

23718 W US HWY 27
High Springs, Florida 32643



Telephone: (386) 454-1416
Facsimile: (386) 454-2126
Web: www.highsprings.us

**HIGH SPRINGS HISTORIC PRESERVATION BOARD
COMMISSION CHAMBER
AGENDA**

April 15, 2024

6:30 P.M.

CALL BOARD TO ORDER:	CHAIR – BRAD RIDDLE
PLEDGE OF ALLEGIANCE:	VICE CHAIR – TIM BOLLIGER
ROLL CALL:	PLANNING TECHNICIAN – KRISTYN ADKINS
APPROVAL OF MINUTES:	MARCH 18, 2024

NEW BUSINESS:

- 1. Z24-000023 – CERTIFICATE OF APPROPRIATENESS - PEDIATRICS CLINIC EXPANSION**
- 2. Z24-000024 – CERTIFICATE OF APPROPRIATENESS - HONEY BEE VENTURES FAÇADE IMPROVEMENTS**

AJOURN

PLEASE NOTE: PURSUANT TO SECTION 286.015, FLORIDA STATUTES, IF A PERSON DECIDES TO APPEAL ANY DECISION MADE BY THE PLAN BOARD WITH RESPECT TO ANY MATTER CONSIDERED DURING THIS MEETING, HE OR SHE WILL NEED TO ENSURE THAT A VERBATIM RECORD OF THE PROCEEDINGS IS MADE, WHICH RECORD INCLUDES THE TESTIMONY AND EVIDENCE UPON WHICH THE APPEAL IS TO BE BASED. IN ACCORDANCE WITH THE AMERICAN WITH DISABILITIES ACT, A PERSON WITH DISABILITIES NEEDING ANY SPECIAL ACCOMODATIONS TO PARTICIPATE IN CITY MEETING SHOULD CONTACT THE OFFICE OF THE CITY CLERK, 23718 W US HWY 27 HIGH SPRINGS, FLORIDA 32643. TELEPHONE (386) 454-1416 EXT 7237

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**HIGH SPRINGS
HISTORIC PRESERVATION BOARD
MEETING MINUTES
March 18, 2024**

Meeting called to order by Chair Riddle at 7:02PM.

ROLL CALL PLAN BOARD:

Chair Bradley Riddle – Present

Vice Chair Tim Bolliger - Present

Member Rick Testa - Present

Member Mark Bertocci – Present

Member Steve Tapanes - Present

STAFF PRESENT:

Scott Walker, City Attorney
Kristyn Adkins, Planning Technician

Motion Member Bolliger to approve March 18, 2024 minutes. Seconded by Member Tapanes. Motion passed 5-0.

UNFINISHED BUSINESS:

- 1. Z23-000042 – CERTIFICATE OF APPROPRIATENESS – DUPLEXES (DAVID SUTTON)**

Motion to deny (due to the Special Exception being denied in the Plan Board Meeting) by Member Bolliger. Seconded by Member Testa. Motion passed 5-0.

NEW BUSINESS:

- 1. Z24-000014: CERTIFICATE OF APPROPRIATENESS – RESIDENTIAL RENOVATIONS (FORREST)**

Staff presented the item.

Member Tapanes stated the paint doesn't fit the neighborhood. He spoke of his experience with copper gutters being that they last longer.

The City Attorney explained the code.

Motion Tapanes to deny. No second.

Motion Member Bolliger to approve with conditions that the black paint be changed to the grey of the shed that was approved, or a color lighter than the grey. Seconded by Member Tapanes. Motion passed 5-0.

2. Z24-000015: CERTIFICATE OF APPROPRIATENESS – REROOF (WATKINS)

Staff presented the item.

Motion Member Bolliger to approve. Seconded by Member Testa. Motion passed 5-0.

3. Z24-000016: CERTIFICATE OF APPROPRIATENESS – AWNINGS (TWO FINGER PROPERTIES LLC)

Staff presented the item. The board discussed district standards/colors. A citizen mentioned a historic preservation brief on awnings that she would email to staff to read.

Motion Member Testa to approve. Seconded by Member Bolliger. Motion passed 5-0.

Member Tapanes asked regarding code issues, and CRA grants.

4. Z24-000017: CERTIFICATE OF APPROPRIATENESS – AWNINGS (SPRING BUILDING LLC)

Staff presented the item.

Motion Member Bolliger to approve. Seconded by Member Tapanes. Motion passed 5-0.

5. Z24-000018: CERTIFICATE OF APPROPRIATENESS – REROOF (HONEY BEE VENTURES)

Staff presented the item.

Motion Member Bolliger to approved. Seconded by Member Tapanes. Motion passed 5-0.

6. Z24-000019: CERTIFICATE OF APPROPRIATENESS – SHED (GARCIA)

Staff presented the item. Member Riddle asked regarding an electrical permit.

Motion Member Bolliger to approve. Seconded by Member Tapanes. Motion passed 5-0.

Member Tapanes asked regarding Chompers' landscaping, which had been a requirement of their approval. Staff stated they would look into it.

Member Tapanes asked regarding the Canoe Outpost the City owns, and whether we could sell it. The City attorney stated he would have to research it.

Member Bertocci motion to adjourn. Seconded by Member Bolliger. Motion passed 5-0. Meeting adjourned.

NEW BUSINESS #1

Z24-000023

CERTIFICATE OF APPROPRIATENESS
PEDIATRICS CLINIC EXPANSION



Planning Department
23718 W US HWY 27, High Springs FL 32643
386-454-7322

**CERTIFICATE OF APPROPRIATENESS – APPLICATION
BOARD APPROVAL**

Attach plan, sketch, materials list, colors, and any information to determine appropriateness of the project. If not provided, this will delay the application process.

DATE: 4/4/24 PERMIT NO.: _____
APPLICANT: eda consultants, inc. PHONE: 352-373-3541
PROJECT LOCATION: 19228 NW US Highway 441
OWNER'S NAME: Sabah Trading LLC (Dr. Nasir Ahmed)
TAX PARCEL NUMBER: 00649-000-000, 00649-001-000, 00650-004-001, 00650-001-001

DESCRIPTION OF PROJECT:
A proposed one story approx. 2,103 S.F medical office building located adjacent to an existing medical
office building along US Hwy 441 within the Downtown Development Overlay District.

LIST OF MATERIALS AND COLORS:
Brick, stucco & glazing, brick to match existing, stucco to match neutral color existing, glazing frames to match
existing bronze. Also, see attached elevations.

APPLICATION FEE: \$100.00 (Must submit fee with application)

I HEREBY CERTIFY that I am the simple owner of record of the above described property (or have attached my authority) to apply for this permit.


Applicant Signature

Clay Sweger, AICP
Print Name

NOTE: Building and/or other permits may be required before proceeding with project. The appropriateness approval expires within one year of approval date. If work is discontinued for a six month period or longer the project will be considered abandoned.

STAFF USE ONLY: APPROVED _____ NOT APPROVED _____

ZONING ADMINISTRATOR

DATE

Sec. 3.02.08.02. Certificate of appropriateness—Review guidelines.

The purpose of establishing guidelines in the review of an application for certificate of appropriateness is not only to preserve the old buildings and structures themselves, but also to preserve the antiquity of the entire historic district. It is not the intent to limit new construction to any one period or architectural style, but to preserve the integrity of historic buildings and to insure harmony of any new work constructed in the vicinity. Harmony or incompatibility should be evaluated in terms of the appropriateness of materials, scale, size, height, placement, and use of new buildings or structures in relationship to existing buildings and structures and to the setting thereof. To that end, the following criteria are hereby established:

- (1) *Criteria for renovation/new construction.* In considering a certificate of appropriateness related to relocation or new construction, the Secretary of Interiors Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings and the following criteria shall be applied:
 - a. Height—Is the height visually/historically compatible with adjacent buildings?
 - b. Proportion of facade—Is the proportion of the width to the height of the front elevation compatible with buildings and places to which it is visually/historically related?
 - c. Proportion of openings within facility—Is the relationship of the width of the windows, etc., in a building compatible with buildings and places to which it is visually/historically related?
 - d. Rhythm of solids to voids in front facades—Is the rhythm of solids to voids compatible with buildings and places to which it is visually/historically related?
 - e. Rhythm of buildings—Is the relationship of the buildings or structures to open spaces and adjoining buildings compatible with the buildings and places to which it is visually/historically related?
 - f. Rhythm of entrance and/or porch projection—Is the relationship of entrances and projections compatible with the buildings and places to which they are visually/historically related?
 - G, Relationship of materials, texture and color—Is the relationship of materials, texture and color of the facade compatible with the predominate materials used in the buildings to which it is visually/historically related?
 - h. Roof shapes—Is the roof shape compatible with buildings to which it is visually/historically related?
 - i. Walls of continuity—Do appurtenances of the building such as walls, fences, landscape masses, etc., form cohesive walls of enclosure along the street to insure compatibility with the buildings and places to which they are visually/historically related?
 - j. Scale of building—Is the size and mass of the building and structure in relation to open space, windows, door openings, porches, balconies, etc., compatible with the buildings and places to which it is visually/historically related?
 - k. Directional expression of front elevation—Is the directional character of the building compatible with buildings and places to which it is visually/historically related?

Consistency: Please see the letter prepared by Andrew Kaplan, Architect, regarding the proposed building's compliance with the criteria outlined above. In addition, the project Architect will be in attendance at the public meeting to present the project and respond to any questions that the board may have.

Andrew Kaplan, Architect
P.O.Box 13893
Gainesville, FL 32604
Phone 352-373-2726
kaplanarchitect@gmail.com

4-8-2024

MEMO RE: Ahmed Pediatrics Building
2023-59

TO: High Springs Preservation Board

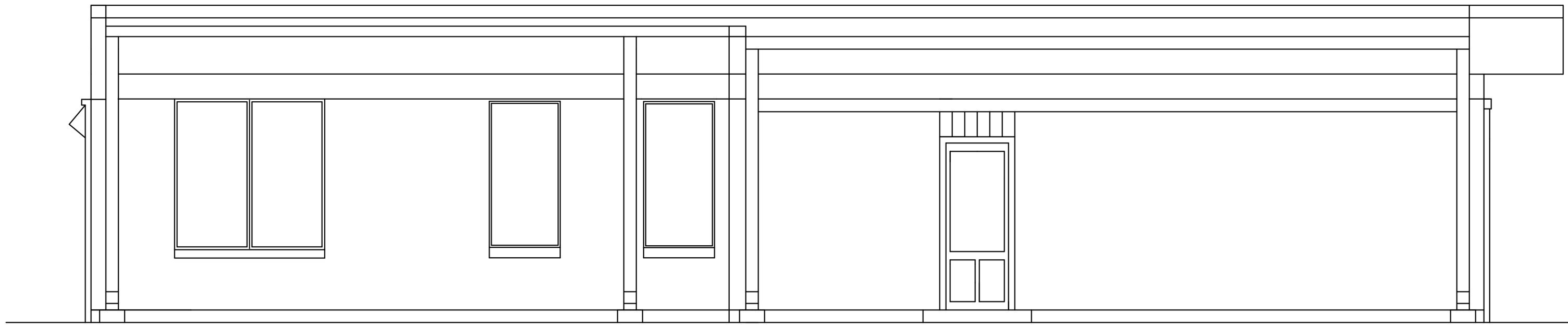
The site is remote from the main area of the Historic District. There are no buildings of historic value nearby. The building existing on the site is a mid-century modern commercial building, one story, flat roof with strong horizontal fascia, brick front, large glass areas at entrances and a band of high horizontal windows.

For the proposed building, the intention is to provide a building similarly contemporary to the existing building to blend with the existing building and to look more updated, but not different.

Program elements are the same as the existing building:

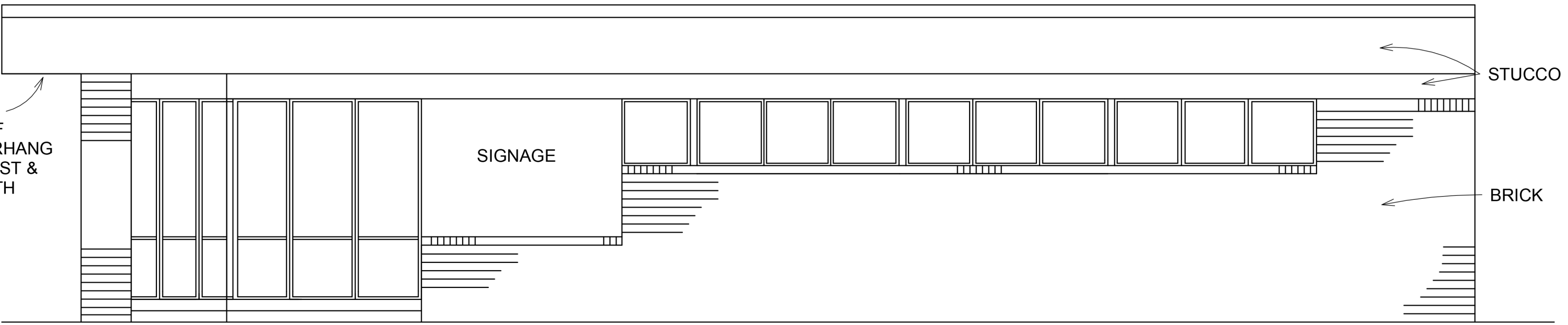
- One story
- Flat roof
- Strong horizontal fascia
- Brick front
- Large glass area at entrance
- Horizontal band of high windows

Since the new building must be brought closer to the street than the existing building, the entrance is from the east rather than facing the street. The glass area of the entrance is brought around from the east side to the street façade to indicate where the entrance is from the street. The glass is set back from the corner column to make it continuous from the east to the north façade.



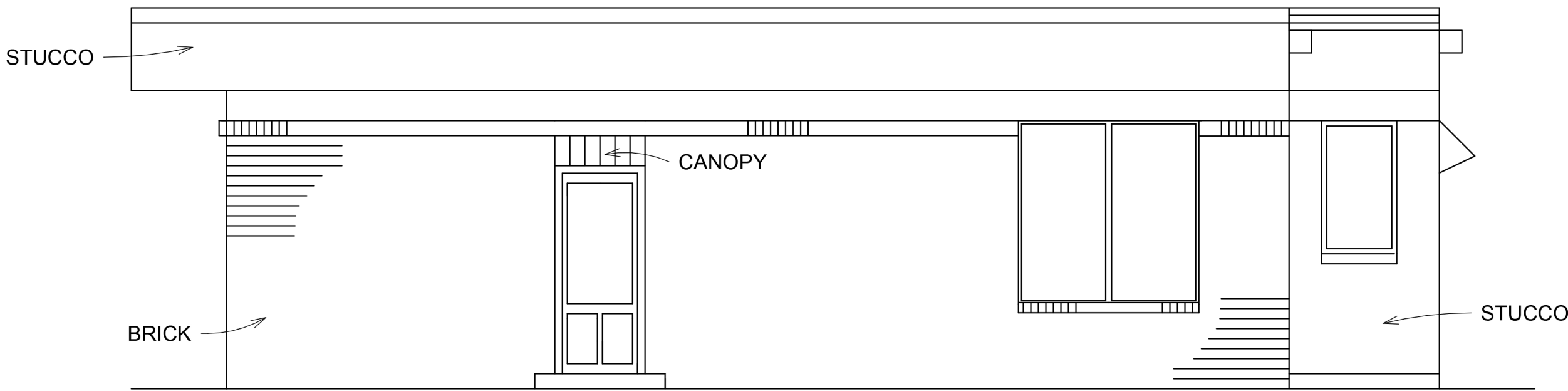
Southwest Elevation

1/4" = 1'-0"



Northeast Elevation

1/4" = 1'-0"



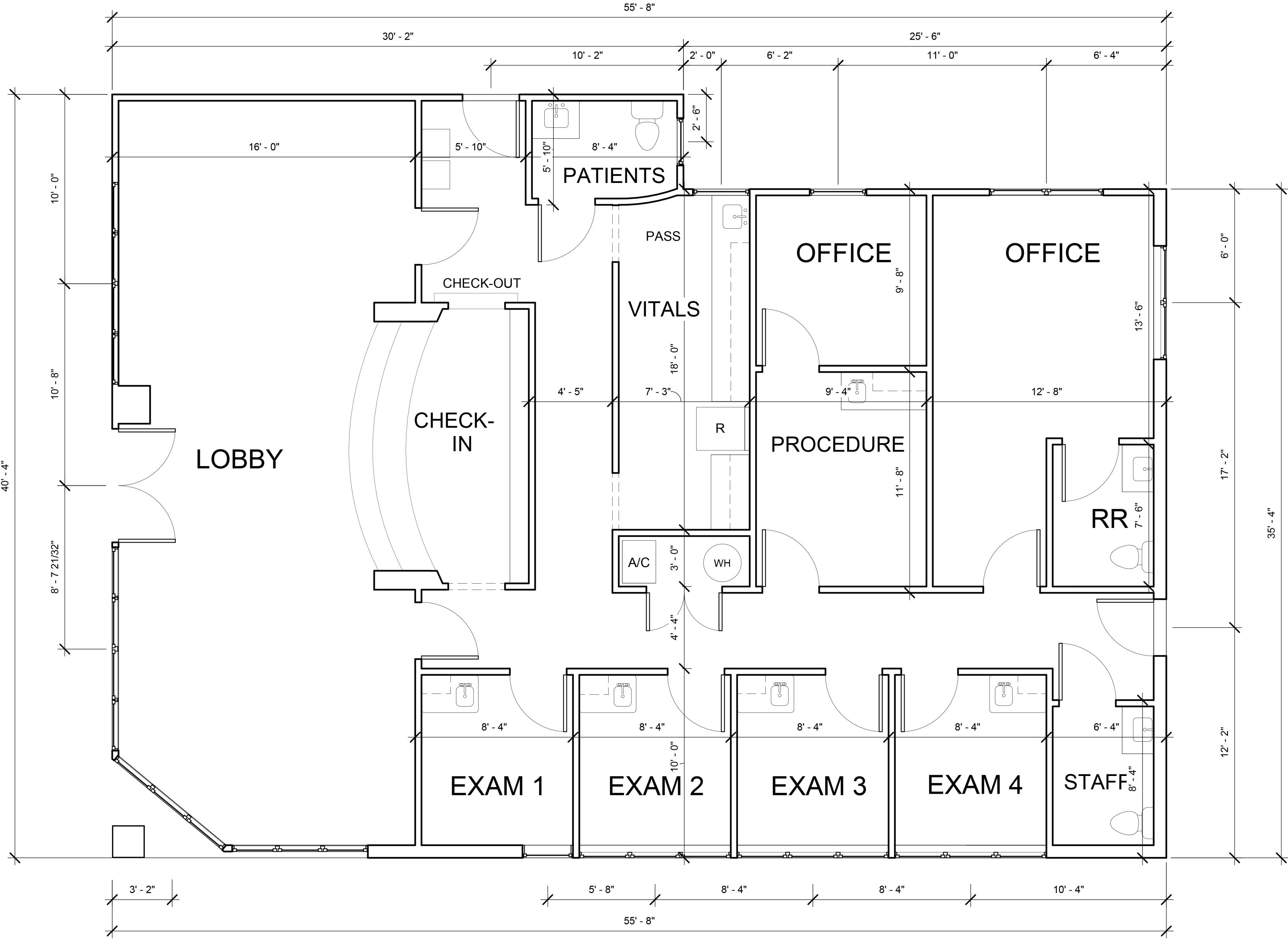
Northwest Elevation

1/4" = 1'-0"



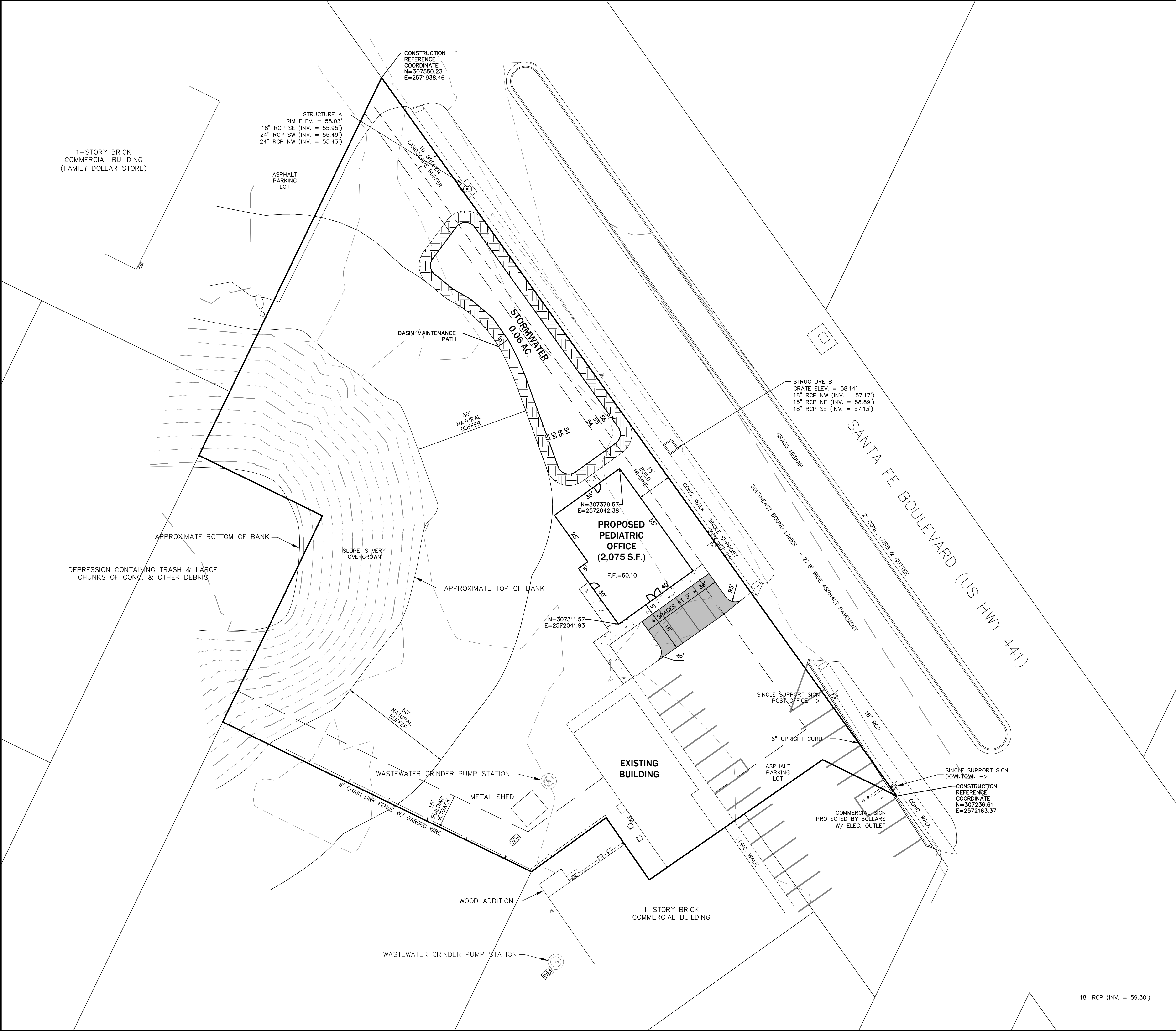
Southeast Elevation

1/4" = 1'-0"



Floor Plan

1/4" = 1'-0"

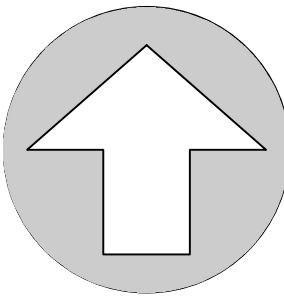


GENERAL NOTES

1. ALL PARKING LOT DIMENSIONS AND RADII SHOWN ARE MEASURED FROM FACE OF CURB AND/OR THE EDGE OF PAVEMENT IF THERE IS NOT CURB PROPOSED. ALL RADIAL PARKING IS 9' MIN. WIDTH AT NARROWEST POINT.
2. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF LOCATION OF ALL EXISTING UTILITIES AND PROTECTION OF SAME DURING CONSTRUCTION.
3. ELECTRIC SERVICE TO BE COORDINATED WITH G.R.U. ELECTRIC ENGINEERING DEPARTMENT.
4. SIDEWALKS WILL BE CONNECTED TO BUILDING ENTRANCE. COORDINATE LOCATIONS WITH ARCHITECT.

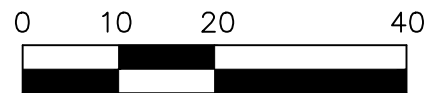


EB 2389
720 S.W. 2nd Ave, South Tower, Suite 300
GAINESVILLE, FLORIDA, 32601
TEL: (352) 373-3541
www.edafl.com permitting@edafl.com



NORTH

SCALE: 1" = 20'



GRAPHIC SCALE

No.	Date	Comment

Professional Engineer of Record:

Engineer Certificate No.

Project No: 23-141

Project phase: SUBMITTAL

Project title:

HIGH SPRINGS PEDIATRICS
CITY OF HIGH SPRINGS

Sheet title:

DIMENSION PLAN

Designed: SJR

Sheet No.:

Drawn: LBO

Checked: TAR

Date: 03/21/24

C200

Existing Building on Property



NEW BUSINESS #2

Z24-000024

CERTIFICATE OF APPROPRIATENESS
HONEY BEE VENTURES FACADE IMPROVEMENTS



Planning Department
23718 W US HWY 27, High Springs FL 32643
386-454-7322

**CERTIFICATE OF APPROPRIATENESS – APPLICATION
BOARD APPROVAL**

Attach plan, sketch, materials list, colors, and any information to determine appropriateness of the project. If not provided, this will delay the application process.

DATE: 4/2/24 PERMIT NO.: _____
APPLICANT: John & Brad Miller PHONE: _____
PROJECT LOCATION: 18501 Main St.
OWNER'S NAME: John & Brad Miller / Honeybee ventures
TAX PARCEL NUMBER: 00615-02-000
DESCRIPTION OF PROJECT:
see Attached

LIST OF MATERIALS AND COLORS:

see Attached

APPLICATION FEE: \$100.00 (Must submit fee with application)

I HEREBY CERTIFY that I am the simple owner of record of the above described property (or have attached my authority) to apply for this permit.

John Miller
Applicant Signature

John Miller
Print Name

NOTE: Building and/or other permits may be required before proceeding with project. The appropriateness approval expires within one year of approval date. If work is discontinued for a six month period or longer the project will be considered abandoned.

STAFF USE ONLY:

APPROVED _____

NOT APPROVED _____

ZONING ADMINISTRATOR

DATE

22744 NW 188th Street
High Springs, FL 32643
John@honeybee.ventures
(352) 316 3741

April 2, 2024

City of High Springs
Planning Department
23718 W. US Hwy 27
High Springs, FL 32643

Dear Planning Board,

We hope this letter finds you well. We are John & Brad Millett, residents of High Springs for the past three years, having relocated from Gainesville. From the moment we arrived, we were captivated by the charm of this town, seemingly untouched by time. However, we couldn't help but notice the number of closed businesses in the downtown area.

Upon inquiring with our friend and Realtor, Kristi Krane, we learned that most closures were due to personal reasons rather than economic challenges. Intrigued by the prospect of contributing positively to the community, we expressed our interest in opening an antique shop. Kristi, always keeping an eye out for opportunities, presented us with an off-market listing - 18581 Main Street, owned by Marice McDaniel.

This historic building, divided into three spaces, immediately captured our hearts. The primary space, once Pettaway's Pharmacy, retains its original Soda Fountain and cabinetry, evoking a sense of nostalgia that inspired us to envision a Vintage Soda & Sweets Shop. With great excitement, we acquired the building.

However, recognizing the age of the structure - 124 years old - we understand the necessity for extensive renovations. We have already scheduled foundation repairs and a new roof for next month. Now, we are seeking permission to replace all doors and windows. A bid for this work is also enclosed. Given the building's age, custom fabrication is required, with an estimated lead time of 8 weeks. In the interim, we intend to install temporary coverings to secure the premises.

Additionally, we aim to restore missing bricks and apply a fresh coat to the exterior rear of the building. Our plans also include painting the front in a classic white hue with black awning and trim, complemented by new signage, as illustrated in the attached rendition. It's important to note that we intend to preserve the original red brick.

We sincerely appreciate your consideration of our request. Our goal is not only to revive this historic establishment but also to contribute to the revitalization of downtown High Springs. We look forward to the opportunity to discuss this further and to collaborate in preserving the unique character of our beloved town.

Thank you for your attention to this matter.

Warm regards,

John & Brad Millett

PROPOSAL

JOB NAME: Honey Bee Ventures Storefront

LOCATION: 18581 Main Street, High Springs, FL. 32643

BID DATE: 03/27/2024

We will Furnish and Install all Material necessary to complete the following:

Furnish and Install Commercial Storefront in Five (5) Prepared Openings.

There are Two Options as to the Framing System and Type of Glass to be used.

Option (A) will be an OBE FG 2000 System and 1/4" Clear Tempered Glass.

Option (B) will be an OBE FG3000 System and 1" Insulated (Double Pane) Clear on Clear Tempered Glass.

The Metal for both options will be in a Black Anodized Finish.

The Hardware will be in a Clear Anodized Finish.

Facing the Building from the street and starting from the left, moving right:

Opening 1:

Approx. 66" X 68" Single Lite Fixed Glass.

Opening 2:

Approx. 101" X 100"

This will be a Pair of Doors, 6'0" - 7'0", with sidelites on either Side and a Transom.

Opening 3:

Approx. 66" X 68" Single Lite Fixed Glass.

Opening 4:

Approx. 62" X 100"

This will be a Single 3'6" – 7'0" Door, hinged on the left, with a Sidelite and Transom.

Opening 5:

Approx. 101" X 102"

This will be a Single 3'6" – 7'0" Door, hinged on the left, with a Sidelite and Transom.

All Doors will be Narrow Stile with a 10" Bottom Rail to meet ADA Standards.

All Doors will have Butt Hinges. Three (3) Hinges Per Leaf.

All Doors will have Falcon Surface Mounted Closers. Drop Plates will be used if necessary.

All Doors will have 1" Diameter Standard Push Bars and Offset Pull Handles.

All Doors will have Standard Thresholds and Bug Sweeps.

Operable Doors will have a Deadlock, Keyed Lock cylinder on the outside and a Thumbturn on the inside. One Door of your choice on the Pair will have Flush Bolts.

All Doors will Open Out Only.

See Attached Elevations for Configurations.

We will seal the openings, Interior and Exterior, with a Silicone Based Caulking when the installation is complete.

We have accounted for Labor and Materials only to complete the above-mentioned scope of work.

Anything not specifically accounted for should be considered excluded

This Proposal does not include Demolition. Correct Openings must be provided by Others.

Total Proposed Prices:

Option A:

FG 2000 System, Black Anodized and 1/4" Clear Tempered Glass: \$26,596.00

Option B:

FG3000 System, Black Anodized and 1" Clear Insulated Tempered Glass: \$32,600.00

This Proposal covers the front of the building only. The Windows on the rear of the building will be covered in a separate Proposal.

Please sign and return this proposal indicating your approval and our notice to proceed.
A deposit may be required prior to ordering any materials.

If Job requires specific insurance coverages or submittals, additional fees will apply.

STANDARD EXCLUSIONS: PROTECTION OF MATERIALS INSTALLED, FINAL CLEANING OF GLASS OR METAL, CUTTING, DRILLING OR LOCATING HOLLOW METAL STOPS, INTERIOR CAULKING, WOOD BLOCKING, ENGINEERING, AND PERMITS.

Notes: Changes in this proposal will result in a different price according to cost. All agreements contingent upon delays beyond our control.

Adam Heaton
Project Estimator
Adam@pgi-gnv.com

PRICE GOOD FOR (30) DAYS
FROM DATE OF PROPOSAL

AUTHORIZED SIGNATURE:

DATE:

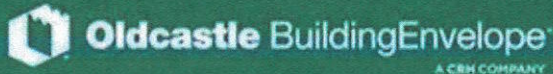
kyle@precisionglassgnv.com

From: Montville, Debbie <dmontville@obe.com>
Sent: Thursday, October 4, 2018 12:11 PM
To: Mark Temple; jon@precisionglassgnv.com; kyle@precisionglassgnv.com
Cc: Harrington, Valerie; Redmond, Matt
Subject: FW: FBC/ NOA INFO

Hi everyone – maybe this will help out on what we have approved for the state of Florida.

Thanks, Debbie

Debbie Montville
Customer Service
Oldcastle BuildingEnvelope®
8655 Elm Fair Blvd.
Tampa, Fl. 33610
Phone: 800-366-0349
Fax: 813-663-9379
dmontville@obe.com
www.obe.com



From: Harrington, Valerie
Sent: Thursday, October 04, 2018 12:08 PM
To: Montville, Debbie <dmontville@obe.com>
Subject: FBC/ NOA INFO

*****NON IMPACT SYSTEMS*****

FG2000 (1-3/4" X 4-1/2") FBC # 17688.1
FG3000 (2" X 4-1/2") FBC # 17688.2
FG3000 MULTIPLANE (THERMAL 2" X 4-1/2") FBC # 17689.1
FG6000 MULTIPLANE (THERMAL 2" X 6") FBC #21204.1
NARROW STILE DOOR AND FRAME - FBC # 17692.2
MEDIUM STILE DOOR AND FRAME- FBC # 17692.1
WIDE STILE DOOR AND FRAME- FBC # 17692.3
RELiance CURTAIN WALL (7-1/4" DEPTH ONLY) - FBC # 17691.3
RELiance IG SS (INSIDE GLAZED SCREW SPLINE) CURTAIN WALL- FBC # 17691.4
RELiance SS (SCREW SPLINE) CURTAIN WALL- FCB # 17691.6
RELiance TC (THERMAL) CURTAIN WALL- FBC # 17691.7
RELiance TC IG (INSIDE GLAZED THERMAL) CURTAIN WALL- FBC # 17691.5

*****IMPACT SYSTEMS*****

FG-5000 IMPACT SYSTEM (FBC #17688.3 / NOA 16-0802.03 WET/ NOA 16-0802.04 DRY)
FG-5100 IMPACT SYSTEM (FBC #17688.4 / NOA 16-0802.05 WET/ NOA 16-0802.06 DRY)
FG-5100T IMPACT SYSTEM (FBC #20665.1 / NOA 16-0713.02 WET / NOA 16-0713.03 DRY)
MSD-375/ WSD-500 IMPACT DOORS AND FRAMES (FBC #17693.1 / NOA 16-1213.02)

RELIANCE STORMMAX IMPACT CURTAIN WALL SYSTEM CAPTURED LMI (FBC #17690.5 / NOA 13-0110.02)

RELIANCE STORMMAX IMPACT CURTAIN WALL SYSTEM CAPTURED SMI (FBC #17690.5 / NOA 13-0110.03)

RELIANCE STORMMAX IMPACT CURTAIN WALL SYSTEM DRY GLAZE (FBC # 17690.6 / NOA 13-0110.05)

RELIANCE STORMMAX IMPACT CURTAIN WALL SYSTEM SSG (FBC # 17690.7 / NOA 13-0110.04)

RELIANCE STORMMAX HIGH PERFORMANCE 3" X 10" CURTAIN WALL (FBC # 17690.4 / NO NOA)

***HP SYSTEM NOT TESTED INTO CONCRETE BLOCK (CMU), CUSTOMER WILL NEED TO HAVE ENGINEERED BY OTHERS AND SIGN SEALED SHOP DRAWINGS FOR VALIDATION OF TEST APPROVAL TO PROCESS ORDER**

HR-250 IMPACT CURTAINWALL SYSTEM LMI/SMI (FBC # 17690.1 / NO NOA)

HR-250 DRY GLAZED IMPACT CURTAINWALL SYSTEM (FBC # 17691.1/ NO NOA)

HR-251 IMPACT SMI CURTAIN WALL SYSTEM (FBC # 17690.2 / NO NOA)

HR-251 DRY GLAZED IMPACT CURTAIN WALL SYSTEM (FBC # 17691.2 / NO NOA)

HR-251 SSG CAPTURED LMI/SMI (FBC # 17690.3/ NO NOA)

RW-5000 IMPACT SYSTEM- FBC # 17687.1 (NO NOA- DISCONTINUED)

RW-5100 IMPACT SYSTEM- FBC # 17687.2 (NO NOA- DISCONTINUED)

ZS-2750 IMPACT PROJECT OUT WINDOWS (FBC # 17668.1/ NO NOA)

BMS 3000 STORMAX SKYLIGHT LMI/SMI (FBC # 17669.1 / NO NOA)

Valerie Harrington

Estimator

Oldcastle BuildingEnvelope®

8655 Elm Fair Blvd.

Tampa, FL 33610

Phone: 800-366-0349 Ext. 51762

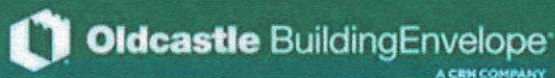
Fax: 813-663-9379

valerieharrington@obe.com

www.obe.com

Please note the new Quote Email address:

TA2METALQUOTES@OBE.COM



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Heat-Treated Glass

Introduction

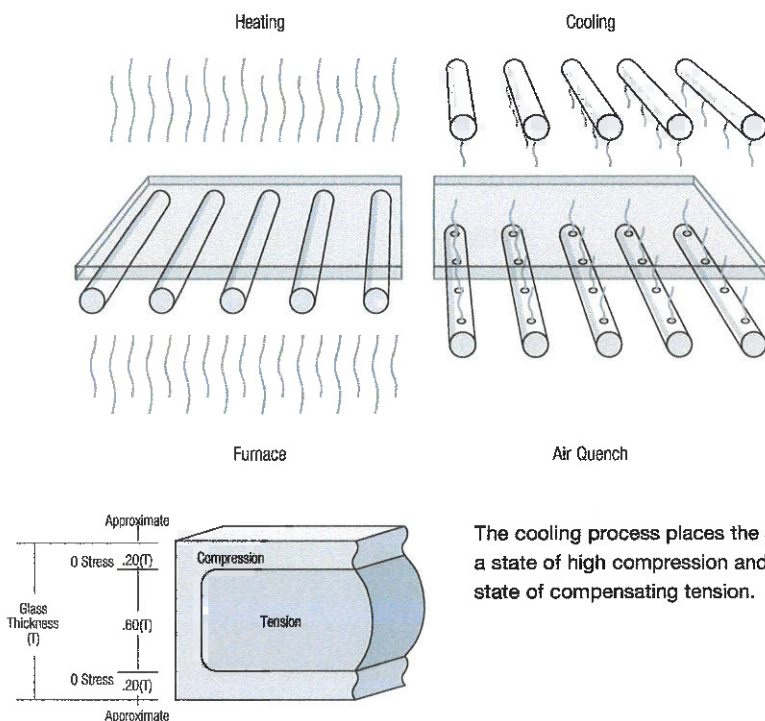
"Heat-treated glass" is a general term used in the glass fabrication industry to describe glass that has been processed through a tempering oven to change its strength and breakage characteristics (i.e., the size and/or shape of the glass pieces after breakage). There are two distinct heat-treated products, heat-strengthened glass and fully tempered glass, as defined in ASTM C1048 Standard Specification for Heat-treated Flat Glass—Kind HS, Kind FT Coated and Uncoated

Glass. Compared to annealed glass (non-heat-treated glass), both have increased strength to resist higher levels of impact, mechanical load and thermal stress. Heat-strengthening adds strength to the glass while limiting the change in its breakage characteristics. Tempered glass is stronger than heat-strengthened glass and significantly reduces the broken piece sizes to meet the safety glazing standards.

Description

Glass is heat-treated by heating annealed glass to a temperature of approximately 1,150°F (621°C), then rapidly cooling it. The glass is cooled by a carefully controlled airflow (also known as

quenching), which uniformly cools all glass surfaces simultaneously. High airflow rates produce tempered glass and much lower airflow rates produce heat-strengthened glass.



The cooling process places the surfaces of the glass in a state of high compression and the central core in a state of compensating tension.

Cross-section of the compression and tension zones in tempered glass.



Heat-Treated Glass

Description (continued)

Fully Tempered Glass

Fully tempered glass, normally referred to as just "tempered glass," is approximately four times stronger than annealed glass of the same thickness and configuration. When it is broken, tempered glass fractures into small fragments that reduce the probability of serious injury as compared to annealed glass. Tempered glass meets all safety glazing standards including the federal safety glazing standard, CPSC 16 CFR 1201. Because tempered glass fractures into many small pieces, it tends to vacate the opening, when broken, more than heat-strengthened and annealed glass does.

Heat-Strengthened Glass

Heat-strengthened glass is approximately twice as strong as annealed glass of similar thickness and configuration. Heat-strengthened glass generally fractures in a manner similar to annealed glass and tends to remain in the opening when broken. It is intended for general glazing where additional strength and/or resistance to mechanical and/or thermal stress are desired. Heat-strengthened glass is NOT a safety-glazing product and therefore should not be used where safety glazing is required.

Capabilities

Glass Options

Most architectural glass products can be heat-treated. Some patterned glass and decorative glass with a deep surface pattern may not be heat-treatable. Silk-screened and ceramic spandrel glass are always either heat-strengthened or tempered as part of their fabrication process. When spandrel glass is incorporated into insulating glass units, both lites must be heat-treated. Heat-absorbing glasses, such as tints, reflective glasses and some Low-E glass, may require heat treatment to reduce the probability of thermal-stress breakage, especially when used as part of an insulating glass unit.

For a list of available glass products/colors, go to the Glass Options Tab.

For more information on silk-screened, spandrel glass and insulating glass products, go to their respective Product Information Tabs.

For monolithic glass performance data, log on to www.oldcastlebe.com and choose GlasSelect™.

Thickness

Glass thicknesses from 1/8" through 3/4" can be tempered. Glass thicknesses from 1/8" through 1/4" are commonly heat-strengthened. And 3/8" can be heat-strengthened on a limited and project-specific basis.

Size

The minimum and maximum heat-treated glass sizes are restricted by the thickness of the glass and production equipment capabilities. Generally, the minimum size is 12" in width and length, and the maximum width and length are 84" x 144", respectively. Specific oversize ovens are able to process some glass types up to 98" in width and 200" in length.



Heat-Treated Glass

Applications

Heat-Strengthened

Due to its superior glass retention properties, heat-strengthened glass is the preferred heat-treated glass product for applications where additional strength is needed to meet mechanical loads (wind or snow) or thermal loads caused by certain tinted or coated glasses. Heat-strengthened glass is widely used in laminated glass for additional strength, such as in overhead and sloped glazing. Heat-strengthened glass cannot be used in any safety glazing applications.

See the Glass Selector Tab for some typical applications.

Tempered

Tempered glass is used when the strength requirements exceed the capabilities of heat-strengthened glass, and for all safety glazing applications. Tempered glass is commonly used in sliding doors, storm doors, atriums, partitions, windows, storefronts, display cases, bath and shower enclosures and all-glass doors and entrances. Tempered glass should not be installed in areas where it is exposed to temperatures greater than approximately 400°F because it will begin to lose its degree of temper (reverting back to annealed glass).

Characteristics

Properties Unaffected by Heat-Treating

The color, chemical composition and light transmission characteristics of glass remain unchanged after the heat-treating process. The physical properties of glass, such as the compressive strength, hardness, specific gravity, the softening point, thermal conductivity, solar transmittance, stiffness and expansion coefficient, also remain unchanged.

Deflection

It is important to note that heat-treating does not change the deflection characteristics of glass. In many cases, even though thinner heat-treated glass may be strong enough for a specific application, thicker glass may need to be specified in order to reduce the amount of glass deflection. The project design professional establishes the maximum allowable deflection, as well as the design loads, on a project. Given a specific glass size and the design load, Oldcastle BuildingEnvelope™ can determine if the glass will meet the specified maximum deflection requirement.

Breakage Characteristics

The higher the amount of residual stress in a piece of glass, the smaller the particle size will be when the glass fractures. When annealed glass

fractures, the cracks are far apart and the pieces are normally quite large with sharp edges. As a result of the heat-treating process, tempered glass fractures into small particles when broken, thus meeting the safety glazing requirements of the federal safety glazing standard, CPSC 16 CFR 1201, the Canadian safety glazing standard CAN/CGSB-12.1 and the American National Standard, ANSI Z97.1. These safety glazing standards require the ten largest particles of the test specimen to weigh no more than the equivalent weight of 10 sq. in. of glass thickness. The breakage characteristics of heat-strengthened glass can vary within the allowable stress range of the product (3,500 to 7,500 psi surface compression). Heat-strengthened glass typically fractures into large pieces that are more similar to annealed glass than to tempered glass.

Fabrication

Fabrication work such as cutting, polishing, grinding, drilling, notching, sandblasting, etching or any other process that modifies the glass must be completed prior to heat-treating the glass. ASTM C1048 provides specific limitations and requirements for the size and location of holes and notches. Any fabrication process completed after the glass is heat-treated, such as sandblasting or V-grooving, will reduce the strength of the glass.



Heat-Treated Glass

Characteristics (continued)

Roller Wave Distortion in Heat-Treated Glass

Since the glass is heat-treated in a horizontal oven, it contains waves created by contact with ceramic rolls during the heating process. This waviness, or roller wave distortion, can be detected when viewing reflected images from a distance. To minimize the appearance of roller wave distortion, the glass orientation in the oven becomes critical. When the direction of roller waves is critical, roller waves are typically specified and ordered parallel to the horizontal (sill) or base dimension.

Flatness

Due to the nature of the heat-treating process, heat-strengthened and tempered glass is not as flat as annealed glass. The deviation for flatness depends on glass thickness, width and length and other factors. ASTM C1048 contains information on the permissible overall bow and warp, and on localized warp.

Strain Pattern

Heat-treated glass may display visible strain patterns, also known as quench marks. These

appear as geometric patterns of iridescence or darkish shadows. The strain pattern may appear under certain lighting conditions, particularly in the presence of polarized light. This phenomenon is a result of localized stresses imparted by the rapid air-cooling (quenching) of the heat-treating process. This strain pattern is an inherent characteristic of heat-treated glass and is not considered a defect.

Thermal Shock Resistance

Heat-treated glass will withstand greater thermal shock than the same thickness and configuration of annealed glass. Thermal shock results when a rapid temperature change between the surface and core of the glass occurs. When this temperature differential is of sufficient magnitude, the glass will fracture. To fracture 1/4" (6 mm) annealed glass, the average temperature differential would be approximately 100°F (38°C). To fracture 1/4" (6 mm) heat-strengthened and tempered glass, the average temperature differential would be about 250°F (121°C) and 400°F (204°C), respectively. The resistance to thermal shock also decreases with increased glass thickness.

Additional Important Information

Specifications

A sample Section 08 81 00 Specification for North America can be found in the last section of this binder titled: Sample Architectural Glass Specifications.

Contact Us

For any additional information, including details, technical data, specifications, technical assistance and samples, call 1-866-OLDCASTLE (653-2278).

Visit Us on the Web

Log on to www.oldcastlebe.com for project photos, product colors, general inquiries and project assistance.

To view performance data on a wide range of glass make-ups, or to build your own product specification, log on to www.oldcastlebe.com and choose GlasSelect®



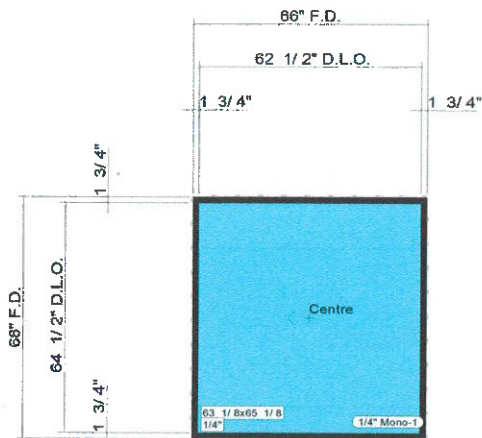
Position Drawing

Date: 3/25/2024 / 14:35
Project: Honey Bee Ventures Storefront

Person in Charge: Administrator

Position: 1

Description:	Fixed Field		
Quantity:	1 Pcs.	Perimeter:	22.3 ft
System:	OBE FG-2000 SQUARE	Area:	31.2 ft²
Colour:	BLACK BLACK (anodized)	Frame:	66.000 x 68.000 in



Scale: 1:48
View: Exterior View

Position Drawing

Date: 3/25/2024 / 14:35

Project: Honey Bee Ventures Storefront

Person in Charge: Administrator

Position: 2

Description: Door Element

Quantity: 1 Pcs.

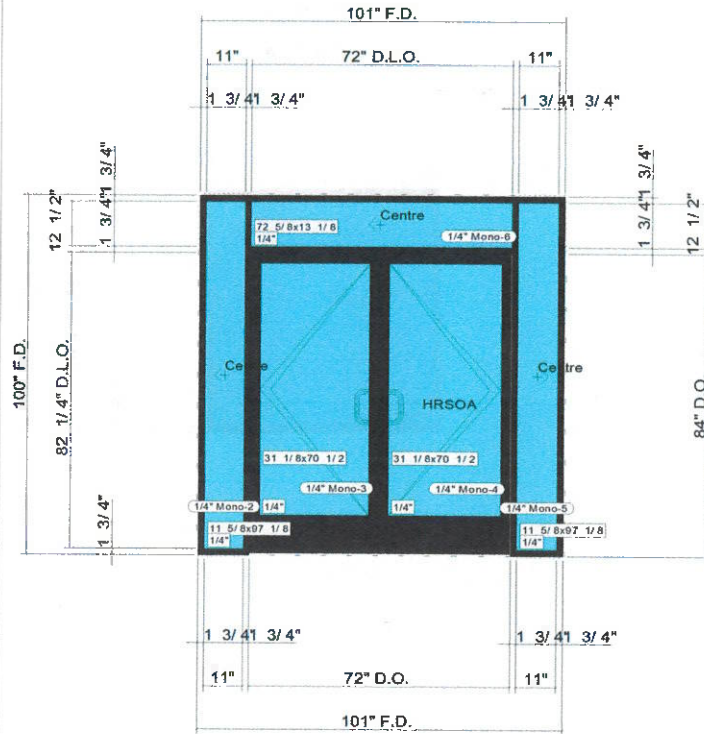
System: OBE FG-2000 SQUARE

Colour: BLACK BLACK (anodized)

Perimeter: 33.5 ft

Area: 70.1 ft²

Frame: 101.000 x 100.000 in



Scale: 1:48

View: Exterior View

Insertion	Description	Width [in]	Height [in]
2	Double Door open Out	35 13/16	83 3/16
		35 13/16	83 3/16

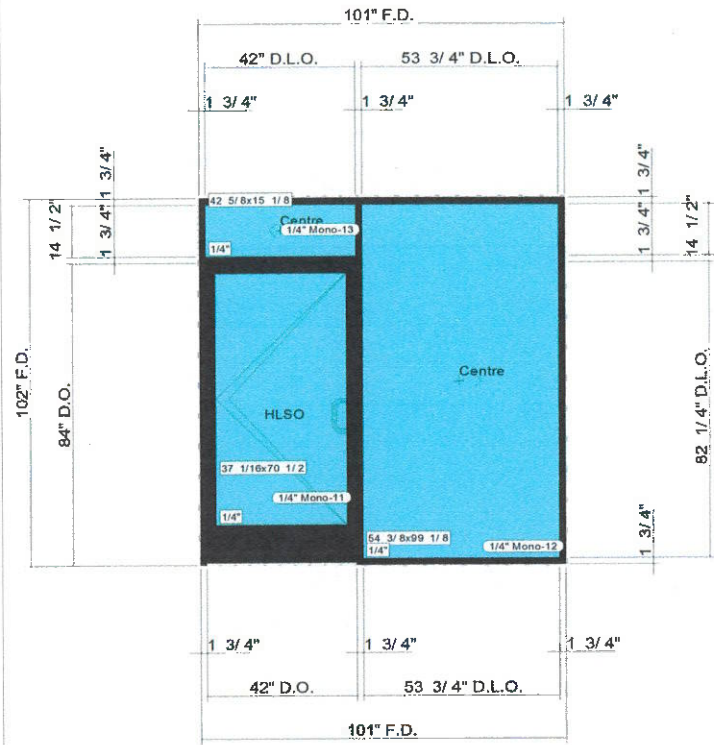
Position Drawing

Date: 3/25/2024 / 14:35
Project: Honey Bee Ventures Storefront

Person in Charge: Administrator

Position: 5

Description:	Door Element	Perimeter:	33.8 ft
Quantity:	1 Pcs.	Area:	71.5 ft²
System:	OBE FG-2000 SQUARE	Frame:	101.000 x 102.000 in
Colour:	BLACK BLACK (anodized)		



Scale: 1:48
View: Exterior View

Insertion	Description	Width [in]	Height [in]
1	Single Door open Out	41 3/4	83 3/16

Position Drawing

Date: 3/26/2024 / 09:35

Project: Honey Bee Ventures IG Storefront

Person in Charge: Administrator

Position: 1

Description: Fixed Field

Quantity: 1 Pcs.

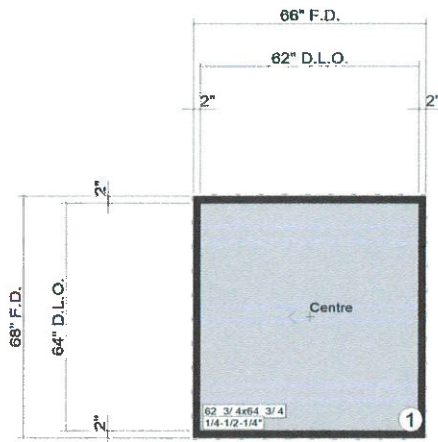
System: OBE FG-3000 Non-Thermal SQUARE

Colour: BLACK BLACK (anodized)

Perimeter: 22.3 ft

Area: 31.2 ft²

Frame: 66.000 x 68.000 in



Scale: 1:48

View: Exterior View

Position Drawing

Date: 3/26/2024 / 09:35

Project: Honey Bee Ventures IG Storefront

Person in Charge: Administrator

Position: 2

Description: Door Element

Quantity: 1 Pcs.

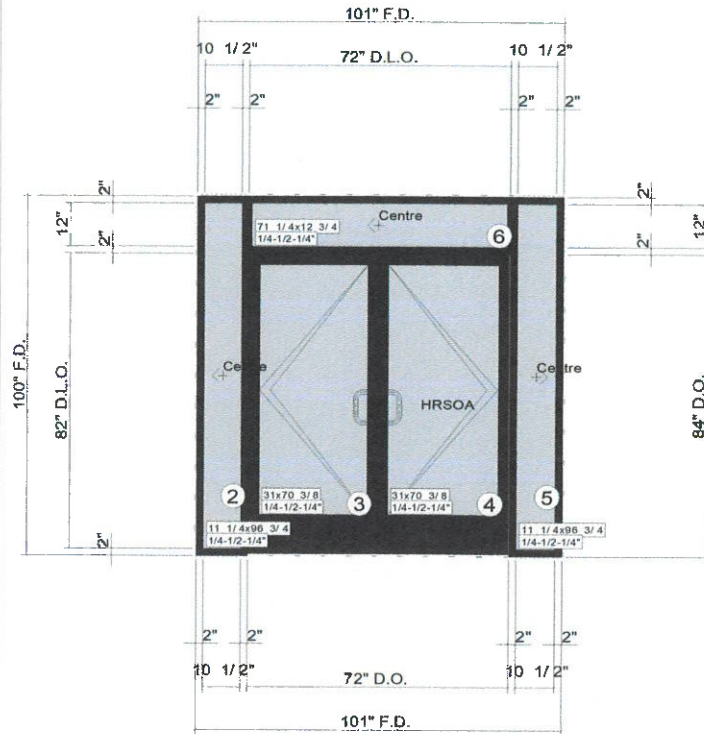
System: OBE FG-3000 Non-Thermal SQUARE

Colour: BLACK BLACK (anodized)

Perimeter: 33.5 ft

Area: 70.1 ft²

Frame: 101.000 x 100.000 in



Scale: 1:48

View: Exterior View

Insertion	Description	Width [in]	Height [in]
2	Double Door open Out	35 13/16	83 3/16
		35 13/16	83 3/16

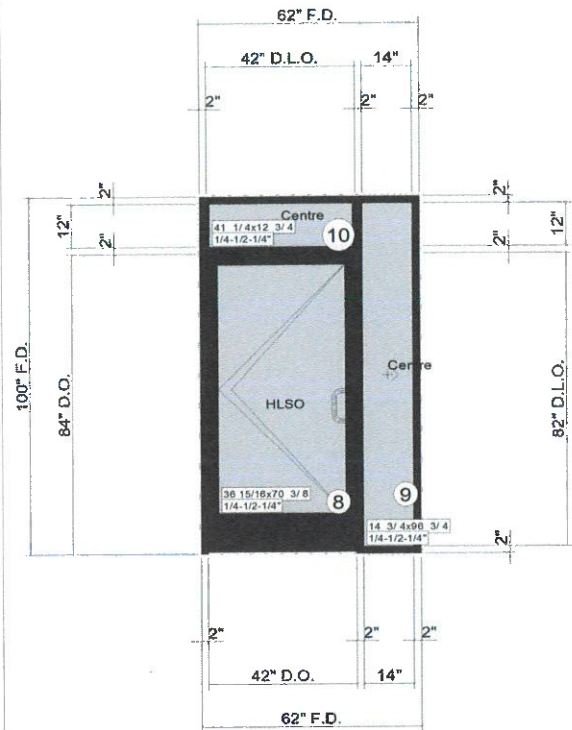
Position Drawing

Date: 3/26/2024 / 09:35
Project: Honey Bee Ventures IG Storefront

Person in Charge: Administrator

Position: 4

Description:	Door Element	Perimeter:	27.0 ft
Quantity:	1 Pcs.	Area:	43.1 ft ²
System:	OBE FG-3000 Non-Thermal SQUARE	Frame:	62.000 x 100.000 in
Colour:	BLACK BLACK (anodized)		



Scale: 1:48
View: Exterior View

Insertion	Description	Width [in]	Height [in]
1	Single Door open Out	41 3/4	83 3/16

Position Drawing

Date: 3/26/2024 / 09:35

Project: Honey Bee Ventures IG Storefront

Person in Charge: Administrator

Position: 5

Description: Door Element

Quantity: 1 Pcs.

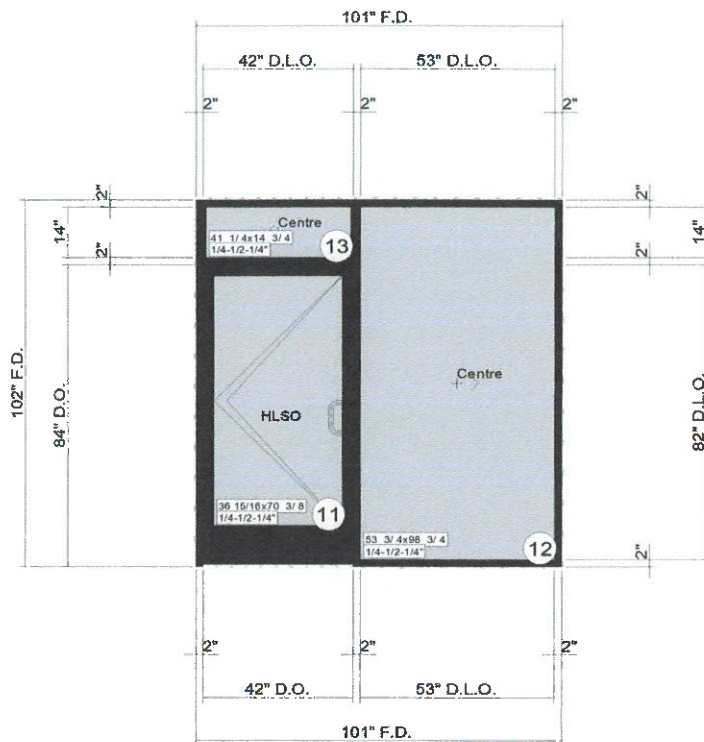
System: OBE FG-3000 Non-Thermal SQUARE

Colour: BLACK BLACK (anodized)

Perimeter: 33.8 ft

Area: 71.5 ft²

Frame: 101.000 x 102.000 in



Scale: 1:48

View: Exterior View

Insertion	Description	Width [in]	Height [in]
1	Single Door open Out	41 3/4	83 3/16





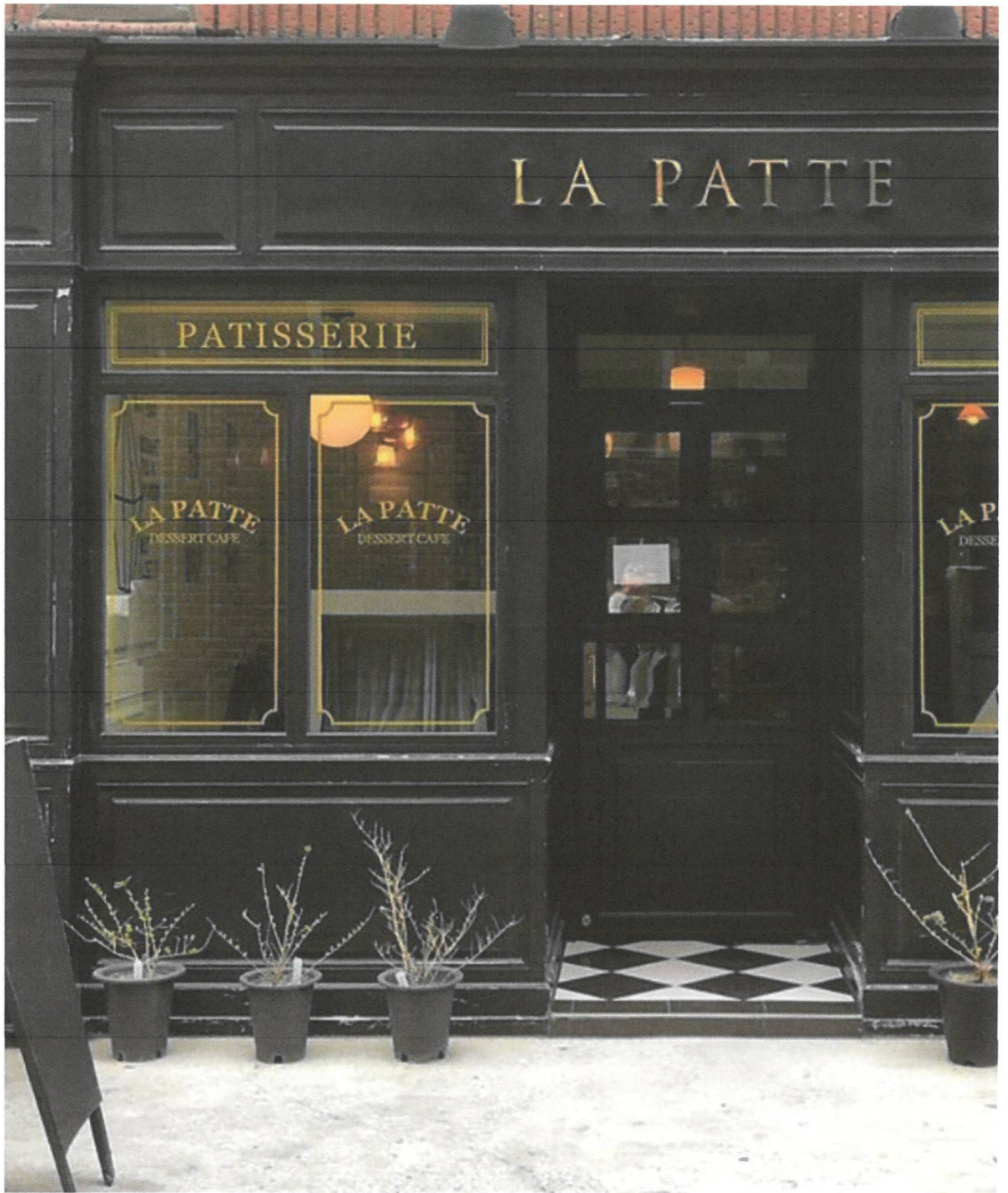
Kristyn Adkins

From: John Millett <john@honeybee.ventures>
Sent: Friday, April 5, 2024 6:13 AM
To: Kristyn Adkins
Subject: 18581 Renovation

You don't often get email from john@honeybee.ventures. [Learn why this is important](#)

Hi Kristy,

Thank you for your call today. Attached are the inspiration photos for the columns on our building. Currently the building has a 1980's remodel vibe that we want to roll back. We're looking for something a little more timeless and befitting a 124 year old Apothecary.





John Millett
John@honeybee.ventures

EXISTING BUILDING

