



PCA

MOUNT VERNON COMPANY

40 BERKELEY STREET

LANDMARKS SUBMISSION

07.11.2017

OUTLINE OF REQUESTED MODIFICATIONS

- New louver in existing opening on Grey Street
- New window above egress door on Grey Street
- New and refurbished doors
- New exterior lighting in various locations
- Patching and painting of underside of exterior “fins”
- New walk up window on Berkeley Street



A - Appleton Street Facade



B - Berkeley Street Facade



Key



C - Berkeley Street / Grey Street Corner



D - Grey Street Facade



Location of proposed louver
Location of proposed window

DESCRIPTION

As part of the HVAC upgrades to the building the existing louvers along Grey Street are being reused. There is an additional need for ventilation that requires an additional louver. In place of an existing mechanical access door the project proposes a new louver. Also along Grey Street an existing louver above the egress door is no longer in use. The project proposes to replace it with a window to match the other new windows previously approved for the building.

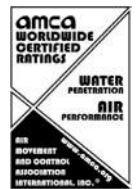
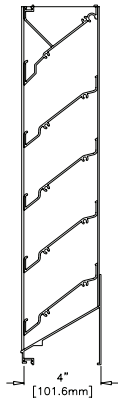


ESD-435

Stationary Louver Drainable Blade

Application and Design

ESD-435 is a weather louver designed to protect air intake and exhaust openings in building exterior walls. Design incorporates drain gutters in the head member and horizontal blades to channel water to the jambs where water is further channeled through vertical downspouts and out at the sloped sill. The ESD-435 is an extremely efficient louver with **AMCA LICENSED PERFORMANCE DATA** enabling designers to select and apply with confidence.

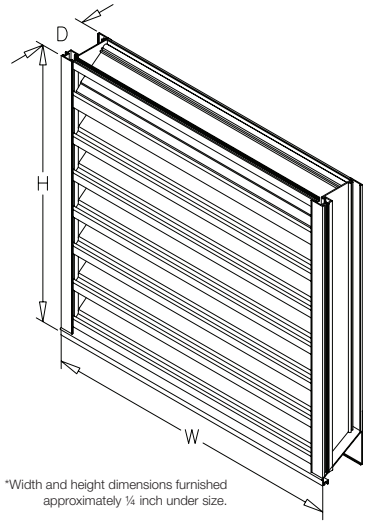


Standard Construction

- Frame** Heavy gauge extruded 6063-T5 aluminum, 4 in. x 0.081 in. nominal wall thickness
- Blades** Drainable design, heavy gauge extruded 6063-T5 aluminum, 0.081 in. nominal wall thickness, positioned at 37.5° angles on approximately 3 ¼ in. centers
- Construction** . . . Mechanically fastened
- Birdscreen** 3/4 in. x 0.051 in. flattened expanded aluminum in removable frame, inside mount (rear)
- Finish** Mill
- Minimum Size** . . . 12 in. W x 9 in. H
- Maximum Single Section Size** . . . 120 in. W or 120 in. H (limited to 70 ft. sq.)

Options (at additional cost)

- A variety of bird and insect screens
- Blank off panel
- Clip angles
- Extended sill
- Filter rack
- Flanged frame
- Glazing adaptor
- Hinged frame
- Security bars
- Welded construction
- 0.125 nominal wall thickness
- A variety of architectural finishes including:
 - Clear anodize
 - Integral color anodize
 - Baked enamel paint
 - Kynar paint



*Width and height dimensions furnished approximately ¼ inch under size.

ADDITIONAL NOTES

- New louver finish to be mill to match existing

WINDOWS

Kawneer offers a comprehensive line of architectural aluminum building products and systems for commercial construction – entrances, framing systems, windows and curtain wall systems. Over the years, Kawneer has built a reputation for producing windows that meet the highest quality standards. Today, we continue that tradition with a combined portfolio of easy-to-maintain Kawneer and Traco brand window products that demonstrate the superior durability and performance that can only come from nearly two centuries of expertise. Our thermal windows are manufactured with long-lasting finishes and durable hardware to help architects and building owners achieve their design objectives.

HUNG AND SLIDING WINDOWS

Our extensive portfolio of hung and sliding window products offers solutions for any building project, whether for new or retrofit applications. Our windows come in a variety of depths and options. The windows have been tested in accordance with AAMA/WDMA/CSA 101/I.S.2/A440 (NAFS) designations. We offer single hung and double hung windows with both tilt and side load sash removal and a variety of horizontal sliding windows.

Single hung window: Only the bottom operating sash moves up and down within the master frame. The top of the window is either fixed glass or fixed sash. The weight of the operating sash is counterbalanced to permit easy operation.

Double hung window: Both operating sashes move up and down within the master frame. The weight of each operating sash is counterbalanced to permit easy operation.

Side load (hung window): The sash is removed by extending the jamb balance clips, raising the sash to full window height, supporting the sash weight and moving the sash to one side to remove it from the master frame.

Tilt (hung window): The lower sash is removed by raising the sash 4°, releasing the tilt releases while supporting the sash weight, and releasing the sash pivot bars to remove the sash from the master frame. Top sash removal is similar.

Horizontal sliding window: The operating sash slides sideways within the master frame. Each operating sash has glides or rollers to permit easy operation.

AA™5450 Thermal Windows
4-5/8" Frame Depth – Side Load
 The industry's smartest window sets the standard for thermal performance
 Single and double hung, AW-PG50-H | Fixed, AW-PG50-FW
 | Single and double slide, AW-PG40-HS

AA™3350 Thermal Windows
3-1/2" Frame Depth – Side Load
 Enhance your views with exceptional value and performance
 Single and double hung, AW-PG70-H | Horizontal single slide, AW-PG70-HS | Horizontal double slide, AW-PG50-HS | Fixed, AW-PG70-FW

NX-5000/6000/7000 Series Thermal Windows
3-1/4" Frame Depth – Tilt
 High energy efficiency and versatility combine to offer exceptional value
 Single and double hung, CW-PG50-H | Horizontal single and double slide, CW-PG50-HS | Fixed, CW-PG50-FW

TR-9000/9800 Series Thermal Windows
4" Frame Depth – Tilt
 Historical sightlines and profiles ideal for retrofit applications
 TR-9000 double hung, AW-PG45-H | TR-9800 double hung, AW-PG50-H | Fixed, AW-PG100-FW

TR-9100/9700 Series Thermal Windows
3-1/4" Frame Depth – Side Load
 Architectural grade single hung window
 TR-9100 single hung, AW-PG50-H | TR-9700 single hung, AW-PG40-H | Fixed, AW-PG100-FW

TR-9900 Series Thermal Windows
4-1/2" Frame Depth – Side Load
 Architectural grade double hung window
 Double hung, AW-PG-50-H | Fixed, AW-PG100-FW

TR-6800 Series Thermal Windows
3-1/4" Frame Depth
 Architectural grade horizontal sliding window
 Horizontal single slide, AW-PG50-HS | Fixed, AW-PG100-FW

8400TL Thermal Windows
4" Frame Depth – Side Load
 For remodel, historic restoration or new construction requiring thermal performance, aesthetic appeal and enough choices to appear custom
 Single and double hung, H-AW-70 | Horizontal single and double slide, HS-AW-70 | Fixed, AW-PG100-FW

Proposed window specification to match other windows in building

PROJECTED AND CASEMENT WINDOWS
 Our comprehensive offering of projected and casement windows provides solutions for any building project, whether new or retrofit applications. Our windows come in a variety of depths and other options, and have been tested in accordance with AAMA/WDMA/CSA 101/I.S.2/A440 (NAFS) designations. We offer a flush appearance and overlapping vents to suit the needs of any building type or requirement.

Projected window: The operating vent moves out (project out or awning) or in (project in or hopper) from the master frame. The vent is hinged on the horizontal axis to permit easy operation.

Casement window: Operating vents move out (casement outswing) or in (casement inswing) from the master frame. Each vent is hinged on the vertical axis to permit easy operation.

Tilt-turn or dual action window: The operating vent tilts in from the top for ventilation and swings in from the side for glass cleaning.

AA™4325 Series – OptiQ™ Ultra Thermal Windows
3-1/4" Frame Depth
 Built-in thermal intelligence makes it one of the industry's smartest windows
 Overlap inswing and outswing casements, AW-PG80-C | Overlap project in and project out, AW-PG80-AP | Fixed, AW-PG80-F

AA™900 Thermal Windows
2-5/8" Frame Depth
 Contemporary styling designed for top thermal performance
 Large- and small-missile impact tested for fixed, project out and casement outswing configurations | Mitered vent corners give picture frame appearance | Overlap inswing and outswing, C-AW90 | Project in and project out, AP-AW90 | Fixed, FW-AW90

NX-200 Series Thermal Windows
2-1/4" Frame Depth
 Commercial grade overlap casement and projecting windows
 NX-210 outswing casement and NX-220 inswing casement, CW-PG50-C | NX-240 project in and NX-250 project out, CW-PG50-AP | NX-280 fixed, CW-PG50-FW

NX-300 Series Thermal Windows
3-1/4" Frame Depth
 Overlap window available as casement outswing, project out and fixed configurations

NX-3000 Series Thermal Windows
3-1/4" Frame Depth
 Thermal performance merges with adaptable design to offer more choices
 Available in overlap casement, projected, fixed and tilt-turn configurations | NX-3100 outswing casement and NX-3200 inswing casement, AW-PG80-C | NX-3400 project in and NX-3500 project out, AW-PG80-AP | NX-3800 fixed, AW-PG80-FW | NX-3700 tilt-turn, DAW-AW50

NX-4000 Series Thermal Windows
4-5/8" Frame Depth
 Energy-efficient projecting window offers distinctive and historic look of a hung window
 Project in and project out, AW-PG80-AP | Fixed, AW-PG80-FW

TR-700 Series Windows and TR-700 Window Wall
4-5/8" Frame Depth
 Architectural grade flush design window available as projecting and casement
 The versatile window wall can be used in various applications including horizontal ribbon windows or punched openings and accepts TR-700 series projecting and casement windows
 | Outswing and inswing casement, AW-PG80-C | Project in and project out, AW-PG80-AP | Fixed, AW-PG80-FW

TR-2000 Series Thermal Windows
2-1/4" Frame Depth
 Architectural grade flush casement and projecting windows
 TR-2100 outswing casement and TR-2200 inswing casement, AW-PG80-C | TR-2400 project in and TR-2500 project out, AW-PG80-AP | TR-2800 fixed, AW-PG80-FW

TR-3000 Series Thermal Windows
3-1/4" Frame Depth
 Architectural grade overlap casement and projecting windows
 TR-3100 outswing casement and TR-3200 inswing casement, AW-PG80-C | TR-3400 project in, AW-PG80-AP | TR-3500 project out, AW-PG65-AP | TR-3800 fixed, AW-PG80-FW

8225TL Thermal Windows
2-1/4" Frame Depth
 For high performance in a thermally broken overlap design window system
 Outswing and inswing casement, AW-PG90-C | Project in and project out, AW-PG90-AP | Fixed, AW-PG100-AW | 7225 series non-thermal version available

VISUALLY FRAMELESS VENTILATORS
 These ventilators offer projecting and casement window solutions without the sightline buildup you get when typical operating windows are added to a framing system.

GLASSvent™ UT (Ultra Thermal) Windows
 Best-in-class thermal performance in a visually concealed ventilator
 4-3/8" (111.1 mm) or 5-1/8" (130.2 mm) depth | Architectural window (AW) | Ultra thermal performance | Available as casement or projecting configuration

GLASSvent™ Visually Frameless Ventilator
 For use with storefront systems and curtain wall systems
 Available as project out or outswing casement window | Suitable for retrofit or new construction | Accepts 1/4" and 1" glazing infills | Blast tested per ASTM F1642 | Outswing casement, AW-PG90-C | Project out, AW-PG80-AP
 *Applies to curtain wall version only



Kawneer: 8400TL Horizontal Sliding Window (blast mitigation version), 1600 Wall System™1, AA™3900 Sliding Doors, 350 Heavy Wall™ Entrances
 Vandenberg Hall AFB, Colorado Springs, Colorado
 Architect: Lantz-Boggio Architects, P.C., Englewood, Colorado
 Glazing Contractor: RGI/EPG Joint Venture, Colorado Springs, Colorado
 Photography: © CJBerg Photographics



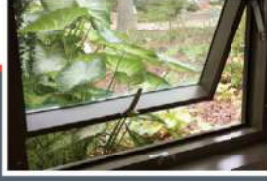
Kawneer: AA™5450 Series – OptiQ™ Ultra Thermal Windows
 Traco: NX-3800 fixed windows (curved) Coddington Hall, Quincy, Massachusetts
 Architect: Wessling Architects, Quincy, Massachusetts
 Window Installer: North East Energy Control Systems, Canton, Massachusetts
 Photography: © Bob Perzel



Traco: NX-5400 Single Hung Windows, NX-8910 Terrace Doors
 Flats on Vine, Columbus, Ohio
 Architect: Sullivan Bruck Architects, Inc., Columbus, Ohio
 Window Installer/Glazing Contractor: Hilliard Glass, Hilliard, Ohio
 Photography: © Matthew Carbone



Kawneer: 7225 Non-Thermal Project Out Windows in 2250 IG Curtain Wall, with 1600 Wall System™1 and 500 Wide Sile Entrances
 Lawrence Berkeley National Laboratory – Molecular Foundry, Berkeley, California
 LEED® Gold certified
 Architect: SmithGroup, San Francisco, California
 Glazing Contractor: Royal Glass Co., Inc., Sacramento, California
 Photography: © CJBerg Photographics



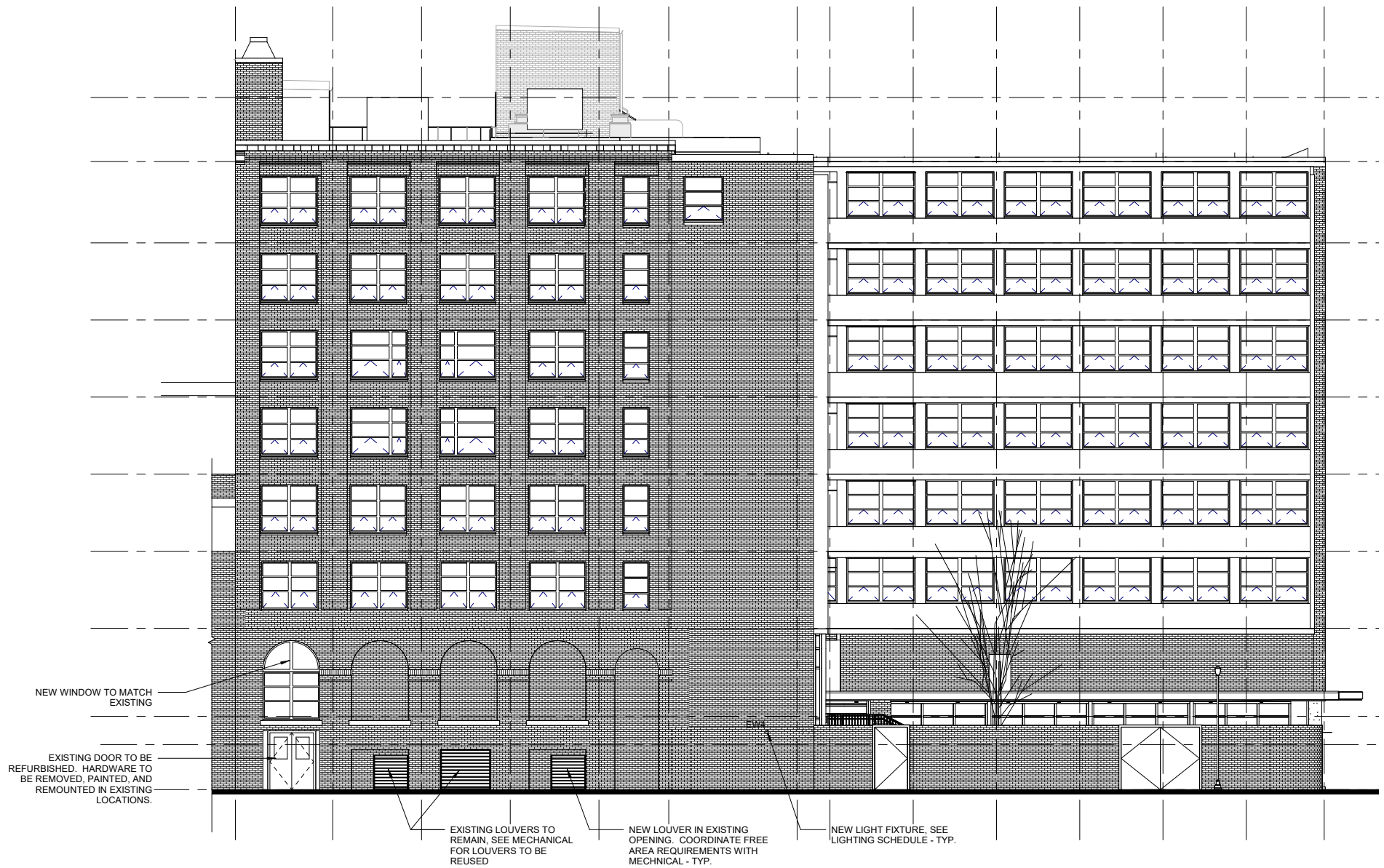
Kawneer: GLASSvent™ Windows for Curtain Wall shown in 1600 Wall System™1 Curtain Wall
 Atlanta Botanical Gardens – Allen and Gail Hardin Visitors Center, Atlanta, Georgia
 Architect: Jova/Daniels/Busby, Atlanta, Georgia
 Glazing Contractor: Snellville Glass Company Inc., Snellville, Georgia
 Photography: © CJBerg Photographics



Traco: TR-700 Series Windows and TR-700 Window Wall, TR-8300 Sliding Glass Door, NX-8910 Terrace Doors
 Kawneer: Trifab™ VersaGlaze™ (VG) 451T Storefront Framing, 350 Medium Sile Entrances
 The Admiral at the Lake, Chicago, Illinois
 Architect: Perkins and Will, Dallas, Texas
 Window Installer: Softer Lite Window Company, Chicago, Illinois
 Glazing Contractor: Alumital Corp., Elk Grove, Illinois
 Photography: © FotoGraphix – Viken Djaferian

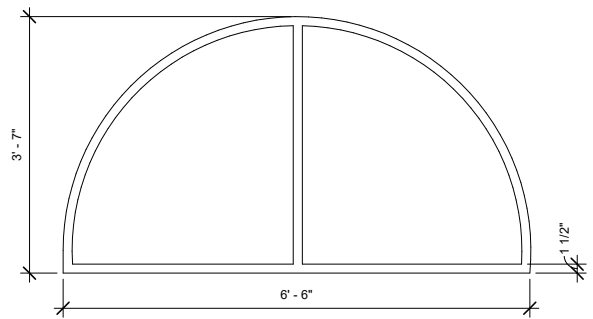


EXISTING ELEVATION - GREY STREET
SCALE: 1/16" = 1'-0"



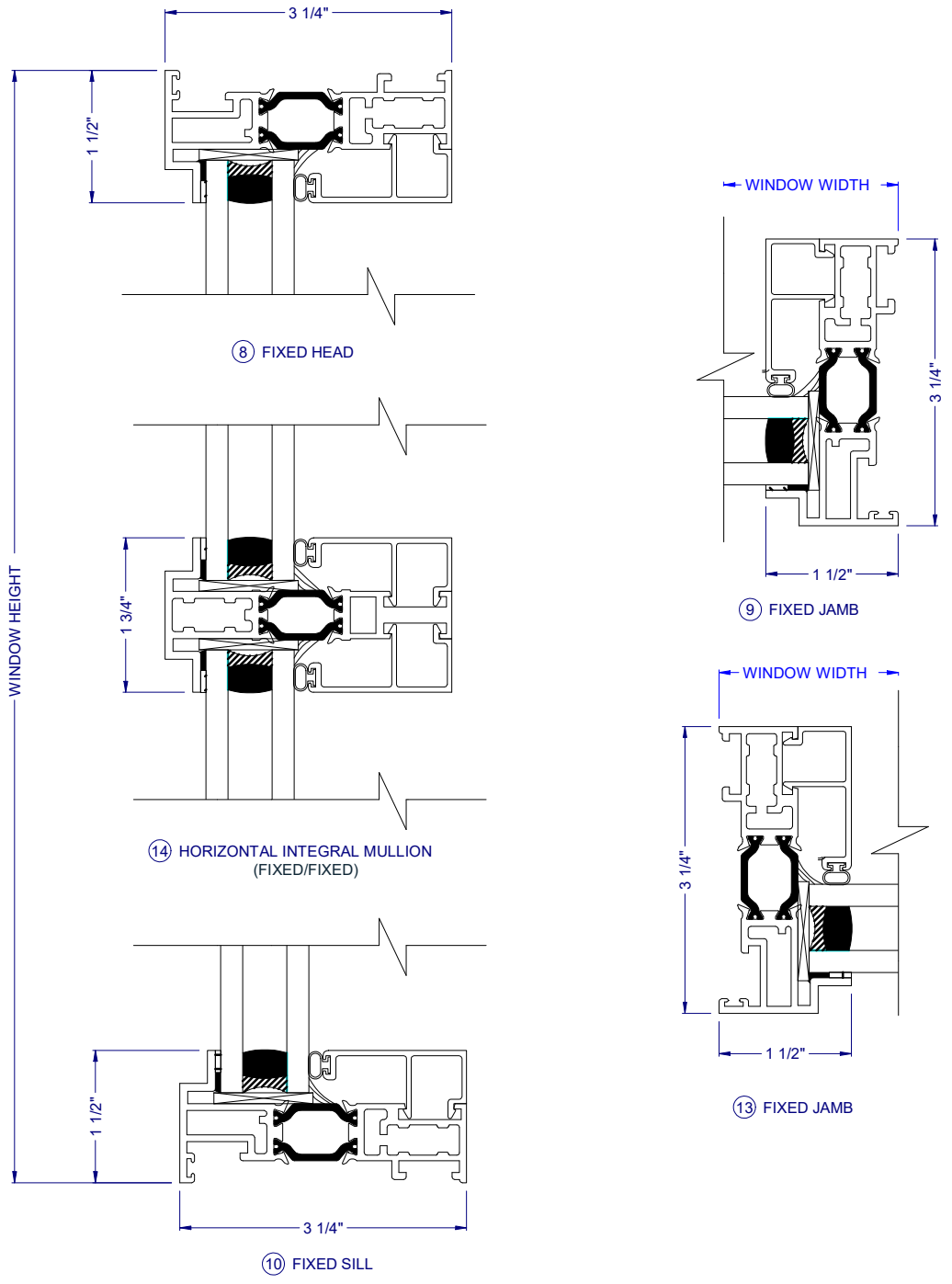
PROPOSED ELEVATION - GREY STREET
 SCALE: 1/16" = 1'-0"

PROPOSED DETAILS



ADDITIONAL NOTES

- Finishes to match previously approved finishes for new windows:
- Exterior finish to be fluoropolymer paint, color "metallic silver"
- Interior finish to be fluoropolymer paint, color charcoal gray



EXISTING PHOTOS



Grey Street Stair Door - Refurbish



Appleton Street Stair Door - Refurbish



Berkeley Street Entrance Door - Refurbish



Appleton Street Access Door - Replace in kind

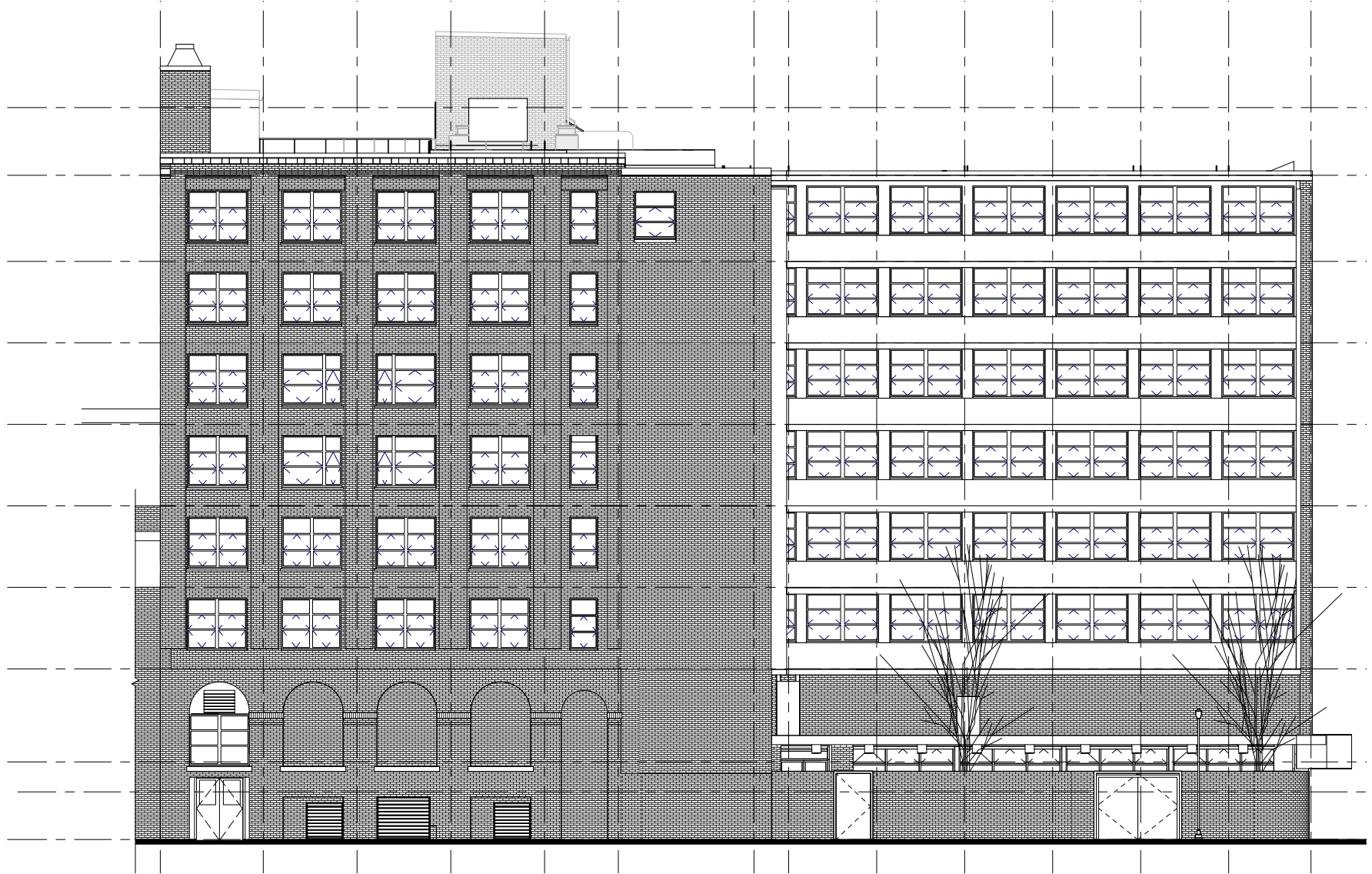
NEW / REFURBISHED DOORS



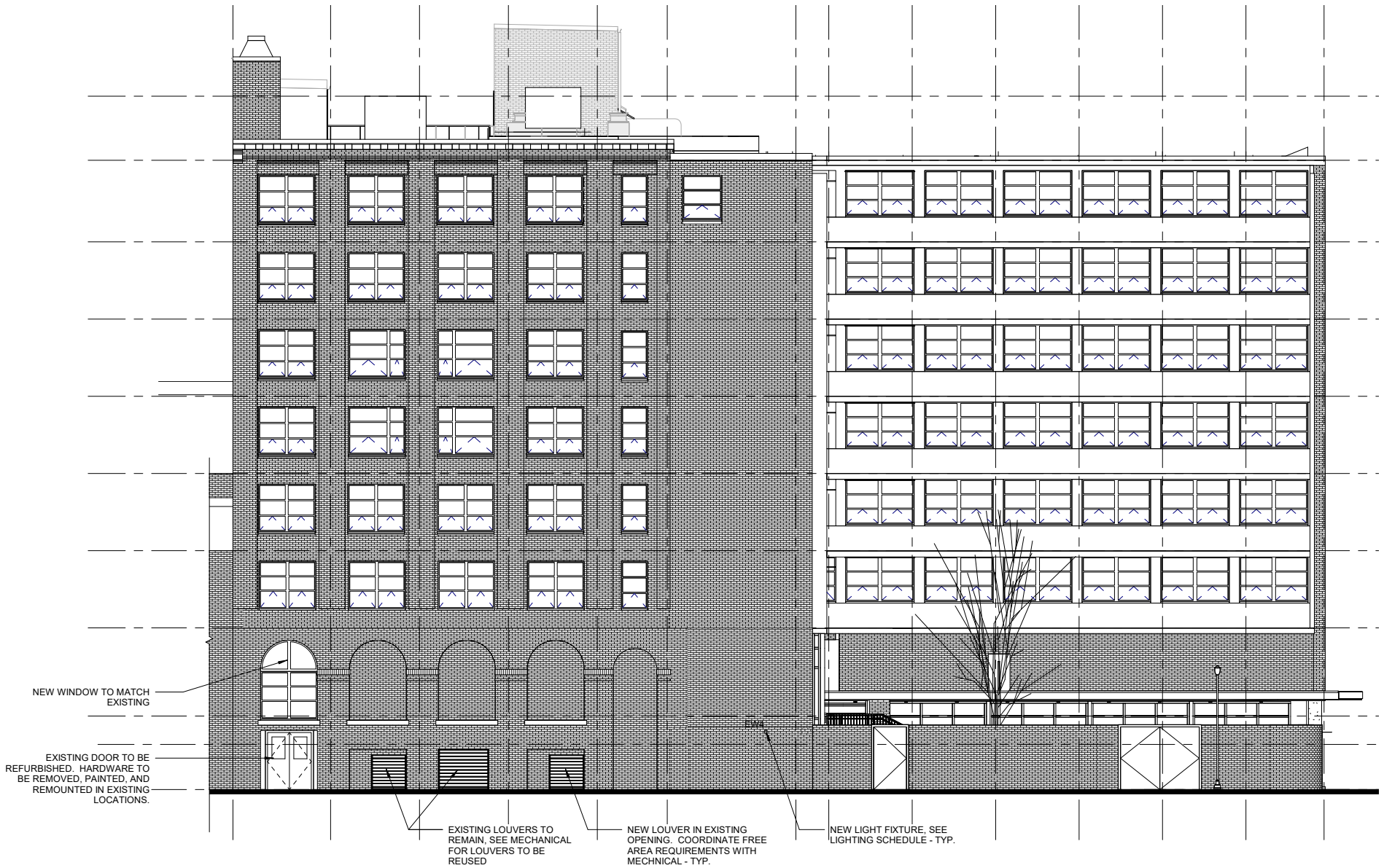
Berkeley Street Entrance Door - Proposed view after refurbishment

DESCRIPTION

As part of the building renovation the existing doors at the street need to be improved. There are 4 locations. One door, an existing hollow metal single lite door, will be replaced in kind with a new hollow metal door to match. The other three doors will be refurbished. The hardware will be removed and painted a charcoal color to match the architect's sample. The doors will be sanded and refinished. The hardware will be then reinstalled and the doors rehung.

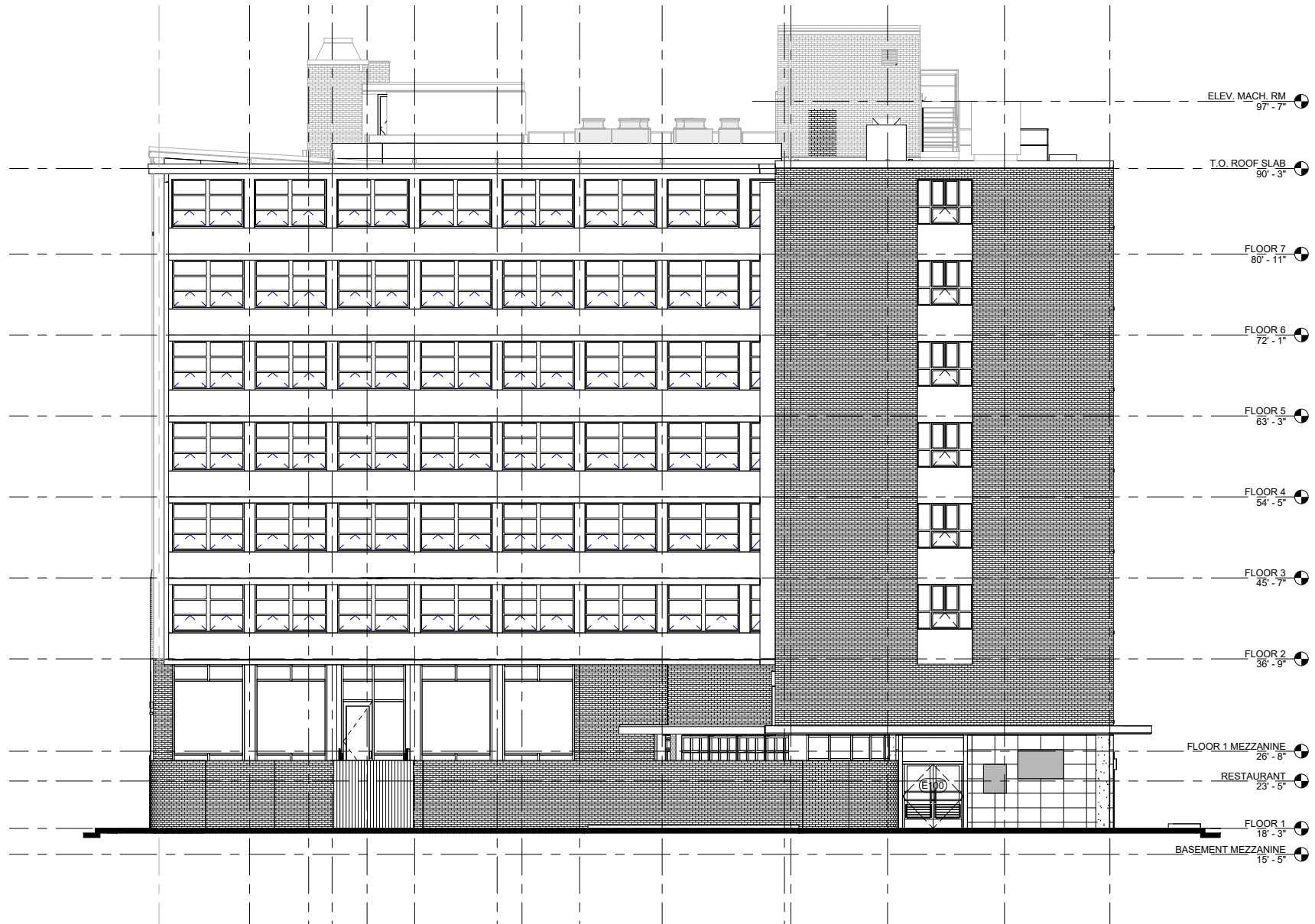


EXISTING ELEVATION - GREY STREET
SCALE: 1/16" = 1'-0"



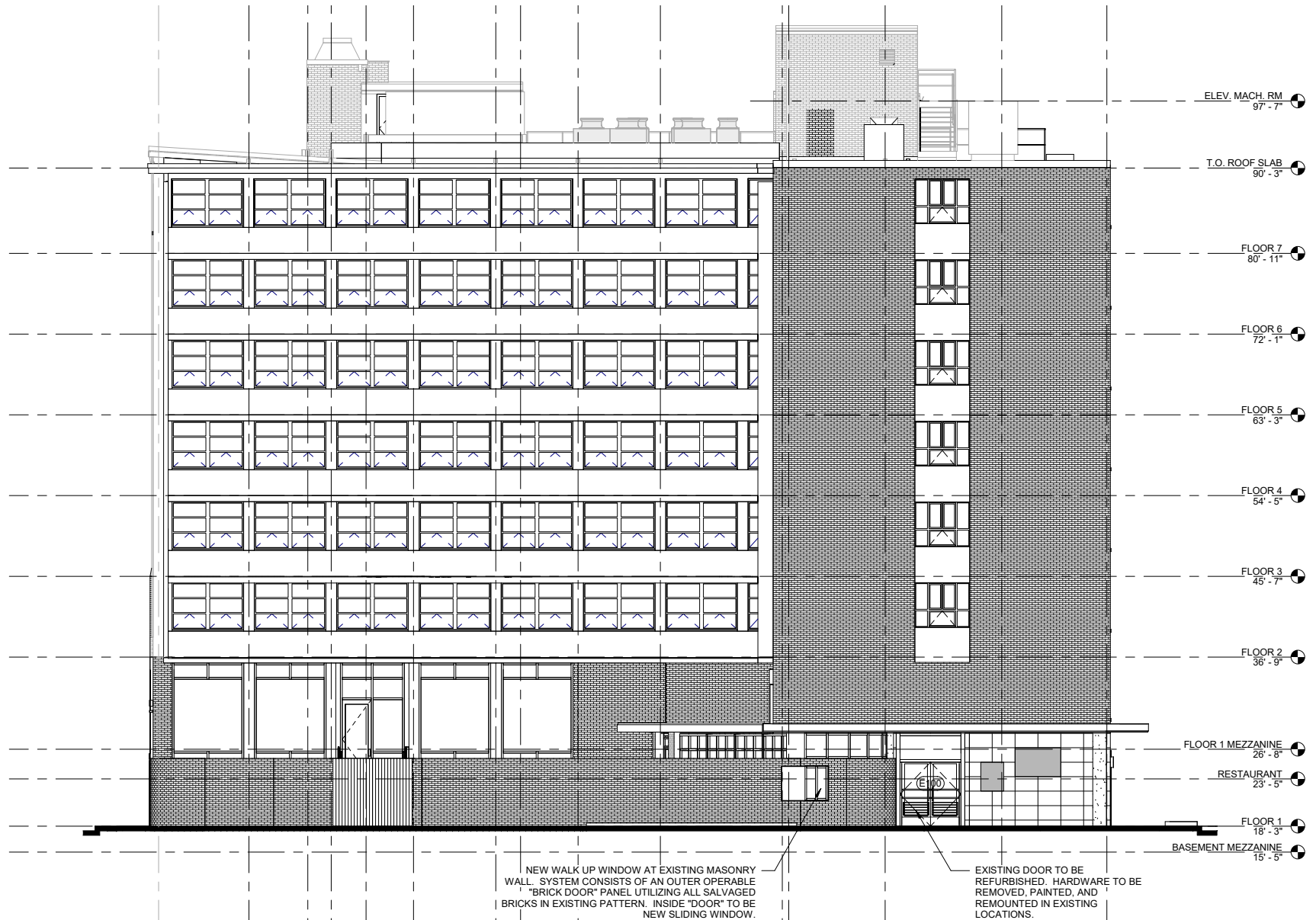
PROPOSED ELEVATION - GREY STREET

SCALE: 1/16" = 1'-0"



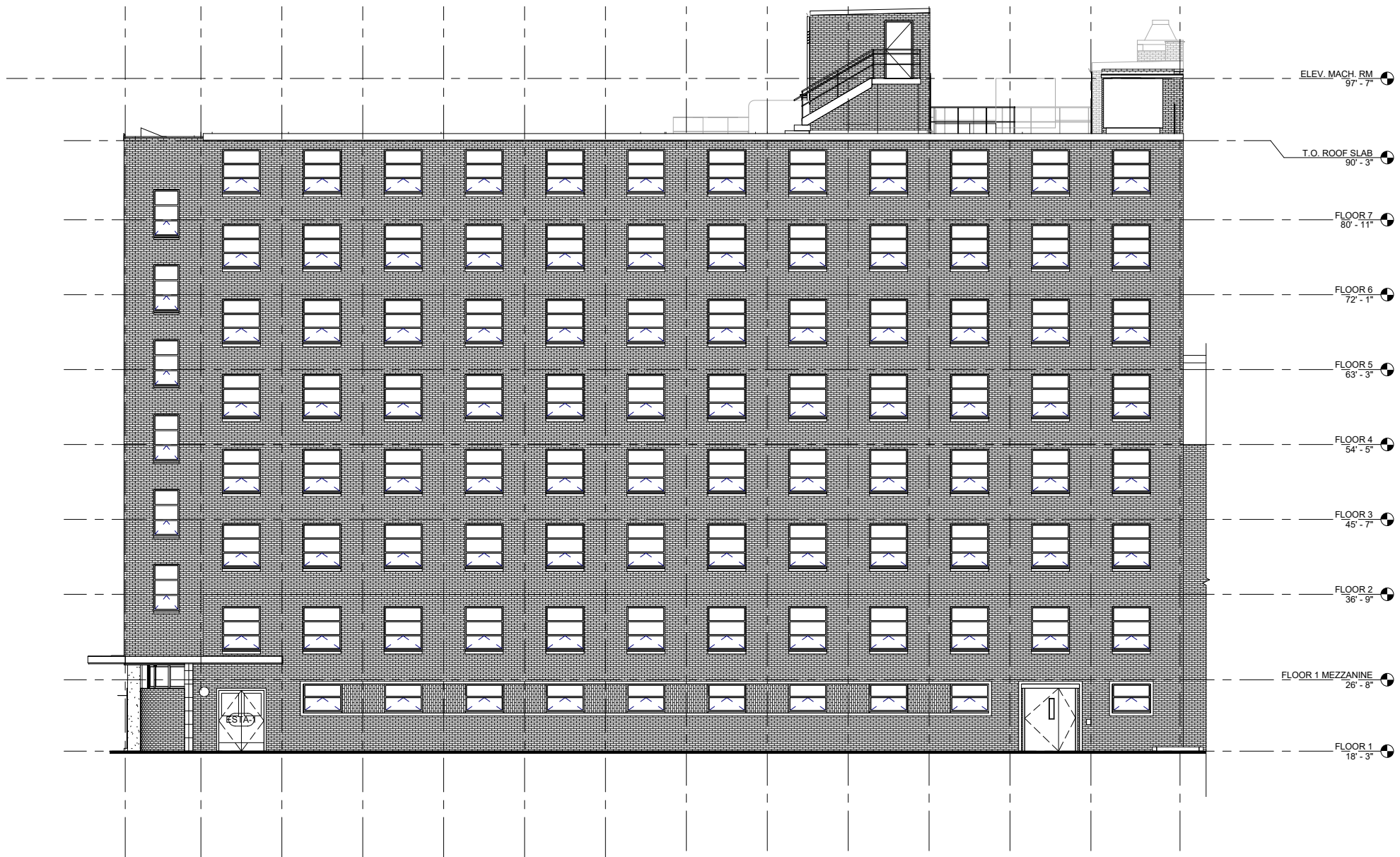
EXISTING ELEVATION - BERKELEY STREET

SCALE: 1/16" = 1'-0"

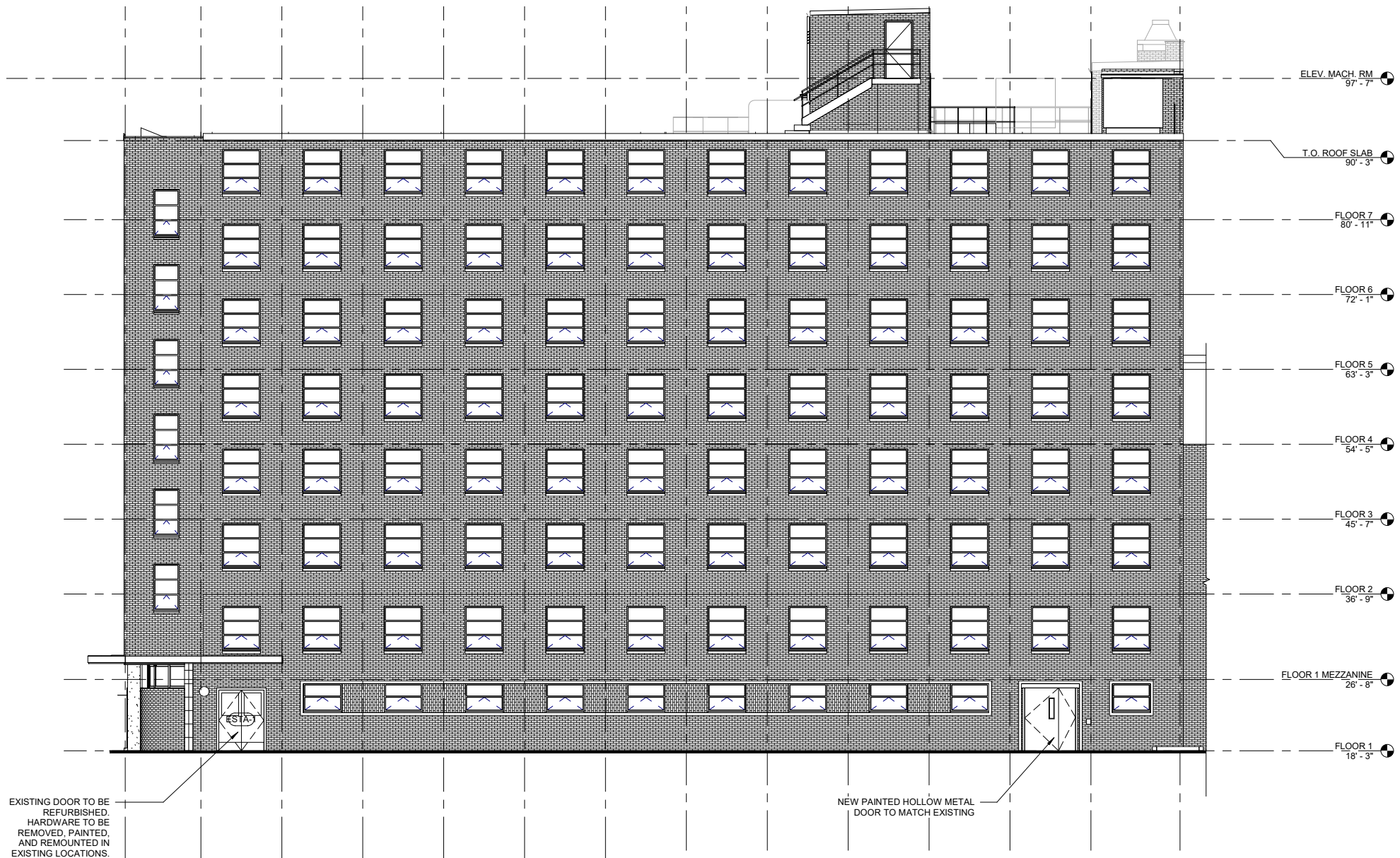


PROPOSED ELEVATION - BERKELEY STREET

SCALE: 1/16" = 1'-0"



EXISTING ELEVATION - APPLETON STREET
SCALE: 1/16" = 1'-0"



PROPOSED ELEVATION - APPLETON STREET

SCALE: 1/16" = 1'-0"



Grey Street Stair Exit



Berkeley Street Entry Canopy Lighting



Berkeley Street Entry Canopy Lighting



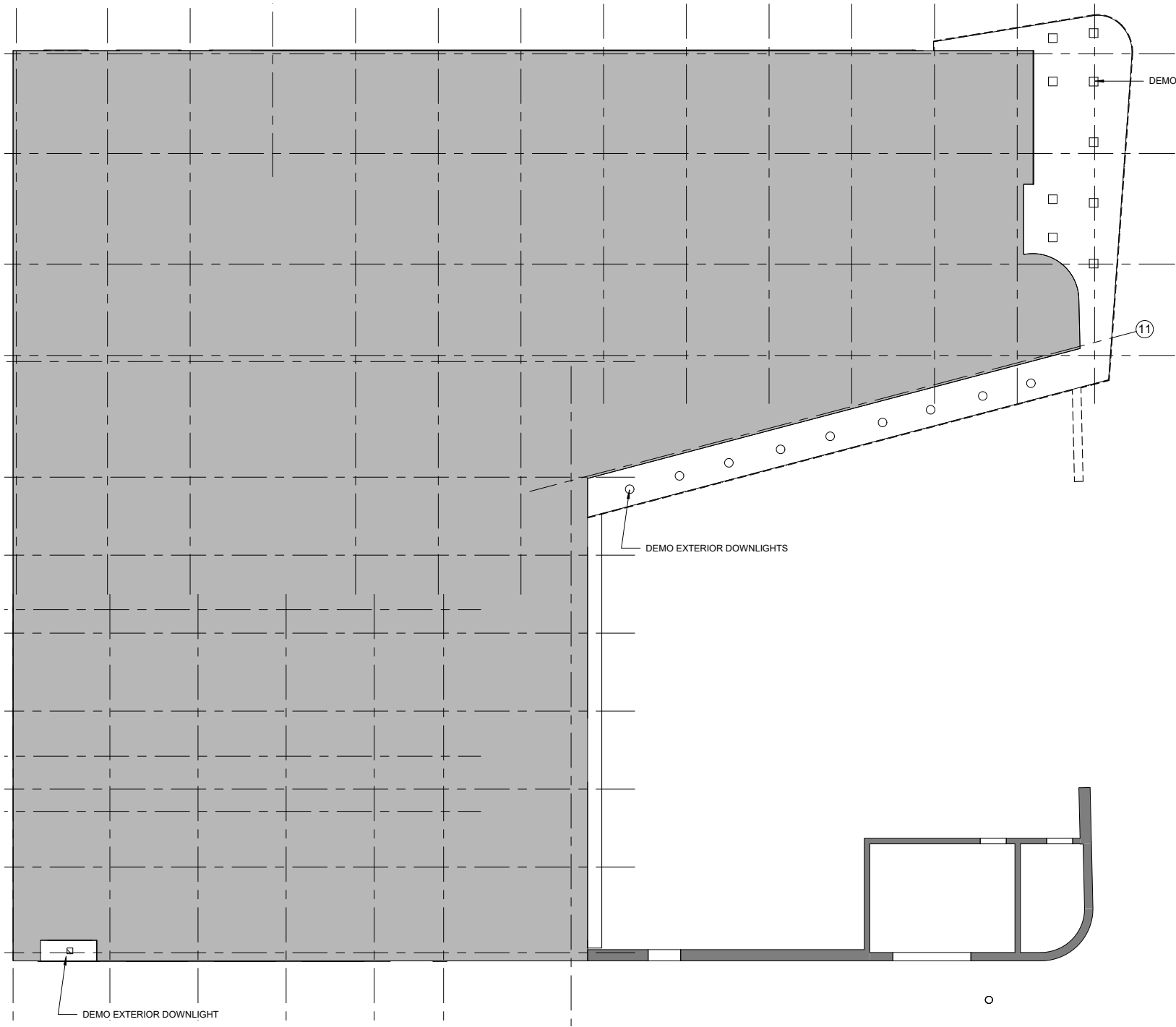
Grey Street Facade



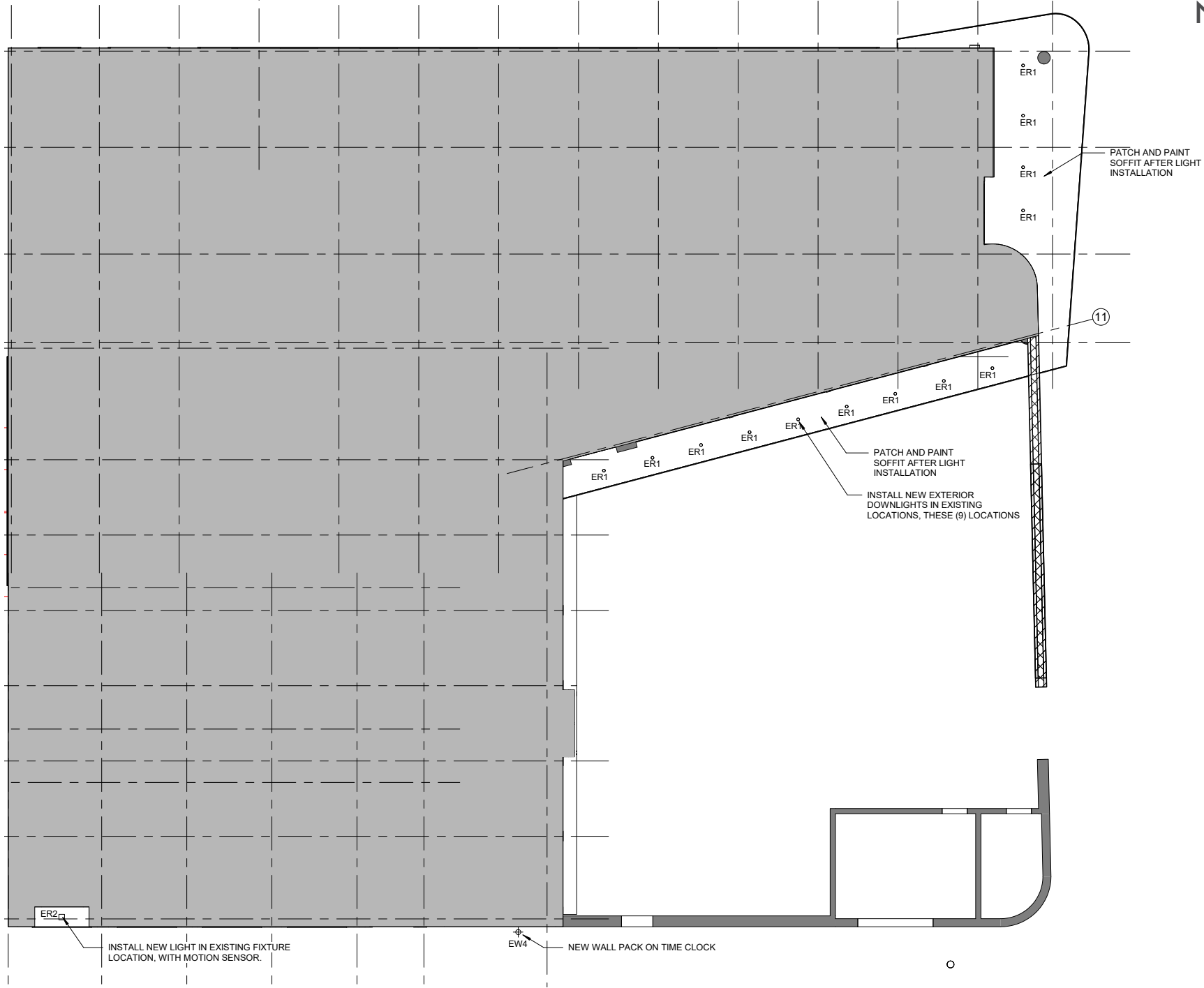
Berkeley Street Entry Canopy Lighting

DESCRIPTION

In order to provide adequate exterior lighting with modern efficient fixtures the project proposes new lights in existing locations. When performing a photometric study it was found that the number of fixtures in the front canopy on Berkeley Street could be reduced while providing ample light with the new fixture selection. Additionally a new fixture on Grey Street was requested by the community to prevent illicit activity at night. This fixture would be programmed to turn on at specific hours.



EXISTING REFLECTED CEILING PLAN
SCALE: 1/16" = 1'-0"



PROPOSED REFLECTED CEILING PLAN
SCALE: 1/16" = 1'-0"



PROPOSED ELEVATION - GREY STREET
SCALE: 1/16" = 1'-0"

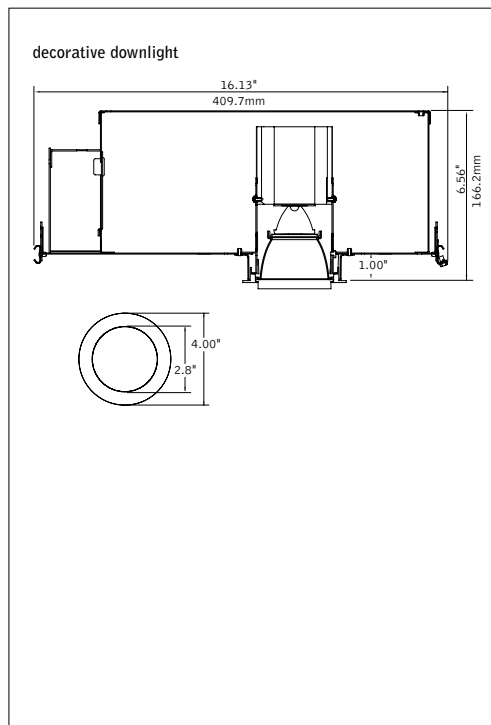
ID+ 2.5"
LED DECORATIVE LENS



LIGHTING SPECIFICATIONS - ER1

- New downlights in existing canopy
- Illuminate sidewalk at main building entry and a portion of the courtyard
- Finish will be white

DIMENSIONAL DATA



FEATURES

- Small aperture LED downlight with dropped decorative lens.
- Selection of dimming drivers available.
- Glowing frosted lens available in two colors.

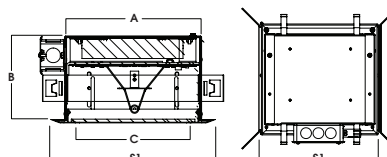
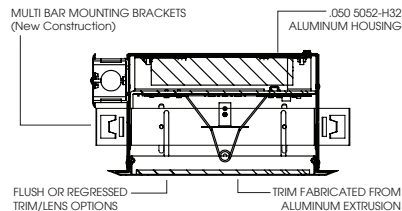
PERFORMANCE

Decorative Lens, 3500K	
Watts	Delivered Lumens
6	500
8	700
12	900

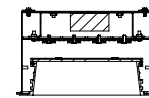
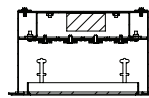
Photometric performance is measured in accordance with IESNA LM-79. Visit focalpointlights.com for complete photometric data.

LIGHTING SPECIFICATIONS - ER2

- New downlights in existing soffit
- Illuminate sidewalk at egress door
- Fixtures will be on a motion sensor to prevent illicit activity in this alcove (community request)
- Finish will be matte black



A	B	C	TRIM	S1
7.9	5.1	6.5	FT0808 RT0808	9.0 8.5



8" SQUARE LENSED

OA SERIES / 4400 LUMENS MAX LED

recessed fixtures

SR8SQLEDOA

APPLICATION

8" square recessed LED downlight LED features soffit/area light for optimal performance.

FEATURES

Efficient, powerful LED light source, designed to exceed 50,000 hours of life (L70). Multi-Bar mounting brackets. All LED modules and drivers are replaceable and up-gradeable. New and Retrofit/Remodeler options. Wet location use screws fasteners. (4)

FINISH

A variety of architectural powdercoat and anodized finishes are available. Matte White self-flange is standard.

ELECTRONICS

LED module features high brightness white Nichia LEDs. 3-step MacAdam Ellipses binning and CRI 84 minimum. Variety of electronic 120v/277v and dimming drivers.

CONSTRUCTION

Housing constructed of .050 5052-H32 aluminum. Trim fabricated from aluminum extrusion and finished to specification.

CODE COMPLIANCE

ARRA Compliant. Non-IC rated. ETL listed for damp locations. Optional Wet location. Manufactured and tested to UL standards No. 1598/8750.

WATTAGE TO LUMENS UPDATE			
CURRENT PART NUMBER EXAMPLE	PREVIOUS PART NUMBER EXAMPLE	SOURCE LUMENS ¹	SYSTEM WATTS
SR8SQLEDOA7L	SR8SQLEDOA11W	750	11W
SR8SQLEDOA15L	SR8SQLEDOA18W	1500	18W
SR8SQLEDOA22L	SR8SQLEDOA25W	2250	25W
SR8SQLEDOA30L	SR8SQLEDOA34W	3000	34W



Retrofit/Remodeler with Flush Trim

RECESSED HOUSING SPECIFICATION							TRIM SPECIFICATION					
SERIES	LUMENS ¹	CCT	DRIVER / VOLTAGE ²		OPTIONS ³		TRIM	FINISH ⁵	OPTIONS			
SR8SQLEDOA	7L	750 Lm	27K	2700°K	E Electronic Driver DS10 10% 0-10V Dimming	1 120v 2 277v	BH27*	27" Mounting Bars	FLUSH TRIM	FINISH	LENS	
	15L	1500 Lm	30K	3000°K			BH6	Expandable Bar Hangers, 6" - 12"				
	22L	2250 Lm	35K	3500°K			BH12	Expandable Bar Hangers, 12" - 24"				
	30L	3000 Lm	40K	4000°K			CB24	C-Channel Bars				
			50K	5000°K			FS	Fuse Holder and Fuse	REGRESSED TRIM			
							EM	Emergency Battery Pack	RT0808	Regressed Extruded Aluminum Door		
							CR	Corrosion Resistant				
							RM	Remodeler Housing				

EXAMPLE: SR8SQLEDOA15L27KE1/BH27/FT0808GW/FO

NOTES:

1 Nominal Source Lumens 2 Contact Factory for Additional Options 3 See Product Options Page for Details 4 Standard Bar Hangers
5 Contact Factory for Special Finishes 6 Standard Finish 7 Standard Lens 8 Trim Secured with 4 Screws

Dimensions shown are nominal. Spectrum Lighting is continually improving products and reserves the right to make changes that will not alter performance or appearance with or without written notice.



PROJECT: _____ TYPE: _____

CAT. NO.: _____

WWW.SPECLIGHT.COM • 994 JEFFERSON STREET, FALL RIVER, MA 02721 • 508.678.2303 FAX 508.678.2260



LIGHTING SPECIFICATIONS - EW4

- New wallpack light located on Grey Street Facade (requested by community)
- Illuminates sidewalk
- Fixture will be on a time clock
- Finish will be black

Wall luminaires with directed light

Housing: One piece die-cast aluminum for direct attachment to wall over 3½" or 4" octagonal wiring box. Die castings are marine grade, copper free (≤ 0.3% copper content) A360.0 aluminum alloy.

Enclosure: One piece die-cast aluminum guard, secured by two (2) captive socket head, stainless steel screws threaded into stainless steel inserts. Tempered etched glass with matte finish. Pure anodized aluminum reflector. Fully gasketed for weather tight operation using a molded silicone rubber O-ring gasket.

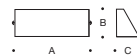
Electrical: 12W LED luminaire, 14.3 total system watts, -20°C start temperature. Integral 120V through 277V electronic LED driver, 0-10V dimming. The LED module and driver are mounted on a removable inner assembly for easy replacement. Standard LED color temperature is 3000K with an 85 CRI. Available in 4000K (85 CRI); add suffix K4 to order.

Finish: All BEGA standard finishes are polyester powder coat with minimum 3 mil thickness. Available in four standard BEGA colors: Black (BLK); White (WHT); Bronze (BRZ); Silver (SLV). To specify, add appropriate suffix to catalog number. Custom colors supplied on special order.

UL listed for US and Canadian Standards, suitable for wet locations. Protection class: IP64

Luminaire Lumens: 465
Tested in accordance with LM-79-08.

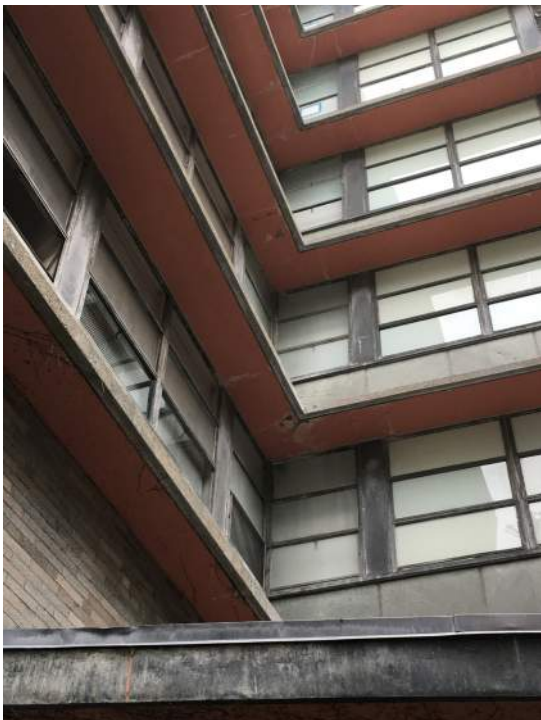
Type:
BEGA Product:
Project:
Voltage:
Color:
Options:
Modified:



	Lamp	A	B	C
22380	ADA 12W LED	11 ¾"	4"	3 ½"



BEGA-US 1000 BEGA Way, Carpinteria, CA 93013 (805) 684-0533 FAX (805) 566-9474 www.bega-us.com
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DESCRIPTION

The underside of the existing concrete fins require patching and repair. After patched the fins will require repainting. The project proposes to modify the color to navy when repainting. The color has been selected to unify the existing palette of cool grey metals, brick, concrete and slate.



PROPOSED PHOTOS



PAINTED "FINS"



PROPOSED COLOR:
California Paints DEA184
Parisian Night LRV 6

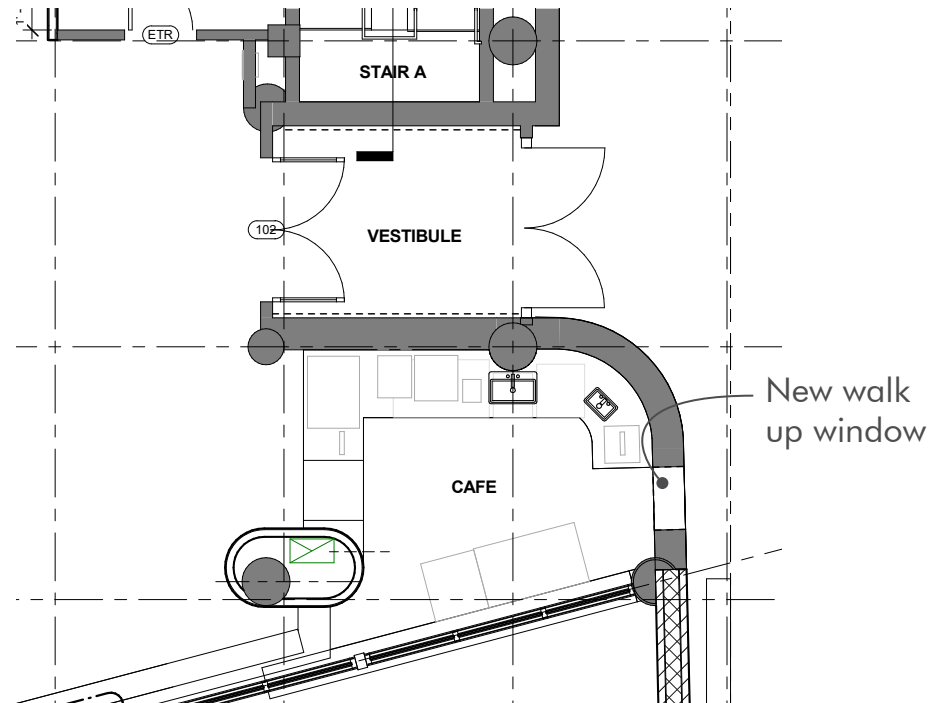
EXISTING PHOTOS



NEW WALK UP WINDOW

DESCRIPTION

As a new amenity to the neighborhood for which the community has expressed support the project proposes the addition of a “hidden window” into the brick wall. This new walk up window would be used to serve items such as ice cream when the cafe inside is open. By reusing the existing bricks, cut down and remounted on a hinged panel the wall would retain its existing character reading as the existing brick when closed.





"Window" when closed



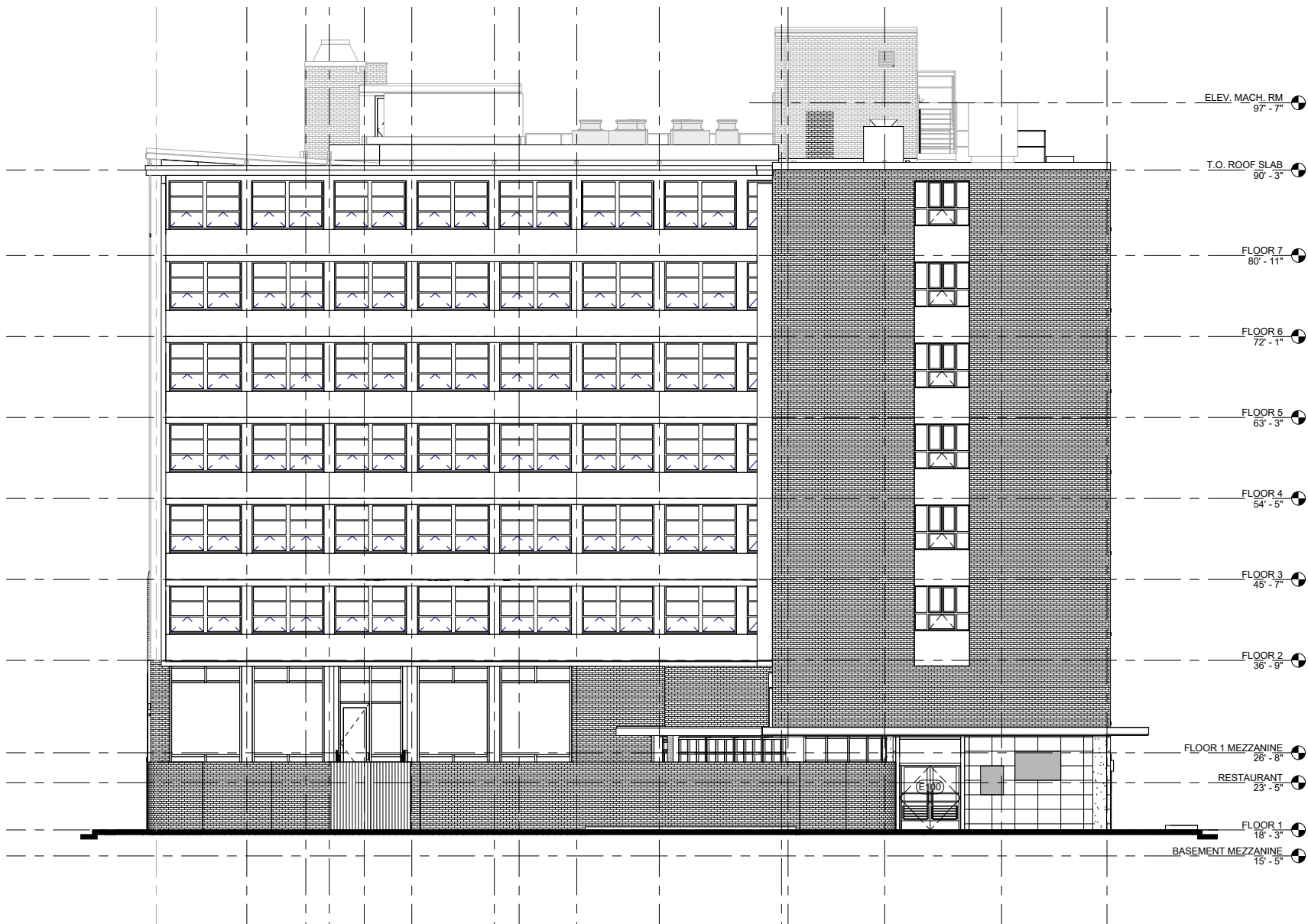
"Window" when opening



"Window" when open

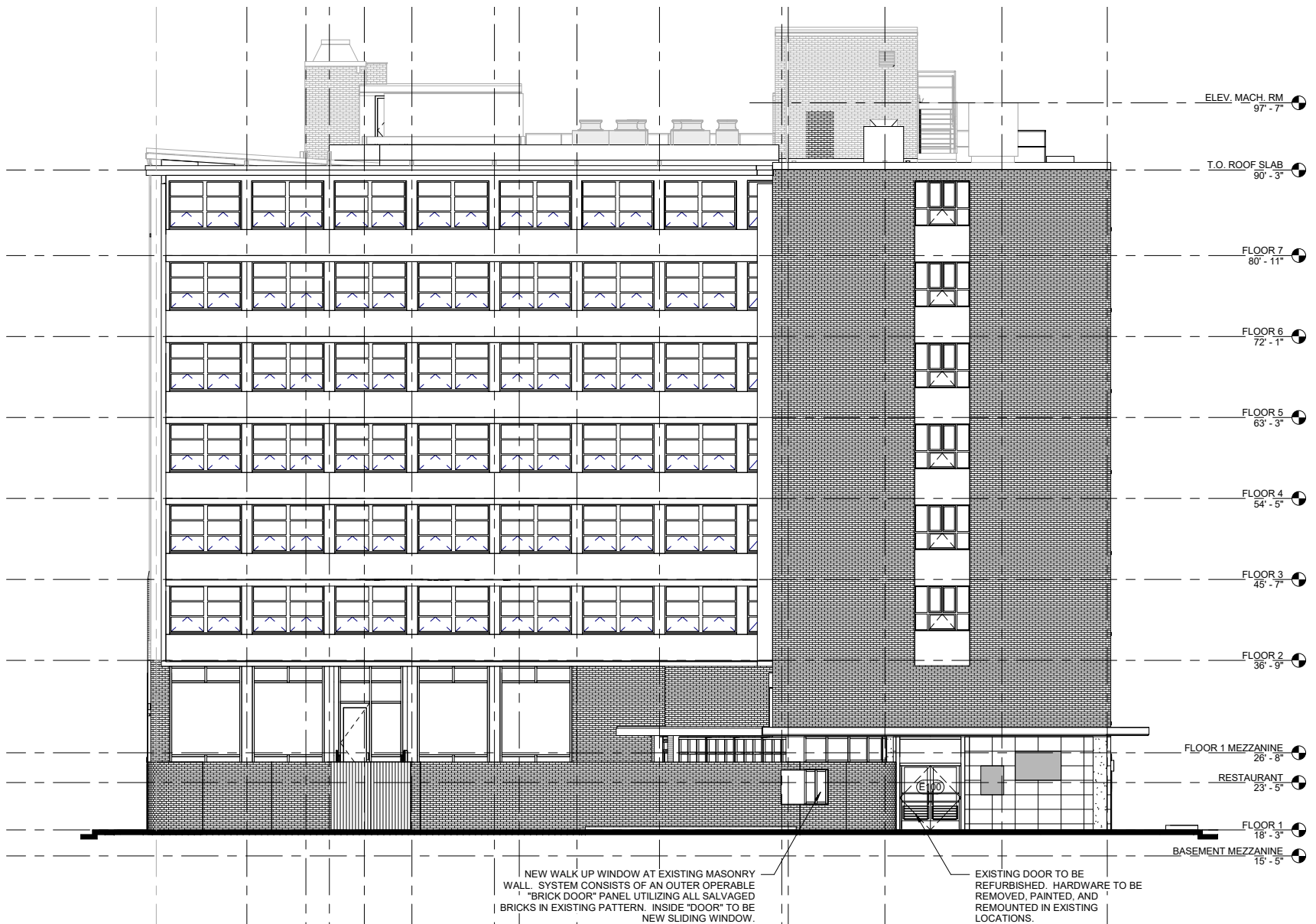


Inspiration / reference imagery



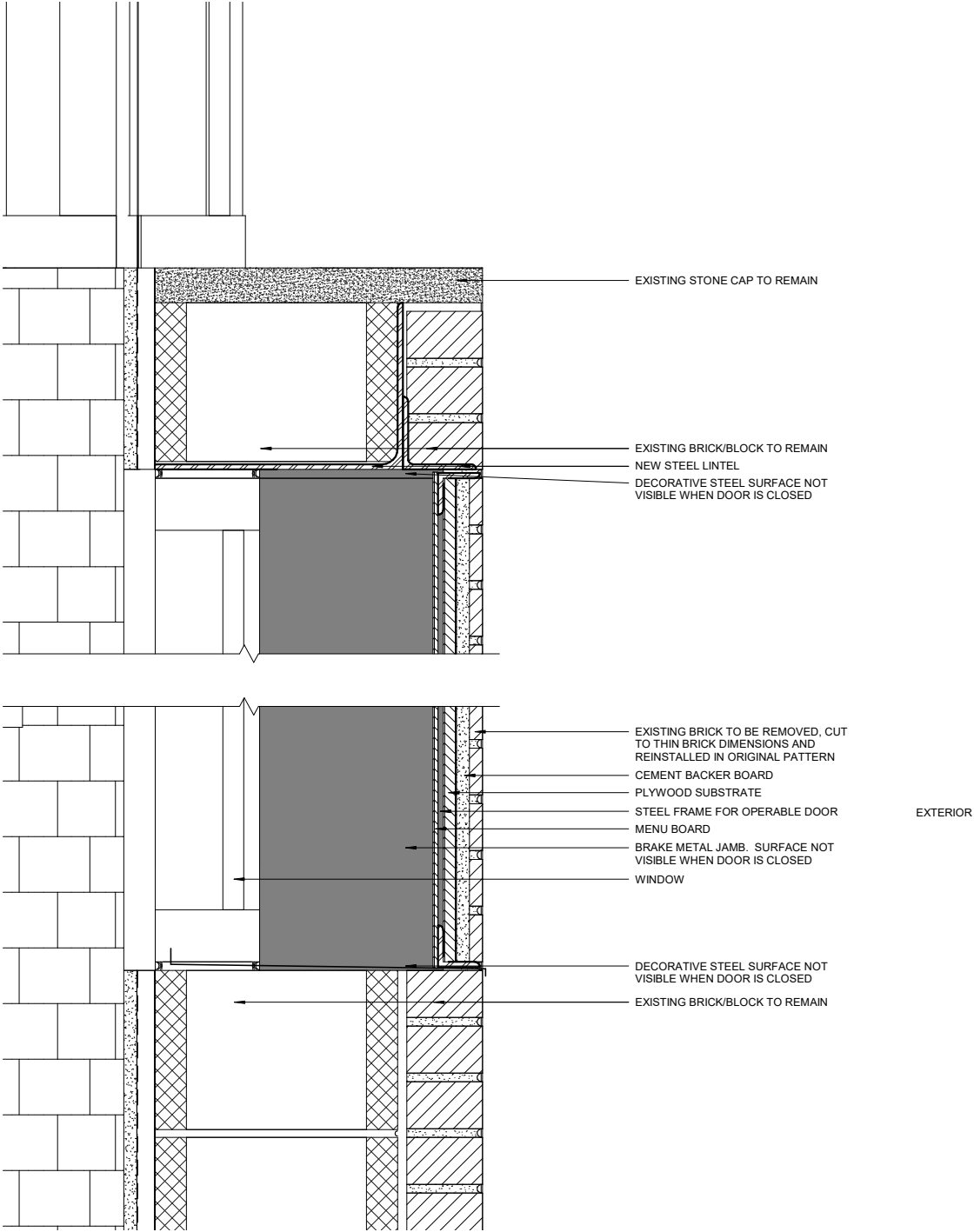
EXISTING ELEVATION - BERKELEY STREET

SCALE: 1/16" = 1'-0"



PROPOSED ELEVATION - BERKELEY STREET

SCALE: 1/16" = 1'-0"



PROPOSED WALK UP WINDOW DETAIL

SCALE: 1 1/2" = 1'-0"

WINDOWS

Kawneer offers a comprehensive line of architectural aluminum building products and systems for commercial construction – entrances, framing systems, windows and curtain wall systems. Over the years, Kawneer has built a reputation for producing windows that meet the highest quality standards. Today, we continue that tradition with a combined portfolio of easy-to-maintain Kawneer and Traco brand window products that demonstrate the superior durability and performance that can only come from nearly two centuries of expertise. Our thermal windows are manufactured with long-lasting finishes and durable hardware to help architects and building owners achieve their design objectives.

HUNG AND SLIDING WINDOWS

Our extensive portfolio of hung and sliding window products offers solutions for any building project, whether for new or retrofit applications. Our windows come in a variety of depths and options. The windows have been tested in accordance with AAMA/WDMA/CSA 101/I.S.2/A440 (NAFS) designations. We offer single hung and double hung windows with both tilt and side load sash removal and a variety of horizontal sliding windows.

Single hung window: Only the bottom operating sash moves up and down within the master frame. The top of the window is either fixed glass or fixed sash. The weight of the operating sash is counterbalanced to permit easy operation.

Double hung window: Both operating sashes move up and down within the master frame. The weight of each operating sash is counterbalanced to permit easy operation.

Side load (hung window): The sash is removed by extending the jamb balance clips, raising the sash to full window height, supporting the sash weight and moving the sash to one side to remove it from the master frame.

Tilt (hung window): The lower sash is removed by raising the sash 4°, releasing the tilt releases while supporting the sash weight, and releasing the sash pivot bars to remove the sash from the master frame. Top sash removal is similar.

Horizontal sliding window: The operating sash slides sideways within the master frame. Each operating sash has glides or rollers to permit easy operation.

AA™5450 Thermal Windows
4-5/8" Frame Depth – Side Load
 The industry's smartest window sets the standard for thermal performance
 Single and double hung, AW-PG50-H | Fixed, AW-PG50-FW
 | Single and double slide, AW-PG40-HS

AA™3350 Thermal Windows
3-1/2" Frame Depth – Side Load
 Enhance your views with exceptional value and performance
 Single and double hung, AW-PG70-H | Horizontal single slide, AW-PG70-HS | Horizontal double slide, AW-PG50-HS | Fixed, AW-PG70-FW

NX-5000/6000/7000 Series Thermal Windows
3-1/4" Frame Depth – Tilt
 High energy efficiency and versatility combine to offer exceptional value
 Single and double hung, CW-PG50-H | **Horizontal single and double slide, CW-PG50-HS | Fixed, CW-PG50-FW**

TR-9000/9800 Series Thermal Windows
4" Frame Depth – Tilt
 Historical sightlines and profiles ideal for retrofit applications
 TR-9000 double hung, AW-PG45-H | TR-9800 double hung, AW-PG50-H | Fixed, AW-PG100-FW

TR-9100/9700 Series Thermal Windows
3-1/4" Frame Depth – Side Load
 Architectural grade single hung window
 TR-9100 single hung, AW-PG50-H | TR-9700 single hung, AW-PG40-H | Fixed, AW-PG100-FW

TR-9900 Series Thermal Windows
4-1/2" Frame Depth – Side Load
 Architectural grade double hung window
 Double hung, AW-PG50-H | Fixed, AW-PG100-FW

TR-6800 Series Thermal Windows
3-1/4" Frame Depth
 Architectural grade horizontal sliding window
 Horizontal single slide, AW-PG50-HS | Fixed, AW-PG100-FW

8400TL Thermal Windows
4" Frame Depth – Side Load
 For remodel, historic restoration or new construction requiring thermal performance, aesthetic appeal and enough choices to appear custom
 Single and double hung, H-AW-70 | Horizontal single and double slide, HS-AW-70 | Fixed, AW-PG100-FW

NX-6400: Proposed window specification to match frame size of other windows in building

PROJECTED AND CASEMENT WINDOWS

Our comprehensive offering of projected and casement windows provides solutions for any building project, whether new or retrofit applications. Our windows come in a variety of depths and other options, and have been tested in accordance with AAMA/WDMA/CSA 101/I.S.2/A440 (NAFS) designations. We offer a flush appearance and overlapping vents to suit the needs of any building type or requirement.

Projected window: The operating vent moves out (project out or awning) or in (project in or hopper) from the master frame. The vent is hinged on the horizontal axis to permit easy operation.

Casement window: Operating vents move out (casement outswinging) or in (casement inswinging) from the master frame. Each vent is hinged on the vertical axis to permit easy operation.

Tilt-turn or dual action window: The operating vent tilts in from the top for ventilation and swings in from the side for glass cleaning.

AA™4325 Series – OptiQ™ Ultra Thermal Windows
3-1/4" Frame Depth
 Built-in thermal intelligence makes it one of the industry's smartest windows
 Overlap inswing and outswinging casements, AW-PG80-C | Overlap project in and project out, AW-PG80-AP | Fixed, AW-PG80-F

AA™900 Thermal Windows
2-5/8" Frame Depth
 Contemporary styling designed for top thermal performance
 Large- and small-missile impact tested for fixed, project out and casement outswinging configurations | Mitered vent corners give picture frame appearance | Overlap inswing and outswinging, C-AW90 | Project in and project out, AP-AW90 | Fixed, FW-AW90

NX-200 Series Thermal Windows
2-1/4" Frame Depth
 Commercial grade overlap casement and projecting windows
 NX-210 outswing casement and NX-220 inswing casement, CW-PG50-C | NX-240 project in and NX-250 project out, CW-PG50-AP | NX-280 fixed, CW-PG50-FW

NX-300 Series Thermal Windows
3-1/4" Frame Depth
 Overlap window available as casement outswinging, project out and fixed configurations

NX-3000 Series Thermal Windows
3-1/4" Frame Depth
 Thermal performance merges with adaptable design to offer more choices
 Available in overlap casement, projected, fixed and tilt-turn configurations | NX-3100 outswing casement and NX-3200 inswing casement, AW-PG80-C | NX-3400 project in and NX-3500 project out, AW-PG80-AP | NX-3800 fixed, AW-PG80-FW | NX-3700 tilt-turn, DAW-AW50

NX-4000 Series Thermal Windows
4-5/8" Frame Depth
 Energy-efficient projecting window offers distinctive and historic look of a hung window
 Project in and project out, AW-PG80-AP | Fixed, AW-PG80-FW

TR-700 Series Windows and TR-700 Window Wall
4-5/8" Frame Depth
 Architectural grade flush design window available as projecting and casement
 The versatile window wall can be used in various applications including horizontal ribbon windows or punched openings and accepts TR-700 series projecting and casement windows
 | Outswing and inswing casement, AW-PG80-C | Project in and project out, AW-PG80-AP | Fixed, AW-PG80-FW

TR-2000 Series Thermal Windows
2-1/4" Frame Depth
 Architectural grade flush casement and projecting windows
 TR-2100 outswing casement and TR-2200 inswing casement, AW-PG80-C | TR-2400 project in and TR-2500 project out, AW-PG80-AP | TR-2800 fixed, AW-PG80-FW

TR-3000 Series Thermal Windows
3-1/4" Frame Depth
 Architectural grade overlap casement and projecting windows
 TR-3100 outswing casement and TR-3200 inswing casement, AW-PG80-C | TR-3400 project in, AW-PG80-AP | TR-3500 project out, AW-PG65-AP | TR-3800 fixed, AW-PG80-FW

8225TL Thermal Windows
2-1/4" Frame Depth
 For high performance in a thermally broken overlap design window system
 Outswing and inswing casement, AW-PG90-C | Project in and project out, AW-PG90-AP | Fixed, AW-PG100-AW | 7225 series non-thermal version available

VISUALLY FRAMELESS VENTILATORS
 These ventilators offer projecting and casement window solutions without the sightline buildup you get when typical operating windows are added to a framing system.

GLASSvent™ UT (Ultra Thermal) Windows
 Best-in-class thermal performance in a visually concealed ventilator
 4-3/8" (111.1 mm) or 5-1/8" (130.2 mm) depth | Architectural window (AW) | Ultra thermal performance | Available as casement or projecting configuration

GLASSvent™ Visually Frameless Ventilator
 For use with storefront systems and curtain wall systems
 Available as project out or outswinging casement window | Suitable for retrofit or new construction | Accepts 1/4" and 1" glazing infills | Blast tested per ASTM F1642 | Outswinging casement, AW-PG90-C | Project out, AW-PG80-AP | *Applies to curtain wall version only



Kawneer: 8400TL Horizontal Sliding Window (blast mitigation version), 1600 Wall System™1, AA™3900 Sliding Doors, 350 Heavy Wall™ Entrances
 Vandenberg Hall AFB, Colorado Springs, Colorado
 Architect: Lantz-Boggio Architects, PC, Englewood, Colorado
 Glazing Contractor: RGI/EPG Joint Venture, Colorado Springs, Colorado
 Photography: © CJBerg Photographics



Kawneer: AA™5450 Series – OptiQ™ Ultra Thermal Windows
 Traco: NX-3800 fixed windows (curved) Coddington Hall, Quincy, Massachusetts
 Architect: Wessling Architects, Quincy, Massachusetts
 Window Installer: North East Energy Control Systems, Canton, Massachusetts
 Photography: © Bob Perzel



Traco: NX-5400 Single Hung Windows, NX-8910 Terrace Doors
 Flats on Vine, Columbus, Ohio
 Architect: Sullivan Bruck Architects, Inc., Columbus, Ohio
 Window Installer/Glazing Contractor: Hilliard Glass, Hilliard, Ohio
 Photography: © Matthew Carbone



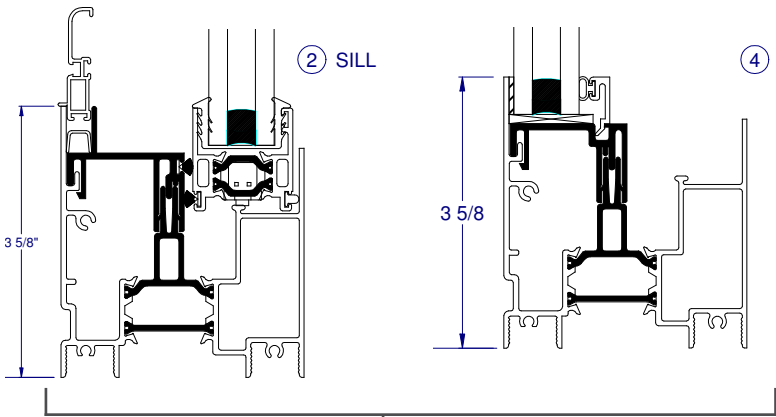
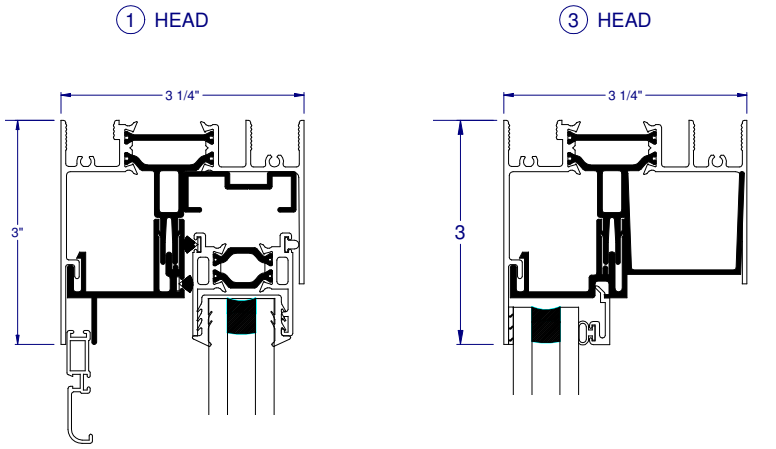
Kawneer: 7225 Non-Thermal Project Out Windows in 2250 IG Curtain Wall, with 1600 Wall System™1 and 500 Wide Sile Entrances
 Lawrence Berkeley National Laboratory – Molecular Foundry, Berkeley, California
 LEED™ Gold certified
 Architect: SmithGroup, San Francisco, California
 Glazing Contractor: Royal Glass Co., Inc., Sacramento, California
 Photography: © CJBerg Photographics



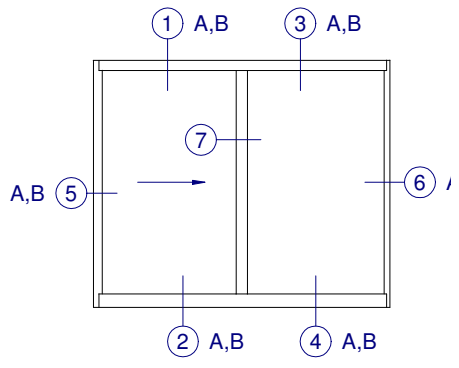
Kawneer: GLASSvent™ Windows for Curtain Wall shown in 1600 Wall System™1 Curtain Wall
 Atlanta Botanical Gardens – Allen and Gail Hardin Visitors Center, Atlanta, Georgia
 Architect: Jova/Daniels/Busby, Atlanta, Georgia
 Glazing Contractor: Snellville Glass Company Inc., Snellville, Georgia
 Photography: © CJBerg Photographics



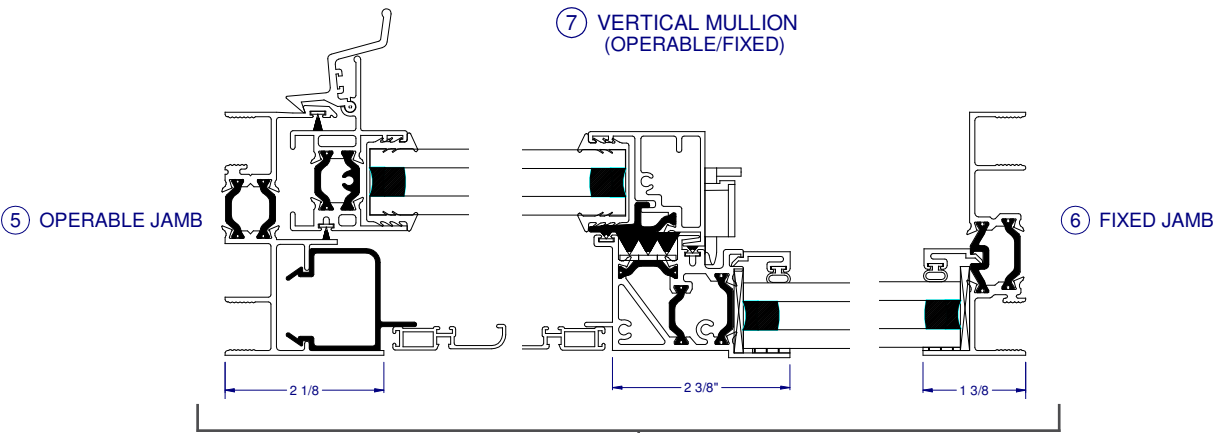
Traco: TR-700 Series Windows and TR-700 Window Wall, TR-8300 Sliding Glass Door, NX-8910 Terrace Doors
 Kawneer: Trifab™ VersaGlaze™1 (VG) 451T Storefront Framing, 350 Medium Sile Entrances
 The Admiral at the Lake, Chicago, Illinois
 Architect: Perkins and Will, Dallas, Texas
 Window Installer: Softer Lite Window Company, Chicago, Illinois
 Glazing Contractor: Alumital Corp., Elk Grove, Illinois
 Photography: © FotoGraphix – Viken Djaferian



HEAD/SILL DETAILS



ELEVATION / DETAIL KEY



JAMB DETAILS