



## DEVELOPMENT TEAM // BRUSH PARK EXPERIENCE





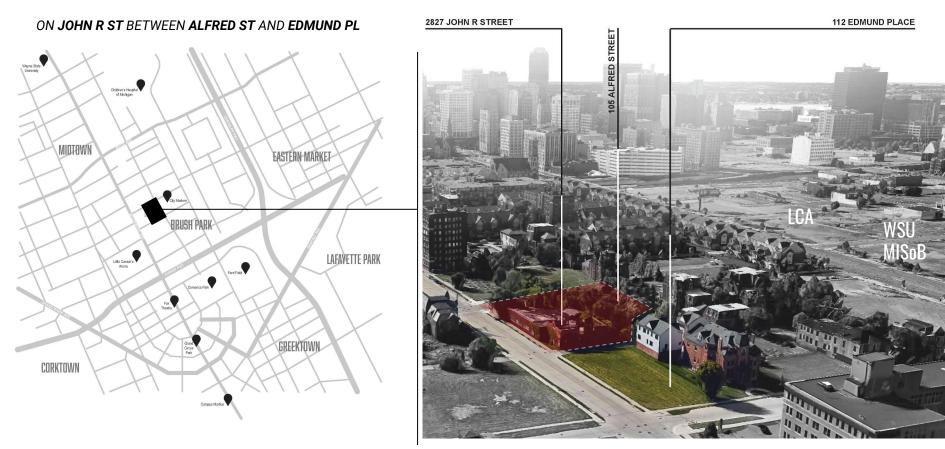




LUCIEN MOORE ESTATE HUDSON / EVANS HOME HP PULLING HOME MT. SINAI GRAND LODGE



## **PROJECT SITE**





### CARRIAGE HOUSE







### CARRIAGE HOUSE INTERIOR









INTERIOR LOOKING EAST

FROM CARRIAGE INTO 1-STORY

INTERIOR NORTH-WEST CORNER

INTERIOR NORTH-EAST CORNER



### WINDOW OPENINGS







1 STORY WEST WINDOW



CARRIAGE HOUSE NORTH GABLE



1 STORY SOUTH WINDOWS

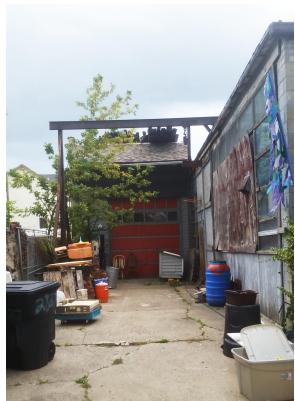


#### 1-STORY STRUCTURE



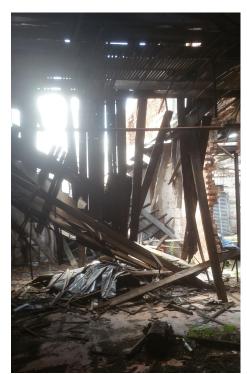


The one-story building does not appear original with the carriage house. Part of the walls are CMU and do not match the period of the brick of the carriage house (Photo 4). Similar to the carriage house, part of the roof has collapsed. The existing brick is in very poor condition. The existing steel lintels above the windows and doors have rusted and caused the brick to crack around the steel (Photo 5). In addition, there are several large step cracking around the corners and several other locations around the building (Photo 6).





### 1-STORY STRUCTURE INTERIOR



INTERIOR LOOKING EAST (COMPROMISED STRUCTURE)



INTERIOR LOOKING EAST (COMPROMISED STRUCTURE)



INTERIOR LOOKING NORTH



FROM 1-STORY INTO CARRIAGE (ROOF COLLAPSED)



### **WEST SIDE OF BUILDINGS**





### EXISTING MASONRY SHELL

# STRUCTURAL REPORT



LOCATION:

#### Ingram Engineering Services, Inc.

16 Hagerty Bivd. Suite 400 West Chester PA 19382 Office 484-947-5549 Fax 610-431-7015

CLIENT: Brush Park Properties, LLC
PROJECT: Structural Assessment, 2 Story Carraige House

2827 John R St. Detroit, MI

DATE: October 18, 2017
ATTENTION: Michael Vanoverbeke

#### INVESTIGATION

Ingram Engineering Services, Inc. (IES) representative David O'Connell was present at 2827 John R St on Wednesday, October 18, 2017 to perform a visual structural inspection and assessment of the stability of the east and north brick exterior walls. Reviewed components include the walls themselves and the remaining floor framing that serves to partially brace them. The inspection overed readily visible structure only, no material was removed to expose concealed elements. Neither destructive nor non-destructive testing were performed. No survey was performed as part of this assessment, all dimensional information is approximate based on visual estimates only. Although mostly destroyed: mechanical, electrical, phumbing equipment, waterproofing, cofing, other architectural and structural elements were not reviewed.

The property is a two-story brick carriage house measuring approximately 54 ft. (east-west) x 30 ft. (north-south). The front of the building faces east onto John X Strett. Although the date of original construction is unknown, it is believed the structure is over 100 years old. The property experienced significant fire damage. IES was informed that the fire occurred approximately 17 years ago. The roof is completely gone exposing the interior of the structure to the elements. The  $2^{\rm sc}$  floor framing is likewise mostly destroyed with only some joists remaining.

The roof framing is non-existent, therefore it is not possible to determine its original configuration.

The 2<sup>st</sup> floor joists are 2x12 wood members spanning across 3 bays. Each bay is approximately an 18 ft. span, east-west. The east and west ends of the joists are pocketed into the east and west exterior brick walls. These walls are typically 12" thick, constructed of 3 wythes of red brick. There are two interior lines of support for the 2x12 joists. The east interior line of support is a "drop girder" consisting of 5-2x14 wood members bothed together spanning 30 ft. The drop girder is supported on brick pilasters measuring approximately 21"x21" bull tinto the north and south exterior walls. The west interior line of support is a 12" thick, 3 wythe, brick wall at the north end and a steel beam spanning from the end of this interior brick wall to the south exterior wall. There are numerous makeshift props located below the drop girder, the steel beam and the joists themselves.

### CONCLUSIONS/ RECOMMENDATIONS

Based on the observations noted above and supporting engineering calculations, it is IES' conclusion that the gable configurations on the exterior walls are potentially unstable and hazardous. They are at risk of collapse under an extreme wind event (gusts in excess of 60 mph), rain or other environmental loading. IES calculations indicate that the free-standing gable formations need to be braced near the top and 2<sup>nd</sup> floor, down to the ground.

Generally, the walls away from the gables have enough strength to remain stable under code level wind loading, so it is only necessary to brace the gables. Sawn lumber framing in the form of diagonal props, as shown in the attached structural sketches are capable of providing enough bracing to prevent the walls from falling into the street under code level wind forces.

Please note that the south and west walls which border private property are similarly susceptible to an extreme wind event. Likewise, the north and east walls, even with the proposed shoring are still susceptible to an inward collapse. The owner of the property and of the adjacent properties must prevent access to the areas near these walls.

Alternatively, IES can provide a similar bracing scheme to prevent an inward collapse and/ or collapse of the south and west walls.



### **EXISTING MASONRY SHELL**

# STRUCTURAL REPORT 2018

2827 JOHN R STREET STRUCTURAL REUSE EVALUATION

Detroit, MI

ARCHITECT:

OOMBRA ARCHTECTS
Philadelphia, PA

Submitted by:

THE HARMAN GROUP STRUCTURAL ENGINEERS 900 W. Valley Forge Rd.

King of Prussia, PA

#### **BUILDING CONDITION**

Although the date of construction of the buildings at 2827 John R is unknown, it is believed the carriage house was built in the late 1800's/early 1900's. The one-story building appears to have been built after the carriage house. The property experienced fire damage 17 years ago.

The carriage house roof collapsed as well as part of the second-floor framing (Photo 1). The existing brick wall is currently unbraced and will need stabilization during construction and in the final design. The gables at the north and east were previously rebuilt (Photo 2). All remaining gables will need to be removed for safety, the existing wall will need to be stabilized and the gables will be rebuilt after construction (Refer to PSKS-01). The existing brick of the carriage house is in good condition. A large opening was created between the carriage house and one-story building. It appears this opening was created when the one-story building was constructed. Part of the opening was infilled with CMU, not original to building (Photo 3).

The one-story building does not appear original with the carriage house. Part of the walls are CMU and do not match the period of the brick of the carriage house (Photo 4). Similar to the carriage house, part of the roof has collapsed. The existing brick is in very poor condition. The existing steel lintels above the windows and doors have rusted and caused the brick to crack around the steel (Photo 5). In addition, there are several large step cracking around the corners and several other locations around the building (Photo 6).

The final design intention has several of the existing columns and load bearing interior walls being demolished. This will require reframing if the existing structure is kept. In addition, the contractor will face challenges trying to construct the new concrete building around the existing.

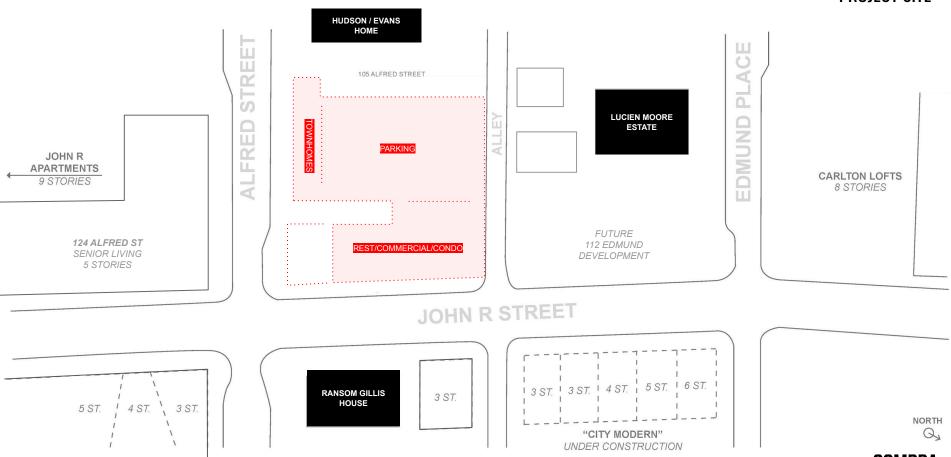
#### REFERENCE STRUCTURAL ASSESSMENT REPORT

See Ingram Engineering Services, Inc. Report dated October 18, 2017 for additional structural assessment of the existing carriage house.

SKETCHES AND PHOTS FOR REFERENCE



## PROJECT SITE





## **SUMMARY OF REVISIONS SINCE HDC APPROVAL**

### ALFRED STREET:

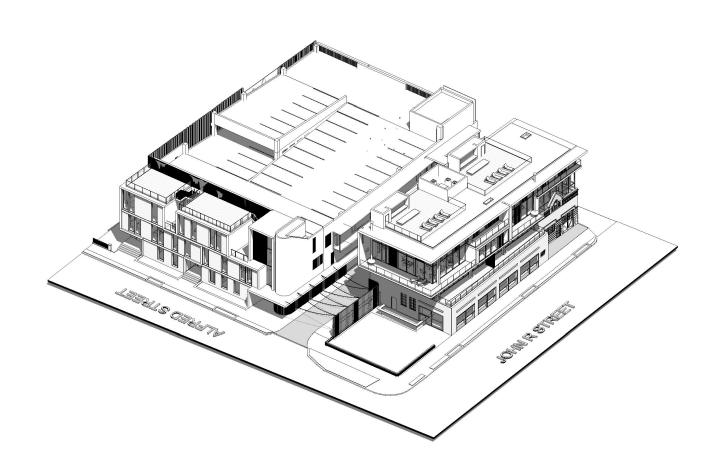
- REDUCED WIDTH OF PARKING STRUCTURE BY 12 FEET (8,200 SF REMOVED IN TOTAL)
- REMOVED 12 PARKING SPACES PARKING COUNT NOW ALIGNS WITH LATEST FBC PARKING REQUIREMENTS

### JOHN R STREET:

- ADDED A FLOOR FOR 3 ADDITIONAL RESIDENTIAL UNITS (LEVEL 5) AND A COMMERCIAL USE (LEVEL 2)
- REPLACE FAILING ONE STORY BUILDING WITH NEW STRUCTURE
- BUILD NEW GABLE STRUCTURE ON CARRIAGE HOUSE WHERE A PORTION HAS COLLAPSED.
- EXTEND RESTAURANT 11 FEET TO THE SOUTH AND NEW FRAMEWORK STRUCTURE AT OUTDOOR DINING AREA

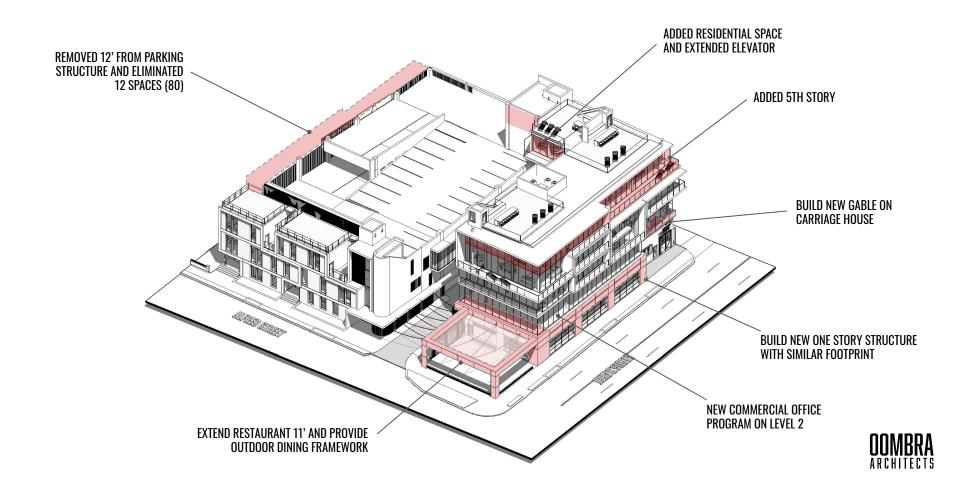


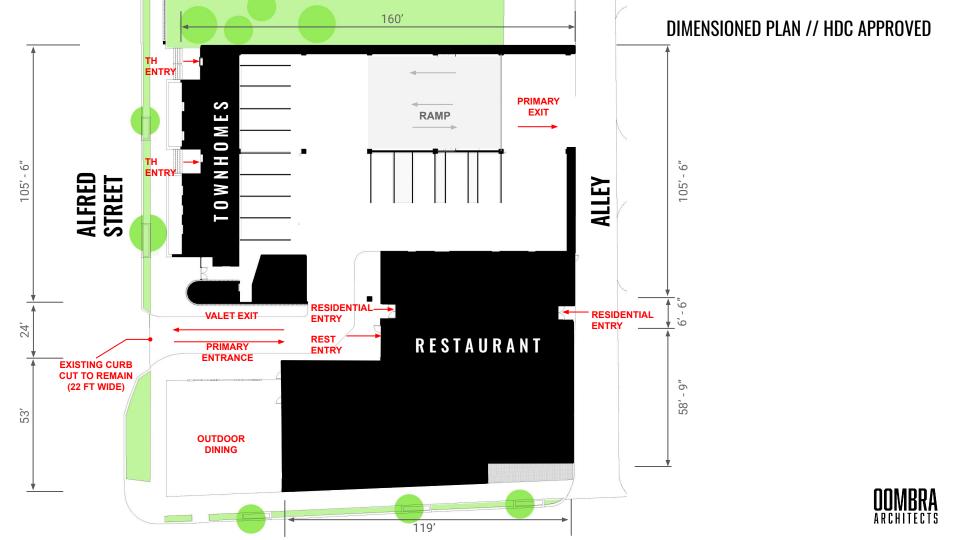
## BUILDING AXON VIEW // HDC APPROVED

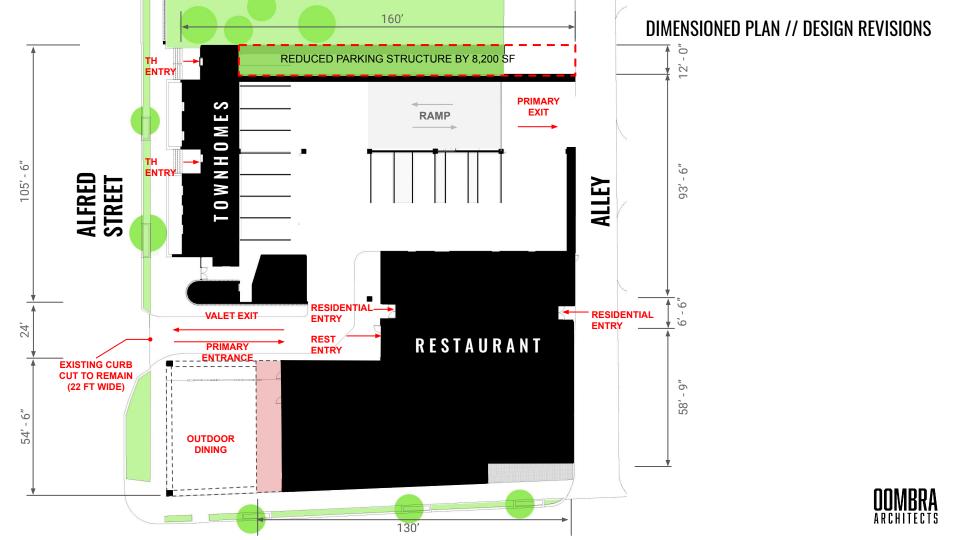


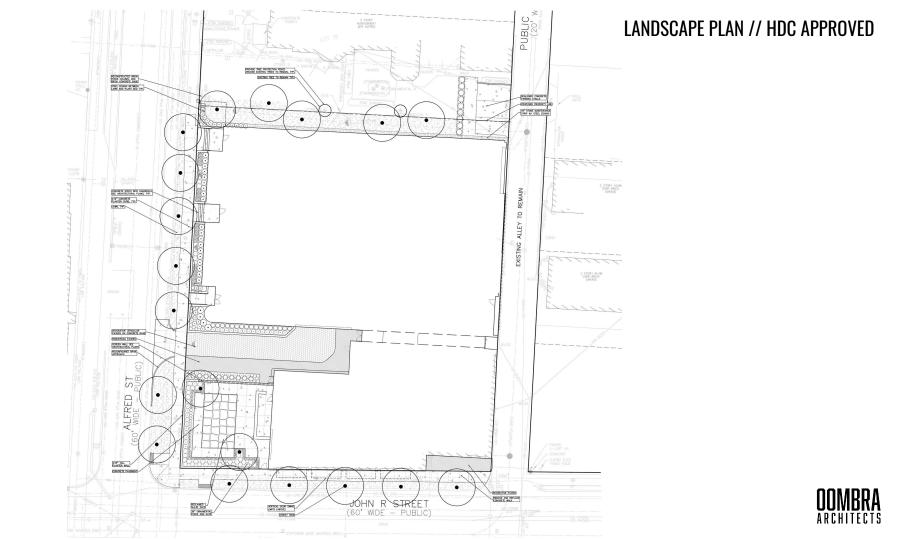


## BUILDING AXON VIEW // DESIGN REVISIONS











## RENDERING COMPARISON





HDC APPROVED JUNE 2018 REVISED DESIGN 2020

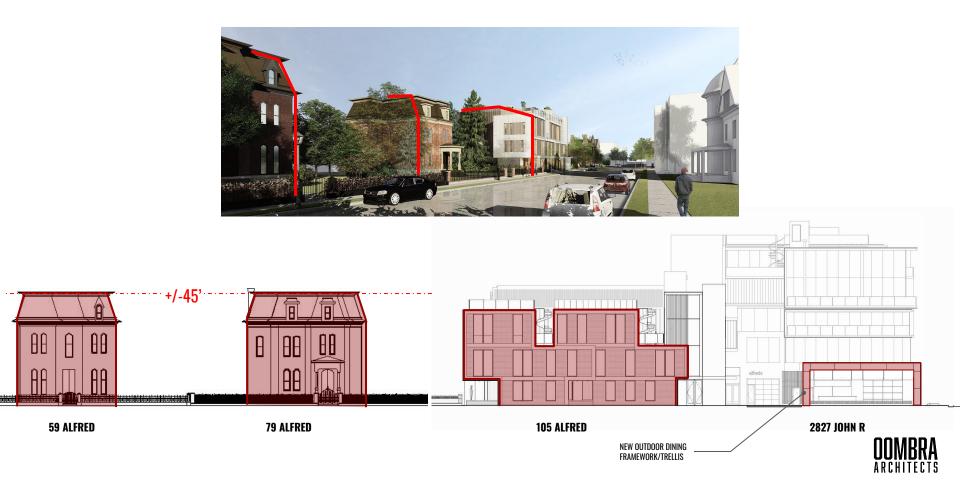








## NO CHANGE TO PREVIOUSLY APPROVED ALFRED ST TOWNHOMES



## **ELEVATIONS WITH DIMENSIONS**



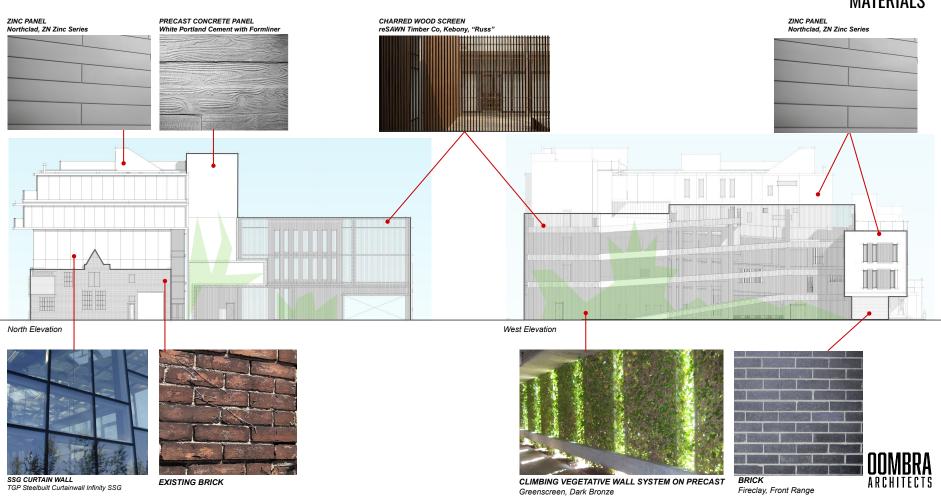
## **ELEVATIONS WITH DIMENSIONS**



## **MATERIALS**



## **MATERIALS**



# **BRUSH PARK ELEMENTS OF DESIGN**



#### BRUSH PARK ELEMENTS OF DESIGN **RELATIONSHIP OF** RELATIONSHIP OF **DEGREE OF COMPLEXITY** SIGNIFICANT LANDSCAPE **HEIGHT MATERIALS** WITH THE FACADES FEATURES AND SURFACE **TREATMENTS**

RELATIONSHIP OF OPEN

SPACE TO STRUCTURES

ORIENTATION, VISTAS,

**OVERVIEWS** 

20

RELATIONSHIP OF

**TEXTURES** 

PROPORTION OF BUILDING'S

FRONT FACADE

PROPORTION OF OPENINGS SCALE OF FACADES AND SYMMETRIC OR **RELATIONSHIP OF COLORS** 15 21 WITHIN THE FACADE **FACADE ELEMENTS** ASYMMETRIC APPEARANCE RHYTHM OF SOLIDS TO **RELATIONSHIP OF** DIRECTIONAL EXPRESSION GENERAL ENVIRONMENTAL **VOIDS IN FRONT FACADE** OF FRONT FACADES ARCHITECTURAL DETAIL **CHARACTER** RHYTHM OF SPACING OF **RELATIONSHIP OF ROOF** RHYTHM OF BUILDING **BUILDINGS ON STREETS SHAPES SETBACKS** 

RHYTHM OF ENTRANCE **RELATIONSHIP OF LOT** AND/OR PORCH WALLS OF CONTINUITY 18 **COVERAGE PROJECTIONS** 







## BP ELEMENTS OF DESIGN

DIRECTIONAL EXPRESSION OF FRONT FACADES

"A substantial majority of the buildings in the district have front facades vertically expressed"

RELATIONSHIP OF ROOF SHAPES
"Examples of many roof shapes . . .
different types are sometimes
combined into a single structure
and tower roofs, cupolas, lanterns . . . are used on various Victorian

houses"
RHYTHM OF SPACING OF
BUILDINGS ON STREET

"The most common relationship of textures in the district is the low relief pattern of mortar joints in the brick contrasted to smoother or rougher surfaces."

PROPORTION OF OPENINGS
WITHIN THE FACADE

"Areas of void generally constitute between 15 and 35 percent...generally taller than wide"

RHYTHM OF ENTRANCE AND OR PORCH PROJECTIONS
"Most buildings have or had a

porch or entrance projection"

OOMBRA ARCHITECTS



## BP ELEMENTS OF DESIGN

DIRECTIONAL EXPRESSION OF FRONT FACADES

Vertical voids in the massing and vertical fenestration give directionality to the facade.

RELATIONSHIP OF ROOF SHAPES Many homes in brush park embrace more than one roof type. The tourette at the stair tower serves as a contextual link as well as a classical element of the facade's composition.

RHYTHM OF SPACING OF BUILDINGS ON STREET

BUILDINGS ON STREET
On Alfred Street, the existing rhythm of the residential homes is maintained by the vertically oriented voids in the townhome massing and its compatibility to the spacing of existing structures.

PROPORTION OF OPENINGS
WITHIN THE FACADE

Areas of void within the townhomes constitute between 15 and 35 % of the facade, which is characteristic of the homes on Alfred Street.

RHYTHM OF ENTRANCE AND OR PORCH PROJECTIONS

Residential entries are provided a covered, in-set porch for consistent means of entry along Alfred Street.















