirrors accurately in place in a manner that avoids distorting reflected images.
  - 1. NGA Publications:,"Glazing Manual" and "Installation Techniques Designed to Prolong the Life of Flat Glass Mirrors."
- B. Provide a minimum airspace of 1/8 inch (3 mm) between back of mirrors and mounting surface for air circulation between back of mirrors and face of mounting surface.

MIRRORS

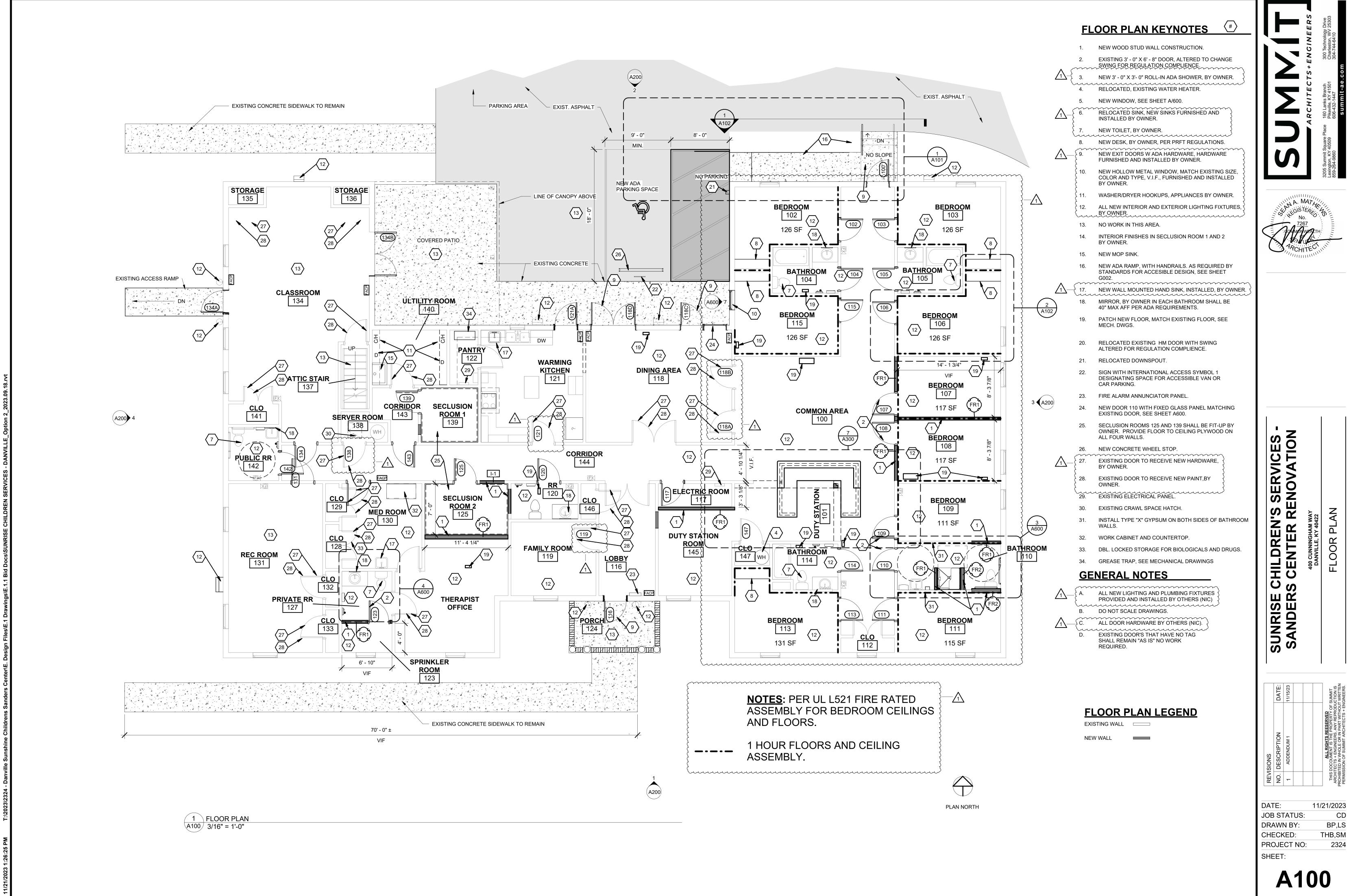
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- C. Install mirrors with **mastic** mirror hardware. Attach mirror hardware securely to mounting surfaces with mechanical fasteners installed with anchors or inserts as applicable. Install fasteners so heads do not impose point loads on backs of mirrors.
  - 1. Install mastic as follows:
    - a. Apply barrier coat to mirror backing where approved in writing by manufacturers of mirrors and backing material.
    - b. Apply mastic to comply with mastic manufacturer's written instructions for coverage and to allow air circulation between back of mirrors and face of mounting surface.
    - c. After mastic is applied, align mirrors and press into place while maintaining a minimum airspace of 1/8 inch between back of mirrors and mounting surface.

#### 3.4 CLEANING AND PROTECTION

- A. Protect mirrors from breakage and contaminating substances resulting from construction operations.
- B. Do not permit edges of mirrors to be exposed to standing water.
- C. Maintain environmental conditions that prevent mirrors from being exposed to moisture from condensation or other sources for continuous periods of time.
- D. Clean exposed surface of mirrors not more than four days before date scheduled for inspections that establish date of Substantial Completion. Clean mirrors as recommended in writing by mirror manufacturer and NGA's publication "Proper Procedures for Cleaning Flat Glass Mirrors."

END OF SECTION 088300



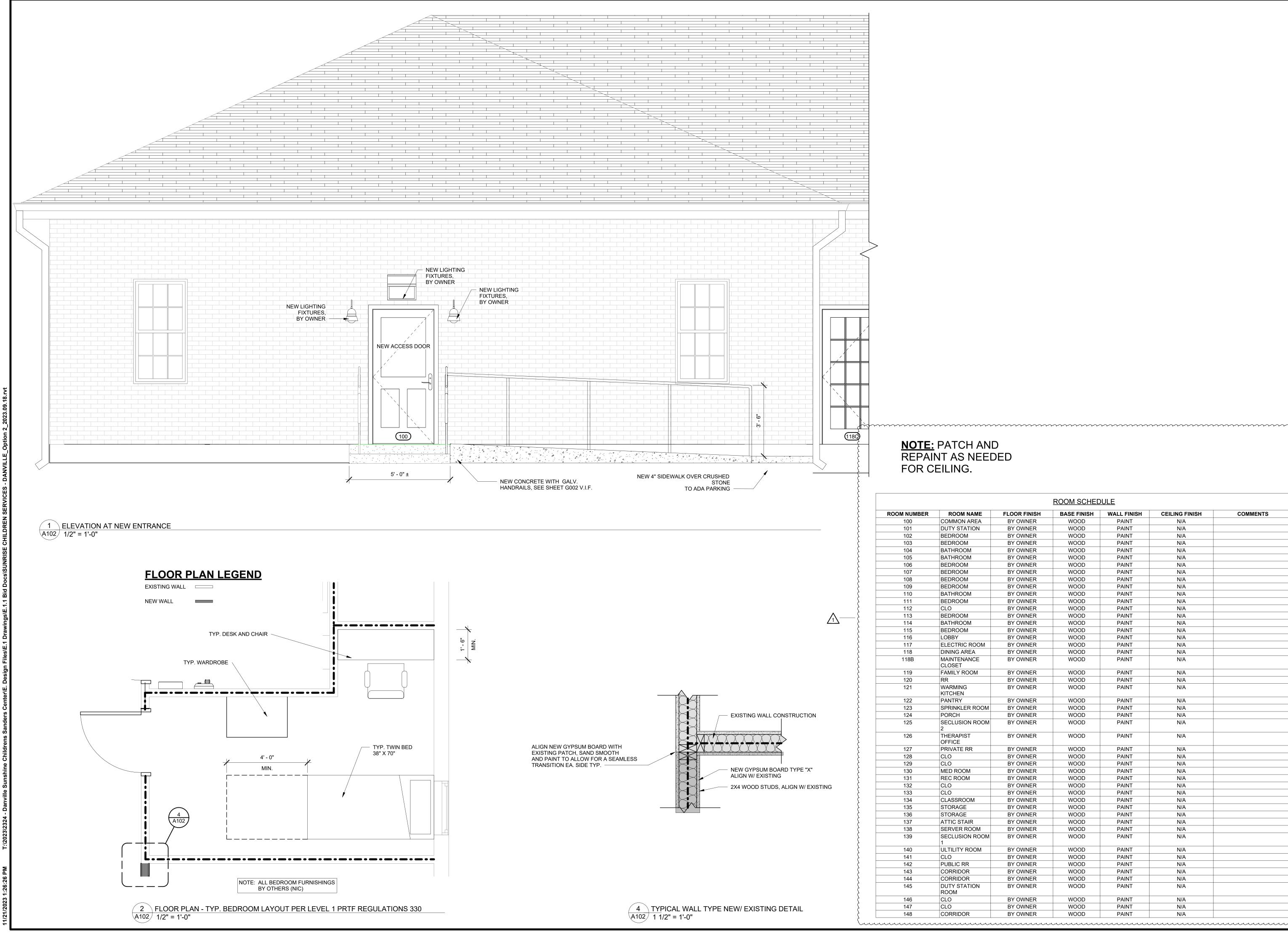
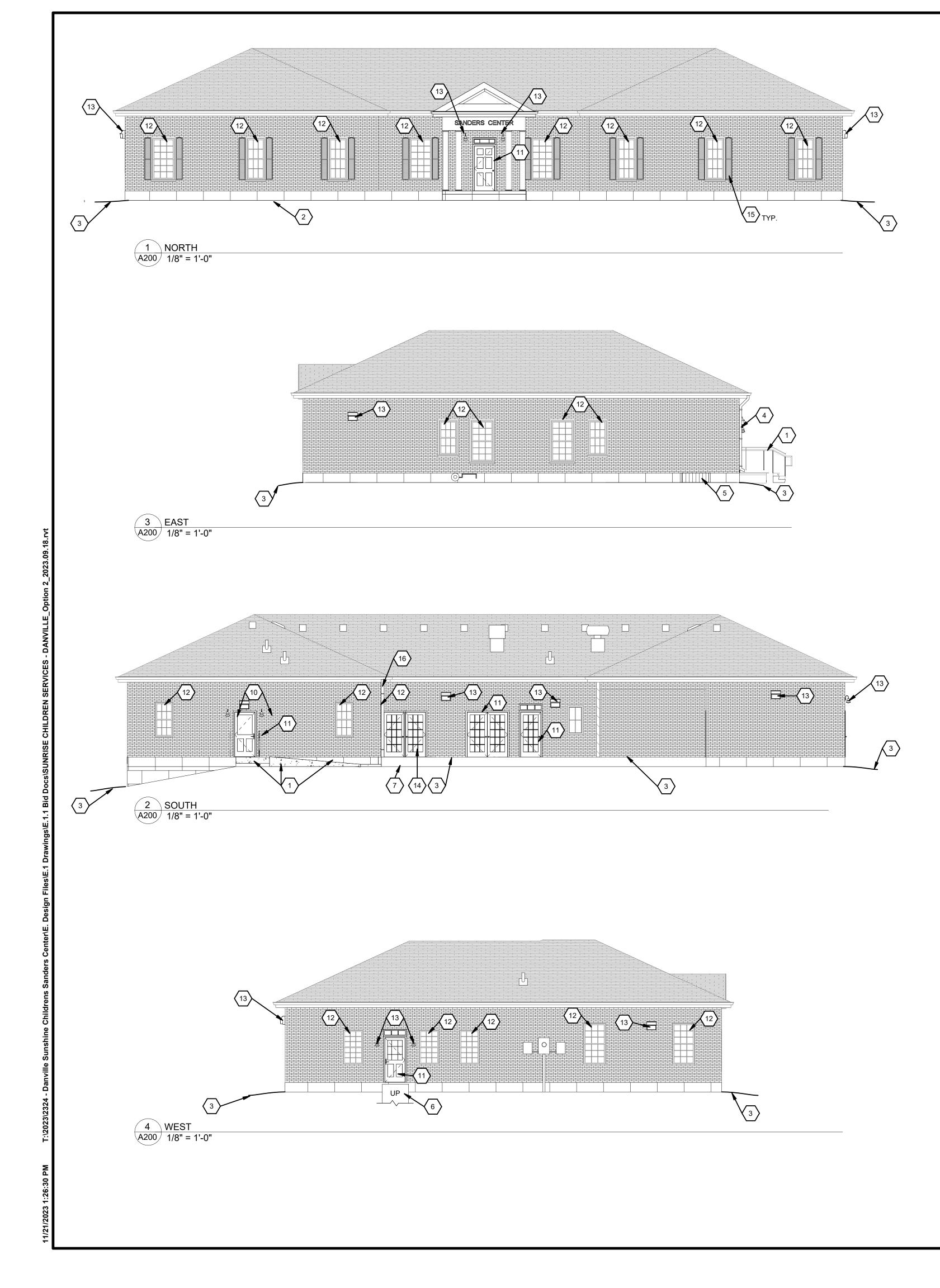


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2324 PROJECT NO: SHEET: A102

/MON AREA		BASE FINISH	WALL FINISH	CEILING FINISH	COMMENTS
	BY OWNER	WOOD	PAINT	N/A	
Y STATION	BY OWNER	WOOD	PAINT	N/A	
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ROOM	BY OWNER	WOOD	PAINT	N/A	
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INKLER ROOM	BY OWNER	WOOD	PAINT	N/A	
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1

# ELEVATION KEY NOTES

1. NEW RAMP W/ 1:12 RISE MAX. V.I.F. AND NO SLOPE ON THE LANDING W/ GALVANIZEDALUMINUM RAILING.

- 2. EXISTING CONCRETE SIDEWALK.
- 3. EXISTING GRADE
- 5. EXISTING CRAWL SPACE.
- 6. EXISTING CONCRETE RAMP.
  - ADA HANDICAP PARKING SPACE.
- INFILL DOOR OPENING FOR PLACEMENT OF NEW WINDOW. NEW WINDOW. SEE A/600
- NEW EXTERIOR LIGHT FIXTURE BY OWNER, PROVIDE NEW ELECTRICAL BOX.
- NEW 3'-0" x 6'-8" DOOR AND HOLLOW METAL DOOR FRAME. SEE DOOR SCHEDULE A/600. HARDWARE BY OWNER.
- 2 12. NEW WINDOWS BY OWNER.
- 13. NEW EXTERIOR LIGHT FIXTURES BY OWNER. ..... 14. NEW DOOR. SEE DOOR SCHEDULE A/600.
- 15. EXISTING SHUTTERS TO REMAIN. 16. RELOCATED DOWNSPOUT.



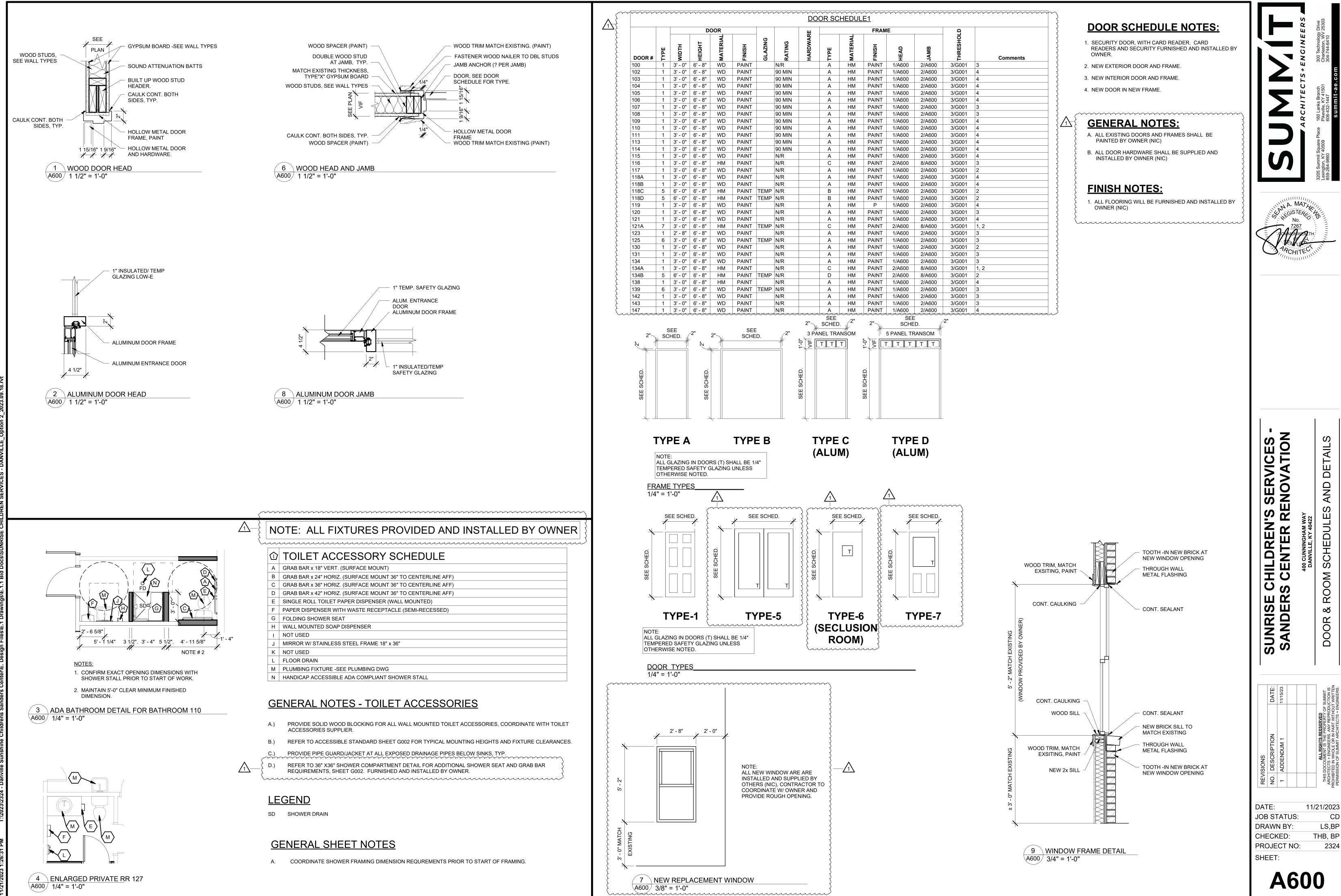
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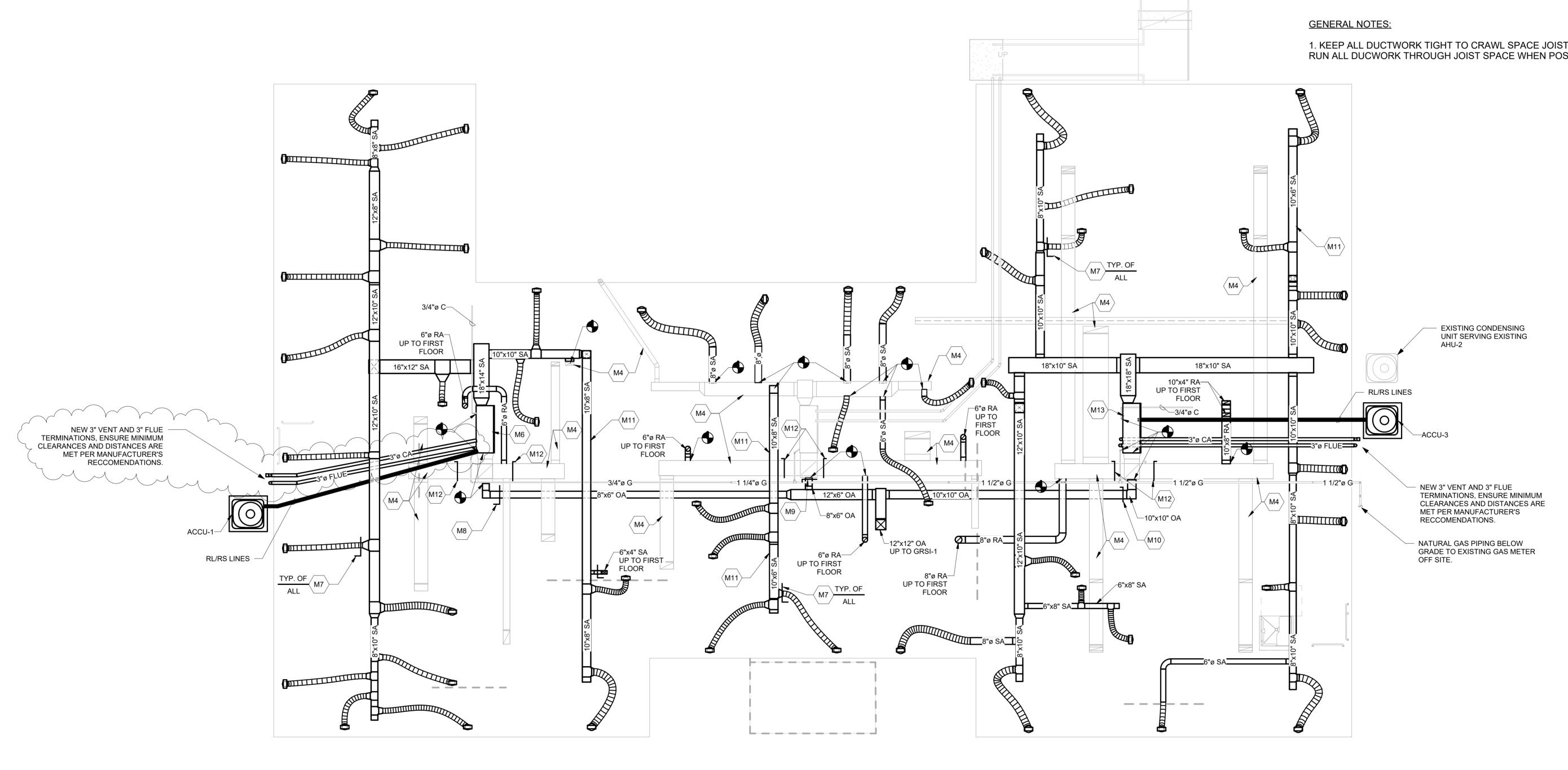


2324

PROJECT NO:

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# KEY VALUE

M4	ENSURE ALL EXISTING DUCTWORK TO I
M6	CONNECT NEW AIR HANDLER TO EXIST EXISTING CONDENSATE DRAIN. CONTR SIZES FOLLOW AIR HANDLER MANUFAC
	AND DIRT LEG FOR EACH AIR HANDLER
M7	ALL BRANCH RUN-OUTS TO BE PROVIDE BRANCH DETAIL. TYPICAL FOR ALL SUP
M8	BALANCE AHU-1 OUTSIDE AIR DAMPER
M9	BALANCE AHU-2 OUTSIDE AIR DAMPER
M10	BALANCE AHU-3 OUTSIDE AIR DAMPER
M11	RUN DUCT BETWEEN JOISTS AND TAP F
M12	RETROFIT RETURN AIR DAMPERS IN RE
M13	CONNECT NEW AIR HANDLER TO EXIST FEILD VERIFY EXISTING PIPE SIZES, AN RECCOMENDATIONS. ENSURE GAS PIPI

# KEYNOTE LEGEND

## TEXT

REMAIN IS INSULATED PER SPECIFICATIONS WITH INTACT VAPOR BARRIER. TING 2" VENT, EXISTING 2" COMBUSTION AIR, EXISTING 3/4" GAS LINE, AND RACTOR TO FEILD VERIFY EXISTING PIPE SIZES, AND ENSURE EXISTING PIPE CTURER'S RECCOMENDATIONS. ENSURE GAS PIPING HAS SHUT-OFF VALVE

DED WITH SPIN-IN DAMPERS AT TAKE-OFF AS SHOWN IN ROUND SUPPLY AIR PPLY DIFFUSERS.

TO 150 CFM, AND RETURN AIR DAMPERS TO 1450 CFM TOTAL.

TO 140 CFM, AND RETURN AIR DAMPERS TO 1060 CFM TOTAL. TO 380 CFM, AND RETURN AIR DAMPERS TO 1620 CFM TOTAL.

FLEX DUCT CONNECTION FROM BOTTOM OF DUCT.

ETURN DUCTWORK TO ALLOW BALANCING OF OUTSIDE AIR DUCT. FING 3/4" GAS LINE, AND EXISTING CONDENSATE DRAIN. CONTRACTOR TO ND ENSURE EXISTING PIPE SIZES FOLLOW AIR HANDLER MANUFACTURER'S PING HAS SHUT-OFF VALVE AND DIRT LEG FOR EACH AIR HANDLER.

1. KEEP ALL DUCTWORK TIGHT TO CRAWL SPACE JOISTS. RUN ALL DUCWORK THROUGH JOIST SPACE WHEN POSSIBLE.

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M100

# MECHANICAL SYMBOLS

ABOVE FINISHED GRADE FINISHED FLOOR ELEVATION ABOVE FINISHED FLOOR ACCESS DOOR TYPICAL NOT TO SCALE EXHAUST FAN ELECTRIC HEATER AIR HANDLING UNIT CONDENSING UNIT FIRE DAMPER SMOKE DAMPER TAGGED NOTE FIRE/SMOKE DAMPER
CARBON DIOXIDE SENSOR
CONDENSATE DRAIN LINE
INDICATES AIR DISTRIBUTION DEVICE SPECIFICATION L = LOUVER T = TRANSFER GRILLE S = SUPPLY DIFFUSER OR REGISTER, R = RETURN GRILLE OR REGISTER, E = EXHAUST GRILLE OR REGISTER) CFM IF INDICATED ON DWG.
SUPPLY AIR DUCT/DUCT DIM. 20'' HORIZ. X 12'' VERT. (ONE LINE)
RETURN AIR DUCT (ONE LINE) 20'' HORIZ. X 12'' VERT. (ONE LINE) EXHAUST AIR DUCT (ONE LINE) 12'' HORIZ. X 12'' VERT. (ONE LINE)
VOLUME DAMPER (MANUAL)
BOWDEN VOLUME DAMPER
U.L. LISTED PENETRATION
SUPPLY, RETURN, EXHAUST GRILLE
THERMOSTAT OR REMOTE SENSOR
DUCT MOUNTED SMOKE DETECTOR
MECHANICAL EQUIPMENT DESIGNATOR
SET OF REFRIGERANT LINES

## MECHANICAL GENERAL NOTES

1. EACH CONTRACTOR, PROPOSER, SUPPLIER AND/OR MANUFACTURER SHALL REFER TO ALL DOCUMENTS PERTAINING TO THIS PROJECT AND COORDINATE ACCORDINGLY SO AS TO ENSURE ADEQUACY OF FIT, COMPLIANCE WITH SPECIFICATIONS, PROPER VOLTAGE AND CURRENT CHARACTERISTICS TO AVOID CONFLICT WITH ANY OTHER BUILDINGS SYSTEMS.

2. ALL OFFSETS, TURNS, FITTINGS, TRIM-, DETAIL, ETC., MAY NOT BE INDICATED, BUT SHALL BE PROVIDED AS REQUIRED. ADDITIONAL ALLOWANCES SHALL BE INCLUDED FOR SAME IN EACH PROPOSERS BID.

3. INSTALL NO PIPING, CONDUITS, ETC., IN A LOCATION OR IN A MANNER WHICH WILL ALLOW FREEZING AND THE COLLECTION OF CONDENSATION THEREON.

4. OBSERVE ALL APPLICABLE CODES, RULES, AND REGULATIONS THAT MAY APPLY TO THE WORK UNDER THIS CONTRACT. (CITY, COUNCIL, LOCAL, FEDERAL, MUNICIPALITY, UTILITY COMPANY, OSHA, COMMONWEALTH OF KENTUCKY, ETC.)

5. UNLESS OTHERWISE SPECIFIED OR INDICATED, ALL EQUIPMENT AND/OR MATERIALS WITHIN OCCUPIED SPACES OR EXPOSED TO VIEW ON THE BUILDING EXTERIOR SHALL BE PRIMED AND FINISHED WITH COLOR AS CHOSEN BY ARCHITECT.

6. UNLESS OTHERWISE SPECIFIED OR INDICATED, INSTALL DIFFUSERS, REGISTERS, GRILLES, SMOKE DETECTORS AND OTHER CEILING MOUNTED APPURTENANCES IN A SYMMETRICAL PATTERN. UNLESS SPECIFICALLY INDICATED OTHERWISE, REFER TO THE ARCHITECT'S REFLECTED CEILING PLAN AS APPLICABLE.

7. ANY VIBRATING, OSCILLATING OR OTHER NOISE OR MOTION PRODUCING EQUIPMENT SHALL BE ISOLATED FROM SURROUNDING SYSTEMS IN AN APPROVED MANNER. NOISY OR STRUCTURALLY DAMAGING INSTALLATIONS SHALL BE SATISFACTORILY REPLACED OR REPAIRED AT THE INSTALLING CONTRACTORS' EXPENSE.

8. DEVIATIONS IN SIZES, CAPACITIES, FIT, FINISH, ETC., FOR EQUIPMENT FROM THAT PRIME SPECIFIED SHALL BE THE RESPONSIBILITY OF THE PURCHASER OF THAT EQUIPMENT. ANY PROVISIONS REQUIRED TO ACCOMODATE A DEVIATION, SHALL BE THE RESPONSIBILITY OF THE PURCHASER.

9. DO NOT SCALE FROM DRAWINGS, AS PRINTING DISTORTS SCALE. WORK SHALL BE LAID OUT FROM DIMENSIONED DRAWINGS, OR DIMENSIONS SUPP-LIED TO THE CONTRACTOR.

10. ALL ELECTRICAL COMPONENTS OR EQUIPMENT SHALL BE LABELED BY UNDERWRITER'S LABORATORIES, OR OTHER APPROVED LISTING AGENCY.

11. ALL SUPPORT FOR EQUIPMENT, DEVICES OR FIXTURES SHALL BE UNIQUE, FROM THE BUILDING STRUCTURE. DO NOT SUPPORT WORK FROM OTHER TRADES OR EQUIPMENT. HOLD ALL ABOVE CEILING EQUIPMENT TIGHT TO STRUCTURAL SUPPORTING ROOF DECK.

12. WHERE INTERRUPTING AN EXISTING UTILITY OR SERVICE DELIBERATELY OR ACCIDENTALLY, THE RESPONSIBLE CONTRACTOR SHALL WORK CONTINUOUSLY AS NEEDED TO RESTORE SAME PROVIDING PREMIUM TIME AS NEEDED.

13. WHERE PENETRATING ROOFING MEMBRANE OR OTHER MATERIALS USED FOR WEATHERPROOFING THE BUILDING, MAKE SUCH PENETRATIONS IN A WAY THAT WILL NOT VOID OR DIMINISH THE ROOFING WARRANTY OR INTEGRITY IN ANYWAY. COORDINATE ALL SUCH PENETRATIONS WITH THE ROOFING MANUFACTURER.

14. CONTRACTOR TO PROVIDE TURNING VANES IN ALL MAIN DUCT 45\90 DEGREE TURNS. THIS APPLIES TO ALL S.A. & R.A. DUCTS.

						GAS	FURNAC	E – D	COIL							
MARK	DAIKIN MODEL		S	UPPLY FAN			OA CFM	TOTAL COOLING	SENSIBLE COOLING	GAS INPUT	GAS OUTPUT	AFUE		ELECTRICA	_	REMARKS
MARK	DAIRIN MODEL	CFM	TYPE	DRIVE		E.S.P.	UA CFM	(MBH)	(MBH)			AFUE	MCA	MOP	VOLTS/ø	REMARNS
AHU—1	DM96VC1005	1600	MULTI	DIRECT	1	0.75	150	48	38.4	100	96.1	96	13.9	20	120/1	1,2,3,4,7
AHU-2	EXISTING UNIT	1200	MULTI	DIRECT	$\frac{3}{4}$	0.6	140	36	28.8	80	$\overline{}_{76}$	95	$\sim$			6
AHU-3	DM96VC1205	1990	MULTI	DIRECT	1	0.7	380	60	48	120	115.3	96 (	14.4	20	120/1	1,2,3,4,5,7
	$\sim$	•	•	•	•		•	•	•	•		•		,		

REMARKS:

1. FRONT ACCESS FILTER WITH 2 SPARE SETS OF FILTERS.

2. FACTORY PROGRAMMABLE SINGLE STAGE HEATING/COOLING THERMOSTAT WITH ON-OFF-AUTO FAN SWITCH AND HEAT/COOL AUTO-CHANGEOVER.

3. PROVIDE DX REFRIGERATION COIL MATCHED TO CAPACTIY OF SPECIFIED CONDENSING UNIT.

4. AIR HANDLER AND MATCHING COIL TO BE DESIGNED FOR HORIZONTAL ORIENTATION.

5. PROVIDE SMOKE SHUT-DOWN IN RETURN AIR DUCT BEFORE OUTSIDE AIR DUCT. 6. VERIFY EXISTING CONDENSING UNIT IS OPERATIONAL, AND CONSULT ENGINEER IF REPLACEMENT IS NEEDED.

7. AIR HANDLER TO BE RATED FOR 30 FEET OF VENT LENGTH WITH 4 ELBOWS.

	SPLIT SYSTEM CONDENSING UNIT												
MARK	DAIKIN MODEL	SERVICE	NOMINAL	SEER RATING	TOTAL COOLING		ELECTRICA	_	REMARKS				
MARN	DAIRIN MODEL	SERVICE	TONNAGE	SEEK KATING	(MBH)	МСА	МОР	VOLTS/ø	REMARNS				
ACCU-1	DX9VCA481	AHU—1	4	19	48	30.1	35	230/1	1,2,3,4,5,6,7				
ACCU-2	EXISTING UNIT	AHU-2	3	16	36	20.3	35	230/1	8				
ACCU-3	DX9VCA601	AHU-3	5	19	60	31.1	35	230/1	1,2,3,4,5,6,7				

REMARKS:

COOLING CAPACITY IS BASED ON 95°F AMBIENT AIR TEMP & RATED IN ACCORDANCE WITH D.O.E. TESTS & A.R.I. STANDARDS.

2. PROVIDE UNIT WITH SUCTION AND DISCHARGE SERVICE VALVES.

3. PROVIDE CRANKCASE HEATER FILTER-DRIER, AND LOW PRESSURE SWITCH. 4. PROVIDE UNIT WITH ELECTRONIC EXPANSION VALVES AND HARD START KITS. 5. 5 YEAR COMPRESSOR WARRANTY.

6. PROVIDE HIGH EFFIECIENCY UNIT.

7. LOW AMBIENT HEAD PRESSURE CONTROL.

	EXHAUST FAN SCHEDULE												
DESIGNATION	LOCATION	MANUFAC.	MODEL	CFM	ESP	H.P.	DRIVE	SONES	VOLT/Ø	FLA	WEIGHT (LBS)	REMARKS	
EF-1	CEILING	GREENHECK	SP-A90	70	0.2	FRACT.	DIRECT	0.7	120/1	0.17	12	1,2,3,4	
EF-2	CEILING	GREENHECK	SP-A70	50	0.2	FRACT.	DIRECT	0.6	120/1	0.14	12	1,2,3,4	
EF-3	CEILING	GREENHECK	SP-A70	50	0.2	FRACT.	DIRECT	0.6	120/1	0.14	12	1,2,3,4	
EF-4	CEILING	GREENHECK	SP-A110	100	0.2	FRACT.	DIRECT	0.8	120/1	0.19	17	1,2,3,4	
EF-5	CEILING	GREENHECK	SP-A110	100	0.2	FRACT.	DIRECT	0.8	120/1	0.19	17	1,2,3,4	
EF-6	CEILING	GREENHECK	SP-A110	100	0.2	FRACT.	DIRECT	0.8	120/1	0.19	17	1,2,3,4	
EF-7	CEILING	GREENHECK	SP-A110	100	0.2	FRACT.	DIRECT	0.8	120/1	0.19	17	1,2,3,4	
EF-8	CEILING	GREENHECK	SP-A70	50	0.2	FRACT.	DIRECT	0.6	120/1	0.14	12	1,2,3,4	

## REMARKS:

1. PROVIDE WITH ALUMINUM GRILLE AND TAMPER PROOF SCREWS.

2. PROVIDE WITH APPROPRIATE BACK DRAFT DAMPER

3. PROVIDE STARTER AND DISCONNECT SWITCH

4. PROVIDE GOOSENECK TERMINATION ON ROOF

GRAVITY INTAKE HOOD SCHEDULE											
MARK	MANUFACTURER	MODEL	E.S.P.	THROAT AREA (SQ. FT.)	THROAT VELOCITY (FT/MIN.)	THROAT SIZE	MAX CFM	WEIGHT	REMARKS		
GRSI-1	GREENHECK	GRSI-16	0.033	1.5	462	16"	670	16	1,2,3		

## **REMARKS:**

1. PROVIDE BIRDSCREEN

2. PROVIDE COUNTERBALANCED GRAVITY INTAKE DAMPER WITH BLADE AND JAMB SEALS. 3. PROVIDE INSULATED ROOF CURB

GRAVITY RELIEF HOOD SCHEDULE											
MARK	MANUFACTURER	MODEL	DEL E.S.P. THROAT AREA (SQ. FT.)		THROAT VELOCITY (FT/MIN.)	THROAT SIZE	MAX CFM	WEIGHT	REMARKS		
GRSR-1	GREENHECK	GRSR-8	0.03	0.4	541	8"	170	7	1,2,3		
GRSR-2	GREENHECK	GRSR-10	0.01	0.6	135	8"	50	7	1,2,3		
GRSR-3	GREENHECK	GRSR-8	0.03	0.4	541	8"	200	7	1,2,3		
GRSR-4	GREENHECK	GRSR-8	0.03	0.4	541	8"	200	7	1,2,3		

**REMARKS:** 

1. PROVIDE BIRDSCREEN AND #12 INSECT SCREEN.

2. PROVIDE GRAVITY RELIEF DAMPERS WITH FELT TIPPED BLADES.

3. PROVIDE INSULATED AND SLOPED ROOF CURB.



8. VERIFY EXISTING CONDENSING UNIT IS OPERATIONAL, AND CONSULT ENGINEER IF REPLACEMENT IS NEEDED.

REGISTERS, GRILLES, AND DIFFUSERS											
MARK	PRICE MODEL	ТҮРЕ	NOMINAL SIZE	MOUNTING	CFM MAX.	PD MAX.	THROW @ 100 FPS	OBD?	FINISH	NC MAX.	REMARKS
S-1	LBPH SERIES ALUMINUM	LINEAR BAR GRILLE	4"X12"	FLOOR	125	0.07	15' NO DEFL	YES	CHOSEN BY ARCHITECT	22	1,2,4
S-1A	LBPH SERIES ALUMINUM	LINEAR BAR GRILLE	4"X12"	FLOOR	125	0.07	15' NO DEFL	YES	CHOSEN BY ARCHITECT	22	1,2,3,4
S-2	LBPH SERIES ALUMINUM	linear bar grille	6"X12"	FLOOR	165	0.05	16' NO DEFL	YES	CHOSEN BY ARCHITECT	20	1,2,4
S-2A	LBPH SERIES ALUMINUM	linear bar grille	6"X12"	FLOOR	165	0.05	16' NO DEFL	YES	CHOSEN BY ARCHITECT	20	1,2,3,4
S-3	LBPH SERIES ALUMINUM	linear bar grille	4"X10"	SURFACE	50	0.02	8' NO DEFL	YES	CHOSEN BY ARCHITECT	18	1,2,4
S-3A	LBPH SERIES ALUMINUM	linear bar grille	4"X10"	SURFACE	50	0.02	8' NO DEFL	YES	CHOSEN BY ARCHITECT	18	1,2,3,4
S-4	MSRRP SERIES ALUMINUM	RISK RESISTANT Perforated grille	6"X6"	SURFACE	50	0.03	10'	YES	CHOSEN BY ARCHITECT	15	1,2,3,4
R – 1	LBPH SERIES ALUMINUM	linear bar grille	6"X16"	SURFACE	200	0.045	_	_	CHOSEN BY ARCHITECT	18	1,2
R – 1 A	LBPH SERIES ALUMINUM	LINEAR BAR GRILLE	6"X16"	SURFACE	200	0.045	_	-	CHOSEN BY ARCHITECT	18	1,2,3
R-2	LBPH SERIES ALUMINUM	linear bar grille	6"X16"	FLOOR	200	0.045	_	-	CHOSEN BY ARCHITECT	18	1,2
R-2A	LBPH SERIES ALUMINUM	linear bar grille	6"X16"	FLOOR	200	0.045	_	_	CHOSEN BY ARCHITECT	18	1,2,3
R-3	LBPH SERIES ALUMINUM	LINEAR BAR GRILLE	6"X30"	FLOOR	530	0.08	_	_	CHOSEN BY ARCHITECT	26	1,2,3
R-4	LBPH SERIES ALUMINUM	LINEAR BAR GRILLE	6"X30"	SURFACE	345	0.04	_	_	CHOSEN BY ARCHITECT	18	1,2,3
TG-1	MSRRP SERIES ALUMINUM	RISK RESISTANT PERFORATED GRILLE	6"X6"	SURFACE	50	0.03	_	_	CHOSEN BY ARCHITECT	15	1,2,3

## **REMARKS:**

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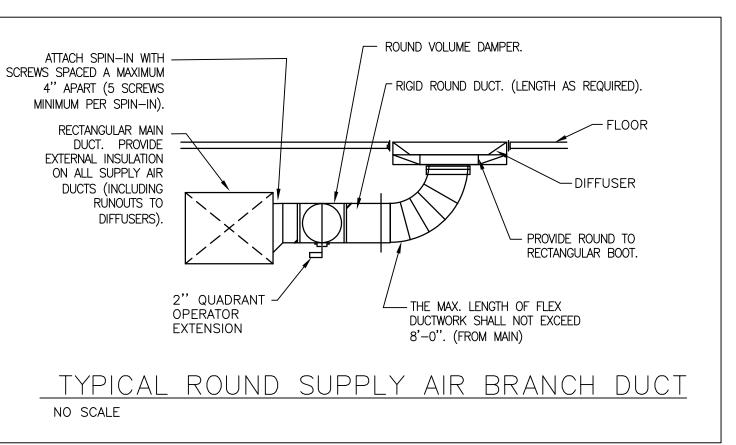
1. PROVIDE DUCT TRANSITION TO GRILLE/DIFFUSER AS REQUIRED.

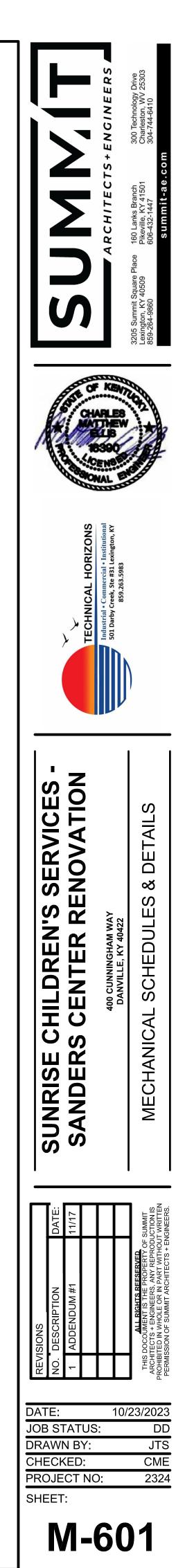
2. IF ARCHITECT DOES NOT CHOOSE A COLOR, THEN COLOR SHALL BE OFF-WHITE OR AS INDICATED ON PLANS.

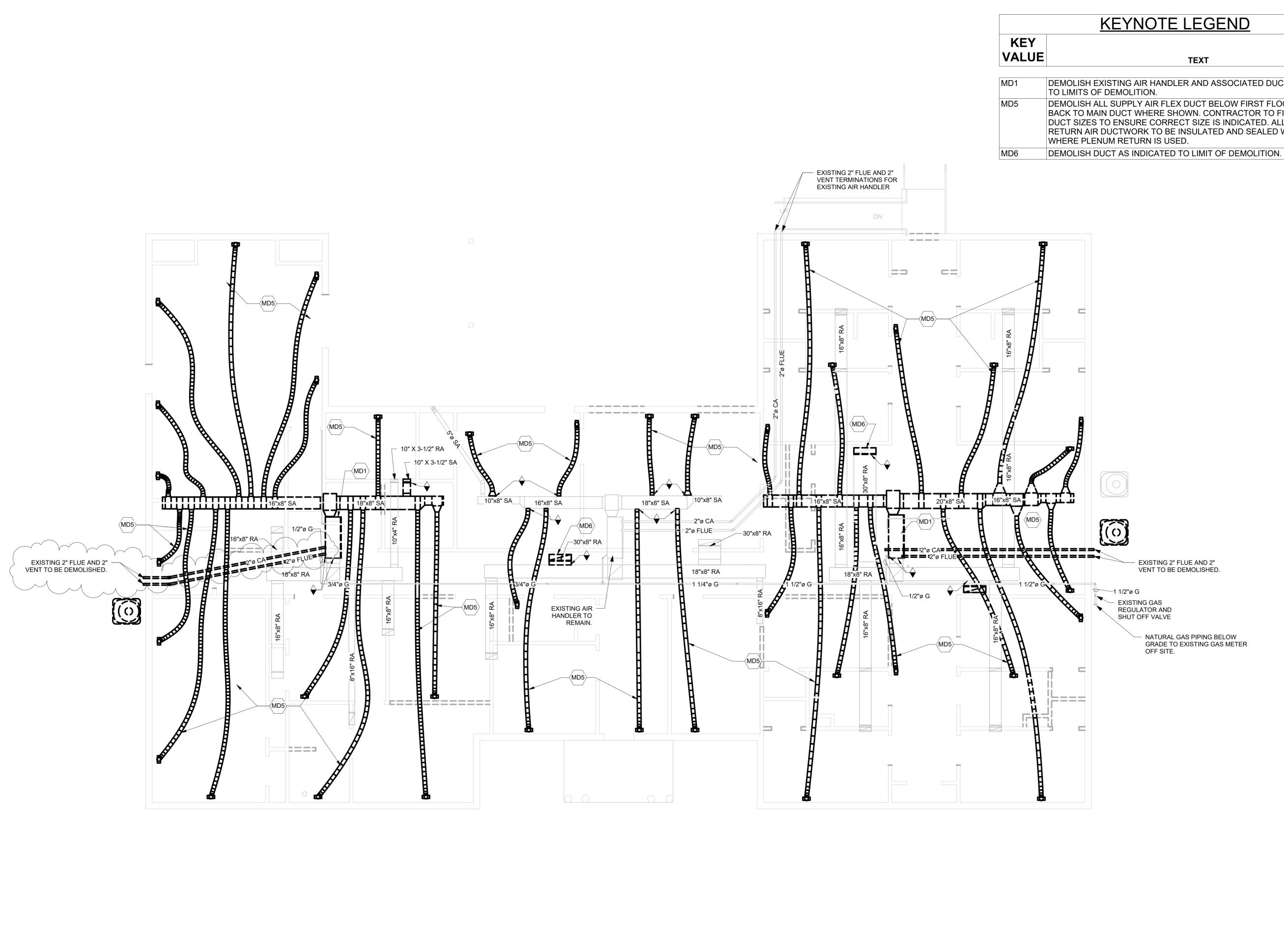
3. TAMPER PROOF HEAVY DUTY BAR GRILLE. PROVIDE TAMPER PROOF SCREWS.

4. PROVIDE MANUFACTURERS INTEGRAL BALANCING DAMPER IN DEVICE TO ALLOW BALANCING OF AIR DEVICE THROUGH FACE OF DEVICE.

# MECHANICAL SCHEDULES & DETAILS









DEMOLISH EXISTING AIR HANDLER AND ASSOCIATED DUCTWORK BACK

DEMOLISH ALL SUPPLY AIR FLEX DUCT BELOW FIRST FLOOR, AND CAP BACK TO MAIN DUCT WHERE SHOWN. CONTRACTOR TO FIELD VERIFY ALL DUCT SIZES TO ENSURE CORRECT SIZE IS INDICATED. ALL EXISTING RETURN AIR DUCTWORK TO BE INSULATED AND SEALED WITH CAULKING

