

TROIANI GROUP

Planning Commission Briefing for demolition and consolidation at Boulevard, First and Market
Submitted June 9, 2020



TROIANI
GROUP

Rothschild
COLLABORATIVE
Doyne
ARCHITECTURE AND URBAN DESIGN

BUROHAPPOLD
ENGINEERING

 PJ DICK

大成 DENTONS

COHEN
& GRIGSBY

FIRSTSIDE OPPORTUNITY

Location of Troiani Group properties within the Golden Triangle

Boulevard and Market

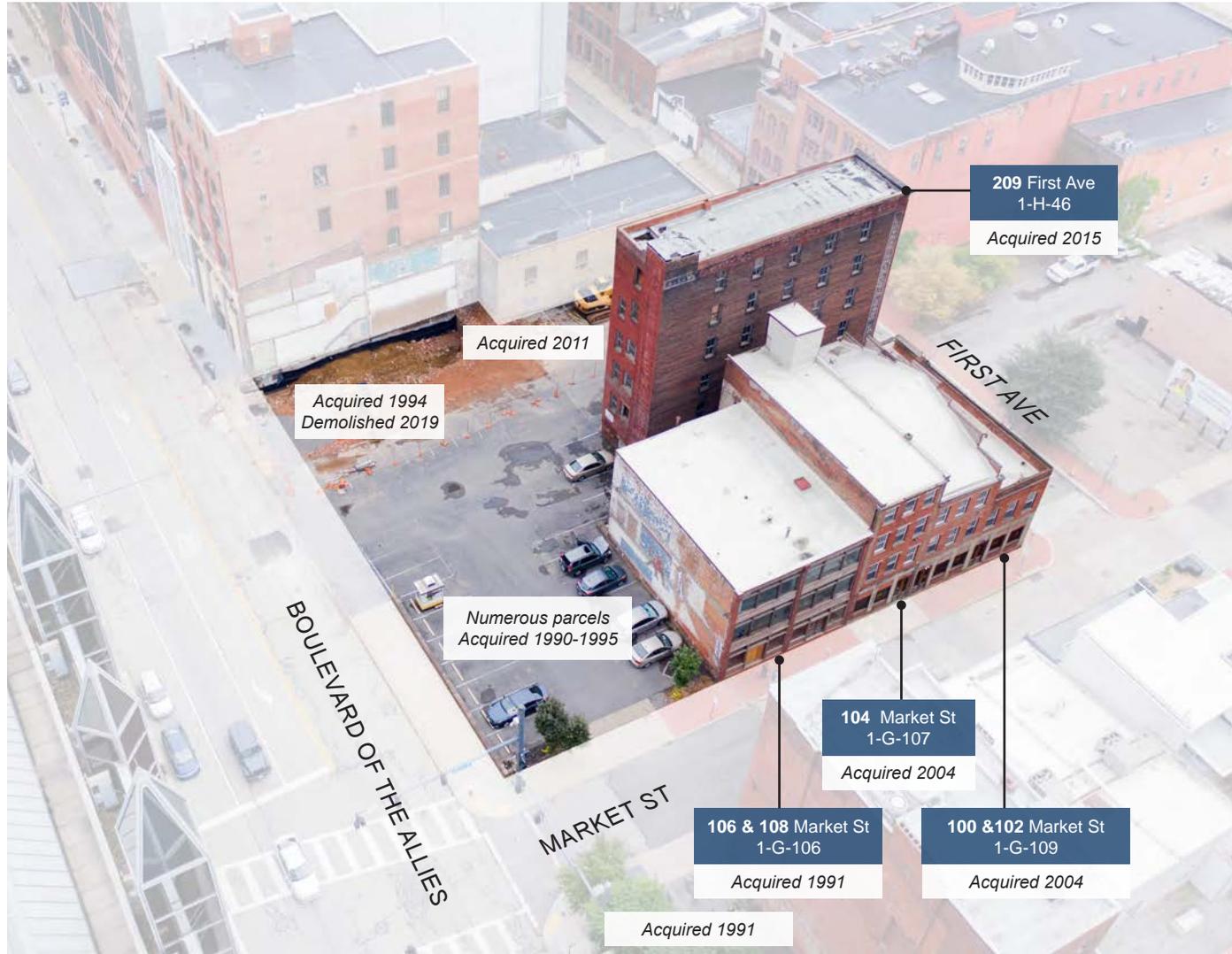
- *Mixed-use Signature Tower with Class A office space*
- *Bridges the Boulevard and activates Firstside*
- *150 residential units*
- *Sidewalk level restaurant*
- *Urban Open Space along Boulevard and Market*

First and Wood

- *90 residential units*
- *Atrium access to Ft. Pitt building*
- *Ground floor retail*

30 YEARS TO SITE CONTROL

A historic assembly of contiguous property



Aerial View of Boulevard & Market

Historic photo showing original, 3 story facades of First and Market building before 1884 fire.

floor in a fire on September 9, 1884.¹¹ By 1893, 106 Market was home to a wholesale grocery and home appliance distributor.¹² Major alterations to the exterior façade were conducted in the early 20th century.



100 (center) and 104 Market (left), with 209 First in background
Source: "Design Analysis: Market Street & First Avenue," Pittsburgh History and Landmarks Foundation, 11/15/2019



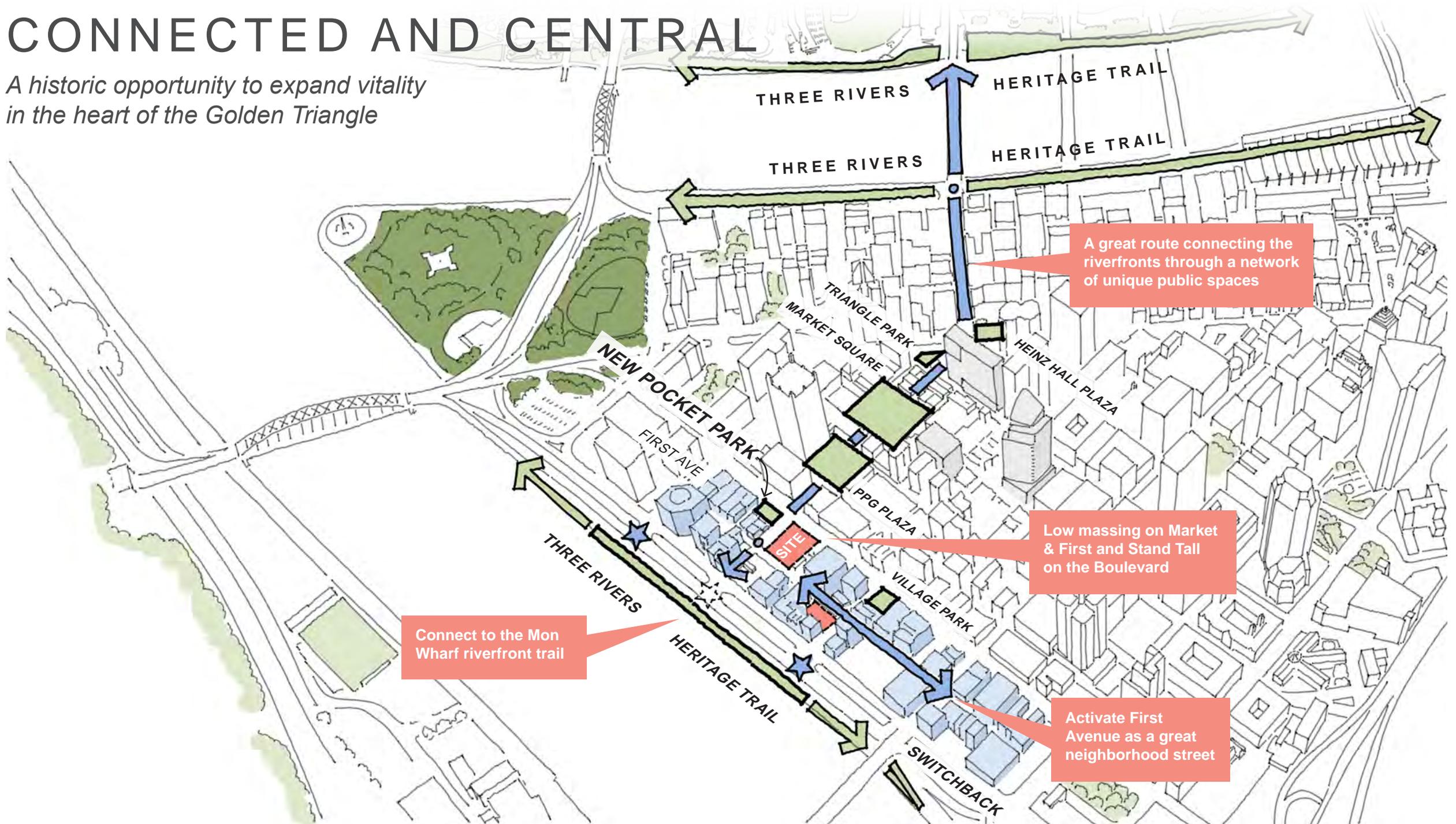
106 Market (center), with 104 Market at right

¹¹ "Rags and Tea: A Bad Fire on Market Street," Pittsburgh Post-Gazette: September 10, 1884, Page 2.
¹² Sanborn Fire Insurance Maps, Pittsburgh, PA, Volume 1 Sheet 3, 1893.

** Historic photos provided by Heritage Consulting Group in Historic Property Assessment study from Dec, 11, 2019*

CONNECTED AND CENTRAL

A historic opportunity to expand vitality in the heart of the Golden Triangle



A great route connecting the riverfronts through a network of unique public spaces

Low massing on Market & First and Stand Tall on the Boulevard

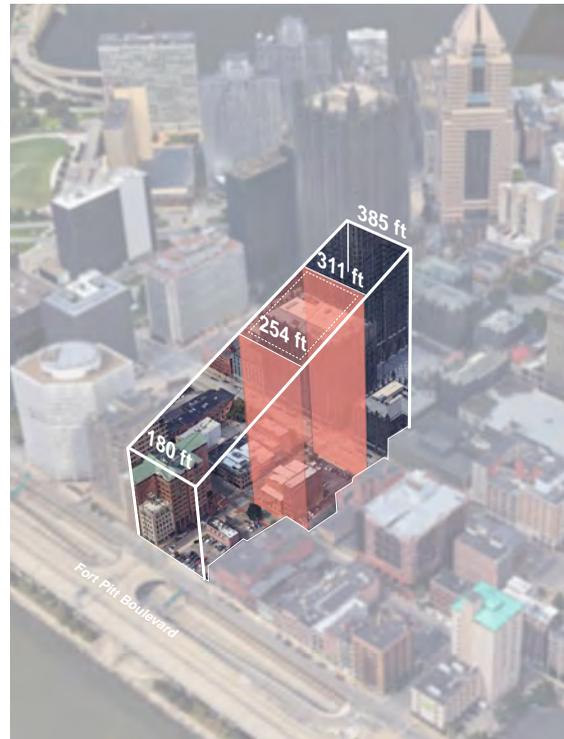
Activate First Avenue as a great neighborhood street

Connect to the Mon Wharf riverfront trail

INCLINE PLANE AND HEIGHT

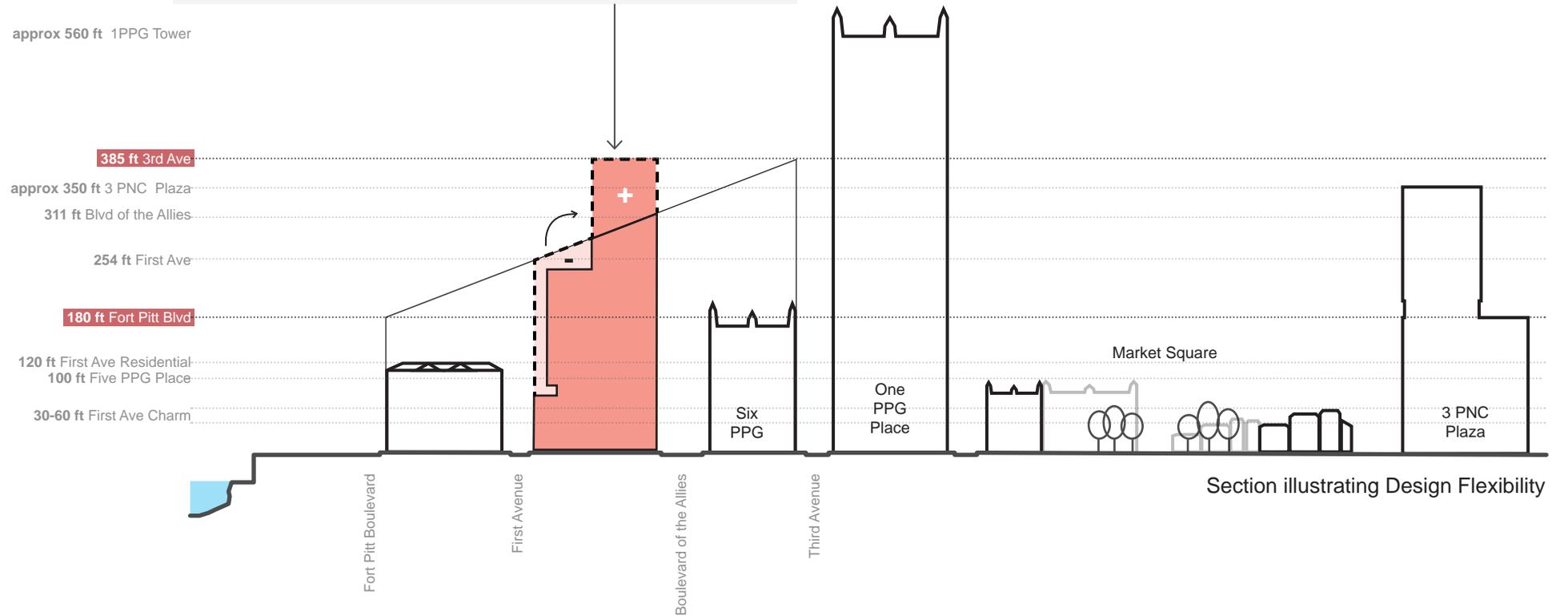
910.01.H.2 (d) (1) Height - Early studies to start from Zoning Rules

"910.01.H.2(d)(1) Height Monongahela River Side structures or portions of structures may not penetrate an inclined plane determined by straight lines connecting points 180-feet on Fort Pitt Boulevard and 385-feet on Third Avenue."



Aerial View of the GT-C inclined plane height envelope

"910.01.H.2(d)(4) Design Flexibility Structures may penetrate a portion of the incline plane only if an equal amount of building bulk is reduced below the incline plane and only if the maximum height of the structures occurs at that portion of the site covered by the highest portion of the inclined plane."



Note: information provided for site only. Elevation data provided by Google Earth and is approximate.

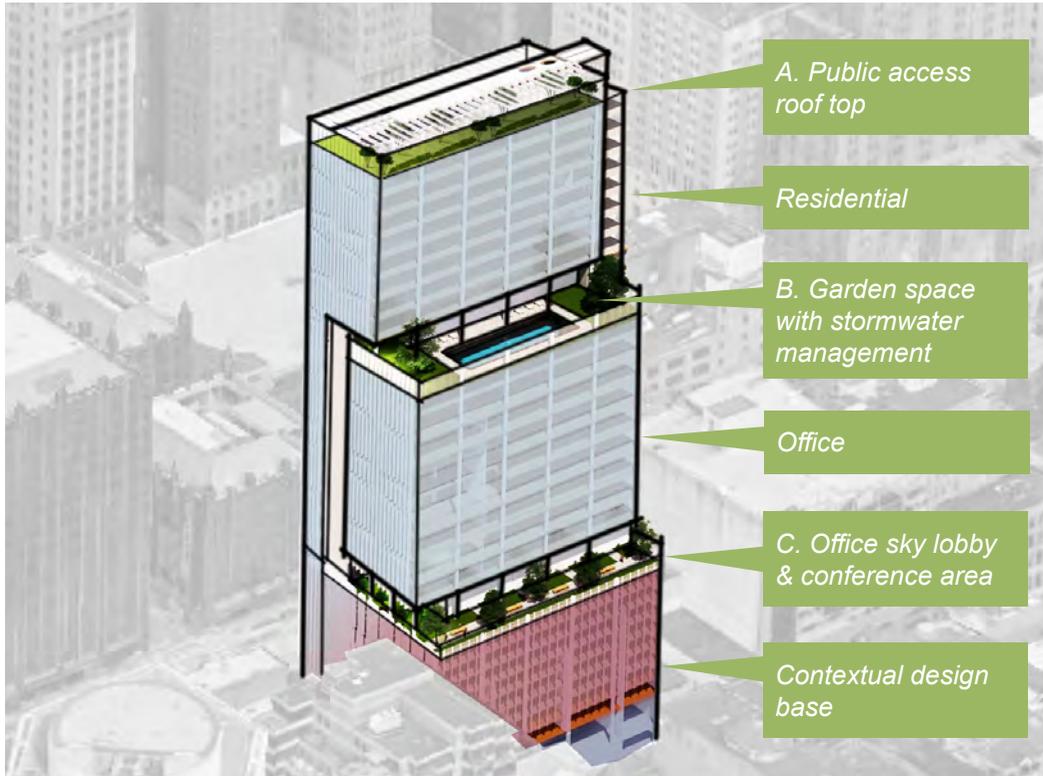
DEVELOPMENT PROGRAMMING

September 2014 to March 2020



GREEN IN THE SKY

South-facing skydecks and sustainable design features advance Pittsburgh's global leadership as a resilient city.



EXPLORING THE POSSIBILITIES

Advocated of older buildings call attention to approaches

LARGER SCALE MASONRY PLINTH



Atlantic Wharf Lofts, Boston, MA

LOWER SCALE THIN FACADES



Penn Mutual Tower, 510 Walnut Street, Philadelphia, PA

STEEL BRACING OF HISTORIC FACADE



Historic facades, Washington D.C.

REMOVE AND REBUILD

Range of re-use of older building materials and elements



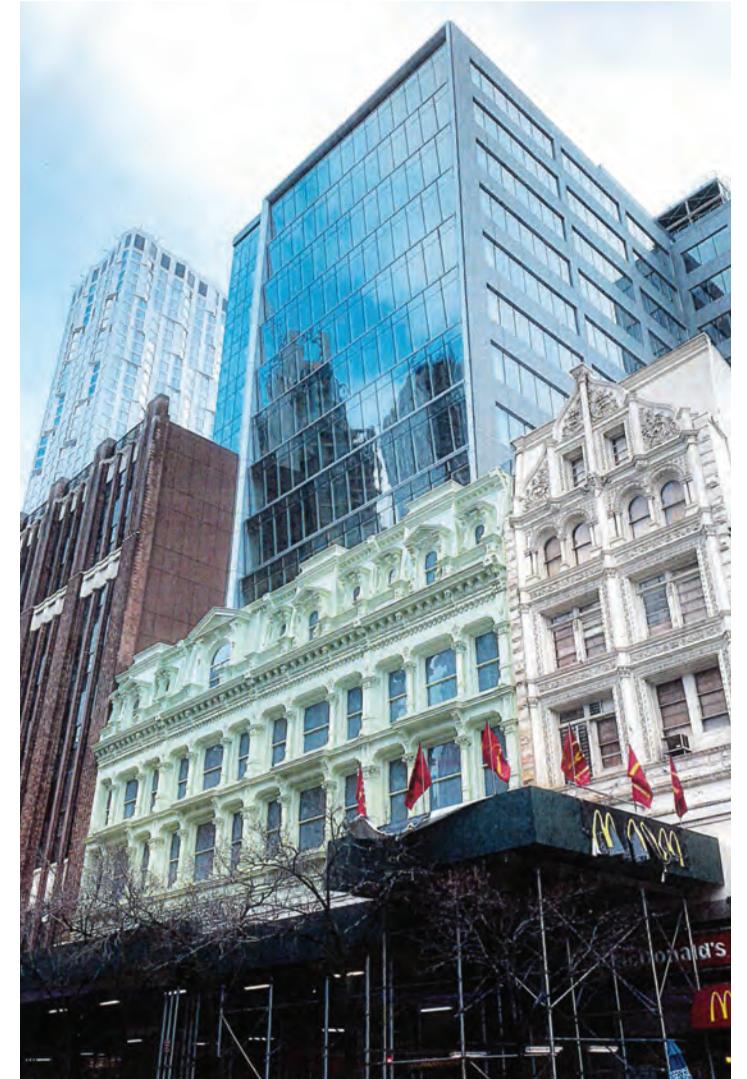
The Wheeler building in Brooklyn, NY integrates cast iron facade

HISTORIC FACADE REMOVED



The Wheeler relates to the surrounding historic facades

HISTORIC FACADE REBUILT



The new building steps back from the historic facade

BALANCING BIG BASE

Toronto tower meets intricate context



Nicholas Street Residences early rendering



New construction with contextual design features

RENEWED APPROACH

Activated bases with historic qualities create connected places



The Wharf early rendering of historic and modern integration



The Wharf early rendering



The Wharf street scale

PITTSBURGH PLACE PRECEDENTS: SMALL-MEDIUM

Public spaces in Downtown Pittsburgh activate the Downtown experience.

Triangle Park



Image by Pittsburgh History and Landmarks Foundation

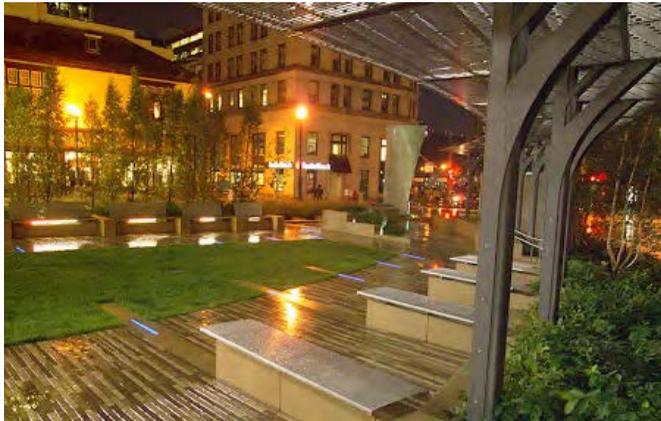


Image by LaQuatra Bonci

- Tall vegetation and art panels provide a visual/ noise barrier from Liberty Avenue traffic.
- Covered courtyard seating and covered bus stop offers shelter to pedestrians and commuters.
- Both pavement and grass are meant to be used.

Water cube parklet



Image by GBBN



Image by GBBN

- Small parklet with free public drinking fountains and modest seating.
- Free public bike repair station with tools and pump.
- Simple but effective attraction: A beacon of light!

Art Installations



Image by EighthandPenn.com

8th Penn Sky bridge - Color changing bridge



Image by NEXTPittsburgh

Pittsburgh Trust Arts Oasis - Rotating Public Art venue

PITTSBURGH PARK PRECEDENTS: SMALL-MEDIUM

A variety of public spaces in Downtown Pittsburgh offer a variety of assets to the Downtown experience.

Gateway Center Park



Image by GBBN



Image by Three Rivers Arts Festival

- Previously lost, unused traffic island becomes pedestrian parklet with green lawn and low wall planter seating.
- Both pavement and grass are meant to be used.
- Popular gathering space during downtown cultural events with tables and chairs.

Village Park



Image by NEXTPittsburgh



Image by Point Park University

- Park space nested beside buildings and arcade.
- Low masonry perimeter wall suggests ownership while still open to public use
- Wide variety of textures on walls and floors. Variety of natural elements like plants and running water.

Katz Plaza



Image by the Pittsburgh Cultural Trust



Image by the Pittsburgh Cultural Trust

- Unique water sculpture anchors a ring of shade trees and seating to serve bus riders and the Cultural district.
- Openness allows for medium sized gatherings during good weather like jazz concerts.
- Small parklet across 7th connects pedestrians to both parklets

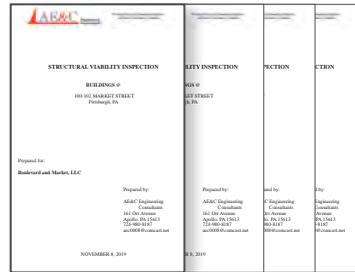
SUPPLEMENTAL SUBMISSION

Summary of Reference Documents included in supplemental submission package in March of 2020



01
Historical Report

via [Dropbox link](#)



02
Structural Reports

via [Dropbox link](#)



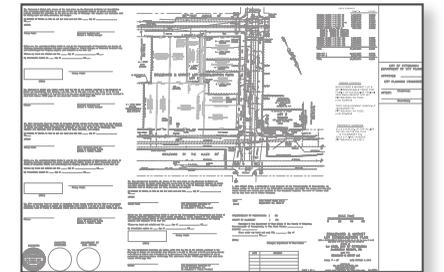
03
Masonry Report

via [Dropbox link](#)



04
Zoning Review

this document and via [Dropbox link](#)



05
Lot Consolidation

via [Dropbox link](#)

* See updated reports provided 6.09.20

* To be updated with Development Plan Submission for Staff Review 06.23.20

ASSESSMENT OF BUILDING CONDITIONS

CONCLUSION

The present conditions of the front portion of the left brick bearing wall, as observed and photographed, lead to the conclusion that the front portion of the left

STRUCTURAL VIABILITY INSPECTION – 209 First Avenue
(Revision 1)
June 5, 2020

1st floor brick bearing wall of the building is very unsafe structurally and is in danger of, a possibly imminent, collapse. The collapse of this section of the left brick bearing wall would more likely, than not, cause the drastic and complete collapse of the entire structure.

NEW GOLDEN TRIANGLE NEIGHBOR

Proposed mixed use development brings renewal to Firstside



ACTIVATING MARKET AND FIRST

Sidewalk view looking towards the Boulevard from the corner of Market Street and First Avenue



BRIDGING TO FIRSTSIDE

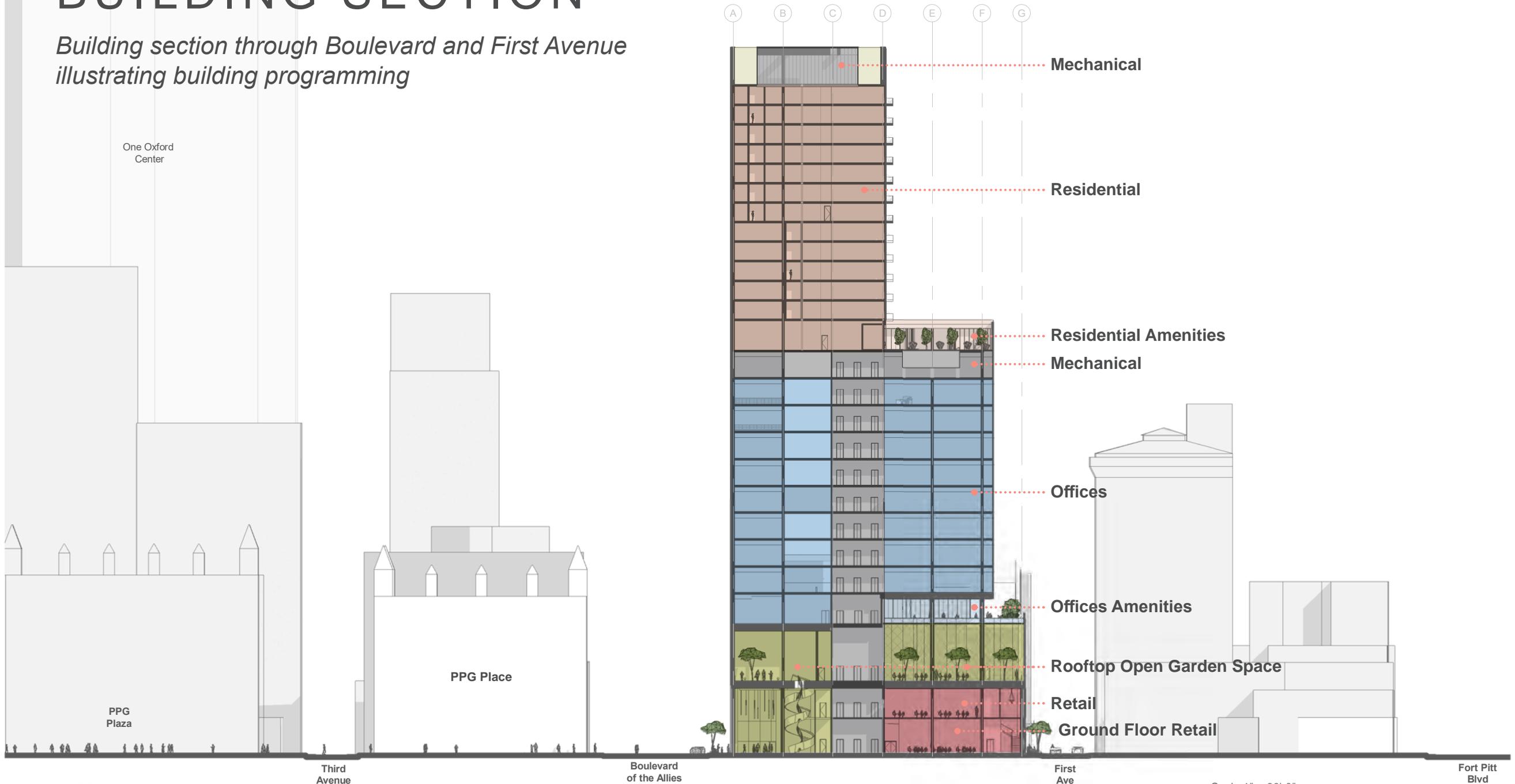
A series of urban open spaces connect accross the Boulevard



The Urban Open Space at 113 Boulevard of the Allies will provide accessible public space adjacent and at the same level as the sidewalks. Existing Port Authority stops located adjacent to the space activate and provide comfort for pedestrians, transit riders, and others downtown.

BUILDING SECTION

Building section through Boulevard and First Avenue illustrating building programming



One Oxford Center

PPG Plaza

PPG Place

Third Avenue

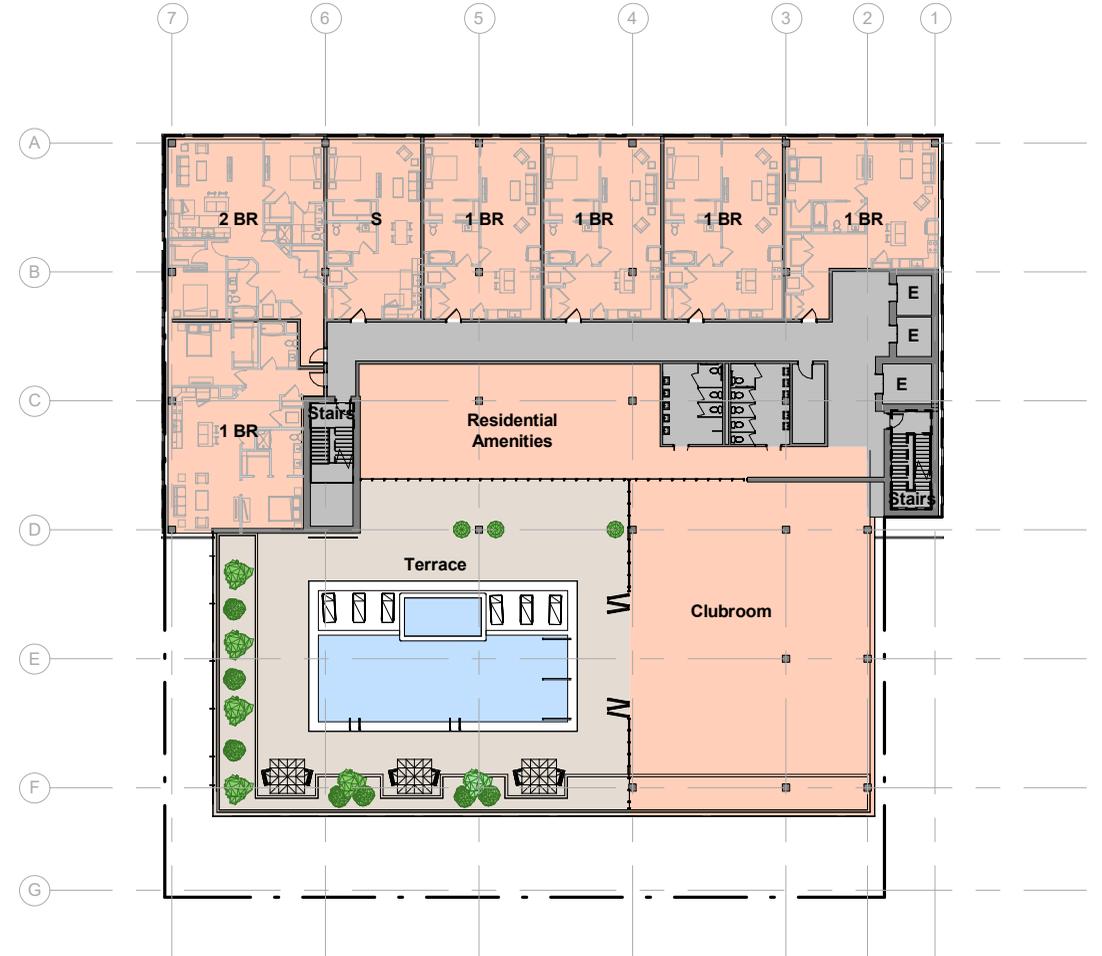
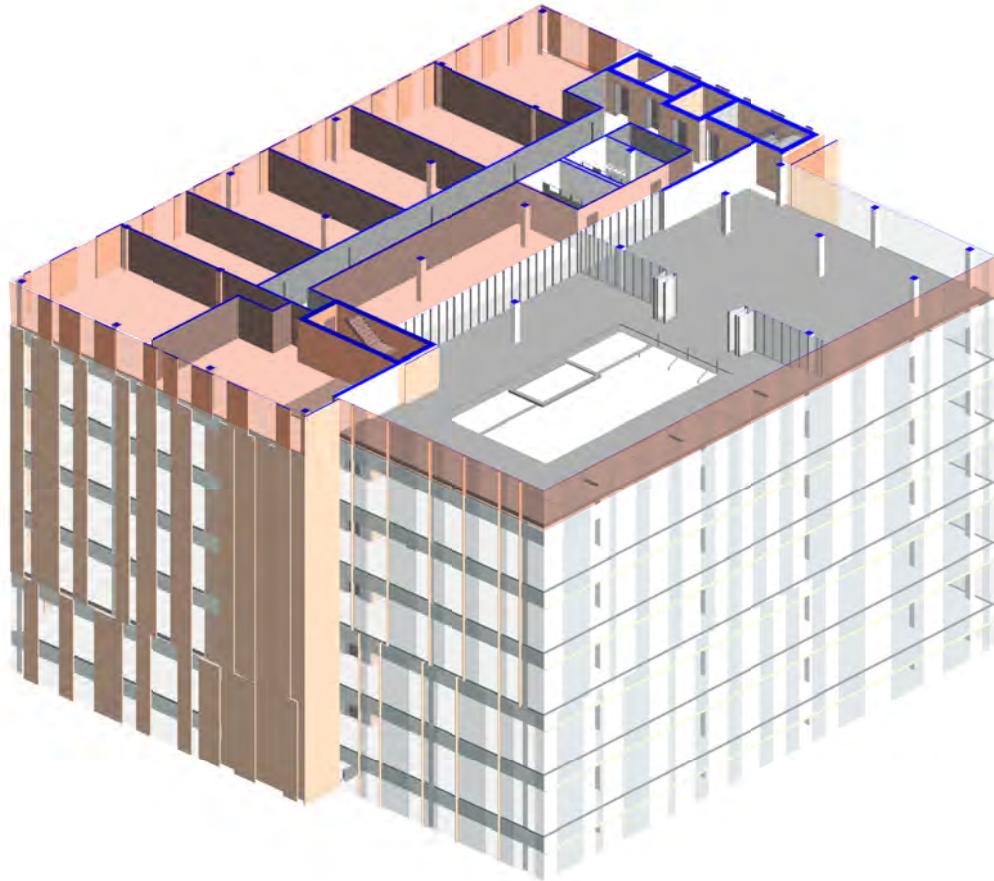
Boulevard of the Allies

First Ave

Fort Pitt Blvd
19

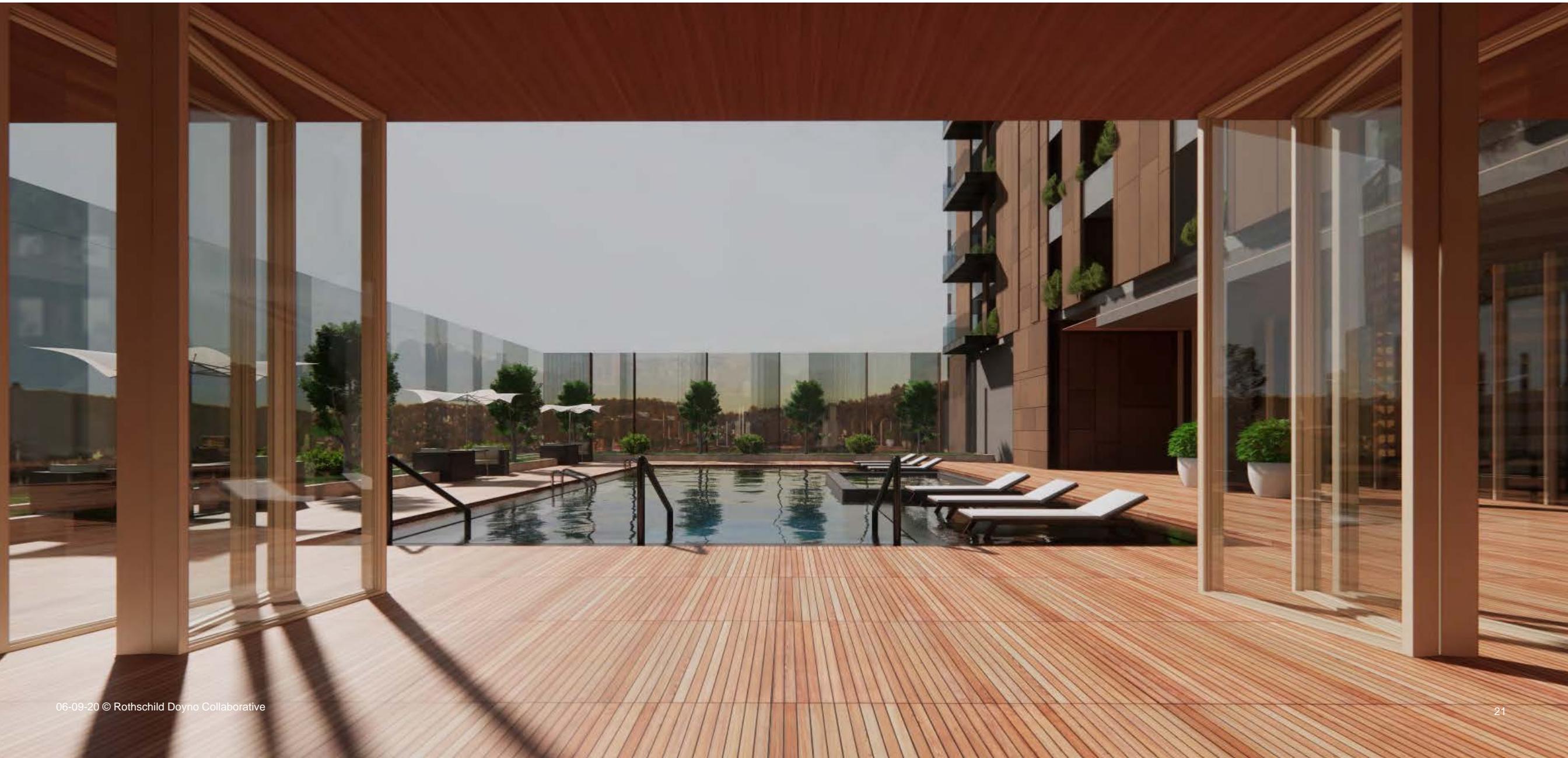
RESIDENTIAL AMENITIES

Upper floor patio and amenities brings prominent visible activity across from Mt. Washington



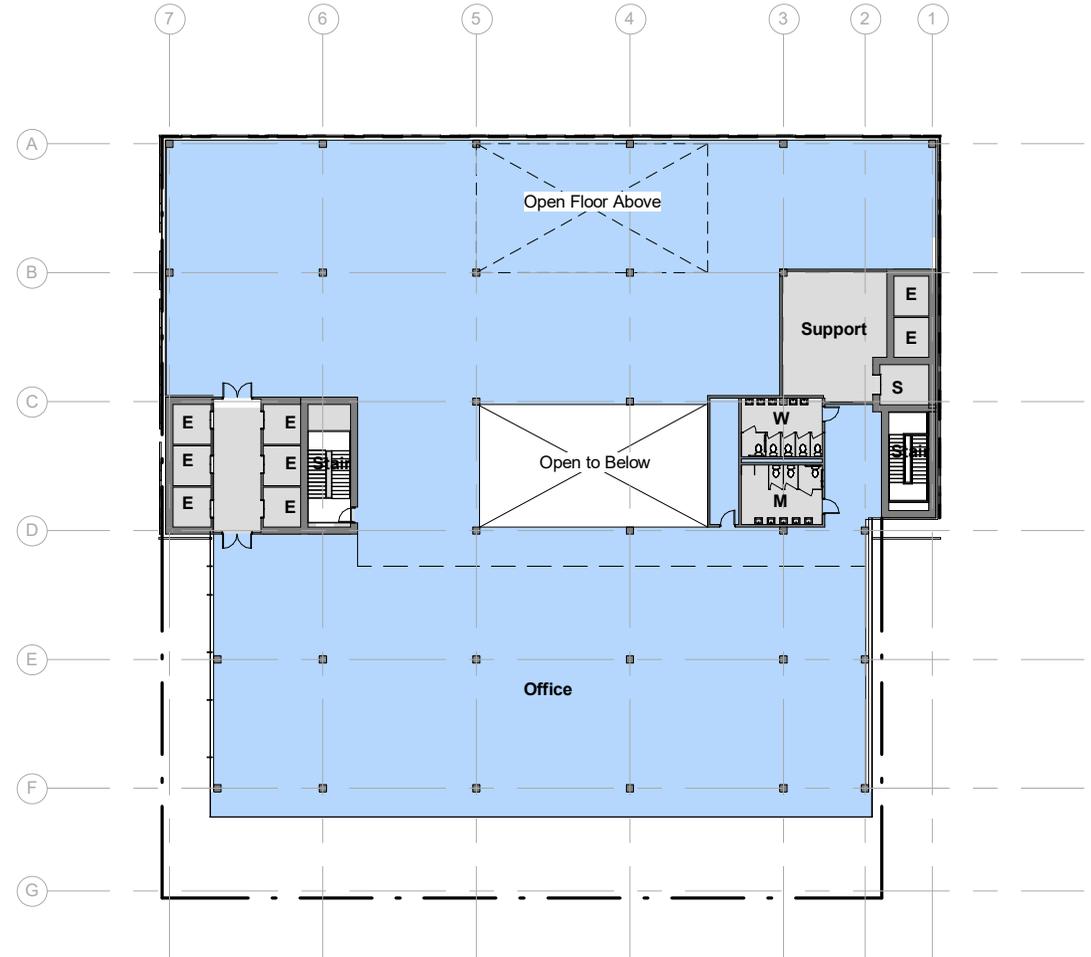
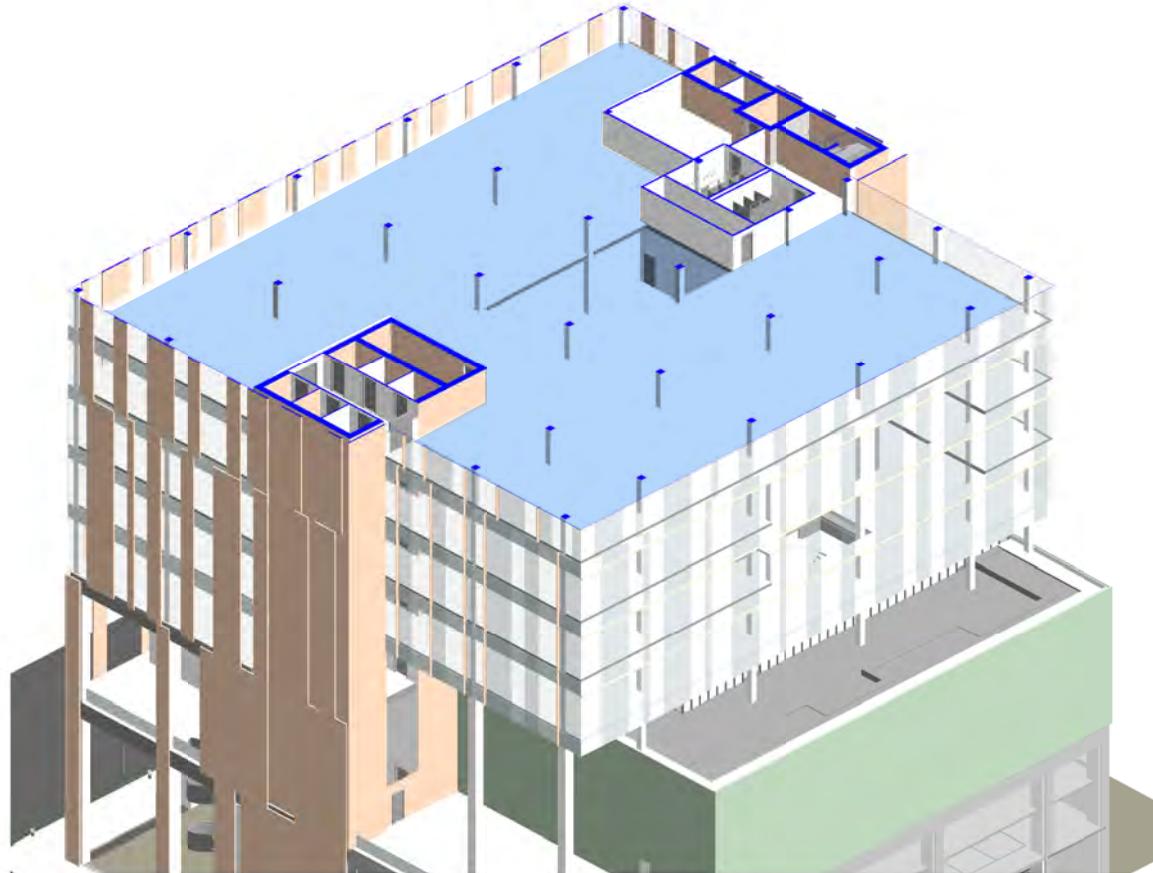
GARDEN IN THE SKY

Residential Amenities Roof Deck bathed in southern sun and protected from wind.



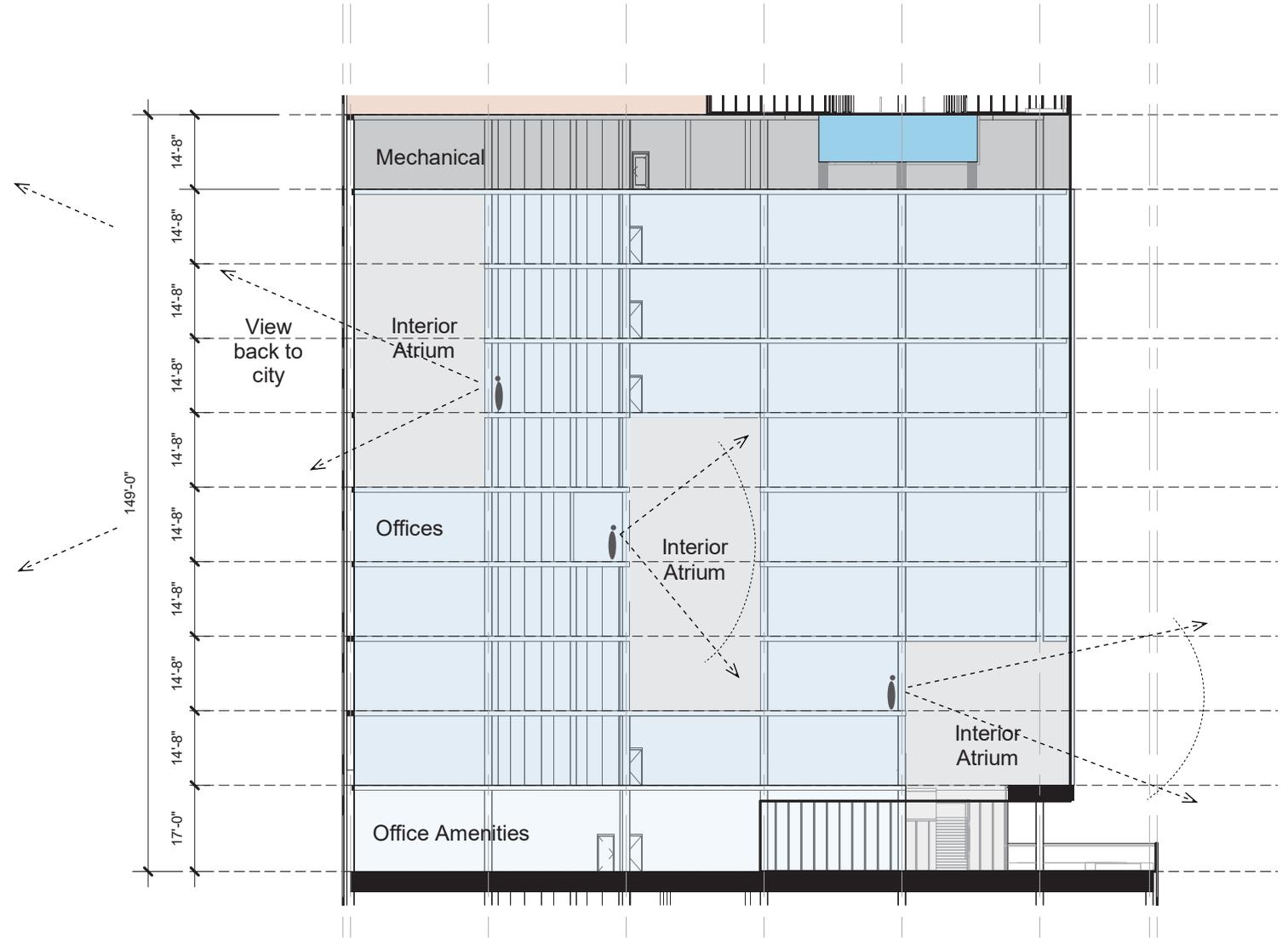
21st CENTURY WORKPLACE

Pittsburgh's Golden Triangle needs compelling office space to attract new downtown headquarters to Pittsburgh



INTER-CONNECTED OFFICE

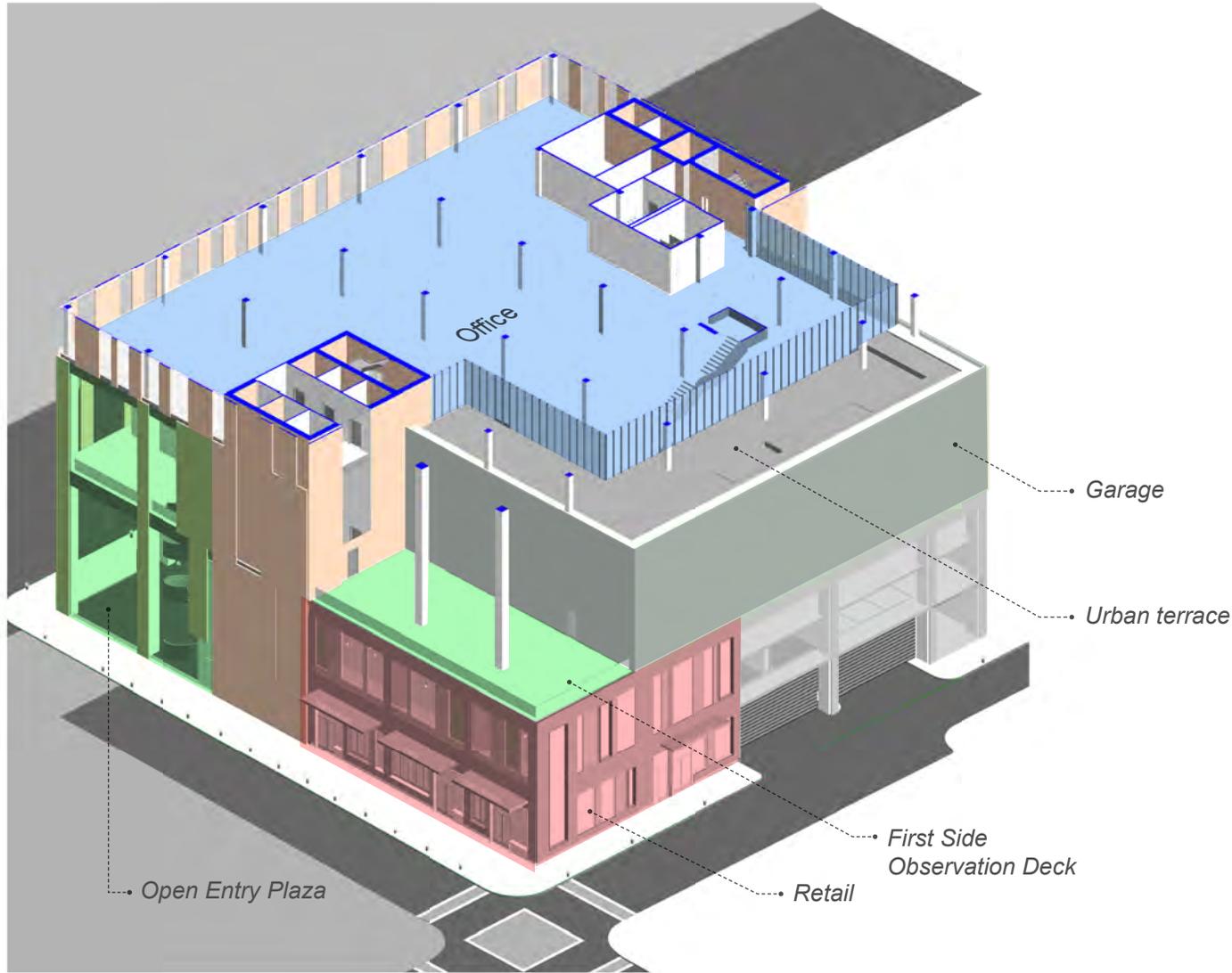
A workplace with strong social connections within the building levels and the city context



Scale 1/32" = 1'-0"
0' 16' 32' 64'

WORKPLACE EXTERIOR CONNECTIONS

The office sky-lobby provides indoor/outdoor space at the office arrival level



URBAN TERRACES

South facing sun terrace off of the lobby creates compelling arrival floor. West office shaded terrace overlooks Market Street.



INTERSECTING FIRST AND MARKET

Scale and character of Firstside corner needs activity to catalyze renewal in the area



Developing a signature corner retail / restaurant to promote the highest and best use along first avenue



Rather than introduce another small scale masonry storefront or closed garage door to first "avenue"

MARKET CORNER

*Dramatic stepback at Market Street and First Avenue
activates the corner*

First Side observation deck with panoramic view

Open Space volume creates an outdoor room

Sheltered Firstside Observation Deck accessed from public sidewalk activates and provides lower scale mass to relate to context

Multi-story ground floor restaurant turns the corner activating First Avenue

Ground Floor Retail activates sidewalk along Market Street

WELCOME TO FIRST SIDE

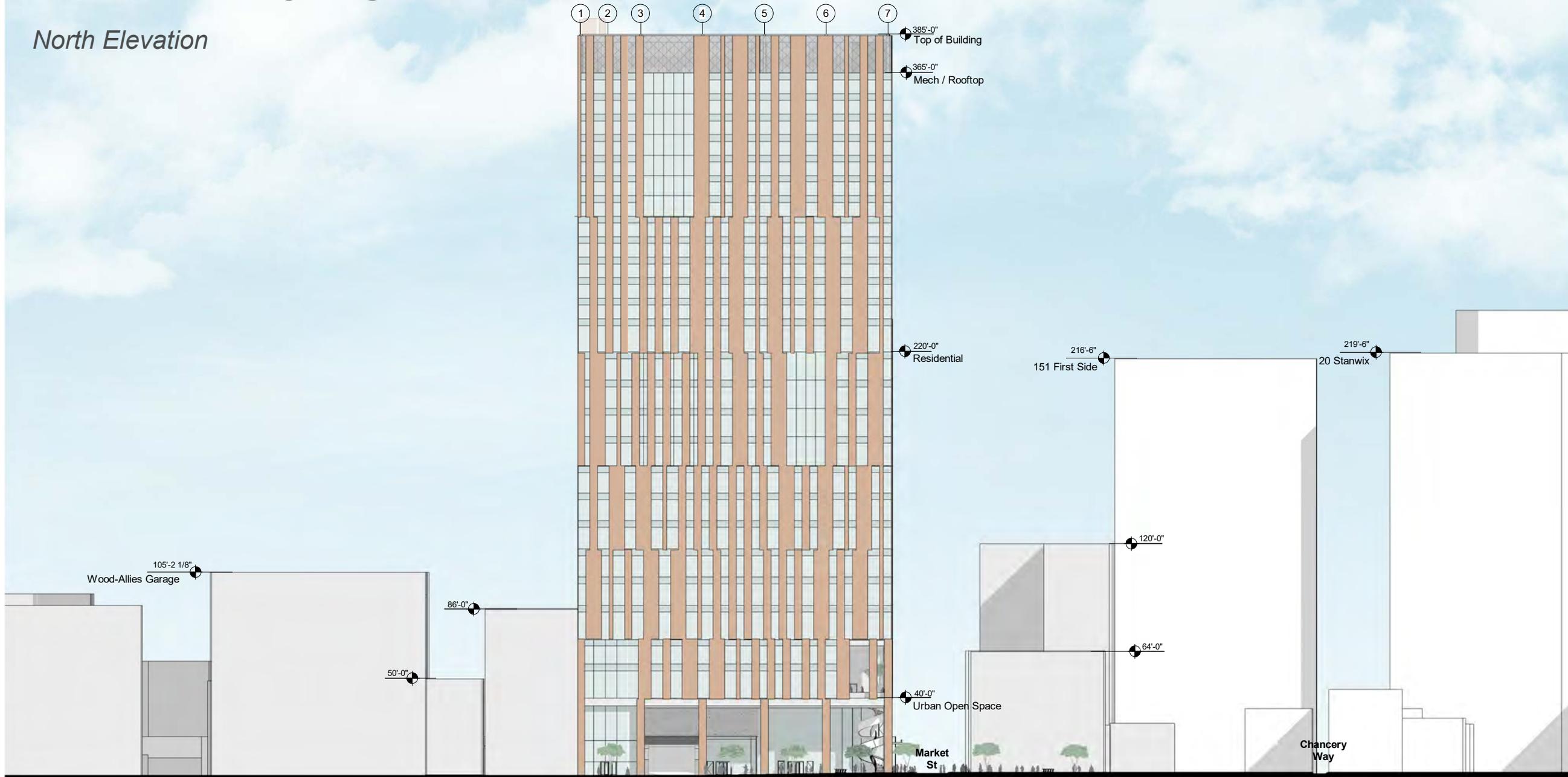
Sidewalk view looking across Boulevard of the Allies



The Urban Open Space at 113 Boulevard of the Allies will provide accessible public space adjacent and at the same level as the sidewalks. Existing Port Authority stops located adjacent to the space activate and provide comfort for pedestrians, transit riders, and others downtown.

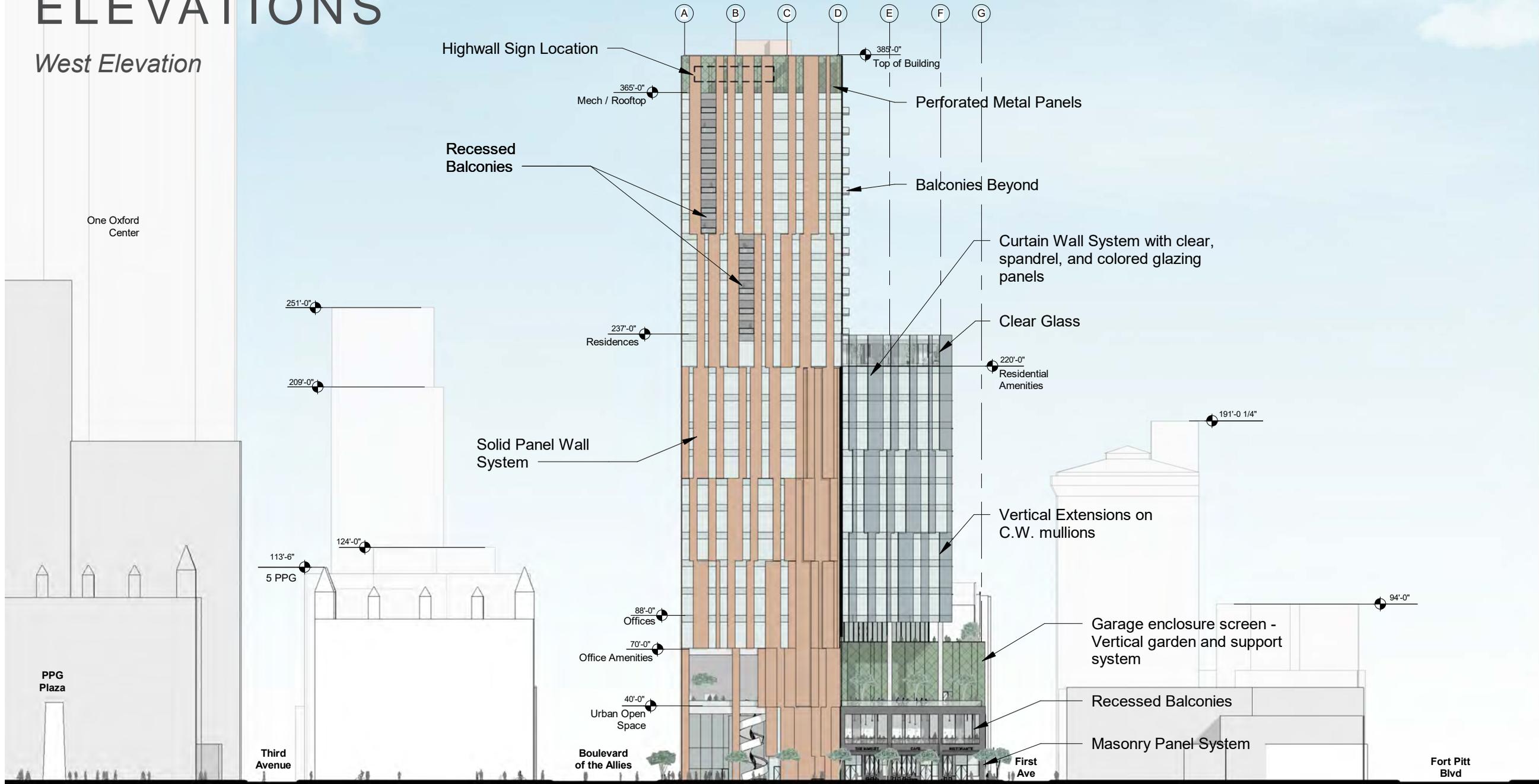
ELEVATIONS

North Elevation



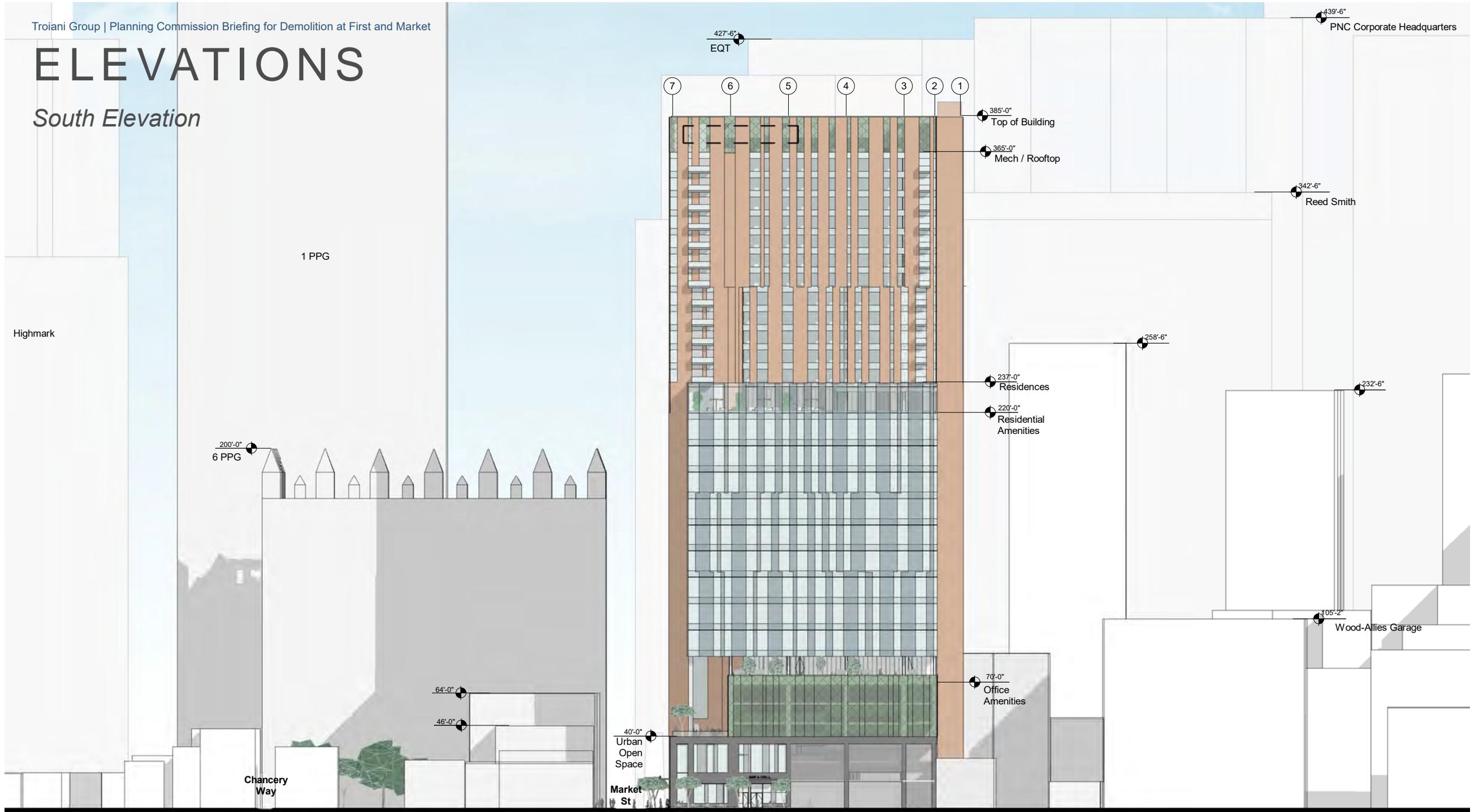
ELEVATIONS

West Elevation



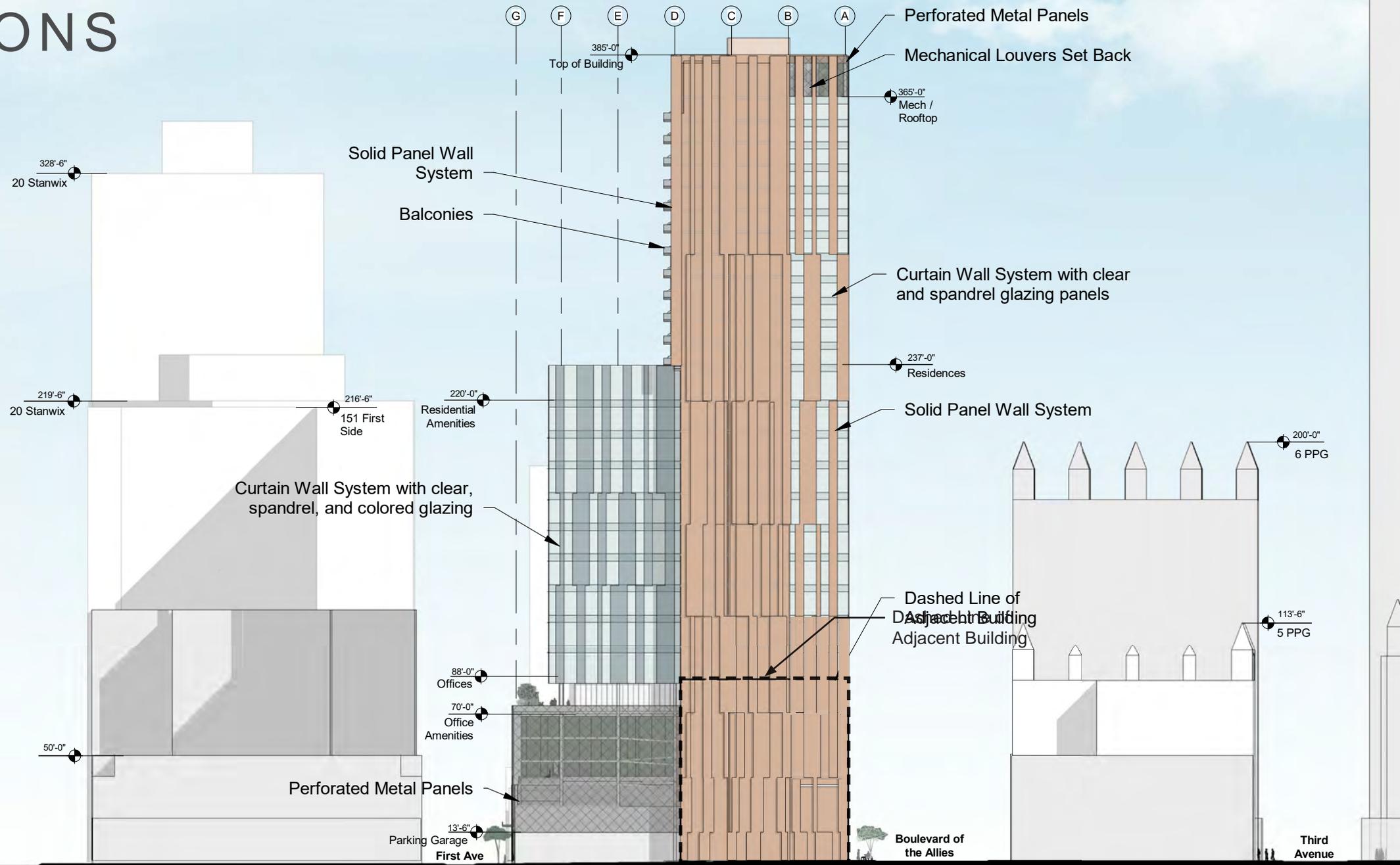
ELEVATIONS

South Elevation



ELEVATIONS

East Elevation



SKYLINE CONTEXT



PLANNING COMMISSION SUBMISSION

June 23, 2020



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Rothschild
COLLABORATIVE
Doyno

ARCHITECTURE AND URBAN DESIGN

BUROHAPPOLD
ENGINEERING

 PJ DICK

SUPPLEMENTAL EXHIBITS

Summary of Reference Exhibits included in submission package

Exhibit

*Market Street Corridor
Office & Retail Analysis*

*Cushman & Wakefield /
Grant Street Associates*

Exhibit

*Proposal for Transportation
Engineering Services*

Trans Associates

Exhibit

*Structural Viability Inspections
100-102 Market Street
104 Market Street
106-108 Market Street
209 First Avenue*

AE&C Engineering Consultants

Exhibit

*Historic Property
Assessment*

Heritage Consulting Group

Exhibit

*Structural facade retention
study*

Rothschild Doyno Collaborative

Exhibit

*Community Interaction
Timeline*

Rothschild Doyno Collaborative

Exhibit

*Design Analysis: Market
Street & First Avenue*

PHLF and IKM

Exhibit

*Pittsburgh Overview -
COVID-19 Impact on Office*

JLL

Exhibit

*Appeal of Emergency
Application for 209 First
Avenue*

Dentons Cohen & Grigsby P.C.

Exhibit

*Interim Site Plan, Sidewalk
Obstruction Plan, and Construction
Management Plan*

Rothschild Doyno Collaborative

Exhibit

*MEP, Structural, Facades
Services Proposal*

Buro Happold Engineering

Exhibit

*Proposal for Civil Engineering
Services*

PVE

Exhibit

*Proposal
and Contract*

Future of Cities

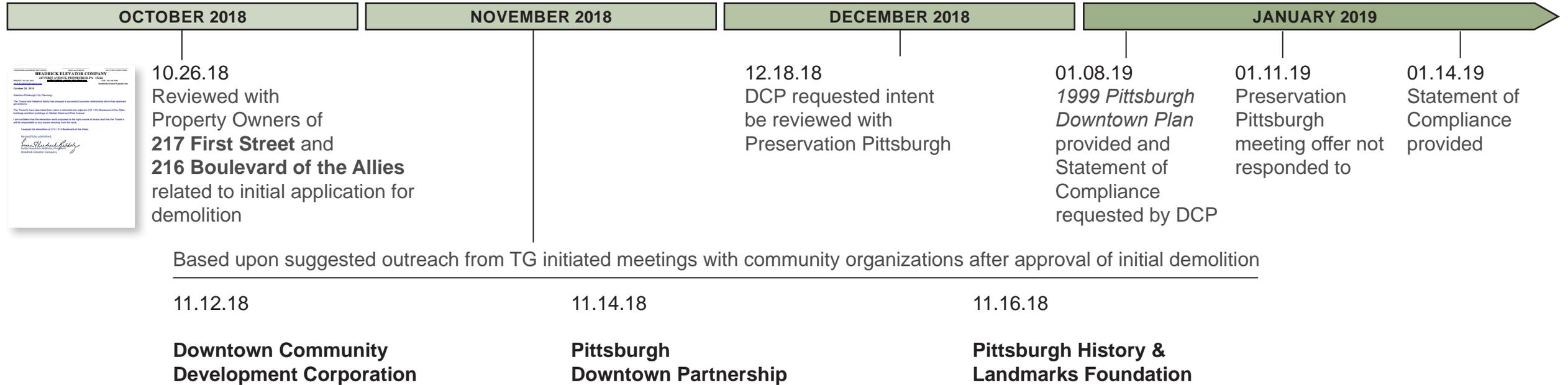
Exhibit

*Statement
of Compliance*

Rothschild Doyno Collaborative

COMMUNITY PROCESS

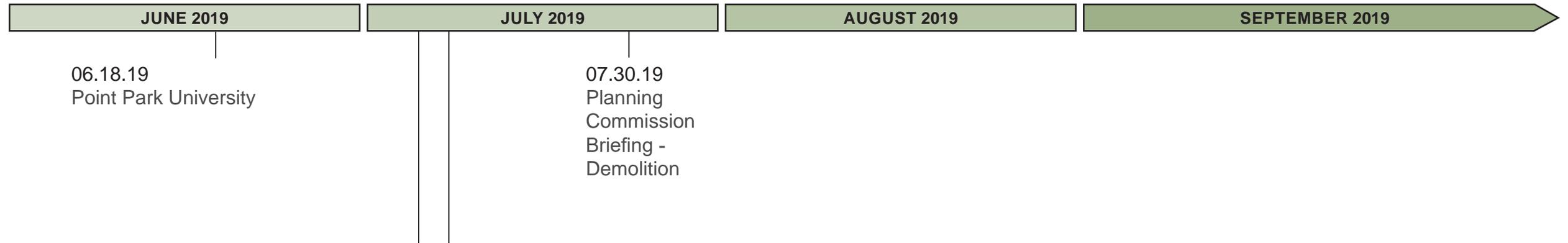
Following approval of initial building demolition of 212/214 building, Troiani Group openly communicated and met with adjacent property owners and community organizations. The Design Sketchbook articulated context, conditions, and intent.



COMMUNITY PROCESS

Troiani Group sought to advance demolition, community development intent, and goals.

Summer of 2019

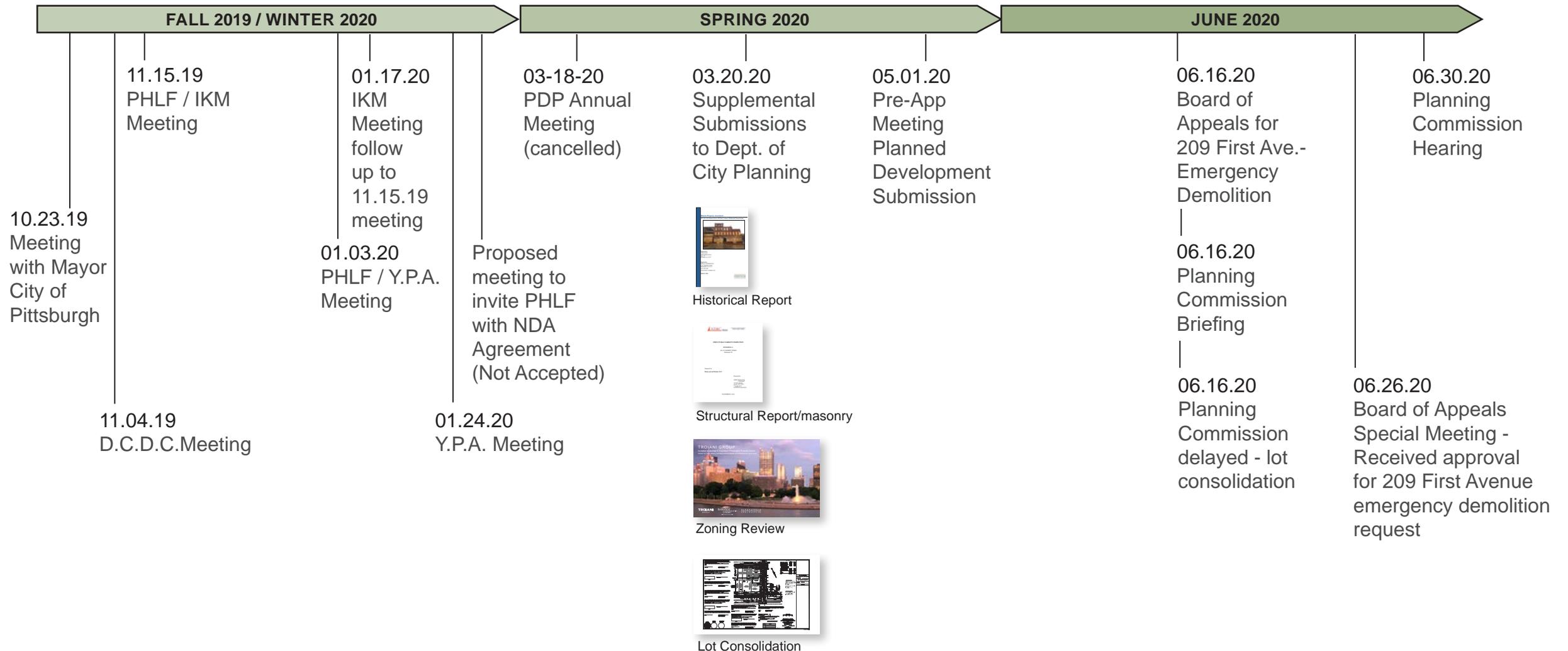


Based upon suggested outreach from DCP, outreach with community organizations and interested parties were held

Pittsburgh History & Landmarks Foundation / Y.P.A. 07.09.19	Pittsburgh Downtown Partnership 07.17.19	Downtown Community Development Corporation	Riverlife Design Review Committee	Preservation Pittsburgh
Meet on-site and walked through existing structures	Reviewed Sketchbook at Executive Committee Meeting	Multiple email interactions expressing support based on earlier dialogue at 212/214	Design Review Committee declined to review demo application, but plans to review proposed future design	Did not participate in dialogue after initial communication

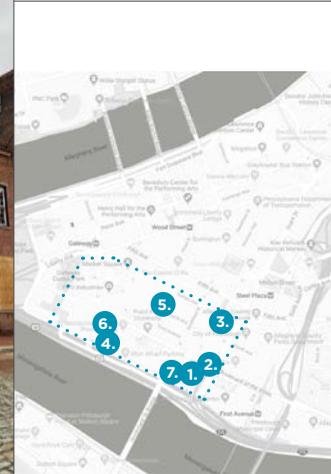
CONTINUED ENGAGEMENT

Based on planning commission request, Troiani Group continued to seek feedback and design progress was advanced.



CUSHMAN AND WAKEFIELD REPORT

October 2019



COMPETITIVE SET AVERAGE:
Gross Rent PSF: \$17.71
% Leased: 60%

Square Feet	Effective Market Rent (NNN)	Cash Flow
27,596	\$7.75	\$213,869
10.00%	(\$0.78)	(\$21,387)
	\$6.98	\$192,482
		8.85%
		\$2,173,915
		\$78.78

Improvement Type	Improvements Per Square Foot	Total
Tenant Work	\$50.00	\$1,379,800
Other Capex	\$110.00	\$3,035,560
	\$160.00	\$4,415,360
	PSE	TOTAL
6.00%	\$8.28	\$228,441
\$0.20	\$0.40	\$11,058
\$2.85	\$5.66	\$156,193
\$0.15	\$0.30	\$8,279
12.44%	\$19.60	\$540,761
	\$0.00	\$0
	\$34.23	\$944,713
	\$194.23	\$5,360,073

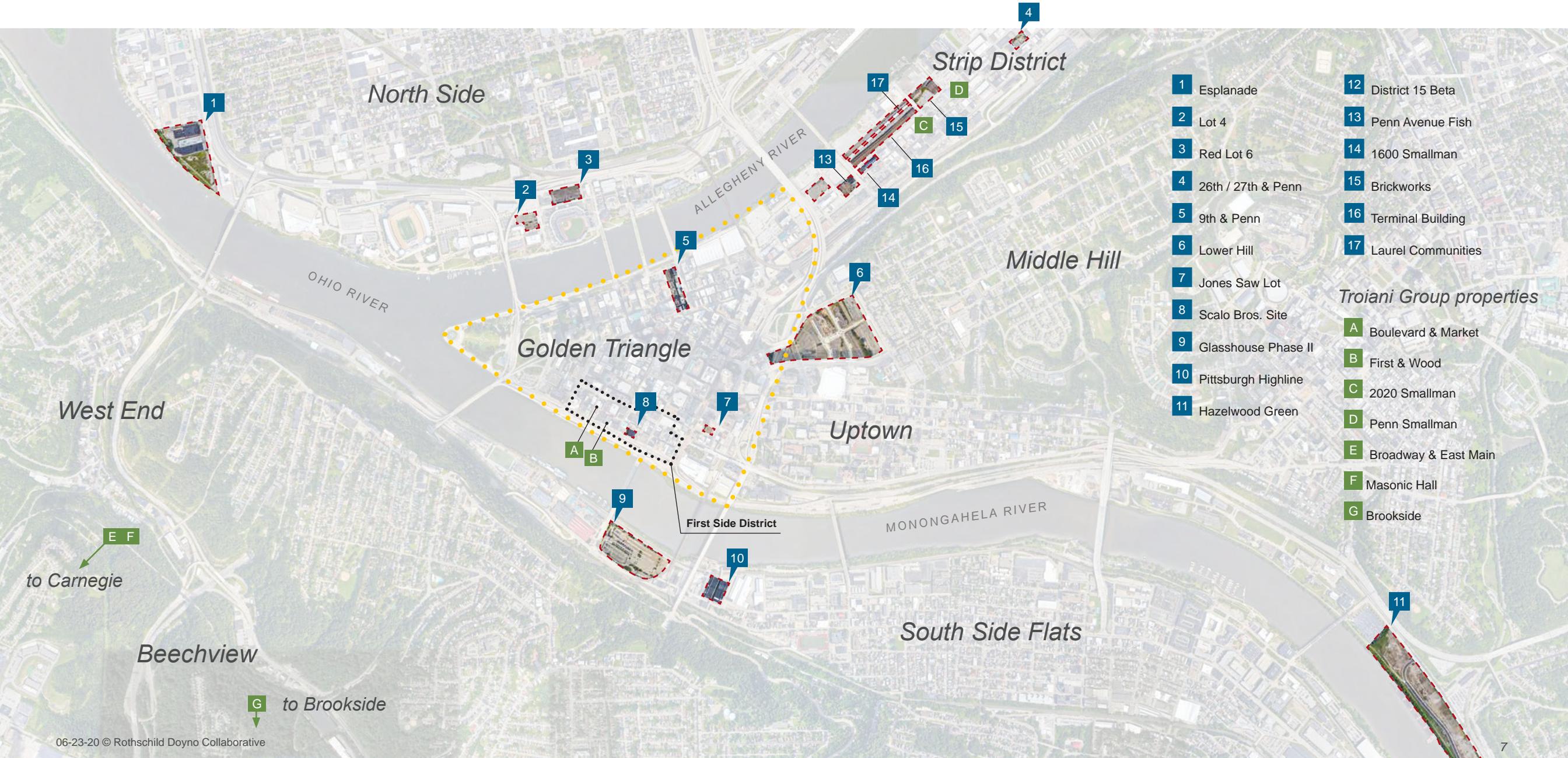
	\$78.78	\$2,173,915
Less: Costs to Achieve Full Occupancy	(\$194.23)	(\$5,360,073)
Value to an Investor/Developer	(\$115.46)	(\$3,186,158)

"The general market dynamics in their current state do not support a successful retail venture with the existing building"

"The instance where retail could serve the greater good would be under the creation of a critical mass element"

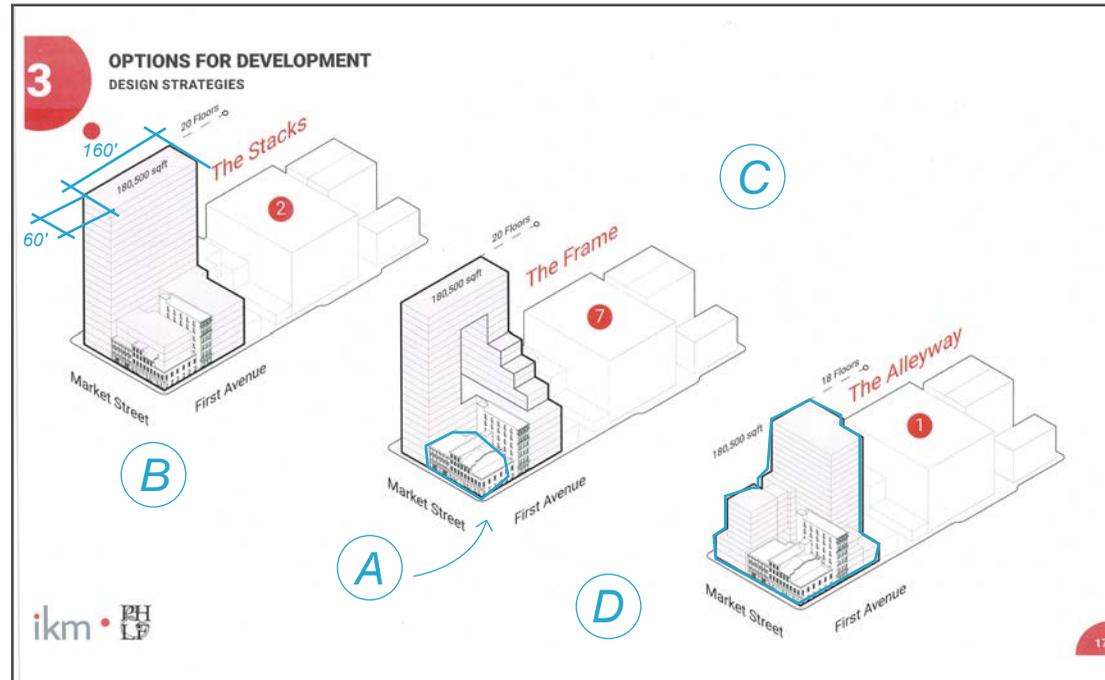
MARKET ANALYSIS

Pittsburgh development scene has shifted focus from the Golden Triangle to the downtown fringe

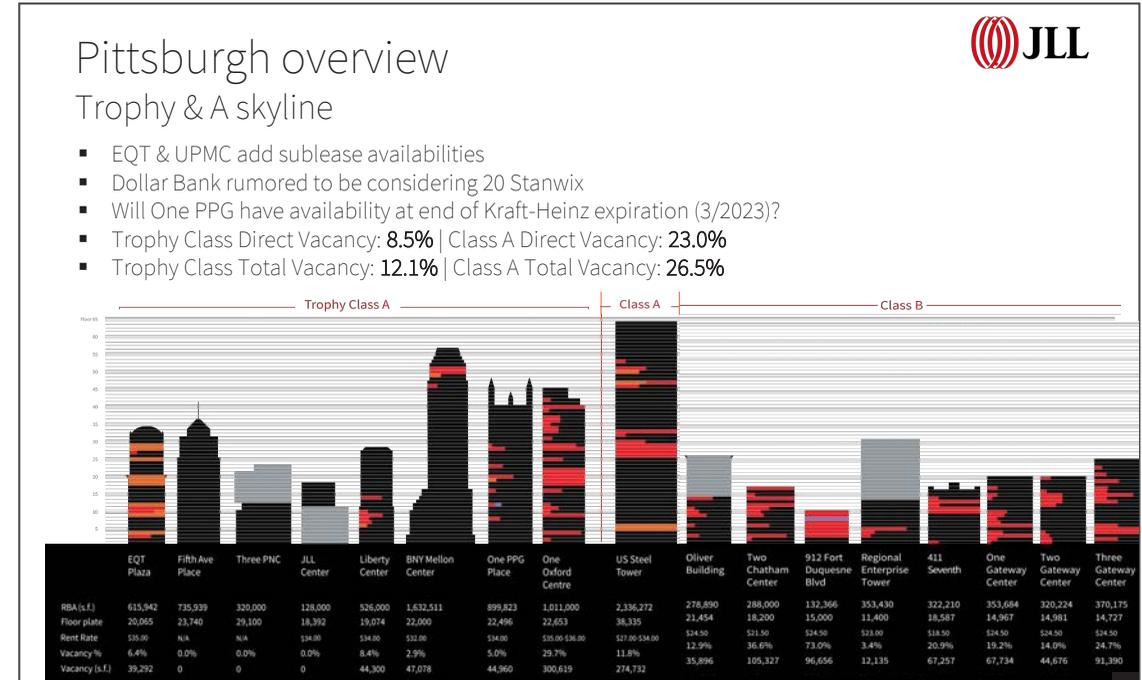


COMPARING FEEDBACK & MARKETS

PHLF/IKM study & JLL identifying significant differences and traits



- A** Troiani group received PHLF/IKM report in November of 2019 exhibit () - "Option for Development 3" suggested restoration with retail, apartments, and existing parking lot contradicting October 2019 Cushman&Wakefield/Grant St Associates, Inc report
- B** Option 2 suggested retail and apartment tower of 60'x160' = 9,600 gsf/floor tower on Boulevard of the Allies and a robotic parking structure on First Ave: compare with JLL market summary
- C** Option 2 suggested variations of forms filling in whole site around retained buildings or facades with no urban open space contradicting criteria C
- D** All proposals fall short of GTC district allowable area and volume nor seek any bonus square footage or urban open space



- two most recent transformative large-scale mixed-use downtown development
- Owner goal of an activating catalytic development is reflected on Market St mixed use Trophy Class development featuring office, residential, retail, parking, and urban open space
 - 18,000 to 29,000 sf per office floor
 - TROPHY CLASS A: 2 developments have "boutique" qualities with 130,000 to 320,000 sf
 - OLDER AND SMALLER CLASS A&B: Need stronger market and a reason to be renovated upward as office or continue being changed to mixed and residential use
 - In Golden Triangle Class A is only reason to build
 - Class B - all older buildings with smaller floor plates, some converting over into residential

COMPARING FEEDBACK & MARKETS

JLL market report from fall of 2019 identifying character of recent development in the area

SITE DEVELOPMENT STANDARDS

910.01.H.2 (d)(3) Tall Building Height Reduction, and (4) Design Flexibility

(d) Height
 (3) Tall Building Bulk Reduction
 "The floor area of all floors at or above three hundred (300) feet in height shall be reduced in accordance with the following formula:
 Total floor area at or above 300 feet = (base floor area) (number of floors) x (reduction factor from table below)."¹

(4) Design Flexibility
 "In order to provide design flexibility for structures that utilize the entire height allowed by the inclined plane, any structure or structures in a unit group development may penetrate a portion of the inclined plane only if an equal amount of building bulk is reduced below the inclined plane and only if the maximum height of the structure or structures occurs at that portion of the site covered by the highest portion of the inclined plane."¹

Incline Plane | 300' high at Blvd of Allies | **Mass Above Incline Plane |** 385' high

Incline Plane | 254' high at First Ave

Tower

Buildable Envelope

Property Line

Retail

Offices

Garage

Legend:
 - Incline plane (red line)
 - Property line (dashed line)
 - Building massing (grey)
 - Buildable envelope (purple)

ALLOWABLE DEVELOPMENT

Development within zoning rights essential for impacting the market

FAR 10:1 (GLA) = 388,990.28 GSF

Residential: 194,495 GSF

Office: 194,495 GSF

Bonus Floor Area

Retail Bonus:

Urban Open Space Bonus:

ALLOWABLE AREA INCREASES WITH BONUSES

Note
 Per Zoning Code, parking does not contribute to FAR, nor is it required within the GT-C, but it is part of the overall program mix.

Optimize appeal with high-floor living

Goal of 20,000 sf min floor to plate

Plinth at scale to accommodate contextual design considerations(c)

- Reviewed zoning extensively to identify highest impact essential to bridging the Boulevard of the Allies and overcoming inactive market conditions

ASSESSMENT OF STRUCTURAL CONDITIONS

Structural Report Conclusion

 <p>Providing Structural Engineering Designs for • Architects • Engineers • Contractors</p>	<p>Providing Structural Engineering Designs for • Architects • Engineers • Contractors</p>	<p>Engineering Designs for • Owners • Contractors</p>	<p>Engineering Designs for • Owners • Contractors</p>
<p>STRUCTURAL VIABILITY INSPECTION</p> <p>BUILDINGS @ 100-102 MARKET STREET Pittsburgh, PA</p> <p>Prepared for: Boulevard and Market, LLC</p> <p>Prepared by: AE&C Engineering Consultants 161 Orr Avenue Apollo, PA 15613 724-980-8187 aec0008@comcast.net</p> <p>NOVEMBER 8, 2019</p>	<p>STRUCTURAL VIABILITY INSPECTION</p> <p>BUILDINGS @ 100-102 MARKET STREET Pittsburgh, PA</p> <p>Prepared by: AE&C Engineering Consultants 161 Orr Avenue Apollo, PA 15613 724-980-8187 aec0008@comcast.net</p> <p>NOVEMBER 8, 2019</p>	<p>SECTION</p> <p>Prepared by: AE&C Engineering Consultants 161 Orr Avenue Apollo, PA 15613 724-980-8187 aec0008@comcast.net</p>	<p>SECTION</p> <p>Prepared by: AE&C Engineering Consultants 161 Orr Avenue Apollo, PA 15613 724-980-8187 aec0008@comcast.net</p>

CONCLUSION

The present conditions of the front portion of the left brick bearing wall, as observed and photographed, lead to the conclusion that the front portion of the left

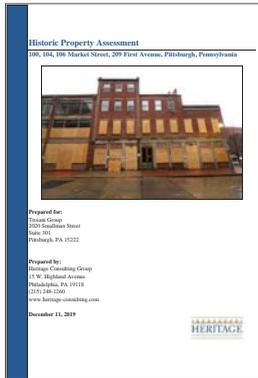
STRUCTURAL VIABILITY INSPECTION – 209 First Avenue
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FEDERAL HISTORIC DISTRICT

What it means to be in a Federal Historic District

Historic Significance of Market Street Assembly

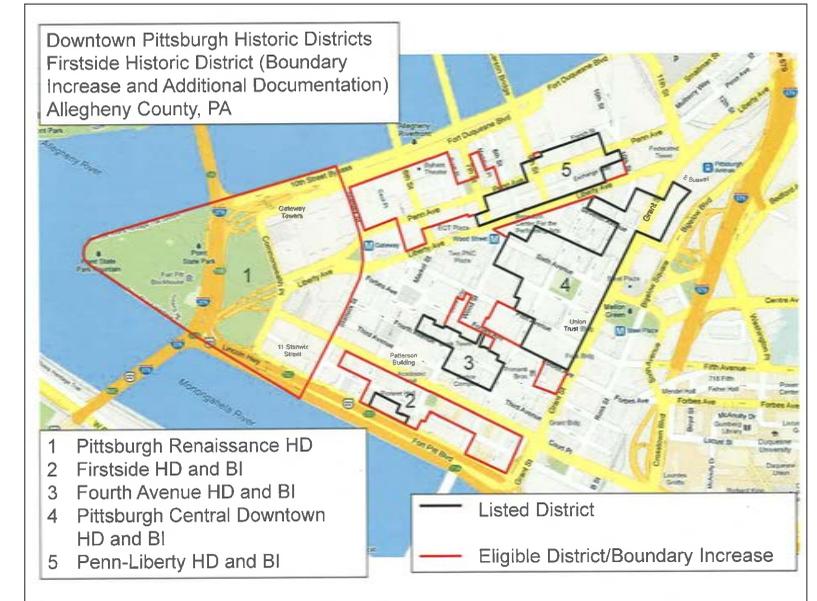


- *In 2013 the building was accepted as a contributing resource to the Firstside National Register Historic District Boundary Increase. Buildings were not listed in the original 1988 district*
- *Listing as a resource which contributes to a historic district is not the same level of significance required for individual listing the National Register*
- *The buildings are not designated local landmarks nor a contributing buildings to a Local Historic District.*

- *These buildings are of marginal significance when viewed in context with the National Register Historic District. Research has established that the tenants of the subject building were not of particular significance during the historic district's period of significance from 1845-1938.*
- *A direct connection between the businesses which operated at the subject buildings and the commercial activity of the Monongahela Wharf cannot be established.*
- *There are no architects or developers of historical significance attributed to the subject buildings.*
- *Limited information was readily available on any of the tenants that occupied the buildings during the district's period of significance from 1845-1938, attesting to their relative insignificance.*

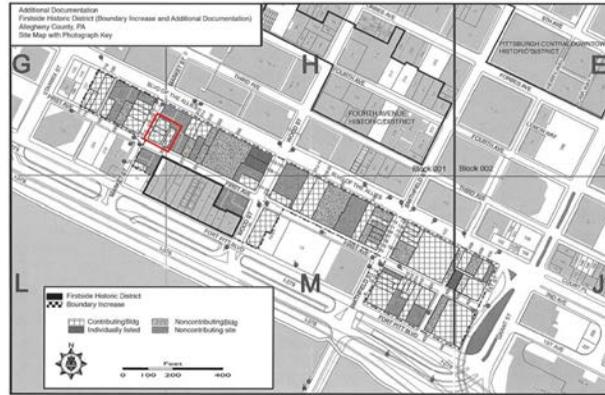
Example History of 106-108 Market Street

- **c.1910**
The building was constructed according to the Firstside Historic District Inventory
- *District Period of Significance: 1927 Sanborn Map for the property lists a Plumbing Supplies Store*
- **1931-1940** *City Directories list that a plumbers supply store continued to occupy the space*
- *Businesses that occupied the building between c.1910 and 1927 have not been identified*
- *No further information has been found on Bruce Co. Plumbers Supplies*
- *History Outside of the District Period of Significance*
- **1946** *Opening of an electric equipment supply*
- **1951** *The building was vacant*
- **1956-1960** *Building used as a construction warehouse*
- **1965** *Building used by an electric corporation*
- **1975** *Building was vacant*
- **1980s-2000s** *Building was occupied by commercial tenants*



ALTERATIONS TO MARKET ASSEMBLY

Historic Timeline



Firstside Historic District Boundary Increase | 2013



The 2013 district expansion included adjacent blocks with buildings of significant scale and significant original material detail



Over the years many of these buildings had been maintained, renovated, continuously occupied, or previously restored

• **Early 20th century** *The original façade of the building was altered at an unknown date. Windows and doors have been replaced and 3rd bay was subsequently demolished*

• *The interior finishes and furnishings were altered in multiple campaigns as ownership and occupancy constantly changed. Thus, little historic fabric remains*



While others with remarkable material history transferable uses and ornate façades were renovated



The assemblage of buildings at Market and First do not share these characteristics; They are NOT of significant scale nor do they feature significant original material detail. When purchased, each building had not been maintained, renovated to current standards, continuously occupied, nor restored. The current owner stabilized the Market Street buildings. 209 First, the most recent purchase in 2015, has been empty for > 50 years The buildings do not reflect any remarkable material history or ornate façades



Across Market Street a three story brick building was adapted into 3 for-sale, exclusive condominiums with an expressive rooftop addition and six garage curb cut along the sidewalk on Market and First. The continuity of these structures allows for us to have confidence the removal of the structures would not threaten the historic district status while the proposed development investment and activity would foster continued activation and investment in both the original and extended district.

LESSONS LEARNED

Based on our experience at the Northside's Garden Block

PHLF bracing example



Structural configuration, if structurally feasible, would in reality be a much bigger imposition on First Avenue for the duration of construction, possibly 2+ years.

All too familiar



PHLF bracing example comparable to efforts tried and abandoned at the Garden Block; 04/2014 to 04/2016

Do not pursue, we need less depth as Boulevard and Market is tighter to the structure

BRACE YOURSELF

STRUCTURAL OPTIONS TO PRESERVING THE HISTORIC FACADES

OPTION ONE: Structural bracing from the outside requires DEEP FOUNDATIONS, which are further complicated by recent utility work at sidewalk

OPTION TWO: Creating a new structural frame behind the facade requires EXTENSIVE LABOR, and inhibits new construction within.

OPTION THREE: Preferred approach STABILIZES existing lateral floor systems, allowing them to be reused in place. This also maintains the front 30' of the historic building

INITIAL APPROACH: Four floors were reworked into five behind FACADES in order to maximize unit

SECTION

existing structure stabilized new, independent system beyond

Most important due to interior needs, but per PHLF precedent, will encroach in street more

Do not pursue for same reasons as above

Not an option at Boulevard and Market due to interior site constraints, must go back to Option One

BRACING BEFORE BUILDING

Understanding the efforts needed to keeping the brick facades along Market street and First avenue

Bracing system along Market street

(Load bearing brick has limited capability to withstand renovations and life cycle of new building)

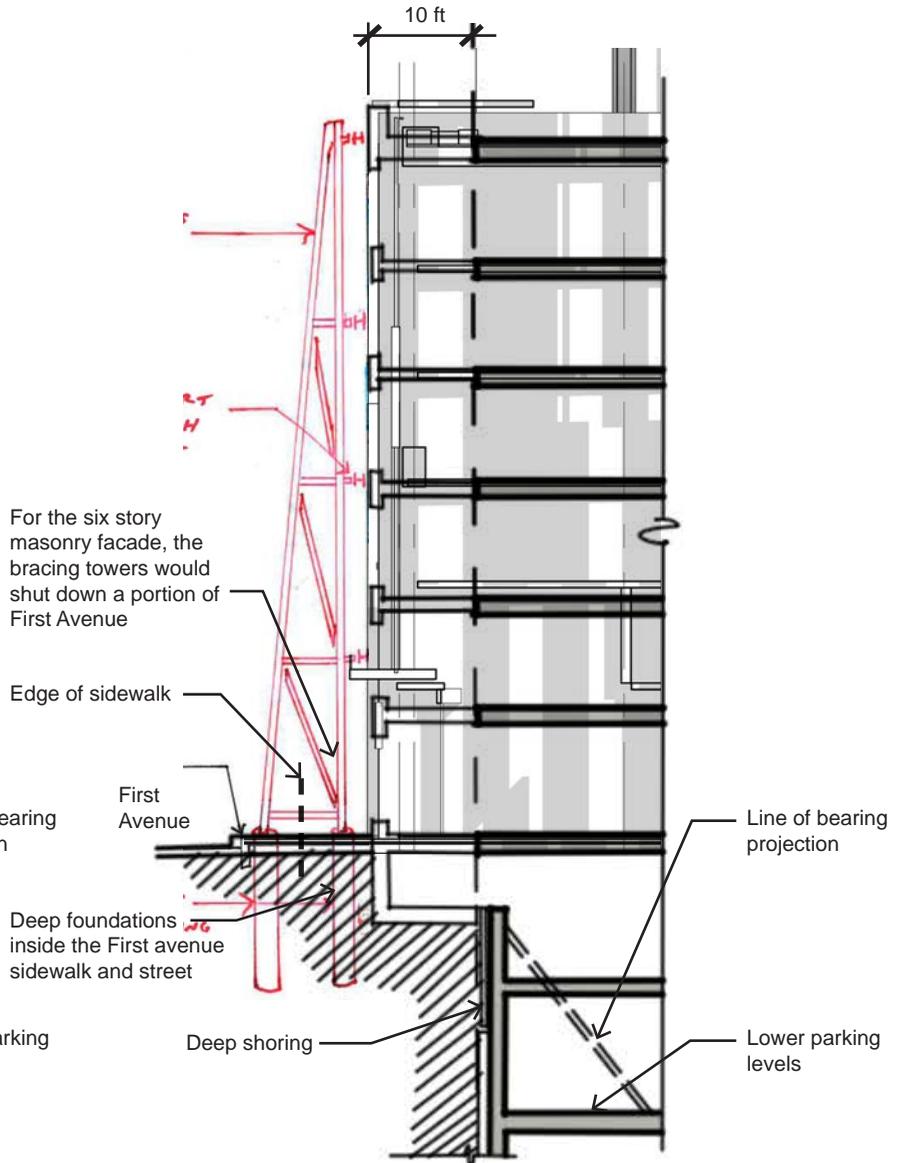
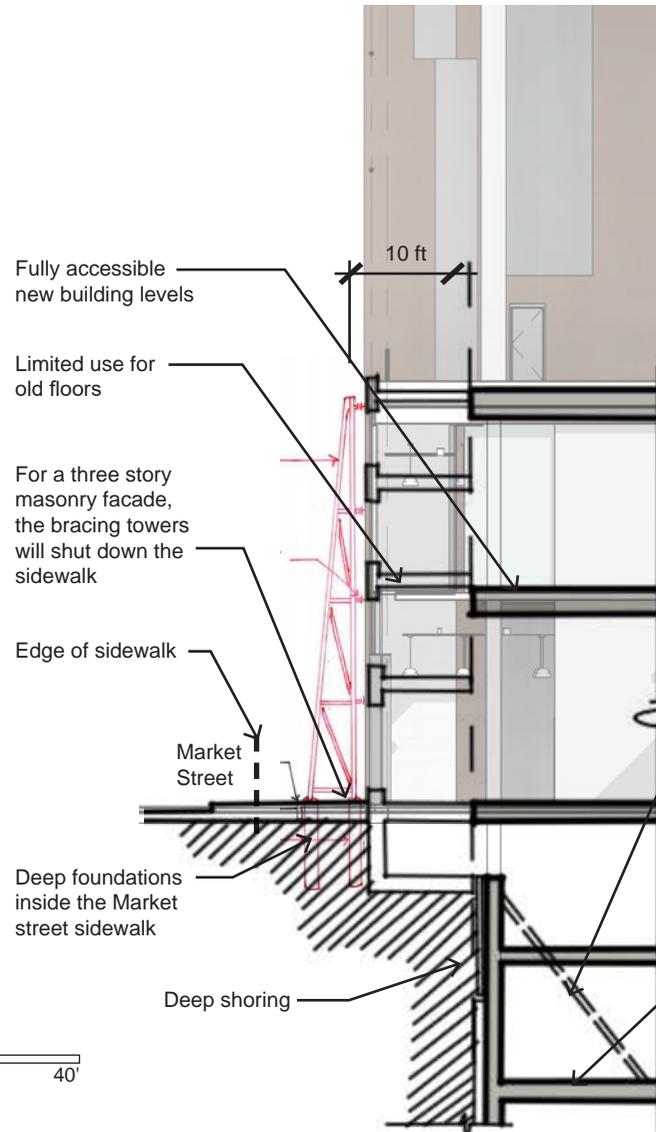
Bracing system along First avenue

(Potential failure likely)

“The proposed bracing is significant and would increase cost while not increasing the potential for an income producing activityit makes the project less financially feasible than it would be otherwise”

“the shoring will need to be set back from the facades reducing the size of the garage below. This would effect parking count (likely) which also makes the project less financially feasible....working around the bracing and existing facades will effect construction productivity”

John Robinson
Executive Director, Development
PJ Dick - Trumbull - Lindy Paving

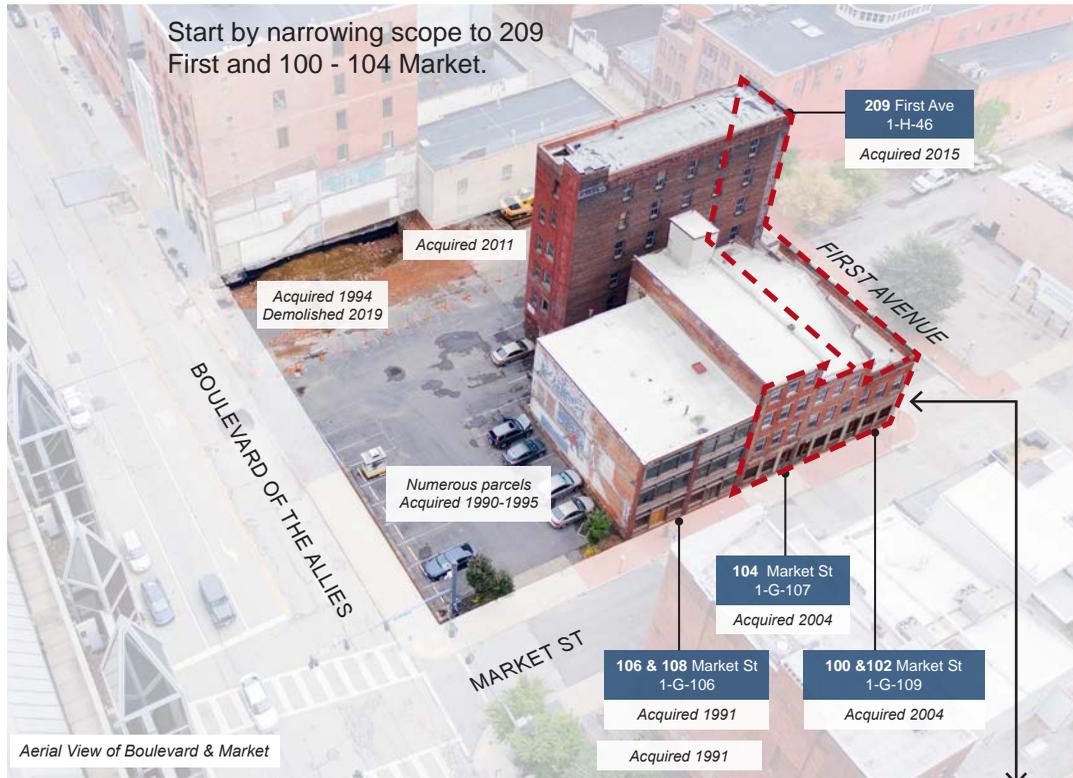


Scale 1" = 20'-0"
0' 5' 10' 20' 40'

BRACING BEFORE BUILDING

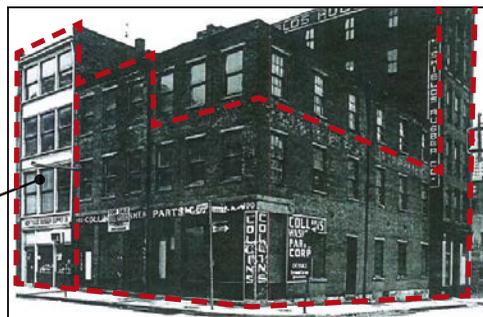
Understanding the efforts needed to keep the brick facades along Market street and First avenue

Rethinking Scope



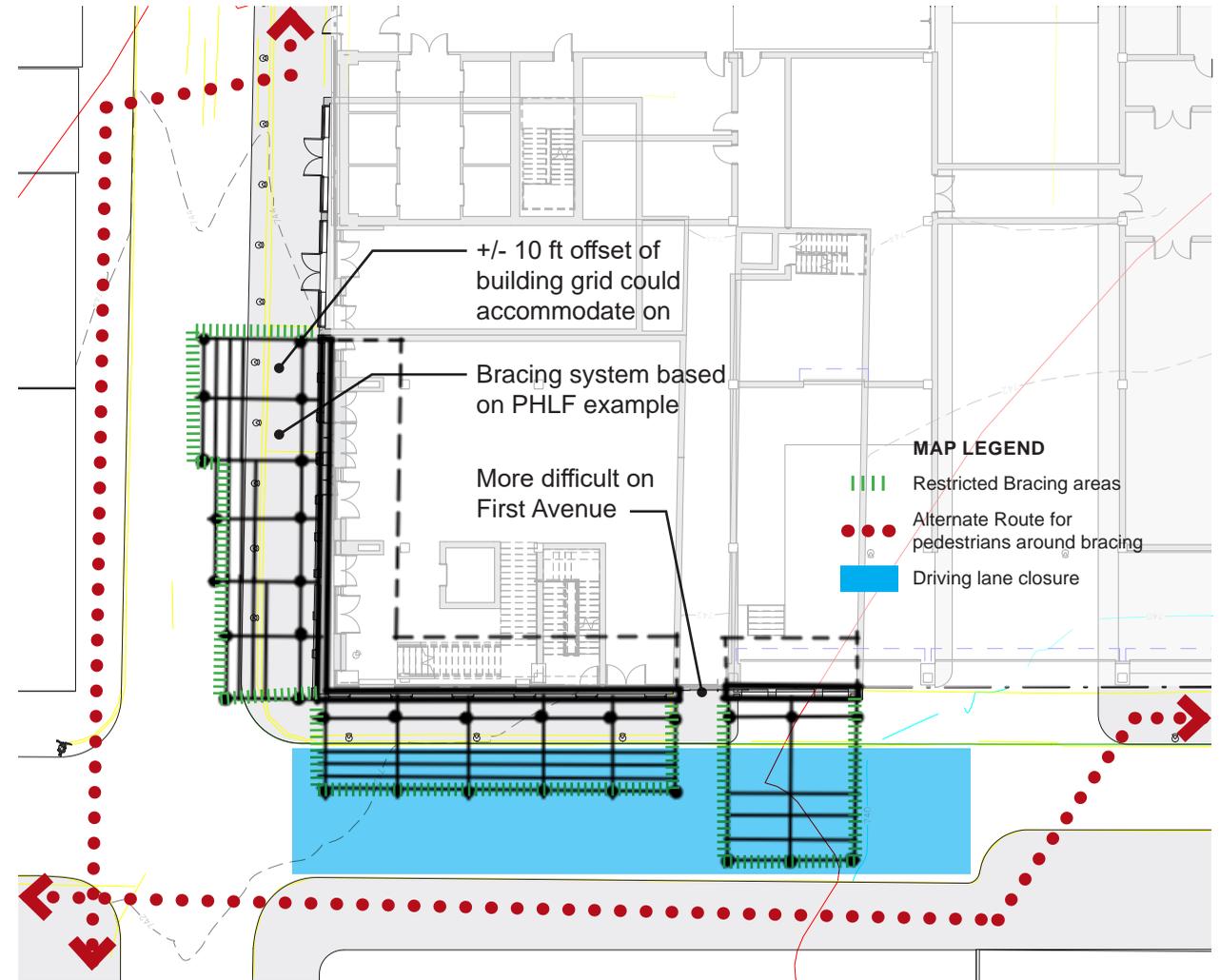
Narrow scopes to facades and bearing walls and returns for +/- 10 ft in from face

The facade to 104 Market Street has been previously renovated/reconstructed



100 (center) and 104 Market (left), with 209 First in background
Source: "Design Analysis: Market Street & First Avenue," Pittsburgh History and Landmarks Foundation, 11/15/2019

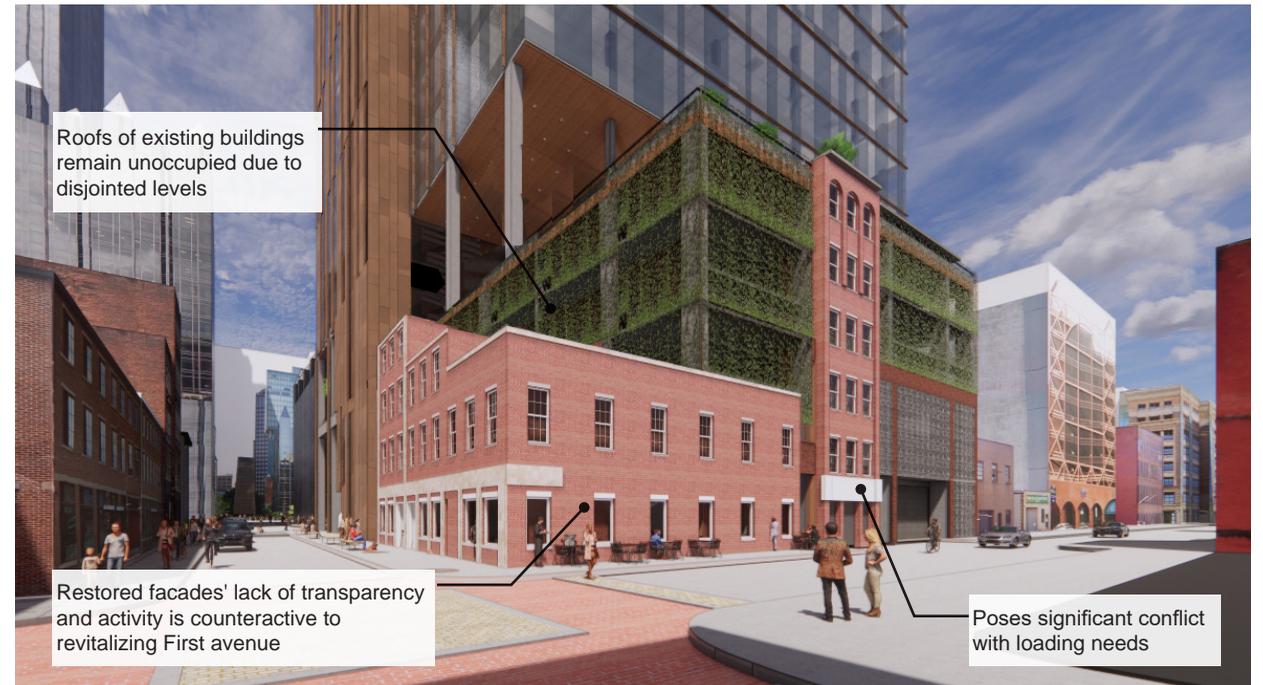
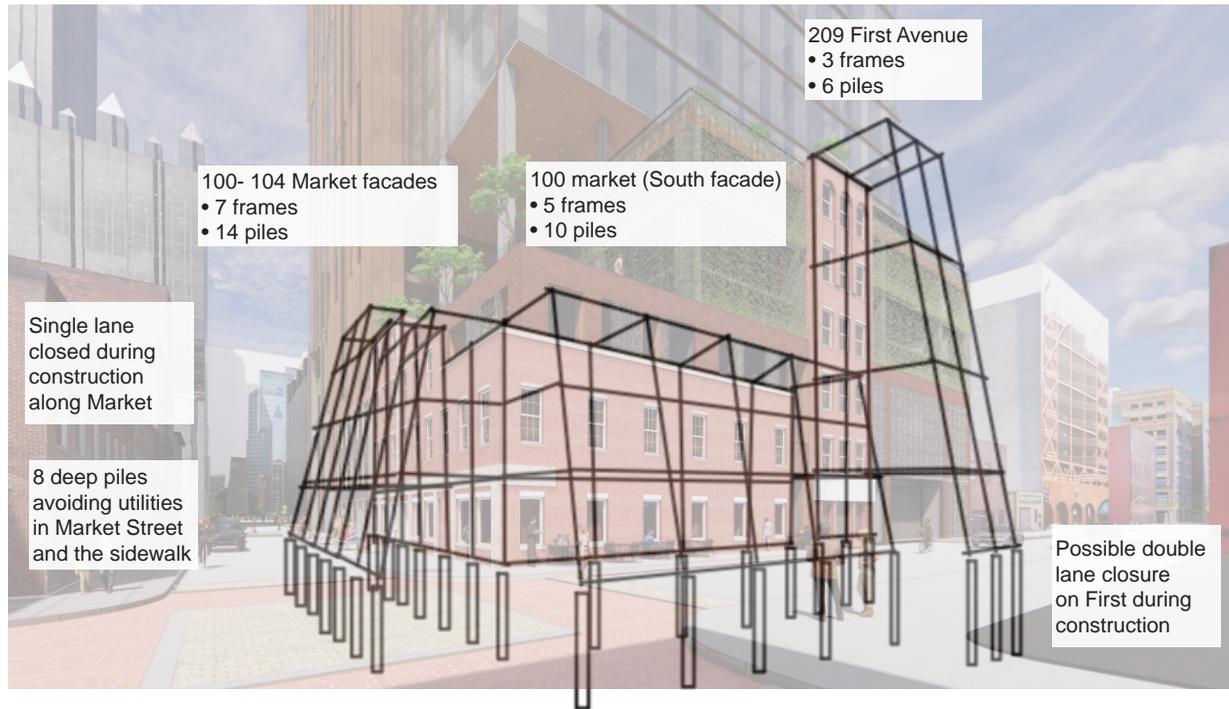
Bracing system plan



Scale 1" = 30'-0"
0' 15' 30' 60'

EVEN IF IT WERE FEASIBLE...

the outcome would take away from the projects quality and performance



FACADE SUPPORT STRUCTURAL CONCLUSIONS

 **AE&C Engineering Consultants**
Providing Structural Engineering Designs for:
• Architects • Engineers • Contractors

June 21, 2020

RE: Boulevard & Market Demolition AE&C Project No. 21848

Façade Support for reuse: 100/102 Market Street, 104 Market Street & 209 First Avenue

209 First Avenue

It is structurally infeasible to reuse the 6-story non-bearing brick façade of the front wall of 209 First Avenue. The building has been vacant and unmaintained against water damages for 50 years. This condition has likely deteriorated the brick and mortar on the interior of the façade bands/columns and created hidden, but potentially dangerous and unstable conditions throughout the façade. Additionally, a structural viability report prepared for 209 First Avenue has warned that the building is unsafe. The building could totally and unpredictably collapse due to any disturbance of the structural elements of the building. Attaching the façade elements to temporary steel bracing frames would necessarily create significant risks of disturbances to the building structure. Due to the conditions described above, the risks to public safety, and the risks to the other existing buildings on-site (along Market Street) from an unpredictable collapse of the building at 209 First Avenue; it is strongly recommended that an emergency demolition plan for the building be issued immediately.

100/102 Market Street

The structural feasibility of reusing the non-bearing brick façades of the front walls of 100/102 Market Street is dependent upon verifying the structural strength of the existing brick and verifying the mortar strength in brick work of the walls.

161 Orr Avenue, Apollo, PA 15613 aec0008@comcast.net (724) 980-8187

June 22, 2020

However, even if the façades are found to be structurally feasible for reuse, it is infeasible to reuse the existing brick façades due to the fact that the remaining useful life of the existing brick and existing mortar in the façades is much less than the expected useful life of the new construction.

Extensive steel bracing frames w/deep foundations could be erected to support the existing brick façade horizontally and allow traffic to use Market Street during construction of the project. The deep vertical foundations for the bracing frame will likely have to be installed on a grid of concrete grade beams to step around the underground utilities in Market Street. Utility lines may have to be relocated to permit the installation of the grade beams and deep foundations for the steel bracing frames. Thus, providing temporary steel bracing frames and their foundations to support the existing facade will likely become financially infeasible.

104 Market Street

The structural feasibility of reusing the non-bearing brick façade of the front wall of 104 Market Street is dependent upon verifying the structural strength of the existing brick and verifying the mortar strength in brick work of the wall.

However, even if the façade is found to be structurally feasible for reuse, it is infeasible to reuse the existing brick façade due to the fact that the remaining useful life of the existing brick and existing mortar in the facade is much less than the expected useful life of the new construction.

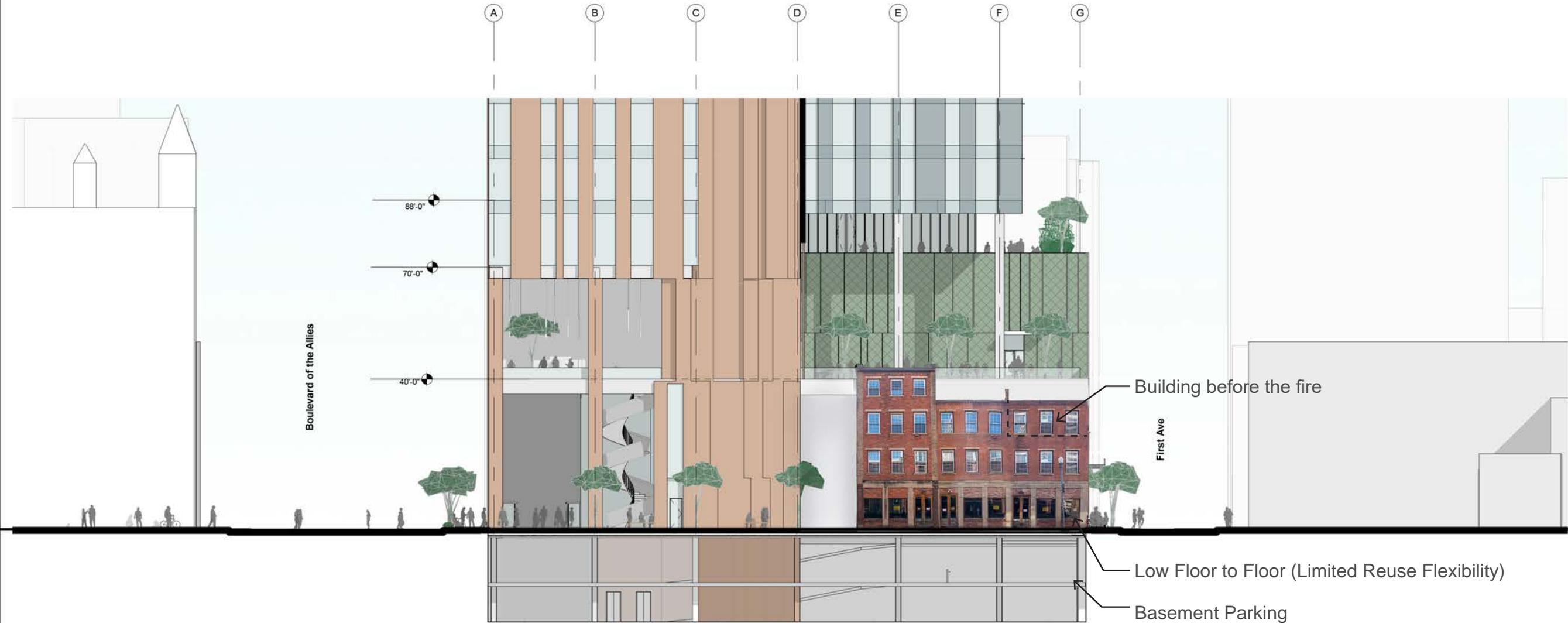
Extensive steel bracing frames w/deep foundations could be erected to support the existing brick façade horizontally and allow traffic to use Market Street during construction of the project. The deep vertical foundations for the bracing frame will likely have to be installed on a grid of concrete grade beams to step around the underground utilities in Market Street. Utility lines may have to be relocated to permit the installation of the grade beams and deep foundations for the steel bracing frames. Thus, providing temporary steel bracing frames and their foundations to support the existing facade will likely become financially infeasible.

106/108 Market Street

Horizontal support and reuse of the existing front façades (3-story wood and glass window walls) of 106/108 Market Street is not structurally feasible due to the extremely fragile nature of the window walls and the short remaining useful life of the materials in the façades.

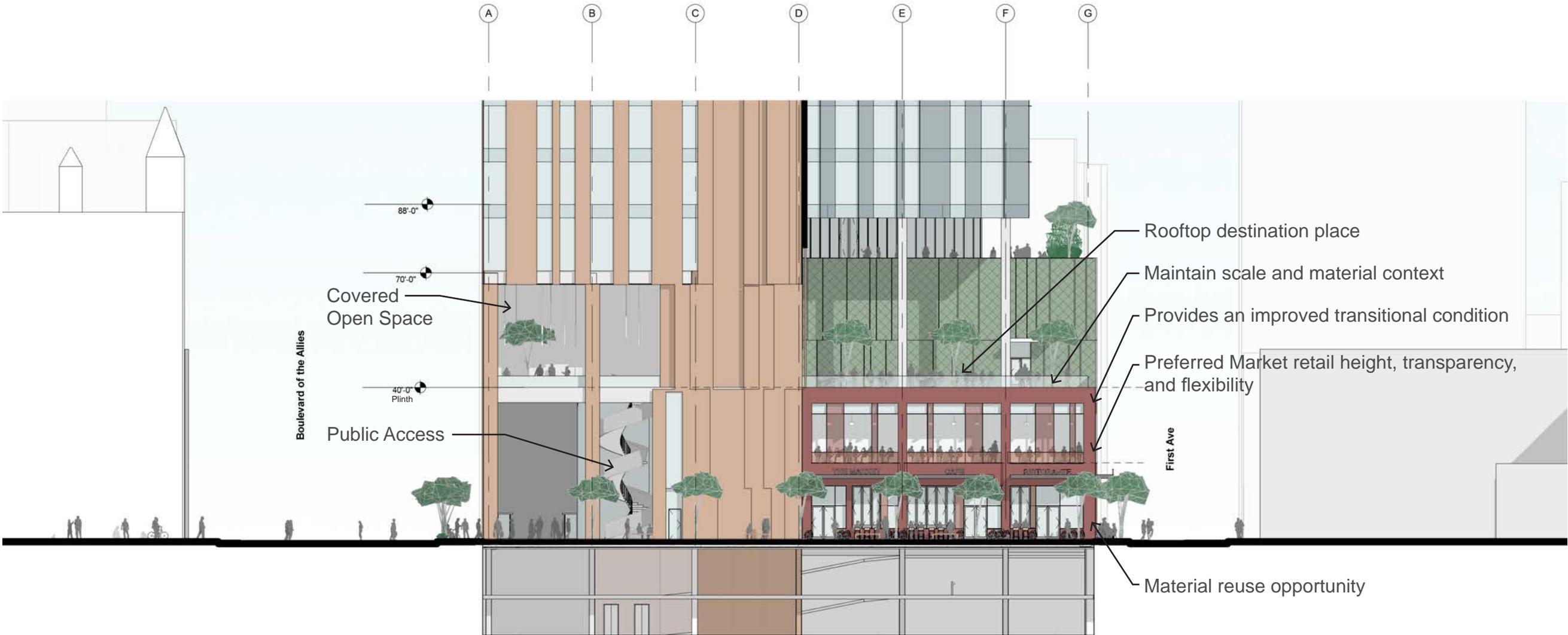
MARKET STREET ELEVATION

Restored or Rebuilt Facade



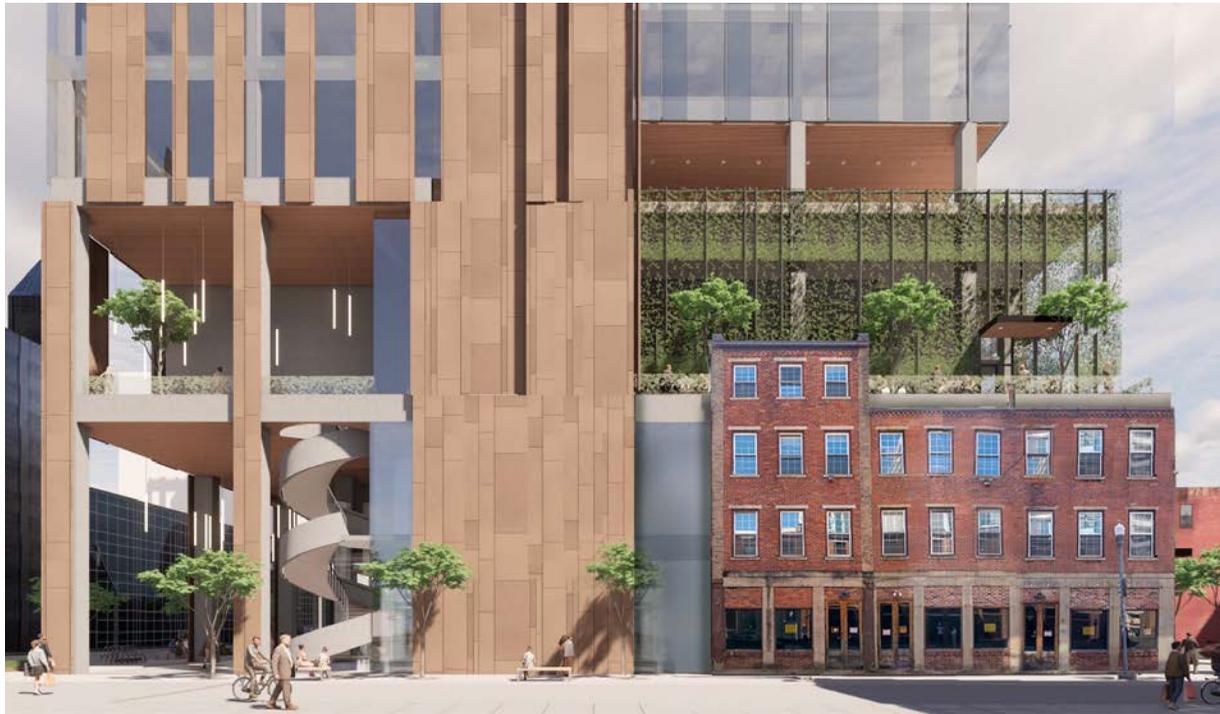
MARKET STREET ELEVATION

New Proposed Facade



MARKET STREET ELEVATION

RESTORED MARKET STREET ELEVATION



Reuse of 10' of Existing Facade Depth

- Limited Floor to Floor Conditions
- Limited Retail Flexibility
- Limited Character to retain

PROPOSED MARKET STREET ELEVATION



New Facade Reuse of Materials

- Optimal Floor to Floor Retail
- Optimal Flexibility
- Optimal Transparency
- Optimal Transition in Scale

FIRST AVENUE ELEVATION

RESTORED FIRST AVE ELEVATION Without 209 First Ave



RESTORED FIRST AVE ELEVATION With 209 First Ave + 100-102 Market



Minimal Street Activation - Added Top Floor

PROPOSED FIRST AVE ELEVATION



South facing planted facade

Rooftop access
Improved Street activation and Rooftop space
Garage Loading

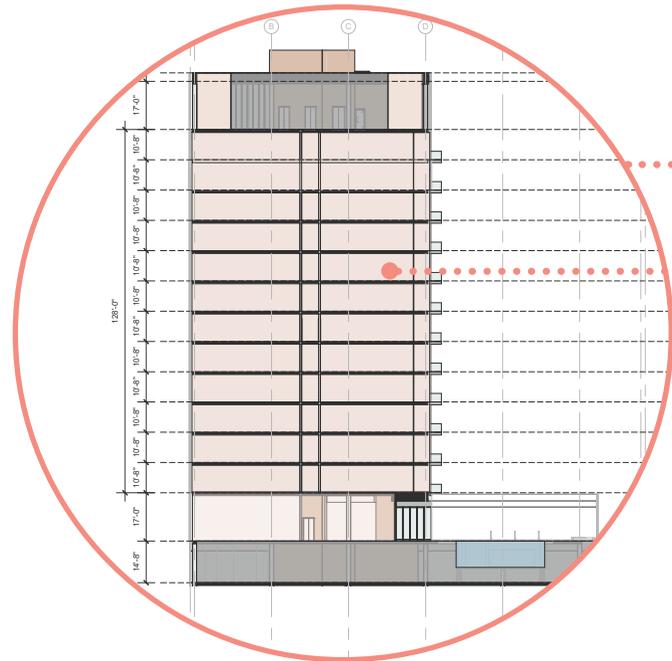
Building Service area inadequate





SITE DEVELOPMENT STANDARDS

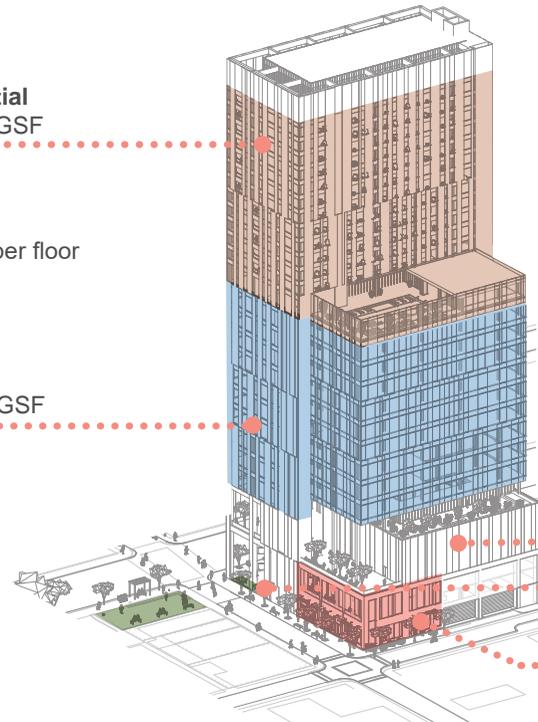
910.01.H.2 Summary of site development standards - items (a) through (c)



Residential
194,495 GSF

12 units per floor

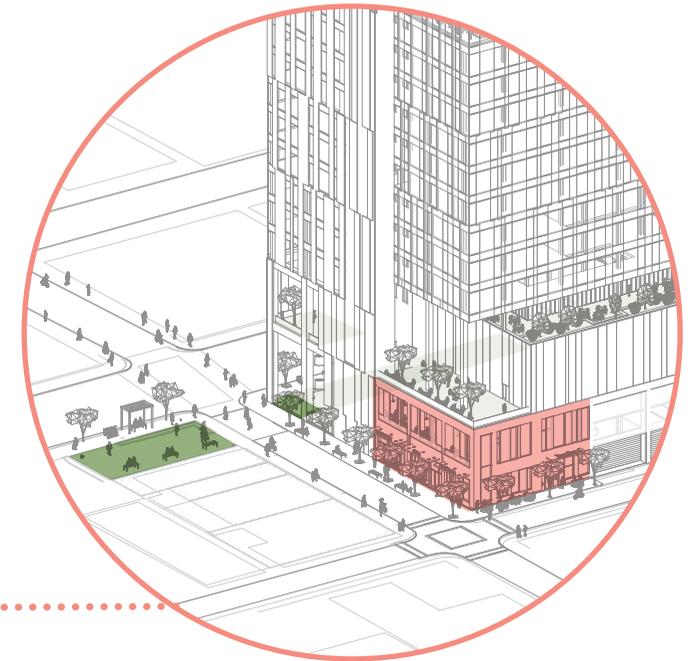
Office
194,495 GSF



Parking

Urban Open Space
2,497 SF

Retail / Restaurant



- Residential**
- Maximizing air quality through natural ventilation creating healthy ecological systems
 - Reducing climate impacts by improving building performance
 - Reducing energy consumption through high performance mechanical systems

Code | **110 sf per unit / 24,968.40 lot area**
Permitted | **227 units**

- FAR**
- Driving economic prosperity through equitable development
 - Allowing for enhancement of local transportation options to improve public access to the area
 - Driving market leadership through creative solutions to complex urban environments

Code | **10:1**
Allowed | **388,990.28 (FAR 10:1 per Gross Lot Area)**
Proposed Bonus Floor Area | **17,780 gsf**

- Urban Open Space**
- Reactivating abandoned and distressed lots returning them to productive use revitalizing the neighborhood
 - Activating public realm through inviting indoor and outdoor public spaces
 - Accentuating local identity through use of exterior materials and relationship with context

Code | **10% of lot area**
Required | **2,497 sf (10% of 24,968.40 sf)**

PREVIEW OF STAFF REVIEW SUBMISSION

URBAN OPEN SPACE REQUIREMENTS

910.01.C.3(a) Components

"910.01.C.3 Urban Open Space Requirements. (a) Components The particular functions and kinds of Urban Open Space to be provided at a development site shall be based upon consideration of existing and projected pedestrian volumes and circulation patterns; the location, size and character of existing Urban Open Space in the vicinity of the development site; existing and proposed land use patterns; relation to public transportation; and objectives contained in the adopted plan and policy documents pertaining to the GT District."

The proposed development enhances the connection from river to river and from front to back to Point Park.

GROSS LOT AREA

910.01.C.4 (a) (1) Meaning of "Gross Lot Area" for calculation of Floor Area Bonus of Urban Open Space

(a) Urban Open Space bonus
 "Total required Urban Open Space = lot area x 20% x (total floor area/base floor area)."
 = 24,698 x .20 x 1.575
 = 7,779.87 GSF for Urban Open Space Bonus

Definitions
Lot Area = 24,698 GSF
 "The total area of a lot lying within the lot lines, not including any portion of a street or way."
Gross Lot Area = 38,899 GSF
 "The lot area plus one-half of the total of the area of each street or way but in no case including any area more than 60 feet from the lot."
Base Floor Area = 246,980 GSF (FAR 10:1) (FAR based on lot area)
Total Floor Area = 388,990 GSF (FAR 10:1) (FAR based on gross lot area)

MAP LEGEND
 Lot Area
 Gross Lot Area
 Urban Open Space
 Natural Ground
 Floor Retail

THE GT-C SUBDISTRICT

910.01.H.1 Purpose of GT-C Subdistrict

"The purpose of the GT-C Subdistrict area as follows:"

"A. To provide a zoning classification suitable for application along the upper sides of the Golden Triangle Area, where the rivers on the one (1) side of this District and the core of the central business area on the other side create a fitting environment for downtown residential development."

"B. To encourage residential development of relatively high-density, high-rise dwelling structures among which properly integrated commercial facilities designed primarily to service such residential development may be intermingled."

"C. To encourage development that will enhance the natural site advantages and at the same time preserve and complement visual advantages from other Golden Triangle and adjacent locations."

URBAN OPEN SPACE REQUIREMENTS

910.01.C.3 (b)(4) Development Standards

910.01.C.3 (b) continued Development Standards
 (4) Additional Urban Open Space utilizing the floor area bonus may be provided as interior urban open space and shall comply with the following standards:"

- (4)(i) Entrances illumination
- (4)(ii) High level of natural illumination
- (4)(iii) Lobby as a through-block passage
- (4)(iv) Accessible
- (4)(v) Open to public
- (4)(vi) Observation deck on roof with panoramic view as bonus Urban Open Space
- (4)(vii) Gallery
- (4)(viii) Rotate to adjacent sites

(4)(vi) Observation deck with panoramic view of the Monongahela River and Mount Washington
 "(4)(vi) an observation deck or viewing area located on the top or roof of a building and designed to provide a panoramic view may be used to fulfil requirements."

INCLINE PLANE AND HEIGHT

910.01.H.2 (d) (1) Height

"910.01.H.2(d)(1) Height Monongahela River Side structures or portions of structures may not penetrate an inclined plane, determined by straight lines connecting points 100 feet on Port Pitt Boulevard and 100 feet on Third Avenue."

"910.01.H.2(d)(4) Design Flexibility Structures may penetrate a portion of the incline plane only if an equal amount of building bulk is reduced below the incline plane and not of the maximum height of the structures occur at that portion of the site covered by the highest portion of the incline plane."

Aerial View of the GT-C inclined plane height envelope

Section Illustrating Design Flexibility

Note: information provided for site only. Elevation data provided by Google Earth and is approximate.

MARKET ST & FIRST AVE

Sidewalk view looking towards the Boulevard from the corner of Market Street and First Avenue

Urban Open Space volume creates an outdoor room

Urban Open Space Roof Deck accessed from public sidewalk

Ground Floor Retail

June 23, 2020

Kate Rakus, AICP
Land Use Policy and Code Implementation Coordinator
Department of City Planning
Division of Zoning and Development Review
kate.rakus@pittsburghpa.gov

**RE: Troiani Group | Boulevard and Market Development
Statement of Compliance**

Dear Ms. Rakus,

Please accept this letter that describes the project's compliance with the Review Criteria listed in Section 922.10.E.2 of the Pittsburgh Zoning Code. The Project Development Submission currently under review is for demolition of the existing vacant structures. However, the answers below provide additional information in logical relationship to development investment and sequencing, with respect to the plan as a whole. As we presently submit for demolition and site consolidation, we continue to prepare the Project Development Plan. I hope that you find the attendant answers below satisfactory and responsive to the criteria set forth in the zoning code as it relates to the current approvals being sought and we look forward to continuing working with the Planning Department and other City Agencies on completing the Development Plan.

We are continuing to advance Schematic Design of the building in compliance with the GT-C (Golden Triangle, Subdistrict C) District zoning requirements and look forward to resolving any remaining issues over the course of the Project Development Plan process. After initially submitting the project goals and vision last July we provided a narrower response to the Planning Commission provisions in Section 922.10.E.2, which specifically relate to demolition, items (g), (k), and (l.) At that time the Planning Commission requested we continue dialog with community members, the Owner elected to continue to advance the design and the development plan, and we believe we are now able to show how these further efforts allow us to better address both the initial items and the remaining items (a), (b), (c), (d), (e), (f), (h), (i), (j), and (m).

Our collected narrative response and the presentation through which exhibits and consultants will be introduced begins on the following page. We are hopeful that the Planning Commission will recognize the thorough and earnest effort to address their concerns and feedback and allow this development to proceed to the next steps.

Respectfully,

Kenneth Doyno, AIA, LEED-AP
Senior Principal
Rothschild Doyno Collaborative

**Troiani Group | Boulevard and Market Development
Statement of Compliance**

(a) The proposed development must include retail facilities, where such facilities would maintain and continue the existing retail patterns;

The development proposes retail facility focused upon Market Street which will be visible from the Boulevard of the Allies, continue along Market Street and turn the corner onto First Avenue. This use and building mass is consistent with the historic patterns of the neighborhood and urban patterns in the immediate area in particular, seen at the ground floor retail areas on the opposite side of Market Street on this block, as well as the larger role that market street plays in Market square and Sixth Avenue to the Allegheny River and the Roberto Clemente Bridge.

*The proposed development seeks to alter the **market dynamics in their current state** by extending the Golden Triangle mixed-use renewal from along Market street across the Boulevard of the Allies, significantly increasing activation and investment in the area. This development approach has received positive feedback and support through discussions with downtown stakeholders including many property owners in First side represented in **Exhibit _ community interaction timeline**. To further our understanding of the nature and prospects for integration of historical assets and to be responsive to advocate of Historic preservation that continued to call for preservation of the older buildings on the site the owners engaged in study from an architectural historian and structural engineer whose exhibit are referenced below.*

(b) The proposed development must address compatibility with any existing residential area, including provision for maintenance of residential uses in existing residential areas;

Residential uses in this area are very limited and the proposed development seeks to alter this by creating new residential uses that will de-isolate the existing residential uses across the street and 151 Fort Pitt Boulevard condominium projects. The proposed development will improve residential quality of life in the area which presently suffers from a lack of services, and eyes on the street, creating a negative pedestrian experience and encouragement to only car use. A goal of this market-shifting development is to increase activity through mixed use, urban open space, and the commensurate increase in pedestrian movement. The configuration seeks to encourage a pedestrian route along First Avenue between Smithfield Street and Market Street; and to build on transit paths, destinations, and the pleasant scale of First street. In contrast to the current experience of Fort Pitt Boulevard and the Boulevard of the Allies, the project and related development and Frist and Wood will close a missing link of habitability in downtown substantially improving quality of life and turning isolated residential development into an actual residential area. At a micro scale, the development balances the need to active the street while limiting impact on the adjacent adaptive reuse property across Market Street by creating limiting second floor openings along Market Street and to offsetting upper level balconies from that development's rooftop additions.

(c) The proposed development must make provision for adequate parking, considering available transit alternatives and support services, and make provision for adequate vehicle access and loading areas in relation to street capacity, functional classification, and land use patterns, such that any vehicular access points do not create congestion on public streets or create hazardous conditions for pedestrians;

The proposed development integrates 300 parking spaces, with access provided at two different access points, located as the farthest distance away from the corners as possible on this site, with the intent that office users would primarily use the Boulevard of the Allies entrance and residential users will primarily access the site from First Avenue. Available transit access includes T and pedestrian movements from Smithfield Street and Market Square / Gateway. The site seeks to create an additional destination a link between the two major Transit facilities. The Boulevard of the Allies is also a location for bus services and the urban open space at Boulevard of the Allies and Market Street will significantly improve transit user experience. At present loading, garage doors and service aspects of First Avenue make the street's service role the dominant characteristic. The building's southern facing activity at each level seeks to restore balance while keeping services in appropriate locations for the patterns of the area.

(d) The proposed development must adequately address traffic generation characteristics in relation to street capacity, intersection classification, and existing and projected traffic volumes and address reasonable alternatives that would enable increased traffic to be directed away from congested areas;

*The proposed development is advancing these issues but because of ongoing infrastructure work at the Boulevard at Market, the COVID-19 pandemic, and the commensurate changes in traffic volumes and patterns, this will be developed over the course of the Project Development Plan process in coordination with traffic engineering, site planning, and civil engineering. **Exhibit** –Proposal for Transportation Engineering Services.*

(e) The proposed development must adequately address pedestrian traffic generation, proposed pedestrian circulation facilities and patterns, including, but not limited to, provision for adequate sidewalk capacity on and off site, provision for appropriate pedestrian safety on and off site, and provision for pedestrian circulation patterns which do not substantially alter existing patterns and which enhance desired patterns where possible;

The proposed development includes full sidewalk access along Boulevard of the Allies, Market Street, and First Avenue. Additional pedestrian capacity is provided along the Boulevard of the Allies, where proposed Urban Open Space bonus area will increase the area provided for the public realm. In addition, 113 Boulevard of the Allies, located across Market Street from the proposed development, will provide the majority of required urban open space. This open space will be programmed to increase pedestrian circulation patterns,

(f) The proposed development must adequately address access to public transportation facilities, including, but not limited to, provision for safe pedestrian access to and from transit stops, and pedestrian circulation patterns which encourage the use of public transit, and the provision of on-site facilities for alternative means of transportation such as bicycles or van pools;

The majority of the required urban open space for the proposed development will be located on an adjacent development parcel, 113 Boulevard of the Allies. An existing Port Authority bus stop is located along the public sidewalk adjacent to 113 Boulevard of the Allies. The proposed improvements to 113 Boulevard of the Allies will include provisions that encourage and improve the transit experience along the Boulevard of the Allies corridor.

(g) The proposed development must adequately address the preservation of historic structures and significant features of existing buildings, including, if applicable, the retention and reuse of structures which are locally or federally designated historic structures; retention and reuse of significant structures, provided that such preservation requirements may be waived if the applicant shows that use of such structure is no longer economically or physically viable; and

retention and reuse of structures which contribute to the character of an historically significant area;

Exhibit _ – Structural Reports, prepared by AE&C Engineering Consultants,

Exhibit _ – Historic Property Assessment, prepared by Heritage Historical Consulting Group

Exhibit _ – Structural façade retention study

Exhibit _ – Community Interaction Timeline

Exhibit _ – Design Analysis: Market Street & First Avenue, prepared by PHLF and IKM

Exhibit _ – Pittsburgh Overview – COVID-19 Impact on Office, prepared by JLL

Exhibit _ – Appeal of Emergency Demolition Application for 209 First Avenue

Exhibit _ – Planning Commission Hearing presentation dated June 30, 2020

CONCLUSION: use of the structures is no longer economically or physically viable.

(h) The proposed development must adequately address architectural relationships with surrounding buildings, including, but not limited to, provision for appropriate building siting, massing, facade treatment, materials, proportion, and scale;

The proposed development addresses these issues and will advance further through the Planning Staff Review and CDAP processes as the Development Plan Review advances.

(i) The proposed development must adequately address microclimate effects of proposed development, including, but not limited to, wind velocities, sun reflectance and sun access to streets, existing buildings, and public and private open space;

The proposed development addresses these issues and will advance further through the Planning Staff Review and CDAP processes as the Development Plan Review advances.

(j) The proposed development must adequately address protection of views and view corridors, including, if applicable, important views along major public streets, views from surrounding private properties, and views to and from significant public places, such as parks, open spaces, or riverfronts;

The proposed development addresses these issues and will advance further through the Planning Staff Review and CDAP processes as the Development Plan Review advances

(k) The proposed development must adequately address the location, development and functions of open space, including, but not limited to, provision for additional open space where necessary for light and air to adjacent properties, provision for additional open space where desirable to lessen pedestrian impacts and increase safety, or maintenance of existing open spaces which serve these same purposes;

The proposed remaining conditions include defined open space. The removal of the deteriorated structures increases the pedestrian safety along the Market street and First Avenue sidewalks.

(l) The proposed development must address the project's compatibility and conformance with any overall master plans or comprehensive plans approved by the City Planning Commission and designated by the Department of City Planning, which address Downtown area development;

Not Applicable. However, we anticipate community interaction through organizations such as the Pittsburgh Downtown Partnership will advance through planning and design phases as outcomes continue to be informed by productive dialog.

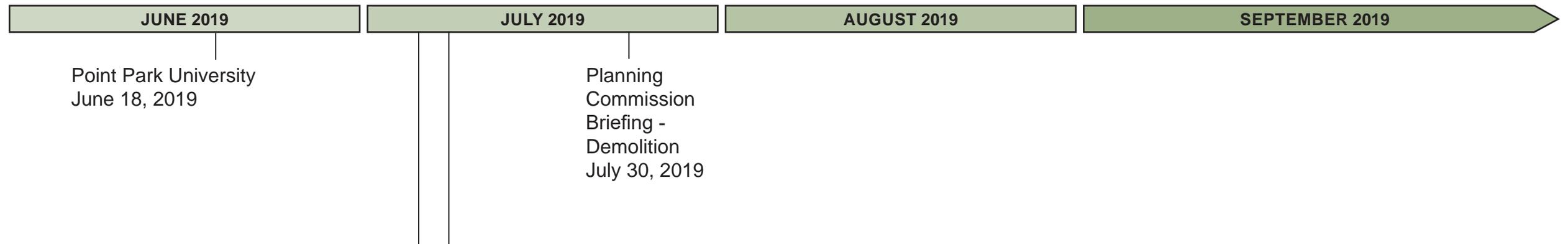
(m) If the proposed application includes a building(s) that exceeds fifty thousand (50,000) square feet of building footprint, the proposed development must adequately address large footprint building criteria of Section 922.04.E.6.

Not Applicable since the site and building footprint is smaller than this threshold such that these additional criteria should not be applied to the project.

COMMUNITY PROCESS

Troiani Group sought to advance demolition, community development intent, and goals.

Summer of 2019



Based upon suggested outreach from DCP, outreach with community organizations and interested parties were held

Pittsburgh History & Landmarks Foundation / Y.P.A.
July 9, 2019

Meet on-site and walked through existing structures

Pittsburgh Downtown Partnership
July 17, 2019

Reviewed Sketchbook at Executive Committee Meeting

Downtown Community Development Corporation

Multiple email interactions expressing support based on earlier dialogue at 214/214

Riverlife Design Review Committee

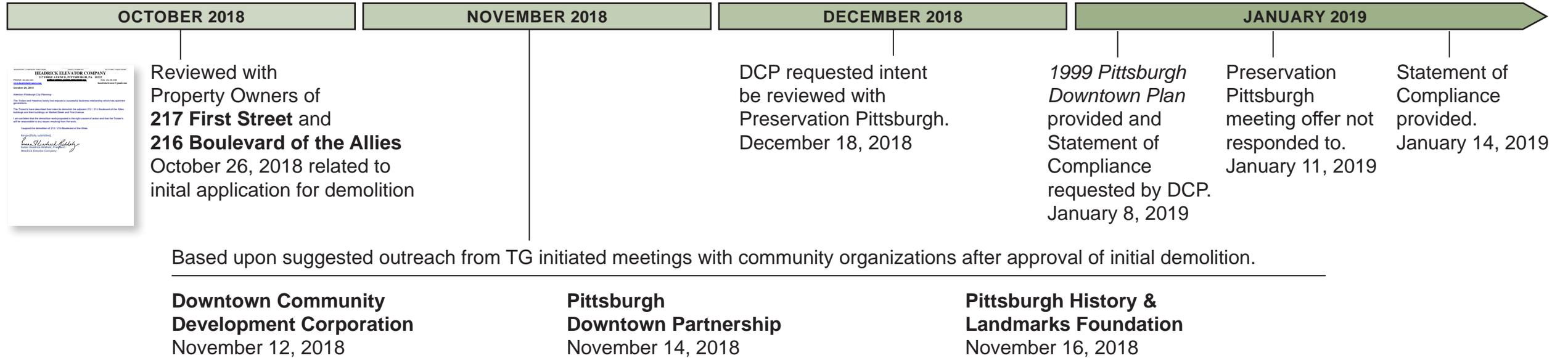
Design Review Committee declined to review demo application, but plans to review proposed future design

Preservation Pittsburgh

Did not participate in dialogue after initial communication.

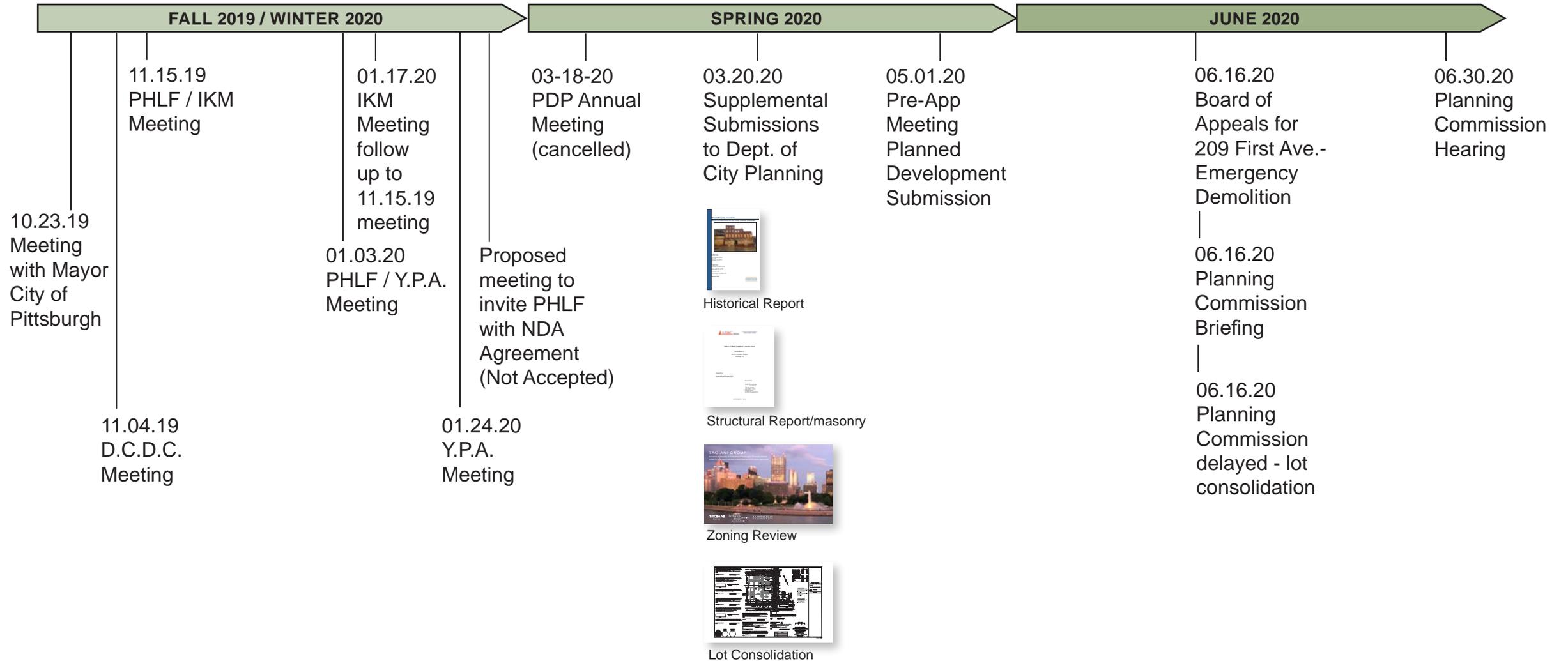
COMMUNITY PROCESS

Following approval of initial building demolition of 212/214 building, Troiani Group openly communicated and met with adjacent property owners and community organizations. The Design Sketchbook articulated context, conditions, and intent.



CONTINUED ENGAGEMENT

Based on planning commission request, Troiani Group continued to seek feedback and design progress was advanced.





CUSHMAN &
WAKEFIELD



GRANT STREET
ASSOCIATES, INC.

Market Street Corridor Office & Retail Analysis

OCTOBER 18, 2019



MARKET STREET CORRIDOR ANALYSIS

Cushman & Wakefield | Grant Street Associates, Inc. (C&W|GSA) has been asked to evaluate the office and retail leasing markets in the Market Street Corridor of the Pittsburgh Central Business District and provide an opinion of the ability to renovate and lease the First and Market Building, 209 1st Avenue, and 106-108 Market Street (Subject Properties).

The following pages outline the competitive office leasing set to the Subject Properties, the value of the assets to an investor/developer based on the current conditions of the Subject Properties, and a state of the retail landscape in the Market Street corridor.

The Subject Properties compete for office tenants in the Class C to Class B office market in Downtown Pittsburgh. The rental rate in the competitive set to the Subject Properties averages \$17.71 PSF gross with a total percentage leased of 60%. Based on the current poor condition of the Subject Properties, significant capital must be invested into the Subject Properties in order to re-tenant each project. This includes, but is not limited to, new base building and tenant improvements.



MARKET OVERVIEW - CBD CLASS B & C

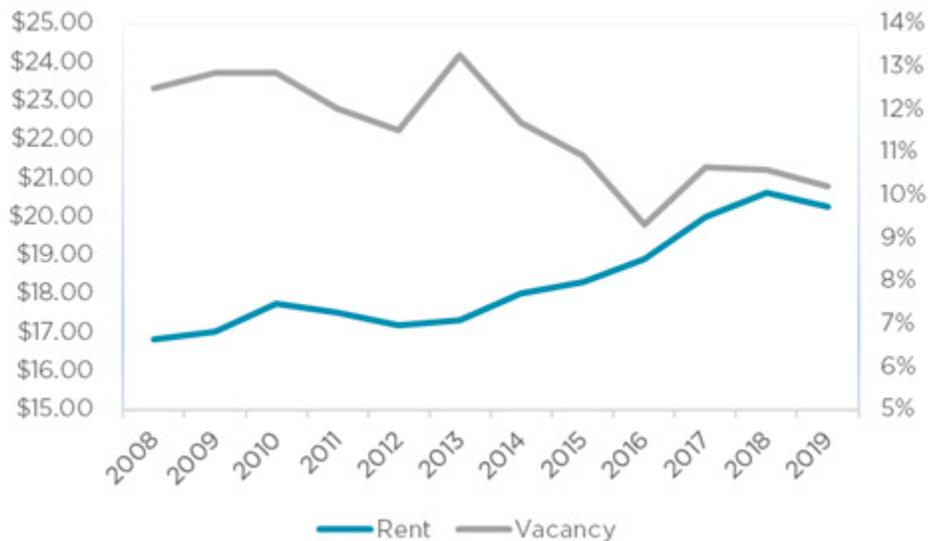
2019 Q3 asking rent	\$20.25
2019 Q3 vacancy rate	10.2%
Total office inventory	13.2 MSF
Net absorption	13,986 SF

DEMAND DRIVERS

- Amenities, amenities, amenities
- Public transportation
- Corporate presence includes PNC, UPMC, BNY Mellon
- Stabilized community of large corporate users



OFFICE VACANCY VS. RENTS



COMPETITIVE SET

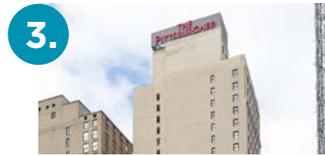
Office supply in the immediate corridor of the CBD:



1. HEARTLY ROSE BUILDING
425 1ST AVENUE
 Gross Rent PSF: \$20.00
 % Leased: 60%



2. AKF BUILDING
434-436 BLVD OF THE ALLIES
 Gross Rent PSF: \$15.50
 % Leased: 80%



3. THE PITTSBURGHER
428 FORBES AVENUE
 Gross Rent PSF: \$18.50
 % Leased: 54%



4. FORT PITT
227-237 FORT PITT BLVD
 Gross Rent PSF: \$16.50
 % Leased: 100%



5. BANK TOWER
307 FOURTH AVENUE
 Gross Rent PSF: \$17.95
 % Leased: 57%

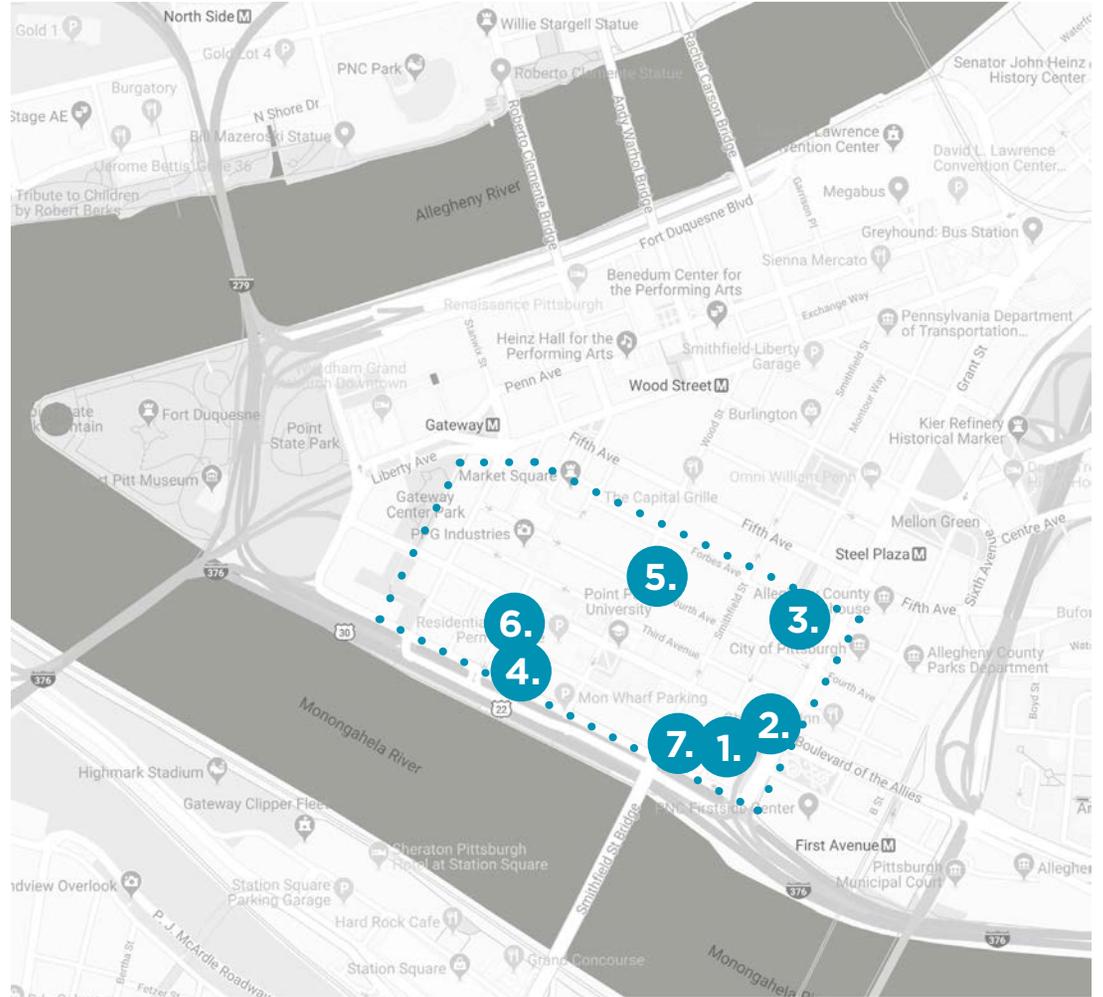


6. 105 MARKET STREET
 Gross Rent PSF: \$19.50
 % Leased: 0%



7. HOUSE BUILDING
4 SMITHFIELD STREET
 Gross Rent PSF: \$16.00
 % Leased: 73%

COMPETITIVE SET AVERAGE:
 Gross Rent PSF: \$17.71
 % Leased: 60%



ASSUMPTIONS

Total Square Footage (rentable) 27,596 SF

Capital Expenditures:	TOTAL	PSF
Interior Demolition	\$275,960	\$10.00
Deferred R&M and HVAC	\$2,759,600	\$100.00
Total Base Building Improvements	\$3,035,560	\$110.00

Tenant Improvements	\$50.00	PSF	
Leasing Commissions	6.00%		
Leasing Commissions: Calculate Using Gross or Net	Gross		
Lease-Up Period	2.00	YEARS	
Market Rent (Gross)	\$17.71	PSF	
Operating Expenses & Real Estate Taxes	<u>\$9.72</u>	PSF	
Market Rent	\$7.75	NNN	Excluding Free Rent
Rent Step	2.00%		Annually
Year of Rent Step	Annual		
Marketing and Soft Costs	\$0.20	PSF	
Capital Reserve	\$0.15	PSF	
Length of Initial Leases	10.00	YEARS	Any Free Rent is outside the term
Percent Leased Year One	0%	(leases commence at the end of the year)	
Carry Costs (<i>Average Cost During Lease-Up</i>)	\$2.83	PSF	Taxes + 10% of remaining opex

Valuation Assumptions

Capitalization Rate	8.50%	
Cost of Sale	<u>4.00%</u>	
Capitalization Rate Adjusted for Sales Cost	8.85%	
Vacancy Factor/Credit Loss	10.00%	
Corporate/Market Valuation Adjustments:		
Price Adjustment Due to Size of Facility	0.00%	
Price Adjustment Due to Market Conditions	0.00%	
Real Estate: Cost of Capital Rate		
Corporate Perspective:		
Cost of Debt	4.50%	Amount of Total 70.00%
Required Return on Equity	15.00%	30.00%
Weighted Return	7.65%	
Real Estate: Financing Costs and Required Return		
Developer Perspective:		
Cost of Debt	6.25%	55.00%
Required Return on Equity	20.00%	45.00%
Blended Return	12.44%	

INVESTOR/DEVELOPER PURCHASE

Capitalized Value Before Costs & Adjustments

	Square Feet	Effective Market Rent (NNN)	Cash Flow
Upon Full Occupancy	27,596	\$7.75	\$213,869
Vacancy Factor	10.00%	(\$0.78)	(\$21,387)
Stabilized Cash Flow		\$6.98	\$192,482
Capitalization Rate			8.85%
Capitalized Value Per Square Foot			\$2,173,915 \$78.78

Adjustments: Costs to Achieve Full Occupancy

	Improvement Type	Improvements Per Square Foot	Total
Capital Costs - Tis	Tenant Work	\$50.00	\$1,379,800
Capital Costs - Other	Other Capex	\$110.00	\$3,035,560
Totals		\$160.00	\$4,415,360
<u>Additional Lease-Up Costs:</u>		<u>PSF</u>	<u>TOTAL</u>
Leasing Commissions	6.00%	\$8.28	\$228,441
Marketing and Soft Costs	\$0.20	\$0.40	\$11,038
Carry Costs	\$2.83	\$5.66	\$156,193
Capital Reserve	\$0.15	\$0.30	\$8,279
Cost of Capital: Based on a Percentage of Project Value (Includes Profit)	100.0%	12.44%	\$540,761
Income During Lease-Up		\$0.00	\$0
Total		\$34.23	\$944,713
Total Costs to Achieve Full Occupancy		\$194.23	\$5,360,073

Valuation

Capitalized Value	\$78.78	\$2,173,915
Less: Costs to Achieve Full Occupancy	(\$194.23)	(\$5,360,073)
Value to a Investor/Developer	(\$115.46)	(\$3,186,158)

RETAIL PERSPECTIVE OF THE IMMEDIATE AREA

There are several factors at play to determine the viability of retail tenants within the first floor of the Premises.

The first factor to consider is the structure itself. The property has not hosted a tenant since 2003, or 16 years. As a result, it is necessary to inject capital into the first floor of the property to make it habitable and attractive to prospective retail tenants. In this case, the aforementioned economics would at a minimum be needed for the ground floor rehab as well. The first floor would need to be split into several smaller bays, as the layout is not conducive to larger retail users. As it exists today, the first floor plan is very inefficient, as flow is interrupted throughout and in many cases has floors that do not align. These inefficiencies are noticeable under existing conditions, but may become more problematic if a full scale rehab of the current structure is undertaken, as additional square footage would be lost on the first floor as a result of bringing the rest of the structure up to code to allow for tenants on the upper floors.

One key facet to consider is the location of the subject. This is one of the true “blind spots” in the central business district where there is a lack of supportive demographic information. The reason for this is because the micro area metrics don’t warrant inclusion or study. This is proven in the Pedestrian study that was conducted by the PDP, as this corridor was not even given consideration at the time. Traffic count studies that have been conducted on this section of market street only show 557 cars per day, which is a far departure from the heavier traveled thoroughfares within downtown that produce figures closer to 20,000 cars per day. From a pure traffic consideration, the numbers show that this corridor is an outlier of downtown and makes it easier to isolate this corridor and concentrate on stronger areas of activity.

Currently on this street, retail tenants are paying anywhere from \$11 to \$18 per square foot gross, and offerings currently consist of two pizza shops and one coffee shop. Even if this property is fully renovated with a significant injection of capital, which would also need to include attractive above market tenant improvement allowances, the demand drivers are not here to justify national, credit tenants locating here and paying lucrative rents. Even moving closer to market square still presents its challenges, which is clearly evident by the River City Inn space at 5PPG Place, which has been vacant for over seven years. Therefore, the similar capital injection required above for office conversion does not justify an increase in the building rents, and we would see on average of \$15-\$16 per square foot in retail rents even after a full rehab to the improvements upon the property.

If retail is to be successful here, it needs to have a purpose, and the general market dynamics in their current state to not support a successful retail venture with the existing building, as the cost benefit analysis, as illustrated above, provides minimal benefit. A Landlord would be more willing to invest in the real estate if there were more paybacks to exploit beyond purely economic means. An instance where retail could serve the greater good would be under the creation of a critical mass element, where increased density are brought to the immediate vicinity with the construction of a large scale development. In creation of this critical mass, the decision to put retail in this location is much more defensible, as it becomes an amenity that serves the building first and foremost, attracting tenants and reducing vacancy in the overall plan. The immediate vicinity and surrounding corridor would be secondary beneficiaries of this retail as well. By no means does the retail element of the project become highly lucrative at this point, but does contribute to the overall project and serve a purpose beyond ground floor economic means.

In summary, if quality retail is to not only survive here, but also to be successful, then it needs to have a purpose, and the general market dynamics in their current state do not support any successful retail venture with the existing structure.



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Cushman & Wakefield | Grant Street Associates, Inc.

310 Grant Street, Suite 1825
Pittsburgh, PA 15219

gsa-cw.com

**Design Analysis:
Market Street & First Avenue**

November 15TH, 2019

*“The past is not the property of historians; it is a **public possession**. It belongs to anyone who is aware of it, and it grows by being shared. It sustains the whole society, which always needs the **identity** that only **the past can give.**”*

- William Murtagh



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UNDERSTANDING THE
DEVELOPER'S NEEDS

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DESIGN STRATEGIES

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4 APPENDIX
SUPPLEMENTAL MATERIAL

PG. 26-35

LISTENING SESSION

1

1

LISTENING SESSION UNDERSTANDING THE DEVELOPER'S NEEDS

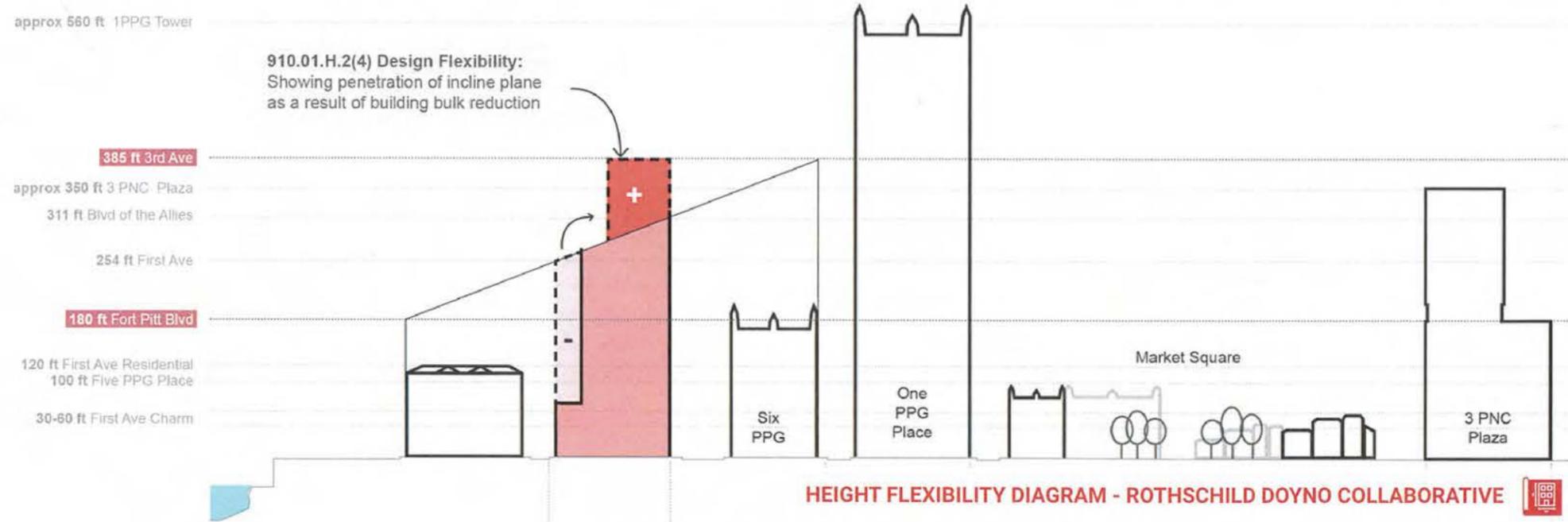
Market Street & First Avenue – PHLF Study

Proposed Programmatic Functions:

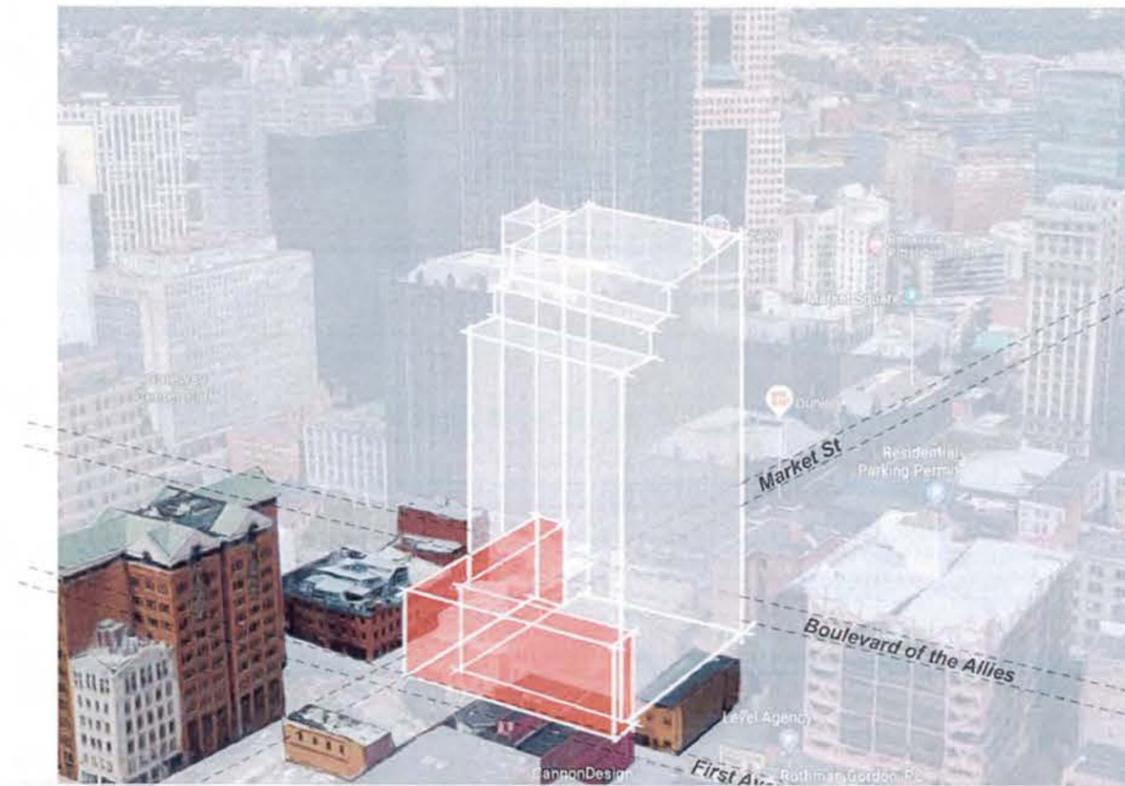
- “Signature tower:”¹
- “Midrise structure facing Boulevard of the Allies”²
 - 200,000 – 290,000 SF
 - 22 stories tall
 - Development includes:
 - 100-102 Market Street (Froggy’s)
 - 104 and 106-108 Market Street
 - 212 and 214 (Papa J’s) Boulevard of the Allies
 - 209 First Avenue
 - “Office component” – Boulevard of the Allies
 - “Mixed-use residential” – First Avenue & Market Street
 - 3-10 stories
 - Brick façade – relates to historical contextual scale (i.e. 3-4 stories)
 - Proposed park as part of redevelopment
 - Reuse timber structural members for sculpture
 - Reuse foundation stones as site furniture
 - Reuse brick from demolished facades

¹ Belko, Mark. “Planning Board Skeptical of Proposal to Demolish Froggy’s.” Pittsburgh Post Gazette, 31 July 2019, pp. B-7-B-8.

² Belko, Mark. “A Not-so-Happy Hour for Froggy’s.” Pittsburgh Post Gazette, 26 July 2019, pp. A-1.



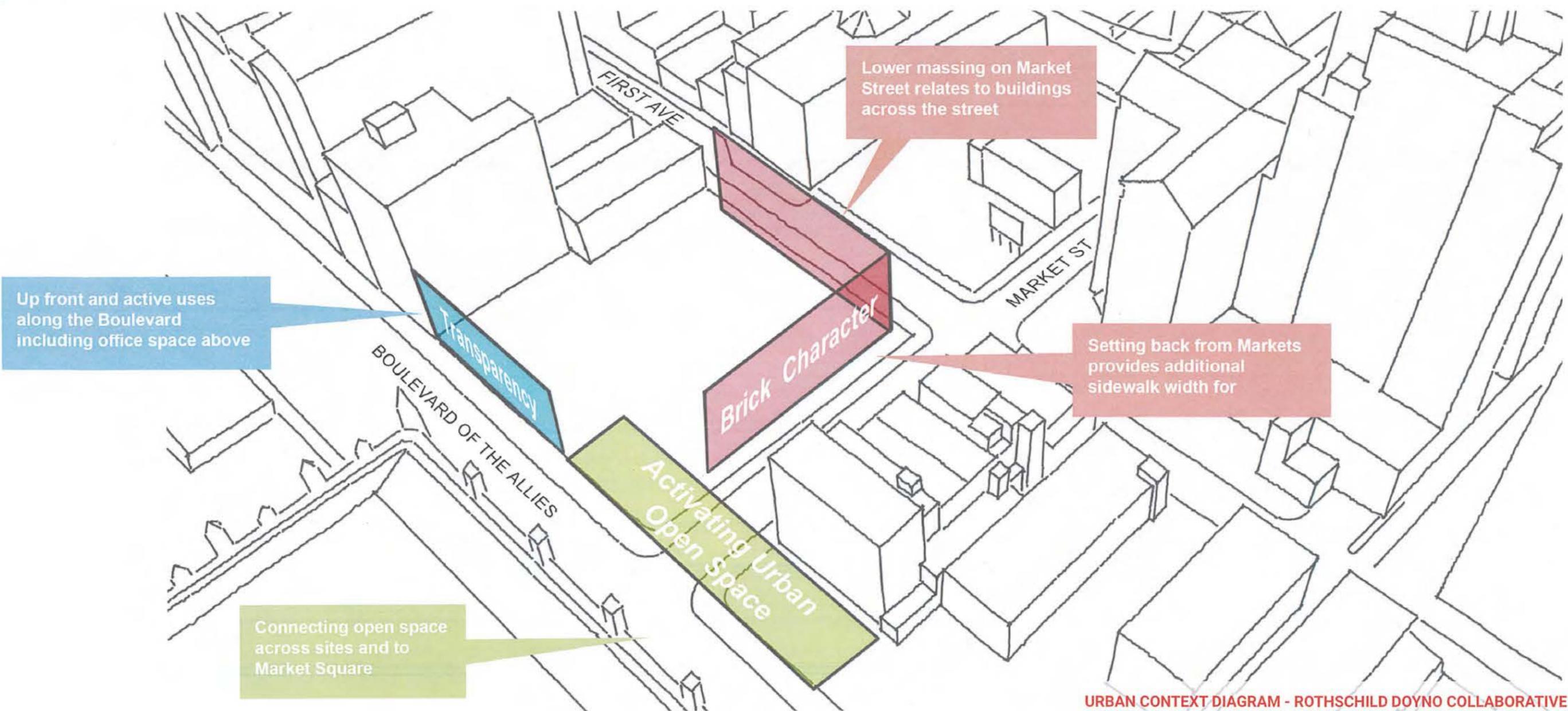
HEIGHT FLEXIBILITY DIAGRAM - ROTHSCHILD DOYNO COLLABORATIVE



URBAN COMPATIBILITY DIAGRAM - ROTHSCHILD DOYNO COLLABORATIVE

1

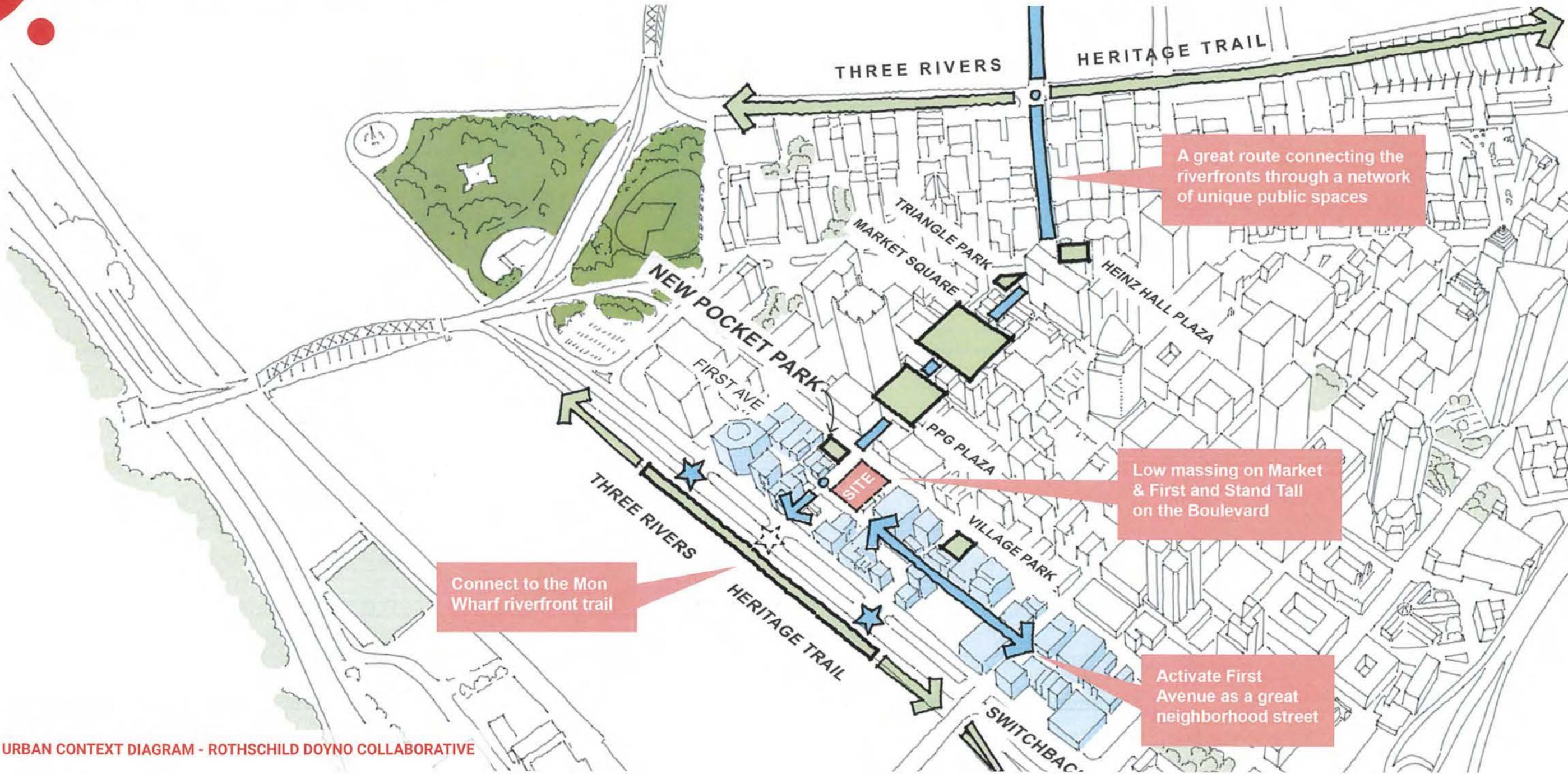
LISTENING SESSION UNDERSTANDING THE DEVELOPER'S NEEDS



URBAN CONTEXT DIAGRAM - ROTHSCHILD DOYNO COLLABORATIVE

1

LISTENING SESSION UNDERSTANDING THE DEVELOPER'S NEEDS

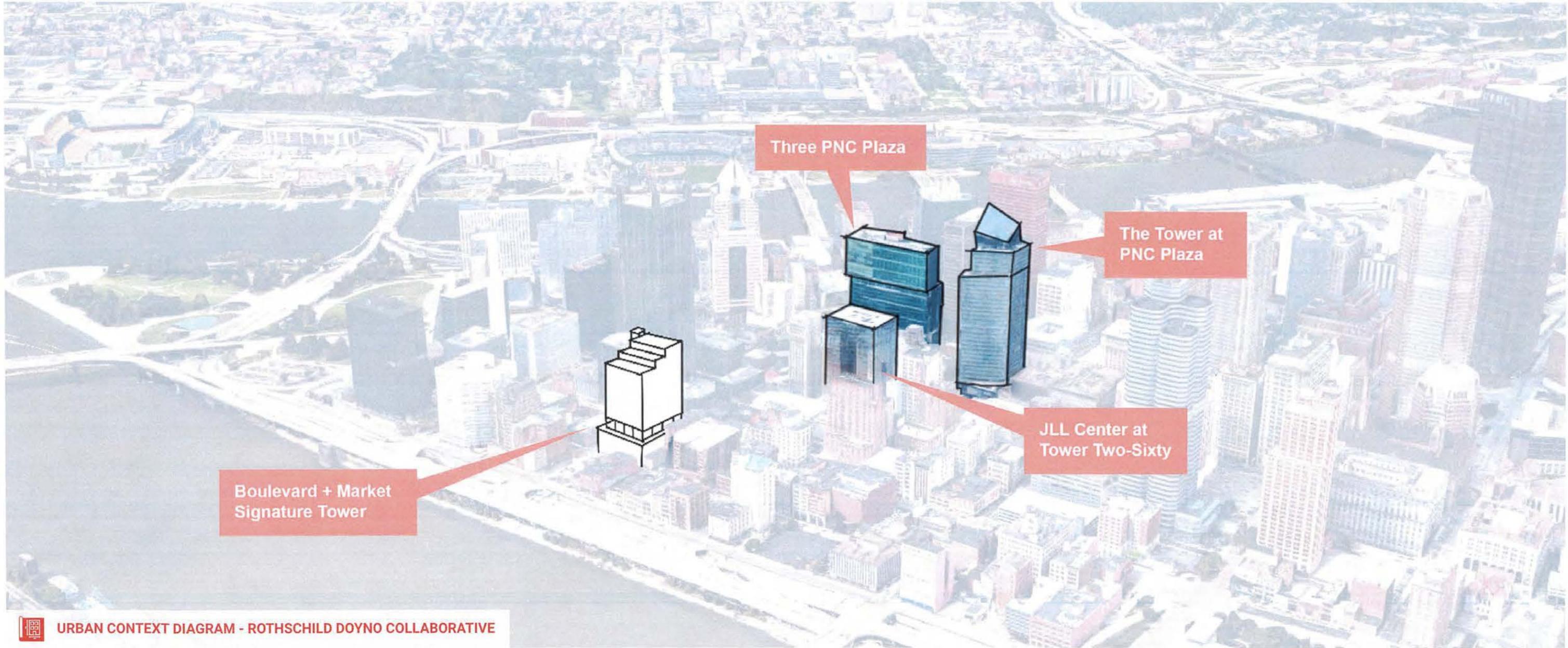


URBAN CONTEXT DIAGRAM - ROTHSCHILD DOYNO COLLABORATIVE

1

LISTENING SESSION

UNDERSTANDING THE DEVELOPER'S NEEDS



URBAN CONTEXT DIAGRAM - ROTHSCHILD DOYNO COLLABORATIVE



LISTENING SESSION

UNDERSTANDING THE DEVELOPER'S NEEDS

CONCEPTUAL COST ANALYSIS: OPTION 1

Market Street & First Avenue Financial Analysis

Option 1- New Construction (Commercial & Residential)

Development Budget		
Sources		
Equity	\$	14,673,408
Debt	\$	34,237,952
GAP	\$	50,240,992
Total Sources	\$	99,152,352
Uses		
Hard Costs	\$	87,358,900
Miscellaneous Costs	\$	2,620,767
Design Fees	\$	3,931,151
Developer Fee	\$	5,241,534
Total Uses	\$	99,152,352

Operating Budget		
Type		Total
Commercial & Residential		
Total Revenue	\$	4,839,616
Total Expenses	\$	(1,660,377)
Net Operating Income	\$	3,179,238

Total Construction Cost	\$	99,152,352
Average cost/Sqft.	\$	292
Useable Sqft breakdown		
Office		-
Commercial		20,022
Residential		199,586
Parking/Storage		18,771
Total Useable		238,379
Gross Building(s) Sqft		299,539
Net operating Income	\$	3,179,238
Value based on 6.5% CAP	\$	48,911,360

GAP **\$ 50,240,992**

Net Profit Projection				
	Year 2	Year 3	Year 4	Year 5
\$	3,249,136	\$ 3,320,578	\$ 3,393,596	\$ 3,468,223
\$	49,986,713	\$ 51,085,815	\$ 52,209,165	\$ 53,357,272

Assumptions

Revenue (Office Space)	N/A	Expenses (Office Space)	N/A
Revenue (Commercial)	\$ 20.83	Expenses (Commercial)	\$ 6.19
Revenue (Residential)	\$ 21.60	Expenses (Residential)	\$ 7.70
Yearly Increase (Revenues)	2.5%	Yearly Increase (Expenses)	3%
Parking Spot /month	\$ 150	Office Mgmt Fee	3%
Cap Rate	6.5%	Residential Mgmt Fee	7%
Equity	30%	Misc Costs	3%
Debt	70%	Developer Fee	6%

MARKET ANALYSIS

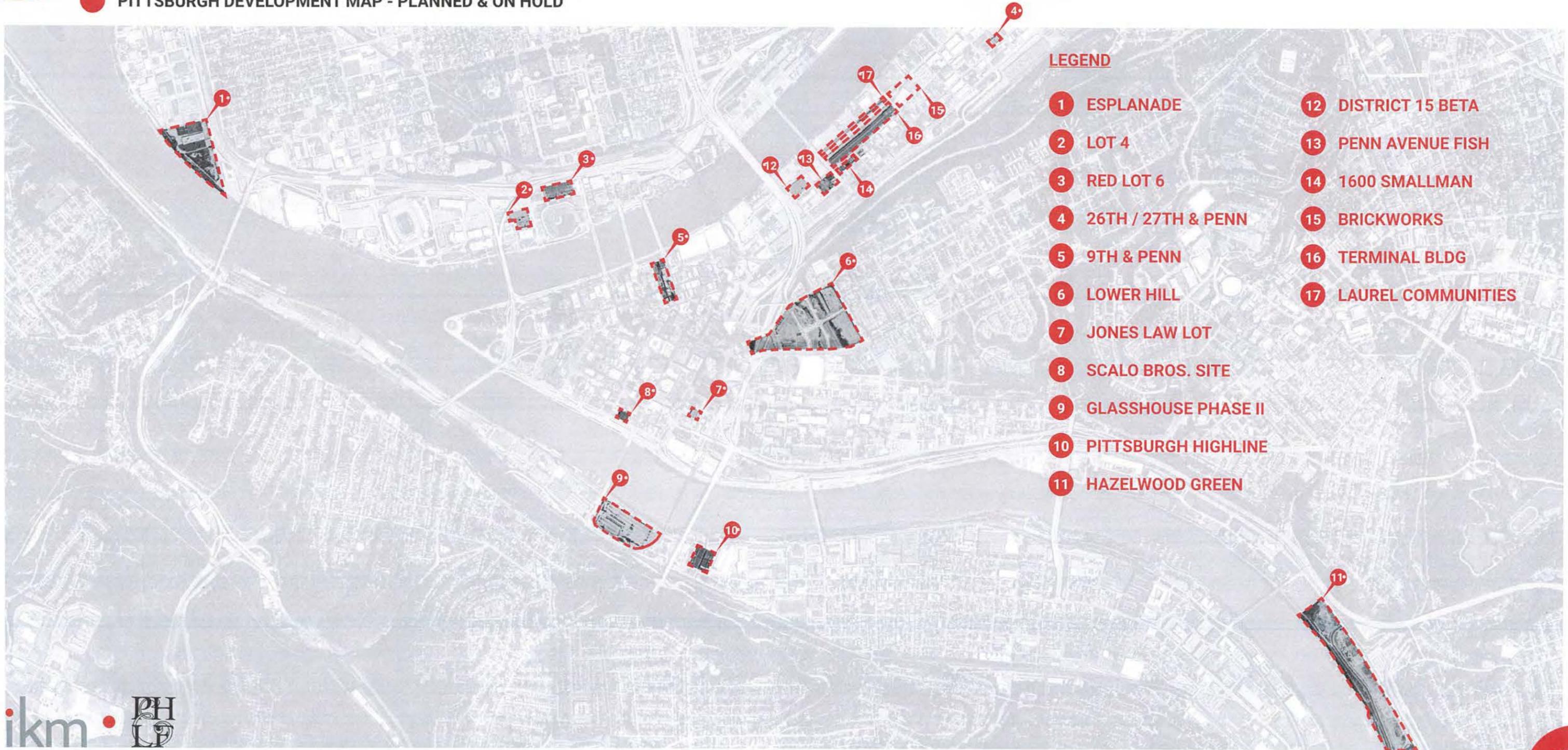
2

2

MARKET ANALYSIS

UNDERSTANDING THE DEVELOPMENT SCENE

PITTSBURGH DEVELOPMENT MAP - PLANNED & ON HOLD



2

MARKET ANALYSIS

UNDERSTANDING THE DEVELOPMENT SCENE

MARKET ANALYSIS: PITTSBURGH, PA OFFICE Q3 2019

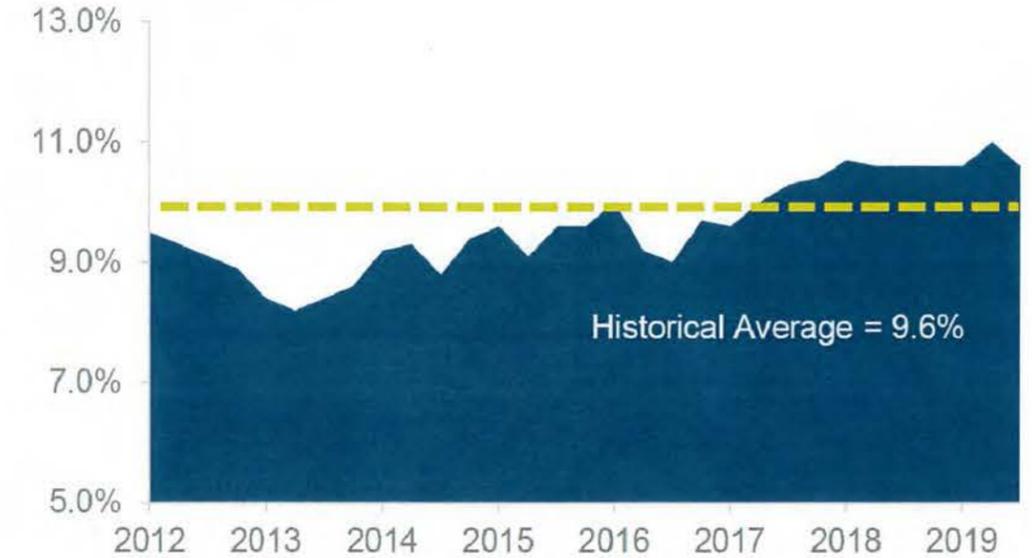
SUBMARKET	INVENTORY (SF)	SUBLET VACANT (SF)	DIRECT VACANT (SF)	OVERALL VACANCY RATE	CURRENT QTR OVERALL NET ABSORPTION (SF)	YTD OVERALL NET ABSORPTION (SF)	YTD LEASING ACTIVITY (SF)**	UNDER CNSTR (SF)	OVERALL AVERAGE ASKING RENT (ALL CLASSES)*	OVERALL AVERAGE ASKING RENT (CLASS A)*
Armstrong County	123,367	0	0	0%	0	21,400	0	0	\$8.58	\$8.58
Beaver County	1,201,455	0	188,052	15.7%	5,250	-60,989	10,433	0	\$12.57	N/A
Butler County	4,696,201	12,289	202,155	4.6%	9,646	-47,421	44,551	0	\$22.45	\$23.75
CBD	26,281,109	297,515	3,348,754	13.9%	-43,060	-253,107	264,823	0	\$26.47	\$29.84
Fayette County	630,275	0	0	0%	0	0	0	0	\$12.00	N/A
Greater Downtown	12,291,492	149,880	1,038,546	9.7%	15,708	32,362	124,204	581,708	\$25.94	\$34.30
North Pittsburgh	6,373,978	4,841	561,616	8.9%	-52,530	-133,627	75,441	135,000	\$20.66	\$24.25
Northeast Pittsburgh	2,536,135	0	114,395	4.5%	6,303	16,053	6,211	0	\$19.12	\$21.16
Oakland	3,153,502	0	29,066	0.9%	705	35,547	26,537	399,067	\$22.86	N/A
Parkway East	10,400,548	15,034	1,037,300	10.1%	-86,776	2,747	89,855	453,833	\$19.29	\$21.62
Parkway West	10,149,967	163,497	1,228,960	13.7%	41,371	-93,932	228,213	296,380	\$22.14	\$23.83
South Pittsburgh	6,059,686	1,359	513,634	8.5%	-36,313	-88,633	42,532	0	\$18.24	\$21.69
Washington County	5,072,139	26,431	569,105	11.7%	-37,064	-45,194	223,205	0	\$21.59	\$26.48
Westmoreland County	3,149,693	0	219,529	7.0%	-5122	33,260	46,874	0	\$15.89	\$29.77
PITTSBURGH TOTALS	92,119,547	670,846	9,051,112	10.6%	-181,882	-581,534	1,182,879	1,865,988	\$19.68	\$24.12

*Rental rates reflect gross asking \$psf/year **Does not include renewals

	INVENTORY (SF)	SUBLET VACANT (SF)	DIRECT VACANT (SF)	OVERALL VACANCY RATE	CURRENT QTR OVERALL NET ABSORPTION (SF)	YTD OVERALL NET ABSORPTION (SF)	YTD LEASING ACTIVITY (SF)	UNDER CNSTR (SF)	DIRECT AVERAGE ASKING RENT*	OVERALL AVERAGE ASKING RENT*
Class A	31,809,885	451,409	4,099,710	14.3%	-31,341	-339,169	555,344	1,563,574	\$25.68	\$24.12
Class B	48,170,157	206,591	4,372,747	9.5%	-192,584	-300,439	457,760	302,414	\$19.96	\$19.94
Class C	12,139,505	12,846	578,655	4.9%	42,043	58,074	169,755	0	\$16.05	\$16.05

TABLES OBTAINED FROM CUSHMAN & WAKEFIELD | GRANT STREET ASSOC. INC.

Overall Vacancy



PITTSBURGH OFFICE

Economic Indicators

	Q3 18	Q3 19	12-Month Forecast
Pittsburgh Employment	1.18M	1.19M	▲
Pittsburgh Unemployment	4.1%	3.9%	▲
U.S. Unemployment	3.8%	3.7%	▲

*Q3 19 data based on the latest available data. Source: BLS, Moody's Analytics, Cushman & Wakefield Research

Market Indicators (Overall, All Classes)

	Q3 18	Q3 19	12-Month Forecast
Vacancy	11.1%	10.6%	▼
Net Absorption (sf)	-339k	-182k	▲
Under Construction (sf)	1.1M	1.87M	■
Average Asking Rent*	\$19.42	\$19.68	▲

*Rental rates reflect gross asking \$psf/year

2

MARKET ANALYSIS

UNDERSTANDING THE DEVELOPMENT SCENE

MARKET ANALYSIS: PITTSBURGH, PA MULTI-FAMILY Q4 2017

URBAN PITTSBURGH MULTIFAMILY MARKET STATISTICS BY NEIGHBORHOOD, Q4 2017

Submarket	Units	Vacancy Rate	Studio	1 bed	2 bed	Under Construction Units	Proposed Units	2017 Absorption	Asking Rent PSF
Downtown	2,827	7.7%	\$1,045	\$1,327	\$1,936	845	200	27	\$1.60
Strip District & Lawrenceville	1,702	12.7%	\$1,204	\$1,352	\$1,788	600	0	213	\$1.07
Hill District & Uptown	2,608	5.3%	\$930	\$934	\$1,185	0	350	41	\$1.17
Oakland	5,481	4.1%	\$986	\$1,134	\$1,535	523	0	590	\$1.70
South Side	1,670	6.6%	\$1,168	\$1,278	\$1,713	319	322	86	\$1.68
North Shore	2,340	7.4%	\$798	\$1,034	\$1,544	0	133	43	\$1.50
Bloomfield & East Liberty	4,687	3.7%	\$999	\$876	\$1,040	0	0	-154	\$1.16
Shadyside	8,163	3.7%	\$894	\$1,147	\$1,688	146	0	159	\$1.71
Squirrel Hill	3,218	4.4%	\$760	\$922	\$1,316	33	0	19	\$1.53

DOWNTOWN

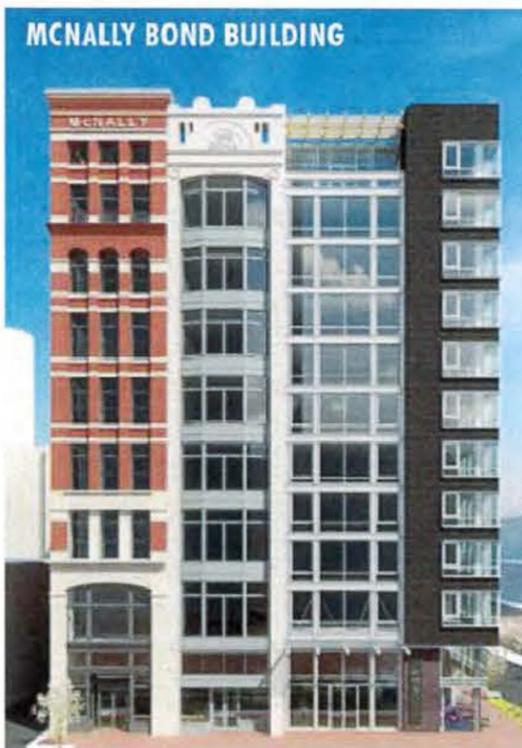
Pittsburgh's Downtown is commonly referred to as the Golden Triangle, forming where the Monongahela and Allegheny rivers meet to form the Ohio River. Major corporations with headquarters in the CBD include U.S. Steel, PPG, BNY Mellon, Kraft Heinz, Federated Investors, GNC, UPMC, and Highmark.

Over the past ten years, the Downtown multifamily market has been defined by Class B office property conversions. Over 2.2 million sq. ft. of Class B office space and 1.1 million sq. ft. of retail space has been converted into 1,319 multifamily units, 100 condos, and 1,097 hotel rooms. Downtown currently has more units in development than any other neighborhood, and all are redevelopments and conversions.

HISTORICAL RENT AND VACANCY



- Daytime population: 92,363
- Resident population: 5,068 (2% pop. growth 2010-2017)
- Avg household income: \$52,188
- Median home value: \$256,579
- Under construction: 600 units
- Proposed: 200 units



CHALLENGES:



Supply Exceeds Demand

Absorption trends have clearly shown that renters are choosing new construction, and demographic trends have clearly shown that the city of Pittsburgh is gaining more renters. Yet, as more supply is delivered than can be absorbed, unit pricing will likely moderate in new construction – but will likely even further moderate in older, Class B properties as these struggle to maintain occupancy.



Affordable Housing

There is a lack of stock that caters to cohorts on the lower end of the income scale. The city of Pittsburgh recently agreed to provide \$10 million a year to the Urban Redevelopment Authority to preserve and create affordable housing by funding projects that address the need, which may help to mitigate the affordable housing issue but will place greater emphasis on developing with affordability in mind.



Construction Costs

A potential construction labor shortage is looming in Pittsburgh. Three projects entailing billions of dollars of development are on the horizon: The \$5 billion Shell cracker plant, the \$1.1 billion airport redevelopment and UPMC's plan to build three new hospitals in the city. While this will bring many new jobs to the area, as construction labor gets tighter, construction costs will get loftier.

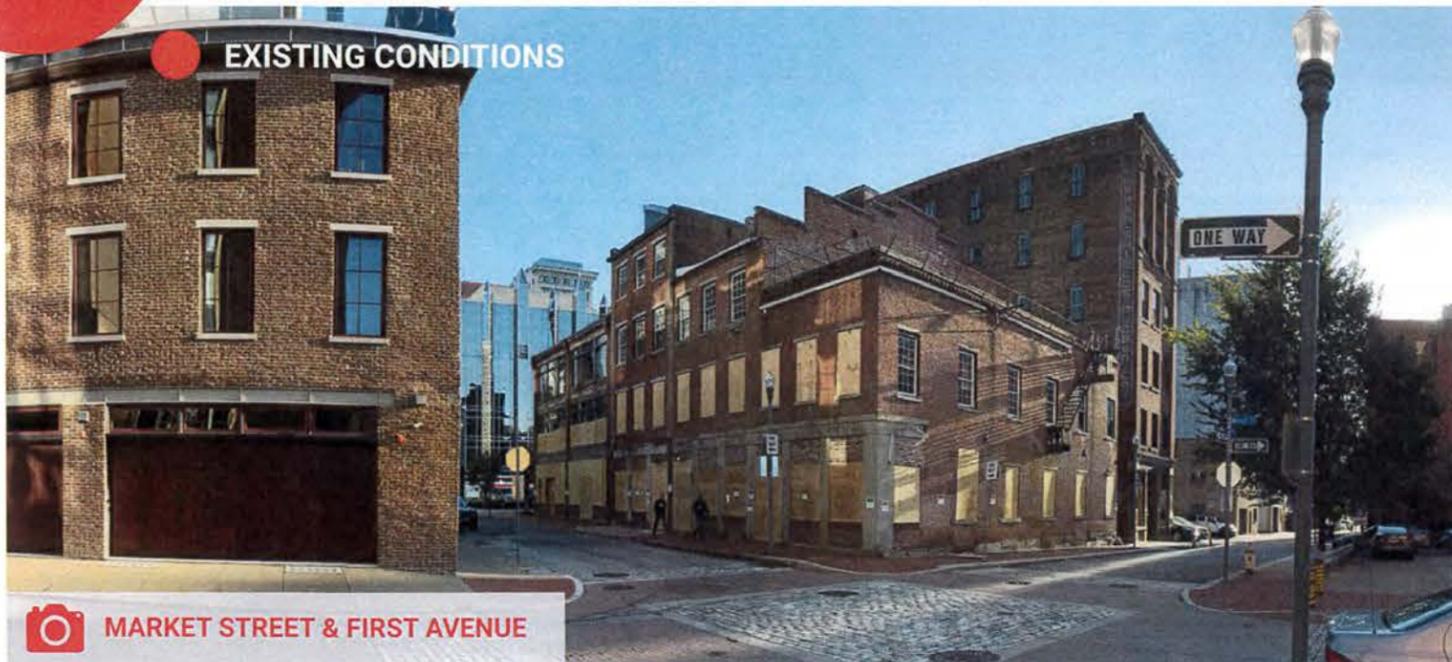
OPTIONS FOR DEVELOPMENT

3

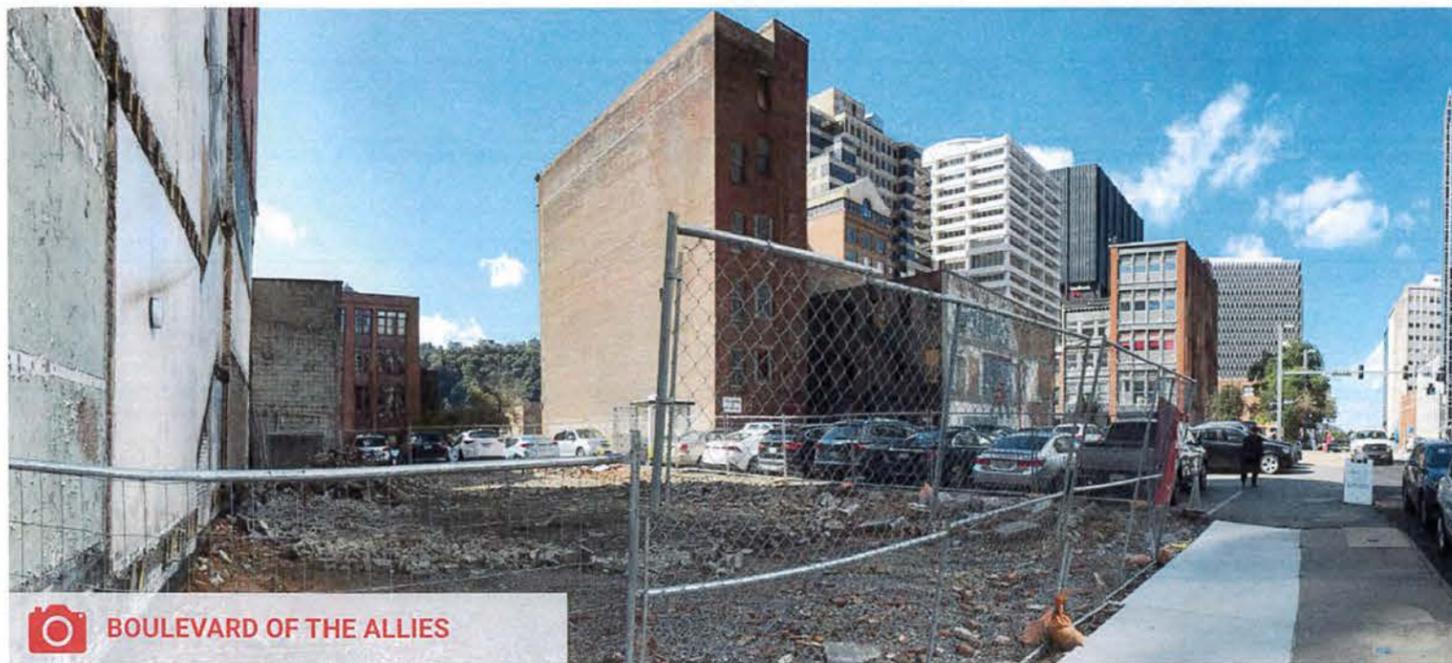
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OPTIONS FOR DEVELOPMENT DESIGN STRATEGIES

EXISTING CONDITIONS



MARKET STREET & FIRST AVENUE



BOULEVARD OF THE ALLIES

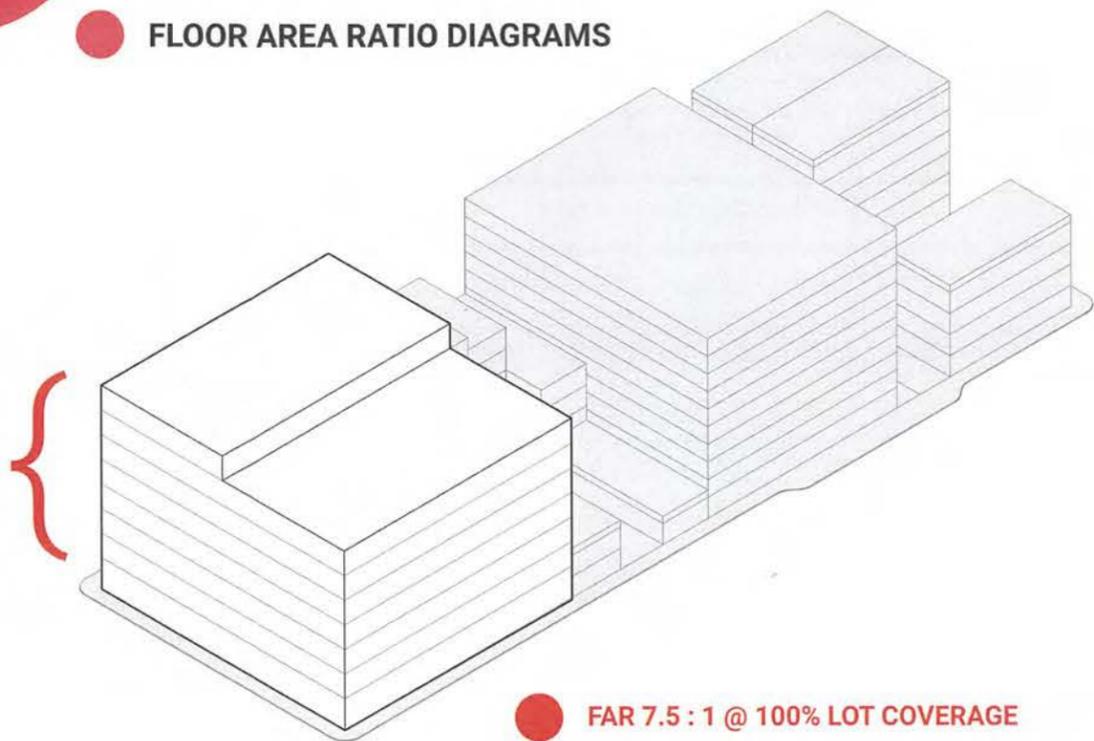


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OPTIONS FOR DEVELOPMENT DESIGN STRATEGIES

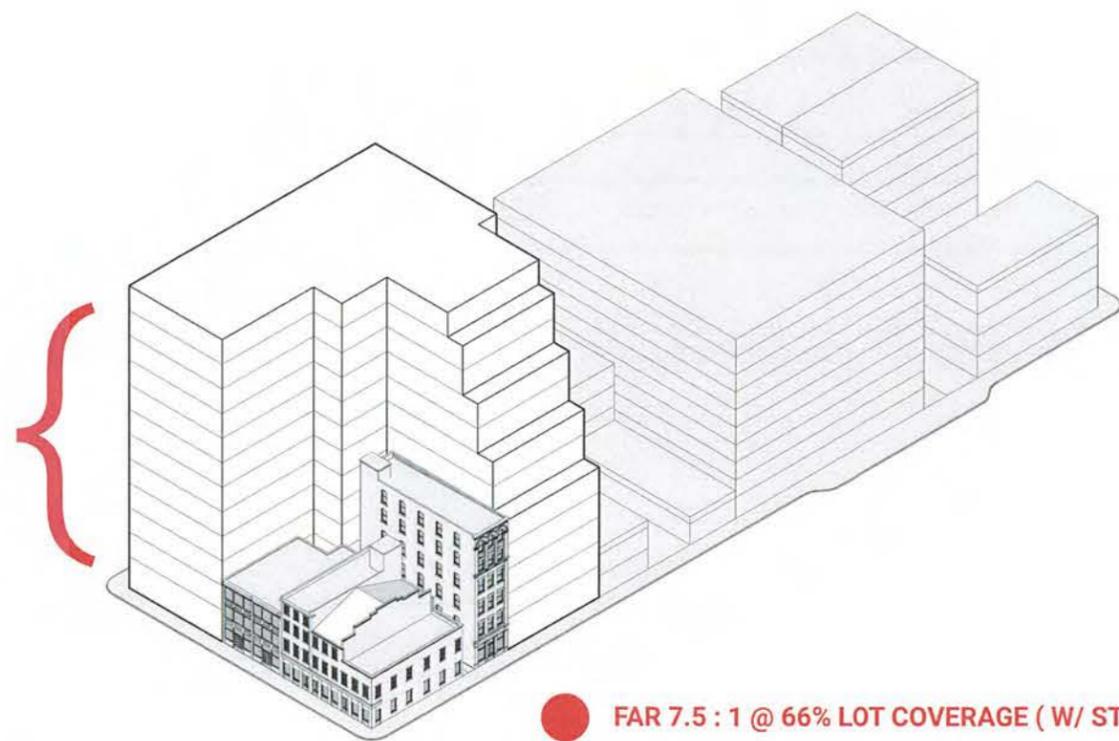
FLOOR AREA RATIO DIAGRAMS

7 1/2 STORIES



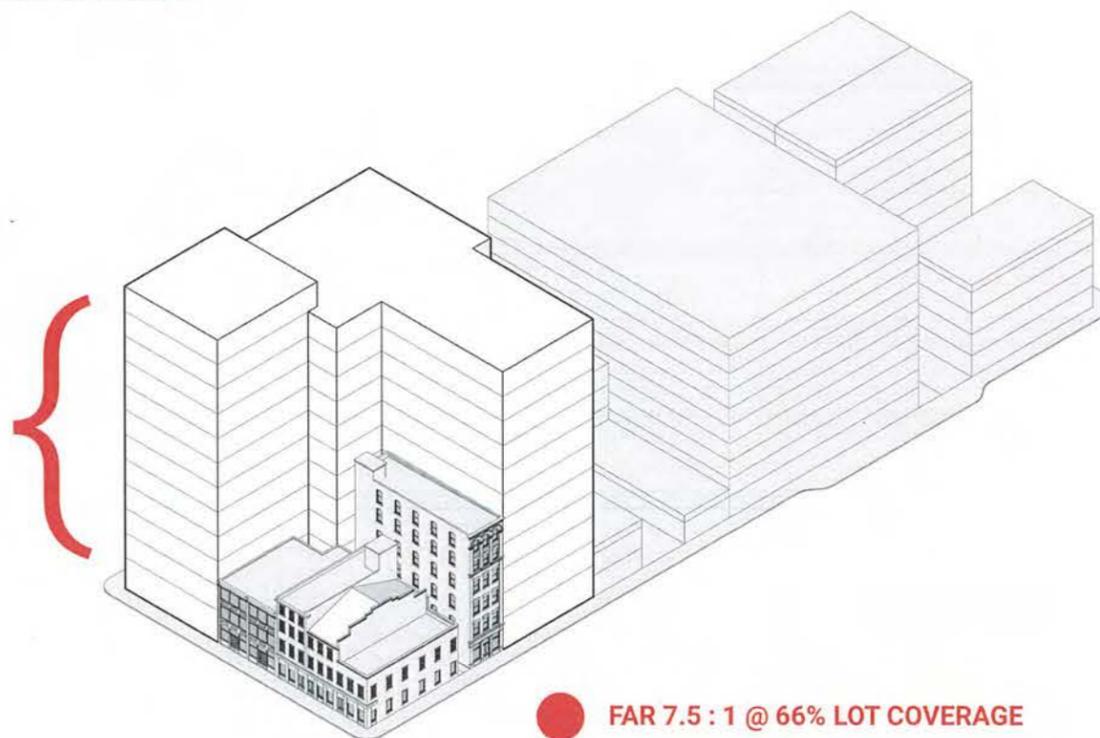
FAR 7.5 : 1 @ 100% LOT COVERAGE

12 STORIES



FAR 7.5 : 1 @ 66% LOT COVERAGE (W/ STEPBACKS)

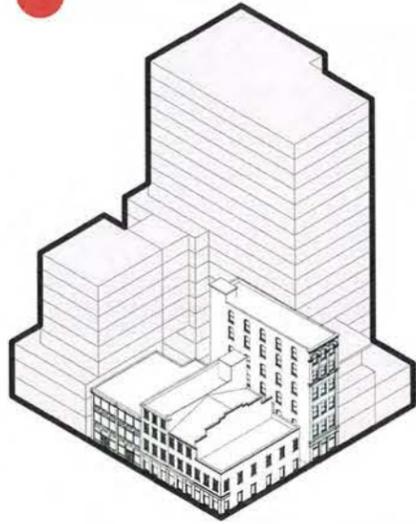
11 1/2 STORIES



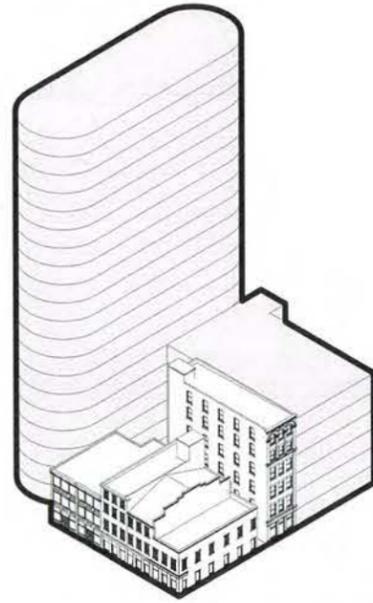
FAR 7.5 : 1 @ 66% LOT COVERAGE

3

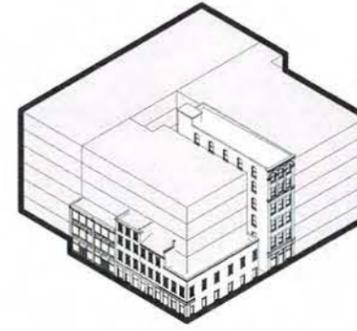
OPTIONS FOR DEVELOPMENT DESIGN STRATEGIES



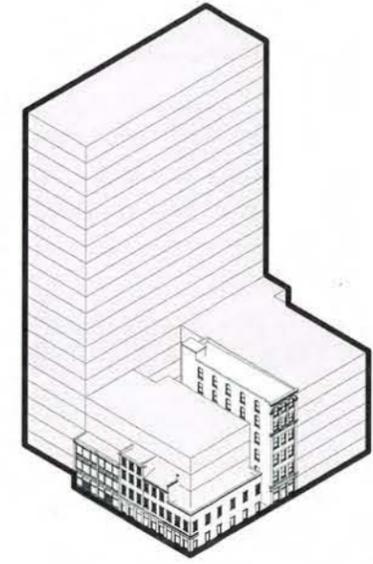
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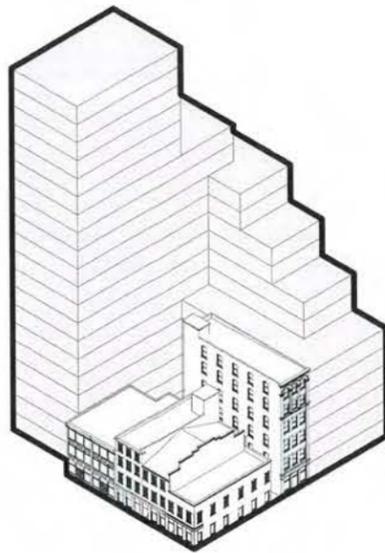
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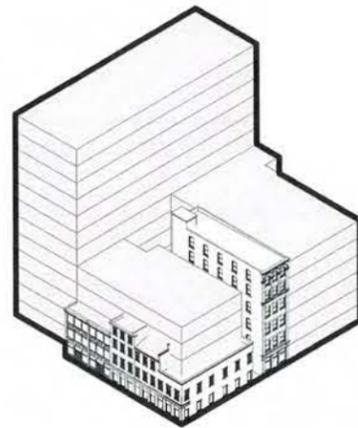
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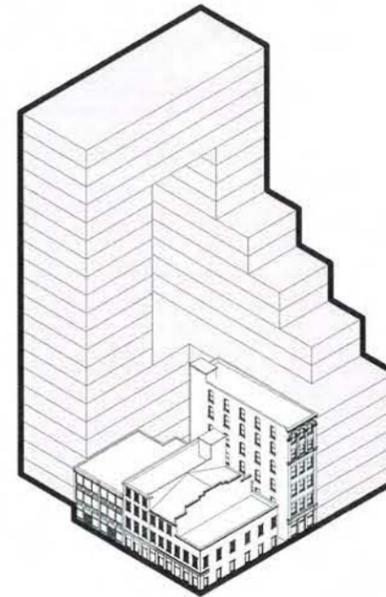
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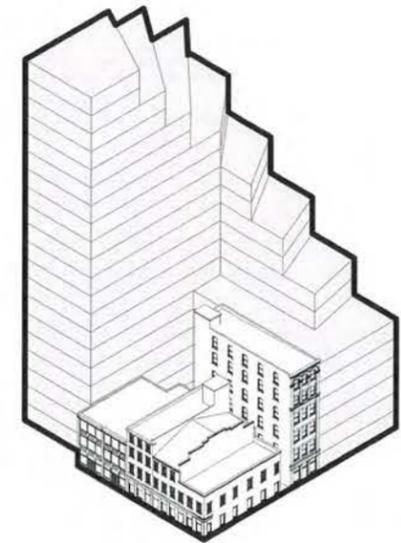
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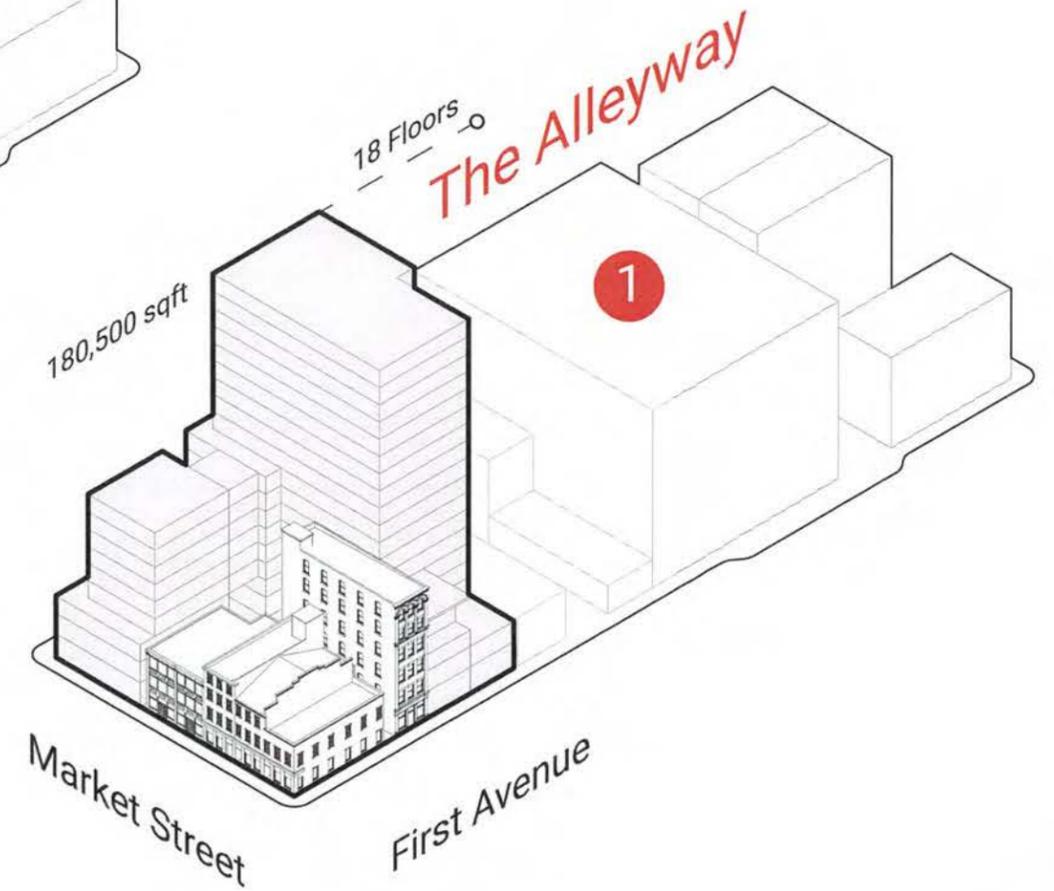
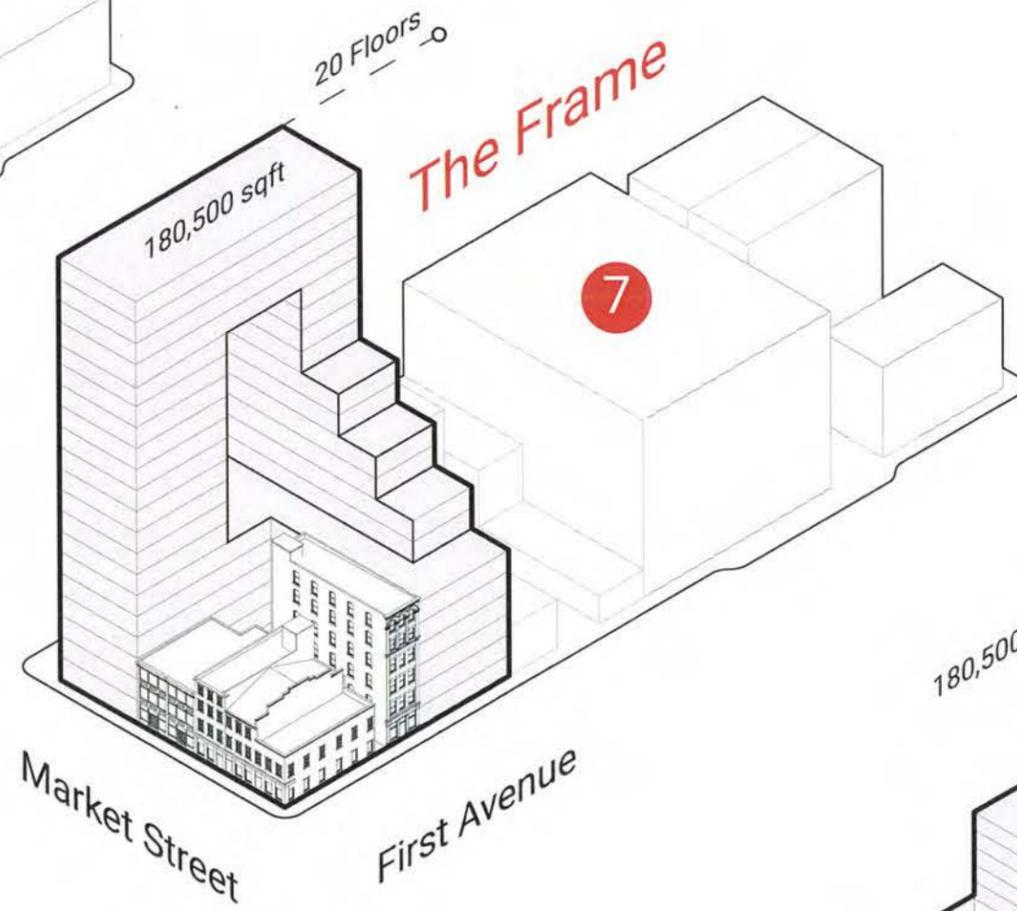
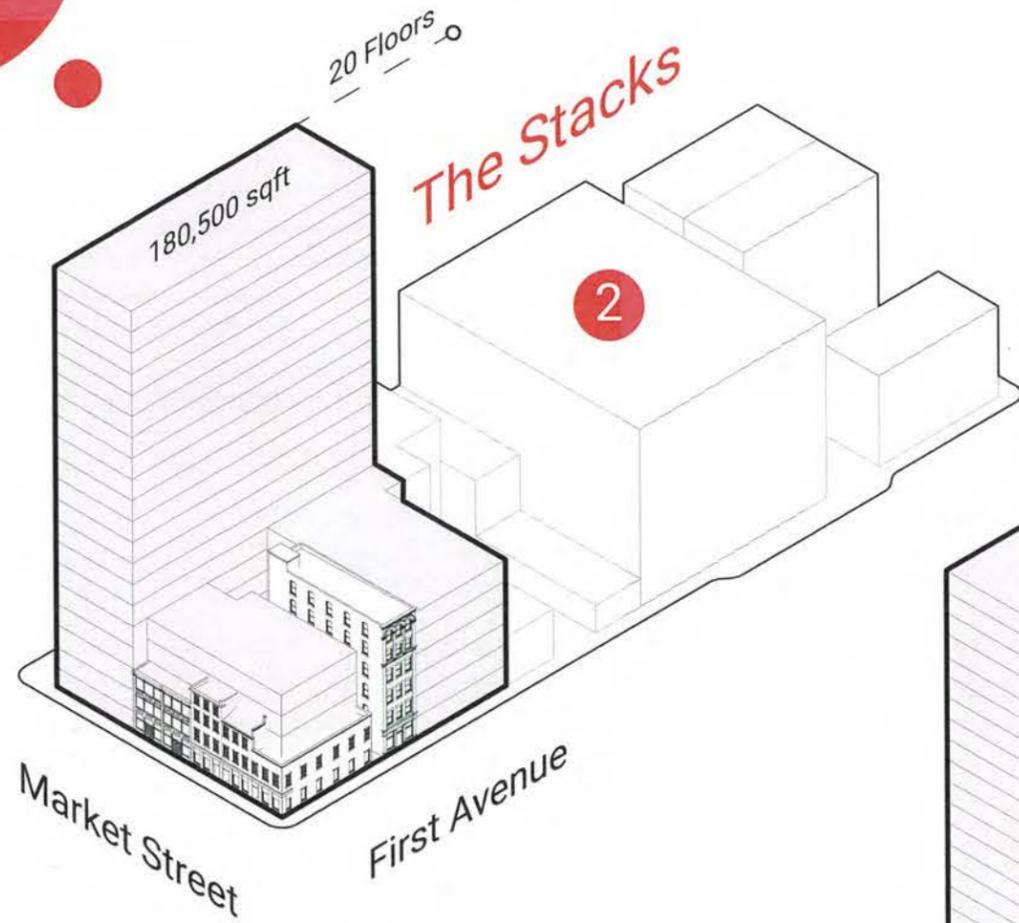
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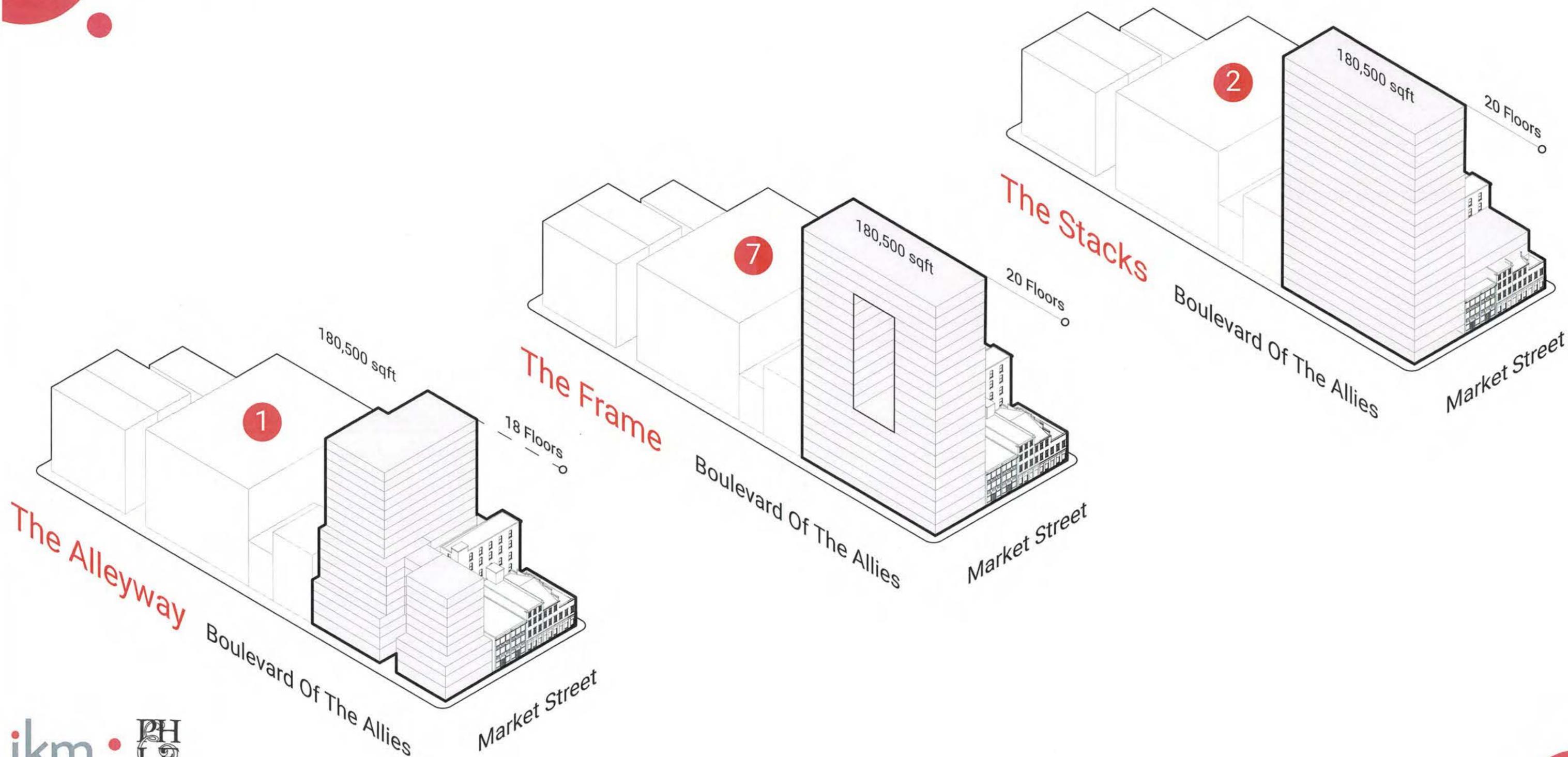
OPTIONS FOR DEVELOPMENT DESIGN STRATEGIES



3

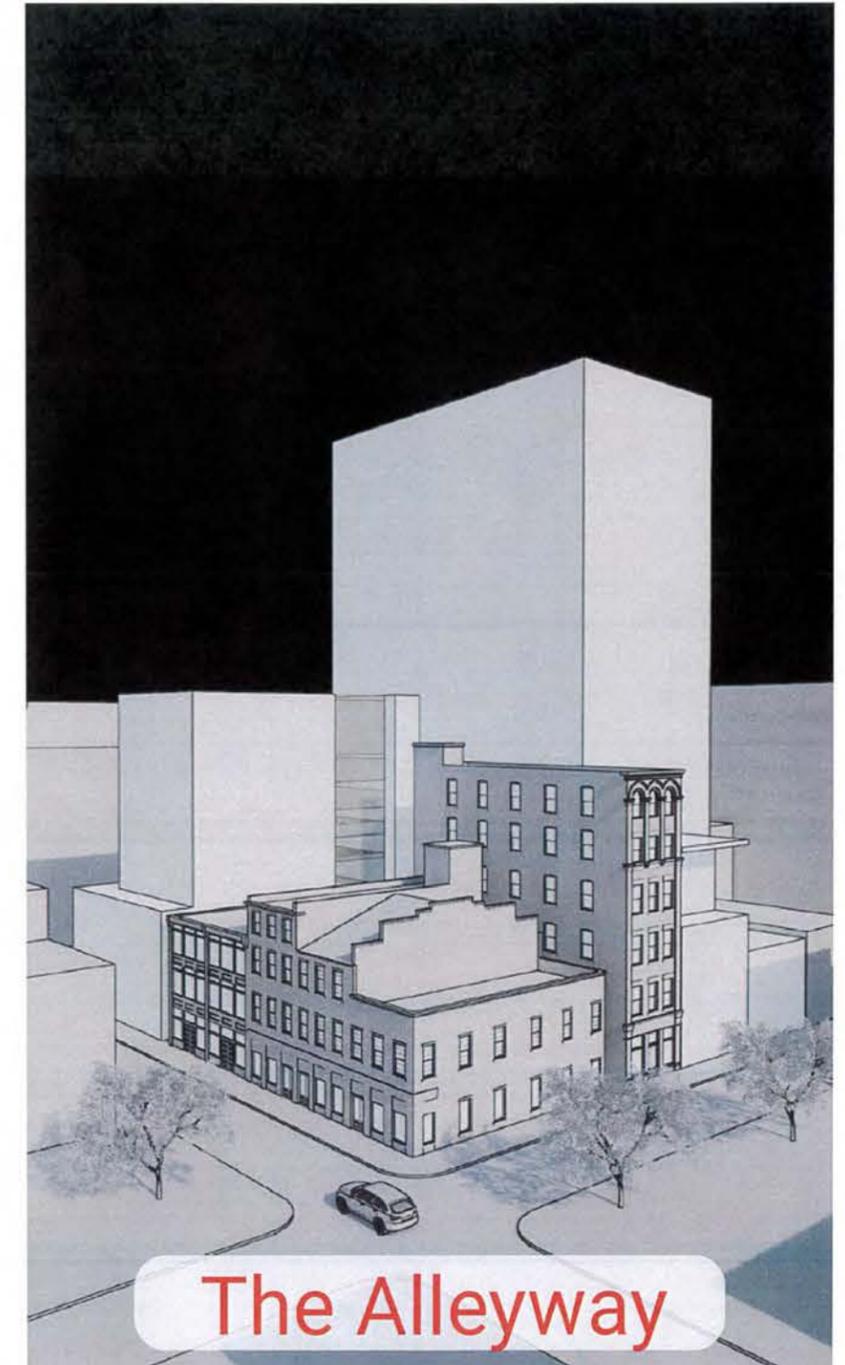
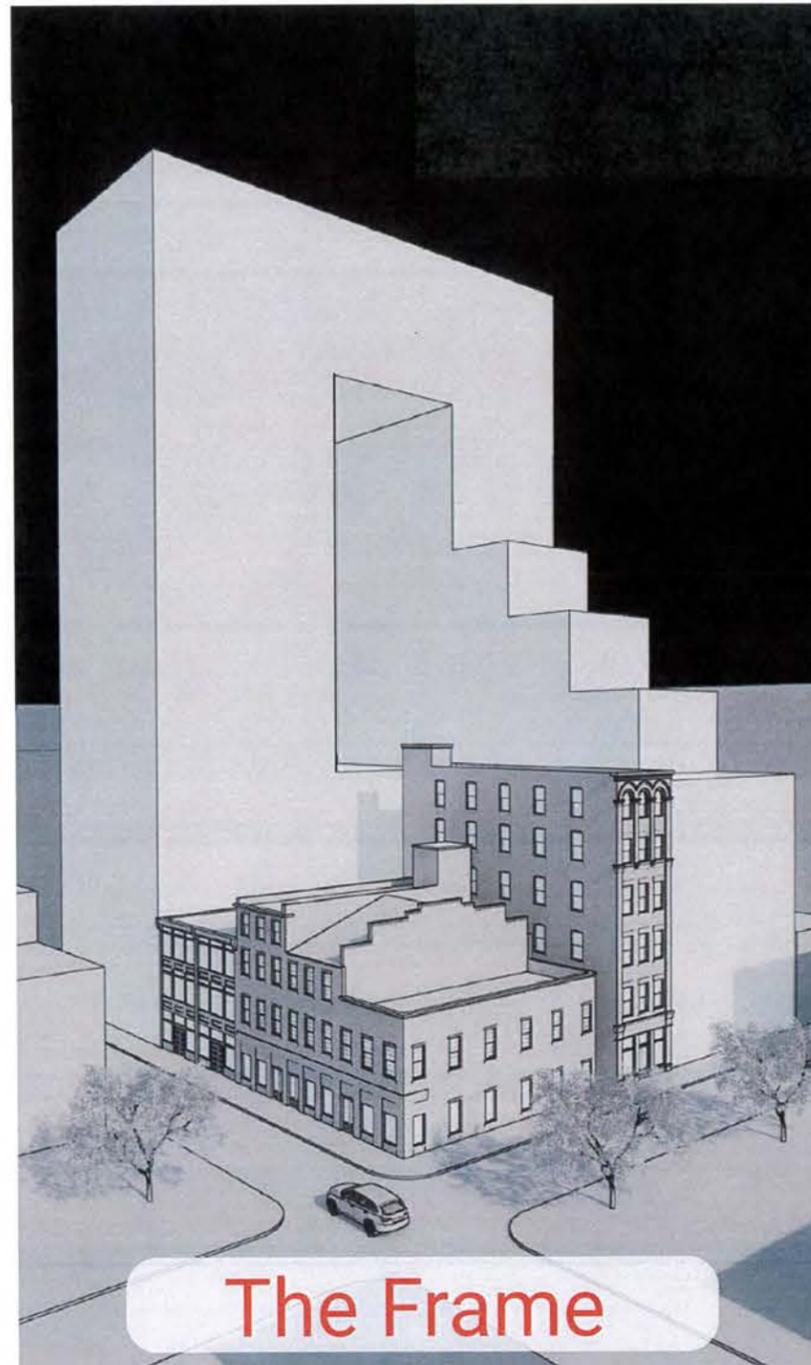
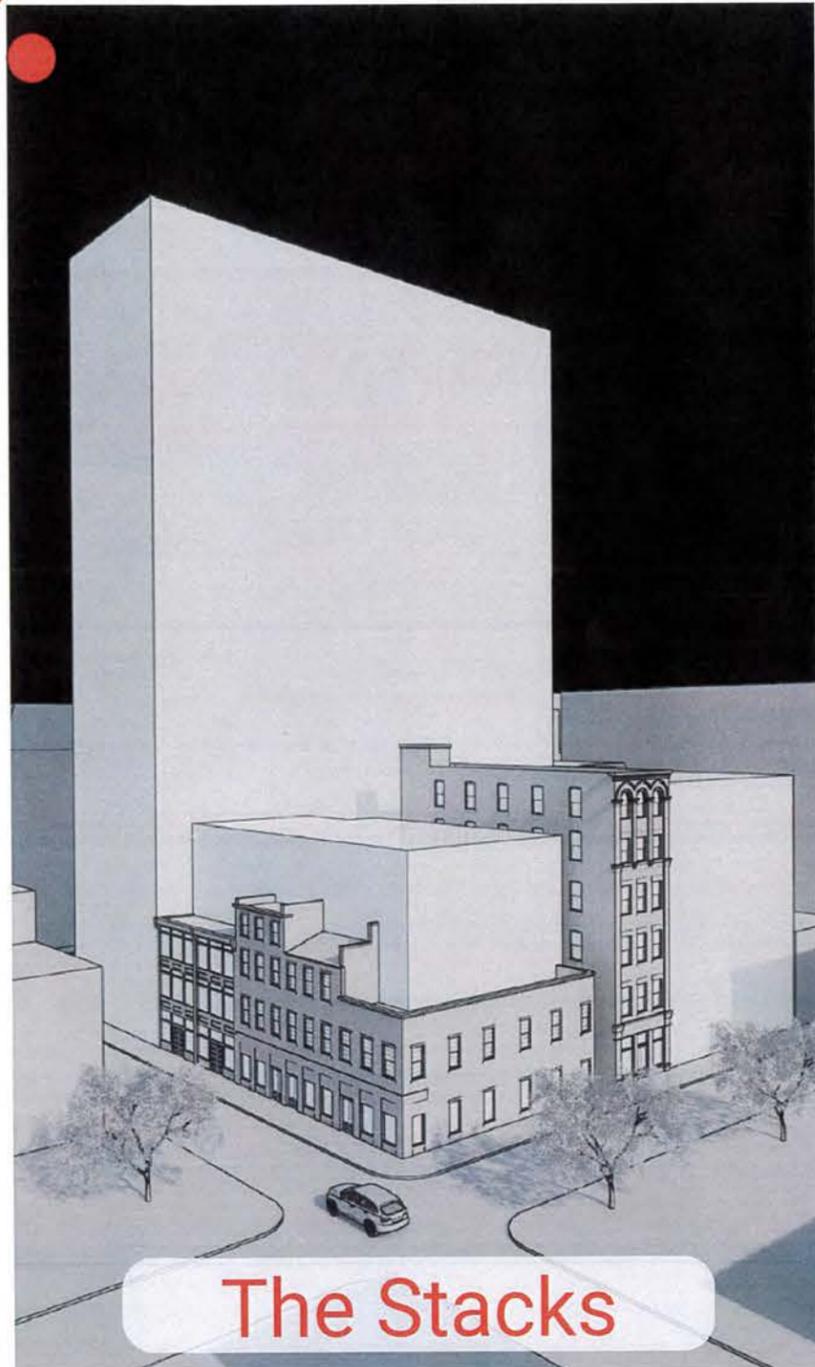
OPTIONS FOR DEVELOPMENT

DESIGN STRATEGIES



3

OPTIONS FOR DEVELOPMENT
DESIGN STRATEGIES



OPTIONS FOR DEVELOPMENT
DESIGN STRATEGIES

CONCEPTUAL COST ANALYSIS: OPTION 2

Market Street & First Avenue Financial Analysis

Option 2- Restore Existing Buildings and New Construction (Commercial & Residential)

Assumptions

Development Budget		
Sources		
Equity	\$	11,112,342
Debt	\$	25,928,797
GAP	\$	37,024,504
Total Sources	\$	74,065,642
Uses		
Hard Costs	\$	65,162,725
Miscellaneous Costs	\$	1,954,882
Design Fees	\$	3,038,272
Developer Fee	\$	3,909,764
Total Uses	\$	74,065,642

Total Construction Cost	\$	74,065,642
Average cost/Sqft.	\$	275
Useable Sqft breakdown		
Office		-
Commercial		17,352
Residential		146,896
Parking/Storage		12,775
Total Useable		177,023
Gross Building(s) Sqft		226,550
Net operating Income	\$	2,407,674
Value based on 6.5% CAP	\$	37,041,139

Revenue (Office Space)	N/A	Expenses (Office Space)	N/A
Revenue (Commercial)	\$ 20.83	Expenses (Commercial)	\$ 6.19
Revenue (Residential)	\$ 21.60	Expenses (Residential)	\$ 7.70
Yearly Increase (Revenues)	2.5%	Yearly Increase (Expenses)	3%
Parking Spot /month	\$ 150	Office Mgmt Fee	3%
Cap Rate	6.5%	Residential Mgmt Fee	7%
Equity	30%	Misc Costs	3%
Debt	70%	Developer Fee	6%

GAP \$ 37,024,504

Operating Budget		
Type	Total	
Commercial & Residential		
Total Revenue	\$	3,645,909
Total Expenses	\$	(1,238,235)
Net Operating Income	\$	2,407,674

Net Profit Projection				
	Year 2	Year 3	Year 4	Year 5
\$	2,459,995	\$ 2,513,472	\$ 2,568,129	\$ 2,623,990
\$	37,846,080	\$ 38,668,801	\$ 39,509,674	\$ 40,369,081

3

OPTIONS FOR DEVELOPMENT DESIGN STRATEGIES

PH&LF CASE STUDY: MARKET AND FIRST ADAPTIVE REUSE



 **FOOD & BEVERAGE**
6,543 SF

 **OFFICE / COMMERCIAL**
4,304 SF

 **RETAIL**
1,936 SF

 **LOFT SPACE**
13,604 SF

3

OPTIONS FOR DEVELOPMENT DESIGN STRATEGIES

PH&LF CASE STUDY: MARKET AND FIRST ADAPTIVE REUSE

Welcome
to
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-  **FOOD & BEVERAGE**
6,543 SF
-  **OFFICE / COMMERCIAL**
4,304 SF
-  **RETAIL**
1,936 SF
-  **LOFT SPACE**
13,604 SF

OPTIONS FOR DEVELOPMENT DESIGN STRATEGIES

CONCEPTUAL COST ANALYSIS: OPTION 3

Market Street & First Avenue Financial Analysis

Option 3- Restore Existing Buildings (Commercial & Residential)

Development Budget		
Sources		
Equity	\$	1,674,773
Debt	\$	3,907,803
GAP	\$	3,002,068
Total Sources	\$	8,584,644
Uses		
Hard Costs	\$	7,487,019
Miscellaneous Costs	\$	224,611
Design Fees	\$	423,794
Developer Fee	\$	449,221
Total Uses	\$	8,584,644

Operating Budget		
Type	Total	
Commercial & Residential		
Total Revenue	\$	493,246
Total Expenses	\$	(130,378)
Net Operating Income	\$	362,867

Total Construction Cost	\$	8,584,644
Average cost/Sqft.	\$	255
Useable Sqft breakdown		
Office		-
Commercial		4,577
Residential		13,256
Parking/Storage		-
Total Useable		17,833
Gross Building(s) Sqft		27,562
Net operating Income	\$	362,867
Value based on 6.5% CAP	\$	5,582,576

GAP \$ **3,002,068**

Net Profit Projection				
	Year 2	Year 3	Year 4	Year 5
\$	368,597	\$ 374,454	\$ 380,440	\$ 386,558
\$	5,670,730	\$ 5,760,833	\$ 5,852,927	\$ 5,947,053

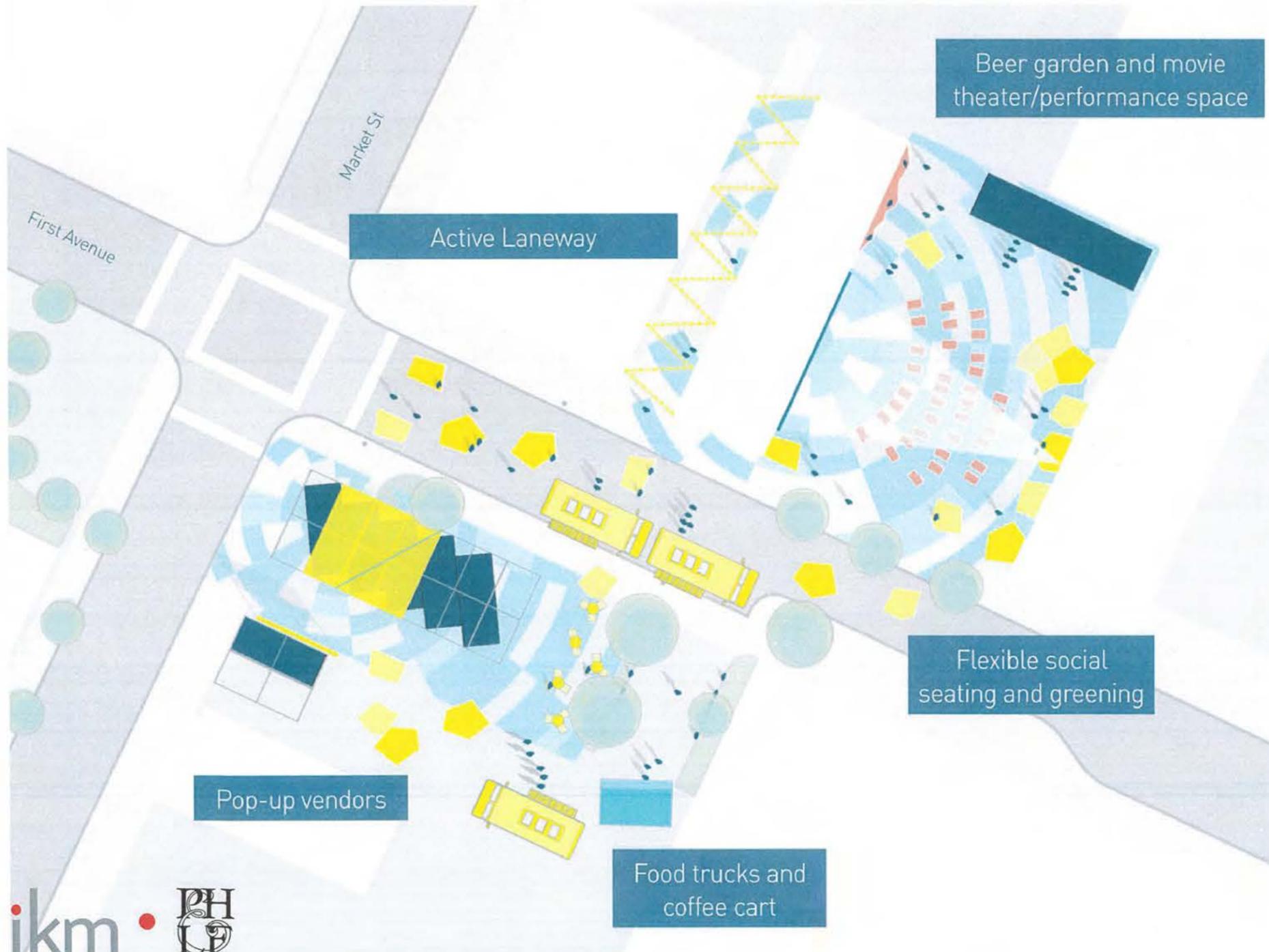
Assumptions

Revenue (Office Space)	N/A	Expenses (Office Space)	N/A
Revenue (Commercial)	\$ 20.83	Expenses (Commercial)	\$ 6.19
Revenue (Residential)	\$ 21.60	Expenses (Residential)	\$ 7.70
Yearly Increase (Revenues)	2.5%	Yearly Increase (Expenses)	3%
Parking Spot /month	\$ 150	Office Mgmt Fee	3%
Cap Rate	6.5%	Residential Mgmt Fee	7%
Equity	30%	Misc Costs	3%
Debt	70%	Developer Fee	6%

3

OPTIONS FOR DEVELOPMENT ALTERNATIVE DESIGN STRATEGIES

● DOWNTOWN PITTSBURGH: PUBLIC REALM ACTION PLAN



FIRSTSIDE POP-UP HUB: GEHL & DOWNTOWN PITTSBURGH PARTNERSHIP



FIRSTSIDE BEER GARDEN: GEHL & DOWNTOWN PITTSBURGH PARTNERSHIP

3

OPTIONS FOR DEVELOPMENT ALTERNATIVE DESIGN STRATEGIES

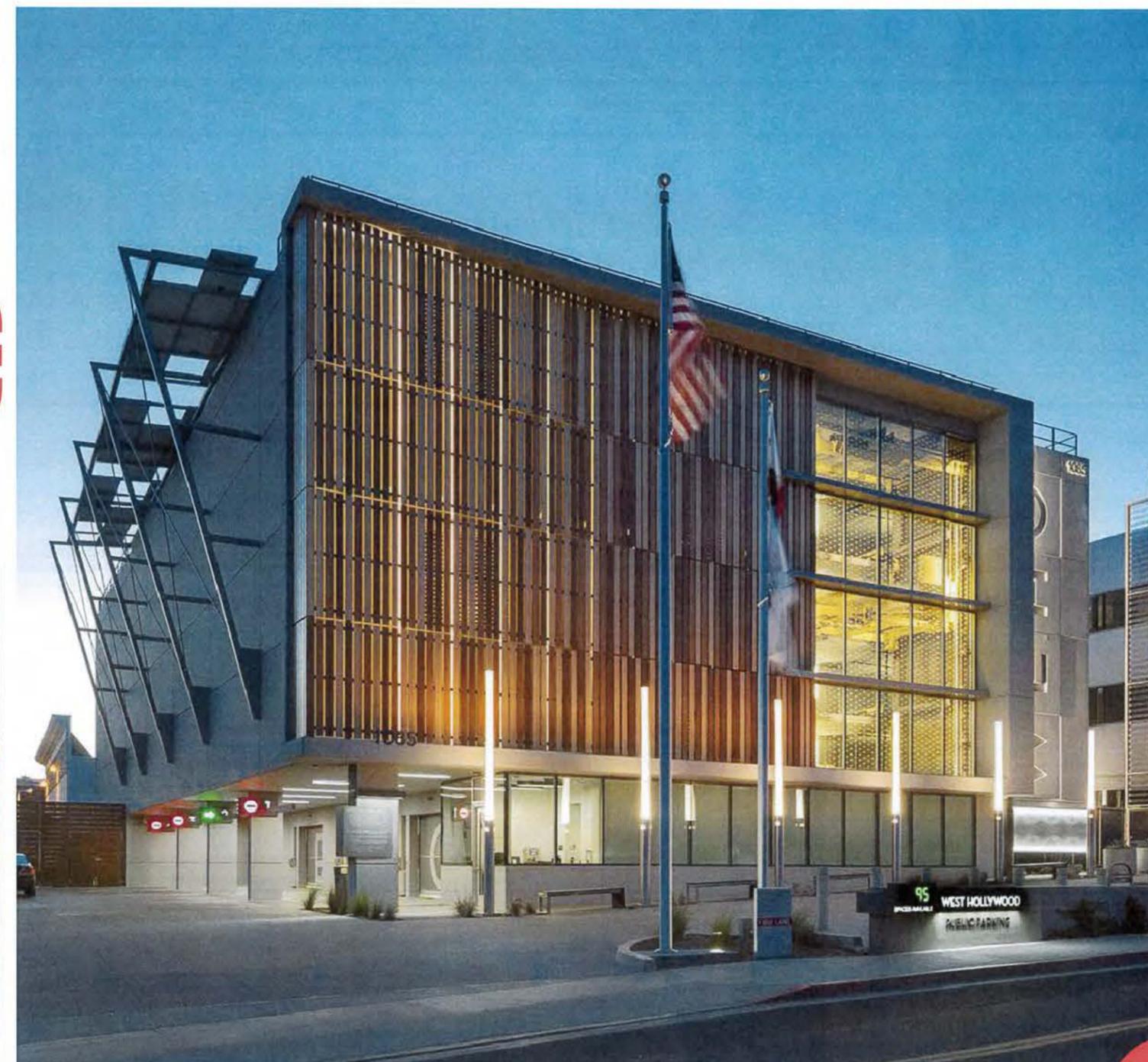
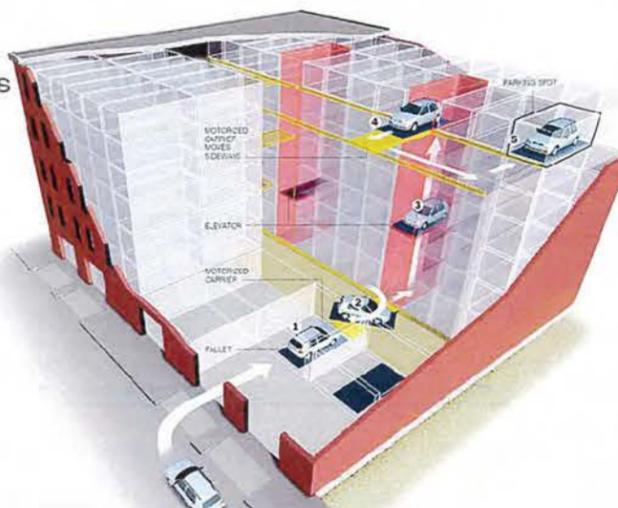
ROBOTIC PARKING

Configuration	Type	Unit Cost/St	Efficiency St/Stall	Building Cost per Stall	Automated Machinery Cost, \$/Stall	Total Cost per Stall
Stand-alone, Above Grade	Conventional	\$50	320	\$16,000	\$0	\$16,000
	Automated	\$45	225	\$10,125	\$16,000	\$26,125
Below building, above grade	Conventional	\$75	450	\$33,750	\$0	\$33,750
	Automated	\$65	225	\$14,625	\$16,000	\$30,625
Below building, below grade	Conventional	\$105	450	\$47,250	\$0	\$47,250
	Automated	\$85	225	\$19,125	\$16,000	\$35,125

WALKER PARKING CONSULTANTS

How Automated Parking Works

1. Drive into the garage and park on the pallet.
2. The computerized control system rotates the car and pallet 180 degrees so the car is facing forward when it is retrieved.
3. Lifts take the car and pallet to an upper level.
4. Car is transferred by another carrier that moves it laterally into an open space.
5. The car and its pallet are moved to the designated parking space.



APPENDIX

4

APPENDIX SUPPLEMENTAL MATERIAL

HISTORICAL SURVEY

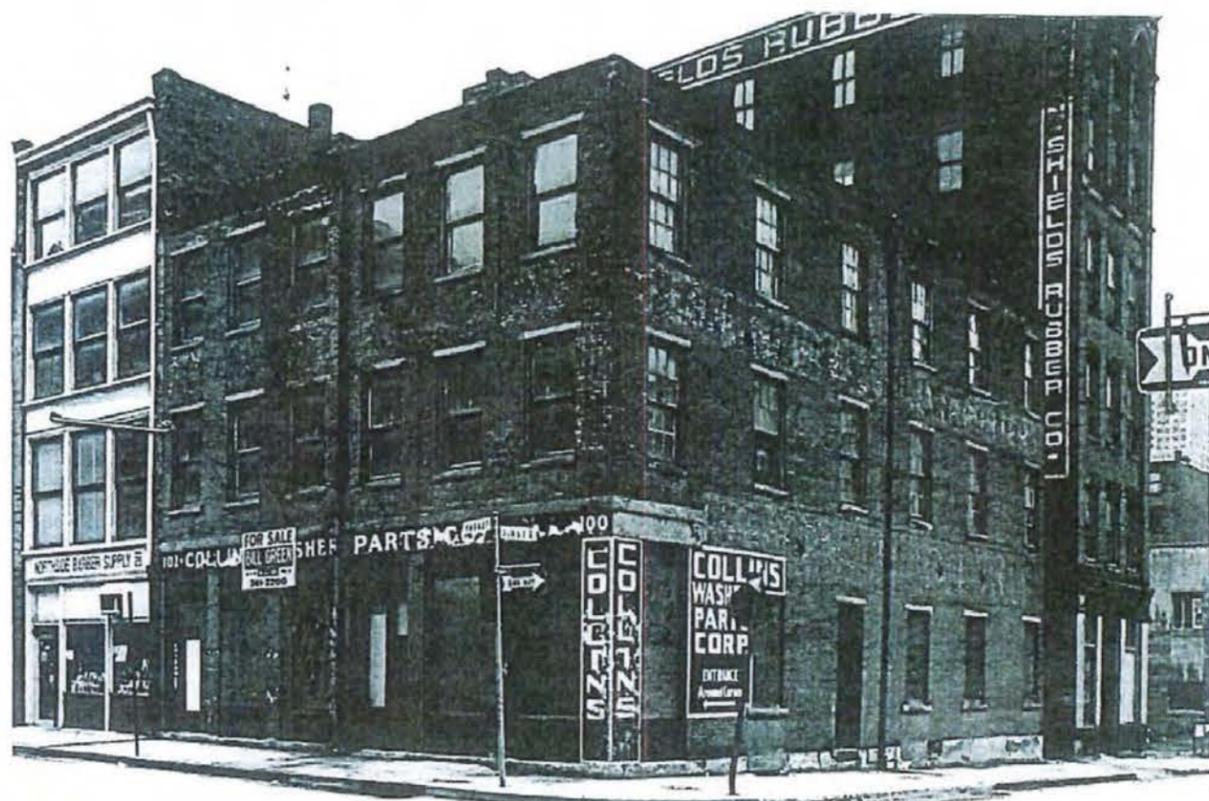


 IMAGE 1: 100-102 MARKET STREET

ARCHITECTURAL AND HISTORICAL DESCRIPTION

BUILT: 1860

These are very simple Vernacular Greek Revival brick commercial buildings with simple corbeled brick cornices. The side elevation of no. 100 still has some multi-paned windows. The shop fronts are almost unaltered. There is a low pitched roof. These structures represent a remarkable collection of early Pittsburgh commercial buildings.



PITTSBURGH 1923 - G.M. HOPKINS & CO.

APPENDIX SUPPLEMENTAL MATERIAL

HISTORICAL SURVEY

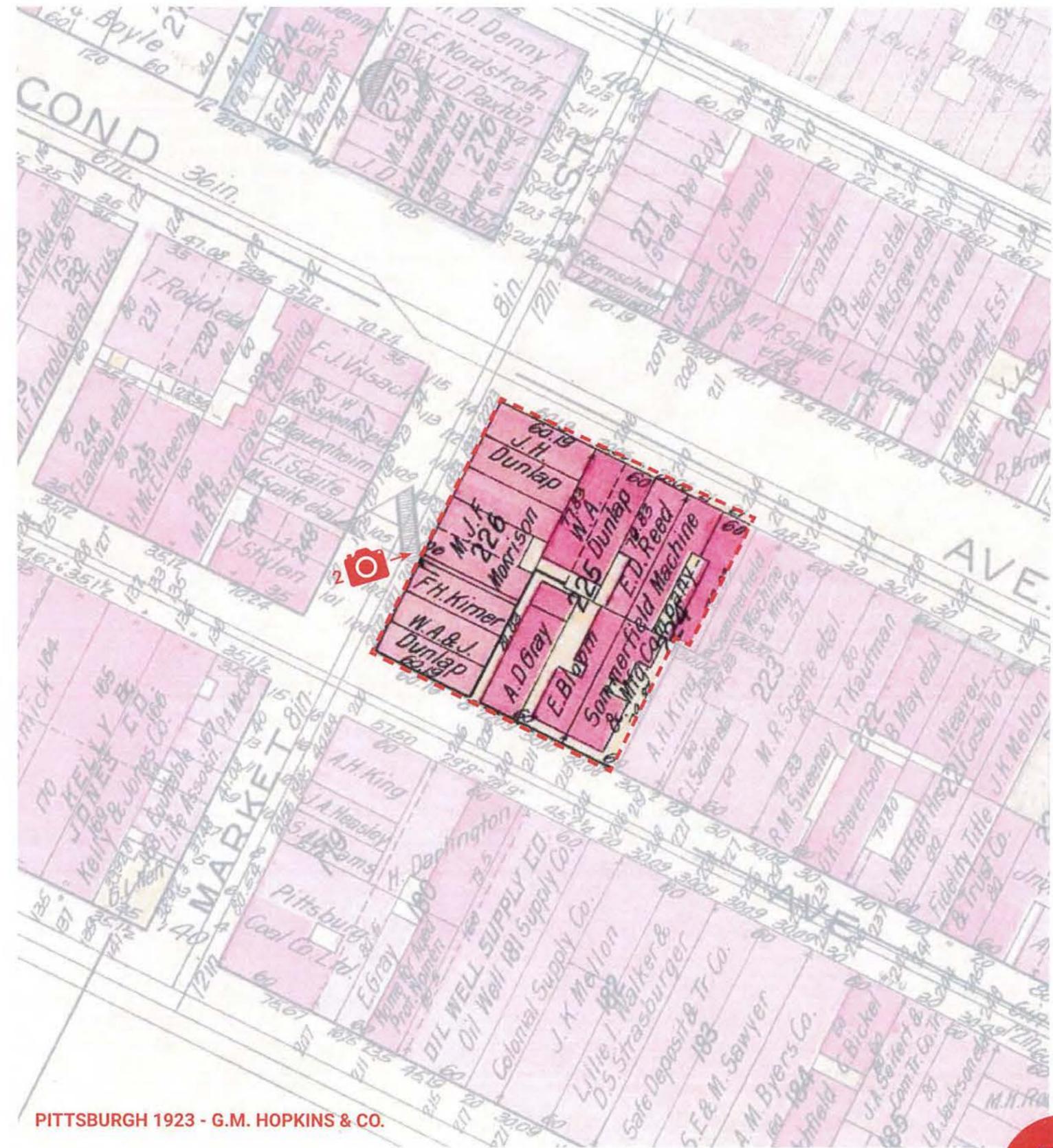


IMAGE 2: 106-110 MARKET STREET

ARCHITECTURAL AND HISTORICAL DESCRIPTION

BUILT: 1910

These three buildings are notable for the huge sash windows which fill the facade; they are almost Modern in their amplitude of fenestration. They would probably make very good "loft" apartments which would contribute notably to a revived block.



PITTSBURGH 1923 - G.M. HOPKINS & CO.

APPENDIX SUPPLEMENTAL MATERIAL

HISTORICAL SURVEY

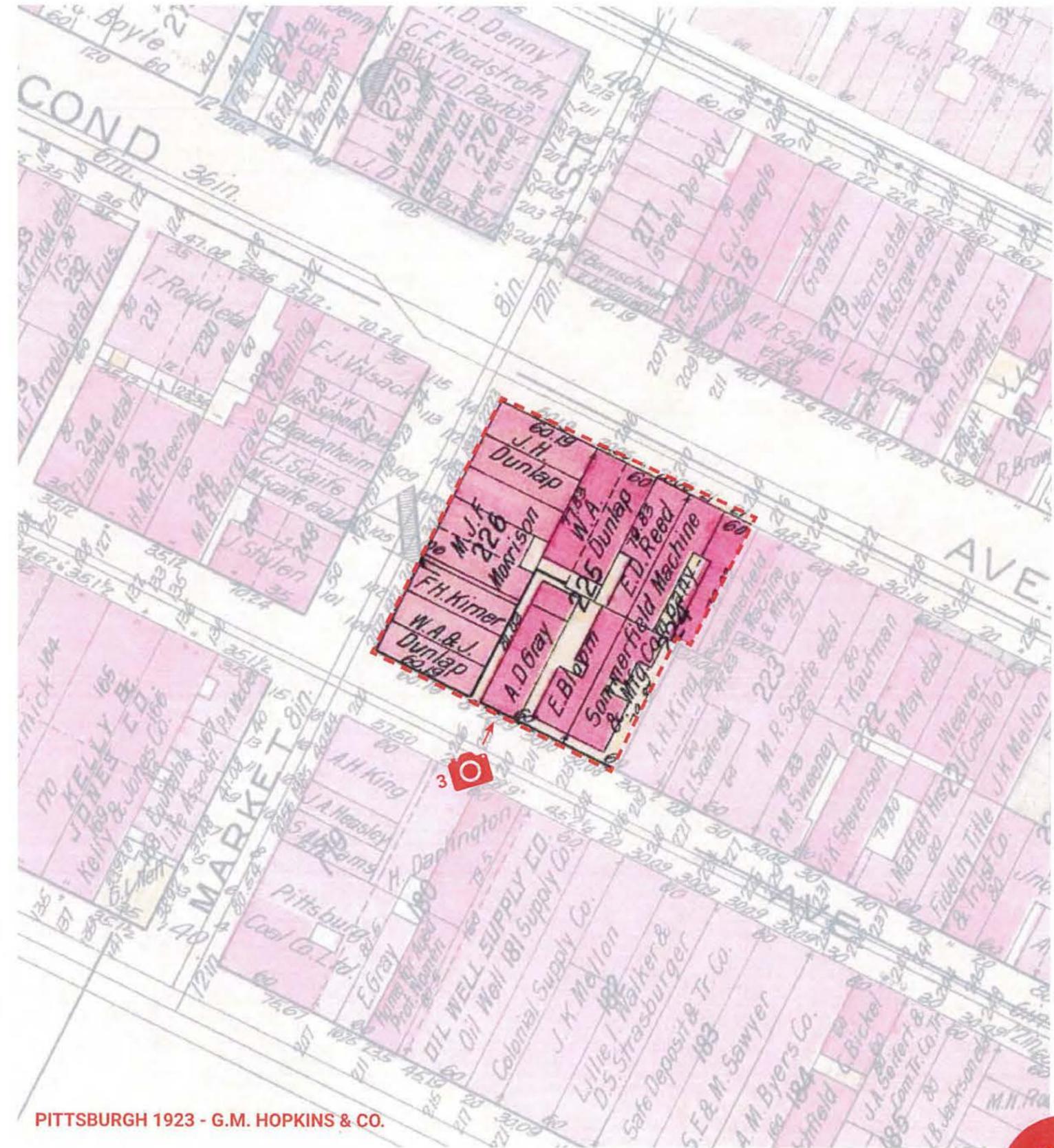


 IMAGE 3: 209 FIRST AVENUE

ARCHITECTURAL AND HISTORICAL DESCRIPTION

BUILT: 1872

A 6 story narrow 3 bay commercial building freestanding in an area of 2 and 3 story buildings. Roof: flat, stone cornice with modillions. Fifth and sixth stories: Roman arched arcade springing from brick pilaster strips with capitals echoing cornice, paneled frieze spandrels separate the floors. Second through fourth floors: 3 DHS (1/1) windows with stone lintels and sills. First floor: cornice with leaf molding; bay openings have transoms, single pane windows flank double doors. Water table, and stone foundation.



PITTSBURGH 1923 - G.M. HOPKINS & CO.

4

APPENDIX SUPPLEMENTAL MATERIAL

MARKET STREET: THEN & NOW



MARKET STREET: 1936

MARKET STREET: 2016

4

APPENDIX SUPPLEMENTAL MATERIAL

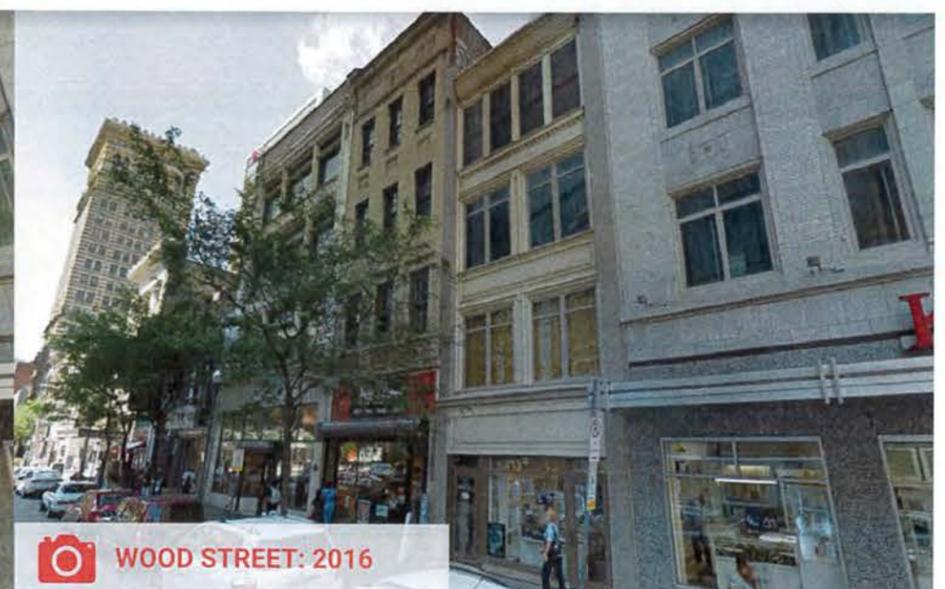
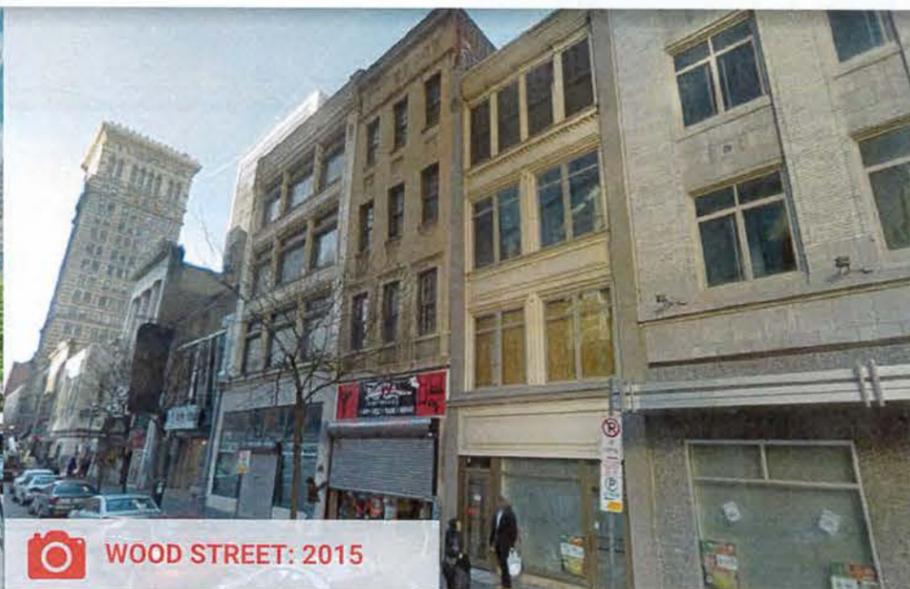
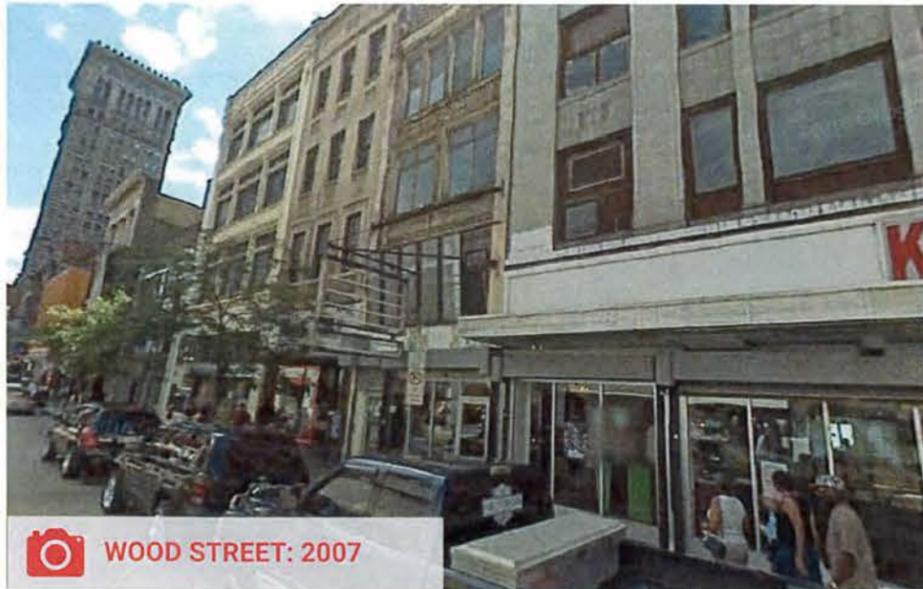
PH&LF CASE STUDY: 101-103 MARKET STREET



4

APPENDIX SUPPLEMENTAL MATERIAL

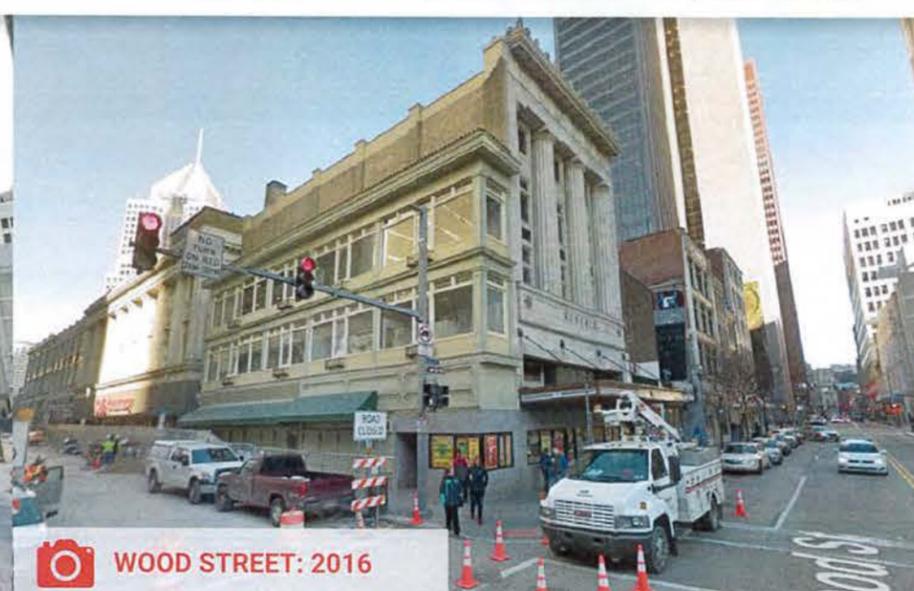
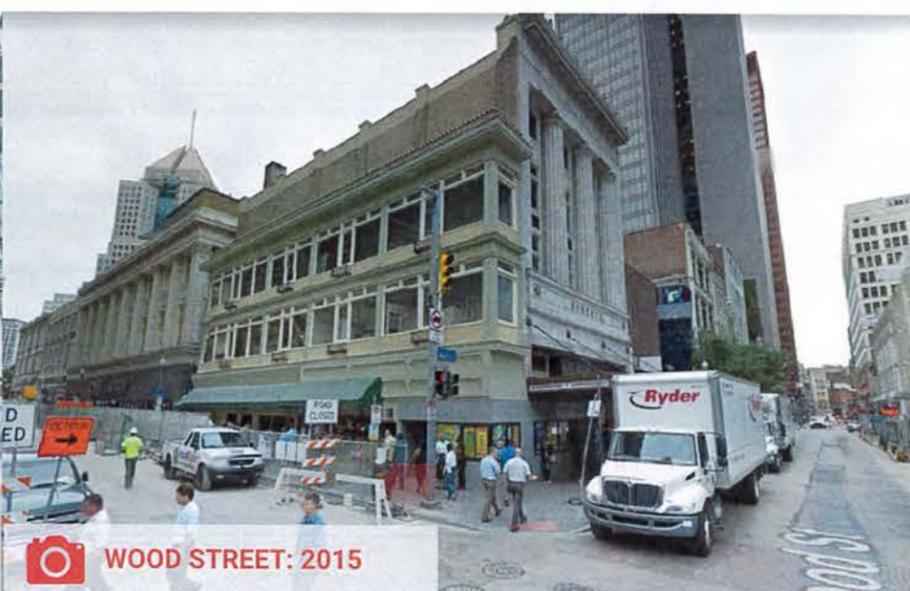
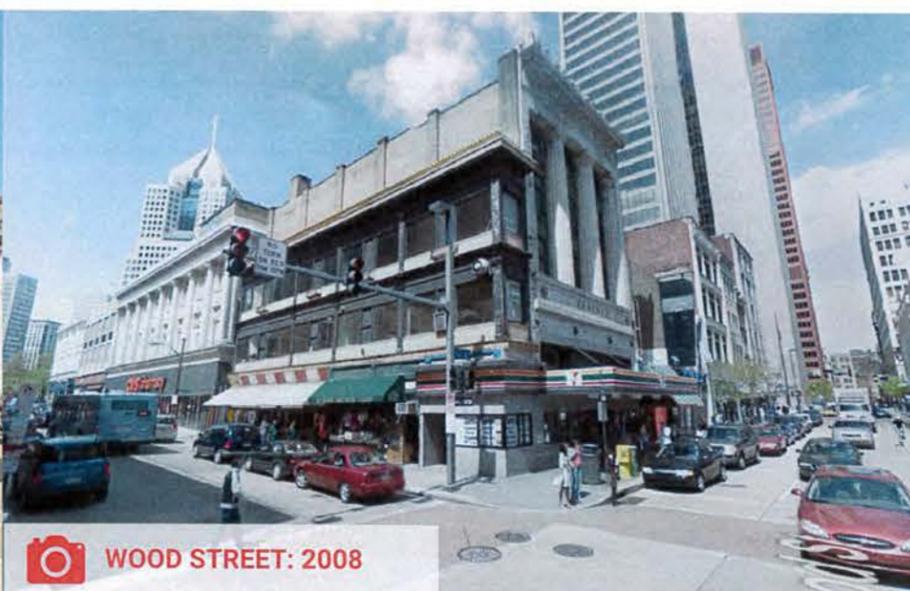
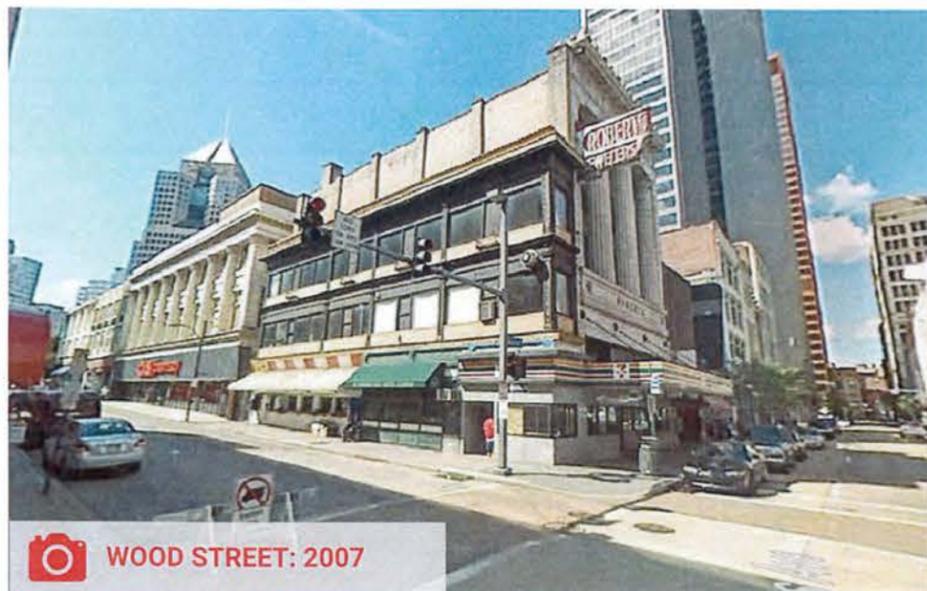
PH&LF CASE STUDY: 445 WOOD STREET



4

APPENDIX SUPPLEMENTAL MATERIAL

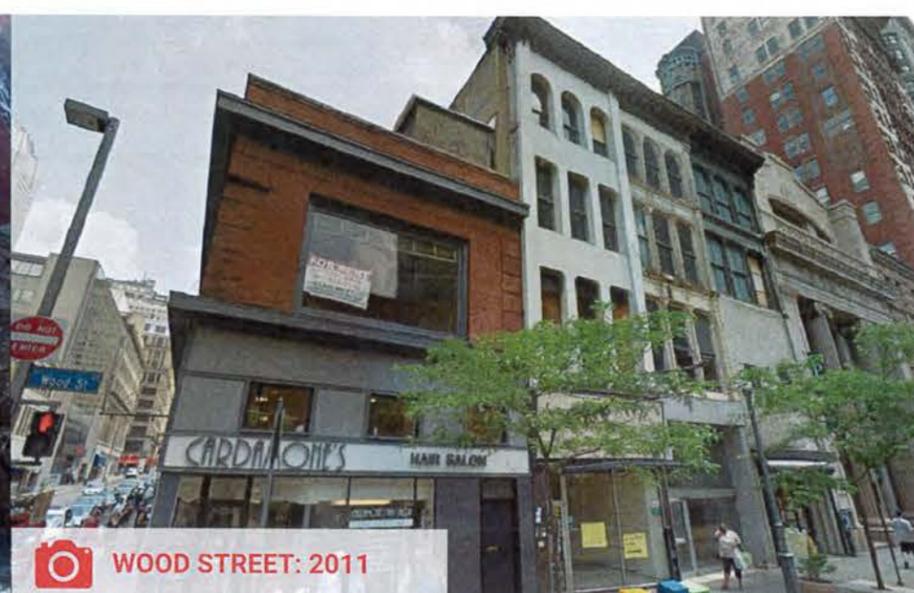
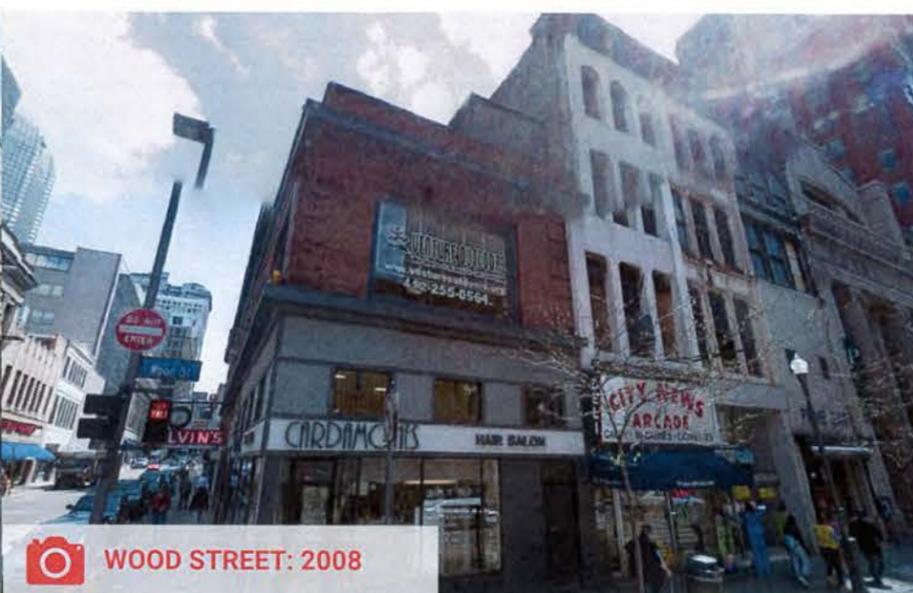
PH&LF CASE STUDY: 429 WOOD STREET



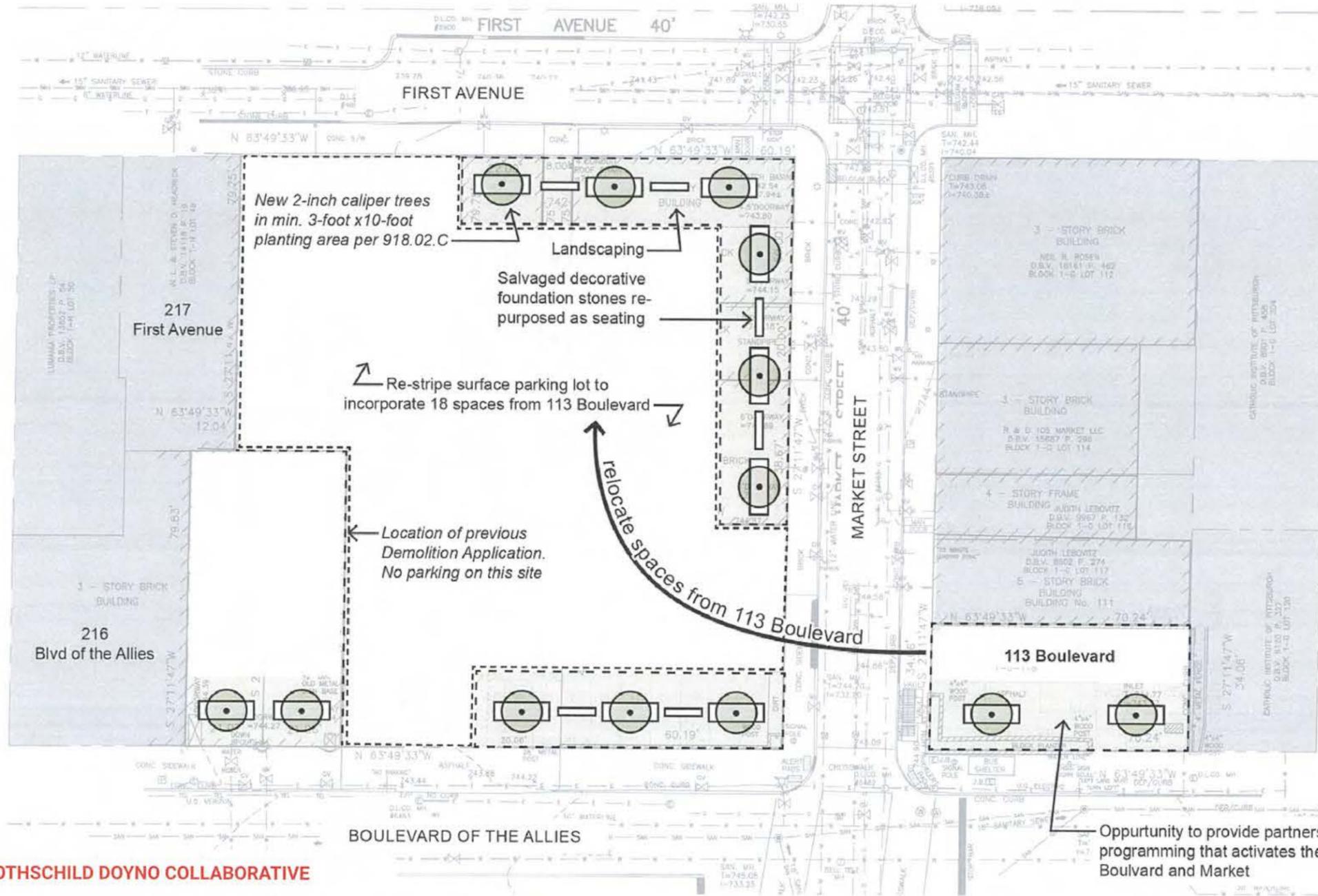
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APPENDIX SUPPLEMENTAL MATERIAL

PH&LF CASE STUDY: 418, 420, & 422 WOOD STREET



APPENDIX SUPPLEMENTAL MATERIAL



Relocating the existing parking spaces at 113 Boulevard to the Boulevard and Market Site allows for a civic opportunity to incorporate partnership programming on the 113 Boulevard site. No new added parking spaces are proposed

MAP LEGEND

Existing Buildings

INTERIM SITE PLAN - ROTHSCHILD DOYNO COLLABORATIVE





Pittsburgh

STATE OF THE REAL ESTATE MARKET



Prepared for:
Allegheny County
Bar Association

Agenda



Since We Last Met

Skyline

Inside the Central Business District

Tenant Behavior

What's Happening in the Strip?

The New Oakland

Pittsburgh Law Office Trends

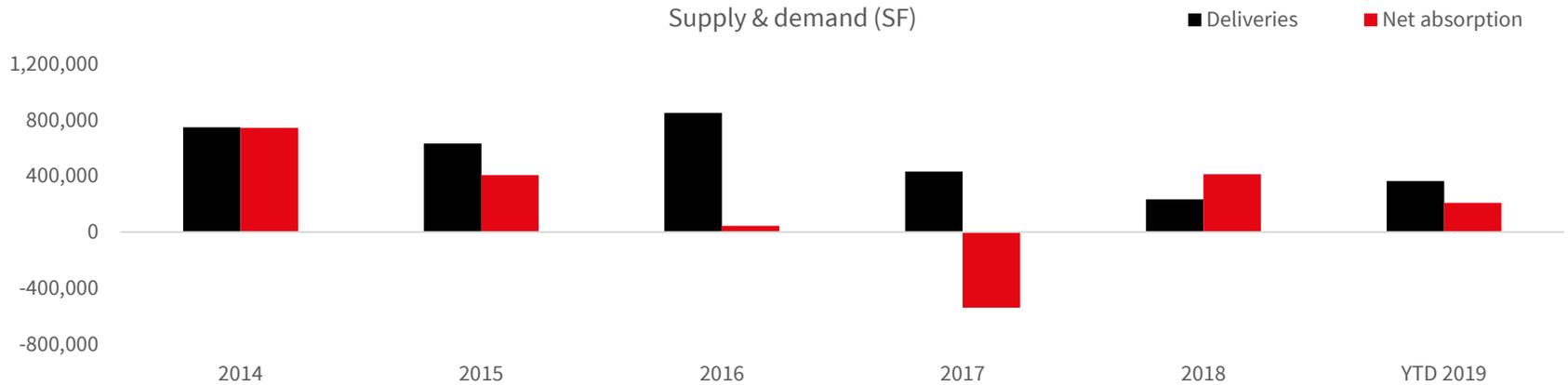
Looking Ahead

Since We Last Met

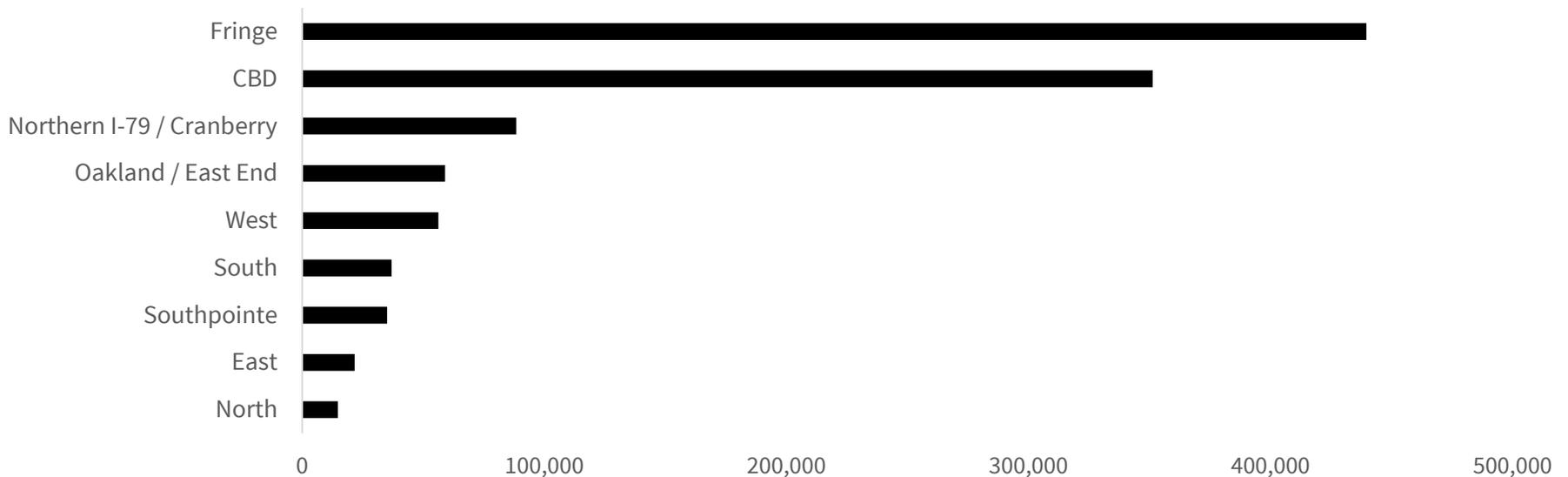
- ✓ Facebook signed **105k SF** lease @ District 15
- ✓ SAP Ariba moved into **122k SF** within the newly delivered SAP Center
- ✓ Wabtec became a Fortune 500 company (GE) & relocated HQ to **84k SF** @ 30 Isabella
- ✓ ConnectiveRx preleased **106k SF** @ Boardwalk development in West
- ✓ Uber's Autonomous Vehicle Unit received a collective \$1 billion from SoftBank, Toyota and Denso
- ✓ VW invested **\$2.6B** into Argo AI, taking Argo AI's valuation over **\$7B**
- ✓ **New Office Leasing / Relocations: 1.1M SF** (Total leasing activity: 2.2M SF)
 - Urban: **850k SF**
 - Suburban: **253k SF**

Since We Last Met

Market Shows Steady Performance



SF Leased per Submarket (New Leases & Expansions)

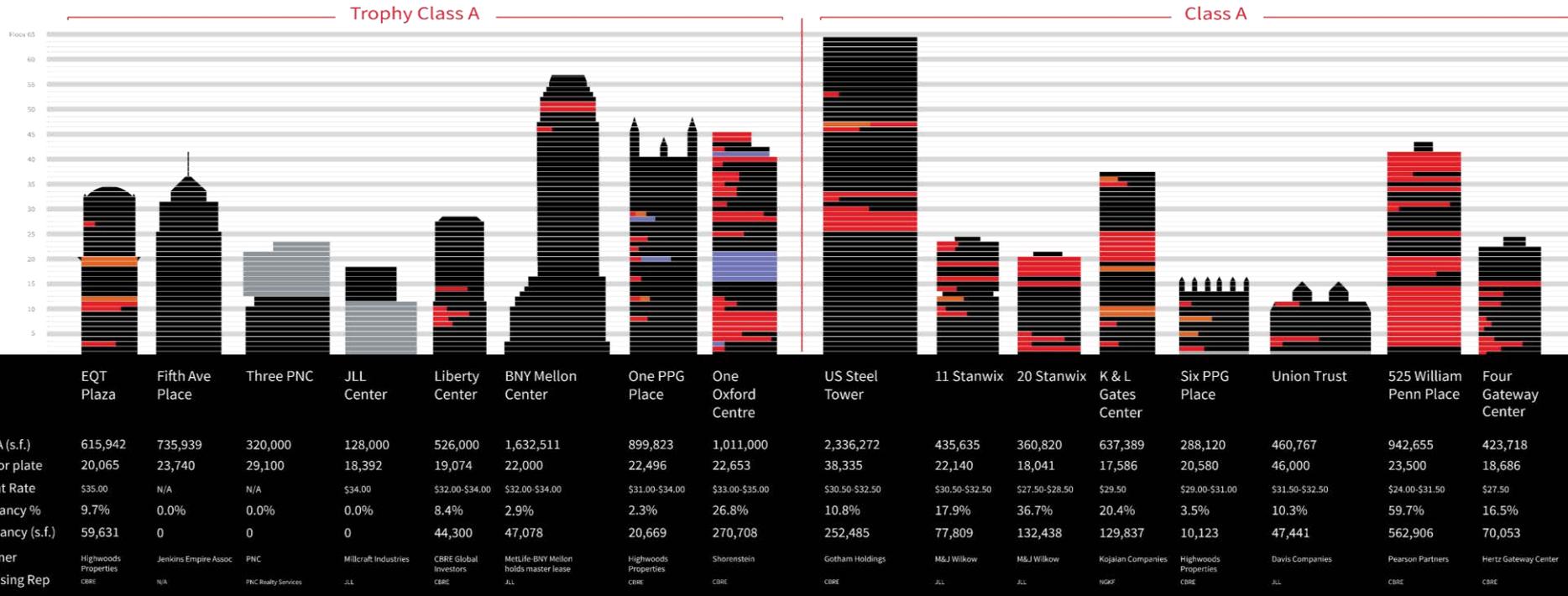


Pittsburgh Skyline

Trophy Class & Class A

9.6% Total Vacancy

23.6% Total Vacancy



Occupied / not available



Direct available space



Sublease



Confirmed future available



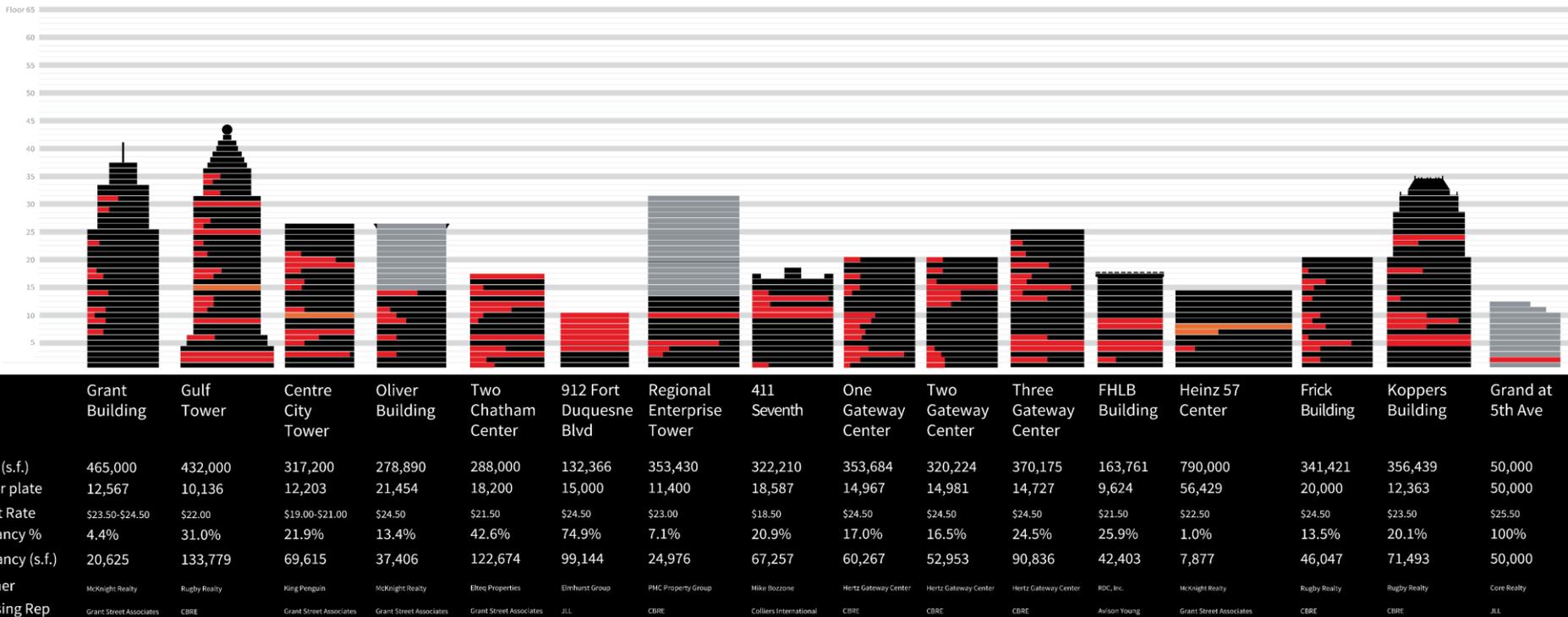
Other commercial use

Pittsburgh Skyline

Class B

20.3% Total Vacancy

Class B



Occupied / not available



Direct available space



Sublease



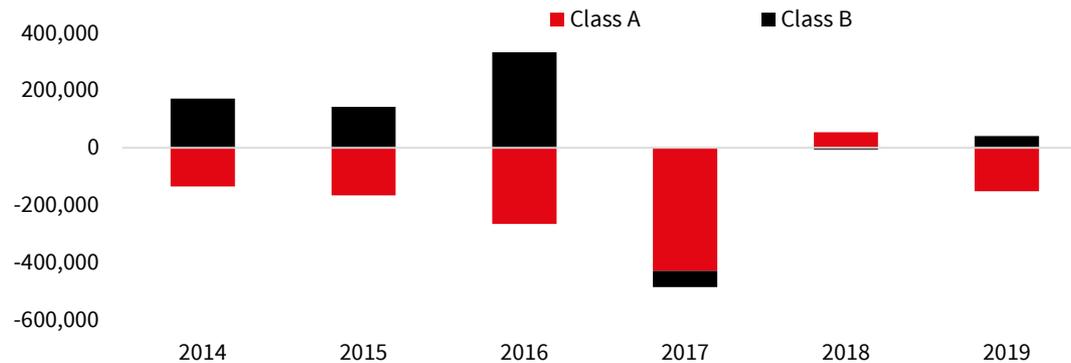
Confirmed future available



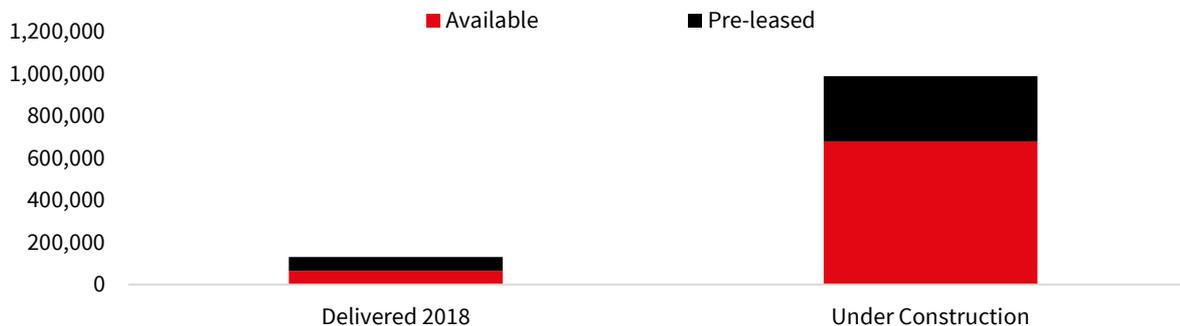
Other commercial use

Inside the Central Business District

CBD Class A absorption has experienced a slow-down due to corporate right-sizing



Urban construction in 2019 – 2020 is set to deliver more than 800k SF of Class A space to the Fringe, offering alternative options for CBD tenants



Typical CBD Class A lease terms FSG Equivalent



New development

15 years **2.0%**
Term Annual escalation

\$40.00 **\$65.00 / 4**
Base rent (PSF) TIA / Free Months



Renewal

5 years **2.0%**
Term Annual escalation

\$30.00 **\$25.00 / 0**
Base rent (PSF) TIA / Free Months



Relocation

10 years **2.0%**
Term Annual escalation

\$33.00 **\$60.00 / 4**
Base rent (PSF) TIA / Free Months



Sublease

5 years **2.0%**
Term Annual escalation

\$28.50 **\$0.00 / 0**
Base rent (PSF) TIA / Free Months

Inside the Central Business District

Renovations & Concessions

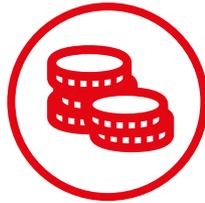
Total Office Renovation Projects Since 2016



31 Properties



15 CBD



\$650M+

*4.5M SF affected in the CBD by upgrades

Most popular updates

54% included new fitness facilities

50% included lobby updates

50% included retail & restaurants

2018 – 2019 CBD Averages



\$45.13 PSF

Tenant Improvement Allowance



84 months

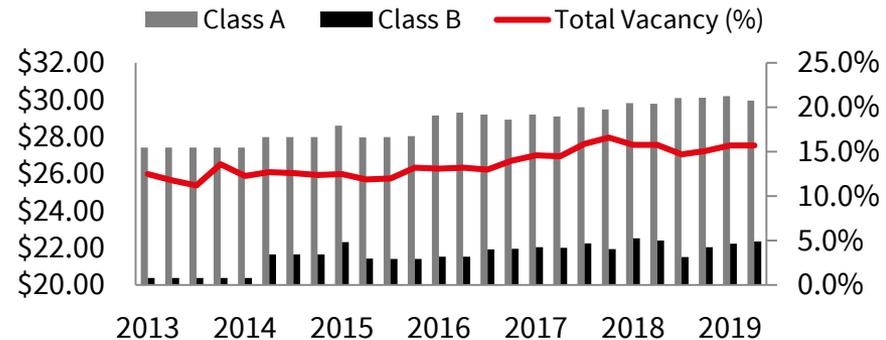
Term Length



3 months

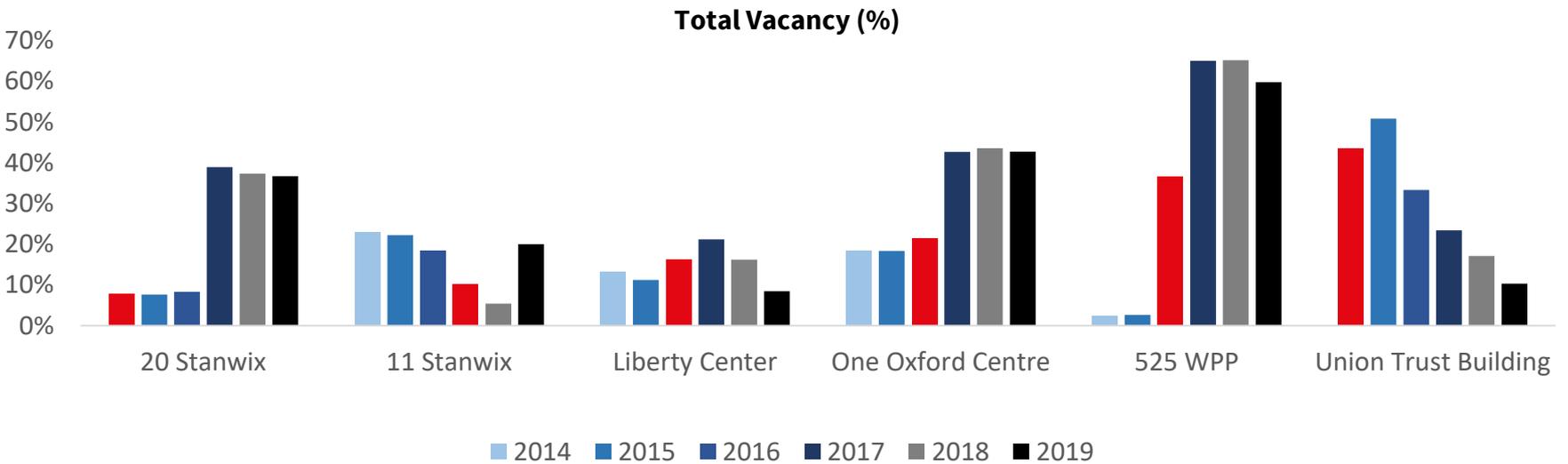
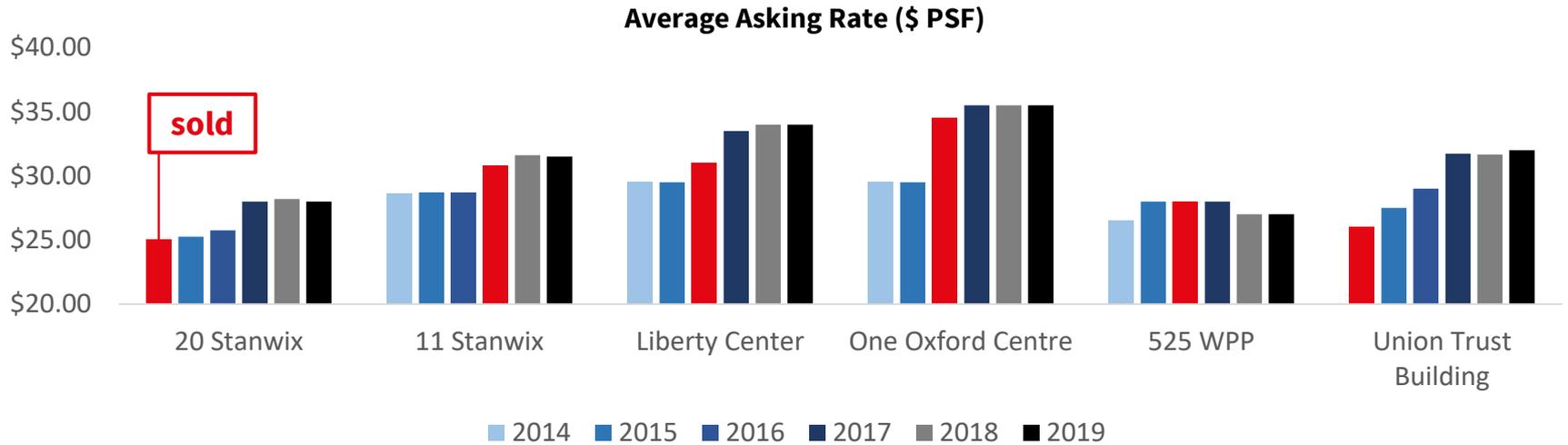
Abated Rent

CBD Average Asking Rates vs Total Vacancy



Inside the Central Business District

Post-Sale Building Performance



Tenant Behavior: Urban Migration

BOMBARDIER
90,000 SF
Fringe
One Waterfront Place

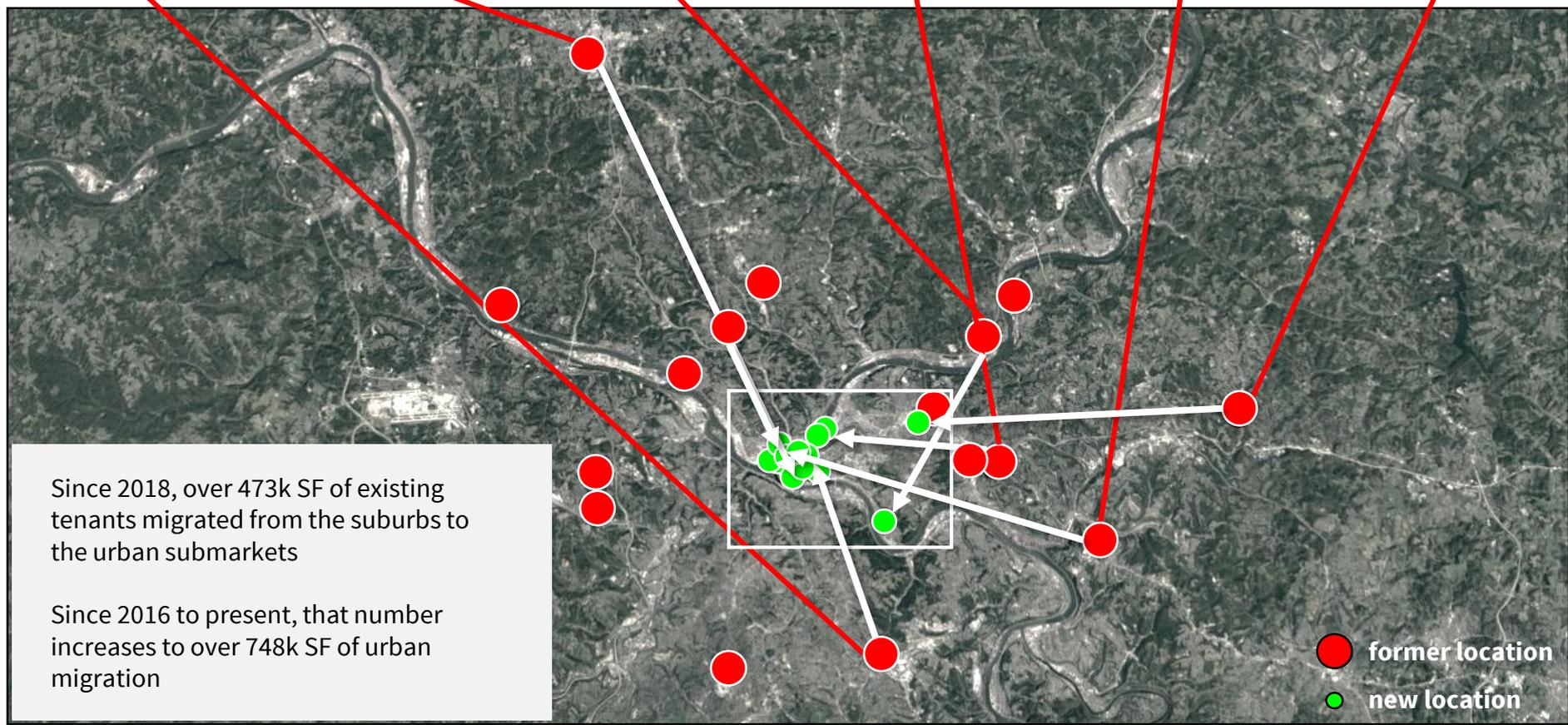

56,000 SF
CBD
K&L Gates Center

• APTIV •
60,000 SF (Flex)
Oakland / East End
Mill 19

Honeywell
25,000 SF
Fringe
3 Crossings


84,000 SF
Fringe
30 Isabella

PHILIPS RESPIRONICS
205,000 SF
Oakland / East End
Bakery Square 2.0



Since 2018, over 473k SF of existing tenants migrated from the suburbs to the urban submarkets

Since 2016 to present, that number increases to over 748k SF of urban migration

 former location
 new location

Tenant Behavior: New to Market

2016 - Present

1.1M SF of new-to-market leasing in market

745k SF of new-to-market leasing in urban submarkets

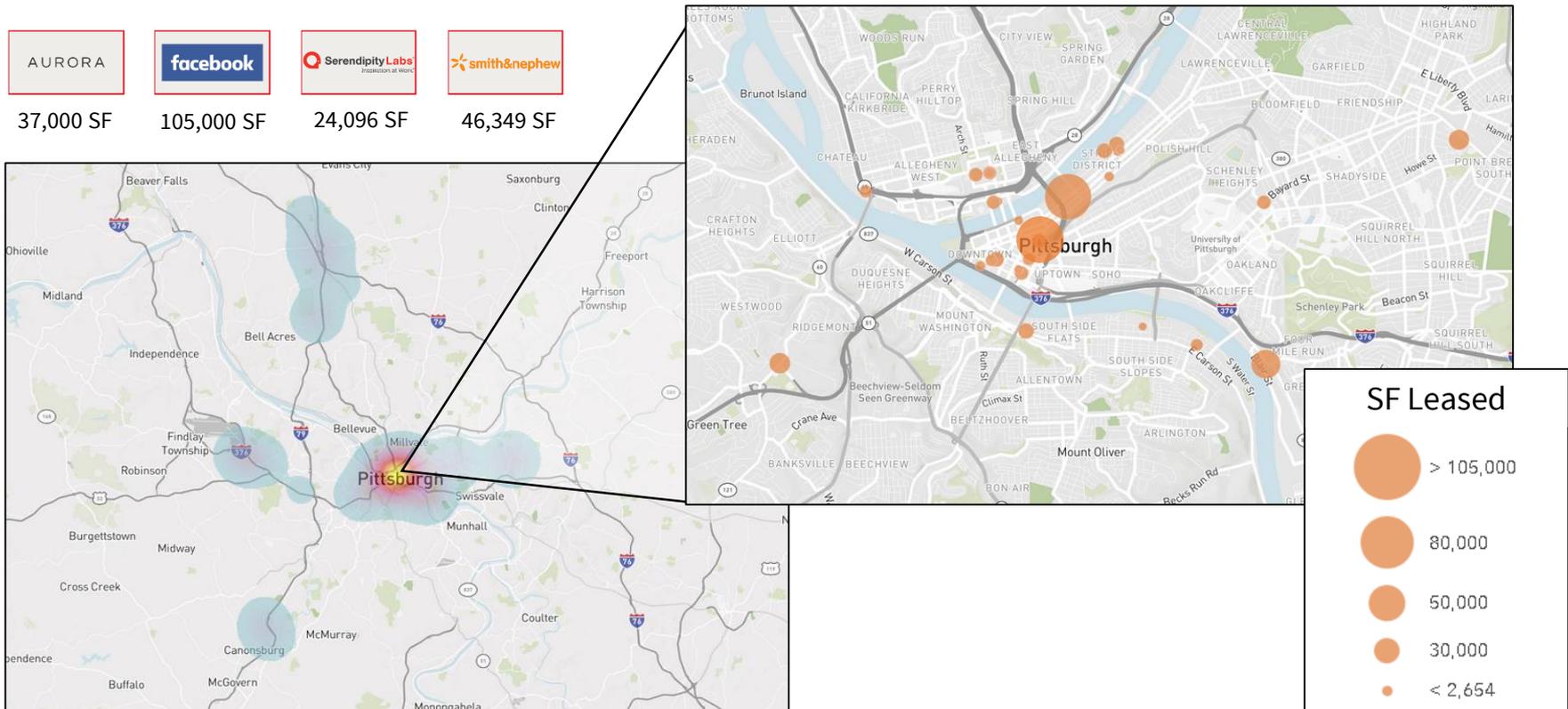
notable tenants



Uber's Growth since 2015 (not included)



100,000 SF → 600,000 SF+

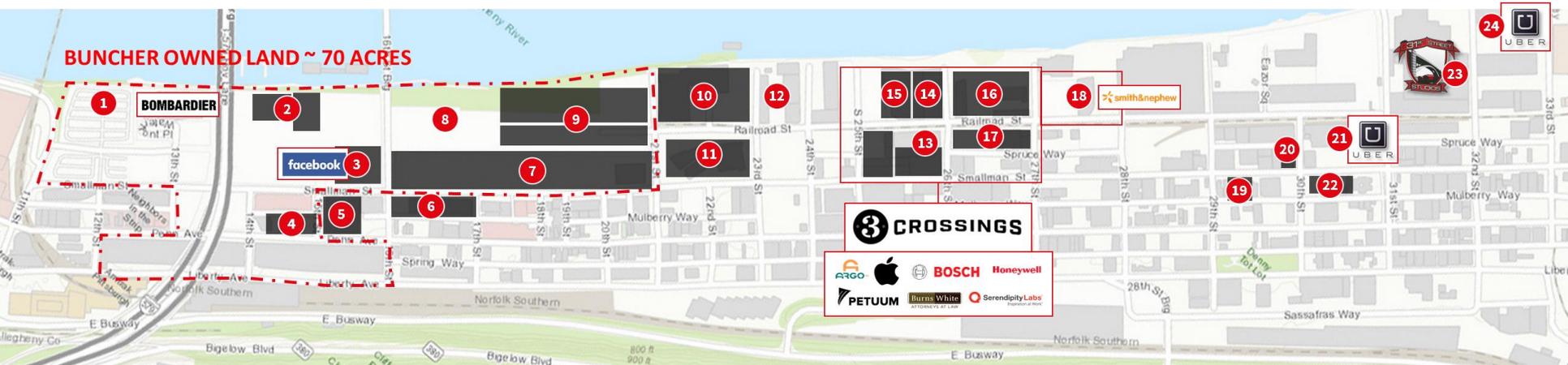


What's Happening in the Strip?

- 1 Two Waterfront Place**
BTS Option, Buncher owned, min 50k SF commitment needed
- 2 District Fifteen Beta**
Planned 215k SF Office; 15k SF R&D; 5k SF Retail w/ 580 Parking
- 3 District Fifteen**
105k SF Office development, leased by Facebook in Q3 2018
- 4 1627 on the Strip**
Luxury apartments by Red Rocks Group, w/ rooftop deck & fitness
- 5 Wholey's Redevelopment**
Planned 17-story office redevelopment of 500k SF in GT-B zoning
- 6 1600 Smallman**
120k SF office redevelopment currently underway
- 7 Produce Terminal**
150k SF retail redevelopment currently underway
- 8 Riverfront Landing – Phase Two**
443 apartment units to deliver May 2021 with 546 parking spaces

- 9 Riverfront Landing – Phase One**
364 multifamily units delivered
- 10 Consumers Produce**
79k SF; Midwood purchased Q2 2017; sale-leaseback for 5 years
- 11 21st Street & Smallman**
Rugby & Al. Neyer proposed 225k SF
- 12 Cork Factory**
297 loft style apartments, currently 9.4% available; \$1,450 - \$3,000
- 13 Offices at 3 Crossings**
1st phase office portion, 130k SF; tenants include Apple, Bosch, & Rycon
- 14 Riverfront East**
Burns White relocated from North Shore, 105k SF
- 15 Riverfront West**
Argo AI anchors 60k SF in the 130k SF building ; Serendipity 24k SF
- 16 The Yards**
300-unit apartments currently 11.3% available

- 17 The Hub**
590 space garage & 13.5k SF of first floor retail
- 18 3 Crossings Phase II**
Master plan for 560k SF more office across 6 additional buildings
- 19 2908 Smallman**
37k SF office redevelopment by Todd Palcic
- 20 2949 Smallman**
Redevelopment adding 2 floors to the 15k SF building
- 21 Crucible Building**
Uber occupies entire 110k SF building
- 22 3000 Smallman**
24k SF ground up speculative development
- 23 31st Street Studios**
Purchased in 2017 by North River Co., no confirmed plans
- 24 Uber Advanced Technology Center**
Uber's original 100k SF before expanding into Crucible building



UNDER CONSTRUCTION



Pittsburgh Athletic Association
102,000 SF
70% Preleased
Walnut Capital



The Murdoch Building
94,000 SF
100% Preleased
Murland Associates



3250 Craft Place
42,000 SF
100% Preleased
Walnut Capital



The Riviera
160,200 SF
11% Preleased
Burns & Scalo

PROPOSED CONSTRUCTION



Innovation Research Tower
285,000 SF
10-Stories
Walnut Capital



Carlow / Elmhurst Office
225,000 SF
TBD
Elmhurst Group



District Hall
250,000 SF
13-Stories
Wexford Science + Technology



Two Sterling Plaza
105,000 SF
6-Stories
Sterling Properties

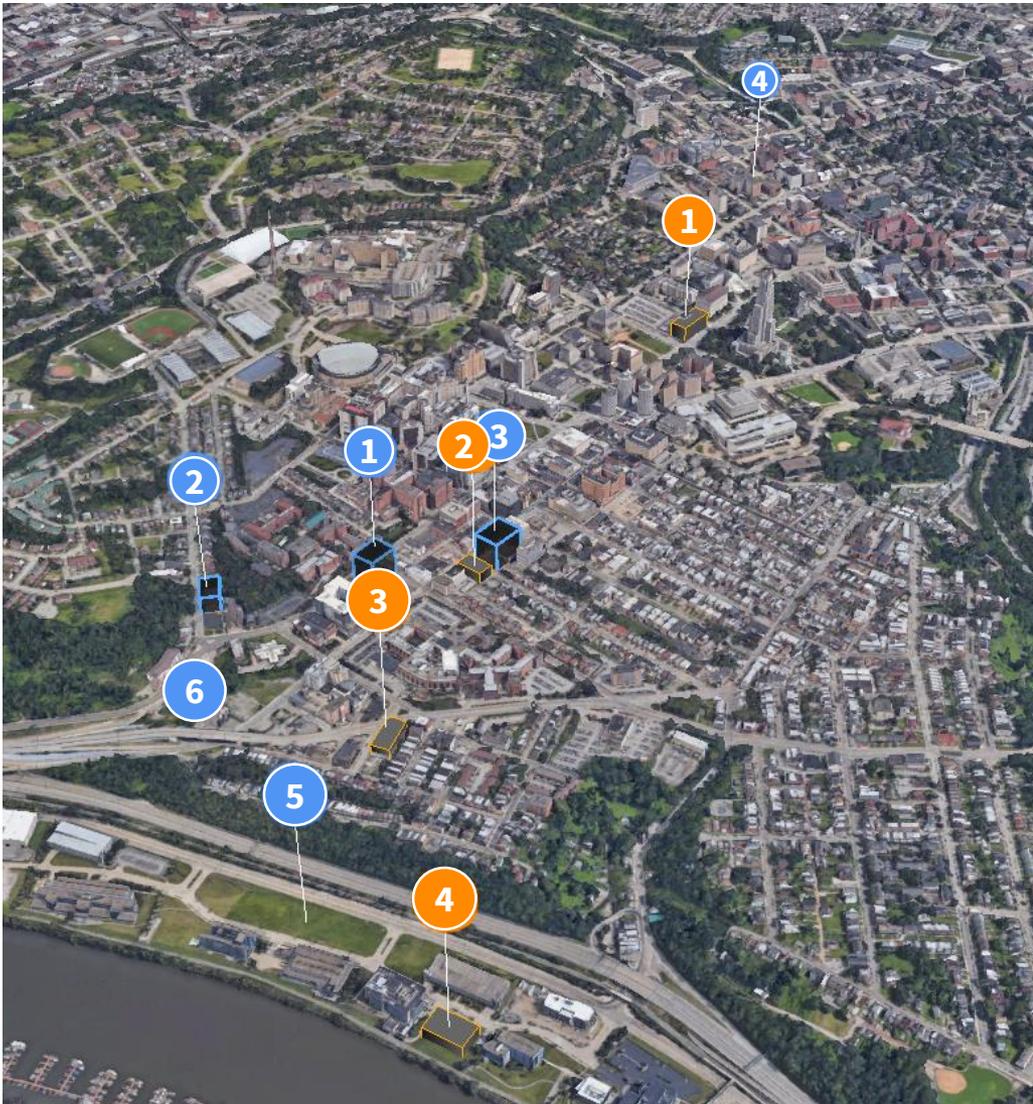


Elmhurst Innovation Center
156,000 SF (2x 78,000 SF Buildings)
TBD-Stories
Elmhurst Group



Portal Place
366,000 SF (2 Buildings Phase I)
8-Stories / 5-Stories
MR3

The New Oakland



Under Construction

- 1 Pittsburgh Athletic Association
- 2 The Murdoch Building
- 3 3250 Craft Place
- 4 The Riviera

Proposed Construction

- 1 Innovation Research Tower
- 2 Carlow / Elmhurst Office
- 3 District Hall
- 4 Two Sterling Plaza
- 5 Elmhurst Innovation Center
- 6 Portal Place

Pittsburgh Law Office Trends

Renovations pushing rates to new highs

CBD market leverage

Where are we
now?

Where are we
headed?

- CBD Class A asking rates are 10% higher than they were five years ago, & firms looking to sign a new lease will have to adjust to the sticker shock of these reset rents caused by a surge in tech leasing demand.
- Institutional investors are spending large sums on repositioning core assets, & firms can look forward to greater amenities & increasing concessions due to the competition among landlords to land prospective tenants.

- New deliveries over the next 18 months will increase availability & offer more choices to firms in the market as only 56% of the pipeline is preleased.
- Rent increases should continue, but stabilize over time, as overall market asking rates adjust to new Class A construction pricing priced at a 10-15% premium.



Tenant



Neutral



Neutral

SF & rent per attorney
per year:

Historic:
1,000 – 1,200 SF
~\$33,132 / year

Current:
800 – 950 SF
~\$26,355 / year

Target:
600 – 750 SF
~\$20,331 / year

* Annual full service real estate cost per attorney based on average CBD Class A pricing of \$30.12 PSF

Pittsburgh Law Office Trends

	FROM		TO
	 US Steel Tower		 The Grant Building
	 BNY Mellon Center		 Union Trust Building
	 EQT Plaza		 BNY Mellon Center
	 One PPG Place		 Liberty Center
	 Liberty Center		 Three Gateway Center
	 11 Stanwix Street		 Henry W. Oliver Building
	 Two PNC Plaza		 Henry W. Oliver Building
	 US Steel Tower		 Koppers Building
	 Four Northshore Center		 Three Crossings
	 EQT Plaza		 JLL Center
	 US Steel Tower		 Union Trust Building
	 One PPG Place		 Union Trust Building
	 One Oxford Centre		 Six PPG Place
	 525 William Penn Place		 Henry W. Oliver Building
	 One Oxford Centre		 Union Trust Building
	 BNY Mellon Center		 Union Trust Building
	 Fifth Avenue Place		 Liberty Center

- ✓ **Tech giants will continue to grow, as shown by Microsoft**
 - Other tech giants will grow, as new ones will enter the market, due to success of existing tenants
 - Oakland will be beneficiary of the demand, as long as new development continues

- ✓ **Oakland will look completely different**
 - Beyond the office development and demand, UPMC Heart & Transplant Hospital will attract more population to the area
 - UPMC Heart & Transplant Center will be a 900k SF, 18-story tower beside Presby
 - PITT's master plan is a long-term strategy to renovate and develop buildings on campus

- ✓ **CBD will continue to lag**
 - Vacancy will be fought by new-to-market coworking, added building amenities consuming inventory and growth of existing tenants
 - Attracting new tenants into downtown will continue to be a challenge while new development is occurring in higher desired neighborhoods
 - Concessions will be pressured towards record highs, as space competes with built-out flexible office options

- ✓ **Urban Migration**
 - Urban migration will continue, look towards large tenants with owned locations in the suburbs
 - Low population growth numbers, especially in suburbs, will be driving force for the migration
 - Driving forces are growth in the tech sector's urban demand and continuous low unemployment



Thank you

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Pittsburgh Overview

COVID-19 IMPACT ON OFFICE

Presented by

Dan Adamski | Senior Managing Director

Nick Francic | Managing Director

Tobiah Bilski | Director of Research

June 17, 2020

Contents



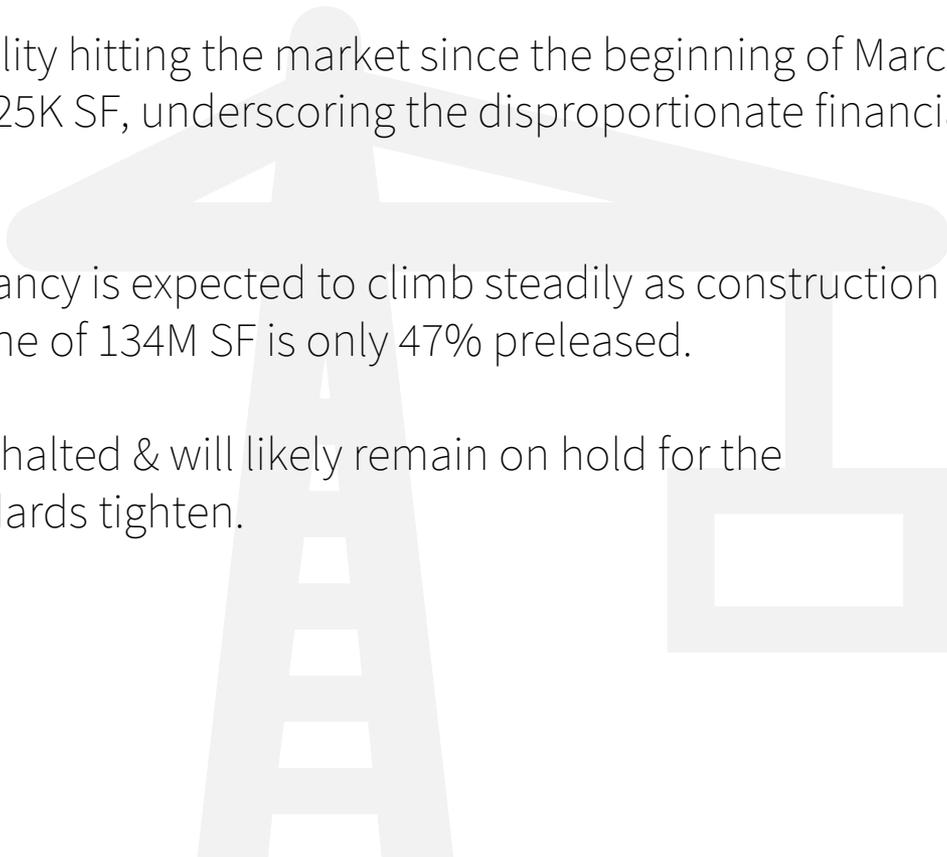
- 1 COVID-19 impact on U.S. office market
- 2 Pittsburgh overview
- 3 Working remotely
- 4 (Re)entry



A grayscale photograph of an office building entrance. Several people in business attire are walking on a tiled sidewalk. One man in the foreground is wearing a face mask and headphones while looking at a smartphone. Another man in the background is also looking at a smartphone. A woman with a backpack is walking towards the left. The building has large glass windows and a modern architectural style.

COVID-19
Impact on U.S. office market

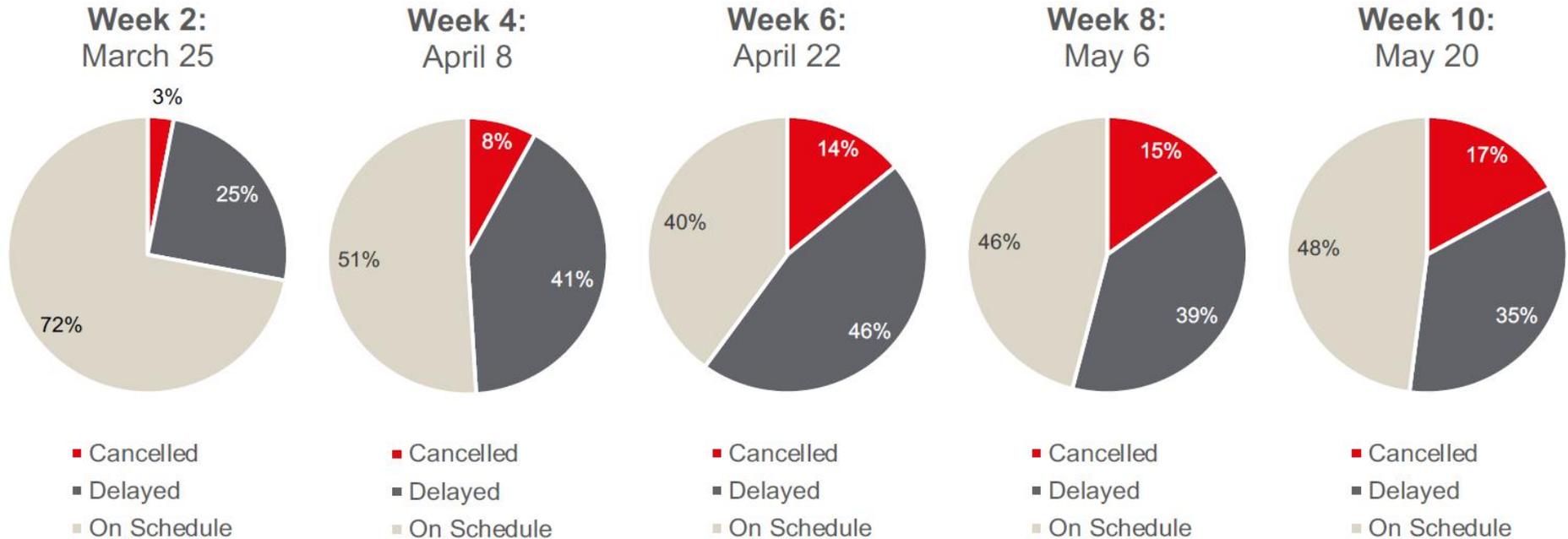
COVID-19 impact on U.S. office market supply

- Sublease space is trending upward as companies affected by COVID attempt to shed space & right-size their footprint to conserve capital. Sublease availability surpassed 100M SF for the first time in May.
 - Of the 14.7M SF of new sublease availability hitting the market since the beginning of March, nearly half is within blocks smaller than 25K SF, underscoring the disproportionate financial distress being felt by small businesses.
 - In addition to rising sublease space, vacancy is expected to climb steadily as construction projects deliver; the development pipeline of 134M SF is only 47% preleased.
 - Most speculative groundbreakings have halted & will likely remain on hold for the foreseeable future as underwriting standards tighten.
- 
- A large, faint, light gray watermark of a scale of justice is centered in the background of the slide. The scale has a horizontal beam with a central fulcrum, and two pans hanging from it. The base of the scale is a simple rectangular block.

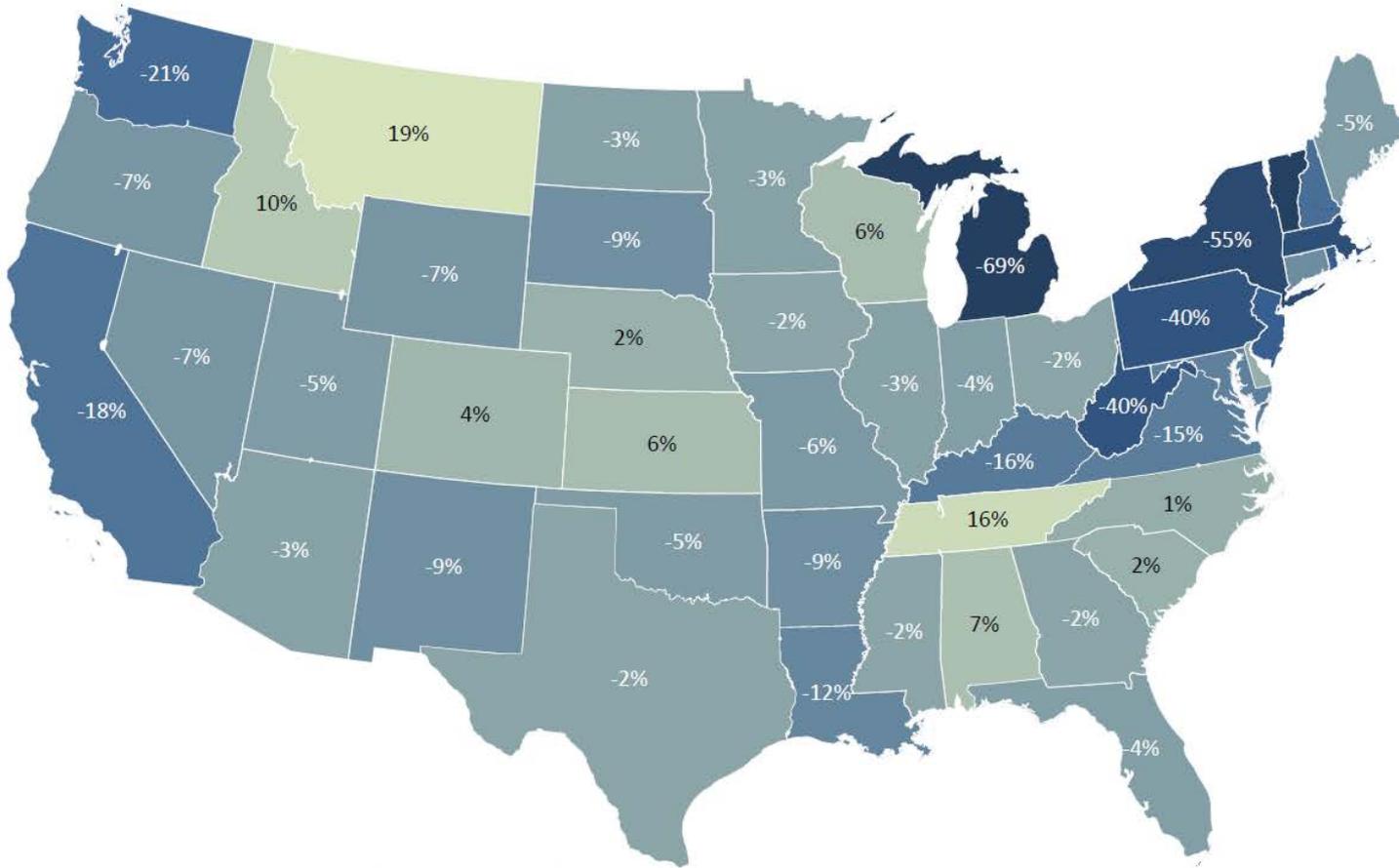
COVID-19 impact on U.S. office market supply



As stay-at-home orders swept the country, construction projects were delayed...



COVID-19 impact on U.S. office market supply

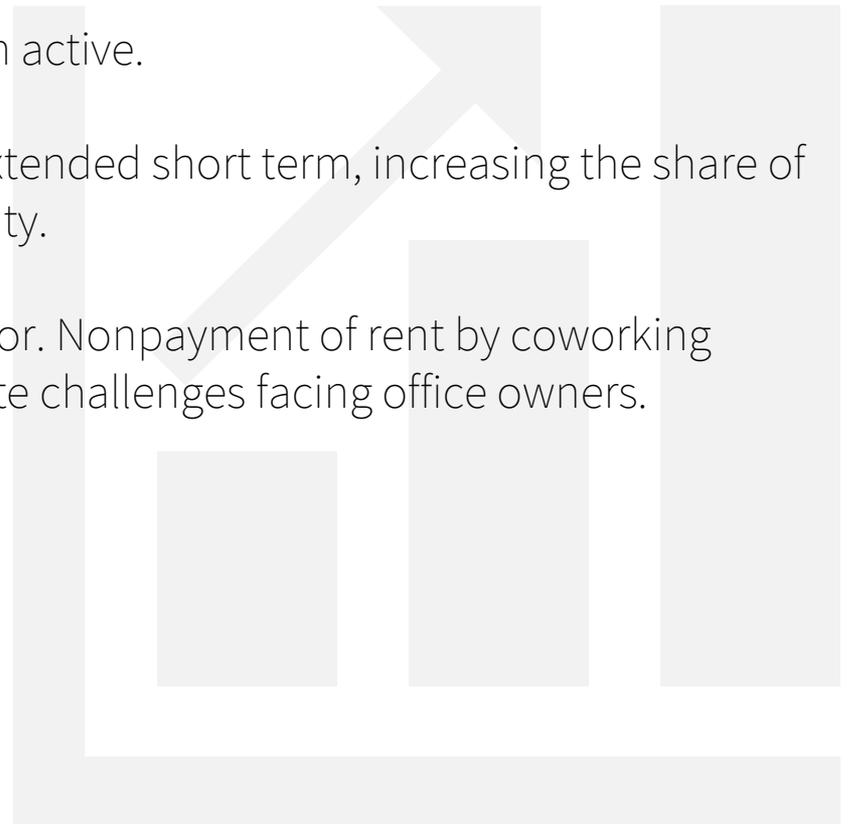


Map values represent percentage change in construction hours worked from the **week of March 1 to the week April 27**.

State	% Change
Vermont	-68%
New Hampshire	-20%
Massachusetts	-48%
Rhode Island	-28%
Connecticut	-10%
New Jersey	-26%
Delaware	1%
Maryland	-14%

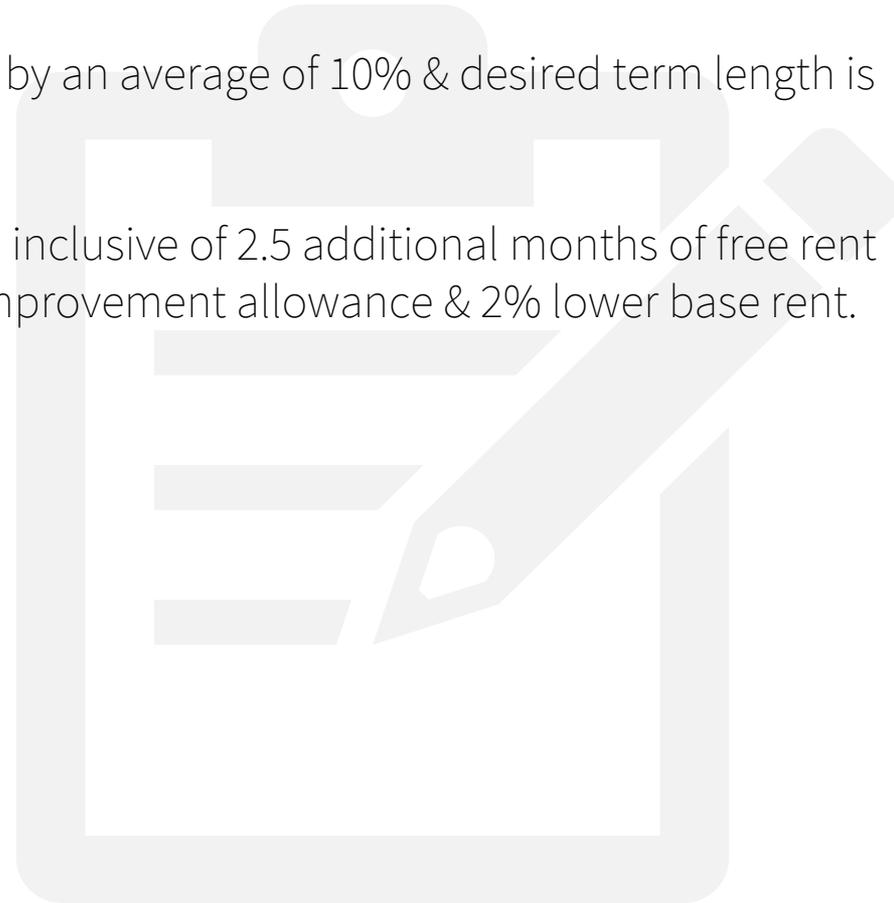
COVID-19 impact on U.S. office market demand

- Despite grabbing headlines for stating up to 50% of its workforce could be working from home in 10 years, Facebook is closing on a 740K SF lease in NYC.
- Demand for suburban office space is trending upward, particularly in the NY Tri-State area.
- Leases for specialty uses like lab space remain active.
- Many near-term lease expirations are being extended short term, increasing the share of renewals as a percentage of overall deal activity.
- Concerns are mounting in the coworking sector. Nonpayment of rent by coworking operators has been one of the most immediate challenges facing office owners.



COVID-19 impact on U.S. office market leasing

- Based on internal JLL survey data, 9% of pre-COVID space requirements are being characterized as “dead or on-hold indefinitely,” 55% as “delayed or on-hold” & 36% as “proceeding on schedule.”
- Active space requirements are shrinking in size by an average of 10% & desired term length is shortening by 15%.
- NERR’s are being repriced by an average of 6%, inclusive of 2.5 additional months of free rent (normalized for 10Y terms), 4% higher tenant improvement allowance & 2% lower base rent.



COVID-19 impact on U.S. office market

industries at risk

Most Severe

Industries with the **most immediate challenges** to their businesses, revenue & financial wherewithal

- Energy
- Aviation
- Travel & Tourism
- Restaurants & Dining
- Performing Arts & Sports
- General Retail
- Senior Housing
- Education
- Non-Emergency Healthcare
- Coworking

At-Risk

Industries **susceptible to disruption** depending on the duration & severity of the downturn

- Legal
- Finance & Banking
- Accounting & Consulting
- Marketing & Advertising
- Consumer Technology

Positive Impact

Industries **likely to expand** as a result of changing consumer behavior & future growth prospects

- eCommerce
- Data Centers
- Warehouses
- Federal Government
- Government Contractors
- Grocery & Consumer Staples
- Medical & Biotech
- Urgent Care Healthcare
- Construction & Infrastructure

COVID-19 impact on U.S. office market summary



▼ TENANT DEMAND

Demand will recede as work-from-home programs remain in place & tenants facing financial hardship delay decisions or right-size.

▶ CAP RATES

Record-low interest rates & limited investment alternatives will support asset values despite challenging conditions in the leasing market.

▼ NEW CONSTRUCTION

Completions will accelerate closer to year-end as permitting comes back online, but new groundbreakings will slow markedly.

▼ SALES VOLUME

Market participants will await price discovery given high levels of economic & market volatility.

▲ VACANCY RATES

Vacancy will rise given the addition of sublease space & potential pullback in relocations to new construction.

▶ ECONOMIC GROWTH

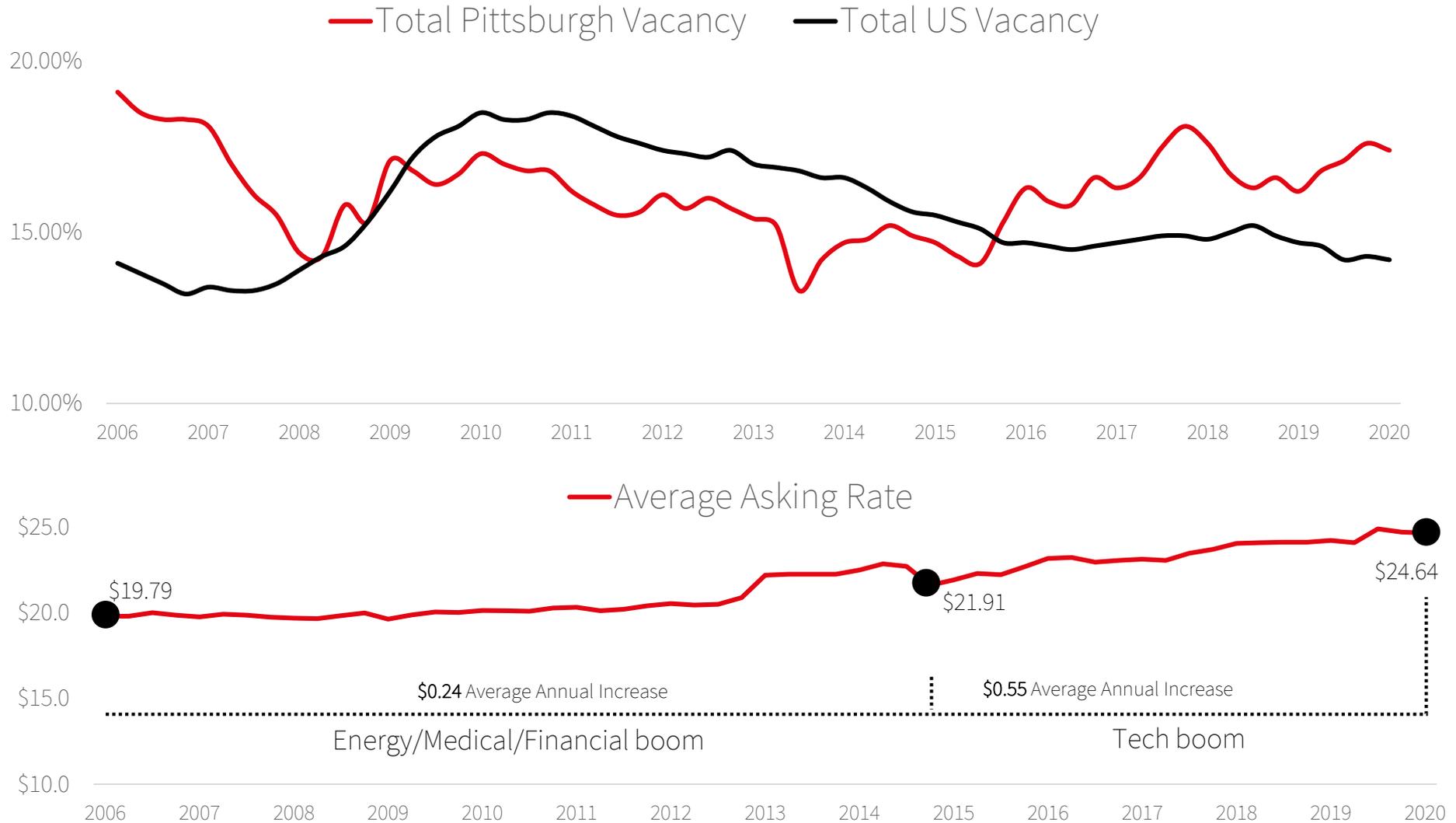
Q2 figures will be dismal, but unprecedented federal stimulus will help drive an economic rebound.

Pittsburgh overview



Pittsburgh overview

economic diversity & recession resiliency



Pittsburgh overview



Where are we



now?

- The overall Pittsburgh office market was showing strong momentum in the new decade. Absorption for Q1 2020 was over 285k SF & there was 1.9M SF of office under construction.
- Due to COVID-19, office market activity paused for Q2 2020. Construction sites were shut down & leasing activity slowed considerably. In a market that experiences 250k – 500k SF of leasing activity per quarter, Q2 2020 is trending less than 150k SF.
- Tenants renegotiating leases from a position of strength w/ high concession offerings

Where are we



headed?

- Pittsburgh is gradually recovering. Construction is resuming & new speculative construction (The Vision on 15th & Liberty East) has broken ground.
- Employees returning to the office will be phased in most cases, with some companies opting to work remote until the new year.
- New tenant requirements will include upgraded mechanical systems & touchless technologies.
- Corporate right-sizing & adjustment to remote work will put upward pressure on vacancy in near-term.
Examples:
 - **PwC** currently leasing 60k SF in US Steel tower but only searching for 10k SF for relocation
 - **Pond Lehocky** has decided to move Pittsburgh office remote as test case for portfolio
 - **Keystone Clearwater** going 100% remote
 - **Summer McDonnell** has exercised termination & is cutting space in half
 - **UPMC** 90k SF sublease on market

Pittsburgh overview

well-positioned

A boomerang of space per employee due to COVID-19?



Adapting to ‘social distancing’ may lead companies to redraw floorplans to focus on de-densification (i.e. more square footage per person). Although space per person has dropped 13% over the past decade, this trend is likely to reverse (until a vaccine or therapeutic is developed). Additional spacing may be required for regulatory compliance (CA Governor included “redrawing floor plans” as a pillar of his 6-point re-entry plan). Some mega-cap technology companies have already changed target space allocation from 150 to 175 SF to 300 SF per person.

Market	Average Direct Asking Rate (\$ PSF FSG)
Pittsburgh	\$24.64
San Francisco	\$92.07
New York City	\$84.83
Silicon Valley	\$60.13
Austin	\$51.23
Boston	\$46.70

Social Distancing

5.3k /
sq mi



The City of Pittsburgh
Population Density

BY COMPARISON
ACROSS STATE



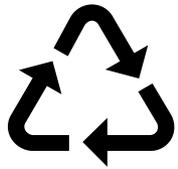
11.9k /
sq mi



The City of Philadelphia
Population Density

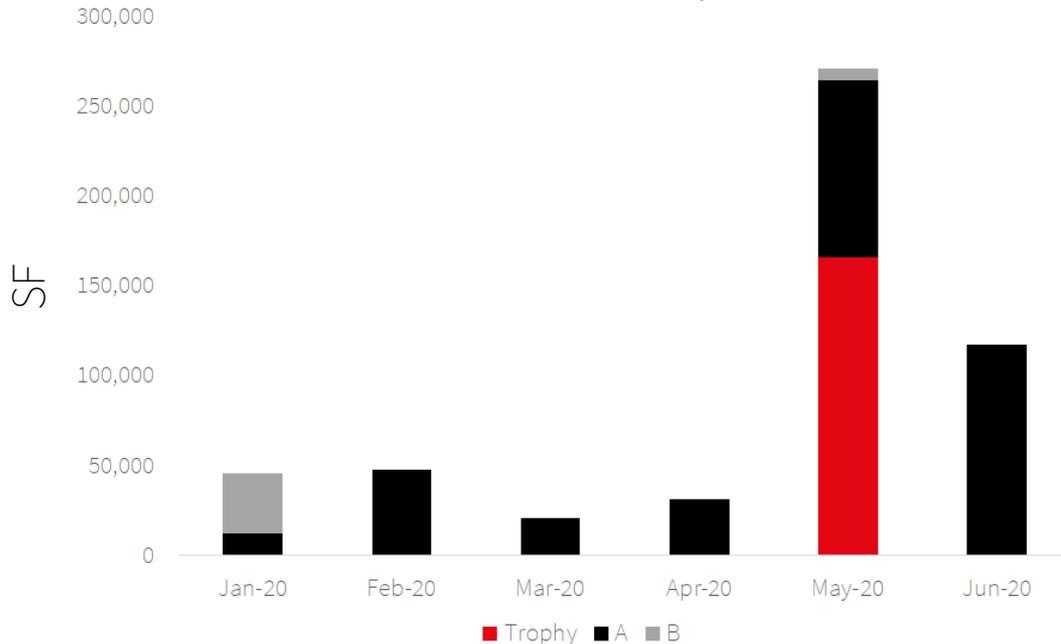
Pittsburgh overview

market updates



In May, over 250k SF of subleases flooded the market. EQT Corporation & Chevron together contributed over 200k SF.

Sublease Availabilities by Month Added



Wave of new urban availabilities



FNB Building
RBA: 387,000 SF
Available: 227,000 SF



1501 Penn Avenue
RBA: 500,000+ SF
Available: 500,000+ SF



The Vision on 15th
RBA: 250,000 SF
Available: 250,000 SF



The Post-Gazette Building
RBA: 400,000+ SF
Available: 400,000+ SF



The Riviera
RBA: 160,200 SF
Available: 140,130 SF

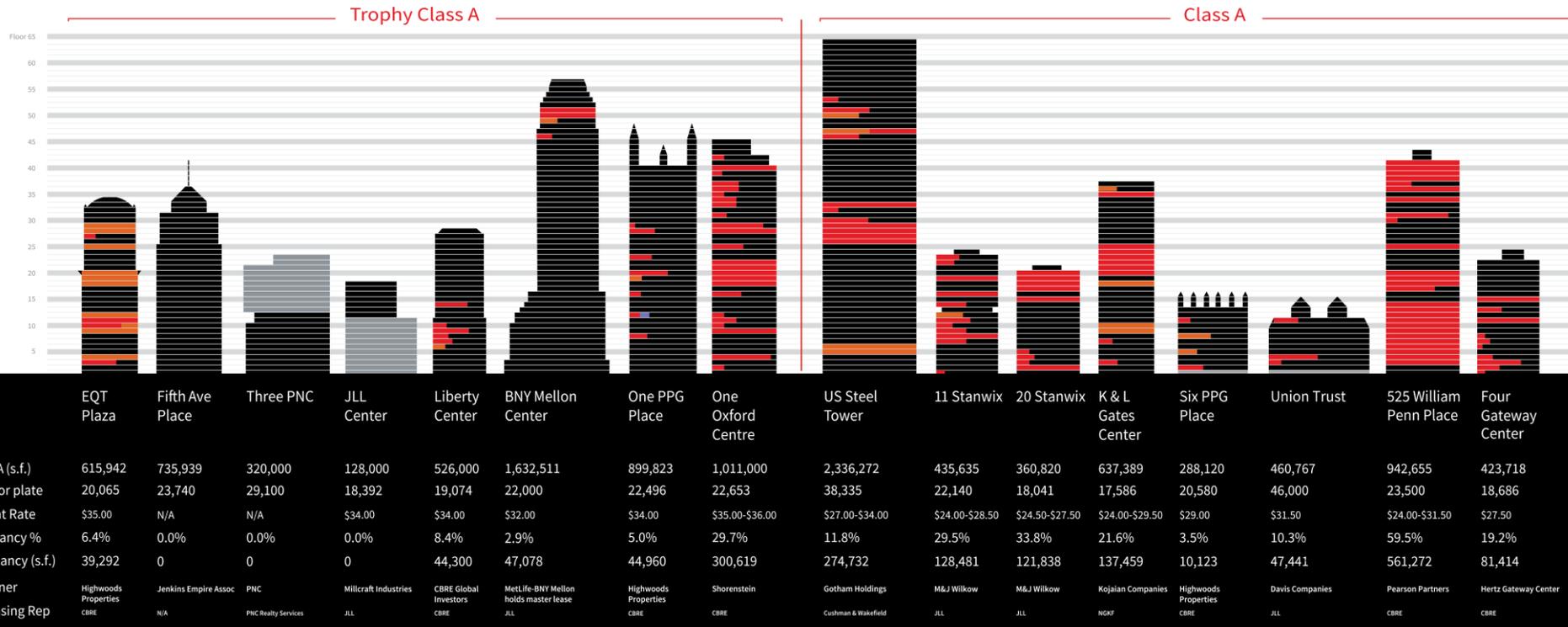


Liberty East
RBA: 281,649 SF
Available: 246,561 SF

Pittsburgh overview

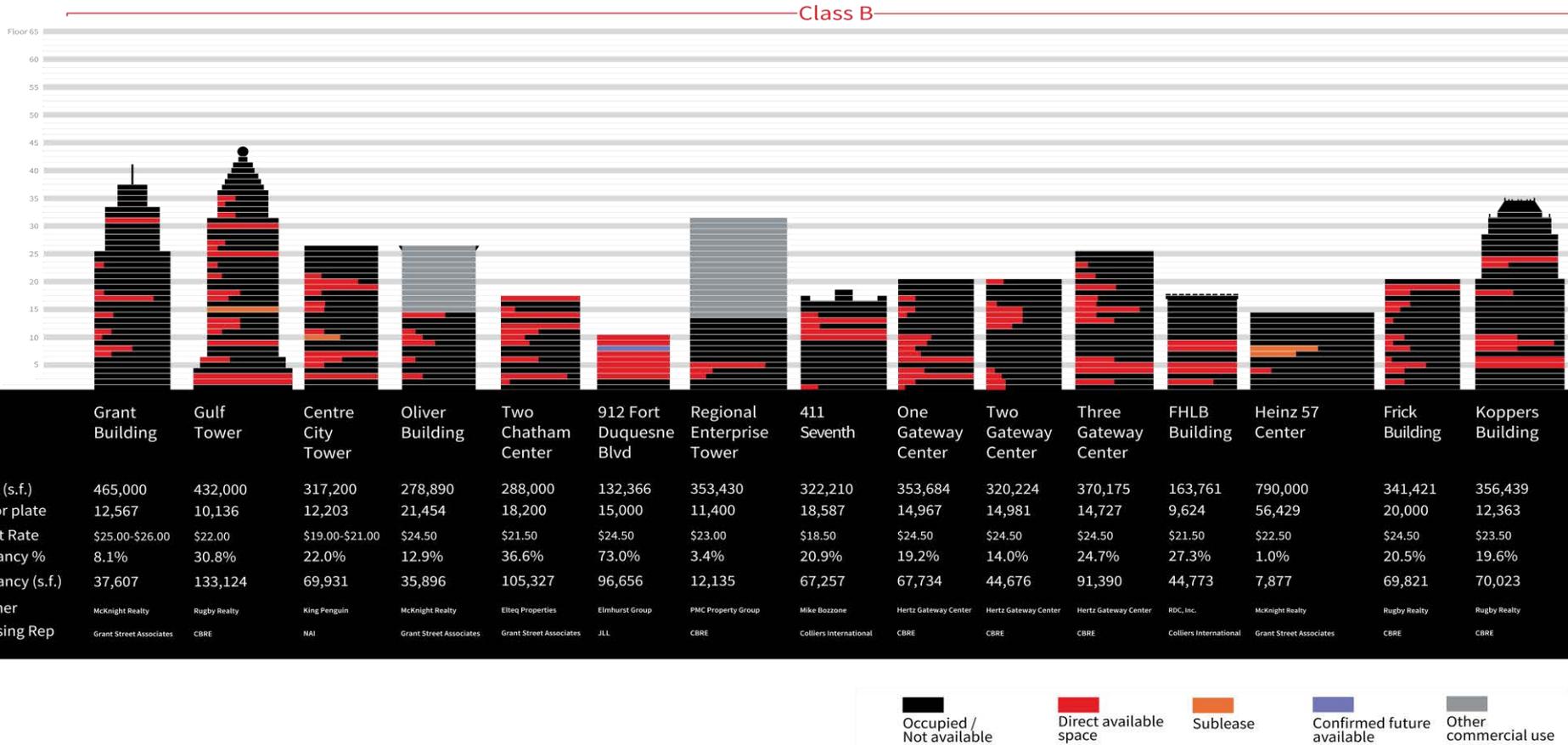
Trophy & A skyline

- EQT & UPMC add sublease availabilities
- Dollar Bank rumored to be considering 20 Stanwix
- Will One PPG have availability at end of Kraft-Heinz expiration (3/2023)?
- Trophy Class Direct Vacancy: **8.5%** | Class A Direct Vacancy: **23.0%**
- Trophy Class Total Vacancy: **12.1%** | Class A Total Vacancy: **26.5%**



COVID-19 impact on Pittsburgh office Class B skyline

- Low leasing velocity in Class B stagnates vacancy
- Anticipate Post-COVID-19 requirements to exacerbate low Class B demand
- Direct Vacancy: **17.8%** | Total Vacancy: **19.0%**



Working remotely



Working remotely

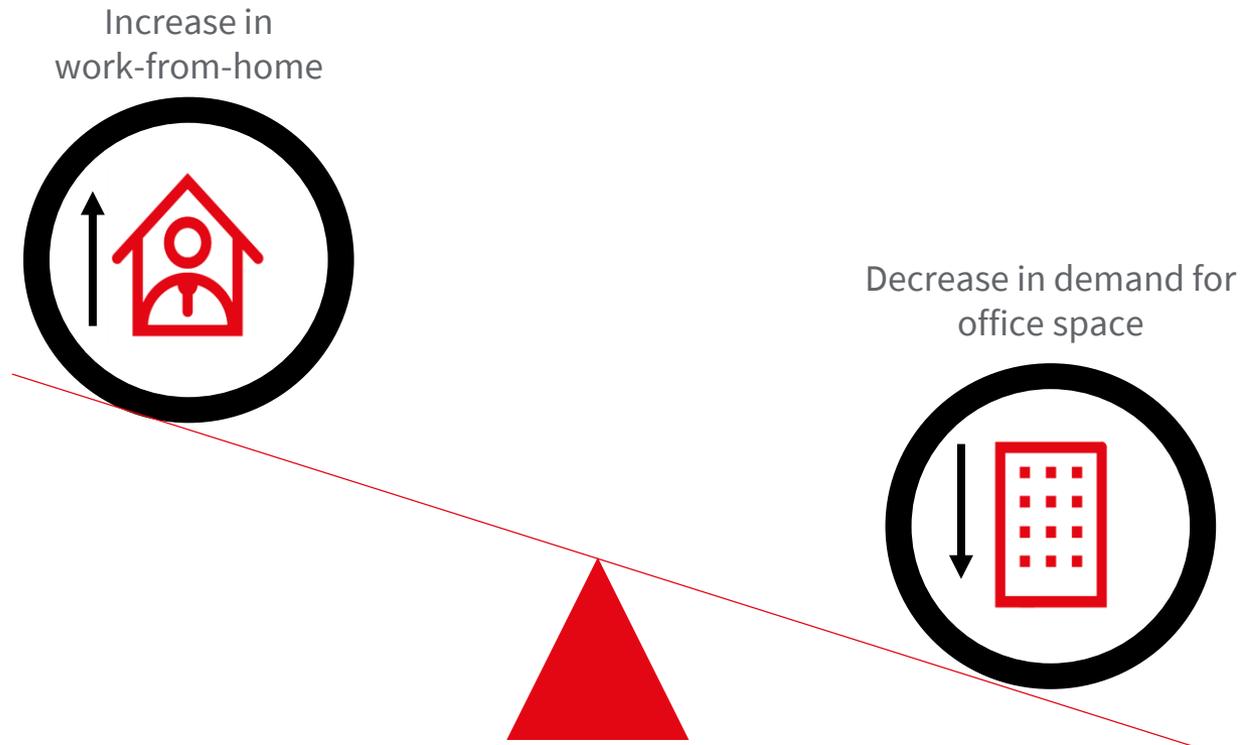
Determining factors of future office demand

- Prolonged office shutdowns have intensified discussion of shifting certain functions to more permanent WFH, which may drive a near-term increase in shadow space & threaten longer-term real estate demand.
- Expanded WFH programs in response to the immediate public health emergency does not mean we're ushering in a "new normal" once this pandemic & economic downturn stabilizes. Site selection & occupancy strategies post-pandemic will be driven principally by strategic objectives such as productivity, innovation, collaboration, workforce recruitment/retention & access to capital/customers. Several tech companies experimented with large-scale WFH initiatives over the past 25 years but have generally moved employees back to the office when noticing quantifiable declines in productivity, teamwork & innovation.
- Landlords continue to implement measures to address distancing, enhanced cleaning/janitorial, air purification, touchless technologies & the supply of PPE, while tenants are generally maintaining cautious postures, opting to extend WFH.

Working remotely

Determining factors of future office demand

The current conversation is too simplistic...



Working remotely

Determining factors of future office demand

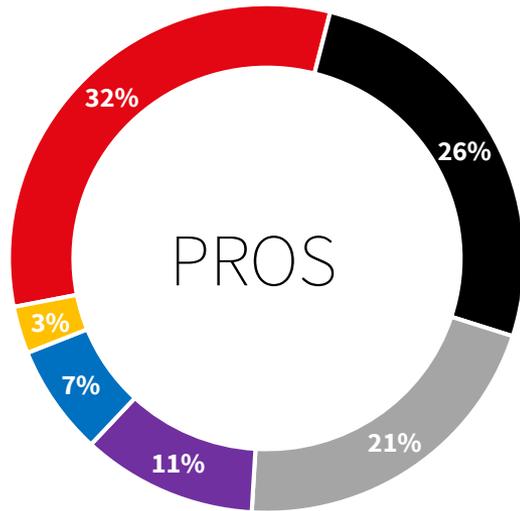


Future demand impact more complex with a broad mix of factors at play...

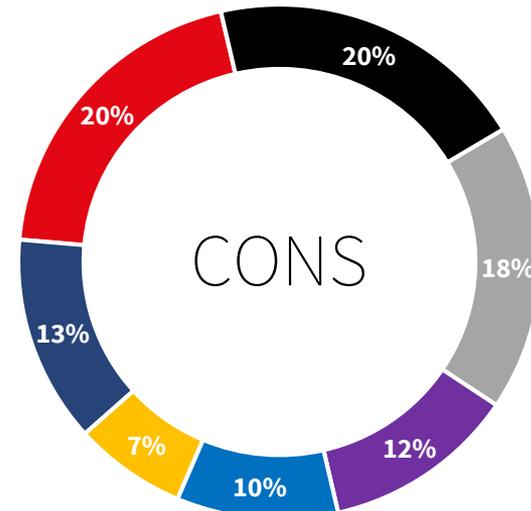


Working remotely

Determining factors of future office demand



- Ability to have a flexible schedule
- Flexibility to work from anywhere
- Not having to commute
- Ability to spend time with family
- Ability to work from home
- Other



- Collaboration & communication
- Loneliness
- Not being able to unplug
- Distractions at home
- Being in a different timezone than teammates
- Staying motivated
- Other

(Re)entry



(Re)entry

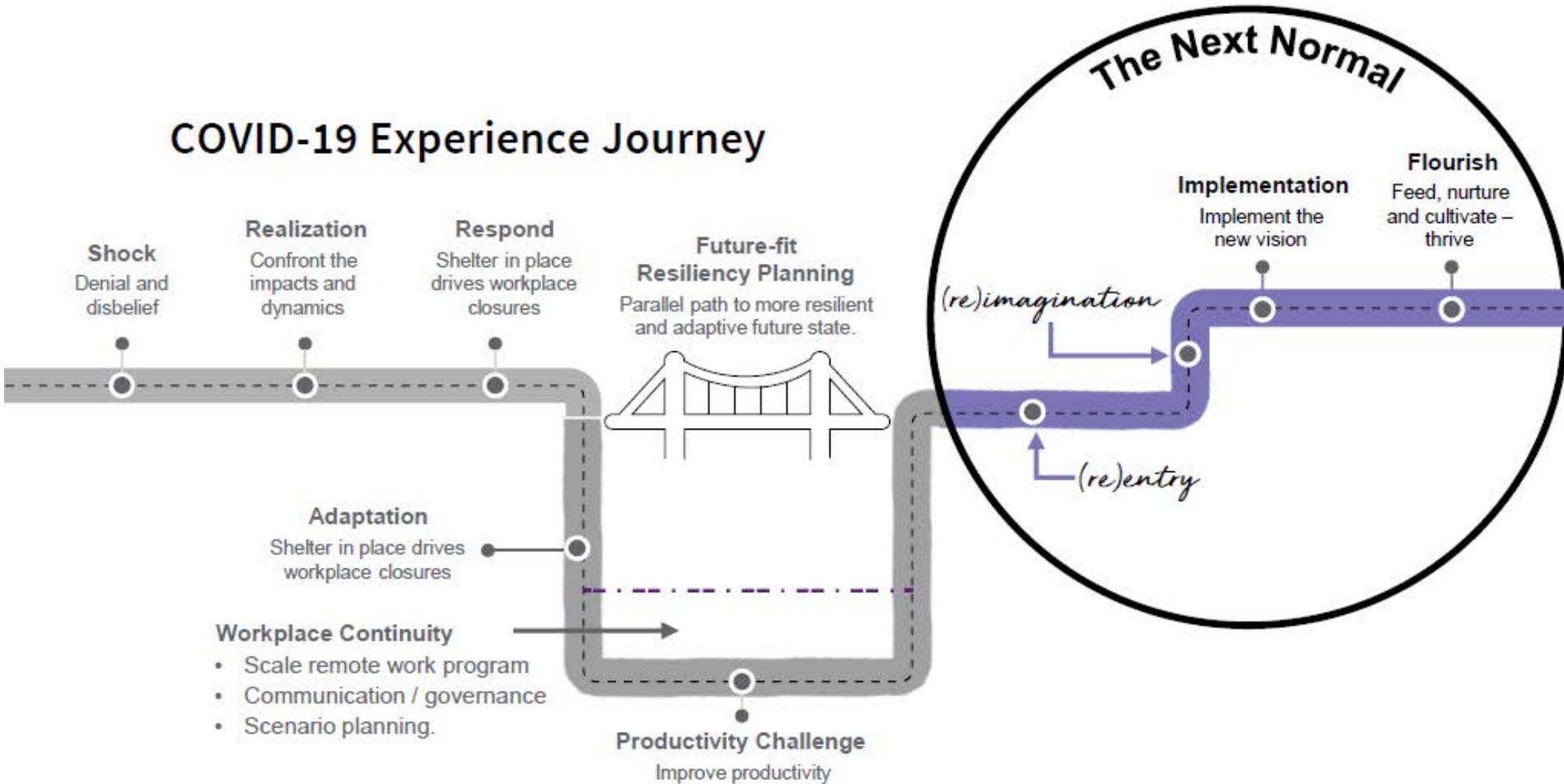


Past	Present	Future
Emphasis on the physical office environment	Work-from-home	Will companies maintain work-from-home programs after the COVID scare subsides?
High seating density	Shelter-in-place	Will we see a fundamental shift in space design with less desk-sharing & more s.f. per person?
Shift to open plan & bench seating	Home offices & kitchen tables	How will landlords modify building operations to ensure an antiviral workplace?
Rapid growth of communal spaces, shared amenities & social programming	Video conferencing & Netflix	Will tenants view communal spaces & amenities differently?

(Re)entry

gradual, multi-phased journey

COVID-19 Experience Journey



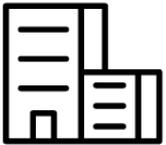
Summary



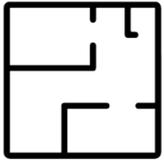
Summary



COVID will accelerate preexisting trends in distributed work – benefitting emerging, high-growth & lower cost secondary markets like Pittsburgh



Although facing challenges over the short-term, Pittsburgh will reaffirm its position as a growing market, driven by University research & strong talent base



Increased spatial distancing will help neutralize some detrimental impact of expanded work-from-home initiatives



Innovation & productivity gains are quantifiably higher when work is performed collaboratively in a physical office, which will support long-term demand for office space

Summary

what now?



Review lease / leverage options



Ex. Affirm leveraging termination option for rent relief & term extension

Be proactive & access market



Dollar Bank & K&L Gates considering relocating leaves some landlords exposed

Evaluate (re)entry services



Full JLL (Re)entry Guide [\(Click Here\)](#)

Take advantage of tenant favorable market



Currently highest level of TI allowance & rent abatement



Thank you

Pittsburgh's Fortune 200 Real Estate Company

As the industry leader in commercial real estate, we give our clients access to unsurpassed knowledge of the market, real-time analytics & research, & a culture based on teamwork, integrity & excellence.



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June 29, 2020

RE: Boulevard & Market Demolition

AE&C Project No. 21848

Expanded Opinion – 100/102 Market Street

2.0 OPINION

Within a reasonable degree of engineering certainty, and subject to change if further information becomes available, it is my opinion that:

1. A Demolition Plan for the demolition of the 2 & 3 story building at 100-102 Market Street should be developed and implemented immediately after the demolition of the 6-story building at 209 First Avenue is completed.

The brick construction used throughout the existing multi-wythe non-bearing and bearing walls of this building consists of fully-fired brick (regular hard brick) and a relatively high percentage of partially-fired brick (the soft orange brick). The brick wall construction is shown in numerous attached photographs. The soft orange brick has much less compressive strength and a shorter useful life than the fully-fired brick. New, modern, and code compliant construction will have a reliable structural strength and a long & useful life.

Based on the deteriorated brick and mortar observed in the building walls, the existing brick wall construction-in all of the building walls-is in my opinion, structurally unsound and is not suitable for reuse. The entire building, including all of the existing brick walls, should be demolished.

The recommendation for the demolition of this building after the demolition of 209 First Avenue is due to the possibility of debris from this building crossing the 8-foot space between the buildings. The debris could fall against, and possibly collapse, the unsafe 1st floor wall of the undemolished building at 209 First Avenue; thereby causing the collapse of the 209 First Avenue structure.

2. The building is not safe for occupancy and the building is not safe for rehabilitation construction activities on the interior of the building.



Providing Structural Engineering Designs for:
• Architects • Engineers • Contractors

STRUCTURAL VIABILITY INSPECTION
(Revision 1)

BUILDINGS @

100-102 MARKET STREET
Pittsburgh, PA

Prepared for:

Boulevard and Market, LLC

Prepared by:

AE&C Engineering
Consultants

161 Orr Avenue

Apollo, PA 15613

724-980-8187

aec0008@comcast.net

June 6, 2020

STRUCTURAL VIABILITY INSPECTION: 100-102 Market Street
(Revision 1)

June 6, 2020

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2.0 OPINION

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APPENDICES

Appendix A - Site Plan: 100-102 Market Street

Appendix B – Existing Conditions: Photographs #1 through #28

June 6, 2020

1.0 STRUCTURAL VIABILITY

1.1 Description of the building

The empty commercial building at 100-102 Market Street is a brick bearing wall building which occupies Parcel 1-G-109. See Appendices A & B.

The front of the building faces Market Street with the front wall of the building along the rear extent of the sidewalk. The structure is a 2 & 3-story brick bearing wall building with a flat roof. The floor and roof construction typically consist of wood joists supporting original wood plank subflooring. A sidewalk vault is present under the entire length of the sidewalk along Market Street and along First Avenue. Photographs #1 through 28 of the building are included in Appendix B.

1.2 Existing Structural Conditions

1.2.1 Multi-wythe brick non-bearing walls

-Front wall

The front and rear brick walls of the building are structurally considered to be non-bearing walls. The front wall is shown in Photograph #3. No significant structural distress or structural unsoundness was observed in the front wall.

-Rear wall

The rear brick wall is shown in Photographs #8 through #13. There are numerous areas where the mortar joints of the exterior wythe (width) have been pointed in the past to fill deteriorated mortar joints and cracks in the brick work, which were allowing water and moisture to get into the interior wythes of the brick wall. There are exposed areas of the wall where low strength orange-colored brick (salmon brick/pumpkin brick) was used in the construction of the wall.

ANALYSIS OF EXISTING CONDITIONS

The brick walls (bearing and non-bearing) of the building are 2 & 3-stories tall and are likely four (4) wythes thick (4" width of brick = 1 wythe), or 4 wythes x 4" width = 16" thick. Deterioration of the mortar and cracking of the brick in the exterior wythe of brick allows moisture and water to get into the mortar of the interior wythes of the brick wall; also deteriorating the mortar of those wythes of brick, over time. The areas of previous pointing of the exterior brick wythe show that there were, other, past opportunities for long-term deterioration of the mortar in the exterior wythe. Water and moisture that do get into the interior of the wall through open cracks and mortar joints can cause damage inside the wall without the exterior wythe of brick showing damage.

STRUCTURAL VIABILITY INSPECTION: 100-102 Market Street
(Revision 1)

June 6, 2020

The present condition of the brick and mortar of the interior wythes of the rear wall could not be determined. However, in the past, it was common construction practice to mix low strength salmon brick into the overall construction of brick walls.

CONCLUSION

In light of the conditions observed and the likelihood of rather large areas of structurally unsound, low strength and unstable brick on the interior of the rear wall leads to the conclusion; **the rear non-bearing brick wall of this building should be considered structurally unsound and structurally unstable.**

1.2.2 Multi-wythe brick bearing walls

- Right bearing wall

The right exterior brick bearing wall is shown in Photographs #14, #15, & #16. There are areas of deteriorated mortar, missing mortar, and deteriorated brick in the exterior wythe of the brick work of the right bearing wall. The deterioration of the brick work is prevalent along the top of the 2-story wall.

Star-bolts have been installed along the entire length of the right wall, in the past, to stabilize the brick wall from outward movement. There are numerous areas where the exterior wythe (width) has been pointed in the past to fill deteriorated mortar joints and cracks in the brick work, which were allowing water and moisture to get into the interior wythes of the brick wall. There are areas of the exterior wythe of the wall where low strength orange-colored brick (salmon brick/pumpkin brick) was used in the construction of the wall.

Photograph #28 shows a large section of the interior side of the right brick bearing wall on the 2nd floor of the building. There is a high percentage of low strength orange-colored brick (salmon brick/pumpkin brick) in the interior wythe of the brick wall. There are also head joints in the brick work without mortar in the joints.

CONCLUSION

The conditions observed on the exterior and interior faces of the right brick bearing wall lead to the conclusion that **the right brick bearing wall of the building should be considered structurally unsound and structurally unstable.**

-Left bearing wall

The left brick bearing wall of the building abuts the right wall of the adjacent building at 104 Market street, so the exterior of the wall is not visible. The condition of the brick work on the interior of the wall is, more likely than not, similar to the conditions observed elsewhere

STRUCTURAL VIABILITY INSPECTION: 100-102 Market Street
(Revision 1)

June 6, 2020

in the building.

- Brick bearing wall separating 100 & 102 Market Street

Portions of the brick bearing wall separating the interiors of 100 Market Street and 102 Market Street are shown in Photographs #26 & #27. Note the high percentage of low strength orange-colored brick (salmon brick/pumpkin brick) in the wall.

ANALYSIS OF EXISTING CONDITIONS

The existing conditions observed, on the exterior of the rear brick wall, on the interior of the right brick bearing wall and on the exterior and the interior of the left brick bearing wall shown in Photographs #8, #9, & #12- 1) the high percentage of salmon brick in the interior wythe of the left brick wall and in the isolated brick pier-presently threaten the overall stability of the entire building.

CONCLUSION

The present conditions of the left, right and rear brick walls, as observed and photographed, lead to the conclusion that a sudden collapse of the brick bearing and non-bearing walls of the building would cause the drastic and complete collapse of the entire structure.

The location of the severely deteriorated condition of the exterior and interior wythes of the right brick bearing wall and exterior wythe of the rear brick wall leads to the likelihood that a collapse of the building would cause significant damage to the adjacent buildings (See Photograph #8) and should cause immediate concerns for the safety of pedestrians and street traffic in the vicinity of the building-as the existing conditions make a reliable prediction of a collapse of the building impossible.

1.2.3 1st floor joists along the right foundation wall

Photographs #19 through #23 show either a 6" leftward movement of the wood joists under the 1st floor, or, a 6" rightward movement of the right foundation wall. Wood beams and posts have been installed under the floor joists to allow the joists to carry imposed loads on the floor.

2.0 OPINION

Within a reasonable degree of engineering certainty, and subject to change if further information becomes available, it is my opinion that:

STRUCTURAL VIABILITY INSPECTION: 100-102 Market Street
(Revision 1)

June 6, 2020

1. A Demolition Plan for the demolition of the 2 & 3 story building at 100-102 Market Street should be developed and implemented immediately after the demolition of the 6-story building at 209 First Avenue is completed.

The recommendation for the demolition of this building after the demolition of 209 First Avenue is due to the possibility of debris from this building crossing the 8-foot space between the buildings. The debris could fall against, and possibly collapse, the unsafe 1st floor wall of the undemolished building at 209 First Avenue; thereby causing the collapse of the 209 First Avenue structure.

2. The building is not safe for occupancy and the building is not safe for rehabilitation construction activities on the interior of the building.

3.0 DISCLAIMER

The services provided for this project were performed with the care and skill ordinarily exercised by reputable members of the engineering profession. No warranty, expressed or implied, is made or intended by rendition of these consulting services. We reserve the right to revise or amend any portion of this Structural Viability Report in the event new information or documentation becomes available.

Sincerely,



Charles L. Cornely, P.E.
Structural/Foundation Engineer

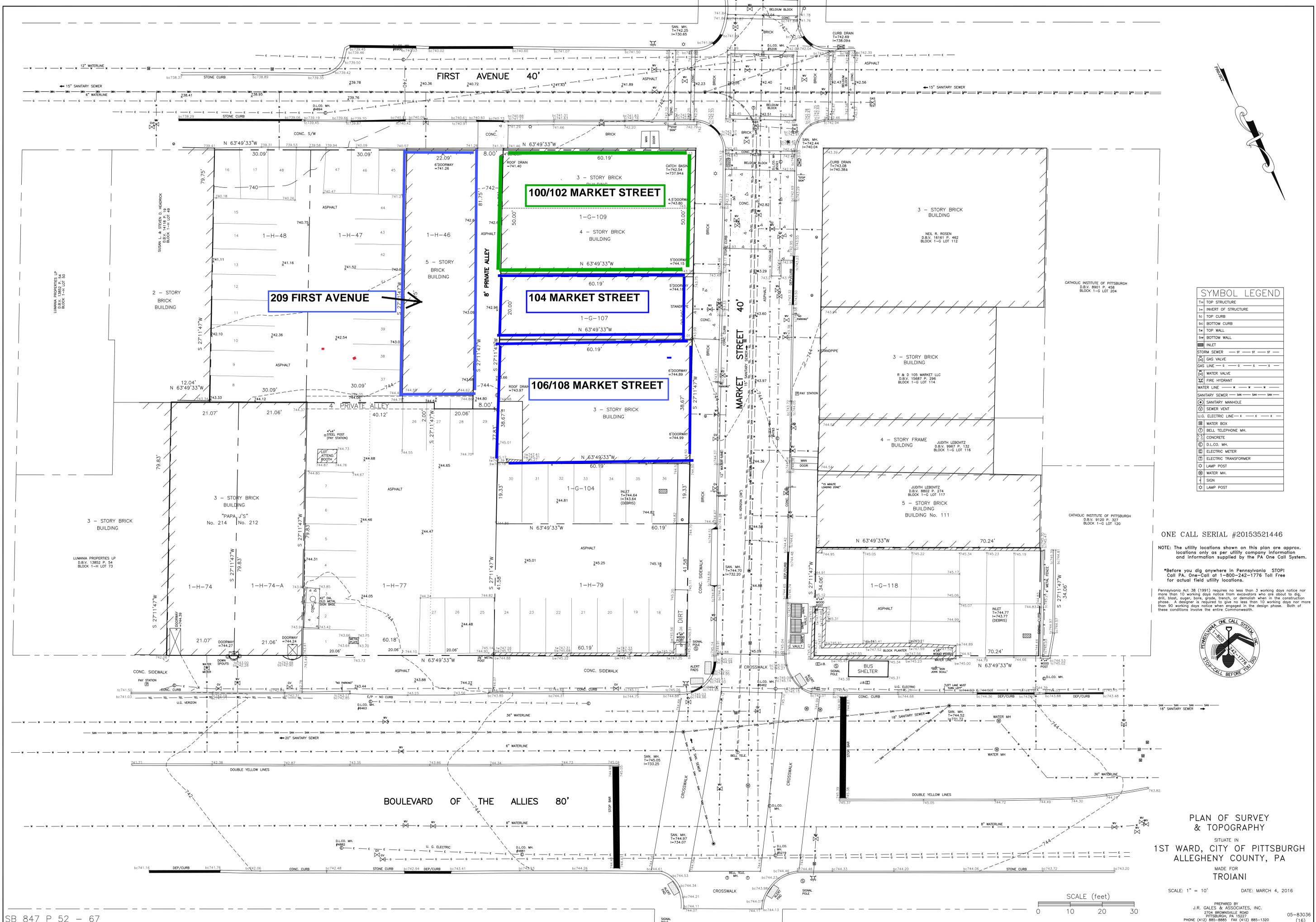
CLC/pbc

Enclosures

APPENDIX A
(Revision 1)

100-102 MARKET STREET

SITE PLAN



SYMBOL LEGEND	
TS	TOP STRUCTURE
TI	INVERT OF STRUCTURE
TC	TOP CURB
BC	BOTTOM CURB
TW	TOP WALL
BW	BOTTOM WALL
IN	INLET
SS	STORM SEWER
GV	GAS VALVE
GL	GAS LINE
WL	WATER VALVE
FW	FIRE HYDRANT
WLN	WATER LINE
SSM	SANITARY SEWER
SMH	SANITARY MANHOLE
SV	SEWER VENT
EL	ELECTRIC LINE
WB	WATER BOX
BT	BELL TELEPHONE MH.
CON	CONCRETE
DLM	D.L.C.O. MH.
EM	ELECTRIC METER
ET	ELECTRIC TRANSFORMER
LP	LAMP POST
WMH	WATER MH.
SI	SIGN
LP	LAMP POST

ONE CALL SERIAL #20153521446

NOTE: The utility locations shown on this plan are approx. locations only as per utility company information and information supplied by the PA One Call System.

*Before you dig anywhere in Pennsylvania STOP! Call PA One-Call at 1-800-242-1776 Toll Free for actual field utility locations.

Pennsylvania Act 38 (1991) requires no less than 3 working days notice nor more than 10 working days notice from excavators who are about to dig, drill, blast, auger, bore, grade, trench, or demolish when in the construction phase. A designer is required to give no less than 10 working days nor more than 90 working days notice when engaged in the design phase. Both of these conditions involve the entire Commonwealth.



PLAN OF SURVEY & TOPOGRAPHY
 SITUATE IN
 1ST WARD, CITY OF PITTSBURGH
 ALLEGHENY COUNTY, PA
 MADE FOR
 TROIANI

SCALE: 1" = 10' DATE: MARCH 4, 2016

PREPARED BY
 J.R. GALES & ASSOCIATES, INC.
 2704 BROWNVILLE ROAD
 PITTSBURGH, PA 15227
 PHONE (412) 885-8885 FAX (412) 885-1320

APPENDIX B
(Revision 1)

100-102 MARKET STREET

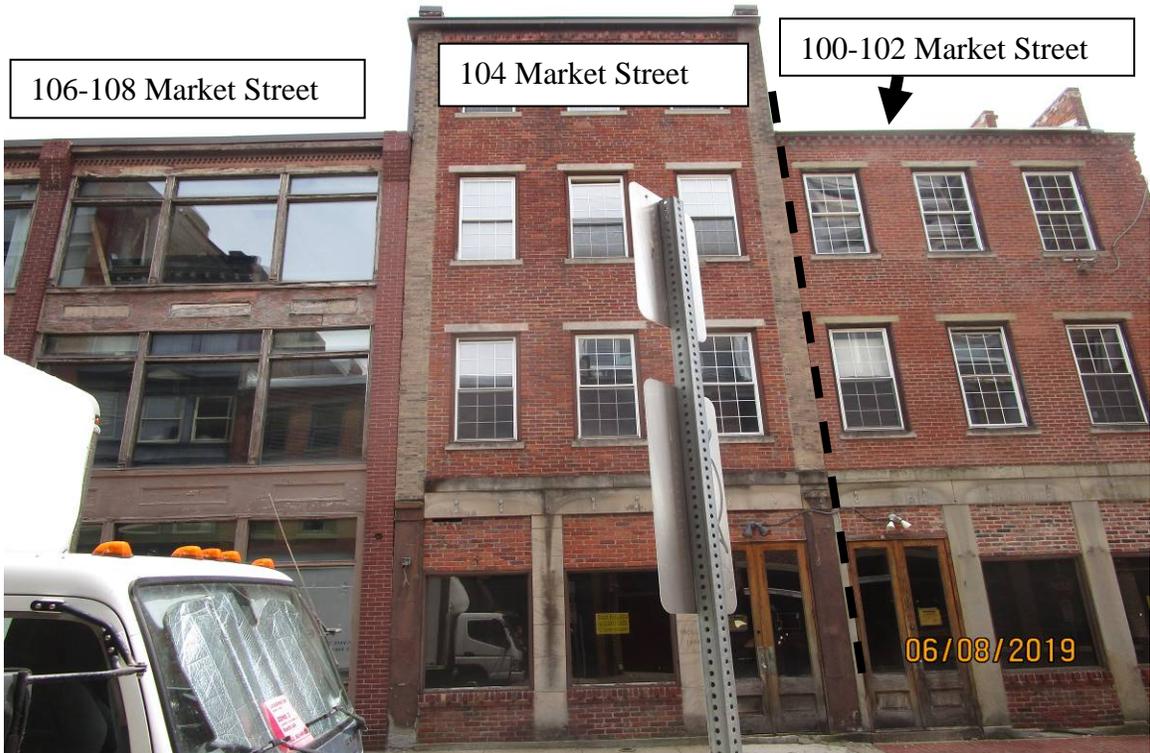
EXISTING CONDITIONS

PHOTOGRAPHS #1 THROUGH #28

**APPENDIX B (Rev. 1)
100-102 Market Street**



PHOTOGRAPH #1
Looking along Market Street toward First Avenue at the front wall of the building at 100-102 Market Street.



PHOTOGRAPH #2
The front wall of 100-102 Market Street.

**APPENDIX B (Rev. 1)
100-102 Market Street**



PHOTOGRAPH #3
The front wall of 100-102 Market Street.



PHOTOGRAPH #4
**Looking north on Market Street across the intersection
of First Avenue and Market Street.**

**APPENDIX B (Rev. 1)
100-102 Market Street**



PHOTOGRAPH #5
**Looking east on First Avenue across the intersection
of First Avenue and Market Street.**



PHOTOGRAPH #6
The front and right walls of 100-102 Market Street.

**APPENDIX B (Rev. 1)
100-102 Market Street**



PHOTOGRAPH #7
The right wall of 100-102 Market Street.



PHOTOGRAPH #8
The right rear corner of the 2-story portion of the building. Note the deteriorated and missing mortar in the joints of the brick work over the entire area of the rear brick wall shown.

**APPENDIX B (Rev. 1)
100-102 Market Street**



PHOTOGRAPH #9

Extremely weathered foundation stones along the sidewalk and under the right brick bearing wall of the 2-story portion of the building. Note the weathered soft bricks and missing mortar in the brick work of the rear bearing wall.



PHOTOGRAPH #10

The base of the rear wall of the 2-story portion of the building near the right end of the wall. See Photograph #9. Note the deteriorated and missing mortar in the joints of the brick work over the entire area of the rear brick wall shown.

**APPENDIX B (Rev. 1)
100-102 Market Street**



PHOTOGRAPH #11

The upper portion of the rear wall of the 2-story portion of the building. Note the deteriorated and missing mortar in the joints of the brick work over the entire area of the rear brick wall shown. See Photograph #8.



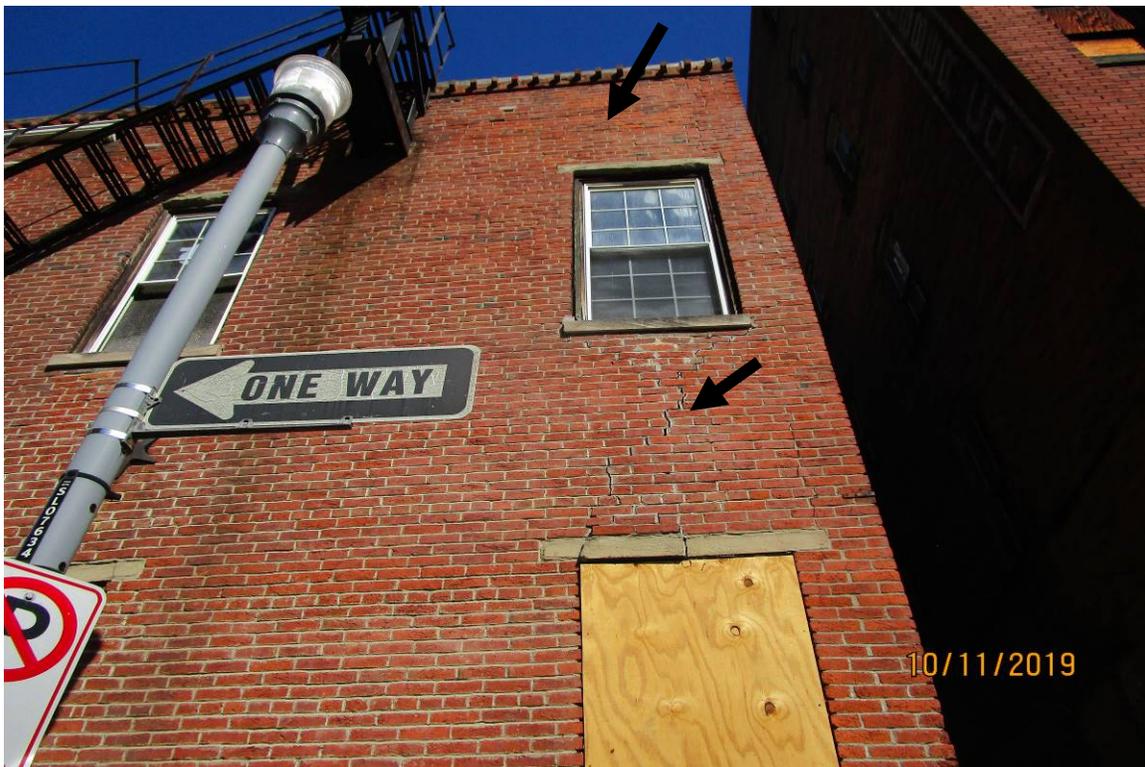
PHOTOGRAPH #12

The rear wall of the 3-story portion of the building. Note the deteriorated and missing mortar in the joints of the brick work over the entire area of the rear brick wall shown.

**APPENDIX B (Rev. 1)
100-102 Market Street**



PHOTOGRAPH #13
Deteriorated mortar and joints without mortar at a window in the 3-story portion of the building.



PHOTOGRAPH #14
Deteriorated mortar, missing mortar, deteriorated brick and cracking in the brick work of the right bearing wall.

**APPENDIX B (Rev. 1)
100-102 Market Street**



PHOTOGRAPH #15

Deteriorated mortar, missing mortar, and deteriorated brick in the brick work of the right bearing wall. Note the severe deterioration of the stones along the top of the foundation under the wall. Note the "star bolts" installed in the past to stabilize the brick bearing wall.



PHOTOGRAPH #16

Deteriorated mortar and deteriorated soft brick in the brick work of the right bearing wall.

**APPENDIX B (Rev. 1)
100-102 Market Street**



PHOTOGRAPH #17
A portion of the interior of the rear brick wall.



PHOTOGRAPH #18
A portion of the interior face of the rear stone basement wall.

**APPENDIX B (Rev. 1)
100-102 Market Street**



PHOTOGRAPH #19

Wood Beam and wood posts installed to give structural support to the end bearings of 1st floor joists along the right wall of the basement.



PHOTOGRAPH #20

Wood Beam and wood posts installed to give structural support to the end bearings of 1st floor joists along the right wall of the basement. Note the distance that the joist bearing areas have moved (6", or more) relative to the interior face of the stone basement wall.

**APPENDIX B (Rev. 1)
100-102 Market Street**



PHOTOGRAPH #21

Wood Beam and wood posts installed to give structural support to the end bearings of 1st floor joists along the right wall of the basement. Note the distance that the joist bearing areas have moved (6", or more) relative to the interior face of the stone basement wall.



PHOTOGRAPH #22

A portion of the stone basement wall.

**APPENDIX B (Rev. 1)
100-102 Market Street**



PHOTOGRAPH #23

A portion of the right stone basement wall. Note the concrete block acting as a permanent footing for the wood post under the wood beams supporting the floor joists



PHOTOGRAPH #24

Deteriorated mortar in a portion of the stone basement foundation walls.

**APPENDIX B (Rev. 1)
100-102 Market Street**



PHOTOGRAPH #25

A mixture of steel and wood members that were installed in the past to provide required structural support of an indeterminate load capacity.



PHOTOGRAPH #26

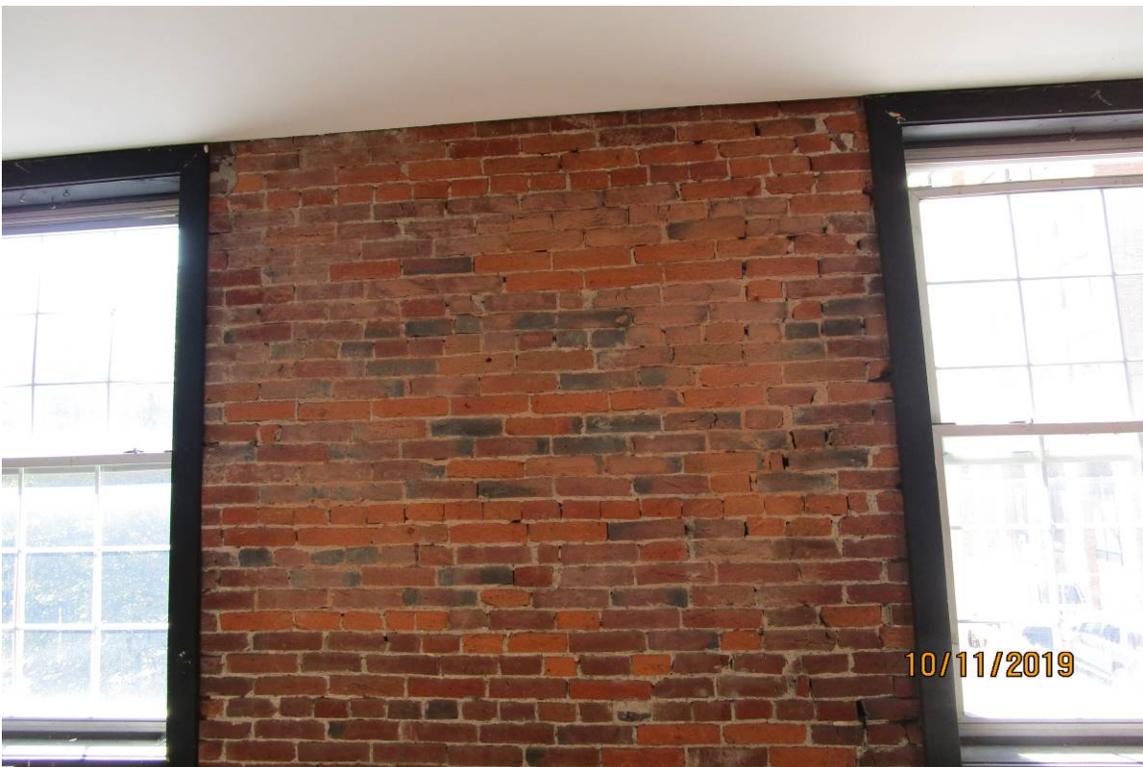
A large section of the brick bearing wall separating the interiors of 100 Market Street and 102 Market Street. Note the high percentage of low strength orange-colored brick (salmon brick/pumpkin brick) in the bearing wall.

**APPENDIX B (Rev. 1)
100-102 Market Street**



PHOTOGRAPH #27

A large section of the brick bearing wall separating the interiors of 100 Market Street and 102 Market Street. Note the high percentage of low strength orange-colored brick (salmon brick/pumpkin brick) in the wall.



PHOTOGRAPH #28

A large section of the right brick bearing wall on the 2nd floor. Note the high percentage of low strength orange-colored brick (salmon brick/pumpkin brick) in the wall. Note the joints in the brick work without mortar.

June 29, 2020

RE: Boulevard & Market Demolition

AE&C Project No. 21848

Expanded Opinion – 104 Market Street

2.0 OPINION

Within a reasonable degree of engineering certainty, and subject to change if further information becomes available, it is my opinion that:

1. A Demolition Plan for the demolition of the 4-story building at 104 Market Street should be developed and implemented immediately after the demolition of the 6-story building at 209 First Avenue is completed.

The brick construction used throughout the existing multi-wythe non-bearing and bearing walls of this building consists of fully-fired brick (regular hard brick) and a relatively high percentage of partially-fired brick (the soft orange brick). The brick wall construction is shown in numerous attached photographs. The soft orange brick has much less compressive strength and a shorter useful life than the fully-fired brick. New, modern, and code compliant construction will have a reliable structural strength and a long & useful life.

Based on the deteriorated brick and mortar observed in the building walls, the existing brick wall construction-in all of the building walls-is in my opinion, structurally unsound and is not suitable for reuse. The entire building, including all of the existing brick walls, should be demolished.

The recommendation for the demolition of this building after the demolition of 209 First Avenue is due to the possibility of debris from this building crossing the 8-foot space between the buildings. The debris could fall against, and possibly collapse, the unsafe 1st floor wall of the undemolished building at 209 First Avenue; thereby causing the collapse of the 209 First Avenue structure.

2. The building is not safe for occupancy and the building is not safe for rehabilitation construction activities on the interior of the building.
3. ~~The sidewalks along both sides of Market Street and the roadway of Market Street should be immediately closed to insure the safety of pedestrians and vehicle traffic.~~

STRUCTURAL VIABILITY INSPECTION

(Revision 1)

BUILDING @

104 MARKET STREET
Pittsburgh, PA

Prepared for:

Boulevard and Market, LLC

Prepared by:

AE&C Engineering
Consultants

161 Orr Avenue

Apollo, PA 15613

724-980-8187

aec0008@comcast.net

June 6, 2020

STRUCTURAL VIABILITY INSPECTION: 104 Market Street
(Revision 1)

June 6, 2020

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APPENDICES

Appendix A - Site Plan: 104 Market Street

Appendix B – Existing Conditions: Photographs #1 through #13

June 6, 2020

1.0 STRUCTURAL VIABILITY

1.1 Description of the building

The empty commercial building at 104 Market Street is a brick bearing wall building which occupies Parcel 1-G-107. See Appendices A & B.

The front of the building faces Market Street, with the front wall of the building along the rear extent of the sidewalk. The structure is a 4-story brick bearing wall building with a flat roof. The floor and roof construction typically consist of wood joists supporting original wood plank subflooring. A sidewalk vault is present under the entire length of the sidewalk along Market Street and along First Avenue. Photographs #1 through #13 of the building are included in Appendix B.

1.2 Existing Structural Conditions

1.2.1 Multi-wythe brick non-bearing walls

-Front wall

The front and rear brick walls of the building are structurally considered to be non-bearing walls. The front wall is shown in Photograph #3. No significant structural distress or structural unsoundness was observed in the front wall.

-Rear wall

The rear brick wall is shown in Photographs #8 through #13. There are numerous areas where the mortar joints of the exterior wythe (width) have been pointed in the past to fill deteriorated mortar joints- and cracks in the brick work, which were allowing water and moisture to get into the interior wythes of the brick wall. There are exposed areas of the wall where low strength orange-colored brick (salmon brick/pumpkin brick) was used in the construction of the wall.

ANALYSIS OF EXISTING CONDITIONS

The brick walls (bearing and non-bearing) of the building are 4-stories tall and are likely four (4) wythes thick (4" width of brick = 1 wythe), or 4 wythes x 4" width = 16" thick. Deterioration of the mortar and cracking of the brick in the exterior wythe of brick allows moisture and water to get into the mortar of the interior wythes of the brick wall; also deteriorating the mortar of those wythes of brick, over time. The areas of previous pointing of the exterior brick wythe show that there were, other, past opportunities for long-term deterioration of the mortar in the exterior wythe. Water and moisture that do get into the interior of the wall through open cracks and mortar joints can cause damage inside the wall without the exterior wythe of brick showing damage.

June 6, 2020

The present condition of the brick and mortar of the interior wythes of the rear wall could not be determined. However, in the past, it was common construction practice to mix low strength salmon brick into the overall construction of brick walls. The soft salmon brick is especially susceptible to deterioration and damage from water, which makes the brick unable to function structurally and carry compressive loads.

CONCLUSION

In light of the conditions observed and the likelihood of rather large areas of structurally unsound, low strength and unstable brick on the interior of the rear wall leads to the conclusion; **the rear non-bearing brick wall of this building should be considered structurally unsound and structurally unstable.**

1.2.2 Multi-wythe brick bearing walls

- Right & left bearing walls

The left brick bearing wall of the building abuts the right wall of the adjacent building at 106-108 Market street, so the exterior of the wall is not visible. The right brick bearing wall of the building abuts the left wall of the adjacent building at 100-102 Market street, so the exterior of the wall is not visible. The condition of the brick work on the interiors of the walls are, more likely than not, similar to the conditions observed elsewhere in the adjacent buildings.

Photographs #10, #11, & #12 show the interior faces of brick bearing walls. There is a high percentage of deteriorated low strength orange-colored brick (salmon brick/pumpkin brick) in the interior wythe of the brick wall. The soft salmon brick is especially susceptible to deterioration and damage from water, which makes the brick unable to function structurally and carry compressive loads.

ANALYSIS

The existing conditions observed on the interior faces of brick bearing walls lead to the conclusion that **the right and left brick bearing walls of this building should be considered structurally unsound and structurally unstable.**

CONCLUSION

The present conditions of the left, right and rear brick walls, as observed and photographed, lead to the conclusion that a sudden collapse of the brick bearing and non-bearing walls of the building would cause the drastic and complete collapse of the entire structure.

STRUCTURAL VIABILITY INSPECTION: 104 Market Street
(Revision 1)

June 6, 2020

The location of the severely deteriorated condition of the interior wythes of the right and left brick bearing walls and exterior wythe of the rear brick wall leads to the likelihood that a collapse of the building would cause instability of, and significant damage to, the adjacent buildings (See Photographs #1 through #6) and should cause immediate concerns for the safety of pedestrians and street traffic in the vicinity of the building-as the existing conditions make a reliable prediction of a collapse of the building impossible.

1.2.3 Floor joists and roof joists

Photograph #13 shows an area of repaired roof sheathing and added wood roof joists.

2.0 OPINION

Within a reasonable degree of engineering certainty, and subject to change if further information becomes available, it is my opinion that:

1. A Demolition Plan for the demolition of the 4-story building at 104 Market Street should be developed and implemented immediately after the demolition of the 6-story building at 209 First Avenue is completed.

The recommendation for the demolition of this building after the demolition of 209 First Avenue is due to the possibility of debris from this building crossing the 8-foot space between the buildings. The debris could fall against, and possibly collapse, the unsafe 1st floor wall of the undemolished building at 209 First Avenue; thereby causing the collapse of the 209 First Avenue structure.

2. The building is not safe for occupancy and the building is not safe for rehabilitation construction activities on the interior of the building.
3. The sidewalks along both sides of Market Street and the roadway of Market Street should be immediately closed to insure the safety of pedestrians and vehicle traffic.

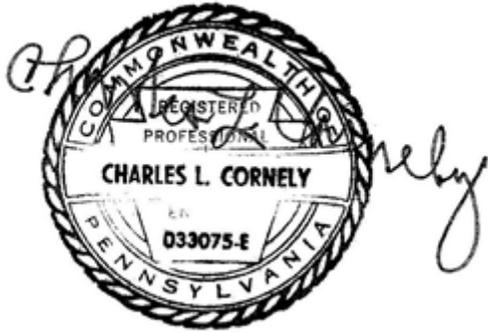
3.0 DISCLAIMER

The services provided for this project were performed with the care and skill ordinarily exercised by reputable members of the engineering profession. No warranty, expressed or implied, is made or intended by rendition of these consulting services. We reserve the right to revise or amend any portion of this Structural Viability Report in the event new information or documentation becomes available.

STRUCTURAL VIABILITY INSPECTION: 104 Market Street
(Revision 1)

June 6, 2020

Sincerely,

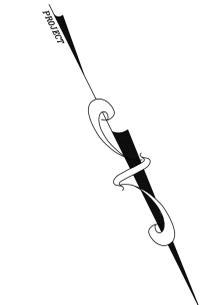
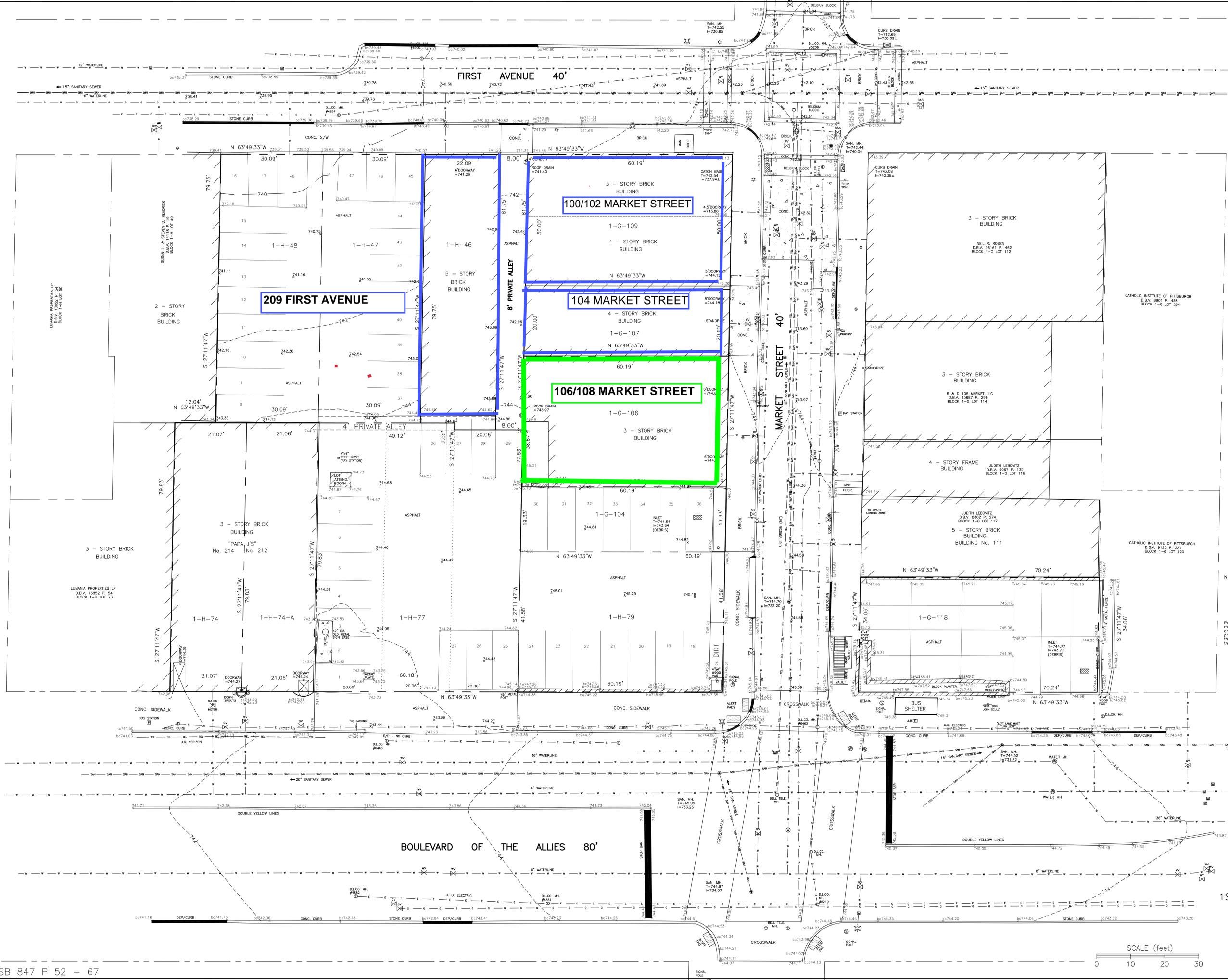


Charles L. Cornely, P.E.
Structural/Foundation Engineer

APPENDIX A
(Revision 1)

106-108 MARKET STREET

SITE PLAN



SYMBOL LEGEND	
TS	TOP STRUCTURE
IS	INVERT OF STRUCTURE
TC	TOP CURB
BC	BOTTOM CURB
TW	TOP WALL
BW	BOTTOM WALL
IN	INLET
SS	STORM SEWER
GV	GAS VALVE
GL	GAS LINE
WL	WATER VALVE
FW	FIRE HYDRANT
SL	SEWER LINE
SM	SANITARY MANHOLE
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SI	SIGN
LA	LAMP POST

ONE CALL SERIAL #20153521446

NOTE: The utility locations shown on this plan are approx. locations only as per utility company information and information supplied by the PA One Call System.

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PLAN OF SURVEY & TOPOGRAPHY
 SITUATE IN
 1ST WARD, CITY OF PITTSBURGH
 ALLEGHENY COUNTY, PA
 MADE FOR
 TROIANI

SCALE: 1" = 10' DATE: MARCH 4, 2016

PREPARED BY
 J.R. GALES & ASSOCIATES, INC.
 2704 BRUNSWICK ROAD
 PITTSBURGH, PA 15227
 PHONE (412) 885-8885 FAX (412) 885-1320

APPENDIX B
(Revision 1)

106-108 MARKET STREET

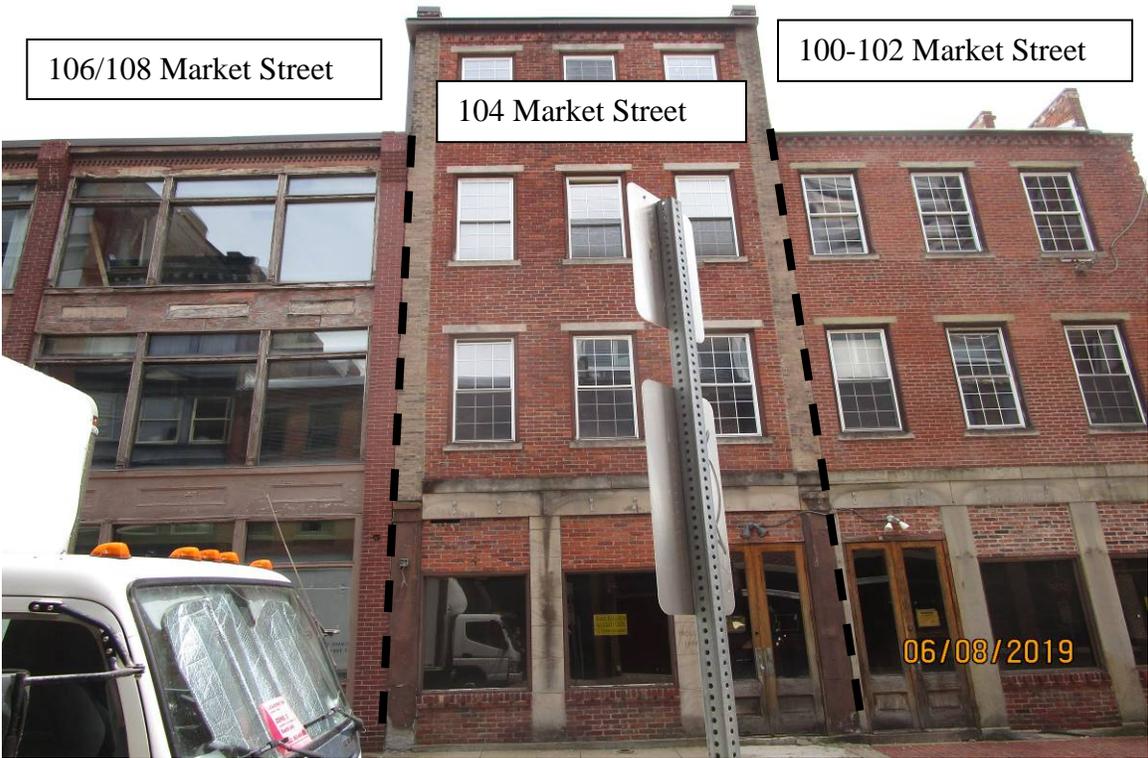
EXISTING CONDITIONS

PHOTOGRAPHS #1 THROUGH #17

**APPENDIX B (Rev. 1)
104 Market Street**



PHOTOGRAPH #1
The front of the building at 104 Market Street.

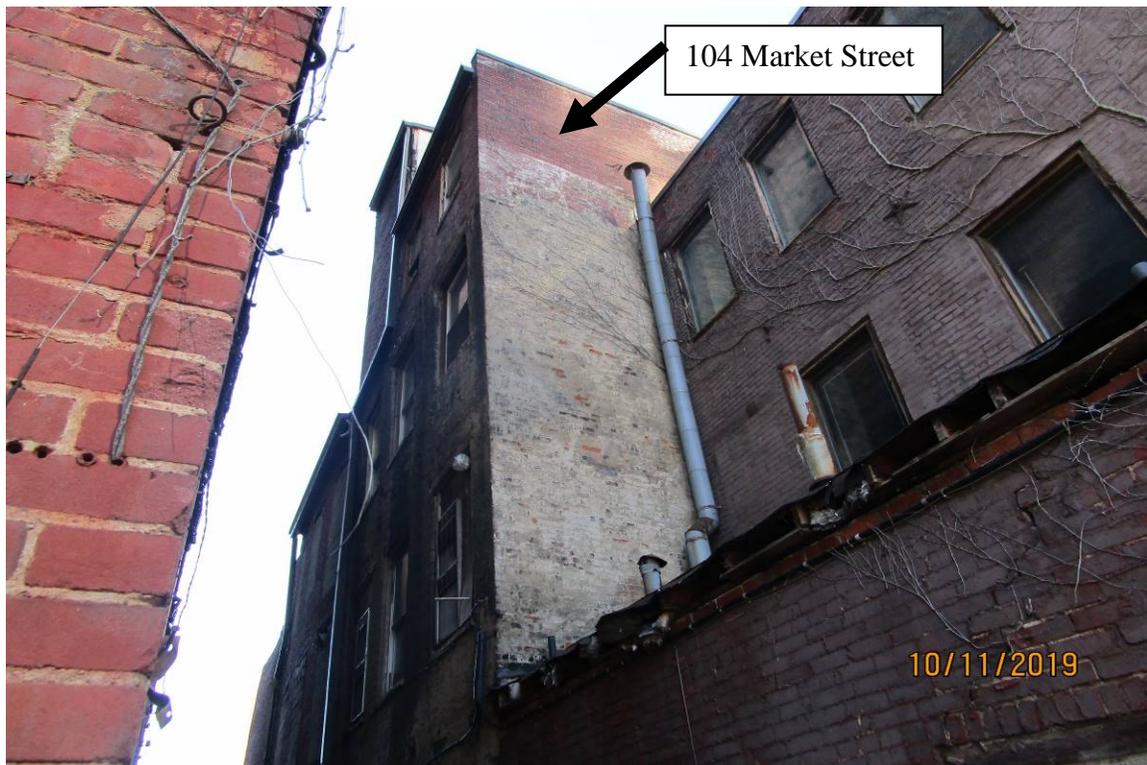


PHOTOGRAPH #2
The front of 104 Market Street. Note that the front wall of 104 Market Street and the front walls of the adjacent buildings appear to be separate walls.

**APPENDIX B (Rev. 1)
104 Market Street**



PHOTOGRAPH #3
Portions of the left and rear walls of 104 Market Street.



PHOTOGRAPH #4
The rear portion of the left brick wall and the upper portion of the rear brick wall of the building.

**APPENDIX B (Rev. 1)
104 Market Street**



PHOTOGRAPH #5

The upper portion of the rear wall. Note the extreme deterioration of the mortar in the joints of the brick work of the entire wall area shown and the missing mortar in the joints. Note the parging covering the very deteriorated brick and mortar in some areas of the wall.



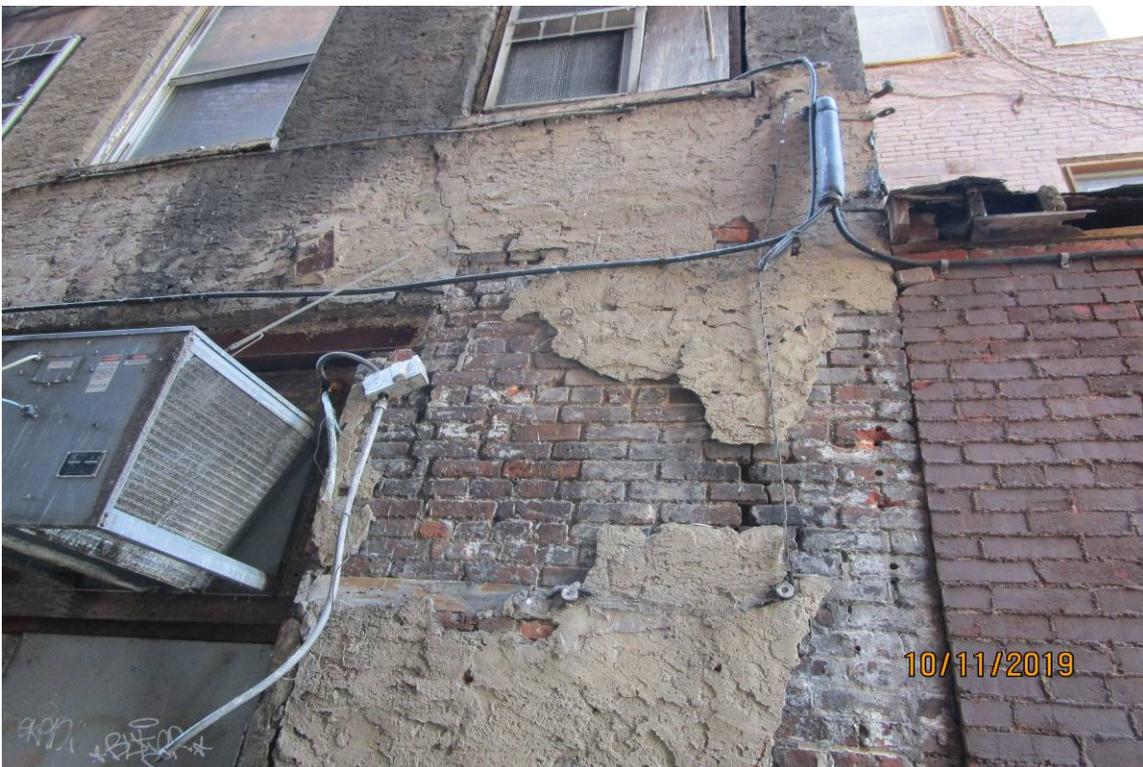
PHOTOGRAPH #6

The rear wall of the building. Note the parging covering the very deteriorated brick and mortar in some areas of the wall. See Photograph #5.

**APPENDIX B (Rev. 1)
104 Market Street**



PHOTOGRAPH #7
Extremely deteriorated and missing mortar under the parging applied to the face of the wall in the past.



PHOTOGRAPH #8
Extremely deteriorated and missing mortar under the parging applied to the face of the wall in the past.

**APPENDIX B (Rev. 1)
104 Market Street**



PHOTOGRAPH #9
Extremely deteriorated and missing mortar under the parging applied to the face of the wall in the past.



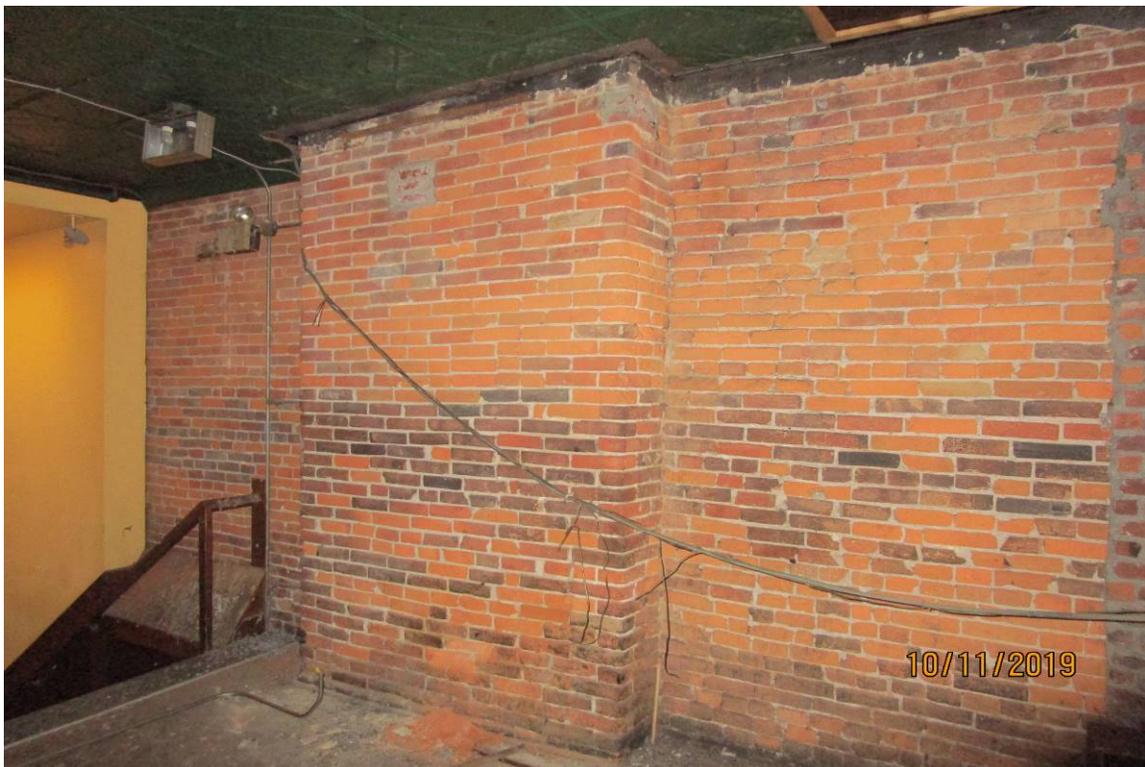
PHOTOGRAPH #10
A large section of brick bearing wall. Note the high percentage of low strength orange-colored brick (salmon brick/pumpkin brick) in the wall.

**APPENDIX B (Rev. 1)
104 Market Street**



PHOTOGRAPH #11

A large section of brick bearing wall. Note the high percentage of low strength orange-colored brick (salmon brick/pumpkin brick) in the wall.



PHOTOGRAPH #12

A large section of brick bearing wall. Note the high percentage of low strength orange-colored brick (salmon brick/pumpkin brick) in the wall.

APPENDIX B (Rev. 1)
104 Market Street



PHOTOGRAPH #13
An area of repaired roof sheathing and added wood roof joists.

June 29, 2020

RE: Boulevard & Market Demolition

AE&C Project No. 21848

Expanded Opinion – 104 Market Street

2.0 OPINION

Within a reasonable degree of engineering certainty, and subject to change if further information becomes available, it is my opinion that:

1. A Demolition Plan for the demolition of the three (3) story building at 106-108 Market Street should be developed and implemented immediately after the demolition of the 6-story building at 209 First Avenue is completed.

The brick construction used throughout the existing multi-wythe non-bearing and bearing walls of this building consists of fully-fired brick (regular hard brick) and a relatively high percentage of partially-fired brick (the soft orange brick). The brick wall construction is shown in numerous attached photographs. The soft orange brick has much less compressive strength and a shorter useful life than the fully-fired brick. New, modern, and code compliant construction will have a reliable structural strength and a long & useful life.

Based on the deteriorated brick and mortar observed in the building walls, the existing brick wall construction-in all of the building walls-is in my opinion, structurally unsound and is not suitable for reuse. The entire building, including all of the existing brick walls, should be demolished.

The recommendation for the demolition of this building after the demolition of 209 First Avenue is due to the possibility of debris from this building crossing the 8-foot space between the buildings. The debris could fall against, and possibly collapse, the unsafe 1st floor wall of the undemolished building at 209 First Avenue; thereby causing the collapse of the 209 First Avenue structure.

2. The building is not safe for occupancy and the building is not safe for rehabilitation construction activities on the interior of the building.



Providing Structural Engineering Designs for:
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STRUCTURAL VIABILITY INSPECTION
(Revision 1)

BUILDINGS @

106-108 MARKET STREET
Pittsburgh, PA

Prepared for:

Boulevard and Market, LLC

Prepared by:

AE&C Engineering
Consultants

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June 6, 2020

STRUCTURAL VIABILITY INSPECTION: 106-108 Market Street
(Revision 1)

June 6, 2020

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APPENDICES

Appendix A - Site Plan: 106-108 Market Street

Appendix B – Existing Conditions: Photographs #1 through #17

June 6, 2020

1.0 STRUCTURAL VIABILITY

1.1 Description of the building

The empty commercial building at 106-108 Market Street is a brick bearing wall building which occupies Parcel 1-G-106. See Appendices A & B.

The front of the building faces Market Street with the front wall of the building along the rear extent of the sidewalk. The structure is a 3-story brick bearing wall building with a flat roof. The floor and roof construction typically consist of wood joists supporting original wood plank subflooring and new plywood sheathing in repaired areas. A sidewalk vault is present under the entire length of the sidewalk along Market Street. The building has been used for a number of commercial uses throughout its life as shown by the strengthened wood roof joists, strengthened wood beams, strengthened wood joists, and added wood columns observed at various locations in the building. Photographs #1 through #17 of the building are included in Appendix A.

1.2 Existing Structural Conditions

1.2.1 Multi-wythe brick non-bearing walls

-Front wall

The front and rear brick walls of the building are structurally considered to be non-bearing walls. The front wall is shown in Photograph #5. No significant structural distress or structural unsoundness was observed in the front wall.

-Rear wall

The rear wall is shown in Photographs #6 & #7. There is deteriorated and cracked brick work below the 3rd story window and below the fire escape landing attached to the rear wall. Star-bolts have been installed along the entire length of the rear wall, in the past, to stabilize the brick wall from outward movement. There are numerous areas where the exterior wythe (width) has been pointed in the past-to fill deteriorated mortar joints and cracks in the brick work, which were allowing water and moisture to get into the interior wythes of the brick wall. There are exposed areas of the wall where low strength orange-colored brick (salmon brick/pumpkin brick) was used in the construction of the wall.

ANALYSIS OF EXISTING CONDITIONS

The brick walls (bearing and non-bearing) of the building are 3-stories tall and are likely four (4) wythes thick (4" width of brick = 1 wythe), or 4 wythes x 4" width = 16" thick. Deterioration of the mortar and cracking of the brick in the exterior wythe of brick allows moisture and water to get into the mortar of the interior wythes of the brick wall; also deteriorating the mortar of those wythes of brick, over time. The areas of previous pointing of the exterior brick wythe and the installation of star-bolts along the entire

STRUCTURAL VIABILITY INSPECTION: 106-108 Market Street
(Revision 1)

June 6, 2020

length of the wall show that there were, other, past opportunities for long-term deterioration of the mortar in the exterior wythe. Water and moisture that do get into the interior of the wall through open cracks and mortar joints can cause damage inside the wall without the exterior wythe of brick showing damage.

The present condition of the brick and mortar of the interior wythes of the rear wall could not be determined. However, in the past, it was common construction practice to mix low strength salmon brick into the overall construction of brick walls.

CONCLUSION

In light of the conditions observed and the likelihood of rather large areas of structurally unsound, low strength and unstable brick on the interior of the rear wall leads to the conclusion; **the rear non-bearing brick wall of this building should be considered structurally unsound and structurally unstable.**

1.2.2 Multi-wythe brick bearing walls

- Right bearing wall

The right brick bearing wall of the building of 106-108 Market abuts the left wall of 104 Market Street. See Photograph #5. Visible portions of the interior wythe of the right brick bearing wall are shown in Photographs #10 & #11. There is a high percentage of low strength orange-colored brick (salmon brick/pumpkin brick) in the exposed portions of the wall.

CONCLUSION

The conditions observed on the interior face of the right brick bearing wall (Photographs #10 & #11) lead to the conclusion that **the right brick bearing wall of the building should be considered structurally unsound and structurally unstable.**

-Left bearing wall

The exterior of the left brick bearing wall of the building is shown in Photograph #6. This brick bearing wall is bowed inward an extreme amount. The condition of exposed areas on the interior of the wall can be observed in Photographs #8 & #9.

Photograph #12 shows an isolated brick pier. There is a high percentage of low strength orange-colored brick (salmon brick/pumpkin brick) in the pier and there is advanced deterioration of the mortar in the joints of the brick.

June 6, 2020

ANALYSIS OF EXISTING CONDITIONS

The existing conditions observed, on the exterior of the rear brick wall, on the interior of the right brick bearing wall and on the exterior and the interior of the left brick bearing wall shown in Photographs #8, #9, & #12- 1) the extreme inward bowing of the entire height, and length, of the left bearing wall and 2) the high percentage of salmon brick in the interior wythe of the left brick wall and in the isolated brick pier-presently threaten the overall stability of the entire building.

CONCLUSION

The present conditions of the left, right and rear brick walls, as observed and photographed, lead to the conclusion that a sudden collapse of the brick bearing and non-bearing walls of the building would cause the drastic and complete collapse of the entire structure.

The location of the severely deteriorated condition of the interior wythe of the right brick bearing wall and exterior wythe of the rear brick wall leads to the likelihood that a collapse of the building would cause significant damage to the adjacent buildings (See Photographs #6 & #7) and should cause immediate concerns for the safety of pedestrians and street traffic in the vicinity of the building-as the existing conditions make a reliable prediction of a collapse of the building impossible.

2.0 OPINION

Within a reasonable degree of engineering certainty, and subject to change if further information becomes available, it is my opinion that:

1. A Demolition Plan for the demolition of the three (3) story building at 106-108 Market Street should be developed and implemented immediately after the demolition of the 6-story building at 209 First Avenue is completed.

The recommendation for the demolition of this building after the demolition of 209 First Avenue is due to the possibility of debris from this building crossing the 8-foot space between the buildings. The debris could fall against, and possibly collapse, the unsafe 1st floor wall of the undemolished building at 209 First Avenue; thereby causing the collapse of the 209 First Avenue structure.

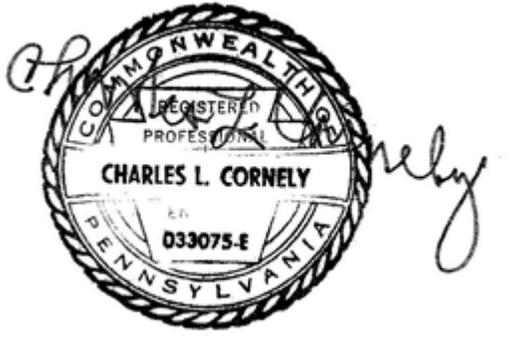
2. The building is not safe for occupancy and the building is not safe for rehabilitation construction activities on the interior of the building.

June 6, 2020

3.0 DISCLAIMER

The services provided for this project were performed with the care and skill ordinarily exercised by reputable members of the engineering profession. No warranty, expressed or implied, is made or intended by rendition of these consulting services. We reserve the right to revise or amend any portion of this Structural Viability Report in the event new information or documentation becomes available.

Sincerely,



Charles L. Cornely, P.E.
Structural/Foundation Engineer

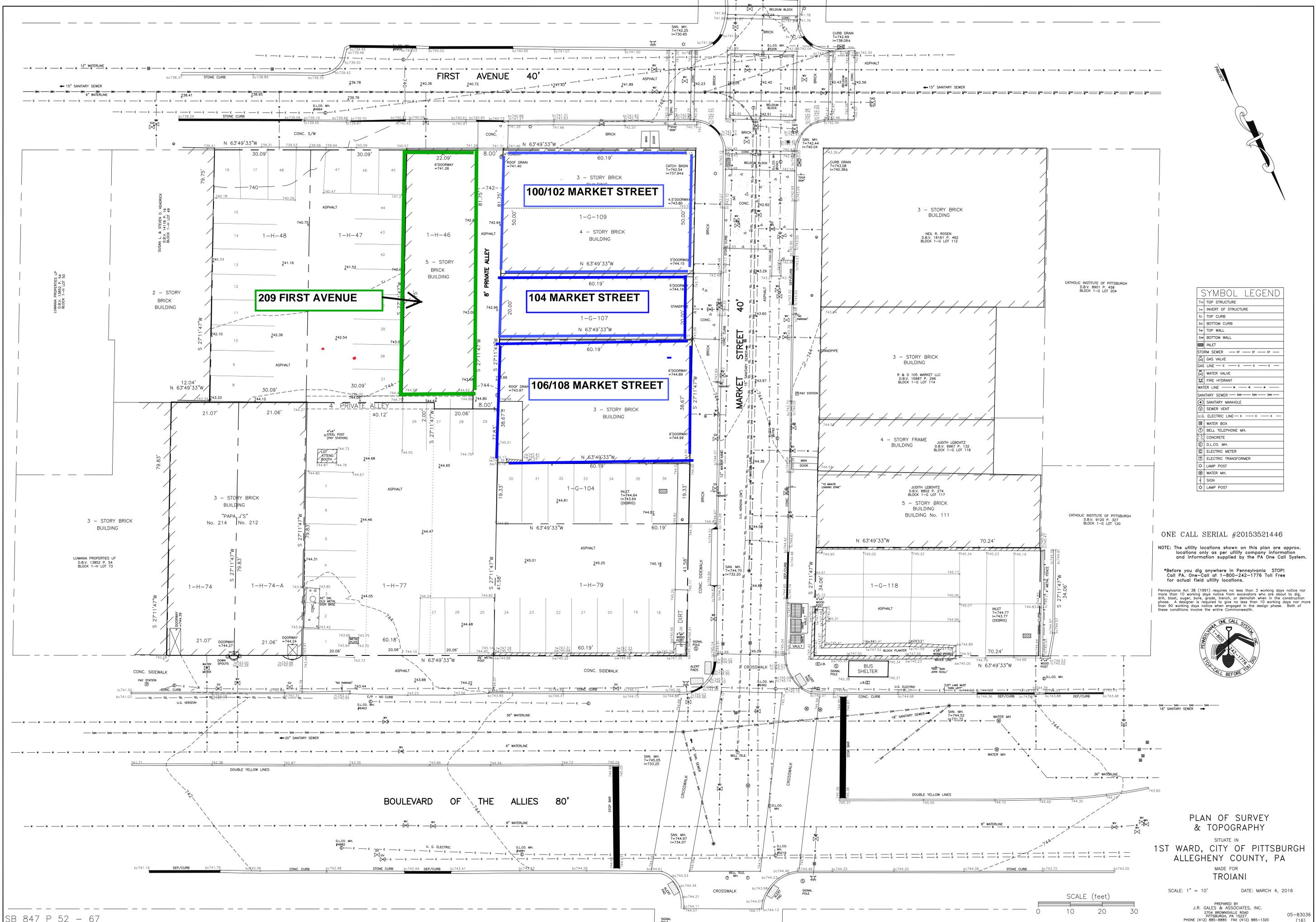
CLC/pbc

Enclosures

APPENDIX A
(Revision 1)

209 FIRST AVENUE

SITE PLANS (2)



SYMBOL LEGEND

TS	TOP STRUCTURE
TI	INVERT OF STRUCTURE
TC	TOP CURB
BC	BOTTOM CURB
TW	TOP WALL
BW	BOTTOM WALL
IN	INLET
SS	STORM SEWER
GV	GAS VALVE
GL	GAS LINE
WL	WATER VALVE
FL	FIRE HYDRANT
SL	SEWER LINE
SM	SANITARY MANHOLE
SV	SEWER VENT
EL	ELECTRIC LINE
WB	WATER BOX
BT	BELL TELEPHONE MH.
CO	CONCRETE
DM	D.I.C.O. MH.
EM	ELECTRIC METER
ET	ELECTRIC TRANSFORMER
LP	LAMP POST
WM	WATER MH.
SI	SIGN
LP	LAMP POST

ONE CALL SERIAL #20153521446

NOTE: The utility locations shown on this plan are approx. locations only as per utility company information and information supplied by the PA One Call System.

*Before you dig anywhere in Pennsylvania STOP! Call PA One-Call at 1-800-242-1776 Toll Free for actual field utility locations.

Pennsylvania Act 38 (1991) requires no less than 3 working days notice nor more than 10 working days notice from excavators who are about to dig, drill, blast, auger, bore, grade, trench, or demolish when in the construction phase. A designer is required to give no less than 10 working days nor more than 90 working days notice when engaged in the design phase. Both of these conditions involve the entire Commonwealth.



PLAN OF SURVEY & TOPOGRAPHY
 SITUATE IN
1ST WARD, CITY OF PITTSBURGH
ALLEGHENY COUNTY, PA
 MADE FOR
TROIANI

SCALE: 1" = 10' DATE: MARCH 4, 2016

PREPARED BY
J.R. GALES & ASSOCIATES, INC.
 2704 BRUNSWICK ROAD
 PITTSBURGH, PA 15227
 PHONE (412) 885-8885 FAX (412) 885-1320

APPENDIX B
(Revision 1)

209 FIRST AVENUE

EXISTING CONDITIONS

PHOTOGRAPHS #1 THROUGH #28

**APPENDIX A (Rev. 1)
106-108 Market Street**



PHOTOGRAPH #1
Looking across the Boulevard of the Allies at the left wall of 106-108 Market Street.



PHOTOGRAPH #2
The left wall of 106-108 Market Street.

**APPENDIX A (Rev. 1)
106-108 Market Street**



PHOTOGRAPH #3
Looking south across the Boulevard of the Allies and south on Market Street.



PHOTOGRAPH #4
The left front corner of 106-108 Market Street.

**APPENDIX A (Rev. 1)
106-108 Market Street**



PHOTOGRAPH #5
The front of 106-108 Market Street.



PHOTOGRAPH #6
Structural damage in the brick construction of the rear wall and left wall of 106-108 Market Street. Note the deteriorated brick work below the 3rd story window and below the fire escape landing on the rear wall, and the extreme inward bowing of the brick work of the left wall. Note the "star bolts" installed in the past to stabilize the rear brick wall.

**APPENDIX A (Rev. 1)
106-108 Market Street**



PHOTOGRAPH #7

The right portion of the rear wall of 106-108 Market street and the adjacent left wall of 104 Market Street. Note the "star bolts" installed in the past to stabilize the brick bearing wall.

**APPENDIX A (Rev. 1)
106-108 Market Street**



PHOTOGRAPH #8

A visible portion of a 2-story brick wall. Note the high percentage of low strength orange-colored brick (salmon brick/pumpkin brick) in the exposed portion of the wall.

**APPENDIX A (Rev. 1)
106-108 Market Street**



PHOTOGRAPH #9

A visible portion of a 2-story brick wall. Note the high percentage of low strength orange-colored brick (salmon brick/pumpkin brick) in the exposed portion of the wall.

**APPENDIX A (Rev. 1)
106-108 Market Street**



PHOTOGRAPH #10

A visible section of a brick bearing wall. Note the high percentage of low strength orange-colored brick (salmon brick/pumpkin brick) in the exposed portion of the wall.



PHOTOGRAPH #11

A visible section of a brick bearing wall. Note the high percentage of low strength orange-colored brick (salmon brick/pumpkin brick) in the exposed portion of the wall.

**APPENDIX A (Rev. 1)
106-108 Market Street**



PHOTOGRAPH #12

A visible section of an isolated brick pier. Note the high percentage of low strength orange-colored brick (salmon brick/pumpkin brick) in the pier. Note the advanced deterioration of the mortar in the joints of the brick.



PHOTOGRAPH #13

Strengthened wood roof joists, strengthened wood beams and added wood columns.

**APPENDIX A (Rev. 1)
106-108 Market Street**



PHOTOGRAPH #14
An additional wood post installed to strengthen steel/wood beam members which support wood roof joists.



PHOTOGRAPH #15
Wood roof joists and wood board sheathing with watermarking.

**APPENDIX A (Rev. 1)
106-108 Market Street**



PHOTOGRAPH #16

A portion of the right foundation wall of 106-108 Market Street. This foundation wall is likely a common foundation wall with 104 Market Street.



PHOTOGRAPH #17

A portion of the front foundation wall of 106-108 Market Street.

LESSONS LEARNED

Based on our experience at the Northside's Garden Block

PHLF bracing example



Structural configuration, if structurally feasible, would in reality be a much bigger imposition on First Avenue for the duration of construction, possibly 2+ years.

All too familiar



PHLF bracing example comparable to efforts tried and abandoned at the Garden Block; 04/2014 to 04/2016

Do not pursue, we need less depth as Boulevard and Market is tighter to the structure

BRACE YOURSELF STRUCTURAL OPTIONS TO PRESERVING THE HISTORIC FACADES

INITIAL APPROACH: Four floors were reworked into five behind FACADES in order to maximize unit

OPTION ONE: Structural bracing from the outside requires DEEP FOUNDATIONS, which are further complicated by recent utility work at sidewalk

OPTION TWO: Creating a new structural frame behind the facade requires EXTENSIVE LABOR, and inhibits new construction within.

OPTION THREE: Preferred approach STABILIZES existing lateral floor systems, allowing them to be reused in place. This also maintains the front 30' of the historic building

existing structure stabilized new, independent system beyond

Do not pursue for same reasons as above

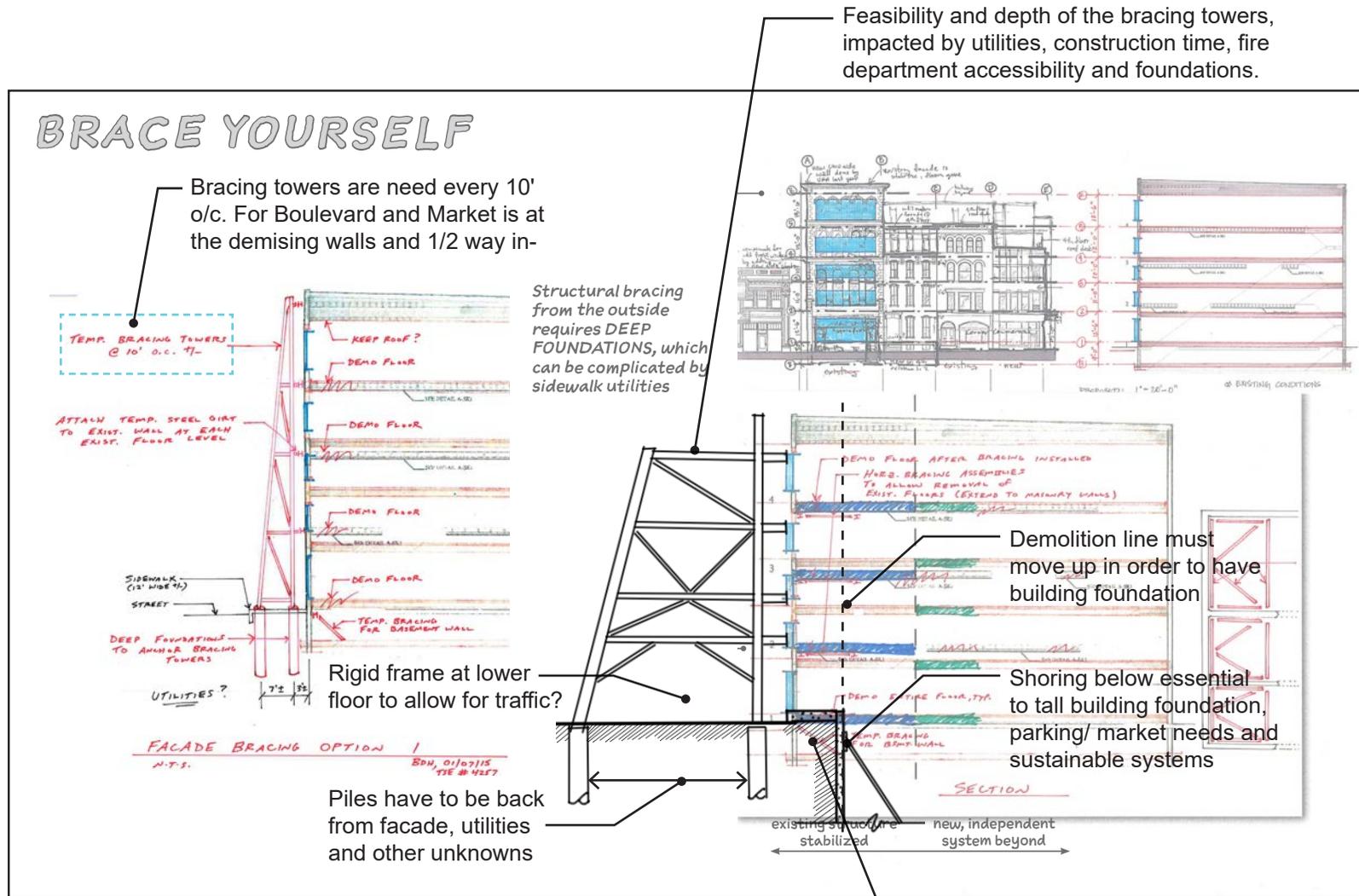
Do not pursue, we need less depth as Boulevard and Market is tighter to the structure

Most important due to interior needs, but per PHLF precedent, will encroach in street more

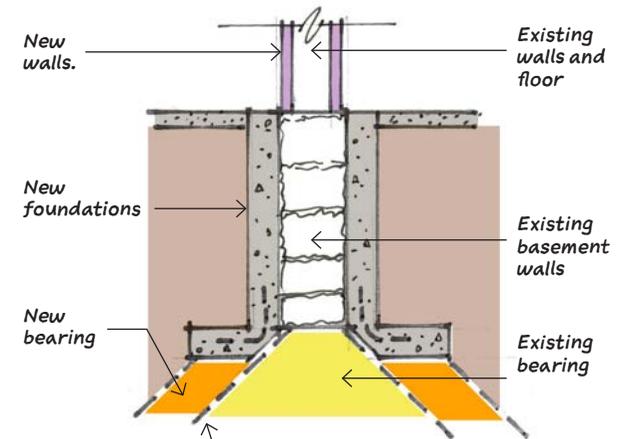
Not an option at Boulevard and Market due to interior site constraints, must go back to Option One

LESSONS LEARNED

Based on our experience at the Northside's Garden Block



+/- 10 ft of costly structural retrofit and handwork is needed between the foundation and the facades



Lateral loading and relative stiffness of existing and new structures.

High risk hand work due to structural instability- IF EVEN POSSIBLE.

BRACING BEFORE BUILDING

Understanding the efforts needed to keeping the brick facades along Market street and First avenue

Bracing system along Market street

(Load bearing brick has limited capability to withstand renovations and life cycle of new building)

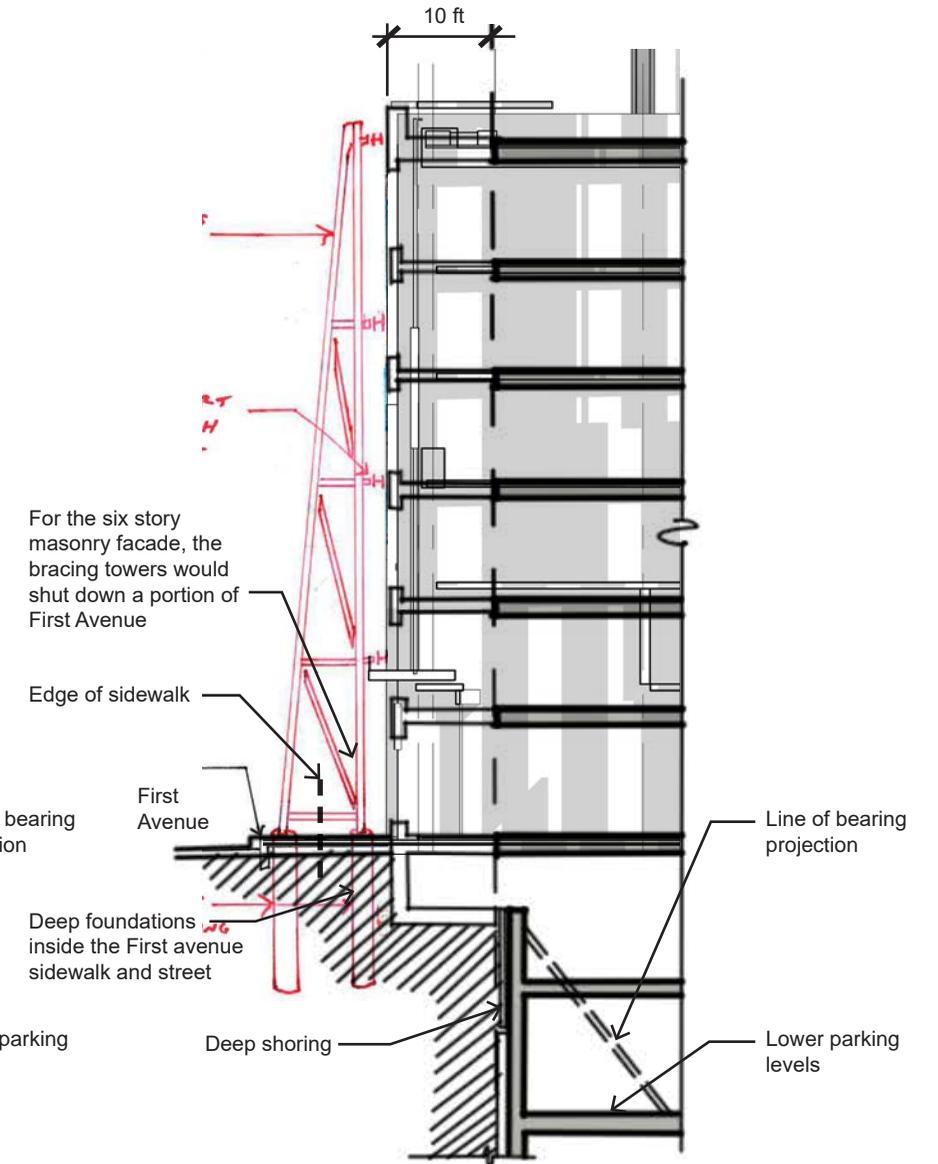
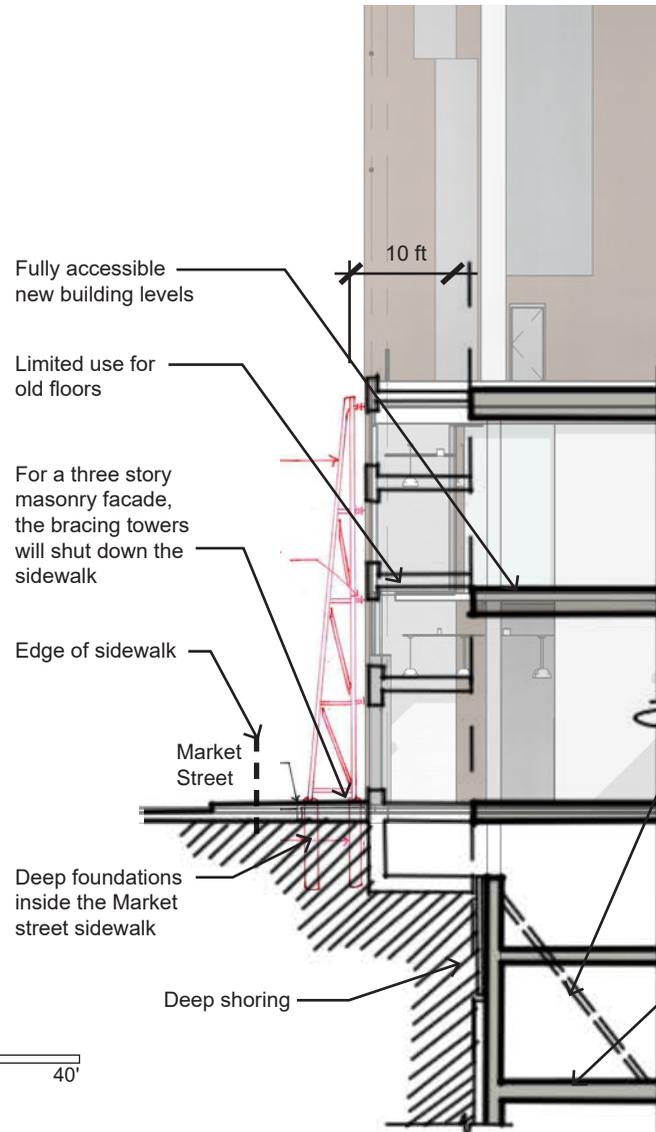
Bracing system along First avenue

(Potential failure likely)

“The proposed bracing is significant and would increase cost while not increasing the potential for an income producing activity ...it makes the project less financially feasible than it would be otherwise”

“the shoring will need to be set back from the facades reducing the size of the garage below. This would effect parking count (likely) which also makes the project less financially feasible....working around the bracing and existing facades will effect construction productivity”

John Robinson
Executive Director, Development
PJ Dick - Trumbull - Lindy Paving

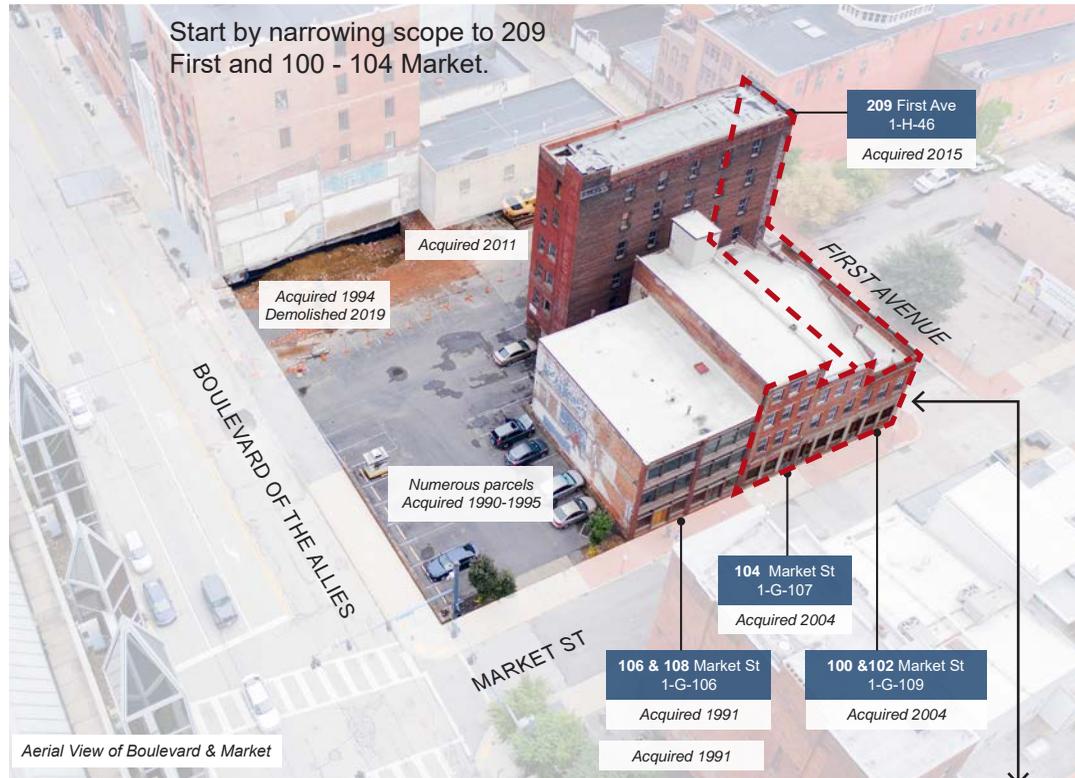


Scale 1" = 20'-0"
0' 5' 10' 20' 40'

BRACING BEFORE BUILDING

Understanding the efforts needed to keep the brick facades along Market street and First avenue

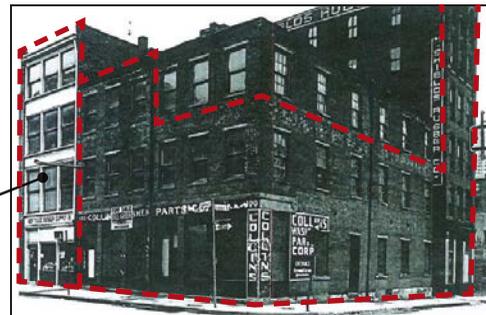
Rethinking Scope



Aerial View of Boulevard & Market

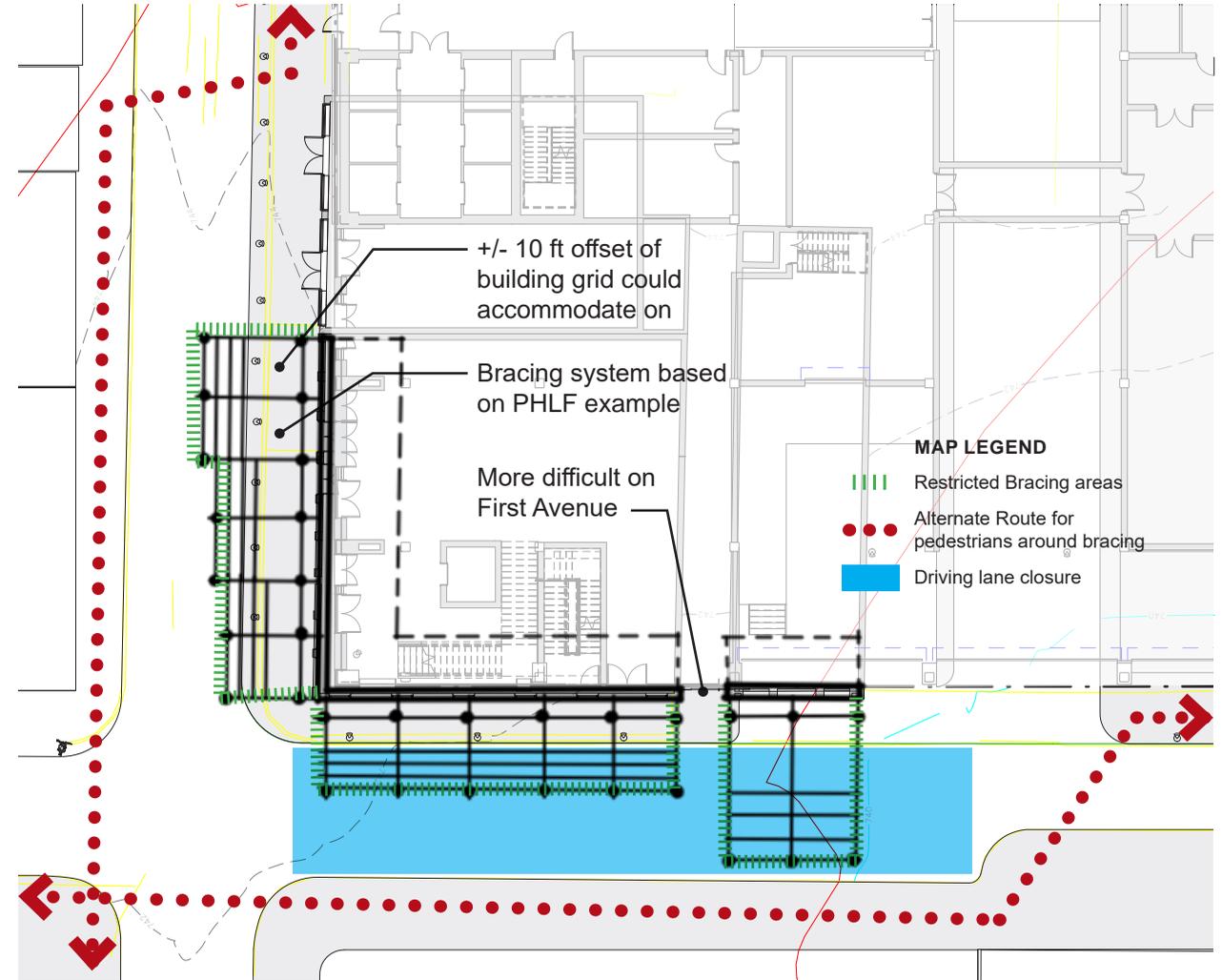
Narrow scopes to facades and bearing walls and returns for +/- 10 ft in from face

The facade to 104 Market Street has been previously renovated/reconstructed



100 (center) and 104 Market (left), with 209 First in background
Source: "Design Analysis: Market Street & First Avenue," Pittsburgh History and Landmarks Foundation, 11/15/2019

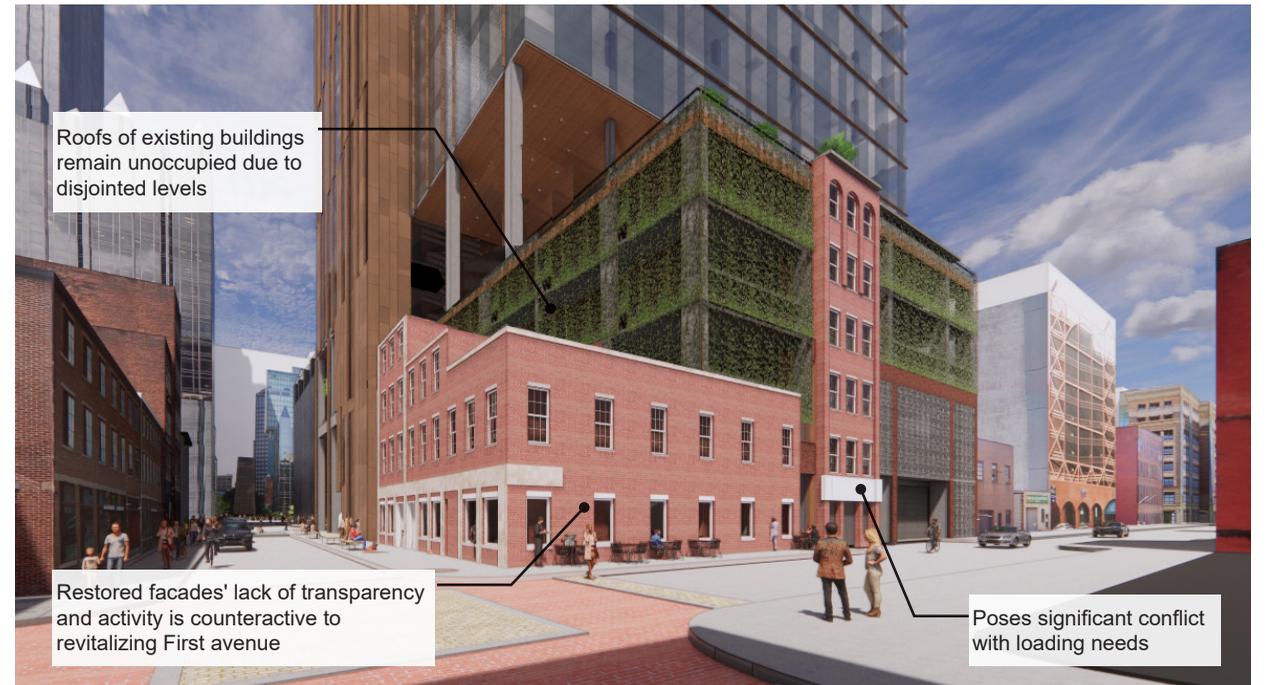
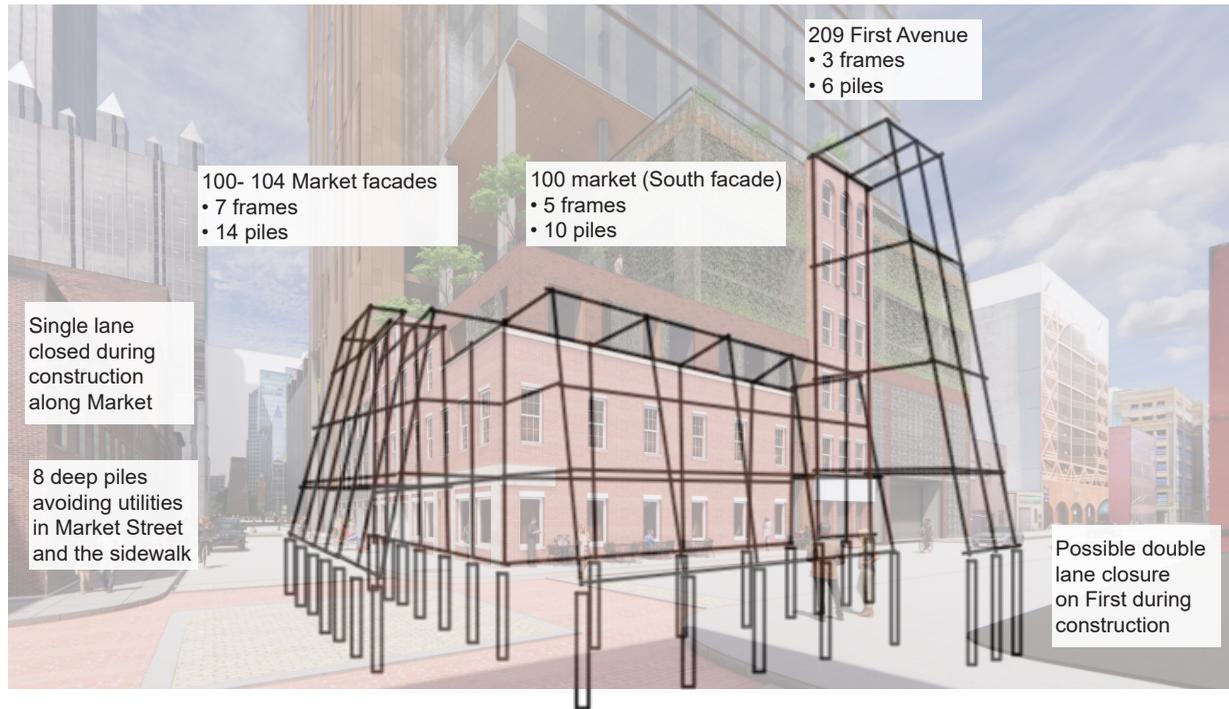
Bracing system plan



Scale 1" = 30'-0"
0' 15' 30' 60'

EVEN IF IT WERE FEASIBLE...

the outcome would take away from the projects quality and performance



FACADE SUPPORT STRUCTURAL CONCLUSIONS

 **AE&C Engineering Consultants**
Providing Structural Engineering Designs for:
• Architects • Engineers • Contractors

June 21, 2020

RE: Boulevard & Market Demolition AE&C Project No. 21848

Façade Support for reuse: 100/102 Market Street, 104 Market Street & 209 First Avenue

209 First Avenue

It is structurally infeasible to reuse the 6-story non-bearing brick façade of the front wall of 209 First Avenue. The building has been vacant and unmaintained against water damages for 50 years. This condition has likely deteriorated the brick and mortar on the interior of the façade bands/columns and created hidden, but potentially dangerous and unstable conditions throughout the façade. Additionally, a structural viability report prepared for 209 First Avenue has warned that the building is unsafe. The building could totally and unpredictably collapse due to any disturbance of the structural elements of the building. Attaching the façade elements to temporary steel bracing frames would necessarily create significant risks of disturbances to the building structure. Due to the conditions described above, the risks to public safety, and the risks to the other existing buildings on-site (along Market Street) from an unpredictable collapse of the building at 209 First Avenue; it is strongly recommended that an emergency demolition plan for the building be issued immediately.

100/102 Market Street

The structural feasibility of reusing the non-bearing brick façades of the front walls of 100/102 Market Street is dependent upon verifying the structural strength of the existing brick and verifying the mortar strength in brick work of the walls.

161 Orr Avenue, Apollo, PA 15613 aec0008@comcast.net (724) 980-8187

June 22, 2020

However, even if the façades are found to be structurally feasible for reuse, it is infeasible to reuse the existing brick façades due to the fact that the remaining useful life of the existing brick and existing mortar in the façades is much less than the expected useful life of the new construction.

Extensive steel bracing frames w/deep foundations could be erected to support the existing brick façade horizontally and allow traffic to use Market Street during construction of the project. The deep vertical foundations for the bracing frame will likely have to be installed on a grid of concrete grade beams to step around the underground utilities in Market Street. Utility lines may have to be relocated to permit the installation of the grade beams and deep foundations for the steel bracing frames. Thus, providing temporary steel bracing frames and their foundations to support the existing facade will likely become financially infeasible.

104 Market Street

The structural feasibility of reusing the non-bearing brick façade of the front wall of 104 Market Street is dependent upon verifying the structural strength of the existing brick and verifying the mortar strength in brick work of the wall.

However, even if the façade is found to be structurally feasible for reuse, it is infeasible to reuse the existing brick façade due to the fact that the remaining useful life of the existing brick and existing mortar in the facade is much less than the expected useful life of the new construction.

Extensive steel bracing frames w/deep foundations could be erected to support the existing brick façade horizontally and allow traffic to use Market Street during construction of the project. The deep vertical foundations for the bracing frame will likely have to be installed on a grid of concrete grade beams to step around the underground utilities in Market Street. Utility lines may have to be relocated to permit the installation of the grade beams and deep foundations for the steel bracing frames. Thus, providing temporary steel bracing frames and their foundations to support the existing facade will likely become financially infeasible.

106/108 Market Street

Horizontal support and reuse of the existing front façades (3-story wood and glass window walls) of 106/108 Market Street is not structurally feasible due to the extremely fragile nature of the window walls and the short remaining useful life of the materials in the façades.



Providing Structural Engineering Designs for:
• Architects • Engineers • Contractors

STRUCTURAL VIABILITY INSPECTION

(Revision 1)

BUILDING @

209 First Avenue
Pittsburgh, PA

Prepared for:

Boulevard and Market, LLC

Prepared by:

AE&C Engineering
Consultants

161 Orr Avenue

Apollo, PA 15613

724-980-8187

aec0008@comcast.net

June 8, 2020

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APPENDICES

Appendix A - Site Plan: 209 First Avenue

Appendix B – Existing Conditions: Photographs #1 through #28

1.0 STRUCTURAL VIABILITY

1.1 Description of the building

The empty commercial building at 209 First Avenue is a symmetrical 6-story brick building which occupies Parcel 1-H-46 (The building is mislabeled as a 5-story building). See Appendices A & B.

The front of the building faces First Avenue with the front wall of the building along the rear extent of the sidewalk. The structure is a 6-story brick bearing wall building with a flat roof. The floor construction of the 1st floor consists of an area supported by large wood floor beams and other areas supported by steel beams and concrete floor. The remaining floors of the building are typically supported by large wood beams with wood plank flooring. A sidewalk vault is present under the entire length of the sidewalk along First Avenue. Photographs of the building are included in Appendix A. The four (4) exterior walls of the building are shown in Photographs #1 through #7. Only an 8' wide private alley & along the left (west) wall separates the building from the rear walls (east walls) of the existing five (5) buildings on the three (3) adjacent properties; 100/102 Market Street, 104 Market Street & 106/108 Market Street.

1.2 Existing Structural Conditions

1.2.1 Multi-wythe brick non-bearing walls

-Front wall

The front brick wall of the six (6) story building is structurally considered a 6-story non-bearing brick wall. The front wall is shown in Photograph #5. Photograph #23 shows cracking and deteriorated mortar in the interior wythe of brick in the interior of the front wall on the top floor. No significant structural distress, structural unsoundness, or structural instability was observed in the front wall.

-Rear wall

The six (6) story rear wall is shown in Photographs #7, #8, #9, & #10. Four (4) areas of severely deteriorated mortar are shown in the exterior wythe of brick near the top of the wall. Three (3) locations of cracks in the brick work were also observed. There are numerous small areas where the exterior wythe has been pointed in the past to fill deteriorated mortar joints and cracks in the brick work, conditions which were allowing water and moisture to get into the interior wythes of the brick wall.

[The rear non-bearing brick wall of the building is 6-stories tall and is at least four (4) wythes thick (4" width of brick = 1 wythe), or 4 wythes x 4" width = 16" thick.

Deterioration of the mortar and cracking of the brick in the exterior wythe of brick allows

moisture and water to get into the mortar of the interior wythes of the brick wall; also deteriorating the mortar of those interior wythes of brick, over time. The areas of previous pointing of the exterior brick wythe show that there were other past opportunities for long-term deterioration of the mortar in the exterior wythe. Water and moisture will continue to get into the interior of the wall through the presently open cracks and open mortar joints, and cause structural damage inside the wall; without the exterior wythe of brick showing damage.

The present condition of the brick and mortar of the interior wythes of the rear wall could not be determined. However, the condition of the interior wythes of the left brick bearing wall was observed and is shown in Photographs #11, #12, & #13. The mortar of the interior wythe shown in the photographs is completely deteriorated with no remaining strength and, in portions of the area shown, the mortar has been completely eroded out of the joints between the bricks of many vertical courses.

CONCLUSION

In light of the conditions observed and the likelihood of rather large areas of structurally unsound and deteriorated brick/mortar on the interior of the rear wall, **the rear non-bearing brick wall of this six (6) story building should be considered structurally unsound. No areas of visible structural instability were observed in the rear wall at the time of this inspection.** However, this condition could change due to continuing deterioration of the brick and mortar from water entering the wall, and from seasonal freeze/thaw cycles. Additionally, vibrations and shifting of vertical loads on the rear wall could occur during the top-down demolition of the building or the drilling of soil test borings for the foundation investigation of future construction-thereby causing the wall to become structurally unstable and collapse.

1.2.2 Multi-wythe brick bearing walls

- Right bearing wall

The right multi-wythe brick bearing wall of the six (6) story building is shown in Photographs #6, #21, & #22. The exterior wythe of the brick in this wall is intact and appears to generally be weather-tight. The brick wythe on the inside face of the wall shown in Photographs #21 & #22 is sound and stable. The present condition of the brick and mortar of the wythes on the interior of the right bearing wall could not be determined. No significant areas of brick and/or mortar deterioration were observed in this wall.

CONCLUSION

A visual structural inspection of the right brick bearing wall of the building concludes that this wall appears to be structurally sound and stable. However, the wall should not be positively relied upon to be structurally sound and stable without investigation of the actual existing condition of the interior wythes of the wall,

-Left bearing wall

The left brick bearing wall of the six (6) story building is shown in Photographs #11, #12, & #13. The condition of the interior wythes at the bottom of the left brick bearing wall can be observed in these photographs. The mortar of the interior wythes shown in the photographs is completely deteriorated with no remaining strength and, in portions of the area shown, the mortar has been completely eroded out of the joints between the bricks of many vertical courses.

ANALYSIS OF EXISTING CONDITIONS

The existing conditions observed in the front portion of the left brick bearing wall shown in Photographs #11, #12, & #13 presently threaten the overall stability of the entire building. The collapse of a significant area of the exterior wythe of the brick bearing wall has exposed the structurally unsound and unstable interior wythes of brick on the interior of the wall at this location. The mortar of some of the interior wythes shown in the photographs is completely deteriorated with no remaining strength and, in portions of the area shown, the mortar has been completely eroded out of the joints between the bricks of many vertical courses.

Photograph #11 was taken looking to the rear along a significant length of the west brick bearing wall of the building at 209 First Avenue. The exterior wythe (4" width) of the brick bearing-wall has completely fallen off the wall in this area; exposing the 1st interior wythe of the wall. Note the deterioration of the soft bricks and the absence of mortar in the exposed area of the 1st interior wythe of the bearing wall. Note the concrete block in-fills of the 1st floor windows.

This bearing wall appears to be 5-wythes thick (5-widths/horizontal layers x 4" per wythe = 20" thick). The exterior 2-wythes (an 8" thickness of wall) are missing or are structurally unsound; this condition leads to the conclusion that the structural strength of the wall has been reduced by as much as 40% from its load-carrying capacity when the wall was originally built. The structural ability of the interior wythes of brick to act in compression to safely carry the present dead loads of the wall, and the floor & roof structures above, has been reduced to an indeterminate value.

Note that the collapse of the severely weakened 1st floor section of the west brick bearing wall of the 6-story building at 209 First Avenue would cause that 6-story building to collapse to the left (westward) and fall onto (and against) the buildings at 100/102 Market Street, 104 Market Street, & 106/108 Market Street. See Photographs #1, #2, #4, #5, & #7.

CONCLUSION

The present conditions of the front portion of the left brick bearing wall, as observed and photographed, lead to the conclusion that the front portion of the left

1st floor brick bearing wall of the building is very unsafe structurally and is in danger of, a possibly imminent, collapse. The collapse of this section of the left brick bearing wall would more likely, than not, cause the drastic and complete collapse of the entire structure.

The severely deteriorated condition of the interior wythes of the front portion of the left brick bearing wall make that portion of the wall structurally unsafe. Conditions that would increase the danger of collapse include:

- a) Vibrations and shifting of vertical loads on the rear wall which could occur during the top-down demolition of the building
- b) The vibrations from the drilling of soil test borings for the foundation investigation of future construction.
- c) Vibrations caused by the proposed demolition of the adjacent buildings.
- d) Impact from debris during the demolition of the adjacent buildings.
- e) Further deterioration of the structural load capacity of the interior wythes of the brick and mortar in the wall from the continuing action of rain, snow and ice.

The location of the severely deteriorated and unsafe condition of the interior wythes of the front portion of the left brick bearing wall leads to the likelihood that a collapse of the building at 209 First Avenue (to the left) would cause significant damage to the adjacent buildings located to the left of 209 First Avenue (See Photographs #3, #4, & #5) and should cause immediate concerns for the safety of pedestrians and street traffic in the vicinity of the buildings-as the existing conditions make a reliable prediction of a collapse of the building at 209 First Avenue impossible.

1.2.3 Wood floor beams

The large wood floor beams supporting the floor structures throughout the building are shown in Photographs #14 through #28. The present conditions of the floor beams in the building include:

- a) Deteriorated wood beams supported on steel beams and posts along the right wall of the basement under the 1st floor
- b) Floor beams cracked at the bearing areas on the brick bearing walls.
- c) Typically water damaged floor beams.
- d) Fire damaged wood floor beams

CONCLUSION

The observed conditions of the severely deteriorated and fire-damaged wood floor beams lead to the conclusions that the building is 1) unsafe for occupancy and 2) that renovation of the building is not structurally or economically feasible.

2.0 OPINION

Within a reasonable degree of engineering certainty, and subject to change if further information becomes available, it is my opinion that:

1. A Demolition Plan for the demolition of the six (6) story building at 209 First Avenue should be developed and implemented immediately.

The present conditions of the front portion of the left 1st floor brick bearing wall have made that portion of the building structurally very unsafe and in danger of, possibly imminent, collapse. The collapse of this section of the left brick bearing wall would more likely, than not, cause the drastic and complete collapse of the entire structure.

The time of the collapse of the building is unpredictable (possibly imminent) and the further deterioration of the 1st floor left brick bearing wall by rain and freeze/thaw action is unstoppable.

2. If the already severely weakened, and unsafe, 1st floor portion of the left (west) brick bearing wall of the building at 209 First Avenue collapses; 1) before the demolition of the building, or 2) during the “top down” demolition of the building, the 6-story building can totally collapse and fall to the left (westward) and fall onto (and against) the buildings located 8 feet away from the left bearing wall of 209 1st Avenue. The endangered buildings are located at 100/102 Market Street, 104 Market Street, & 106/108 Market Street.
3. From this point in time-until the 1) unpredictable (possibly imminent) and unstoppable collapse, or 2) after the demolition, of the 6-story building at 209 First Avenue-immediate actions should be taken to preserve the safety of pedestrians and traffic in the potential “fall zone” of the debris from a collapse of the building. There is also concern for the safety of pedestrians and street traffic along the walls of the buildings located along Market Street-due to the possible partial collapses of those buildings from the impact of the collapse of 209 First Street on those structures.

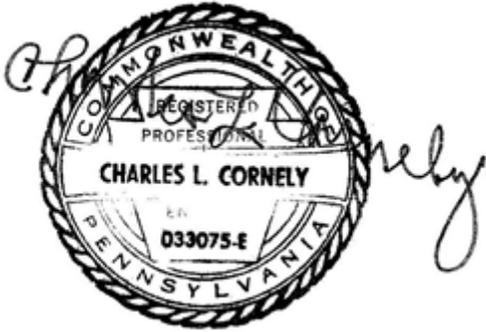
3.0 DISCLAIMER

The services provided for this project were performed with the care and skill ordinarily exercised by reputable members of the engineering profession. No warranty, expressed or implied, is made or intended by rendition of these consulting services. We reserve the right to revise or

STRUCTURAL VIABILITY INSPECTION – 209 First Avenue
(Revision 1)
June 8, 2020

amend any portion of this Structural Viability Report in the event new information or documentation becomes available.

Sincerely,



Charles L. Cornely, P.E.
Structural/Foundation Engineer

CLC/pbc

Enclosures

GOLDEN TRIANGLE OPPORTUNITY

Application for Demolition and Consolidation

March 6, 2020 Supplemental Submission to Department of City Planning



TROIANI
GROUP

Rothschild
COLLABORATIVE
Doyno
ARCHITECTURE AND URBAN DESIGN

BUROHAPPOLD
ENGINEERING

 PJ DICK

TOP OF THE MARKET

Pittsburgh's Golden Triangle anchors regional real estate by developing dense high impact buildings



Image developed to facilitate design dialogue with interested parties shows impact and visibility on the Golden Triangle skyline

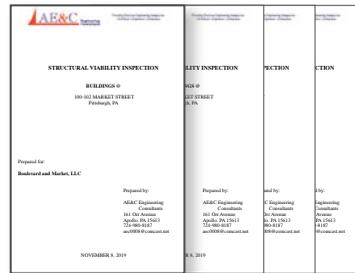
SUPPLEMENTAL SUBMISSION

Summary of Reference Documents included in supplemental submission package



01
Historical Report

via [Dropbox link](#)



02
Structural Reports

via [Dropbox link](#)



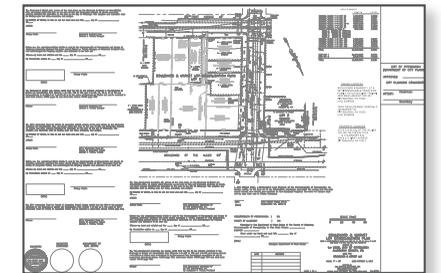
03
Masonry Report

via [Dropbox link](#)



04
Zoning Review

this document and via [Dropbox link](#)



05
Lot Consolidation

via [Dropbox link](#)

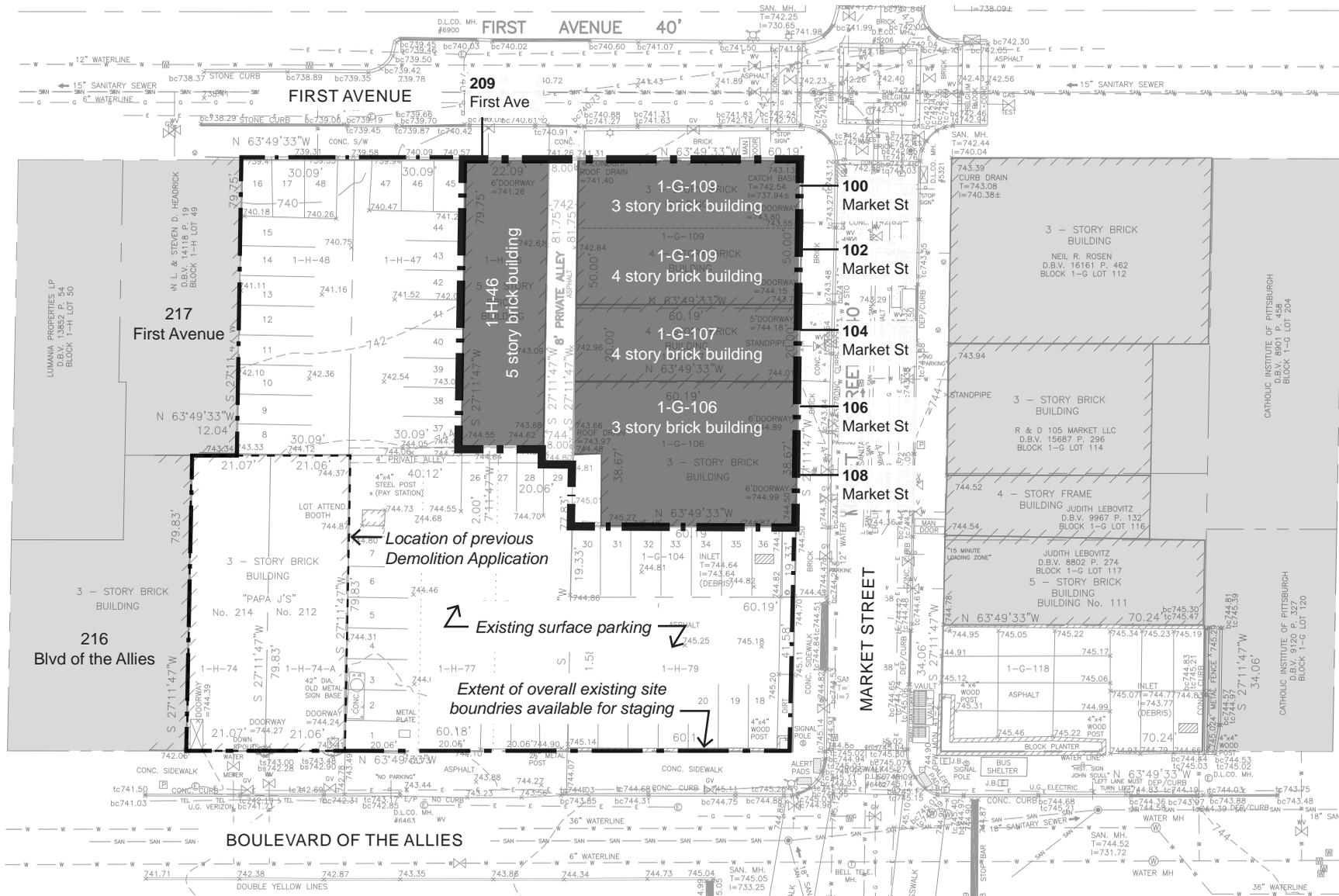
Reference reports [Dropbox link](#):

https://www.dropbox.com/sh/danfonsfb27v9vf/AABCvujGse5orU_d9fhMeCMma?dl=0

04 ZONING REVIEW

FIRST AND MARKET

Existing Site Plan Showing Proposed Demolition



- MAP LEGEND**
- Existing Buildings
 - Subject Buildings
 - Extent of Demolition
 - Extent of Site



ASSEMBLING CONTIGUOUS PROPERTIES

A historic understanding of the 30 year assembly of contiguous properties at Boulevard & Market



Aerial View of Boulevard & Market properties

URBAN LAND - MAXIMIZING POTENTIAL

Meaning of "Gross Lot Area" for calculation of Floor Area Bonus of Urban Open Space

910.01.C.4 Floor Area Bonuses

(a) Urban Open Space bonus

Total required Urban Open Space =
lot area x 20% x (total floor area/base floor area)

= 24698 x .20 x 1.575

= **7,779.87 GSF for Urban Open Space Bonus**

Definitions

Lot Area = 24,698 GSF

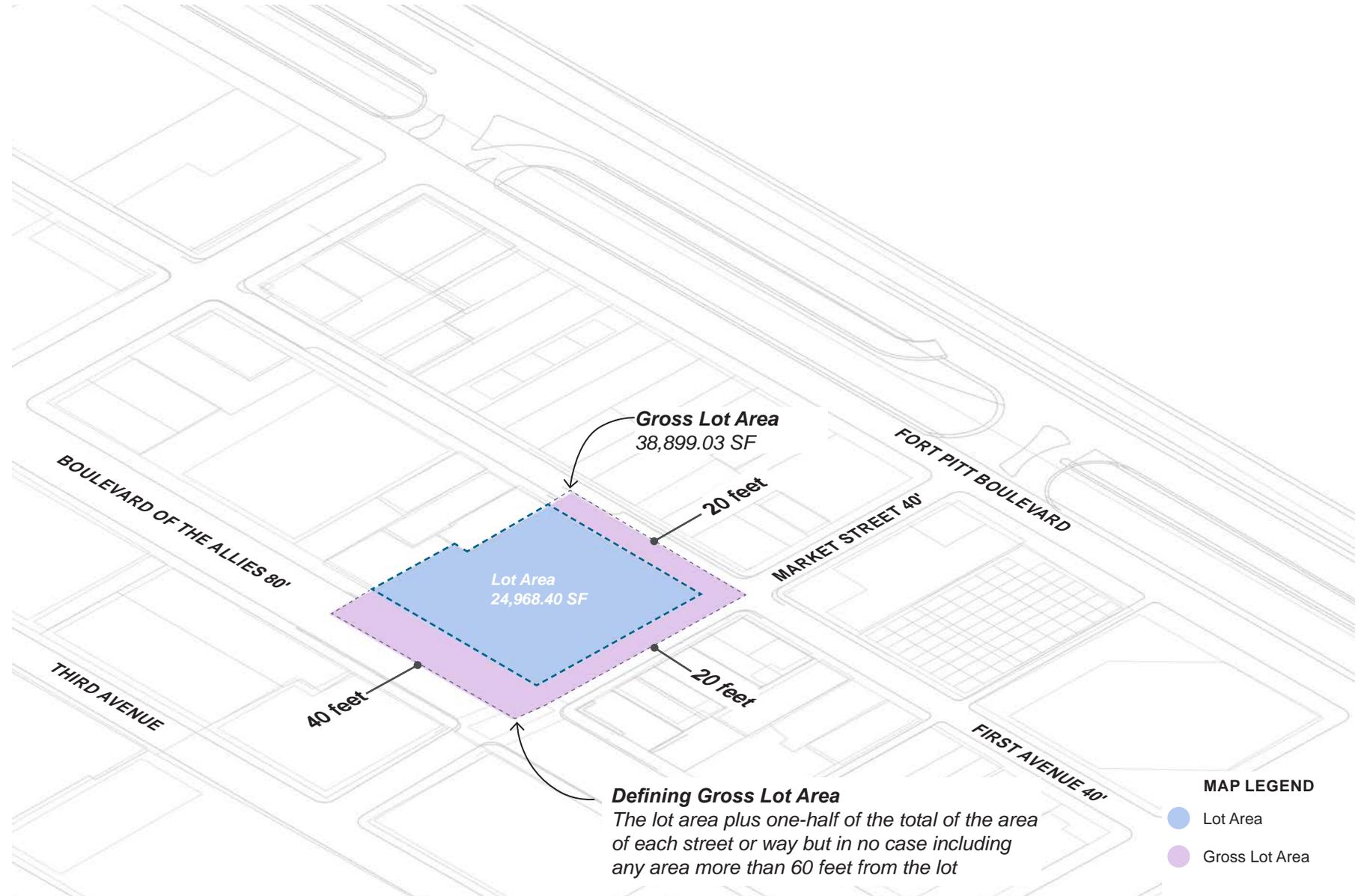
The total area of a lot lying within the lot lines, not including any portion of a street or way.

Gross Lot Area = 38,899 GSF

The lot area plus one-half of the total of the area of each street or way but in no case including any area more than 60 feet from the lot.

Base Floor Area = 246,980 GSF (FAR 10:1)
(FAR based on **lot area**)

Total Floor Area = 388,990 GSF (FAR 10:1)
(FAR based on **gross lot area**)



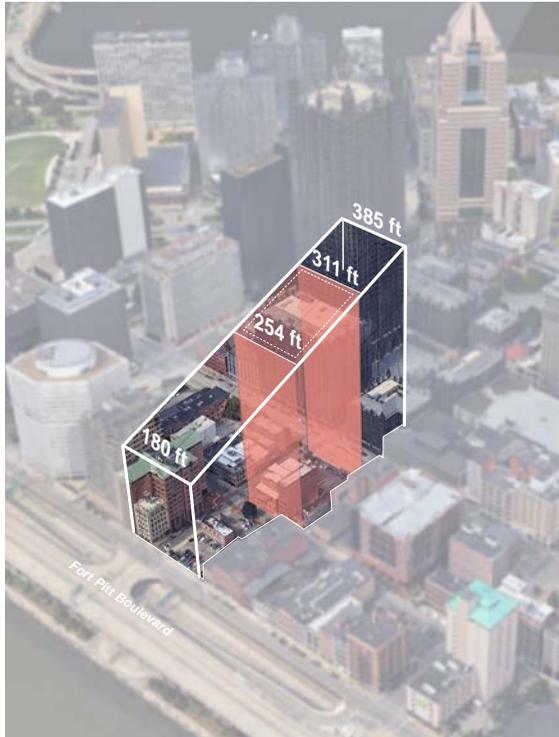
ALLOWABLE HEIGHT

Lower height and floor area along Market and First and higher height along the Boulevard of the Allies

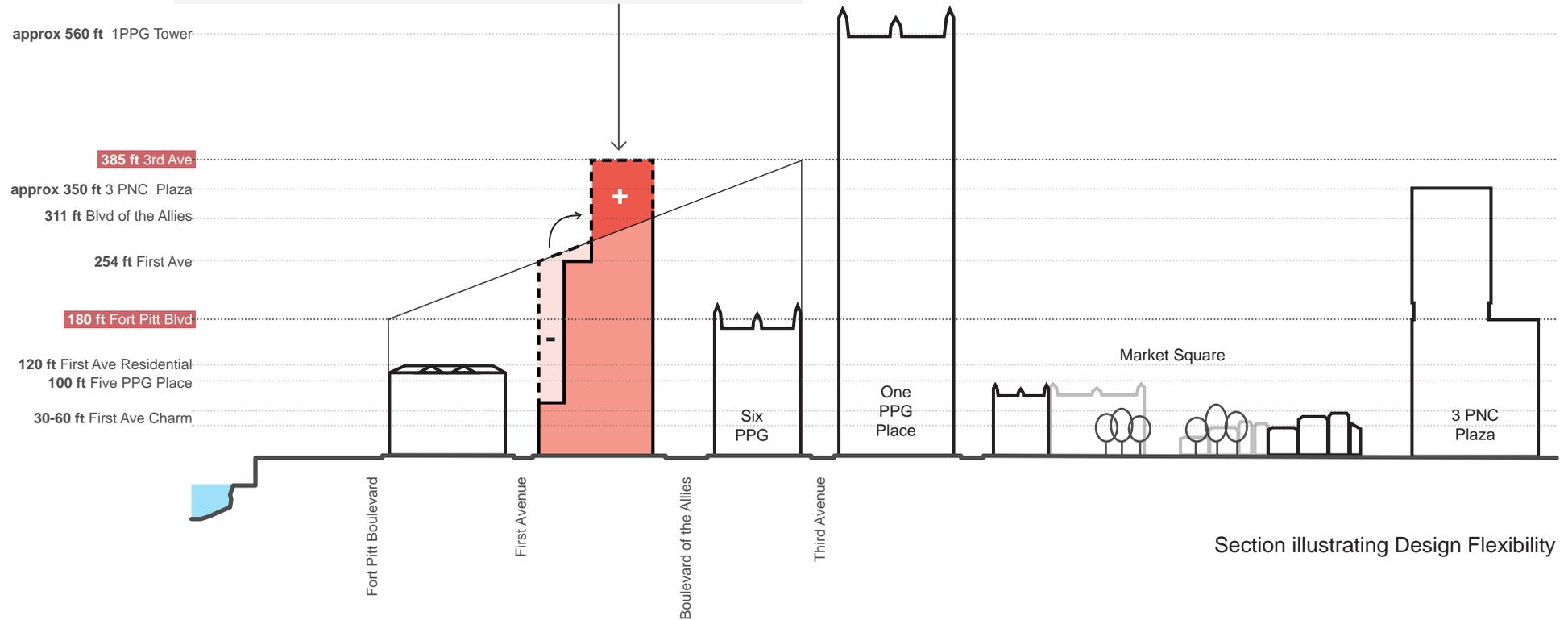
910.01.H.2(d)(1) Height *Monongahela River Side structures or portions of structures may not penetrate an inclined plane determined by straight lines connecting points 180-feet on Fort Pitt Boulevard and 385-feet on Third Avenue*

910.01.H.2(d)(3) Tall Building Height Reduction *Floor area above 300-feet shall be reduced where Total floor area above 300 feet = (base floor area) (number of floors) x (reduction factor from zoning table)*

910.01.H.2(d)(4) Design Flexibility *Structures may penetrate a portion of the incline plane only if an equal amount of building bulk is reduced below the incline plane and only if the maximum height of the structures occurs at that portion of the site covered by the highest portion of the inclined plane*



Aerial View of the GT-C inclined plane height envelope



Note: information provided for site only. Elevation data provided by Google Earth and is approximate.

APPLYING FLOOR AREA RATIO

Utilizing the Gross Lot Area for the determination of Floor Area Ratio

Development Table

Gross Lot Area (GLA) = 38,899 GSF

FAR 7.5:1 (GLA) = 291,742 GSF
FAR 10:1 (GLA) = 388,990 GSF

910.01.H.2 Site Development Standards

(b) Floor Area Ratio, (2) Residential

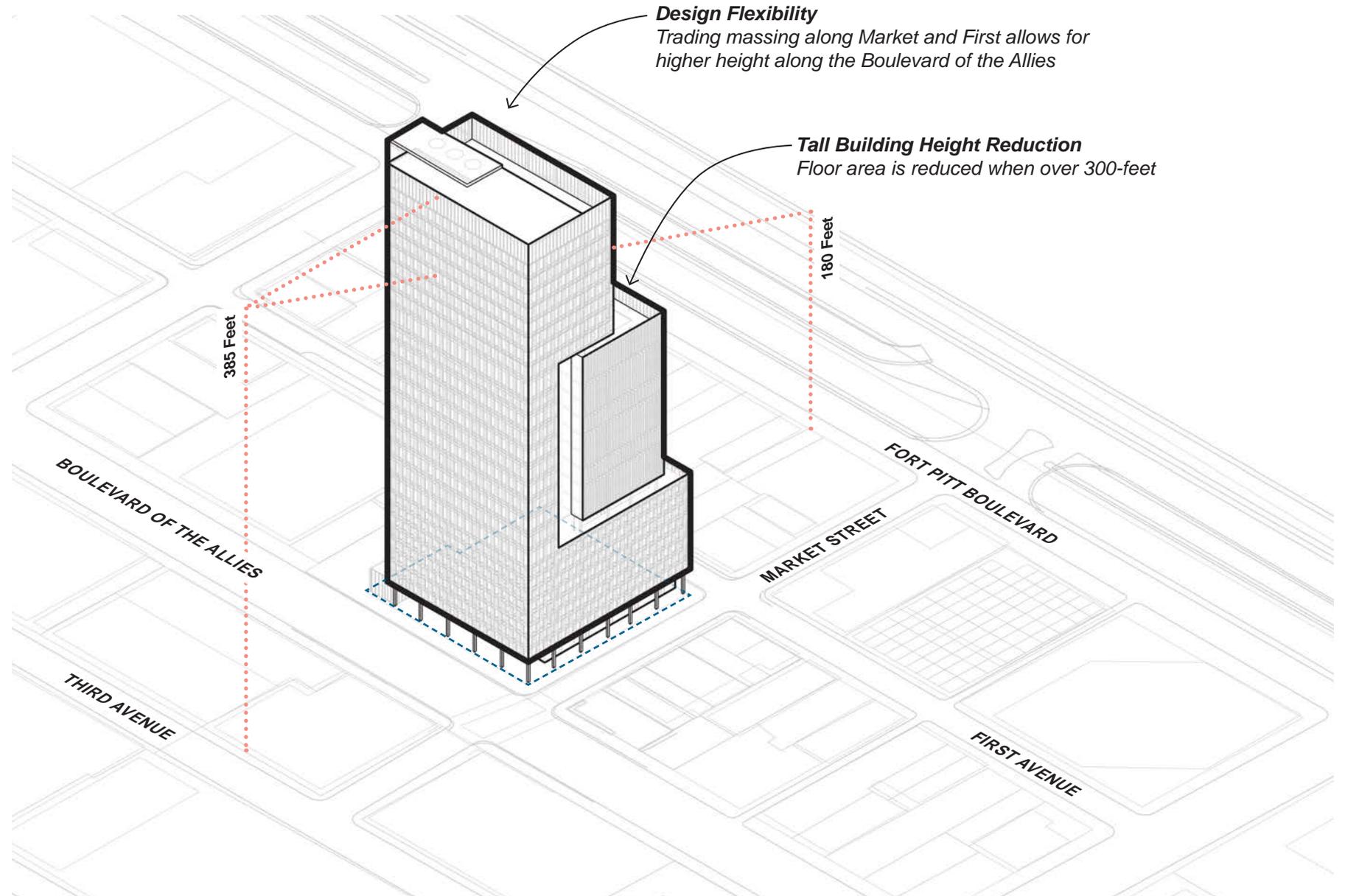
The maximum FAR for structures that contain residential shall be 7.5:1, provided that a maximum FAR of up to 10:1 may be allowed by the Planning Commission when the total amount of residential area equals or exceeds twice the amount of bonus floor area

Bonus floor area = 97,247 GSF

Twice the bonus floor area = 194,495 GSF

Residential

194,495 GSF required



*Updated survey required to verify Monongahela River incline plane height

PROPOSED BY-RIGHT DEVELOPMENT

FAR 10:1 (GLA) = 388,990.28 GSF

Residential:
194,495 GSF

Office:
194,495 GSF

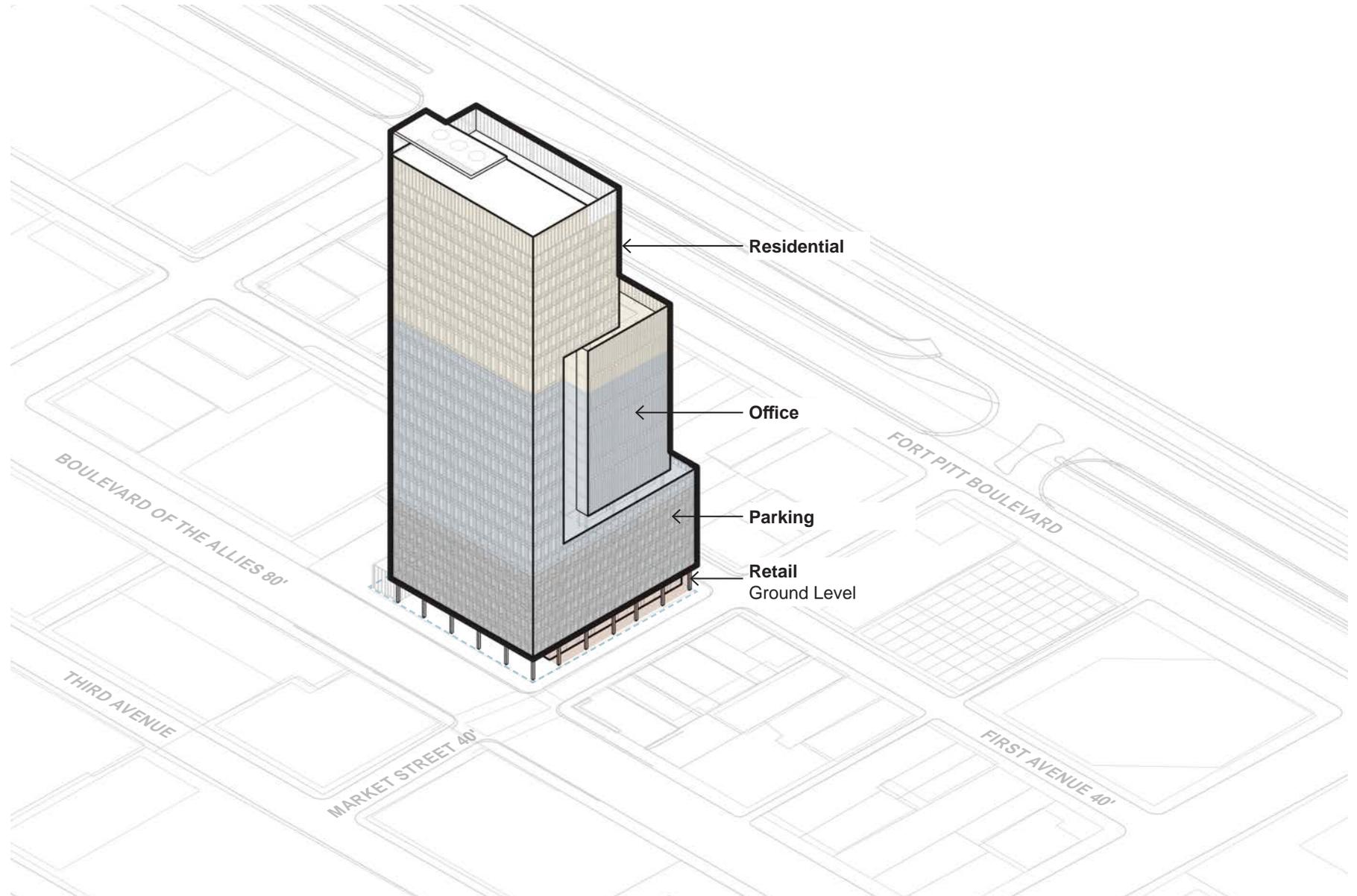
Bonus Floor Area

Retail Bonus:
10,000 GSF

Urban Open Space Bonus:
7,780 GSF

**ALLOWABLE AREA WITH
BONUSES = 406,770 GSF**

Note
Per Zoning Code, **parking** does not contribute to FAR, nor is it required within the GT-C, but it is part of the overall program mix.



INTEGRATION OF URBAN OPEN SPACE

Illustrating the proposed location and amount of required and bonus Urban Open Space

910.01.C.2 General Open Space Requirements

(a) Location
Open space required by the GT District regulations may be located on the same zoning lot as the principle use or on an **adjacent zoning lot**.

910.01.C.3 Urban Open Space Requirements

(b)(4) Development Standards
Developments which utilize the floor bonus may be provided as **interior (urban open) space** rather than outdoor space and shall comply with zoning standards.

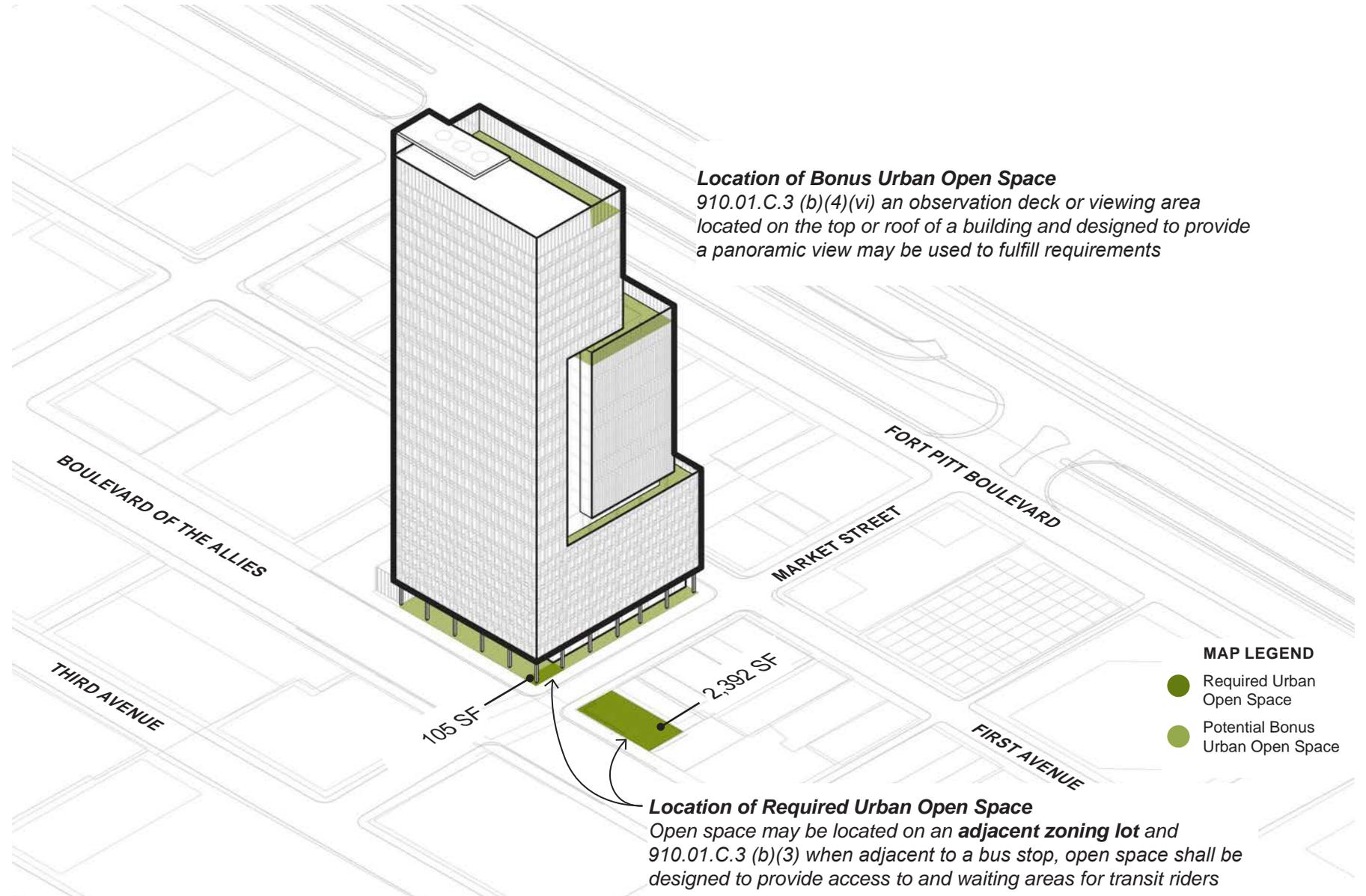
910.01.C.4 Floor Area Bonuses

(a) Urban Open Space bonus
= **7,780 GSF for bonus Urban Open Space**

910.01.H.2 GT-C Site Development Standards

(c) Urban Open Space
Shall be provided at ground level in an amount at least equal to 10% of the lot area.
= **2,497 GSF for required Urban Open Space**

Total Urban Open Space
10,277 GSF
(Required + Bonuses)



Reference reports Dropbox link:

https://www.dropbox.com/sh/danfonsfb27v9vf/AABCvujGse5orU_d9fhMeCMma?dl=0

Historic Property Assessment

100, 104, 106 Market Street, 209 First Avenue, Pittsburgh, Pennsylvania



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March 9, 2020



EXECUTIVE SUMMARY

Entities associated with Troiani Group own the properties located at 100-108 Market Street and 209 First Street in Downtown Pittsburgh, PA. After extensive study and consideration of alternatives, Troiani Group, LLC is proposing to demolish the existing buildings and develop a high-rise, mixed-use building on the site which incorporates elements from the historic buildings into the redevelopment. In order to fully understand the historic and architectural aspects of the site, Heritage Consulting Group was retained to research the history of the property and to assess the significance of the existing buildings and the proposed development. Heritage also considered a feasibility analysis, prepared by Pittsburgh History and Landmarks Foundation (PHLF), a local non-profit preservation group.

The site is situated at the northeast corner of Market Street and First Avenue, and runs most of the length of Market Street between First Avenue and Boulevard of the Allies. The Market Street Buildings are two-to-four-story attached brick buildings constructed circa 1860-1910. The 209 First Avenue Building was constructed c. 1904. Since construction, each of the buildings have been occupied by multiple tenants in a multitude of uses, with upgrades frequently made to meet changing needs. As a result, little historic fabric remains at the interior. The buildings have been vacant since 2003. As a result, the buildings survive in very poor condition. Adaptive reuse would require substantial capital improvements. Even with significant investment, the buildings are not ideal for the current use. The limited floorplates do not provide the space necessary for viable retail or office tenants and there is limited foot or vehicular traffic in this isolated section of Downtown Pittsburgh to support retail use.

The buildings are currently historically designated as contributing resources to the Firstside National Register Historic District Boundary Increase. They were not listed in the original 1988 district, but were included in the recent 2013 boundary extension. The buildings are not designated local landmarks nor a contributing buildings to a Local Historic District. Thus, review by Pittsburgh's Historic Review Commission is not required. These buildings are of marginal significance when viewed in context with the National Register Historic District. Review of historic Sanborn maps, newspaper articles, photographs, archival resources, and available city directories has established that the tenants of the subject buildings were not of particular significance. A direct connection between the businesses which operated at the subject buildings and the commercial activity of the Monongahela Wharf cannot be established. There are no architects or developers of historical significance attributed to the subject buildings. Limited information was readily available on any of the tenants that occupied the buildings during the district's period of significance from 1845-1938, attesting to their relative insignificance.

“Demolition” is defined within the Pittsburgh Zoning Code’s definition of “development.” Thus, as required for all defined “developments,” the Planning Commission is required to review applications for demolition of the subject buildings pursuant to the criteria set forth in Code Section 922.10.E.2. Under the code, the Planning Commission must consider the retention and reuse of locally or federally designated historic structures. The subject buildings are listed in the National Register under the Firstside Historic District and are therefore, “federally designated.” However, federal designation does not necessarily indicate outstanding historical significance, particularly when viewed in the context of a district with 53 contributing buildings. Although these buildings have a federal designation as “contributing” buildings, their significance to the district is marginal.

Furthermore, listing as a contributing resource in a district is not the same level of significance associated with a building(s) that are individually listed on the National Register. Although these buildings are federally designated they are of marginal significance to the district. In addition to consideration of whether preservation of structures is possible, the Zoning Code also requires the Planning Commission to consider goals and objectives established in the comprehensive plan when reviewing demolitions. The proposed development for a mixed-use residential and office tower is consistent with the intent of the GT-C Zoning District and the goals and objectives of the PlanPGH Plan.

The project team considered preservation of the existing buildings and considered the feasibility analysis completed by PHLF. Ultimately, preservation proved economically and physically infeasible due to the lack of a viable retail market and structural issues with the buildings. Elements from the buildings will be reused on site of the new tower. The proposed tower will bring much-needed density to the neighborhood, increasing pedestrian traffic that will help contribute to neighboring businesses, thereby meeting the goals established in the PreservePGH Plan.

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1. PROJECT BACKGROUND

Entities associated with Troiani Group own the properties located at 100, 104, 106 Market Street, and 209 First Avenue in the Downtown neighborhood of City of Pittsburgh. The four subject buildings are currently located on separate parcels, which are to be consolidated. The three-story commercial vernacular buildings at 100-108 Market Street were constructed circa 1860. The six-story commercial vernacular building at 209 First Avenue was completed in 1904. These buildings are surrounded by a surface parking lot to the east and north. In general, the buildings survive in varying states of disrepair. In recent years some conditions of deterioration have become so extreme that there is imminent danger of collapse as confirmed in reports provided by AE&C Engineering Consultants.

Troiani Group has plans to demolish the existing deteriorated buildings and develop a high-rise building on the site with parking at the lower levels and residential units at the upper levels. These units will fill a gap in the housing stock in the Downtown neighborhood of Pittsburgh. The individual tax parcels would be consolidated in the development plan.

The four subject buildings are located within the Firstside National Register Historic District. The Firstside Historic District was originally listing in the National Register in 1988. As originally listed, 12 buildings were identified for inclusion in the district, including 10 contributing buildings and two non-contributing buildings. The subject buildings were not included in the original Firstside Historic District boundaries. In 2013, the Firstside Historic District expansion was added to the existing district. The expansion area included 43 additional contributing buildings, including the four subject buildings, as well as 15 non-contributing buildings, and 13 non-contributing sites. When listed in the National Register in 2013, the district included a total of 53 contributing buildings.

While the existing buildings have no local historic designations, the Troiani Group recognizes the historic link of the properties to the community. Preservation of these buildings was initially explored by Troiani Group and PHLF. Ultimately, preservation of these properties has proven infeasible for safety and economic reasons as well as the challenges related to feasibility of reuse. The city Planning Commission is currently in the process of reviewing Troiani Group's application for demolition of these properties. Troiani Group retained Heritage Consulting Group to better and more fully understand the historic and architectural aspects of the property. In the course of reviewing the subject buildings, Heritage reviewed Structural Viability Reports completed by AE&C Engineering Consultants, a Market Street Corridor Office and Retail Analysis Report completed by Cushman and Wakefield and Grant Street Associates Inc., and research and feasibility analyses completed by the Pittsburgh History and Landmarks Foundation. In addition, Heritage reviewed the available historic documentation including historic photographs, newspaper articles, city directories, Sanborn Fire Insurance Maps, atlases, and building permits. A site visit was conducted by Lee Riccetti, Associate of Heritage Consulting Group in November 2019. Research was undertaken in order to better understand the history and development of the properties. The National Register nomination, the Pittsburgh Zoning Code, and PlanPGH plan for the surrounding area were reviewed to understand the city's priorities and objectives for the neighborhood. Finally, an assessment of the redevelopment concept was completed to gain an appreciation of the preservation challenges.

This report is the product of Heritage's assessment.

2. HERITAGE CONSULTING GROUP

Established in 1982, Heritage is a national firm that assists the owners and developers of older and historic buildings in understanding the relative significance of their resources, navigating the regulatory redevelopment processes, and securing financial opportunities from federal, state and local incentives. Our firm is staffed by seasoned historic preservation professionals who meet the Professional Qualifications Standards under the category of *Historic Architecture* and *Architectural History* in the Secretary of the Interior's Standards and Guidelines, *Code of Federal Regulations, 36 CFR Part 61*.

Heritage has established a reputation for a sophisticated understanding of the rules and regulations related to older and historic buildings. The firm assists developers in effectively navigating the agencies responsible for implementing preservation programs. Heritage has completed projects across the country, totaling billions in construction.

The firm routinely provides due diligence analyses, detailing the history, integrity and historic parameters for sites. Heritage has prepared hundreds of National Register Nominations, arguably more than any other entity in the country. The firm conducts surveys, both reconnaissance and intensive, and completes building documentation in anticipation of demolition. Additionally, Heritage works with developers to help secure federal, state and local financial incentives. Finally, the firm provides guidance for public and government agencies, such as the United States Postal Service and United States Air Force, in understanding and navigating relevant historic preservation laws.

The firm's client base is national and broad and includes private developers, not-for-profit organizations, colleges and universities, as well as federal, state and local governments.

Heritage's services include:

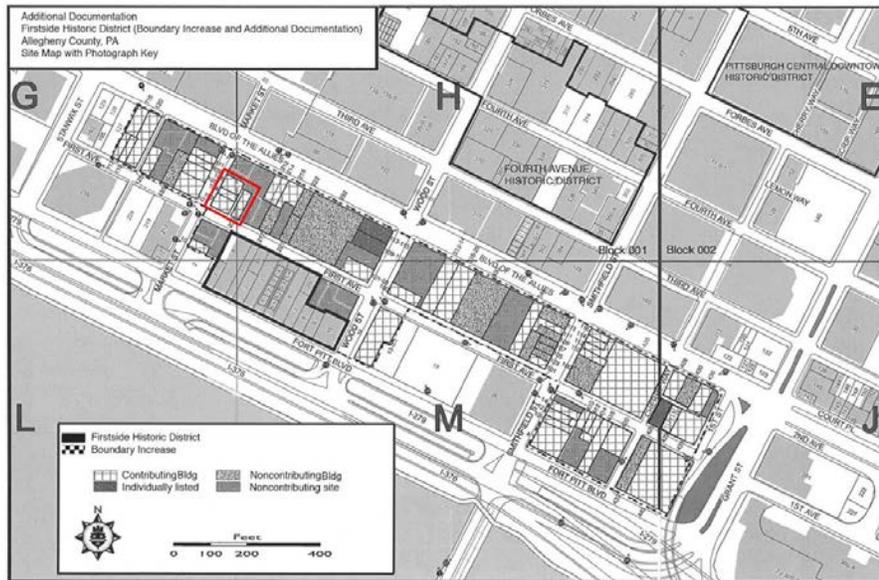
- Owner representation and agency negotiations
- Historic rehabilitation tax credit certification
- National Register nominations
- Older and historic building due diligence and strategic planning
- Strategic design feasibility and guidance
- Regulatory compliance
- Historic resource policy analysis and guidance
- Historic building documentation and HABS reports

3. PROPERTY DESCRIPTION

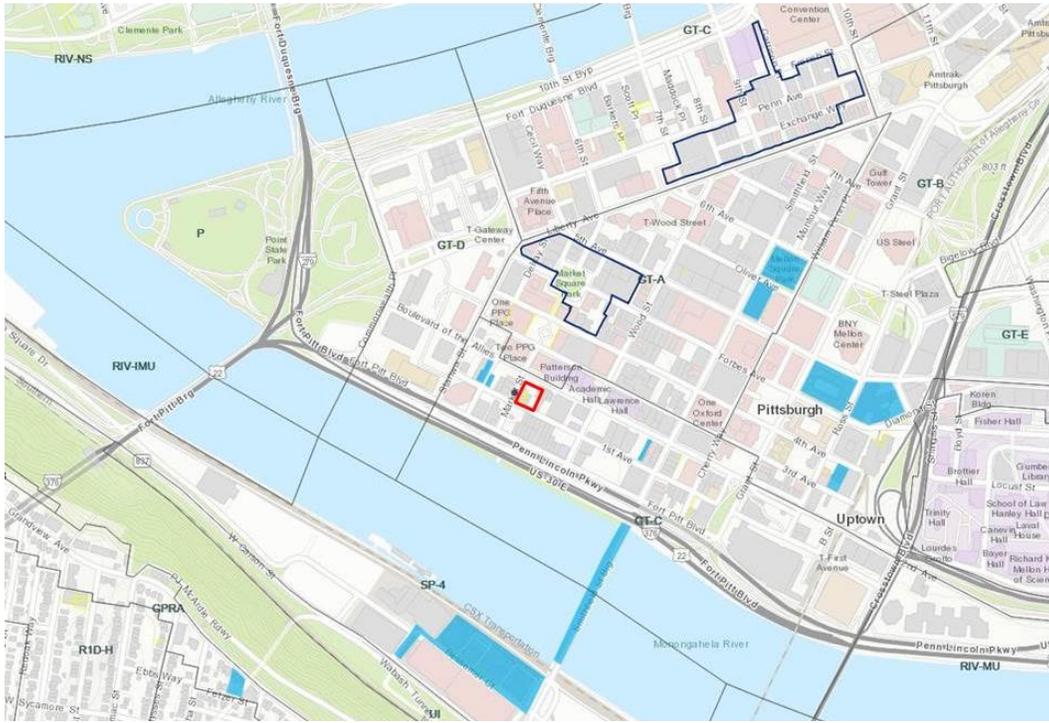
The First and Market buildings are located at 100, 104, and 106 Market Street, and 209 First Avenue in Pittsburgh, Pennsylvania. The site is located within the Golden Triangle District-C (GT-C) Zoning District in Downtown Pittsburgh, and approximately one block northeast of Interstate 376 and the Monongahela River.

Setting: The site is situated at the northeast corner of Market Street and First Avenue, and runs most of the length of Market Street between First Avenue and Boulevard of the Allies, a major thoroughfare.

Across Market Street from the subject buildings are low- and mid-rise buildings of similar scale and style. To the north, across Boulevard of the Allies, is the PPG Place and Market Square. The remainder of the block is dominated by parking lots, and an assortment of two- to seven-story late 18th century commercial structures. Modern high-rise buildings dominate the skyline in the immediate vicinity of the subject buildings.



The Firstside Historic District (Boundary Increases and Additional Documentation) Map identifies the First and Market complex, outlined in red, as contributing historic buildings.



**Pittsburgh Zoning Map, Subject Buildings outlined in red.
Note: The building is not located in a City Historic District**



Aerial view of subject buildings at the First and Market intersection. Image Source: Google Maps.

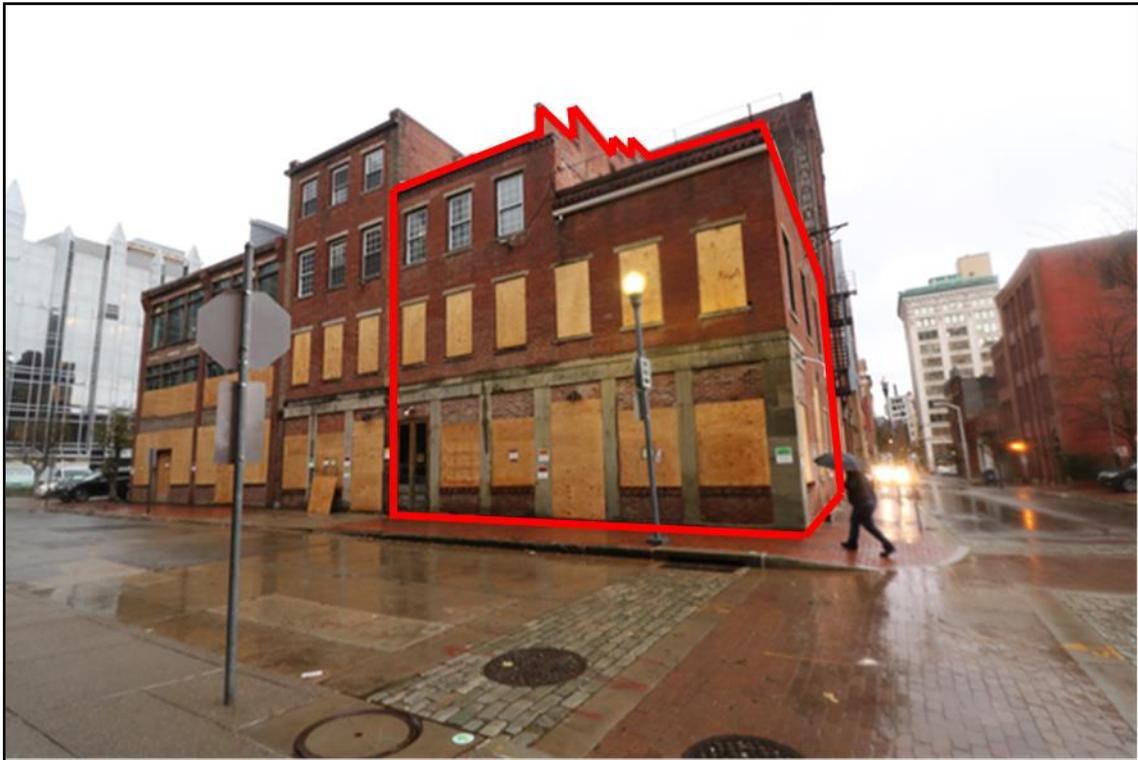
Site: The project site is comprised of nine tax parcels, four of which contain buildings. The subject properties that contain buildings include: 209 First Avenue (parcel 0001H00046000000); 100 Market Street (parcel 0001G00109000000); 104 Market Street (parcel 0001G00107000000); and 106 Market Street (parcel 0001G00106000000). The remaining five parcels are undeveloped and utilized for parking, and include parcel numbers 0001H00047000000, 0001H00048000000, 0001H00077000000, 0001G00104000000, and 0001H00079000000. Located within the Downtown GT-C (Golden Triangle sub-district C) zoning district in Pittsburgh, the site extends approximately 100 feet along Market Street and about 100 feet on First Avenue. The site is generally flat.



KEY	
■	100-102 Market St.
■	104 Market St.
■	106-108 Market St.
■	209 First Ave.



The site consists of four buildings and a surface parking lot: 100-102 Market at the corner with First Avenue, 104 Market at the center, 106-108 Market at the end of the row of buildings, and 209 First around the corner on First Avenue. All buildings except for 209 First Avenue front Market Street. 100-102 Market Street has the largest footprint with approximately 3,000 square feet; 106-108 Market Street is the next largest with approximately 2,280 square feet; 209 First Avenue is the second smallest at approximately 1,804 square feet, and 104 Market Street has the smallest footprint with approximately 1,200 square feet. A parking lot wraps around the subject buildings north of 106-108 Market and east of 209 First, and accesses Market Street, First Avenue, and Boulevard of the Allies.



View of 100 Market at the corner of Market Street and First Avenue, looking northeast.

100 Market:

The building at 100 Market Street was constructed circa 1860. The low-rise building is located at the northeast corner of the intersection of Market Street and First Avenue. 100 Market is a three-story commercial/office building designed in a utilitarian vernacular style. The building structure is heavy timber and the exterior is brick, with patterned brick detailing at the roofline, and cast stone detailing, window sills, and lintels. The building has been vacant since the early 2000s, and as such, much of the interior is damaged due to unmitigated exposure to the elements.

100 Market has two street-facing elevations; the primary elevation fronts Market Street to the west with a secondary south elevation fronting First Avenue. The west elevation consists of six bays at the second floor, and three bays at the third floor; at the south are six bays, and a metal fire stair at the south accesses the roof. The bays are uniform in shape and size, with modern aluminum 9/9 replacement windows. At the first floor of the primary west elevation is an aluminum storefront system, with two sets of wood double-leaf doors, and patterned brick detailing at the bulkhead. Above the storefront system was a series of identical non-historic fabric awnings, which provided shelter at the sidewalk from the elements, and have been removed. At the secondary south elevation there are six bays of modern aluminum single-light replacement windows at the first floor, and six bays of modern aluminum 9/9 replacement windows at the second floor. The east elevation neighbors the building at 209 First Avenue, and lacks fenestration. The north elevation is a party wall with the building at 104 Market Street. All windows at the first floor west and south elevations, and at the second floor west elevation, have been boarded up to prevent further damage and trespassing. The roof above the 100 Market half is flat, while the roof above the 102 Market half is pitched. Both roofs are clad in a modern synthetic membrane.

The building has been vacant since at least the early 2000s and remains in very poor condition. After more than a decade of vacancy, with no maintenance, the building has deteriorated to the extent that it is no longer structurally sound. A 2019 structural viability inspection conducted by AE&C Engineering Consultants determined that a majority of exterior walls and interior joists are structurally unsound, and in some instances posed a risk of total building collapse.¹

Alterations/Integrity

Both the 100 and the 102 Market Street halves of the building were originally three stories in height. The third floor of the 100 Market half of the building was removed at some point after 1979. At the interior, little historic fabric remains to connect the building to its historic use. The interior finishes and furnishings were altered in multiple campaigns as ownership and occupancy constantly changed. Modern demising walls of wood paneling and of gypsum board are evidence of the alterations conducted over multiple ownership campaigns. Carpeting over hardwood floors, modern ceilings of gypsum board, and acoustic tile dropped ceilings are also evidence of the aforementioned alterations.



Looking southeast towards 104 Market Street (center).

104 Market:

The building at 104 Market Street was constructed circa 1861 based on available City Directories.² The low-rise building fronts Market Street. 104 Market is a four-story commercial building designed in a vernacular Greek Revival style. The building structure is heavy timber and the exterior is brick, with patterned brick detailing at the roofline and cast stone window sills and lintels.

¹ AE&C Engineering Consultants, “Structural Viability Inspection Buildings @ 100-102 Market Street: Pittsburgh, PA,” October 21, 2019.

² The building at 106 Market Street is documented in the inventory of the Firstside Historic District Boundary Increase as constructed circa 1910.

The building has been vacant since the early 2000s. Consequently, much of the interior is damaged due to unmitigated exposure to the elements.

104 Market has one street-facing elevation: the primary west elevation which fronts Market Street. The primary west elevation consists of three bays. The bays at the second and third floors are uniform in shape and size, while the fourth floor windows are slightly shorter. All bays consist of modern aluminum 9/9 replacement windows. At the first floor of the primary west elevation is an aluminum framed storefront system, with wood double-leaf doors, and patterned brick detailing at the bulkhead. Above the storefront was a series of identical non-historic fabric awnings, which provided shelter at the sidewalk from the elements, and have since been removed. The east elevation is separated from the building at 209 First Avenue by a narrow passageway, and is fenestrated by three bays of 1/1 aluminum replacement windows. The north elevation abuts the building at 106 Market Street, and the south elevation abuts the building at 100 Market Street. There are no windows at the visible fourth floors of the north and south elevations. All windows at the first and second floors of the west elevation have been boarded up. The roof is flat and clad in a modern synthetic membrane.

The building is in very poor condition. There is evidence of water damage, material loss, and structural damage. There is step-cracking visible at the exterior, along with other evidence of failing masonry (see image below), and the hardwood floors are uneven and buckling in areas. A 2019 structural viability inspection conducted by AE&C Engineering Consultants determined that a majority of exterior walls and interior joists are structurally unsound, and in some instances posed a risk of total building collapse.³



Interior photograph of 104 Market Street, looking northwest. Note the visibly buckling brick.

³ AE&C Engineering Consultants, “Structural Viability Inspection Building @ 104 Market Street: Pittsburgh, PA,” October 21, 2019.

Alterations/Integrity

Based on Sanborn Fire Insurance Map research, the subject building changes in height from three to four stories sometime between 1905 and 1927. At the interior, little historic fabric remains to connect the building to its historic association or use. The interior finishes and furnishings were altered in multiple campaigns as ownership and occupancy constantly changed. A previous unrelated tenant removed the plaster walls and historic trim, and constructed multiple new staircases. As a result of those renovations, very little historic fabric remains at the interior to convey its association with the historic use. Modern demising walls of wood paneling and of gypsum board are evidence of the alterations conducted over multiple ownership campaigns. Carpeting over hardwood floors, modern ceilings of gypsum board, and acoustic tile dropped ceilings are also evidence of the aforementioned alterations.



Looking southeast towards the subject building at 106 Market Street (center).

106 Market:

The Firstside Historic District Boundary Increase documents that the building located at 106 Market Street was constructed circa 1910. A three-story building has been at this location dating back to the 1860s, but was likely demolished to construct the c.1910 structure. The low-rise building is located at the northeast corner of the intersection of Market Street and First Avenue. The building abuts neighboring 104 Market to the south. 106 Market is a three-story building designed in a vernacular commercial style. The building structure is timber and the exterior is brick, with a simple brick cornice at the roofline, and cast stone detailing, window sills, and lintels. The building has been vacant since at least the early 2000s. Consequently, much of the interior is damaged due to unmitigated exposure to the elements.

The primary west elevation of 106 Market is the only street-facing elevation. The primary west elevation consists of two bays at the second and third floors. The bays contain wood-framed single-light windows with transoms, and are uniform in shape and size. These windows are replacements of the original windows, and were installed in the mid-late 20th century. Entry to the first floor of the primary west elevation is provided by two sets of wood double-leaf doors set within storefront systems. All windows at the west elevation first and second floors have been boarded up. The east elevation faces a parking lot, is fenestrated with six bays of modern aluminum single-light windows. The north elevation is un-fenestrated, and once abutted the neighboring building at 110 Market Street, which was demolished along with 112 and 114 Market Street in the 2000s. The north elevation now faces the parking lot (which is part of the site), and is visible from Boulevard of the Allies. The south elevation abuts the building at 104 Market Street. The roof is flat and clad in a modern synthetic membrane.

The building has been vacant since the early 2000s and is in very poor condition. A structural viability inspection conducted by AE&C Engineering Consultants determined that the building's masonry walls are structurally unsound, concluding that "Deterioration of the mortar and cracking of the brick in the exterior wythe of brick allows moisture and water to get into the mortar of the interior wythes of the brick wall; also deteriorating the mortar of those wythes of brick, over time."⁴The hardwood floors are also uneven and buckling in areas.

Alterations/Integrity

The original façade of the building was altered at an unknown date in the early 20th century. At the interior, little historic fabric remains to connect the building to its historic association or use. The interior finishes and furnishings were altered in multiple campaigns as ownership and occupancy constantly changed. Extant original materials at the interior consist of wood floors (some of which has buckled in areas), exposed wood beamed ceilings, and brick walls. Modern demising walls of wood paneling and of gypsum board are evidence of the alterations conducted over multiple ownership campaigns. Carpeting over hardwood floors, modern ceilings of gypsum board, and acoustic tile dropped ceilings are also evidence of the aforementioned alterations.



Rear elevation of subject building at 106 Market Street. Note the step cracks in the brick, especially below the third story northwest corner window.

⁴ AE&C Engineering Consultants, "Structural Viability Inspection Buildings @106-108 Market Street: Pittsburgh, PA," October 21, 2019, Page 2.



Looking northeast towards the subject building at 209 First Avenue (center).

209 First Avenue:

The building at 209 First Avenue was constructed in 1904. The mid-rise building is located along First Avenue, east of the intersection of Market Street and First Avenue. 209 First Avenue is a six-story commercial/office building designed in a utilitarian vernacular style. The building structure is heavy timber and the exterior is brick, with stone cornices above the first floor entrance, and at the roofline. The building also features brick arches above the sixth-story bays, and cast stone window sills and lintels at the other stories. The building has been vacant for decades, and as such much of the interior is damaged due to unmitigated exposure to the elements.

The primary south elevation fronts First Avenue. The south elevation consists of three bays, with 1/1 steel replacement windows. The bays are uniform in width, and the windows decrease in size as the building rises. The first floor of the primary south elevation is accessed by centrally-located wood double-leaf doors flanked by wood-framed storefront windows and brick pilasters. At the west elevation there are five bays of 2/2 steel replacement windows. The east elevation faces a parking lot,

and lacks fenestration. The north also faces the parking lot, and is fenestrated by two bays of steel 1/1 and 2/2 windows with vertical brick arches. The roof is flat and clad in a modern synthetic membrane.

The building has been vacant for decades, and has not been maintained or heated in that time. Consequently, the building is in very poor condition and in danger of collapse. There is evidence of water damage, material loss, and structural damage throughout the building. During Heritage's site visit it was observed that there are gaps in the floors and significant water damage to load-bearing masonry walls and ceiling/floor joists. At the secondary elevations many of the exterior face bricks have fallen away leaving the underlying layers of masonry exposed to the elements. In addition, there are large step cracks throughout, which are particularly evident at the rear elevation. A structural viability inspection conducted by AE&C Engineering Consultants determined that, "The present conditions of the front portion of the left brick bearing wall, as observed and photographed, lead to the conclusion that a sudden collapse of the left front portion of the brick bearing wall of the building would cause the drastic and complete collapse of the entire structure." Many of the ceiling joists have rotted at joist pockets so severely that they have been displaced from the masonry pocket. The limited wood flooring that remains is in extremely poor condition and severely water-damaged as evidenced by their uneven and buckled appearance. Overall, the steel windows at the side elevation are in poor condition with broken glazing, corrosion, and sash displacement. All windows at the first, second, and third floors of the primary south elevation have since been boarded up. Many of the arched windows at the upper floor of the primary elevation are completely missing or missing sashes.

Alterations/Integrity

The building has been gutted at the interior, and little historic fabric remains to connect the building to its historic use. Extant original materials at the interior consist of wood floors (some of which has buckled in areas), exposed wood beamed ceilings, and brick walls. The interior finishes and furnishings have drastically deteriorated due to negligence by previous unrelated owners. Any historic fabric at the interior which would convey its association with the historic use has either been removed or has deteriorated to an extent that would make rehabilitation unfeasible.



Rear elevation of subject building at 209 First Avenue. Note step cracks in the brick.



Interior photograph of basement of 209 First Avenue. Note the steel beam supporting the displaced floor joists at left.



Interior photograph of upper floor of 209 First Avenue, looking southwest. Visible evidence of water intrusion and structural deterioration.



Interior photograph of upper floor window of 209 First Avenue. Note the overall conditions of deterioration.

4. RESOURCE HISTORY

The subject buildings are situated within the neighborhood of the Golden Triangle in downtown Pittsburgh. The area traces its origins to the plan which was originally laid out in 1764 by Colonel John Campbell for the land in the vicinity of the colonial outpost of Fort Pitt. Campbell's design oriented major roads at the southern portion of the plan parallel to the Monongahela River, with narrow lots in a compact grid. The later Woods and Vickroy plan for Pittsburgh of 1784 extended the street layout of the area to the east of Market Street, going as far as Grant Street. The area of the Golden Triangle which paralleled the Monongahela River strongly benefitted from its proximity to the Monongahela Wharf, the principal commercial wharf for the whole city from the 1840s to the 1930s. Among the warehouses, offices, and manufacturing facilities that gravitated to the area, a bustling trade quarter developed.⁵ Although many of the original buildings in the area (and most of downtown Pittsburgh) were destroyed in a fire in 1845, the area was immediately rebuilt.

The block located at the Market Street and First Avenue intersection was first platted and developed as early as the mid-19th century, with the unrelated buildings across the street at 101-109 Market Street being constructed first in the 1860s.⁶ The subject buildings across Market Street were also developed circa 1860. Located in downtown Pittsburgh's 1st Ward, a number of the buildings constructed in this neighborhood in the late 19th and early 20th centuries (including those at the First and Market intersection) were of a commercial nature.



1927 Sanborn Fire Insurance Map featuring all extant subject buildings (blue).

⁵ U.S. Department of Interior, "National Register of Historic Places: Firstside Historic District (Boundary Increase and Additional Documentation)," May 8, 2013.

⁶ Ibid.

The dense layout of narrow lots that was determined by the nineteenth-century plans is evident in the G.M. Hopkins Map from 1872, which illustrates the subject buildings at First and Market.⁷ The earliest available 1884 Sanborn Fire Insurance Map illustrates that the subject buildings have historically been associated with commercial/retail uses. After consulting Sanborn and Hopkins Maps, historical newspapers, city directories, and other resources, little information on these buildings has been documented as they were vernacular buildings that served a multitude of uses over the years with changing tenants. None of the buildings played a central role in the historic of development of the district.

209 First

The building at 209 First Avenue, built circa 1904, was originally constructed for warehouse use, and was originally owned by a Mr. Dunlap. The 1905 Sanborn Map labels the building as “Wagon Wheel Storage.” After changing hands several times, the property was purchased in 1936 and became a corporate office and sales location for Lowman-Shields Rubber Company.⁸

100 Market

The building at 100 Market was constructed circa 1860, and built for commercial/retail use. The building appears in the 1861 City Directory, 1872 Hopkins Map, and the 1884 Sanborn Map addressed as 16 Market Street. Sometime between 1884 and 1893, the Pittsburgh renumbered building addresses, and the subject building was renumbered to 100 Market Street. Beginning in the 1880s the building at 100 Market Street operated as a wholesale liquor distributor, a business which remained consistent through the turn of the 20th century, and likely until prohibition in the 1920s. Later businesses at this building include Collins Washing Parts Corporation in the 1930s (see photo below).

104 Market

The building at 104 Market Street is listed in the Firstside Historic District Boundary Increase inventory as constructed circa 1900. Prior to the renumbering of addresses, a three-story building at this location is addressed as 20 Market Street, according to the 1861 City Directory, 1872 Hopkins Map, and 1884 Sanborn Map. The building housed businesses including a printing company and a saloon. The building also sustained minor damage due to an 1884 fire which started in the neighboring building at 106 Market. In the 1927 Sanborn Map, the building is identified as four stories in height, suggesting that an addition was completed in the early 20th century. In the 1970s, the 104 Market Street building became home to “Froggy’s” a local bar which closed in 2003.⁹

106 Market

The building at 106 Market Street is listed in the Firstside Historic District Boundary Increase inventory as being constructed circa 1910. Prior to the renumbering of addresses, a three-story building appears at this location addressed as 22 Market Street, according to the 1861 City Directory, 1872 Hopkins Map, and 1884 Sanborn Map. It is unclear whether the buildings identified in 1861 and 1910 are the same building, or if one replaced the other. The 1884 Sanborn Map establishes that the building at 106 Market Street was home to a business called J & D Miller Bottling Works and Mineral Water Facility.¹⁰ Later in 1884, the 106 Market Street

⁷ “1st Ward Pittsburgh. Plate 15,” *G. M. Hopkins & Co.*, 1872.

⁸ “Miscellaneous,” *Pittsburgh Post-Gazette*: August 19, 1936, Page 2.

⁹ Lindeman, Teresa F. “Last Call for Froggy’s,” *Pittsburgh Post-Gazette*: October 17, 2003, Page 38.

¹⁰ Sanborn Fire Insurance Maps, Pittsburgh, PA, Volume 1 Sheet 19, 1884.

buildings housed Joseph Benedict & Co. Rag Warehouse, which sustained damage to its third floor in a fire on September 9, 1884.¹¹ By 1893, 106 Market was home to a wholesale grocery and home appliance distributor.¹² Major alterations to the exterior façade were conducted in the early 20th century.



100 (center) and 104 Market (left), with 209 First in background

Source: "Design Analysis: Market Street & First Avenue," *Pittsburgh History and Landmarks Foundation*, 11/15/2019



106 Market (center), with 104 Market at right

¹¹ "Rags and Tea: A Bad Fire on Market Street," *Pittsburgh Post-Gazette*: September 10, 1884, Page 2.

¹² Sanborn Fire Insurance Maps, Pittsburgh, PA, Volume 1 Sheet 3, 1893.

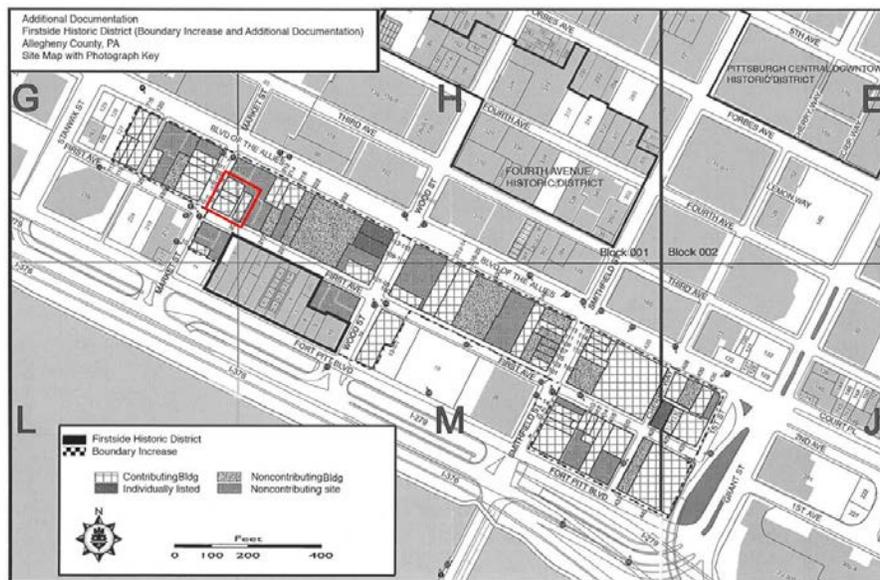
5. CURRENT HISTORIC DESIGNATIONS & ASSESMENT OF SIGNIFICANCE

The original Firstside Historic District was listed in the National Register in 1988 and did not include the 4 subject buildings. The First and Market buildings are listed in the National Register of Historic Places and are listed as contributing in the Firstside Historic District as part of a 2013 boundary increase. The buildings are not historically designated at the local level under Pittsburgh's Historic Preservation Ordinance.

The general standard for historic resource evaluation is found through the National Register program, created by the National Historic Preservation Act of 1966. Listing in the National Register of Historic Places is chiefly honorific, and demolition or changes to listed properties may not be prevented or reviewed outside of local permitting requirements. If federal funding is utilized in a development, then the Section 106 review process may be triggered. Additionally, if historic tax credits are utilized on a project, the State Historic Preservation Office and the National Park Service review changes to the building. In the case of the subject buildings, there is no proposed use of federal funds, so the Section 106 process is not applicable, nor is review by the SHPO/ NPS.

When the Firstside Historic District was originally listed in July of 1988, the collection of low-to-mid-rise brick buildings listed in the district were deemed commercially significant for its role in the economic development of Pittsburgh via the river trade. The original 1988 district comprised of a small stretch of buildings bordered by First Avenue to the north, Fort Pitt Boulevard to the south, Market Street to the east, and Wood Street to the west. The subject buildings were not included as the State Historic Preservation Office and National Park Service determined that the buildings did relate to historic and development of the district.

A boundary extension to the district was listed in 2013, which extends the district to include buildings located on Market Street, First Avenue, Boulevard of the Allies, and Smithfield Street (see map below). When the 1988 nomination was written, the scope of the district only pertained to the buildings immediately north of the Monongahela Wharf. The boundary extension expanded the scope to include buildings located between Stanwix Street to the west, Fort Pitt Boulevard to the south, Grant Street to the east, and Boulevard of the Allies to the north. The argument for the 2013 boundary increase was that the development of the buildings in the area and their commercial/retail/warehouse uses were all tied to the commercial activity of the Monongahela Wharf.



The Firstside Historic District (Boundary Increases and Additional Documentation) Map identifies the First and Market complex, outlined in red, as contributing historic buildings.

Assessment of the Significance of the Subject Resources

The subject buildings are of marginal significance when viewed in context with the National Register Historic District. Review of historic Sanborn maps, newspaper articles, photographs, archival resources, and available city directories has established that the tenants of the subject buildings served a multitude of uses which changed frequently and were not of particular significance. A direct connection between the businesses which operated at the subject buildings and the commercial activity of the Monongahela Wharf cannot be established. There are no architects or developers of historical significance attributed to the subject buildings. Limited information was readily available on any of the tenants that occupied the buildings during the district's period of significance from 1845-1938.

A total of 53 contributing buildings are now located in the historic district, as expanded in 2013. Of those low-to-mid-rise buildings, 14 additional buildings are from the same era and are of similar vernacular commercial styles (1860-1906). The subject buildings do not stand out from an architectural perspective and do not have any historical significance, when viewed in context with the other buildings in the district. The subject buildings are similar to other buildings in the district and are best characterized as vernacular commercial buildings. For context, three comparable buildings within the Firstside Historic District were selected. Exterior views of these properties show that the comparable buildings remain in better condition than the subject buildings:

213-215 Fort Pitt Boulevard/212-214 First Avenue - pre-1872

The National Register Nomination describes this building as a six bay, four story, Italianate brick building with a flat roof. The fourth floor was added in 1908. The cornice is lined with recessed diamond-shaped panels. The first floor storefront has been rebuilt. The rear elevation features more glazed area than the Fort Pitt elevation, with rectangular windows in four bays. The outer two bays of the three rear, upper floors have three double hung sash with transoms, while the inner two bays have paired windows of the same configuration. A sympathetic storefront on the rear elevation was incorporated into the building in the 1985 remodeling.

217 Fort Pitt Boulevard/216 First Avenue - contributing - pre-1872

The National Register Nomination describes this building as a three bay, three story, Italianate brick building with flat roof. It has a corbelled brick cornice and 1/1 windows. The first floor storefront has been re-exposed and a fourth floor added that is set back from Fort Pitt Boulevard. The rear elevation features three arch-topped windows per floor on the upper stories and a sympathetic storefront added in the 1985 remodeling.

223-225 Fort Pitt Boulevard - contributing - pre-1872

The National Register Nomination describes this building as a three bay, three story utilitarian styled brick building. The original gabled roof has been replaced with a flat roof. Overall, the building appears to remain in fair condition from the exterior.

6. PRESERVATION CHALLENGES

The preservation of the buildings located at First and Market are faced with three primary challenges. First, are the poor condition of the buildings and the high cost of bringing the buildings up to code. Second, are the economics of adaptive reuse of the existing buildings including limited reuse potential and restricted floorplates. Third are the challenges of location.

Each of the buildings has been vacant for nearly two decades and remain in extremely poor condition. The buildings have significant accessibility issues with no elevators and the systems are inadequate for reuse. All four buildings would require substantial capital improvements to bring the buildings to modern standards. As detailed in the above physical description section and the attached structural reports, each of the buildings are exhibiting structural issues in addition to cosmetic deterioration. The high cost of bringing these buildings up to code and habitable for any use would be economically infeasible, as outlined in the Cushman and Wakefield report: Market Street Corridor Office and Retail Analysis.

Since the Post-World War II era, the First and Market intersection has faced disinvestment. The buildings neighboring the 209 First Avenue building to the north and east, built within the period of significance, were demolished in the 1950s, and were replaced with a paved surface parking lot. The buildings north of Market Street, also built within the period of significance, were demolished as recently as 2005. The subject buildings and their counterparts across Market Street continued to maintain businesses, but struggled with retention of tenants and ownership. All of the subject buildings at First Avenue and Market Street experienced numerous design changes at the interior to meet the needs of the constantly-changing tenants. As the Golden Triangle continued to grow and develop, modern businesses and buildings eclipsed the small-scale commercial activity of First and Market, and the subject buildings struggled to maintain businesses. Since the early 2000s, the subject buildings at First and Market have been vacant and it has been a challenge to reuse the site and retain tenants.

As outlined in the Cushman and Wakefield Report, the cost of upgrades necessary to stabilize the building is cost prohibitive. There is a gap in income and cost of renovations renders any plan to reuse the buildings as an office or commercial use as economically infeasible. Therefore, the only economically viable redevelopment plan for the site would require demolition of the existing buildings.

Recently, PHLF explored alternatives to demolition including the following: retaining the buildings paired with various iterations of new construction allowed in the by-right zoning regulations; retaining the building facades and constructing a new building behind the facades; preserving the existing buildings and site with no new construction. That report also identified gaps ranging from \$3-\$37MM over a five year period for developments that involved adaptive reuse of the buildings or retaining the buildings in combination with new construction. These gaps underscore the economic infeasibility of retaining and renovating the subject buildings in any redevelopment plan.

Any reuse for these buildings would require significant upgrades to the structural systems, windows, MEP and HVAC systems, roofs, masonry, finishes, and vertical access. As identified in the engineer's reports, there are significant structural issues that would need to be addressed. Due to the conditions of deterioration including missing masonry joints, buckling, efflorescence,

cracked and missing brick, total reconstruction of the masonry walls would be necessary. Particularly in 209 First Street, the interior joists are heavily water-damaged and displaced from the wall pockets. Wholesale window replacement would likely be necessary.

In addition to the economic gaps identified by multiple parties, the retail market in the area is weak and unlikely to support a retail use in the subject buildings, as identified in the Cushman and Wakefield Report. Downtown Pittsburgh suffers from a lack of residential units, and a resulting lack of foot traffic after office hours. Foot traffic and surrounding commercial uses is important for the viability of any urban retail use. The area surrounding First and Market is challenging to even evaluate as it is considered “blind spot” for pedestrians and drivers, meaning it is isolated from the rest of Downtown Pittsburgh and sees little vehicular or foot traffic. Recently, the Pittsburgh Downtown Partnership conducted a traffic survey of the intersection and recorded only 557 cars per day. This stands in stark contrast to 20,000 cars per day on average in other parts of Downtown. This lack of traffic results from a lack of attractions that draw pedestrians or cars into the surrounding blocks. There is stronger activity in other areas of Downtown Pittsburgh. The neighboring PPG Place cuts off the view of the block from Market Square and the surrounding retail and office locations, discouraging additional foot traffic. The Boulevard of the Allies thoroughfare also cuts the location off from north Downtown. The foot traffic does not exist to attract strong retail or commercial tenants. As cited in the Cushman & Wakefield Report, national credit tenants that could afford higher rent rates would not consider this ground floor location with a limited footprint viable. This is also true of office development at the upper floors. Even if significant tenant improvement allowances were made, this would only increase the economic gaps on an already high development cost. As summarized in the Cushman and Wakefield report, “general market dynamics in their current state do not support any successful retail venture within the existing structure.”

7. DEVELOPMENT REVIEW PROCESS

Pittsburgh Historic Review Commission (HRC) review is not required

Troiani Group proposes to demolish the subject buildings for the purpose of constructing a new mixed-use residential and office tower on the site, in the City's GT-C District. Although included in the list of contributing structures for the expanded federal Firstside National Register Historic District Boundary Increase, the City has not designated the subject buildings as historic or as local landmarks and has not created a local historic district that includes the buildings.

The subject buildings are listed in the National Register of Historic Places as "contributing resources" to the Firstside Historic District Boundary Increase. However, their significance to the historic district, as a whole, is nominal. The buildings and the building sites were not included in the original inventory included with the nomination for the historic district boundary in 1988. When a boundary increase for the district was proposed in 2013, the subject buildings were identified in the inventory section of the nomination with only a very brief description of the buildings and no specific information on the developmental history of the buildings or any discussion of any significance of those buildings to the district. Further, inclusion of property in the National Register does not inherently restrict the rights of private property owners to alter, manage, or dispose of property. A National Register designation is chiefly honorific and does not impose any restrictions that would prevent a private from changing or demolishing a building, unless federal funds are utilized.¹³

The buildings are not "historic" by definition, or by inclusion in a City historic district. The inclusion of the properties in the National Register's Firstside Historic District Boundary Increase area does not impose a local historic district zoning or landmark designation. Thus, under the terms of the City's Historic Preservation Ordinance (Title 11 of the City's Code of Ordinances), the buildings are not subject to review by the City's Historic Review Commission (HRC).

Applicable Planning Commission Development Considerations

"Demolition" is defined within the Zoning Code's definition of "development." Thus, as required for all defined "developments," the Planning Commission is required to review applications for demolition pursuant to the criteria set forth in Code Section 922.10.E.2. The twelve review criteria in Section 922.10.E.2 are intended to address all types of developments, generally. Most of the criteria are not applicable to applications for demolition. The only section that specifically refers to the preservation of existing buildings is Section 922.10.E.2(g), which provides:

¹³ An owner of property listed on the National Register is only required to follow the Secretary of the Interior's Standards for Rehabilitation if seeking to qualify for federal or state historic tax credits or certain grants. When applicable, owners may also be required to follow the Section 106 process, which is initiated by the State Historic Preservation Office (SHPO). Section 106 review requires that each federal agency identify and assess the effects its actions may have on historic buildings. Under Section 106, each federal agency must consider public views and concerns about historic preservation issues when making final project decisions.

(g) The proposed development must adequately address the preservation of historic structures and significant features of existing buildings, including, if applicable, the retention and reuse of structures which are locally or federally designated historic structures; retention and reuse of significant structures, provided that such preservation requirements may be waived if the applicant shows that use of such structure is no longer economically or physically viable; and retention and reuse of structures which contribute to the character of an historically significant area.

In addition, Section 922.10.E.2(l) provides, generally, that any proposed “development” must address the project’s “compatibility and conformance with any overall master plans or comprehensive plans” that involve Downtown development.¹⁴

Although preservation has been carefully considered, use of the structures is no longer economically or physically viable

The buildings at issue here are “federally designated” as they are designated in the federal National Register of Historic Places. However, these buildings do not have any “significant features” that would support historic designation as individual structures. Federal designation of the subject buildings is derived solely from listing as a contributing resource in a district, which is a lesser level of historical significance than individual listing. Troiani Group carefully considered alternatives to demolition but concluded, based on structural engineering assessments and other information, that preservation of the buildings is neither physically feasible nor economically viable.

The engineering assessments of the buildings demonstrate that the buildings are a public safety hazard.¹⁵ Further, the cost to bring the buildings into conformance with Building Code requirements is economically infeasible. In addition to the exorbitant costs involved with stabilizing the buildings, the only feasible use of the buildings, from a design standpoint, would be for ground floor retail with limited office or residential uses on the upper floors.

In an effort to assess the viability of reusing the buildings, Troiani retained Cushman & Wakefield to complete a study of the Market Street Corridor retail market. As described in the Cushman & Wakefield report, sufficient density of foot traffic and vehicle traffic does not exist in the neighborhood to support any viable retail tenant. To activate the site and surrounding blocks creation of more density is essential.

Although preservation of the structures is not possible, consistent with the intent of Section 922.10.E(g), Troiani Group intends to preserve some of the historic fabric of the site and will salvage historical building materials, including heavy timber beams and the stone foundation of the 209 First Avenue building, for reuse as site features in the proposed development.

¹⁴ No specific neighborhood plan exists for this section of the Golden Triangle. However, the City’s PreservePGH plan, the historic preservation component of the City’s PlanPGH Plan, details general goals and objectives related to historic preservation in Pittsburgh. The 2012 PreservePGH plan identifies Pittsburgh’s cultural and historic resources, and explains how these resources contribute to the attractiveness, economic growth potential, and living and working environments, as well as cultural elements.

¹⁵ AE&C Engineering Consultants Structural Viability Inspection Reports.

Development for a mixed-use residential and office tower is consistent with the intent of the GT-C District and the goals and objectives of the PlanPGH Plan

The subject properties are located in the City's GT-C District. The purpose of the GT Districts, generally, is to encourage residential development of relatively high-density, high-rise dwelling structures among which are properly integrated commercial facilities. The purpose of the GT-C District, specifically, is to support and develop commercial, office and cultural spaces.¹⁶ It is one of few districts within the City that is designed to permit "high-density, high-rise" structures and commercial facilities.

Troiani Group's proposed development plan, which involves the construction of a multi-story, mixed-use building, including retail and residential components would advance the purposes of the GT District and would be compatible with the other structures in the District. To preserve the structures in their current historic form makes little economic sense in a district where the intended and primary use is for high-rise, commercial buildings.

The intent of the GT District is reflected in the goals, objectives and opportunities described in the PreservePGH component of the PlanPGH Plan. The goals of the plan include strengthening "Pittsburgh's position as a regional hub;" "enhancing its global significance;" and growing and diversifying Pittsburgh's economy and tax base. Consistent with these goals, the proposed development would bring into use a long vacant property, in a highly-visible location, and would create opportunities to attract new businesses and residents to downtown Pittsburgh. A mixed-use residential tower would also increase the density of the site and increase revenue potential consistent with the by-right zoning of the property. The proposed development would replace under-utilized buildings with new buildings that would significantly contribute to the City's tax base.

Other goals of the PlanPGH plan include providing equal access and opportunities; fostering a sense of citywide community; capitalizing on Pittsburgh's natural and cultural resources; and respecting and enhancing the relationship between nature and the built environment. The proposed design of the new building for the site takes into account the scale and materials of the surrounding buildings, tying to the overall neighborhood. The lower levels are designed with materials that blend into the surrounding brick buildings and maintain the same setbacks from the street elevations. The upper floors would be composed of a glazed curtain wall system that would blend into the high-rise buildings to the north of the site. The proposed building would also give residents and office tenants a connection to Pittsburgh's natural environment with sweeping views of the Monongahela River and Mount Washington. Allowing the addition of density on this site would help prevent sprawl outside of the City.

A number of opportunities are described in the PreservePGH component of the PlanPGH Plan, including reuse and redevelopment of historic structures in ways that promote "residential, business, recreational and cultural opportunities; interpreting Pittsburgh's history along riverfront trails and in parks; attracting new investment that is architecturally distinctive; and addressing streetscape and other public realm improvements." Consistent with these opportunities, the proposed project will incorporate historic elements that will evoke the heritage of the neighborhood and will make use of elements from the historic building. The new building will

¹⁶ Zoning Code Sections 910.01.H.1 and 910.01A.

add an architecturally distinctive element to the city's skyline and will promote business, residential, and recreation opportunities. The subject properties are not on the Three Rivers Trail but their proximity to the river will afford residents and tenants with access and opportunity to the rivers and parks. The increased density of residential units and office space will bring new investment into the underused area and will help to activate what is currently an isolated section of the Central Business District, increasing pedestrian traffic that will help to improve existing business in the area.

8. PROPOSED REDEVELOPMENT

Troiani Group, proposes to redevelop the accumulated properties as a consolidated site in a manner that complies with that zoning of this district in the Golden Triangle. This is envisioned as a high-density mixed-use development that reflects the unique characteristics and limited opportunity to develop in the Pittsburgh's limited downtown core area. This development can advance Downtown Pittsburgh by increasing residential units and activity in Firstside which is lagging behind downtown's and the City's recent development of housing. The mixed-use building is also envisioned to office, urban open space, ground floor uses that foster activity, and parking.

Because the size of the site and the allowable and intended development scale and density, the retention of the existing buildings is not feasible nor would the façade retention be appropriate given the relative value of these building elements. Reuse has been studied and demolition of the subject buildings is recommended and reasonable. The ability to demolish the subject buildings and consolidate the properties is both an essential step to the site's development, it send a vital signal identifying the opportunity for this major downtown development to go forward.

Due to the limited land in Pittsburgh's Golden Triangle, the allowable zoning density, the visibility of the site, the need for increased and diversified activity, the access to transit, walkers, greenspace, and the regional road network the development of this site is also a signal of Pittsburgh continued commitment to their central urban core. Because of these access parameters and the implication for continuing downtown's renewal, the type of development also indicates Pittsburgh's commitment to a sustainable future that balances assets of the past, present, and brings these into the future.

To that end, during the demolition process, existing building elements from the subject buildings including foundation stones, brick, large timber elements, and the few remaining unique building elements such as the cornerstone, the circular staircase, will be retained for use on the site, in the urban open space, or elsewhere in the Firstside area.

As the future development design continues forward, key elements of the district can be strengthened at the lower levels of the new building in a manner complimentary to the Firstside district's character. To that end the architects began by outlining context responsive design approaches to include;

- A mixed palette of building materials including brick and stone masonry seen throughout the area
- Scale, proportion, and building design elements that reflect the surrounding buildings
- Integrated Artwork throughout the ground floor and the public urban open space
- Streetscape activity illumination, and storefront transparency that signals continuous occupancy in the area
- Continuity of pedestrian character along Market and First street sidewalks
- Integrated urban green space to be programmed and developed through a public process in conjunction with the Pittsburgh Downtown Partnership and others
- Integrated reuse of building materials
- Historical reference such as plaques and potential reuse of unique building items.

The urban design goals and the development of this site will result in a building that can both compliment the Firstside district and foster continued occupancy and confidence much needed in the area while connecting recent Golden Triangle development onto the Boulevard of the Allies and the Pittsburgh skyline.



Early Development Study showing the scale of the building in relation to Pittsburgh's Golden Triangle skyline.

Image Source: Rothschild Doyno Collaborative

**BEFORE THE CITY OF PITTSBURGH
BOARD OF STANDARDS AND APPEALS**

**Troiani Properties
Appeal of Emergency Demolition
Application for 209 First Avenue**

Case No. PLI-BAP-2020-00482

Hearing Date: June 16, 2020

Clifford B. Levine, Esquire
DENTONS COHEN & GRIGSBY P.C.
625 Liberty Avenue
Pittsburgh, PA 15222-3152
(412) 297-4900

BEFORE THE CITY OF PITTSBURGH
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INDEX

1. June 3, 2020 Appeal Form
2. May 5, 2020 PLI Denial Letter
3. Emergency Demolition Application attaching November 8, 2019 Report by AE&C Engineering Consultants
4. June 8, 2020 Updated Report by AE&C Engineering Consultants



A. GENERAL APPLICATION INFORMATION

1. PROPERTY INFORMATION

Property Address: 209 1st Avenue Owner Name: Troy Development Associates

2. APPEAL INFORMATION:

Nature of Appeal (Select One):

- Proposing Alternative/Equivalent to Code Requirement
- Appealing Code Official's decision or interpretation
- Pennsylvania's Uniform Construction Code does not apply

Appeal applies to these areas (within the building): Appeal of the May 5, 2020 denial of application for emergency demolition of six-story building at 209 1st Avenue

Code Version and Year: 2015 IMPC Code Section: 108, 109 and 202

Code Requirement: Authority to undertake emergency measures and to demolish a a structure to prevent imminent danger to public safety.

Deficiency: Code official did not undertake an on-site review of the existing conditions that require controlled demolition. See May 5, 2020 denial, attached. On-site review would make clear that the structural strength of the bearing wall has been degraded to the extent that collapse is imminent.

Proposed Alternative Equivalent / Alternate Interpretation / Reason UCC does not apply: Based on the structural report prepared by AE&C Engineering Consultants and the continued and severe deterioration of the six-story brick building, immediate demolition is necessary to protect public safety.

3. APPLICANT'S AFFIDAVIT:

I am the Owner of the property, or an agent of the Owner, for which this application is filed. If an agent, I certify that I have been authorized by the Owner to complete this application on their behalf. As the applicant, I certify that the information provided as part of this application is correct.

Signature: *Clifford B. Levine* Print: Clifford B. Levine

Address: Dentons Cohen & Grigsby P.C., 625 Liberty Avenue, Pittsburgh, PA 15222

Phone: 412-297-4900 Email/Fax: clifford.levine@dentons.com - 412-209-1853

Counsel for the Applicant

PLI Use Only
Date Submitted: _____ Case No: _____

B. CODE INFORMATION

Case No: _____

1. BUILDING INFORMATION:

Type of Structure (Check One): Commercial Building Single Family Dwelling Two Family Dwelling

Existing Certificate of Occupancy for use as (attach copy): N/A

No change in use Partial change in use (Portion of the structure changing use) Complete change in use (Use of entire structure changing)

Proposed Use: Emergency Demolition Proposed

2. USE GROUPS (Check all that apply): N/A

A-1	A-2	A-3	A-4	A-5	B	E	F-1	F-2	H-1	H-2	H-3	H-4	H-5
<input type="checkbox"/>													
I-1	I-2	I-3	I-4	M	R-1	R-2	R-3	R-4	S-1	S-2	U		
<input type="checkbox"/>													

3. CONSTRUCTION TYPE (Choose One): N/A

IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
<input type="checkbox"/>								

4. AREA, HEIGHT & EXITS: N/A

Stories Above Grade: _____ Stories Below Grade: _____

Gross area per floor: _____

Number of Exits per Story: _____ Fire-rating of exit enclosure: _____

Height of highest floor above lowest level of fire department vehicle access: _____

5. LIFE SAFETY SYSTEMS: N/A

SYSTEM	REQUIRED	EXISTING	PROPOSED	COVERAGE (Select One)		STANDARD/TYPE
Sprinkler	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Partial	<input type="checkbox"/> Throughout	<input type="checkbox"/> 13 / <input type="checkbox"/> 13D / <input type="checkbox"/> 13R
Fire Alarm	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Partial	<input type="checkbox"/> Throughout	<input type="checkbox"/> Manual / <input type="checkbox"/> Automatic
Standpipe	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	N/A		<input type="checkbox"/> Manual / <input type="checkbox"/> Automatic <input type="checkbox"/> Wet / <input type="checkbox"/> Dry
Automatic Smoke Detection	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Partial	<input type="checkbox"/> Throughout	N/A
Smoke Control	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	N/A		N/A
Smokeproof Enclosure	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	N/A		N/A
Elevator Recall & Emerg. Oper'tion	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	N/A		N/A
Voice/Alarm Communication	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Partial	<input type="checkbox"/> Throughout	N/A
Fire Command Center	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	N/A		N/A
Fire Department Communication	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Partial	<input type="checkbox"/> Throughout	N/A

William Peduto

Mayor



Sarah Kinter

Acting Director

May 5, 2020

Michael Troiani
Troiani Group President
2020 Smallman St, Suite
Pittsburgh, PA 15222

RE: Demolition of 100/102 Market St, 104 Market St, 106/108 Market St and 209 1st Ave

Dear Mr. Troiani,

This letter is in response to your email, dated April 24, 2020, requesting that the Department of Permits, Licenses, and Inspections (PLI) evaluate the current condition of structures located at 100/102 Market St, 104 Market St, 106/108 Market St and 209 1st Ave to determine whether their immediate demolition is necessary to “maintain public safety”. This email included structural reports prepared by AE&C Engineering Consultants, dated November 8, 2019.

For background, agents of the owner(s) of these properties have applied for permits to demolish these structures. Demolition of these structures requires Planning Commission review per Section 910.01.C.1 of the *Pittsburgh City Code (PCC)*. The Planning Commission review for these properties is still in process. Due to this, these demolition permits have not been approved or issued.

Please note that PLI’s authority under the Zoning Code, per Section 924.01 of the PCC, is restricted to enforcement of the Zoning Code. Given this limited authority, this letter documents my assessment, as Building Code Official, of the current structural stability of the subject structures and my recommendation to the Zoning Administrator in response to your request.

As Building Code Official, I have determined that the four (4) structures located at 100/102 Market St, 104 Market St, 106/108 Market St, and 209 First Avenue do not currently pose an “imminent danger” to the public. I recommend that the immediate demolition of these structures is not necessary to preserve the health and safety of the

Department of Permits, Licenses, and Inspections
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public at this time. Please refer to Section I (below) for PLI’s method for assessment and Sections II, III, IV and V (below) for detailed assessments of each structure.

Thank you,



Dave Green
Building Code Official, Assistant Director Construction
412-255-2176

CC: Corey Layman, Zoning Administrator, Department of City Planning
Andrew Dash, Director, Department of City Planning

I. PLI’s Method of Assessment:

PLI based this evaluation, per standard practice, on the following standards of the 2015 *International Property Maintenance Code (IPMC)*, as adopted by the City of Pittsburgh:

1. Section 202 of the *IPMC* which defines the following terms:
 - a. “CONDEMN. To adjudge unfit for occupancy.”
 - b. “IMMINENT DANGER. A condition which could cause serious of life-threatening injury or death at any time.”
2. Section 108 of the *IPMC* titled “Unsafe Structures and Equipment”, which grants the “Code Official” the:
 - a. Authority to assess structures and equipment to determine whether they are unsafe, unfit for human occupancy, unlawful and/or dangerous;
 - b. Power to “condemn” said structure or equipment.
3. Section 109 of the *IPMC* titled “Emergency Measures”, which grants the “Code Official” the:

- a. Authority to assess whether a structure poses an “imminent danger” to occupants of the structure or the public.
 - b. Power to remedy this hazard, including directly employing the necessary labor and materials.
4. The primary differentiation between the standards of “condemnation” and “imminent danger” are as follows:
 - a. Condemnation indicates that a structure is not safe to occupy. A partial or complete collapse may be possible but the likelihood is remote and does not pose a direct hazard to the public.
 - b. Imminent Danger indicates that failure or collapse is immediately/imminently likely and endangers the life of occupants of the structure and/or the public.
5. PLI, as the “Code Official”, assesses structures per these two standards on a regular and continual basis. PLI uses the assessment of an “imminent danger” as a means to determine whether it is appropriate to use powers authorized under “emergency measures” to demolish a structure using City funds.
6. Please note PLI’s assessment of “imminent danger” is two-fold and inter-dependent:
 - a. Assessment of the general stability of the entire structure.
 - b. Assessment of the relative hazard to the public in terms of immediacy and potential for direct physical harm.
7. This assessment is limited to assessing the hazard caused to the public as the structures at 100/102 Market St, 104 Market St, 106/108 Market St, and 209 First Ave are vacant.

II. PLI’s Assessment of 100/102 Market St

1. Overall Building Assessment:
 - a. Based on AE&C Engineering Consultants engineering report, dated November 8, 2019, and PLI’s assessment of the building’s structural system below, no individual element poses an “imminent danger”.

- b. In PLI’s experience, masonry structures of this type and condition are uniquely strong and forgiving of limited/localized movement and/or deterioration.
 - c. **PLI has determined that the current state of the structure at 100-102 Market Street does not pose an “imminent danger” to the public and closure of the 1st Ave sidewalk/cart way is not necessary to preserve the health and safety of the public at this time.**
 - d. **PLI recommends that the immediate demolition of these structures is not necessary to preserve the health and safety of the public at this time.**
2. General AE&C Report Comments:
- a. The AE&C indicates that:
 - i. The front and rear exterior walls of the structure are “non-load bearing” as the floor and roof framing for the structure are spanning in the left/right direction. Therefore, the left and right walls of the structure are the main load-bearing elements.
 - ii. The structures is constructed of 4 wythes of brick and the floor and roof structures are wood framed.
 - iii. That the bricks of “orange”, “salmon”, or “pumpkin” color are low strength based solely on visual inspection.
3. Front Exterior Wall (Facing Market St):
- a. AE&C’s report indicates that:
 - i. This wall is not load-bearing and no significant unsoundness or distress was observed.
 - b. PLI assessment:
 - i. PLI considers this wall to be in a safe and/or stable condition.
 - ii. **Based on current evidence, PLI has determined that this wall does not pose an imminent danger to the public or the adjacent properties.**
4. Rear Exterior Wall (Facing 209 1st Ave):

- a. AE&C's report indicates that:
 - i. The outer wythe, or layer, of masonry of the rear exterior wall has been pointed due to deterioration of the mortar joints and masonry cracks.
 - ii. That "orange/pumpkin" colored brick are present in several areas of the outer wythe, or layer of masonry, of this wall and that this masonry is low strength.
 - iii. AE&C considers the wall structurally unsound and unstable.
 - iv. Note the report does not assess the interior face of this masonry wall.
- b. PLI assessment:
 - i. The type of deterioration noted in AE&C's report is relatively common for masonry construction of this age; the observed deterioration is limited to the outer wythe of masonry.
 - ii. No material tests of the "orange/pumpkin" brick have been performed to confirm strength; PLI advises against determining material strength based on visual inspection only.
 - iii. The report does not identify any signs that this wall is bulging and/or bowing, or of masonry delamination.
 - iv. The current evidence does not demonstrate that the collapse of this wall is immediate in nature.
 - v. **Based on current evidence, PLI has determined that this wall does not pose an imminent danger to the public or the adjacent properties.**

5. Right Exterior Wall (Facing First Ave):

- a. The AE&C report indicates that:
 - i. There are several areas along the exterior face of the right exterior wall where missing mortar and deteriorated brickwork is present.
 - ii. Star plate anchors have been installed and are evidence of previous outward movement.

iii. AE&C considers the wall structurally unsound and unstable.

b. PLI assessment:

i. The type of deterioration noted in AE&C's report is relatively common for masonry construction of this age, the observed deterioration is limited to the outer wythe of masonry, and that the star plate anchors are commonly used in this type of construction.

ii. Regarding the star plate anchors, the AE&C report does not:

1. Identify/approximate how long the plates have been installed.
2. Assess whether the anchors are working effectively.
3. Assess if the condition is worsening.
4. Provide any plumb or level measurements to indicate the amount of lateral movement that the wall has undergone.

iii. While the report identifies that anchors have been installed, the report does not identify any signs that this wall is bulging and/or bowing, or of masonry delamination.

iv. The current evidence does not demonstrate that the collapse of this wall is immediate in nature.

v. Given the current condition of this wall, no closure of 1st Ave sidewalk/cart way adjacent to this structure is necessary to preserve the health and safety of the public at this time.

vi. Based on current evidence, PLI has determined that this wall does not pose an imminent danger to the public or the adjacent properties.

6. Left Party Wall (Abutting 104 Market St):

a. The AE&C report indicates that

i. This wall was not visible for inspection.

ii. However, the report notes that the wall is likely in the same condition as the other exterior walls noted in the report.

b. PLI assessment:

- i. PLI disagrees with AE&C's assessment based on the fact that this wall is interior and therefore protected from direct exposure to weather unlike the front, rear and right walls.
- ii. Absent evidence to the contrary, PLI considers this element to be in a safe and/or stable condition.
- iii. Based on current evidence, PLI has determined that this wall does not pose an imminent danger to the public or the adjacent properties.**

7. Center Masonry Wall (Separating 100 and 102 Market Street)

- a. The AE&C report indicates that:
 - i. There is a high percentage "orange" brick present visible, that these brick are low strength and threaten the overall stability of the structure.
- b. PLI assessment:
 - i. No material tests of the "orange/pumpkin" brick have been performed to confirm strength; PLI advises against determining material strength based on visual inspection only.
 - ii. As the structure is currently vacant, this wall is only supporting existing building "dead loads".
 - iii. The current evidence does not demonstrate that the collapse of this wall is immediate in nature.
 - iv. Based on current evidence, PLI has determined that this wall does not pose an imminent danger to the public or the adjacent properties.**

8. Interior Framing:

- a. AE&C's report indicates that:
 - i. There is 6 inches of movement in either the 1st floor framing or the foundation wall but does not identify any recent changes in this condition.

ii. Wood beams and wood posts have been installed in the basement to address this issue.

iii. No other assessment is provided of the interior framing.

b. PLI assessment:

i. AE&C does not identify if the lateral movement has changed recently.

ii. AE&C does not identify any other interior framing stability issues.

iii. PLI would identify the movement identified by AE&C as related to “creep deformation”, which is common for a structure of this era, and can be mitigated by installation of additional support framing to reduce spans. It appears the installed wood beams and posts have addressed this issue.

iv. The current evidence does not demonstrate that the collapse of this floor framing, or any other interior framing, is immediate in nature.

v. **Based on current evidence, PLI has determined that the interior framing does not pose an imminent danger to the public or the adjacent properties.**

9. Foundations:

a. AE&C’s report does not provide an assessment of this element of the structural system other than noting deterioration of mortar joints in exterior stonework.

b. PLI assessment:

i. Absent documentation to the contrary, PLI considers this element to be in a safe and/or stable condition.

ii. **Based on current evidence, PLI has determined that the foundation does not pose an imminent danger to the public or the adjacent properties.**

III. PLI’s Assessment of 104 Market St

1. Overall Building Assessment:

- a. Based on AE&C Engineering Consultants engineering report, dated November 8, 2019, and PLI's assessment of the building's structural system below, no individual element poses an "imminent danger".
- b. In PLI's experience, masonry structures of this type and condition are uniquely strong and forgiving of limited/localized movement and/or deterioration.
- c. **PLI has determined that the current state of the structure at 104 Market Street does not pose an "imminent danger" to the public and closure of the Market St sidewalk/cart way is not necessary to preserve the health and safety of the public at this time.**
- d. **PLI recommends that immediate demolition of this building is not necessary to preserve the health and safety of the public at this time.**

2. General AE&C Report Comments:

- a. The AE&C report indicates that:
 - i. The front and rear exterior walls of the structure are "non-load bearing" as the floor and roof framing for the structure are spanning in the left/right direction. Therefore, the left and right walls of the structure are the main load-bearing elements.
 - ii. The structure are constructed of 4 wythes of brick and the floor and roof structures are wood framed.
 - iii. That the bricks of "orange", "salmon", or "pumpkin" color are low strength based solely on visual inspection.

3. Front Exterior Wall (Facing Market St):

- a. AE&C's report indicates that:
 - i. This wall is not load-bearing and no significant unsoundness or distress was observed.
- b. PLI assessment:

- i. PLI considers this wall to be in a safe and/or stable condition.
- ii. Given the current condition of this wall, no closure of the Market St sidewalk/cart way, adjacent to this structure, is necessary to preserve the health and safety of the public at this time.
- iii. **Based on current evidence, PLI has determined that this wall does not pose an imminent danger to the public or the adjacent properties.**

4. Rear Exterior Wall (Facing 209 1st Ave):

- a. AE&C's report indicates that:
 - i. The brickwork along the outer wythe, or layer of masonry of the rear exterior wall has been pointed due to deterioration of the mortar joints in the outer wythe of brick.
 - ii. There are several areas where "orange/pumpkin" masonry is present; this masonry is low strength; and threatens the stability of the wall.
- b. PLI assessment:
 - i. The type of deterioration noted in AE&C's report is relatively common for masonry construction of this age and the observed deterioration is limited to the outer wythe.
 - ii. No material tests of the "orange/pumpkin" brick have been performed to confirm strength; PLI advises against determining material strength based on visual inspection only.
 - iii. The report does not identify any signs that this wall is bulging and/or bowing, or of masonry delamination.
 - iv. The current evidence does not demonstrate that the collapse of this wall is immediate in nature.
 - v. **Based on current evidence, PLI has determined that this wall does not pose an imminent danger to the public or the adjacent properties.**

5. Right and Left Party Walls (Abutting 100/102 Market St and 106/108 Market St):

- a. The AE&C report indicates that:
 - i. A high percentage of “orange/pumpkin” masonry is present; and that this masonry is low strength, deteriorated and more susceptible to deterioration when exposed to water.
 - b. PLI assessment:
 - i. The masonry of the party walls are protected from exposure to moisture by the adjacent building on either side, except for the 4th floor.
 - ii. Widespread deterioration of the masonry generally, or the “orange/pumpkin” masonry, are not evident in the photos provided.
 - iii. No material tests of the “orange/pumpkin” brick have been performed to confirm strength; PLI advises against determining material strength based on visual inspection only.
 - iv. There is no documentation to support the claim that the “orange/pumpkin” masonry is more susceptible to water damage.
 - v. The current evidence does not demonstrate that the collapse of this wall is immediate in nature.
 - vi. Based on current evidence, PLI has determined that this wall does not pose an imminent danger to the public or the adjacent properties.**
6. Center Load Bearing Masonry Wall (Separating the 100 and 102 market Street commercial spaces)
- a. The AE&C report indicates that:
 - i. A high percentage of “orange/pumpkin” masonry is present; and that this masonry is low strength, deteriorated and more susceptible to deterioration when exposed to water.
 - b. PLI assessment:

- i. No material tests of the “orange/pumpkin” brick have been performed to confirm strength; PLI advises against determining material strength based on visual inspection only.
- ii. There is no documentation to support the claim that the “orange/pumpkin” masonry is more susceptible to water damage.
- iii. The current evidence does not demonstrate that the collapse of this wall is immediate in nature.
- iv. Based on current evidence, PLI has determined that this wall does not pose an imminent danger to the public or the adjacent properties.**

7. Interior Framing:

- a. AE&C’s report indicates:
 - i. That a portion of the roof sheathing and framing had been repaired at some point in the past.
 - ii. No assessment of the stability of the interior framing is provided.
- b. PLI assessment:
 - i. Absent documentation to the contrary, PLI considers this element to be in a safe and/or stable condition.
 - ii. Based on current evidence, PLI has determined that the interior framing does not pose an imminent danger to the public or the adjacent properties.**

8. Foundations:

- a. The AE&C report does not mention and/or assess this element of the structural assessment.
- b. PLI assessment:
 - i. Absent documentation to the contrary, PLI considers this element to be in a safe and/or stable condition.

- ii. **Based on current evidence, PLI has determined that the foundation does not pose an imminent danger to the public or the adjacent properties.**

IV. PLI's Assessment of 106/108 Market St

1. Overall Building Assessment:

- a. Based on AE&C Engineering Consultants engineering report, dated November 8, 2019, and PLI's assessment of the building's structural system below, no individual element poses an "imminent danger".
- b. In PLI's experience, masonry structures of this type and condition are uniquely strong and forgiving of limited/localized movement and/or deterioration.
- c. **PLI has determined that the current state of the structure at 106/108 Market Street does not pose an "imminent danger" to the public and closure of the Market St sidewalk/cart way is not necessary to preserve the health and safety of the public at this time**
- d. **PLI recommends that the immediate demolition of this building is not necessary to preserve the health and safety of the public at this time.**

2. General AE&C Report Comments:

- a. The AE&C report indicates that:
 - i. The front and rear exterior walls of the structure are "non-load bearing" as the floor and roof framing for the structure are spanning in the left/right direction. Therefore, the left and right walls of the structure are the main load-bearing elements.
 - ii. The structure are constructed of 4 wythes of brick and the floor and roof structures are wood framed.
 - iii. That the bricks of "orange", "salmon", or "pumpkin" color are low strength based solely on visual inspection.

3. Front Exterior Wall (Facing Market St):

- a. AE&C's report indicates that:
 - i. This wall is not load-bearing and no significant unsoundness or distress was observed.
- b. PLI assessment:
 - i. PLI considers this wall to be in a safe and/or stable condition.
 - ii. Given the current condition of this wall, no closure of the Market St sidewalk/cart way adjacent to this structure is necessary to preserve the health and safety of the public at this time.
 - iii. **Based on current evidence, PLI has determined that this wall does not pose an imminent danger to the public or the adjacent properties.**

4. Rear Exterior Wall (Facing 209 1st Ave and parking lot):

- a. AE&C's report indicates that:
 - i. The brickwork along the exterior face of the rear exterior wall has been pointed due to deterioration of the mortar joints and cracks in masonry in the outer wythe of brick.
 - ii. The star plate anchors have been installed and are evidence of previous outward movement.
 - iii. There are several areas where "orange/pumpkin" masonry is present; that this masonry is low strength and threatens the stability of the wall.
- b. PLI assessment:
 - i. The type of deterioration noted in AE&C's report is relatively common for masonry construction of this age, the observed deterioration is limited to the outer wythe of masonry, and that the star plate anchors are commonly used in this type of construction.
 - ii. Regarding the star plate anchors, the AE&C report does not:
 - 1. Identify/approximate how long the plates have been installed.

2. Assess whether the anchors are working effectively.
 3. Asses if the condition is worsening.
 4. Provide any plumb or level measurements to indicate the amount of lateral movement that the wall has undergone.
- iii. While the report identifies that anchors have been installed, the report does not identify any signs that this wall is bulging and/or bowing, or of masonry delamination.
 - iv. No material tests of the “orange/pumpkin” brick have been performed to confirm strength; PLI advises against determining material strength based on visual inspection only.
 - v. The current evidence does not demonstrate that the collapse of this wall is immediate in nature.
 - vi. **Based on current evidence, PLI has determined that this wall does not pose an imminent danger to the public or the adjacent properties.**

5. Left Exterior Wall (Facing The Boulevard of the Allies):

- a. The AE&C report indicates that:
 - i. This wall is bowed inward an “extreme amount”.
 - ii. That a pier in this wall has a high percentage “orange”/”pumpkin” masonry is present, that this masonry is low strength and threatens the stability of the wall.
 - iii. AE&C considers this wall to be structurally unsound and unstable.
- b. PLI assessment:
 - i. Regarding the inward bowing of this wall, the report does not:
 1. Provide any plumb or level measurements to indicate the amount of lateral movement that the wall has undergone.
 2. Asses if the condition is worsening.
 3. **Photos do not appear to demonstrate the inward bow of the wall.**

ii. Some lateral movement of the left exterior wall has occurred and likely requires remedial action.

- iii. No material tests of the “orange/pumpkin” brick have been performed to confirm strength; PLI advises against determining material strength based on visual inspection only.
- iv. The current evidence does not demonstrate that the collapse of this wall is immediate in nature.
- v. **Based on current evidence, PLI has determined that this wall does not pose an imminent danger to the public or the adjacent properties.**

6. Right Party Wall (Abutting 104 Market St):

- a. The AE&C report indicates that:
 - i. This wall has a high percentage “orange/pumpkin” masonry is present, that this masonry is low strength and threatens the stability of the wall.
- b. PLI assessment:
 - i. The masonry of the party walls are protected from direct exposure to the weather and moisture by the adjacent building on either side.
 - ii. No material tests of the “orange/pumpkin” brick have been performed to confirm strength; PLI advises against determining material strength based on visual inspection only.
 - iii. The current evidence does not demonstrate that the collapse of this wall is immediate in nature.
 - iv. **Based on current evidence, PLI has determined that this wall does not pose an imminent danger to the public or the adjacent properties.**

7. Interior Framing:

- a. AE&C’s report provides photos of interior framing but provides no assessment of this element of the structural system.

- b. PLI assessment:
 - i. Absent documentation to the contrary, PLI considers this element to be in a safe and/or stable condition.
 - ii. Based on current evidence, PLI has determined that the interior framing does not pose an imminent danger to the public or the adjacent properties.**

8. Foundations:

- a. AE&C's report provides photos of the foundation but provides no assessment of this element of the structural system.
- b. PLI assessment:
 - i. Absent documentation to the contrary, PLI considers this element to be in a safe and/or stable condition.
 - ii. Based on current evidence, PLI has determined that the foundation does not pose an imminent danger to the public or the adjacent properties.**

V. PLI's Assessment of 209 1st Ave

1. Overall Building Assessment:

- a. Based on AE&C Engineering Consultants engineering report, dated November 8, 2019, and PLI's assessment of the building's structural system below, no individual element poses an "imminent danger".
- b. In PLI's experience, masonry structures of this type and condition are uniquely strong and forgiving of limited/localized movement and/or deterioration.
- c. PLI has determined that the current state of the structure at 209 1st Avenue does not pose an "imminent danger" to the public and closure of the Market St sidewalk/cart way is not necessary to preserve the health and safety of the public at this time.**

d. PLI recommends that the immediate demolition of this structure is not necessary to preserve the health and safety of the public at this time.

2. General AE&C Report Comments:

- a. The AE&C report indicates that:
 - i. The front and rear exterior walls of the structure are “non-load bearing” as the floor and roof framing for the structure are spanning in the left/right direction. Therefore, the left and right walls of the structure are the main load-bearing elements.
 - ii. The structure is constructed of 4 wythes of brick and the floor and roof structures are wood framed.

3. Front Exterior Wall (Facing First Ave):

- a. AE&C’s report indicates that:
 - i. This wall is not load-bearing and no significant unsoundness or distress was observed.
- b. PLI assessment:
 - i. PLI considers this wall to be in a safe and/or stable condition.
 - ii. Given the current condition of this wall, no closure of the 1st Ave sidewalk/cart way adjacent to this structure is necessary to preserve the health and safety of the public at this time.
 - iii. **Based on current evidence, PLI has determined that this wall does not pose an imminent danger to the public or the adjacent properties.**

4. Rear Exterior Wall (Facing parking lot):

- a. AE&C’s report indicates that:
 - i. The mortar in the outer wythe, or layer, of the rear wall has been severely deteriorated.
 - ii. There are three areas of noticeable cracks in masonry, which are located below window openings.

iii. AE&C considers this wall to be structurally unsound and unstable.

b. PLI assessment:

i. The type of deterioration and location of masonry cracking noted in AE&C's report is relatively common for masonry construction of this age; and the observed deterioration is limited to the outer wythe.

iii. While PLI does agree that the rear wall is in a state of disrepair, the current evidence does not demonstrate that the collapse of this wall is immediate in nature.

iv. Based on current evidence, PLI has determined that this wall does not pose an imminent danger to the public or the adjacent properties.

5. Right Exterior Wall:

a. The AE&C report indicates that:

i. The outer wythe, or layer, of masonry of this wall was weather-tight, with no significant areas of masonry or mortar deterioration.

ii. AE&C considers this wall as unsound and unstable due to the condition of the left exterior wall.

b. PLI assessment:

i. PLI disagrees with AE&C's stability assessment of that the condition of this wall is directly impacted by the condition of the left exterior wall.

ii. Absent documentation of significant structural conditions of this wall, PLI considers this element to be in a safe and/or stable condition.

iii. Based on current evidence, PLI has determined that this wall does not pose an imminent danger to the public or the adjacent properties.

6. Left Exterior Wall (Facing 100-108 Market St):

a. The AE&C report indicates that:

- i. Large areas of the outer wythe, or layer, of masonry of the left exterior wall are completely missing.
 - ii. The mortar of the exposed inner wythe mortar is significantly deteriorated and missing in some areas.
 - iii. The compressive strength of this masonry to carry dead loads of existing structure has been reduced to minimal and indeterminate value.
 - iv. AE&C considers this wall to be structurally unsound and unstable.
- b. PLI assessment:
- i. In the area where the outer wythe is missing, portions of the original masonry has been replaced with CMU; the report does not address and/or evaluate the impact of this modification.
 - ii. No assessment and/or documentation of the interior face of this masonry wall was provided; which does not afford a comprehensive assessment of the condition of this wall.
 - iii. It is not clear how the compressive capacity of this masonry was determined based solely on visual inspection. The report also does not document any visual signs of damage to the exposed inner wythe of masonry that would suggest compressive failure.
 - v. The report does not identify any signs that this wall is bulging and/or bowing, or of masonry delamination.
 - vi. While PLI does agree that the left exterior wall is in a state of disrepair, the current evidence does not demonstrate that the collapse of this wall is immediate in nature.
 - vii. **Based on current evidence, PLI has determined that this wall does not pose an imminent danger to the public or the adjacent properties.**

7. Interior Framing

- a. The AE&C report indicates that:

i. Interior “beams” show signs of deterioration, cracking, water damage and fire damage. While photos are provided, the assessment identifies no specific locations.

b. PLI assessment:

i. While the AE&C report identifies general disrepair of the interior framing, it provides no assessment of the impact of this disrepair on the stability of this element of the structural system.

viii. While it is clear from the photos that this structure is not safe to occupy, the current evidence does not demonstrate that the collapse of the interior framing is immediate in nature.

ix. Based on current evidence, PLI has determined that this interior framing does not pose an imminent danger to the public or the adjacent properties.

8. Foundations:

a. AE&C’s report provides photos of the foundation but provides no assessment of this element of the structural system.

b. PLI assessment:

i. Absent documentation to the contrary, PLI considers this element to be in a safe and/or stable condition.

ii. Based on current evidence, PLI has determined that the foundation does not pose an imminent danger to the public or the adjacent properties.

STRUCTURAL VIABILITY INSPECTION

BUILDING @

209 First Avenue
Pittsburgh, PA

Prepared for:

Boulevard and Market, LLC

Prepared by:

AE&C Engineering
Consultants

161 Orr Avenue

Apollo, PA 15613

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NOVEMBER 8, 2019

November 8, 2019

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2.0 OPINION

3.0 Disclaimer5

APPENDICES

Appendix A - Site Plan: 209 First Avenue

Appendix B – Existing Conditions: Photographs #1 through #28

November 8, 2019

1.0 STRUCTURAL VIABILITY

1.1 Description of the building

The empty commercial building at 209 First Avenue is a symmetrical 5-story brick building which occupies Parcel 1-G-107. See Appendices A, B, & C.

The front of the building faces First Avenue with the front wall of the building along the rear extent of the sidewalk. The structure is a 5-story brick bearing wall building with a flat roof. The floor construction of the 1st floor consists of an area supported by large wood floor beams and other areas supported by steel beams and concrete floor. The remaining floors of the building are typically supported by large wood beams with wood plank flooring. A sidewalk vault is present under the entire length of the sidewalk along First Avenue. Photographs of the building are included in Appendix A. The four (4) exterior walls of the building are shown in Photographs #1 through #7.

1.2 Existing Structural Conditions

1.2.1 Multi-wythe brick non-bearing walls

-Front wall

The front and rear brick walls of the building are structurally considered non-bearing walls. The front wall is shown in Photograph #5. No significant structural distress or structural unsoundness was observed in the front wall.

-Rear wall

The rear wall is shown in Photographs #7, #8, #9, & #10. Four (4) areas of severely deteriorated mortar are shown in the exterior wythe of brick near the top of the wall. Three (3) locations of cracks in the brick work were also observed. There are numerous small areas where the exterior wythe has been pointed in the past to fill deteriorated mortar joints and cracks in the brick work, which were allowing water and moisture to get into the interior wythes of the brick wall.

[The brick walls (bearing and non-bearing) of the building are tall and are at least four (4) wythes thick (4" width of brick = 1 wythe), or 4 wythes x 4" width = 16" thick. Deterioration of the mortar and cracking of the brick in the exterior wythe of brick allows moisture and water to get into the mortar of the interior wythes of the brick wall; also deteriorating the mortar of those wythes of brick, over time. The areas of previous pointing of the exterior brick wythe show that there were other past opportunities for long-term deterioration of the mortar in the exterior wythe. Water and moisture that do get into the interior of the wall through open cracks and mortar joints can cause damage inside the wall without the exterior wythe of brick showing damage.

November 8, 2019

The present condition of the brick and mortar of the interior wythes of the front and rear walls could not be determined. However, the condition of the interior wythes of the left brick bearing wall was observed and is shown in Photographs #11, #12, & #13. The mortar of the interior wythes shown in the photographs is completely deteriorated with no remaining strength and, in portions of the area shown, the mortar has been completely eroded out of the joints between the bricks of many vertical courses.

CONCLUSION

In light of the conditions observed and the likelihood of rather large areas of structurally unsound and unstable brick on the interior of the rear wall, **the rear non-bearing brick wall of this building should be considered structurally unsound and structurally unstable.**

1.2.2 Multi-wythe brick bearing walls

- Right bearing wall

The right brick bearing wall of the building is shown in Photograph #6. The exterior wythe of the brick in this wall is intact and appears to generally be weather-tight. The present condition of the brick and mortar of the interior wythes of the right bearing wall could not be determined. No significant areas of brick and/or mortar deterioration were observed in this wall,

CONCLUSION

The conditions found on the interior of the left bearing wall (in Photographs #11, #12, & #13) lead to the conclusion that **the right brick bearing wall of the building should be considered structurally unsound and structurally unstable.**

-Left bearing wall

The left brick bearing wall of the building is shown in Photographs #11, #12, & #13. the condition of the interior wythes at the bottom of the left brick bearing wall can be observed in these photographs. The mortar of the interior wythes shown in the photographs is completely deteriorated with no remaining strength and, in portions of the area shown, the mortar has been completely eroded out of the joints between the bricks of many vertical courses.

ANALYSIS OF EXISTING CONDITIONS

The existing conditions observed in the front portion of the left brick bearing wall shown in Photographs #11, #12, & #13 presently threaten the overall stability of the entire building. The removal of a significant area of the exterior wythe of the brick bearing wall has definitely shown the structurally unsound and unstable interior wythes of brick on the interior of the wall at this location. The mortar of some of the interior wythes

November 8, 2019

shown in the photographs is completely deteriorated with no remaining strength and, in portions of the area shown, the mortar has been completely eroded out of the joints between the bricks of many vertical courses.

The structural ability of the interior wythes of brick to act in compression to safely carry the present dead loads of the wall, and the floor & roof structures above, has been reduced to a minimal and indeterminate value.

CONCLUSION

The present conditions of the front portion of the left brick bearing wall, as observed and photographed, lead to the conclusion that a sudden collapse of the left front portion of the brick bearing wall of the building would cause the drastic and complete collapse of the entire structure.

The severely deteriorated condition of the interior wythes of the front portion of the left brick bearing wall make that portion of the wall susceptible to collapse from:

- a) Vibrations caused by the proposed demolition of the adjacent buildings.
- b) Impact from debris during the demolition of the adjacent buildings.
- c) Further deterioration of the structural load capacity of the interior wythes of the brick and mortar in the wall from rain, snow and ice.

The location of the severely deteriorated condition of the interior wythes of the front portion of the left brick bearing wall leads to the likelihood that a collapse of the building would cause significant damage to the adjacent buildings (See Photographs #3, #4, & #5) and should cause immediate concerns for the safety of pedestrians and street traffic in the vicinity of the building-as the existing conditions make a reliable prediction of a collapse of the building impossible.

1.2.3 Wood floor beams

The large wood floor beams supporting the floor structures throughout the building are shown in Photographs #14 through #28. The present conditions of the floor beams in the building include:

- a) Deteriorated wood beams supported on steel beams and posts along the right wall of the basement under the 1st floor
- b) Floor beams cracked at the bearing areas on the brick bearing walls.
- c) Typically water damaged floor beams.
- d) Fire damaged wood floor beams

November 8, 2019

2.0 OPINION

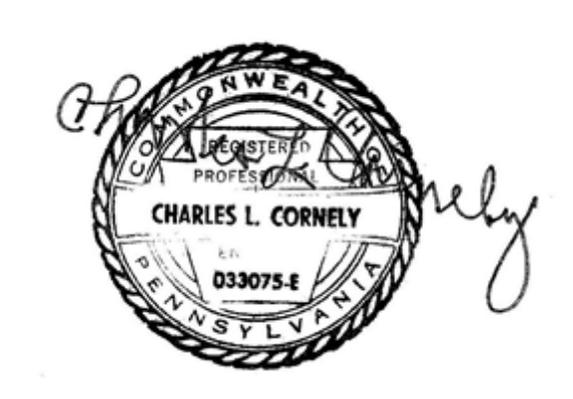
Within a reasonable degree of engineering certainty, and subject to change if further information becomes available, it is my opinion that:

1. A Demolition Plan for the demolition of the five (5) story building at 209 First Avenue should be developed and implemented immediately.

3.0 DISCLAIMER

The services provided for this project were performed with the care and skill ordinarily exercised by reputable members of the engineering profession. No warranty, expressed or implied, is made or intended by rendition of these consulting services. We reserve the right to revise or amend any portion of this Structural Viability Report in the event new information or documentation becomes available.

Sincerely,



Charles L. Cornely, P.E.
Structural/Foundation Engineer

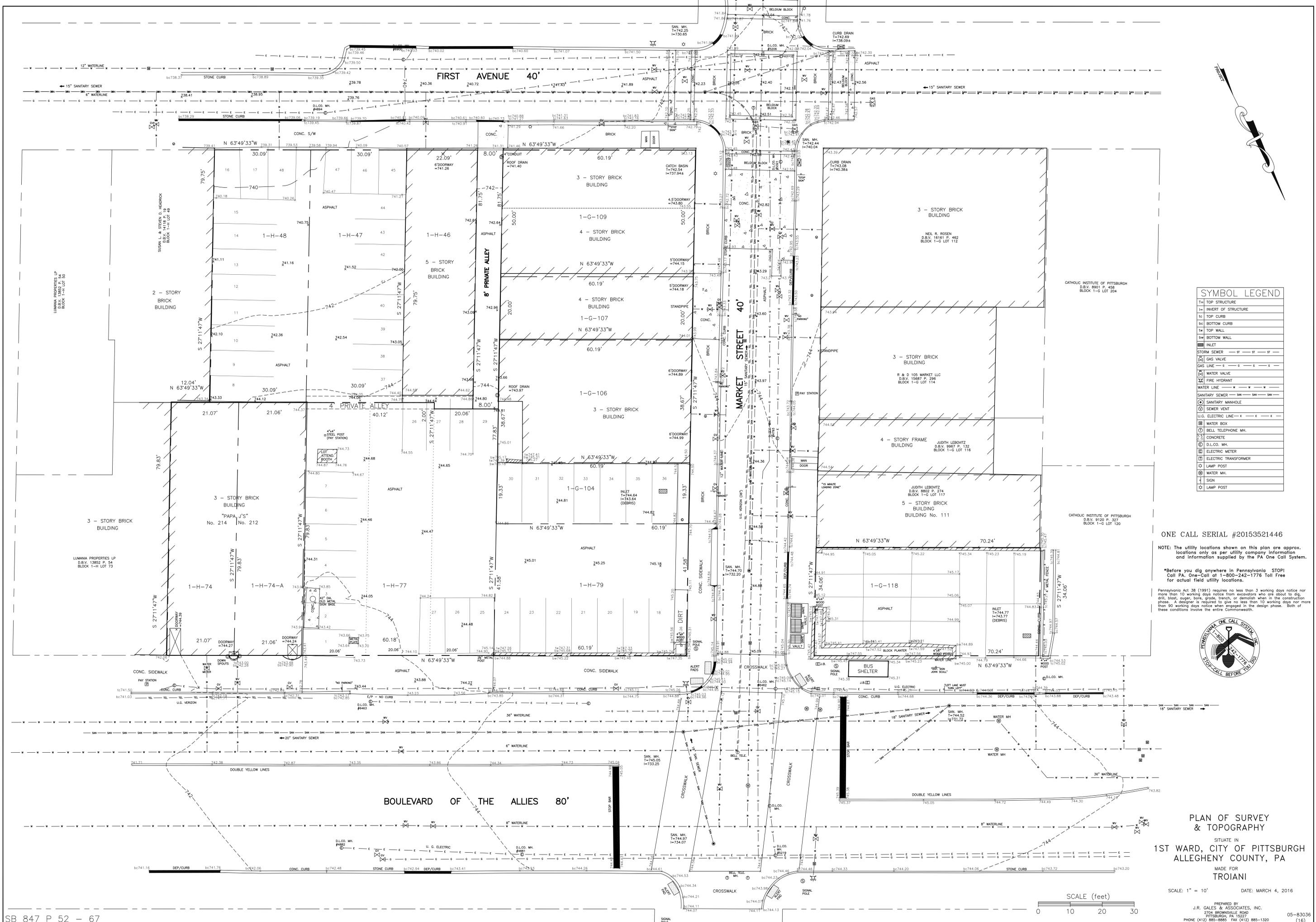
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Enclosures

APPENDIX A

209 FIRST AVENUE

SITE PLAN



SYMBOL LEGEND	
TS	TOP STRUCTURE
TI	INVERT OF STRUCTURE
TC	TOP CURB
BC	BOTTOM CURB
TW	TOP WALL
BW	BOTTOM WALL
IN	INLET
SS	STORM SEWER
GV	GAS VALVE
GL	GAS LINE
WL	WATER VALVE
FW	FIRE HYDRANT
SL	SEWER LINE
SM	SANITARY SEWER
SMH	SANITARY MANHOLE
SV	SEWER VENT
EL	ELECTRIC LINE
WB	WATER BOX
BT	BELL TELEPHONE MH.
CON	CONCRETE
DLM	D.L.C.O. MH.
EM	ELECTRIC METER
ET	ELECTRIC TRANSFORMER
LP	LAMP POST
WMH	WATER MH.
SI	SIGN
LP	LAMP POST

ONE CALL SERIAL #20153521446

NOTE: The utility locations shown on this plan are approx. locations only as per utility company information and information supplied by the PA One Call System.

*Before you dig anywhere in Pennsylvania STOP! Call PA One-Call at 1-800-242-1776 Toll Free for actual field utility locations.

Pennsylvania Act 38 (1991) requires no less than 3 working days notice nor more than 10 working days notice from excavators who are about to dig, drill, blast, auger, bore, grade, trench, or demolish when in the construction phase. A designer is required to give no less than 10 working days nor more than 90 working days notice when engaged in the design phase. Both of these conditions involve the entire Commonwealth.



PLAN OF SURVEY & TOPOGRAPHY
 SITUATE IN
 1ST WARD, CITY OF PITTSBURGH
 ALLEGHENY COUNTY, PA
 MADE FOR
 TROIANI

SCALE: 1" = 10' DATE: MARCH 4, 2016

PREPARED BY
 J.R. GALES & ASSOCIATES, INC.
 2704 BROWNVILLE ROAD
 PITTSBURGH, PA 15227
 PHONE (412) 885-8885 FAX (412) 885-1320

APPENDIX B

209 FIRST AVENUE

EXISTING CONDITIONS

PHOTOGRAPHS #1 THROUGH #28

**APPENDIX A
209 First Avenue**



PHOTOGRAPH #1
Looking across the Boulevard of the Allies at the north side of the building at 106/108 Market Street and the north side of 209 First Avenue.



PHOTOGRAPH #2
The open paved space adjacent to 106/108 Market Street and 209 First Avenue.

APPENDIX A
209 First Avenue



PHOTOGRAPH #3
Looking east on First Avenue across the intersection of First Avenue and Market Street.



PHOTOGRAPH #4
The intersection of Market Street and First Avenue.

**APPENDIX A
209 First Avenue**



**PHOTOGRAPH #5
The front of 209 First Avenue.**



**PHOTOGRAPH #6
The front and right walls of 209 First Avenue.**

**APPENDIX A
209 First Avenue**



PHOTOGRAPH #7

The rear of 209 First Avenue. Note the locations of areas with mortar deterioration and cracking in the exterior wythes of the multi-wythe wall.



PHOTOGRAPH #8

Areas of mortar deterioration near the top of the rear wall of the building.

**APPENDIX A
209 First Avenue**



PHOTOGRAPH #9
Cracking in the brick work of the rear wall.



PHOTOGRAPH #10
Cracking in the brick work of the rear wall.

**APPENDIX A
209 First Avenue**



PHOTOGRAPH #11

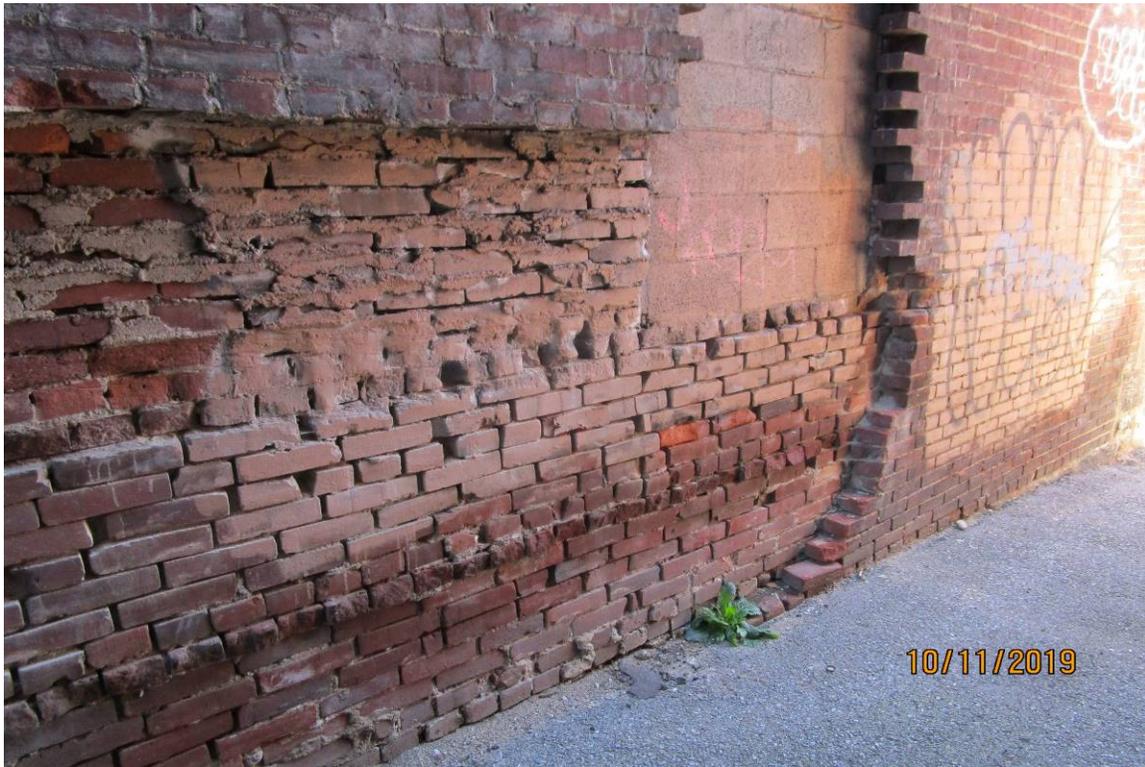
Looking to the rear along the left wall of the building. The exterior wythe (4" width) of the brick bearing-wall has been removed in this area; exposing the interior wythes of the wall. Note the complete deterioration and absence of mortar in the interior wythes of the bearing wall.



PHOTOGRAPH #12

An area of exposure of the interior wythes of the left brick bearing-wall. Note the complete deterioration of the mortar in large areas of the interior wythe.

**APPENDIX A
209 First Avenue**



PHOTOGRAPH #13

The exterior wythe of the brick bearing-wall has been removed in this area; exposing the interior wythes of the wall. Note the complete deterioration and absence of mortar in the interior wythes of the bearing wall.



PHOTOGRAPH #14

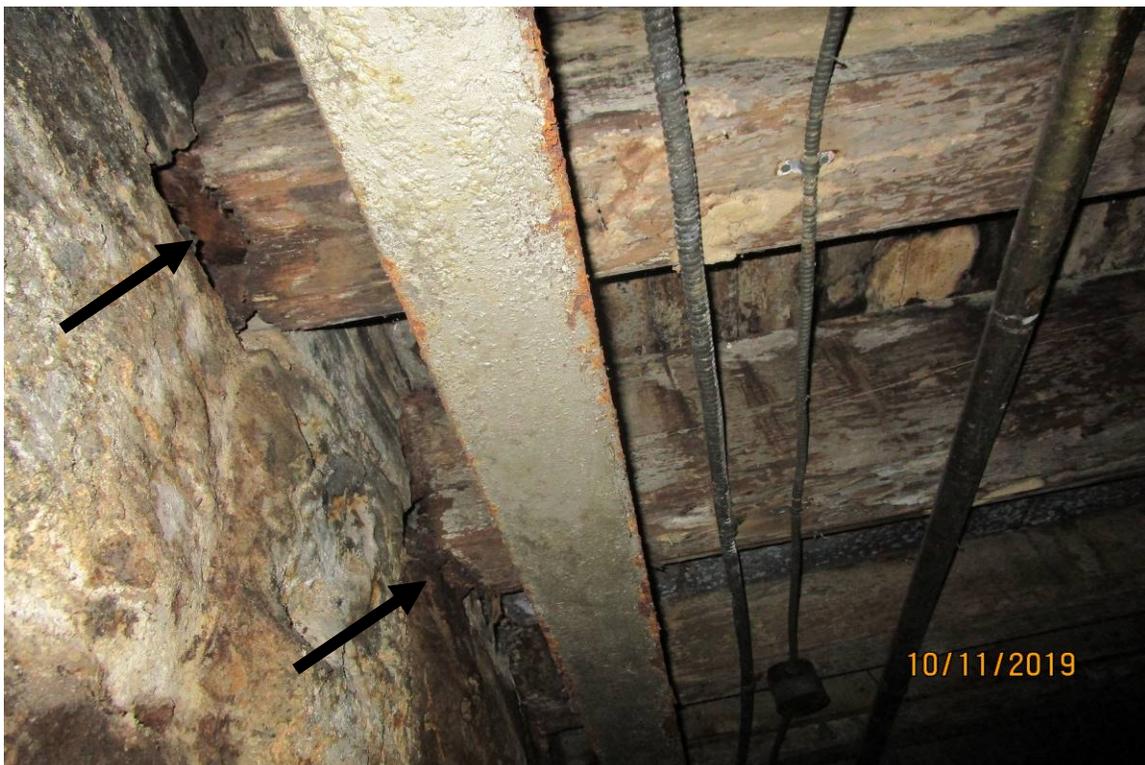
The steel beam and steel posts, along the right foundation wall, which provide support for the deteriorated end bearings of the water damaged, wood beams under the 1st floor.

**APPENDIX A
209 First Avenue**



PHOTOGRAPH #15

The steel beam and steel posts, along the right foundation wall, which provide support for the deteriorated end bearings of the water damaged, wood beams under the 1st floor.



PHOTOGRAPH #16

Typical deteriorated ends of the wood floor beams supported by the steel beam and posts shown in Photographs #14 & #15.

**APPENDIX A
209 First Avenue**



PHOTOGRAPH #17
Severely rusted steel beams under a portion of the 1st floor.



PHOTOGRAPH #18
**Cracked, structurally unsound, and water damaged floor beams
along the right bearing wall.**

**APPENDIX A
209 First Avenue**



PHOTOGRAPH #19
An area of fire damaged wood floor beams.



PHOTOGRAPH #20
An area of fire damaged wood floor beams.

APPENDIX A
209 First Avenue



PHOTOGRAPH #21
Looking to the rear at typical water damaged roof beams.



PHOTOGRAPH #22
Looking to the front at typical water damaged roof beams.

**APPENDIX A
209 First Avenue**



PHOTOGRAPH #23
**Cracking and deteriorated mortar in the interior wythe of brick
in the front wall on the top floor.**



PHOTOGRAPH #24
Typical water damaged floor beams and flooring.

APPENDIX A
209 First Avenue



PHOTOGRAPH #25
Cracked and structurally unsound floor beams.



PHOTOGRAPH #26
An area of fire damaged wood floor beams.

**APPENDIX A
209 First Avenue**



**PHOTOGRAPH #27
Typical water damaged floor beams and flooring.**



**PHOTOGRAPH #28
A cracked, structurally unsound, wood floor joist and adjacent water damaged floor beams.**



Providing Structural Engineering Designs for:
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STRUCTURAL VIABILITY INSPECTION

(Revision 1)

BUILDING @

209 First Avenue
Pittsburgh, PA

Prepared for:

Boulevard and Market, LLC

Prepared by:

AE&C Engineering
Consultants

161 Orr Avenue

Apollo, PA 15613

724-980-8187

aec0008@comcast.net

June 8, 2020

TABLE OF CONTENTS

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APPENDICES

Appendix A - Site Plan: 209 First Avenue

Appendix B – Existing Conditions: Photographs #1 through #28

1.0 STRUCTURAL VIABILITY

1.1 Description of the building

The empty commercial building at 209 First Avenue is a symmetrical 6-story brick building which occupies Parcel 1-H-46 (The building is mislabeled as a 5-story building). See Appendices A & B.

The front of the building faces First Avenue with the front wall of the building along the rear extent of the sidewalk. The structure is a 6-story brick bearing wall building with a flat roof. The floor construction of the 1st floor consists of an area supported by large wood floor beams and other areas supported by steel beams and concrete floor. The remaining floors of the building are typically supported by large wood beams with wood plank flooring. A sidewalk vault is present under the entire length of the sidewalk along First Avenue. Photographs of the building are included in Appendix A. The four (4) exterior walls of the building are shown in Photographs #1 through #7. Only an 8' wide private alley & along the left (west) wall separates the building from the rear walls (east walls) of the existing five (5) buildings on the three (3) adjacent properties; 100/102 Market Street, 104 Market Street & 106/108 Market Street.

1.2 Existing Structural Conditions

1.2.1 Multi-wythe brick non-bearing walls

-Front wall

The front brick wall of the six (6) story building is structurally considered a 6-story non-bearing brick wall. The front wall is shown in Photograph #5. Photograph #23 shows cracking and deteriorated mortar in the interior wythe of brick in the interior of the front wall on the top floor. No significant structural distress, structural unsoundness, or structural instability was observed in the front wall.

-Rear wall

The six (6) story rear wall is shown in Photographs #7, #8, #9, & #10. Four (4) areas of severely deteriorated mortar are shown in the exterior wythe of brick near the top of the wall. Three (3) locations of cracks in the brick work were also observed. There are numerous small areas where the exterior wythe has been pointed in the past to fill deteriorated mortar joints and cracks in the brick work, conditions which were allowing water and moisture to get into the interior wythes of the brick wall.

[The rear non-bearing brick wall of the building is 6-stories tall and is at least four (4) wythes thick (4" width of brick = 1 wythe), or 4 wythes x 4" width = 16" thick.

Deterioration of the mortar and cracking of the brick in the exterior wythe of brick allows

moisture and water to get into the mortar of the interior wythes of the brick wall; also deteriorating the mortar of those interior wythes of brick, over time. The areas of previous pointing of the exterior brick wythe show that there were other past opportunities for long-term deterioration of the mortar in the exterior wythe. Water and moisture will continue to get into the interior of the wall through the presently open cracks and open mortar joints, and cause structural damage inside the wall; without the exterior wythe of brick showing damage.

The present condition of the brick and mortar of the interior wythes of the rear wall could not be determined. However, the condition of the interior wythes of the left brick bearing wall was observed and is shown in Photographs #11, #12, & #13. The mortar of the interior wythe shown in the photographs is completely deteriorated with no remaining strength and, in portions of the area shown, the mortar has been completely eroded out of the joints between the bricks of many vertical courses.

CONCLUSION

In light of the conditions observed and the likelihood of rather large areas of structurally unsound and deteriorated brick/mortar on the interior of the rear wall, **the rear non-bearing brick wall of this six (6) story building should be considered structurally unsound. No areas of visible structural instability were observed in the rear wall at the time of this inspection.** However, this condition could change due to continuing deterioration of the brick and mortar from water entering the wall, and from seasonal freeze/thaw cycles. Additionally, vibrations and shifting of vertical loads on the rear wall could occur during the top-down demolition of the building or the drilling of soil test borings for the foundation investigation of future construction-thereby causing the wall to become structurally unstable and collapse.

1.2.2 Multi-wythe brick bearing walls

- Right bearing wall

The right multi-wythe brick bearing wall of the six (6) story building is shown in Photographs #6, #21, & #22. The exterior wythe of the brick in this wall is intact and appears to generally be weather-tight. The brick wythe on the inside face of the wall shown in Photographs #21 & #22 is sound and stable. The present condition of the brick and mortar of the wythes on the interior of the right bearing wall could not be determined. No significant areas of brick and/or mortar deterioration were observed in this wall.

CONCLUSION

A visual structural inspection of the right brick bearing wall of the building concludes that this wall appears to be structurally sound and stable. However, the wall should not be positively relied upon to be structurally sound and stable without investigation of the actual existing condition of the interior wythes of the wall,

-Left bearing wall

The left brick bearing wall of the six (6) story building is shown in Photographs #11, #12, & #13. The condition of the interior wythes at the bottom of the left brick bearing wall can be observed in these photographs. The mortar of the interior wythes shown in the photographs is completely deteriorated with no remaining strength and, in portions of the area shown, the mortar has been completely eroded out of the joints between the bricks of many vertical courses.

ANALYSIS OF EXISTING CONDITIONS

The existing conditions observed in the front portion of the left brick bearing wall shown in Photographs #11, #12, & #13 presently threaten the overall stability of the entire building. The collapse of a significant area of the exterior wythe of the brick bearing wall has exposed the structurally unsound and unstable interior wythes of brick on the interior of the wall at this location. The mortar of some of the interior wythes shown in the photographs is completely deteriorated with no remaining strength and, in portions of the area shown, the mortar has been completely eroded out of the joints between the bricks of many vertical courses.

Photograph #11 was taken looking to the rear along a significant length of the west brick bearing wall of the building at 209 First Avenue. The exterior wythe (4" width) of the brick bearing-wall has completely fallen off the wall in this area; exposing the 1st interior wythe of the wall. Note the deterioration of the soft bricks and the absence of mortar in the exposed area of the 1st interior wythe of the bearing wall. Note the concrete block in-fills of the 1st floor windows.

This bearing wall appears to be 5-wythes thick (5-widths/horizontal layers x 4" per wythe = 20" thick). The exterior 2-wythes (an 8" thickness of wall) are missing or are structurally unsound; this condition leads to the conclusion that the structural strength of the wall has been reduced by as much as 40% from its load-carrying capacity when the wall was originally built. The structural ability of the interior wythes of brick to act in compression to safely carry the present dead loads of the wall, and the floor & roof structures above, has been reduced to an indeterminate value.

Note that the collapse of the severely weakened 1st floor section of the west brick bearing wall of the 6-story building at 209 First Avenue would cause that 6-story building to collapse to the left (westward) and fall onto (and against) the buildings at 100/102 Market Street, 104 Market Street, & 106/108 Market Street. See Photographs #1, #2, #4, #5, & #7.

CONCLUSION

The present conditions of the front portion of the left brick bearing wall, as observed and photographed, lead to the conclusion that the front portion of the left

1st floor brick bearing wall of the building is very unsafe structurally and is in danger of, a possibly imminent, collapse. The collapse of this section of the left brick bearing wall would more likely, than not, cause the drastic and complete collapse of the entire structure.

The severely deteriorated condition of the interior wythes of the front portion of the left brick bearing wall make that portion of the wall structurally unsafe. Conditions that would increase the danger of collapse include:

- a) Vibrations and shifting of vertical loads on the rear wall which could occur during the top-down demolition of the building
- b) The vibrations from the drilling of soil test borings for the foundation investigation of future construction.
- c) Vibrations caused by the proposed demolition of the adjacent buildings.
- d) Impact from debris during the demolition of the adjacent buildings.
- e) Further deterioration of the structural load capacity of the interior wythes of the brick and mortar in the wall from the continuing action of rain, snow and ice.

The location of the severely deteriorated and unsafe condition of the interior wythes of the front portion of the left brick bearing wall leads to the likelihood that a collapse of the building at 209 First Avenue (to the left) would cause significant damage to the adjacent buildings located to the left of 209 First Avenue (See Photographs #3, #4, & #5) and should cause immediate concerns for the safety of pedestrians and street traffic in the vicinity of the buildings-as the existing conditions make a reliable prediction of a collapse of the building at 209 First Avenue impossible.

1.2.3 Wood floor beams

The large wood floor beams supporting the floor structures throughout the building are shown in Photographs #14 through #28. The present conditions of the floor beams in the building include:

- a) Deteriorated wood beams supported on steel beams and posts along the right wall of the basement under the 1st floor
- b) Floor beams cracked at the bearing areas on the brick bearing walls.
- c) Typically water damaged floor beams.
- d) Fire damaged wood floor beams

CONCLUSION

The observed conditions of the severely deteriorated and fire-damaged wood floor beams lead to the conclusions that the building is 1) unsafe for occupancy and 2) that renovation of the building is not structurally or economically feasible.

2.0 OPINION

Within a reasonable degree of engineering certainty, and subject to change if further information becomes available, it is my opinion that:

1. A Demolition Plan for the demolition of the six (6) story building at 209 First Avenue should be developed and implemented immediately.

The present conditions of the front portion of the left 1st floor brick bearing wall have made that portion of the building structurally very unsafe and in danger of, possibly imminent, collapse. The collapse of this section of the left brick bearing wall would more likely, than not, cause the drastic and complete collapse of the entire structure.

The time of the collapse of the building is unpredictable (possibly imminent) and the further deterioration of the 1st floor left brick bearing wall by rain and freeze/thaw action is unstoppable.

2. If the already severely weakened, and unsafe, 1st floor portion of the left (west) brick bearing wall of the building at 209 First Avenue collapses; 1) before the demolition of the building, or 2) during the “top down” demolition of the building, the 6-story building can totally collapse and fall to the left (westward) and fall onto (and against) the buildings located 8 feet away from the left bearing wall of 209 1st Avenue. The endangered buildings are located at 100/102 Market Street, 104 Market Street, & 106/108 Market Street.
3. From this point in time-until the 1) unpredictable (possibly imminent) and unstoppable collapse, or 2) after the demolition, of the 6-story building at 209 First Avenue- immediate actions should be taken to preserve the safety of pedestrians and traffic in the potential “fall zone” of the debris from a collapse of the building. There is also concern for the safety of pedestrians and street traffic along the walls of the buildings located along Market Street-due to the possible partial collapses of those buildings from the impact of the collapse of 209 First Street on those structures.

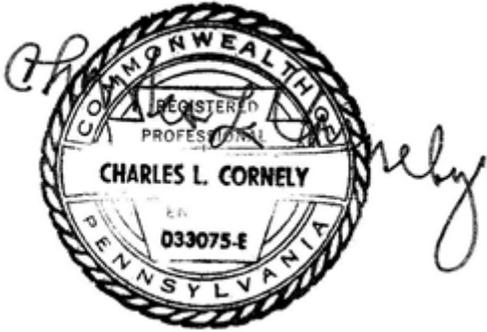
3.0 DISCLAIMER

The services provided for this project were performed with the care and skill ordinarily exercised by reputable members of the engineering profession. No warranty, expressed or implied, is made or intended by rendition of these consulting services. We reserve the right to revise or

STRUCTURAL VIABILITY INSPECTION – 209 First Avenue
(Revision 1)
June 8, 2020

amend any portion of this Structural Viability Report in the event new information or documentation becomes available.

Sincerely,



Charles L. Cornely, P.E.
Structural/Foundation Engineer

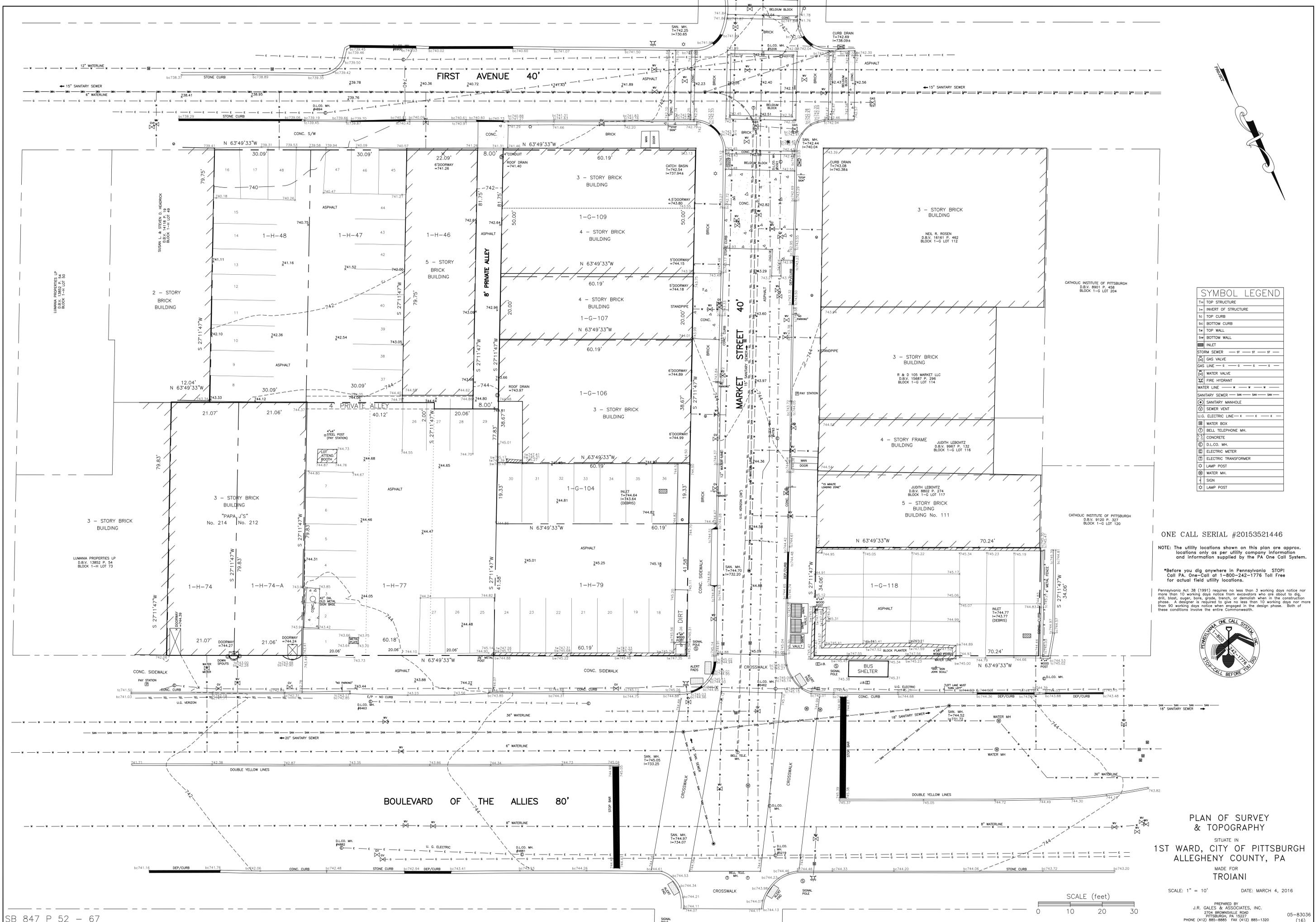
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Enclosures

APPENDIX A
(Revision 1)

209 FIRST AVENUE

SITE PLANS (2)



SYMBOL LEGEND

TS	TOP STRUCTURE
TI	INVERT OF STRUCTURE
TC	TOP CURB
BC	BOTTOM CURB
TW	TOP WALL
BW	BOTTOM WALL
IN	INLET
SS	STORM SEWER
GV	GAS VALVE
GL	GAS LINE
WL	WATER VALVE
FL	FIRE HYDRANT
SL	SEWER LINE
SM	SANITARY SEWER
SMH	SANITARY MANHOLE
SV	SEWER VENT
EL	ELECTRIC LINE
WB	WATER BOX
BT	BELL TELEPHONE MH.
CON	CONCRETE
DLM	D.L.C.O. MH.
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ET	ELECTRIC TRANSFORMER
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SI	SIGN
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ONE CALL SERIAL #20153521446

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PLAN OF SURVEY & TOPOGRAPHY

SITUATE IN
1ST WARD, CITY OF PITTSBURGH
ALLEGHENY COUNTY, PA

MADE FOR
TROIANI

SCALE: 1" = 10' DATE: MARCH 4, 2016

PREPARED BY
J.R. GALES & ASSOCIATES, INC.
 2704 BROWNVILLE ROAD
 PITTSBURGH, PA 15227
 PHONE (412) 885-8885 FAX (412) 885-1320

APPENDIX B
(Revision 1)

209 FIRST AVENUE

EXISTING CONDITIONS

PHOTOGRAPHS #1 THROUGH #28

**APPENDIX A (Rev. 1)
209 First Avenue**



PHOTOGRAPH #1

Looking across the Boulevard of the Allies at the north side of the building at 106/108 Market Street and the north side of 209 First Avenue. Note that the collapse of the severely weakened 1st floor section of the west brick bearing wall of the 6-story building at 209 First Avenue would cause that 6-story building to collapse westward and fall onto (and against) the buildings at 106/108 Market Street. See Photographs #11, #12, & #13.

**APPENDIX A (Rev. 1)
209 First Avenue**



PHOTOGRAPH #2

The open paved space adjacent to 106/108 Market Street and 209 First Avenue. Note that the collapse of the severely weakened 1st floor section of the west brick bearing wall of the 6-story building at 209 First Avenue would cause that 6-story building to collapse westward and fall onto (and against) the buildings at 106/108 Market Street. See Photographs #11, #12, & #13.



PHOTOGRAPH #3

Looking east on First Avenue across the intersection of First Avenue and Market Street.

**APPENDIX A (Rev. 1)
209 First Avenue**



PHOTOGRAPH #4

The intersection of Market Street and First Avenue. Note that the collapse of the severely weakened 1st floor section of the west brick bearing wall of the 6-story building at 209 First Avenue would cause that 6-story building to collapse westward and fall onto (and against) the buildings at 104 Market Street and 100/102 Market Street.

See Photographs #11, #12, & #13.

APPENDIX A (Rev. 1)
209 First Avenue



PHOTOGRAPH #5

The front of the 6-story building at 209 First Avenue. Note that the collapse of the severely weakened 1st floor section of the west brick bearing wall of the 6-story building at 209 First Avenue would cause that 6-story building to collapse westward and fall onto (and against) the buildings at 100/102 Market Street. See Photographs #11, #12, & #13.



PHOTOGRAPH #6

The front and right walls of 209 First Avenue.

**APPENDIX A (Rev. 1)
209 First Avenue**



PHOTOGRAPH #7

The rear of the 6-story building at 209 First Avenue. Note the locations of areas with mortar deterioration and cracking in the exterior wythes of the multi-wythe wall. Note that the collapse of the severely weakened 1st floor section of the west brick bearing wall of the 6-story building at 209 First Avenue would cause that 6-story building to collapse westward and fall onto (and against) the buildings at 106/108 Market Street. See Photographs #11, #12, & #13.



PHOTOGRAPH #8

Areas of mortar deterioration near the top of the rear wall of the building.

**APPENDIX A (Rev. 1)
209 First Avenue**



PHOTOGRAPH #9
Cracking in the brick work of the rear wall of 209 First Avenue.



PHOTOGRAPH #10
Cracking in the brick work of the rear wall of 209 First Avenue.

**APPENDIX A (Rev. 1)
209 First Avenue**



PHOTOGRAPH #11

Looking to the rear along a significant length of the west brick bearing wall of the building at 209 First Avenue. The exterior wythe (4" width) of the brick bearing-wall has completely fallen off the wall in this area; exposing the 1st interior wythe of the wall. Note the deterioration of the soft bricks and the absence of mortar in the exposed area of the 1st interior wythe of the bearing wall. Note the concrete block in-fills of the 1st floor windows.

This bearing wall appears to be 5-wythes thick (5-widths/horizontal layers x 4" per wythe = 20" thick). The exterior 2-wythes (an 8" thickness of wall) are missing or are structurally unsound; this condition leads to the conclusion that the structural strength of the wall has been reduced by as much as 40% from its load-carrying capacity when the wall was originally built.

Note that the collapse of the severely weakened 1st floor section of the west brick bearing wall of the 6-story building at 209 First Avenue would cause that 6-story building to collapse westward and fall onto (and against) the buildings at 100/102 Market Street, 104 Market Street, & 106/108 Market Street. See Photographs #1, #2, #4, #5, & #7.

**APPENDIX A (Rev. 1)
209 First Avenue**



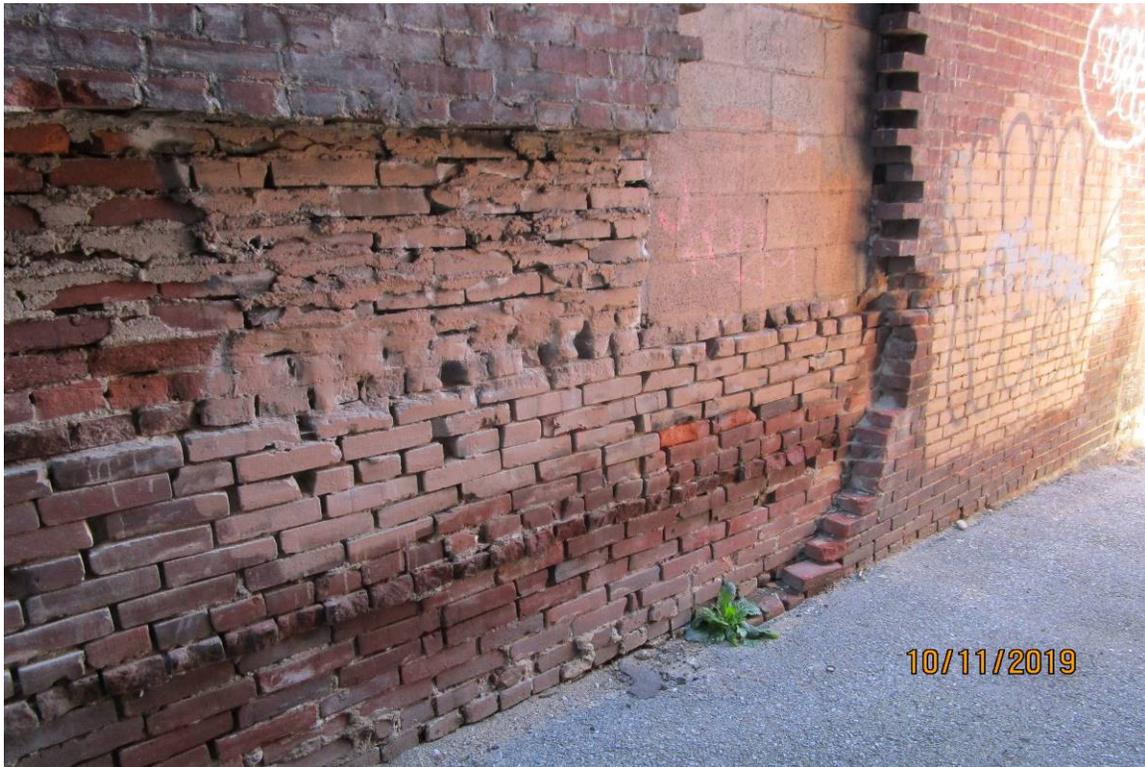
PHOTOGRAPH #12

An area of exposure of the 1st interior wythe of the left brick bearing-wall. Note that the exterior wythe of brick is completely missing and note the extensive deterioration of the mortar in large areas of the 1st interior wythe of the brick bearing wall. Note the concrete block in-fills of the 1st floor windows.

This bearing wall appears to be 5-wythes thick (5-widths/horizontal layers x 4" per wythe = 20" thick). The exterior 2-wythes (an 8" thickness of wall) are missing or are structurally unsound; this condition leads to the conclusion that the structural strength of the wall has been reduced by as much as 40% from its load-carrying capacity when the wall was originally built.

Note that the collapse of the severely weakened 1st floor section of the west brick bearing wall of the 6-story building at 209 First Avenue would cause that 6-story building to collapse westward and fall onto (and against) the buildings at 100/102 Market Street, 104 Market Street, & 106/108 Market Street. See Photographs #1, #2, #4, #5, & #7.

**APPENDIX A (Rev. 1)
209 First Avenue**



PHOTOGRAPH #13

The exterior wythe of the brick bearing-wall has fallen off the wall in this area; exposing the 1st interior wythe of the wall. Note the extensive deterioration and absence of mortar in the joints of 1st interior wythe of the bearing wall.

This bearing wall appears to be 5-wythes thick (5-widths/horizontal layers x 4" per wythe = 20" thick). The exterior 2-wythes (an 8" thickness of wall) are missing or are structurally unsound; this condition leads to the conclusion that the structural strength of the wall has been reduced by as much as 40% from its load-carrying capacity when the wall was originally built.

Note that the collapse of the severely weakened 1st floor section of the west brick bearing wall of the 6-story building at 209 First Avenue would cause that 6-story building to collapse westward and fall onto (and against) the buildings at 100/102 Market Street, 104 Market Street, & 106/108 Market Street. See Photographs #1, #2, #4, #5, & #7.

**APPENDIX A (Rev. 1)
209 First Avenue**



PHOTOGRAPH #14

The steel beam and steel posts, along the right foundation wall, which provide support for the deteriorated end bearings of the water damaged, wood beams under the 1st floor.



PHOTOGRAPH #15

The steel beam and steel posts, along the right foundation wall, which provide support for the deteriorated end bearings of the water damaged, wood beams under the 1st floor.

**APPENDIX A (Rev. 1)
209 First Avenue**



PHOTOGRAPH #16

Typical deteriorated ends of the wood floor beams supported by the steel beam and posts shown in Photographs #14 & #15.



PHOTOGRAPH #17

Severely rusted steel beams under a portion of the 1st floor.

**APPENDIX A (Rev. 1)
209 First Avenue**



PHOTOGRAPH #18
Cracked, structurally unsound, and water damaged floor beams
along the right bearing wall.

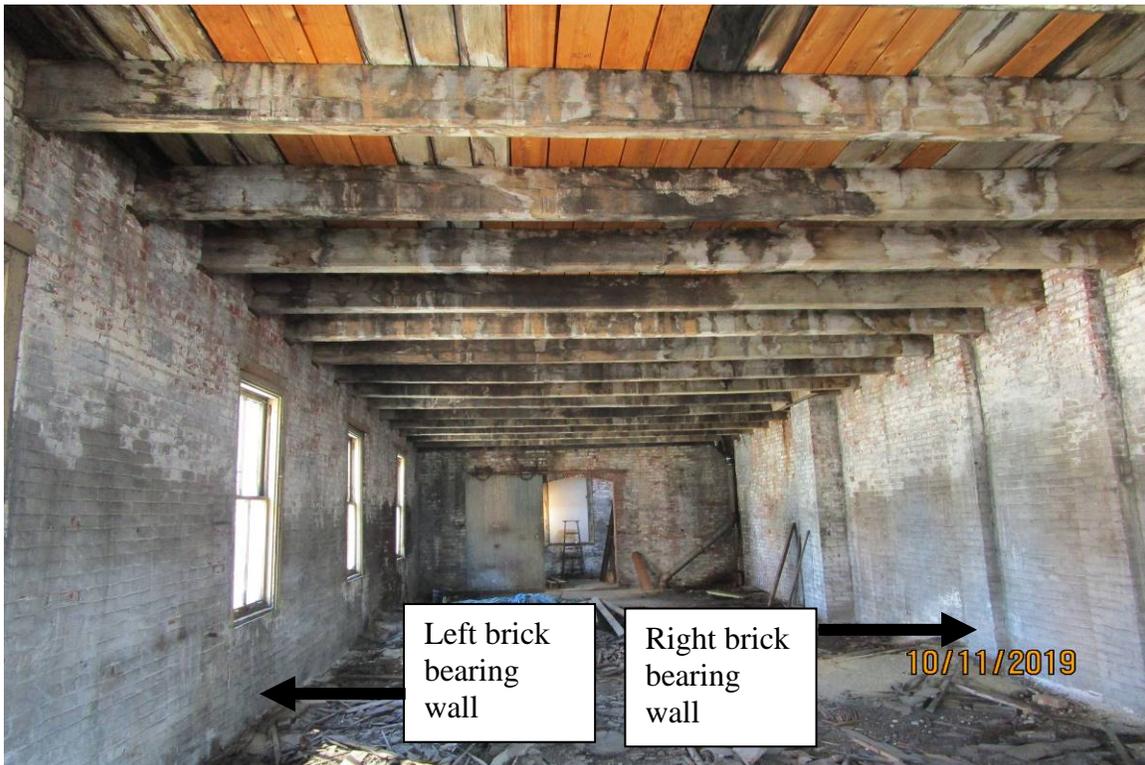


PHOTOGRAPH #19
An area of fire damaged wood floor beams.

**APPENDIX A (Rev. 1)
209 First Avenue**



PHOTOGRAPH #20
An area of fire damaged wood floor beams.



PHOTOGRAPH #21
Looking to the rear at typical water damaged roof beams.

**APPENDIX A (Rev. 1)
209 First Avenue**



PHOTOGRAPH #22
Looking to the front at typical water damaged roof beams.



PHOTOGRAPH #23
**Cracking and deteriorated mortar in the interior wythe of brick
in the front wall on the top floor.**

**APPENDIX A (Rev. 1)
209 First Avenue**



PHOTOGRAPH #24
Typical water damaged floor beams and flooring.



PHOTOGRAPH #25
Cracked and structurally unsound floor beams.

**APPENDIX A (Rev. 1)
209 First Avenue**



PHOTOGRAPH #26
An area of unsound fire damaged wood floor beams.



PHOTOGRAPH #27
Typical unsound water damaged floor beams and flooring.

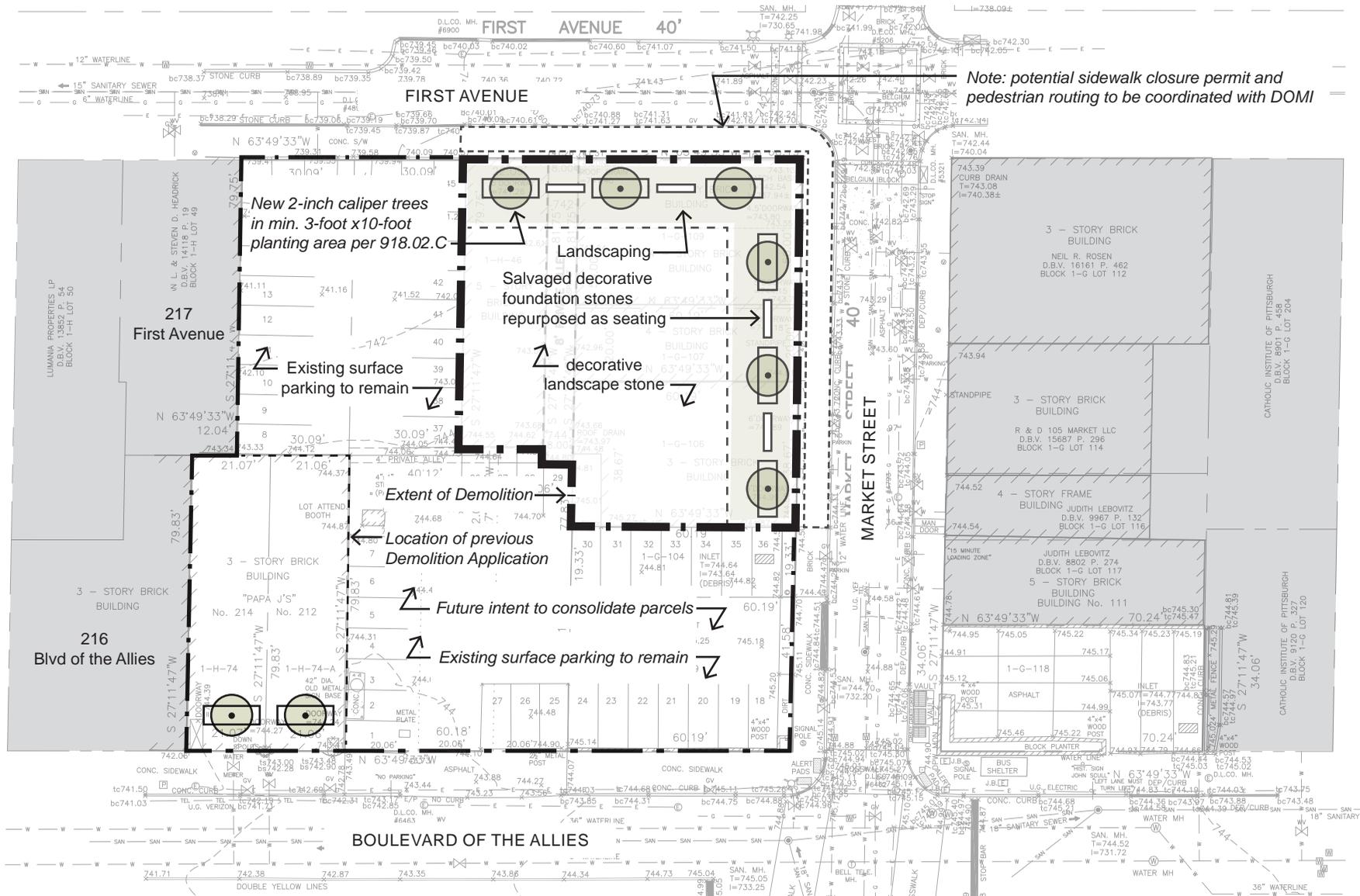
**APPENDIX A (Rev. 1)
209 First Avenue**



PHOTOGRAPH #28
A cracked, structurally unsound, wood floor beam and adjacent unsound water damaged floor beams.

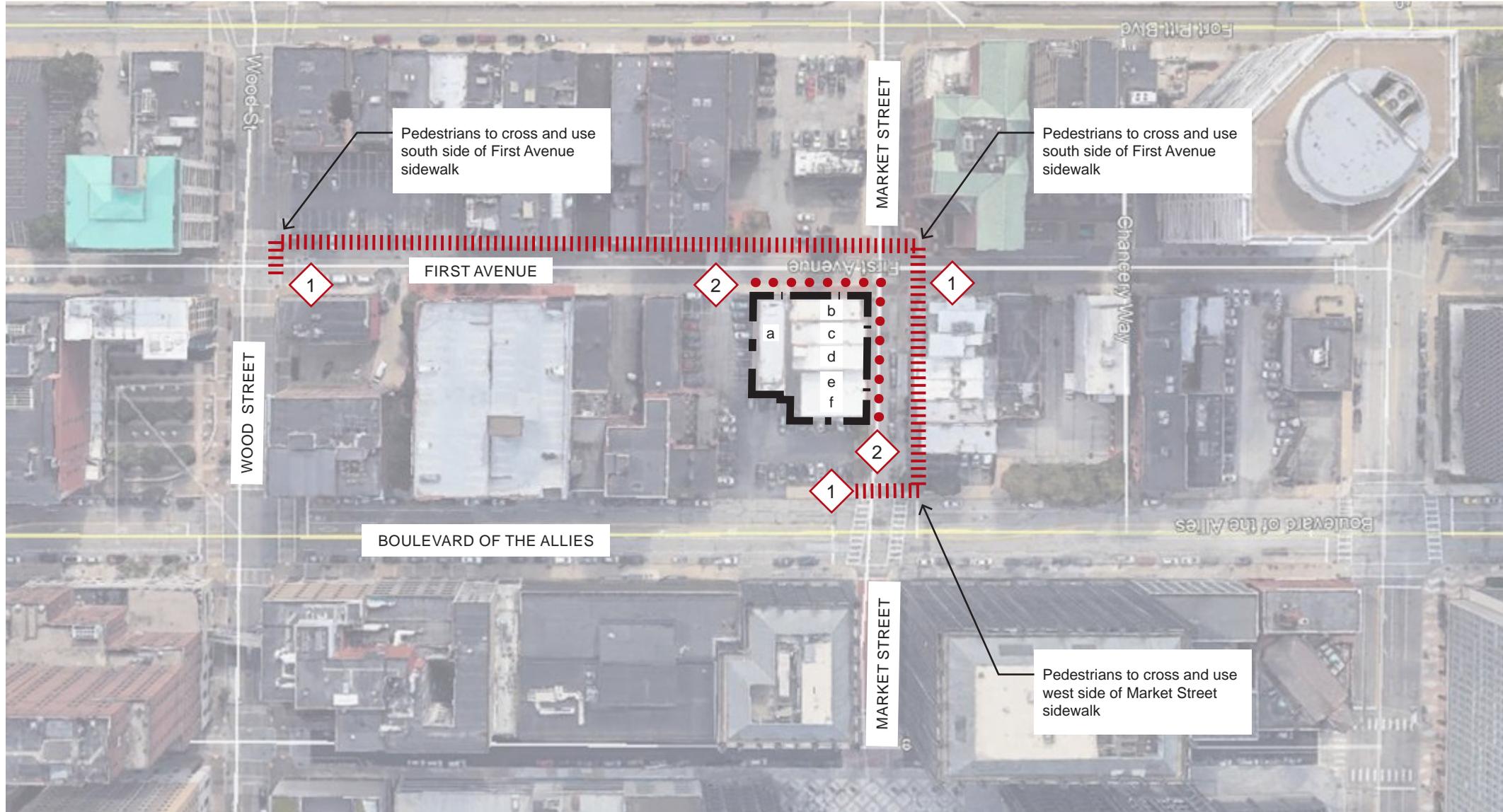
BOULEVARD AND MARKET

Interim Site Plan



BOULEVARD AND MARKET

Obstruction Permit Plan for Sidewalk Routing



SITE ADDRESSES

- a 209 First Avenue
- b 100 Market Street
- c 102 Market Street
- d 104 Market Street
- e 106 Market Street
- f 108 Market Street

MAP LEGEND

- Existing Buildings
- Subject Buildings
- Extent of Demolition
- Extent of Site
- Pedestrian Route
- Temporary Barrier for Sidewalk Closure
- "Sidewalk Closed Cross Here" signage
- "Sidewalk Closed" signage

Scale 1" = 40'-0"



BOULEVARD AND MARKET *Construction Management Plan*

Plan Scope

The scope describes the operational aspects of the proposed demolition work.

The project scope consists of the responsible demolition and site stabilization of 209 First Avenue (1-H-46); 100-102 Market Street (1-G-109); 104 Market Street (1-G-107); and 106-108 Market Street (1-G-106). All parcels are located within the Downtown GT-C zoning district.

TRANSPORTATION ROUTING

No impact on current transportation routing is expected.

STREET CLOSURE AND OBSTRUCTIONS:

No street closures are anticipated as all demolition activity is proposed to be contained within private property. Refer to "Demolition Site Plan" for graphic representation of overall site boundaries.

The sidewalk in front of the project scope will be closed once demolition activity commences at the front elevations with 6-foot temporary construction fencing. The pedestrian pathway will be clearly delineated at First Avenue & Wood Street; First Avenue and Market Street; and Boulevard of the Allies and Market Street with signage notifying pedestrians to cross at the intersection.

The sidewalk obstruction permit will be coordinated with DOMI for duration of demolition. Refer to "Obstruction Permit Plan for Sidewalk Routing."

DEBRIS / DUMPSTER MAINTENANCE

Debris and dumpster to be managed on private property.

WORK CREW PARKING

Work crew parking to be located on private property.

SITE MAINTENANCE

The intent of demolition is to create a maintainable condition. The demolition site will be cleaned daily with mechanical brushes as necessary to maintain public safety.

DURATION OF CONSTRUCTION

Demolition is expected to take less than 60 days and site dressing once demolition is complete is expected to take less than 30 days.

Mitigation Scope

The mitigation scope explains the impacts of the proposed scope and will describe proposed measures to reduce these impacts.

CONSTRUCTION NOISE

Noise related to demolition activities shall conform to levels indicated in the City of Pittsburgh Code of Ordinances.

TRAFFIC

No traffic disturbance is expected.

PARKING

No public parking disturbance is expected.

AIR / LIGHT

No air or light disturbance related to demolition activity is expected.

May 14, 2020

By Email

Mike Gwin
Principal
Rothschild Doyno Collaborative
2847 Penn Avenue
Pittsburgh, PA 15222

RE: Downtown Pittsburgh Highrise ASR-01, MEP, Structural, Facades Services Proposal

Dear Mike,

Further to our recent conversation, Buro Happold Consulting Engineers, Inc. ("BuroHappold") is pleased to submit this proposal add service for MEP, Structural, Facades basic services that covers the architectural concept phase for this project. This proposal covers our anticipated engineering services, including scope of work and associated estimated fees.

BuroHappold has extensive experience in the commercial sector, high rise buildings, and work in Pittsburgh. We appreciate the opportunity to help out with the concepts for this early phase of work.

Section 1 – Project Scope

As described in our conversation and previous meetings, BuroHappold Engineering will be assisting Rothschild Doyno Collaboration with conceptual engineering ideas for a potential new high rise building in downtown Pittsburgh. The exact size and scale of the project will be determined as the project moves from this conceptual planning phase to concept design. The intent is to aid the architecture in best practices and planning of a potential building in terms of MEP, structural, and façade engineering concepts.

If the above Sections and the attached Terms and Conditions are satisfactory to you, please indicate your acceptance by signing in the space provided below and return electronically.

Our proposal is valid for 90 days.

Sincerely,
On Behalf of BuroHappold



Jeremy Snyder
Principal

BuroHappold Engineering
1 PPG Place, 19th Floor
Pittsburgh, PA 15222

Agreed to and Accepted By:

Signature

Date

Name, Title

TERMS AND CONDITIONS

1. General

These Standard Terms and Conditions, together with the attached proposal, constitute the Professional Services Agreement ("Agreement") between BuroHappold and the person or entity to whom the proposal is addressed ("Client") to perform basic or additional services.

2. Independent Contractor

BuroHappold is an independent contractor and is not an employee, agent or partner of Client. Nothing in this Agreement establishes a fiduciary relationship between BuroHappold and Client.

3. Performance of Services

BuroHappold's services will be performed in accordance with the skill and care ordinarily applied by engineers performing similar services at the same time and in the same locality under similar circumstances ("Standard of Care"). BuroHappold shall perform its services according to Client's schedule as expeditiously as is consistent with the Standard of Care and shall exercise the Standard of Care to comply with requirements of all applicable codes, regulations, and current written interpretation thereof published and in effect during this Agreement. This Agreement does not confer upon BuroHappold the responsibility for, or the authority to control, direct, or supervise construction contractors, construction means, methods, techniques, sequences or procedures, or safety measures and programs.

4. Payment

Unless otherwise agreed, BuroHappold will submit fee invoices monthly and payment will be due within thirty days of the invoice date ("Due Date"). Invoices paid within fifteen days of receipt shall receive a 1.5% discount. Invoices paid more than forty-five days after the Due Date shall accrue interest at a rate of 1% per month on the outstanding balance. All payments shall be made in US dollars. In addition to the fee, BuroHappold will bill reimbursable expenses incurred for the project on a direct cost basis + 10% to cover administrative costs. Without BuroHappold's prior agreement, Client shall not withhold amounts from payments due. If Client fails to make payments within fifteen (15) days of the Due Date, BuroHappold may suspend services, without liability to Client for delay, after providing seven (7) days' written notice to Client and an opportunity to make payment. Before resuming services, BuroHappold shall be paid all sums due prior to the suspension and any expenses unavoidably incurred in suspending and resuming the services. Following the resumption of services, time schedules and BuroHappold's fee for the remaining services shall be equitably adjusted.

5. Indemnification

To the fullest extent permitted by law, BuroHappold and Client shall each indemnify and hold harmless (but not defend) the other party, its officers, directors, agents and employees from any damages, losses, costs and reasonable attorneys' fees recoverable under the law arising from personal injuries or property damage, but only to the extent caused by the negligent acts, errors, or omissions of the party from whom indemnity is sought or its officers, employees and/or agents, independent contractors or consultants. Neither party shall be indemnified for its own negligence.

6. Authorized Use of Design Documents

Provided that Client performs its obligations under this Agreement, including timely payment of amounts due, BuroHappold grants to Client a non-exclusive license to reproduce BuroHappold's designs, drawings, models, and specifications ("Documents") solely for purposes of constructing, using, and maintaining the Project. Any termination of this Agreement prior to the completion of the Project shall terminate this non-exclusive license. Client's reuse or modification of any such documents without BuroHappold's professional involvement or written consent is at Client's sole risk and, to the fullest extent permitted by law, Client shall indemnify and defend BuroHappold from claims by any third party arising from such use or modification.

7. Sustainability Goals

Where BuroHappold has agreed to design the Project to achieve certain sustainability goals, BuroHappold does not represent, warrant, or guarantee that the Project will achieve any LEED Certification Level, energy savings, energy efficiencies, payback period or other performance efficiency. Client acknowledges and agrees that the Project's achievement of any such LEED Certification level, energy savings, energy efficiencies, payback period or other performance efficiency is not a representation, guarantee or warranty of the Project's future performance or of the Project's future operating costs. BuroHappold's signing of any declaration or affirmation, or BuroHappold's recommendation regarding the Architect's signing of same, if required to achieve LEED Certification, is for that purpose only. The terms "certify", "affirm", and "declare" in any such document shall mean an expression of BuroHappold's professional opinion, to the best of its information, knowledge and belief, and does not constitute a warranty or guarantee by BuroHappold.

8. Termination

Client may terminate this Agreement following seven (7) days' written notice to BuroHappold for Client's convenience and without cause. Either party may terminate this Agreement for the material default of the other party to perform its obligations under this Agreement through no fault of the terminating party, but only after providing seven (7) days written notice to the defaulting party and an additional ten (10) days to cure the default.

9. Limitation of Liability

To the fullest extent permitted by law, the total liability, in the aggregate, of BuroHappold and its officers, directors, partners, employees, agents, and subconsultants, to Client, and anyone claiming through or under Client, for any claims, losses, costs, or damages whatsoever arising out of, resulting from or in any way relating to this Project or Agreement, from any cause or causes, including but not limited to tort (including negligence and professional errors and omissions), strict liability, breach of contract, or breach of warranty, shall not exceed the total compensation received by BuroHappold or \$100,000, whichever is greater.

10. Existing Conditions

BuroHappold shall be permitted to rely upon the accuracy and completeness of information that Client provides regarding its land and existing structures. Unless specifically required under this Agreement, BuroHappold shall not perform or have performed any destructive testing or open any concealed portions of Client's building(s) or site in order to ascertain its actual, but hidden, condition, and BuroHappold shall not be responsible for costs arising from hidden conditions later discovered. Unless a duty under this Agreement, BuroHappold shall have no responsibility for the discovery, presence, handling, removal, disposal or exposure of persons to hazardous materials of any form and Client shall indemnify and hold harmless BuroHappold from and against any and all claims, damages, losses and expenses (including reasonable attorney's fees) arising from the presence, discharge, release or escape of asbestos, hazardous waste, or other contaminants at Client's site, except to the extent caused by the negligence of BuroHappold.

The layout of mechanical and electrical systems, equipment, fixtures, piping, ductwork, conduit, specialty items, and accessories indicated on the Drawings is diagrammatic, and routine variations in alignment, elevation, and detail required to avoid interferences and satisfy architectural and structural limitations are not necessarily shown. To the extent reasonably achievable, actual layout of the Work shall be performed without affecting the architectural and structural integrity and limitations of the Project and shall be performed in such sequence and manner as to avoid conflicts, to provide clear access to all control points related to such systems and equipment, and to provide adequate clearances as required for operation and maintenance.

11. Waiver of Consequential Damages

BuroHappold and Client waive all consequential or special damages, including, but not limited to, loss of use, profits, revenue, business opportunity, or production, for claims, disputes, or other matters

arising out of or relating to the Agreement or the services provided by BuroHappold, regardless of whether such claim or dispute is based upon breach of contract, willful misconduct or negligent act or omission of either of them or their employees, agents, subconsultants, or other legal theory, even if the affected party has knowledge of the possibility of such damages. This mutual waiver shall survive termination or completion of this Agreement.

12. Force Majeure

Neither party to this Agreement will be liable to the other party for delays in performing the Scope of Services, or for direct or indirect costs resulting from such delays, that may result from labor strikes, riots, acts of war or terrorism, acts of governmental authorities, extraordinary weather conditions or other natural catastrophe, or any other cause beyond the reasonable control or contemplation of either party.

13. No Third Party Rights

Nothing in this Agreement shall be construed to give any person other than Client and BuroHappold any legal or equitable right, remedy or claim under this Agreement.

14. Severability

If any of these Terms and Conditions are adjudicated in a court of competent jurisdiction and determined to be invalid or unenforceable in whole or in part, the remaining provisions shall remain in full force and effect, and remain binding upon the parties.

15. Survival

These Terms and Conditions shall survive the completion of BuroHappold's services on this Project and the termination of services for any cause.

16. Governing Law

This Agreement shall be governed and construed in accordance with the laws of the *Choose Jurisdiction* without giving effect to principles of conflicts of law.

17. Assignment

Neither BuroHappold nor the Client shall assign, sublet or transfer any rights under or interest in this Agreement without the written consent of the other. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assigning party from any duty or responsibility under this Agreement.

18. Professional Credit

All public statements and releases by Client about the Project, including but not limited to brochures, announcements, advertising, issuance of photographs, renderings and the like for all media shall clearly and fairly credit BuroHappold.

19. No Personal Liability

No officers, directors, principals, founders, employers, shareholders, affiliates or agents of BuroHappold shall have any personal liability under or relating to this Agreement. In the same manner, no officers, directors, principals, founders, employers, shareholders, affiliates or agents of the Client shall have any personal liability under or related to this Agreement.



April 17, 2020

Mr. Mike Gwin, AIA, LEED AP
Principal
Rothschild Doyno Collaborative
2847 Penn Ave,
Pittsburgh, PA 15222

Re: Proposal for Civil Engineering Services
Boulevard and Market Tower, Pittsburgh, PA

Dear Mr. Gwin,

In accordance with your request, PVE-LLC (PVE) is pleased to submit the following Civil Engineering Services Fee Proposal for the referenced project. These services would generally include the Civil Engineering services outlined below for the Boulevard and Market Tower in the Golden Triangle area of the City of Pittsburgh, Pennsylvania.

SURVEY

Boundary & Topographical Information

- This survey establishes boundary lines and to collect topographic data which will be used in the design of this project. No other surveys will be required to provide this information.
- Coordinates will be based on State Plane Coordinate System (PA South Zone) in North American Datum of 1983. The vertical datum will be in NAVD88
- It is anticipated that the site will be free of stockpiled material and will be free of parked cars. The field survey can be scheduled during the weekend if necessary.
- The following parcels are included within the scope of the Survey:

1-H-79	1-H-46
1-G-104	1-H-47
1-G-106	1-H-48
1-G-107	1-H-77
1-G-109	1-H-74-A

Hudson Valley

48 Springside Avenue
Poughkeepsie, NY 12603
845.454.2544

NYC

108 West 39th Street
Suite 500
New York, NY 10018
646.602.4999

Ohio

1156 E. State Street
Salem, OH 44460
330.332.5200

Texas

10550 Richmond Avenue
Suite 160
Houston, TX 77042
713.375.1400 ext. 456



ALTA Survey Add Alternate (Boundary and Topo Survey must also be Executed)

- PVE will perform and ALTA/ACSM Land Title Survey for the subject properties totaling approximately 0.48 acres. This survey will be in accordance with the 2016 ALTA/NSPS Minimum Standard Detail Requirements and include the typical Table A Options 2-11 (Excluding 10b), 13-20. Please see attached Table A for additional detail.
- The owner or its agent must supply PVE with a current Title Commitment Report, along with legible copies of all referenced exceptions, deeds, record plans, surveys by others, etc.
- Field survey data will be collected according to the specifications and tolerances identified in the ALTA /ACSM Minimum Standards. Field survey data evidence will be analyzed against the title report, record documents, and other recorded information to determine the boundary location of the subject parcels.
- Final deliverable will be certified (signed & sealed by a licensed PA PLS) ALTA/ACSM survey, along with a digital file of same (in AutoCAD format). All work will be done under the direct supervision of a licensed Professional Land Surveyor.
- The following parcels are included within the scope of the Survey:

1-H-79	1-H-46
1-G-104	1-H-47
1-G-106	1-H-48
1-G-107	1-H-77
1-G-109	1-H-74-A

Consolidation Plan

- Draft consolidation plan to combine the ten (10) subject parcels
- Submission for Owner review and approval prior to transmitting to City Planning
- Submit to City Planning staff electronically
- Prepare two hard copies for signature by Owners and City Planning Commission
- Attend one (1) Planning Commission meeting for the hearing & action of the consolidation plan
- Recording of the plan in the county courthouse
- All fees to be paid by Owner / Client

CIVIL ENGINEERING DESIGN & DOCUMENTS

Civil Engineering Schematic Design

- Review current zoning codes to determine development criteria for preparation of schematic site plan.
- Review current Storm Water Management (SWM) codes to determine development criteria for preparation of schematic SWM plan.
- Prepare one (1) schematic site plan showing the proposed buildings, parking lots, drive isles and other such site amenities. The schematic site plan will include conceptual grading and conceptual utilities. This plan will be presented to The Client for review and approval prior to preparing municipal land development plans or construction drawings. Our estimated fee includes up to three (3) rounds of revisions based on The Client's review comments.
- Prepare final 2D colored rendered conceptual site plan, per Client's approval, to move forward with preparing the Land Development Plans & Presentations.
- Schematic Design Portion of the Proposal includes Civil Engineer attendance at design coordination, up to four (4) calls and up to a total two (2) design team meetings in Pittsburgh.

Utility Coordination



- Coordination with MEP Engineers regarding utility service to the building
- Request "Will Serve" letters from gas and electrical
- Work with Owner to open workorder numbers for Gas & Electrical Authorities
- Drafting of easements, within the subject property, required for the project
- Providing legal descriptions for such easements
- Coordinate service requirements with Natural Gas, & Electric Providers (MEP to provide load letters)
- Order flow tests on behalf of the Owner (fees to be paid by Owner)

Civil Engineering Design Documents

- Develop Design Development Plan Set, incorporating CDAP comments, including:
 - Title Sheet
 - Existing Conditions Plan
 - Site Plan
 - Grading Plan
- Coordination with MEP Engineers regarding storm drainage from the building
- Develop Design Development Plan Set, incorporating comments, including:
 - Stormwater Management Layout & Design
 - Stormwater Management Report
 - Submission of SWM documents to City of Pittsburgh
- Utility Plan
 - Schematic locations of the proposed electric, water, gas, and telecomm.
 - The size, materials & design are not included (provided by the MEP Engineer)
- Sanitary Sewer Plan and Profiles
- Site Details
- Review with Owner - (1) meeting to coincide with Landscape Plan Review
- Prepare plan & presentation incorporating CDAP comments and submit to the Planning Commission
- Address reasonable comments from Planning Commission & resubmit Planning Commission if required
- Design Document Portion of the Proposal includes Civil Engineer attendance at project coordination calls, up to four (4) calls and two (2) design team meeting in Pittsburgh.



Civil Engineering Construction Documents

- Develop Construction Documents Set for Bidding & Construction, including:
 - Title Sheet
 - Existing Conditions Plan
 - Site Plan
 - Grading Plan
 - On-Site Storm Sewer Design (plan and profile)
 - Utility Plan
 - Schematic locations of the proposed electric, water, gas, and telecomm.
 - The size, materials & design are not included (provided by the MEP Engineer)
 - Sanitary Sewer Plan and Profiles
 - Site Details
- Technical Specifications
- Final coordination with project team including sub consultants
- QA/QC Review
- Finalize construction documents incorporating Owner comments
- Finalize 100% Bid Set/ Package for Construction
- Construction Document Portion of the Proposal includes Civil Engineer attendance at coordination calls, up to four (4) calls and two (2) design team meetings in Pittsburgh.

LAND DEVELOPMENT & PERMITTING

Site Plan Entitlements

- Attend up to two (2) community outreach meetings to present site concepts in conjunction with architect
- Attend One (1) Pre-Application meeting with City of Pittsburgh Planning & Zoning Department to review the conceptual building and site plan and discuss anticipated entitlement process.
- Attend one (1) Contextual Design Advisory Panel (CDAP) meetings
- Attend up to two (2) City of Pittsburgh Planning Commission meetings
- Supply necessary applications for
 - City of Pittsburgh Site Plan Review
 - City of Pittsburgh Contextual Design Advisory Panel
 - City of Pittsburgh Addressing Committee
- With assistance from Owner and preferred Contractor, prepare Construction Management Plan as required by City of Pittsburgh Planning Department. Construction Management Plan includes:
 - Brief Narratives of the anticipated impacts to surrounding areas and proposed mitigations
 - Maintenance and Protection of Traffic Plan (MPT Plan)

PWSA Tap-In Permitting

- PWSA Water & Sewer Availability Letter
- Attend one (1) Pre-Application Meeting with PWSA
- Coordinate proposed connection locations with Architect, MEP & PWSA
- Prepare & Submit PWSA Tap-In Drawings (water, sanitary & storm)
- Respond to comments from PWSA
- Print tap-in plans on for PWSA signature and tap-in permit issuance
- Design and permitting of off-site infrastructure or utility extensions and/or upgrades are expressly excluded from this proposal.



PA DEP Sanitary Sewer Planning Module

- Coordinate with Owner & Design Team to determine proposed sanitary sewer discharge
- Prepare & Submit PADEP Sewage Facilities Planning Module Components 3 and 4 as required to:
 - Pittsburgh Water & Sewer Authority
 - City of Pittsburgh Department of Planning
 - Allegheny County Health Department
 - Allegheny County Sanitary Authority ALCOSAN
- Coordinate preparation of draft legislation for adoption by City of Pittsburgh Council
- Attendance at (1) City Council Meeting
- Upon adoption of resolution by City Council, send all approvals and adoptions to PA Department of Environmental Protection
- Upon approval of Planning Module by PA DEP, forward to PWSA for record

Department of Mobility and Infrastructure (DOMI) Right of Way Improvements

- Coordinate with Owner & Design Team to determine proposed improvements within the public, or future public, rights-of-way along the three adjacent public right-of-ways. **Please note that this task expressly excludes design and or permitting efforts associated off-site utility extensions for the project.**
- Attend pre-application meeting with DOMI to discuss ROW improvements including curb-cut locations
- Draft ROW specific plan set for submission to DOMI included detailed site and grading plan of all curb cuts and other such ROW improvements proposed with this plan.
- Provide construction details for all work within ROW as required by DOMI
- Provide technical specifications for all work within ROW to City of Pittsburgh DPW standards
- Respond to DOMI comments and resubmit plan set for final approval
- Execute curb-cut applications and provide to Department of Public Works for review

Erosion & Sediment Control Permit

- Prepare Erosion & Sediment Control Application for submission to ACCD
- Prepare Soil Erosion and Sedimentation Control Plan & Report for inclusion in the NPDES Submission Package
- Complete Applications and transmit documents to Allegheny County Conservation District
- Response to comments as required

CIVIL ENGINEERING CONSTRUCTION ADMINISTRATION

Civil Engineering Construction Administration

PVE has provided the following scope of construction administration services based on the current project understanding. PVE has provided the following scope for Construction Administration which can be limited/expanded at the Owner's request.

- Attend up to ten (10) On-Site Meetings with Civil Engineer
- Respond to RFIs (Up to 20 RFIs)
- Review Submittals for Civil Engineering Scope
- Review Payment Applications for Civil Engineering Scope
- Review Change Orders for Civil Engineering Scope
- Review Substitutions for Civil Engineering Scope

**TERMS AND CONDITIONS**

Please see the attached "*Exhibit B – STANDARD TERMS AND CONDITIONS*" for the terms and conditions of this proposal.

Kindly review this proposal and get back to us with any questions or comments that you may have. Otherwise, if the terms and conditions of this proposal meet with your approval, please forward authorization to proceed.

This Proposal remains valid for a period of sixty (60) days from the date of the proposal.

We thank you for your time and consideration and look forward to working with you on this project. If you have any questions or require any additional information, please feel free to call.

Very truly yours,
PVE, LLC

Rocco Magrino, P.E.
Principal – Land Development

**PVE Proposal
AUTHORIZATION TO PROCEED**

IN WITNESS WHEREOF, the parties have caused this Proposal and Agreement to be executed by their duly authorized representatives, on the date and year first above written.

*Client: Mr. Mike Gwin, AIA, LEED AP
Principal
Rothschild Doyno Collaborative
2847 Penn Ave,
Pittsburgh, PA 15222*

*Re: Proposal for Survey and Civil Engineering Services
Boulevard and Market Tower, Pittsburgh, PA*

Signature: _____

Date: _____



EXHIBIT A – LIST OF EXCLUSIONS

Only the items specifically documented within the Proposal Scope are included under this proposal. This proposal expressly excludes the following services, which may or may not be required for the project:

Survey

- Identification of Utilities un-marked by Utility Companies
- Underground Utility Location
- Creation of Covenants and Restrictions
- Preparation of lease exhibits, legal descriptions, easement agreements, or other similar documents
- Boring Stake-Out
- Title Search
- As-Built Surveys

Environmental

- Historical, archaeological, endangered species, or other similar cultural studies.
Macro Invertebrate and/ or Ecological Stream Assessment Studies and/or Biological and habitat studies
- Wetland Investigations or Studies
Wetland mitigation Plans, Wetland Mitigation Monitoring, Riparian Buffer Permitting and/or Mitigation
- Environmental studies and/or assessments
- Floodway Studies and/or FEMA Map Amendments & Revisions
- FEMA Elevation Certificate
- National Pollutant Discharge Elimination Systems (NPDES), General Permit
- National Pollutant Discharge Elimination Systems (NPDES), Individual Permit

Traffic

- Highway Occupancy Permit
- Traffic Engineering
- Traffic Impact Assessments

Geotechnical

- Boring Plans
- Geotechnical Investigation or Engineering
- Pavement Design
- Infiltration Tests

Design

- Off-Site Utility Design. This Proposal assumes that all utilities are available at the perimeter of the site.
- Landscape Design
- Entrance Sign Designs and Details
- Irrigation Design
- Site Lighting Plan
- Retaining Wall Design and Details
- Structural Engineering - including walls, foundations, structural slabs, buildings, below grade vaults and structures and other improvements which are intended to carry vertical and horizontal loads
- Structural Design and Analysis for Building Components
- Loading Distribution and analysis of those components supported by Foundations
- Multiple Construction Packages - Preparation of multiple construction packages, such as for phased construction
- Bid Alternates - Preparation of multiple designs and separate construction documentation for add and deduct bid alternates
- Schedule - Extensions to the duration of design or construction phases of work beyond schedule defined in contract
- Selective Structural Demolition Plans
- Design for Future Modification or Expansion

- Fire Flow Calculations
- Grease Trap Design

Engineering Approvals

- Work performed for variances, special exceptions, rezoning, and other similar requests for changes to existing municipal regulations
- Floodway Studies and/or FEMA Map Amendments & Revisions
- FEMA Elevation Certificate
- Grading Permit or Land Operations Permit
- US Army Corps of Engineers Section 404 Permit (Joint Permit), This proposal anticipates that the project will not encroach on any jurisdictional wetlands, water courses or floodways.

Construction

- Bidding and Negotiation Coordination and Administration Services
- Construction Inspection and/ or Supervision
- Site Earthwork Monitoring, Inspections and Testing

Other

- Front End and Division 1 Specifications
- Expert Opinion Deposition and/or Legal Proceedings Attendance/Document Preparation
- Additional meeting beyond those identified within the scope above
- Opinion of Probable Costs - Cost Estimates
- Perspective Renderings
- Models and Animation - Physical and/or three dimensional digital models and animations are not included in the Scope of Basic Services
- 3D Color Renderings of Site or Buildings
- Filing, Application, Permit, and Review Fees required for the Project
- Substantial redesign necessitated by value engineering after client acceptance of schematic, design development, or construction documentation phases of work.
- Other engineering services not specifically referenced in the Scope of Services
- Client of governmental agency requested design revisions resulting in a substantial change in the plans
- Marketing Materials - Materials such as brochures, renderings, etc. are not included in this Scope of Services
- Temporary Shoring Design or Coordination
- Foundation Design
- Deep Foundation Design
- Special Inspections
- Preparation of lease exhibits, legal descriptions, easement agreements, or other similar documents.
- City of Pittsburgh DOMI/DPW Temporary and/or Permanent Encroachment Permits

If any of the excluded services are required for the project, PVE, LLC. will provide the Owner with separate proposals or on an hourly rate based upon the most recent PVE Fee Schedule.



EXHIBIT B – STANDARD TERMS AND CONDITIONS

The following Standard Terms and Conditions, together with the attached cost proposal constitute the Agreement” between PVE, LLC (Hereinafter referred to as the Consultant) (For purposes of definition, “Consultant” shall include employees of Consultant) and the entity or person to whom the attached proposal is addressed (Hereinafter referred to as the “Client”) for the performance of basic or additional services.

Performance of Services:

PVE, LLC shall provide consulting services as described under this proposal. Consultant shall render such services and deliver the required reports and other deliverables as outlined in this proposal. The Consultant and its employees will exercise the degree of professional skill and care expected by customarily accepted practices and procedures in the same or similar locality and under the same or similar circumstances. No warranties, expressed or implied, are made with respect to the Consultant’s performance, unless agreed to in writing. The Consultant is not a guarantor of the project to which its services are directed, and its responsibility is limited to work performed for the Client. Consultant will make efforts to perform its services under this Agreement in accordance with applicable laws, rules, or regulations applicable to the engineering services to be provided hereunder. Consultant represents that it is the lawful owner or licensee of any software programs or other materials used by Consultant in the performance of the services called for in this Agreement.

The Consultant is not responsible for acts or omissions of the Client, nor for third parties not under its direct control. Nothing contained in this Agreement shall create a contractual relationship with, or cause of action in favor of, a third-party against either the Client or Consultant. The Consultant shall not be liable for any reasons for any special, indirect or consequential damages including loss of use of any premises and loss of profit. The Consultant may rely upon information supplied by the Client engaging the Consultant, or its contractors or sub-consultants, or information available from generally accepted reputable sources, without independent verification. Client warrants that it owns (or otherwise may lawfully use) all right, title, and interest in and to any plans, programs, systems, data, or materials furnished to Consultant hereunder.

Consultant assumes that the Owner will not request or require “Major or Significant” changes to the project design following approval of the Site Layout Plan. Furthermore, consultant assumes that local, state, and federal reviewing agencies will not require “Major or Significant” revisions to the project. Should revisions be required or requested, invoices for additional services will be submitted and time schedules adjusted accordingly. Consultant will develop the plans and/or reports required for the completion of the work included herein. All application fees shall be paid by the Owner.

Payment

The Client is responsible for payment of all charges for the work indicated on the attached proposal. Invoicing for the work included herein will occur monthly based on the percentage of work completed determined by Consultant. Payment is due upon receipt of invoice and interest is applied at a rate of 1.33% per month (16% annually) for accounts over 30 days past due. If payment is not made within 90 calendar days of submission, the Consultant may suspend work until such time as all payments due have been made. All charges will be billed and invoiced; Client shall have ten (10) days from issuance to dispute any charges. If there is no such dispute, the charges will be deemed valid.

Reimbursable Expenses

Travel costs, transportation (mileage at a rate of \$0.60 per mile for wear and tear on vehicle and gas), long distance communications, photocopies, blueprints, photographs, postage, reproduction and shipping charges; rental equipment, laboratory fees, fees advanced on Client’s behalf; cost of parking and tolls will all be billed at cost plus 10%. Back-up information will be provided upon request.

Instruments of Service:

As between Client and Consultant, all right, title, and interest in and to the Instruments of Service, programs, systems, data, or materials utilized or produced by Consultant in the performance of the services called for in this Agreement shall remain the property of Consultant. All right, title, and interest in and to any programs, systems, data, and materials furnished to Consultant by Client are and shall remain the property of Client. Submission or distribution of Instruments of Service to meet official regulatory requirements or for similar purposes in connection with the Project is not to be construed as publication in derogation of the reserved rights of the Consultant. These documents may not be used for any other purpose without the prior written consent of Consultant. In the event Consultant’s documents are subsequently reused or modified in any material respect without the prior consent of Consultant, the Client agrees to fully defend, hold harmless and indemnify Consultant from any claims advanced on account of said reuse or modification.

Electronic Media

The Consultant may agree to provide materials to the Client stored electronically. The Client recognizes that data, plans, specifications, reports, documents, or other information recorded on or transmitted as electronic media are subject to undetectable alteration, either intentional or unintentional, due to (among other causes) transmission, conversion, media degradation, software error, or human alteration. Accordingly, documents provided to the Client in electronic media are for informational purposes only and not an end product and may not be distributed to third parties without Consultant’s approval.



Documents will conform to specifications defined in the attached proposal. The documents are submitted to the Client for an acceptance period of 30 days. Any defects which the Client discovers in that time period shall be reported to the Consultant for correction. The Consultant makes no warranties, either express or implied, regarding the fitness or suitability of the electronic media.

The electronic media are instruments of professional service, and shall not be used, in whole or in part, for any project other than that for which they were created, nor by third parties, without the express written consent of the Consultant and without reasonable compensation. Accordingly, the Client agrees to waive any and all claims against the Consultant resulting in any way from the unauthorized reuse or alteration of electronic media, and to defend, indemnify, and hold the Consultant harmless for any claims, losses, damages, or costs, including attorney's fees, arising out of the reuse of any electronic media.

Services During Construction

If the Consultant's services include the performance of services during the construction phase of the project, it is understood that the purpose of such services, including visits to the Site, will be to enable the Consultant to better perform the duties and responsibilities assigned to and undertaken by it as a design professional, and to provide the Client with a greater degree of confidence that the completed work of the Contractor will conform generally to the Contract Documents. The Consultant can only comment on conditions readily observable during the site visits and cannot be held responsible for the correctness and completeness of all of the Contractor's work. This lies solely with the Contractor. If the Consultant's services during construction include shop drawing review, the Consultant will review (or take other appropriate action with respect to) shop drawings, samples and other data which the Contractors are required to submit, but only for conformance with the design concept of the project and compliance with the information given in the Contract Documents. Such review or other actions shall not extend to means, methods, techniques, sequences or procedures of manufacture (including the design of manufactured products) or construction, or to safety precautions and programs incident thereto. The Consultant's review or other actions, shall not constitute approval of an assembly or product of which an item is a component, nor shall it relieve the Contractor of (a) their obligations regarding review and approval of any such submittals and (b) their exclusive responsibility for the means, methods, sequences, techniques and procedures of construction, including safety of construction. The Contractor is solely responsible for the quality and completeness of the work performed.

The Consultant shall not supervise, direct or have control over the Contractor's work, nor shall the Consultant be responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with work on the Project. Consultant shall not be responsible for any contractor's failure to carry out the work in accordance with the contract documents, or for failure of the Contractor to comply with laws, rules, regulations, ordinances, codes or orders applicable to the Contractor furnishing and performing their work. The means, methods, techniques, sequences and procedures of the construction work and the safety precautions and programs are solely the Contractor's rights and responsibilities. Consultant shall be held harmless, indemnified and shall not be held responsible for the acts or omissions of any contractor, subcontractor, any of their agents or employees, or any other persons performing any of the work in connection with the Project.

Limitation of Liability

To the fullest extent permitted by law, Client agrees to limit the liability of the Consultant and its owners, officers, directors, employees and insurers to the sum of the fees for the selected tasks to be executed, but in no case exceeding the total compensation quoted in this proposal for claims, losses, expenses and damages (separately and in the aggregate), including claims of breach of contract, breach of warranty, negligence, misrepresentation, strict liability or other tort, or otherwise. In the event that a court determines that the amount of this limitation of liability is not reasonable, liability shall be limited to the amount of Consultant's fee or the lowest amount that a court determines to be a reasonable limitation of liability. The Client releases Consultant from any liability and agrees to defend, indemnify and hold Consultant harmless from any and all claims, damages, losses, and/or expenses, direct and indirect, or consequential damages, including but not limited to attorney's fees and charges and court and arbitration costs, arising out of, or claimed to arise out of, the performance of the Work or any other matter, excepting liability arising from the sole negligence of Consultant. All time and monies spent by Consultant in defending or providing assistance in any such action shall be compensated by the Client at the Hourly Rates in place at that time.

Dispute Resolution

At the option of either party, any claims, disputes or controversies arising out of or in relation to the interpretation, application or enforcement of this Agreement may be resolved by binding arbitration in the State of Pennsylvania in accordance with the rules of the American Arbitration Association or by litigation in an appropriate court in the State of Pennsylvania pursuant to the laws of the State of Pennsylvania. The Client shall pay all arbitration and court costs, reasonable attorney's fees and legal interest on any award or judgment in favor of the Consultant.

Legal Action

Causes of action between the parties to this Agreement accrue upon final completion of the engineering services provided under this Agreement. In the event that the Client institutes a suit against the Consultant, and if such suit is not successfully prosecuted, or if it is dismissed, or if a verdict is rendered for the Consultant, the Client agrees to pay the Consultant any and all costs of defense, including attorney's fees, expert witnesses' fees, and court costs and any and all other expenses of defense which may be reasonably necessary, immediately following dismissal of the case or immediately upon judgment being rendered in favor of the Consultant.

Suspension of Work and Termination

Upon failure of the other party to perform its obligations under this Agreement, the Client or Consultant may terminate this Agreement upon 7-days written Notice to the other party. In the event of Termination, Consultant shall be entitled to be paid for all services rendered through the effective date of termination plus any expenses incurred as a result of the Termination. No deductions shall be made from the Consultant's compensation on account of sums withheld from payments to contractors, nor shall payment to the Consultant be contingent upon financing arrangements or receipt of payment from any third party.

If the Client falls to make payment when due for services and reimbursable expenses, the Consultant may, upon seven (7) days written notice by certified mail return receipt requested to the Client, suspend performance of services under this Agreement. Unless payment in full is received by the Consultant within seven (7) days of the date of the notice, the suspension shall take effect without further notice. In the event of a suspension of services, the Consultant shall have no liability to the Client for delay or damage to the Client or others because of such suspension of services.



Precedence

These Standard Terms and Conditions shall take precedence over any inconsistent or contradictory provisions contained in any proposal, contract, purchase order, requisition, notice to proceed, or like document.

Severability

If any of these Standard Terms and Conditions are finally determined to be invalid or unenforceable in whole or part, the remaining provisions shall remain in full force and effect and be binding upon the parties. The parties agree to reform these Standard Terms and Conditions to replace any such invalid or unenforceable provision with a valid and enforceable provision that comes as close as possible to the intention of the stricken provision.

Survival

These conditions shall survive the completion of the Consultant's services on this project and the termination of services for any cause and shall be binding on the Client's successors and/or assigns.

Governing Law

This Agreement shall be governed by the internal laws of the State of Pennsylvania without regard to principals of conflict of laws.

Assignment

By this Agreement, the Client and Consultant respectively, bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement; and, to the partners, successors, assigns and legal representatives of such other party. Neither the Client nor Consultant shall assign this Agreement without the express written consent of the other party to this Agreement.

Miscellaneous

This Agreement represents the entire and integrated Agreement between the Client and Consultant and supersedes all prior negotiations, representations or agreements, whether they be written or oral, This Agreement may be amended or modified only by a written instrument signed by both the Client and Consultant.

End of Standard Terms and Conditions

**MINIMUM STANDARD DETAIL REQUIREMENTS FOR
ALTA/NSPS LAND TITLE SURVEYS**
(Effective February 23, 2016)

NOTE - Attention is directed to the fact that the National Society of Professional Surveyors, Inc. (NSPS) is the legal successor organization to the American Congress on Surveying and Mapping (ACSM) and that these 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys are the next version of the former Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys.

1. Purpose - Members of the American Land Title Association® (ALTA®) have specific needs, unique to title insurance matters, when asked to insure title to land without exception as to the many matters which might be discoverable from survey and inspection, and which are not evidenced by the public records.

For a survey of real property, and the plat, map or record of such survey, to be acceptable to a title insurance company for the purpose of insuring title to said real property free and clear of survey matters (except those matters disclosed by the survey and indicated on the plat or map), certain specific and pertinent information must be presented for the distinct and clear understanding between the insured, the client (if different from the insured), the title insurance company (insurer), the lender, and the surveyor professionally responsible for the survey.

In order to meet such needs, clients, insurers, insureds, and lenders are entitled to rely on surveyors to conduct surveys and prepare associated plats or maps that are of a professional quality and appropriately uniform, complete, and accurate. To that end, and in the interests of the general public, the surveying profession, title insurers, and abstracters, the ALTA and the NSPS jointly promulgate the within details and criteria setting forth a minimum standard of performance for ALTA/NSPS Land Title Surveys. A complete 2016 ALTA/NSPS Land Title Survey includes:

- (i) the on-site fieldwork required pursuant to Section 5,
- (ii) the preparation of a plat or map pursuant to Section 6 showing the results of the fieldwork and its relationship to documents provided to or obtained by the surveyor pursuant to Section 4,
- (iii) any information from Table A items requested by the client, and
- (iv) the certification outlined in Section 7.

2. Request for Survey - The client shall request the survey, or arrange for the survey to be requested, and shall provide a written authorization to proceed from the person or entity responsible for paying for the survey. Unless specifically authorized in writing by the insurer, the insurer shall not be responsible for any costs associated with the preparation of the survey. The request shall specify that an "**ALTA/NSPS LAND TITLE SURVEY**" is required and which of the optional items listed in Table A, if any, are to be incorporated. Certain properties or interests in real properties may present issues outside those normally encountered on an ALTA/NSPS Land Title Survey (e.g., marinas, campgrounds, trailer parks; easements, leases, other non-fee simple interests). The scope of work related to surveys of such properties or interests in real properties should be discussed with the client, lender, and insurer; and agreed upon in writing prior to commencing work on the survey. The client may need to secure permission for the surveyor to enter upon the property to be surveyed, adjoining properties, or offsite easements.

3. Surveying Standards and Standards of Care

- A. Effective Date** - The 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys are effective February 23, 2016. As of that date, all previous versions of the Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys are superseded by these standards.
- B. Other Requirements and Standards of Practice** - Many states and some local jurisdictions have adopted statutes, administrative rules, and/or ordinances that set out standards regulating the practice of surveying within their jurisdictions. In addition to the standards set forth herein, surveyors shall also conduct their surveys in accordance with applicable jurisdictional survey requirements and standards of practice. Where conflicts between the standards set forth herein and any such jurisdictional requirements and standards of practice occur, the more stringent shall apply.
- C. The Normal Standard of Care** - Surveyors should recognize that there may be unwritten local, state, and/or regional standards of care defined by the practice of the “prudent surveyor” in those locales.
- D. Boundary Resolution** - The boundary lines and corners of any property being surveyed as part of an ALTA/NSPS Land Title Survey shall be established and/or retraced in accordance with appropriate boundary law principles governed by the set of facts and evidence found in the course of performing the research and fieldwork.
- E. Measurement Standards** - The following measurement standards address Relative Positional Precision for the monuments or witnesses marking the corners of the surveyed property.
- i. “Relative Positional Precision” means the length of the semi-major axis, expressed in feet or meters, of the error ellipse representing the uncertainty due to random errors in measurements in the location of the monument, or witness, marking any corner of the surveyed property relative to the monument, or witness, marking any other corner of the surveyed property at the 95 percent confidence level. Relative Positional Precision is estimated by the results of a correctly weighted least squares adjustment of the survey.
 - ii. Any boundary lines and corners established or retraced may have uncertainties in location resulting from (1) the availability, condition, history and integrity of reference or controlling monuments, (2) ambiguities in the record descriptions or plats of the surveyed property or its adjoiners, (3) occupation or possession lines as they may differ from the written title lines, or (4) Relative Positional Precision. Of these four sources of uncertainty, only Relative Positional Precision is controllable, although, due to the inherent errors in any measurement, it cannot be eliminated. The magnitude of the first three uncertainties can be projected based on evidence; Relative Positional Precision is estimated using statistical means (see Section 3.E.i. above and Section 3.E.v. below).
 - iii. The first three of these sources of uncertainty must be weighed as part of the evidence in the determination of where, in the surveyor’s opinion, the boundary lines and corners of the surveyed property should be located (see Section 3.D. above). Relative Positional Precision is a measure of how precisely the surveyor is able to monument and report those positions; it is not a substitute for the application of proper boundary law principles. A boundary corner or line may have a small Relative Positional Precision because the survey measurements were precise, yet still be in the wrong position (*i.e.*, inaccurate) if it was established or retraced using faulty or improper application of boundary law principles.
 - iv. For any measurement technology or procedure used on an ALTA/NSPS Land Title Survey, the surveyor shall (1) use appropriately trained personnel, (2) compensate for systematic errors, including those associated with instrument calibration, and (3) use appropriate error propagation and measurement design theory (selecting the proper instruments, geometric layouts, and field and computational procedures) to control random errors such that the

maximum allowable Relative Positional Precision outlined in Section 3.E.v. below is not exceeded.

- v. The maximum allowable Relative Positional Precision for an ALTA/NSPS Land Title Survey is 2 cm (0.07 feet) plus 50 parts per million (based on the direct distance between the two corners being tested). It is recognized that in certain circumstances, the size or configuration of the surveyed property, or the relief, vegetation, or improvements on the surveyed property, will result in survey measurements for which the maximum allowable Relative Positional Precision may be exceeded. If the maximum allowable Relative Positional Precision is exceeded, the surveyor shall note the reason as explained in Section 6.B.x. below.

4. Records Research - It is recognized that for the performance of an ALTA/NSPS Land Title Survey, the surveyor will be provided with appropriate and, when possible, legible data which can be relied upon in the preparation of the survey. The request for an ALTA/NSPS Land Title Survey shall set forth the current record description of the property to be surveyed or, in the case of an original survey prepared for purposes of locating and describing real property that has not been previously separately described in documents conveying an interest in the real property, the current record description of the parent parcel that contains the property to be surveyed.

In order to complete an ALTA/NSPS Land Title Survey, the surveyor must be provided with complete copies of the most recent title commitment or, if a title commitment is not available, other title evidence satisfactory to the title insurer. In addition, the surveyor must be provided with the following:

- (i) The following records established under state statutes for the purpose of imparting constructive notice of matters relating to real property (public records):
 - (a) The current record descriptions of any adjoining to the property to be surveyed, except where such adjoining are lots in platted, recorded subdivisions;
 - (b) Any recorded easements benefitting the property;
 - (c) Any recorded easements, servitudes, or covenants burdening the property;
- (ii) Any unrecorded documents affecting the property being surveyed and containing information to which the survey shall make reference, if desired by the client.

Except, however, if the documents outlined above in (i) and (ii) of this section are not provided to the surveyor or if non-public or quasi-public documents are required to complete the survey, the surveyor shall be required to conduct only that research which is required pursuant to the statutory or administrative requirements of the jurisdiction where the property being surveyed is located and that research (if any) which is negotiated and outlined in the terms of the contract between the surveyor and the client.

5. Fieldwork - The survey shall be performed on the ground (except as otherwise negotiated pursuant to Table A, Item 15 below, if selected by the client). The fieldwork shall include the following, located to what is, in the surveyor's professional opinion, the appropriate degree of precision based on (a) the planned use of the property, if reported in writing to the surveyor by the client, lender, or insurer, or (b) the existing use, if the planned use is not so reported:

A. Monuments

- i. The location, size, character, and type of any monuments found during the fieldwork.
- ii. The location, size, character, and type of any monuments set during the fieldwork, if item 1 of Table A was selected or if otherwise required by applicable jurisdictional requirements and/or standards of practice.
- iii. The location, description, and character of any lines that control the boundaries of the

surveyed property.

B. Rights of Way and Access

- i. The distance from the appropriate corner or corners of the surveyed property to the nearest right of way line, if the surveyed property does not abut a right of way.
- ii. The name of any street, highway, or other public or private way abutting the surveyed property, together with the width of the travelled way and the location of each edge of the travelled way including on divided streets and highways. If the documents provided to or obtained by the surveyor pursuant to Section 4 indicate no access from the surveyed property to the abutting street or highway, the width and location of the travelled way need not be located.
- iii. Visible evidence of physical access (e.g., curb cuts, driveways) to any abutting streets, highways, or other public or private ways.
- iv. The location and character of vehicular, pedestrian, or other forms of access by other than the apparent occupants of the surveyed property to or across the surveyed property observed in the process of conducting the fieldwork (e.g., driveways, alleys, private roads, railroads, railroad sidings and spurs, sidewalks, footpaths).
- v. Without expressing a legal opinion as to ownership or nature, the location and extent of any potentially encroaching driveways, alleys, and other ways of access from adjoining properties onto the surveyed property observed in the process of conducting the fieldwork.
- vi. Where documentation of the location of any street, road, or highway right of way abutting, on, or crossing the surveyed property was not disclosed in documents provided to or obtained by the surveyor, or was not otherwise available from the controlling jurisdiction (see Section 6.C.iv. below), the evidence and location of parcel corners on the same side of the street as the surveyed property recovered in the process of conducting the fieldwork which may indicate the location of such right of way lines (e.g., lines of occupation, survey monuments).
- vii. Evidence of access to and from waters adjoining the surveyed property observed in the process of conducting the fieldwork (e.g., paths, boat slips, launches, piers, docks).

C. Lines of Possession and Improvements along the Boundaries

- i. The character and location of evidence of possession or occupation along the perimeter of the surveyed property, both by the occupants of the surveyed property and by adjoining, observed in the process of conducting the fieldwork.
- ii. Unless physical access is restricted, the character and location of all walls, buildings, fences, and other improvements within five feet of each side of the boundary lines, observed in the process of conducting the fieldwork. Trees, bushes, shrubs, and other natural vegetation need not be located other than as specified in the contract, unless they are deemed by the surveyor to be evidence of possession pursuant to Section 5.C.i.
- iii. Without expressing a legal opinion as to the ownership or nature of the potential encroachment, the evidence, location and extent of potentially encroaching structural appurtenances and projections observed in the process of conducting the fieldwork (e.g., fire escapes, bay windows, windows and doors that open out, flue pipes, stoops, eaves, cornices, areaways, steps, trim) by or onto adjoining property, or onto rights of way, easements, or setback lines disclosed in documents provided to or obtained by the surveyor.

D. Buildings

The location of buildings on the surveyed property observed in the process of conducting the fieldwork.

E. Easements and Servitudes

- i. Evidence of any easements or servitudes burdening the surveyed property as disclosed in the documents provided to or obtained by the surveyor pursuant to Section 4 and observed in the process of conducting the fieldwork.

- ii. Evidence of easements, servitudes, or other uses by other than the apparent occupants of the surveyed property not disclosed in the documents provided to or obtained by the surveyor pursuant to Section 4, but observed in the process of conducting the fieldwork if they appear to affect the surveyed property (e.g., roads; drives, sidewalks, paths and other ways of access; utility service lines; water courses; ditches; drains; telephone, fiber optic lines, or electric lines; or water, sewer, oil or gas pipelines on or across the surveyed property and on adjoining properties).
- iii. Surface indications of underground easements or servitudes on or across the surveyed property observed in the process of conducting the fieldwork (e.g., utility cuts, vent pipes, filler pipes).
- iv. Evidence on or above the surface of the surveyed property observed in the process of conducting the fieldwork, which evidence may indicate utilities located on, over or beneath the surveyed property. Examples of such evidence include pipeline markers, manholes, valves, meters, transformers, pedestals, clean-outs, utility poles, overhead lines and guy wires.

F. Cemeteries

As accurately as the evidence permits, the perimeter of cemeteries and burial grounds, and the location of isolated gravesites not within a cemetery or burial ground, (i) disclosed in the documents provided to or obtained by the surveyor, or (ii) observed in the process of conducting the fieldwork.

G. Water Features

- i. The location of springs, ponds, lakes, streams, rivers, canals, ditches, marshes, and swamps on, running through, or outside, but within five feet of the perimeter boundary of, the surveyed property, observed during the process of conducting the fieldwork.
- ii. The location of any water feature forming a boundary of the surveyed property. The attribute(s) of the water feature located (e.g., top of bank, edge of water, high water mark) should be congruent with the boundary as described in the record description or, in the case of an original survey, in the new description (see Section 6.B.vi. below).

6. Plat or Map - A plat or map of an ALTA/NSPS Land Title Survey shall show the following information. Where dimensioning is appropriate, dimensions shall be annotated to what is, in the surveyor's professional opinion, the appropriate degree of precision based on (a) the planned use of the property, if reported in writing to the surveyor by the client, lender, or insurer, or (b) existing use, if the planned use is not so reported.

A. The evidence and locations gathered, and the monuments and lines located during the fieldwork pursuant to Section 5 above, with accompanying notes if deemed necessary by the surveyor or as otherwise required as specified below.

B. Boundary, Descriptions, Dimensions, and Closures

- i. (a) The current record description of the surveyed property, or
(b) In the case of an original survey, the current record description of the parent tract that contains the surveyed property.
- ii. Any new description of the surveyed property that was prepared in conjunction with the survey, including a statement explaining why the new description was prepared. Except in the case of an original survey, preparation of a new description should be avoided unless deemed necessary or appropriate by the surveyor and insurer. Preparation of a new description should also generally be avoided when the record description is a lot or block in a platted, recorded subdivision. Except in the case of an original survey, if a new description is prepared, a note shall be provided stating (a) that the new description describes the same real estate as the record description or, if it does not, (b) how the new description differs from

- the record description.
- iii. The point of beginning, the remote point of beginning or point of commencement (if applicable) and all distances and directions identified in the record description of the surveyed property (and in the new description, if one was prepared). Where a measured or calculated dimension differs from the record by an amount deemed significant by the surveyor, such dimension shall be shown in addition to, and differentiated from, the corresponding record dimension. All dimensions shown on the survey and contained in any new description shall be ground dimensions unless otherwise noted.
 - iv. The directional, distance and curve data necessary to compute a mathematical closure of the surveyed boundary. A note if the record description does not mathematically close. The basis of bearings and, where it differs from the record basis, the difference.
 - v. The remainder of any recorded lot or existing parcel, when the surveyed property is composed of only a portion of such lot or parcel, shall be graphically depicted. Such remainder need not be included as part of the actual survey, except to the extent necessary to locate the lines and corners of the surveyed property, and it need not be fully dimensioned or drawn at the same scale as the surveyed property.
 - vi. When the surveyed property includes a title line defined by a water boundary, a note on the face of the plat or map noting the date the boundary was measured, which attribute(s) of the water feature was/were located, and the caveat that the boundary is subject to change due to natural causes and that it may or may not represent the actual location of the limit of title. When the surveyor is aware of natural or artificial realignments or changes in such boundaries, the extent of those changes and facts shall be shown or explained.
 - vii. The relationship of the boundaries of the surveyed property with its adjoiners (e.g., contiguity, gaps, overlaps), where ascertainable from documents provided to or obtained by the surveyor pursuant to Section 4 and/or from field evidence gathered during the process of conducting the fieldwork. If the surveyed property is composed of multiple parcels, the extent of any gaps or overlaps between those parcels shall be identified. Where gaps or overlaps are identified, the surveyor shall, prior to or upon delivery of the final plat or map, disclose this to the insurer and client.
 - viii. When, in the opinion of the surveyor, the results of the survey differ significantly from the record, or if a fundamental decision related to the boundary resolution is not clearly reflected on the plat or map, the surveyor shall explain this information with notes on the face of the plat or map.
 - ix. The location of all buildings on the surveyed property, located pursuant to Section 5.D., dimensioned perpendicular to those perimeter boundary lines that the surveyor deems appropriate (i.e., where potentially impacted by a setback line) and/or as requested by the client, lender or insurer.
 - x. A note on the face of the plat or map explaining the site conditions that resulted in a Relative Positional Precision that exceeds the maximum allowed pursuant to Section 3.E.v.
 - xi. A note on the face of the plat or map identifying areas, if any, on the boundaries of the surveyed property, to which physical access within five feet was restricted (see Section 5.C.ii.).
 - xii. A note on the face of the plat or map identifying the source of the title commitment or other title evidence provided pursuant to Section 4, and the effective date and the name of the insurer of same.
- C. Easements, Servitudes, Rights of Way, Access, and Documents**
- i. The location, width, and recording information of all plottable rights of way, easements, and servitudes burdening and benefitting the property surveyed, as evidenced by documents provided to or obtained by the surveyor pursuant to Section 4.

- ii. A summary of all rights of way, easements and servitudes burdening the property surveyed and identified in the title evidence provided to or obtained by the surveyor pursuant to Section 4. Such summary shall include the record information of each such right of way, easement or servitude, a statement indicating whether or not it is shown on the plat or map, and a related note if:
 - (a) the location cannot be determined from the record document;
 - (b) there was no observed evidence at the time of the fieldwork;
 - (c) it is a blanket easement;
 - (d) it is not on, or does not touch, the surveyed property;
 - (e) it limits access to an otherwise abutting right of way;
 - (f) the documents are illegible; or
 - (g) the surveyor has information indicating that it may have been released or otherwise terminated.

In cases where the surveyed property is composed of multiple parcels, indicate which of such parcels the various rights of way, easements, and servitudes cross or touch.

- iii. A note if no physical access to a public way was observed in the process of conducting the fieldwork.
- iv. The locations and widths of rights of way abutting or crossing the surveyed property, and the source of such information, (a) where available from the controlling jurisdiction, or (b) where disclosed in documents provided to or obtained by the surveyor pursuant to Section 4.
- v. The identifying titles of all recorded plats, filed maps, right of way maps, or similar documents which the survey represents, wholly or in part, with their recording or filing data.
- vi. For non-platted adjoining land, recording data identifying adjoining tracts according to current public records. For platted adjoining land, the recording data of the subdivision plat.
- vii. Platted setback or building restriction lines which appear on recorded subdivision plats or which were disclosed in documents provided or obtained by the surveyor.

D. Presentation

- i. The plat or map shall be drawn on a sheet of not less than 8 ½ by 11 inches in size at a legible, standard engineering scale, with that scale clearly indicated in words or numbers and with a graphic scale.
- ii. The plat or map shall include:
 - (a) The boundary of the surveyed property drawn in a manner that distinguishes it from other lines on the plat or map.
 - (b) If no buildings were observed on the surveyed property in the process of conducting the fieldwork, a note stating “No buildings observed.”
 - (c) A north arrow (with north to the top of the drawing when practicable).
 - (d) A legend of symbols and abbreviations.
 - (e) A vicinity map showing the property in reference to nearby highway(s) or major street intersection(s).
 - (f) Supplementary or detail diagrams when necessary.
 - (g) Notes explaining any modifications to Table A items and the nature of any additional Table A items (e.g., 21(a), 21(b), 21(c)) that were negotiated between the surveyor and client.
 - (h) The surveyor’s project number (if any), and the name, registration or license number, signature, seal, street address, telephone number, company website, and email address (if any) of the surveyor who performed the survey.
 - (i) The date(s) of any revisions made by the surveyor who performed the survey.
 - (j) Sheet numbers where the plat or map is composed of more than one sheet.
 - (k) The caption “ALTA/NSPS Land Title Survey.”

iii. When recordation or filing of a plat or map is required by law, such plat or map shall be produced in recordable form.

7. **Certification** - The plat or map of an ALTA/NSPS Land Title Survey shall bear only the following certification, unaltered, except as may be required pursuant to Section 3.B. above:

To (name of insured, if known), (name of lender, if known), (name of insurer, if known), (names of others as negotiated with the client):

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items _____ of Table A thereof. The fieldwork was completed on _____ [date].

Date of Plat or Map: _____ (Surveyor's signature, printed name and seal with Registration/License Number)

8. **Deliverables** - The surveyor shall furnish copies of the plat or map of survey to the insurer and client and as otherwise negotiated with the client. Hard copies shall be on durable and dimensionally stable material of a quality standard acceptable to the insurer. A digital image of the plat or map may be provided in addition to, or in lieu of, hard copies pursuant to the terms of the contract. When required by law or requested by the client, the plat or map shall be produced in recordable form and recorded or filed in the appropriate office or with the appropriate agency.

TABLE A

OPTIONAL SURVEY RESPONSIBILITIES AND SPECIFICATIONS

NOTE: The twenty (20) items of Table A may be negotiated between the surveyor and client. Any additional items negotiated between the surveyor and client shall be identified as 21(a), 21(b), etc. and explained pursuant to Section 6.D.ii.(g). Notwithstanding Table A Items 5 and 11, if an engineering design survey is desired as part of an ALTA/NSPS Land Title Survey, such services should be negotiated under Table A, Item 21.

If checked, the following optional items are to be included in the ALTA/NSPS LAND TITLE SURVEY, except as otherwise qualified (see note above):

1. Monuments placed (or a reference monument or witness to the corner) at all major corners of the boundary of the property, unless already marked or referenced by existing monuments or witnesses in close proximity to the corner.
2. Address(es) of the surveyed property if disclosed in documents provided to or obtained by the surveyor, or observed while conducting the fieldwork.
3. Flood zone classification (with proper annotation based on federal Flood Insurance Rate Maps or the state or local equivalent) depicted by scaled map location and graphic plotting only.
4. Gross land area (and other areas if specified by the client).
5. Vertical relief with the source of information (e.g., ground survey, aerial map), contour interval, datum, and originating benchmark identified.
6. (a) If set forth in a zoning report or letter provided to the surveyor by the client, list the current zoning classification, setback requirements, the height and floor space area restrictions, and parking requirements. Identify the date and source of the report or letter.
 (b) If the zoning setback requirements are set forth in a zoning report or letter provided to the surveyor by the client, and if those requirements do not require an interpretation by the surveyor, graphically depict the building setback requirements. Identify the date and source of the report or letter.
7. (a) Exterior dimensions of all buildings at ground level.
(b) Square footage of:
 (1) exterior footprint of all buildings at ground level.
 (2) other areas as specified by the client.
 (c) Measured height of all buildings above grade at a location specified by the client. If no location is specified, the point of measurement shall be identified.

8. Substantial features observed in the process of conducting the fieldwork (in addition to the improvements and features required pursuant to Section 5 above) (e.g., parking lots, billboards, signs, swimming pools, landscaped areas, substantial areas of refuse).
9. Number and type (e.g., disabled, motorcycle, regular and other marked specialized types) of clearly identifiable parking spaces on surface parking areas, lots and in parking structures. Striping of clearly identifiable parking spaces on surface parking areas and lots.
10. (a) As designated by the client, a determination of the relationship and location of certain division or party walls with respect to adjoining properties (client to obtain necessary permissions).
- (b) As designated by the client, a determination of whether certain walls are plumb (client to obtain necessary permissions).
11. Location of utilities existing on or serving the surveyed property as determined by:
- observed evidence collected pursuant to Section 5.E.iv.
 - evidence from plans requested by the surveyor and obtained from utility companies, or provided by client (with reference as to the sources of information), and
 - markings requested by the surveyor pursuant to an 811 utility locate or similar request
- Representative examples of such utilities include, but are not limited to:
- Manholes, catch basins, valve vaults and other surface indications of subterranean uses;
 - Wires and cables (including their function, if readily identifiable) crossing the surveyed property, and all poles on or within ten feet of the surveyed property. Without expressing a legal opinion as to the ownership or nature of the potential encroachment, the dimensions of all encroaching utility pole crossmembers or overhangs; and
 - Utility company installations on the surveyed property.
- Note to the client, insurer, and lender - With regard to Table A, item 11, source information from plans and markings will be combined with observed evidence of utilities pursuant to Section 5.E.iv. to develop a view of the underground utilities. However, lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. In addition, in some jurisdictions, 811 or other similar utility locate requests from surveyors may be ignored or result in an incomplete response, in which case the surveyor shall note on the plat or map how this affected the surveyor's assessment of the location of the utilities. Where additional or more detailed information is required, the client is advised that excavation and/or a private utility locate request may be necessary.
12. As specified by the client, Governmental Agency survey-related requirements (e.g., HUD surveys, surveys for leases on Bureau of Land Management managed lands).

-
13. Names of adjoining owners according to current tax records. If more than one owner, identify the first owner's name listed in the tax records followed by "et al."
14. As specified by the client, distance to the nearest intersecting street.
15. Rectified orthophotography, photogrammetric mapping, remote sensing, airborne/mobile laser scanning and other similar products, tools or technologies as the basis for the showing the location of certain features (excluding boundaries) where ground measurements are not otherwise necessary to locate those features to an appropriate and acceptable accuracy relative to a nearby boundary. The surveyor shall (a) discuss the ramifications of such methodologies (e.g., the potential precision and completeness of the data gathered thereby) with the insurer, lender, and client prior to the performance of the survey, and (b) place a note on the face of the survey explaining the source, date, precision, and other relevant qualifications of any such data.
16. Evidence of recent earth moving work, building construction, or building additions observed in the process of conducting the fieldwork.
17. Proposed changes in street right of way lines, if such information is made available to the surveyor by the controlling jurisdiction. Evidence of recent street or sidewalk construction or repairs observed in the process of conducting the fieldwork.
18. If there has been a field delineation of wetlands conducted by a qualified specialist hired by the client, the surveyor shall locate any delineation markers observed in the process of conducting the fieldwork and show them on the face of the plat or map. If no markers were observed, the surveyor shall so state.
19. Include any plottable offsite (i.e., appurtenant) easements or servitudes disclosed in documents provided to or obtained by the surveyor as a part of the survey pursuant to Sections 5 and 6 (and applicable selected Table A items) (client to obtain necessary permissions).
20. Professional Liability Insurance policy obtained by the surveyor in the minimum amount of \$_____ to be in effect throughout the contract term. Certificate of Insurance to be furnished upon request, but this item shall not be addressed on the face of the plat or map.
21. _____

Adopted by the Board of Governors, American Land Title Association, on October 8, 2015.
American Land Title Association, 1800 M St., N.W., Suite 300S, Washington, D.C. 20036-5828.
www.alta.org

Adopted by the Board of Directors, National Society of Professional Surveyors, on October 9, 2015.
National Society of Professional Surveyors, Inc., 5119 Pegasus Court, Suite Q, Frederick, MD 21704.
<http://www.nsp.us.com/>

May 15, 2020

Mr. Michael J. Troiani
Troiani Group
2020 Smallman Street, Unit 301
Pittsburgh, Pennsylvania 15222

Subject: Proposal for Transportation Engineering Services **DRAFT**
Proposed Boulevard of the Allies & Market Street Development
City of Pittsburgh, Allegheny County, Pennsylvania

Dear Mr. Troiani:

Trans Associates (TA) is pleased to provide this proposal for engineering services for a transportation impact study (TIS) of the proposed Boulevard of the Allies and Market Street Development located in the City of Pittsburgh. The project site is bounded by First Avenue, Market Street, the Boulevard of the Allies and private property, with future site garage access driveways located on the Boulevard of the Allies and on First Avenue. The site location is shown in Figure 1. This proposal has been prepared based on information provided by Mr. Mike Gwin of Rothschild Doyno Collaborative (RDC).

PROJECT BACKGROUND

The proposed development will include the following components, as shown in Figures 2A – 2E:

- Residential (apartments) – 200,000 GSF, with 150 apartment units;
- Ground floor retail space;
- Office space – 200,000 GSF; and
- Parking garage with approximately 300 spaces, accessed via the Boulevard of the Allies and via First Avenue.

Only one development scenario will be analyzed for the transportation study.

SCOPE OF SERVICES

The following scope of services has been developed based upon concept plans provided by RDC and our extensive experience in the City of Pittsburgh. TA will prepare a draft version of the Department of Mobility and Infrastructure's (DOMI's) TIS Scoping Form outlining the requirements for the transportation impact study, to be used for a scoping meeting with City representatives from DOMI and the Department of City Planning/Zoning (DCP) in order to finalize the study scope. The meeting should be held as soon possible after notice to proceed. Ideally this meeting could be scheduled back-to-back with the Planning/Zoning pre-

application meeting. If, at the TIS Scoping meeting, the City provides comments that will require additional work not specified in this proposal, TA will prepare a supplemental proposal, with fee increase, for the additional City-required services. The tasks and fee estimate prepared as part of this proposal correspond to the scope of services outlined in this proposal.

Four tasks are anticipated in the completion of the transportation impact study: data collection, analysis, report preparation and meetings. These tasks are described below.

Notes on the Impact of the COVID-19 Pandemic on Study Scope

Due to the COVID-19 pandemic, traffic and pedestrian volumes are currently greatly reduced. Traffic and pedestrian counts cannot be performed at this time due to the atypical low traffic and pedestrian volumes. TA does not have recent data in its files for this area. At the TIS Scoping meeting, TA will ask DOMI if data in the area is available for our use. If it is, we will use that data to perform the traffic analysis portion of the study, and we will not collect traffic/pedestrian/heavy vehicle/bicycle count data. If no data is available, we will discuss with DOMI whether the traffic analysis will be required, given the relatively low trip generation that will be related to the development. If the traffic analysis is still required, TA will perform other aspects of the study first, and will work with DOMI to determine when reliable data can be collected, collect that data and then perform the analysis.

Parking Study

TA will calculate the minimum number of parking spaces required for the proposed development based on the City of Pittsburgh Zoning Code. The impact of reduction in the number parking spaces required, based on the bicycle parking section of the Zoning Code, will be included. The number of required bicycle parking spaces will be calculated, as will the required ADA spaces and the maximum number of compact spaces allowed by Code. The permitted reduction in parking spaces related to bicycle spaces provided will also be calculated.

TA will review the dimensions of parking spaces and access aisles, as well as traffic flow patterns entering, exiting and traveling through the parking facility to determine functionality using AutoTurn software, based on the AutoCAD plan to be provided by you or the architect in CAD format. TA will identify any changes needed for optimal operation of the parking and circulation and will provide these in AutoCAD format to you or the architect.

Loading Analysis

TA will calculate the required number of loading spaces for the site based on the current City of Pittsburgh Zoning Code. TA will assess truck maneuverability to/from the loading space(s) and through the site using

AutoTurn software on an electronic version of the site plan to be provided by you or the architect in CAD format.

Other Analyses

TA will review five (5) years of crash data at the study intersections and will identify any location(s) of high crash activity and any crash patterns, if applicable.

TA will summarize and plot information on public transit within the study area, including routes and stops, and bicycle facilities in the area on a schematic drawing of the study area. TA will include in the graphics the details of any transit and/or bicycle improvements planned by the City in this area, along with projected implementation date(s). TA will also prepare a graphic of Residential Permit Parking areas within the study area, if applicable.

TA will measure the available sight distances at the proposed site access driveways. In addition, TA will calculate the minimum sight distance requirements for the proposed site access driveways based on City of Pittsburgh standards.

Transportation Demand Management Plan

The City DOMI will require development of a Transportation Demand Management (TDM) Plan specific to the development. The TDM Plan should also be consistent with the overall City TDM plan, which is anticipated to be developed soon. Working with you, TA will develop a Transportation Demand Management (TDM) plan which will include multi-modal approaches to the reduction in numbers of single occupant vehicles and measures to reduce parking demand.

Traffic Data Collection and Traffic Impact Study (if required)

This portion of the study will involve collection of traffic data, analysis and development of a required traffic mitigation strategy as necessary.

Data Collection

Analysis of the following intersections anticipated to be required by the City as part of this study:

- First Avenue and Market Street;
- First Avenue and Wood Street;
- Boulevard of the Allies and Market Street;
- Boulevard of the Allies and Wood Street;
- Boulevard of the Allies and Site Garage Driveway; and
- First Avenue and Site Garage Driveway.

These intersections are shown in Figure 1.

TA will perform a field reconnaissance of the study intersections, collecting data on geometric design features, lane arrangements, traffic control devices, signage, on-street parking permit parking areas, and intersection operations.

Turning movement counts and pedestrian counts will be performed for this project at all aforementioned study intersections. These counts will be performed on a typical weekday from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM. In addition, truck, bus and bicycle count information will be collected for the study intersections.

Traffic Impact Analysis

The traffic, pedestrian, bicycle and heavy vehicle data will be summarized and balanced.

Trip generation for the proposed development will be estimated based upon accepted rates published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 10th Edition*. The use of the trip generation information for the study will be discussed with the City at the scoping meeting, along with any permitted adjustments. Only one site plan will be used for detailed capacity analyses. Trip reductions related to transportation mode alternatives will be used following approval by the City, and may include the use of TA estimates.

The following development scenarios will be analyzed, in accordance with City requirements:

- Existing volumes and conditions (2020);
- Year of full occupancy of the development without project traffic (no build) (2023);
- Year of full occupancy of the development with project traffic (build) (2023) without mitigation measures; and
- Build year (2023) development with mitigation measures analysis will be performed.

Intersection capacity and queuing analyses will be performed for each of the aforementioned study intersections using Synchro Software. In addition, TA will perform Synchro queuing analyses for all study intersections.

The outcome of the analyses will be a determination of the intersection levels of service and queuing, and driveway lane arrangements. Pedestrian and bicycle mitigation measures will also be determined. These mitigation measures will be defined in conceptual terms only. This proposal does not include design of these items. These findings will be presented to you for discussion in a working meeting prior to preparation of the final report.

URBAN REDEVELOPMENT OPPORTUNITIES

Troiani Group project development sites in Downtown Pittsburgh and the Strip District

Penn Smallman

- Mixed-use: residential units, hotel, offices and retail
- Connects Penn Avenue and Smallman Street activity
- Approx. 150 residential units
- Sidewalk level restaurant/ retail
- Elevated Urban Open Space above garage structure

2020 Smallman

- Mixed-use: offices and sidewalk retail/ restaurants
- Located at head of Smallman Street/ Terminal building urban redevelopment project

Boulevard and Market

- Mixed-use Signature Tower with Class A office space
- Bridges the Boulevard and activates Firstside
- Up to 226 residences
- Sidewalk level restaurant
- Urban Open Space along the Boulevard

First and Wood

- Residential high-rise
- Up to 87 residences
- Connects First Avenue to Fort Pitt Boulevard

To Beechview site

- Potential transit oriented catalytic site



** Developments have the potential to add a diverse mix of 460 residences to Pittsburgh's urban center.*

RESIDENTIAL DEVELOPMENT SUMMARY

Summary of Troiani Group project development sites in Downtown Pittsburgh and the Strip District



BOULEVARD AND MARKET



FIRST AND WOOD



2020 SMALLMAN



PENN SMALLMAN

Current use	Surface parking and vacant buildings	Surface parking	Mixed-use commercial building	Surface parking
Status	Demolition, Consolidation, Planning Commission approvals, and development partner solicitation	Planning for multi-unit residential building	Interior renovations underway / exterior improvements proposed	Vision planning for mixed-use development
Site area	24,968 SF 2,392 SF (113 Boulevard)	9,617 SF	12,000 SF	55,000 SF
Office SF	204,000 SF when including residential component; 291,750 SF total when residential not included	none	36,000 SF	150,000 to 250,000 SF
Commercial SF	13,000 SF retail	2,500 SF ground floor retail	12,000 SF retail 12,000 SF support and storage	22,000 SF of retail
RESIDENTIAL UNITS	Up to 226 residences	Up to 87 residences		+ 150 residential units Potential addition of approx. 460 residential units
Parking	330 parking spaces	up to 20 private spaces	Off-site surface spaces	285 garage parking spaces
Height	up to 385 feet	up to 239 feet	~ 56 feet	90-feet per RIV zoning
Stories	up to 30 stories	up to 21 stories	4 stories	7 stories
Total SF	422,814 GSF	96,170 GSF	60,000 SF	up to 275,000 SF



R. DANIEL LAVELLE



Councilman, City of Pittsburgh-District 6

Chair, Finance & Law

June 24, 2020

Planning Commission
200 Ross St
Pittsburgh, PA 15219

To the members of the Planning Commission-

As the City Council representative to District 6, I am writing to express my full support of the Troiani Group's development plans for the First Side project. I have had the opportunity to review and discuss Troiani's vision for their properties at Market St, Boulevard of the Allies and First Ave, and believe they would provide an invaluable economic benefit to the Downtown market ecosystem.

Should you have any questions regarding my support of the project, please feel free to reach out to my office.

Sincerely,

R. Daniel Lavelle

510 City-County Building • Pittsburgh, Pennsylvania 15219

412-255-2134 • Fax: 412-255-0737

daniel.lavelle@pittsburghpa.gov

[Facebook.com/LavelleDistrict6](https://www.facebook.com/LavelleDistrict6) [Twitter.com/RDLavelle](https://twitter.com/RDLavelle) www.pittsburghpa.gov/district6/

42ND DISTRICT

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WEB: www.senatorfontana.com



COMMITTEES

INTERGOVERNMENTAL OPERATIONS,
DEMOCRATIC CHAIR
COMMUNITY, ECONOMIC
& RECREATIONAL DEVELOPMENT
LAW & JUSTICE
RULES & EXECUTIVE NOMINATIONS
URBAN AFFAIRS AND HOUSING
POLICY

Senate of Pennsylvania

June 24, 2020

City of Pittsburgh Planning Commission
Department of City Planning
200 Ross Street
Pittsburgh, PA 15219

Dear Planning Commission:

Please accept this letter as evidence of my support of the Development Vision at the Troiani First Side Sites in downtown Pittsburgh. I have reviewed the vision plans and have spoken with the Troiani Group and am pleased to support this important project.

This project has the ability to help attract national and international businesses and headquarters to our downtown area, further growing our region. I appreciate the efforts put forth by the Troiani Group in working with all affected parties to try and satisfy any and all questions and concerns.

Thank you, in advance, for allowing me to offer you this letter of support on behalf of the Troiani Group. If I may answer any questions or provide you with any additional information, please contact me at 412-344-2551.

Sincerely,

Wayne D. Fontana
State Senator, 42nd Senatorial District



June 26, 2020
City Planning Commission
Pittsburgh, PA

Dear Members of the Planning Commission,

Mr. Troiani has convinced me and the Downtown Community Development Corporation (Downtown CDC) of the need for Demolition, Consolidation and Development at the Boulevard and Market Site.

I have met with Mr. Troiani and members of his team on multiple occasions and I have visited 209 First Avenue, 100-104 Market Street and 106-108 Market Street. The vacant buildings which are in poor condition do not benefit the residents of the Golden Triangle.

Mr. Troiani has provided clear evidence that reuse of the structures are no longer economically or physically viable, by proving structural reports and economic studies.

He has also committed in writing to the Downtown CDC board that there will be NO additional surface parking at the intermediary consolidated site after the buildings are demolished.

A new mixed-use tower creates desirable activity for residents of Downtown and is the scale of development fitting of the regional and federal commitment to the Rapid Transit Project.

I endorse demolition, consolidation and development at the Troiani Boulevard of the Allies and Market Street site.

I strongly advocate that members of the Planning Commission vote to endorse the demolition application for PLI processing at once.

The Downtown CDC applauds the unique generational vision to assemble this large Golden Triangle site and attests that the residential community will be enhanced by development at the Troiani sites.

Thank you,

John Valentine
Downtown CDC