STAFF REPORT CONCERNING APPLICATION FOR A CERTIFICATE OF APPROPRIATENESS



Date:December 6, 2023Application Number:2023-1208i8i6Property Location:635 South Main StreetArchitectural Style/Date/Architect or Builder:Renaissance Revival / 1910Property Owner:Studebaker Center, LLCLandmark or District Designation Local Landmark, #8267-92Rating: Significant/Notable

DESCRIPTION OF STRUCTURE/ SITE: Rectangular plan with smooth dressed stone foundation.

Stretcher bond brick walls with two sets flat arcades, quoin pilasters, stone string course, flat arch & round arch, keystone radiating voussoirs. Flat roof, smooth dressed stone cap. Windows: Reveal, double hung sash flat head, joint 3 and 4th single large sash and side and side fixed sash 1st and 2nd, wood lintel panel. Doors: Metal flat overhang roof and double leaf panel, glass, glass transom, solid glass side panels. Stairs: Concrete

ALTERATIONS: COA 2010-0622 allowed for Removal of dead trees on Main Street in front of the entrance. City Forester, Brent Thompson, concurred that the 2 Sugar Maples are dying from girding roots; and that they can be removed. COA 2022-0906 allowed for the installation of polycarbonate panels over the windows (work not completed).

<u>APPLICATION ITEMS:</u> "Proposed work will cover the following distinct application items further outlined in documentation attached: 1.) Window and door rehabilitation & replacement. 2.) Masonry re-pointing, cleaning, and possible limited reconstruction, 3.) Roof replacement and drainage."

DESCRIPTION OF PROPOSED PROJECT: The applicant has requested approval to:

- 1. Windows / Doors
 - a. Repair, restore, update, improve existing wood windows, on the west, south, east, as well as the chamfered corners of the structure facing Main Street.
 - i. Deteriorated windows will be either A) replaced with salvaged units from the north façade of the structure, B) replaced with new wood window units specially fabricated for these openings,
 - b. Replace windows and doors on the:
 - i. Upper clerestory (windows) with Quaker H650 (or equivalent) in dark or medium bronze finish, color to match other/existing original windows.
 - ii. North façade (windows, see Kil proposal) would be replaced with all-aluminum, thermally broken Low-E glass windows.
 - iii. Primary east entrance (non-original, anachronistic 'modern' aluminum entry system) will be replaced with a door, transom, sidelight unit ("Tubelite 14000T"), color to match other windows and doors on structure.
- 2. Masonry "maintenance"/repair/rehabilitation, including cleaning, re-pointing, reconstruction, coping and parapet walls, sealant joints, and steel lintel replacement.
- 3. Roof Replacement/Reconfiguration
 - a. Replacement of existing roof material/membrane,
 - b. Repair/replacement of decking,
 - c. Repair/replacement of roof drain systems,
 - d. Replacement of plywood/material covering eastern skylight for later repair/rehabilitation,
 - e. Chimney, HVAC, ducts, and miscellaneous roof equipment, including removal of nonfunctional/ancillary/redundant chimney stacks and vents to clean the roof line,

STANDARDS AND GUIDELINES:

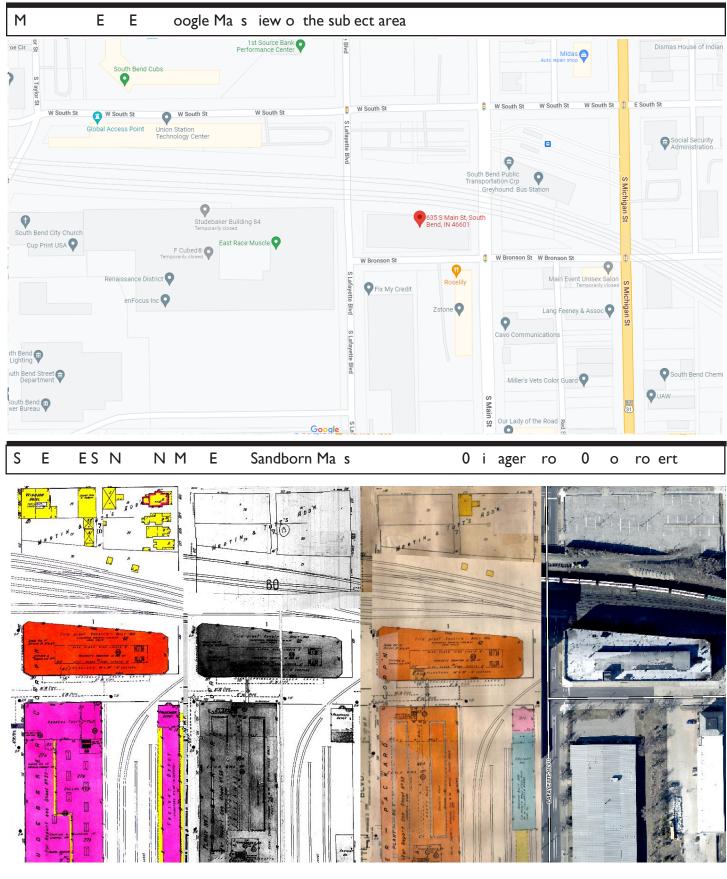
- Cornices and Parapets Page 43
- Doors and Entrances Page 44
- Roofs Page 50
- Walls Page 59-60
- Windows Pages 61-63

SITE VISIT REPORT:

HPC Administrator Adam Toering and Specialist Ross Van Overberghe have made repeated site visits to the structure over the course of the last few years. Condition of specific windows throughout the structure varies, with some window sashes nearing failure, while many are eminently restorable.

<u>STAFF RECOMMENDATION:</u> Staff makes a favorable recommendation.

Prepared by Adam Toering, Historic Preservation Administrator



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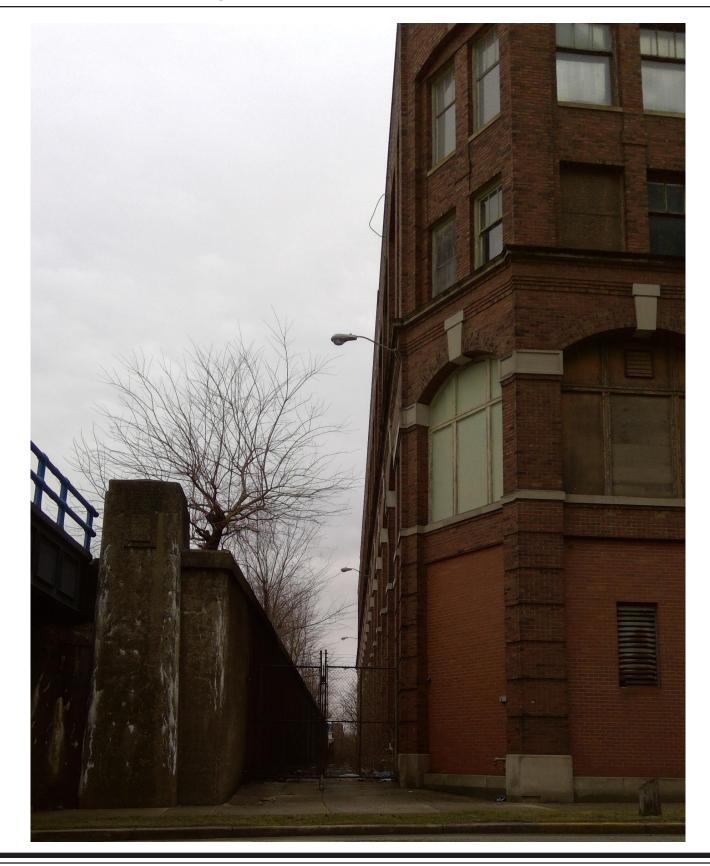
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December 5, 2023 MA HISTORIC PRESERVATION COMMISSION Rec. 261444 \$20.00

OF SOUTH BEND AND ST. JOSEPH COUNTY

County-City Building, South Bend, IN 46601

http://www.southbendin.gov/government/department/community-investment Phone: 574/235.9371 Fax: 574/235.9021

Email: hpcsbsjc@southbendin.gov

Michele Gelfman, President

A Certified Local Government of the National Park Service

Adam Toering, Historic Preservation Administrator

APPLICATION FOR A — CERTIFICATE OF APPROPRIATENESS

OFFICE USE ONLY>>>>>> <u>DO NOT COMPLETE ANY ENTRIES CONTAINED IN THIS BOX</u> <<<< <office only<="" th="" use=""></office>						
Date Received:						
Past Reviews: YES (Date of Last Review) NO						
Staff Approval authorized by:						
Historic Preservation Commission Review Date:						
Local Landmark Local Historic District (Name)						
National Landmark National Register District (Name)						
Certificate Of Appropriateness: Denied Tabled Sent To Committee Approved and issued:						
Address of Property for proposed work: 635 South Main St., South Bend, IN 46601 (Street Number—Street Name—City—Zip)						
Name of Property Owner(s): Kevin Smith Phone #: (574) 472-0715						
Address of Property Owner(s): 6561 Lonewolf Drive, South Bend, IN, 46628 (Street Number—Street Name—City—Zip)						
Name of Contractor(s): Phone #:						
Contractor Company Name:						
Address of Contractor Company:						
Current Use of Building: Vacant (previously Office)						
Current Use of Building: (Single Family—Multi-Family—Commercial—Government—Industrial—Vacant—etc.)						
Type of Building Construction: Cast in place concrete with brick exterior						
(Wood Frame—Brick—Stone—Steel—Concrete—Other)						
Proposed Work: (more than one box may be checked) Landscape New Replacement (not in-kind) Demolition						
Description of Proposed Work:						
1.) Window and door rehabilitation & replacement; 2.) Masonry re-pointing, cleaning, and possible limited reconstruction; 3.) Roof replacement and drainage						
Owner e-mail: k.smith@dsm-inc.us and/or Contractor e-mail: gkil@kilarchitecture.com						
X and/or X APC						
Signature of Owner Signature of Contractor						

By signing this application I agree to abide by all local regulations related to project and to obtain a Building Department Permit, if applicable.

-APPLICATION REQUIREMENTS ARE LISTED ON REVERSE SIDE-



STUDEBAKER ADMINISTRATION BUILDING EXTERIOR ENVELOP REHABILITATION SCOPE OF WORK PROPOSED:

1.) Window and Door Restoration and Replacement: Photos 1-21

- a. Restoration of Wood Windows: The building has original wood windows, most of which are proposed to be retained and repaired and rehabilitated in like in kind. On the East, South and West facades, and NE and NW chamfered corners of the building the windows (Basement, First, Second, Third and Fourth Floors) will be wood window rehabilitation in like in kind. The sashes will be removed and repaired off-site (if restoration is feasible given the window's condition) and reinstalled with new double-pane insulated glazing or single-pane with new interior storm windows. The frames and exterior sills will be renovated on site in the field. The addition of double-pane glass would require the routing of sash stiles and rails to accommodate the thicker glazing profile. This would only minimally affect the exterior appearance of the windows, once they are reglazed. A compressible sill seal will be added to all restored windows, along with weatherstripping along the frame for the lower operable units. The double hung upper sash will be fixed in place. Some windows have pivot operation and other very large windows are hopper operation. The intent is to salvage existing window hardware and repair/replace as required.
- b. *Replacement of Wood Windows with New Wood Windows or Salvaged Windows*: In situations where the original wood windows are in such poor condition that they cannot be restored, or in places where they have been removed altogether, new wood windows will be fabricated to recreate the original appearance. These windows will feature insulated glazing and will match the sash profiles and proportions of the original windows (glass/sash/frame). These repaired windows would be prioritized on the East, South and West facades. Where applicable, some windows may be salvaged from the North side and used to infill the East, South and West Facades.
- c. *Replacement of Wood Windows with New Aluminum Windows*: For this project new all-aluminum windows are proposed in the following locations:

Upper Clerestory Roof Monitor Windows:

The clerestory windows are set back from the perimeter upper parapet and as such are not visible at grade. These window units are in very poor condition, and mostly boarded up. The windows are large double-hung units (4 over 4 lights). The proposed new all aluminum windows would be non-operable fixed windows but will match the 4 over 4 light pattern. Since these units would be visible from the interior double height atrium space, this geometry is important to replicate (muntin/sash/frame/glass geometry). These windows are visible two levels above





the Third Floor atrium floor as viewed from the inside. The proposed windows are based on a Quaker Window Specification H650 (or approved equal). Color would be a dark or medium bronze finish as proposed, exact color to be determined and coordinated with the exterior Sash and frame color of the restored windows on the East, South and West facades.

North Façade Windows:

The existing wood windows are boarded up at the First and Second Floors with a handful of additional windows boarded up at the Third Floor. All original windows are drywalled over on the interior of the Fourth Floor, with the exception of seven, which have been replaced with incompatible aluminum replacements. Some of these are infilled openings with brick masonry as exposed from the exterior. These boarded openings in some cases cover the original windows (sash/frame/glass). These openings are boarded up due to glass breakage by rocks being thrown at the building from the tracks over the years. This design plan retains boarded-up window openings at the First and Second Floors of the North Façade given the proximity of these windows to the elevated tracks (25' to 30' away). The boarded up openings would retain the existing windows if they exist (sash/glass/frame). The NE and NW windows on the angled bays of the North Façade would be rehabilitated as wood windows (in like and kind) since they are visible from Main Street as well as Lafayette.

These new all-aluminum windows will be thermally broken and will incorporate dual pane Low-E glass. The north side windows will also include a glass specification that will reduce the noise transfer from the rail traffic at adjacent railroad with sound dampening/acoustic attenuation design. Exterior glass would most likely be a combination of laminated and/or tempered glass. Color would be a dark or medium bronze finish as proposed, exact color to be determined and coordinated with the exterior Sash and frame color of the restored windows on the East, South and West facades.

- d. *Replacement of Modern Aluminum Entry System with New Aluminum Entry System*: At the primary East entrance, an aluminum entry door and sidelight system exist that is not original to the building. This door and aluminum framing system will be replaced with new aluminum entry door, transom and sidelight system that approximates the glazing and door proportions of the original entry. The proposed door, transom and sidelights are based on a Tubelite Specification 14000T (or approved equal). Color would be a dark or medium bronze finish as proposed, exact color to be determined and coordinated with the exterior sash and frame color of the restored windows on the East, South and West facades.
- e. Existing Doors to Remain





The OH Door at the First Floor West Façade will be retained along with the South Loading Dock door and entrance at the First Floor. These locations will be retained and stabilized to remain as-is and secure until a future tenant comes along. At that time a COA will be expected to address these future proposed improvements.

2.) Masonry Re-Pointing, Cleaning, and Reconstruction: Photos 1-18, 22-28

- a. *Cleaning:* The façade brick is proposed to be cleaned with a mild and NPS approved cleaner such as a Prosoco 'Sure Klean' Restoration Cleaner. Limestone sills, banding, base, and keystones should be cleaned with a mild and NPS approved cleaner such as a Prosoco "Enviro Klean" EK Restoration Cleaner or similar product. These products are approved by the NPS for application on historic national register properties by qualified masonry technicians in the field.
- b. *Re-pointing of Brick*: The exterior walls consist of brick in a running bond. All facades will be tuck-pointed. Remove all extraneous metal anchors and fill or repair holes.
- c. *Reconstruction*: In where the brick walls are deteriorated or unstable, brick walls will be reconstructed. This may be required at certain sections of the parapet walls. Broken original brick will be replaced with new or salvaged matching brick.
- d. *Copings and Parapet Walls*: Limestone copings over triple wythe parapet walls exist, but are not the original design. Corbelled brick, a stone cornice, and multi-layered shouldered copings were present in the building's original condition, but were removed between 1941 and 1950, when the large illuminated cursive signs were also removed. The existing parapet walls be repaired, but the current design will not be modified.
- e. *Sealant Joints*: Horizontal and vertical limestone masonry joints, such as parapet copings, sloping sills and cornice trim should be ground out and pointed with a backer-rod and soft sealant joint to allow for movement, instead of a hard mortar joint. This will prevent water infiltration which is allowing water into the wall and causing efflorescence.
- f. *Steel Lintels*: Some windows have steel lintels and shall be renovated as follows: Inspect for rust and metal deterioration. Rust to be removed with mechanical means (wire brush, grinder, etc.) coated with an oil base rust inhibiting primer and coated with 2 coats exterior finish paint. If any rust jacking is observed once masons are mobilized, verify extent of rust and remove brick, expose steel lintel and repeat process to remove rust and prep for paint before rebuilding masonry.

3.) Roof Replacement and Drainage: Photos 13, 16, 19-24, 26, 28

a. *Replacement of Roofing:* The existing roof consists of 2 layers of BUR (smooth BUR over granular) on the original poured in place concrete deck. The roof is deteriorated and leaking in certain areas and will be replaced with a new 60 mil





TPO 20 year warranted membrane or comparable. New perimeter flashing will be added as required for a complete and warranted new roofing system.

- b. Alternate for rigid insulation: Consideration will be given to adding a minimum of R-30 polyiso rigid board insulation under the new roof (2 layers of 2.5" = 5" total). New roof membrane will be provided at all roof locations, including main roof, upper monitor roof along with over stair and elevator core. The upper monitor roof is a BUR over OSB decking and an older bitumen roof on the original concrete deck.
- c. *Deck:* The existing roof deck is a cast in place concrete deck and has a significant slope (at least $\frac{1}{2}$ " per 1'-0"), so no tapered insulation will be required.
- d. *Drains:* The roof slopes to the four corners (NE/SE/SW/NW), where internal roof drains exist. Overflow drains will be added so there will be two drains per corner for a total of eight total roof drains. Only one drain in each corner is functioning, with the remainder clogged or damaged. The drains and strainers will be cleared and repaired to allow for full functionality of all eight drains.
- e. *Skylights:* The east skylight is covered with a membrane that is failing and part of the original frame is exposed. The design will flash the new roof up to the curb 12" min and the skylight will be covered with a new plywood deck secured to the frame and a new membrane added. A future tenant or developer can then consider renovation of the skylight one a use has been determined. The Stair / elevator shaft has 2 small original skylights that remain. These will be treated similar to the east Skylight (decked and roofed over).
- f. *Chimney, HVAC Ventilators, Ducts and Misc Abandoned Roof Equipment:* The Chimneys, HVAC Ventilators, Ducts and Misc Abandoned Roof Curbs and Equipment that are not being used will be demolished, capped off, decked over and re-roofed for a clean roof installation. Plumbing vents will be retained to allow sewer gas to exhaust through the roof.





Photo 1 - East Facade



Photo 2 - South Facade





Photo 3 - West Facade



Photo 4 - North Facade





Photo 5 - Aerial from East



Photo 6 - Aerial from NW



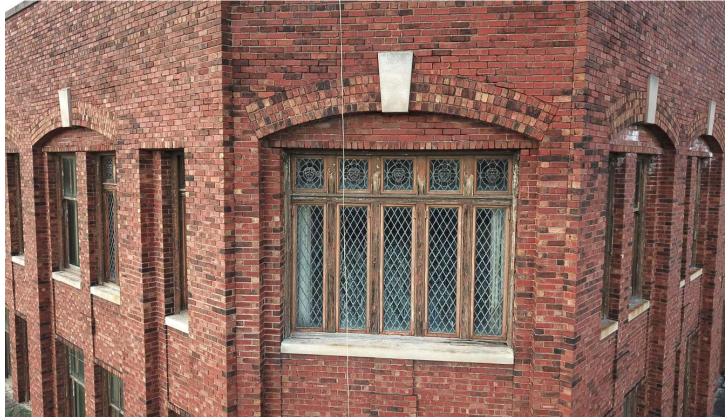


Photo 7 - Executive Office Windows at SE Corner

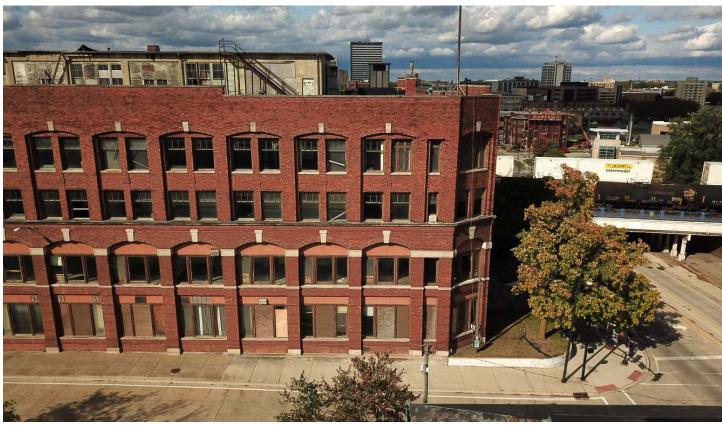


Photo 8 - SE Corner





Photo 9 - South Central Facade

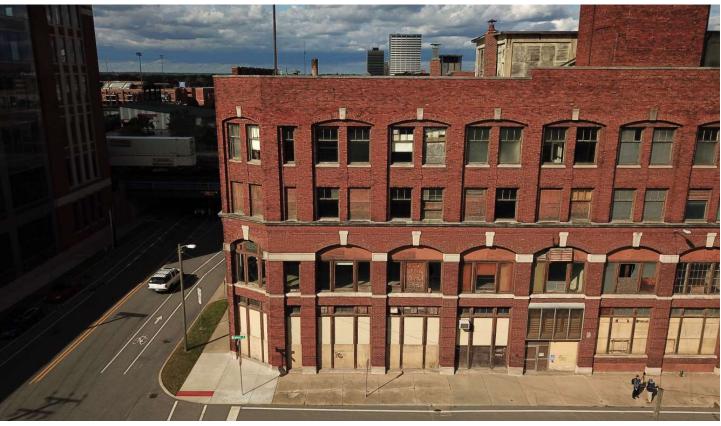


Photo 10 - SW Corner





Photo 11 - Typical Condition 3-4 Floors - W Facade



Photo 12 - Typical Condition 1-2 Floors - W Facade





Photo 13 - Monitor Roof w/ Clerestory from NW



Photo 14 - Aerial from SE





Photo 15 - Low Aerial from SW



Photo 16 - High Aerial from SW



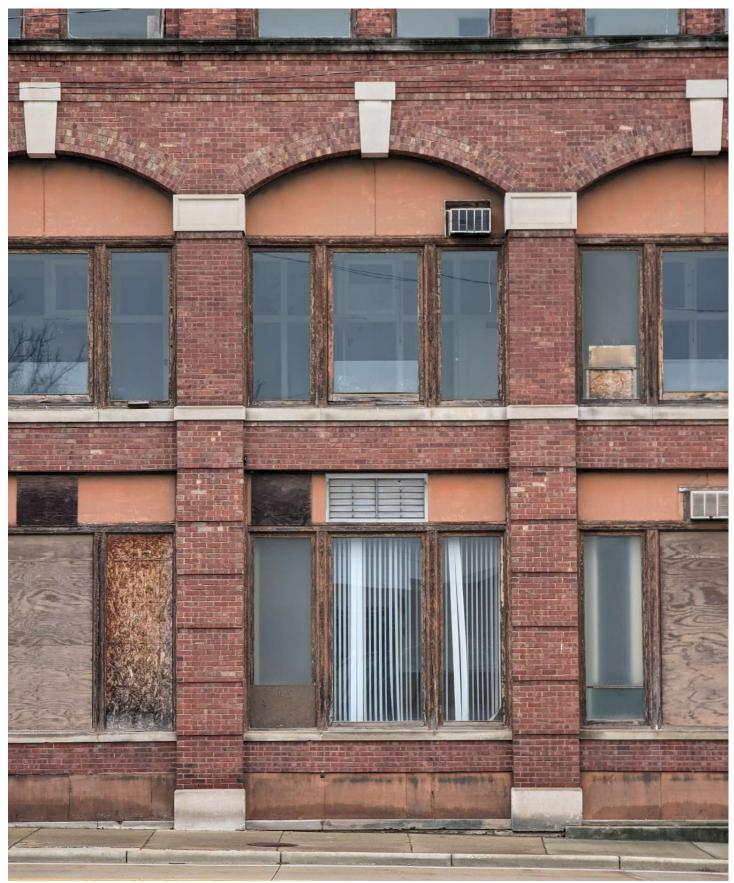


Photo 17 - Typical 1-2 Floor South Windows





Photo 18 - Typical 3-4 Floor South Windows and Parapet Wall





Photo 19 - Typical Bank of Clerestory Double Hung Windows



Photo 20 - Brackets, Flashing, etc. at Monitor Roof





Photo 21 - View to W of Clerestory Windows and Roof



Photo 22 - Significant Ponding above Executive Offices





Photo 23 - Roof condition at top of Monitor Roof (bricks above concrete wall below)



Photo 24 - Typical Stepped Flashing and Parapet Pier adjacent to Elevator Tower



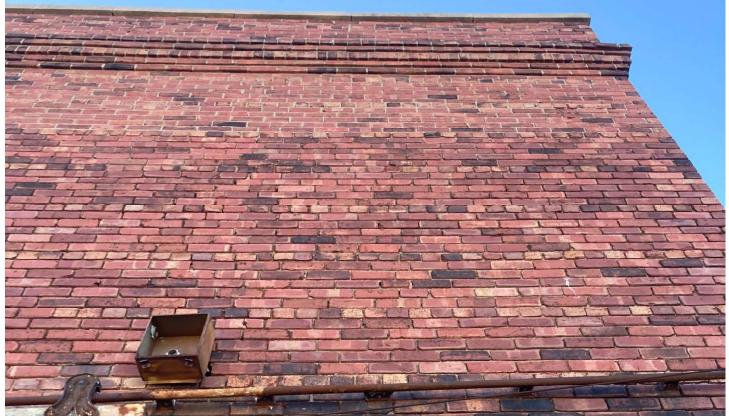


Photo 25 - Brick Wall and Corbelling at Elevator Tower



Photo 26 - Typical Parapet Wall at North Side of Roof



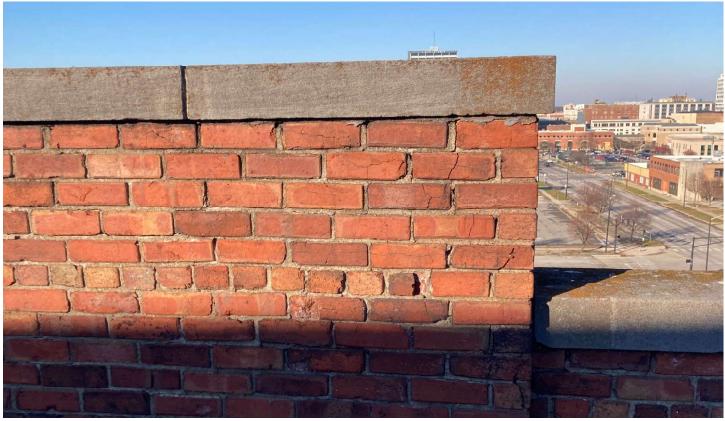
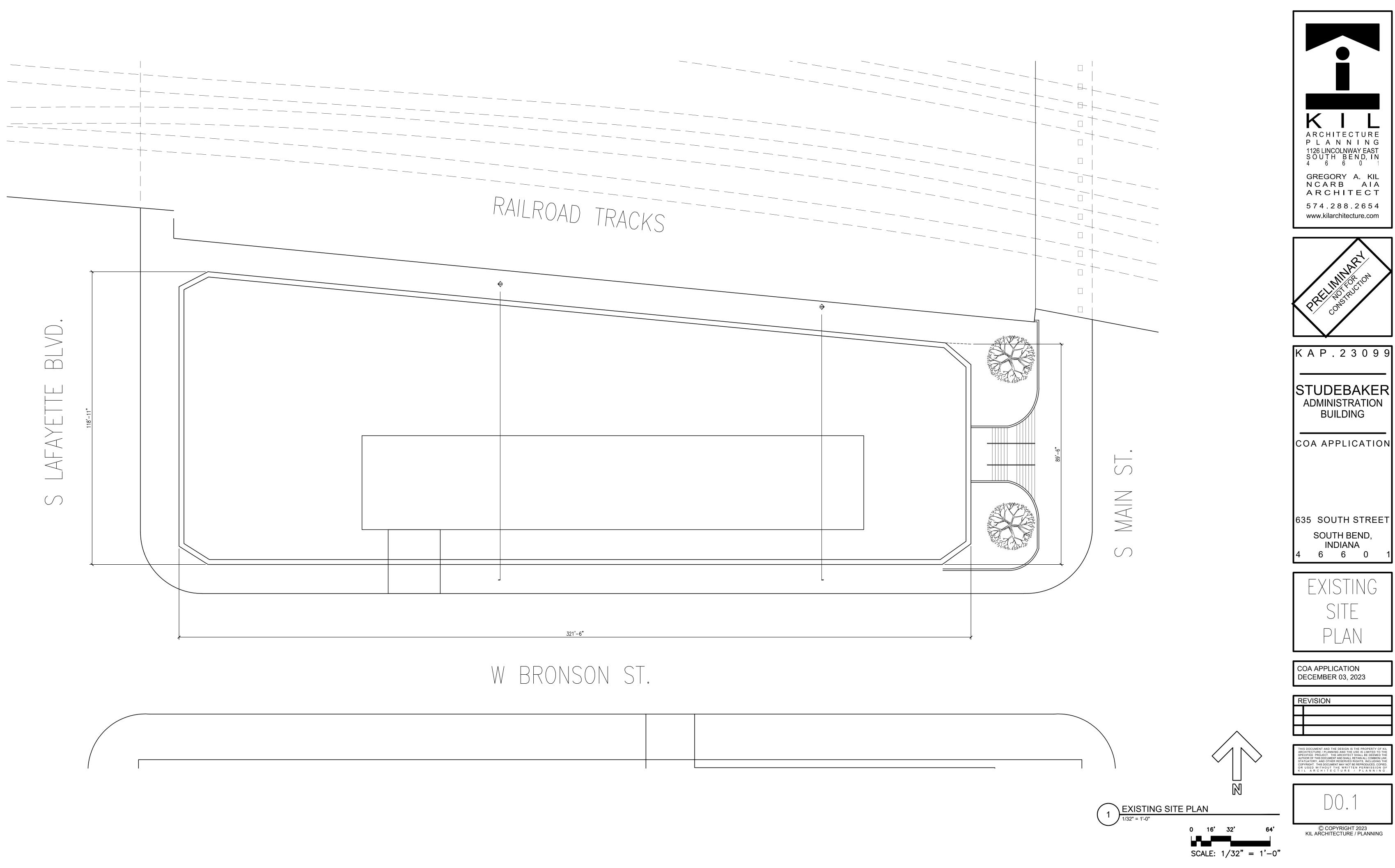


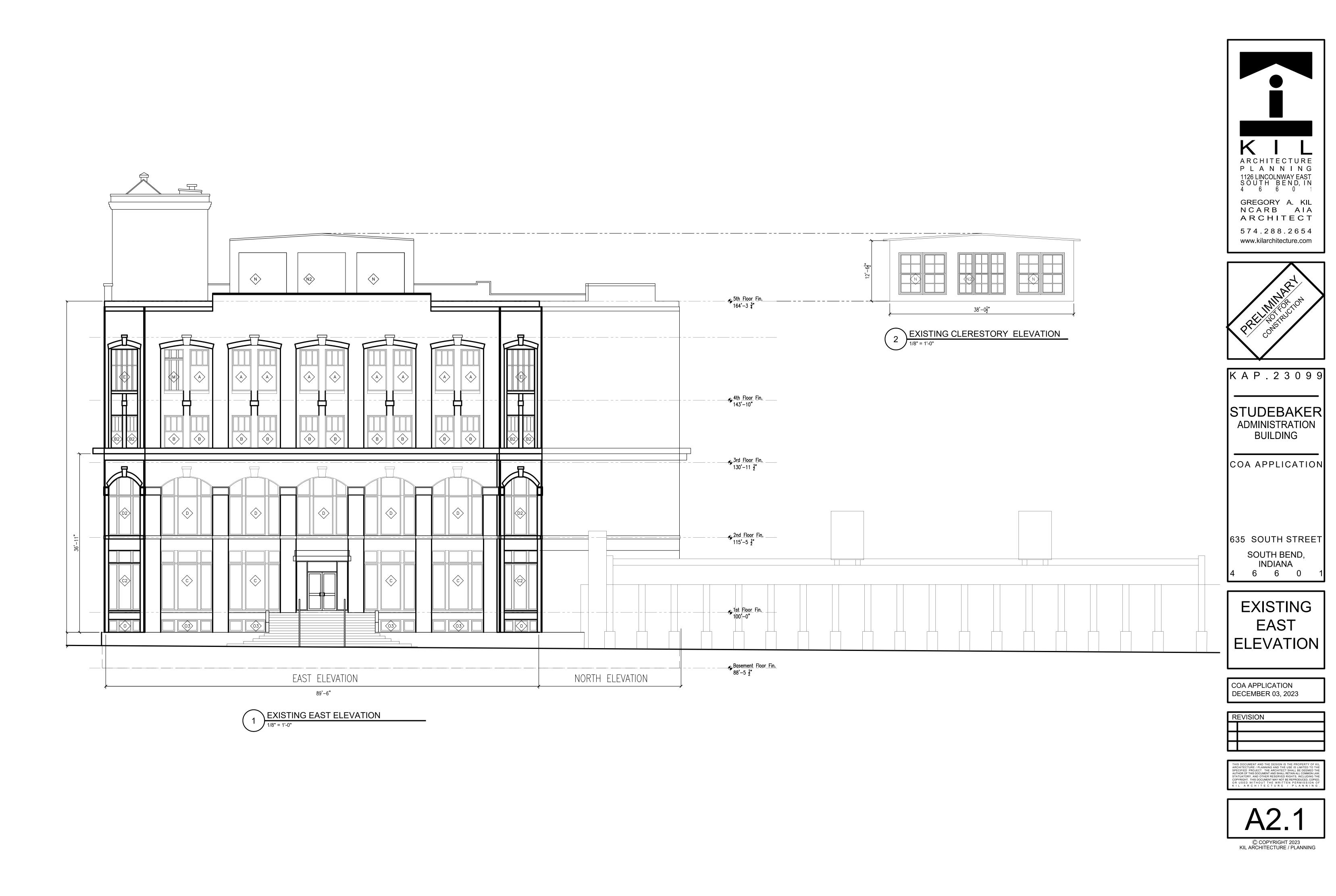
Photo 27 - Typical Step in Height of Parapet Wall

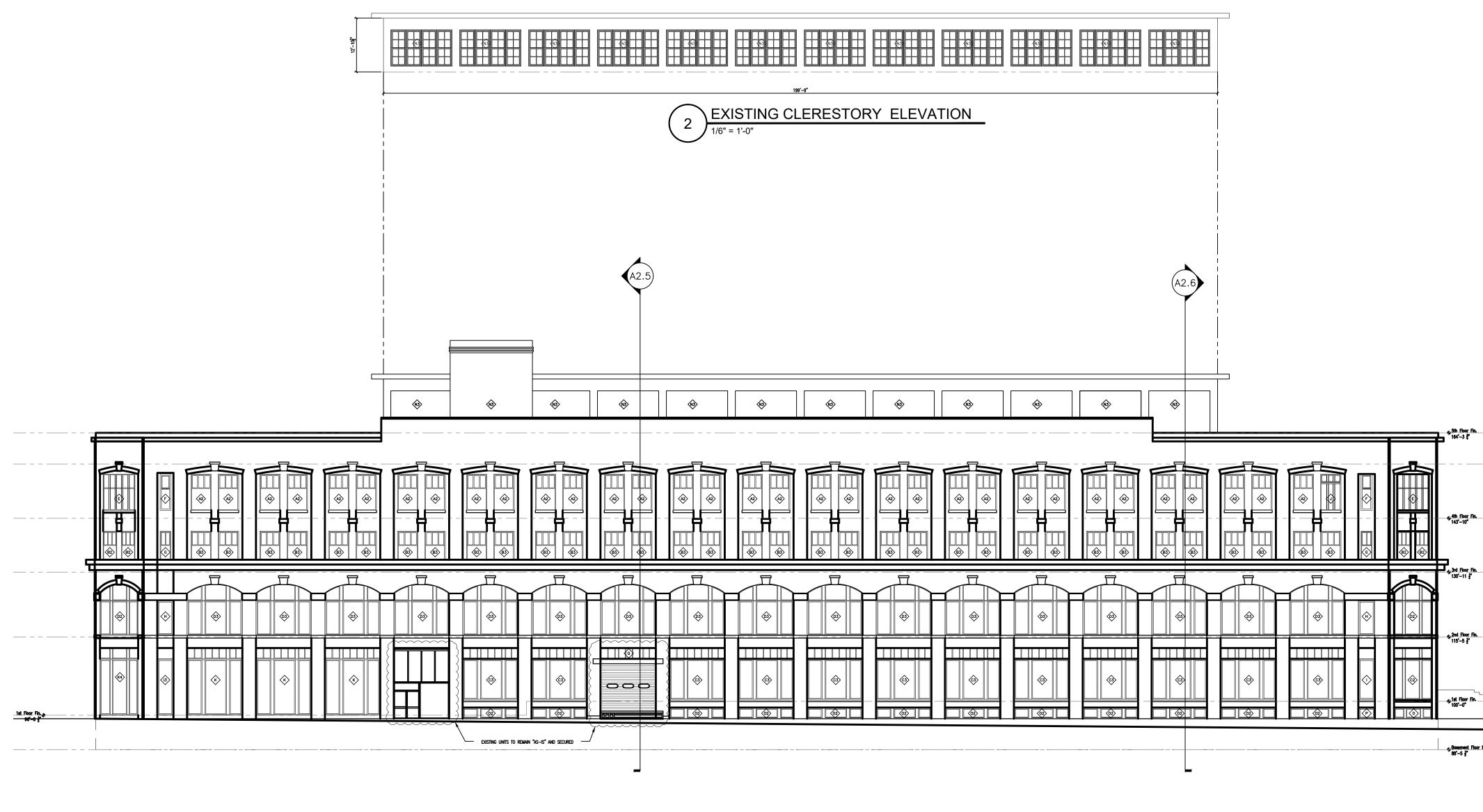


Photo 28 - Ponding at Corner Drain









EXISTING SOUTH ELEVATION 1/16" = 1'-0"

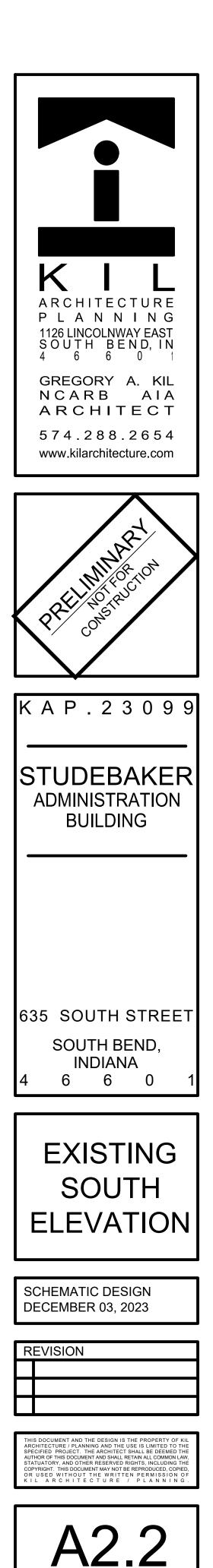
+4th Floor Fin. 143"−10"

→ <u>3rd Floor Fin.</u> 130'-11 ‡"

◆2nd Floor Fin. 115"-5 ½"

_____01st Floor Fin. _____ 100'-0"

Bosement Floor Fin. 88'-5 ½"



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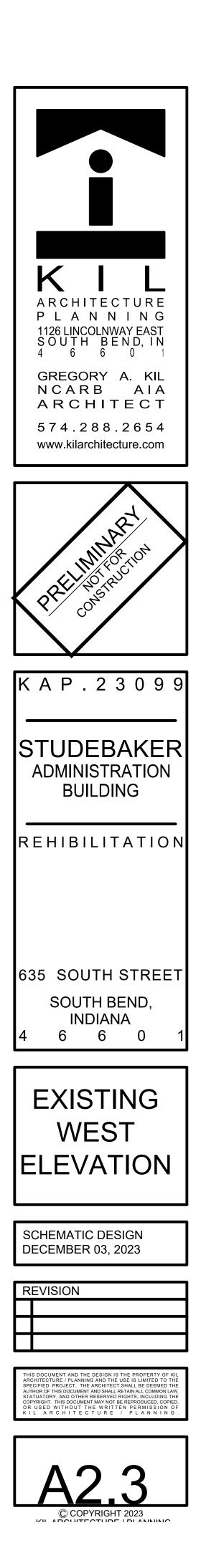


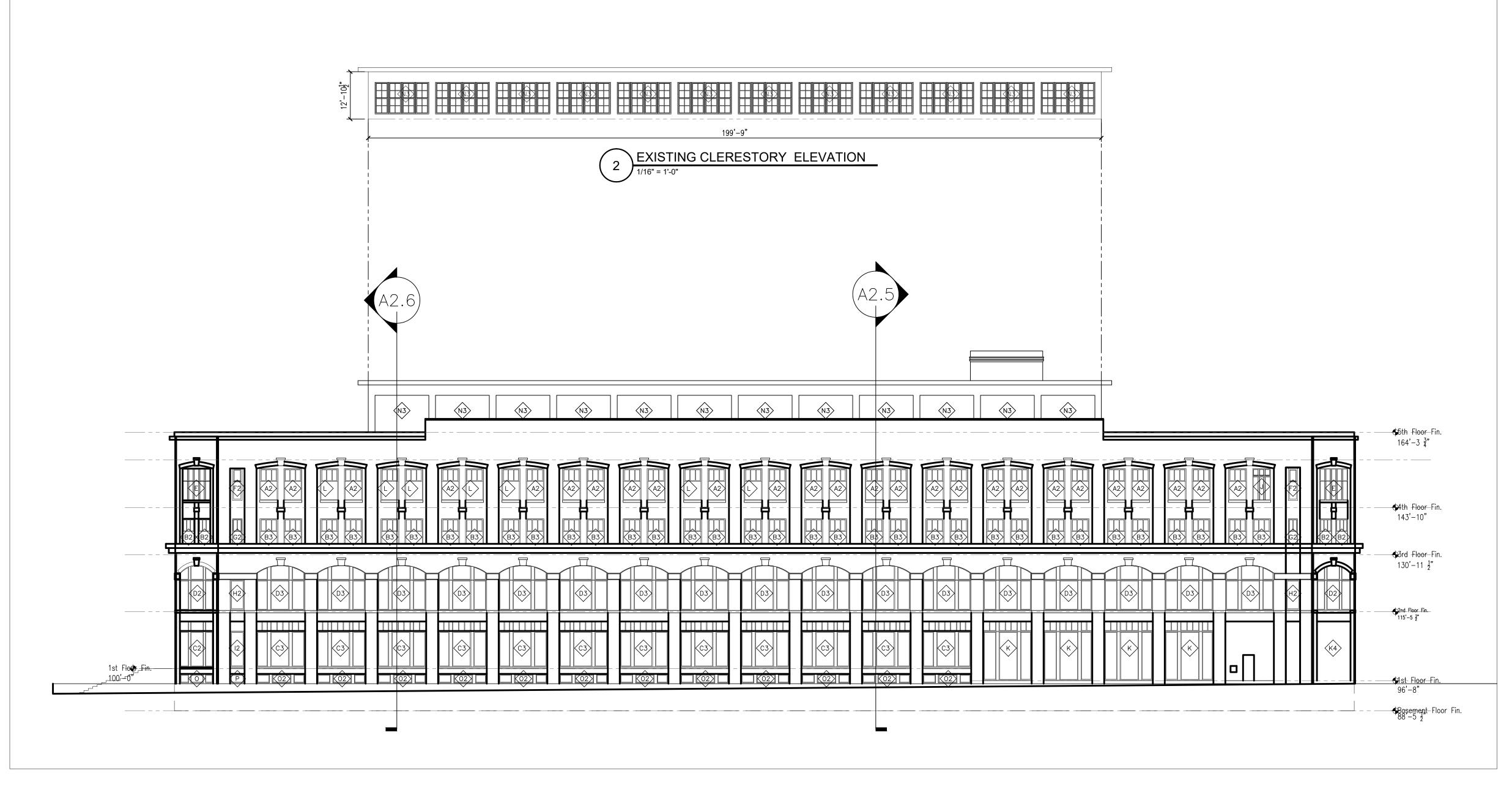
1 EXISTING WEST ELEVATION

______3rd_Floor_Fin._____ 130'-11_¹2"

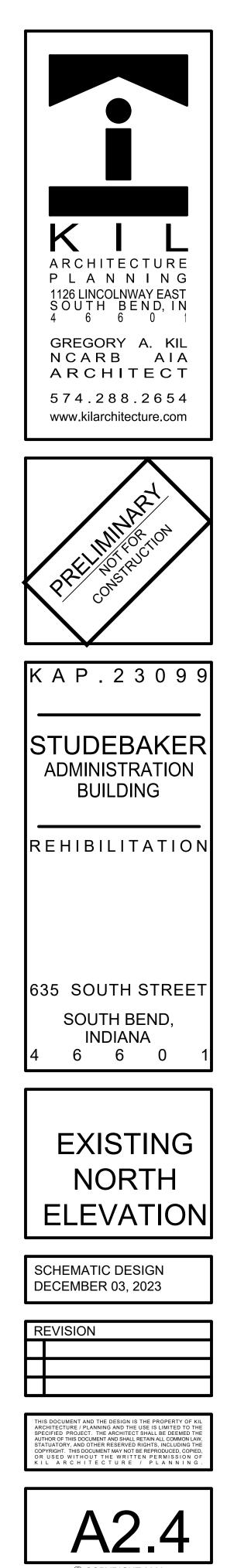
_____<u>2nd_Floor</u>_<u>Fin.</u>_____ 115'−5 ½"

● Basement Floor Fin. 88'-5 1"

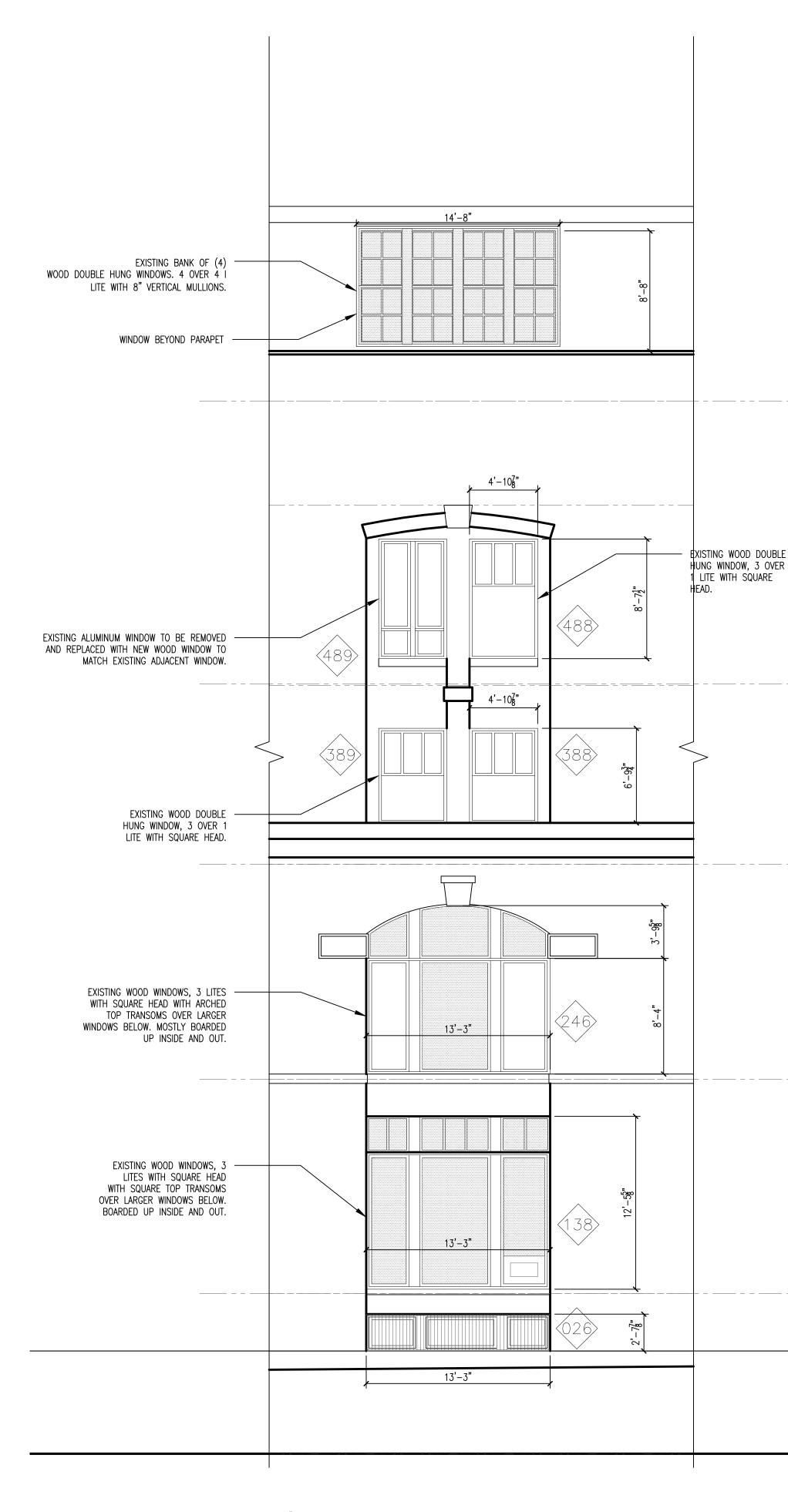




1 EXISTING NORTH ELEVATION



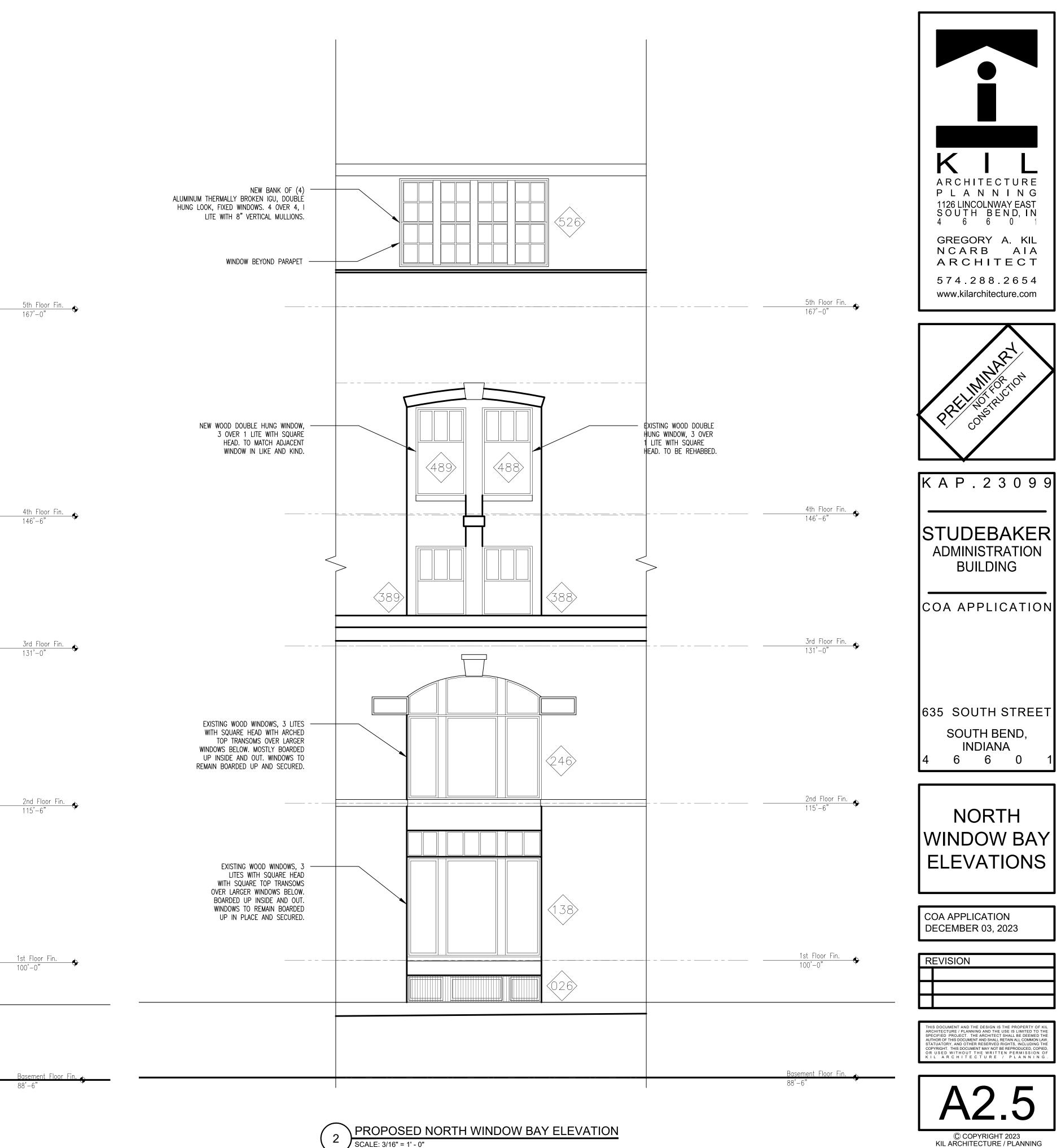
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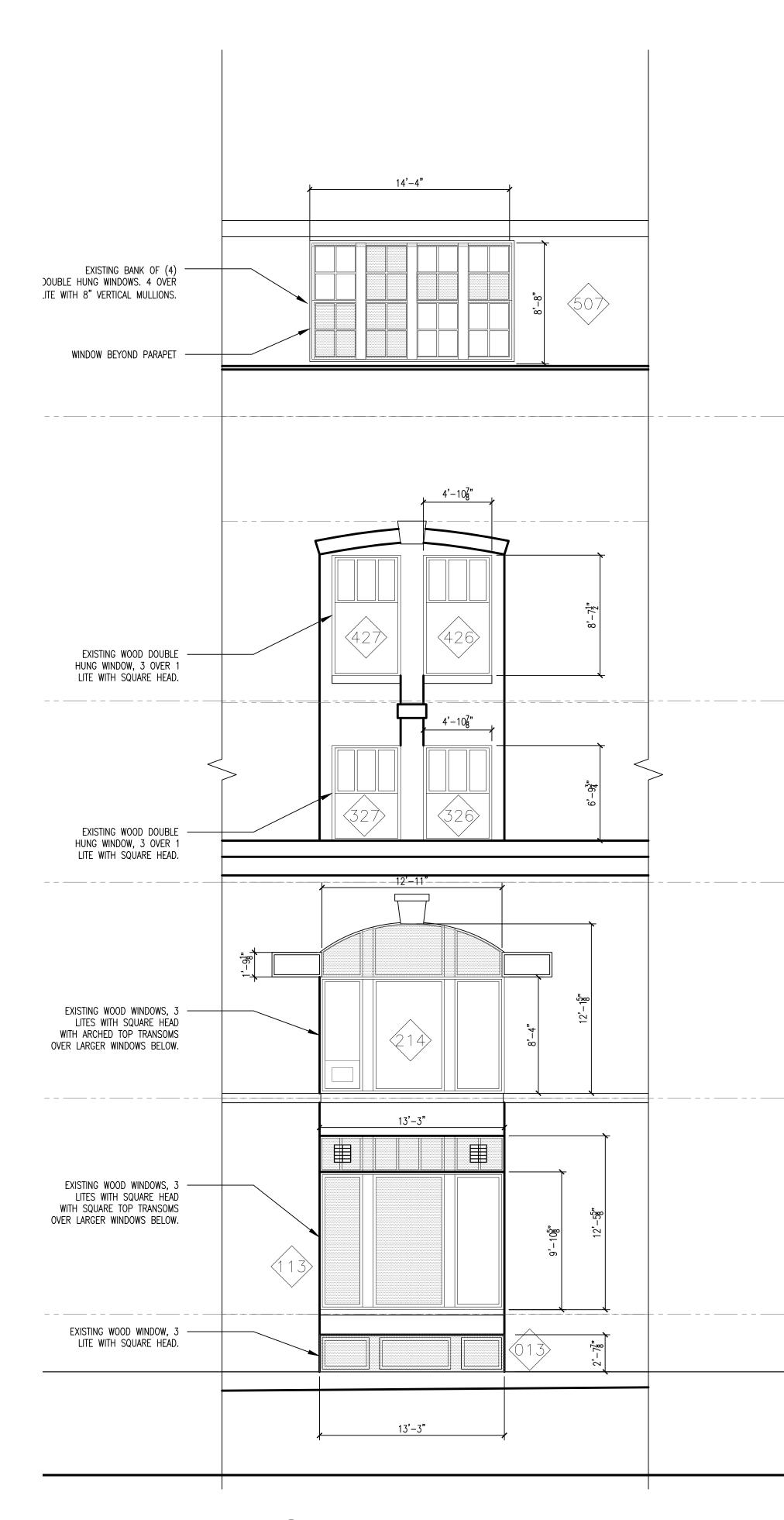


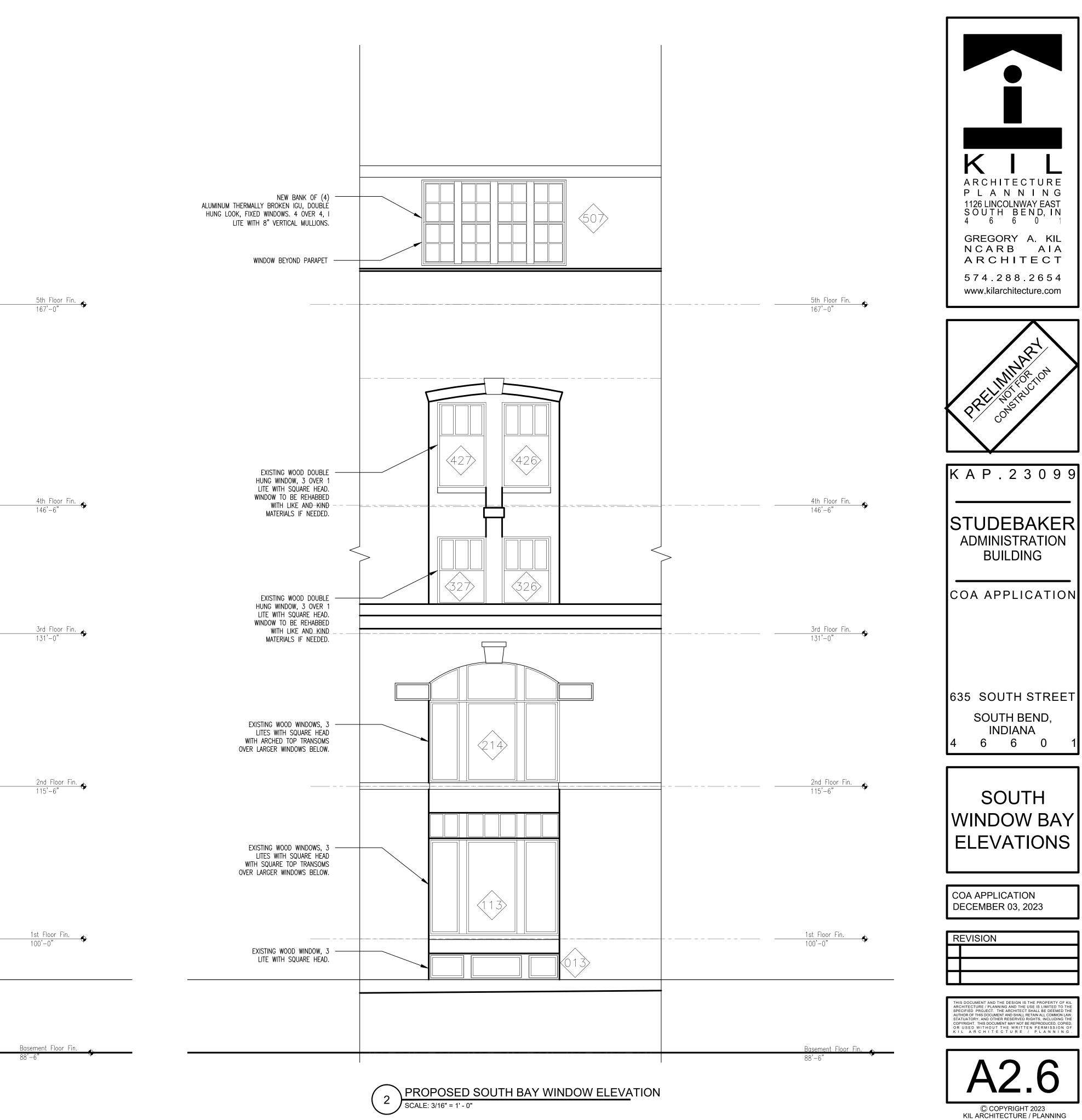


Basement Floor Fir





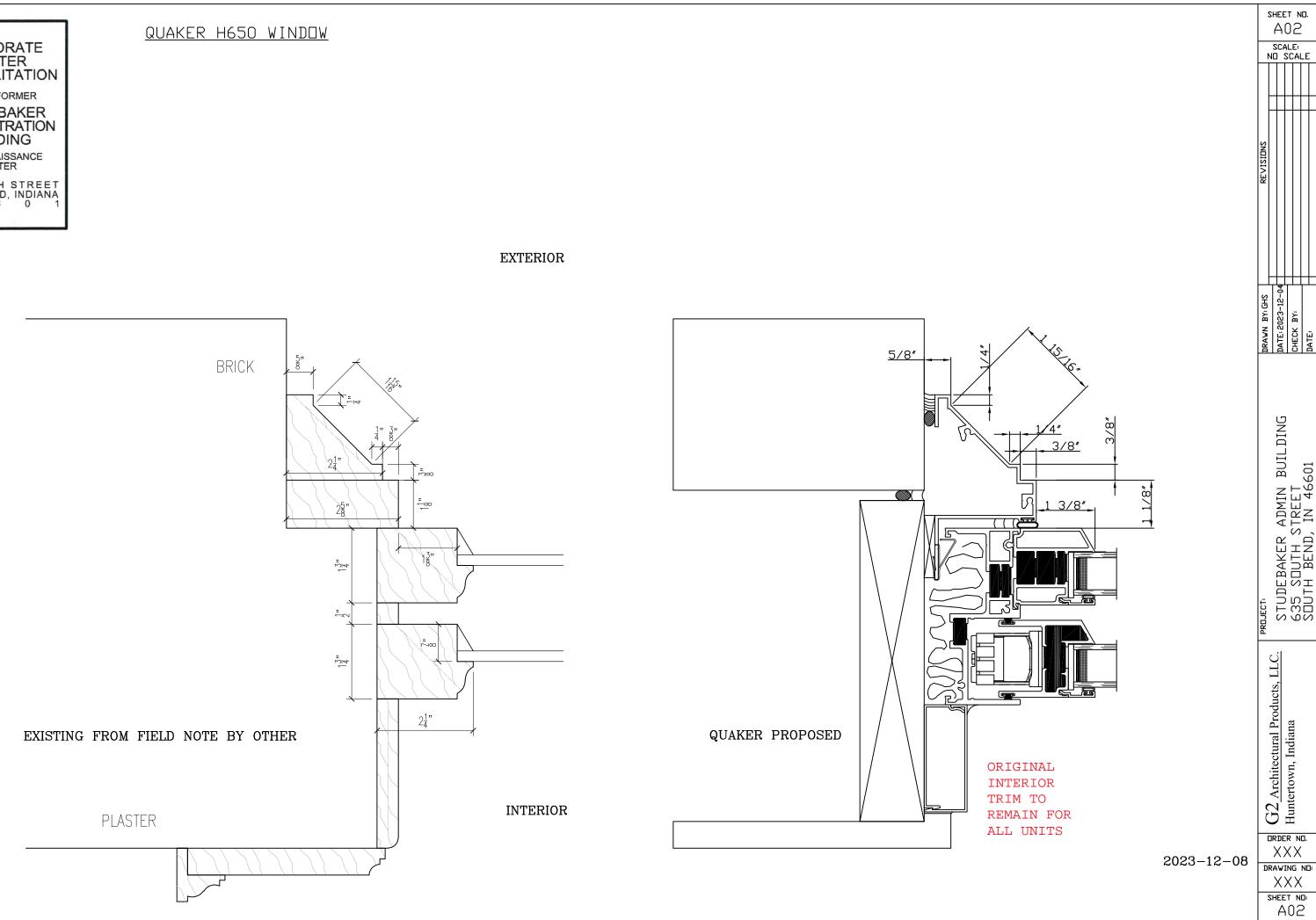
















Single Hung | Fixed | Fixed Simulated Hung



Frame Depth





Design Pressure	U-Value*					
Single Hung:	Single Hung:					
Fixed:	Fixed:					
Air Infiltration	SHGC*					
Single Hung:	Single Hung:					
Fixed:	Fixed:					
Water Resistance	CR*					
Single Hung:	Single Hung:					
Fixed:	Fixed:					
OITC [×]	STC [×]					
))))Single Hung:))) Single Hung:					
Fixed:	Fixed:					
*-Ranges based on multiple Low-E/Argon I.G. combinations ^x -Ranges based on multiple I.G. combinations						

* - AW50 rating and thermal test numbers are projected. Official testing in progress as of September, 2021

FEATURES:

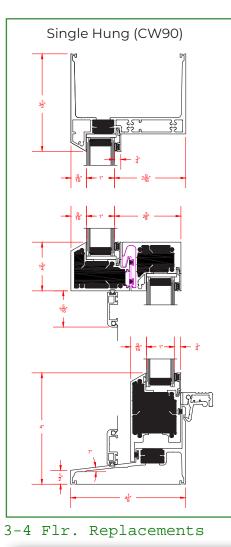
- Historically-correct bevel frame
- Architectural grade aluminum frame
- Thermally-broken frame and sash with pourand-debridge technology
- No fin main frame for retro-fit purposes
- Alternative model with Nail fin (H655 Series)
- ► 1" insulating glass
- Heavy-duty Class 5 balancers
- ► Auto lock sill
- Standard High-Performance 2604 Powder Paint Finish (an FGIA Specification)
- Optional Upgrade to 2605 Powder Paint Finish (an FGIA Specification)
- ► 30+ "Quick-Pick" colors, with unlimited custom colors available

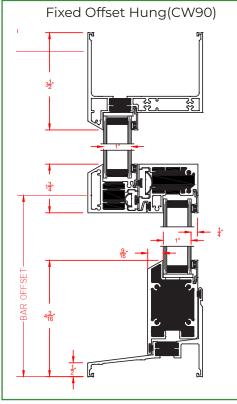
www.QuakerCommercialWindows.com

Information listed is deemed accurate as of date shown. Quaker Windows reserves the right to change or discontinue any product, feature or option without notice .



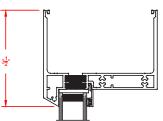


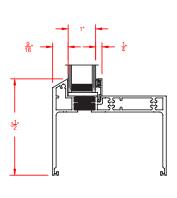




Clerestory Replacements

Fixed (AW110)





All ratings listed are NAFS certified.



Made in America: All Quaker products are designed and manufactured in the United States at our state-of-the-art facilities in Freeburg, MO and Eldon, MO.





H650/H655 Series 4 1/8" Frame Depth Single Hung

H650/H655 SERIES SINGLE HUNG

The Quaker Historical H650/H655 Series Single Hung window is ideal for a variety of applications including - Historical, Landmarks, Institutions, Education, Apartments and Assisted Living.

FEATURES

- ♦ Commercial Framing System
 - 4 1/8" main frame
 - 0.062" wall thickness of interior and exterior walls
 - Nail flange main frame (H650) or no nail flange (H655)
- ♦ Thermally Enhanced Design
 - Azon pour and debridge thermal break in main frame.
 - AzoCore expandable polyurethane barriers in sash rail extrusions
- ♦ Glazing
 - 1' insulated glass
- ♦ Hardware
 - Gravity Latch
 - Heavy duty Class 5 Balancers
- ♦ Screen
 - Extruded aluminum screen frame

BENEFITS

- The capacity to match exterior colors for unique project facades
- ♦ The ability to facilitate large sizes for taller and wider window openings
- Historically accurate panning and trim styles to help your project meet Historic Preservation codes

PERFORMANCE

Structural & Thermal (test reports and thermal simulations available upon request)

Model	Single Hung		
NAFS Rating	AW-PG50*		
Structural Load P.S.F.	75.00*		
Air at 6.2 PSF Differential	0.30*		
Water (No Penetration) P.S.F.	10.00*		
U-Value (ranges based on multiple Low-E/Argon combinations)	as low as 0.30*		
SHGC (ranges based on multiple Low-E/Argon combinations)			

Window test size: $60^{\circ} \times 99^{\circ}$

Operating Force: 25.3 lbf (maintain motion), 14 lbf (latches)

* - Ratings and Test data shown are projected. Testing in progress as of September, 2021

Our products are tested to the standards of and certified by some of the foremost organizations in the fenestration industry.





♦

 \Diamond

• Internal or simulated divided lites available

Simulated Single Hung/Fixed

♦ Limited travel hardware

Muntin Choices

Available Configurations

Oriel Single Hung

Single Hung

◊ Screen

OPTIONS

•

- Extruded aluminum half screen frame with aluminum wire mesh
- Extruded aluminum screen frame with sunscreen mesh
- Extruded aluminum screen frame with stainless steel 0.009" thickness mesh
- Security screen
- ♦ Glazing
 - Multiple Low-E and argon glazing choices
 - Capillary tubes
 - Wide variety of glazing, tinting and thickness options
- ♦ Panning & Trim Choices
 - Wide variety of panning, receptor and trim available
- ♦ Mulling
 - Wide variety of structural mulls
- ♦ Specialty
 - Extension jambs
 - Ogee lugs
 - WOCD hardware

10/2021 - V4



- AAMA 2605 (an FGIA specification) powder coat finishes (not available for all colors shown)
- ♦ SolarLE Paint Finish (available with Textured Black and Dark Espresso colors only)
- ♦ AAMA 611-98 Class I (an FGIA specification) clear and tinted anodized finishes

* Printed colors shown here may not accurately depict actual painted colors. Color samples are available upon request.









Historical Product Selection Guide

Model	Series	Frame Depth	Structural Test Rating	Test Size	Design Pressure	Air Infilt.	Water Resistance	U-Value Range [#]	SHGC Range [#]	STC Range ^x	OITC Range ^X
Casement	H450	3-1/4"	CW90	36" x 60"	90	<.10	10	.39–.44	.14–.48	34-37	29-32
Project-Out	H450	3–1/4"	CW70	60" x 36"	70	<.10	10	.4060	.14–.59		
Single Hung	H650	4-1/8"	AW-PG50 ^	60" x 99"		<.10^	10^			31–32	24-26
Fixed	H450	3–1/4"	AW-PG110	72" x 120"	110	<.10	15.04	.26–.50	.16–.69		
	H650	4-1/8"	AW-PG65 ^			<.10^	12^				

Projected performance data as of 7–5–2022

*-Ranges based on multiple Low-E/Argon I.G. combinations

x-Ranges based on multiple I.G. combinations

All ratings listed are NAFS certified. Periodic re-certification testing is required thus data shown may vary slightly.

THE ASSEMBLY (FORMERLY FORD MOTOR ASSEMBLY PLANT) Indianapolis, IN Built: 1914

Windows: Floating Operator, Fixed and Arch Fixed As motor car popularity grew in the early 1900s, Ford Motor Company decided to build this assembly plant in Indianapolis. Production at the new plant exceeded expectations quickly. By 1923, it was rolling out 85,000 vehicles a year. But when the Great Depression hit, the Indy plant became a casualty, closing in 1932. Decades later, after years of non-use and little maintenance, the structure had become an eyesore. That changed in 2017 when a development firm bought the property and eventually transformed it into a mixed-use facility, gaining national accolades along the way.

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