

AGENDA
REGULAR MEETING OF THE BIRMINGHAM PLANNING BOARD
WEDNESDAY MAY 11, 2022
151 MARTIN ST., CITY COMMISSION ROOM 205, BIRMINGHAM MI *
*******7:30 pm*******

Michigan and Oakland County are at a substantial rate of COVID-19 community transmission. Per Occupational Safety and Health Administration (OSHA) mask guidance for areas of high or substantial community transmission levels, and to continue to protect essential government operations and functions, the city requires masks in City Hall for all employees, and for board and commission members. Masks are recommended for members of the public who attend city meetings. The city continues to provide KN-95 respirators for all in-person meeting attendees.

- A.** Roll Call
- B.** Review and Approval of the Minutes of the Regular Meeting of **April 13, 2022** and **April 27, 2022**
- C.** Chairpersons' Comments
- D.** Review of the Agenda
- E.** Unfinished Business
- F.** Rezoning Applications
- G.** Community Impact Studies
- H.** Special Land Use Permits
- I.** Study Session
 - 1. **Outdoor Dining Standards – Public Hearing**
 - 2. **Front Yard Setbacks – Public Hearing**
 - 3. **Accessible Ramps – Public Hearing**
 - 4. **Window Standards – Study Session**
- J.** Site Plan & Design Reviews
 - 1. **770 S. Adams – Perennial – Final Site Plan & Design Review request for new 4 & 6 story mixed-use building.**
- K.** Miscellaneous Business and Communications:
 - 1. Pre-Application Discussions
 - i. **219 Elm St. – All Seasons 2**
 - 2. Communications
 - i. **Open Meetings Act Memorandum – City Attorney**
 - ii. **Kozlowski – 2040 Plan Comments**
 - iii. **Ortiz Educare, LLC – Review Meeting Request**
 - 3. Administrative Approval Correspondence
 - 4. Draft Agenda – **May 11, 2022**
 - 5. Action List - 2022
 - 6. Other Business
- L.** Planning Division Action Items
 - 1. Staff Report on Previous Requests
 - 2. Additional Items from Tonight's Meeting
- M.** Adjournment

* Please note that board meetings will be conducted in person once again. Members of the public can attend in person at Birmingham City Hall OR may attend virtually at:

Link to Access Virtual Meeting: [**https://zoom.us/j/111656967**](https://zoom.us/j/111656967)
Telephone Meeting Access: 877-853-5247 US Toll-Free
Meeting ID Code: 111656967

NOTICE: Due to Building Security, public entrance during non-business hours is through the Police Department—Pierce St. Entrance only. Individuals with disabilities requiring assistance to enter the building should request aid via the intercom system at the parking lot entrance gate on Henrietta St.

Persons with disabilities that may require assistance for effective participation in this public meeting should contact the City Clerk's Office at the number (248) 530-1880, or (248) 644-5115 (for the hearing impaired) at least one day before the meeting to request help in mobility, visual, hearing, or other assistance.

Las personas con incapacidad que requieren algún tipo de ayuda para la participación en esta sesión pública deben ponerse en contacto con la oficina del escribano de la ciudad en el número (248) 530-1800 o al (248) 644-5115 (para las personas con incapacidad auditiva) por lo menos un día antes de la reunión para solicitar ayuda a la movilidad, visual, auditiva, o de otras asistencias. (Title VI of the Civil Rights Act of 1964).

City Of Birmingham
Regular Meeting Of The Planning Board
Wednesday, April 13, 2022
City Commission Room
151 Martin Street, Birmingham, Michigan

Minutes of the regular meeting of the City of Birmingham Planning Board held on April 13, 2022.
Chair Scott Clein convened the meeting at 7:30 p.m.

A. Roll Call

Present: Chair Scott Clein; Board Members, Stuart Jeffares, Bert Koseck, Daniel Share, Janelle Whipple-Boyce; Alternate Board Member Nasseem Ramin; Student Representative MacKinzie Clein

Absent: Board Members Robin Boyle, Bryan Williams; Alternate Board Member Jason Emerine; Student Representative Andrew Fuller

Administration:

Nick Dupuis, Planning Director
Leah Blizinski, City Planner
Bruce Johnson, Building Official
Jeff Zielke, Assistant Building Official

04-86-22

B. Approval Of The Minutes Of The Regular Planning Board Meeting Of March 23, 2022 And The Special Meeting Of The Planning Board on March 31, 2022

Motion by Mr. Share

Seconded by Ms. Whipple-Boyce to approve the minutes of the Regular Planning Board meeting of March 23, 2022 as submitted.

Motion carried, 6-0.

VOICE VOTE

Yeas: Share, Whipple-Boyce, Clein, Jeffares, Koseck, Ramin

Nays: None

Motion by Mr. Jeffares

Seconded by Ms. Whipple-Boyce to approve the minutes of the Special Planning Board meeting of March 31, 2022 as submitted.

Motion Carried, 5-0.

VOICE VOTE

Yeas: Jeffares, Whipple-Boyce, Clein, Ramin, Share

Nays: None
Abstain: Koseck

	04-87-22
C. Chair's Comments	
Chair Clein welcomed everyone to the meeting and reviewed the meeting's procedures.	
	04-88-22
D. Review Of The Agenda	
	04-89-22
E. Unfinished Business	
None.	
	04-90-22
F. Rezoning Applications	
None.	
	04-91-22
G. Community Impact Study	
None.	
	04-92-22
H. Site Plan & Design Review	
1. 191 N. Chester - 191 N. Chester – OneStream – Request for new dumpster enclosure (WITHDAWN)	
	04-93-22
I. Special Land Use Permit	
None.	
	04-94-22
J. Site Plan & Design Review	
None.	
	04-95-22
K. Study Session	
1. Outdoor Dining – Public Hearing	

PD Dupuis explained that the public hearing was not noticed for the meeting and thus, could not be held.

Chair Clein requested that language requiring any extensions in front of neighboring property have the subsequent agreements between property owner(s) affected to be re-submitted each year.

Motion by Mr. Share

Seconded by Mr. Koseck to set a public hearing date of May 11, 2022 to consider amendments to the outdoor dining standards.

Motion carried, 6-0

VOICE VOTE

Yeas: Share, Koseck, Clein, Jeffares, Ramin, Whipple-Boyce

Nays: None

Mr. Koseck requested clarification on noticing for ordinance public hearings.

2. Side Yard A/C Units – Study Session

CP Blizinski introduced the item.

Mr. Koseck asked if a/c units are permitted in the side setback, and clarified that a/c units are not allowed in the required side yard open space, but are permitted in the side yard if space permits.

BO Johnson stated that a/c units are considered accessory structures and confirmed Mr. Kosecks statement regarding placement in side setbacks versus required side yards.

In response to Chair Cleins request to state the proposed ordinance language, CP Blizinski read the proposed language to the board.

Mr. Share asked about efficiency ratings and how efficiency may relate to the noise produced by a unit. He continued on to state that he has concerns regarding different components and styles of heating and cooling systems and how the proposed ordinance language would regulate equipment that may not be considered a traditional a/c unit.

BO Johnson stated background information regarding the issue and the concerns that the proposed ordinance was written to resolve. He explained that in the event that an existing nonconforming side yard a/c unit were to fail during the high temperature summer, the process to either (1) move the a/c unit to the rear yard to comply with current ordinance or (2) seek a variance from the Board of Zoning Appeals could prove to be uncomfortable and in some cases dangerous for residents.

Ms. Whipple-Boyce expressed concerns regarding consistent regulation with the proposed ordinance and how it would be applied in different conditions.

Chair Clein asked for clarification as to what issue the board is trying to solve based on the proposed language provided by staff.

CP Blizinski clarified that the proposed ordinance language was based on her research into how adjacent communities regulate a/c units and their placement in the side yard. She stated that the explicit issue was to allow nonconforming a/c units to be replaced, but that her research findings suggested that there was an opportunity to permit a/c units in the side yard open space based on technological improvements that reduce noise and to promote efficiency.

Mr. Koseck stated that he feels that despite the technological advancements, the noise is still an issue with a/c units and feels as though a/c units are better placed in the rear yard. However, he is in favor of allowing homeowners to replace existing units in the side yard.

The board discussed the issues with bringing a/c units up to code during replacements including the need for new pads, connections and efficiency.

Mr. Jeffares added that there is also a potential requirement for other items to be brought up to code during a/c replacement such as electrical.

The board agreed that the language should be brought back for further study based on comments from the review.

Public Comment

Patrick Hillberg, resident, explained that he originated the concern that predicated this review, and that he has major concerns regarding public health and comfort during heat waves that are related to the speed at which a/c units can be replaced.

3. Barrier-Free Ramps – Study Session

PD Dupuis introduced the item.

Mr. Share asked if the reference to the residential building code would be adequate in regulating the size and location of the ramp.

Chair Klein, Mr. Share and Staff clarified that this proposed ordinance prevents any unintended consequences relating to accessibility ramps and excessive projections into the front or rear yard, and suggested adding width requirements to the language to prevent unnecessarily wide ramps.

Motion by Mr. Share

Seconded by Mr. Koseck to set a public hearing date of May 11, 2022 to amend Article 4, Section 4.30, Open Space Standards, to add language to permit accessibility ramps in the required open space.

Motion carried, 6-0

VOICE VOTE

Yeas: Share, Koseck, Klein, Jeffares, Ramin, Whipple-Boyce

Nays: None

4. Front Yard Setbacks – Study Session

PD Dupuis introduced the item.

Ms. Whipple-Boyce commended the ordinance and was supportive of the change. She went on to ask if there is anything that can be done to address homes that are currently being built under the current standards.

Mr. Koseck asked how the front lot line is determined.

Public Comment

Cindy Rose, resident, thanked the Planning Board for looking into the item and was supportive of the new language.

Motion by Ms. Whipple-Boyce

Seconded by Mr. Koseck to set a public hearing date of May 11, 2022 to amend Article 2, Sections 2.04, 2.06, 2.08 and 2.10 to modify the minimum front yard setback requirement.

Motion carried, 6-0

VOICE VOTE

Yeas: Whipple-Boyce, Koseck, Clein, Jeffares, Ramin, Share

Nays: None

Mr. Koseck stated that based on his experience working with our ordinance, he was very glad to see some of these things are being cleared up.

04-96-22

L. Miscellaneous Business and Communications

1. Pre-Application Discussions

i. 115 Willits – Mare

PD Dupuis summarized the item and asked the Board what the application process should be for the proposed pergola.

Antonino Cutraro, owner of Bella Piatti and Mare Mediterranean, detailed the proposed pergola and explained that the impetus for the proposal was weather-based.

The Board discussed the construction of the pergola and the attachments that would be required to secure the pergola.

The Board recommended Administrative Approval for the basic black table umbrellas, but asked that the pergola proposal be brought before the Board through a Special Land Use Permit Amendment.

2. Communications

i. Joint Meeting with City Commission – Monday April 18, 2022

The Board clarified that this meeting is only to discuss the 2040 Plan.

3. Administrative Approval Correspondence

4. Draft Agenda

5. Other Business

i. Action List – 2022

04-97-22

L. Planning Division Action Items

a. Staff Report on Previous Requests

b. Additional Items from tonight's meeting

04-98-22

M. Adjournment

No further business being evident, the Chair adjourned the meeting at 9:03 p.m.



Nick Dupuis
Planning Director

City Of Birmingham
Regular Meeting Of The Planning Board
Wednesday, April 27, 2022
City Commission Room
151 Martin Street, Birmingham, Michigan

Minutes of the regular meeting of the City of Birmingham Planning Board held on April 27, 2022.
Chair Scott Clein convened the meeting at 7:30 p.m.

A. Roll Call

Present: Chair Scott Clein (left at 9:40 p.m.); Board Members Robin Boyle, Bert Koseck, Daniel Share, Janelle Whipple-Boyce, Bryan Williams; Student Representatives MacKinzie Clein, Andrew Fuller

Absent: Board Member Stuart Jeffares; Alternate Board Members Jason Emerine, Nasseem Ramin

Administration:

Nick Dupuis, Planning Director
Leah Blizinski, City Planner
Brooks Cowan, Senior Planner
Laura Eichenhorn, City Transcriptionist

B. Minutes

Mr. Share asked that more information be included about the concerns prompting the side yard a/c unit ordinance revision. He said he recalled the aim was to permit homeowners with existing side yard a/c units to repair broken units without having to go through a months-long process to do so.

Chair Clein said that CP Blizinski had provided an explanation of what the proposed ordinance changes would address that should be minuted.

The Chair recommended that the minutes be tabled until more detail could be added to those two aspects of the side yard a/c unit discussion.

C. Chair's Comments

Chair Clein welcomed everyone to the meeting and reviewed the meeting's procedures.

D. Review Of The Agenda

E. Unfinished Business

None.

F. Rezoning Applications

1. Watkins/Brown Property (No address, Parcel Identification Number: 1936151027) – Request to rezone property from R8 to R2

SP Cowan presented the item.

In reply to Mr. Share, SP Cowan said that R8 allows for the construction of a single-family residence. This particular lot cannot be split, however, so the only way to build on it would be a rezoning to R2.

The Chair emphasized for the public that the Board was constrained to making its recommendation based solely on the five criteria set forth in Article 7, section 7.02(B)(5). He said that while the public may have a number of other valid concerns, those concerns were not part of the Board's present purview.

Mr. Williams noted this project was previously before the Board. He said to his recollection, there was at least one previous proposal for multi-family residences on this site which was not approved. He stated that the neighbors on Watkins had objected to this parcel being developed as R8 at the time, and that the objection by the neighbors was extensive. He said that when the site plan was first brought before the Board, development of this parcel was to be limited to single-family residential development.

At the direction of the Chair, SP Cowan twice read aloud the five criteria set forth in Article 7, section 7.02(B)(5) for both the Board's and public's clarification.

The Chair then invited public comment.

Public Comment

Brian Gordon, resident of W. Brown, said the appropriate time to consider a lot split for this parcel was before the development commenced. He said that the developer has since maxed out the lot and was seeking a lot split and rezoning to develop further, which Mr. Gordon said he found disingenuous.

Michael Tyranski, resident of Watkins, said he concurred with Mr. Gordon. He continued that adding another residence would exacerbate already-difficult traffic conditions on Watkins, would deflate the values of the nearby brownstones, and would hurt the character and integrity of the neighborhood. Mr. Tyranski said the neighbors were willing to work with the developer and the City to offer market price to purchase the parcel in question.

The Chair noted the Board's receipt of a letter from Mr. Tyranski and an email from Maria VanHees both in opposition to the rezoning. He asked for a motion to receive and file the communications.

04-99-22

Motion by Mr. Williams

Seconded by Ms. Whipple-Boyce to receive and file the letter from Mr. Tyranski and the email from Maria VanHees.

Motion carried, 6-0.

VOICE VOTE

Yeas: Share, Boyle, Koseck, Whipple-Boyce, Williams, Clein

Nays: None

A resident of Watkins reiterated that neighbors in the area were offering to buy the lot, which he said would be the most mutually agreeable outcome for the developer, the neighborhood, and the City.

The Chair clarified that the City could not participate in any discussions about a potential private purchase agreement between the neighbors and the developer.

The resident said he believed that the neighbors' potential purchase of the parcel would benefit the City as well. He said the City should consider the perspective of its residents, that the homeowners' association should be able to veto the rezoning, and that there is an issue with traffic congestion on Watkins.

Seeing no further public comment, the Chair invited comment from the applicant.

Anthony Palleschi was present on behalf of LB Land.

In reply to Mr. Palleschi, SP Cowan confirmed that when applicant previously applied for a lot split, Staff's recommendation had been for the applicant to postpone the lot split and to pursue a rezoning to R2 first.

The Chair then returned discussion to the Board.

Ms. Whipple-Boyce noted that when this parcel was before the Commission on May 24, 2021, the applicant was advised that a lot split would be required in order to add further multi-family residences. She said she wanted to clarify that information was just a factual statement of what would be required for further multi-family residences, not a recommendation to do so.

Chair Clein said it was a useful clarification.

Mr. Share asked whether the Board should consider the three questions set forth in Article 07, section 7.02 of the Zoning Ordinance in addition to the five criteria set forth in Article 7, section 7.02(B)(5) in making its recommendations on this matter.

Chair Clein said the Board has always taken the three questions to inform its discussion of a rezoning request. He said that while the three questions and five criteria are not identical, they are related and do inform his vote on a recommendation.

Mr. Share said:

- It was true that the applicant had a piece of property that could not be developed as currently zoned;

- It was also true that in considering the map, the neighborhood, the existing uses of the property, the suitability of the property and the trend of development in the area, this parcel is more suited for single-family residential than multi-family residential;
- The difficulty was whether to look at this land as part of the existing condominiums or on its own;
- Whether the land should be separated from the condominium was not before the Board, and was not within the Board's control;
- The Board had always been led to believe that single-family residential would be developed on this parcel, except for one proposal for a duplex;
- From a land use perspective, R2 is a more appropriate zoning than R8;
- He was inclined to believe that the neighbors' concerns about traffic, usage, and intensity would be more appropriately addressed as part of a discussion on a lot split; and,
- He was struggling with how to proceed for these reasons.

Mr. Williams said:

- While the developer had initially proposed single-family residential for this parcel, the developer proceeded to develop it according to the allowances of R8;
- Before the original development started, the developer could have requested a rezoning of this parcel to R2 from the Board but did not;
- Attempting to do so now was 'backwards';
- He raises the issue of the original development because from the inception of the project this parcel was envisioned as an R2 development;
- He was troubled by question three, since the proposed rezoning would be detrimental to many of the surrounding properties; and,
- The developer's failure to reserve this parcel for future development was a mistake.

Mr. Boyle said:

- The developer previously told the Board that a landscape architect would redesign this parcel, which has not been done;
- Every residential, suburban scheme in the country has odd-shaped lots, which often become valuable open space;
- This parcel is no different, and could become a public space to serve the neighborhood. While this is not a comment on R2 versus R8, in terms of long-term use it should be considered for active development in the public interest to enliven the area; and,
- He did not think the parcel was appropriate for a single-family residence.

In reply to Ms. Whipple-Boyce, SP Cowan explained why this lot could not be split into two R8 lots.

Chair Clein said:

- The matter presently before the Board was one of land use, and not one of a potential lot split;
- The map view indicates that the property should be rezoned to R2, while the more practical view indicates that the lot was developed as one site and now the developer wants to try and squeeze more development in because the lot was not developed properly the first time; and,
- He did not know that it was the Board's responsibility to help fix mistakes.

Mr. Koseck said the Board reviewed this lot as a total piece, and that the review likely considered the design based on the context of the entire lot.

Mr. Palleschi said the original survey provided for 525 W. Brown had single-family residential sketched on the lot in question. He said the developer had made its intent to build single-family residential on this plot from day one.

In response, Mr. Boyle said the Board pressed the applicant's architect and the developer to describe how they would intend to built the single-family residential. He said the applicant's team declined.

Chair Clein and Mr. Williams concurred with Mr. Boyle's recollection.

Chair Clein said:

- He believed, ever so slightly, that it was more appropriate for the property to retain its R8 designation;
- Rezoning would be detrimental to a portion of the neighborhood;
- Retaining the current designation does not prevent the owner from enjoying the rights of usage. The applicant retains the rights of usage, and in fact determined on their own how they would develop the lot;
- While the City's Master Plan and the existing zoning in the area is a compelling argument, the suitability of the current zoning of the property was not proven to be inappropriate;
- Consequently, he would recommend denial of the rezoning.

04-100-22

Motion by Mr. Williams

Seconded by Mr. Boyle that based on a review of the rezoning request and supporting documentation submitted by the applicant, a review of the applicable master plan documents and the development trends in the area, the Planning Board recommends denial to the City Commission of the applicant's request for the rezoning of parcel #19-36-151-027 from R8 Attached Single Family to R2 Single Family Residential.

Mr. Share said he leaned just slightly in favor of the proposed rezoning to R2. He said that a rezoning would be appropriate when solely considering this as a matter of land use. Consequently, in sticking to the parameters set forth in the zoning ordinance, he would vote no on the motion. Mr. Share continued, however, that his vote did not mean that he necessarily thought a single-family residence on the lot would be appropriate. He said he would not want the Commission thinking this was anything but an exceedingly close case. He said he would not want anyone, including the Commission, thinking that he would necessarily recommend a lot split to enable construction on the site. Mr. Share stated that a number of compelling reasons were given for why developing this property into a single-family residence would not be the right thing to do.

Mr. Boyle said that two members of the Board referred to this matter as an issue of land use. He specified that it was not just a matter of land use, but of future land use

of the area. He said this is a planning matter, and not just a zoning matter. Mr. Boyle continued that the case was made by a number of residents and by the Board in the past that the section of the parcel in question should have considered the parcel as a whole. He contended that an appropriate land use for this section of the parcel now would be some form of organized open space.

Motion carried, 5-1.

ROLL CALL VOTE

Yeas: Boyle, Koseck, Whipple-Boyce, Williams, Clein

Nays: Share

G. Community Impact Study

None.

I. Special Land Use Permit and Final Site Plan and Design Review

1. 588 S. Old Woodward – Phoenicia – Request for small addition to rear of building

SP Cowan presented the item. He added that Phoenicia would be required to provide a parking lease agreement to the City every year during liquor license renewals in order to demonstrate the provision of sufficient parking or risk losing its SLUP agreement, per the City Attorney. He noted that a memo provided to the Board at the beginning of the meeting also provided updated motion language to that effect.

04-101-22

Motion by Mr. Williams

Seconded by Mr. Share to receive and file the memo from SP Cowan dated April 27, 2022 to the Planning Board.

Motion carried, 6-0.

VOICE VOTE

Yeas: Share, Boyle, Koseck, Whipple-Boyce, Williams, Clein

Nays: None

Mr. Koseck noted a discrepancy between the parking proposals on the architectural site plan and the civil site plan and asked which was correct.

SP Cowan stated that the architectural site plan showed the accurate parking proposal.

Mr. Boyle asked why the City would measure parking based on square footage when the Board has a plan that states the establishment's number of seats. He noted that half of the proposed addition would not be holding seating, and asserted as a result that the number of additional parking spaces being required was excessive. He said the City needed to amend its parking regulations accordingly or the ordinance would result in overparking.

Messrs. Share, Williams, and the Chair concurred with Mr. Boyle that the City's parking regulations require updating.

Victor Saroki, architect, and Samy Eid, owner, spoke on behalf of the project.

Mr. Saroki commented that a parking requirement of one parking space per 75 feet of gross area within an establishment is no longer valid by today's standards. He said that the applicant would likely pursue a variance at the Board of Zoning Appeals (BZA) and asked if the Planning Board might be willing to provide comment for that potential appeal. He also asked the City to consider a revision to the City's parking requirements.

Jack Reinhardt, managing partner of The 555 and 555 Commercial, said he was fully in support of Phoenicia and confirmed that 555 Commercial and Phoenicia would be entering into a five year lease to provide Phoenicia with 20 extra parking spaces.

Mr. Reinhardt also contested the parking counts described on page 38 of the agenda packet. He said he does counts at 10 a.m. and 2 p.m. and that he usually counts between 180-200 parked cars in the 555 parking structure at those times. He said he would go further into his objection of the parking counts later on.

Messrs. Eid and Saroki expressed concern that Phoenicia's SLUP agreement would be tied to the continuance of the parking agreement, noting that unforeseen future changes in the 555's management could leave Phoenicia in a difficult situation with no recourse.

Chair Clein acknowledged Mr. Eid's statement but said the Board had no leeway in following direction from the City Attorney.

In reply to Mr. Boyle, Mr. Saroki confirmed that the walls on the east side of the parking lot would be replaced with a well-maintained hedge and three trees.

Mr. Boyle opined that while he appreciates vegetation, this is a very urban space and the walls work well in this context.

In reply to Mr. Koseck, Mr. Saroki confirmed that the front door would continue to be the main entry for the majority of patrons.

In reply to Mr. Share, Mr. Eid confirmed he understood that if he did not maintain an adequate number of parking spaces that he could lose the ability to operate out of the restaurant's addition.

In reply to Mr. Share, SP Cowan confirmed that the parking counts were based off a standard office and a standard retail usage, and not some of the more high-intensity retail usages.

Mr. Share said he wanted to make sure that Mr. Reinhardt understood that if he enters into this parking lease with Phoenicia, it may have an impact on the parking available to other tenants in the building in the future.

Mr. Reinhardt confirmed he understood.

SP Cowan clarified that the parking calculations for this item were based on 100% occupancy, whereas an analysis of a tenant's parking needs would only be based on current demand. He also noted that The 555 would be doing a bit more restriping in its lot, which would add a few more parking spaces.

In reply to the Chair, Mr. Saroki said he could likely expand the clear pedestrian path adjacent to the outdoor dining deck to be closer to six feet.

The Chair said he would appreciate an expansion in the pedestrian clear path adjacent to the outdoor dining deck, and said he would be comfortable with an administrative approval on those changes.

PD Dupuis asked if the Planning Board would be willing to provide comment for the applicant's potential future variance request at the BZA.

Mr. Williams said he was not willing since he wanted to address the issue by ordinance since this is not the only parcel adversely affected by the current parking regulations.

The Chair concurred.

Public Comment

Wendy Zabriskie stated that the City's parking requirements are archaic. She advocated for the City to change its parking requirements so Phoenicia, a long-running small business, would not be at risk of losing its ability to operate.

Mr. Reinhardt spoke in favor of retaining parking in the S. Old Woodward area.

04-102-22

Motion by Mr. Williams

Seconded by Mr. Koseck to approve the Final Site Plan and Design Review for 588 S. Old Woodward – Phoenicia – subject to the following conditions:

- 1. The applicant submit a signed parking lease agreement for 20 parking spaces or obtain a variance for required parking spaces from the BZA;**
- 2. The applicant submit an updated photometric plan that satisfies the foot candle level requirements for parking lot circulation areas;**
- 3. The Planning Board allow evergreen parking lot screening in place of a masonry screen wall;**
- 4. The Planning Board allow the glazing standards for the northern elevation with a public entrance to be modified; and,**
- 5. The City Attorney draft language to be included in the Special Land Use Permit contract to require that the applicant demonstrates satisfactory parking is maintained to satisfy compliance with the current parking ordinance during its review in the annual liquor license review with the City; and,**
- 6. The applicant comply with the requests of all City Departments.**

Motion carried, 6-0.

VOICE VOTE

Yeas: Share, Boyle, Koseck, Whipple-Boyce, Williams, Clein

Nays: None

04-103-22

Motion by Mr. Williams

Seconded by Mr. Koseck to recommend approval to the City Commission of the Special Land Use Permit for 588 S. Old Woodward – Phoenicia – subject to the following conditions:

- 1. The applicant submit a signed parking lease agreement for 20 parking spaces or obtain a variance for required parking spaces from the BZA;**
- 2. The applicant submit an updated photometric plan that satisfies the foot candle level requirements for parking lot circulation areas;**
- 3. The Planning Board allow evergreen parking lot screening in place of a masonry screen wall;**
- 4. The Planning Board allow the glazing standards for the northern elevation with a public entrance to be modified; and,**
- 5. The City Attorney draft language to be included in the Special Land Use Permit contract to require that the applicant demonstrates satisfactory parking is maintained to satisfy compliance with the current parking ordinance during its review in the annual liquor license review with the City; and,**
- 6. The applicant comply with the requests of all City Departments.**

Motion carried, 6-0.

VOICE VOTE

Yeas: Share, Boyle, Koseck, Whipple-Boyce, Williams, Clein

Nays: None

- 2. 243 E. Merrill – La Strada – Request for expansion and a new outdoor dining platform**

CP Blinzinski presented the item.

John Henke, attorney, was present on behalf of item.

In reply to Mr. Boyle, Mr. Henke confirmed the six square four tops shown on page 131 of the agenda packet would actually be round. He said he would have the architect update the drawings accordingly.

04-104-22

Motion by Mr. Boyle

Seconded by Ms. Whipple-Boyce to approve the Final Site Plan & Design Review application for 243 Merrill St. – La Strada – with the following conditions:

- 1. The applicant must provide revised plans with clear dimensions to ensure compliance with the Zoning Ordinance;**
- 2. The applicant must provide a certified survey;**
- 3. The applicant is required to install a city standard grate to protect the street tree;**
- 4. The applicant will need to submit revised landscape plans detailing the species of plants that will be housed in the concrete planters and ensure that no plants are on the prohibited species list;**
- 5. The applicant must receive Historic District Commission approval for all exterior changes proposed within the Downtown Historic District;**
- 6. The applicant must obtain a recommendation from the Advisory Parking Committee for the use of public parking spaces;**
- 7. The Planning Board approves the use of the chairs as proposed; and,**
- 8. The applicant must comply with the requests of all City Departments.**

Motion carried, 6-0.

VOICE VOTE

Yeas: Share, Boyle, Koseck, Whipple-Boyce, Williams, Clein

Nays: None

04-105-22

Motion by Mr. Boyle

Seconded by Mr. Share to recommend approval to the City Commission of the Special Land Use Permit amendment application for 243 Merrill St. – La Strada – with the following conditions:

- 1. The applicant must provide revised plans with clear dimensions to ensure compliance with the Zoning Ordinance;**
- 2. The applicant must provide a certified survey;**
- 3. The applicant is required to install a city standard grate to protect the street tree;**
- 4. The applicant will need to submit revised landscape plans detailing the species of plants that will be housed in the concrete planters and ensure that no plants are on the prohibited species list;**
- 5. The applicant must receive Historic District Commission approval for all exterior changes proposed within the Downtown Historic District;**
- 6. The applicant must obtain a recommendation from the Advisory Parking Committee for the use of public parking spaces;**
- 7. The Planning Board approves the use of the chairs as proposed; and,**
- 8. The applicant must comply with the requests of all City Departments.**

Motion carried, 6-0.

VOICE VOTE

Yeas: Share, Boyle, Koseck, Whipple-Boyce, Williams, Clein

Nays: None

J. Site Plan & Design Review

1. 294 E. Brown – Request for a new 4-story mixed-use building

Chair Clein recused himself from this item, citing a business relationship with one of the members of the applicant team, and left the meeting at 9:40 p.m.

Vice-Chair Williams assumed facilitation of the meeting at 9:40 p.m.

PD Dupuis reviewed the item.

Mr. Saroki and Michael Dul, landscape architect, spoke on behalf of the item.

Mr. Koseck noted that the applicant was providing all the landscaping required by ordinance, and that the synthetic landscaping would be in addition to the required landscaping.

In reply to Mr. Boyle, Mr. Saroki said the management of 294 E. Brown would stipulate that the building's residents should not allow their pets to relieve themselves on the synthetic turf.

Mr. Dul said the synthetic turf could also have sprinklers added.

Public Comment

Patti Shain, resident at the corner of Daines and Purdy, expressed concern about the increasing density in her neighborhood.

The Vice-Chair stated that the proposed project complies with all the zoning requirements as regard density. He advised Ms. Shain that concerns regarding zoning density in the City would be most appropriately addressed to the Commission.

In regards to the proposed infinity edge rooftop pool, Mr. Koseck said he felt the proposal met the spirit and intent of the ordinance in that the goal was to prevent the viewing of rooftop activity.

Ms. Whipple-Boyce also said she supported the proposed infinity edge rooftop pool, saying the five foot setback from the eave line was clearly intended to prevent amenities on the surface of the roof from being on the edge of the building, and not for a situation in which an amenity is embedded within the roof like the pool would be. She said she wished she could vote to approve that amenity presently without the applicant being required to go to the BZA.

04-106-22

Motion by Ms. Whipple-Boyce

Seconded by Mr. Share to approve the Final Site Plan and Design Review application for 294 E. Brown with the following conditions:

- 1. The Planning Board grants a waiver for innovative landscaping design and approves the synthetic planting material (turf, groundcover, birch trees, etc.) proposed;**

- 2. The Planning Board approves the non-cutoff light fixtures pursuant to Article 4, Section 4.21 (D)(1);**
- 3. The applicant must submit a revised photometric plan demonstrating light levels that do not exceed 1.5 maintained foot-candles along the rear property line;**
- 4. The Planning Board approves the preliminary building sign design plan;**
- 5. The applicant must submit revised plans demonstrating a 5 ft. setback from the eave line for all rooftop amenities, or obtain a variance from the BZA;**
- 6. The Planning Board approves one row of glass for the loading dock garage door on Daines Street rather than the three shown, the Planning Board grants flexibility from the glazing standards for the door, and the changes to the door may be approved administratively;**
- 7. The applicant must comply with the requests of all City Departments; and,**
- 8. The Planning Board approves arborvitae in lieu of a screening wall around the transformer.**

Motion carried, 5-0.

ROLL CALL VOTE

Yeas: Share, Boyle, Koseck, Whipple-Boyce, Williams

Nays: None

Vice-Chair Williams, Mr. Share, and Mr. Boyle added their concurrence to Mr. Koseck's and Ms. Whipple-Boyce's comments about the appropriateness of the proposed infinity edge rooftop pool.

K. Study Session

None.

L. Miscellaneous Business and Communications

- 1. Pre-Application Discussions**
- 2. Communications**
- 3. Administrative Approval Correspondence**
- 4. Draft Agenda**

PD Dupuis requested a motion to allow both site plan and study session items at the May 11, 2022 meeting.

Vice-Chair Williams recommended that Mr. Koseck abstain from the vote since he had a conflict arising from one of the items on the May 11, 2022 agenda.

04-107-22

Motion by Mr. Share

Seconded by Ms. Whipple-Boyce to amend the rules of procedure to permit the regular Planning Board meeting on May 11, 2022 to consider both site plan and study session items.

Motion carried, 4-0.

ROLL CALL VOTE

Yeas: Share, Boyle, Whipple-Boyce, Williams

Nays: None

Abstain: Koseck

5. Other Business

i. Action List – 2022

M. Planning Division Action Items

a. Staff Report on Previous Requests

b. Additional Items from tonight's meeting

N. Adjournment

No further business being evident, the Vice-Chair adjourned the meeting at 10:42 p.m.



Nick Dupuis
Planning Director



Laura Eichenhorn
City Transcriptionist



MEMORANDUM

Planning Division

DATE: May 11, 2022

TO: Planning Board Members

FROM: Nicholas Dupuis, Planning Director

SUBJECT: Outdoor Dining Ordinance – Public Hearing

On December 7, 2020, the City Commission discussed amending the Zoning Ordinance to consider allowing the enclosure of outdoor dining areas during the winter months. The City Commission asked the Planning Board to consider this issue, and any regulations they may recommend should outdoor dining enclosures be permitted.

On June 21st, 2021, the City Commission and Planning Board met at a joint meeting to further discuss outdoor dining, and to get a clear direction as to what elements of outdoor dining should be addressed. In general, the City Commission and Planning Board discussed several topics spanning from enclosures to private vs. public space, but ultimately asked the Planning Board to take a comprehensive look at the entire outdoor dining ordinance.

On June 23rd, 2021, the Planning Board discussed outdoor dining in further detail based on the joint meeting two days prior. The Planning Board settled on a list of goals that they would like to focus on in the ordinance review process, which includes the following:

- Incentivize outdoor off-season dining;
- Review the placement of decks and enclosures;
- Ensure that additional outdoor off-season dining does not become an extension of the indoor space;
- Solicit feedback from restaurateurs of all types in the City;
- Seek possible ideas from local, national and international examples;
- Review the current ordinance for issues;
- Review tickets that were given out to temporary outdoor dining operations;
- Review photos of the variety of temporary outdoor dining structures that were used around the City;
- Explore options for maintaining permanent aspects of outdoor dining structures even if the parts of the structures come down in different seasons;
- Discuss potential differences in policy for outdoor dining on public versus private property;
- Solicit feedback from Public Services and the BSD;

- Review agreements from temporary outdoor dining to see if any of the temporary policies might be worth integrating;
- Consider aspects like sidewalk widths and snow clearing in writing the policy;
- Maintain the current seating allowances for differently-sized establishments and maintain the differences for establishments holding different kinds of licenses for alcoholic beverage service; and,
- Recommend a permanent solution so that restaurateurs do not have to continue to adapt to changing policies.

Study Session #1 Summary

On July 14th, 2021, the Planning Board reviewed a high-level report on outdoor dining to guide future discussion. The topics included observations as to what constitutes “good” outdoor dining with national and local examples, as well as a local ordinance review for outdoor dining. The Planning Board discussed next steps and emphasized the need to (1) hear from different City Departments (code issues, retail neighbor conflicts, streetscape), (2) review available codes and ordinances from other areas of the country (enclosures, public vs. private, year-round), and (3) analyze information from national downtown associations or other related organizations (trends, social districts, success stories).

Study Session #2 Summary

On August 11th, 2021, the Planning Board reviewed another high-level report in which the Planning Division presented various departmental comments on outdoor dining, a national outdoor dining ordinance review, conversations with local cities, and a study of national organization input and trends. The Planning Division also provided some public feedback from Engage Birmingham, which surveyed the public for their opinion of the COVID-19 temporary outdoor dining expansions, which were overwhelmingly positive. Moving forward, the Planning Board expressed interest in getting into more detail on seasonal/year round dining and its effect on street activation, public versus public space, the potential for regulating different restaurants/licenses differently, and defining and establishing a purpose of outdoor dining in the City.

Study Session #3 Summary

On September 9th, the Planning Board discussed the report which contained comments from the Advisory Parking Committee, common issues with outdoor dining patios, information on the temporary COVID-19 patios, and also discussed the purpose of outdoor dining. In addition, the Planning Board was able to review an example of how the outdoor dining ordinance could look based on comments up to that point. Ultimately, the conversation started to get more granular with specific ordinance-related ideas ranging from an official stance on enclosures to material guidelines to patio placement. There were several other requests for information including a review of Michigan Liquor Control Commission guidelines for outdoor dining, a review of the concept of windbreak versus wall, and the possibility of regulating outdoor dining by zones.

Study Session #4 Summary

On September 23rd, the Planning Board discussed the MLCC rules for outdoor dining patios, the concept of a windbreak and whether or not they should be permitted, and also explored the different zoning districts in which outdoor dining is permitted. These topics led to more conversation about how overhead weather protection will interact with said overhead coverings, and what typed of overhead protection the Planning Board should permit. The Planning Board expressed an interest in taking a deeper dive into overhead weather protection and reviewing different options.

Study Session #5 Summary

On October 27th, 2021, the Planning Board focused much their conversation on overhead weather protection and which types may be considered within the new ordinance language, and what different issues might arise with the different styles. In addition, the Birmingham Fire Chief Paul Wells gave a brief overview of the fire code as it relates to overhead weather protection, and offered some guidance to the Planning Board regarding fire suppression and other aspects of outdoor dining. In addition to overhead weather protection, the Planning Board provided some clear direction on the subjects of windbreaks, year-round dining, and the role of outdoor dining decks.

Study Session #6 Summary

On December 8th, 2021, the Planning Board reviewed comments regarding outdoor dining from the Birmingham Shopping District (BSD). In addition to the BSD comments, the Planning Board also reviewed some updated comments from the Fire Department based on their additional research into the Fire Code. To round out the meeting, the Planning Board outlined several items that they feel need further discussion/decision moving forward:

- Whether establishments with liquor licenses and establishments without liquor licenses should be handled differently;
- Whether there should be on-season and off-season dates for outdoor dining, and what should happen to furniture and other equipment on public property if there are different 'seasons';
- Whether establishments should be permitted outdoor dining on both a sidewalk and a deck if requested, and if not, what the City wants to incentivize instead;
- What types of coverings and equipment should be allowed, and how specific the standards should be in terms of material, location, and other considerations;
- Whether outdoor dining should be permitted to extend beyond the storefront of an establishment, and if so, what the limitations should be;
- Whether outdoor dining decks should be limited to a certain number per block; and,
- Whether outdoor dining in public space and outdoor dining in private space should be regulated differently.

Study Session #7 Summary

On January 12, 2022, the Planning Board discussed the several questions posed in the previous study session and come to a conclusion on most of them. In general, the Planning Board decided on a short extension to the regular outdoor dining season, treating all outdoor dining establishments alike, enhanced material and appearance standards, and allowing expansion of patios with neighbor consent. During this study session, the Planning Board also reviewed seating data for the different outdoor dining establishments, and was provided a map of all outdoor dining in the City, which is heavily concentrated downtown. Ultimately, the Planning Board asked Staff to take their comments and work them into a new revised set of ordinance amendments to review on February 9, 2022.

Study Session #8 Summary

On February 9, 2022, the Planning Board worked on fine-tuning a set of ordinance amendments to try to finalize a few of their discussion points, and make sure the intent of the original direction of the City Commission was met. The Planning Board made several revision requests that were aimed at clarifying different aspects of the proposed ordinance, but especially relating to the barriers and enclosure regulations. In addition, the Planning Board made some requests to review various site plans from approved outdoor dining patios in the City to help guide the final discussions on the placement of patios, and other design limitations.

Study Session #9

On March 9, 2022, the Planning Board took another long look at the proposed ordinance language and offered several minor changes to the text in attempts to offer further clarity and consistency throughout the ordinance. In addition, the Planning Board discussed the remaining issues that were in need of direction. In short, the Planning Board decided that they did not wish to restrict outdoor dining patios to one contiguous patio, but did express interest in restricting platform dining to the street with no impingement on the furniture zone. Additionally, the majority of the Planning Board did not feel as though fixed awnings were appropriate over outdoor dining platforms, and sought additional language to restrict overhead weather protection to umbrellas on platforms. Finally, the Planning Board did not feel as though the numbers of platforms per block should be restricted.

Public Hearing

On March 9, 2022, the Planning Board moved to set a public hearing date of April 13, 2022 for a final review and recommendation to be forwarded to the City Commission. Due to a noticing issue, the Planning Board reset the public hearing to May 11, 2022. The Planning Division has updated the proposed ordinance language based on the Planning Board comments, but has also re-circulated the language to each department, as well as the City Attorney to ensure that the language addressed their concerns, and will provide consistent and enforceable regulation. Please see the final draft of the proposed ordinance language below.

Sample Motion Language:

Motion to recommend APPROVAL to the City Commission the amendments to Article 4, Section 4.44, Article 3, Section 3.03, Article 3, Section 3.16 and Article 9, Section 9.02 of the Zoning Ordinance to revise the outdoor dining standards and provide consistent and enforceable regulations.

CITY OF BIRMINGHAM

ORDINANCE NO. _____

THE CITY OF BIRMINGHAM ORDAINS:

AN ORDINANCE TO AMEND THE ZONING ORDINANCE OF THE CITY OF BIRMINGHAM:

TO AMEND ARTICLE 4, SECTION 4.44, OUTDOOR DINING STANDARDS, TO SUPPORT PUBLIC HEALTH, ACTIVATE PUBLIC SPACE, FOSTER ECONOMIC DEVELOPMENT, SAFEGUARD THE USE OF PUBLIC PROPERTY, AND PROVIDE FLEXIBILITY FOR CURRENT TRENDS AND FUTURE DEMANDS FOR OUTDOOR DINING.

Article 4, Section 4.44 – Outdoor Dining Standards

This Outdoor Dining Standards section applies to the following districts:



The following outdoor dining standards apply:

- A. Outdoor Dining: Outdoor dining is permitted immediately next to the [principal use](#), subject to Site Plan Review, and the following conditions:
- ~~1. Outdoor dining areas shall provide and service refuse containers within the outdoor dining area and maintain the area in good order.~~
 - ~~2. All outdoor activity must cease at the close of business or as noted in subsection 3 below.~~
 - ~~3. When an outdoor dining area is immediately adjacent to any single-family or multiple-family residential district, all outdoor activity must cease at the close of business or 10:00 p.m., whichever is earlier.~~
 - ~~4. Outdoor dining may be permitted on the sidewalk throughout the year with a valid Outdoor Dining License.~~
 - ~~5. All tables and chairs provided in the outdoor dining area shall be constructed primarily of metal, wood, or material of comparable quality.~~
 - ~~6. Table umbrellas shall be considered under Site Plan Review and shall not impede sight lines into a retail establishment, pedestrian flow in the outdoor dining area, or pedestrian or vehicular traffic flow outside the outdoor dining area.~~
 - ~~7. For outdoor dining located in the public right-of-way:~~

- ~~a. All such uses shall be subject to a license from the city, upon forms provided by the Community Development Department, contingent on compliance with all city codes, including any conditions required by the Planning Board in conjunction with Site Plan approval.~~
- ~~b. In order to safeguard the flow of pedestrians on the public sidewalk, such uses shall maintain an unobstructed sidewalk width as required by the Planning Board, but in no case less than 5 feet.~~
- ~~c. Outdoor dining is permitted to extend in the right-of-way in front of neighboring properties, with the written permission of the property owner(s) and with Planning Board approval, if such property is vacant or the first floor storefront(s) is/are vacant. Outdoor dining areas may extend up to 50% of the width of the neighboring lot(s) storefront(s), or up to 50% of the lot(s) frontage, if such lot is vacant.~~
- ~~d. City Commission approval is also required for outdoor dining extensions onto neighboring property if the establishment making such a request holds a bistro license.~~
- ~~e. An elevated, ADA compliant platform may be erected on the street in front of an eating establishment to create an outdoor dining area only if the Engineering Department determines there is sufficient space available for this purpose given parking and traffic conditions.~~
- ~~f. No such facility shall erect or install permanent fixtures in the public right-of-way.~~

~~8. Outdoor dining is permitted in a B1 District at a rate of 4 seats for every 12 linear feet of store frontage, with no more than 12 seats total per [building](#); no elevated enclosed platforms on the street are permitted in a B1 District.~~

The following outdoor dining standards apply:

- A. Purpose and Intent: The purpose of this section is to provide harmonious outdoor dining design in order to support public health, activate public space, foster economic development, safeguard the use of public property, and provide flexibility for current trends and future demands for outdoor dining.
- B. Outdoor Dining – General: Outdoor dining is permitted immediately adjacent to the principal use, subject to review by the Planning Board, or by the Planning Division at the discretion of the Planning Board, and the conditions below. For the purposes of this section, outdoor dining facility shall mean patios and/or platforms.
 - 1. All outdoor activity including cleaning, maintenance and closing procedures must cease at the close of business or as noted in subsection 2.

2. When an outdoor dining facility is immediately adjacent to any single-family or multiple-family zoned residential district, all outdoor activity must cease at the close of business or 10:00 p.m., whichever is earlier.
3. Reviews of outdoor dining facilities shall include, but are not limited to, the following elements: tables, chairs, umbrellas, portable heating elements, barriers, service stations, landscaping/plantings, awnings, canopies, lighting, host/hostess stands, and entertainment.
4. Outdoor dining facilities may be permitted to extend in front of neighboring properties or tenant spaces with the written permission of the property owners(s) affected and with Planning Board approval. Written permission must be renewed annually and submitted with the Outdoor Dining Permit application(s) for each outdoor dining facility affected.
5. Outdoor dining facilities may be permitted on public property only with a valid Outdoor Dining License, provided that the following conditions are met:
 - i. Approval of an Outdoor Dining License shall be contingent upon compliance with all city codes, including any conditions required by the City or the Planning Board in conjunction with Site Plan approval.
 - ii. Operators of outdoor dining facilities shall be responsible for snow and ice removal, and shall remove snow and ice in a manner consistent with the regulations of the Department of Public Services.
 - iii. All outdoor dining facility elements such as railings, planters, tables, chairs, heaters, umbrellas, and the like must be stored indoors each night between January 1 and March 31 to allow for complete snow and ice removal.
 - iv. Outdoor dining patios located in an alley or passage that contains vehicular traffic are only permitted April 1 through December 31.
 - v. An ADA compliant platform may be erected in the on-street parking space(s) immediately in front of an eating establishment to create an outdoor dining facility from April 1 through December 31, subject to an additional review by the Advisory Parking Committee.
6. All outdoor facilities shall be designed to meet the requirements of this section, as well as all applicable building and fire codes.

C. Outdoor Dining – Design: All outdoor dining facilities are subject to the following design standards:

1. All tables and chairs provided in the outdoor dining facility shall be constructed primarily of metal, wood, or a material of comparable quality as determined and approved by the Planning Board.

2. Outdoor dining facilities shall provide and service refuse containers within the outdoor dining facility and maintain the area in good order. Public trash receptacles are not permitted to be utilized by outdoor dining facilities.
3. Outdoor dining facilities shall not contain enclosures as defined in Article 9, Section 9.02 of the Zoning Ordinance.
4. In order to safeguard the flow of pedestrians on the public sidewalk, such uses shall maintain an unobstructed sidewalk width as required by the Planning Board, but in no case less than 5 ft.
5. No outdoor dining facility is permitted within the furnishing zone of a streetscape. Outdoor dining platforms within the adjacent street or parking space(s) shall be designed to be flush with the curb, and may not extend beyond the curb into the furnishing zone except to accommodate accessibility requirements.
6. No such establishment shall erect or install permanent fixtures in the public right-of-way.
7. Table umbrellas or other overhead weather protection shall not
 - i. Impede sight lines into a retail establishment;
 - ii. Obstruct pedestrian flow within the outdoor dining facility;
 - iii. Obstruct pedestrian or vehicular traffic flow outside the outdoor dining facility or extend beyond the limits of the facility; or
 - iv. Contain signage or advertising.
8. Fixed or freestanding awnings are not permitted within outdoor dining platforms.
9. Barriers defining outdoor dining facilities shall be constructed of a quality and durable material, and shall be maintained and placed in a consistent and organized fashion. Barriers may not exceed 42 inches in height except as permitted in subsection 10.
10. Windbreaks are permitted within outdoor dining facilities and shall be affixed to, or integrally designed within a barrier. The total combined height of a barrier and windbreak shall not exceed 60 inches as measured from grade. Windbreaks must be constructed of a clear, rigid and durable material. Eisenglass and other vinyl-based materials are prohibited.
11. Portable heating elements must be maintained and kept in an orderly fashion and in accordance with all applicable fire codes. Propane or other fuels may not be stored on public property, and are subject to the Storage and Display Standards outlined in Article 4, Section 4.67 of the Zoning Ordinance.
12. All service functions and ancillary elements including, but not limited to, trash receptacles, service stations or host/hostess stands must be located within the approved outdoor dining facility, contained, and kept in a neat and orderly fashion. Service stations and host/hostess stands may not exceed 4 feet in height. The storage of dirty dishware is prohibited.

ORDAINED this _____ day of _____, 2022 to become effective 7 days after publication.

Therese Longe, Mayor

Alex Bingham, City Clerk

CITY OF BIRMINGHAM

ORDINANCE NO. _____

THE CITY OF BIRMINGHAM ORDAINS:

AN ORDINANCE TO AMEND THE ZONING ORDINANCE OF THE CITY OF BIRMINGHAM:

TO AMEND ARTICLE 3, SECTION 3.04 (C), SPECIFIC STANDARDS, TO REDUCE REDUNANCY AND PROVIDE CONSISTENT OUTDOOR DINING REGULATIONS.

Article 3, Section 3.04 – Specific Standards (Downtown Overlay District)

C. Building Use: Buildings shall accommodate the following range of uses for the various designations on the Regulating Plan of the Downtown Birmingham Overlay District:

1. ...
2. ...
3. ...
4. ...
5. ...
6. ...
7. ...
8. ...
9. ...
10. Bistros are permitted with a valid Special Land Use Permit with the following conditions:
 - a. No direct connect additional bar permit is allowed and the maximum seating at a bar cannot exceed 10 seats;
 - b. Alcohol is served only to seated patrons, except those standing in a defined bar area;
 - c. No dance area is provided;
 - d. Only low key entertainment is permitted;
 - e. Bistros must have tables located in the storefront space lining any street, or pedestrian passage. **If the storefront area is not feasible for outdoor dining, alternative outdoor dining facility placement may be considered by the Planning Board;**
 - f. **All outdoor dining facilities are subject to the requirements located in Article 4, Section 4.44 of this Ordinance;**
 - g. A minimum of 70% glazing must be provided along building facades facing a street or pedestrian passage between 1 foot and 8 feet in height; **and**

- h. All bistro owners must execute a contract with the City outlining the details of the operation of the bistro.; and
- ~~i. Outdoor dining must be provided, weather permitting, along an adjacent street or passage during the months of May through October each year. Outdoor dining is not permitted past 12:00 a.m. If there is not sufficient space to permit such dining on the sidewalk adjacent to the bistro, an elevated, ADA compliant, defined platform must be erected on the street adjacent to the bistro to create an outdoor dining area if the Engineering Department determines there is sufficient space available for this purpose given parking and traffic conditions.~~
- ~~j. Enclosures facilitating year round dining outdoors are not permitted.~~
- ~~k. Railings, planters or similar barriers defining outdoor dining platforms may not exceed 42" in height.~~
- ~~l. Outdoor rooftop dining is permitted with the conditions that surrounding properties are not impacted in a negative manner and adequate street level dining is provided as determined by the Planning Board and City Commission. Rooftop dining seats will count towards the total number of permissible outdoor dining seats.~~

ORDAINED this _____ day of _____, 2022 to become effective 7 days after publication.

Therese Longe, Mayor

Alex Bingham, City Clerk

CITY OF BIRMINGHAM

ORDINANCE NO. _____

THE CITY OF BIRMINGHAM ORDAINS:

AN ORDINANCE TO AMEND THE ZONING ORDINANCE OF THE CITY OF BIRMINGHAM:

TO AMEND ARTICLE 3, SECTION 3.16, SPECIFIC STANDARDS, TO REDUCE REDUNANCY AND PROVIDE CONSISTENT OUTDOOR DINING REGULATIONS, AND TO PERMIT OUTDOOR DINING IN ACTIVE VIAS.

Article 3, Section 3.16 – Specific Standards (Via Activation Overlay District

- A. Permitted and Prohibited Uses: To enhance the amenity and character of vias, **and** to enhance visual interest and encourage surveillance of urban spaces, active uses should be provided at the ground floor level along the majority of the edges of buildings located adjacent to vias. While buildings should accommodate these uses, care must be taken to avoid conflict with pedestrian movement in the via. To specifically encourage the activation of vias, the following uses are permitted within Active, Connecting, and Destination Vias:

1. Retail sales and display;
2. Public plazas and informal gathering spaces;
- 3. Outdoor Dining;**
4. Art display; and
5. Community Gardens.

In addition, the following ~~uses are~~ **use is** also permitted within Connecting and Destination Vias:

- ~~1. Outdoor dining; and~~
2. Special Events.

The following are specifically prohibited in all vias:

1. Automatic food and drink vending machines outdoors;
2. Drive-in facilities or any commercial use that encourages patrons to remain in their automobiles while receiving goods or services;
3. Unscreened trash receptacles; and
4. Unscreened outdoor storage.

B. ...

C. ...

ORDAINED this _____ day of _____, 2022 to become effective 7 days after publication.

Therese Longe, Mayor

Alex Bingham, City Clerk

CITY OF BIRMINGHAM

ORDINANCE NO. _____

THE CITY OF BIRMINGHAM ORDAINS:

AN ORDINANCE TO AMEND THE ZONING ORDINANCE OF THE CITY OF BIRMINGHAM:

TO AMEND ARTICLE 9, SECTION 9.02, DEFINITIONS, TO ADD DEFINITIONS FOR ENCLOSURE, OUTDOOR DINING PATIO, AND PERMANENT FIXTURE.

Article 9, Section 9.02 – Definitions

Enclosure (outdoor dining): A vertical wall, panel, or other material that extends above 60 in. in height which provides extended relief from weather and impedes physical and/or visual access to the outdoor dining space. For the purposes of this definition, enclosure does not include exterior building walls.

~~**Outdoor Café:** An outdoor area accessory to an existing restaurant operation designated for consumption of food prepared within the restaurant and subject to the provisions of this ordinance.~~

Outdoor Dining Patio: A defined outdoor area accessory to an existing food and drink establishment designated for consumption of food and/or drink prepared within the establishment and subject to the provisions of this ordinance.

Outdoor Dining Platform: A defined outdoor area accessory to an existing food and drink establishment designated for consumption of food and/or drink prepared within the establishment that is located in a parking space and/or street and subject to the provisions of this ordinance.

Permanent Fixture (outdoor dining): Any element within an outdoor dining patio containing a foundation or other rigid attachment that prevents removal or that which requires extensive modifications to the public right-of-way.

ORDAINED this _____ day of _____, 2022 to become effective 7 days after publication.

Therese Longe, Mayor

Alex Bingham, City Clerk

Planning Division Reports

(Chronological Order)



MEMORANDUM

Planning Division

DATE: July 14th, 2021

TO: Planning Board

FROM: Nicholas Dupuis, City Planner

SUBJECT: Outdoor Dining Ordinance – Study Session #1

On December 7, 2020, the City Commission discussed amending the Zoning Ordinance to consider allowing the enclosure of outdoor dining areas during the winter months. The City Commission asked the Planning Board to consider this issue, and any regulations they may recommend should outdoor dining enclosures be permitted.

On June 21st, 2021, the City Commission and Planning Board met at a joint meeting to further discuss outdoor dining, and to get a clear direction as to what elements of outdoor dining should be addressed. In general, the City Commission and Planning Board discussed several topics spanning from enclosures to private vs. public space, but ultimately asked the Planning Board to take a comprehensive look at the entire outdoor dining ordinance.

On June 23rd, the Planning Board discussed outdoor dining in further detail based on the joint meeting two days prior. The Planning Board settled on a list of goals that they would like to focus on in the ordinance review process, which includes the following:

- Incentivize outdoor off-season dining;
- Review the placement of decks and enclosures;
- Ensure that additional outdoor off-season dining does not become an extension of the indoor space;
- Solicit feedback from restaurateurs of all types in the City;
- Seek possible ideas from local, national and international examples;
- Review the current ordinance for issues;
- Review tickets that were given out to temporary outdoor dining operations;
- Review photos of the variety of temporary outdoor dining structures that were used around the City;
- Explore options for maintaining permanent aspects of outdoor dining structures even if the parts of the structures come down in different seasons;
- Discuss potential differences in policy for outdoor dining on public versus private property;
- Solicit feedback from Public Services and the BSD;

- Review agreements from temporary outdoor dining to see if any of the temporary policies might be worth integrating;
- Consider aspects like sidewalk widths and snow clearing in writing the policy;
- Maintain the current seating allowances for differently-sized establishments and maintain the differences for establishments holding different kinds of licenses for alcoholic beverage service; and,
- Recommend a permanent solution so that restaurateurs do not have to continue to adapt to changing policies.

At this early stage, the Planning Division would like to begin with a high-level general review of outdoor dining beginning with research into what “good” outdoor dining may look like. By beginning with an example driven discussion, the Planning Division hopes to work towards several of the goals listed above and guide more pointed discussions in future study sessions.

Discussing personal experiences with outdoor dining across the world was a large part of the Planning Board and City Commission discussions prior to embarking on this study session. Considering this approach, the Planning Division reviewed [OpenTable's annual list 100 Best Al Fresco Restaurants in America for 2019](#). Naturally, California, Florida and Hawaii make up 67% of the list. However, the Midwest and Northeast (similar weather conditions to Birmingham) have strong representation on the list, making it an interesting place to start. Please see the following page for images of several outdoor dining spaces from restaurants present on the list.

Upon researching many of the outdoor dining patios on the list, the Planning Division made several observations:

1. Overhead coverings are common in the form of umbrellas, awnings, and pergola-type structures. Other covering methods such as canvas shade sails, retractable fabric shade canopies, and even trees/vegetation were observed as well.
2. Several rooftop patios made the list.
3. Heaters, lights, and fire tables/pits were very common.
4. Dining chairs appeared to be constructed of a myriad of materials, including plastic, wicker, and fabric.
5. Full enclosures (roof/covering plus walls or partial walls) were rare. Most cases of perceived enclosures included variables such as below-grade placement, placement next to building facades or screening from nuisances such as parking areas.
6. The majority of outdoor dining patios contained greenery and plantings.
7. Patio placement was observed in public and private property, and patio design elements were consistent between those that were on both.



Cecconi's – Brooklyn, NY



Farmers Fishers Bakers – Washington D.C.



El Five – Denver, CO



The Mooring Restaurant – Newport, RI



Campfire – Carlsbad, CA



The Pink Door – Seattle, WA

Similar observations were made while researching opinions of the “best” outdoor dining in Michigan. [Pure Michigan's Top Outdoor Patios for Dining in Michigan](#) and [M-Live's list of Michigan's Best Outdoor Dining](#) highlight several dining establishments that contain many of the same features.



On a more local level, Southeast Michigan contains several comparable cities with outdoor dining. The Planning Division was able to locate several cities that created specific regulations for outdoor dining within their Zoning Ordinances:

- [Berkley](#)
- [Royal Oak](#)
- [Plymouth](#)
- [Rochester Hills](#) (pg. 77)
- [Lake Orion](#) (pg. 60)

Other cities and Zoning Ordinances such as Northville, Detroit, Ferndale and Ann Arbor were also researched. However, the Zoning Ordinances of these cities either did not contain any specific ordinance language regarding outdoor dining, or proved too difficult to locate at this time. Of the above cities that yielded results, only one or two had detailed regulations regarding outdoor dining within their Zoning Ordinance. If requested, further research into the Zoning Ordinance regulations of other cities, local or national, will be provided for review. As a consequence, no

examples of different outdoor dining regulations for private versus public property, enclosures, maintenance, or other items from the list of goals above were discovered.



So how does the feedback from the City Commission, the Planning Board's current list of goals for the outdoor dining discussion, and the above high-level research relate to the current Outdoor Dining ordinance? At this time, there are outdoor dining standards spread across several areas of the Zoning Ordinance:

- [Article 4, Section 4.44 – Outdoor Dining Standards](#)
- [Article 3, Section 3.04 \(C\)\(10\) – Bistros](#)
- [Article 3, Section 3.14, 3.16 – Via Activation Overlay](#)
- [Article 9, Section 9.02 – Definitions \(Bistro, Outdoor Café\)](#)

This outdoor dining study affords an opportunity to ensure that ordinance language is consistent throughout, and addresses the issues of potentially regulating different restaurant and/or liquor license types (Bistro, Class C, Economic Development, Theaters & Hotels) separately, or affording them all the same outdoor dining standards, at least in terms of design. For example, rooftop dining is permitted for bistro license holders, but is not mentioned in the overall outdoor dining standards. Similarly, the bistro ordinance language prohibits enclosures facilitating year-round dining outdoors, but the Outdoor Dining Standards do not regulate enclosures.

Considering the information above, and before attempts are made at amending any zoning ordinance language, the Planning Division suggests a discussion based on the following questions and requests that the Planning Board provide some direction as to which items to move forward with for the next study session, including any that are not listed:

- Does the Planning Board want to see enclosures? If so, during what season(s)? Additionally, the City should define “enclosure” as a part of this study. This has also been advised by the City Attorney.
- Should restaurants be permitted to extend in front of neighboring properties on the sidewalk? In the street?
- Should a survey be created and sent to property owners to solicit feedback on several key discussion points before the Planning Board begins to draft ordinance amendments?
- Should the Planning Division do a broader ordinance search for other areas of the Midwest and/or Northeast? What should we be looking for?



MEMORANDUM

Planning Division

DATE: August 11th, 2021

TO: Planning Board

FROM: Nicholas Dupuis, City Planner

SUBJECT: Outdoor Dining Ordinance – Study Session #2

On December 7, 2020, the City Commission discussed amending the Zoning Ordinance to consider allowing the enclosure of outdoor dining areas during the winter months. The City Commission asked the Planning Board to consider this issue, and any regulations they may recommend should outdoor dining enclosures be permitted.

On June 21st, 2021, the City Commission and Planning Board met at a joint meeting to further discuss outdoor dining, and to get a clear direction as to what elements of outdoor dining should be addressed. In general, the City Commission and Planning Board discussed several topics spanning from enclosures to private vs. public space, but ultimately asked the Planning Board to take a comprehensive look at the entire outdoor dining ordinance.

On June 23rd, 2021, the Planning Board discussed outdoor dining in further detail based on the joint meeting two days prior. The Planning Board settled on a list of goals that they would like to focus on in the ordinance review process, which includes the following:

- Incentivize outdoor off-season dining;
- Review the placement of decks and enclosures;
- Ensure that additional outdoor off-season dining does not become an extension of the indoor space;
- Solicit feedback from restaurateurs of all types in the City;
- Seek possible ideas from local, national and international examples;
- Review the current ordinance for issues;
- Review tickets that were given out to temporary outdoor dining operations;
- Review photos of the variety of temporary outdoor dining structures that were used around the City;
- Explore options for maintaining permanent aspects of outdoor dining structures even if the parts of the structures come down in different seasons;
- Discuss potential differences in policy for outdoor dining on public versus private property;
- Solicit feedback from Public Services and the BSD;

- Review agreements from temporary outdoor dining to see if any of the temporary policies might be worth integrating;
- Consider aspects like sidewalk widths and snow clearing in writing the policy;
- Maintain the current seating allowances for differently-sized establishments and maintain the differences for establishments holding different kinds of licenses for alcoholic beverage service; and,
- Recommend a permanent solution so that restaurateurs do not have to continue to adapt to changing policies.

Study Session #1 Summary

On July 14th, 2021, the Planning Board reviewed a high-level report on outdoor dining to guide future discussion. The topics included observations as to what constitutes “good” outdoor dining with national and local examples, as well as a local ordinance review for outdoor dining. The Planning Board discussed next steps and emphasized the need to (1) hear from different City Departments (code issues, retail neighbor conflicts, streetscape), (2) review available codes and ordinances from other areas of the country (enclosures, public vs. private, year-round), and (3) analyze information from national downtown associations or other related organizations (trends, social districts, success stories).

Study Session #2

Departmental Comments

Initially, the Planning Board requested that staff solicit comments from the Department of Public Services (DPS) and Birmingham Shopping District (BSD) regarding outdoor dining and its different aspects from their point of view. From the Department of Public Services, any issues surrounding snow removal, streetscape maintenance, or other relevant issues observed from DPS were topics of interest. As for the BSD, the Planning Board wanted to determine if expanded outdoor dining had any impact on neighboring, non-restaurant retail uses...positive or negative. During the discussion at the first study session, the Planning Board requested to include the Building Division, Fire Department, Police Department and Engineering Division for comments pertaining to their professions and expertise. Full comments from each department are attached.

- **Department of Public Services**

In general, the Department of Public Services has some issues with snow removal and streetscape maintenance. They noted that although the plows have managed to get by without major incident thus far, snow and ice accumulates in the hard-to-reach areas, which necessitates more salt and more maintenance to mitigate the hazard. In addition, although private businesses are responsible for clearing their own platforms or dining areas, the snow is often placed right back into the street or sidewalk, which creates more of the same conditions noted above. As far as streetscape maintenance, DPS notes that tree pruning/trimming becomes challenging while working around platforms and patios, and these dining areas often get in the way of other streetscape programs such as hanging baskets, tree lighting, and possibly even landscaping beds in the future.

- **Birmingham Shopping District**

The Birmingham Shopping District will make this a discussion item at their Board meeting in September. Comments will be provided to the Planning Board thereafter.

- **Engineering Division**

The Engineering Division provided important comments relating to stormwater, infrastructure elements such as fire hydrants, manhole covers, drains, and catch basins, and patio placement. For dining platforms specifically, Engineering requires a channel between the curb and the deck structure for the passage of stormwater during rain events. Large rain events like those we have experienced recently (and will continue to experience) may exacerbate any issues with drainage and the placement of storm sewers and other infrastructure. Furthermore, they indicate that these patios should have provisions in place for emergency events such as water/sewer main repairs. As far as patio placement, Engineering noted that a 5 ft. clear path should be maintained, but also explained that traffic lanes should not be impeded for larger vehicles such as emergency vehicles and busses, and that sign lines may be impacted by dining patios.

- **Building Division**

As far as Building Division comments go, they note that much of the outdoor dining elements, from patios to enclosures/coverings, must be built to the standards of the Michigan Building Code. In addition, the Building Division outlined some issues with encroachment into the pedestrian path of umbrellas, tents, awnings etc. as well as important points about the Michigan Plumbing Code and employee use of the pedestrian clear path.

- **Police Department**

The Police Department has indicated that they do not have many issues with outdoor dining, nor concerns about any changes at this time. There has been no loss of revenue from the parking meters for outdoor dining platforms, as the owners of the platforms pay a fee to cover the costs. Additionally, they have not considered the loss of parking spaces as an issue at this time.

- **Fire Department**

The Fire Department comments revolved heavily around heating elements, structures/coverings, and access for emergencies. When it came to portable outdoor heating elements, there are a laundry list of requirements that must be followed to meet the Fire Codes. These regulations include the size and storage of fuel tanks, clearance, and safety devices such as fire extinguishers and carbon monoxide detectors. In terms of structures/coverings, the Fire Department requires flame retardant certificates regardless of the presence of heating elements. For those structures attached to buildings, the Fire Department may require the facility to contain fire suppression.

National Ordinance Review

The Planning Board expressed interest in finding out what other areas of the country may have ordinance wise. These areas include the Midwest and east coast, but also other areas with weather conditions that may necessitate unique outdoor dining solutions such as Colorado, Seattle, and warm weather cities. Several cities and the relevant facets of their Zoning Ordinances are provided below. In general it appears that most all cities require review of outdoor dining

proposals on both private and public space. Full enclosures of outdoor dining do not appear to be permitted on public space in any city reviewed.

- [Elmwood Park, IL](#) (Chicago Area)
 - o Parking requirements for outdoor dining which requires the greater of one parking space for every two seats or 3.5 parking spaces per 100 square feet of indoor and outdoor dining area.
- [Highland Park, IL](#) (Chicago Area)
 - o Table and chair limits determined by City Manager.
 - o Temporary barrier required to keep tables and chairs from migrating into the requires 5 ft. clear path.
 - o Tables and chairs removed every night.
- [Oak Brook, IL](#) (Chicago Area)
 - o No live entertainment.
 - o 5 ft. pedestrian path.
- [Columbus, OH](#)
 - o "Outdoor patio" means an outdoor area, open to the air at all times, that is either: enclosed by a roof or other overhead covering and not more than two walls or other side coverings; or has no roof or other overhead covering at all regardless of the number of walls or other side coverings.
 - o Parking is required for dining patios at a rate of 50% of ratio required for primary structure.
- [Edina, MN](#) (Minneapolis Area)
 - o The patio shall not be enclosed in such a manner that the space becomes an indoor area.
 - o Patio screening may be required if the premises is adjacent to a residential district.
- [Fishers, IN](#) (Indianapolis Area)
 - o Outdoor dining areas shall be adjacent to their tenant space.
- [Columbia, MO](#) (St. Louis Area)
 - o Outdoor patio plan with requirements to include any existing light poles, sidewalk grates, parking meters, or other facilities located in the right-of-way.
 - o Any tables, chairs, posts, cordons or other furniture be portable and not fastened or affixed to or over the public sidewalk unless the owner has obtained right-of-use approval from the city council.
- [Arvada, CO](#) (Denver Area)
 - o Outdoor dining areas shall not be located within 100 feet of a residential zoning district.
 - o Outdoor dining areas are allowed and shall be set back as required for the principal building. Outdoor dining on public property permitted within specific district.
- [Golden, CO](#) (Denver Area)

- o Portable seating, movable chairs, tables for cafes and other furniture should be of substantial materials; preferably metal or wood rather than plastic.
- o Permanent outdoor seating is recommended in and along all publicly-accessible pathways and spaces.

Local Strategies

Staff reviewed Ordinance requirements for local cities including Royal Oak, Rochester, Ferndale, Berkley, Northville, and Plymouth for the way outdoor dining was handled prior to the Covid-19 pandemic. The Planning Division was also able to speak with staff or an elected official from each of the localities. All cities mentioned above require board review and approval for restaurants proposing outdoor dining on private and/or public space. The only City that allows restaurants to rent an on-street parking space for outdoor dining is Northville. Full enclosures for outdoor dining on public property are not allowed in any of the cities mentioned. Rochester and Ferndale said they would allow a restaurant to have an enclosure such as a tent, igloo, or greenhouse on private property. Examples of private outdoor enclosures in Ferndale include igloos at Detroit Fleet and a tent on Rosie O'Grady's patio. Enclosure material on private space is not tightly regulated. The Planning Director of Berkley indicated full enclosures were not permitted on private property. In regards to placement, the outdoor dining on public property for all cities mentioned is required to stay within the frontage lines of the business, it may not extend in front of neighboring properties.

As in Birmingham, a number of Ordinance regulations mentioned above for outdoor dining were relaxed in a temporary resolution during the Covid-19 pandemic. All of the cities experimented with outdoor dining for on-street parking spaces and some allowed enclosures for outdoor dining on public sidewalks and/or streets. A number of the resolutions were extended into winter time 2021-2022 for the sampled cities and will be reviewed for what to extend, what to get rid of, and what to keep indefinitely.

Downtown/Restaurant Organizations

The Planning Division looked to various national and local associations or organizations that could potentially provide some information on trends and happenings within national or local communities that may help guide discussions regarding outdoor dining in Birmingham. It is worth noting that in recent news, blogs or publications from these groups, it was difficult to separate outdoor dining and the COVID-19 pandemic. However, the Planning Board did indicate that they wish to discuss the temporary COVID-19 outdoor dining expansions that were built in Birmingham. Additionally, Engage Birmingham survey results (attached) appeared to indicate that many residents and business owners in Birmingham were supportive of the various expansions and/or enclosures that were erected in the City.

- **[Michigan Downtown Association](#)**

The Michigan Downtown Association has also provided some opinions on outdoor dining as an attraction for a downtown. In a 2021 article about [creative ways to bring residents downtown this summer and boost economic growth](#), it was noted that the Michigan Economic Development Corporation has supported outdoor dining expansion efforts across the state through Match on Main funding. Restaurants have seen the value of a quality outdoor dining space and have been investing in such to use into the future, and potentially year-round.

- **Main Street America**

Main Street America is an organization “committed to strengthening communities through preservation-based economic development in older and historic downtowns and neighborhood commercial districts.” Digging into their website, the Planning Division found an interesting article based on a 2021 Main Street Forward Award Winner in the Argenta District in North Little Rock, Arkansas. The award was given based on the efforts to create the Argenta Outdoor Dining District, a designated outdoor seating area that has helped local restaurants stay in business despite the pandemic. Although created for the pandemic, the district has plans underway to reopen in the spring. “Given its success, city leaders want to keep the district going even after the pandemic recedes, and Argenta’s restaurants are inspired to continue regular meetings to ensure the neighborhood’s future as a culinary destination.”

- **National Restaurant Association**

In general, the National Restaurant Association is an important resource in understanding trends and data regarding the restaurant industry. In reading through two documents, “2021 Restaurant Trends” and “Restaurant Industry 2030” (both attached), it was apparent that this particular group do not appear to be overly concerned about outdoor dining. Interestingly enough, this group found that restaurants would need to dedicate more space and capitol to *off-premise consumption* (i.e. takeout) as opposed to on premise indoor or outdoor dining. Additionally, when it comes to weather volatility, the group is finding that the concern lies in supply chains and food costs as opposed to protecting diners with coverings or enclosures.

- **Independent Restaurant Coalition**

The Independent Restaurant Coalition was created to “provide a strong, unified voice on legislative, regulatory, and policy issues that affect the restaurant industry; and provide advocacy, advice, networking and information to members.” In obtaining data from this group (attached), it is clear that the restaurant industry is an important industry that has unique struggles when it comes to situations like the pandemic. Restaurants and bars have large economic impacts in business and job creation, which could benefit from new outdoor dining regulations that could possibly expand outdoor dining, or add more comfort to outdoor dining patios.



MEMORANDUM

Planning Division

DATE: September 9th, 2021

TO: Planning Board

FROM: Nicholas Dupuis, City Planner

SUBJECT: Outdoor Dining Ordinance – Study Session #3

On December 7, 2020, the City Commission discussed amending the Zoning Ordinance to consider allowing the enclosure of outdoor dining areas during the winter months. The City Commission asked the Planning Board to consider this issue, and any regulations they may recommend should outdoor dining enclosures be permitted.

On June 21st, 2021, the City Commission and Planning Board met at a joint meeting to further discuss outdoor dining, and to get a clear direction as to what elements of outdoor dining should be addressed. In general, the City Commission and Planning Board discussed several topics spanning from enclosures to private vs. public space, but ultimately asked the Planning Board to take a comprehensive look at the entire outdoor dining ordinance.

On June 23rd, 2021, the Planning Board discussed outdoor dining in further detail based on the joint meeting two days prior. The Planning Board settled on a list of goals that they would like to focus on in the ordinance review process, which includes the following:

- Incentivize outdoor off-season dining;
- Review the placement of decks and enclosures;
- Ensure that additional outdoor off-season dining does not become an extension of the indoor space;
- Solicit feedback from restaurateurs of all types in the City;
- Seek possible ideas from local, national and international examples;
- Review the current ordinance for issues;
- Review tickets that were given out to temporary outdoor dining operations;
- Review photos of the variety of temporary outdoor dining structures that were used around the City;
- Explore options for maintaining permanent aspects of outdoor dining structures even if the parts of the structures come down in different seasons;
- Discuss potential differences in policy for outdoor dining on public versus private property;
- Solicit feedback from Public Services and the BSD;

- Review agreements from temporary outdoor dining to see if any of the temporary policies might be worth integrating;
- Consider aspects like sidewalk widths and snow clearing in writing the policy;
- Maintain the current seating allowances for differently-sized establishments and maintain the differences for establishments holding different kinds of licenses for alcoholic beverage service; and,
- Recommend a permanent solution so that restaurateurs do not have to continue to adapt to changing policies.

Study Session #1 Summary

On July 14th, 2021, the Planning Board reviewed a high-level report on outdoor dining to guide future discussion. The topics included observations as to what constitutes “good” outdoor dining with national and local examples, as well as a local ordinance review for outdoor dining. The Planning Board discussed next steps and emphasized the need to (1) hear from different City Departments (code issues, retail neighbor conflicts, streetscape), (2) review available codes and ordinances from other areas of the country (enclosures, public vs. private, year-round), and (3) analyze information from national downtown associations or other related organizations (trends, social districts, success stories).

Study Session #2 Summary

On August 11th, 2021, the Planning Board reviewed another high-level report in which the Planning Division presented various departmental comments on outdoor dining, a national outdoor dining ordinance review, conversations with local cities, and a study of national organization input and trends. The Planning Division also provided some public feedback from Engage Birmingham, which surveyed the public for their opinion of the COVID-19 temporary outdoor dining expansions, which were overwhelmingly positive. Moving forward, the Planning Board expressed interest in getting into more detail on seasonal/year round dining and its effect on street activation, public versus public space, the potential for regulating different restaurants/licenses differently, and defining and establishing a purpose of outdoor dining in the City.

Study Session #3

Advisory Parking Committee Comments

During the August 4th, 2021 meeting of the Advisory Parking Committee, the committee expressed an interest in being involved in the process for the current outdoor dining study. The Planning Division brought the issue to the September 1st, 2021 meeting to solicit some comments for the Planning Board to consider. Their comments arose from their role in reviewing outdoor dining platforms, and their effect on parking specifically. Their comments may be summarized in the following bullet points:

- Regulating the number of platforms per block.
- Begin the platform review at the APC instead of Planning Board.
- Finding a balance between two desired commodities: outdoor dining and parking.
- Annual review of outdoor dining decks.
- Different uses, different rules.

- Platforms open at all hours of the day to foster activation, avoid empty decks/wasted space.
- The possibility of different outdoor dining districts.

Common Ordinance Issues

During Study Session #2, Planning Board members expressed an interest in reviewing some of the issues that arose during the temporary COVID-19 outdoor dining expansions, and which of the expansions received enforcement for violations of the temporary ordinance. Before reviewing these issues, the Planning Division felt it important to outline some of the more regular and/or routine issues with approved outdoor dining patios that are observed on a day-to-day basis:

- Maintenance of the required 5 ft. minimum clear path.
- Maintaining a valid outdoor dining license.
- Adherence to the approved outdoor dining/site plans.
- Exceeding approved/permitted outdoor dining seat counts.

These four issues come up on a regular basis during the outdoor dining season, but also a typically become a focal point during the annual liquor license review process for those establishments serving alcoholic beverages, which occurs in January/February every year. When it comes to the required 5 ft. minimum clear path, there are a number of variables to consider. For outdoor dining patios with more modular barriers separating the dining patio from the sidewalk, these barrier elements tend to migrate outward more easily, causing issues with pedestrian passage (or in the case of alleys, vehicular passage). Those dining patios that are enclosed with a more rigid barrier such as a fixed metal railing are better suited to maintain the required clear path, but may not offer as many opportunities for beautification/plantings.

In the absence of barriers, tables and chairs also have a tendency to migrate. In some recent reviews for outdoor dining proposals, it was observed that outdoor dining plans often show tables and chairs neat and tucked in without considerations for the space a person takes up after sitting at the table. While a 5 ft. clear path is often shown on the plans as required, reality is often observed to be different. To combat this, the Planning Division is considering either widening the required clear path to 6 ft. or more, or requiring outdoor dining plans to show a buffer around each table to reduce the likelihood of encroachments into the clear path. Finally, it has been noted by the Engineering Division that the exposed aggregate concrete in the streetscape amenity zones throughout Birmingham may not be considered ADA compliant and thus, may not be considered as clear path for the purposes of this ordinance.

The issue of maintaining a valid outdoor dining license also contains many layers. The outdoor dining license is an annual license required for all outdoor dining patios located on public property. The applicant is required to submit the application, as well as complete and sign an Outdoor Café License Agreement outlining their responsibilities in using public property. The Planning Division is currently reviewing the Outdoor Café License Agreement for any potential areas of improvement, but it has been observed over the years that there are often inconsistencies with the information entered by applicants in terms of their tables and chairs, and whether or not any changes have occurred from previous years.

The inconsistencies described above, along with other factors, often result in outdoor dining patios that do not adhere to the approved outdoor dining plans on file within the Planning Division.

Table and chair numbers, umbrellas, heaters, planters, and service stations are often added or changed without any approval from the Planning Division or Planning Board. These types of changes and the requirements for changes to the outdoor patio space is expected to be clarified in new ordinance language.

The deviations from the approved number of tables and chairs can become an issue not only for certain uses who are permitted to have a maximum seat count, but we now know that outdoor seating matters when it comes to the plumbing code and required restroom facilities.

Temporary COVID-19 Enforcements

The temporary COVID-19 outdoor dining expansions offered some new complications on top of what is typically observed in outdoor dining patios. During the pandemic, and through various emergency orders by state and local governments, the Police Department performed regular checks on restaurants to monitor all of the COVID-19 regulations associated with the emergency orders, as well as compliance with the temporary resolution adopted by the City Commission. A full log of checks is attached for your review containing comments from the Police and Fire Departments, as well as the Building Division. When the end date for the temporary resolution came up in June 2021, the Police Department also created a summary presentation for the City Commission with general information on some of the challenges that the City was facing in regards to the temporary patio expansions. Some of the main issues were as follows:

- ADA standards and requirements were compromised.
- Expansions encroached further into sidewalks, yellow curb zones, and streets.
- Expansions impaired access to neighboring retailers.
- Propane heaters and storage of propane tanks posed safety concerns.

These issues, in conjunction with the state of the overall COVID-19 pandemic, were the main drivers in ending the temporary resolution and bringing the City's outdoor dining patios back into compliance with pre-COVID outdoor dining plans. The Police Department presentation is also attached for your review.

In addition, the Fire Department performed an inspection of the temporary outdoor dining expansion and provided some photographs to the Planning Division which are attached to this report. Finally, the Planning Division kept a spreadsheet of which restaurants applied for expansions and recorded data on the outdoor dining conditions on site, which is also attached to this report. In most cases, due to the social distancing requirements, the number of outdoor dining seats pre-COVID and expansion related were comparable. However, the square footage of total outdoor dining space was not.

Purpose of Outdoor Dining

Also discussed at length during Study Session #2 was the need for the Planning Board to consider the purpose of the outdoor dining ordinance, and the potential to codify this purpose within the ordinance language. From an urban planning/urban design perspective, outdoor dining is beneficial in many ways:

- Outdoor dining is trendy, but also a permanent fixture;
- Spending time outdoors is beneficial to overall public health;
- Increased seating options frees up indoor space for the rapid growth in carry-out business;

- Added business fosters economic development;
- Well-designed patios activate public space;
- Outdoor dining offers more options for diners, including pet owners;

A purpose statement for outdoor dining could include any or all of these benefits, as well as general statements regarding the health, safety and welfare of the public. Other areas of our current Zoning Ordinance contain purpose statements, including the following:

- Screening Standards: The purpose of this section is to require a barrier, capable of containing noise, vehicular lights, visual disarray, debris and other factors detrimental to the health, safety and welfare of the community, between an open parking station, outdoor storage, dumpsters and adjacent properties. Flexibility in the materials, size, height and placement of walls is permitted in order to allow architectural harmony and usable open space and to accomplish a unified design.
- Landscaping Standards: Landscaping is an essential part of the design and development of a site. Landscape plantings are a benefit to the environment, public health, air quality, safety, comfort, convenience and general welfare of the community. These standards will result in the reduction of storm water runoff, heat buildup and will filter and reduce glare from car headlights. They may reduce energy costs in structures and will improve the aesthetics of the community.
- Alternative Energy: The purpose and intent of the city is to balance the need for clean and renewable energy resources with the necessity to protect the public health, safety and welfare of the city, as well as to preserve the integrity, character, property values, and aesthetic quality of the community at large.

Below is an example of how the outdoor dining purpose statement could look:

- Outdoor Dining: The purpose of this section is to provide an appropriate balance for outdoor dining patios across the city, and to encourage better spaces to improve public health, activate public space, foster economic development, and provide flexibility for current trends and future demands for outdoor dining.

Draft Ordinance Language

(See next page)

Article 4, Section 4.44 – Outdoor Dining Standards

This Outdoor Dining Standards section applies to the following districts:

B1 B2 B2B B2C B3 B4 MX O1 O2 TZ3

The following outdoor dining standards apply:

- A. Purpose and Intent: The purpose of this section is to provide an appropriate balance for outdoor dining patios across the city, and to encourage better spaces to improve public health, activate public space, foster economic development, and provide flexibility for current trends and future demands for outdoor dining.
- B. Outdoor Dining – General: Outdoor dining is permitted immediately adjacent to the principal use, subject to review by the Planning Board, or by the Planning Division at the discretion of the Planning Director, and the following conditions
 1. Outdoor dining patios shall provide and service refuse containers within the outdoor dining patio and maintain the area in good order.
 2. All outdoor activity must cease at the close of business or as noted in subsection 3 below.
 3. When an outdoor dining patio is immediately adjacent to any single-family or multiple-family zoned residential district, all outdoor activity must cease at the close of business or 10:00 p.m., whichever is earlier.
 4. The review of outdoor dining patios shall include, but are not limited to, the following elements: tables, chairs, umbrellas, portable heating elements, barriers, service stations, landscaping/plantings, awnings, canopies, lighting, host/hostess stands, and entertainment.
 5. Outdoor dining patios shall not contain enclosures as defined in Article 9, Section 9.02 of the Zoning Ordinance.
 6. All outdoor patios shall be designed to meet the requirements of this section, as well as all applicable building and fire codes.
- C. Outdoor Dining – Public Property: Outdoor dining located on public property such as sidewalks, alleys and passages, and streets, shall be subject to the following requirements:
 1. Outdoor dining may be permitted on public property throughout the year with a valid Outdoor Dining License, provided that the following conditions are met:
 - i. Approval of an Outdoor Dining License shall be contingent on compliance with all city codes, including any conditions required by the Planning Board in conjunction with Site Plan approval.
 - ii. Operators of outdoor dining patios shall be responsible for snow and ice removal, and shall remove of such in a manner consistent with that of the Department of Public Services.
 - iii. Portable patio elements such as tables, chairs, heaters and umbrellas must be stored indoors each night between December 1 and March 1 to allow for complete snow and ice removal.

- iv. An ADA compliant platform may be erected in the on-street parking space(s) in front of an eating establishment to create an outdoor dining patio from April 1 through November 1, subject to a review by the Advisory Parking Committee.

2. Design: Outdoor dining patios located on public property are subject to the following design standards:

- i. All tables and chairs provided in the outdoor dining patio shall be constructed primarily of metal, wood, or a material of comparable quality as determined by the Planning Board.
- ii. In order to safeguard the flow of pedestrians on the public sidewalk, such uses shall maintain an unobstructed sidewalk width as required by the Planning Board, but in no case less than 6 ft.
- iii. No such facility shall erect or install permanent fixtures in the public right-of-way.
- iv. Table umbrellas or other freestanding overhead weather protection shall not (1) impede sight lines into a retail establishment, (2) obstruct pedestrian flow in the outdoor dining area, (3) obstruct pedestrian or vehicular traffic flow outside the outdoor dining area, or (4) contain signage or advertising.
- v. Barriers delineating outdoor patios shall be constructed of a quality and durable material, and shall be maintained and placed in a consistent and organized fashion. Barriers may not exceed 42 inches in height, with the exception of planting material.
- vi. Portable heating elements must be maintained and kept in an orderly fashion. Propane or other fuels may not be stored on public property, and are subject to the Storage and Display Standards outlined in Article 4, Section 4.67 of the Zoning Ordinance.
- vii. Ancillary elements such as service stations or host/hostess stands must be located within the approved outdoor dining patio, contained, and kept in a neat and orderly fashion. Service stations and host/hostess stands may not exceed 4 feet in height. The storage of dirty dishware is prohibited.

D. Outdoor Dining – Private Property: Outdoor dining located on private property such as general private property, porches, recesses, courtyards decks and rooftops, shall be subject to the following conditions:

1. Design: Outdoor dining patios located on private property are subject to the following design standards:

- i. All tables and chairs provided in the outdoor dining patio shall be constructed primarily of metal, wood, or a material of comparable quality as determined by the Planning Board.
- ii. Table umbrellas or other freestanding overhead weather protection shall not (1) impede sight lines into a retail establishment, (2) obstruct pedestrian flow in the outdoor dining area, (3) obstruct pedestrian or

- vehicular traffic flow outside the outdoor dining area, or (4) contain signage or advertising.
- iii. Barriers delineating outdoor patios shall be constructed of a quality and durable material, and shall be maintained and placed in a consistent and organized fashion. Barriers may not exceed 42 inches in height, with the exception of planting material.
 - iv. Portable heating elements must be maintained and kept in an orderly fashion. The storage of propane or other fuels shall be subject to the Storage and Display Standards outlined in Article 4, Section 4.67 of the Zoning Ordinance.
 - v. Ancillary elements such as service stations or host/hostess stands must be located within the approved outdoor dining patio, contained and kept in an orderly fashion. Service stations and host/hostess stands may not exceed 4 feet in height. The storage of dirty dishware is prohibited.

Article 9, Section 9.02 – Definitions

Enclosure (outdoor dining): An area that may or may not contain a roof and as few as one wall, panel, or material that provides relief from weather and impedes physical and/or visual access to the space. For the purposes of this definition, enclosure does not include exterior building walls or landscaping.

Outdoor Dining Patio: A defined outdoor area accessory to an existing food and drink establishment designated for consumption of food and/or drink prepared within the restaurant and subject to the provisions of this ordinance.

Permanent Fixture (outdoor dining): Any element within an outdoor dining patio containing a foundation or other rigid attachment that prevents removal or that which requires extensive modifications to the public right-of-way.



MEMORANDUM

Planning Division

DATE: September 23rd, 2021

TO: Planning Board

FROM: Nicholas Dupuis, City Planner

SUBJECT: Outdoor Dining Ordinance – Study Session #4

On December 7, 2020, the City Commission discussed amending the Zoning Ordinance to consider allowing the enclosure of outdoor dining areas during the winter months. The City Commission asked the Planning Board to consider this issue, and any regulations they may recommend should outdoor dining enclosures be permitted.

On June 21st, 2021, the City Commission and Planning Board met at a joint meeting to further discuss outdoor dining, and to get a clear direction as to what elements of outdoor dining should be addressed. In general, the City Commission and Planning Board discussed several topics spanning from enclosures to private vs. public space, but ultimately asked the Planning Board to take a comprehensive look at the entire outdoor dining ordinance.

On June 23rd, 2021, the Planning Board discussed outdoor dining in further detail based on the joint meeting two days prior. The Planning Board settled on a list of goals that they would like to focus on in the ordinance review process, which includes the following:

- Incentivize outdoor off-season dining;
- Review the placement of decks and enclosures;
- Ensure that additional outdoor off-season dining does not become an extension of the indoor space;
- Solicit feedback from restaurateurs of all types in the City;
- Seek possible ideas from local, national and international examples;
- Review the current ordinance for issues;
- Review tickets that were given out to temporary outdoor dining operations;
- Review photos of the variety of temporary outdoor dining structures that were used around the City;
- Explore options for maintaining permanent aspects of outdoor dining structures even if the parts of the structures come down in different seasons;
- Discuss potential differences in policy for outdoor dining on public versus private property;
- Solicit feedback from Public Services and the BSD;

- Review agreements from temporary outdoor dining to see if any of the temporary policies might be worth integrating;
- Consider aspects like sidewalk widths and snow clearing in writing the policy;
- Maintain the current seating allowances for differently-sized establishments and maintain the differences for establishments holding different kinds of licenses for alcoholic beverage service; and,
- Recommend a permanent solution so that restaurateurs do not have to continue to adapt to changing policies.

Study Session #1 Summary

On July 14th, 2021, the Planning Board reviewed a high-level report on outdoor dining to guide future discussion. The topics included observations as to what constitutes “good” outdoor dining with national and local examples, as well as a local ordinance review for outdoor dining. The Planning Board discussed next steps and emphasized the need to (1) hear from different City Departments (code issues, retail neighbor conflicts, streetscape), (2) review available codes and ordinances from other areas of the country (enclosures, public vs. private, year-round), and (3) analyze information from national downtown associations or other related organizations (trends, social districts, success stories).

Study Session #2 Summary

On August 11th, 2021, the Planning Board reviewed another high-level report in which the Planning Division presented various departmental comments on outdoor dining, a national outdoor dining ordinance review, conversations with local cities, and a study of national organization input and trends. The Planning Division also provided some public feedback from Engage Birmingham, which surveyed the public for their opinion of the COVID-19 temporary outdoor dining expansions, which were overwhelmingly positive. Moving forward, the Planning Board expressed interest in getting into more detail on seasonal/year round dining and its effect on street activation, public versus public space, the potential for regulating different restaurants/licenses differently, and defining and establishing a purpose of outdoor dining in the City.

Study Session #3 Summary

On September 9th, the Planning Board discussed the report which contained comments from the Advisory Parking Committee, common issues with outdoor dining patios, information on the temporary COVID-19 patios, and also discussed the purpose of outdoor dining. In addition, the Planning Board was able to review an example of how the outdoor dining ordinance could look based on comments up to that point. Ultimately, the conversation started to get more granular with specific ordinance-related ideas ranging from an official stance on enclosures to material guidelines to patio placement. There were several other requests for information including a review of Michigan Liquor Control Commission guidelines for outdoor dining, a review of the concept of windbreak versus wall, and the possibility of regulating outdoor dining by zones.

Study Session #4

Michigan Liquor Control Commission (MLCC)

In conversations regarding enclosures, it was suggested that the Planning Board review the MLCC rules for enclosures so that the ordinance language amendments do not conflict or confuse outdoor dining patio operators who would have to then juggle two separate rules. At this time, it appears as though the MLCC rules regarding outdoor patios are simple:

R 436.1419 - Outdoor service without approval prohibited; requirements for outdoor service if approval is granted.

- (1) An on-premises licensee shall not have outdoor service without the prior written approval of the commission.
- (2) If approval for outdoor service is granted, then the on-premises licensee shall ensure that the outdoor service area is well-defined and clearly marked and the on-premises licensee shall not sell, or allow the consumption of, alcoholic liquor outdoors, except in the defined area.
- (3) The commission may issue up to 12 daily temporary outdoor service permits to a licensee each calendar year upon written request of the licensee and approval of the chief law enforcement officer who has jurisdiction.

It is clear that the Planning Board would do well to include that language in new ordinance language, but also be safe to define enclosures as they see fit.

Windbreak versus Wall

As the Planning Board has decided their approach to outdoor dining will *not* include allowing enclosures, the board did express interest in exploring some options for relief from wind. Windbreak is generally defined as “a thing, such as a row of trees or a fence, wall, or screen, that provides shelter or protection from the wind.” At this point, it is also helpful to review definitions for a couple of other concepts:

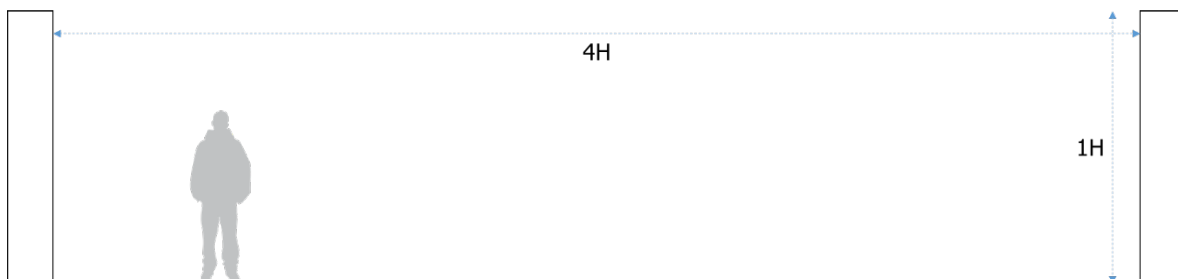
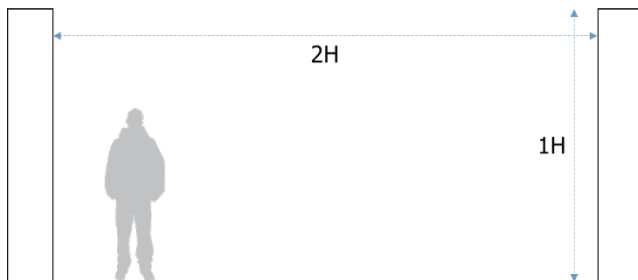
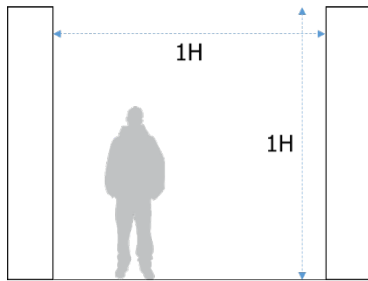
- **Wall:** Structural element used to divide or enclose, and, in building construction, to form the periphery of a room or a building. ([Britannica](#))
- **Room:** A part of the inside of a building that is separated from other parts by walls, floor, and ceiling. ([Cambridge](#))
- **Building:** Any structure having a roof, including but not limited to tents, awning, carports, and such devices as house trailers, which have a primary function other than being a means of conveyance. ([Article 9, Section 9.02](#))

As the Planning Division understood the conversation at the Planning Board, there seems to be a line where a windbreak could become something closer to a wall, and the Planning Board is interested in discussing what that point may be. To help guide that conversation, the Planning Division considered the following:

Degree of Enclosure

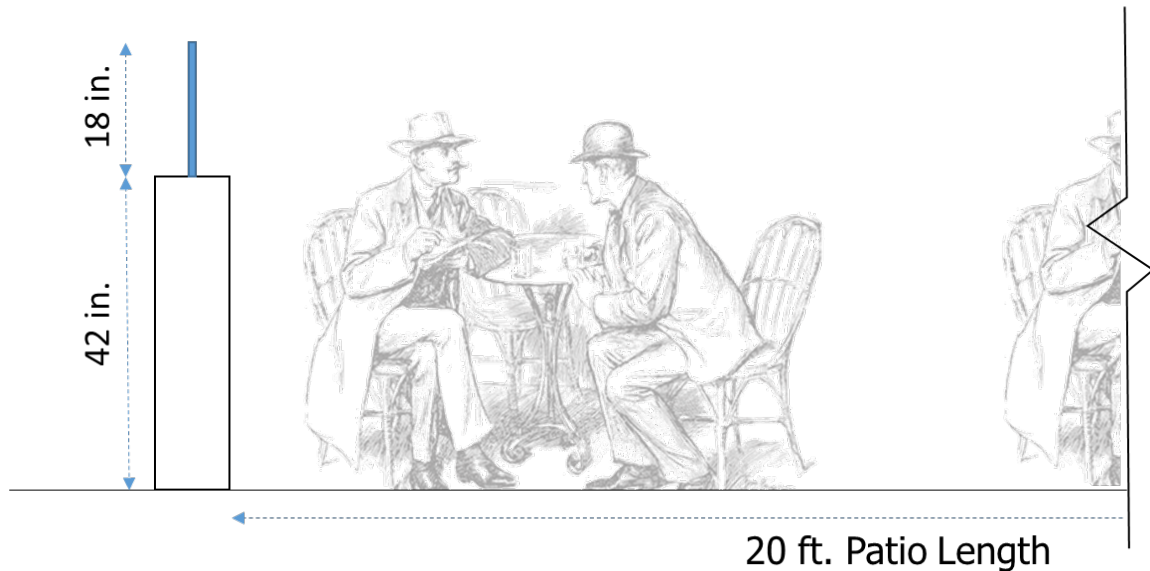
The concept of [degree of enclosure](#) is an urban design principle that revolves around a person's perception of enclosure within a space, which is based on a horizontal to vertical ratio. In general, the principle suggests that a person begins to perceive a sense of enclosure at a 3:1 ratio, and

more of a sense of enclosure as that ratio decreases. Ratios of 4:1 or greater generate no sense of enclosure.

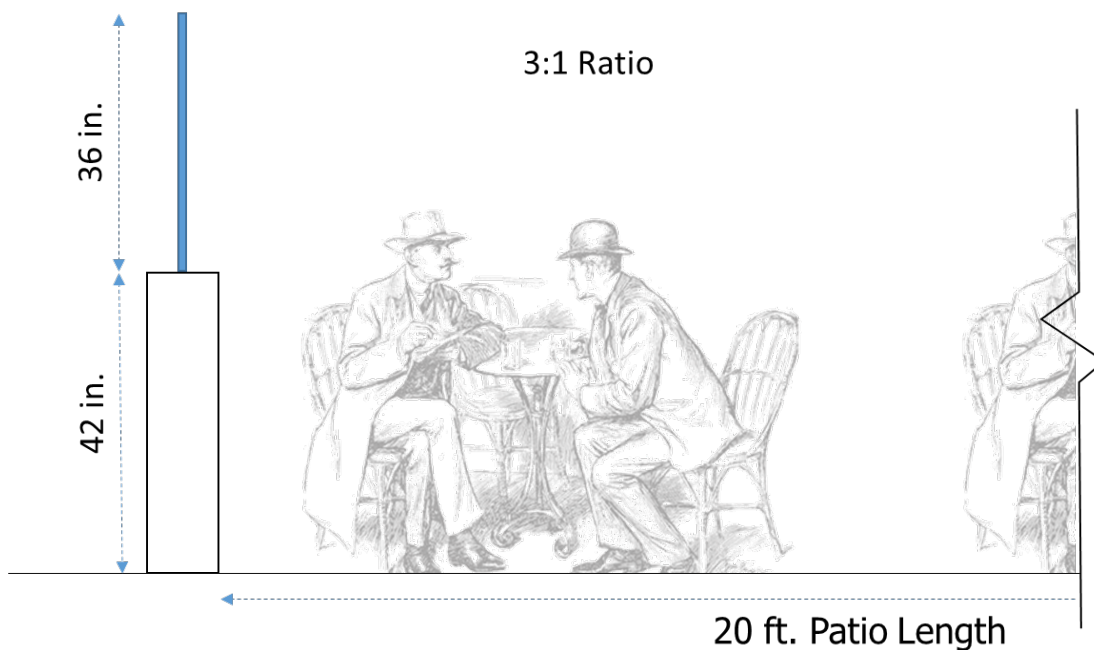


Could this concept be transposed and used to determine the appropriate height for a windbreak in an outdoor dining patio? For example, using the 4:1 ratio in an outdoor dining patio that measures 20 ft. in length (the typical length of a platform in the right-of-way), a barrier with a wind break would be permitted at no greater than 5 ft. (60 in.). A barrier with windbreak for the same 20 ft. patio at a 3:1 ratio would permit a roughly 6 ft. 6 in. (78 in.) barrier and windbreak. The following drawings were created under the assumption that the patio barrier would be 42 in. tall as currently permitted under the Zoning Ordinance:

4:1 Ratio

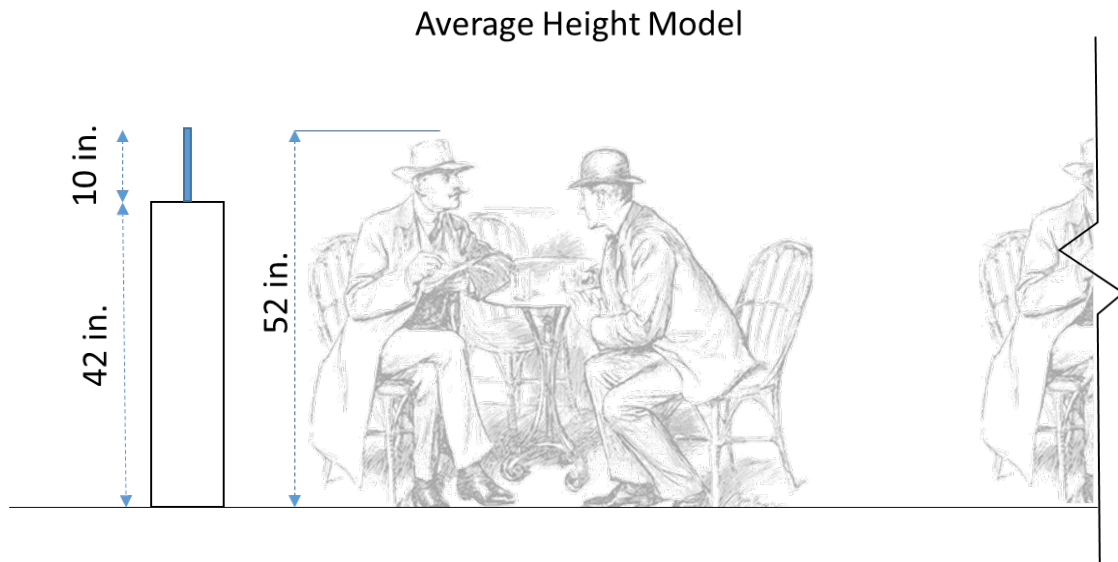


3:1 Ratio



Average Height

Alternatively, if a more standard height is preferred based on the ease and consistency of review and enforcement, the Planning Board could consider the average height of Americans. According to the [Center for Disease Control](#), the average height of a male is 5 ft. 9 in. (69 in.), while the average height for a female is 5 ft. 4 in. (64 in.) An analysis of the seat height of 10 different outdoor patio chairs yielded an average seat height of 17.5 in. Using a simple proportion of 50/50 for the average human, we can assume that we should consider 50% of a person's height in determining the overall height of a person sitting in a chair. Using these figures, the average male should measure around 52 in. tall while sitting, and the average female would measure 49.5 in. tall while sitting.



Interestingly enough, if the Planning Board were to account for different seat and person height, the windbreak could be close in height to the 4:1 ratio model presented above.

In addition to height, the Planning Board was also interested in what typed of materials to consider for windbreaks. Based on research, different materials for windbreaks could include glass/plastic, landscaping, screens, wood, metal or canvas/cloth. However, the most common windbreaks observed in outdoor dining patios appear to be glass/plastic:







Outdoor Dining Regulations by Zoning District

At this time, outdoor dining is permitted in all business and office zones within the city (B1, B2, B2B, B2C, B3, B4, O1, O2, MX) as well as the TZ3 transitional zone. Out of the 43 establishments with outdoor dining, 64% are located within the B4 zoning district, while the next highest share is located in O2 at 14%.

Please see attached maps for reference.

Draft Ordinance Language

(See next page)

Article 4, Section 4.44 – Outdoor Dining Standards

This Outdoor Dining Standards section applies to the following districts:

B1 B2 B2B B2C B3 B4 MX O1 O2 TZ3

The following outdoor dining standards apply:

- A. Purpose and Intent: The purpose of this section is to provide an appropriate balance for outdoor dining patios across the city, and to encourage better spaces to support public health, activate public space, foster economic development, safeguard the use of public property, and provide flexibility for current trends and future demands for outdoor dining.
- B. Outdoor Dining – General: Outdoor dining is permitted immediately adjacent to the principal use, subject to review by the Planning Board, or by the Planning Division at the discretion of the Planning Director, and the following conditions
 - 1. All outdoor activity must cease at the close of business or as noted in subsection 3 below.
 - 2. When an outdoor dining patio is immediately adjacent to any single-family or multiple-family zoned residential district, all outdoor activity must cease at the close of business or 10:00 p.m., whichever is earlier.
 - 3. The review of outdoor dining patios shall include, but are not limited to, the following elements: tables, chairs, umbrellas, portable heating elements, barriers, service stations, landscaping/plantings, awnings, canopies, lighting, host/hostess stands, and entertainment.
 - 4. Outdoor dining may be permitted on public property throughout the year with a valid Outdoor Dining License, provided that the following conditions are met:
 - i. Approval of an Outdoor Dining License shall be contingent on compliance with all city codes, including any conditions required by the Planning Board in conjunction with Site Plan approval.
 - ii. Operators of outdoor dining patios shall be responsible for snow and ice removal, and shall remove of such in a manner consistent with that of the Department of Public Services.
 - iii. Portable patio elements such as tables, chairs, heaters and umbrellas must be stored indoors each night between December 1 and March 1 to allow for complete snow and ice removal.
 - iv. An ADA compliant platform may be erected in the on-street parking space(s) in front of an eating establishment to create an outdoor dining patio from April 1 through November 1, subject to a review by the Advisory Parking Committee.
 - 5. All outdoor patios shall be designed to meet the requirements of this section, as well as all applicable building and fire codes.
- C. Outdoor Dining – Design: All outdoor dining patios are subject to the following design standards:

1. All tables and chairs provided in the outdoor dining patio shall be constructed primarily of metal, wood, or a material of comparable quality as determined by the Planning Board.
2. Outdoor dining patios shall provide and service refuse containers within the outdoor dining patio and maintain the area in good order.
3. Outdoor dining patios shall not contain enclosures as defined in Article 9, Section 9.02 of the Zoning Ordinance.
4. In order to safeguard the flow of pedestrians on the public sidewalk, such uses shall maintain an unobstructed sidewalk width as required by the Planning Board, but in no case less than 6 ft.
5. No such facility shall erect or install permanent fixtures in the public right-of-way.
6. Table umbrellas or other freestanding overhead weather protection shall not (1) impede sight lines into a retail establishment, (2) obstruct pedestrian flow in the outdoor dining area, (3) obstruct pedestrian or vehicular traffic flow outside the outdoor dining area, or (4) contain signage or advertising.
7. Barriers defining outdoor patios shall be constructed of a quality and durable material, and shall be maintained and placed in a consistent and organized fashion. Barriers shall be secured to the ground and/or building to maintain an immovable, clearly defined patio space. Barriers may not exceed 42 inches in height with the exception of planting material.
8. Windbreaks are permitted within outdoor dining patios and shall not exceed 60 inches in height and must be constructed of a clear material. Windbreaks placed atop a barrier shall not exceed 18 in. in height.
9. Portable heating elements must be maintained and kept in an orderly fashion. Propane or other fuels may not be stored on public property, and are subject to the Storage and Display Standards outlined in Article 4, Section 4.67 of the Zoning Ordinance.
10. Ancillary elements such as service stations or host/hostess stands must be located within the approved outdoor dining patio, contained, and kept in a neat and orderly fashion. Service stations and host/hostess stands may not exceed 4 feet in height. The storage of dirty dishware is prohibited.

Article 9, Section 9.02 – Definitions

Enclosure (outdoor dining): An area that may or may not contain a roof and as few as one wall, panel, or material that provides relief from weather and impedes physical and/or visual access to the space. For the purposes of this definition, enclosure does not include exterior building walls, windbreaks or landscaping.

Outdoor Dining Patio: A defined outdoor area accessory to an existing food and drink establishment designated for consumption of food and/or drink prepared within the establishment and subject to the provisions of this ordinance.

Permanent Fixture (outdoor dining): Any element within an outdoor dining patio containing a foundation or other rigid attachment that prevents removal or that which requires extensive modifications to the public right-of-way.



MEMORANDUM

Planning Division

DATE: December 8, 2021

TO: Planning Board

FROM: Nicholas Dupuis, City Planner

SUBJECT: Outdoor Dining Ordinance – Study Session #6

On December 7, 2020, the City Commission discussed amending the Zoning Ordinance to consider allowing the enclosure of outdoor dining areas during the winter months. The City Commission asked the Planning Board to consider this issue, and any regulations they may recommend should outdoor dining enclosures be permitted.

On June 21st, 2021, the City Commission and Planning Board met at a joint meeting to further discuss outdoor dining, and to get a clear direction as to what elements of outdoor dining should be addressed. In general, the City Commission and Planning Board discussed several topics spanning from enclosures to private vs. public space, but ultimately asked the Planning Board to take a comprehensive look at the entire outdoor dining ordinance.

On June 23rd, 2021, the Planning Board discussed outdoor dining in further detail based on the joint meeting two days prior. The Planning Board settled on a list of goals that they would like to focus on in the ordinance review process, which includes the following:

- Incentivize outdoor off-season dining;
- Review the placement of decks and enclosures;
- Ensure that additional outdoor off-season dining does not become an extension of the indoor space;
- Solicit feedback from restaurateurs of all types in the City;
- Seek possible ideas from local, national and international examples;
- Review the current ordinance for issues;
- Review tickets that were given out to temporary outdoor dining operations;
- Review photos of the variety of temporary outdoor dining structures that were used around the City;
- Explore options for maintaining permanent aspects of outdoor dining structures even if the parts of the structures come down in different seasons;
- Discuss potential differences in policy for outdoor dining on public versus private property;
- Solicit feedback from Public Services and the BSD;

- Review agreements from temporary outdoor dining to see if any of the temporary policies might be worth integrating;
- Consider aspects like sidewalk widths and snow clearing in writing the policy;
- Maintain the current seating allowances for differently-sized establishments and maintain the differences for establishments holding different kinds of licenses for alcoholic beverage service; and,
- Recommend a permanent solution so that restaurateurs do not have to continue to adapt to changing policies.

Study Session #1 Summary

On July 14th, 2021, the Planning Board reviewed a high-level report on outdoor dining to guide future discussion. The topics included observations as to what constitutes “good” outdoor dining with national and local examples, as well as a local ordinance review for outdoor dining. The Planning Board discussed next steps and emphasized the need to (1) hear from different City Departments (code issues, retail neighbor conflicts, streetscape), (2) review available codes and ordinances from other areas of the country (enclosures, public vs. private, year-round), and (3) analyze information from national downtown associations or other related organizations (trends, social districts, success stories).

Study Session #2 Summary

On August 11th, 2021, the Planning Board reviewed another high-level report in which the Planning Division presented various departmental comments on outdoor dining, a national outdoor dining ordinance review, conversations with local cities, and a study of national organization input and trends. The Planning Division also provided some public feedback from Engage Birmingham, which surveyed the public for their opinion of the COVID-19 temporary outdoor dining expansions, which were overwhelmingly positive. Moving forward, the Planning Board expressed interest in getting into more detail on seasonal/year round dining and its effect on street activation, public versus public space, the potential for regulating different restaurants/licenses differently, and defining and establishing a purpose of outdoor dining in the City.

Study Session #3 Summary

On September 9th, the Planning Board discussed the report which contained comments from the Advisory Parking Committee, common issues with outdoor dining patios, information on the temporary COVID-19 patios, and also discussed the purpose of outdoor dining. In addition, the Planning Board was able to review an example of how the outdoor dining ordinance could look based on comments up to that point. Ultimately, the conversation started to get more granular with specific ordinance-related ideas ranging from an official stance on enclosures to material guidelines to patio placement. There were several other requests for information including a review of Michigan Liquor Control Commission guidelines for outdoor dining, a review of the concept of windbreak versus wall, and the possibility of regulating outdoor dining by zones.

Study Session #4 Summary

On September 23rd, the Planning Board discussed the MLCC rules for outdoor dining patios, the concept of a windbreak and whether or not they should be permitted, and also explored the different zoning districts in which outdoor dining is permitted. These topics led to more conversation about how overhead weather protection will interact with said overhead coverings, and what typed of overhead protection the Planning Board should permit. The Planning Board expressed an interest in taking a deeper dive into overhead weather protection and reviewing different options.

Study Session #5 Summary**Study Session #6**

Article 4, Section 4.44 – Outdoor Dining Standards

This Outdoor Dining Standards section applies to the following districts:

B1 B2 B2B B2C B3 B4 MX O1 O2 TZ3

The following outdoor dining standards apply:

- A. Purpose and Intent: The purpose of this section is to provide an appropriate balance for outdoor dining patios across the city, and to encourage better spaces to support public health, activate public space, foster economic development, safeguard the use of public property, and provide flexibility for current trends and future demands for outdoor dining.
- B. Outdoor Dining – General: Outdoor dining is permitted immediately adjacent to the principal use, subject to review by the Planning Board, or by the Planning Division at the discretion of the Planning Director, and the following conditions
 - 1. All outdoor activity must cease at the close of business or as noted in subsection 2 below.
 - 2. When an outdoor dining patio is immediately adjacent to any single-family or multiple-family zoned residential district, all outdoor activity must cease at the close of business or 10:00 p.m., whichever is earlier.
 - 3. The review of outdoor dining patios shall include, but are not limited to, the following elements: tables, chairs, umbrellas, portable heating elements, barriers, service stations, landscaping/plantings, awnings, canopies, lighting, host/hostess stands, and entertainment.
 - 4. Outdoor dining may be permitted on public property throughout the year with a valid Outdoor Dining License, provided that the following conditions are met:
 - i. Approval of an Outdoor Dining License shall be contingent on compliance with all city codes, including any conditions required by the Planning Board in conjunction with Site Plan approval.
 - ii. Operators of outdoor dining patios shall be responsible for snow and ice removal, and shall remove of such in a manner consistent with that of the Department of Public Services.
 - iii. Portable patio elements such as tables, chairs, heaters and umbrellas must be stored indoors each night between December 1 and March 1 to allow for complete snow and ice removal.
 - iv. An ADA compliant platform may be erected in the on-street parking space(s) in front of an eating establishment to create an outdoor dining patio from April 1 through November 1, subject to a review by the Advisory Parking Committee.
 - 5. All outdoor patios shall be designed to meet the requirements of this section, as well as all applicable building and fire codes.
- C. Outdoor Dining – Design: All outdoor dining patios are subject to the following design standards:

1. All tables and chairs provided in the outdoor dining patio shall be constructed primarily of metal, wood, or a material of comparable quality as determined by the Planning Board.
2. Outdoor dining patios shall provide and service refuse containers within the outdoor dining patio and maintain the area in good order.
3. Outdoor dining patios shall not contain enclosures as defined in Article 9, Section 9.02 of the Zoning Ordinance.
4. In order to safeguard the flow of pedestrians on the public sidewalk, such uses shall maintain an unobstructed sidewalk width as required by the Planning Board, but in no case less than 6 ft.
5. No such facility shall erect or install permanent fixtures in the public right-of-way.
6. Table umbrellas or other overhead weather protection shall not (1) impede sight lines into a retail establishment, (2) obstruct pedestrian flow in the outdoor dining area, (3) obstruct pedestrian or vehicular traffic flow outside the outdoor dining area, or (4) contain signage or advertising.
7. Barriers defining outdoor patios shall be constructed of a quality and durable material, and shall be maintained and placed in a consistent and organized fashion. Barriers shall be secured to the ground and/or building to maintain an immovable, clearly defined patio space. Barriers may not exceed 42 inches in height with the exception of planting material.
8. Windbreaks are permitted within outdoor dining patios and shall be affixed to a barrier. The total combined height of a barrier and windbreak shall not exceed 60 inches. Windbreaks must be constructed of a clear and durable material.
9. Portable heating elements must be maintained and kept in an orderly fashion. Propane or other fuels may not be stored on public property, and are subject to the Storage and Display Standards outlined in Article 4, Section 4.67 of the Zoning Ordinance.
10. Ancillary elements such as service stations or host/hostess stands must be located within the approved outdoor dining patio, contained, and kept in a neat and orderly fashion. Service stations and host/hostess stands may not exceed 4 feet in height. The storage of dirty dishware is prohibited.

Article 9, Section 9.02 – Definitions

Enclosure (outdoor dining): An area that may or may not contain a roof and as few as one wall, panel, or material that provides relief from weather and impedes physical and/or visual access to the space. For the purposes of this definition, enclosure does not include exterior building walls, windbreaks or landscaping.

Outdoor Dining Patio: A defined outdoor area accessory to an existing food and drink establishment designated for consumption of food and/or drink prepared within the establishment and subject to the provisions of this ordinance.

Permanent Fixture (outdoor dining): Any element within an outdoor dining patio containing a foundation or other rigid attachment that prevents removal or that which requires extensive modifications to the public right-of-way.



MEMORANDUM

Planning Division

DATE: January 12, 2022

TO: Planning Board

FROM: Nicholas Dupuis, City Planner

SUBJECT: Outdoor Dining Ordinance – Study Session #7

On December 7, 2020, the City Commission discussed amending the Zoning Ordinance to consider allowing the enclosure of outdoor dining areas during the winter months. The City Commission asked the Planning Board to consider this issue, and any regulations they may recommend should outdoor dining enclosures be permitted.

On June 21st, 2021, the City Commission and Planning Board met at a joint meeting to further discuss outdoor dining, and to get a clear direction as to what elements of outdoor dining should be addressed. In general, the City Commission and Planning Board discussed several topics spanning from enclosures to private vs. public space, but ultimately asked the Planning Board to take a comprehensive look at the entire outdoor dining ordinance.

On June 23rd, 2021, the Planning Board discussed outdoor dining in further detail based on the joint meeting two days prior. The Planning Board settled on a list of goals that they would like to focus on in the ordinance review process, which includes the following:

- Incentivize outdoor off-season dining;
- Review the placement of decks and enclosures;
- Ensure that additional outdoor off-season dining does not become an extension of the indoor space;
- Solicit feedback from restaurateurs of all types in the City;
- Seek possible ideas from local, national and international examples;
- Review the current ordinance for issues;
- Review tickets that were given out to temporary outdoor dining operations;
- Review photos of the variety of temporary outdoor dining structures that were used around the City;
- Explore options for maintaining permanent aspects of outdoor dining structures even if the parts of the structures come down in different seasons;
- Discuss potential differences in policy for outdoor dining on public versus private property;
- Solicit feedback from Public Services and the BSD;

- Review agreements from temporary outdoor dining to see if any of the temporary policies might be worth integrating;
- Consider aspects like sidewalk widths and snow clearing in writing the policy;
- Maintain the current seating allowances for differently-sized establishments and maintain the differences for establishments holding different kinds of licenses for alcoholic beverage service; and,
- Recommend a permanent solution so that restaurateurs do not have to continue to adapt to changing policies.

Study Session #1 Summary

On July 14th, 2021, the Planning Board reviewed a high-level report on outdoor dining to guide future discussion. The topics included observations as to what constitutes “good” outdoor dining with national and local examples, as well as a local ordinance review for outdoor dining. The Planning Board discussed next steps and emphasized the need to (1) hear from different City Departments (code issues, retail neighbor conflicts, streetscape), (2) review available codes and ordinances from other areas of the country (enclosures, public vs. private, year-round), and (3) analyze information from national downtown associations or other related organizations (trends, social districts, success stories).

Study Session #2 Summary

On August 11th, 2021, the Planning Board reviewed another high-level report in which the Planning Division presented various departmental comments on outdoor dining, a national outdoor dining ordinance review, conversations with local cities, and a study of national organization input and trends. The Planning Division also provided some public feedback from Engage Birmingham, which surveyed the public for their opinion of the COVID-19 temporary outdoor dining expansions, which were overwhelmingly positive. Moving forward, the Planning Board expressed interest in getting into more detail on seasonal/year round dining and its effect on street activation, public versus public space, the potential for regulating different restaurants/licenses differently, and defining and establishing a purpose of outdoor dining in the City.

Study Session #3 Summary

On September 9th, the Planning Board discussed the report which contained comments from the Advisory Parking Committee, common issues with outdoor dining patios, information on the temporary COVID-19 patios, and also discussed the purpose of outdoor dining. In addition, the Planning Board was able to review an example of how the outdoor dining ordinance could look based on comments up to that point. Ultimately, the conversation started to get more granular with specific ordinance-related ideas ranging from an official stance on enclosures to material guidelines to patio placement. There were several other requests for information including a review of Michigan Liquor Control Commission guidelines for outdoor dining, a review of the concept of windbreak versus wall, and the possibility of regulating outdoor dining by zones.

Study Session #4 Summary

On September 23rd, the Planning Board discussed the MLCC rules for outdoor dining patios, the concept of a windbreak and whether or not they should be permitted, and also explored the different zoning districts in which outdoor dining is permitted. These topics led to more conversation about how overhead weather protection will interact with said overhead coverings, and what typed of overhead protection the Planning Board should permit. The Planning Board expressed an interest in taking a deeper dive into overhead weather protection and reviewing different options.

Study Session #5 Summary

On October 27th, 2021, the Planning Board focused much their conversation on overhead weather protection and which types may be considered within the new ordinance language, and what different issues might arise with the different styles. In addition, the Birmingham Fire Chief Paul Wells gave a brief overview of the fire code as it relates to overhead weather protection, and offered some guidance to the Planning Board regarding fire suppression and other aspects of outdoor dining. In addition to overhead weather protection, the Planning Board provided some clear direction on the subjects of windbreaks, year-round dining, and the role of outdoor dining decks.

Study Session #6 Summary

On December 8th, 2021, the Planning Board reviewed comments regarding outdoor dining from the Birmingham Shopping District (BSD). In addition to the BSD comments, the Planning Board also reviewed some updated comments from the Fire Department based on their additional research into the Fire Code. To round out the meeting, the Planning Board outlined several items that they feel need further discussion/decision moving forward:

- Whether establishments with liquor licenses and establishments without liquor licenses should be handled differently;
- Whether there should be on-season and off-season dates for outdoor dining, and what should happen to furniture and other equipment on public property if there are different 'seasons';
- Whether establishments should be permitted outdoor dining on both a sidewalk and a deck if requested, and if not, what the City wants to incentivize instead;
- What types of coverings and equipment should be allowed, and how specific the standards should be in terms of material, location, and other considerations;
- Whether outdoor dining should be permitted to extend beyond the storefront of an establishment, and if so, what the limitations should be;
- Whether outdoor dining decks should be limited to a certain number per block; and,
- Whether outdoor dining in public space and outdoor dining in private space should be regulated differently.

Study Session #7

At this time, the Planning Board has expressed interest in spending some time discussing the questions posed in the previous study session (above). To help aid the discussion, the Planning Division has prepared a map and gathered data on the placement and number of platforms, as well as the most recent data available on the number of outdoor dining seats present in Birmingham for all permit-holding outdoor dining establishments.

Article 4, Section 4.44 – Outdoor Dining Standards

This Outdoor Dining Standards section applies to the following districts:

B1 B2 B2B B2C B3 B4 MX O1 O2 TZ3

The following outdoor dining standards apply:

- A. Purpose and Intent: The purpose of this section is to provide an appropriate balance for outdoor dining patios across the city, and to encourage better spaces to support public health, activate public space, foster economic development, safeguard the use of public property, and provide flexibility for current trends and future demands for outdoor dining.
- B. Outdoor Dining – General: Outdoor dining is permitted immediately adjacent to the principal use, subject to review by the Planning Board, or by the Planning Division at the discretion of the Planning Director, and the following conditions
 - 1. All outdoor activity must cease at the close of business or as noted in subsection 2 below.
 - 2. When an outdoor dining patio is immediately adjacent to any single-family or multiple-family zoned residential district, all outdoor activity must cease at the close of business or 10:00 p.m., whichever is earlier.
 - 3. The review of outdoor dining patios shall include, but are not limited to, the following elements: tables, chairs, umbrellas, portable heating elements, barriers, service stations, landscaping/plantings, awnings, canopies, lighting, host/hostess stands, and entertainment.
 - 4. Outdoor dining may be permitted on public property throughout the year with a valid Outdoor Dining License, provided that the following conditions are met:
 - i. Approval of an Outdoor Dining License shall be contingent on compliance with all city codes, including any conditions required by the Planning Board in conjunction with Site Plan approval.
 - ii. Operators of outdoor dining patios shall be responsible for snow and ice removal, and shall remove of such in a manner consistent with that of the Department of Public Services.
 - iii. Portable patio elements such as tables, chairs, heaters and umbrellas must be stored indoors each night between December 1 and March 1 to allow for complete snow and ice removal.
 - iv. An ADA compliant platform may be erected in the on-street parking space(s) in front of an eating establishment to create an outdoor dining patio from April 1 through November 1, subject to a review by the Advisory Parking Committee.
 - 5. All outdoor patios shall be designed to meet the requirements of this section, as well as all applicable building and fire codes.
- C. Outdoor Dining – Design: All outdoor dining patios are subject to the following design standards:

1. All tables and chairs provided in the outdoor dining patio shall be constructed primarily of metal, wood, or a material of comparable quality as determined by the Planning Board.
2. Outdoor dining patios shall provide and service refuse containers within the outdoor dining patio and maintain the area in good order.
3. Outdoor dining patios shall not contain enclosures as defined in Article 9, Section 9.02 of the Zoning Ordinance.
4. In order to safeguard the flow of pedestrians on the public sidewalk, such uses shall maintain an unobstructed sidewalk width as required by the Planning Board, but in no case less than 6 ft.
5. No such facility shall erect or install permanent fixtures in the public right-of-way.
6. Table umbrellas or other overhead weather protection shall not (1) impede sight lines into a retail establishment, (2) obstruct pedestrian flow in the outdoor dining area, (3) obstruct pedestrian or vehicular traffic flow outside the outdoor dining area, or (4) contain signage or advertising.
7. Barriers defining outdoor patios shall be constructed of a quality and durable material, and shall be maintained and placed in a consistent and organized fashion. Barriers shall be secured to the ground and/or building to maintain an immovable, clearly defined patio space. Barriers may not exceed 42 inches in height with the exception of planting material.
8. Windbreaks are permitted within outdoor dining patios and shall be affixed to a barrier. The total combined height of a barrier and windbreak shall not exceed 60 inches. Windbreaks must be constructed of a clear and durable material.
9. Portable heating elements must be maintained and kept in an orderly fashion. Propane or other fuels may not be stored on public property, and are subject to the Storage and Display Standards outlined in Article 4, Section 4.67 of the Zoning Ordinance.
10. Ancillary elements such as service stations or host/hostess stands must be located within the approved outdoor dining patio, contained, and kept in a neat and orderly fashion. Service stations and host/hostess stands may not exceed 4 feet in height. The storage of dirty dishware is prohibited.

Article 9, Section 9.02 – Definitions

Enclosure (outdoor dining): An area that may or may not contain a roof and as few as one wall, panel, or material that provides relief from weather and impedes physical and/or visual access to the space. For the purposes of this definition, enclosure does not include exterior building walls, windbreaks or landscaping.

Outdoor Dining Patio: A defined outdoor area accessory to an existing food and drink establishment designated for consumption of food and/or drink prepared within the establishment and subject to the provisions of this ordinance.

Permanent Fixture (outdoor dining): Any element within an outdoor dining patio containing a foundation or other rigid attachment that prevents removal or that which requires extensive modifications to the public right-of-way.



MEMORANDUM

Planning Division

DATE: February 9, 2022

TO: Planning Board

FROM: Nicholas Dupuis, City Planner

SUBJECT: Outdoor Dining Ordinance – Study Session #8

On December 7, 2020, the City Commission discussed amending the Zoning Ordinance to consider allowing the enclosure of outdoor dining areas during the winter months. The City Commission asked the Planning Board to consider this issue, and any regulations they may recommend should outdoor dining enclosures be permitted.

On June 21st, 2021, the City Commission and Planning Board met at a joint meeting to further discuss outdoor dining, and to get a clear direction as to what elements of outdoor dining should be addressed. In general, the City Commission and Planning Board discussed several topics spanning from enclosures to private vs. public space, but ultimately asked the Planning Board to take a comprehensive look at the entire outdoor dining ordinance.

On June 23rd, 2021, the Planning Board discussed outdoor dining in further detail based on the joint meeting two days prior. The Planning Board settled on a list of goals that they would like to focus on in the ordinance review process, which includes the following:

- Incentivize outdoor off-season dining;
- Review the placement of decks and enclosures;
- Ensure that additional outdoor off-season dining does not become an extension of the indoor space;
- Solicit feedback from restaurateurs of all types in the City;
- Seek possible ideas from local, national and international examples;
- Review the current ordinance for issues;
- Review tickets that were given out to temporary outdoor dining operations;
- Review photos of the variety of temporary outdoor dining structures that were used around the City;
- Explore options for maintaining permanent aspects of outdoor dining structures even if the parts of the structures come down in different seasons;
- Discuss potential differences in policy for outdoor dining on public versus private property;
- Solicit feedback from Public Services and the BSD;

- Review agreements from temporary outdoor dining to see if any of the temporary policies might be worth integrating;
- Consider aspects like sidewalk widths and snow clearing in writing the policy;
- Maintain the current seating allowances for differently-sized establishments and maintain the differences for establishments holding different kinds of licenses for alcoholic beverage service; and,
- Recommend a permanent solution so that restaurateurs do not have to continue to adapt to changing policies.

Study Session #1 Summary

On July 14th, 2021, the Planning Board reviewed a high-level report on outdoor dining to guide future discussion. The topics included observations as to what constitutes “good” outdoor dining with national and local examples, as well as a local ordinance review for outdoor dining. The Planning Board discussed next steps and emphasized the need to (1) hear from different City Departments (code issues, retail neighbor conflicts, streetscape), (2) review available codes and ordinances from other areas of the country (enclosures, public vs. private, year-round), and (3) analyze information from national downtown associations or other related organizations (trends, social districts, success stories).

Study Session #2 Summary

On August 11th, 2021, the Planning Board reviewed another high-level report in which the Planning Division presented various departmental comments on outdoor dining, a national outdoor dining ordinance review, conversations with local cities, and a study of national organization input and trends. The Planning Division also provided some public feedback from Engage Birmingham, which surveyed the public for their opinion of the COVID-19 temporary outdoor dining expansions, which were overwhelmingly positive. Moving forward, the Planning Board expressed interest in getting into more detail on seasonal/year round dining and its effect on street activation, public versus public space, the potential for regulating different restaurants/licenses differently, and defining and establishing a purpose of outdoor dining in the City.

Study Session #3 Summary

On September 9th, the Planning Board discussed the report which contained comments from the Advisory Parking Committee, common issues with outdoor dining patios, information on the temporary COVID-19 patios, and also discussed the purpose of outdoor dining. In addition, the Planning Board was able to review an example of how the outdoor dining ordinance could look based on comments up to that point. Ultimately, the conversation started to get more granular with specific ordinance-related ideas ranging from an official stance on enclosures to material guidelines to patio placement. There were several other requests for information including a review of Michigan Liquor Control Commission guidelines for outdoor dining, a review of the concept of windbreak versus wall, and the possibility of regulating outdoor dining by zones.

Study Session #4 Summary

On September 23rd, the Planning Board discussed the MLCC rules for outdoor dining patios, the concept of a windbreak and whether or not they should be permitted, and also explored the different zoning districts in which outdoor dining is permitted. These topics led to more conversation about how overhead weather protection will interact with said overhead coverings, and what typed of overhead protection the Planning Board should permit. The Planning Board expressed an interest in taking a deeper dive into overhead weather protection and reviewing different options.

Study Session #5 Summary

On October 27th, 2021, the Planning Board focused much their conversation on overhead weather protection and which types may be considered within the new ordinance language, and what different issues might arise with the different styles. In addition, the Birmingham Fire Chief Paul Wells gave a brief overview of the fire code as it relates to overhead weather protection, and offered some guidance to the Planning Board regarding fire suppression and other aspects of outdoor dining. In addition to overhead weather protection, the Planning Board provided some clear direction on the subjects of windbreaks, year-round dining, and the role of outdoor dining decks.

Study Session #6 Summary

On December 8th, 2021, the Planning Board reviewed comments regarding outdoor dining from the Birmingham Shopping District (BSD). In addition to the BSD comments, the Planning Board also reviewed some updated comments from the Fire Department based on their additional research into the Fire Code. To round out the meeting, the Planning Board outlined several items that they feel need further discussion/decision moving forward:

- Whether establishments with liquor licenses and establishments without liquor licenses should be handled differently;
- Whether there should be on-season and off-season dates for outdoor dining, and what should happen to furniture and other equipment on public property if there are different 'seasons';
- Whether establishments should be permitted outdoor dining on both a sidewalk and a deck if requested, and if not, what the City wants to incentivize instead;
- What types of coverings and equipment should be allowed, and how specific the standards should be in terms of material, location, and other considerations;
- Whether outdoor dining should be permitted to extend beyond the storefront of an establishment, and if so, what the limitations should be;
- Whether outdoor dining decks should be limited to a certain number per block; and,
- Whether outdoor dining in public space and outdoor dining in private space should be regulated differently.

Study Session #7 Summary

On January 12, 2022, the Planning Board discussed the several questions posed in the previous study session and come to a conclusion on most of them. In general, the Planning Board decided on a short extension to the regular outdoor dining season, treating all outdoor dining establishments alike, enhanced material and appearance standards, and allowing expansion of patios with neighbor consent. During this study session, the Planning Board also reviewed seating data for the different outdoor dining establishments, and was provided a map of all outdoor dining

in the City, which is heavily concentrated downtown. Ultimately, the Planning Board asked Staff to take their comments and work them into a new revised set of ordinance amendments to review on February 9, 2022.

Study Session #8

At this point, the Planning Board has indicated that they would like to start working on fine-tuning a set of ordinance amendments over the next meeting or two and forward them to the City Commission for final approval. The Planning Division has prepared ordinance language that reflects the conversation of the board across the following pages. In addition to a review of the amended language, there is an opportunity for the board to discuss the final unanswered questions from previous study sessions, which are as follows:

- Whether establishments should be permitted outdoor dining on both a sidewalk and a deck if requested, and if not, what the City wants to incentivize instead;
- What types of coverings and equipment should be allowed, and how specific the standards should be in terms of material, location, and other considerations; and
- Whether outdoor dining decks should be limited to a certain number per block.

Article 4, Section 4.44 – Outdoor Dining Standards

This Outdoor Dining Standards section applies to the following districts:

B1 B2 B2B B2C B3 B4 MX O1 O2 TZ3

The following outdoor dining standards apply:

- A. Purpose and Intent: The purpose of this section is to provide an appropriate balance for outdoor dining patios across the city, and to encourage better spaces to support public health, activate public space, foster economic development, safeguard the use of public property, and provide flexibility for current trends and future demands for outdoor dining.
- B. Outdoor Dining – General: Outdoor dining is permitted immediately adjacent to the principal use, subject to review by the Planning Board, or by the Planning Division at the discretion of the Planning Director, and the following conditions
 - 1. All outdoor activity must cease at the close of business or as noted in subsection 2 below.
 - 2. When an outdoor dining patio is immediately adjacent to any single-family or multiple-family zoned residential district, all outdoor activity must cease at the close of business or 10:00 p.m., whichever is earlier.
 - 3. The review of outdoor dining patios shall include, but are not limited to, the following elements: tables, chairs, umbrellas, portable heating elements, barriers, service stations, landscaping/plantings, awnings, canopies, lighting, host/hostess stands, and entertainment.
 - 4. Outdoor dining patios may be permitted to extend in the right-of-way in front of neighboring properties or tenant spaces with the written permission of the property owners(s) affected and with Planning Board approval.
 - 5. Outdoor dining may be permitted on public property throughout the year with a valid Outdoor Dining License, provided that the following conditions are met:
 - i. Approval of an Outdoor Dining License shall be contingent on compliance with all city codes, including any conditions required by the Planning Board in conjunction with Site Plan approval.
 - ii. Operators of outdoor dining patios shall be responsible for snow and ice removal, and shall remove snow and ice in a manner consistent with that of the Department of Public Services.
 - iii. Portable patio elements such as tables, chairs, heaters and umbrellas must be stored indoors each night between January 1 and March 31 to allow for complete snow and ice removal.
 - iv. Outdoor dining patios located in an alley or passage that contains vehicular traffic are permitted April 1 through December 31 only.
 - v. An ADA compliant platform may be erected in the on-street parking space(s) in front of an eating establishment to create an outdoor dining patio from April 1 through December 31, subject to an additional review by the Advisory Parking Committee.
 - 6. All outdoor patios shall be designed to meet the requirements of this section, as well as all applicable building and fire codes.

C. Outdoor Dining – Design: All outdoor dining patios are subject to the following design standards:

1. All tables and chairs provided in the outdoor dining patio shall be constructed primarily of metal, wood, or a material of comparable quality as determined by the Planning Board.
2. Outdoor dining patios shall provide and service refuse containers within the outdoor dining patio and maintain the area in good order. Public trash receptacles are not permitted to be utilized by outdoor dining facilities.
3. All outdoor dining elements shall be contained within the defined outdoor dining patio space.
4. Outdoor dining patios shall not contain enclosures as defined in Article 9, Section 9.02 of the Zoning Ordinance.
5. In order to safeguard the flow of pedestrians on the public sidewalk, such uses shall maintain an unobstructed sidewalk width as required by the Planning Board, but in no case less than 6 ft.
6. No such facility shall erect or install permanent fixtures in the public right-of-way.
7. Table umbrellas or other overhead weather protection shall not (1) impede sight lines into a retail establishment, (2) obstruct pedestrian flow in the outdoor dining area, (3) obstruct pedestrian or vehicular traffic flow outside the outdoor dining area, or (4) contain signage or advertising.
8. Barriers defining outdoor patios shall be constructed of a quality and durable material, and shall be maintained and placed in a consistent and organized fashion. Barriers shall be secured to the ground and/or building to maintain an immovable, clearly defined patio space. Barriers may not exceed 42 inches in height with the exception of planting material, or as permitted in subsection 9 below.
9. Windbreaks are permitted within outdoor dining patios and shall be affixed to a barrier. The total combined height of a barrier and windbreak shall not exceed 60 inches. Windbreaks must be constructed of a clear and durable material.
10. Portable heating elements must be maintained and kept in an orderly fashion. Propane or other fuels may not be stored on public property, and are subject to the Storage and Display Standards outlined in Article 4, Section 4.67 of the Zoning Ordinance.
11. Ancillary elements such as service stations or host/hostess stands must be located within the approved outdoor dining patio, contained, and kept in a neat and orderly fashion. Service stations and host/hostess stands may not exceed 4 feet in height. The storage of dirty dishware is prohibited.

Article 9, Section 9.02 – Definitions

Enclosure (outdoor dining): An area that may or may not contain a roof or any wall, panel, or material that provides relief from weather and impedes physical and/or visual access to the space. For the purposes of this definition, enclosure does not include exterior building walls, windbreaks or landscaping.

Outdoor Dining Patio: A defined outdoor area accessory to an existing food and drink establishment designated for consumption of food and/or drink prepared within the establishment and subject to the provisions of this ordinance.

Permanent Fixture (outdoor dining): Any element within an outdoor dining patio containing a foundation or other rigid attachment that prevents removal or that which requires extensive modifications to the public right-of-way.



MEMORANDUM

Planning Division

DATE: March 9, 2022

TO: Planning Board

FROM: Nicholas Dupuis, City Planner

SUBJECT: Outdoor Dining Ordinance – Study Session #9

On December 7, 2020, the City Commission discussed amending the Zoning Ordinance to consider allowing the enclosure of outdoor dining areas during the winter months. The City Commission asked the Planning Board to consider this issue, and any regulations they may recommend should outdoor dining enclosures be permitted.

On June 21st, 2021, the City Commission and Planning Board met at a joint meeting to further discuss outdoor dining, and to get a clear direction as to what elements of outdoor dining should be addressed. In general, the City Commission and Planning Board discussed several topics spanning from enclosures to private vs. public space, but ultimately asked the Planning Board to take a comprehensive look at the entire outdoor dining ordinance.

On June 23rd, 2021, the Planning Board discussed outdoor dining in further detail based on the joint meeting two days prior. The Planning Board settled on a list of goals that they would like to focus on in the ordinance review process, which includes the following:

- Incentivize outdoor off-season dining;
- Review the placement of decks and enclosures;
- Ensure that additional outdoor off-season dining does not become an extension of the indoor space;
- Solicit feedback from restaurateurs of all types in the City;
- Seek possible ideas from local, national and international examples;
- Review the current ordinance for issues;
- Review tickets that were given out to temporary outdoor dining operations;
- Review photos of the variety of temporary outdoor dining structures that were used around the City;
- Explore options for maintaining permanent aspects of outdoor dining structures even if the parts of the structures come down in different seasons;
- Discuss potential differences in policy for outdoor dining on public versus private property;
- Solicit feedback from Public Services and the BSD;

- Review agreements from temporary outdoor dining to see if any of the temporary policies might be worth integrating;
- Consider aspects like sidewalk widths and snow clearing in writing the policy;
- Maintain the current seating allowances for differently-sized establishments and maintain the differences for establishments holding different kinds of licenses for alcoholic beverage service; and,
- Recommend a permanent solution so that restaurateurs do not have to continue to adapt to changing policies.

Study Session #1 Summary

On July 14th, 2021, the Planning Board reviewed a high-level report on outdoor dining to guide future discussion. The topics included observations as to what constitutes “good” outdoor dining with national and local examples, as well as a local ordinance review for outdoor dining. The Planning Board discussed next steps and emphasized the need to (1) hear from different City Departments (code issues, retail neighbor conflicts, streetscape), (2) review available codes and ordinances from other areas of the country (enclosures, public vs. private, year-round), and (3) analyze information from national downtown associations or other related organizations (trends, social districts, success stories).

Study Session #2 Summary

On August 11th, 2021, the Planning Board reviewed another high-level report in which the Planning Division presented various departmental comments on outdoor dining, a national outdoor dining ordinance review, conversations with local cities, and a study of national organization input and trends. The Planning Division also provided some public feedback from Engage Birmingham, which surveyed the public for their opinion of the COVID-19 temporary outdoor dining expansions, which were overwhelmingly positive. Moving forward, the Planning Board expressed interest in getting into more detail on seasonal/year round dining and its effect on street activation, public versus public space, the potential for regulating different restaurants/licenses differently, and defining and establishing a purpose of outdoor dining in the City.

Study Session #3 Summary

On September 9th, the Planning Board discussed the report which contained comments from the Advisory Parking Committee, common issues with outdoor dining patios, information on the temporary COVID-19 patios, and also discussed the purpose of outdoor dining. In addition, the Planning Board was able to review an example of how the outdoor dining ordinance could look based on comments up to that point. Ultimately, the conversation started to get more granular with specific ordinance-related ideas ranging from an official stance on enclosures to material guidelines to patio placement. There were several other requests for information including a review of Michigan Liquor Control Commission guidelines for outdoor dining, a review of the concept of windbreak versus wall, and the possibility of regulating outdoor dining by zones.

Study Session #4 Summary

On September 23rd, the Planning Board discussed the MLCC rules for outdoor dining patios, the concept of a windbreak and whether or not they should be permitted, and also explored the different zoning districts in which outdoor dining is permitted. These topics led to more conversation about how overhead weather protection will interact with said overhead coverings, and what typed of overhead protection the Planning Board should permit. The Planning Board expressed an interest in taking a deeper dive into overhead weather protection and reviewing different options.

Study Session #5 Summary

On October 27th, 2021, the Planning Board focused much their conversation on overhead weather protection and which types may be considered within the new ordinance language, and what different issues might arise with the different styles. In addition, the Birmingham Fire Chief Paul Wells gave a brief overview of the fire code as it relates to overhead weather protection, and offered some guidance to the Planning Board regarding fire suppression and other aspects of outdoor dining. In addition to overhead weather protection, the Planning Board provided some clear direction on the subjects of windbreaks, year-round dining, and the role of outdoor dining decks.

Study Session #6 Summary

On December 8th, 2021, the Planning Board reviewed comments regarding outdoor dining from the Birmingham Shopping District (BSD). In addition to the BSD comments, the Planning Board also reviewed some updated comments from the Fire Department based on their additional research into the Fire Code. To round out the meeting, the Planning Board outlined several items that they feel need further discussion/decision moving forward:

- Whether establishments with liquor licenses and establishments without liquor licenses should be handled differently;
- Whether there should be on-season and off-season dates for outdoor dining, and what should happen to furniture and other equipment on public property if there are different 'seasons';
- Whether establishments should be permitted outdoor dining on both a sidewalk and a deck if requested, and if not, what the City wants to incentivize instead;
- What types of coverings and equipment should be allowed, and how specific the standards should be in terms of material, location, and other considerations;
- Whether outdoor dining should be permitted to extend beyond the storefront of an establishment, and if so, what the limitations should be;
- Whether outdoor dining decks should be limited to a certain number per block; and,
- Whether outdoor dining in public space and outdoor dining in private space should be regulated differently.

Study Session #7 Summary

On January 12, 2022, the Planning Board discussed the several questions posed in the previous study session and come to a conclusion on most of them. In general, the Planning Board decided on a short extension to the regular outdoor dining season, treating all outdoor dining establishments alike, enhanced material and appearance standards, and allowing expansion of patios with neighbor consent. During this study session, the Planning Board also reviewed seating data for the different outdoor dining establishments, and was provided a map of all outdoor dining

in the City, which is heavily concentrated downtown. Ultimately, the Planning Board asked Staff to take their comments and work them into a new revised set of ordinance amendments to review on February 9, 2022.

Study Session #8 Summary

On February 9, 2022, the Planning Board worked on fine-tuning a set of ordinance amendments to try to finalize a few of their discussion points, and make sure the intent of the original direction of the City Commission was met. The Planning Board made several revision requests that were aimed at clarifying different aspects of the proposed ordinance, but especially relating to the barriers and enclosure regulations. In addition, the Planning Board made some requests to review various site plans from approved outdoor dining patios in the City to help guide the final discussions on the placement of patios, and other design limitations.

Study Session #9

Based on the Planning Division's understanding of the previous meeting, the Planning Board wished to take another look at the proposed ordinance language after the comments from February 9 were considered by Staff, but also postponed conversation on three discussion points posed during Study Session #6, which include the following:

- Whether establishments should be permitted outdoor dining on both a sidewalk and a deck if requested, and if not, what the City wants to incentivize instead;
- What types of coverings and equipment should be allowed, and how specific the standards should be in terms of material, location, and other considerations; and
- Whether outdoor dining decks should be limited to a certain number per block.

At this time, the Planning Division has provided amended ordinance language based on Planning Board comments, but has also included other relevant sections in the Zoning Ordinance that deal with Outdoor Dining to address redundancy and provide consistent regulation. Finally, the Planning Division has compiled several approved outdoor dining plans to help guide the discussion as requested.

Article 4, Section 4.44 – Outdoor Dining Standards

This Outdoor Dining Standards section applies to the following districts:

B1 B2 B2B B2C B3 B4 MX O1 O2 TZ3

The following outdoor dining standards apply:

- A. Purpose and Intent: The purpose of this section is to provide an appropriate balance for outdoor dining patios across the city, and to encourage better spaces to support public health, activate public space, foster economic development, safeguard the use of public property, and provide flexibility for current trends and future demands for outdoor dining.
- B. Outdoor Dining – General: Outdoor dining is permitted immediately adjacent to the principal use, subject to review by the Planning Board, or by the Planning Division at the discretion of the Planning Director, and the following conditions
 1. All outdoor activity must cease at the close of business or as noted in subsection 2 below.
 2. When an outdoor dining patio is immediately adjacent to any single-family or multiple-family zoned residential district, all outdoor activity must cease at the close of business or 10:00 p.m., whichever is earlier.
 3. The review of outdoor dining patios shall include, but are not limited to, the following elements: tables, chairs, umbrellas, portable heating elements, barriers, service stations, landscaping/plantings, awnings, canopies, lighting, host/hostess stands, and entertainment.
 4. Outdoor dining patios may be permitted to extend ~~in the right-of-way~~ in front of neighboring properties or tenant spaces with the written permission of the property owners(s) affected and with Planning Board approval.
 5. Outdoor dining may be permitted on public property throughout the year with a valid Outdoor Dining License, provided that the following conditions are met:
 - i. Approval of an Outdoor Dining License shall be contingent on compliance with all city codes, including any conditions required by the Planning Board in conjunction with Site Plan approval.
 - ii. Operators of outdoor dining patios shall be responsible for snow and ice removal, and shall remove snow and ice in a manner consistent with that of the Department of Public Services.
 - iii. **All outdoor dining patio elements such as railings, planters**, tables, chairs, heaters, ~~and~~ umbrellas, **and the like** must be stored indoors each night between January 1 and March 31 to allow for complete snow and ice removal.
 - iv. Outdoor dining patios located in an alley or passage that contains vehicular traffic are permitted April 1 through December 31 only.
 - v. An ADA compliant platform may be erected in the on-street parking space(s) in front of an eating establishment to create an outdoor dining patio from April 1 through December 31, subject to an additional review by the Advisory Parking Committee.

6. All outdoor patios shall be designed to meet the requirements of this section, as well as all applicable building and fire codes.
- C. Outdoor Dining – Design: All outdoor dining patios are subject to the following design standards:
1. All tables and chairs provided in the outdoor dining patio shall be constructed primarily of metal, wood, or a material of comparable quality as determined by the Planning Board.
 2. Outdoor dining patios shall provide and service refuse containers within the outdoor dining patio and maintain the area in good order. Public trash receptacles are not permitted to be utilized by outdoor dining facilities.
 - ~~3. All outdoor dining elements shall be contained within the defined outdoor dining patio space.~~
 4. Outdoor dining patios shall not contain enclosures as defined in Article 9, Section 9.02 of the Zoning Ordinance.
 5. In order to safeguard the flow of pedestrians on the public sidewalk, such uses shall maintain an unobstructed sidewalk width as required by the Planning Board, but in no case less than ~~6~~ **5** ft.
 6. No such facility shall erect or install permanent fixtures in the public right-of-way.
 7. Table umbrellas or other overhead weather protection shall not (1) impede sight lines into a retail establishment, (2) obstruct pedestrian flow in the outdoor dining area, (3) obstruct pedestrian or vehicular traffic flow outside the outdoor dining area, or (4) contain signage or advertising.
 8. Barriers defining outdoor patios shall be constructed of a quality and durable material, and shall be maintained and placed in a consistent and organized fashion. ~~Barriers shall be secured to the ground and/or building to maintain an immovable, clearly defined patio space.~~ Barriers may not exceed 42 inches in height ~~with the exception of planting material, or~~ **except** as permitted in subsection 9 below.
 9. Windbreaks are permitted within outdoor dining patios and shall be affixed to a barrier. The total combined height of a barrier and windbreak shall not exceed 60 inches. Windbreaks must be constructed of a clear, **rigid** and durable material. **Eisenglass and vinyl materials are prohibited.**
 10. Portable heating elements must be maintained and kept in an orderly fashion. Propane or other fuels may not be stored on public property, and are subject to the Storage and Display Standards outlined in Article 4, Section 4.67 of the Zoning Ordinance.
 11. Ancillary elements ~~such as~~ **including, but not limited to, trash receptacles,** service stations or host/hostess stands must be located within the approved outdoor dining patio, contained, and kept in a neat and orderly fashion. Service stations and host/hostess stands may not exceed 4 feet in height. The storage of dirty dishware is prohibited.

Article 3, Section 3.04 – Specific Standards (Downtown Overlay District)

- C. Building Use: Buildings shall accommodate the following range of uses for the various designations on the Regulating Plan of the Downtown Birmingham Overlay District:
1. ...

2. ...
3. ...
4. ...
5. ...
6. ...
7. ...
8. ...
9. ...

10. Bistros are permitted with a valid Special Land Use Permit with the following conditions:

- a. No direct connect additional bar permit is allowed and the maximum seating at a bar cannot exceed 10 seats;
- b. Alcohol is served only to seated patrons, except those standing in a defined bar area;
- c. No dance area is provided;
- d. Only low key entertainment is permitted;
- e. Bistros must have tables located in the storefront space lining any street, or pedestrian passage. **If the storefront area is not feasible for outdoor dining, alternative outdoor dining patio placement may be considered by the Planning Board;**
- f. All outdoor dining patios are subject to the requirements located in Article 4, Section 4.44 of this Ordinance;**
- g. A minimum of 70% glazing must be provided along building facades facing a street or pedestrian passage between 1 foot and 8 feet in height;
- h. All bistro owners must execute a contract with the City outlining the details of the operation of the bistro; and
- ~~i. Outdoor dining must be provided, weather permitting, along an adjacent street or passage during the months of May through October each year. Outdoor dining is not permitted past 12:00 a.m. If there is not sufficient space to permit such dining on the sidewalk adjacent to the bistro, an elevated, ADA compliant, defined platform must be erected on the street adjacent to the bistro to create an outdoor dining area if the Engineering Department determines there is sufficient space available for this purpose given parking and traffic conditions.~~
- ~~j. Enclosures facilitating year round dining outdoors are not permitted.~~
- ~~k. Railings, planters or similar barriers defining outdoor dining platforms may not exceed 42" in height.~~
- ~~l. Outdoor rooftop dining is permitted with the conditions that surrounding properties are not impacted in a negative manner and adequate street level dining is provided as determined by the Planning Board and City Commission. Rooftop dining seats will count towards the total number of permissible outdoor dining seats.~~

Article 3, Section 3.16 – Specific Standards (Via Activation Overlay District

- A. Permitted and Prohibited Uses: To enhance the amenity and character of vias, **and** to enhance visual interest and encourage surveillance of urban spaces, active uses should be provided at the ground floor level along the majority of the edges of buildings located

adjacent to vias. While buildings should accommodate these uses, care must be taken to avoid conflict with pedestrian movement in the via. To specifically encourage the activation of vias, the following uses are permitted within Active, Connecting, and Destination Vias:

1. Retail sales and display;
2. Public plazas and informal gathering spaces;
3. **Outdoor Dining;**
4. Art display; and
5. Community Gardens.

In addition, the following ~~uses are~~ **use is** also permitted within Connecting and Destination Vias:

1. ~~Outdoor dining; and~~
2. Special Events.

The following are specifically prohibited in all vias:

1. Automatic food and drink vending machines outdoors;
2. Drive-in facilities or any commercial use that encourages patrons to remain in their automobiles while receiving goods or services;
3. Unscreened trash receptacles; and
4. Unscreened outdoor storage.

B. ...

C. ...

Article 9, Section 9.02 – Definitions

Enclosure (outdoor dining): ~~An area that may or may not contain a roof or any~~ A wall, panel, or **other** material **that extends above 60 in. in height which** provides **extended** relief from weather, and impedes physical and/or visual access to the space. For the purposes of this definition, enclosure does not include exterior building walls, ~~windbreaks or landscaping.~~

~~**Outdoor Café:** An outdoor area accessory to an existing restaurant operation designated for consumption of food prepared within the restaurant and subject to the provisions of this ordinance.~~

Outdoor Dining Patio: A defined outdoor area accessory to an existing food and drink establishment designated for consumption of food and/or drink prepared within the establishment and subject to the provisions of this ordinance.

Permanent Fixture (outdoor dining): Any element within an outdoor dining patio containing a foundation or other rigid attachment that prevents removal or that which requires extensive modifications to the public right-of-way.

**Planning Board & City Commission
Meeting Minutes**
(Chronological Order)

Commissioner Sherman stated that this was a very routine item and accordingly moved the suggested resolution.

MOTION: Motion by Commissioner Sherman, seconded by Commissioner Host:
To approve the cost sharing agreement with the Road Commission for Oakland County, agreeing to pay the City of Birmingham's share of the cost to replace the traffic signal at the intersection of Coolidge Highway and Maple Road, at a cost not to exceed \$75,000, to be charged to account number 202-303.001-971.0100. Also, to authorize the Mayor to sign the agreement on behalf of the City.

In reply to a question from Commissioner Nickita, CCE Surhigh stated that the RCOC will commence the intersection upgrade designs pending the approval of this motion by the City Commission. He stated that Birmingham has been invited by the RCOC to provide input on the design.

Commissioner Nickita said this is one of the most dangerous intersections for pedestrians in Birmingham. He said that two matters of high priority for the intersection must be the addition of continental pattern crosswalks to the south and east sides, and the addition of pedestrian signals that actually function as the current ones seem never to change from 'Don't Walk'.

ROLL CALL VOTE: Ayes, Commissioner Sherman
Commissioner Host
Commissioner Nickita
Commissioner Hoff
Mayor Boutros
Mayor Pro-Tem Longe

Nays, None

12-267-20 Request for Planning Board Review of Proposed Ordinance Amendments

Planning Director Ecker presented the item.

Some Commissioners wanted the Planning Board's review to take into account findings of what worked or what did not work over the winter of '20-'21, while other Commissioners wanted the review done more expeditiously so restaurant owners could know which purchases for outdoor dining could be used during both winter '20-'21 and winter '21-'22. After discussion there was a general understanding among the Commissioners that even if this review were requested now the Planning Board's findings would not likely be available until late spring 2021 at the earliest, which meant that the circumstances of winter '20-'21 could be factored into the review but that by necessity restaurant owners would not be able to use the findings to guide their purchases for outdoor dining for the '20-'21 season.

Commissioners asked that the Planning Board consider the following topics during their review, including that:

- The outdoor dining structures should be taken down in the summer;
- The approvals of outdoor seating should be considered vis-a-vis the type of license already held by the restaurant (bistro, Class C, etc.);
- The size of the tents should be maximized where possible since the sizes of the aisles inside the tents are dictated by building code;
- Issues that have already arisen with outdoor dining during the winter of '20-'21 should be discussed; and,
- The differences between outdoor dining that would be on public or private property, offer alcohol or not, or other potential variations should be addressed.

MOTION: Motion by Commissioner Hoff, seconded by Commissioner Sherman:
To direct the proposed ordinance amendments Chapter 126, Zoning, Article 4, Section 4.44 to the Planning Board for their review and recommendation.

ROLL CALL VOTE: Ayes, Commissioner Hoff
Commissioner Sherman
Commissioner Nickita
Commissioner Host
Mayor Boutros
Mayor Pro-Tem Longe

Nays, None

□

**Birmingham City Commission /
Planning Board Workshop Session
Monday, June 21, 2021**

7:30 p.m.

Virtual Meeting via ZOOM

Vimeo Link: <https://vimeo.com/event/3470/videos/563053049/>

I. CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Mayor Pierre Boutros called the meeting to order at 7:30 p.m.

II. ROLL CALL

Commission

ROLL CALL:

Present:

Mayor Boutros
Mayor Pro Tem Longe
Commissioner Baller
Commissioner Host
Commissioner Hoff
Commissioner Nickita
Commissioner Sherman

All located in Birmingham, MI.

Planning Board

ROLL CALL:

Present:

Chair Scott Clein
Robin Boyle
Stuart Jeffares
Bert Koseck
Daniel Share
Janelle Whipple-Boyce
J. Bryan Williams
Jason Emerine, alternate

All located in Birmingham, MI.

Absent:

Nasseem Ramin, alternate
Daniel Murphy, student
Jane Wineman, student

Administration: City Clerk Bingham, Planning Director Ecker, Building Official Johnson, City Attorney Kucharek, City Manager Markus

III. ITEMS FOR DISCUSSION

Mayor Boutros explained the purpose of the joint workshop session and the meeting procedures that would be followed.

A. **Outdoor Dining Discussion**

PD Ecker introduced the item.

Chair Klein said it would be most helpful to know whether the Commission wanted the Planning Board to conduct a broad review of the outdoor dining ordinances or whether the Commission wanted the Board to focus on discussion enclosures.

Discussion generated a number of items for the Board to consider, including:

- What issues City departments encountered while the temporary outdoor dining standards were in place;
- Whether encroachment upon neighbors' properties might be permissible with the consent of the neighbors;
- How to ensure that potential year-round outdoor dining does not become de facto indoor dining;
- How to deal with matters of capacity, sidewalk clearance, ADA compliance, excessive uses of public space including public parking, summer versus winter regulations, public versus private regulations;
- How other municipalities, nationally and internationally, address outdoor dining;
- How expanded outdoor dining would impact the City's various mixed-use districts;
- How to make sure that the ordinance is enforceable;
- How to approach differences between bistro, Class C, economic development licenses, theater/hotel/onsite brewing, and non-alcoholic outdoor dining;
- Whether platforms are consistently necessary for outdoor dining;
- How to deal with snow and street sweeping;
- Whether minimizing covered space in the public right-of-way would be appropriate;
- How to ensure that outdoor dining is held to similarly consistent and high standards as buildings are in Birmingham;
- Whether all outdoor dining structures have to have roofs or walls year-round; and,
- How climate control might be used to mitigate colder weather without requiring complete enclosures.

The consensus was that the Board should review the outdoor dining ordinance overall and that their focus should not be limited to enclosures.

Public Comment

Blake George, restaurant owner, stated that the popularity of outdoor dining in the last year was often due to indoor dining being unavailable. He said it would be harder to persuade diners to dine outside in the colder months without a roof or partial protection from the wind. He stated that changing restrictions are hard on the restaurant owners and employees. He asked the Commission and Board to note that one size would not fit all in making these regulations, since restaurants operate in a variety of circumstances.

Joe Bongiovanni, restaurant owner, asked the Commission to consider maintaining the current temporary outdoor dining standards. He said the discussion was an encouraging one, and said that Summer 2020, despite the many difficulties, was the best summer for outdoor dining in the City thus far.

B. Parking Standards Discussion

06-087-21

G. Miscellaneous Business and Communications

a. Communications - Live meetings starting in July 2021

b. Administrative Approval Correspondence

PD Ecker notified the Board that the HDC requested changes to Bloom Bistro's plans. She asked whether the Board wanted to review the updated plans once available.

After brief Board discussion, it was decided that the Planning Board would only review the project again if the updated plans included changes to the site plan.

c. Draft Agenda for next meeting

d. Other Business

Chair Clein summarized his understanding of the directives from the Commission regarding outdoor dining and parking standards.

The Board agreed that the goals of the outdoor dining review would be to:

- Incentivize outdoor off-season dining;
- Review the placement of decks and enclosures;
- Ensure that additional outdoor off-season dining does not become an extension of the indoor space;
- Solicit feedback from restauranteurs of all types in the City;
- Seek possible ideas from local, national and international examples;
- Review the current ordinance for issues;
- Review tickets that were given out to temporary outdoor dining operations;
- Review photos of the variety of temporary outdoor dining structures that were used around the City;
- Explore options for maintaining permanent aspects of outdoor dining structures even if the parts of the structures come down in different seasons;
- Discuss potential differences in policy for outdoor dining on public versus private property;
- Solicit feedback from Public Services and the BSD;
- Review agreements from temporary outdoor dining to see if any of the temporary policies might be worth integrating;
- Consider aspects like sidewalk widths and snow clearing in writing the policy;
- Maintain the current seating allowances for differently-sized establishments and maintain the differences for establishments holding different kinds of licenses for alcoholic beverage service; and,
- Recommend a permanent solution so that restauranteurs do not have to continue to adapt to changing policies.

Public Comment

Joe Bongiovanni expressed optimism about the upcoming review of outdoor dining and said he looked forward to participating in the discussions. He said that in terms of his restaurants, Market North End and Luxe might both be good case studies in that the outdoor dining at Luxe might be appropriate for longer-term whereas the outdoor dining at Market North End would be less so.

In terms of timing, the Board concurred that outdoor dining would be the second priority after the master plan second draft and that study sessions in July and August would focus on outdoor dining. The aim would be to have new ordinances in place for the 2021-2022 fall/winter dining season.

The Board agreed that the goals of the parking standards review would be to determine whether the City's current zoning requires too many spaces for certain types of uses or in certain contexts. They agreed that they would compare Birmingham's standards to other municipalities to see how those issues are addressed elsewhere.

Mr. Boyle recommended the City consider hiring a consultant to help guide the review of the parking standards, stating that it is an enormous and serious topic that should not be addressed on the fly.

Chair Clein said the Board could start to get a broad idea of the topic, and could concurrently discuss with PD Ecker and CM Markus whether there is a need, willingness, or budget to bring on a consultant to guide the process.

Mr. Williams asked Chair Clein to communicate the Board's understanding of these two charges to make sure there are no misunderstandings from the outset.

Mr. Share stated that the parking issue would be best guided by the master plan, and recommended that the Board's studies of the issue do not get excessively in-depth until the master plan's recommendations on parking are more clear.

Mr. Boyle concurred with Mr. Share and suggested that parking could be discussed as part of the review of the second master plan draft.

The Board concurred that this would be the third priority on their action list.

Chair Clein said that the Board and Staff should begin familiarizing themselves with the factors that go into devising parking standards as preparation for the Board's review of the subject.

Public Comment

Mr. Bloom said that parking is the largest issue facing Birmingham aside from unimproved streets and encouraged the Board to face the task of reviewing parking standards accordingly.

06-088-21

H. Planning Division Action Items

a. Staff Report on Previous Requests

b. Additional Items from tonight's meeting

It was discussed that the ordinance should require the signs to be “visible from a public right-of-way” to clarify where the signs should be located.

Mr. Koseck recommended getting rid of the tree and boulevard graphics on the signs.

Staff said they would update the recommended language for Article 7, Section 7.29 to clarify that this ordinance only applies to Historic District Commission reviews of non-historic buildings in historic districts.

Motion by Mr. Williams

Seconded by Mr. Boyle to schedule a public hearing for the amendment of Article 7, Section 7.29 and Article 7, Section 7.01(b), to August 11, 2021 with changes as noted.

Mr. Jeffares said that while he respected his colleagues’ perspectives he would be voting no on principle.

Motion carried, 6-1.

VOICE VOTE

Yeas: Boyle, Ramin, Koseck, Clein, Williams, Emerine

Nays: Jeffares

CP Dupuis said this would be an excellent Engage Birmingham topic to explore how much detail residents wants to see on the signs.

2. Outdoor Dining

CP Dupuis presented the item.

Mr. Boyle noted that many examples of the outdoor dining he was seeing occur on private property, and that Birmingham is considering how to deal with outdoor dining on public property. He noted there are key differences in those considerations. He stated that when outdoor dining occurs on public property in Europe it often is on very wide sidewalks or in squares adjacent to the cafes.

Mr. Jeffares noted that Birmingham’s sidewalks keep getting wider. He said outdoor dining in Europe would not be a perfect match to Birmingham but that there would still be things to learn from those examples.

Chair Clein told CP Dupuis that he appreciated the high level start to the discussion.

Board members listed aspects of outdoor dining that would need discussion and/or further research in order to make ordinance recommendations. Those aspects included whether there should be a year-round set of standards, or two sets of standards for the warmer and colder months; how pop-ups and social districts might be related; what national downtown associations are discussing and recommending for outdoor dining; how winter resort towns like Aspen or Vail

handle cold-weather outdoor dining; creating some appearance standards for outdoor dining and related utilities; whether outdoor dining should be on both sides of a pedestrian path or in parking spaces; how the building, energy, and plumbing codes relate to outdoor dining; how outdoor dining relates to clear width of the streets, travelled ways, and shy distances; the differences between walls versus windbreaks, weather protection versus roofs, and temperature mitigation versus full climate control; the perspectives of City Departments; and, how to minimize potential conflict between restauranteurs and their retail neighbors.

CP Dupuis noted that the City had begun soliciting feedback from residents on the Covid-19 outdoor dining, and that the feedback regarding outdoor dining had been overwhelmingly positive. He said some of that information could be relevant to these proceedings.

PD Ecker encouraged residents to visit Engage Birmingham on the City's website in order to provide their feedback.

Public Comment

Joe Bongiovanni of Market North End said that a detached deck in wintertime may not have a lot of value to restauranteurs. He said that one of the main questions seemed to be whether the City would continue to give up parking spaces for dining decks. He recommended that outdoor service remain close to the entrance/exit of a restaurant.

Chair Clein thanked Mr. Bongiovanni and asked him to stay involved in the ongoing outdoor dining discussions.

PD Ecker said that Staff would bring the item back to the Board in parts in order to maintain momentum on the issue.

07-096-21

G. Miscellaneous Business and Communications

- a. Communications**
- b. Administrative Approval Correspondence**
- c. Draft Agenda for next meeting**
- d. Other Business**

The possibility of scheduling a second Board meeting for September 2021 was briefly discussed.

07-097-21

H. Planning Division Action Items

- a. Staff Report on Previous Requests**
- b. Additional Items from tonight's meeting**

07-098-21

I. Adjournment

ROLL CALL VOTE

Yeas: Share, Williams, Boyle, Koseck, Jeffares, Clein, Whipple-Boyce

Nays: None

Motion by Mr. Share

Seconded by Mr. Williams to recommend approval based on a review of the site plans submitted of the Final Site Plan and Design Review to the City Commission with the following conditions: 1. The applicant will be required to reduce the length of the platform to be less than the storefront width to retain two unobstructed on street parking spaces between the platform and the corner to the south; 2. Obtain a favorable recommendation from the Advisory Parking Committee prior to City Commission review; 3. The Commission consider a sunset date with the possibility of amendment based on a change in ordinance, if it occurs, and on the advice of the City Attorney; 4. The applicant complies with the requirements of all departments; and, 5. The applicant submits an updated final site plan showing the reduced deck and clear relation to parking spaces on the site for administrative approval and submission to the Advisory Parking Committee.

Motion carried, 7-0.

VOICE VOTE

Yeas: Share, Williams, Boyle, Koseck, Jeffares, Clein, Whipple-Boyce

Nays: None

08-114-21

G. Study Session

1. Outdoor Dining

CP Cowan presented the item.

Discussion by the Board members noted:

- Keeping diners safe from traffic should be addressed;
- The reasons for seeking a change in the ordinances should be clarified;
- The difference between Class C and bistros should be preserved;
- The difference between wind breaks and walls should be clarified;
- The Board should review tickets issued under the Covid-19 expanded dining and photos of the outdoor dining during the same period;
- It would be most appropriate to design guidelines for a trial period since achieving a permanent solution during a shifting pandemic would be unlikely;
- Definitions should be provided for concepts such as enclosure, structure, roof and wall;
- Given the National Restaurant Association's focus on carryout more than outdoor dining, perhaps the APC or other City body should consider temporary parking zones on certain blocks to better facilitate carryout;
- DPS concerns would be included in the contracts on outdoor dining for restaurants but need not be part of the ordinance considerations;

- The desired relationship between the restrooms available and the number of exterior seats should be considered;
- The current ordinance should be evaluated for what should be changed or updated, and should be considered in terms of whether it should apply for eight months or year-round;
- Input from the restaurateurs and the BSD should be provided to the Board;
- The travel way, impacts on road, and pedestrian way are likely to be more code than ordinance issues;
- The permissions granted for outdoor dining might appropriately vary from zone to zone in the City.

2. Wall Art

CP Cowan presented the item.

It was clarified that:

- Maintenance issues with wall art would be a code issue;
- 'Content' is not something that can be regulated, but 'non-commercial', 'aesthetically appropriate' or 'compatible with the area' could work;
- It would be useful to have a brief statement in Article 7, Section 7.41 about the benefit and value of wall art;
- The intent of the word 'facing' should be made more clear in the proposed amendment to Article 9 - Definitions To Define Wall Art And Determine Permitted Locations For Wall Art;
- Wall art approval would be a standalone process and not subject to site plan approval, though site plan approval would be granted at the Planning Board contingent on the wall art's approval by the appropriate boards; and,
- This ordinance amendment does not intend to allow a new building to create a blank wall in excess of 20 feet with the intent of installing wall art; it intends to allow already-existing blank walls that qualify according to the ordinance amendments to consider installing wall art.

Mr. Share noted that often wall art in other cities is not painted directly on buildings, but on canvas-type features.

Staff said they would make the recommended revisions and return with the item.

08-115-21

H. Miscellaneous Business and Communications

a. Communications

ACM Ecker introduced a pre-application discussion request from the owner for 220 Park.

Chris Longe, architect, and Jeff Hutchinson, owner, were present on behalf of the potential application and walked through the proposal to convert an existing office building into a residential building.

Seconded by Mr. Jeffares to approve the Preliminary Site Plan for 325 S. Eton Street with the following conditions:

- 1. The applicant provide a public access easement to the City to accommodate the required space to install required street trees and street lights in a manner consistent with the Eton Street Corridor and to maintain a 5 foot public sidewalk;**
- 2. The applicant provide plans indicating one Rail District City standard street lamp and one street tree for every 40 feet of frontage for Final Site Plan Review;**
- 3. The applicant provide plan indicating additional public amenities along S. Eton Street including Rail District standard benches, bike, racks, and refuse containers for Final Site Plan and Design Review;**
- 4. The applicant apply for a Special Land Use Permit to have greater than 6,000 square feet of commercial space on the first floor in the MX zone;**
- 5. The applicant apply for design review by the Historic District Committee;**
- 6. The applicant provide a first floor ceiling height of 12 feet for the 1st floor in the MX zone;**
- 7. The applicant label materials and dimensions for the dumpster screen wall and gate for FSP review to verify all dumpster screening requirements are met;**
- 8. The applicant properly screen the ground level transformers with landscaping 5' in height; and,**
- 9. Provide all specification sheets including but not limited to building materials, screening materials, signage, streetscape items, glass, light fixtures, mechanical units and landscaping be included for Final Site Plan and Design Review.**

Motion carried, 7-0.

VOICE VOTE

Yeas: Williams, Jeffares, Clein, Whipple-Boyce, Koseck, Share, Ramin

Nays: None

09-135-21

H. Study Session Items

1. Outdoor Dining

CP Dupuis reviewed the item.

Topics raised for further consideration included:

- Whether to allow full, partial, or no walls;
- If allowing walls, what height, transparency, and materials should be permitted;
- Whether to allow overhead coverings or just umbrellas;
- How to distinguish between wind breaks and walls;
- How to define enclosures, roofs, and sides;
- Whether to have different allowances for MX areas and the central business district;

- Whether to have different allowances for public and private properties, and what to do if a business has outdoor dining that uses both;
- Changing 'improving' public health to 'protecting' public health;
- Whether to require some kind of barrier to protect the required five-foot clear path for pedestrians;
- How to make outdoor dining operations both more standardized and more efficient, with ideas including: tables with heating elements below the table tops, standardizing the permitted heating elements, having a layout with a shared fire and tables around the fire -- if safe, whether the BSD might look into hiring one unified contractor to replace and refill propane tanks, and how the heated sheds in Northville, MI could provide a model for standardization;
- Whether to create a bit more flexibility in allowing outdoor dining in front of neighboring businesses with consent;
- Whether artificial turf or plants should be permitted;
- Whether there should be some reference in the Intent to how outdoor dining at restaurants can allow people to be together in a pandemic when other options may be less safe or available;
- How the requirements of the plumbing code are enforced for outdoor dining without decks;
- Whether natural gas or electricity might be more appropriate than propane tanks for helping to provide heat;
- What specifications should be made for allowed materials;
- How to replace 'restaurants' with a broader word that encompasses other establishments like cafes or ice cream shops;
- How to specify that part of the goal is to protect the public use of public property; and,
- Whether an establishment should be permitted to have outdoor dining on both a sidewalk and a deck.

CP Dupuis stated that the BSD was working on developing comments for the discussion, and hoped to have them ready by October.

Ms. Whipple-Boyce asked that departments elaborate their reasons when making recommendations that are not part of the legal requirements.

Chair Clein thanked the APC for their feedback and said he wanted to make sure they remained involved in the process. He said he was a little concerned about how the City would limit the number of decks per block, and whether outdoor dining should be permitted on a first-come, first-serve basis, but said that otherwise he agreed with the bulk of the APC's comments.

There was Board consensus that the City should require outdoor dining plans to be professionally done.

09-136-21

I. Miscellaneous Business and Communications
a. Communications

SP Cowan presented the item.

Ms. Whipple-Boyce and ACM Ecker recommended that 'of the proposed location' be struck from the last line of 7.41 Wall Art Review: Purpose.

SP Cowan and ACM Ecker confirmed for Mr. Share that wall art would not be permitted on rear walls facing single family residential areas.

SP Cowan reviewed the different proposed review processes for a development with wall art, just wall art with a proposed location, and just wall art without a proposed location.

Motion by Mr. Share

Seconded by Ms. Whipple-Boyce to set a public hearing to consider amendments to Article 7, Section 7.41 to 7.46 and companion sections of Article 9 of the Zoning Ordinance on October 27, 2021.

Motion carried, 6-0.

VOICE VOTE

Yeas: Share, Whipple-Boyce, Emerine, Williams, Jeffares, Boyle

Nays: None

2. Outdoor Dining

PD Dupuis reviewed the item.

After discussion and with the exception of Ms. Whipple-Boyce, the Board concurred that wind breaks should be permitted on up to three sides with clear glass above 42 inches and a maximum height of 60 inches.

Mr. Jeffares suggested that umbrellas could be permitted in the summer and retractable awnings might be an all-season option. He noted that the awnings would have to be retracted every night.

ACM Ecker noted that the awnings would have to be higher than eight feet off the ground.

Mr. Share and Ms. Whipple-Boyce expressed concern that restaurant awnings that cover the entire sidewalk can deter pedestrians from using the sidewalk.

It was suggested that perhaps awnings could come out partially into the sidewalk and the rest would have to be covered by umbrellas.

Ms. Whipple-Boyce said she wanted to see more information about retractable awning options.

The Board said they would not likely limit the color options for retractable awnings.

It was noted that the Board still needed to hear preferences and concerns from both restaurateurs and retailers.

Mr. Share and Vice-Chair Williams said coverings for outdoor dining should not be required to handle snow loads.

There was general Board consensus that coverings would only need to protect from sun, rain, and possibly light snow.

Ms. Whipple-Boyce recommended the City look into sail shades that would protect against light inclement weather and sun. She said that could also help standardize some of the outdoor dining aesthetic.

In regards to retractable awnings, PD Dupuis noted as a point of consideration that the City recently revised its ordinance regarding projections into the right-of-way. He also noted that some awnings would be required to have fire suppression systems depending on their size.

The matter of allowing igloos was raised but not decided.

SP Cowan said the Board would also need to figure how to clearly define a 'side' in the ordinance in regards to windbreaks.

Public Comment

Mitch Black, owner of Dick O'Dow's, said he would support outdoor dining that was more open than many of the prior temporary outdoor dining structures. He said that enclosed outdoor dining in the winter can cause bistros to be more like Class C license holders. He said some standardization of outdoor dining aesthetics between establishments would be positive. He stated that those design and functional elements should not be cost prohibitive but should be high quality. He said a retractable awning was likely preferable to umbrellas, but that many operators may not be able to afford the cost.

09-148-21

J. Miscellaneous Business and Communications

a. Communications

b. Administrative Approval Correspondence

PD Dupuis presented a request from Dick O'Dow's to receive a waiver of the glazing requirement.

After brief discussion, the Board concurred that a waiver was reasonable.

Motion by Mr. Share

Seconded by Mr. Emerine to grant a waiver to 160 W Maple Rd - Dick O'Dow's - under Section 4.90(e) of the Zoning Ordinance to reduce their glazing percentage within the first eight feet from 70% to 52%.

Motion carried, 6-0.

appropriate on Mondays when brick-and-mortar restaurants are often closed. He also said he would not view them as encroaching into the neighborhoods.

A Birmingham resident stated he and his wife were food truck operators and could provide insight into what would be required to make Birmingham attractive for food truck operators.

Mayor Boutros recommended the aforementioned member of the public reach out to PD Dupuis to further discuss his experiences operating a food truck.

B. Outdoor Dining

PD Dupuis introduced the item.

There was general consensus that full enclosures should not be permitted as part of an expansion of the outdoor dining standards.

Commissioner Nickita said he was in favor of finding ways to activate the streets in winter. He noted that there are occasionally warmer days in winter where dining outside would be pleasant.

Mr. Koseck said architectural standards and codes' impact on outdoor dining would require further study.

Commissioner Nickita recommended exploring how other local municipalities have interpreted and enforced building, plumbing, fire or other codes for winter outdoor dining. He stated that guardrails much shorter than 42 inches might suffice and asked the Planning Board to look into it further.

Mayor Pro Tem Longe, Commissioner Nickita and Mr. Jeffares concurred that snow clearing or similar needs could be figured out and should not be treated as an impediment to winter outdoor dining.

The Mayor Pro Tem said that restaurant staff might be willing to help clear the street in front of their restaurants.

Commissioner Baller stated that it was not the City's responsibility to legislate to protect certain kinds of dining establishments. He noted outdoor dining's overwhelming popularity per the Engage Birmingham survey and said it likely did not matter to residents whether a particular establishment was a bistro or Class C license holder. He said it was worth considering relaxing the bistro outdoor dining standards for the winter months since people are in favor of being able to dine outside.

Mr. Jeffares said he was not overly concerned with maintaining the distinction between Class C and bistro outdoor dining since colder temperatures would cause outdoor dining to be self-limiting regardless. He said if outdoor dining decks were not being used by an establishment during the winter they should be taken inside.

Mayor Pro Tem Longe and Mr. Boyle also both noted the overwhelming popularity of outdoor dining according to the Engage Birmingham survey and said it was the City's responsibility to

figure out how to deliver that option to residents. They both noted the importance of being responsive to feedback received.

Mr. Jeffares and Mayor Pro Tem Longe said the City needed to determine what it would do on November 15, 2021 while the study of outdoor dining standards was still on-going.

Mayor Boutros said it would be important to determine whether there is demand for winter outdoor dining from restaurateurs, especially in light of current staffing difficulties in the service industry.

Chair Clein noted that the Planning Board would not make changes to the distinction between bistro and Class C licenses since that falls under the Commission's purview. Consequently, he said the Planning Board was focusing on keeping them distinct while trying to determine what outdoor dining allowances would be appropriate. He stated that the decision about what to do for Winter 2021-2022 was a Commission one since the Planning Board would not have its ordinance recommendations ready by then.

Commissioner Baller said the Commission should discuss the matter of outdoor dining during Winter 2021-2022 during its next two meetings.

Commissioner Sherman said there could be temporary regulations for Winter 2021-2022.

Allowing decks to remain and allowing wind breaks were mentioned as possibilities for Winter 2021-2022.

Commissioner Hoff observed that dining establishments already had an option in the City for offseason outdoor dining and suggested that no changes be made for Winter 2021-2022. She said that perhaps the City could not charge for offseason licenses during this season only as a compromise.

CM Markus stated that the Birmingham Shopping District was in the process of collecting feedback from its members regarding the potential expansion of the outdoor dining standards.

Commissioner Baller said he did not want to see the outdoor dining standards stem the creativity of the restaurateurs too much.

Mr. Williams, Chair Clein, Mr. Jeffares spoke in favor of having some sort of trial period once the ordinance recommendations are determined. Mr. Jeffares specified that they would have to make clear to the restaurateurs that it would be a trial period.

CM Markus expressed concerns about the management and enforcement that will be required of Staff for trial periods.

Commissioner Baller said the City would have to ensure that the costs to the City are outweighed by the benefits.

Mr. Share said the Planning Board was not looking to guarantee all-weather dining.

Mr. Share, CM Markus and Commissioner Hoff all commented on the importance of preventing outdoor dining from encroaching beyond its permitted areas.

Public Comment

Anthony Long said residents would need to know what outdoor dining might look like to provide relevant feedback. He recommended posting another survey to Engage Birmingham with descriptions. He also concurred with prior comments that the restaurateurs' interest in having outdoor dining needs to be ascertained. Mr. Long also recommended extending outdoor dining through the winter since Covid-19 remains an issue, and then soliciting further feedback from the public and restaurateurs then.

Mr. Bloom said it would be positive if the Planning Board could recommend temporary standards for Winter 2021-2022. He said the City should also consider two sets of outdoor dining standards: one for normal circumstances and one for ongoing Covid-19 issues.

C. 2040 Master Plan Update

PD Dupuis introduced the item.

Chair Clein, Mr. Williams and Commissioner Baller all noted that the Planning Board was presently working with the second draft of the master plan, and not with a finalized document.

Commissioner Nickita said the Planning Board should pay specific attention to what changed between the first and second drafts.

PD Dupuis confirmed that would be the case.

Commissioner Baller said more attention should be paid to the presentation of the Master Plan, including keeping maps on one page and with legible street names. He said the presentation should make it easy for residents to review.

In reply to Mr. Share, PD Dupuis said that in addition to speaking at Planning Board meetings members of the public could submit feedback on the Master Plan directly to staff or at thebirminghamplan.com.

Mr. Williams encouraged the public to attend Planning Board meetings and submit feedback. He said there were likely to be a number more changes before review of the second draft is completed.

Mr. Boyle noted Commissioners Nickita, Sherman and Hoff were stepping down in November and acknowledged them for their contributions to the City.

Public Comment

Mr. Bloom said he would like to see redline maps to see what how the maps changed from draft one to draft two. He expressed concern about some of the draft's recommendations and said he wanted to make sure they would all be thoroughly vetted. He said he also wanted to ensure that residents' concerns about the draft would be taken into account.

Yeas: Share, Williams, Jeffares, Whipple-Boyce, Boyle, Clein, Koseck
Nays: None

2. Outdoor Dining

PD Dupuis presented the item.

FC Wells described aspects of the Fire Code relevant to outdoor dining.

Chair Clein summarized that there seemed to be Board, Commission and public consensus that the on-/off-season distinction for outdoor dining should be eliminated, thus allowing those permitted for outdoor dining to maintain it year-round.

Ms. Whipple-Boyce and Messrs. Jeffares, Boyle, and Share were in favor of prohibiting dining decks for some period during January, February, and March, and allowing them all other times.

Mr. Jeffares said restaurants that only had an option for dining decks for outdoor dining could potentially pursue a variance in that case.

Mr. Koseck said he would also be concerned about the damage that could potentially be done to the decks by snow plows in winter.

PD Dupuis noted that decks could be required to be slimmer in order to be less effected by snow plows. He also noted the Board would have to clarify whether the Board was discussing all decks or only decks in the street.

Chair Clein and Mr. Williams were initially not in favor of restricting the use of decks during the winter. Chair Clein noted that decks were popular with both the Commission and the public, and cautioned that restricting their use might not be what the Commission wanted.

There was discussion that the decks would likely be underused in the coldest parts of winter and would lead to deactivation of the streets.

Chair Clein and Mr. Williams said they would be willing to consider a deck prohibition that starts on January 1, with an end date in February or March to be determined.

Mr. Williams said the requirements of fire suppression might affect where establishments are able to locate their outdoor dining.

Mr. Koseck said fire suppression would not likely overly affect establishments, saying that the requirements may be relatively simple in many cases.

Mr. Jeffares concurred, citing a conversation with a restaurant owner who retrofitted their outdoor dining area for fire suppression and said that it was simpler and less costly than anticipated.

Mr. Share noted the Board need not create an ordinance that allows every establishment to have outdoor dining year round. He suggested that the Board could recommend a trial without decks and then could add them the following year if they remained in demand.

Mr. Jeffares agreed with Mr. Share's recommendation of a trial.

It was confirmed that all decks would be evaluated according to building, plumbing, and other codes, including restroom-to-diner ratios.

Ms. Whipple-Boyce recommended that dining establishments be able to leave their furniture out overnight in winter. She also recommended that dining establishments be required to clear the snow from their frontage if they do leave their furniture out.

As for outdoor weather protection, Mr. Boyle said he most preferred large, relatively immovable umbrellas.

Mr. Jeffares and Ms. Whipple-Boyce said they liked the covering of the outdoor dining deck at Toast.

Mr. Jeffares said he also liked retractable awnings, with the caveat that it not encroach into the five-foot pedestrian clearance.

Ms. Whipple-Boyce said she liked immovable umbrellas, shade sails, and butterfly awnings. She said she wanted more information on the housing sizes for retractable awnings.

While there was Board unanimity that outdoor dining coverings should not encroach into the five-foot pedestrian clearance, there was also some discussion that on larger sidewalks the outdoor dining coverings could be larger than the projection ordinance currently allows.

Mr. Share recommended a minimum height be considered for outdoor dining coverings.

Chair Clein said he did not like retractable awnings and said he did like umbrellas and some other coverage options. He noted that if most outdoor dining ends up adjacent to the building for part of the winter then the current projection ordinance would not afford the dining area much protection from the elements.

PD Dupuis said he would return with photos of fire suppression at Bistro Joe's and Market North.

Chair Clein requested verification that the City Manager, Building Official and DPS want outdoor dining railings drilled into sidewalks. He also noted the importance of maintaining the five-foot pedestrian clear path for the benefit of pedestrians and those with disabilities. He noted that the Department of Justice had sent a letter to Birmingham and other communities about violations of the ADA stemming from outdoor dining platforms and encroachment into the five-foot pedestrian clear path by outdoor dining.

Board consensus remained on windbreaks, noting that they would have to maintain the five-foot pedestrian clear path, have a prescribed height, not attach to buildings, and be clear above 42 inches.

Ms. Whipple-Boyce said she had grown more accepting of windbreaks, saying she would be willing to evaluate proposals on a case-by-case basis.

Chair Clein said he would be willing to consider wind break proposals of up to four sides and 60 inches in height.

Ms. Whipple-Boyce concurred.

It was noted the Board still had to determine recommendations for wind break material.

The Board agreed to further discuss whether an establishment should be permitted outdoor dining in the street and adjacent to the restaurant at the same time.

PD Dupuis said he anticipated that the Birmingham Shopping District would be submitting their feedback to the Board in November.

Chair Clein said he thought the Board could have outdoor dining ordinance recommendations to the Commission in Quarter One of 2022.

In reply to the Commission request that the Board recommend options for outdoor dining during Winter 2021-2022, the Board suggested that outdoor dining be allowed to continue as-is beyond the November 15, 2021 date for this winter and that outdoor furniture be allowed to remain outside in the evenings. It was noted that this recommendation would be replaced by the finalized outdoor dining recommendations once they are completed.

The Board said they would hold a public hearing on the recommendation on November 10, 2021.

10-172-21

K. Miscellaneous Business and Communications

a. Communications

b. Administrative Approval Correspondence

PD Dupuis presented a request from Hearthside Condos on Southfield Road.

After discussion, the Board said they needed more information about potential drainage issues in the rear of the building to know whether the request could be administratively approved or should be submitted to the Board.

c. Draft Agenda for next meeting

d. Other Business

Mr. Williams said further exploration of zoning to allow main-floor additions, instead of vertical additions like ADUs, would likely be more beneficial in terms of keeping seniors in the community.

Ms. Whipple-Boyce said she was curious to learn more about ADUs and was glad they had not been eliminated entirely from the draft Plan. She said study of ADUs would be appropriate.

Chair Clein concurred with Ms. Whipple-Boyce, adding that he was not persuaded that denser areas were the appropriate trial locations for ADUs.

Chair Clein responded to Mr. Bertollini's comments. The Chair noted that sometimes broader Master Plan efforts supersede more local Master Plan efforts, as may be the case with the 2040 Plan and the Kenning Park Master Plan. Chair Clein acknowledged that can be disappointing when one has put effort into the more local Master Plan, but can also be necessary when trying to plan for a whole community. He concluded by stating that he did not believe the best use for the northeast corner of Eton and Lincoln was pickleball or tennis courts.

Chair Clein thanked all participants.

2. Outdoor Dining (End Date)

PD Dupuis and Chair Clein introduced the item.

There was no Board or public comment or inquiry.

Motion by Mr. Williams

Seconded by Mr. Boyle to recommend approval to the City Commission the ordinance amendments to Article 4, Section 4.44, Outdoor Dining Standards, to remove temporal restrictions on outdoor dining patios in the public right-of-way, and to allow outdoor dining fixtures and furnishings to stay outside overnight.

Motion carried, 7-0.

ROLL CALL VOTE

Yeas: Williams, Boyle, Koseck, Share, Whipple-Boyce, Clein, Jeffares

Nays: None

3. Outdoor Dining (Comprehensive)

PD Dupuis reviewed the item. He noted that an establishment's outdoor dining is restricted in most cases by ordinance to only being in front of said establishment's storefront.

Mr. Jeffares stated that while the resident survey on Engage Birmingham regarding outdoor dining had hundreds of respondents, he had heard from Birmingham Shopping District (BSD) members that very few business owners participated in writing the letter from the BSD to the Planning Board. He noted that page six of the BSD letter specified that the BSD received minimal feedback

from business owners. He recommended that the Board not give the letter from the BSD disproportionate weight given the rate of participation.

Chair Clein said Mr. Jeffares' point was fair and that the perspectives of the BSD members still needed to be taken into account as property and business owners in the City.

Motion by Mr. Williams

Seconded by Mr. Jeffares to receive and file an email from Joe Bongiovanni to PD Dupuis dated December 7, 2021.

Motion carried, 7-0.

VOICE VOTE

Yeas: Williams, Jeffares, Boyle, Koseck, Share, Whipple-Boyce, Clein

Nays: None

Chair Clein noted that the email was signed by both Joe and Kristen Bongiovanni. The Chair summarized that the Bongiovannis recommended outdoor dining be enclosed and heated during colder months, and that they stated the lean-to Luxe had would likely meet guest expectations while not meeting pedestrian expectations. The Bongiovannis also recommended retractable awnings that cover a wider width of the sidewalk and at a lower height to protect against inclement weather.

Mr. Williams stated the Bongiovannis' perspective was largely opposite of what was contained in the BSD's letter. Mr. Williams said it was unlikely that all stakeholders would reach an agreement about how to approach outdoor dining. Mr. Williams said he was not in favor of fully enclosed outdoor dining but remained in favor of being able to provide protection from inclement weather during months of the year when people may want to dine outdoors.

Mr. Koseck said he was comfortable either with maintaining the outdoor dining as it was prior to Covid-19 or bringing in professionals to study the options and make recommendations. He said that changing the outdoor dining standards was a complex enough undertaking that the City should have outside assistance.

Chair Clein said that if the Board were at more of an impasse he might agree with Mr. Koseck, but that there were already a number of points of agreement among the Board members. He cited the Commission's and Board's agreement that there should not be full enclosures as one example.

Chair Clein said the Board must first determine the purpose of expanding outdoor dining. He said that decision would then help guide the further recommendations the Board would make.

In reply to the Chair, Mr. Share ventured that not all days or times of day would be appropriate for outdoor dining. He stated that pedestrian access and other accessibility concerns should all be appropriately addressed. He said that the purpose of this study would be creating opportunities to seize the infrequent times between November and April when outdoor dining would be appropriate, and to preserve the look, feel and utility of the City. He said he would prefer to err

on the side of maintaining access over drastically increasing the number of days that outdoor dining would be feasible. He said those would be possible criteria for guiding the study.

In reply to the BSD letter, the Chair noted that hours of operation are a SLUP matter and not an outdoor dining one.

After Board discussion, Chair Clein summarized the matters to be decided regarding outdoor dining. Those matters included:

- Whether establishments with liquor licenses and establishments without liquor licenses should be handled differently;
- Whether there should be on-season and off-season dates for outdoor dining, and what should happen to furniture and other equipment on public property if there are different 'seasons';
- Whether establishments should be permitted outdoor dining on both a sidewalk and a deck if requested, and if not, what the City wants to incentivize instead;
- What types of coverings and equipment should be allowed, and how specific the standards should be in terms of material, location, and other considerations;
- Whether outdoor dining should be permitted to extend beyond the storefront of an establishment, and if so, what the limitations should be;
- Whether outdoor dining decks should be limited to a certain number per block; and,
- Whether outdoor dining in public space and outdoor dining in private space should be regulated differently.

Mr. Williams asked PD Dupuis to get a clear opinion from the BSD regarding whether the number of outdoor dining operations on a block should be limited and/or clustered in some way.

Mr. Boyle noted the City already has outdoor design standards that the Board can use to inform the discussion.

Chair Clein said it would be helpful for PD Dupuis to provide, if possible:

- A map with all non-liquor, bistro, and Class C establishments in the City;
- The number of parking spaces per street in the central business district; and,
- A compilation of all existing outdoor dining standards in the ordinance.

Mr. Jeffares asked PD Dupuis to seek clarification from the Fire Marshal about how an awning that is more than four feet wide and made of a non-combustible material would be handled.

Ms. Whipple-Boyce and Mr. Jeffares said it could be helpful to learn more about social districts, especially since it could help address a concern about too many potential outdoor dining decks on particular blocks.

Chair Clein said hearing about social districts might be helpful anecdotally, but that the Board was not tasked with studying social districts and should be careful not to overly focus on the topic.

Mr. Share noted any recommendations made by the Board can be observed post-implementation and then amended later if need be.

Chair Clein said the Board could likely make initial recommendations on a majority of the matters, while some of the other decisions could be potentially delayed to see how the initial implementation goes.

Chair Clein also recommended that a poll be posted to Engage Birmingham sometime in the new year to ascertain whether the public was actually interested in al fresco outdoor dining, as opposed to outdoor dining in semi-permanent structures with climate control.

12-196-21

K. Miscellaneous Business and Communications

- a. Communications**
- b. Administrative Approval Correspondence**
- c. Draft Agenda for next meeting**
- d. Other Business**

12-197-21

L. Planning Division Action Items

- a. Staff Report on Previous Requests**
- b. Additional Items from tonight's meeting**

12-198-21

M. Adjournment

No further business being evident, the Chair adjourned the meeting at 9:48 p.m.



Nick Dupuis
Planning Director

Paul Reagan commended the Board members and Mr. Lambert for their work and comments thus far. He said that one way to stem demolitions would be to study why people are leaving the community and to do more to address those issues. He suggested that requiring the addition of drainage wells to new construction could act as a disincentive. He agreed with Mr. Lambert that the bulk and size allowances in Birmingham are often too generous. He recommended that the parks be considered as a system, and not just as individual parks. He said more needed to be done in planning for an aging population.

David Bloom said the City should explore ways to offset the costs of installing elevators into homes for seniors, which would eliminate the need to find ways to expand first floor additions. He said he wanted residents living near parks to continue to be engaged about potential changes to park amenities.

Mr. Bloom also made a number of comments regarding seams. Chair Clein addressed the comments, and noted that those issues had been discussed thoroughly during the Board's November 2021 and December 2021 meetings and were not part of the topic at hand.

Cindy Rose said zoning should be reviewed because new construction is negatively affecting character of the community.

After public comment concluded, Mr. Lambert said prioritizing partnerships with schools to increase access to parks for the community should be a more clear recommendation in the draft. He said that at the end of the review of the second draft, he and the Board should discuss how recommendations in the chapters should be prioritized.

In regards to whether speeds on residential streets could be lowered, Chair Clein asked Mr. Lambert to consult with ACM Ecker and the City Attorney.

2. Outdoor Dining (Comprehensive)

PD Dupuis summarized the item.

Ms. Whipple-Boyce recommended that if the Planning Board were to consider year-round outdoor dining at any point moving forward, more enclosed and/or heated options be considered for the coldest times of year.

Mr. Williams said he was concerned that the Board did not have sufficient expertise to make appropriate recommendations without an outside consultant.

Mr. Jeffares and Chair Clein expressed more confidence that the Board would be able to make appropriate recommendations.

Mr. Williams suggested then that the Board could make recommendations and maybe also continue a longer-term study with a consultant in the future.

Ms. Whipple-Boyce was concerned that knowing a consultant might be enlisted in the future could result in establishments not wanting to invest in the initially recommended outdoor dining guidelines.

Chair Clein said his understanding was that the Commission did not want more enclosed or heated areas that would functionally expand indoor dining. He agreed with Ms. Whipple-Boyce that without those aspects people would be unlikely to dine outside in the coldest months, and so recommended that the Board not overly focus on making those months conducive to outdoor dining.

After further discussion, there was consensus that the regular outdoor dining season should run from April 1 to December 31, using broadly the same ordinances that are currently in place with some modifications to be recommended. From January 1 to March 31, establishments should be allowed to have outdoor dining with no additional permitting process with the understanding that no dining decks should be used, the furniture and outdoor amenities must still be reviewed and approved by the Board, and that the furniture and amenities must be taken in every night.

Mr. Share noted that these changes could be implemented while seeking feedback from business owners and the public regarding how the extension of the regular outdoor dining season was going and on ways to improve.

The Board did not believe that establishments with liquor licenses and establishments without liquor licenses should be handled differently in terms of outdoor dining.

Ms. Whipple-Boyce said the material requirements could remain the same as the current ones, as they have largely been working.

After brief discussion, Chair Clein recommended that the material and appearance standards for outdoor dining overall be updated to align with the material and appearance standards for bistros.

Ms. Whipple-Boyce noted that in Article 3, Section 3.04(C)(10)(h), the ordinance seems to require that decks only be allowed if there is not enough room for dining on the sidewalk.

Mr. Williams said that if the ordinance does say that, it should be modified to reflect current practice.

A number of Board members recommended that social districts be considered for future study and discussion.

In regards to whether outdoor dining in public space and outdoor dining in private space should be regulated differently, the consensus was that they should be treated largely the same.

Mr. Jeffares and Ms. Whipple-Boyce said they did not believe that establishments on private property should have to take in their furniture at night in the off-season.

Mr. Share qualified that suggestion, saying that private property owners should be permitted to leave their furniture out at night if it is in the rear of their buildings, but not if it is along the street.

The Board requested further clarification from the Fire Marshal regarding when fire suppression is required, especially if non-flammable materials are used.

In reply to Board comments, PD Dupuis noted:

- In cases where there are differences between the general ordinance and the overlay, the overlay prevails;
- There would likely be ways to clean up the ordinance to make the differences between the general requirements and the overlay more clear;
- There is a difference in the appearance of built-up platforms and flush platforms that should be considered;
- The City is working harder to make sure outdoor dining is appropriately contained in its allowed space, often via railings or barriers; and,
- It would be worth considering how larger outdoor spaces, like the one by the Mad Hatter, could be used by a few neighboring establishments at once.

There was Board consensus that outdoor dining should be allowed in front of neighboring businesses with permission of the neighboring owner, and not only if the neighboring space is vacant. The Board specific that this would have to be renewed every year. It was noted that capacity and restroom requirements would still have to be met. It was also noted that this would not apply to decks.

It was determined that further discussion still needed to occur regarding whether an individual establishment should be permitted both dining adjacent to the building and dining on a deck in the street.

01-10-22

K. Miscellaneous Business and Communications

a. Communications

b. Administrative Approval Correspondence

In reply to Board feedback, PD Dupuis said he would require 191 N. Chester to appear before the Board for a design review if the owners choose to pursue a change in the location of their dumpster.

c. Draft Agenda for next meeting

The Chair asked that sufficient details be provided for the Townsend discussion, including views of the full street, the relationships of the proposed changes to the nearby buildings, and precise dimensions.

d. Other Business

C. Chair's Comments

Chair Clein welcomed everyone to the meeting and reviewed the meeting's procedures.

02-27-22

D. Review Of The Agenda

02-28-22

E. Unfinished Business

None.

02-29-22

F. Rezoning Applications

None.

02-30-22

G. Community Impact Studies

None.

02-31-22

H. Special Land Use Permits

None.

02-32-22

I. Site Plan & Design Reviews

None.

02-33-22

J. Study Session

1. Outdoor Dining (Comprehensive)

PD Dupuis presented the item.

Board member comments were as follows:

- Article 4, Section 4.44(B)(4) should address whether an outdoor dining patio could extend onto the private property of a neighboring property owner with written permission from the neighboring property owner;
- Article 4, Section 4.44(B)(5)(iii) should be amended to require that all aspects of outdoor dining should be brought in from January 1 to March 31 at night, including railings or

planters. Applicants should be expected to propose temporary outdoor dining delineations for those months rather than permanent ones drilled into the ground. It was noted that unobtrusive planters could possibly be pressed up against the exterior of the building at night instead of being brought in;

- Article 4, Section 4.44(C)(5) should require a five foot clear path with some way of providing the Planning Board and/or the Engineering Department leeway to require a greater width for a clear path if necessary;
- Article 4, Section 4.44(C)(8) should require barriers be a maximum of 42 inches in height with no exception for planting material;
- Article 4, Section 4.44(C)(9) should specify that 'Windbreaks must be constructed of a clear, rigid, and durable material,' adding 'rigid';
- Article 4, Section 4.44(C)(3) and Article 4, Section 4.44(C)(11) could likely be combined;
- These standards should be crosschecked for redundancy with the overlay standards and redundancy should be eliminated wherever possible;
- The enclosure definition should prohibit vertical elements above 60 inches except for exterior building walls, windbreaks, umbrellas, or landscaping; and,
- BO Johnson should be asked how the ordinance could best address the definition of 'permanent fixtures', whether by defining it, allowing the Building Official to judge at their discretion, or some other approach.

In regards to comments that Article 4, Section 4.44(C)(8) should be updated to reflect the changes to be made to Article 4, Section 4.44(B)(5)(iii) regarding immovable barriers between January 1 and March 31, PD Dupuis said he would likely add language stating that the Board could provide flexibility on the immovable barrier requirement between January 1 and March 31.

There was Board consensus that requiring barriers for establishments without alcohol was likely inappropriate.

PD Dupuis noted that the concern is not alcohol service but expansion of outdoor dining beyond its allowed parameters into the public clear path.

Chair Clein asked PD Dupuis to come back with recommendations regarding barriers for establishments that do not serve alcohol. He suggested that the ordinance could specify differential treatment based on the number or location of outdoor dining tables, such as more than one row of tables against a building.

Ms. Whipple-Boyce asked that the Commission be made aware via a memo included with the outdoor dining recommendations that members of the Board are interested in studying the topic of social districts. She noted that social districts would complement the Board's work on outdoor dining. She said she did not want the Board to miss the opportunity to review the topic.

Public Comment

Ann Steglich asked how the ordinances are enforced.

The Chair explained the City has code enforcement in place.

There was Board consensus to discuss the questions posed in the Study Session #8 summary at the next Board discussion of outdoor dining.

Mr. Williams asked for photographic examples of outdoor dining located on both a deck and the sidewalk.

2. 2040 Plan – Chapter 4 (Support Mixed-Use Districts) & Chapter 5 (Advance Sustainability Practices)

Chair Clein and PD Dupuis introduced the item.

Mr. Lambert presented the item.

In reply to Mr. Williams, ACM Ecker noted that all boards and committees provided feedback on the first draft of the master plan.

Chair Clein asked Staff to solicit feedback from other boards and committees on the second draft of the master plan, especially regarding tasks the draft suggests the various boards and committees undertake in the future.

Individual Board member comments were as follows:

- Chapters Four and Five had areas that were too detailed for a master plan;
- Discouraging barriers for outdoor dining may not be appropriate;
- There may be too much flexibility recommended for the Rail District;
- It may be appropriate to include an appendix of potential ways to implement recommendations rather than including those examples in the body of the plan;
- Prioritizing intergovernmental cooperation should be emphasized as part of the sustainability recommendations;
- It might be more appropriate for the City to determine what sustainability goals it would like its developments to meet instead of using LEED certification as a metric since LEED is an imperfect measure of sustainability;
- The canopy recommendations would likely be helpful in mitigating the noise and speeding problems on Woodward but may not be enough to eliminate the issues;
- Enhancing the safety of crossing Woodward may need more attention in the plan;
- Mr. Lambert should stay apprised of the Board's decisions regarding 770 S. Adams because it will impact the plan's recommendations for Worth Plaza;
- The recommendations for Market North and the Rail District are both attractive and likely feasible;
- The sustainability board is a good idea and would likely get new and different residents involved with the City;
- The draft recommends EV charging in the parking decks but also notes that the parking decks cannot afford to lose spaces to dedicated EV charging, which is an inconsistency that should be addressed;
- The focus on increasing pedestrian activity in the downtown is appropriate, and social districts could be recommended as another way of increasing downtown pedestrian activity;

- Number Two merits inclusion in terms of its effects neighborhood cohesion.

Public Comment

Samuel Oh, resident and member of the Corridor Improvement Authority, spoke on behalf of his neighborhood group in the Triangle. He expressed concerns about the speed and density of traffic, about the process of appointments for the Corridor Improvement Authority, and about potentially increasing density in the Triangle. He requested that a park or open space be considered for the Triangle.

Chair Clein clarified that:

- The Plan itself makes recommendations but does not rezone properties; and,
- The recommendations made for the Triangle in the Plan align with the Triangle Plan which was adopted by the City in 2007.

Mr. Oh reiterated his belief that the Plan rezoned properties in the Triangle to a higher density.

David Bloom said the Plan should provide more clarity on how a Master Plan influences zoning, noting that the process may confuse some residents. He advocated for clarity in the Plan as to whether there is insufficient parking in the City, recommended public engagement on the Plan's recommendations, raised concerns about having cafes in the parks, and said there should be clarity regarding whether a mezzanine is considered a 'floor' in describing building heights.

Jack Reinhardt, Managing Partner of the 555 Building, expressed concern about the S. Old Woodward project. He said he had not received notice of discussions of the S. Old Woodward project.

Chair Clein clarified that the present topic before the Board was the Master Plan.

Mr. Williams said Mr. Reinhardt's comments regarding the S. Old Woodward project would be more appropriately directed to the Commission.

Mr. Reinhardt then expressed concern about the loss of parking in the S. Old Woodward area.

2. Outdoor Dining Standards (previously Item J1)

PD Dupuis introduced the item.

Mr. Share recommended in Article 4, Section 4.44(B), "or by the Planning Division at the discretion of the Planning Director" would be changed to "or by the Planning Division at the discretion of the Planning Board", and that "throughout the year with a valid Outdoor Dining License" be removed from Article 4, Section 4.44(B)(5).

Mr. Jeffares and Chair Clein said the 'written permission' referenced in Article 4, Section 4.44(B)(4) should require renewal yearly and should be submitted to the City as part of the Outdoor dining patio renewal process. Chair Clein recommended Staff determine where best to include that as part of the policy.

Mr. Jeffares said dining establishments should be permitted to store their planters against the building during January, February, and March. He noted that the City and establishments without outdoor dining leave their planters out year-round.

Chair Clein stated that the Board is trying to maintain the public space for pedestrians by requiring the removal of planters during January, February, and March. He contended that planters that would normally demarcate outdoor dining would unnecessarily clutter the sidewalk during those months.

Mr. Share concurred with Chair Clein.

Ms. Whipple-Boyce said there were likely some planters that could be allowed to be placed against the building during January, February, and March, and some planters where it would not be appropriate to allow that. She said she was not immediately sure of how to differentiate between the two types.

The Board then addressed the three discussion points posed in the Staff report under Study Session #9.

After discussion, the Board concurred that for Number One establishments should be permitted outdoor dining on both a sidewalk and a deck if requested as long as the clear path meets the five foot minimum and the deck does not encroach past the curb.

PD Dupuis noted that the majority of outdoor dining is regulated by SLUPs, meaning the City can make modifications if necessary.

For Number Two, there were a range of opinions about what sort of coverings should be permitted for outdoor dining adjacent to a building and for outdoor dining on a deck.

Mr. Koseck proposed that awnings or umbrellas be allowed along the buildings, and that only umbrellas be allowed on the decks. He noted that it would make the pedestrian clear path feel less closed in, and would also keep the streetscape view more open.

Messrs. Share and Williams and Chair Clein agreed with Mr. Koseck.

Mr. Jeffares and Ms. Whipple-Boyce spoke in favor of awnings being allowed in both conditions. Ms. Whipple-Boyce noted prior Departmental comments had raised the issue of umbrellas potentially being moved and encroaching into the road or pedestrian clear path.

Mr. Jeffares agreed that umbrellas' ability to be moved was possibly a drawback, and noted that awnings more effectively protect against inclement weather.

For Number Three, there was Board consensus that there would be no appropriate way to limit the number of decks per block.

Chair Clein said he would sooner discuss limiting the number of dining establishments in an area than he would limiting the number of outdoor dining decks permitted per block, though he clarified he was not particularly interested in doing either.

Mr. Williams agreed it would be better to limit the number of dining establishments in an area than it would be to limit the number of outdoor dining decks permitted per block.

Ms. Whipple-Boyce asked if using recycled materials for outdoor dining furniture could be discussed as part of the topic.

Chair Clein said he wanted to avoid delaying this topic so that restaurateurs know what to expect for outdoor dining, but said he would be open to discussing appropriate outdoor dining furniture materials as a future, separate topic.

Motion by Mr. Williams

Seconded by Mr. Share to set a public hearing on April 13, 2022 to amend Article 4, Section 4.44 Outdoor Dining Standards, Article 3, Section 3.04 – Specific Standards (Downtown Overlay District), Article 3, Section 3.16 – Specific Standards (Via Activation Overlay District), and Article 9, Section 9.02 – Definitions.

Motion carried, 7-0.

VOICE VOTE

Yeas: Jeffares, Williams, Whipple-Boyce, Koseck, Ramin, Clein, Share

Nays: None

Public Comment

Richard Astrein, owner of Astrein's Jeweler, member of the Advisory Parking Committee, and member of the Birmingham Shopping District Board, expressed a concern that too many outdoor dining decks could negatively impact other retailers.

03-58-22

K. Miscellaneous Business and Communications

Motion by Mr. Share

Seconded by Mr. Williams to have whatever needs to be amended be amended so that on March 31, 2022 the special meeting will include consideration of the application for 220 Merrill Street for outdoor dining.

Mr. Williams noted that this item would be reviewed in addition to 770 S. Adams on the same date.

Motion carried, 7-0.

VOICE VOTE

Yeas: Jeffares, Williams, Whipple-Boyce, Koseck, Ramin, Clein, Share

City Department / Board Feedback



MEMORANDUM

Building Department

DATE: August 4, 2021
TO: Nicholas J. Dupuis
FROM: Bruce R. Johnson, Building Official
SUBJECT: Outdoor Dining Thoughts

Dining platforms in the street:

- Must be constructed in accordance with the Michigan Building Code including accessibility (ADA) regulations.
- While not required by the building code, a 42-inch tall guardrail should be installed on the platform adjacent to vehicle drive lanes.

Enclosures/coverings:

- Must be constructed in accordance with the Michigan Building Code.
- Must not block or conceal any exits from the platform.

Sidewalk patios:

- Tend to creep into the required sidewalk width when they are not clearly defined by barriers such as rails/fencing. Especially when there is seating along both the building and the curb with the public walk between the two areas.

Heating elements:

- Must be UL listed for the proposed use and installed and utilized in accordance with manufactures recommendations

Full Enclosures/year-round dining:

- Would need to be constructed in accordance with the Michigan Building Code.
- A permanent power source will need to be installed for all electrical needs – lighting, emergency lighting, exit signs, etc.
- An approved heating system should be utilized rather than temporary portable heaters.

Weather protection:

Umbrellas, tent and awnings tend to define the dining areas and should not be allowed to encroach at any height into the clear path of sidewalk for public use.

General Comments:

- The Michigan Plumbing Code now requires that outdoor dining seats be included in the total number of occupants for the establishment when calculating the total number toilet room fixtures required.

- Barriers that define the approved limits of the outdoor dining areas work well in keeping the public portion of the sidewalk free and clear for pedestrians. A perfect example of this is Churchills.
- Designs should be such that servers do not have to utilize the pedestrian flow portion of the sidewalk while taking orders or serving patrons. We have received complaints about this.
- The current enforcement protocol is to inspect per the approved outdoor dining plan. Compliance for the number and type of tables and chairs, layout, barriers and planters, umbrellas, awnings, number of portable heaters, etc. are all checked. Anything not on the approved plan is a violation. Applicants should be encouraged to show on their plan all the items they intend to utilize during the various seasons.



Nicholas Dupuis <ndupuis@bhamgov.org>

DPS Issues with Outdoor Dining

Carrie Laird <Claird@bhamgov.org>

Fri, Jul 23, 2021 at 1:24 PM

To: Nicholas Dupuis <ndupuis@bhamgov.org>

Cc: Lauren Wood <Lwood@bhamgov.org>, Brendan McGaughey <bmcgaughey@bhamgov.org>, Shon Jones <sjones@bhamgov.org>

Hi Nick,

Thank you for asking! We do have feedback on year-round dining platform decks and structures, as follows:

In the winter months especially, we have safety concerns. Snow plowing is challenging around these structures when they are located in the parking spots. Often, the street cannot be cleared properly in order to avoid hitting the platform deck, resulting in accumulating snow and ice that has to be salted more often than if we could eliminate it to begin with. In other words, we have to return to these locations with salt until the snow melts completely. Another safety concern is how narrow some of the roadways are in which the platforms are located. Visibility is decreased substantially in the snow, and it's frankly amazing that we haven't had an accident yet with a snow plow. In addition, if snow and/or ice must be removed from the platform, it's the business owner's responsibility to clear it, and it winds up back in the street or on the sidewalk, creating the same situation I explained above with several visits to the same area.

Further, we need access to the trees. Often the structure/platforms envelope the trees just by the nature of the sidewalk/building setting, and we are unable to perform preventative maintenance of our trees (routine pruning, elevating). Additionally, if a broken branch or dead tree becomes an issue or hazard, it is difficult or impossible to remove with the surrounding obstacles. We've also had an instance of illegal pruning by others of City trees in order to make a seating area on a deck more accommodating for their customers. Our holiday lights program is also affected by no access to the city trees, resulting sometimes in lack of decoration or inability to fix outages.

We haven't encountered any issues with access to the landscape boxes as of yet, however that could be a possibility in the future. We have had to relocate or eliminate hanging baskets due to the decks/structures because of inability to access by our watering trucks. This results sometimes in an off-pattern but we haven't had any complaints of "missing" baskets to my knowledge.

DPS would prefer a window from mid-December through March, but at minimum 3 month window in the winter months, i.e. Jan-March, to avoid most snow and ice issues and it would also allow for preventative care and maintenance of our trees downtown. We typically have all of the holiday lights downtown on by Thanksgiving, so this suggestion does not solve the decorating issues, nor the hanging baskets/landscape boxes concerns, but we are trying to be flexible because we understand the desire for the extended or year round season for outdoor dining.

Thanks again and if you have any further questions, please let me know!

[Quoted text hidden]

--

Carrie A. Laird
Parks & Recreation Manager

851 S. Eton
Birmingham, MI 48009
248-530-1714

[Quoted text hidden]

Outdoor Dining Study

Jim Surhigh <cityengineer@bhamgov.org>
To: Nicholas Dupuis <ndupuis@bhamgov.org>
Cc: Scott Zielinski <szielinski@bhamgov.org>

Tue, Aug 3, 2021 at 10:59 AM

Nick,

Following are potential issues related to outdoor dining that the Engineering Dept would normally review when one is proposed:

- do not block, interrupt or redirect surface drainage
- do not cover or obstruct the access to underground infrastructure elements, such as manholes, gate wells and catch basins
- do not obstruct fire hydrants
- understand if constructed over sewers or water mains, that provisions are in place to remove features if emergency repairs are needed
- review with respect to upcoming city construction projects in area and possibly prohibit or restrict period of time that outdoor dining would be allowed to accommodate City projects
- consider placement with respect to traffic lanes, and providing adequate offsets for safe passage of all vehicles that use street, including emergency and DPS vehicles, buses, and delivery trucks.
- consider placement with respect to available sight-distance for vehicles and pedestrians at street intersections and crosswalks
- consider placement with respect to public sidewalk space (5-ft minimum clear distance required)
- consider impact to street parking, possibly prohibit if utilizing high-demand spaces, or spaces allocated or leased to neighboring businesses.

Scott - if you have anything to add, please do so.

Thanks,
Jim

[Quoted text hidden]



Nicholas Dupuis <ndupuis@bhamgov.org>

Outdoor Dining Study

Scott Zielinski <szielinski@bhamgov.org>
To: Jim Surhigh <cityengineer@bhamgov.org>
Cc: Nicholas Dupuis <ndupuis@bhamgov.org>

Wed, Aug 4, 2021 at 8:37 AM

I would be tempted to prohibit enclosures near drive entrances, Alleys and intersections due to potential visual obstructions.

If they are using the space next to the curb at a parking location a minimum distance from the curb should be considered 12" minimum. TO prevent issues with parking and help limit issues with car doors.

On Tue, Aug 3, 2021 at 10:58 AM Jim Surhigh <cityengineer@bhamgov.org> wrote:

[Quoted text hidden]

--

Scott D. Zielinski, PE
Assistant City Engineer
City of Birmingham
Tel: 248-530-1838



CITY OF BIRMINGHAM FIRE DEPARTMENT

572 SOUTH ADAMS • BIRMINGHAM, MICHIGAN 48009 • 248.530.1900 FAX 248.530.1950

Outdoor Dining Survey

Dining platforms in the street: These structures and the footprint shall be clear of the right of way for traffic and emergency vehicles. No open flame devices on combustible structures (Fire pits on wood, vinyl, composite platforms, etc.).

Enclosures/Coverings: Tents have a use period of 180 days in a 12 month period, IFC '15 sec. 3103.5.

Year-round outdoor dining:

Sidewalk Patios:

- Proper clearance from fire department connections FDC: 36 inches wide, 36 inches in depth and 78 inches in height.
- Proper clearance around fire hydrants, 3 feet in circumference and no obstructions from the street.
- Clear path of egress from buildings (do not setup dining in path of egress).

Heating Elements:

Clearance: Heating devices shall meet the proper clearance from combustible material at all times. Sec. 603.4.2.1.2 **Clearance to buildings** Portable outdoor gas-fired heating appliances shall be located not less than 5 feet from buildings.

603.4.2.1.3 Clearance to combustible materials. Portable outdoor gas-fired heating appliances shall not be located beneath, or closer than 5 feet to combustible decorations and combustible overhangs, awnings, sunshades or similar combustible attachments to buildings (regardless of a flame retardant rating certificate).

603.4.2.1.4 Proximity to exits. Portable outdoor gas -fired heating appliances shall not be located within 5 feet of exits or exit discharge.

Carbon monoxide detection: Shall be installed for enclosed or semi-enclosed structures regardless of heating device used.

Fire extinguisher mounting: Shall be installed in enclosed or semi-enclosed structures. AHJ to determine size, type and location(s) of devices.

Storage of LP gas: Storage of fuel cannot be inside of a building. LP gas must be stored in a cage. Cage must be a minimum of 10 feet from any type of building opening.



CITY OF BIRMINGHAM FIRE DEPARTMENT

572 SOUTH ADAMS • BIRMINGHAM, MICHIGAN 48009 • 248.530.1900 FAX 248.530.1950

Storage cannot be on the streetside of an establishment. Storage must be in a "cage" protected from vehicle strikes. This may mean that the cage may have to be protected by bollards. A permit would be required to install bollards.

Only 20 lbs. or smaller tanks would be approved.

Electric heaters in an enclosure or other assembly use would require clearance and carbon monoxide detection in an enclosed space and must meet proper clearance guidelines from combustibile material at all times.

Full enclosures:

Weather protection (umbrellas, tents, awnings): Must provide a flame retardant certificate to the AHJ regardless of using outdoor heating or not. These items must meet the clearance of heating devices. Must meet clearance of portable heating devices.

Structures attached to buildings: Full fire suppression for structures attached to buildings with existing fire suppression is required on additions such as awnings, tents, sun rooms etc.

In some cases an assembly occupancy that currently does not have fire suppression required could be required to suppress the whole building with the addition of an attached outdoor structure depending on occupant load, layout and other aspects of design.

Anything else: My understanding is that rules were eased due to COVID dining rules. I would not want to continue the use of fuel supplied heating device clearances that were allowed during COVID. The clearance requirements were allowed to be less than what is required (5 feet) during COVID. Gas storage and use was a large part of target hazards and the issuance of citations during outdoor COVID dining. Some establishments would not be able to store fuel on their property due to location specifics.

Jack D. Pesh

Fire Marshal

Birmingham Fire Department

OD

Scott Grewe <Sgrewe@bhamgov.org>
To: Nicholas Dupuis <ndupuis@bhamgov.org>

Fri, Jul 30, 2021 at 8:44 AM

Really we have had no issues with the decks at the PD level. They pay for the metered spaces to put their decks up so there is no loss of revenue but we do obviously lose the spaces which has not been an issue.

--

Scott Grewe
Operations Commander
Birmingham Police Department
[151 Martin St.](#)
[Birmingham, MI. 48009](#)
(248)530-1867



Important Note to Residents

Let's connect! Join the Citywide Email System to receive important City updates and critical information specific to your neighborhood at www.bhamgov.org/citywideemail.



MEMORANDUM

Planning Division

DATE: September 1st, 2021

TO: Advisory Parking Committee

FROM: Nicholas Dupuis, City Planner

APPROVED: Scott Grewe, Operations Commander

SUBJECT: Outdoor Dining

At the Advisory Parking Committee meeting on August 4th, 2021, the committee expressed interest in a larger, or more inclusive role in both the outdoor dining platform approval process, as well as the outdoor dining ordinance study currently being performed by the Planning Board. At this time, the Planning Division has provided a summary of current outdoor dining ordinances, as well as a summary of the new ordinance study below.

Outdoor Dining Ordinance

In general, outdoor dining plays an integral role in creating an active and vibrant downtown. The City of Birmingham has enjoyed and benefited from high quality and carefully designed outdoor dining patios for many years. Currently, outdoor dining standards exist across several sections of the Zoning Ordinance:

- [Article 4, Section 4.44 – Outdoor Dining](#): This section outlines the outdoor dining requirements for all commercial areas in the City. This is the section that permits the outdoor dining platforms that gets reviewed by the APC as they come up.
- [Article 3, Section 3.04 \(C\)\(10\) – Bistros](#): This is the section that specifically regulated bistros. There is also mention of platforms being permitted here, and the language is the same as the section above.
- [Article 3, Section 3.14 – Activation Overlay District](#): This is one of the more unique places for outdoor dining regulations, but essentially all this does is enable outdoor dining in certain alleys in the City. Some examples of which are Dick O' Dows and the future Bloom Bistro, both of which have been approved for outdoor dining in the alley.

Outdoor Dining Study

As mentioned above the Planning Board has been directed by the City Commission to do a major, comprehensive review of the outdoor dining standards present in the current zoning ordinance. The study will involve significant research into other communities, city departments, building codes, and the like. Attached are the two study session memos that have been completed thus far. The Planning Division plans to make your input available to the Planning Board on September 9th, 2021.



CITY OF BIRMINGHAM FIRE DEPARTMENT

572 SOUTH ADAMS • BIRMINGHAM, MICHIGAN 48009 • 248.530.1900 FAX 248.530.1950

Fire Department Outdoor Dining Requirements

Dining platforms in the street

- These structures and the footprint shall be clear of the right of way for traffic and emergency vehicles.
- Proper clearance from fire department connections FDC: 36 inches wide, 36 inches in depth and 78 inches in height.
- Proper clearance around fire hydrants, 3 feet in circumference and no obstructions from the street.
- Clear path of egress from buildings (do not setup dining in path of egress).

Enclosures/coverings

- Temporary tents, air-supported, air-inflated or tensioned membrane structures shall not be erected for a period of more than 180 days within a 12-month period on a single premises. **sec. 3103.5., International Fire Code 2015 ed.**

Heating elements

- Heating devices shall meet the proper clearance from combustible material at all times. **Sec. 603.4.2.1.2 Clearance to buildings, International Fire Code 2015 ed.**
- Portable outdoor gas-fired heating appliances shall be located not less than **5 feet** from buildings. **International Fire Code 2015 ed.**
- Portable outdoor gas-fired heating appliances shall not be located beneath, or closer than **5 feet** to combustible decorations and combustible overhangs, awnings, sunshades or similar combustible attachments to buildings or structures (regardless of a flame retardant rating certificate). Electric heating devices are allowed following manufacturers specifications. **603.4.2.1.3 Clearance to combustible materials International Fire Code 2015 ed.**
- Portable outdoor fireplaces shall be used in accordance with the manufacturer's instructions and shall not be operated within **15 feet** of a structure or combustible material. (ie. fire pits, fire tables on wood, vinyl, composite platforms). **307.4.3 Portable Outdoor fireplaces International Fire Code 2015 ed.**
- Portable outdoor gas -fired heating appliances shall not be located within **5 feet** of exits or exit discharge. **603.4.2.1.4 Proximity to exits. International Fire Code 2015 edition.**
- **Weather protection (umbrellas, tents, awnings):** Must provide a flame retardant certificate to the AHJ regardless of using outdoor heating or not. These items must meet the clearance of heating devices and provide fire extinguisher protection.



CITY OF BIRMINGHAM FIRE DEPARTMENT

572 SOUTH ADAMS • BIRMINGHAM, MICHIGAN 48009 • 248.530.1900 FAX 248.530.1950

Carbon monoxide detection

- Shall be installed for enclosed or semi-enclosed structures regardless of heating device used. Enclosures near vehicle traffic shall have carbon monoxide detectors in the event that vehicle emissions enter the enclosure accidentally.

Fire extinguisher mounting

- Shall be installed in enclosed or semi-enclosed structures. Authority Having Jurisdiction (AHJ) to determine size, type and location(s) of devices. **Sec. 906.2, International Fire Code 2015 ed.**

Storage of LP gas

- Storage of fuel cannot be inside of a building. LP gas must be stored in a cage outdoors. Storage cage must be a **minimum of 10 feet** from any type of building opening. Storage locations shall be approved by the Planning Department and the Fire Marshal. **6104.3 Container location, International Fire Code 2015 ed.**
- Only 20-pound propane or smaller tanks would be approved.

Structures attached to buildings:

- Full fire suppression for structures attached to buildings with **existing** fire suppression is required on additions such as awnings, retractable awnings, tents, sun rooms, projections etc. that are more than 4 feet wide and of combustible material. If a structure is free standing and is a minimum of 3 feet away from a building, it would not require suppression. **8.15.7.1 National Fire Protection Agency 13, Standard for the Installation of Sprinkler Systems 2013 ed.**
- **A-2** assembly occupancy that currently **does not** have fire suppression required could be required to suppress the whole building with the addition of an attached outdoor structure depending on occupant load and square footage increases (ie. A building with the new outdoor addition is now over 5,000sq. ft. or over 100 occupants), layout and other aspects of design. **Sec. 903.2.1.2, Michigan Building Code 2015 ed.**



CITY OF BIRMINGHAM FIRE DEPARTMENT

572 SOUTH ADAMS • BIRMINGHAM, MICHIGAN 48009 • 248.530.1900 FAX 248.530.1950

Fire Department Outdoor Dining Requirements

Dining platforms in the street

- These structures and the footprint shall be clear of the right of way for traffic and emergency vehicles.
- Proper clearance from fire department connections FDC: 36 inches wide, 36 inches in depth and 78 inches in height.
- Proper clearance around fire hydrants, 3 feet in circumference and no obstructions from the street.
- Clear path of egress from buildings (do not setup dining in path of egress).

Enclosures/coverings

- Temporary tents, air-supported, air-inflated or tensioned membrane structures shall not be erected for a period of more than 180 days within a 12-month period on a single premise. **Use period Sec. 3103.5., International Fire Code 2015 ed.**
- Flame retardant certificates shall be provided to the AHJ for structures using membrane and other combustible materials **Sec. 3104.2 Flame propagation performance treatment, International Fire Code 2015 edition.**
- Tents or membrane structures and their appurtenances shall be adequately roped, braced and anchored to withstand the elements of weather and prevent against collapsing. Documentation of structural stability shall be furnished to the fire code official on request. **Sec. 3103.9 Anchorage required International Fire Code 2015 ed.**
- A field inspection shall be performed by the Assistant Building Official and Fire Marshal for all erected structures prior to final approval.

Heating elements

- Portable outdoor gas-fired heating appliances shall be located not less than **5 feet** from buildings. **Sec. 603.4.2.1.2 Clearance to buildings, International Fire Code 2015 ed.**
- Heating devices shall meet the proper clearance from combustible material at all times (5 feet). **Sec. 603.4.2.1.3 Clearance to combustible materials, International Fire Code 2015 ed.** Gas fired heating devices may be approved to be placed closer than 5 feet if specific manufacturer recommendations and specifications are followed. Documentation shall be submitted for review, and a field inspection performed by the Fire Marshal to determine safety is met prior to approval.
- Portable outdoor gas -fired heating appliances shall not be located within **5 feet** of exits or exit discharge. **603.4.2.1.4 Proximity to exits. International Fire Code 2015 edition.**



CITY OF BIRMINGHAM FIRE DEPARTMENT

572 SOUTH ADAMS • BIRMINGHAM, MICHIGAN 48009 • 248.530.1900 FAX 248.530.1950

- Electric heating devices are allowed following manufacturers specifications and meeting proper clearances. Manufactures specifications shall be provided to the fire code official upon request for review and approval. **Sec. 603.4.2.1.3 Clearance to combustible materials International Fire Code 2015 ed.**
- Portable outdoor fireplaces shall be used in accordance with the manufacturer's instructions and shall not be operated within **15 feet** of a structure or combustible material. (ex. fire pits, fire tables on wood, vinyl, composite platforms). **Sec. 307.4.3 Portable Outdoor fireplaces. International Fire Code 2015 edition.**
- Portable open-flame devices fueled by flammable or combustible gases or liquids shall be enclosed or installed in such a manner as to prevent the flame from contacting combustible material. **Sec. 308.1.6.2 Portable fueled open-flame devices. International Fire Code 2015 edition.** Approved outdoor fireplaces shall be fully screened to cover exposed flames. Final approval by the Fire Marshal is required.
- Solid fuels (wood, coal, etc.) shall not be allowed for use of outdoor fire features such as fire tables, fire pits or other heating and decorative devices.
- **Weather protection (umbrellas, tents, awnings):** Must provide a flame retardant certificate to the AHJ regardless of using outdoor heating or not. These items must meet the clearance of heating devices and provide fire extinguisher protection.

Smoke Detectors / Carbon monoxide detection

- Smoke alarms and carbon monoxide (CO) detectors shall be installed for enclosed or semi-enclosed (3 or more sides enclosed) structures regardless of heating device used or not. Enclosures near vehicle traffic shall have carbon monoxide detectors in the event that vehicle emissions enter the enclosure accidentally.

Fire extinguisher

- Shall be installed in enclosed or semi-enclosed structures as well as structures made of combustible materials. Authority Having Jurisdiction (AHJ) to determine size, type and location(s) of devices. **Sec. 906.2, International Fire Code 2015 ed.**
- Fire extinguishers shall be mounted to a stationary object.
- Fire extinguishers shall be provided with a service tag showing annual maintenance performed within the last twelve months.



CITY OF BIRMINGHAM FIRE DEPARTMENT

572 SOUTH ADAMS • BIRMINGHAM, MICHIGAN 48009 • 248.530.1900 FAX 248.530.1950

Storage of LP gas

- Storage of fuel cannot be inside of a building. LP gas must be stored in a lockable cage outdoors. Storage cage must be a **minimum of 10 feet** from any type of building opening. Storage locations shall be approved by the Planning Department and the Fire Marshal. **6104.3 Container location, International Fire Code 2015 ed.**
- No loose or free-standing tanks are permitted at any time. All tanks shall be installed inside of heating devices, or secured in LP cages that are strategically placed to prevent an accidental vehicle strike.
- Only 20-pound or smaller LP tanks will be approved.

Structures attached to buildings

- Full fire suppression for structures attached to buildings with **existing** fire suppression is required on additions such as awnings, retractable awnings, tents, sun rooms, projections etc. that are more than 4 feet wide and of combustible material. If a structure is free standing and is a minimum of 3 feet away from a building, it would not require suppression. **8.15.7.1 National Fire Protection Agency 13, Standard for the Installation of Sprinkler Systems 2013 ed.**
- **A-2** assembly occupancy that currently **does not** have fire suppression required could be required to suppress the whole building with the addition of an attached outdoor structure depending on occupant load and square footage increases (ie. A building with the new outdoor addition is now over 5,000sq. ft. or over 100 occupants), layout and other aspects of design. **Sec. 903.2.1.2, Michigan Building Code 2015 ed.**
- Sunshades, awnings or other added structures that are attached to buildings and are 3 feet or more away from the building do not require fire suppression. Example: a sunshade is installed with tension cables anchored to the building and ground but situated so that the shade material itself meets the clearance requirement of 3 or more feet away from the building.



Birmingham Shopping District
Meeting Date: 11/04/2021
151 Martin Street
Birmingham, MI 48009
248-530-1200
ALLINBirmingham.com

MEMORANDUM

DATE: November 2, 2021
TO: Birmingham Shopping District Board
FROM: Sean Kammer, Executive Director
SUBJECT: Outdoor Dining Recommendations

The proposed recommendations below have been developed for the BSD's consideration to advise the Planning Board regarding its study of outdoor dining. Should the board concur with these recommendations, a resolution has been prepared for its consideration.

SUGGESTED ACTION:

The Birmingham Shopping District approves the following recommendations to the Planning Board concerning outdoor dining.

RECOMMENDATIONS

The Planning Board may wish to consider recommending that any form of extended and/or expanded dining permission be available only to bistros and any other establishment holding a liquor license. Further, outdoor dining establishments should at least be open until 9:00 p.m.

The BSD recommends that the spirit of the Bistro program be considered when evaluating the extent of outdoor dining permissions in the downtown. The Bistro Program was intended to help spur activity in the downtown by encouraging foot traffic, dining outside, which is visible and publicly displays activity, as well as encourages commercial activity to be visible through the windows of bistros (dining, socializing, etc). It is understood that the Planning Board has been asked by Planning Department staff to consider the viability of social districts as a means to incentivize businesses to stay open later to meet this criteria.

The Planning Board should consider formulating recommendations regarding the size of outdoor dining space and the number of furniture permitted in zoning districts other than B1.

The BSD suggests that a formula be developed to address the number of outdoor seats that are permitted for bistros in zoning districts B2, B2B, and B4. Under the relaxed restrictions during the pandemic, there were no guidelines for the number of outdoor seating furniture and bistros were able to breach their previous 65 seat threshold, some by an extreme number. The B1 district has guidance on the size of outdoor dining areas based on the linear frontage of the business. The B1 district is a neighborhood business district, applying to only three small parcels in the city, all outside of the shopping district. The city's zoning ordinance lays out the dimensions and seating criteria for outdoor dining in the B1 district. The ordinance does not mention the seating ratios to building frontage for the other districts (B2, B2B, B4, etc). It may be that no standard ratios for such districts exist. If this is the case, the BSD strongly recommends that the Planning Board consider formulating criteria for the size of outdoor dining areas based on ratios of building frontage, as exists in the B1 District.

The Planning Board should consider recommending stronger regulations regarding businesses that attempt to have both sidewalk cafes and on-street dining platforms in order to ensure public walkways are not obstructed, and that on-street parking remains available.

The Planning Board may wish to consider formulating additional guidance regarding the co-location of on-street platforms and sidewalk dining. In some specific cases, the lack of cohesion has resulted in a cluttered view of an otherwise clean and well planned streetscape with instances of garbage accumulation in the public right-of-way, obstructed public walkways, congestion, and obstructed views of shops and services. The BSD consulted the guidance provided by the city's 2016 Plan concerning outdoor dining platforms and sidewalk cafes. The BSD recommends that this plan be considered when developing future outdoor dining policies.

The Planning Board may also wish to consider limiting the number of parking spaces occupied by on-street dining platforms on any given block. This could be established as a formula per block or even by referencing the parking utilization rates that have been observed in recent studies.

Further, if the maximum permitted number of seats can feasibly be accommodated on the sidewalk in front of a business, then the option of an on-street outdoor dining platform should not be considered. A business with outdoor dining would have a sidewalk café, or an on-street platform if they can accommodate more seats, but ideally not both.

The Planning Board should consider downtown maintenance activities performed by the BSD/DPS when considering additional features and accoutrements related to outdoor dining, and encourages the Planning Board to recommend supporting the current ordinance restricting outdoor dining to the months of April through November.

The BSD, along with DPS, funds and performs regular maintenance activities in the downtown, ranging from snow removal, to power washing the sidewalks in the summer. Too many items in the public right of way at certain times of the year can inhibit the performance of necessary upkeep of the downtown. This also potentially generates significantly more costs for the BSD and DPS in order to achieve the same maintenance outcomes while experiencing challenges and obstacles. Consequently, the BSD recommends that the Planning Board support the current ordinance which regulates the outdoor dining season (April through November).

Obstructed views can create problems. The Planning Board should consider the effects of wind screening, temporary outdoor dining structures, and other outdoor dining items on traffic visibility, the appearance of the streetscape, terminating vistas, and views to retail display windows.

The BSD has observed complaints from non-restaurants regarding the effect of obstructed store fronts on their business. The Planning Board may wish to consider rules for outdoor dining that mitigates these potential externalities.

MOTION: Motion by Astrein, seconded by Pohlod to approve the stated recommendations to the Planning Board concerning outdoor dining.

VOTE: Yeas: 8; Nays: 0; Absent: 4.

APPENDIX – A

BACKGROUND

Relaxed outdoor dining restrictions and the extension of outdoor dining into the colder months were intended as business relief and recovery measures during a nation-wide state of emergency. Outdoor dining restrictions were relaxed during the covid-19 pandemic in order to relieve businesses of the stress of reduced sales resulting from capacity restrictions, which were implemented to protect the public health.

Since that time, outdoor dining has proliferated, not just in Birmingham but in many other communities as well. The current demand for outdoor dining continues to remain very high. A recent survey about outdoor dining on the Engage Birmingham website revealed that it remains popular among the respondents.

The Planning Board has undertaken a study on outdoor dining in order to ascertain the need for any permanent changes to local regulations. The BSD and other city departments have been asked to provide input. The purpose of the Planning Board's study is to determine the future of outdoor dining innovations as potentially permanent features of the dining experience in downtown Birmingham.

In recent meetings, the Planning Board has discussed a range of topics, such as whether retractable awnings could be permitted to enhance outdoor dining in the downtown and whether windscreens should be permitted for dining in colder months.

As far as the BSD is concerned, outdoor dining must be measured in terms of its effect on the downtown overall. This includes impacts on operations, marketability, safety, attractiveness, business development, and promotion potential of the downtown. Additionally, it should be noted that the BSD represents a diverse constituency, ranging from retailers and restaurants, to salons, and office firms who have differences of opinion on outdoor dining. Some retailers have expressed frustration at unreasonably large outdoor dining structures that obstructed their storefronts. Some pedestrians found difficulty safely navigating the public sidewalks in areas where sidewalk cafes and dining platforms were co-located. Consequently, the position of the BSD must take these various perspectives into account, while also prioritizing what it considers to be the best policies to protect the community's economy, reputation, operation, safety, and overall appearance.

BSD staff undertook a comprehensive effort to equitably gather the perspectives of downtown stakeholders for the BSD's review. On August 31, BSD staff sent out a general announcement to businesses and property owners soliciting opinions and feedback on outdoor dining policies, allowing stakeholders more than ten days to respond with their perspectives and concerns.

The BSD's committees considered the physical expansion of outdoor dining footprints, relaxed restrictions, and seasonal extension of the outdoor dining season into the winter months. The committees considered this issue from a downtown marketing, infrastructure, events, and economic development perspective. The Business Development committee identified two features of the outdoor dining question, the first being the question of physical expansion of dining into the public right-of-way, and the second being the seasonal extension of outdoor dining into the winter months.

It should be noted that at the October 25th, 2021 City Commission meeting, the Commission directed staff to develop zoning amendments regarding the November 15 end of the regular outdoor dining season for businesses that currently have city-approved outdoor dining.

The BSD's Business Development committee suggested that the BSD consider consulting the City's 2016 Plan, which contained recommendations for outdoor dining in respect to sidewalk width. According to the plan, sidewalks should not be completely obstructed with outdoor dining tables, chairs and other accoutrements to the point where it might interfere with pedestrian access.

Further commentary included that outdoor dining was originally intended for businesses with bistro licenses and other establishments with liquor licenses. The committee also provided commentary addressing the expansion of winterized enclosures defeating the purpose of 'outdoor' dining, and may end up becoming cost prohibitive when considering the costs of requirements such as enclosures, propane for heaters, fire suppression, and other equipment. During the covid-19 pandemic, some of these costs were mitigated by public subsidies, which may not always be the case moving forward.

The Advertising and Marketing Committee considered the issue of outdoor dining in light of regional competition and the downtown's brand identity. The Capital Improvements and Maintenance Committee chair identified several concerns related to the ongoing maintenance and cleanliness of the downtown, and the Special Events Committee provided feedback concerning outdoor dining's effect on the BSD's annual events. Attached for the BSD's review

are the written feedback received from downtown stakeholders and committee members concerning the issue of expanded outdoor dining.

The BSD received minimal feedback from business owners. General comments included support for outdoor dining, but with practical limitations. One owner revealed that the costs of heating outdoor dining structures in cold weather was prohibitively expensive. Further, business owners reported that sudden and rapid shifts and reversals in public policies concerning outdoor dining created logistics and cost challenges.

Additionally, board members discussed the committee recommendations and feedback at the October 7th BSD board meeting. It was agreed that a developed set of recommendations would be presented to the BSD board at the November 4, 2021 board meeting.

CONSENSUS OF THOUGHTS

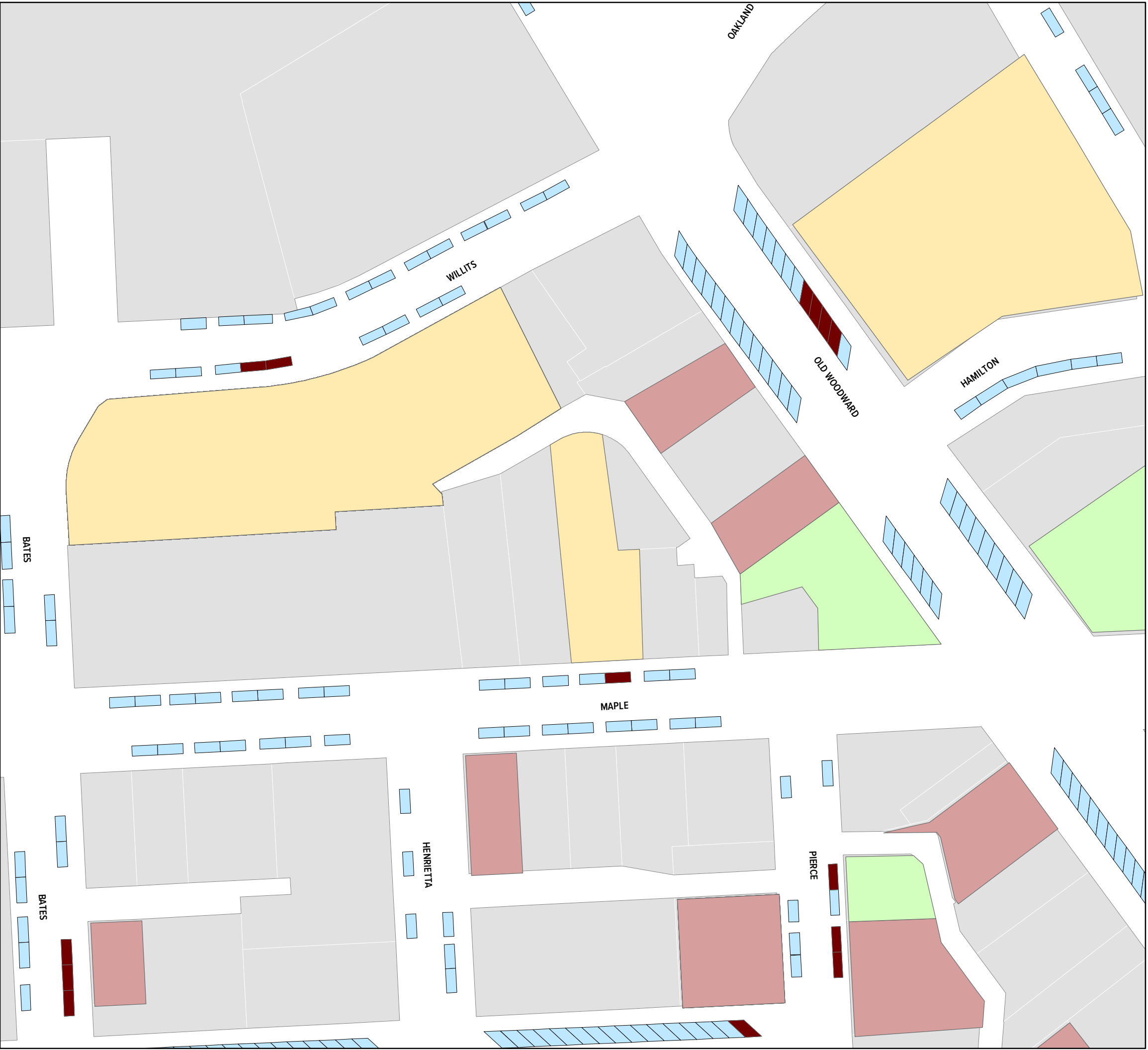
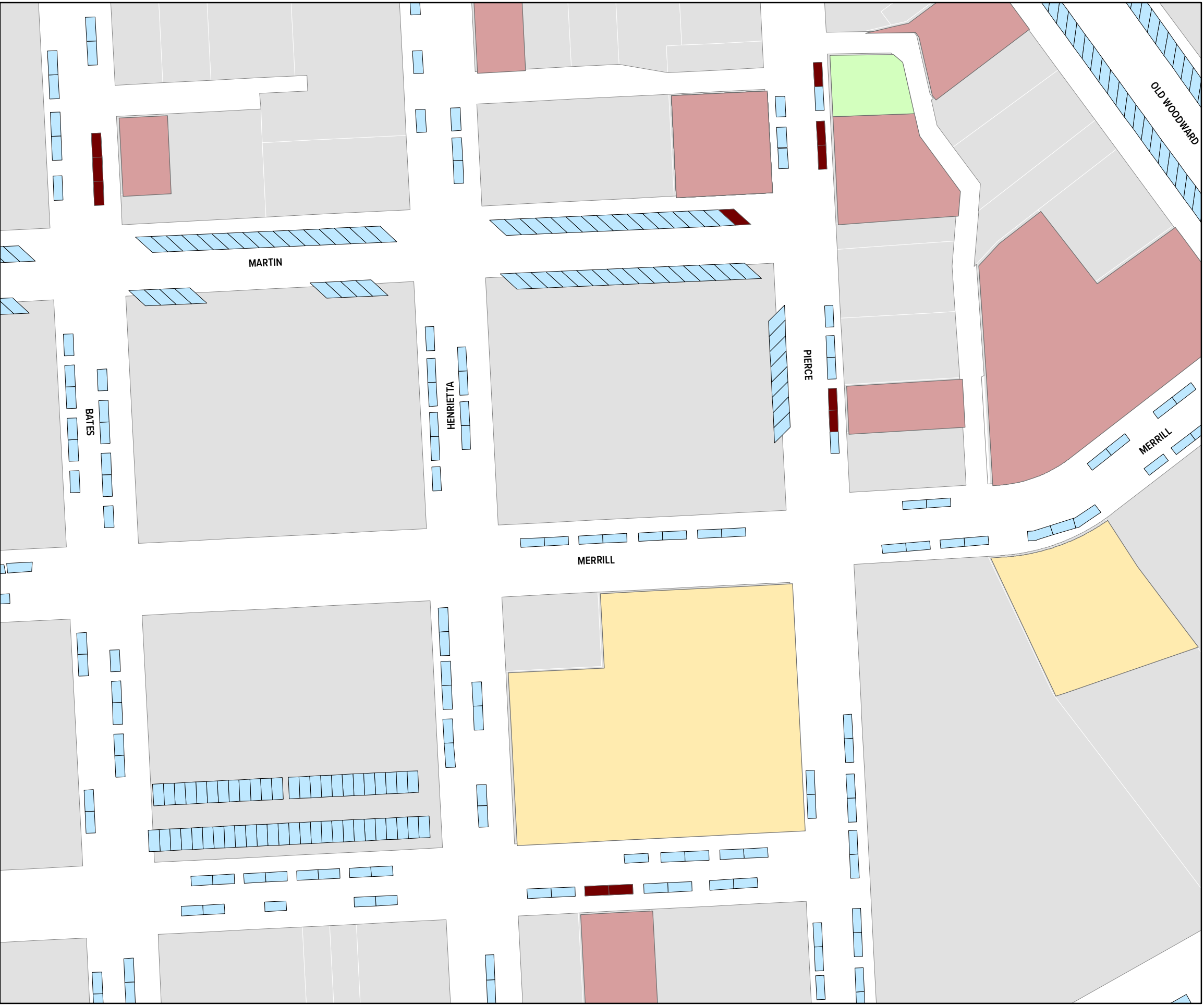
The feedback from committee members varied widely from advocating an extension of relaxed outdoor dining practices to support for a return to precovid guidelines. Some committees were unable to arrive at a consensus, however some general themes can be identified by the comments. The proposed recommendations for the BSD's consideration are based on what feedback was provided. Generally, outdoor dining is a positive activity in the downtown. The restaurants in the shopping district are more competitive in light of regional competition and popular trends.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'SKammer', with a long horizontal flourish extending to the right.

Sean Kammer, Executive Director

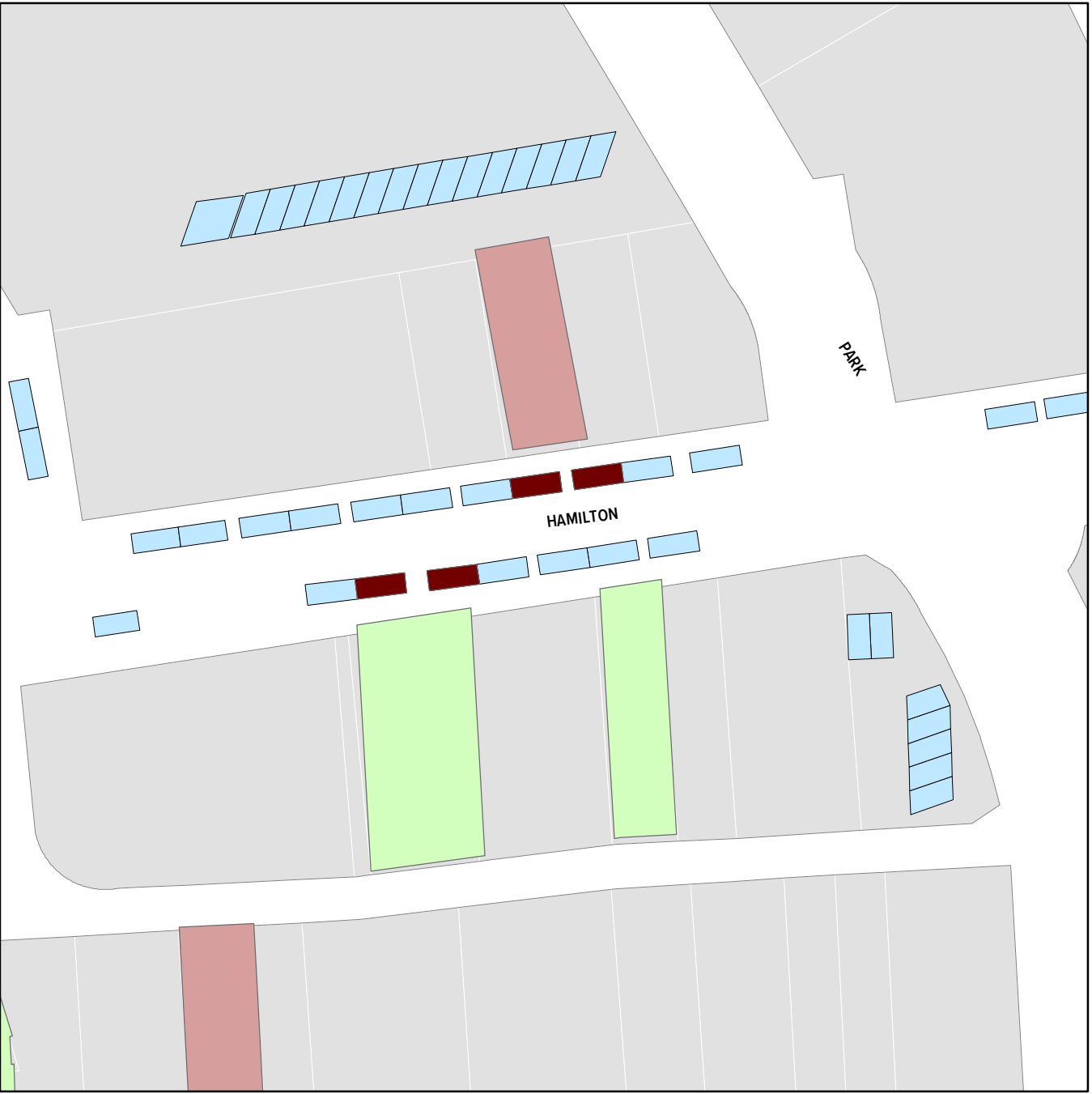
Misc. Attachments / Research



Outdoor Dining

- Non-LL
- Class C LL
- Bistro LL
- Platforms
- Parking

ROW Spaces Downtown - 1270
Parking Spaces w/ Decks - 23



Outdoor Dining in Birmingham



Outdoor Dining in Birmingham



OUTDOOR DINING DATA

		Outdoor Dining Seats			
		Public Property	Dining Platform	Private Property	TOTAL
BISTRO LL - 880 SEATS	Whole Foods (Maple Road Taproom)	0	0	33	33
	Salvatore Scallopini	34	0	0	34
	Luxe Bar & Grille	48	0	0	48
	Bella Piatti	6	22	0	28
	Market North End	0	0	44	44
	Adachi	0	0	67	67
	Bistro Joes	0	0	60	60
	Forest Grill	30	0	0	30
	Social Kitchen & Bar	56	0	30	86
	Brooklyn Pizza	41	0	0	41
	Elies Mediterranean	4	20	0	24
	Townhouse	52	24	0	76
	Churchills	12	0	0	12
	La Strada	14	0	0	14
	Toast	19	40	0	59
	Tallulah	0	42	0	42
	Pernoi	0	0	26	26
	Mad Hatter	24	0	0	24
	EM Bistro	24	0	28	52
	Bloom	36	0	0	36
	Whistle Stop	28	0	0	28
	Japan Sushi	16	0	0	16
CLASS C/OTHER LL - 589 SEATS	Griffin Claw	0	0	62	62
	Big Rock	0	0	97	97
	Dick O' Dows	36	24	0	60
	Townsend Hotel (Rugby Grille)	16	0	4	20
	220	0	0	78	78
	Phoenicia	0	26	0	26
	Hazels	0	0	22	22
	Streetside Seafood	8	12	0	20
	The Morrie	14	32	0	46
	Birmingham Pub	30	0	0	30
	Shift, Sidecar, Slice	90	0	0	90
	Mare Mediterranean	14	24	0	38
NON-LL - 214 SEATS	Be Well	0	0	12	12
	Birmingham Roast	24	0	0	24
	Commonwealth	20	32	0	52
	Hunter House	0	0	18	18
	Papa Joes	0	0	18	18
	Canelle Patisserie	12	0	0	12
	7-Greens	8	0	0	8
	Birmingham Sushi Café	12	12	0	24
	Starbucks	24	0	0	24
	Work Company, LLC	6	0	0	6
	Planthropie	4	8	0	12
	Beyond Juice	4	0	0	4

Recently Approved Outdoor Dining

[illegible]

Application In Progress
Application Denied
* Approved under first resolution
Need to Confirm Numbers
Missing Information

MUST MAINTAIN
APPROVED SITE PLAN
AND 6 FT SOCIAL
DISTANCING

555 South Old Woodward “Birmingham Pub”



575 South Eton “Griffin Claw”



325 South Old Woodward “Adachi”



260 North Old Woodward “The Morrie”



525 North Old Woodward “LUXE”



505 North Old Woodward “Sal’s”



474 North Old Woodward “Market North End”



Willits ally “The Dow”



117 Willits “Side Car”



100 Townsend



263 Pierce “Elies”



263 Pierce “Elies”



167 Townsend “Bella”



167 Townsend



220 Merrill



220 Merrill



Temporary COVID-19 Off- Season Outdoor Dining Standards Expiration Date Analysis

Police/Fire/
Building/Planning/Finance/
Manager's Office



Purpose/Provisions:

- ☐The purpose of the temporary outdoor dining program was to provide our dining establishments with the opportunity to add additional outdoor seating to make up for lost indoor dining capacity from the State of Michigan's restrictions.
- ☐The City implemented numerous economic relief efforts to assist business owners during the pandemic (free parking, waiving of fees & design standards, PPE distribution, temporary structures, gas heaters and propane tanks, etc.)
- ☐All of the efforts were TEMPORARY measures enacted to address the COVID-19 pandemic.

Challenges Encountered by the City:

- ☐ Temporary plans poorly designed and not supported by proper engineering documents.
- ☐ Plan reviews were cursory compared to permanent plans.
- ☐ Lack of meaningful enforcement due to legal conflicts (prosecutorial jurisdiction) between state, county and local law enforcement.
- ☐ Inequity of allowing temporary outdoor dining to exist without payment for use of public property compared to approved outdoor dining which has continued to pay for their space.
- ☐ Lack of design review led to some haphazard structures and layouts.
- ☐ Americans with Disability Act (ADA) standards and requirements that may have been compromised by the temporary deck designs and implementation issues in terms of width of passage, ramps and accessibility.

Challenges Encountered by the City:

- Projects expanded beyond plans - creeping into sidewalks, yellow curb zones and streets.



Challenges Encountered by the City:

- Dining decks were allowed to be erected in front of adjacent businesses, impairing visibility to retail and other uses.



Challenges Encountered by the City:

- Safety concerns with propane heaters and storage tanks.



Expiration Date: June 30, 2021 – Why is This Date Recommended by City Staff?

- ❑ The City's current resolution allowing for temporary COVID-19 Outdoor Dining Standards is set to expire on June 30, 2021.
- ❑ Recent media releases from the State of Michigan are that all remaining COVID-19 restrictions will be lifted on July 1, 2021 – All restaurants will be able to return to their original (allowable) seating both for inside dining and at their City approved outdoor dining locations.
- ❑ Stop the interference with the public right of way, the blocking of adjacent storefronts, use of public parking spaces and public areas without compensation.

Expiration Date: June 30, 2021 – Why is This Date Recommended by City Staff? (Cont.)

- ☐ Removes the risk that the temporary structures and dining platform “rules” would be allowed to continue to “drag-on” for extended periods of time.
- ☐ Other COVID-19 City initiatives have or are coming to an end on July 1: City Hall has begun a phased re-opening, parking decks will resume charging fees and in-person public meetings will commence.
- ☐ Desirable on-street parking spaces will return to service, hopefully reducing traffic issues, valet issues and assist retailer customers.
- ☐ Return to the City’s established process of site plan and design review by our staff, boards and the City Commission.

Year-Round Enclosed Outdoor Dining

SURVEY RESPONSE REPORT

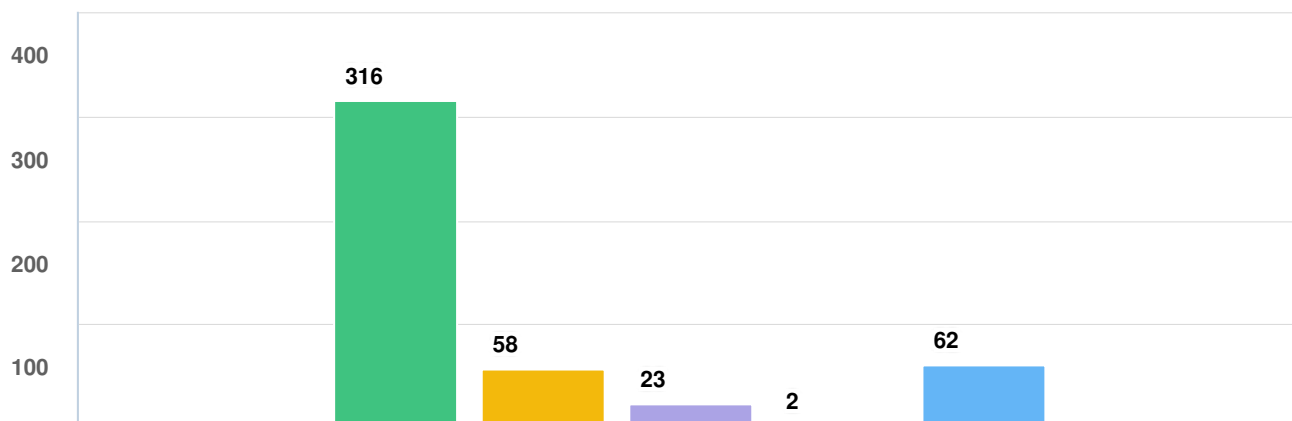
13 July 2021 - 07 September 2021

PROJECT NAME:

Year-Round Enclosed Outdoor Dining

REGISTRATION QUESTIONS

Q1 What best describes you? (check all that apply)



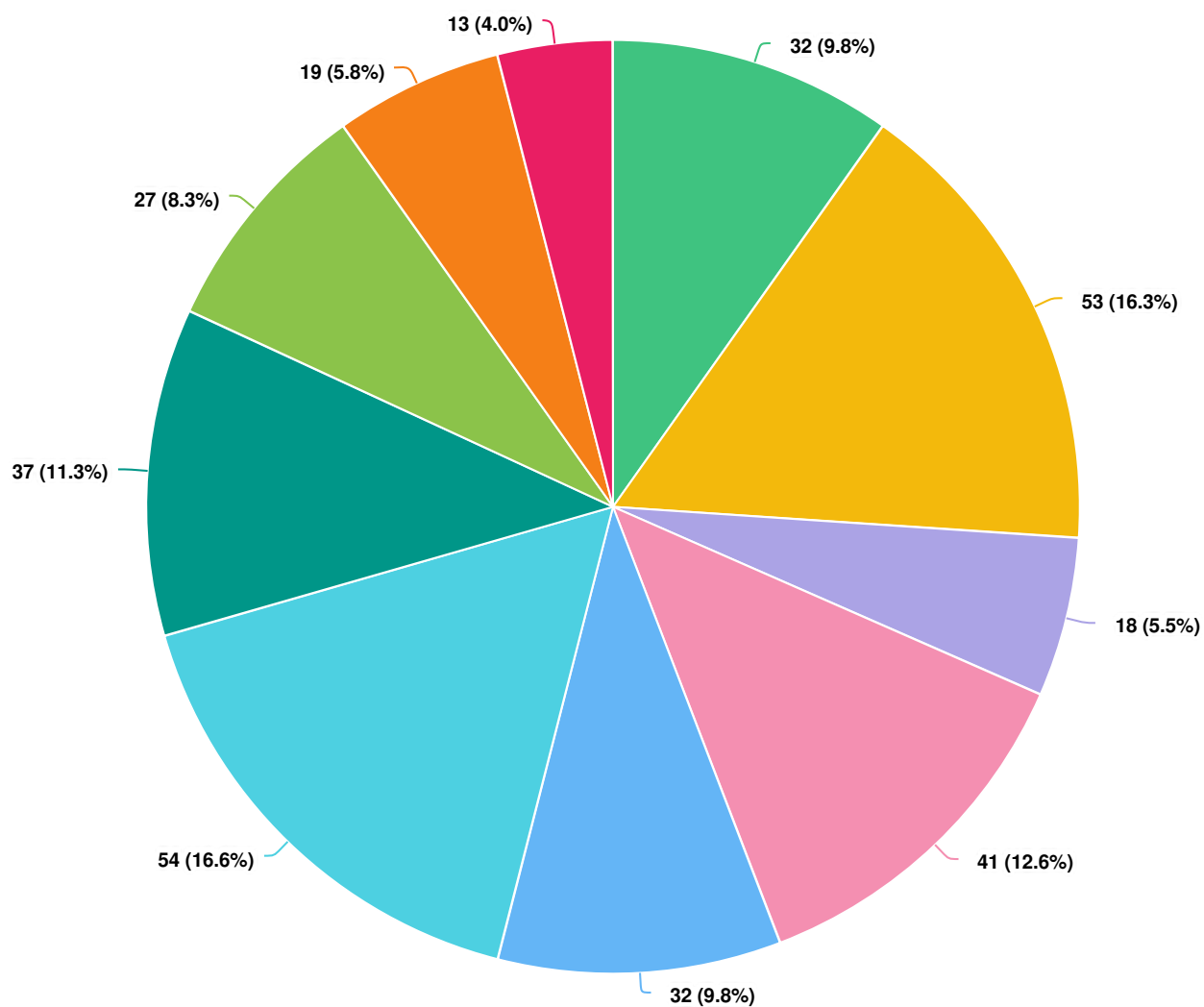
Question options

- I live in Birmingham.
- I work in Birmingham.
- I own a business in Birmingham.
- I am a student in Birmingham.
- I am a frequent visitor to Birmingham.

Mandatory Question (351 response(s))

Question type: Checkbox Question

Q2 Which section of Birmingham do you live in?



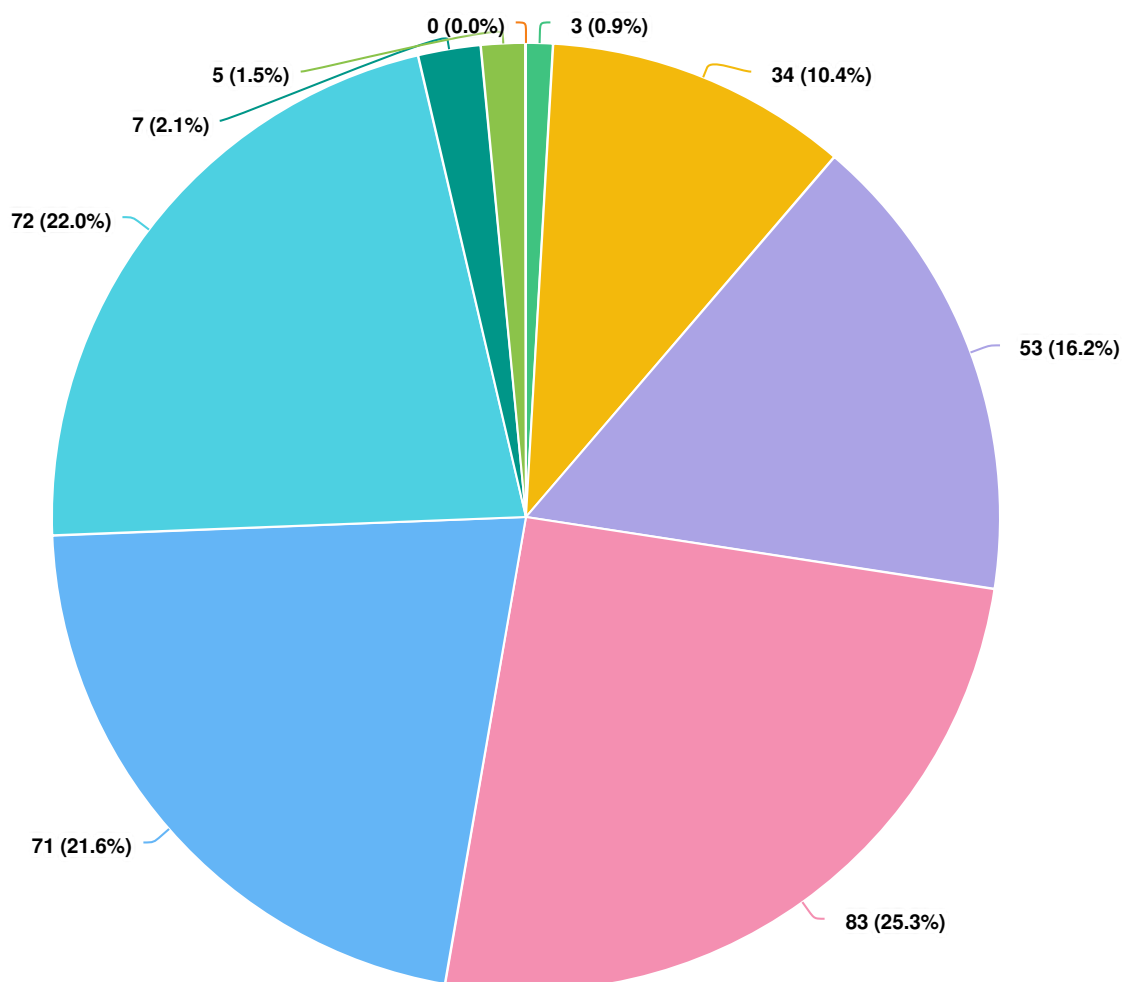
Question options

1 2 3 4 5 6 7 8 9 N/A

Optional question (326 response(s), 25 skipped)

Question type: Dropdown Question

Q3 In which decade were you born?



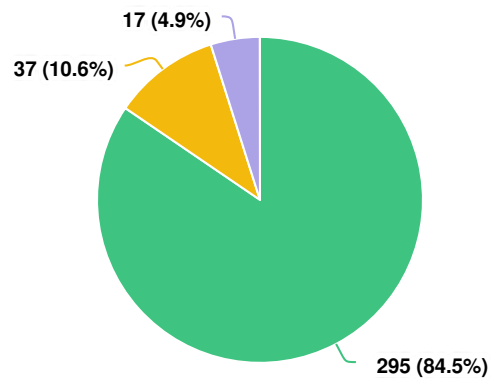
Question options

● 1931-1940
 ● 1941-1950
 ● 1951-1960
 ● 1961-1970
 ● 1971-1980
 ● 1981-1990
 ● 1991-2000
 ● After 2000
 ● Before 1931

Optional question (328 response(s), 23 skipped)
Question type: Dropdown Question

SURVEY QUESTIONS

Q1 Do you think restaurants should be allowed to expand their dining platforms?



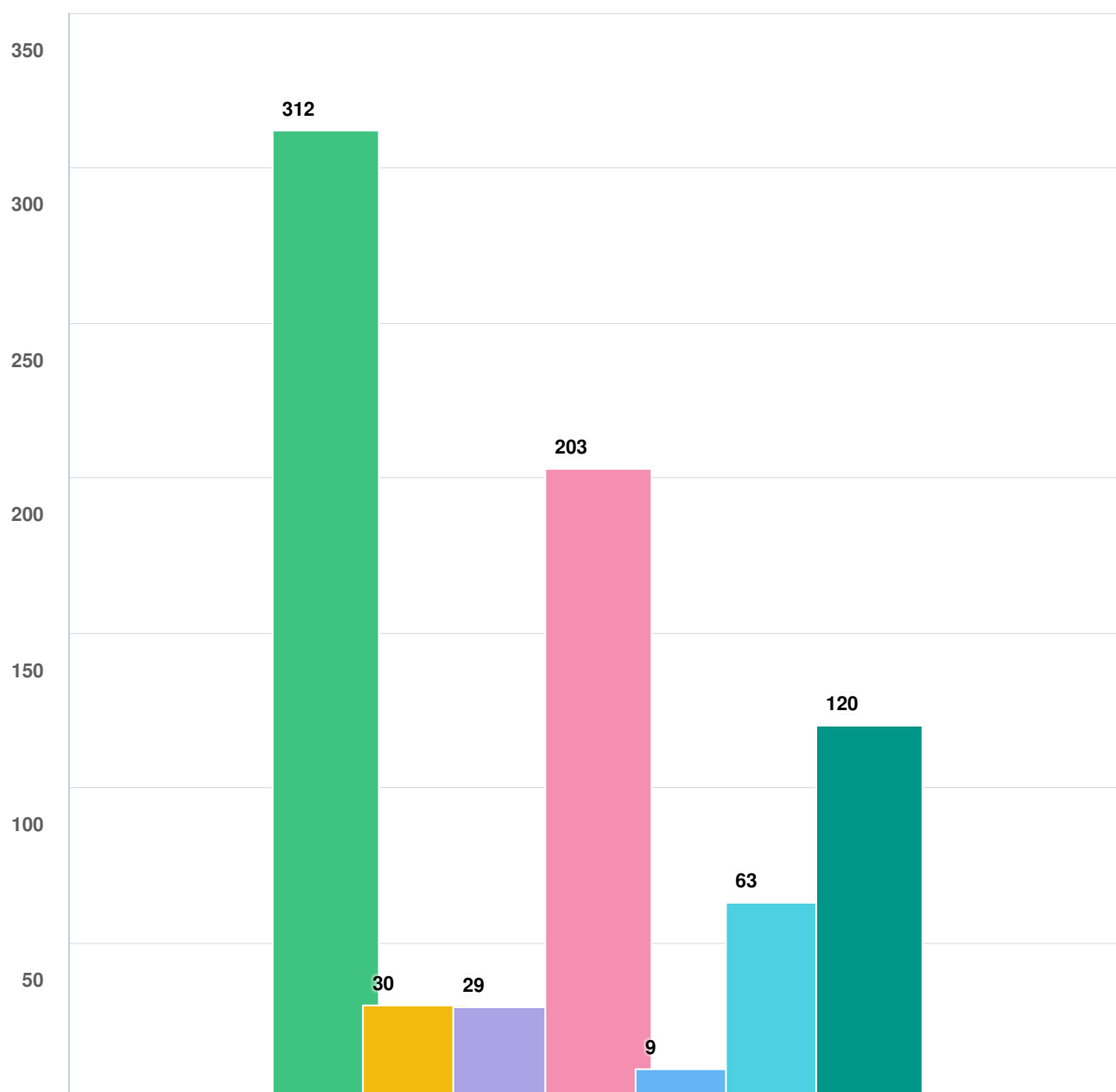
Question options

- ☒ Yes, the City should allow expanded year-round platforms.
- ☐ Yes, the City should allow expanded platforms from April through November.
- ☐ No, the City should not allow expanded platforms.

Optional question (349 response(s), 2 skipped)

Question type: Radio Button Question

Q2 Which of these statements do you agree with?



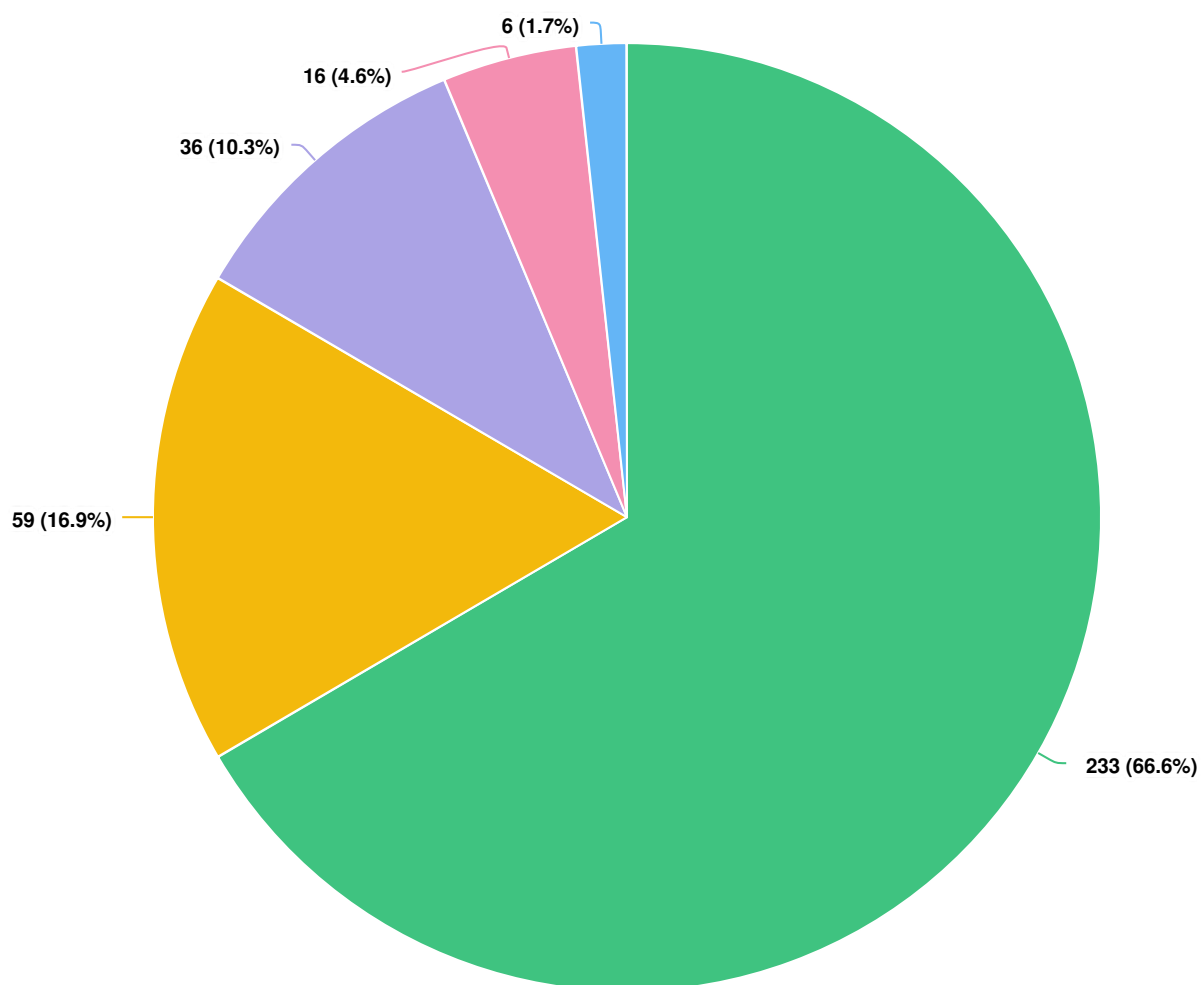
Question options

- I enjoyed the expanded dining platforms and wish for them to become a permanent part of Birmingham.
- I am concerned that outdoor dining platforms occupy needed street parking spaces.
- I do not like to use the sidewalk in between restaurants and their dining platforms.
- Birmingham's dining platforms are attractive and pleasant.
- I feel unsafe eating on dining platforms adjacent to the road.
- I feel that other merchants should be allowed to expand their sidewalk sales if restaurants expand their outdoor dining.
- There is adequate street parking in Birmingham.

Optional question (349 response(s), 2 skipped)

Question type: Checkbox Question

Q3 What are your thoughts about outdoor dining spaces that are heated but not fully enclosed?

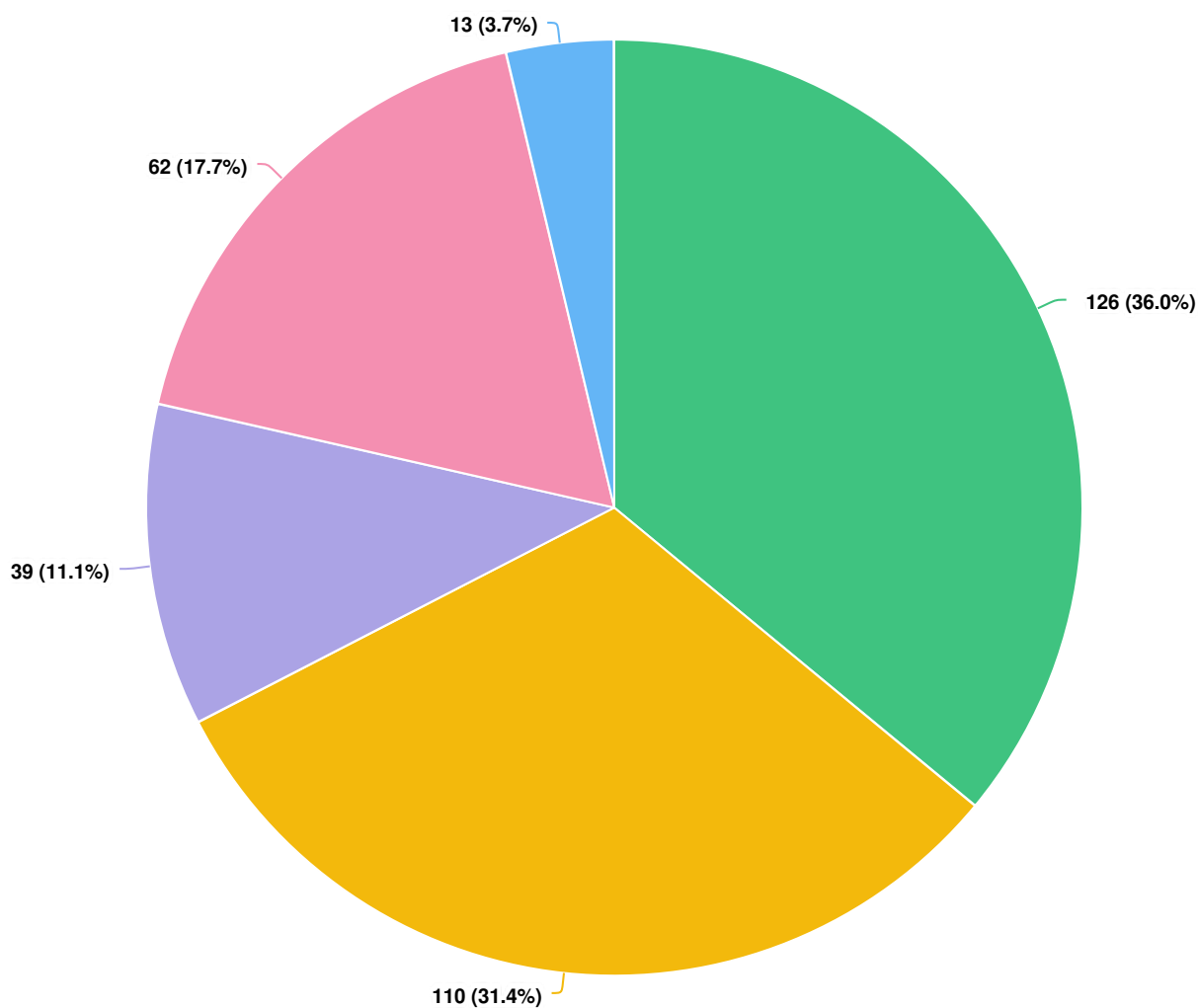


Question options

- I love them and would visit them year-round.
- I love the enclosures but would not use them in the winter.
- Neutral
- I do not wish to see this type of enclosure in Birmingham.
- Other (please specify)

Optional question (350 response(s), 1 skipped)
Question type: Radio Button Question

Q4 | What are your thoughts about private, fully enclosed dining spaces such as igloos and greenhouses?

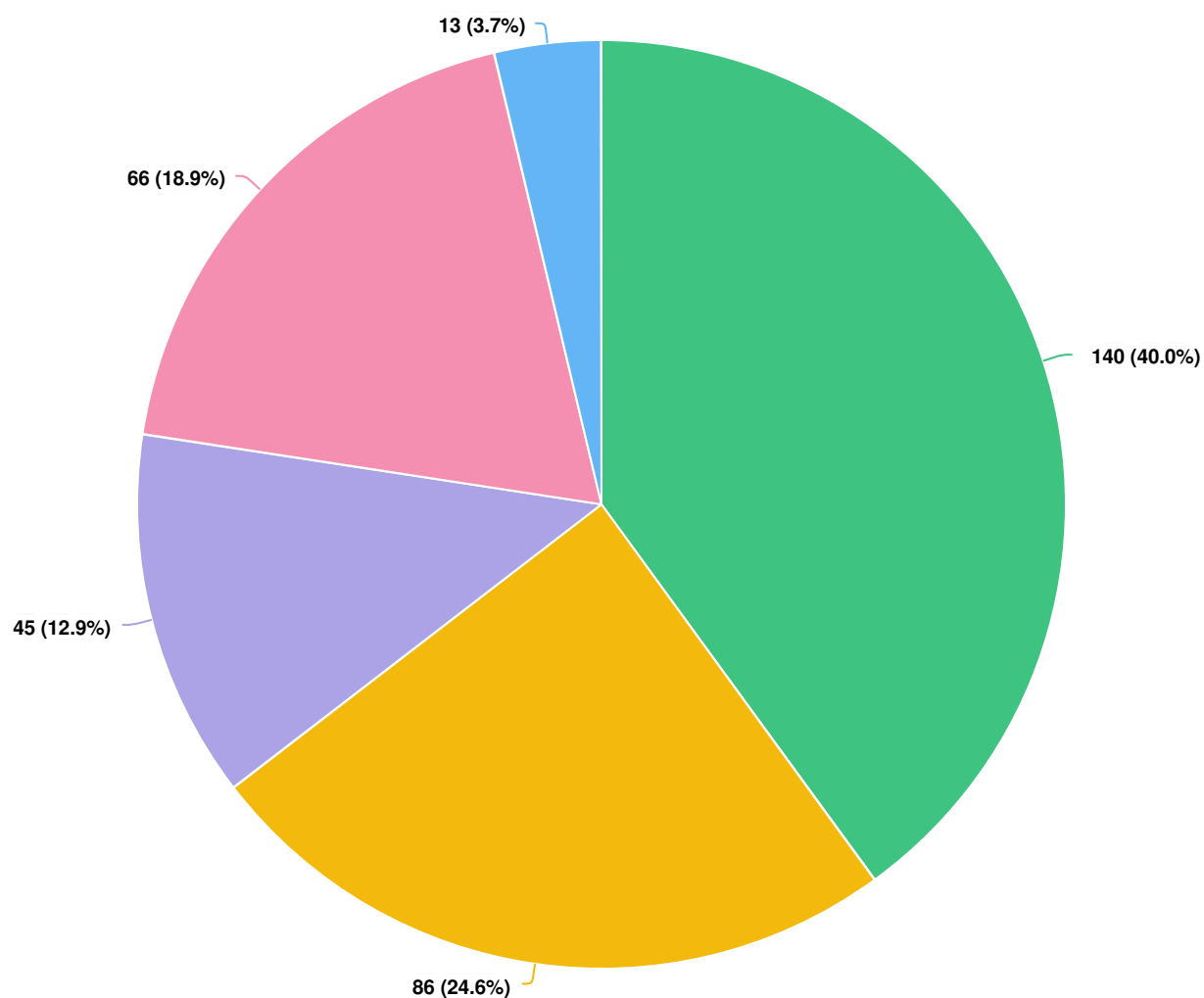


Question options

- I love them and would visit them year-round.
- I love the enclosures but would not visit them in warm months.
- Neutral
- I do not wish to see this type of enclosure in Birmingham.
- Other (please specify)

Optional question (350 response(s), 1 skipped)
Question type: Radio Button Question

Q5 What are your thoughts about fully enclosed dining tents?

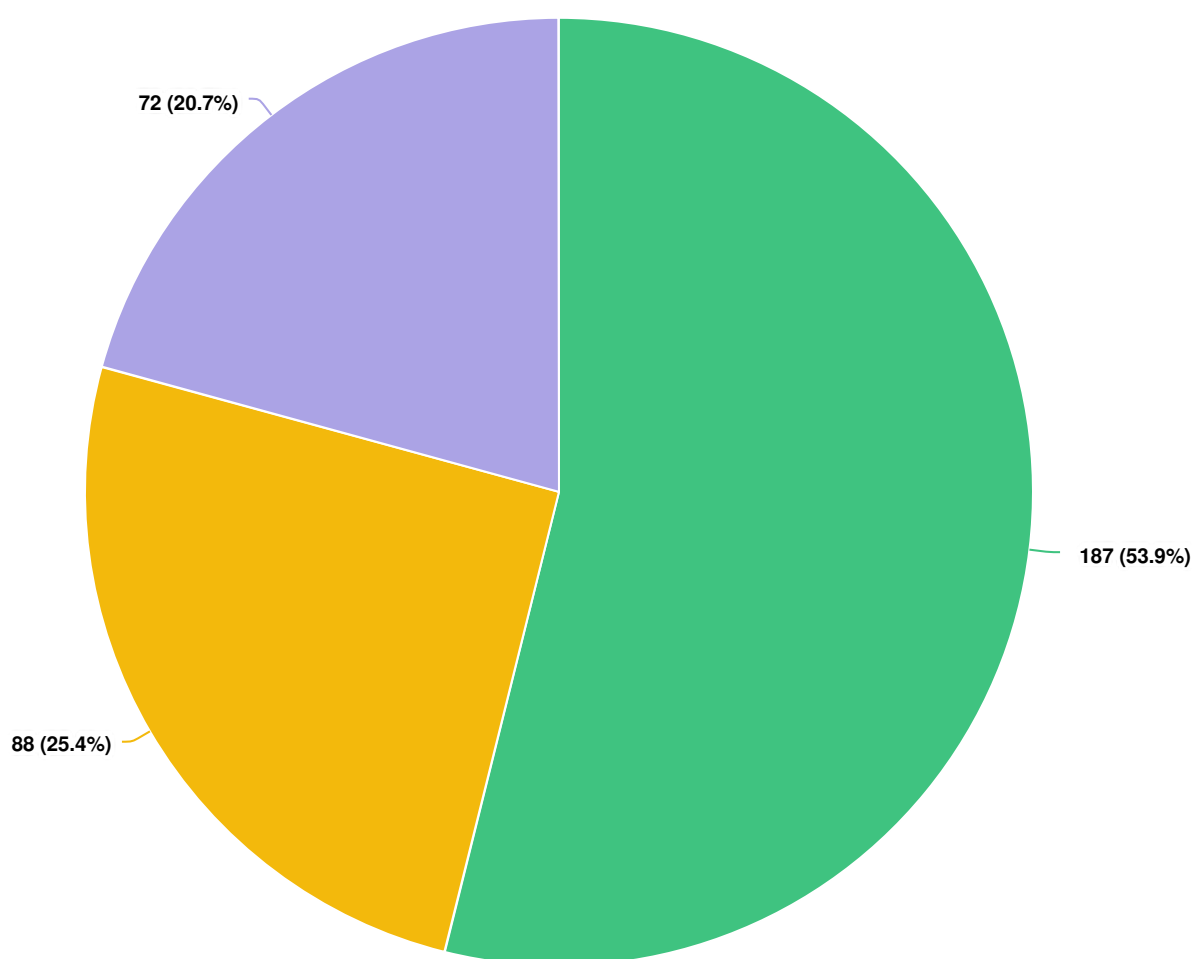


Question options

- I love them and would visit them year-round.
 ● I love the enclosures but would not visit them in warm months.
 ● Neutral
- I do not wish to see this type of enclosure in Birmingham.
 ● Other (please specify)

Optional question (350 response(s), 1 skipped)
Question type: Radio Button Question

Q6 Under the current ordinance, chairs and tables must be brought in each evening so that sidewalks may be cleared of snow and ice. Should a future ordinance include the same language?



Question options

☒ Yes
 ☐ No
 ☐ Other (please specify)

Optional question (347 response(s), 4 skipped)
Question type: Radio Button Question

Q7 | Please share any additional thoughts about expanded outdoor dining in Birmingham.

Screen Name Redacted

7/13/2021 01:14 PM

I like the idea of providing creative dining options to the City to increase traffic; however, it needs to be intentional and thoughtful.

Screen Name Redacted

7/13/2021 01:15 PM

I prefer we expand the outdoor dining and shopping opportunities, and have no problem with limiting downtown driving and parking. Less traffic, more walkability.

Screen Name Redacted

7/13/2021 01:17 PM

We should absolutely have outdoor dining expanded in the winter, so we can enjoy the city year round. Especially if we utilize areas that are "dead space" on the sidewalks.

Screen Name Redacted

7/13/2021 01:17 PM

The expanded outdoor dining brought a positive energy and definitely enhanced the surrounding communities and businesses. I

fully support making expanded outdoor dining a permanent right.

Screen Name Redacted

7/13/2021 01:19 PM

Eating outside isn't just about having more space, it's more fun. It's attractive to the city when driving and walking through. It makes it looks bustling and fun. I don't like the full enclosed tents as the can be large, but the cute and smaller ones like Bella Piatti are flattering to see. These spaces also give restaurants more flexibility and they need it. I feel that these spaces don't take up too much parking on the streets, and that's what we've garages for..

Screen Name Redacted

7/13/2021 01:19 PM

The restaurants were here for us and got very creative during the shut down. They spent a lot of money and it increases the opportunity to dine at these establishments and I'm sure it increases revenue. They look very cute in the city.

Screen Name Redacted

7/13/2021 01:20 PM

I love the additional outdoor dining. I have not been inside a restaurant in Birmingham since the start of COVID but I have been to outdoor dining and really would like to see it stay in place even once COVID is past us.

Screen Name Redacted

7/13/2021 01:21 PM

Good for the summer months. Pushing it into the spring and fall is just okay. Does not make sense for the winter months.

Screen Name Redacted

7/13/2021 01:22 PM

More seating at all restaurants will help Birmingham thrive.

Screen Name Redacted

7/13/2021 01:23 PM

None

Screen Name Redacted

7/13/2021 01:24 PM

Outdoor dining is available in numerous cities thru out the country including the colder climates! I believe they have drawn more people to Birmingham to eat and shop. Its' GREAT that you can sit outside for up to 6 months and enjoy the Michigan weather. I know quite a few people who told me they made specific trips to have lunch or dinner in Birmingham because of the outdoor dining. It reminded them of Chicago, New York, Miami, South Beach etc and they LOVED it!! Bring this back!

Screen Name Redacted

7/13/2021 01:25 PM

Keep it, it's great

Screen Name Redacted

7/13/2021 01:26 PM

We don't want to be a city of the 1950's! Other wonderful forward thinking cities offer this. This is a new era we are living in. The answer is a slam dunk yes! Yes we should move ahead and offer this option!!!

Screen Name Redacted

7/13/2021 01:26 PM

Outdoor dining should be allowed year round. This is a city of activity and community. We ordered faithfully from local restaurants during the pandemic. We want business/restaurants to be successful so our city thrives.

Screen Name Redacted

7/13/2021 01:27 PM

I love the outdoor dining! I have always wished there was more outdoor dining, especially in the summer, but year around as well. This was the one good thing that came of Covid – having a lot more outdoor dining in Michigan. Please allow restaurants to continue outdoor dining, and allow heated, enclosed dining areas in the winter..

Screen Name Redacted

7/13/2021 01:28 PM

The City Commissioners and City Manager are too late as we should have had the additional seating through the summer post pandemic. They chose not to listen to its residents. Consideration from April through November should be considered. Most people will NOT want to eat outdoors in the colder weather/winter. (except for Mark Nakita).

Screen Name Redacted

7/13/2021 01:28 PM

We moved to Birmingham from Seattle in 2020. I absolutely loved all of the outdoor dining options. It made the city feel energized (even with COVID) and reminded me of Europe where people sit on the sidewalk enjoying the evenings. I think there should be some rules as to how things look, but generally I am in favor of a covered patio style so restaurants can still honor reservations when it rains. I liked the ones that had removable plexiglass side panels. I definitely like things to be more open air in the summer.

Screen Name Redacted

7/13/2021 01:28 PM

I think the expanded outdoor dining has been a great addition. I am sure it will help attract more people to Birmingham that will frequent local businesses. I would go even further and suggest to close off parts of Old Woodward, e.g., between Maple and Brown and turn it into a pedestrian area.

Screen Name Redacted

Outdoor dining adds a welcoming street vibe that indoor dining

7/13/2021 01:29 PM

cannot provide ; Europeans would laugh at this survey.

Screen Name Redacted

7/13/2021 01:30 PM

Its a huge investment and they should be able to use them outside year-round.

Screen Name Redacted

7/13/2021 01:31 PM

Expanded outdoor dining has been a huge, unintended benefit of COVID. I hate to see us lose this opportunity to keep these seats available. There is plenty of parking in garages all over town - let's keep the town more "walker friendly" and keep the outside for pedestrians, shoppers & diners. I love the outdoor dining!

Screen Name Redacted

7/13/2021 01:32 PM

Love the outdoor dining.

Screen Name Redacted

7/13/2021 01:32 PM

I am so disappointed that Birmingham chose to remove the additional outdoor seating areas. I would like to see it come back in some format

Screen Name Redacted

7/13/2021 01:34 PM

So uplifting! Made it much more enjoyable to walk around downtown

Screen Name Redacted

7/13/2021 01:37 PM

The charm and appeal of Birmingham is that of a small town. Since these structures have been added to the DT area it has become so congested, busy and chaotic that we don't enjoy walking or driving into town anymore (we live in the Crestbrook neighborhood). The sidewalks are so crowded with spillover diners from restaurants that the DT has lost its charm and instead now feels like that of a very busy but small city. Although it's great that Birmingham has become a destination for dining, it can still be that without the addition of ugly, large structures that block the view of other businesses and the natural beauty of the buildings. There are plenty of dining/seating options in DT we don't need to any more seating options especially when they're intrusive of other businesses. Most importantly they're dangerous for drivers and pedestrians! Numerous times I've been almost hit or witnessed pedestrians or strollers almost being hit because these structures are blocking the view of the street/corners. Drivers seem so distracted as they search for parking they aren't even looking for pedestrians and these dining structures just bring in more vehicle traffic and distracted drivers. I strongly encourage the city council to keep the current rules in place and not allow the DT area to lose its charm.

Screen Name Redacted

7/13/2021 01:37 PM

COVID-19 is far from over so outdoor seating is a must for the business owners and patrons.

Screen Name Redacted

7/13/2021 01:39 PM

Many restaurant have invested in expanded platforms and eating areas during Covid, and from my perspective, it has been a huge success. Why make them tear down these structures when they obviously are bringing people into Birmingham and people enjoy the opportunity to sit outside. There is so little street parking in the downtown area, a few less spaces won't make a big difference. (People can easily use the first-2-hour free parking structures.) Also, some of the more permanent structures seem very nice. Why make the restaurant owners tear these down in the winter. Snow and ice can be removed around them. Put the onus on the owner to ensure the pavement is clean and safe.

Screen Name Redacted

7/13/2021 01:42 PM

I have loved the outdoor dining, especially in our better weather months. It's very european and creates a nice new flair to the same old. People love to be outside, Please keep them.

Screen Name Redacted

7/13/2021 01:43 PM

Please keep outdoor dining!!

Screen Name Redacted

7/13/2021 01:44 PM

Outdoor dining DEFINITELY makes Birmingham a better city and makes it more enjoyable. I live here because of its beautiful downtown and this makes it better. PLEASE consider making it EVEN BETTER by experimenting with closing off a few streets to vehicles 1 or 2 Saturdays a month in summer and creating a european style walking zone (fussganger zone). Cannot realistically do it to many streets and some will consider it a hassle, but this is what makes Germany and other places in Europe great in the summer. Expanded outdoor dining and no vehicles nearby. Possibly pick a block, close it off for one Saturday a month and call in Fussganger zone day with the following options: A) Allow expansion of dining/shopping of those businesses on that block into street and people to walk, eat and drink within that zone B) Allow expansion of dining/shopping of those businesses on that block into street and people to walk, eat and drink within that zone and allow other Bham restaurants to set up stands and tables in the street. C) Get some variety and invite food trucks to set up in road along with the restaurants and stores on that street to expand dining/shopping into street and people to walk, eat and drink within that zone . The naysayers will think its an inconvenience but it

leverages one of our best attributes in Bham which is a beautiful vibrant downtown area

Screen Name Redacted

7/13/2021 01:44 PM

I loved the increased outdoors experiences and I think they add a beautiful touch to the city appearance.

Screen Name Redacted

7/13/2021 01:46 PM

They create a wonderful atmosphere and a vibrancy to town we need to maintain

Screen Name Redacted

7/13/2021 01:51 PM

Expanded dining options bring people and liveliness to Birmingham streets and create more shopping opportunities for merchants.

Screen Name Redacted

7/13/2021 01:52 PM

Close the streets at night to vehicle traffic and allow the restaurants to use the street. It happens in many cities including European city centers and Birmingham would be perfect for that situation, in warm months.

Screen Name Redacted

7/13/2021 01:54 PM

Let's encourage more dining and shopping in Birmingham by giving people dining options year round.

Screen Name Redacted

7/13/2021 01:58 PM

Year around enclosures serve their purpose in warm weather if it's raining and they add lots of life to the city in the winter with their hubbub and hanging lights. I'm in favor! There aren't enough pedestrians to be concerned with sidewalk encroachments they might pose. No problem walking through them. Strongly in favor! European cities have outdoor cafes all year long. It's at least worth another trial year now that covid is "over" to see if people are still interested in year round outdoor dining. I'm also in favor of more food trucks around but that's another topic.

Screen Name Redacted

7/13/2021 01:59 PM

As longtime Birmingham residents who frequent many restaurants in town, my wife and I were very disappointed by the seemingly sudden decision to pull-back expanded outdoor dining. Summer had just started. Restaurants had gone through a great deal, just to survive through the C-19 crisis. It was a very short-sighted, non-business like decision. Many cities are closing their key streets to vehicles and making streets walkable. That would be much preferable to restricting restaurants, for a few parking spots. Also, this would cut down on the ridiculous speeding by vehicles, in the restaurant district. Thank you. Don Warwick

Screen Name Redacted

7/13/2021 02:00 PM

The loss of street parking really effects the non restaurant business and should be strongly considered.

Screen Name Redacted

7/13/2021 02:01 PM

I think food trucks should be allowed in the parks .

Screen Name Redacted

7/13/2021 02:02 PM

I feel outdoor dining is important to the look and feel of Birmingham. Much like similar cities in Michigan, the US, and Europe, this is a great idea for bringing people into Birmingham to enjoy the downtown area.

Screen Name Redacted

7/13/2021 02:04 PM

Increased business to our local businesses is good for Birmingham. Our city leaders should be more proactive working with owners to develop solutions to the challenge of new positive changes for our city.

Screen Name Redacted

7/13/2021 02:04 PM

Outside dinning year round provides both customers a good experience especially on those wonderful late fall and now and then nice winter days. For those establishments who want to participate this gives them the ability to increase their revenue and provide guests a unique experience.

Screen Name Redacted

7/13/2021 02:06 PM

I have absolutely loved it! It brings such an incredible energy to the city and will attract people to downtown Birmingham all year round. I love that it expands dining capacity and also helps restaurants that have struggled the last year to make up that income. Please continue to allow this.

Screen Name Redacted

7/13/2021 02:06 PM

Times have changed and changes should be made with Birmingham dining.

Screen Name Redacted

7/13/2021 02:09 PM

Most were tasteful but that huge enclosure on Townsend was over the top ugly.

Screen Name Redacted

7/13/2021 02:12 PM

The pandemic showed all of us how wonderful it was to be able to be outside, warm or cold, and enjoy our restaurants. I think it is a shame that the platform dining area at Bistro Joe's had to be removed.

Screen Name Redacted

7/13/2021 02:13 PM

I appreciate and applaud the restaurants that were able to stay open during the pandemic. If they are willing, they should be allowed to maintain their expanded outdoor seating areas.

Screen Name Redacted

7/13/2021 02:14 PM

In general, I am fine with expanded outdoor dining, as long as its done right. I don't have a problem with outdoor dining taking over a few parking spaces or an alleyway - to me, the loss of parking spaces is a minimal side effect and people can walk from the decks. However, I do feel that the sidewalks are still necessary and do not support restaurants turning the sidewalk into their own (outdoor) dining room. I walk my dog regularly and also am a runner and utilize the sidewalks for walking/running. When restaurants turn the sidewalk into a dining room, it essentially pushes the pedestrian traffic into the street. This is not safe! Example: Luxe Grill and Sal's made the sidewalk their dining room over the last year+. It was not possible to walk through that area with a dog or go for a run through there as the added tables, waitstaff, people standing around, strollers sticking out, etc, made it not easy to walk/run through there. I often had to walk out into the street (behind the angle parked cars that could easily back into me) not to mention the traffic traveling on the street. I had that issue multiple times. It simply was NOT SAFE and I am surprised there was not more complaints or concerns for pedestrian safety.

Screen Name Redacted

7/13/2021 02:15 PM

It would be great for the restaurants to continue their expanded seating, both for summer and winter.

Screen Name Redacted

7/13/2021 02:16 PM

I wish there were more family-friendly restaurants in B'ham. I know that isn't your question here but thought I'd offer my opinion. Too many steakhouses and fancy, costly restaurants and not enough family restaurants other than all the Coneys.

Screen Name Redacted

7/13/2021 02:18 PM

Birmingham is such a nice city downtown so keeping it not over too much with outdoor seating is important. Winter walking and sidewalk cleaning is critical if we want to have a clean and safe winter environment.

Screen Name Redacted

7/13/2021 02:22 PM

I believe a lesson from the covid experience and even more broadly what makes a city like Birmingham vibrant and adds to its character is its walkability, shops and most importantly the outdoor

cafes/restaurants/bistros that bring the streets to life! It creates a healthy commercial environment where all the stake holders benefit.

Screen Name Redacted

7/13/2021 02:29 PM

It is great in the summer to eat outdoors, but I'm not a fan in the winter.

Screen Name Redacted

7/13/2021 02:35 PM

I love the outdoor options and would like to see actual dining districts in summer and winter. To me, it makes downtown feel festive and vibrant year-round. I wouldn't mind seeing one of the streets blocked off for outdoor seating. I thought that our restaurants handled the outdoor expansion in a tasteful and fun+eclectic manner. Much like our residential streets, we saw a little bit of everything, and the sum of the parts was very appealing. This is one of the remnants of the pandemic that I hope remains: a great outdoor dining scene 365 days/year!

Screen Name Redacted

7/13/2021 02:39 PM

I felt the enclosures were a way for restaurants to maintain their business during covid especially in winter. Like outdoor seating weather permitting but would opt for indoor seating when covid is gone.

Screen Name Redacted

7/13/2021 02:39 PM

Many of these restaurants have made a large investment to create an outdoor dining experience for their customers during this pandemic. I think it is unfair for the city to not allow the outdoor dining to continue just because this pandemic is coming to an end. As a result of the pandemic we now have a whole new way to vote (that all you liberals out there LOVE because it got you Biden)), so now we have a whole new way to dine as a result of the pandemic. You can not have it both ways.

Screen Name Redacted

7/13/2021 02:40 PM

The platforms erected during the covid pandemic were attractive (with exception of 220 Merrill's additional platform) and a great asset to the city's dining scene in my opinion. I believe they should be allowed to continue as long as there is some sort of review process to make sure they are not garish.

Screen Name Redacted

7/13/2021 02:43 PM

Please keep the outdoor dining i believe they make Birmingham more vibrant and interesting..

Screen Name Redacted

7/13/2021 02:44 PM

Expanded and year round outdoor dining is necessary for our town and to help support our bar/restaurant owners

Screen Name Redacted

7/13/2021 02:50 PM

I like the type of outdoor eating area Bella Piatti & the Townsend provided during the pandemic. Somewhat open, friendly, and not private. Everyone seems so concerned about street parking but the downtown is surrounded by parking structures and when was the last time all the structures were filled?

Screen Name Redacted

7/13/2021 02:59 PM

Once covid is over, outdoor dining during the winter will end. No one wants to eat out in the cold. Since you cannot control the type of structure used for outdoor dining, you will see some very unattractive structures and it will completely change the look of our streets.

Screen Name Redacted

7/13/2021 02:59 PM

The pandemic taught us we need to allow businesses to do what they can to survive.

Screen Name Redacted

7/13/2021 02:59 PM

We really enjoyed the back alley set up at dick o dows especially with the heaters and table top fire pits. This was amazing and allowed us to go out with our daughter safely.

Screen Name Redacted

7/13/2021 03:11 PM

This is a no brainer . Expanded all year dining is a must.

Screen Name Redacted

7/13/2021 03:24 PM

I think the outdoor dining enclosures are a nice addition to the downtown Birmingham experience. I enjoy eating on the outdoor patios but would not want to be indoors in the summer months. I hope the city will allow restaurants to have the option to continue using these outdoor arenas. I believe that our lives, since covid have been forever altered. I don't feel safe with people sneezing and coughing all around me (which may be the case if I were at an indoor restaurant venue). I prefer eating outdoors where there is natural air circulation. There is so much uncertainty. Even though a person may be vaccinated, there is no evidence how long protection from the vaccine will last. The person sitting at the table next to me may be a carrier of the virus but have no symptoms. As far as I'm concerned, there is still a lot to be concerned about. I feel privileged to be able to go out and be social. However, let's not press our luck. We should continue to make outdoor dining available year round, for now.

Screen Name Redacted

7/13/2021 03:24 PM

Would also like to see restaurants allowed to serve alcoholic beverages to go and patrons be allowed to take them to a nearby park or while walking through town.

Screen Name Redacted

7/13/2021 03:35 PM

Outdoor dining has been a bright spot during the pandemic, and we should continue to encourage it. I would also consider permanently or temporarily closing streets to further enhance outdoor dining/entertainment possibilities downtown.

Screen Name Redacted

7/13/2021 03:38 PM

the questions are biased against allowing year long outside dinning
If the folks who made the survey disagree they do not understand how to word questions to be truly neutral

Screen Name Redacted

7/13/2021 03:44 PM

In bringing in the chairs for snow and ice, only if it there aren't tents or part enclosures. The restaurant should then just be responsible for clearing it before they open.

Screen Name Redacted

7/13/2021 03:55 PM

Love it... was SO impressed with what NORTHVILLE did this year. We should have a "festival" one night mid-winter like they did. Just promoting outdoor winter dining options.

Screen Name Redacted

7/13/2021 04:04 PM

This whole concept must be very carefully controlled - in some instances what's being erected is close to "state fair" quality - very cheap and temporary looking. Most of the decks - to date - are first class - but the outdoor areas enclosed in plastic sheeting are downright cheap looking.

Screen Name Redacted

7/13/2021 04:11 PM

Additional dining options, i.e. outdoors is fun.

Screen Name Redacted

7/13/2021 04:20 PM

I love it! It makes the city feel more European. It enhances community and nightlife.

Screen Name Redacted

7/13/2021 04:25 PM

Birmingham has a charming European feel with the outdoor dining. Please keep it going/bigger!

Screen Name Redacted

I would love to see the continued use of outdoor dining in

7/13/2021 04:28 PM

Birmingham. Although I might not use them in very cold or hot days, there are people who may do so. I love seeing people out dining and supporting our restaurants. This activity also brings more people to the retailers in town.

Screen Name Redacted

7/13/2021 04:34 PM

Winter stinks in Michigan. Let's try and make it a better experience.

Screen Name Redacted

7/13/2021 04:37 PM

I totally support this

Screen Name Redacted

7/13/2021 04:52 PM

Sidewalks for pedestrians need to be a priority

Screen Name Redacted

7/13/2021 05:10 PM

The current administration is tone deaf to the residents. Taking down the outdoor structures is senseless. Residents enjoy the added space and enjoy the outdoor atmosphere

Screen Name Redacted

7/13/2021 05:18 PM

We need to go even further we should take cars off the streets in the core of the downtown and make some walking areas with cobblestone streets like Europe. We should make pierce between merrill and maple and Martin between pierce and Henrietta all car free and use that space as a central gathering. I feel like we are leaving so much potential on the table for downtown bham. We should look to small downtown like cologne Germany where they have parts that are car free it would be so much nicer.

Screen Name Redacted

7/13/2021 05:26 PM

Create more parking spaces for quick pick up etc and market those properly. Then allow the restaurants to purchase the spaces from the city. There is ample valet and parking structures. There is no guarantee covid will not return this winter and businesses have already suffered enough. Allow them to expand if they wish.

Screen Name Redacted

7/13/2021 05:40 PM

They bring extra business to the city...it does impact parking! As long as it works I don't object. If it becomes a problem then the ordinance can be changed!

Screen Name Redacted

7/13/2021 05:44 PM

It is not fair to the other businesses in town to allow restaurants to take up much needed parking space on the street or allow them to block or cover the frontage of other businesses with their outdoor seating. Restaurants have returned to full capacity and should not

be permitted to have more space.

Screen Name Redacted

7/13/2021 05:45 PM

I've been a resident of Birmingham since 2012 and have always wondered why we didn't have more outdoor dining options throughout all seasons. Many other cities that I have traveled to - with similar climates - seem to have more options than we do. I have enjoyed dining at expanded outdoor establishments over the past year and also have enjoyed experiencing how vibrant the city feels with more people on the streets.

Screen Name Redacted

7/13/2021 06:07 PM

Anything we can do to help restaurants navigate the situation as well as create safe seating is a positive.

Screen Name Redacted

7/13/2021 06:20 PM

Make/keep (I love walking distance I don't use it sorry!) valet easy, convenient, and CHEAP, keep the garages reasonably priced, and keep/get the good restaurants with good outdoor atmospheres and lots of seating available and people will come with or without those parking spots, but they won't come if they can't get in to eat anywhere and/or there's nowhere to sit outside on a beautiful night. Keep Birmingham pedestrian friendly and encourage ride share use with discount codes or some other promotion to offset any parking issues!

Screen Name Redacted

7/13/2021 06:34 PM

Overall , I think outdoor dining all year round creates a small town, friendly, welcoming atmosphere.

Screen Name Redacted

7/13/2021 07:19 PM

Consider making police station and adjacent park blocks walking only. Allow take out and picnics in the park with open containers. Examples like Vail & Beaver creek do this with great success and furthers bham's walkability model.

Screen Name Redacted

7/13/2021 07:25 PM

We should enable organic growth of businesses year around, and this includes innovation around dining during winter months.

Screen Name Redacted

7/13/2021 07:38 PM

Shut these super spreaders down entirely.

Screen Name Redacted

7/13/2021 07:48 PM

I prefer the sacrifice the small amount of parking, to add to the great outdoor dining experience that happened during 2020-2021

Screen Name Redacted

7/13/2021 08:01 PM

Since Covid I think outdoor is important. Even though I am vaccinated I still safer eating outdoors.

Screen Name Redacted

7/13/2021 08:07 PM

Outdoor seating is great! It adds charm to Birmingham. Other cities who will continue to have outdoor seating with pull customers from Birmingham if we don't offer it to customers.

Screen Name Redacted

7/13/2021 09:12 PM

We really enjoyed the option to dine outside in the cold months, and took advantage of it a few times (would have been more if not for covid and a baby). We liked the "apres ski" feel of the outdoor winter spaces and would really enjoy tasteful options for outdoor dining in the winter. That said, some structures/tents can be an eyesore. An "architectural" standard would be great

Screen Name Redacted

7/13/2021 10:26 PM

Due to covid 19, the outdoor expanded restaurants have been a god send for those of us who are concerned about eating in crowded restaurants. Love the outdoor eating with heaters!!

Screen Name Redacted

7/14/2021 03:17 AM

Outdoor dining benefits both restaurants and their employees, while giving patrons an opportunity to open air ans safer dining. In winter, igloos are more scenic and allow for private dining.

Screen Name Redacted

7/14/2021 04:21 AM

this is a no brainer not sure why the restaurants had to take them down this summer they were busy and everybody enjoyed them. This also helped the restaurants increase their income and after 2020 it was a win win for all

Screen Name Redacted

7/14/2021 04:58 AM

I live in Birmingham and there are many of our restaurants that I can't even go to on a Friday or Saturday night unless I make a reservation far in advance -- e.g., Casa Perno, Tallulah, Adachi, 220, Bella Piatti, Townhouse, etc. So, I am all for expanded dining in any form that allows for more seating at these restaurants, that might allow me to actually have dinner at one of my local restaurants.

Screen Name Redacted

7/14/2021 05:00 AM

I believe that ther should be an option for resruarants to expand their dining to outdoor, and since Michigan is so cold, there must be an option for those businesses to heat their space if they would like to. Why not expand the dininig in birmingham? And help these

businesses out? I think that igloos are a thing of the past, and are unsanitary, but if a busniess wants them, they shouldbe able to. Sidewalks still need to be accessible and should not be blocked under any circumstances.

Screen Name Redacted

7/14/2021 05:16 AM

Since Michigan has such a short outdoor dining season, enclosed or heating outdoor seating really makes the dining experience enjoyable all year round. It has been a fun experience for my family and I.

Screen Name Redacted

7/14/2021 05:29 AM

It's great for the restaurant and a great experience for the diner.

Screen Name Redacted

7/14/2021 05:35 AM

I loved the outdoor dining!

Screen Name Redacted

7/14/2021 05:35 AM

Restaurants are THE most important part of downtown Birmingham. Defer to them to keep their businesses flourishing!!

Screen Name Redacted

7/14/2021 06:01 AM

Having outdoor seating adds so much vibrancy to the downtown. While expanding will present challenges, I hope the City approaches expansion with a "can do " attitude and works with the merchants to address issues that may arise.

Screen Name Redacted

7/14/2021 06:03 AM

People generally want to be outdoors in warm weather. Restaurants should be able to utilize their space for patrons. I do not want to have to go to other surrounding cities for outdoor eating. This should be as accommodating as the shopping we encourage.

Screen Name Redacted

7/14/2021 06:18 AM

This is an important topic... we love the outdoor component and feel as though sacrificing a few parking spaces is a small give for this huge amenity!

Screen Name Redacted

7/14/2021 07:21 AM

Outdoor dining is one of the best things the city has to offer to get people to come to town in my opinion.

Screen Name Redacted

7/14/2021 09:14 AM

Just want to confirm that the strategies in other northern city climates are being reviewed to enable Birmingham to select best

practices going forward for consumers, retailers and restaurateurs

Screen Name Redacted

7/14/2021 10:09 AM

Your survey wording is confusing and inadequately descriptive. Should the DATES allowing outdoor dining be expanded or date limits eliminated entirely? -YES Should the SPACE for current individual restaurant's space outdoor dining be expanded-NO Should more restaurants have option for year-round heated or not/partially enclosed outdoor dining?-YES Should tables and chairs be removed for snow and ice? -YES But every night? -NO (if they do not remove for snow or ice once, then outdoor dining privilege revoked--zero tolerance) Tents and "Igloos" in alleys -YES if no objections from neighbors. NOT on street sidewalks or streets platforms.

Screen Name Redacted

7/14/2021 10:09 AM

Restaurants have been very busy and still recuperating from Covid revenue losses. Let's give them an opportunity to recoup; however, only in front of their respective restaurants. The dining igloos, etc. should not be in front of other businesses, like the restaurant across from the Townsend Hotel had all winter. That is unfair to the other business owners .

Screen Name Redacted

7/14/2021 11:19 AM

Please made outdoor expanded dining permanent! It enhances Birmingham's reputation as a destination city and adds much needed spirit to our town.

Screen Name Redacted

7/14/2021 03:09 PM

As a frequenter of restaurants in bham, I would be absolutely dismayed if this is not amended. People LOVED the outdoor patios: Umbrellas do not do the same thing as an enclosed area. Restaurants barely made it out of the pandemic if they did so at all, and this was the one positive thing you allowed them to do, and now you're stripping it away immediately before they've even been able to get back on their feet. Many people, myself included, feel far more comfortable eating outside, but would love to do so in the shade, which this clearly anti-business measure makes way harder. Why can't people eat outside in the winter if they want to? Where's the harm? Frankly anybody who voted for this should be embarrassed of their vote-restaurants got crushed this pandemic, many of them invested a LOT of money to adjust to the times, and the cities decision to make them get rid of everything as soon as restrictions are lifted is foolish and cruel.

Screen Name Redacted

The city manager and planning director, in coordination with city

7/14/2021 04:25 PM

commissioners, should study and discuss the feasibility of closing two blocks of Pierce Street between Maple and Merrill to vehicles from 11 a.m. to 10 p.m. daily (or Friday-Sunday as a pilot) for a dining/pedestrian promenade. Retractable bollards can be used to allow emergency access, and deliveries/trash pickup can be restricted to 7-11 a.m.

Screen Name Redacted

Makes sense 9 months a year but not Jan-March.

7/14/2021 04:32 PM

Screen Name Redacted

Also allow outdoor fireplaces. We need the smell of burning wood in the air in fall and winter.

7/15/2021 04:50 AM

Screen Name Redacted

Birmingham is losing a lot of customers to downtown Detroit restaurants and other hotspots. Year-round outdoor dining would keep more customers in Birmingham and add to the ambiance of the city on the winter.

7/15/2021 07:16 AM

Screen Name Redacted

I believe that year round outdoor dinning gives Birmingham a more cosmopolitan feel. In all of Europe people dine outdoors year round and I believe it would not take long for people to not only get used to it but seek it out. This would help all types of businesses in birmingham by drawing more people to visit here.

7/15/2021 07:29 AM

Screen Name Redacted

year round outdoor dining is great! it's a fun experience, makes Birmingham even more attractive (like a resort town), helps restaurants by allowing them more space. My family love it and I are totally in favor of keeping it going!

7/15/2021 08:05 AM

Screen Name Redacted

The city is dramatically more vibrant with the outdoor dining. Many of us are not comfortable returning to indoor dining for the foreseeable future and would like a way to enjoy Birmingham's restaurants (take our just isn't the same). Please bring this back!

7/15/2021 02:21 PM

Screen Name Redacted

Outdoor dinning year round is unique and enjoyable by all! Highly recommend you keep year round outdoor dinning.

7/16/2021 06:30 AM

Screen Name Redacted

If any expanded seating options are to be considered the following is necessary: Any parking spaces occupied must be paid at full occupancy cost to the city parking fund for the entire period

7/16/2021 06:52 AM

occupied at the meter rate. Any seating number above the original number permitted in the original licence application for any establishment must trigger a review of the licence criteria and a PAD parking review to include the cumulative loss of parking spots occupied by all outdoor structures. Any net loss of parking spaces by the establishment must be subtracted from their licensed occupancy numbers and if it reduces net seating, their licenced occupancy must go down accordingly. Any Bistro that exceeds the bistro limit must either limit to the Bistro ordinance or submit for a restaurant licence to gain higher seating numbers, the increased number only to be allowed if the restaurant licence is granted. A 3 strikes and out type concept is needed for legal compliance complaints. More than 3 then the seating must be removed and a cooling off period enforced of minimum 1 year. Zero tolerance of encroachment onto non structure permitted parking, ADA access, pedestrian walkways etc.

Screen Name Redacted

7/16/2021 07:59 AM

Dining venues should be allowed to add rooftop patios/dining if appropriate and feasible.

Screen Name Redacted

7/16/2021 10:03 AM

If you change this ordinance then there should be a total ban on complaining about parking. Contrary to what everyone _says_, people don't want to take advantage of the North Old Woodward and Chester garages when they eat at various spots downtown. And on-street parking - many is the time I've seen people block Old Woodward to try and snag a spot by one of the restaurants when there are 10-20 open spots merely a block away in either direction (never mind the open spots in Lot 6 for those on N Old Woodward!). Reminds me of the days when the Jacobson customers of the Maple/Chester store (now McCann Detroit) would idle in the eastbound lane of Willits/Oakland waiting for a spot to open up in the parking lot (they'd do this for 30 minutes-1 hour at a time!). Maybe run the season March - November? We're having warmer springs now and it could be a compromise that might placate some. However, snow removal remains the absolute #1 reason for not allowing these from December to February/March. I can't help but think this will make it much harder on both the drivers and those restaurant employees who have to shovel. Has DPS had a say in this? What happens when the snow plows damage a platform? The platform on Ravine was problematic because it was almost impossible to squeeze two cars through - it's bad enough when there are cars parked there, but it's somehow easier for drivers to gauge how close to get to those than how close to get to a structure with walls, ha ha. However, with snow, it quickly becomes one wide lane rather than two. It's a street and we still

need to use it for cars! What about liability for both employees and patrons when it's icy out? I think expanding this ordinance just increases the total seating of all of the applicable places - and runs afoul of the Bistro licenses in particular. I wonder if places like Townhouse want this because their regular seating is limited _by a design they created & submitted and which was approved as is_. As far as roof/no sides - the patrons who think this is a great idea now will really want to sit under a cupola in January with driving snow? FYI, when they pull up platforms such as those by Bella Piatti there are clear signs of rats and other vermin living under them (and why wouldn't they take advantage of such a great shelter with a food source?!). Permanent structures, I fear, would lead to an increase in pest problems in the streets - I've already seen rats in the streets in the early morning (and a dead one on the sidewalk) and I don't really want to be like NYC or New Orleans or Tokyo (all places I've spent considerable time) where it is commonplace to see them every day/night. Tables and chairs are enough. Maybe the Commission can set some guidelines for those that will make it both more comfortable for patrons and easier for the employees who haul them in/put them away.

Screen Name Redacted

7/16/2021 02:59 PM

I love the outdoor dining - it is such a PLUS for our community!

Screen Name Redacted

7/16/2021 04:00 PM

The outdoor dining was a big draw for us during the colder months

Screen Name Redacted

7/16/2021 04:08 PM

Please study Royal Oak's Social District to permit walking with alcoholic beverages withing a defined perimeter(s).

Screen Name Redacted

7/16/2021 07:16 PM

N/a

Screen Name Redacted

7/17/2021 02:57 AM

As Birmingham residents you are forcing us to go to other communities by shutting down outdoor dining.

Screen Name Redacted

7/17/2021 09:34 AM

There is no reason for Birmingham not to allow year-round outdoor dining. It brings additional people to down town for all the other businesses

Screen Name Redacted

7/17/2021 02:17 PM

In cooler seasons, many European restaurants with outdoor dining provide and drape a rug/ blanket over the back of dining chairs for

use when it gets chilly. It's a nice hospitality touch. I support expanded outdoor dining so long as the facility, when built, isn't actually and simply an indoor dining room space extension; Outdoor dining needs to be differentiated from indoor dining. If there is glass, or similar, for windows, the square footage should be extensive so you can see out and watch the falling snow! Outdoor spaces don't always need to be 100% enclosed - otherwise it is not outdoor dining. Some 'outdoor' dining areas in the City last winter were 100% enclosed, therefore not really outdoor dining. Thank you.

Screen Name Redacted

7/18/2021 06:32 AM

EVERY "beautiful city" in the USA, Europe and the Middle East has outdoor dining, enclosed, open, glass, plastic! Makes for a beautiful community and communal space. Which cities in Michigan are a destination for residents and better real estate values? Roseville or Northville? Plymouth or Warren? Grosse Pointe or Gibraltar? Rochester or Romeo. Holland or Ecorse? Instead of faux downtowns like the strip mall porn all over our burbs (see: Waterford, Canton, Troy and their soulless "major retailer" concrete pads w/chairs). Take care of our boutique establishments. It's not about parking lanes. It's about community. Channel the same "politico" fervor for a restoration hardware big box... for what's best for LOCAL businesses. "The one thing about common sense, it's uncommon" -JD Andary "New resident from Oakland Twp"

Screen Name Redacted

7/18/2021 11:41 AM

We can walk to Birmingham from our house located in the Birmingham Estates neighborhood. Make frequent visits to outdoor areas like Ellies, Phoenicia, Salvatore, Luxe, Streetside, Tallulah and so many others. Right now we are not eating inside at any restaurants even though we are vaccinated. Still think the risk is too high with so many unvaccinated and the variants growing stronger. Please bring back outdoor to help our restaurants succeed.

Screen Name Redacted

7/18/2021 07:18 PM

I loved the way outdoor dining enlivened the streets of Birmingham's downtown. My husband and I are strong advocates to continue to allow and promote outdoor dining.

Screen Name Redacted

7/19/2021 10:02 AM

We loved the style Birmingham followed this last year and hope to see it again in the future.

Screen Name Redacted

7/19/2021 11:37 AM

Hey! We moved here from California where most of our favorite small businesses went under due to very strict covid measures.

Birmingham has literally and figuratively been a breath of fresh air for us, and I would LOVE to see more outdoor dining and retail options in the winter again. It gave our town a european vibe that I truly loved and added so much to the character of our fine city. Please help small businesses to keep thriving here and please keep the permit process open for these types of structures... we don't know what the future holds in terms of this epidemic, but even if it ended magically tomorrow, eating outdoors in the winter is SO FUN!!!

Screen Name Redacted

7/19/2021 01:45 PM

It would greatly benefit our city in promoting social engagement and financial gains.

Screen Name Redacted

7/19/2021 03:29 PM

I like the outdoor dining! It is a great enhancement for Birmingham. But, during normal times, we NEED more parking! That should be accomplished with additions to existing parking garages or building new ones. Way past time for the city to make this happen. The city owes it to the merchants and residents.

Screen Name Redacted

7/19/2021 03:52 PM

Fully support expanded outdoor dining and so do our friends and neighbors who may not take this survey. Go for it!!!!

Screen Name Redacted

7/20/2021 04:09 AM

I think it would be a major mistake for the city to not embrace the year round outdoor dinning. It has been a positive game changer for Birmingham.

Screen Name Redacted

7/21/2021 02:28 PM

It would be detrimental to the retail stores. Additionally some restaurants have have expanded their outdoor dining areas to the point the sidewalk areas are difficult to navigate.

Screen Name Redacted

7/21/2021 03:26 PM

I love it, more outdoor dining, the better

Screen Name Redacted

7/23/2021 03:07 PM

Should be year round with a compromise for business owners feeling blocked from the street....

Screen Name Redacted

7/23/2021 06:22 PM

Expanded outdoor dining throughout the year makes me love living in Birmingham even more. It would be fantastic to be able to have this post-pandemic too. Reminds me of Europe very much, I also think it encourages community spirit.

Screen Name Redacted

7/23/2021 07:58 PM

I love the idea of keeping expanded outdoor dining year around. I do recognize challenges during winter months and would want sidewalks to be cleared and safe. If there is a way to accomplish both that round be great.

Screen Name Redacted

7/26/2021 12:14 PM

Over head structures (awnings or roofs should be considered to allow guests to dine outdoors even when the weather looks uncertain

Screen Name Redacted

7/28/2021 09:34 AM

The availability of increased outdoor dining may be the only upside of the Covid epidemic. I believe that people overwhelmingly prefer it to indoor dining. I understand that there are a number of codes that can make its permanent establishment difficult. But we should find a way to make it work, even selectively, to the locations where it makes the most sense.

Screen Name Redacted

7/28/2021 11:19 AM

I would love to see year round outdoor dining in birmingham. I already thing there is a limit to how much outdoor dining there is available in birmingham and would love to see even more, especially in the summer month! I do not want to sit inside restaurants at the current moment and having additional outdoor seating would be extremely welcomed! I think offering year round outdoor seating would be beneficial to restaurants as well!

Screen Name Redacted

7/28/2021 01:48 PM

Love outdoor dining. Wonderful option for residents and visitord

Screen Name Redacted

7/28/2021 03:13 PM

I think the outdoor dining during COVID has been one of the few bright spots It gives a vibrant, European feel to the city. If done with care and taste outdoor dining perfectly suits the upscale town. This winter and spring birmingham was as lively as possible. I enjoy outdoor dining so much now! I plan on putting on a parka and heading to the outdoor restaurants frequently even in winter. If I had a choice I would rarely go inside now that I see how much fun it is. Please consider at least one more year like last year while you evaluate the best permanent plan and details going forward for a permanent solution .

Screen Name Redacted

7/28/2021 05:41 PM

I love the ambiance and feel of the expanded outdoor dining

Screen Name Redacted

7/28/2021 05:41 PM

I found the expanded dining options to be attractive and added life to the city even during colder winter months. Igloos are too isolating and service in them was generally compromised.

Screen Name Redacted

7/28/2021 06:06 PM

My physician husband has had a kidney transplant and has zero antibody after vaccination. I am 67 and an asthmatic. We cannot and will not be able to eat indoors until the variants are under control. We cannot go into crowded spots with unmasked individuals. We only eat outdoors and frequent the outdoor dining. We were disappointed with the removal of the platforms. We cannot eat in inclosed tents with other people - that is the same as eating indoors. Thankyou

Screen Name Redacted

7/28/2021 06:32 PM

Keep outdoor dining open so those of us taking Covid seriously can still support our local businesses through in person dining vs just carry out!

Screen Name Redacted

7/28/2021 06:37 PM

Please include dining with dogs. Love to walk into town and eat

Screen Name Redacted

7/28/2021 07:07 PM

Expanded dining is great when it supports the restaurants needs and does not interfere with foot and vehicular traffic. However Townhouse either was given too much space towards the road or took too much, but the tents/seating was right on the curb of Martin and it creates a blind spot. Heading south on Pierce and turning west on Martin I have encountered pedestrians (walking east in my lane) head on. You can't see who or what is in the road from Pierce. There was no place for the pedestrians to go. The wall of Townhouse tents on Martin, trapped the people in the street. They were passed the parking spots/sidewalk entrance on the north side of the street. Cars were backed up eastward to turn onto Pierce and then I turned from Pierce straight into them. However the outdoor space is allocated to each restaurant , visible permanent markings should be made on the ground so it is obvious where a planter or wall should be placed and then enforce it! I can't believe the Townhouse setup was sanctioned by the city that close to/ or on the road.

Screen Name Redacted

7/28/2021 10:20 PM

I love the year round outdoor dining and believe that it encourages more people to eat out in winter months.

Screen Name Redacted

7/29/2021 05:43 AM

All the Other Cities around us Royal Oak Ferndale Northville Plymouth Detroit have mad Outdoor Dining work....Why does the City of Birmingham think they are different or that this option is not a positive thing for the City? Strong resturant business increases foot traffic in the city and the Small Businesses will profit. But maybe Birmingham would rather only have Large Corporate Business in the city?

Screen Name Redacted

7/29/2021 06:58 AM

Absolutely loved this. Was sad to see them removed this summer- the covers allowed for additional outdoor seating even if it was raining out. Loved the option of sitting outside instead of being crammed in next to others.

Screen Name Redacted

7/29/2021 07:28 AM

If restaurants choose to not clear sidewalks of chairs/tables - they should be required to shovel the snow themselves and clear the path without putting snow on other areas of the sidewalk. Or something like that.

Screen Name Redacted

7/29/2021 10:34 AM

The outdoor spaces let us enjoy the outside year round. It makes Bham a 12 month destination. Thanks to Covid we have learned what to wear to eat outside in all weather. It is so enjoyable! Please work with the restaurants.

Screen Name Redacted

7/29/2021 10:48 AM

Outdoor dining year round is charming way to expand seating. I love it in the winter as well as long as it's heated. Very festive!

Screen Name Redacted

7/29/2021 12:32 PM

In these uncertain times outdoor is desirable and the only option for safety and health benefits.

Screen Name Redacted

7/29/2021 01:42 PM

Outdoor street dining is a must for Birmingham. It is better for the town, the businesses, and the old world charm it adds to the city.

Screen Name Redacted

7/30/2021 04:17 AM

Expanded outdoor dining in Birmingham is definitely the way to go! It is more enjoyable and safer than dining in an enclosed area.

Screen Name Redacted

7/30/2021 04:35 AM

I would like to Pierce and Martin Street (the area around city Hall) pedestrianised in the summer months

Screen Name Redacted 7/30/2021 02:42 PM	Why did B'ham administration move so quickly to RE-restrict outdoor dining options without public opinion? Most cities are embracing this Covid creation for further future design, but B'ham is still the known dinosaur. The Planning Board & the City Commission rule with iron fists in a vacuum. I've lived in the City for 30 years & it's becoming a place I no longer recognize, with self-serving administrators.
Screen Name Redacted 7/30/2021 06:50 PM	Look at what Northville is doing.
Screen Name Redacted 7/30/2021 07:18 PM	I think we should support our shops and restaurants and allow them to continue outdoor service year round!!!
Screen Name Redacted 7/30/2021 07:25 PM	Some restaurants abused the space . With the new and "improved" Maple and Old Woodward--enough parking was taken away, platforms are not used enough in decent weather during the week--and don't even start thinking about closing streets on weekends to expand dining as in Northville and Ann Arbor
Screen Name Redacted 7/30/2021 09:03 PM	Outdoor dining is so enjoyable for our family. Through covid we have learned to adapt to colder outdoor dining and have decided we will continue to patronize these options post-covid if available. However, we feel that FULLY enclosed single or group "outdoor" experiences are only suitable post-covid.
Screen Name Redacted 7/31/2021 05:09 AM	I think expanded outdoor "open air" dining is needed in Birmingham. Even in the winter. It would have a European vibe and help business reach more customers all year. I will not dine indoors at the moment due to covid and the Delta variant but enjoy using the patios. I would love the option of winter dining outdoors.
Screen Name Redacted 8/01/2021 09:08 AM	Dining outdoors adds much to our beautiful downtown area and contributes to a sense of community. All in favor!
Screen Name Redacted 8/01/2021 09:22 AM	After all of the difficulties restaurants have endured over the last 18 months, to require them to remove their dining platforms in the middle of the season where they may make up for at least some lost revenue was simply unconscionable. They badly needed this break. Apparently the costs involved in the erection of these platforms, some quite costly, was ignored when the decision was

made. The outdoor dining scene in downtown, as lively and attractive as it was, has diminished dramatically. I can only say "shame on those who voted to remove the platforms". I hope residents remember this in the next election.

Screen Name Redacted

8/01/2021 12:51 PM

Outdoor dining has been a boon to those of us not comfortable eating inside and they are a lifeline for restauranteurs. I wouldn't want to see these structures up all year and don't think they should creep into neighborhoods.

Screen Name Redacted

8/02/2021 07:15 AM

Recommend closing certain streets to increase foot, rather than car, traffic. Preserve green spaces.

Screen Name Redacted

8/02/2021 09:09 AM

I live right downtown, and love the vitality of outdoor dining all year round. The city needs to figure out a way to make it work. I've visited nearly every downtown in our area. Northville, Fenton, Plymouth etc. All of them have something to teach us, and none of them have loud revving/screeching vehicles and motorcycles taking away from a nice night outdoors. Expanding our patios will help make Birmingham a more enjoyable place to live and visit. Losing those parking spots is a trade worth making.

Screen Name Redacted

8/02/2021 04:46 PM

Expanded outdoor dining provides a pleasant atmosphere and should be embraced. I have never had an issue finding parking in downtown Birmingham thanks to the parking structures, and losing a small number of street parking spots should not be a concern. If you think about what makes so many European cities enjoyable, pedestrian friendly streets and outdoor dining are a huge part of it. Birmingham should look at the great features and atmosphere that set it apart. People can go to Troy if they want large parking lots and no pedestrians.

Screen Name Redacted

8/02/2021 07:00 PM

I really have enjoyed the opportunity for outside dining in Birmingham in all seasons, including the winter. Please allow this to continue, and allow the establishments to utilize the expanded outside dining areas that they had last year - the reductions implemented at the beginning of July were disappointing. Thanks!

Screen Name Redacted

8/02/2021 07:07 PM

2020 was an exceptional year. If reviews/survey results are mixed on continuing outdoor dining in winter months going forward, then I would suggest a trial period of another year or two, for two

reasons: allow restaurants an opportunity to recoup some of their losses from 2020-2021, and also as a real-world test of proposed rules to see if expanded outdoor dining going forward will be workable for B'ham.

Screen Name Redacted

8/03/2021 11:47 AM

Having traveled abroad extensively, I'm surprised that it took Covid for al fresco dining to be embraced as it has. And with vaccinations helping to curtail the spread of Covid, you want to enforce the ordinance(s) and further punish these already suffering businesses! There was nothing unsightly about the "temporary" sidewalk cafes. If you want to charge the businesses for permits, then do so but not at the expense of having fewer options and less dining space! Why would you want to discourage people from dining in Birmingham by limiting space? Just don't keep changing your mind about what you're going to enforce and make the owners have to constantly make arrangements to remove and reinstall the tables, tents, and chairs during the same season. It's ludicrous.

Screen Name Redacted

8/03/2021 12:24 PM

The current outdoor structures that any restaurant in Bham has set up are all very pleasant to look at and extremely practical. The structures are welcoming and encourage diners to sit outside when they may have stayed home to be able to eat out on a back patio instead. Everyone I have spoken with feels the structures should all stay up to make outdoor dining available - outdoor dining is such a pleasant experience.

Screen Name Redacted

8/06/2021 10:36 AM

We would eat outdoors all year round and would like bigger outdoor dining areas especially in the summer months.

Screen Name Redacted

8/06/2021 10:41 AM

We want to eat outside all year

Screen Name Redacted

8/08/2021 09:48 AM

The pandemic is not over. Outside dining should return. I have yet to eat inside a restaurant since the pandemic began. Fully enclosed, public spaces seem to defeat the purpose, but open air facilities provide a safer alternative. If we want to support our local businesses, they need to have an outside dining option to offer. It is ridiculous that restaurants were bullied into removing such facilities in the middle of the summer by the city. It makes no sense.

Screen Name Redacted

Love the outside dining now in place in downtown and would be

8/12/2021 10:30 AM

very, very disappointed if City Planning takes it all away. The City restaurants have financially been so damaged from this pandemic and have taken such a hit I respect their ingenuity and forward thinking. My husband and I love the European flair of eating outside even if a wee bit chilly. It is also much safer. We also like the idea of closing the streets to parking and traffic. Love the pedestrian aspect and respecting Birmingham's motto as "A Walkable Community". I look forward to the results of this survey and fingers crossed Birmingham is able to keep unique flair.

Screen Name Redacted

8/17/2021 05:16 AM

There is plenty of parking in lots, and residents can walk too so there should be no complaints from those living near downtown. It is good for restaurants who are coming off a tough time with COVID and good for the city at large by increasing activity.

Screen Name Redacted

8/17/2021 05:31 AM

I feel that we should be supporting our restaurants in any way we can. The efforts made to provide outdoor dining options were immense and expensive. To prohibit these spaces while we are still in the midst of a pandemic is ridiculous and inappropriate. There is currently no end in sight regarding COVID and providing safer eating options gives residents/visitors some safer options than just staying home.

Screen Name Redacted

8/17/2021 06:13 AM

There is plenty of parking in the city. It is a walking community. If merchants are concerned about parking spots and sales it has nothing to do with accessibility of parking. If people are coming to eat they will shop if the merchants change their hours of operation and stay open during the dinner rush.

Screen Name Redacted

8/17/2021 07:38 AM

It should be allowed all year round! It was a fun option to be outside especially when when we tend to be stuck inside more in winter. It gives people who are still weary about eating indoors due to COVID an opportunity to still dine out in a way they are comfortable with. It gives restaurants additional seating and opportunity for increased revenue which I'm sure all restaurants could benefit from due to COVID. Other city's in metro detroit were creative in how they approached outdoor dining and I think Birmingham could be a little more creative when discussing this option. I think overall it will allow more residents and non-residents to dine in Birmingham but will also benefit the other businesses by bringing people into our downtown area.

Screen Name Redacted

8/17/2021 09:46 AM

I loved being able to dine outside last winter and would definitely do so again next winter if the option was available. Outdoor dining also allows all of the restaurants to expand their capacity, which makes for shorter wait times and better experiences overall. Given all of the pandemic-related uncertainty, I think it's best to give the restaurants the most options we can.

Screen Name Redacted

8/17/2021 10:53 AM

Don't take our year-round outdoor dining away...we love it!!

Screen Name Redacted

8/17/2021 11:22 AM

I have lived in and around Birmingham my entire life except for the 7 years I lived in Manhattan, during which time I grew to appreciate the inextricable link between restaurants and the fabric and spirit of a town/city. The continued success of Birmingham depends on its ability to accommodate its restaurant owners and patrons. Not only is outdoor dining going to be necessary again this winter to keep patrons coming in due to the surge of the COVID, it's necessary for those restaurants to have extended seating to recoup the disastrous losses of income from the last year. What's more, it's proven that Michiganders enjoyed the spirit around outdoor dining (or "arctic dining" at its coldest) last year and if given the ability to get creative, patrons would continue to be all in. The Europeans and the New Yorkers figured this out a long time ago, we can too.

Screen Name Redacted

8/17/2021 11:41 AM

I froze my a** off trying to support my favorite restaurants during the lockdown and you should be doing all you can to help them. This is a no brainer.

Screen Name Redacted

8/17/2021 06:34 PM

I dined outdoors throughout this past winter and loved it! It allows businesses to serve more people throughout the year, creates a pleasant space for dining, and a safer space during covid surges.

Screen Name Redacted

8/22/2021 07:13 AM

Please make it all year round! My family and I love it!

Screen Name Redacted

8/23/2021 05:57 AM

Restaurants should be accounted to clean (really clean sidewalks by the time they will close at night. What I use to see is garbage and dirty sidewalk in the block "some restaurants" are using the sidewalk. I refer specially to STARBUCKS. the sidewalk is always dirty and should be water pressure washed frequently by Starbucks, besides the garbage on the bins that they do not remove. I remember that the cups on the bins and on the sidewalk

and a huge source of virus. Starbucks is dirtiest place in our town and we should have a better service from them.

Screen Name Redacted

8/29/2021 09:39 AM

We lived in Germany for several years and really enjoyed the outdoor dining in European city centers. It seemed to bring a really nice community feel walking through places like Frankfurt, Paris, or Vienna. In the colder months, it was common to see each chair with a blanket and heatlamps near the tables. And people always used them - winter or summer. I realize that there are some challenges here in Birmingham, but it would be nice to see if we can bring some of that outdoor dining culture and flavor to our streets. I feel this could be an opportunity to make Birmingham unique and stand out among our peer communities.

Screen Name Redacted

8/30/2021 12:40 PM

I think that during times of limited seating due to covid such structures are necessary to sustain our restaurants. However leaving them up when there are no restrictions leave a very gray space,,,,can start to look junky etc

Screen Name Redacted

8/31/2021 07:37 AM

Sidewalks are for safe walking. Not blocking pedestrians. I would file a lawsuit against the business and the city if anyone gets injured in this situation. This land belongs to the city, not the business community.

Screen Name Redacted

8/31/2021 05:45 PM

Properties like Griffens Claw where iglos in cold weather are within the fencing of the property are fine in cold weather..Those in parking lots or intersected by sidewalks should not be allowed unless health department restrictions reduce indoor seating.

Screen Name Redacted

8/31/2021 08:22 PM

I would be interested in studying the potential of a pedestrian-only street span to encourage shopping and outdoor dining.
<https://www.afar.com/magazine/the-10-best-pedestrian-streets-around-the-world>

Screen Name Redacted

9/06/2021 06:06 PM

I'm not really interested in cold weather 'outdoor' dining. It's great to dine outside in town in the summer but the enclosures are so big and still cold inside I'd rather get a carry out. Time to move on from last winter's restrictions about indoor dining. Maybe extend until after Christmas for a few restaurants but I'd rather not see them or eat in the tents, etc.

Optional question (202 response(s), 149 skipped)

Question type: Essay Question



Help Protect 435,500 Michigan Jobs By Investing in Michigan's Restaurant and Bar Community

Future of Michigan's 16,543 restaurants and bars locations depend on refilling the Restaurant Revitalization Fund

Leisure and Hospitality Industry Has Accounted for 29.0% of All Jobs Lost in Michigan

Independent Restaurants and Bars Eligible for At Least \$168 Billion in Relief; Only \$28.6 Billion Appropriated to Date

Independent restaurants and bars accumulated 16 months of losses and need relief to pay down their debts. They will not be "back to normal" anytime soon.

- **The COVID-19 pandemic has cost restaurants and bars over \$280 billion in sales.¹**
- **One point of sale system estimates that restaurants and bars are eligible for at least \$168 billion in RRF grants.**
- **Costs necessary for running a restaurant are rising.** The price of beef and veal (41.4%), grains (93.8%), and shortening and cooking oil (34.8%) have surged over the past year.²
- **36% of diners will not resume their regular dining behavior until at least after September 2021.³** Consumer hesitancy will continue to hamper restaurants' and bars' revenue generating abilities.
- After accumulating 16 months of debt, restaurants and bars cannot simply fix their balance sheets with a few weeks of near-capacity business operations afforded by loosened restrictions and summer outdoor dining. **Approximately 90,000 restaurants and bars have closed during the pandemic.⁴**

Investing in restaurants and bars protects Michigan's \$17.9 Billion industry⁵

- The RRF would galvanize Michigan's tourism industry, encouraging travelers to eat in Michigan's establishments and spend money on lodging, other tourist attractions and retail.
- Refilling the RRF would support Michigan's vast restaurant supply chain, protecting the state's bakers, fisherman butchers and 41,550 small farms.⁶
- Since the beginning of March 2020, the **leisure and hospitality industry has accounted for 29.0% of all jobs lost in Michigan**; keeping many of Michigan's 435,500 leisure and hospitality workers employed would save the state millions in unemployment benefits and insurance taxes.⁷

¹ [US Census](#).

² [Bureau of Labor Statistics, Producer Price Index](#), June 2021.

³ [OpenTable Diner Q1 Insights](#).

⁴ [National Restaurant Association](#).

⁵ [National Restaurant Association](#), Michigan at a Glance.

⁶ [Independent Restaurants are a Nexus of Small Business in the United States and Drive Billions of Dollars of Economic Activity that is at risk of Being lost Due to the COVID-19 Pandemic](#), 11.

⁷ [Bureau of Labor Statistics](#), Michigan at a glance.



Refilling the RRF is a long term plan to return to full employment and growth.

- **Restaurant and bar employment is down 1.2 million from its pre-pandemic levels, stopping a decade of rapid job growth:** employment for restaurants and bars increased over 33% in the last decade. The third fastest growth of any industry.⁸ Restaurants and bars account for one in five jobs lost during the pandemic.⁹
- **Until the pandemic, restaurants added middle class jobs at a rate over three times faster than the rest of the economy.**¹⁰
- 60% of all chefs are minorities. Restaurants also employ more minority employee-managers than any other industry.¹¹ **Failing to provide support for this beleaguered industry will cause an employment crisis disproportionately affecting women, people of color, immigrants, young people, the formerly incarcerated and single mothers.**
- Restaurants are uniquely hurting – providing relief to America’s restaurants and bars will allow these businesses to pay down debt and keep their doors open, protecting the 11 million workers they employ nationwide and the more than 5 million others who work in the industry’s vast supply chain.

The Restaurant Revitalization Fund provides restaurants and bars with the grant relief they need to keep their doors open.

- The RRF is modeled after the \$120 billion RESTAURANTS Act, which independent restaurant and bar operators from the IRC specifically designed so their industry could access the relief they need.
- The RRF provides debt-free support in the amount of annual revenue lost from 2019 and 2020, with special provisions for businesses that opened in 2020 and 2019. Grants can only be used on eligible expenses: payroll, rent, mortgage, maintenance, outdoor seating constructions, supplies, protective equipment, food, beverage, operational expenses, and principal business payments for business debt.
- The RRF has a track record of success: within the first three weeks of opening the application portal, over 372,000 restaurants, bars, and other eligible businesses have applied, requesting over \$76 billion in funds.¹²
- Businesses unable to access other federal relief programs, like PPP, applied in droves: over half of applicants came from women (over 122,000 applications), Veterans (over 14,000 applications), and socially and economically disadvantaged businesses (over 71,000 applications).¹³
- This relief fund allows struggling small businesses a chance to survive the pandemic and caters to vulnerable businesses: grants cannot exceed \$10,000,000 per restaurant group (which cannot have more than 20 entities) and \$5,000,000 per business.

⁸ [Bureau of Labor Statistics, B - Tables, Food Service and Drinking Places; Independent Restaurants are a Nexus of Small Business in the United States and Drive Billions of Dollars of Economic Activity that is at risk of Being lost Due to the COVID-19 Pandemic](#), 18.

⁹ [Bureau of Labor Statistics, B - Tables](#).

¹⁰ [National Restaurant Association](#).

¹¹ [Independent Restaurants are a Nexus of Small Business in the United States and Drive Billions of Dollars of Economic Activity that is at risk of Being lost Due to the COVID-19 Pandemic](#), 9; *ibid*.

¹² [House Small Business Committee](#), An Examination of the SBA’s COVID-19 Programs, Isabella Casillas Guzman.

¹³ [Small Business Administration](#), please note this data came from May 18, when 303,000 applications had been submitted. While the administrator disclosed an updated application amount during a May 26 House Small Business Committee Testimony, the SBA has not released a more specific breakdown.



RESTAURANT INDUSTRY

2030

ACTIONABLE INSIGHTS FOR THE FUTURE

IN PARTNERSHIP WITH



ABOUT THIS REPORT

This report was prepared by the National Restaurant Association Research and Knowledge Group.

Hudson Riehle, Senior Vice President, Research and Knowledge Group
Bruce Grindy, Chief Economist and Vice President, Research
Denise Roach, Beth Lorenzini, Editors
Daniela Smith, Brand and Creative Director

In partnership with



The National Restaurant Association would like to thank our partners American Express and Nestlé Professional for their support for the Restaurant Industry 2030 report.

About American Express

American Express is a globally integrated payments company, providing customers with access to products, insights and experiences that enrich lives and build business success.

Learn more at americanexpress.com and connect with us on:

Facebook.com/americanexpress

Instagram — @americanexpress

LinkedIn.com/company/american-express

Twitter — @americanexpress

Youtube.com/americanexpress

About Nestlé Professional

Nestlé Professional is dedicated to being an inspiring growth partner that delivers creative, branded food and beverage solutions, enabling foodservice operators to delight their consumers. From Minor's®, Stouffer's®, Chef-Mate® and Trio® on-trend culinary items to innovative beverage systems under Nescafé® and Coffee-Mate® brands, Nestlé Professional meets the needs of foodservice operators while satisfying the tastes of the out-of-home consumer. Nestlé Professional is part of Nestlé S.A. in Vevey, Switzerland—the world's largest food company—with sales of over \$98 billion. For foodservice product news and information, visit www.nestleprofessional.com.

Instagram — @chefsinitiative

Twitter — @NestleProUSA

LinkedIn.com/company/nestleprofessional-northamerica/

ISBN

Print: 978-0-9978029-6-2 • Digital: 978-0-9978029-5-5



2055 L Street NW, Suite 700
Washington, DC 20036
(800) 424-5156
Restaurant.org



JOIN THE CONVERSATION
#RESTAURANTS2030

NOVEMBER 2019 • RESTAURANT.ORG/RESTAURANTS2030



TABLE OF CONTENTS

Introduction: Looking to the Future	02	2030: The Disruptors: Think Ahead.	30
2030: The Landscape	05	1. The Intelligent Restaurant	31
Economic Roadmap to 2030	06	2. Virtual Restaurants & Ghost Kitchens	32
The Workforce in 2030	08	3. Apps Challenge Your Brand	33
Consumers in 2030	12	4. Autonomous Vehicles	34
2030: Pulse Check	16	5. Big Tech Bundles Food	35
Industry Structure	17	6. The Bionic Restaurant	36
Facilities & Operations	18	7. Third-Space Restaurants	37
Profitability & Income	19	8. Weather Volatility	38
Financing	20	9. Culinary AI	39
Technology & Data	21	10. Medical Meals	40
Workforce	22	Appendix	41
Training & Development	23		
Marketing	24		
Food Safety & Security	25		
Government	26		
Food & Menu	27		
Health & Nutrition	28		
Sustainability	29		



INTRODUCTION:

LOOKING TO THE FUTURE

RESTAURANTS HAVE BECOME A NOW INDUSTRY.

The only constant as we look toward 2030 will be the speed of change and the hyper-competition the restaurant and foodservice industry will face.

Succeeding in the restaurant industry will always be about great food and great service. In 2030, however, it's going to be about technology and data, too. For a long time now, restaurants have known that they need to get more innovative ... and fast. Technology and data allow for quicker consumer response, and restaurants will need to be nimble. Restaurants will need to embrace new ways of using data and information to keep up — or get left behind.

Ordinary won't cut it in 2030. What constitutes a restaurant is rapidly changing. The off-premises market — carryout, delivery, drive-thru and mobile units — is where the majority of industry growth is going to come from over the next 10 years. But the only reason that growth can occur is that the technology is now in place to support it. Data-driven decisions will expand beyond sales and staffing applications to guest services, supply-chain logistics, and menu development, allowing restaurants to

adapt what to sell in real time as demand dictates.

The other side of the off-premises coin is on-premises, which won't diminish but will likely change. The natural privacy that accompanies dining off-site could lead to an even more heightened demand for restaurants as community hubs delivering myriad new and shared social experiences.

When the National Restaurant Association began tracking industry sales in 1970, sales were \$40 billion. Sales in 2019 are expected to reach \$863 billion and by 2030, the Association projects the industry's sales will top \$1.2 trillion. The industry's workforce, now 15.3 million, is likely to exceed 17 million by 2030.

We are at a crossroads in how people dine. Restaurants are swiftly adapting both the front- and back-of-the-house to meet the needs of guests — serving them wherever they want to be served. As the industry approaches its next decade, this report uncovers what may be around the corner.

WHAT'S INSIDE:

- **2030 Landscape**

A look at where the economy, workforce and consumer demographics are headed in 2030.

- **2030 Pulse Check**

Industry experts weigh in on the most and least likely developments by 2030.

- **2030 Disruptors**

Some possible outliers and disruptors, driven by factors outside the restaurant industry.



10 20 30

SURE THINGS IN

AS RESTAURANTS SHIFT AWAY FROM THE TRADITIONAL, OPERATORS MUST BE NIMBLE.

The world is changing fast, and business leaders will have to adapt with speed and agility. Constant innovation and speed-to-market will help restaurants thrive as they serve guests where and when they want to be served.

1. The definition of “restaurant” will change.

The digital world and evolving consumer preferences are resulting in an array of restaurant models aimed at giving customers what they want, when and where they want it. Some restaurants will morph into a hybrid model, offering counter service, full service, takeout and delivery, and meal kits. The delivery-only restaurant is on the rise through virtual restaurants and “ghost kitchens.” New food halls feature retail and restaurant pairings to make it easy for people both to eat and to shop for food they can take home.

2. Off-premises opportunities will drive industry growth.

The increasing demand for off-premises meals is transforming the restaurant industry and operators will need to find ways to tap into this new revenue channel. Delivery orders are booming, and business models are shifting fast to find ways to serve that customer base. The shift affects everything from restaurant design to marketing, tech investment, operations, and site selection.

3. Margin pressures will continue.

Labor costs, real-estate costs, and increasing investments in delivery and technology will continue to put pressure on the restaurant P&L. There will be a strong motivation to automate routine back-of-house tasks in restaurant kitchens and bars, as well as escalate the use of kiosks and digital ordering.

4. Data is king. Restaurants will see new opportunities to apply data analytics to predict and capitalize on consumer demand and optimize supply economics.

5. Restaurants will serve — and employ — a different demographic.

The U.S. population and labor force will be the most diverse it's ever been, and the workforce will include more older Americans. Restaurant operators will need to accommodate both the dining preferences and work styles of an increasingly diverse American public.

6. Recruitment, retention and training will remain top priorities.

The skills and talent restaurants seek in their workforce will evolve to support a new technology ecosystem. Restaurants will compete with other industries for tech talent. Benefits will be critical to recruiting and retaining employees. Technology-based training, certifications, and internal career paths will be increasingly important tools to retain valuable employees.

7. Technology will drive tremendous advances in food safety, food sourcing, and sustainability.

As the supply chain grows increasingly complex, operators will leverage blockchain and other new traceability technologies, ingredient and sourcing data, automated food safety management systems, and advances in utility and waste management to become more efficient, transparent organizations.

8. Government will be a greater factor in everything operators do.

In addition to the federal government, state and local governments may continue to add to the legislation, taxation and regulation affecting restaurant operators.

9. Sustainability isn't just a buzzword.

It's an important way to drive costs down as well as showcase the industry's efforts to attract and serve the growing number of guests who are interested in everything about sustainability — from restaurant packaging to food sourcing.

10. Restaurants will continue to bring people together.

Hospitality, excellence in service, and engagement in local communities will remain the hallmark of the restaurant industry. That strong commitment to guests and consumers of every type will be core to the industry's identity in 2030 as operators innovate and thrive in an age of increasing technology.

2030

BY THE NUMBERS



**1.2
MILLION**
fewer 16- to 24-
year-olds
in the labor force
by 2028.



0.5%
Anticipated
U.S. average
annual
labor force
growth,
2018 to
2028.



RESTAURANT
INDUSTRY
PROJECTED SALES
IN 2030:
**\$1.2
TRILLION**

RESTAURANT
& FOODSERVICE
JOBS IN 2030:

**17.2
MILLION**



**6.1
MILLION**
Number of
additional adults 65
and older who are
expected to be in
the labor force
by 2028.



3%
Teens as an
expected share
of the U.S. labor
force in 2028.



**74.8
MILLION**
Projected
Hispanic-
American
population
in the U.S.
in 2030.



2030: THE LANDSCAPE

GROWTH IN THE RESTAURANT INDUSTRY FOR THE PAST SEVERAL DECADES HAS BEEN DRIVEN BY CONSUMERS' DESIRE FOR CONVENIENCE, SOCIALIZATION, AND HIGH-QUALITY FOOD AND SERVICE.

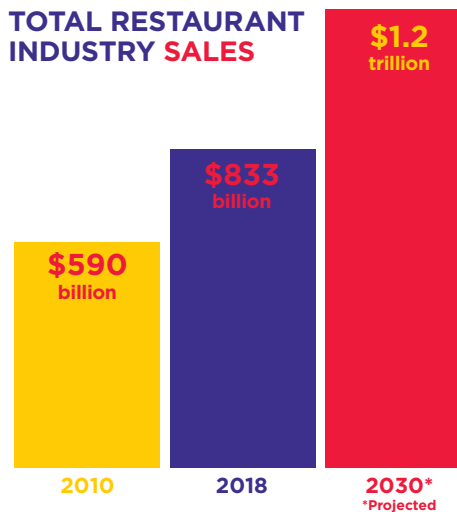
These same drivers will be the catalysts for expansion well into the future, as the restaurant industry continues to innovate and adapt to the ever-changing tastes and preferences of consumers.

By 2030, the National Restaurant Association expects total restaurant industry sales to top **\$1.2 trillion**, and provide employment opportunities for **more than 17 million** individuals.

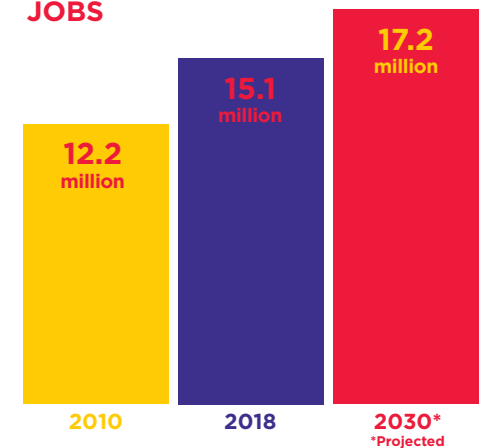
This section looks at some key drivers for the industry's success over the next decade, including the U.S. economic outlook, workforce changes, and the continued evolution of the American consumer.

RESTAURANT INDUSTRY SNAPSHOT IN 2030

**TOTAL RESTAURANT
INDUSTRY SALES**



**TOTAL RESTAURANT
AND FOODSERVICE
JOBS**





2030: THE LANDSCAPE

ECONOMIC ROADMAP TO 2030

AT A GLANCE

The U.S. economy is expected to expand at a more moderate pace over the next decade, due in large part to slower growth of the population and labor force. Trends won't be uniform across the country. Opportunities for restaurant industry expansion will likely be much more significant in areas with faster-growing economies.



WHERE WE ARE NOW

As of September 2019, the U.S. economy had added jobs in 108 consecutive months, making for the longest uninterrupted streak of job growth on record, with the addition of more than 21 million jobs. But even with these steady gains, the economy during that time posted job growth of more than 2% in just one year: 2015. As a result, the decade that began in 2010 is on pace to be the second-weakest for job growth since the 1930s, in percentage terms. The projected 1.7% average annual employment growth between 2010 and 2020 would outpace only the 2000 to 2010 period — a decade that included two recessions.



WHERE WE'RE HEADED

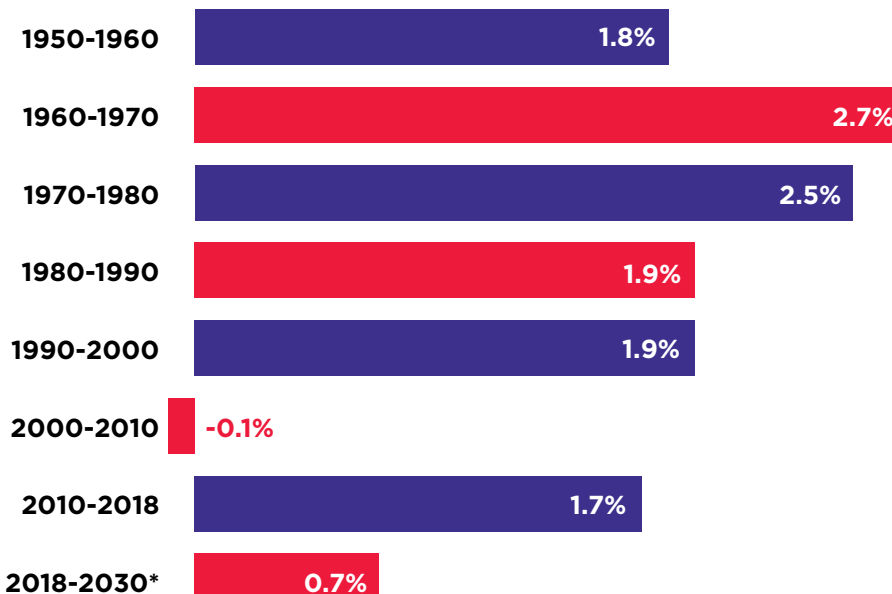
Employment growth is projected to slow even further over the next decade. The National Restaurant Association expects total U.S. employment to increase at a 0.7% average annual rate between 2018 and 2030. The 2018 to 2030 period is likely to feature stretches of stronger growth, as well as at least one recession.

JOB GROWTH IS PROJECTED TO BE MODEST DURING THE NEXT DECADE

AVERAGE ANNUAL GROWTH IN TOTAL U.S. EMPLOYMENT

Job growth is expected to average 0.7% a year from 2018 to 2030.

Source: Bureau of Labor Statistics, National Restaurant Association projections



* Projected



2030: THE LANDSCAPE ECONOMIC ROADMAP TO 2030

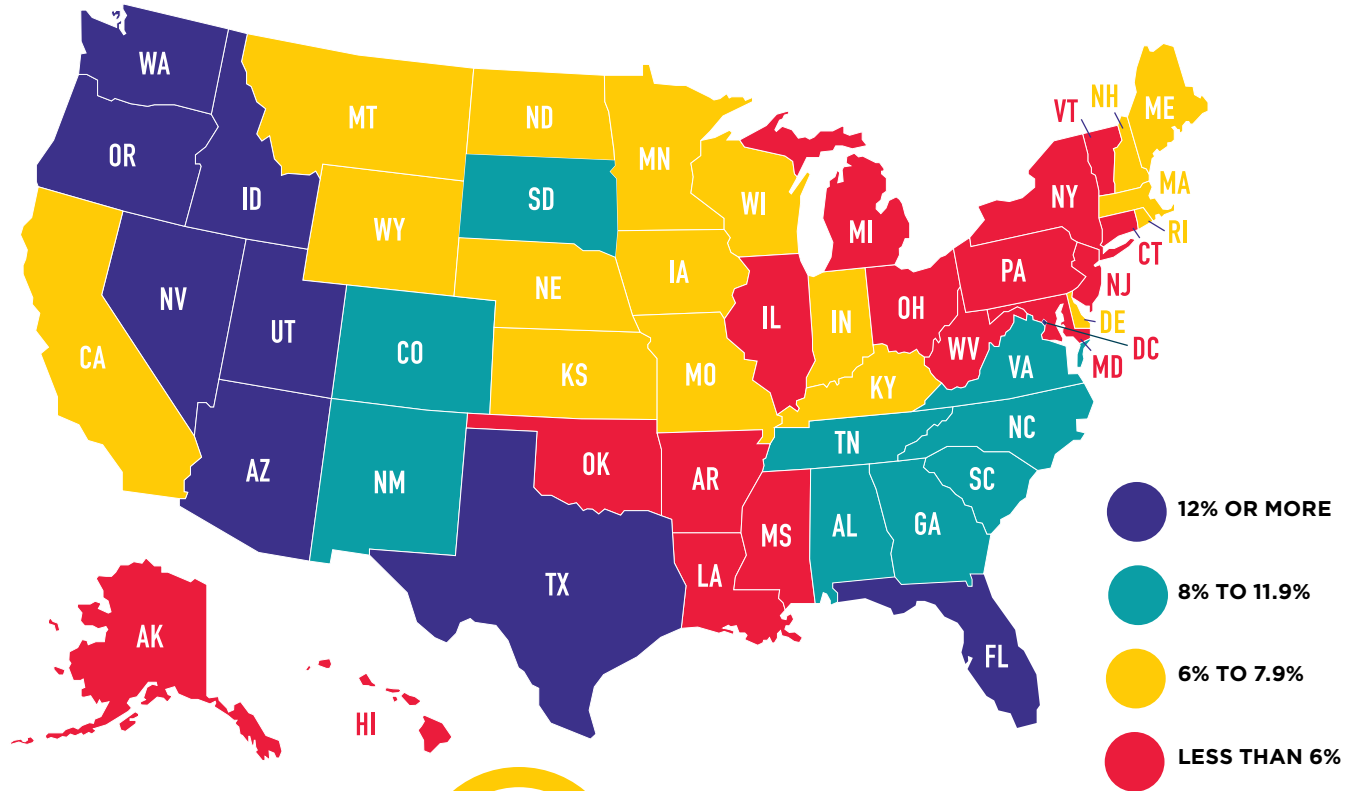
MAPPING THE STATE JOB MARKET

PROJECTED GROWTH IN TOTAL STATE EMPLOYMENT, 2018 TO 2030

Southern and western states are expected to post the strongest job growth.

Source: National Restaurant Association projections

**U.S. TOTAL:
8.5%
JOB GROWTH**



MAKE A NOTE ...

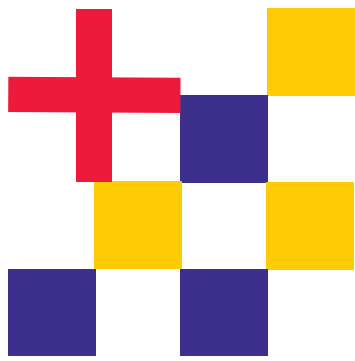


Job growth will be highest in the South and West.

The National Restaurant Association is projecting job growth of 8.5% for the U.S. overall between 2018 and 2030, but some states — particularly in the southern and western regions — will see higher growth.

Texas and Nevada are expected to lead the way.

Both states are expected to expand their workforces by more than 17% between 2018 and 2030, according to National Restaurant Association projections. Arizona, Oregon, Utah, Florida, Idaho and Washington are also expected to register job growth well above the national average during the next decade.



2030: THE LANDSCAPE

THE WORKFORCE IN 2030

AT A GLANCE

Growth in the U.S. labor force is projected to slow over the next decade, which would make the upcoming decade the fifth consecutive decade of decelerating growth. Trends in labor force participation will vary by age group. Older adults are expected to register the largest inflows to the labor force over the next decade. While older adult workers should become more prevalent, the number of teenage workers will likely dwindle and by 2028, their numbers are expected to decline to their lowest level in 65 years.



WHERE WE ARE NOW

U.S. job growth has been somewhat tempered during the recent economic expansion. One reason for this is the relatively slow growth in the U.S. labor force. The total U.S. civilian labor force increased at an average annual rate of 0.6% between 2010 and 2018, according to data from the Bureau of Labor Statistics. If this trend continues, the current decade will be the slowest decade of labor force expansion on record.



WHERE WE'RE HEADED

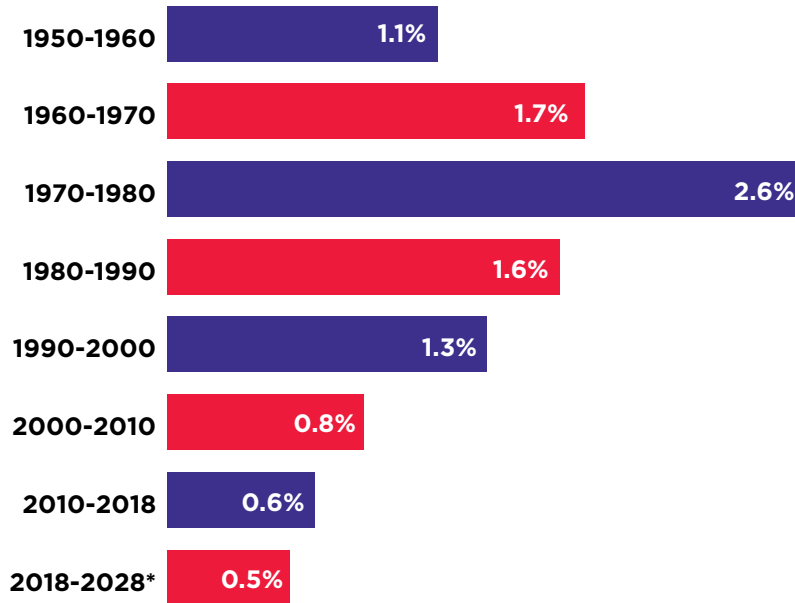
Labor force growth is expected to remain modest. The U.S. civilian labor force will grow at an average annual rate of just 0.5% between 2018 and 2028, according to BLS projections. Slower population growth and changing demographics are largely responsible for the dampened labor force growth.

PUTTING ON THE BRAKES

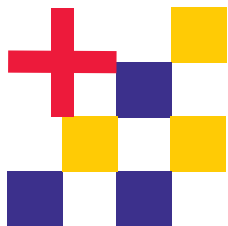
AVERAGE ANNUAL GROWTH IN THE TOTAL U.S. CIVILIAN LABOR FORCE

Labor-force growth is expected to average 0.5% a year over the next decade.

Source: Bureau of Labor Statistics, National Restaurant Association



* Projected



2030: THE LANDSCAPE THE WORKFORCE IN 2030

CHARTING A NEW COURSE WITH AN OLDER WORKFORCE



WHERE WE ARE NOW

There were 9.7 million teenagers in the U.S. labor force in 1978, which is the highest number ever recorded. At that time, there were 3.1 million adults age 65 and older in the labor force. The dynamics shifted over the next three decades. Teen representation in the labor force slumped, while more older adults remained in the workforce beyond the typical retirement age. By 2008, the U.S. labor force included 6.9 million teenagers and 6.2 million adults age 65 and older. That was the last year teenagers outnumbered their older counterparts in the labor force. The divergent trends accelerated during the next decade, and by 2018 older adults outnumbered teenagers by more than 4 million.



WHERE WE'RE HEADED

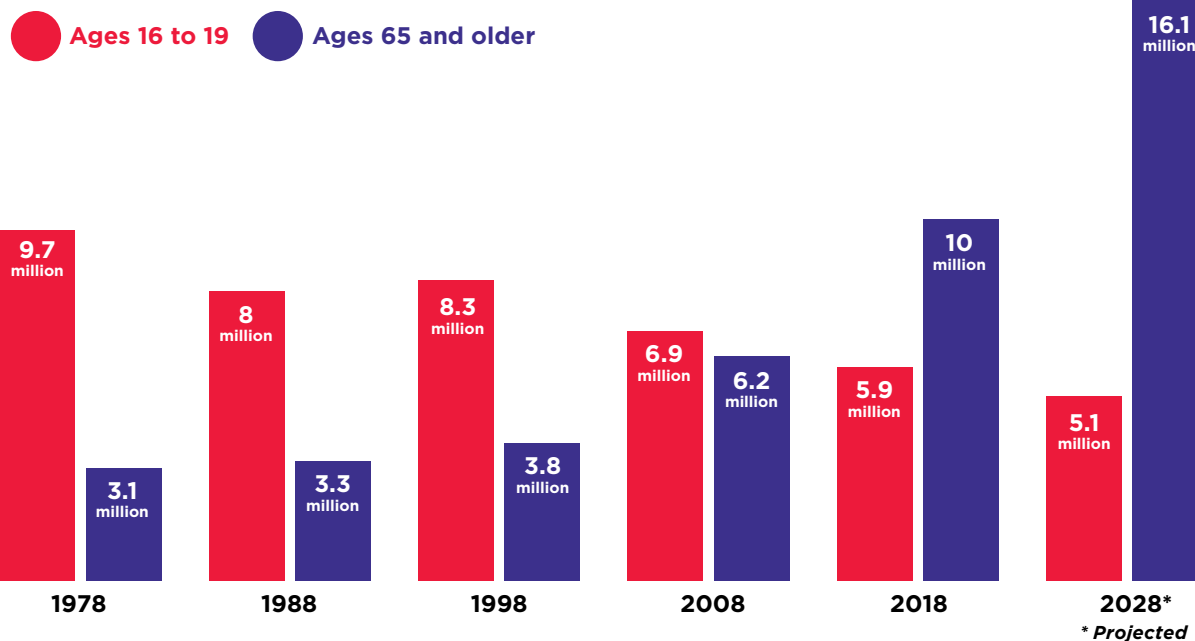
The Bureau of Labor Statistics expects this trend to continue over the next decade. By 2028, there are projected to be 16.1 million adults age 65 and older in the labor force — a record high. In contrast, BLS expects there to be only 5.1 million teenagers in the labor force in 2028, which would be the fewest number of teenagers in the labor force since 1963.

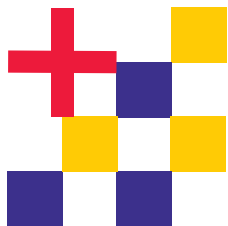
MORE OLDER WORKERS, FEWER YOUNGER WORKERS

NUMBER OF PEOPLE IN THE LABOR FORCE: TEENAGERS AND ADULTS AGE 65 AND OLDER

By 2028, workers age 65 and older will outnumber teenage workers by 11 million.

Source: Bureau of Labor Statistics, National Restaurant Association





2030: THE LANDSCAPE

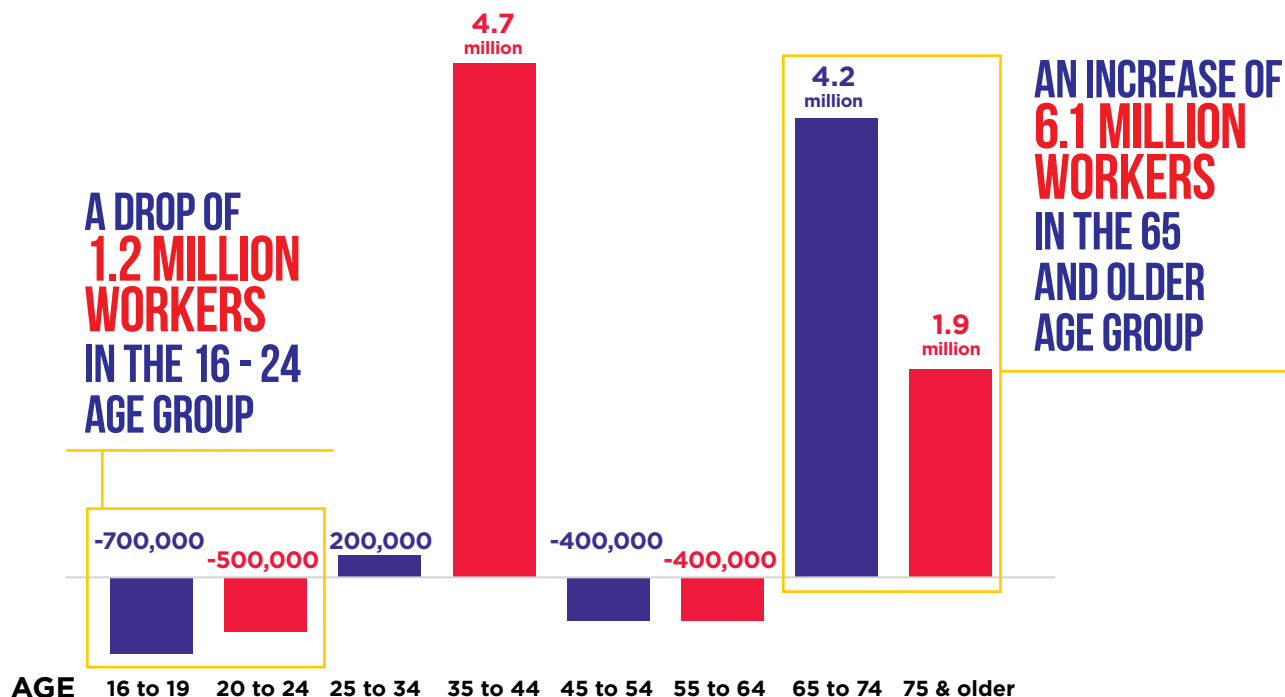
THE WORKFORCE IN 2030

OLDER ADULTS ARE A GROWING PROPORTION OF THE LABOR FORCE

PROJECTED CHANGE IN THE U.S. LABOR FORCE BY AGE, 2018 TO 2028

The number of 16- to 24-year-olds in the labor force is expected to drop by 1.2 million by 2028.

Source: Bureau of Labor Statistics, National Restaurant Association



MAKE A NOTE ...

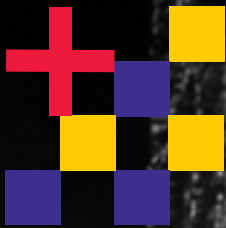
Older Americans will increase their presence in the workforce.

The number of 65- to 74-year-olds in the labor force is projected to rise by 4.2 million during the next decade, and the number of workers age 75 and older is expected to increase by 1.9 million.



The number of working teens and young adults will shrink.

This will be particularly important for restaurants. Nearly 40% of today's restaurant workforce is made up of 16- to 24-year-olds, much higher than this group's 12% representation in the U.S. workforce overall. The number of 16- to 24-year-olds in the labor force is expected to drop by 1.2 million by 2028, according to BLS projections.



2030: THE LANDSCAPE

THE WORKFORCE IN 2030

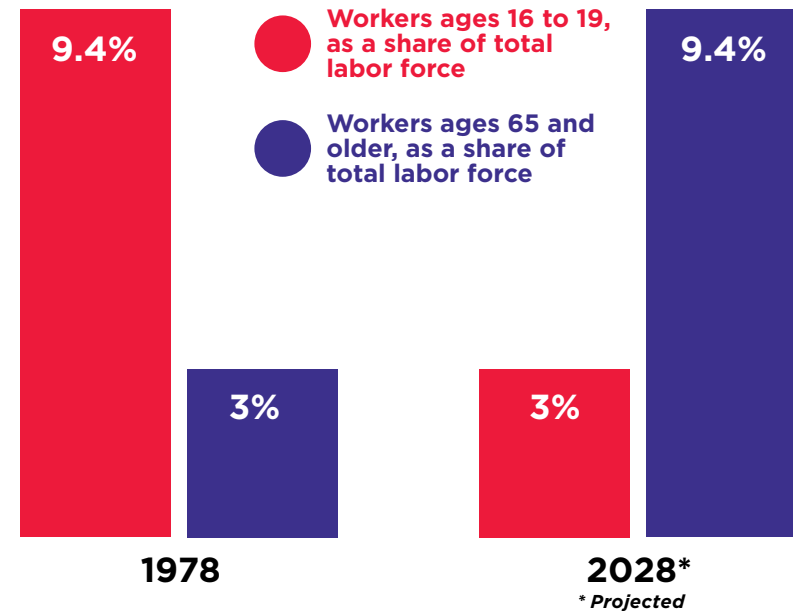


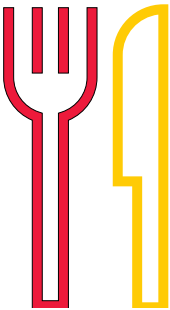
SHARP TURN COMING UP

SHARE OF THE U.S. LABOR FORCE: TEENAGERS VS. ADULTS AGE 65 AND OLDER

What a difference a half-century makes: Teens made up 9.4% of the total U.S. labor force in 1978, and adults 65 and older made up 3%. Fast forward 50 years, and the numbers are expected to flip: According to BLS projections, adults 65 and older are expected to represent 9.4% of the labor force in 2028; teens are expected to make up only 3%.

Source: Bureau of Labor Statistics, National Restaurant Association





2030: THE LANDSCAPE CONSUMERS IN 2030

AT A GLANCE

Population growth is a key driver of restaurant industry expansion. Any slowdown in U.S. population growth has a far-reaching impact on restaurants because it effectively constrains expansion in the economy, the workforce and the industry's customer base. **Population growth is projected to remain modest in the next decade**, and the U.S. population is expected to become older and more diverse.



WHERE WE ARE NOW

Population growth in the U.S. slowed in recent years. Total U.S. population increased at an average annual rate of 0.7% between 2010 and 2018, according to the U.S. Census Bureau. If the trend continues, the decade that began in 2010 will represent the slowest population growth since the 1940s.



WHERE WE'RE HEADED

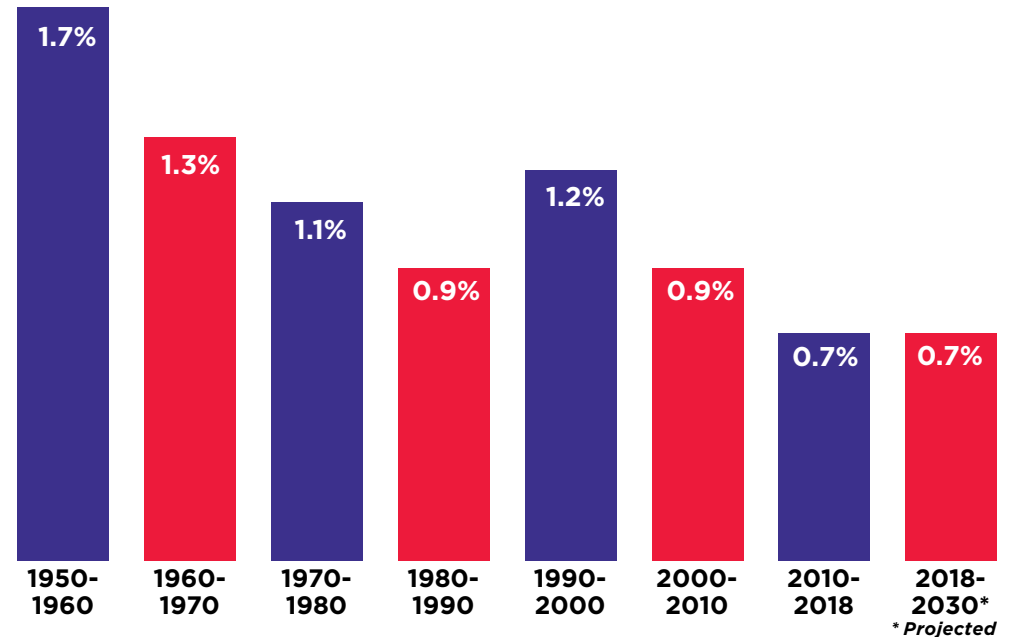
The U.S. population is expected to continue growing at a modest pace. **Total U.S. population will grow at an average annual rate of 0.7%** between 2018 and 2030, according to projections by the U.S. Census Bureau.

U.S. POPULATION GROWTH IS EXPECTED TO REMAIN MODEST

AVERAGE ANNUAL GROWTH IN TOTAL U.S. RESIDENT POPULATION

The U.S. population is expected to grow at an average annual rate of 0.7% between 2018 and 2030.

Source: U.S. Census Bureau, National Restaurant Association

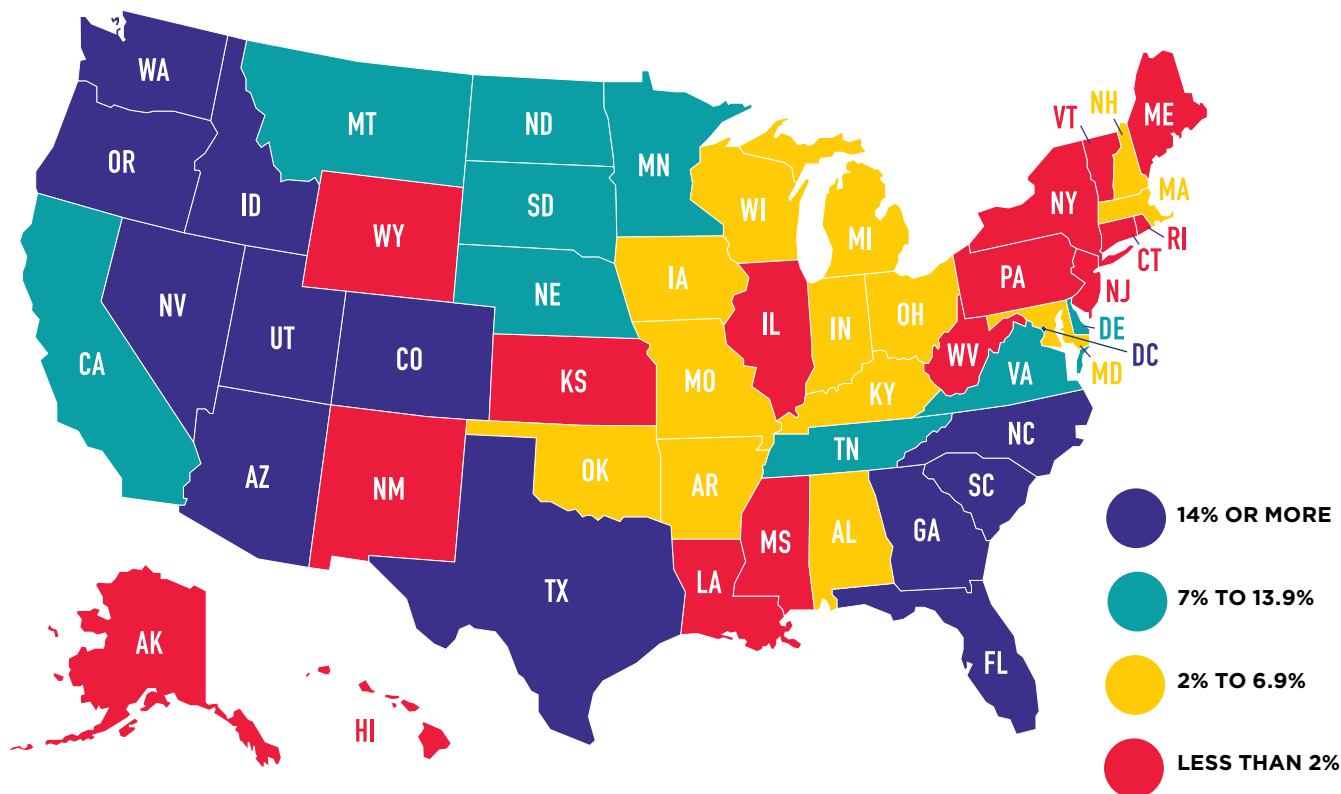


SET YOUR GPS FOR WEST AND SOUTH

PROJECTED GROWTH IN TOTAL STATE POPULATION, 2018 TO 2030

Source: National Restaurant Association projections

**U.S. TOTAL:
8.5%
POPULATION GROWTH**



MAKE A NOTE ...



Mountain states among the fastest-growing

Over the next decade, the top three states in terms of projected population gains are the Mountain-region states of Nevada, Utah and Idaho. States in the southeast and Pacific Northwest are also expected to see population growth well above the national average in the years ahead.



SNAPSHOT OF THE U.S. POPULATION IN 2030

WE'LL BE OLDER ...

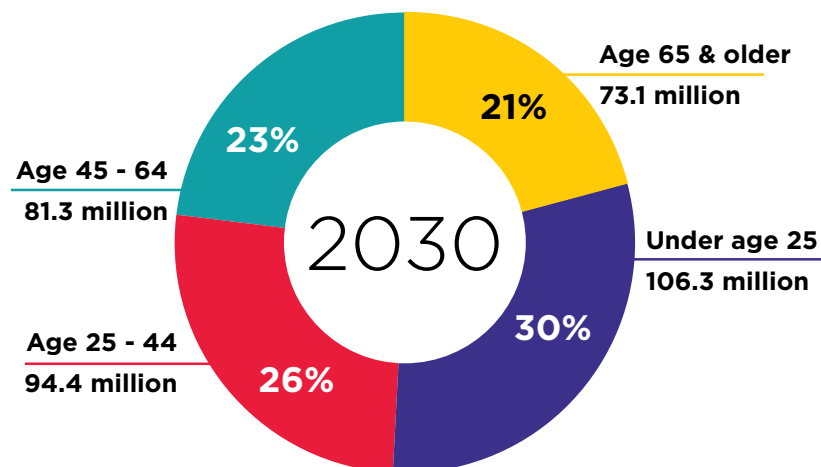
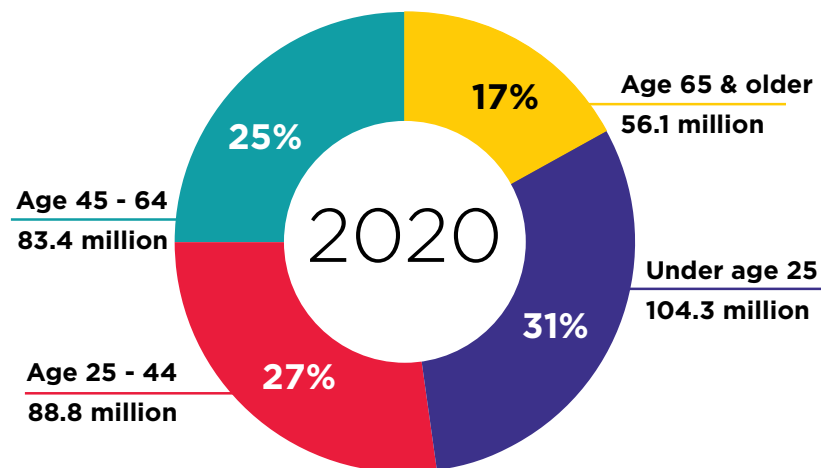
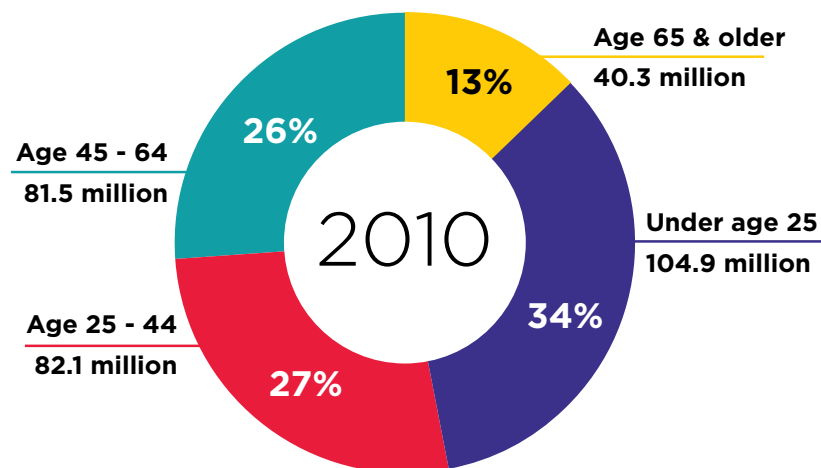
Older adults are expected to make up a larger proportion of the U.S. population over the next decade. According to projections from the U.S. Census Bureau, **there will be 73.1 million adults age 65 and older in the U.S. in 2030, comprising 21% of the total population.** This age group represented just 13% of the population in 2010, at 40.3 million people.

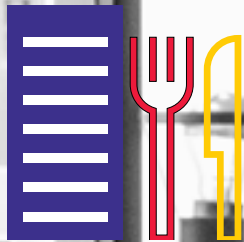
OLDER ADULTS CLAIM BIGGER SLICE OF THE PIE

DISTRIBUTION OF U.S. POPULATION BY AGE GROUP, 2010 TO 2030

Americans age 65+ are expected to make up 21% of the U.S. population by 2030.

Source: U.S. Census Bureau, National Restaurant Association





2030: THE LANDSCAPE CONSUMERS IN 2030

... AND MORE DIVERSE

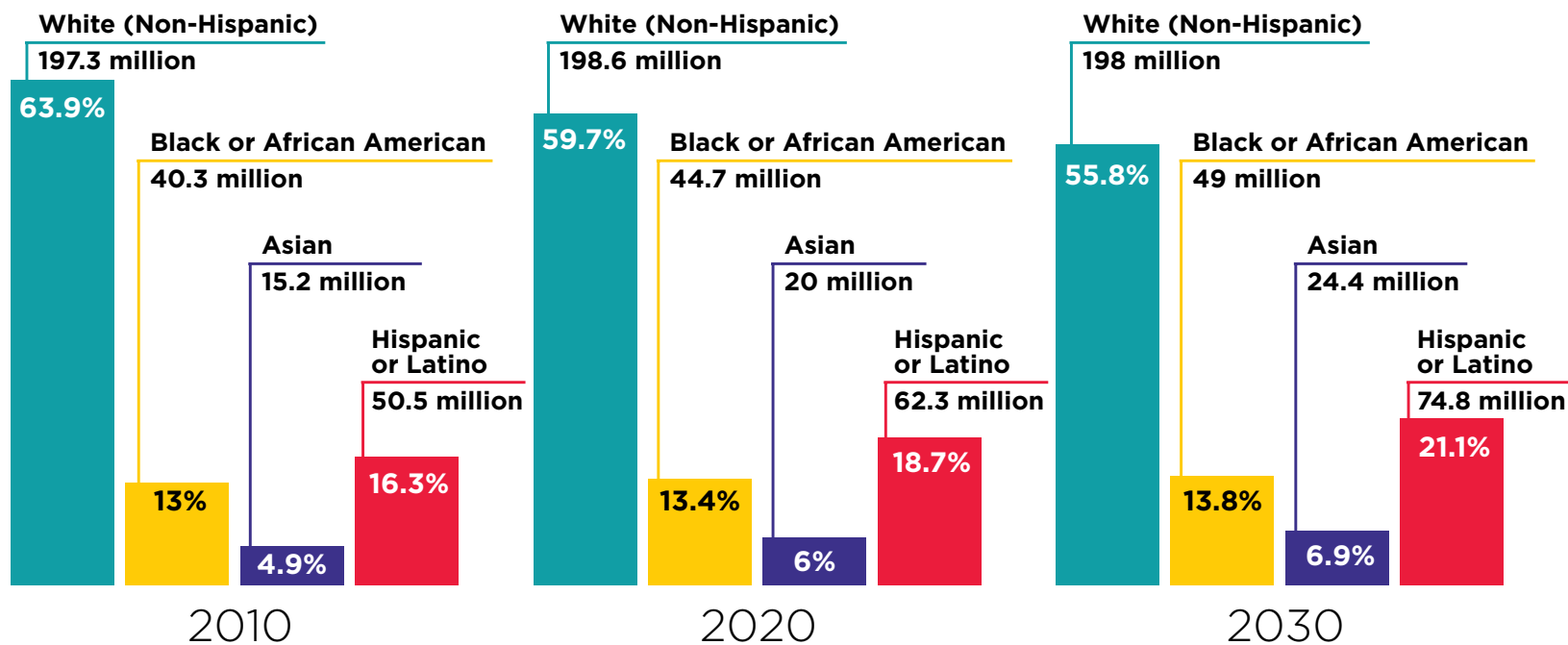
The Census Bureau projects that the **number of Hispanic-Americans will increase to 74.8 million by 2030, accounting for 21% of the U.S. population.** Asian and black or African-American residents are also expected to increase their share in the U.S. population.

DIVERSITY ON THE MENU FOR 2030

DISTRIBUTION OF U.S. POPULATION BY RACE AND ETHNICITY, 2010 TO 2030

Hispanics are expected to represent 21% of the U.S. population by 2030.

Source: U.S. Census Bureau, National Restaurant Association





2030: PULSE CHECK

THE NATIONAL RESTAURANT ASSOCIATION CONSULTED INDUSTRY EXPERTS TO GET THEIR TAKE ON THE MOST AND LEAST LIKELY DEVELOPMENTS FOR THE RESTAURANT INDUSTRY BY 2030, IN ABOUT A DOZEN CATEGORIES.

We used a Delphi approach for this part of our Restaurant Industry 2030 report, relying on a panel of industry thought leaders to identify issues and rank them in order of likelihood. This research method, originated by the Rand Corporation in the 1960s, has been found to work well when a topic lends itself more to subjective judgments than precise analytical techniques. (See “Delphi Methodology” in appendix for details.)

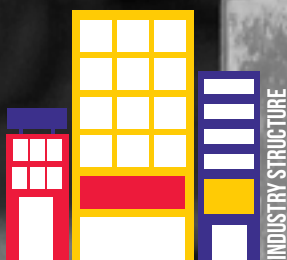
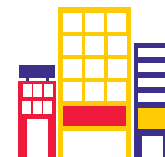
THE DELPHI PANEL'S PREDICTIONS FOR 2030

Industry experts were asked about the issues, events and developments that will shape the restaurant industry in the year 2030. Panelists rated 180 statements on a scale from +3 to -3, from “very likely to occur” to “very unlikely to occur.” According to the panelists, these are the 25 most likely developments for 2030. A full ranking is available in the appendix.

25

MOST LIKELY DEVELOPMENTS BY 2030

1. Competition for customers will intensify.
2. It will be commonplace for restaurants to accept mobile payments.
3. Handheld payment terminals that allow for pay-at-the-table will be commonplace.
4. The vast majority of takeout and delivery orders will be placed digitally.
5. Packaging designed exclusively for delivery and carryout will be more sophisticated and effective.
6. Regardless of the nutritional content of the food, consumers will still want comfort foods.
7. Convenience stores and grocery stores will expand their foodservice offerings.
8. More restaurant layouts will include areas dedicated to delivery and carryout.
9. State and local governments will increase restaurant industry regulation.
10. Total employee compensation costs will increase as a percent of sales.
11. More training will be provided online and on smartphones.
12. The restaurant industry will continue to be a breeding ground for entrepreneurialism.
13. Equipment used in restaurants will be more energy-efficient.
14. The use of kiosks in limited-service restaurants will be commonplace.
15. There will be increased regulation around third-party delivery.
16. More employees will be certified in safe food handling through ServSafe products.
17. Video menu boards in limited-service restaurants will be commonplace.
18. More restaurants will be designed to reduce use of energy and water and minimize waste.
19. Turning point-of-sale (POS) data into actionable knowledge for operators will become easier.
20. Restaurant operators will be more likely to implement more local, targeted and customized promotions.
21. Technology will be more effectively used to control costs and enhance management efficiency.
22. Women will hold a larger proportion of upper management jobs in the restaurant industry.
23. Restaurants will offer more healthy options on their menus.
24. Restaurant inspection results will be readily available to the public.
25. The federal government will enact more data-privacy rules to regulate how businesses handle customer data.



INDUSTRY STRUCTURE

Come In
WE'RE
OPEN

2030: PULSE CHECK

INDUSTRY STRUCTURE

**THE RESTAURANT INDUSTRY
IN 2030 WILL BE LIKE
NOTHING YOU HAVE EVER
SEEN BEFORE ... AND THAT'S
EXACTLY HOW OPERATORS
WILL THRIVE.**

At the same time, the industry will continue to be the industry of the American dream, where low barriers to entry offer entrepreneurial opportunities in every community.

Our Delphi panelists believe that competition will intensify, and that the restaurant industry of the future will be a hybrid model. Convenience will be a huge priority and consumers will appreciate all the options offered by restaurants ... but they won't always be eating at the restaurant. Dining away from the restaurant will grow in importance. This could mean takeout, delivery and perhaps styles that haven't developed yet. Third-party delivery firms, virtual restaurants, and other models will enable new formats to appeal to guests.

When guests dine in the restaurant, the experience may be as important as the meal. Restaurant entrepreneurs will focus on a premium customer experience, whether that's inside or outside the restaurant.



Off-premises traffic will post stronger growth than on-premises traffic.

— Delphi panelist



MOST LIKELY DEVELOPMENTS BY 2030

- ✓ Competition for customers will intensify.
- ✓ Convenience stores and grocery stores will expand their foodservice offerings.
- ✓ The restaurant industry will continue to be a breeding ground for entrepreneurialism.
- ✓ There will be more delivery options in smaller markets.
- ✓ Virtual or “ghost” restaurants that only offer delivery will be more common.
- ✓ Off-premises traffic will post stronger growth than on-premises traffic.
- ✓ Consolidation in food manufacturing and distribution will intensify.

LEAST LIKELY DEVELOPMENTS BY 2030

- ✓ Independent operators will be the primary innovators and new product developers.
- ✓ A larger number of American restaurant companies will expand internationally.

See appendix for full survey results.

2030

RESTAURANT INDUSTRY 2030 • NATIONAL RESTAURANT ASSOCIATION



2030: PULSE CHECK

FACILITIES & OPERATIONS

OFF-PREMISES IS WHERE MUCH OF THE FUTURE GROWTH WILL LIKELY BE.

That trend will accelerate thanks to technology and it will necessitate long-term changes in the design, flow and speed of service in restaurants.

The restaurant of the future will likely be smaller and more efficient. Smaller restaurants, as predicted by the Delphi panel, should mean more automated kitchen equipment and a change in how the typical kitchen lays out.

With delivery and takeout being key drivers of the industry's growth, the focus will be on preparing foods that travel safely with quality intact. Expect an intensified focus on delivery packaging and look for kitchen spaces configured for takeout and delivery.

The on-premises occasion is also predicted to change as well, with more self-service options and perhaps a heightened desire for dining "experiences" when and where customers gather.

“Design will become more experiential.”

— Delphi panelist

“

Restaurant physical spaces will be smaller, requiring less square footage due to the increase in delivery and takeout.

”

— Delphi panelist



MOST LIKELY DEVELOPMENTS BY 2030

- ✓ Packaging designed exclusively for delivery and carryout will be more sophisticated and effective.
- ✓ More restaurant layouts will include areas dedicated to delivery and carryout.
- ✓ More restaurants will be designed to reduce use of energy and water and minimize waste.
- ✓ The typical restaurant footprint will be smaller.
- ✓ Computerized cooking equipment will become more common in restaurant kitchens.
- ✓ Restaurant space utilization will be more flexible.

LEAST LIKELY DEVELOPMENTS BY 2030

- ✓ Restaurants will increase their hours of operation.
- ✓ Restaurants will include more retail space.

See appendix for full survey results.



Tighter margins are the new norm. How do we run even leaner? Simple, good menus are the future.

— Delphi panelist

2030: PULSE CHECK

PROFITABILITY & INCOME

MARGIN PRESSURES WILL REMAIN INTENSE FOR RESTAURANTS OF ALL TYPES AND SIZES, MAKING COST MANAGEMENT MORE ESSENTIAL THAN EVER.

The restaurant of the future will see escalating expenses for employee compensation and real estate, our Delphi panel says. Tech costs are likely to become a standard line item on the restaurant P&L, as even smaller operators will access integrated data systems that increase their profitability.

Panelists were in strong agreement: Food and beverage costs as a percent of sales aren't likely to go down, and restaurant profit margins aren't likely to increase.

MOST LIKELY DEVELOPMENTS BY 2030



- ✓ Total employee compensation costs will increase as a percent of sales.
- ✓ Real estate costs will escalate more rapidly as competition for prime sites increases.
- ✓ Smaller operators will have greater access to fully integrated software systems — from scheduling to ordering supplies to tracking sales/traffic metrics — which will increase their profitability.

LEAST LIKELY DEVELOPMENTS BY 2030

- ✓ Restaurant profit margins will increase.
- ✓ Food and beverage costs will decrease as a percent of sales.
- ✓ Operations with lower-check-per-person averages will have higher profit margins than higher-check operations.

See appendix for full survey results.



FINANCING



“
I love
crowdfunding
and hope it
expands. ESOPs
[employee stock
ownership plans]
and employee
ownership are also
attractive.”

— Delphi panelist

2030: PULSE CHECK

FINANCING



FINANCING MAY CONTINUE TO BE CHALLENGING FOR RESTAURANTS.

According to the Delphi panel, profit margins and stockholder demands will likely continue to deter the risk-averse, which means many in the restaurant industry will still turn to private investors in 2030 and beyond.

At the same time, panelists do not expect the restaurant industry overall to become more attractive to investors.

Panelists also do not see it getting any easier in 2030 for restaurants to access credit or for operators to find financing, including through local independent banks.

“
More predatory lending
will leave owners high
and dry.”

— Delphi panelist



MOST LIKELY DEVELOPMENTS BY 2030

- ✓ Private financing of restaurant operations will be more common than public financing.
- ✓ Meeting the demands of stockholders will force more public restaurant companies to go private.

LEAST LIKELY DEVELOPMENTS BY 2030

- ✓ Accessing credit will become easier for restaurant operators.
- ✓ Local independent banks will be more willing to finance restaurants.
- ✓ More funding will come from tax incentives offered to small businesses for job creation.
- ✓ The restaurant industry will be more attractive to investors.
- ✓ Suppliers will be more likely to invest in new restaurants and concepts.

See appendix for full survey results.

2030

RESTAURANT INDUSTRY 2030 • NATIONAL RESTAURANT ASSOCIATION

“

POS systems will need to become even more sophisticated, but training will be imperative. It is shocking how few of the functions restaurateurs learn how to use.”

— Delphi panelist

2030: PULSE CHECK

TECHNOLOGY & DATA

TECHNOLOGY AND DATA ARE GOING TO PLAY THE BIGGEST ROLE YET IN THIS FUTURE STATE OF THE INDUSTRY.

Most restaurants are already living it now. We're moving rapidly toward a restaurant industry that will fully adopt technology by 2030.

Guests of the future will demand technology. If you're not doing business through a phone or tablet — whether it's delivery, online ordering or even your tableside POS — you could find your business struggling, our panel suggests. Today's customers are interacting with restaurants digitally — to order takeout and delivery, pay, rate the experience, provide preferences in advance — and they expect the restaurant industry to keep up.

Technology will automate traditional tasks. Everything from inventory management to scheduling, payroll, taxes, and bill reconciliation will be more automated in the restaurant of the future. This means more need for tech support, cybersecurity, and restaurant managers and staff who are tech-savvy.

Innovation in many areas will drive productivity. Big data will have applications for restaurants of all sizes, and the Internet of Things (IoT) will allow data to be collected in even more ways. Making data-driven decisions will expand into every area of the operation — although panelists do not see it as highly likely that customers will embrace data collection.



MOST LIKELY DEVELOPMENTS BY 2030

- ✓ It will be commonplace for restaurants to accept mobile payments.
- ✓ Handheld payment terminals that allow for pay-at-the-table will be commonplace.
- ✓ The vast majority of takeout and delivery orders will be placed digitally.
- ✓ The use of kiosks in limited-service restaurants will be commonplace.
- ✓ Video menu boards in limited-service restaurants will be commonplace.
- ✓ Turning point-of-sale (POS) data into actionable knowledge for operators will become easier.
- ✓ Technology will be more effectively used to control costs and enhance management efficiency.

LEAST LIKELY DEVELOPMENTS BY 2030

- ✓ Customers will embrace data collection in their everyday restaurant experiences, with their permission.
- ✓ Drones, self-driving vehicles and robots will play a larger role in delivery.

See appendix for full survey results.

2030: PULSE CHECK

WORKFORCE

RESTAURANTS ALREADY EMPLOY MORE WOMEN AND MINORITY MANAGERS THAN ANY OTHER PRIVATE-SECTOR INDUSTRY.

Our Delphi panel expects that to become even more so by 2030. The restaurant industry of the future will continue to grow its ranks of women and minority leaders as it remains one of America's most diverse sectors.

The Delphi panel agrees that there will be continued competition for employees in the restaurant industry, and that the average number of employees per restaurant is likely to decline. Employers are likely to use compensation and benefits to attract new talent. Technology skills will be needed to ensure the staff is able to deal with automation and robotics, data analytics and more. Yet even with enhanced use of technology to drive productivity, panelists expect the industry to remain very labor-intensive.

With demographic trends pointing to continued dips in the number of working teens, panelists predicted an increase in the restaurant industry's reliance on older workers.

“Culture is the only way to keep staff.”

— Delphi panelist

“To reach its 2030 potential, the restaurant industry needs to enhance its status as a good career choice.”

— Delphi panelist



MOST LIKELY DEVELOPMENTS BY 2030

- ✓ Women will hold a larger proportion of upper management jobs in the restaurant industry.
- ✓ Minorities will hold a larger proportion of upper management jobs in the restaurant industry.
- ✓ The average number of employees per restaurant location will decline.
- ✓ The restaurant industry workforce will become more diverse.
- ✓ The restaurant industry will remain very labor-intensive despite technological developments.

LEAST LIKELY DEVELOPMENTS BY 2030

- ✓ The average tenure in the industry for a typical employee will increase.
- ✓ Younger workers will make up a larger proportion of the restaurant workforce.

See appendix for full survey results.

2030: PULSE CHECK

TRAINING & DEVELOPMENT



More developed career paths will create more lifetime employees in the industry.

— Delphi panelist



THE FUNDAMENTALS WILL ALWAYS BE ESSENTIAL WHEN IT COMES TO TRAINING IN THE RESTAURANT INDUSTRY: HOSPITALITY, MANAGING RISK, AND OPERATING EFFICIENTLY.

Here's one thing that will be different about the restaurant of the future and training: Technology will be a skillset that requires training — and technology will also be the way restaurants train. Online and smartphone training will be common. And even as more tasks are automated or done digitally, restaurants will become more career-focused, the Delphi panelists said. Restaurants will increase their focus on internal career-pathing to retain employees and work more closely with schools and universities to recruit employees.



MOST LIKELY DEVELOPMENTS BY 2030

- ✓ More training will be provided online and on smartphones.
- ✓ More employees will be certified in safe food handling through ServSafe products.
- ✓ Allergen training for employees will be mandatory.
- ✓ Independents will have greater access to professional training online.
- ✓ More restaurants will develop and promote internal career ladders to help retain employees.

LEAST LIKELY DEVELOPMENTS BY 2030

- ✓ The typical restaurant employee will be more highly trained and educated.
- ✓ Video games designed for restaurant-employee training will be more popular.

See appendix for full survey results.

2030: PULSE CHECK

MARKETING

SAY GOODBYE TO
TRADITIONAL MARKETING.

Savvy operators have known for a while that social-media marketing connects well with consumers, but marketing will get more personal and localized in the restaurant of the future as the industry strives to deliver a customized experience at every touchpoint.

The Delphi panel believes that mastering personalization and targeted marketing will be the hallmarks of successful operations as we head toward 2030. That includes using technology to change menu offerings and prices depending on demand, and leveraging loyalty programs for online marketing.

The bottom line: Give consumers what they want when they want it ... even if it means you have to use facial recognition technology to figure it out.

“We will see more apps, digital ads and geo-tracking of customers.”

— Delphi panelist

“Data budgets will likely surpass today’s marketing budgets for most restaurants.”

— Delphi panelist

MOST LIKELY
DEVELOPMENTS
BY 2030

- ✓ Restaurant operators will be more likely to implement more local, targeted and customized promotions.
- ✓ Restaurants will be more likely to incorporate technology to allow menu offerings and prices to change depending on the time of day or day of the week.
- ✓ Frequent-diner databases and loyalty programs will be used more frequently for online advertising and promotion.
- ✓ Videos — both in-store and in digital marketing — will be used more frequently to market restaurants.
- ✓ Restaurants will be more susceptible to negative social media.

LEAST LIKELY
DEVELOPMENTS
BY 2030

- ✓ Discounting will be less common in restaurants.
- ✓ Customer loyalty at restaurants will decline.

See appendix for full survey results.

2030: PULSE CHECK

FOOD SAFETY & SECURITY

FOOD SAFETY WILL CONTINUE TO BE A MISSION-CRITICAL AREA FOR RESTAURANTS.

The growing interest in on-demand food is likely to up the game, to ensure no reputational risks as delivery and takeout foods increase.

Technology will be a game-changer in food safety, the Delphi panel says. As consumers increasingly expect transparency, restaurant inspection reports are likely to be publicly available. Food-safety certification and comprehensive food safety management systems will be critical components of enhancing food safety. Supply-chain technologies such as bar coding and blockchain will help create digital records of a product's journey from farm to table. The dramatic increase in data from across the supply chain will quickly identify the source of foodborne-illness outbreaks and remove potentially contaminated foods.

“More automation, robotics and AI should improve food safety and security.”

— Delphi panelist

“

Food safety knowledge will increase as consumers become more educated.

”

— Delphi panelist

MOST LIKELY DEVELOPMENTS BY 2030

- ✓ Restaurant inspection results will be readily available to the public.
- ✓ A majority of cases shipped in the supply chain will be equipped with universal bar codes or transponders.
- ✓ More of the handling of food products in the supply chain will be done by machines, rather than people.
- ✓ More food safety certification for hourly and management employees will enhance restaurant food safety.
- ✓ Technologies such as blockchain will improve traceability in the restaurant supply chain.
- ✓ More restaurants will implement comprehensive food safety management systems.
- ✓ Food-chain security and “food defense” will receive greater attention to prevent intentional food contamination.

LEAST LIKELY DEVELOPMENTS BY 2030

- ✓ The complexity of traceability will be an increased barrier to the local-foods movement.
- ✓ Restaurants will spend a larger proportion of their budget on food safety.

See appendix for full survey results.



2030: PULSE CHECK

GOVERNMENT



OUR PANEL OF EXPERTS FORESEES MORE RESTAURANT REGULATIONS AHEAD.

This includes regulations in emerging areas such as third-party delivery, data privacy, environmental rules, and packaging. The trend will be even more pronounced at the local and state levels, our panel predicts.

Some see more mandates coming on employee benefits, and more taxes on alcoholic beverages and foodservice-focused taxes.

The recommendation: Get on top of it now. And stay engaged with your lawmakers around issues and regulations that are key to the industry's success.

Despite concerns about new regulations, panelists say the industry's entrepreneurial spirit will be going strong in 2030.



The industry will employ more lobbyists at city halls than at the state and federal levels, combined.”

— Delphi panelist



The industry is always entrepreneurial and will always survive. That is the nature of the individuals that go into the hospitality business.”

— Delphi panelist



MOST LIKELY DEVELOPMENTS BY 2030

- ✓ State and local governments will increase restaurant industry regulation.
- ✓ There will be increased regulation around third-party delivery.
- ✓ The federal government will enact more data-privacy rules to regulate how businesses handle customer data.
- ✓ New environmental regulations will increase operating expenses.
- ✓ There will be more government regulation of restaurant takeout and single-use packaging.

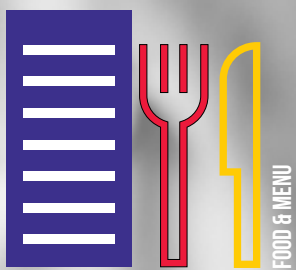
LEAST LIKELY DEVELOPMENTS BY 2030

- ✓ Government will increasingly regulate portion sizes of menu items.
- ✓ Restaurateurs will become more involved in donating to political candidates and causes.

See appendix for full survey results.

2030

RESTAURANT INDUSTRY 2030 • NATIONAL RESTAURANT ASSOCIATION

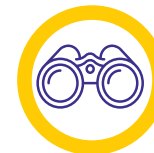
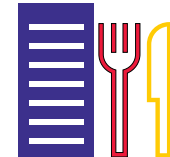


Menus will continue to be innovative and fresh; this is what the consumer demands.”

— Delphi panelist

2030: PULSE CHECK

FOOD & MENU



MOST LIKELY DEVELOPMENTS BY 2030

- ✓ Restaurants will offer more healthy options on their menus.
- ✓ Plant-based protein (vegetarian) food products will grow in popularity.
- ✓ Consumers will increasingly ask for allergen information.
- ✓ Consumers' palates will be more sophisticated.
- ✓ Global-cuisine-themed restaurants will grow in popularity.
- ✓ Restaurants will offer more fresh produce options on their menus.
- ✓ Consumers' interest in food sourcing will increase.
- ✓ Local food sourcing will become more commonplace.

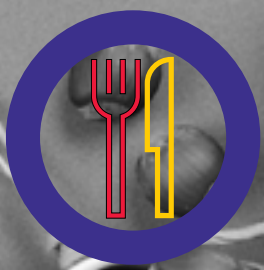
LEAST LIKELY DEVELOPMENTS BY 2030

- ✓ Restaurants will be less likely to offer paper menus.
- ✓ Restaurant menus in general will offer fewer choices.

IF YOUR MENU HAS THE WORDS “SUSTAINABLY SOURCED,” YOUR INGREDIENTS ARE CONSIDERED “CLEAN” AND YOU’RE PREPARED TO TELL THE STORIES BEHIND THE FOOD YOU’RE SERVING, THEN YOU’RE ALREADY LIVING IN THE RESTAURANT OF THE FUTURE.

It’s not surprising that the Delphi panel predicts that the years ahead are going to focus increasingly on healthy options, sourcing, local foods, and a product’s journey from farm to table. Look for increased demand for plant-based proteins and global cuisines.

See appendix for full survey results.



HEALTH & NUTRITION

2030: PULSE CHECK

HEALTH & NUTRITION

IF EATING AT A RESTAURANT IS AN EXPERIENCE, THEN THE EXPERIENCE YOUR DINERS WANT WHEN IT COMES TO HEALTH AND NUTRITION IS A FLAVOR AND DISH THEY CAN'T GET AT HOME.

Sometimes that means “comfort food,” regardless of the food’s nutrition content, say our Delphi panelists.

The restaurant of the future is going to be expected to be creative and innovative about the healthy dishes it offers, including for children. The Delphi panel expects that more consumers will have dietary restrictions — and that operators will offer more options to satisfy specific diets. Many see a focus on reducing added sugars in menu items.

“

Fresh, fresh, fresh.”

— Delphi panelist

“

Anyone serving food will have to be transparent about the health information of the product.”

— Delphi panelist

”



MOST LIKELY DEVELOPMENTS BY 2030

- ✓ Regardless of the nutritional content of the food, consumers will still want comfort foods.
- ✓ Restaurants will offer more healthy food and beverage options for children.
- ✓ Restaurants will be more creative and innovative in making dishes more healthful.
- ✓ Restaurants will offer more options to satisfy specific diets.
- ✓ A larger proportion of consumers will have dietary restrictions.
- ✓ Restaurants will offer more food and beverage items that are lower in added sugars.

LEAST LIKELY DEVELOPMENTS BY 2030

- ✓ Restaurants will be more likely to retain the services of a registered dietitian, whether on staff or as a consultant.
- ✓ There will be restrictions on advertising “unhealthy” foods.

See appendix for full survey results.

2030

RESTAURANT INDUSTRY 2030 • NATIONAL RESTAURANT ASSOCIATION

“

Waste is a huge challenge, yet to be adequately addressed.”

— Delphi panelist

2030: PULSE CHECK

SUSTAINABILITY

SUSTAINABILITY WILL BE INTEGRATED INTO EVERY ASPECT OF RESTAURANT OPERATIONS IN 2030.

Environmentally friendly practices have been increasing over the last decade and our panelists expect them to increase even faster in the next one as innovative restaurants lead the way in sustainable operations. Look for more energy-efficient equipment, recycling programs, sustainably sourced menu items, and environmentally friendly restaurant design. With a surge in delivery, packaging considerations will become more important.

As sustainability becomes more top-of-mind for guests as they make restaurant decisions, promoting sustainability practices will become increasingly part of a restaurant's marketing efforts, panelists say.

“

Packaging regulations will increase. This is a tremendous opportunity to be proactive.”

— Delphi panelist



MOST LIKELY DEVELOPMENTS BY 2030

- ✓ Equipment used in restaurants will be more energy-efficient.
- ✓ More restaurant operators will promote their sustainability practices and efforts in marketing to consumers.
- ✓ More restaurants will implement recycling programs.
- ✓ Restaurants will offer more menu items that are sustainably sourced.
- ✓ There will be a decline in single-use restaurant packaging.
- ✓ Eco-friendly restaurant designs will be more common.

LEAST LIKELY DEVELOPMENTS BY 2030

- ✓ A larger proportion of restaurant energy will be supplied by nuclear power.
- ✓ Restaurant utility costs will decrease as a proportion of total operating costs.

See appendix for full survey results.



2030: THE DISRUPTORS THINK AHEAD

WHILE DEVELOPING THE SCOPE OF THE RESTAURANT INDUSTRY 2030 REPORT, THE ASSOCIATION COLLABORATED WITH A TEAM OF FUTURISTS.

Foresight Alliance's team of futurists apply science and research to help companies build business plans that withstand, respond to, and even capitalize on developments that may arise in the coming decades.

The team excels in consequential thinking, and bringing in non-restaurant trends, to consider:

WHAT ARE THE POTENTIAL RAMIFICATIONS OF TODAY'S WAY OF LIFE ON TOMORROW'S WAY OF LIFE?

The firm maintains a list of "disruptors," developments and trends that have the potential to affect lifestyles and businesses. Each disruptor is a "space to watch." These are not predictions, nor even expected futures — but they are possible futures, based on external factors such as demographic trends and artificial intelligence.

Disruptors are opportunities, too. They can help us look ahead to spaces where there's a need, spaces where people aren't working in them yet. The trick is to get as many people working in them as possible, thinking about the future together.

We've selected a few we think could have a particular impact on the restaurant space. Of the 10, perhaps only three or four will happen, or maybe they'll happen in different ways with effects we didn't see coming.

1. THE INTELLIGENT RESTAURANT

KEEP AN EYE OUT FOR ...

- A sufficiently intelligent restaurant may be able to do more of its own supply chain management.



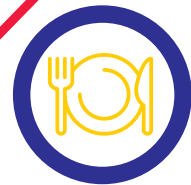
2030: THE DISRUPTORS

INFORMATION TECHNOLOGY WILL PERMEATE RESTAURANTS.

This will enable restaurants to interact in real time with an evolving digital ecosystem of apps, services and personal AI assistants (apps such as Siri (Apple) or Alexa (Amazon) that understand natural-language voice commands, complete tasks for the user, and over time “learn” their owners’ preferences). All will deeply integrate into consumers’ everyday decisions. It will be increasingly important for restaurants to provide accessible, detailed and accurate data. Restaurants will be able to use new data capabilities to develop dynamic menus with real-time pricing that can respond to supply-and-demand changes. Relevant data about restaurant operations will include details on nutrition, preparation methods, ingredients and supply-chain authentication.

WHY THIS COULD HAPPEN

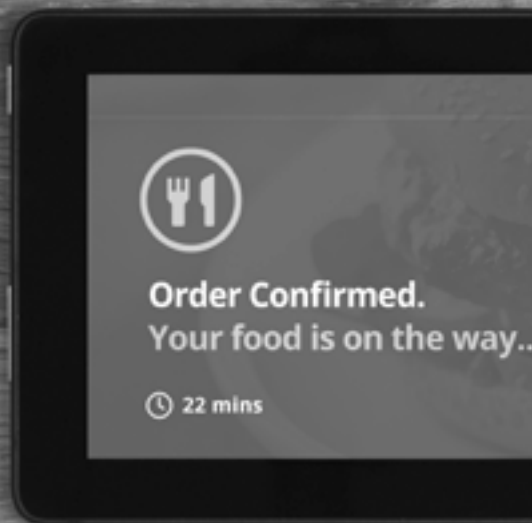
- ✓ Near-universal smartphone adoption.
- ✓ AI as personal assistant and gatekeeper between a brand and consumer.
- ✓ The spread of the Internet of Things (IoT), physical objects embedded with electronics, software, sensors and network connectivity that enable the objects to collect, send and receive data.
- ✓ Growth of voice search, which allows users to search the Internet by verbally asking a question via smartphone, smart device or a computer.
- ✓ Growing demand for personalized diets (e.g., allergies, weight, religion, ethics).
- ✓ Consumer choices as an expression of social and political values.



WHY THIS MATTERS FOR RESTAURANTS

- ✓ A growing information ecosystem will require upgrades and integration of restaurant data collection and IT systems.
- ✓ Brands will market directly on virtual-assistant platforms and may find the platforms’ algorithms to be highly responsive to small tweaks in restaurant pricing or other data.
- ✓ All aspects of restaurant operations will be more transparent, such as health inspections, safety training, staff certifications and food sourcing.
- ✓ Effective management of food allergens will grow in importance as consumers expect documentation of food preparation, ingredients and practices.

2. VIRTUAL RESTAURANTS & CLOUD KITCHENS



KEEP AN EYE OUT FOR ...

- In some cases, owners of virtual restaurants could discover opportunities to open permanent physical restaurants based on their precise knowledge of local tastes.
- Data mining could enable hyperlocal, rapidly created virtual restaurants to serve the demonstrated tastes of a market.



2030: THE DISRUPTORS



ACCELERATING TRENDS IN TECHNOLOGY AND CONSUMER DEMAND WILL LEAD TO MORE “CLOUD KITCHENS” AND “VIRTUAL RESTAURANTS” —

restaurants that exist only online or via an app. Growth will be fueled by the expansion of central kitchens for food prep, and social media marketing that showcases menus, philosophies and chefs. New chains could quickly emerge regionally or nationally.

WHY THIS COULD HAPPEN

- ✓ Proliferation of centralized kitchens serving delivery.
- ✓ Expansion of online delivery brands.
- ✓ Rising real estate and labor costs.
- ✓ Time-pressed consumers who don't want to cook.
- ✓ Expanded role of social media in brand marketing.
- ✓ Increasing demand for convenience.
- ✓ Lifestyles of “digital natives,” those who have grown up in the digital age.
- ✓ Food-preparation robotics and new delivery options.

WHY THIS MATTERS FOR RESTAURANTS

- ✓ The rise of “placeless” restaurants will challenge and redefine the concept of what a restaurant is.
- ✓ Like other industries that have moved online, virtual restaurants would likely see a relative lowering of costs (such as staff and rent) and of other barriers to entry in launching a restaurant.
- ✓ Virtual restaurants could substantially alter the franchising model.
- ✓ The expansion of centralized kitchens for meal prep will support the ongoing growth of app-based meal delivery services.
- ✓ A shift to cloud kitchens would likely affect municipal real estate markets as well as local commercial and retail areas that serve the customers of physical restaurants.
- ✓ Surprise pop-up versions of these online-only restaurants could bring the experience of these restaurants to the real world and build exclusivity.

3. APPS CHALLENGE YOUR BRAND



KEEP AN EYE OUT FOR ...

- Food halls could merge with — or could sometimes be cobranded with — large food delivery apps.
- Data collection/consumer profiles could lead to food delivery apps dictating menus to restaurants, including which restaurants are “allowed” to make certain kinds of food.



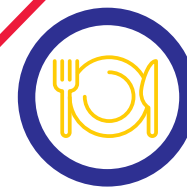
2030: THE DISRUPTORS

CONSUMERS MAY GROW INCREASINGLY LOYAL TO THIRD-PARTY DELIVERY APPS, ECLIPSING LOYALTY TO INDIVIDUAL RESTAURANTS.

Third-party delivery apps are emerging as a key gatekeeper between consumers and restaurants, able to capture consumers' business with convenient, frictionless ordering. With a growing number of consumers using third-party apps as their primary interface with restaurants, app companies could build on these relationships by creating private-label brands, similar to what many big-box and grocery stores have done. By contracting with local restaurants to offer app-associated “house-brand” meals, app companies could further sever a direct connection between restaurant and consumers.

WHY THIS COULD HAPPEN

- ✓ Rapid rise of food delivery and other off-premises options.
- ✓ Consumer expectations of seamless convenience.
- ✓ Consolidation among food-delivery apps.
- ✓ Success of private labeling in retail.
- ✓ Apps lock in customers through a “network effect” — the more users who use the apps, the more valuable the apps.
- ✓ Delivery services' acquisition of “shadow” restaurant URL domains.



WHY THIS MATTERS FOR RESTAURANTS

- ✓ Start-up independent restaurants could find opportunities in wholesaling to delivery apps.
- ✓ An industry-financed delivery app could preserve restaurants' direct brand relationships with consumers.
- ✓ Restaurants can use specialized, unique menu items to defend against brand disintermediation.
- ✓ Food-delivery packaging becomes an increasingly important touchpoint for brand interaction with consumers.

4. AUTONOMOUS VEHICLES

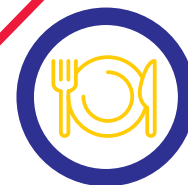


KEEP AN EYE OUT FOR ...

- More restaurants may need drive-thrus, in effect — but geared toward online and automated interactions.
- Some automated food trucks could become automats on wheels, circulating with selections from a group of restaurants, or their own preparations.



2030: THE DISRUPTORS



WHY THIS MATTERS FOR RESTAURANTS

- ✓ Restaurants that engage early with AVs will get practice in processes that are likely to become common in the future.
- ✓ Software, including AI assistants that recognize voice commands and complete tasks for users, will increasingly choose destinations and will eventually interface with cars directly. Having a strong and clear marketing presence in all relevant channels — including screens in AVs — will grow more important for restaurants.
- ✓ Autonomous delivery vehicles may be feasible sooner than fully self-driving passenger cars and could change the economics of delivery.
- ✓ Restaurant layouts and drive-thrus will need to accommodate interactions with self-driving vehicles.
- ✓ Cars that are increasingly hands-free will mean different kinds of foods can be consumed in cars.

AUTONOMOUS VEHICLES (AVS) PROMISE TO CHANGE HOW PEOPLE ON THE ROAD GET THEIR FOOD, AND WHAT THEY EAT AND DRINK IN CARS.

People will have more time to eat, with both hands, in their vehicles. Longer travel times will be possible, making it useful to carry and reheat food while on the road. Restaurants can geo-target their marketing. Eventually, driverless cars will go through drive-thrus.

WHY THIS COULD HAPPEN

- ✓ Artificial intelligence advances.
- ✓ Autonomous vehicle development.
- ✓ Consumer convenience expectations.
- ✓ Expanding online ordering and delivery infrastructure.
- ✓ Patterns of automobile and truck use.
- ✓ Advanced safety technology.
- ✓ Declining tolerance for risk.

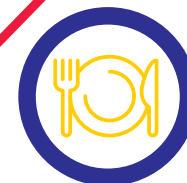
5. BIG TECH BUNDLES FOOD

KEEP AN EYE OUT FOR ...

- Food ordering could become directly integrated with ordering media content.



2030: THE DISRUPTORS



WHY THIS MATTERS FOR RESTAURANTS

✓ **Well-funded, non-traditional businesses could stake out positions within the restaurant industry and disrupt the status quo.**

✓ **Non-traditional operators will bring new ideas and new approaches to the restaurant industry.**

✓ **There will be opportunities for existing operators to partner with the new entrants.**

✓ **The scale, reach, and commitment to years-long losses to capture market of some online retailers will test competitors.**

✓ **There will likely be greater integration of industry segments — wholesalers, grocers, supply companies — as new-entrant companies use logistics experience to maximize efficiency and minimize costs.**

NON-FOOD COMPANIES COULD ADD FOOD AND PREPARED MEALS TO THEIR OFFERINGS AS AN ADDED SERVICE.

For example, a media-streaming service could buy or pair with existing meal delivery services to create an all-in-one dinner and entertainment experience. Or an online retailer could leverage one-click ordering, logistics and delivery expertise to add meals to their subscriptions. Restaurants could move beyond current loyalty or rewards programs and offer flat-rate monthly subscription plans to customers.

WHY THIS COULD HAPPEN

✓ **Growth in third-party delivery apps.**

✓ **More online retail options.**

✓ **Low-friction buying options (e.g., one-click purchases).**

✓ **Expectations and lifestyles of digital natives.**

✓ **Dominance of “big tech” companies with expertise in logistics and last-mile delivery.**

✓ **Proliferating delivery models and services.**

6. THE BIONIC RESTAURANT



KEEP AN EYE OUT FOR ...

- Food engineer could be a job category that spreads into the restaurant industry.



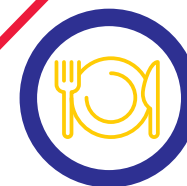
2030: THE DISRUPTORS

AUTOMATION AND ROBOTICS WILL BEGIN TO PLAY A GREATER ROLE IN FOOD PREPARATION AND THE KITCHEN LINE.

Automation technologies such as touchscreen ordering kiosks are already spreading in front-of-house restaurant operations. Back-of-house operations will become more fully automated as costs fall and flexible, reprogrammable robot systems grow more sophisticated. This will allow automation of more of the repetitive elements of food preparation and even permit motion-capture replication of the movements of chefs. Chefs will work in collaboration with these systems, using their physical senses and expert judgment.

WHY THIS COULD HAPPEN

- ✓ Machine-learning advances (machines learn from data, identify patterns and make decisions with minimal human intervention).
- ✓ Development of flexible, reprogrammable robots.
- ✓ AI services provided by Google, Amazon, Microsoft, and others.
- ✓ Growth in data analytics.



WHY THIS MATTERS FOR RESTAURANTS

- ✓ Higher automation-backed kitchen productivity can reduce staffing needs and alter compensation patterns.
- ✓ Using robotic equipment will become part of the kitchen staff skillset, and part of restaurant kitchen workflows.
- ✓ Robotics will enhance food-quality consistency.
- ✓ Operations will have higher capital costs, and potentially lower labor costs.

7. THIRD SPACE RESTAURANTS



2030: THE DISRUPTORS

THE DECLINE OF SHOPPING MALLS AND “BRICKS-AND-MORTAR” RETAIL WILL LEAD TO RESTAURANTS BECOMING EVEN MORE IMPORTANT FOR PUBLIC OUTINGS, COMMUNITY ENGAGEMENT AND SOCIALIZING.

With their expanded and versatile seating options, gastropubs and full-bar fast-casual restaurants could evolve into American versions of German biergartens, with less emphasis on table turnover and more emphasis on facilitating repeat socializing by customers. Café seating and local independent restaurants could help transform food courts in the direction of food halls and bustling Asian street-food markets.

WHY THIS COULD HAPPEN

- ✓ Rise of ecommerce and decline of shopping malls.
- ✓ Need for social space as more people work remotely or at home.
- ✓ Aging of baby boomers.
- ✓ Retailers co-locating restaurants with stores.
- ✓ Rise of delivery, keeping people at home, or in offices.
- ✓ Mainstreaming of ‘foodie’ culture.
- ✓ Expansion of outdoor restaurant seating areas.
- ✓ Growth and popularity of coffee bars, craft breweries and food halls.



WHY THIS MATTERS FOR RESTAURANTS

- ✓ Growth in takeout and food delivery will increase the importance of the face-to-face restaurant experience.
- ✓ The need for more socializing space will change restaurant layouts and space allocation. Zoning laws could interfere with outdoor seating allowances.
- ✓ Embracing the social aspects of global food cultures can add an experiential component to restaurant visits and expand the appeal of international food offerings.

KEEP AN EYE OUT FOR ...

- Third-space restaurants could become an arena in which people actively try to undo some of the polarizations that can divide American society.



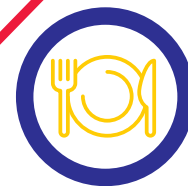
8 WEATHER VOLATILITY

KEEP AN EYE OUT FOR ...

- Food waste could be targeted, requiring adjustments in how food is sourced, prepared, served, and disposed of.



2030: THE DISRUPTORS



WHY THIS MATTERS FOR RESTAURANTS

- ✓ Disrupted weather patterns may cause spikes and volatility in food prices even before food costs reach a relatively higher level.
- ✓ A sustained higher proportion of food costs would change the basic economics of restaurant operations.
- ✓ More consumers will have grown up with weather-related information and be more responsive to its effects in restaurants, such as the carbon footprint of foods and the impact of packaging.
- ✓ Weather-change issues may spur the perfection of alternative “meats” (for example, plant-based and lab-grown/cell-based meats) and consumer enthusiasm for them.
- ✓ Weather-related public policy could affect other operational costs for restaurants, such as transportation, energy expenses and packaging.

WEATHER VOLATILITY COULD DRIVE UP FOOD COSTS BY CAUSING DISRUPTIONS IN AGRICULTURE AND THE FOOD DISTRIBUTION SYSTEM.

This would reverse the long-term trend of falling household food costs in developed countries. The issue: growing patterns of both staple and specialty crops may be disturbed as weather change affects agriculture, including shifts in water availability. Secondary factors may drive up food costs as well, such as carbon taxes on energy used in food production and transportation, or direct taxes on carbon-intensive foods.

WHY THIS COULD HAPPEN

- ✓ Rising global temperature volatility.
- ✓ Weather-based shifts in agricultural seasons and growing areas.
- ✓ Weather-induced disasters such as floods and drought.
- ✓ Weather-conscious consumers ready to act on the impact of specific foods' carbon footprints.
- ✓ Global growth of middle classes, driving food demand.
- ✓ Development of vegetable-based meat alternatives.

9. CULINARY AI

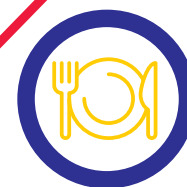


KEEP AN EYE OUT FOR ...

- There may be attempts to patent recipes not as ingredient lists but as technological processes.
- The software and recipes to support automated cooking could be valuable digital intellectual property in need of security.



2030: THE DISRUPTORS



WHY THIS MATTERS FOR RESTAURANTS

✓ AI chefs and recipe builders could create entirely new categories of cuisine and beverages, which could lead to new kinds of restaurants.

✓ Because they “live” in software, AI chefs are placeless and thus could be run at many locations simultaneously.

✓ More facets of cooking will be organized to be readable by artificial intelligence.

✓ If provided with medicinal and health information, AI chefs driven by algorithms could be programmed to maximize the health benefits of recipes and foods.

✓ Backlash against automation of all kinds could create a “return to artisanal” movement — predicated on humans being the center of all parts of the food and beverage process.

ARTIFICIAL INTELLIGENCES WITH KNOWLEDGE OF COOKING TECHNIQUES, FOOD CHEMISTRY, RECIPES, AND ALCOHOL WILL PRODUCE UNEXPECTED NEW CULINARY AND BEVERAGE EXPERIENCES.

An AI with the algorithmic ability to analyze and synthesize inhuman amounts of data and information about foods, beverages, ingredients, chemical compounds, and tastes will result in the creation of recipes, dishes and beverages beyond, and unlike, what humans would produce. Some AIs will become as well-known as human chefs, baristas and bartenders.

WHY THIS COULD HAPPEN

✓ Rapid advances in artificial intelligence.

✓ AI-derived new discoveries.

✓ AI-designed recipes.

✓ Algorithmic eating guidance.

✓ Machine-readable data (ingredients, processes, etc.).

✓ Popularization of AI chefs, baristas and bartenders in the media.

10. MEDICAL MEALS



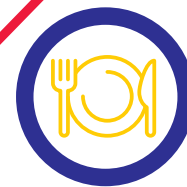
2030: THE DISRUPTORS

AN AGING U.S. POPULATION, ADVANCED GENETIC KNOWLEDGE, AND THE RISING INCIDENCE OF LIFESTYLE DISEASES SUCH AS HEART DISEASE, OBESITY AND TYPE 2 DIABETES WILL CREATE GROWING DEMAND FOR MEALS THAT PROVIDE SPECIFIC HEALTH BENEFITS TO DINERS, ON AN INCREASINGLY PERSONALIZED LEVEL.

In some cases, these meals may be prescribed by doctors or as part of coverage by insurance companies. For restaurants, costs for providing these meals could be offset by relationships with health care and insurance providers, which would direct patients to eateries with the proper medical meal and portion for their condition.

WHY THIS COULD HAPPEN

- ✓ Rise in health care spending, including prescription drugs.
- ✓ Aging populations.
- ✓ Efforts in preventative care.
- ✓ Menu personalization for diet and health.
- ✓ Ingredient restrictions for diet and health.
- ✓ Faster, cheaper, more accessible human-genome testing for personal health care data.



WHY THIS MATTERS FOR RESTAURANTS

- ✓ Prescription meals will be more precisely targetable with a growing understanding of how food can impact gut microbes or activate gene traits.
- ✓ People like to eat good food, even if they have medical restrictions. The growing recognition of chronic conditions that are helped or hindered by eating appropriate foods could make prescription meals an important new category of prepared foods.
- ✓ Restaurants will need to provide clearer, more thorough information about ingredients in dishes so that customers can make better-informed decisions about choosing a meal based on health.



KEEP AN EYE OUT FOR ...

- Personal digital assistants could manage people's diets with nudges, information-shaping "filter bubbles," and "choice architecture" to manage health, weight, etc.
- Insurance companies could begin to require information about what and how their customers are eating.



APPENDIX

Delphi Methodology

One of the most important aspects of a Delphi study is selecting the panel of experts who will lend their judgments to the topic being researched. For this study, Delphi was able to rely on an already-assembled group of experts — the National Restaurant Association Board of Directors. Based on their industry experience, these individuals are able to offer predictions on industry conditions in 2030. A variety of other experts were invited to join the panel, including the National Restaurant Association Educational Foundation Board of Trustees, state restaurant association leadership, suppliers, manufacturers, distributors and consultants.

Delphi Process

The research's first phase began in 2018 with an open-ended questionnaire that allowed panelists to raise any and all issues they believed would be important to the industry in 2030. Based on responses generated in the open-ended questionnaire, a second questionnaire was developed, asking respondents to rate 180 statements about possible developments in the industry on a scale from +3 to -3, where +3 equals "very likely to occur" and -3 equals "very unlikely to occur." All 180 statements are listed here. The Restaurant Industry 2030 research initiative was based on responses from more than 100 industry experts.

Detailed Survey Responses

Survey responses below are ranked according to the average rating they received on the +3 to -3 scale.

STATEMENTS RANKED BY CATEGORY

INDUSTRY STRUCTURE		AVERAGE
1	Competition for customers will intensify.	2.8
2	Convenience stores and grocery stores will expand their foodservice offerings.	2.4
3	The restaurant industry will continue to be a breeding ground for entrepreneurialism.	2.3
4	There will be more delivery options in smaller markets.	2.0
5	Virtual or "ghost" restaurants that only offer delivery will be more common.	2.0
6	Off-premises traffic will post stronger growth than on-premises traffic.	2.0
7	Consolidation in food manufacturing and distribution will intensify.	2.0
8	The limited-service segment (quick-service, fast casual, coffee and snack) will post stronger growth than the table-service segment.	1.8
9	The table-service segment will place a greater emphasis on growing off-premises traffic.	1.8
10	Chain unit growth will be driven more by franchising than adding company-owned stores.	1.8
11	There will be a greater emphasis on experiential restaurants to drive on-premise traffic.	1.6
12	The restaurant and foodservice industry will capture a larger share of consumers' food dollar.	1.6
13	Tipping in table-service restaurants will still be commonplace.	1.4
14	Suppliers will become increasingly like partners with restaurant operators.	1.3
15	The number of restaurant and foodservice locations will continue to grow.	1.3
16	Chef-driven restaurant concepts will be more common.	1.1
17	Restaurant industry sales growth in the upcoming decade will be more moderate than in the prior decade.	1.0
18	A larger number of American restaurant companies will expand internationally.	0.9
19	Independent operators will be the primary innovators and new product developers.	0.8

RESTAURANT FACILITIES & OPERATIONS		AVERAGE
1	Packaging designed exclusively for delivery and carryout will be more sophisticated and effective.	2.4
2	More restaurant layouts will include areas dedicated to delivery and carryout.	2.3
3	More restaurants will be designed to reduce use of energy and water and minimize waste.	2.2
4	The typical restaurant footprint will be smaller.	2.0
5	Computerized cooking equipment will become more common in restaurant kitchens.	2.0
6	Restaurant space utilization will be more flexible.	1.9
7	Restaurants will be more likely to offer self-service options for customers.	1.7
8	Restaurant design will become more experiential.	1.5
9	More restaurants will have open-kitchen designs for display cooking.	1.1
10	Mobile foodservice (food trucks) will account for a larger share of sales and traffic.	0.5
11	Restaurants will include more retail space.	0.0
12	Restaurants will increase their hours of operation.	-0.3



APPENDIX

PROFITABILITY & INCOME		AVERAGE
1	Total employee compensation costs will increase as a percent of sales.	2.3
2	Real estate costs will escalate more rapidly as competition for prime sites increases.	1.6
3	Smaller operators will have greater access to fully integrated software systems — from scheduling to ordering supplies to tracking sales/traffic metrics — which will increase their profitability.	1.5
4	Investments in technology will increase restaurant profitability.	1.3
5	Operators will be more likely to invest in training to increase productivity.	1.1
6	Alcohol sales will increase as ride-sharing apps and self-driving vehicles reduce the risks of drunk driving.	0.9
7	Growth in alcohol delivery will increase profit margins for restaurants.	0.8
8	A higher proportion of restaurants will stop accepting cash.	0.8
9	Traditional brick and mortar restaurants will be more likely to create “pop-up” concepts as an additional source of revenue.	0.7
10	Restaurants will share a larger percentage of profits with third-party delivery firms.	0.6
11	Operations with lower-check-per-person averages will have higher profit margins than higher-check operations.	0.1
12	Food and beverage costs will decrease as a percent of sales.	-1.0
13	Restaurant profit margins will increase.	-1.2
FINANCING THE BUSINESS		AVERAGE
1	Private financing of restaurant operations will be more common than public financing.	1.4
2	Meeting the demands of stockholders will force more public restaurant companies to go private.	1.1
3	Financing for independents will be harder to obtain.	0.8
4	A greater foreign presence in restaurant financing will occur.	0.6
5	Crowd-sourcing of funds will become more important for niche foodservice concepts.	0.6
6	Suppliers will be more likely to invest in new restaurants and concepts.	0.0
7	The restaurant industry will be more attractive to investors.	-0.1
8	More funding will come from tax incentives offered to small businesses for job creation.	-0.2
9	Local independent banks will be more willing to finance restaurants.	-0.5
10	Accessing credit will become easier for restaurant operators.	-0.8



APPENDIX

TECHNOLOGY & DATA		AVERAGE
1	It will be commonplace for restaurants to accept mobile payments.	2.5
2	Handheld payment terminals that allow for pay-at-the-table will be commonplace.	2.5
3	The vast majority of takeout and delivery orders will be placed digitally.	2.4
4	The use of kiosks in limited-service restaurants will be commonplace.	2.2
5	Video menu boards in limited-service restaurants will be commonplace.	2.2
6	Turning point-of-sale (POS) data into actionable knowledge for operators will become easier.	2.1
7	Technology will be more effectively used to control costs and enhance management efficiency.	2.1
8	Artificial intelligence (AI) will be used in more ways, such as optimizing menu prices or having an app or tablet verbally suggest menu items for consumers.	1.9
9	Restaurant inventories will be calculated and transmitted automatically as product is removed from inventory.	1.8
10	Restaurants will provide more tools for customers to give real-time feedback electronically.	1.8
11	Restaurants will rely more on third parties for data hosting.	1.8
12	Handheld tablet menus in tableservice restaurants will be commonplace.	1.6
13	Restaurants will invest more in cybersecurity to protect consumer data.	1.6
14	Increased usage of virtual assistants by consumers to place voice orders as well as to initiate general restaurant and menu item searches will be an important productivity and sales driver.	1.4
15	Customers will be less forgiving when data breaches occur.	1.3
16	Drones, self-driving vehicles and robots will play a larger role in delivery.	1.2
17	Customers will embrace data collection in their everyday restaurant experiences, with their permission.	1.1
WORKFORCE		AVERAGE
1	Women will hold a larger proportion of upper management jobs in the restaurant industry.	2.1
2	Minorities will hold a larger proportion of upper management jobs in the restaurant industry.	2.0
3	The average number of employees per restaurant location will decline.	2.0
4	The restaurant industry workforce will become more diverse.	1.9
5	The restaurant industry will remain very labor-intensive despite technological developments.	1.8
6	The restaurant industry will increase compensation and benefit levels to attract and retain employees.	1.6
7	Immigrants will make up a larger proportion of the restaurant workforce.	1.5
8	Tech skills will be more highly valued in restaurant employees.	1.5
9	Older workers will make up a larger proportion of the restaurant workforce.	1.4
10	Restaurant operators will rely more on gig workers.	1.2
11	An increase in the use of automation and robotics will ease labor challenges for the restaurant industry.	1.1
12	Apprenticeship programs will become more popular in the restaurant industry.	1.1
13	Younger workers will make up a larger proportion of the restaurant workforce.	0.3
14	The average tenure in the industry for a typical employee will increase.	0.0

TRAINING & DEVELOPMENT		AVERAGE
1	More training will be provided online and on smartphones.	2.3
2	More employees will be certified in safe food handling through ServSafe products.	2.2
3	Allergen training for employees will be mandatory.	1.9
4	Independents will have greater access to professional training online.	1.9
5	More restaurants will develop and promote internal career ladders to help retain employees.	1.8
6	More restaurant operators will partner with schools and universities to recruit staff.	1.7
7	Multi-lingual employees will be in higher demand by restaurant operators.	1.6
8	Virtual-reality technology will be used in employee training experiences.	1.5
9	Restaurants will place greater emphasis on internal training and development.	1.4
10	Employers will increasingly value certifications that show proof of employees' restaurant operational skills.	1.1
11	Video games designed for restaurant-employee training will be more popular.	0.9
12	The typical restaurant employee will be more highly trained and educated.	0.7
MARKETING		AVERAGE
1	Restaurant operators will be more likely to implement more local, targeted and customized promotions.	2.1
2	Restaurants will be more likely to incorporate technology to allow menu offerings and prices to change depending on the time of day or day of the week.	2.0
3	Frequent-diner databases and loyalty programs will be used more frequently for online advertising and promotion.	1.9
4	Videos — both in-store and in digital marketing — will be used more frequently to market restaurants.	1.8
5	Restaurants will be more susceptible to negative social media.	1.7
6	Digital marketing will offer the best operator ROI among marketing/advertising channels.	1.6
7	Consumers will be more value-conscious.	1.6
8	Tourism spending in restaurants will rise, due in part to operators marketing directly to tourists.	1.3
9	More restaurant companies will offer their branded retail products for sale in the restaurant and stores.	1.1
10	Biometrics/facial recognition will be more widely available as part of identity authentication in loyalty programs.	1.1
11	More restaurants will sell meal kits or "prepare at home" options.	0.7
12	Customer loyalty at restaurants will decline.	-0.1
13	Discounting will be less common in restaurants.	-0.7



APPENDIX

FOOD SAFETY & SECURITY		AVERAGE
1	Restaurant inspection results will be readily available to the public.	2.0
2	A majority of cases shipped in the supply chain will be equipped with universal bar codes or transponders.	1.8
3	More of the handling of food products in the supply chain will be done by machines, rather than people.	1.8
4	More food safety certification for hourly and management employees will enhance restaurant food safety.	1.7
5	Technologies such as blockchain will improve traceability in the restaurant supply chain.	1.6
6	More restaurants will implement comprehensive food safety management systems.	1.6
7	Food-chain security and "food defense" will receive greater attention to prevent intentional food contamination.	1.6
8	Background verifications of employees and suppliers will be more common.	1.5
9	The restaurant industry will develop a more comprehensive response to food security incidents.	1.5
10	There will be a greater push for global food safety standards.	1.5
11	Consumers will show an increasing awareness and interest in food safety.	1.5
12	The restaurant industry will develop a more comprehensive response to food safety incidents.	1.4
13	There will be greater oversight of foreign-grown food products.	1.3
14	Restaurants will spend a larger proportion of their budget on food safety.	0.8
15	The complexity of traceability will be an increased barrier to the local-foods movement.	0.5
GOVERNMENT		AVERAGE
1	State and local governments will increase restaurant industry regulation.	2.3
2	There will be increased regulation around third-party delivery.	2.2
3	The federal government will enact more data-privacy rules to regulate how businesses handle customer data.	2.0
4	New environmental regulations will increase operating expenses.	2.0
5	There will be more government regulation of restaurant takeout and single-use packaging.	2.0
6	The federal government will increase restaurant industry regulation.	1.9
7	The level of required benefits for employees will increase.	1.9
8	Alcoholic beverages will be more heavily taxed.	1.5
9	Taxes focused on foodservice will grow at all levels of government.	1.5
10	Providing nutrition information for food and beverage items will be mandatory, regardless of restaurant size.	1.1
11	The federal government will mandate food safety training for all restaurant employees.	0.9
12	Restaurateurs will become more involved in donating to political candidates and causes.	0.6
13	Government will increasingly regulate portion sizes of menu items.	0.3



APPENDIX

FOOD & MENU		AVERAGE
1	Restaurants will offer more healthy options on their menus.	2.0
2	Plant-based protein (vegetarian) food products will grow in popularity.	2.0
3	Consumers will increasingly ask for allergen information.	1.9
4	Consumers' palates will be more sophisticated.	1.9
5	Global cuisine-themed restaurants will grow in popularity.	1.7
6	Restaurants will offer more fresh produce options on their menus.	1.7
7	Consumers' interest in food sourcing will increase.	1.6
8	Local food sourcing will become more commonplace.	1.6
9	Portion sizes in general will be smaller.	1.3
10	Restaurants will be more likely to offer CBD-infused options on their menus.	1.0
11	More food-and-beverage suppliers will have their products "branded" on menus.	1.0
12	Restaurant menus in general will offer fewer choices.	0.9
13	Restaurants will be less likely to offer paper menus.	0.8
HEALTH & NUTRITION		AVERAGE
1	Regardless of the nutritional content of the food, consumers will still want comfort foods.	2.4
2	Restaurants will offer more healthy food and beverage options for children.	1.8
3	Restaurants will be more creative and innovative in making dishes more healthful.	1.8
4	Restaurants will offer more options to satisfy specific diets.	1.7
5	A larger proportion of consumers will have dietary restrictions.	1.6
6	Restaurants will offer more food and beverage items that are lower in added sugars.	1.6
7	Items that are lower in fat, calories, and sodium will become commonplace on menus.	1.3
8	There will be increased synchronization between POS systems and consumers' personal health-monitoring devices/apps.	1.0
9	Restaurants will be more likely to offer smaller portions at lower prices.	0.8
10	There will be restrictions on advertising "unhealthy" foods.	0.5
11	Restaurants will be more likely to retain the services of a registered dietitian, whether on staff or as a consultant.	0.3



APPENDIX

SUSTAINABILITY		AVERAGE
1	Equipment used in restaurants will be more energy-efficient.	2.3
2	More restaurant operators will promote their sustainability practices and efforts in marketing to consumers.	1.8
3	More restaurants will implement recycling programs.	1.8
4	Restaurants will offer more menu items that are sustainably sourced.	1.7
5	There will be a decline in single-use restaurant packaging.	1.7
6	Eco-friendly restaurant designs will be more common.	1.7
7	Restaurants will be more likely to take steps toward reducing their environmental impact.	1.6
8	A larger proportion of operators will purchase products made from recycled materials.	1.6
9	More restaurants will track food waste.	1.3
10	Consumers will be more likely to patronize restaurants with robust sustainability programs.	1.3
11	A larger proportion of restaurant energy will be supplied by natural gas.	0.9
12	A smaller proportion of restaurant energy will be supplied by oil.	0.9
13	More restaurants will implement composting programs.	0.7
14	More restaurants will use their sourcing policies and practices to set higher animal-welfare standards.	0.7
15	A larger proportion of restaurant energy will be supplied on-site by solar power.	0.3
16	A larger proportion of restaurant energy will be supplied by wind power.	0.1
17	Restaurant utility costs will decrease as a proportion of total operating costs.	-0.5
18	A larger proportion of restaurant energy will be supplied by nuclear power.	-0.8



IN PARTNERSHIP WITH



JOIN THE CONVERSATION
#RESTAURANTS2030

NOVEMBER 2019 • RESTAURANT.ORG/RESTAURANTS2030



2021 TOP RESTAURANT TRENDS

Read more in our 2021 STATE OF THE RESTAURANT INDUSTRY



2020 was a year unlike any other for the foodservice industry. It tested the limits of operator innovation, accelerated trends, and confirmed that customers miss their restaurant experiences.

The following food and menu trends didn't offset the industry's devastation; it's down nearly \$240 billion in sales and nearly 2.5 million employees are still out of work. But they do show restaurateurs' resiliency, innovation and commitment. The following were the top operating means by which restaurants survived 2020, from a survey of 6,000 operators and consumer preferences from a survey of 1,000 adults.

1. Streamlined menus

Fullservice operators got lean fast, reducing inventories and developing menu items they could make well with a smaller staff. These items had to travel well and be what customers craved. Expect menus to stay trimmed in coming months.

2. Off-premises takes precedence

Prior to the pandemic, 80% of fullservice restaurant traffic was on-premises. Then in March 2020, most restaurants were forced to shut down on-premises dining. In what's likely the fastest pivot in industry history, focus quickly shifted to off-premises, via takeout and delivery.

3. Blended meals, a team effort

Homebound, customers like to mix up meals—maybe

make the main dish but order appetizers, sides or dessert from a restaurant. Millennials are especially big fans of the blended meal.

4. Bundled meals? Considered deals!

Why do any cooking? Customers' restaurant choices can be influenced by the offer of a bundled meal that perhaps includes an appetizer, entrée and dessert in either family packs or for individual meals.

5. Meal kits make cooking fun

More than half of adults surveyed say they'd likely purchase a meal kit if it was offered by one of their favorite restaurants. That percentage rises to 75% for both millennials and Gen Z adults. Kits package pre-measured ingredients and

instructions to make the restaurant meal at home.

6. Meal subscriptions

Customers sign up to get meals during the month for pickup or delivery—at a discounted price. More than half of consumers surveyed say they'd sign up if their favorite places offered this option.

7. Selling groceries

Seems like anything that saves a trip gets a thumbs up. More than half of consumers surveyed would buy groceries (fresh, uncooked food items such as meat, produce, dairy, bread or pasta) if restaurants offered them.

8. Alcohol to go

A third of off-premises customers (ages 21+) say they included an alcoholic beverage

with a takeout or delivery order since the beginning of the COVID-19 outbreak, and they'll continue to in the future.

9. Comfort foods

Consumers say menus that offer a good selection of comfort foods influence their restaurant choice. From haute to homey, a third of fine dining operators surveyed are adding more comfort items—think burgers, pot pies, lasagna, soups, curries, sandwiches, pizza and noodle dishes.

10. Healthy and diet-specific food

To the same degree the availability of comfort foods influences restaurant choice, so do healthful menu options. Diet-specific items (gluten-free, vegan, etc.) however, are less important right now.



What Customers Crave. Each year, the National Restaurant Association publishes its annual What's Hot Culinary Forecast to identify the menu trends to watch in the coming year, as identified in a survey of American Culinary Federation chefs.

This year, to identify what's *truly selling best* during the pandemic, we asked restaurant operators for their single most popular menu item right now.

The vast majority say their current top-selling food and beverage items were already on menus prior to the coronavirus outbreak.

2020 TOP MENU SELLERS

Read more in our 2021 STATE OF THE RESTAURANT INDUSTRY

Top Sellers: Fullservice

(Fine Dining, Family Dining, Casual Dining)

1. Burgers
2. Seafood items
3. Pizza
4. Steak
5. Chicken items (excl. wings)
6. Breakfast items
7. Pasta
8. Mexican food
9. Sandwiches / Subs / Wraps
10. Chicken wings

Top Sellers: Limited Service

(Quickservice, Fast Casual, Coffee & Snack)

1. Sandwiches / Subs / Wraps
2. Pizza
3. Burgers
4. Chicken items (excl. wings)
5. Ice cream / cookies / cakes
6. Baked goods
7. Breakfast items
8. Mexican food
9. BBQ items
10. Seafood items

METHODOLOGY

National Household Survey, 2020: The National Restaurant Association commissioned Engine to conduct an online survey of 1,000 adults in December 2020, asking questions about their personal finances and interaction with restaurants.

Restaurant Trends Survey, 2020: The National Restaurant Association conducted an online survey of 6,000 restaurant owners and operators in November-December 2020, asking questions about their business and operating environments.

Public Comments



Nicholas Dupuis <ndupuis@bhamgov.org>

Fwd: Outdoor Dining Public Hearing - Wednesday

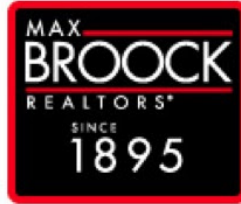
Stuart Jeffares <stuartjeffares@gmail.com>

Wed, Apr 13, 2022 at 5:09 PM

To: Nick Dupuis <ndupuis@bhamgov.org>, Brooks Cowan <bcowan@bhamgov.org>

FYI

STUART JEFFARES, ASSOCIATE BROKER



THEJEFFARESGROUP@GMAIL.COM

C/248.321.2120

O/248.644.6700

----- Forwarded message -----

From: **Regan Bloom** <reganb0938@gmail.com>

Date: Wed, Apr 13, 2022 at 5:07 PM

Subject: Re: Outdoor Dining Public Hearing - Wednesday

To: Stuart Jeffares <stuartjeffares@gmail.com>, Anthony Minicilli <tminicilli@eatattoast.com>

Planning board and other concerned parties

My name is Regan Bloom and I am writing this letter with concern regarding awnings placed over outdoor dining areas. I have been in business in Birmingham for over 10 years and the difficulty of protecting patrons from the sun and inclement weather has always been a huge issue for all restaurants in the downtown area. Umbrellas are unstable and are blown down the street all summer long. It is impossible to have a heavy enough bases that don't take up a huge foot print area that will stabilize from the wind. Living here in Michigan the weather is highly unpredictable we can have sunny skies and rain within an hour. Or have incoming storms that hold off and on all day. If the patio area does not have permanent coverage we are not able to seat customers with any confidence. Trying to explain to hungry patrons that they cannot sit outside because rain is predicted soon is nearly impossible. Sitting customers with the possibility of rain and then their food arrives only to have it sprinkled on which always comes in sideways under the umbrellas. This causes a huge problem of now where to seat them when a restaurant is full. Umbrellas also can not cover everyone seated on patios because there is not enough room for all the large stands. The stands also impede wheel chair access to get in and out from tables. Not to mention the trip hazards from the bases set all over the patios. I have experience with trial and error for years with umbrellas and chose to take on a huge financial investment to solve the problem. With patios being the primary seating during the summer time and the draw for residents to enjoy the downtown experience we should all work together to make this as comfortable and safe as possible.

Thank you for your time

Regan Bloom

Owner Toast Birmingham

On Tue, Apr 12, 2022, 3:36 PM Stuart Jeffares <stuartjeffares@gmail.com> wrote:

FYI, I was talking with a restaurant owner today who was unaware that the city was working on a new Outdoor Dining ordinance, so since I know several of you, I thought I would make sure you were aware. The Public Hearing is tomorrow at 7:30 at City Hall, 2nd floor in the Commission Room. Here is a link to the Planning Board site and the material can be found under the April 13th "Packet" link.

https://bhamgov.org/about_birmingham/city_government/boards___commissions/planning_board.php

The summary of past meetings can be found on page 22 and the proposed ordinance language starts on page 26. The meeting may be attended and feedback provided on Zoom as well as live. Comments can also be submitted to ndupuis@bhamgov.org

Thanks,
Stuart

STUART JEFFARES, ASSOCIATE BROKER



THEJEFFARESGROUP@GMAIL.COM

C/248.321.2120

O/248.644.6700



MEMORANDUM

Planning Division

DATE: May 11, 2022

TO: Planning Board Members

FROM: Nicholas Dupuis, Planning Director

SUBJECT: Single Family Residential Front Yard Setbacks

Article 2 of the Zoning Ordinance outlines setback requirements for the R1A, R1, R2 and R3 single-family zoning districts in the City of Birmingham. At present, the required minimum front yard setback is calculated by taking the average setback of homes within 200 ft. However, if there are no homes within 200 ft., then the required minimum front yard setback is 25 ft.

The City has received inquiries regarding the calculation of the minimum front yard setback and its application in the construction of new homes. In particular, the concern arises when calculating setbacks along shorter blocks, or for houses close to the corner where the corner house is oriented towards another street.

On April 13, 2022, the Planning Board moved to set a public hearing date of May 11, 2022 to review the proposed ordinance language and make a recommendation to the City Commission.

Sample Motion Language:

Motion to recommend APPROVAL to the City Commission amendments to Article 2, Sections 2.04, 2.06, 2.08 and 2.10 of the Zoning Ordinance to modify the minimum front yard setback requirement.

CITY OF BIRMINGHAM

ORDINANCE NO. _____

THE CITY OF BIRMINGHAM ORDAINS:

AN ORDINANCE TO AMEND THE ZONING ORDINANCE OF THE CITY OF BIRMINGHAM:

TO AMEND ARTICLE 2, SECTION 2.04, Table 2.04.2, SETBACKS, TO MODIFY THE MINIMUM FRONT YARD SETBACK REQUIREMENT.

2.04 R1A (Single-Family Residential) District Development Standards

TABLE 2.04.2 – Setbacks (see Figure 2.04.2)	
Minimum Front Yard Setback	Average distance from the front lot line of homes on lots with frontage on the same side of the street within 200 feet, if no homes within 200 feet, then 25 feet.
Minimum Rear Yard Setback	30 feet
Minimum Combined Front and Rear Setback	55 feet
Minimum Side Yard Setback	• 9 feet or 10% of total lot width whichever is larger for one side yard • 14 feet or 25% of total lot width whichever is larger for both side yards • no side yard shall be less than 5 feet

ORDAINED this _____ day of _____, 2022 to become effective 7 days after publication.

Therese Longe, Mayor

Alex Bingham, City Clerk

CITY OF BIRMINGHAM

ORDINANCE NO. _____

THE CITY OF BIRMINGHAM ORDAINS:

AN ORDINANCE TO AMEND THE ZONING ORDINANCE OF THE CITY OF BIRMINGHAM:

TO AMEND ARTICLE 2, SECTION 2.06, Table 2.06.2, SETBACKS, TO MODIFY THE MINIMUM FRONT YARD SETBACK REQUIREMENT.

2.06 R1 (Single-Family Residential) District Development Standards

TABLE 2.06.2 – Setbacks (see Figure 2.06.2)	
Minimum Front Yard Setback	Average distance from the front lot line of homes on lots with frontage on the same side of the street within 200 feet, if no homes within 200 feet, then 25 feet.
Minimum Rear Yard Setback	30 feet
Minimum Combined Front and Rear Setback	55 feet
Minimum Side Yard Setback	• 9 feet or 10% of total lot width whichever is larger for one side yard • 14 feet or 25% of total lot width whichever is larger for both side yards • no side yard shall be less than 5 feet

ORDAINED this _____ day of _____, 2022 to become effective 7 days after publication.

Therese Longe, Mayor

Alex Bingham, City Clerk

CITY OF BIRMINGHAM

ORDINANCE NO. _____

THE CITY OF BIRMINGHAM ORDAINS:

AN ORDINANCE TO AMEND THE ZONING ORDINANCE OF THE CITY OF BIRMINGHAM:

TO AMEND ARTICLE 2, SECTION 2.08, Table 2.08.2, SETBACKS, TO MODIFY THE MINIMUM FRONT YARD SETBACK REQUIREMENT.

2.08 R2 (Single-Family Residential) District Development Standards **R2**

TABLE 2.08.2 – Setbacks (see Figure 2.08.2)	
Minimum Front Yard Setback	Average distance from the front lot line of homes on lots with frontage on the same side of the street within 200 feet, if no homes within 200 feet, then 25 feet.
Minimum Rear Yard Setback	30 feet
Minimum Combined Front and Rear Setback	55 feet
Minimum Side Yard Setback	• 9 feet or 10% of total lot width whichever is larger for one side yard • 14 feet or 25% of total lot width whichever is larger for both side yards • no side yard shall be less than 5 feet

ORDAINED this _____ day of _____, 2022 to become effective 7 days after publication.

Therese Longe, Mayor

Alex Bingham, City Clerk

CITY OF BIRMINGHAM

ORDINANCE NO. _____

THE CITY OF BIRMINGHAM ORDAINS:

AN ORDINANCE TO AMEND THE ZONING ORDINANCE OF THE CITY OF BIRMINGHAM:

TO AMEND ARTICLE 2, SECTION 2.10, Table 2.10.2, SETBACKS, TO MODIFY THE MINIMUM FRONT YARD SETBACK REQUIREMENT.

2.10 R3 (Single-Family Residential) District Development Standards

TABLE 2.10.2 – Setbacks (see Figure 2.10.2)	
Minimum Front Yard Setback	Average distance from the front lot line of homes on lots with frontage on the same side of the street within 200 feet, if no homes within 200 feet, then 25 feet.
Minimum Rear Yard Setback	30 feet
Minimum Combined Front and Rear Setback	55 feet
Minimum Side Yard Setback	• 9 feet or 10% of total lot width whichever is larger for one side yard • 14 feet or 25% of total lot width whichever is larger for both side yards • No side yard shall be less than 5 feet

ORDAINED this _____ day of _____, 2022 to become effective 7 days after publication.

Therese Longe, Mayor

Alex Bingham, City Clerk

DIVISION 17. - SCHEDULE OF REGULATIONS

Sec. 138-526. - Schedule of regulations.

	Minimum Size of <u>Lot per Unit</u> —		Maximum Height — of <u>Buildings</u> —		<u>Minimum Yard Setback</u> —				Minimum Floor Area <u>Per Unit</u>	
Districts	Area in Square Feet (a)	Width in Feet	In Feet	Front	At Least 1 Side Yard	Total of 2 Side Yards	Rear	Maximum Percentage of Lot Coverage (Area of All Structures)	With Base- ment	Without Base- ment
R-1A	12,000	100	40	25(b)	5(c, d)	15	20	35(e)	1,800	2,000
R-1B	8,800	80	30	25(b)	5(c, d)	15	20	35(e)	1,500	1,700
R-1C	6,600	<u>50</u>	30	25(b)	5(c, d)	15	20	35(e)	1,300	1,500
R-1D	4,400	40	30	25(b)	5(c, d)	15	35	35(e)	1,300	1,500
R-2	4,000	40	30	25(b)	5(c, d)	15	35	35	1,100	1,300
R-M	(e)	(e)	30	25(b)	10(g)	20(f)	35	35	(h)	(h)
R-M-H	(See article V, division 5, High-Rise Multiple-Family Residential District)									
Greenfield	(See article V, division 7, Greenfield District)									

Community centerpiece	(See article V, division 8, Community Centerpiece District)									
Office	—	—	30	10(j, k)	(m)	(m)	10	—	—	—
Downtown	—	—	—	(n)	(n)	(n)	10	—	—	—
Local business	—	—	40	10(j, k)	(m)	(m)	10	—	—	—
Twelve mile	—	—	40	(n)	(n)	(n)	10	—	—	—
Coolidge	—	—	40	10(j, k)	(m)	(m)	10	—	—	—
Gateway	—	—	40	10(j, k)	(m)	(m)	10	—	—	—
Woodward	—	—	50	10(j, k)	m	m	10	—	—	—
Eleven mile	—	—	40	10(j, k)	(m)	(m)	10	—	—	—
Industrial	—	—	40	10(j, k)	(m)	(m)	10	—	—	—
Parking	—	—	15		(See sections <u>138-496</u> —138-503)					
Cemetery	(See article V, <u>division 16</u> , Cemetery District)									

(Code 1981, § 33-108; Ord. No. O-10-97, § 1, 2-17-1997; Ord. No. O-21-97, § 1, 10-20-1997; Ord. No. O-09-01, § 4, 9-17-2001; Ord. No. O-09-07, § 2, 1-7-2008; Ord. No. O-04-08, § 1, 10-20-2008; Ord. No. O-08-08, § 1, 11-3-2008; Ord. No. O-14-20, § 1, 9-21-2020)

Sec. 138-527. - Notes to schedule of regulations.

- (a) In calculating the area of a lot that adjoins an alley, one-half the width of such alley abutting the lot shall be considered as part of such lot.
- (b) The front yard setback shall be 25 feet or equal to the average setback of the six adjacent buildings on the same block, whichever is greater.
- (c) Exterior side yards on corner lots:

When a rear yard abuts a rear yard, the exterior side yard setback shall not be less than ten feet.

When a rear yard abuts a side yard, the exterior side yard setback shall be as follows:

Distance from Rear Lot Line to Structure	Setback Required
0 to 5 feet	No structures permitted
5-35 feet	25 feet
Greater than 35 feet	10 feet

- (d) There shall be a distance of at least 15 feet between dwellings.
- (e) Maximum lot coverage for corner lots shall not exceed 45 percent. See chapter 138, article III, division 1. for additional requirements.
- (f) No multiple dwelling shall be erected on a lot or parcel of land that has an area of less than 10,000 square feet. The total number of rooms (other than kitchen and sanitary facilities) provided shall not be more than the area of the parcel in square feet divided by 500.

$$\text{Total number of rooms} = \text{Area of parcel} / 500$$

- (g) Every lot on which a multiple dwelling is erected shall be provided with a side yard on each side of such lot. Each side yard shall be increased by one-half foot for each ten feet or part thereof by which the length of the multiple dwelling exceeds 50 feet in overall dimension along the adjoining lot line.
- (h) The following minimum floor areas shall be met (the number of rooms listed is in addition to the kitchen and sanitary facilities):

Efficiency apartment: One-room—250 square feet minimum floor area per unit.

One-bedroom: Three-room—450 square feet minimum floor area per unit.

Two-bedroom: Four-room—600 square feet minimum floor area per unit.

Three-bedroom: Five-room—750 square feet minimum floor area per unit.

The maximum floor area for an efficiency apartment shall not exceed 300 square feet (in addition to the kitchen and sanitary facilities).

- (i) Reserved.
- (j) Parking shall be permitted in the front yard after approval of the parking plan layout and points of access by the planning commission. The setback shall be measured from the nearest side of existing and/or proposed right-of-way lines.
- (k) Front yard setbacks shall be ten feet or equal to the setback of the adjacent buildings, whichever is less.
- (l) Reserved.
- (m) No side yards are required along the interior side lot lines except as otherwise specified in the building code. On the exterior side yard that borders on a residential district, there shall be provided a setback of at least ten feet on the side or residential street.
- (n) No setback shall be permitted, unless the planning commission finds that the proposed setback shall be developed as a defined plaza, outside eating area, or other pedestrian space.

(Code 1981, §§ 33-109, 33-136(5); Ord. No. O-10-97, § 1, 2-17-1997; Ord. No. O-21-97, § 2, 10-20-1997; Ord. No. O-09-01, § 4, 9-17-2001; Ord. No. O-09-07, § 2, 1-7-2008; Ord. No. O-04-08, § 1, 10-20-2008; Ord. No. O-08-08, § 1, 11-3-2008; Ord. No. O-7-13, § 2, 12-16-2013)

Sec. 138-528. - Marihuana business regulations.

- (a) A marihuana business must front on a major thoroughfare with the primary ingress/egress onto a major thoroughfare.
- (b) The marihuana business must have all applicable state and local licenses and approvals to operate.
- (c) The property where the marihuana business will be located must be entirely within the boundaries of the city, and must not be within 1,000 feet of a pre-existing public or private school providing education in kindergarten or any of grades 1 through 12.
- (d) Notwithstanding any other provision in the zoning ordinance, a marihuana business must operate within a fully enclosed building.
- (e) Pursuant to article XV of chapter 30 of the Berkley City Code, all marihuana business license approvals are subject to the following:
 - (1) Public notice requirements as outlined in section 30-806; and
 - (2) Site plan approval from the planning commission must be obtained prior to receiving license approval from the city council. Failure to do so will result in license denial as outlined in section 30-813.

(Ord. No. O-14-19, § 1, 12-16-2019)

Secs. 138-529, 138-530. - Reserved.

Sec 24-43 Schedule Of Regulations

Residential Districts Schedule of Regulations				
	R-1	R-2	R-3 ^c	R-4
Maximum Height				
Building height (feet)	25	35	45	60
Lot Size (minimum unless otherwise noted)				
Area (square feet)	4,000	4,000	4,000	4,000
Lot width (feet)	40	35	33	70
Maximum Lot Coverage				
Buildings	35%	35%	70%	50%
Minimum open space	40	40	-	-
Maximum Density				
Units per acre	12	15	35	80
Setbacks (minimum unless otherwise noted)				
Front (feet)	25 ^a	25 ^a	Max 10 ^a	25
Side (least) (feet) ^d	5	5	5	20
Side (total) (feet) ^d	10	10	10	40
Rear (feet)	35 ^b	35 ^b	20	20

Notes:

- (a) Where 50 percent or more of the frontage on the same block has been previously built upon, the front setback shall be plus or minus three feet from a line established by using the average depth of the front yards of the five adjacent lots in either direction within the same zoning district eliminating the greatest and least distances measured from the front edge of the house, attached garage or enclosed front porch.
- (b) The required rear setback for any lot of record less than 100 feet in depth may be reduced by the number of feet in difference between the depth of the lot and 100 feet.
- (c) Required minimum lot area, lot width and other regulations for single and two-family dwellings shall be the same in the R-3 districts as they are in the R-2 district.
- (d) On corner lots, there shall be a side setback for all buildings, structures and accessory buildings whenever there are any lots fronting on either side of the side street. The setback shall be equivalent to the required front setback of the side street or the average setback as determined in footnote a. above. In cases where residential lots are back-to-back, the side setback for principal buildings abutting a side street shall be a minimum of six feet.
- (e) A three-foot minimum side-yard setback for a second-floor addition over an existing non-conforming structure shall be permitted, if construction is fire-resistance rated according to the current Michigan Residential Code.

(Ord. No. 1087, § 3.03, 3-8-10)

HISTORY

Amended by Ord. [1201 Pt. I](#) on 1/8/2018

Amended by Ord. [1230 Pt. I](#) on 6/11/2018

Sec. 214. - Schedule of regulations.

	Height				Setbacks (feet)					Lot		
	Min.		Max.		Front	Sides (min.)			Rear	Area	Width	Coverage
	Stories	Ft.	Stories	Ft.	Min.	Least 1	Total 2	Exterior	Min.	Sq. Ft. (min.)	Ft. (min.)	Max. %
R-1	-	-	2	27	25	4(B)	14	20	30	6,000	50(A)	35
R-2	-	-	2	27	25	4(B)	14	20	30	4,000	60	35
RM-1	-	-	4	45	10	10	20	20	40	3,000 per d.u.	-	35
RM-2	4	40	15	150	Equal to height of building					1,500 per d.u. (C)	-	20

- a. Does not apply to lots platted and of record prior to the passage of Ordinance No. 54, adopted March 3, 1952.
- b. If the building is located on a corner lot, the side yard setback on the street side shall be 15 feet.
- c. In RM-2 districts, any building five stories or higher, the minimum lot area per dwelling unit may be reduced by 50 square feet per unit for every story above the fourth level; however, in no case shall the minimum lot area per dwelling unit be less than 1000 square feet per dwelling unit.

Sec. 2000. - Schedule of district regulations.

- (a) The area, height, bulk, and placement requirements for principal and accessory uses shall be as set forth below and following this schedule:

District	Maximum Percent of Lot Coverage by all Buildings	Minimum Yard Setback From Lot Lines (in feet)				Maximum Building Height		Minimum Lot Size	
		Front Yard	Side Yards		Rear Yard				
			Least One	Total of Two					
						In Feet	In Stories	Area (in Square Feet)	Width (in feet)
R-1	30	25	5	15	35	25	2½	6,000	50
R-2	30	25	5	15	35	25	2½	7,200	60
R-3	30	25	5	15	35	25	2½	8,400	70
R-4	25	25	10	30	35	25	2½	9,600	80
R-5	25	25	10	30	35	25	2½	15,000	100
RT	30	25	5	15	35	35	2½	3,200	54

RM-1	30	40	20	40	<u>35</u>	30	2½	1 BR: 2,250 2 BR: 3,000 3 BR: 3,750	
RM-2 1 or 2 stories	30	40	40	80	40	25	2	1 BR: 3,500 2 BR: 4,500 3 BR: 6,000 4 BR: 8,000	
More than 2 stories		50	50	50	50	100	8	1 BR: 1,000 2 BR: 2,000 3 BR: 5,000	
O-1*	—	25	5	20	30	<u>35</u>	2½	—	—
O-2*	—	25	<u>10</u>	20	30	<u>35</u>	2½	—	—
CBD	—	See following notes	<u>10</u>	<u>35</u> **	3**	—	—		
B-1	—	See following notes	<u>10</u>	<u>35</u>	3	—	—		

RP	—	50	20	40	50	50		40,000	<u>200</u>
RP	See following notes								
IND-1	—	25	15	40	20	50		10,000	80
IND-2	—	25	15	40	20	75		10,000	80

*Minimum setback from residential district: 30 feet in O-1, 20 feet in O-2.

**Except west side of Walnut Boulevard to the east right-of-way line of Pine Street, with an extension of said east right-of-way line of Pine Street, southerly from Second Street to First Street (properties currently zoned CBD, Central Business District). Reduced to 25 feet and two stories. See section 2010.

(Ord. No. 2005-08, 8-22-2005)

§ 770-34. One-Family Residential.

- A. Purpose. This zone is composed in those areas of the City where the principal use is intended to be single-family detached dwellings. In addition to the dwellings permitted in this zone, there are certain nonresidential uses which may be compatible with and supportive of a medium-density residential environment and may be permitted either by right or through the special land use approval.
- B. Permitted uses.
 - (1) A single-family detached dwelling, subject to the requirements set forth in § 770-23, Minimum floor area of dwelling units, and § 770-24, One-family dwelling unit standards.
 - (2) Public parks and playgrounds.
 - (3) Home occupations, subject to the requirements set forth in § 770-25, Home occupations.
 - (4) Public and private schools with curriculum equivalent to kindergarten through 12th grade.
 - (5) Publicly owned and operated museums or libraries.
 - (6) Accessory buildings and structures, subject to the requirements set forth in § 770-22, Accessory buildings.
 - (7) Family day-care homes as an accessory use and subject to the requirements set forth in § 770-26, Family day-care homes.
 - (8) Adult foster care family homes and small group homes with a capacity to receive six or fewer adults, child foster care family homes and child foster care family group homes subject to the conditions of the state regulatory agencies.
- C. Special land uses.
 - (1) Group family day-care homes and day-care centers, when incorporated with an existing church or school, subject to the requirements set forth in § 770-59, Day-care facilities.
 - (2) Police and fire stations, public safety buildings, public utility buildings, telephone exchange buildings, electric transformer stations and gas regulator stations, but not including service or storage yards.
 - (3) Churches and other institutions for religious worship, subject to the requirements set forth in § 770-74, Churches and other institutions for religious worship.
 - (4) Bed-and-breakfast operations, subject to the requirements set forth in § 770-78, Bed-and-breakfast facilities.
 - (5) Residential accessory parking lots, subject to the requirements set forth in

§ 770-73, Residential accessory off-street parking lots.

- (6) Senior accessory housing subject to the requirements set forth in § 770-71 Senior accessory housing.
 - (7) Golf courses and country clubs.
 - (8) Cemeteries subject to the requirements set forth in § 770-50, Cemeteries.
 - (9) Community centers subject to the requirements set forth in § 770-51, Community centers.
 - (10) Those uses/parcels located in the One-Family (Single-Family) Residential Overlay District, subject to the requirements set forth in § 770-58, Single-Family Residential Overlay District.
 - (11) Reuse of school facilities when the existing principal building(s) are maintained, subject to the requirements set forth in § 770-87, Special redevelopment projects.
- D. Area and bulk regulations. The following minimum requirements shall apply to all permitted and special land uses unless a more restrictive requirement is provided for in this chapter:
- (1) Lot size. No lot shall be less than 6,000 square feet in area, unless otherwise modified by § 770-21B, Application of area, width and frontage regulations.
 - (2) Lot width. No interior lot shall be less than 50 feet in width, while a corner lot shall be no less than 60 feet in width unless otherwise modified by § 770-21B, Application of area, width and frontage regulations.
 - (3) Lot depth. No lot shall have a depth of less than 100 feet, unless otherwise modified by § 770-21B, Application of area, width and frontage regulations.
 - (4) Height. No principal building shall exceed a height of 30 feet.
 - (5) **Front yard setback.**
 - (a) Interior lot. All principal buildings shall be set back the greater of 25 feet or the average setback of adjacent dwellings, but shall not exceed 50 feet from the front property line.
 - (b) Corner lot. A front yard abutting the side street of a corner lot where the adjacent lot does not front upon said side street shall not be less than 10 feet in width; provided a lot with frontage of less than 50 feet in width may have the side yard abutting the street reduced to not less than eight feet. A front yard abutting the side street of a corner lot where the adjacent lot does front upon said side street shall maintain the minimum setbacks as required for an interior lot.
 - (6) Side yard setback.

- (a) For lots equal to or greater than 45 feet in width at the building line, all principal buildings shall be set back no less than five feet from the side property line. The total of the two side yard setbacks shall equal no less than 15 feet if no attached accessory building is provided in the side yard.
 - (b) For lots less than 45 feet in width at the building line, the side yard setback shall be a minimum of four feet. The total of the two side yard setbacks shall be no less than 12 feet if no attached accessory building is provided.
 - (c) For all lots without accessory buildings located in the side yard, an open area a minimum of eight feet in width unoccupied and unobstructed from the ground upward and suitable for a driveway shall be provided in one side yard.
- (7) Rear yard setback. All principal buildings shall be set back no less than 35 feet from the rear property line.
- (8) Lot coverage. On lots less than 6,000 square feet, the lot coverage of all buildings shall not exceed 35% of the site, provided that in no instance shall the total ground floor area of all buildings exceed 1,800 square feet. On lots equal to or larger than 6,000 square feet, the lot coverage of all buildings shall not exceed 30% of the site. **[Amended 5-20-2013 by Ord. No. 2013-08]**
- (9) Maximum floor area. No single-family residential structure shall exceed 3,500 square feet of usable floor area. **[Amended 4-21-2014 by Ord. No. 2014-04]**

CP Blizinski clarified that the proposed ordinance language was based on her research into how adjacent communities regulate a/c units and their placement in the side yard. She stated that the explicit issue was to allow nonconforming a/c units to be replaced, but that her research findings suggested that there was an opportunity to permit a/c units in the side yard open space based on technological improvements that reduce noise and to promote efficiency.

Mr. Koseck stated that he feels that despite the technological advancements, the noise is still an issue with a/c units and feels as though a/c units are better placed in the rear yard. However, he is in favor of allowing homeowners to replace existing units in the side yard.

The board discussed the issues with bringing a/c units up to code during replacements including the need for new pads, connections and efficiency.

Mr. Jeffares added that there is also a potential requirement for other items to be brought up to code during a/c replacement such as electrical.

The board agreed that the language should be brought back for further study based on comments from the review.

Public Comment

Patrick Hillberg, resident, explained that he originated the concern that predicated this review, and that he has major concerns regarding public health and comfort during heat waves that are related to the speed at which a/c units can be replaced.

3. Barrier-Free Ramps – Study Session

PD Dupuis introduced the item.

Mr. Share asked if the reference to the residential building code would be adequate in regulating the size and location of the ramp.

Chair Klein, Mr. Share and Staff clarified that this proposed ordinance prevents any unintended consequences relating to accessibility ramps and excessive projections into the front or rear yard, and suggested adding width requirements to the language to prevent unnecessarily wide ramps.

Motion by Mr. Share

Seconded by Mr. Koseck to set a public hearing date of May 11, 2022 to amend Article 4, Section 4.30, Open Space Standards, to add language to permit accessibility ramps in the required open space.

Motion carried, 6-0

VOICE VOTE

Yeas: Share, Koseck, Klein, Jeffares, Ramin, Whipple-Boyce

Nays: None

4. Front Yard Setbacks – Study Session

PD Dupuis introduced the item.

Ms. Whipple-Boyce commended the ordinance and was supportive of the change. She went on to ask if there is anything that can be done to address homes that are currently being built under the current standards.

Mr. Koseck asked how the front lot line is determined.

Public Comment

Cindy Rose, resident, thanked the Planning Board for looking into the item and was supportive of the new language.

Motion by Ms. Whipple-Boyce

Seconded by Mr. Koseck to set a public hearing date of May 11, 2022 to amend Article 2, Sections 2.04, 2.06, 2.08 and 2.10 to modify the minimum front yard setback requirement.

Motion carried, 6-0

VOICE VOTE

Yeas: Whipple-Boyce, Koseck, Clein, Jeffares, Ramin, Share

Nays: None

Mr. Koseck stated that based on his experience working with our ordinance, he was very glad to see some of these things are being cleared up.

04-96-22

L. Miscellaneous Business and Communications

1. Pre-Application Discussions

i. 115 Willits – Mare

PD Dupuis summarized the item and asked the Board what the application process should be for the proposed pergola.

Antonino Cutraro, owner of Bella Piatti and Mare Mediterranean, detailed the proposed pergola and explained that the impetus for the proposal was weather-based.

The Board discussed the construction of the pergola and the attachments that would be required to secure the pergola.

The Board recommended Administrative Approval for the basic black table umbrellas, but asked that the pergola proposal be brought before the Board through a Special Land Use Permit Amendment.



MEMORANDUM

Planning Division

DATE: May 11, 2022

TO: Planning Board Members

FROM: Nicholas Dupuis, Planning Director

SUBJECT: Public Hearing – Projections into Required Open Space

Article 4, Section 4.30(C) outlines projections into the required open space for all commercial, mixed-use and residential properties in the City. This issue arose during a recent permit review for an accessible ramp at a residence in Birmingham. After a review by the City Attorney, Building Official and Planning Director, the City saw an opportunity to expand the ordinance language to include provisions for accessible ramps that do not unintentionally inhibit persons in need as it relates to open space restrictions. The Zoning Ordinance defines open space as follows:

Open Space, Front: The open space extending the full width of the lot and of a depth equal to the required set- back measured horizontally at right angles to the front lot line which is unobstructed by any building or structure.

Open Space, Rear: The open space extending the full width of the lot and having a depth which is the minimum horizontal distance between the rear lot line and the rear building line.

Open Space, Side: The open space extending from the front open space to the rear open space and of a width equal to the required side setback measured horizontally at right angles to the side lot line which is unobstructed by any building or structure.



On April 13, 2022, the Planning Board moved to set a public hearing on May 11, 2022 to review the proposed ordinance language and make a recommendation to the City Commission.

Sample Motion Language:

Motion to recommend APPROVAL to the City Commission the amendments to Article 4, Section 4.30 of the Zoning Ordinance to include provisions for accessible ramps that do not unintentionally inhibit persons in need as it relates to open space restrictions.

CITY OF BIRMINGHAM

ORDINANCE NO. _____

THE CITY OF BIRMINGHAM ORDAINS:

AN ORDINANCE TO AMEND THE ZONING ORDINANCE OF THE CITY OF BIRMINGHAM:

TO AMEND ARTICLE 4, SECTION 4.30, OPEN SPACE STANDARDS, TO ADD LANGUAGE TO PERMIT ACCESSIBILITY RAMPS IN THE REQUIRED OPEN SPACE.

Article 4, Section 4.30 – Open Space Standards

This Open Space Standards section applies to the following districts:



The following open space standards apply:

- A. Minimum Open Space: The minimum open space shall be as per each two-page layout in Article 2.
- B. Maximum Lot Coverage: The maximum lot coverage shall be as per each two-page layout in Article 2.
- C. Projections into Required Open Space: Projections into the open spaces required by each two-page layout in Article 2, shall be permitted as follows:
 - 1. An unenclosed, covered or uncovered, concrete, masonry or wooden porch, deck and/or steps may project into a front open space for a maximum distance of 10 feet. The floor of a porch, deck or top step shall not be higher than the floor of the first story. This provision shall not reduce the required front set- back to less than 10 feet. Said porches and decks shall not project into the required side open space, except as provided elsewhere in this Article. Said porches and decks shall be restricted to 1 story in height.
 - 2. Roof overhangs, cornices, eaves, gutters, lintels, planter boxes, chimneys, bay windows and similar projections may extend or project into a required open space not more than 2 inches for each 1 foot of width of such required open space provided that such extensions may not project more than 2 feet into the front or rear open space, except as provided elsewhere in this Article.

3. Patios, terraces, porches or decks may not project into the required side open space except that steps leading to an entrance, patio, terrace, porch or deck may project into the required side open space. Such steps shall project not more than 3 inches for each 1 foot width of such required open space up to a maximum of 3 feet. Where the side open space is required by this chapter for parking or driveway purposes, the projection shall not reduce the drivable or usable area for those purposes to less than 7 feet in width.
4. Basement window wells may project into the required side open space and rear open space a maximum of 3 feet measured to the inside of the well opening. Basement window well structures may not project more than 8 inches above grade, excluding the height of an approved guard rail. Basement window wells that project into the required side open space or rear open space shall not exceed 6 feet in width and must be covered at grade with a suitable covering capable of sustaining the weight of not less than 500 pounds or be enclosed with a guard rail in accordance with the current applicable edition of the Michigan Residential Building Code or the Michigan Building Code.
5. A porch, deck and/or steps may project into a rear open space for a maximum distance of 15 feet. The floor of said porch, deck or top step shall not be higher than the floor of the first story. This provision shall not reduce the required rear setback to less than 15 feet. Said porches and decks shall not project into the required side open space, except as provided elsewhere in this Article. Said porches and decks shall be restricted to 1 story in height.
6. When no exterior staircase exists for an accessory structure, a bonus of 75 square feet of area is permitted in the accessory structure if used for an interior fixed and stationary staircase.
7. **Accessible ramps and structures are permitted to project into the front and rear open space the minimum distance and width required to accommodate the ramp or structure per the residential building code and to allow uninhibited access to a dwelling unit.**

ORDAINED this _____ day of _____, 2022 to become effective 7 days after publication.

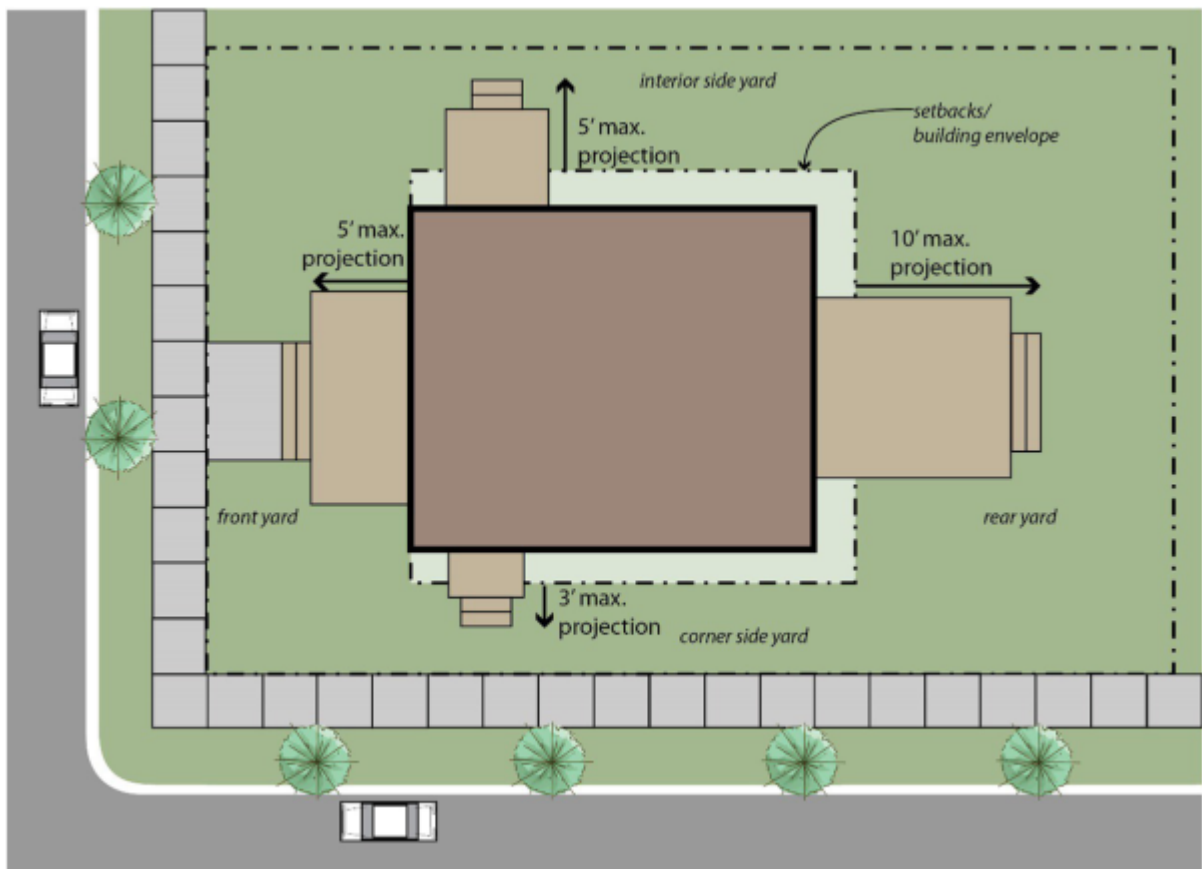
Therese Longe, Mayor

Alex Bingham, City Clerk

Sec 24-193 Projections Into Yards

- (a) Certain features may project into the required yard setbacks in accordance with the following table.

Permitted Projections into Required Yards				
Projection	Front Yard	Rear Yard	Interior Side Yard	Corner Side Yard
ADA Ramps and Structures	Permitted in any yard provided the location meets ADA and other applicable ordinances			
Architectural Features	3 ft.	3 ft.	2 in. per 1 ft. of setback	
Awnings and Canopies	3 ft.	3 ft.	5 ft.	5 ft.
Balconies	5 ft. from any lot line unless denied by the public right-of-way governing body			
Flagpoles	3 ft. from any lot line			
Gardens and Landscaping	Permitted in any yard			
Laundry Drying Equipment	Not permitted	5 ft. from any lot line	Not permitted	
Light Standard, Ornamental	Permitted in any yard			
Mechanical Equipment such as HVAC	Not Permitted	See (b) below	See below (b)	Not permitted
Paved Terraces and Decks	3 ft. from any lot line			
Unroofed Porches, Stoops, Stairways and Steps	5 ft.	10 ft.	5 ft.	3 ft.
Window Wells	Not permitted	3 ft.	3 ft.	Not permitted
Window Air Conditioning Units	Not permitted	3 ft.	3 ft.	Not permitted



- (b) Equipment used for central air conditioning, heating or water filtration purposes and installed outside of single-family or two-family dwellings and their attached structures shall be located in the rear yard. The community development department may allow units to be located within the side yard in those instances where such location does not adversely impact an abutting dwelling, conditioned upon screening of the equipment with appropriate landscaping to reasonably conceal the equipment from view.
- (c) Any walk, terrace, patio or other pavement or surface less than six inches above grade shall not be considered to be a structure and is permitted in any required yard. No more than 30 percent of the front yard area of any residentially zoned lot shall be paved.

(Ord. No. 1087, § 9.13, 3-8-10)

HISTORY

Amended by Ord. [1231 Pt. I](#) on 6/11/2018

BUILDING PLANNING

R311.7.12 Ships ladders. Ships ladders shall not be used as an element of a means of egress. Ships ladders shall be permitted provided that a required means of egress stairway or ramp serves the same space at each adjoining level or where a means of egress is not required. The clear width at and below the handrails shall be not less than 20 inches.

R311.7.12.1 Treads of ships ladders. Treads shall have a depth of not less than 5 inches (127 mm). The tread shall be projected such that the total of the tread depth plus the nosing projection is not less than 8½ inches (216 mm). The riser height shall be not more than 9½ inches (241 mm).

R311.7.12.2 Handrails of ships ladders. Handrails shall be provided on both sides of ships ladders and shall comply with Sections R311.7.8.2 to R311.7.8.4. Handrail height shall be uniform, not less than 30 inches (762 mm) and not more than 34 inches (864 mm).

R311.8 Ramps.

R311.8.1 Maximum slope. Ramps serving the egress door required by Section R311.2 shall have a slope of not more than 1 unit vertical in 12 units horizontal (8.3-percent slope). All other ramps shall have a maximum slope of 1 unit vertical in 8 units horizontal (12.5 percent).

Exception: Where it is technically infeasible to comply because of site constraints, ramps shall have a slope of not more than 1 unit vertical in 8 units horizontal (12.5 percent).

R311.8.2 Landings required. There shall be a floor or landing at the top and bottom of each ramp, where doors open onto ramps, and where ramps change directions. The width of the landing perpendicular to the ramp slope shall be not less than 36 inches (914 mm).

R311.8.3 Handrails required. Handrails shall be provided on not less than one side of ramps exceeding a slope of one unit vertical in 12 units horizontal (8.33-percent slope).

R311.8.3.1 Height. Handrail height, measured above the finished surface of the ramp slope, shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm).

R311.8.3.2 Grip size. Handrails on ramps shall comply with Section R311.7.8.3.

R311.8.3.3 Continuity. Handrails where required on ramps shall be continuous for the full length of the ramp. Handrail ends shall be returned or shall terminate in newel posts or safety terminals. Handrails adjacent to a wall shall have a space of not less than 1½ inches (38 mm) between the wall and the handrails.

SECTION R312

GUARDS AND WINDOW FALL PROTECTION

R312.1 Guards. Guards shall be provided in accordance with Sections R312.1.1 through R312.1.4.

R312.1.1 Where required. Guards shall be located along open-sided walking surfaces, including stairs, ramps and

landings, that are located more than 30 inches (762 mm) measured vertically to the floor or *grade* below at any point within 36 inches (914 mm) horizontally to the edge of the open side. Insect screening shall not be considered as a *guard*.

R312.1.2 Height. Required *guards* at open-sided walking surfaces, including stairs, porches, balconies or landings, shall be not less than 36 inches (914 mm) in height as measured vertically above the adjacent walking surface or the line connecting the leading edges of the treads.

Exceptions:

1. *Guards* on the open sides of stairs shall have a height not less than 34 inches (864 mm) measured vertically from a line connecting the leading edges of the treads.
2. Where the top of the *guard* serves as a handrail on the open sides of stairs, the top of the *guard* shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm) as measured vertically from a line connecting the leading edges of the treads.

R312.1.3 Opening limitations. Required *guards* shall not have openings from the walking surface to the required *guard* height that allow passage of a sphere 4 inches (102 mm) in diameter.

Exceptions:

1. The triangular openings at the open side of stair, formed by the riser, tread and bottom rail of a *guard*, shall not allow passage of a sphere 6 inches (153 mm) in diameter.
2. *Guards* on the open side of stairs shall not have openings that allow passage of a sphere 4¾ inches (111 mm) in diameter.

R312.1.4 Exterior plastic composite guards. Plastic composite exterior *guards* shall comply with the requirements of Section R317.4.

R312.2 Window fall protection. Window fall protection shall be provided in accordance with Sections R312.2.1 and R312.2.2.

R312.2.1 Window sills. In dwelling units, where the top of the sill of an operable window opening is located less than 24 inches (610 mm) above the finished floor and greater than 72 inches (1829 mm) above the finished *grade* or other surface below on the exterior of the building, the operable window shall comply with one of the following:

1. Operable windows with openings that will not allow a 4-inch-diameter (102 mm) sphere to pass through the opening where the opening is in its largest opened position.
2. Operable windows that are provided with window fall prevention devices that comply with ASTM F2090.
3. Operable windows that are provided with window opening control devices that comply with Section R312.2.2.

R312.2.2 Window opening control devices. Window opening control devices shall comply with ASTM F2090.

CP Blizinski clarified that the proposed ordinance language was based on her research into how adjacent communities regulate a/c units and their placement in the side yard. She stated that the explicit issue was to allow nonconforming a/c units to be replaced, but that her research findings suggested that there was an opportunity to permit a/c units in the side yard open space based on technological improvements that reduce noise and to promote efficiency.

Mr. Koseck stated that he feels that despite the technological advancements, the noise is still an issue with a/c units and feels as though a/c units are better placed in the rear yard. However, he is in favor of allowing homeowners to replace existing units in the side yard.

The board discussed the issues with bringing a/c units up to code during replacements including the need for new pads, connections and efficiency.

Mr. Jeffares added that there is also a potential requirement for other items to be brought up to code during a/c replacement such as electrical.

The board agreed that the language should be brought back for further study based on comments from the review.

Public Comment

Patrick Hillberg, resident, explained that he originated the concern that predicated this review, and that he has major concerns regarding public health and comfort during heat waves that are related to the speed at which a/c units can be replaced.

3. Barrier-Free Ramps – Study Session

PD Dupuis introduced the item.

Mr. Share asked if the reference to the residential building code would be adequate in regulating the size and location of the ramp.

Chair Klein, Mr. Share and Staff clarified that this proposed ordinance prevents any unintended consequences relating to accessibility ramps and excessive projections into the front or rear yard, and suggested adding width requirements to the language to prevent unnecessarily wide ramps.

Motion by Mr. Share

Seconded by Mr. Koseck to set a public hearing date of May 11, 2022 to amend Article 4, Section 4.30, Open Space Standards, to add language to permit accessibility ramps in the required open space.

Motion carried, 6-0

VOICE VOTE

Yeas: Share, Koseck, Klein, Jeffares, Ramin, Whipple-Boyce

Nays: None

4. Front Yard Setbacks – Study Session



MEMORANDUM

Planning Division

DATE: May 11, 2022

TO: Planning Board Members

FROM: Nicholas Dupuis, Planning Director

SUBJECT: Window Glazing Standards – Study Session #5

Over the last several years, the City has been studying possible ordinance amendments to relax the city's window standards to promote energy efficiency while also achieving the goals of storefront activation that have helped make Birmingham a vibrant and walkable community. A chronology of prior reviews is provided below:

On November 13, 2019, the Planning Board discussed the potential for ordinance amendments encompassing the Window Standards outlined in Article 3, Section 3.04(E) and Article 4, Section 4.90 of the Zoning Ordinance. The Planning Board directed City Staff to (1) research any possible differences in the Visual Light Transmittance (VLT) figures between different manufacturers and (2), research other cities to determine what VLT figures are used.

On January 8, 2020, the Planning Board discussed the glazing ordinance amendments again, and expressed interest in hearing from more professionals such as a mechanical engineer, a glass vendor or supplier, or a glass contractor or installer. At that time, the Planning Division was unable to find and secure any additional professionals or glass experts to add any new information to the conversation other than the professionals that were already involved up to that point.

On July 22, 2020, the Planning Board reviewed the proposed ordinance language alongside a glass professional from Guardian Glass, who offered expertise and clarity on the proposed amendments and what is available in the glass world, and what the effect is on energy codes. The Planning Board entertained ideas for including low iron glass to the definition and discussing other items such as shelving and merchandise in windows. Ultimately, the Planning Board directed City Staff to make a few minor changes including eliminating the bronze requirement from Section 3.04 (E)(4), and adding low iron glass and no tint to the definition of clear glazing for final consideration before the public hearing.

On April 14, 2021, the Planning Board motioned to set a public hearing on May 12, 2021 to amend the glazing standards, which was rescheduled to June 9th, 2021 due to Eid al-Fitr.

On June 9, 2021, the Planning Board motioned to recommend approval to the City Commission amendments to Sections 3.04, 4.90 and 9.02 of the Zoning Ordinance to update the clarity requirements for storefront windows.

On July 26, 2021, the City Commission held a public hearing to review the proposed ordinance amendments and ultimately took no action. Rather, the City Commission directed the Planning

Board to re-review the proposed language to clarify whether the same or different standards would apply to the ground and upper floors of a building. In addition to the specific direction, there was discussion about window treatments and their effect on clear glazing.

At this time, the Planning Division has amended the previously recommended language to reflect the comments made by the City Commission. In addition, the Planning Division has revisited prior ordinance research into other communities for any precedent regarding window treatments. Although research did not turn up any specific ordinance related to window treatments, the Planning Division found the point to be fair and included general language restricting window treatments on an “as needed” basis.

CITY OF BIRMINGHAM

ORDINANCE NO. _____

THE CITY OF BIRMINGHAM ORDAINS:

AN ORDINANCE TO AMEND CHAPTER 126, ZONING, OF THE CODE OF THE CITY OF BIRMINGHAM:

TO AMEND ARTICLE 3, SECTION 3.04 (E), ARCHITECTURAL STANDARDS, TO ADJUST THE ARCHITECTURAL STANDARDS TO REFLECT NEW CLEAR GLAZING REQUIREMENTS AND TO PROVIDE REGULATIONS FOR WINDOW TREATMENTS.

Article 3, Section 3.04 – Specific Standards

- A. ...
- B. ...
- C. ...
- D. ...
- E. Architectural standards. All buildings shall be subject to the following physical requirements:
 - 1. ...
 - 2. ...
 - 3. ...
 - 4. Storefronts shall be directly accessible from public sidewalks. Each storefront must have transparent areas, equal to 70% of its portion of the facade, between one and eight feet from the ground. The wood or metal armature (structural elements to support canopies or signage) of such storefronts shall be painted, ~~bronze~~, or powder-coated.
 - 5. Storefronts shall have mullion systems, with doorways and signage integrally designed. Mullion systems shall be painted, powder-coated, or stained.
 - 6. The glazed area of a facade above the first floor shall not exceed 35% of the total area, with each facade being calculated independently.
 - 7. Clear glazing is required on the first floor. ~~Lightly tinted glazing is permitted on upper floors only~~ **all building facades that face a frontage line**. Windows shall not be blocked with opaque materials or the back of shelving units or signs. **Window treatments shall be limited and utilized only when necessary to provide relief from direct sunlight.**
 - 8. ...
 - 9. ...

ORDAINED this _____ day of _____, 2022 to become effective upon publication.

Therese Longe, Mayor

Alexandria Bingham, City Clerk

CITY OF BIRMINGHAM

ORDINANCE NO. _____

THE CITY OF BIRMINGHAM ORDAINS:

AN ORDINANCE TO AMEND CHAPTER 126, ZONING, OF THE CODE OF THE CITY OF BIRMINGHAM:

TO AMEND ARTICLE 4, SECTION 4.90(A), WINDOW STANDARDS, TO ELIMINATE LIGHTLY TINTED GLAZING AND TO PROVIDE REGULATIONS FOR WINDOW TREATMENTS.

Article 4, Section 4.90 – Window Standards (WN)

- A. Storefront Windows: Ground floor facades shall be designed with storefronts that have windows, doorways and signage, which are integrally designed. The following standards apply:
1. No less than 70% of a storefront/ground floor façade between 1 and 8 feet above grade shall be clear glazing.
 2. Only clear glazing is permitted on storefront facades ~~at the first floor. Lightly tinted glazing above the first floor may be permitted.~~ Mirrored glass is prohibited.
 3. Required window areas shall be either pedestrian entrances, windows that allow views into retail space, working areas or lobbies. Display windows set into the wall may be approved by the Planning Board.
 4. Windows shall not be blocked with opaque materials or the back of shelving units or signs.
 5. The bottom of the window shall be no more than 3 feet above the adjacent exterior grade.
 6. **Window treatments shall be limited and utilized only when necessary to provide relief from direct sunlight.**
- B. ...
- C. ...

ORDAINED this _____ day of _____, 2022 to become effective upon publication.

Therese Longe, Mayor

Alexandria Bingham, City Clerk

CITY OF BIRMINGHAM

ORDINANCE NO. _____

THE CITY OF BIRMINGHAM ORDAINS:

AN ORDINANCE TO AMEND CHAPTER 126, ZONING, OF THE CODE OF THE CITY OF BIRMINGHAM:

TO AMEND ARTICLE 9, SECTION 9.02, DEFINITIONS, TO REDFINE CLEAR GLAZING, AND TO ELIMINATE LIGHTLY TINTED GLAZING

Article 9, Section 9.02 – Definitions

Clear Glazing: Glass and other transparent elements of building facades with **no tint**, a minimum visible light transmittance of ~~80%~~ **66 % and a reflectivity of 15 % or less**.

~~Lightly Tinted Glazing: Glass and other transparent elements of building facades with a minimum visible light transmittance of 70%.~~

ORDAINED this _____ day of _____, 2022 to become effective upon publication.

Therese Longe, Mayor

Alexandria Bingham, City Clerk

Previous Planning Division Reports
(Chronological Order)



MEMORANDUM

Planning Division

DATE: November 8, 2019

TO: Planning Board Members

FROM: Nicholas Dupuis, City Planner
Brooks Cowan, City Planner

APPROVED: Jana Ecker, Planning Director

SUBJECT: Study Session – Window Glazing Standards

The City of Birmingham has engaged in designing ordinances to fulfill the goals of the Downtown Birmingham 2016 Master Plan with regards to encouraging walkability and a healthy retail setting to increase the pedestrian environment and economic vitality of the City. Included in the many ordinances adopted over time has been the recent adoption of ordinances regulating glazing on Birmingham's commercial buildings. Since adoption, City Staff have fielded inquiries from architects, developers, business owners and glass manufacturers about the standards, which have spilled over into several recent Planning Board Hearings (Lincoln Yard, Baldwin Library, Brooklyn Pizza). The purpose of this memorandum is to present the Planning Divisions findings based on current ordinance, meetings with glass professionals, research into the science behind light and windows, and the conflicts that arise based on different regulations.

The City of Birmingham currently regulates glazing in Article 4, Section 4.90 (A) of the Zoning Ordinance:

1. No less than 70% of a storefront/ground floor façade between 1 and 8 feet above grade shall be clear glazing.
2. Only Clear Glazing is permitted on storefront facades at the first floor. Lightly tinted glazing above the first floor may be permitted. Mirrored glass is prohibited.
3. Required window areas shall be either pedestrian entrances, windows that allow views into retail space, working areas or lobbies. Display windows set into the wall may be approved by the Planning Board.
4. Windows shall not be blocked with opaque materials or the back of shelving units or signs.
5. The bottom of the window shall be no more than 3 feet above the adjacent exterior grade.

On July 24th, 2017, in order to provide more clarity as to what determines "clear glazing", the City Commission approved the definition of Clear Glazing as follows:

- Glass and other transparent elements of building facades with a minimum visible light transmittance of 80%.

Before the adoption of the Clear Glazing definition, applicants were required to provide glass samples and specification sheets to the Planning Board at Site Plan Review to determine if the

type of glass proposed was considered clear to the point that it met the spirit and the intent of the Ordinance. Applicants are still required to provide samples and specification sheets, but the Clear Glazing definition leaves little variation in the types of glass available to utilize.

As alluded to, there has been some recent pushback by architects and developers citing the challenges they face meeting the energy standards as required by the Michigan Building Code while also meeting the City's Glazing Standards. Perhaps obviously, this is more of an issue for buildings being redeveloped or renovated as opposed to brand new buildings that are able to account for the 80% VLT glass as a part of an entire energy system strategy rather than working around existing conditions. This discussion gained prominence during the selection process for the glass at the Baldwin Library project, and has subsequently spilled over into several site plan reviews. To consider any changes to the current Window Standards, it is helpful to define several glass industry terms:

Visible Light Transmittance – The amount of light in the visible portion of the spectrum that passes through a glazing material.

U-Factor – A measure of thermal transmittance, through conduction, convection, and radiation; a measurement to quantify overall heat flow.

R-Value – The capacity of an insulating material to resist heat flow.

Solar Heat Gain Coefficient (SHGC) – The fraction of incident solar radiation admitted through a window, both directly transmitted and absorbed, and subsequently released inward.

Reflectivity – The reflecting of varying amounts of light and solar heat, away from a glazing unit/building.

Absorptance – Energy that is not transmitted through the glass or reflected off its surfaces.

Low-E Coatings – Coatings (sputtered or pyrolytic) that minimizes the amount of ultraviolet and infrared light that can pass through glass without compromising the amount of visible light that is transmitted.

Window Tinting – The process performed to glass for the purposes of absorbing a portion of the solar heat and blocking daylight for the purposes of reducing glare and the amount of solar energy transmitted through glass.

Insulated Glass – Glass manufactured with trapped air or gas between them, which provides cost saving benefits through controlling heat gain/loss and condensation.

Laminated Glass – Glass made of two or more layers of glass with one or more polymeric material layers bonded between the glass layers.

Safety Glass - A type of commercial glass specifically designed to withstand blunt force. It is covered with a film or laminate to help hold the glass together and prevent further

damage if it fractures, and the pane will break into many small “crumbs” instead of large shards.

The issue in Birmingham has generally revolved around the Visible Light Transmittance (VLT) value that is controlled through the Zoning Ordinance. As evident by the many different facets of building design and window manufacturing in modern times, the topic appears to be more complicated than simply controlling for VLT. In meeting with glass industry professionals, it became evident that Low-E Coatings (LEC) are very important in the approach to glazing, as LEC's contribute to less heat flow and increasing the R-Value, especially in areas with significant glazing. Utilizing LEC's can help building meet the required U-Factors in the Michigan Building Code.

Because the original intent of the glazing requirements in the Zoning Ordinance was to maintain storefronts that are active with the ability to see into buildings and the activity happening inside of them, the Ordinance was written to achieve those goals. However, according to research and glass professionals, there is another factor to consider when seeking clear glazing, which is reflectivity. Reflectivity becomes especially apparent during low light conditions. The surface on the brighter side acts like a mirror because the amount of light passing through the window from the darker side is less than the amount of light being reflected from the lighter side. This effect can be noticed from the outside during the day and from the inside during the night. This means that during a bright day outside, the reflectivity of a glazing unit may actually make the glass appear less clear. Special coatings, such as LEC's, can reduce this effect.

The important correlation between the VLT, LEC and reflectivity of glass is that LEC's reduce the VLT of a glazing unit, but also significantly reduce the reflectivity. In other words, although a LEC can make glass appear darker in reducing the VLT figure, adding the LEC reduces the reflectivity, which actually makes the glazing unit appear clearer. As described above, LEC's also increase R-Values and Reduce the U-factor, so it would appear that allowing LEC's (and subsequently lowering the VLT requirements) may prove beneficial towards both the energy and clarity issues that the City is concerned with. To quantify this concept, two glass samples were obtained by the Planning Division, and the properties are as follows:

	Visible Light Transmittance	Reflectance	U-Factor
Glass #1 (No LEC)	80%	15%	0.47
Glass #2 (LEC)	68%	11%	0.29

In applying the LEC, the glass sample's reflectivity was reduced by 25%, while the u-factor was decreased by almost 40%. With this information, it became evident that the City may benefit from relaxing its VLT standards to allow for LEC's, but in addition, adding regulations regarding the reflectivity of proposed glass. In regulating both, the City may be able to achieve the goals of clear glazing, while also having high performing buildings and reducing the environmental footprint of its developments. The City may also be able to take advantage of this information and readdress the concept of Window Tinting in the ordinance.

The following is an example of how the Ordinance language could read:

ORDINANCE NO. _____

THE CITY OF BIRMINGHAM ORDAINS:

AN ORDINANCE TO AMEND CHAPTER 126, ZONING, OF THE CODE OF THE CITY OF BIRMINGHAM:

TO AMEND ARTICLE 3, SECTION 3.04(E), ARCHITECTURAL STANDARDS, TO AMEND ARTICLE 4, SECTION 4.90(A), WINDOW STANDARDS, AND TO AMEND ARTICLE 9, SECTION 9.02, DEFINITIONS TO REDFINE CLEAR GLAZING, AND TO ELIMINATE LIGHTLY TINTED GLAZING

Article 3, Section 3.04

E. Architectural standards. All buildings shall be subject to the following physical requirements:

1. ...
2. ...
3. ...
4. Storefronts shall be directly accessible from public sidewalks. Each storefront must have transparent areas, equal to 70% of its portion of the facade, between one and eight feet from the ground. The wood or metal armature (structural elements to support canopies or signage) of such storefronts shall be painted, bronze, or powder-coated.
5. Storefronts shall have mullion systems, with doorways and signage integrally designed. Mullion systems shall be painted, powder-coated, or stained.
6. The glazed area of a facade above the first floor shall not exceed 35% of the total area, with each facade being calculated independently.
7. Clear glazing is required on the first floor. ~~Lightly tinted glazing is permitted on upper floors only~~ **storefront facade**. Windows shall not be blocked with opaque materials or the back of shelving units or signs.

Article 4, Section 4.90 – Window Standards (WN)

A. Storefront Windows: Ground floor facades shall be designed with storefronts that have windows, doorways and signage, which are integrally designed. The following standards apply:

1. No less than 70% of a storefront/ground floor façade between 1 and 8 feet above grade shall be clear glazing.
2. Only Clear glazing is permitted on storefront facades ~~at the first floor. Lightly tinted glazing above the first floor may be permitted.~~ Mirrored glass is prohibited.
3. Required window areas shall be either pedestrian entrances, windows that allow views into retail space, working areas or lobbies. Display windows set into the wall may be approved by the Planning Board.
4. Windows shall not be blocked with opaque materials or the back of shelving units or signs.
5. The bottom of the window shall be no more than 3 feet above the adjacent exterior grade.

Article 9, Section 9.02 – Definitions

Clear Glazing: Glass and other transparent elements of building facades with a minimum visible light transmittance of 80%. **68 % and a reflectivity of 15 % or less.**

~~Lightly Tinted Glazing: Glass and other transparent elements of building facades with a minimum visible light transmittance of 70%.~~



MEMORANDUM

Planning Division

DATE: January 3rd, 2020

TO: Jana Ecker, Planning Director

FROM: Nicholas Dupuis, City Planner

SUBJECT: Window Glazing Standards – Study Session

On November 13th, 2019, the Planning Board discussed the potential for ordinance amendments encompassing the Window Standards outlined in Article 3, Section 3.04(E) and Article 4, Section 4.90 of the Zoning Ordinance. The Planning Board directed City Staff to (1) research any possible differences in the Visual Light Transmittance (VLT) figures between different manufacturers and (2), research other cities to determine what VLT figures are used.

Upon contacting representatives at Guardian Glass, Midwest Glass Fabricators, Michigan Glass Coating, and Service Glass, it was apparent that there is no noticeable difference in glass between manufacturers. That is, all else being equal, a pane of glass with a low-e coating at 68% Visual Light Transmittance from manufacturer X will look the same as the same pane of glass from manufacturer Y. The results may differ based on what type of glass is used in the construction, whether the glass is single pane, double pane or laminated, whether a film is used or not, etc.

The transparency requirements in other communities was researched in 2016 when the subject of glazing was discussed for the second time. The table below summarizes the confirmed VLT figure present in other Michigan communities, as well as some new figures:

Grand Rapids, MI	70% VLT minimum
Ferndale, MI	60% VLT minimum, 20% Reflectance
Muskegon, MI	70% VLT minimum
West Bloomfield, MI	75% VLT minimum
Rochester Hills, MI	65% VLT minimum
Pontiac, MI	Non reflective, non-tinted
Detroit, MI	70% VLT minimum
Kalamazoo, MI	Clear, non reflective

At this time, the Planning Division would like to request specific direction as to how the Planning Board would like to proceed, and if any other research is sought after.

DATE: July 22nd, 2020

TO: Jana Ecker, Planning Director

FROM: Nicholas Dupuis, City Planner

SUBJECT: Window Glazing Standards – Study Session #3

On November 13th, 2019, the Planning Board discussed the potential for ordinance amendments encompassing the Window Standards outlined in Article 3, Section 3.04(E) and Article 4, Section 4.90 of the Zoning Ordinance. The Planning Board directed City Staff to (1) research any possible differences in the Visual Light Transmittance (VLT) figures between different manufacturers and (2), research other cities to determine what VLT figures are used.

Upon contacting representatives at Guardian Glass, Midwest Glass Fabricators, Michigan Glass Coating, and Service Glass, it was apparent that there is no noticeable difference in glass between manufacturers. That is, all else being equal, a pane of glass with a low-e coating at 68% Visual Light Transmittance from manufacturer X will look the same as the same pane of glass from manufacturer Y. The results may differ based on what type of glass is used in the construction, whether the glass is single pane, double pane or laminated, whether a film is used or not, etc.

Additionally, the research done into the transparency requirements in other communities was confirmed and/or updated. The table below summarizes the confirmed VLT figure present in other Michigan communities, as well as some new figures:

Grand Rapids, MI	70% VLT minimum
Ferndale, MI	60% VLT minimum, 20% Reflectance
Muskegon, MI	70% VLT minimum
West Bloomfield, MI	75% VLT minimum
Rochester Hills, MI	65% VLT minimum
Pontiac, MI	Non reflective, non-tinted
Detroit, MI	70% VLT minimum
Kalamazoo, MI	Clear, non reflective

On January 8th, 2020, the Planning Board discussed the glazing ordinance amendments again, and expressed interest in hearing from more professionals such as a mechanical engineer, a glass vendor or supplier, or a glass contractor or installer. At this time, the Planning Division has been unable to find and secure any additional professionals or glass experts to add any new information to the conversation other than the professionals that were already involved up to this point.

The following ordinance amendments have been updated to reflect the most recent research.

ORDINANCE NO. _____

THE CITY OF BIRMINGHAM ORDAINS:

AN ORDINANCE TO AMEND CHAPTER 126, ZONING, OF THE CODE OF THE CITY OF BIRMINGHAM:

TO AMEND ARTICLE 3, SECTION 3.04(E), ARCHITECTURAL STANDARDS, TO AMEND ARTICLE 4, SECTION 4.90(A), WINDOW STANDARDS, AND TO AMEND ARTICLE 9, SECTION 9.02, DEFINITIONS TO REDFINE CLEAR GLAZING, AND TO ELIMINATE LIGHTLY TINTED GLAZING

Article 3, Section 3.04

E. Architectural standards. All buildings shall be subject to the following physical requirements:

1. ...
2. ...
3. ...
4. Storefronts shall be directly accessible from public sidewalks. Each storefront must have transparent areas, equal to 70% of its portion of the facade, between one and eight feet from the ground. The wood or metal armature (structural elements to support canopies or signage) of such storefronts shall be painted, bronze, or powder-coated.
5. Storefronts shall have mullion systems, with doorways and signage integrally designed. Mullion systems shall be painted, powder-coated, or stained.
6. The glazed area of a facade above the first floor shall not exceed 35% of the total area, with each facade being calculated independently.
7. Clear glazing is required on the first floor. ~~Lightly tinted glazing is permitted on upper floors only~~ **storefront facade**. Windows shall not be blocked with opaque materials or the back of shelving units or signs.

Article 4, Section 4.90 – Window Standards (WN)

A. Storefront Windows: Ground floor facades shall be designed with storefronts that have windows, doorways and signage, which are integrally designed. The following standards apply:

1. No less than 70% of a storefront/ground floor façade between 1 and 8 feet above grade shall be clear glazing.
2. Only Clear glazing is permitted on storefront facades ~~at the first floor. Lightly tinted glazing above the first floor may be permitted.~~ Mirrored glass is prohibited.
3. Required window areas shall be either pedestrian entrances, windows that allow views into retail space, working areas or lobbies. Display windows set into the wall may be approved by the Planning Board.
4. Windows shall not be blocked with opaque materials or the back of shelving units or signs.
5. The bottom of the window shall be no more than 3 feet above the adjacent exterior grade.

Article 9, Section 9.02 – Definitions

Clear Glazing: Glass and other transparent elements of building facades with a minimum visible light transmittance of 80%. **66 % and a reflectivity of 15 % or less.**

~~Lightly Tinted Glazing: Glass and other transparent elements of building facades with a minimum visible light transmittance of 70%.~~



MEMORANDUM

Planning Division

DATE: April 14th, 2021

TO: Jana Ecker, Planning Director

FROM: Nicholas Dupuis, City Planner

SUBJECT: Window Glazing Standards – Study Session #4

On November 13th, 2019, the Planning Board discussed the potential for ordinance amendments encompassing the Window Standards outlined in Article 3, Section 3.04(E) and Article 4, Section 4.90 of the Zoning Ordinance. The Planning Board directed City Staff to (1) research any possible differences in the Visual Light Transmittance (VLT) figures between different manufacturers and (2), research other cities to determine what VLT figures are used.

Upon contacting representatives at Guardian Glass, Midwest Glass Fabricators, Michigan Glass Coating, and Service Glass, it was apparent that there is no noticeable difference in glass between manufacturers. That is, all else being equal, a pane of glass with a low-e coating at 68% Visual Light Transmittance from manufacturer X will look the same as the same pane of glass from manufacturer Y. The results may differ based on what type of glass is used in the construction, whether the glass is single pane, double pane or laminated, whether a film is used or not, etc.

Additionally, the research done into the transparency requirements in other communities was confirmed and/or updated. The table below summarizes the confirmed VLT figure present in other Michigan communities, as well as some new figures:

Grand Rapids, MI	70% VLT minimum
Ferndale, MI	60% VLT minimum, 20% Reflectance
Muskegon, MI	70% VLT minimum
West Bloomfield, MI	75% VLT minimum
Rochester Hills, MI	65% VLT minimum
Pontiac, MI	Non reflective, non-tinted
Detroit, MI	70% VLT minimum
Kalamazoo, MI	Clear, non reflective

On January 8th, 2020, the Planning Board discussed the glazing ordinance amendments again, and expressed interest in hearing from more professionals such as a mechanical engineer, a glass vendor or supplier, or a glass contractor or installer. At that time, the Planning Division was unable to find and secure any additional professionals or glass experts to add any new information to the conversation other than the professionals that were already involved up to that point.

On July 22nd, 2020, the Planning Board reviewed the proposed ordinance language alongside a glass professional from Guardian Glass, who offered expertise and clarity on the proposed amendments and what is available in the glass world, and what the effect is on energy codes.

The Planning Board entertained ideas for including low iron glass to the definition and discussing other items such as shelving and merchandise in windows. Ultimately, the Planning Board directed City Staff to make a few minor changes including eliminating the bronze requirement from Section 3.04 (E)(4), and adding low iron glass and no tint to the definition of clear glazing for final consideration before the public hearing.

The following ordinance amendments have been updated to reflect the most recent research.

ORDINANCE NO. _____

THE CITY OF BIRMINGHAM ORDAINS:

AN ORDINANCE TO AMEND CHAPTER 126, ZONING, OF THE CODE OF THE CITY OF BIRMINGHAM:

TO AMEND ARTICLE 3, SECTION 3.04(E), ARCHITECTURAL STANDARDS, TO AMEND ARTICLE 4, SECTION 4.90(A), WINDOW STANDARDS, AND TO AMEND ARTICLE 9, SECTION 9.02, DEFINITIONS TO REDFINE CLEAR GLAZING, AND TO ELIMINATE LIGHTLY TINTED GLAZING

Article 3, Section 3.04

E. Architectural standards. All buildings shall be subject to the following physical requirements:

1. ...
2. ...
3. ...
4. Storefronts shall be directly accessible from public sidewalks. Each storefront must have transparent areas, equal to 70% of its portion of the facade, between one and eight feet from the ground. The wood or metal armature (structural elements to support canopies or signage) of such storefronts shall be painted, ~~bronze~~, or powder-coated.
5. Storefronts shall have mullion systems, with doorways and signage integrally designed. Mullion systems shall be painted, powder-coated, or stained.
6. The glazed area of a facade above the first floor shall not exceed 35% of the total area, with each facade being calculated independently.
7. Clear glazing is required on the first floor. ~~Lightly tinted glazing is permitted on upper floors only~~ **storefront facade**. Windows shall not be blocked with opaque materials or the back of shelving units or signs.

Article 4, Section 4.90 – Window Standards (WN)

A. Storefront Windows: Ground floor facades shall be designed with storefronts that have windows, doorways and signage, which are integrally designed. The following standards apply:

1. No less than 70% of a storefront/ground floor façade between 1 and 8 feet above grade shall be clear glazing.
2. Only Clear glazing is permitted on storefront facades ~~at the first floor. Lightly tinted glazing above the first floor may be permitted~~. Mirrored glass is prohibited.
3. Required window areas shall be either pedestrian entrances, windows that allow views into retail space, working areas or lobbies. Display windows set into the wall may be approved by the Planning Board.
4. Windows shall not be blocked with opaque materials or the back of shelving units or signs.
5. The bottom of the window shall be no more than 3 feet above the adjacent exterior grade.

Article 9, Section 9.02 – Definitions

Clear Glazing: Glass and other transparent elements of building facades with **low iron content, no tint, a minimum visible light transmittance of 80%, 66 % and a reflectivity of 15 % or less.**

~~Lightly Tinted Glazing:~~ Glass and other transparent elements of building facades with a minimum visible light transmittance of 70%.



MEMORANDUM

Planning Division

DATE: June 9th, 2021

TO: Jana Ecker, Planning Director

FROM: Nicholas Dupuis, City Planner

SUBJECT: Window Glazing Standards – Public Hearing

On November 13th, 2019, the Planning Board discussed the potential for ordinance amendments encompassing the Window Standards outlined in Article 3, Section 3.04(E) and Article 4, Section 4.90 of the Zoning Ordinance. The Planning Board directed City Staff to (1) research any possible differences in the Visual Light Transmittance (VLT) figures between different manufacturers and (2), research other cities to determine what VLT figures are used.

Upon contacting representatives at Guardian Glass, Midwest Glass Fabricators, Michigan Glass Coating, and Service Glass, it was apparent that there is no noticeable difference in glass between manufacturers. That is, all else being equal, a pane of glass with a low-e coating at 68% Visual Light Transmittance from manufacturer X will look the same as the same pane of glass from manufacturer Y. The results may differ based on what type of glass is used in the construction, whether the glass is single pane, double pane or laminated, whether a film is used or not, etc.

Additionally, the research done into the transparency requirements in other communities was confirmed and/or updated. The table below summarizes the confirmed VLT figure present in other Michigan communities, as well as some new figures:

Grand Rapids, MI	70% VLT minimum
Ferndale, MI	60% VLT minimum, 20% Reflectance
Muskegon, MI	70% VLT minimum
West Bloomfield, MI	75% VLT minimum
Rochester Hills, MI	65% VLT minimum
Pontiac, MI	Non reflective, non-tinted
Detroit, MI	70% VLT minimum
Kalamazoo, MI	Clear, non reflective

On January 8th, 2020, the Planning Board discussed the glazing ordinance amendments again, and expressed interest in hearing from more professionals such as a mechanical engineer, a glass vendor or supplier, or a glass contractor or installer. At that time, the Planning Division was unable to find and secure any additional professionals or glass experts to add any new information to the conversation other than the professionals that were already involved up to that point.

On July 22nd, 2020, the Planning Board reviewed the proposed ordinance language alongside a glass professional from Guardian Glass, who offered expertise and clarity on the proposed amendments and what is available in the glass world, and what the effect is on energy codes.

The Planning Board entertained ideas for including low iron glass to the definition and discussing other items such as shelving and merchandise in windows. Ultimately, the Planning Board directed City Staff to make a few minor changes including eliminating the bronze requirement from Section 3.04 (E)(4), and adding low iron glass and no tint to the definition of clear glazing for final consideration before the public hearing.

On April 14th, 2021, the Planning Board motioned to set a public hearing on May 12th, 2021 to amend the glazing standards, which was rescheduled to June 9th, 2021 due to Eid al-Fitr.

The following ordinance amendments have been updated to reflect the most recent research.

ORDINANCE NO. _____

THE CITY OF BIRMINGHAM ORDAINS:

AN ORDINANCE TO AMEND CHAPTER 126, ZONING, OF THE CODE OF THE CITY OF BIRMINGHAM:

TO AMEND ARTICLE 3, SECTION 3.04(E), ARCHITECTURAL STANDARDS, TO AMEND ARTICLE 4, SECTION 4.90(A), WINDOW STANDARDS, AND TO AMEND ARTICLE 9, SECTION 9.02, DEFINITIONS TO REDFINE CLEAR GLAZING, AND TO ELIMINATE LIGHTLY TINTED GLAZING

Article 3, Section 3.04

E. Architectural standards. All buildings shall be subject to the following physical requirements:

1. ...
2. ...
3. ...
4. Storefronts shall be directly accessible from public sidewalks. Each storefront must have transparent areas, equal to 70% of its portion of the facade, between one and eight feet from the ground. The wood or metal armature (structural elements to support canopies or signage) of such storefronts shall be painted, ~~bronze~~, or powder-coated.
5. Storefronts shall have mullion systems, with doorways and signage integrally designed. Mullion systems shall be painted, powder-coated, or stained.
6. The glazed area of a facade above the first floor shall not exceed 35% of the total area, with each facade being calculated independently.
7. Clear glazing is required on the first floor. ~~Lightly tinted glazing is permitted on upper floors only~~ **storefront facade**. Windows shall not be blocked with opaque materials or the back of shelving units or signs.

Article 4, Section 4.90 – Window Standards (WN)

A. Storefront Windows: Ground floor facades shall be designed with storefronts that have windows, doorways and signage, which are integrally designed. The following standards apply:

1. No less than 70% of a storefront/ground floor façade between 1 and 8 feet above grade shall be clear glazing.
2. Only Clear glazing is permitted on storefront facades ~~at the first floor. Lightly tinted glazing above the first floor may be permitted~~. Mirrored glass is prohibited.
3. Required window areas shall be either pedestrian entrances, windows that allow views into retail space, working areas or lobbies. Display windows set into the wall may be approved by the Planning Board.
4. Windows shall not be blocked with opaque materials or the back of shelving units or signs.
5. The bottom of the window shall be no more than 3 feet above the adjacent exterior grade.

Article 9, Section 9.02 – Definitions

Clear Glazing: Glass and other transparent elements of building facades with **no tint**, a minimum visible light transmittance of ~~80%~~ **66 % and a reflectivity of 15 % or less**.

~~Lightly Tinted Glazing: Glass and other transparent elements of building facades with a minimum visible light transmittance of 70%.~~

ORDAINED this _____ day of _____, 2021 to become effective upon publication.

Pierre Boutros, Mayor

Alexandria Bingham, City Clerk

Meeting Minutes
(Chronological Order)

Planning Director Ecker told Mr. Arpin that the D5 study is available to the public in previous Planning Board agendas posted on the City's website.

In reply to a request by Mr. Arpin, Chairman Clein asked that the City Manager and City Commission consider whether it might be useful to provide the D5 study on thebirminghamplan.com website as well.

Mr. Arpin shared his gratitude for the Board's thoroughness when discussing a CIS, and expressed concern that, in his opinion, the Board was not proceeding as thoroughly when discussing potential zoning changes that would impact a three or four block area of the City.

Chairman Clein thanked Mr. Arpin for his comments.

Patrick Howe, attorney representing the Birmingham Place Condo Association, spoke. He reviewed the minutes from the February 13, 2017 City Commission meeting minutes in order to highlight the original intent of the D5 ordinance. Mr. Howe argued that the only piece of property that was both abutting and adjacent was the south strip next to the 555 Building. He noted that the entire transcript of the D5 portion of the February 13, 2017 City Commission meeting was 18 minutes long, and echoed Mr. Arpin's assertion that more discussion is merited before an amendment to the D5 ordinance is considered.

Motion by Mr. Share

Seconded by Mr. Williams to set a public hearing for December 11, 2019 for the two proposed ordinance amendments to Article 3, section 3.04 (A) and Article 9, Definitions, Section 9.02 as presented on pages 132 and 133 of the Board's November 13, 2019 agenda.

Duraid Markus, owner of 469-479 S. Old Woodward, asked whether an adjacent building's height would be calculated from the height of the closest point of a building, which could be five stories, for example, or from the highest part of a building as a whole, which could extend to nine stories on the far side of a building.

Planning Director Ecker confirmed for Mr. Markus and for Michele Prentiss that a building's height is calculated based off of a building's overall height, and not just the height of the closest part of the building.

Motion carried, 7-0.

VOICE VOTE

Yeas: Share, Williams, Whipple-Boyce, Boyle, Clein, Jeffares, Koseck

Nays: None

2. Glazing Standards

City Planner Dupuis presented the item.

Ms. Whipple-Boyce confirmed based on her research that the 80% VLT glass required in the City's ordinance causes much more heat loss and gain depending on the seasons, increases the cost of heating and cooling the building, could change the capacity of the HVAC to make up for that gain and loss, and that those facts will remain true as long as 80% VLT is required. She said that people in the industry she spoke with advised that if the VLT requirement is lowered to 68% those issues could be mitigated. She said determining how to accommodate low-e glass will have environmental benefits in addition to the benefits it would bring developers and builders.

Mr. Share and Ms. Whipple-Boyce both wondered about possible differences between one manufacturer's 68% VLT glass and another's.

City Planner Dupuis and Planning Director Ecker said they would return with more information on the topic for the Board's next meeting.

In reply to Mr. Boyle, City Planner Dupuis explained glass professionals advised staff that only the VLT and the reflectivity affect the transparency of glass, which is why the recommended wording only mentions those two criteria.

In reply to Chairman Clein, City Planner Dupuis said he could do further research on what other Michigan cities require for VLT since the table with VLT figures included in this item was produced sometime in 2017.

In reply to Chairman Clein, Planning Director Ecker said she would try to find someone who could provide the City with more insight into the various considerations at play in this discussion.

Ms. Whipple-Boyce stressed the environmental impact of this decision and said the decision should move towards the highest VLT glass that does not lead to negative environmental results.

3. Master Plan Review

Planning Director Ecker presented the item.

Chairman Clein thanked Planning Director for putting together the proposed schedule.

Subsequent to discussion, Board consensus was that they would schedule the master plan discussions for regular study session meetings beginning in January 2020 and running through May 2020. Notes would be provided to DPZ after each study session. The Board agreed to start those study session meetings at 7 p.m. instead of 7:30 p.m.

Planning Director Ecker noted that a member of the public could always provide their feedback on a previous meeting's topic as well.

Ms. Whipple-Boyce recommended creating an insert with the schedule of these meetings to mail out to all Birmingham residents in the City's 2020 calendar. She advocated for allowing staff to determine the most appropriate division of the master plan topics over the four or five study sessions.

- Ground mounted solar panels could enable residents who do not want to mount panels on their roof to still have access to some solar power. Ground mounted solar panels would also allow businesses to use solar-powered trash compactors.

Ms. Whipple-Boyce said that she did not yet know enough about ground-mounted solar panels, but that if the City proceeded toward allowing them she would prefer that their allowable yard coverage be calculated by percentage and not by a set amount. She also told City Planner Dupuis that there had been a conversation regarding wind energy facilities about ten years hence, and that if he could find the minutes from that conversation it might help provide some useful information on the topic.

Mr. Koseck said the Board might want to consider not allowing solar panels at grade because it could encourage residents to do away with any greenery that could get in the way of the panels. He also said that 40 square feet of solar panels on the ground might not be enough to generate a worthwhile amount of energy. Mr. Koseck added that solar panels are impervious which would also raise ordinance issues in terms of ground cover. Since most people would likely rather not install solar panels at grade anyways, Mr. Koseck said he would just as soon prohibit it to avoid these issues since the potential environmental gain would likely not be significant in those cases.

Mr. Jeffares echoed Mr. Koseck's concerns about ground mounted solar panels and said he would prefer to continue studying that possibility and whether it would be worthwhile.

Ms. Ramin noted that on page 625, in section G, the phrase "If a wind energy facility has not been removed within 30 days a deadline specified by the City" would need to be clarified.

Mr. Share noted that on page 621, Item F, the word should be 'complemented', not 'complimented'. He agreed with Mr. Koseck and Mr. Jeffares that ground mounted solar panels were likely not necessary to pursue at this time.

Chairman Clein expressed agreement with Mr. Koseck, Mr. Jeffares, and Mr. Share regarding ground mounted solar panels.

In reply to Chairman Clein, City Planner Dupuis said he would do more research on the benefits and drawbacks of the anti-reflective coating some other cities' ordinances require for solar panels.

4. Glazing Standards

City Planner Dupuis presented the item.

Mr. Koseck said he had a list of two or three people he would be reaching out to soon who might be able to contribute meaningfully to the glazing standards conversation. He said that once he had done that he would loop City Planner Dupuis in as appropriate.

Chairman Clein explained that in February 2020 and April 2020 there will only be one Planning Board meeting per each month and that both of those meetings are dedicated to master plan discussion. He suggested that Board members look at their calendars to see if a special meeting could be scheduled to wrap up some of these other study session topics. He added that even if

the Board moved forward with a resolution on this item during the present meeting, due to noticing requirements the public hearing would not occur until the second meeting in March 2020. Chairman Clein recommended the Board take the time to do adequate research, as a result, before moving further forward on this.

Mr. Emerine suggested it might be worthwhile to speak with glass contractors in addition to glass vendors in order to get more insight.

Planning Director Ecker said she would recommend reaching out to a mechanical engineer, a glass vendor or supplier, and a glass contractor or installer.

City Planner Dupuis confirmed he would reach out to people who work with glass regularly in architectural settings and would return to the Board with further information.

01-06-20

G. Miscellaneous Business and Communications:

a. Communications

b. Administrative Approval Correspondence

c. Draft Agenda for the next Regular Planning Board Meeting (January 22, 2020)

- Whistle Stop Design Review
- 35001 Woodward - Amended CIS and Amended Preliminary Site Plan
- Fred Lavery Porsche SLUP
- Two small solar panel items

d. Other Business – Discuss amending Rules of Procedure for January 22, 2020 meeting

Motion by Ms. Whipple-Boyce

Seconded by Mr. Share to amend the Rules of Procedure for the Planning Board's January 22, 2020 meeting to allow for the review of the above items as described by Planning Director Ecker.

Motion carried, 7-0.

VOICE VOTE

Yeas: Whipple-Boyce, Share, Emerine, Clein, Jeffares, Ramin, Koseck

Nays: None

Abstain: Emerine, Ramin

There were no changes to the agenda.

07-89-20

E. Study Session Items

1. Glazing Requirements

City Planner Dupuis reviewed the item and Kreg Hatfield, from Guardian Glass, was present to answer questions.

Mr. Hatfield explained that:

- All manufacturers calculate VLT and reflectivity percentages in the same way.
- Most people would be unlikely to notice the difference between 66% and 80% VLT.
- When glass gets into the range of 40-50% VLT it tends to begin to look less clear. Tinting would reduce the VLT even further.
- The glass make-up at the Brookside development and the glass make-up at the Daxton Hotel have identical coatings on the glass. The difference is that the Brookside development used a basic clear glass while the Daxton used a low iron glass. The Brookside glass has a VLT of 68% and the Daxton has a VLT of 70% because removing some iron makes glass a bit more clear.
- Glass can be rated in terms of reflectivity both from the inside-out and from the outside-in. It is important to keep those percentages about the same.
- For basic, first floor applications the ordinance should include language about prohibiting tinted glass. There would be no way for property owners to meet the proposed ordinance requirements if they have both tinted glass and low-e coating.
- There would likely be no need to mention low iron glass because it would meet ordinance requirements should a property owner choose to use it. Low iron glass tends to cost significantly more than regular clear glass. It also tends to be a bit more efficient in terms of retaining the heating and cooling of the building's interior.
- Clear glass tends to have a bit of a green hue versus low iron glass. For protection three coats of silver were added to the library windows' glass, and those layers of silver also add a bit of a greenish hue. If the library had used low iron glass with the same layers of silver the green tint would still be present but not as substantially.
- Low iron glass is widely enough available that no property owners would have a difficult time sourcing it should it be required by ordinance. Cost would be the biggest reason not to require low iron glass via ordinance.
- He has not heard of any municipality requiring low iron glass in their ordinances.
- Any glass sample from an architect submitted to the City should specify whether it is low iron glass.
- The Brookside development is the best example of what kind of glass would be permissible under the proposed ordinance language. Brookside's glass is regular clear glass and not low iron.

Mr. Share said the Board should probably not require low iron glass, especially in a time when the City is trying to help retailers weather the financial impacts of the Covid-19 pandemic.

In reply to Mr. Koseck, Planning Director Ecker stated that the ordinance does not specify how many feet from a window shelving must be placed. She said there could be some value in adding that to the ordinance.

City Planner Dupuis said it might also be worthwhile to consider a vertical height limit for shelving if a horizontal one is added.

Mr. Koseck suggested that some of the language could be clarified in Article 3, Section 3.04 of the ordinance. He said 'bronze' should probably be struck from that section.

Ms. Whipple-Boyce concurred with Mr. Koseck regarding removing the word 'bronze'. She said she agreed that it might be useful to have a horizontal distance requirement for how far shelving must be from a window. She said a typical aisle's width might be the appropriate distance. She said it would also be helpful to know the cost difference between low iron and clear glass.

City Planner Dupuis asked how the Board might want a horizontal distance requirement to deal with retail items displayed in a window.

Ms. Whipple-Boyce said that if retailers displayed their merchandise attractively in their windows she would be supportive of that.

Mr. Williams said the Board should come up with language regarding displaying merchandise in windows and shelving before it goes to a public hearing.

In reply to Chairman Clein, Planning Director Ecker said that the ordinance's current restrictions against shelving in the windows work well and are generally enforceable. She said that any examples that seem to be in egregious violation of that standard tend to have existed before the ordinance went into effect.

Mr. Jeffares recommended the Board conclude its discussion about glazing without trying to presently integrate new topics. He noted the Board had been studying glazing for months and had worked hard to prepare for the review, and thought the other topics being raised deserved a similar amount of thoroughness at a future date.

Mr. Koseck said he would be fine with Mr. Jeffares' recommendation that questions of shelving and merchandising in windows be discussed further at a later date.

The Board asked Planning Director Ecker to add 'no tint' and 'low iron glass' to the definition of clear glazing, with the understanding that 'low iron' could possibly be removed after discussion at the public hearing.

Motion by Ms. Whipple-Boyce

Seconded by Mr. Koseck to set a public hearing on August 26, 2020 to consider Zoning Ordinance amendments to Article 3, Section 3.04(E), Article 4, Section 4.90(A) and Article 9, Section 9.02 to change the Clear Glazing standards and definition to require low iron glass, no tint, to relax the Visual Light Transmittance requirements and to add reflectivity requirements.

Mr. Share said he was in favor of moving the topic to a public hearing and not in favor of mandating low iron glass.

Motion carried, 6-1.

ROLL CALL VOTE

Yeas: Whipple-Boyce, Koseck, Williams, Boyle, Clein, Jeffares

Nays: Share

Mr. Boyle echoed Ms. Whipple-Boyce's previous statement that the Board should have comparative costs for low iron and clear glass to review. He said the Board should be aware how a low iron requirement might be layering on costs to development in the City.

Chairman Clein thanked Mr. Hatfield for sharing his expertise with the Board.

2. Solar Panel Review Process

City Planner Dupuis reviewed the item.

Ms. Whipple-Boyce said she recently encountered a large solar battery in some work she was doing in another community, and cautioned that the Board might not want to allow any and all ancillary equipment for solar panels to be outside the home given the potential range of sizes.

Mr. Williams said he was fine with solar panels but might be less fine with ancillary equipment on the side of a home given that it might be more prominent in a neighbor's view.

City Planner Dupuis asked if Mr. Williams would prefer the ancillary equipment to be mounted only to the rear of the home, or to possibly be screened in some way.

Mr. Williams said he was not sure what the best approach would be. He said he thought it would depend on the house, the location of the neighboring properties, and the type of equipment.

Planning Director Ecker said that moving the equipment to the rear of a home would have the benefit of being further from a neighbor's yard because of the greater required setback. She noted that, in contrast, equipment on the side of a home might be only five feet from the property line.

Ms. Whipple-Boyce agreed that placement would depend on the size of the equipment. She said that a small electric meter or connection into the house to the battery need not be limited to the rear or interior of a home, whereas larger equipment should be. She said that the Board could likely specify appropriate locations with more information on the most commonly used kinds of equipment.

City Planner Dupuis said he could find pictures of the City's most recent solar panel approvals to provide the Board with a better sense of the size of the ancillary equipment.

Chair Clein concurred with Mr. Jeffares' recommendation regarding wall- or facade-mounted solar panels.

Mr. Boyle asked if there was any near-future technology the ordinance should address.

Chair Clein said that strips of solar panels being used to line bicycle paths was being tried in Europe, but that wide-spread implementation would not be in the near future.

In reply to Mr. Share, CP Dupuis said he did not recommend screening for ancillary equipment because it would increase the difficulty of installation and maintenance. CP Dupuis noted this ordinance review was being conducted with an aim towards reducing the impediments to using solar panels in the City. He added that users of solar panels also needed quick access to disconnect features.

Mr. Share recommended that the ordinance states that users of solar panels are not exempt from screening otherwise required by the Zoning Ordinance.

CP Dupuis said he could update the recommended ordinance language with the Board's comments and have it ready for a public hearing on May 12, 2021.

Motion by Mr. Boyle

Seconded by Mr. Jeffares to set a public hearing on solar panel regulations ordinance language for the regular Planning Board meeting of May 12, 2021.

Motion carried, 7-0.

ROLL CALL VOTE

Yeas: Boyle, Jeffares, Whipple-Boyce, Clein, Ramin, Share, Koseck

Nays: None

2. Glazing Standards

CP Dupuis summarized the item.

Mr. Share said he had recent occasion to purchase some low-iron glass, and that it added about 15% to the cost. He stated that he found the difference between low-iron and regular glass to be **visually** immaterial. He suggested that the low-iron requirement be removed from the recommended language, saying he thought it inappropriate to burden owners and developers with the extra cost.

Mr. Koseck and Ms. Whipple-Boyce, two other members of the Board familiar with glazing standards from their professions, did not dispute Mr. Share's recommendation when asked.

Motion by Mr. Share

Seconded by Ms. Whipple-Boyce to set a public hearing on Article 9, Section 9.02 Definition of Clear Glazing as presented without the reference to low-iron content for the regular Planning Board meeting of May 12, 2021.

Motion carried, 7-0.

ROLL CALL VOTE

Yeas: Share, Whipple-Boyce, Clein, Ramin, Koseck, Boyle, Jeffares

Nays: None

04-053-21

**G. Miscellaneous Business and Communications:
a. Communications**

PD Ecker reminded the Board that the Commission would be holding a special meeting regarding the 2040 Master Plan on April 19, 2021 and that the Board had been asked to attend.

b. Administrative Approval Correspondence

CP Dupuis explained that the owner of EM Bistro wanted to change their outdoor dining chairs to sculptural, white ones constructed of polypropylene. CP Dupuis noted that while polypropylene would not usually be considered a high-enough quality material for outdoor bistro chairs, these chairs differed significantly from standard plastic seating.

Mr. Koseck said the ordinance's main concern regarding the materials for outdoor bistro seating is longevity. He said that these chairs would withstand the elements and would not likely have longevity issues.

The Board, with the exception of Chair Clein, endorsed allowing an administrative approval for the request. Chair Clein's dissent arose from a dislike of the chairs and concern regarding their recyclability.

CP Dupuis said he would proceed with an administrative approval of the request.

CP Dupuis then asked the Board how the matter of outdoor dining decks should be addressed once the Covid-19 guidelines for outdoor dining decks in the City expire.

Mr. Boyle said the City should decide on a more comprehensive approach to how outdoor dining should interact with the streetscape in Birmingham over the next five to ten years before specific design guidelines for outdoor dining should be created.

Mr. Jeffares noted that the Board would need to come up with an answer quickly in order to have recommendations ready for Fall 2021.

ROLL CALL VOTE

Yeas: Williams, Share, Koseck, Clein, Whipple-Boyce, Jeffares, Emerine

Nays: None

2. Public Hearing – Glazing Standards

PD Ecker reviewed the item. She noted that 'low iron content' in the change to Article 9, Section 9.02 – Definitions should be struck per previous Board discussions.

Motion by Mr. Share

Seconded by Mr. Williams to recommend to the City Commission amendments to Sections 3.04, 4.90, and 9.02 of the Zoning Ordinance to change the definition of clear glazing and to amend the glazing standards as recommended by staff in the evening's agenda packet.

Motion carried, 7-0.

ROLL CALL VOTE

Yeas: Share, Williams, Clein, Whipple-Boyce, Jeffares, Emerine, Koseck

Nays: None

06-079-21

G. Miscellaneous Business and Communications:

- a. Communications**
- b. Administrative Approval Correspondence**
- c. Draft Agenda for next meeting**
- d. Other Business**

PD Ecker updated the Board about potentially moving from virtual to hybrid live-virtual meetings in the near future.

Brief informational replies regarding other Board member inquiries were also provided.

06-080-21

H. Planning Division Action Items

- a. Staff Report on Previous Requests**
- b. Additional Items from tonight's meeting**

06-081-21

I. Adjournment

No further business being evident, the Chair adjourned the meeting at 9:10 p.m.

Commissioner Nickita stated that while he was not supportive of bistros without evening hours in general, he was comfortable in this case that it was unique enough to avoid setting a precedent. He said that the addition of 12 total seats, which would only be present in outdoor dining, would not overburden parking. He said he was comfortable with the more organic shared parking arrangement. He reiterated that the applicant should find some way of livening up the front of the building in winter months, whether with outdoor dining or something else.

Commissioner Sherman said the existing business license was the strongest factor preventing this bistro license for daytime-only hours from establishing a precedent. He said it would be a mistake to not require a written shared parking agreement and asked that it be pursued.

Commissioner Hoff reiterated her previously stated concerns and asked that the applicant work with the City to address those issues.

Mayor Pro Tem Longe echoed Commissioner Nickita's comfort regarding the current state of the shared parking arrangement between the Griffin Claw and the Whistle Stop.

Mayor Boutros reiterated that this is an established restaurant that has been functioning well in the City. He said that if it were a new restaurant he would be more concerned about getting a written parking arrangement. He said he was supportive of the proposal.

ROLL CALL VOTE: Ayes, Mayor Pro Tem Longe
 Commissioner Sherman
 Commissioner Nickita
 Mayor Boutros
 Commissioner Host
 Commissioner Baller

Nays, Commissioner Hoff

The Mayor paused the meeting at 10:09 p.m.

The meeting resumed at 10:16 p.m.

07-201-21 Public Hearing – Amendments to Section 3.04, 4.90 and 9.02 of Chapter 126, Zoning – Window and Glazing Standards

The Mayor opened the public hearing at 10:16 p.m.

CP Dupuis reviewed the item.

Commissioner Hoff said the language did not sufficiently clarify whether the standards applied only to the first floor or to the whole principal building frontage.

PD Ecker asked for a few minutes to look up definitions that might resolve the issue.

The Mayor called for a break on this topic at 10:27 p.m. The Commission moved on to discuss solar electric system ordinance amendments with the understanding that they would return to this item once PD Ecker had definitions available.

07-202-21 Public Hearing – Zoning Amendments to Section 4.09 of Chapter 126, Zoning – Solar Electric Systems

The Mayor opened the public hearing at 10:27 p.m.

CP Dupuis presented the item.

In reply to Commissioner Baller, CP Dupuis confirmed the City would publicize the changes to the solar electric systems ordinances so that residents could be made aware that the process of installing solar electric systems has been simplified.

The Mayor closed the public hearing at 10:33 p.m.

The City Attorney recommended motion language that differed from the motion language offered in the agenda packet. Commissioner Hoff adopted the City Attorney's recommended motion language.

MOTION: Motion by Commissioner Hoff, seconded by Commissioner Sherman:
To adopt Ordinance 2352 amending the sign ordinance, Article 4, Section 4.09 (Essential Services), to remove Roof Mounted Solar Electric Systems.

ROLL CALL VOTE: Ayes, Commissioner Hoff
Commissioner Sherman
Commissioner Nickita
Mayor Boutros
Commissioner Host
Commissioner Baller
Mayor Pro Tem Longe

Nays, None

07-203-21 Public Hearing – Zoning Amendments to Section 4.88 of Chapter 126, Zoning – Solar Electric Systems

This item was discussed concurrently with the previous item. The City Attorney recommended motion language that differed from the motion language offered in the agenda packet. Commissioner Hoff adopted the City Attorney's recommended motion language.

MOTION: Motion by Commissioner Hoff, seconded by Commissioner Sherman:
To adopt Ordinance 2353 amending the sign ordinance, Article 4, Section 4.88 (Alternative Energy) to add amended Roof Mounted Solar Electric Systems Language.

ROLL CALL VOTE: Ayes, Commissioner Hoff
Commissioner Sherman
Commissioner Nickita
Mayor Boutros
Commissioner Host
Commissioner Baller
Mayor Pro Tem Longe

Nays, None

07-201-21 (Cont'd) Public Hearing – Amendments to Section 3.04, 4.90 and 9.02 of Chapter 126, Zoning – Window and Glazing Standards

Discussion of this item resumed at 10:37 p.m.

PD Ecker defined storefront facade as the portion of building on first floor per architectural standards in the overlay district.

The Commission directed the Planning Board to re-review the proposed language to clarify whether the same or different standards would apply to the ground and upper floors of a building.

The Mayor closed the public hearing at 10:44 p.m.

07-204-21 Designation of Voting Delegate(s) for the Michigan Municipal League Annual Meeting

Commissioner Host volunteered to serve as the alternate voting delegate.

MOTION: Motion by Commissioner Sherman, seconded by Commissioner Hoff:
To appoint City Manager Tom Markus as the Birmingham City Commission's official voting delegate, and Commissioner Brad Host as the alternate voting delegate, at the Michigan Municipal League Annual Meeting to be held in Grand Rapids, Michigan on September 22, 2021.

ROLL CALL VOTE: Ayes, Commissioner Sherman
Commissioner Nickita
Mayor Boutros
Commissioner Host
Commissioner Hoff
Commissioner Baller
Mayor Pro Tem Longe

Nays, None

07-205-21 Commission Items for Future Discussion. A motion is required to bring up the item for future discussion at the next reasonable agenda, no discussion on the topic will happen tonight.

MOTION: Motion by Commissioner Hoff, seconded by Commissioner Baller:
To invite representatives of the Baldwin House to a Commission meeting to explain the changes that are currently taking place.

ROLL CALL VOTE: Ayes, Commissioner Hoff
Commissioner Baller
Mayor Pro Tem Longe
Commissioner Sherman
Commissioner Nickita
Mayor Boutros
Commissioner Host

Prior Research / Attachments

Sec. 61-14-26 Building design standards: Façade and architectural details.

(Ord. No. 11-05, §1, 5-28-05; Ord. No. 20-05, §1, 5-29-05; Ord. No. 23-13, §1, 8-28-13)

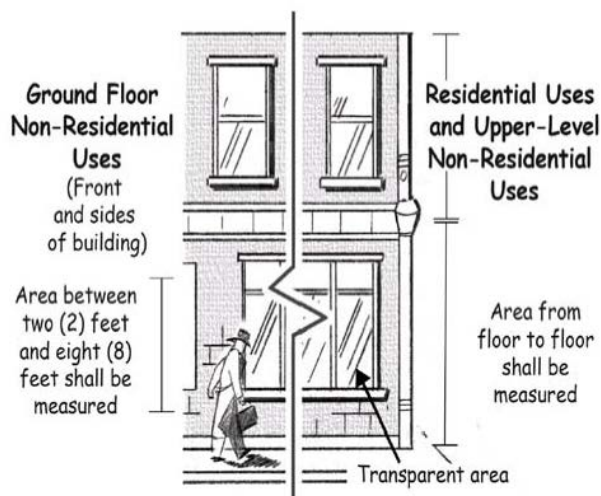
Sec. 61-14-26. Building design standards: Façade and architectural details.

- (a) For purposes of this subdivision, “street level façade” shall mean the first story of a multi-story building or the first thirteen (13) feet of the façade above grade plane;
- (b) The objectives of this section are:
 - (1) To provide street level façades on Traditional Main Streets with maximum visibility and transparency between active interior uses and the outside;
 - (2) To create façades with ratios of solids (wall surfaces) to voids (openings for windows and doors) that express traditional fenestration patterns; and
 - (3) To require fenestration patterns, surface delineations, textures, material expressions and architectural details that relate to the human scale.
- (c) To achieve the objectives of this section, the following standards shall apply:
 - (1) For all buildings located on lots abutting a Traditional Main Street that contain a commercial use and all other buildings located on the front property line, a minimum of sixty percent (60%) of the street level façade along Traditional Main Streets, major thoroughfares, or secondary thoroughfares between two (2) and eight (8) feet above the grade plane shall consist of transparent windows and doors; all other façades of buildings on lots abutting a Traditional Main Street that face a public street (other than a major or secondary thoroughfare) shall consist of transparent windows or doors covering at least forty percent (40%) of the façade between four (4) and eight (8) feet above the grade plane;
 - (2) For all buildings, a minimum of forty percent (40%) of the upper level façade along a Traditional Main Street shall consist of openings for windows or window wall system;
 - (3) Façades with a public entrance that do not face a public street shall consist of transparent windows or doors covering at least thirty percent (30%) of the façade between four (4) and eight (8) feet above the grade plane;
 - (4) Transparent doors and windows shall be defined as those having glass that can be seen through from the right-of-way into the establishment. The glass shall have a minimum visible transmittance rating of 0.70, according to the National Fenestration Rating Council. Glass that obscures visibility shall not be considered transparent, such as glazed glass. Reflective or mirrored glass and glass block are prohibited;
 - (5) Eighty percent (80%) of the transparent area required in subsection (1) of this section shall be visually unobstructed by signs, advertisements, window screens, security grilles, and other permanent window coverings. The display of merchandise items in display windows is not restricted by this provision; [.]

(Ord. No. 20-05, §1, 5-29-05; Ord. No. 23-13, §1, 8-28-13)

Sec. 5.2.14. Building Transparency.

- A. **Clear Glass.** Glass in windows, doors, and display windows shall be transparent to insure a safe, pedestrian-oriented environment. Glass shall be clear or lightly tinted and have a measurement of seventy (70) percent or greater VLT. A glass sample must be provided with the performance values listed on the sample as needed for project review.
- B. **Measurement.** Transparency requirements shall apply as follows:
1. For non-residential ground-floor uses, the area of the front and sides of a building between two (2) and eight (8) feet above the sidewalk (or ground level adjacent to the building if a sidewalk is not present) shall be used to measure transparency.
 2. For residential uses and for upper level non-residential uses, the area from floor to floor shall be used to measure transparency. For single-family and two-family dwellings, main entrance doors (not including storm doors) which contain a window shall be counted toward the minimum transparency requirement for the building wall facing the street.
 3. Only those windows and door areas arranged so that active uses within the building are visible from or accessible to the street shall be counted toward meeting transparency requirements. Enclosed product display windows and other similar elements that do not permit clear visibility into the interior of the building shall be omitted from transparency calculations.



5.2.14.B. Transparency Measurement

- C. **Reflective Surfaces.** The use of highly reflective surfaces, including reflective glass and mirrors, is prohibited on the ground floor.
- D. **Security Shutters.** Exterior steel barriers, hurricane curtains and other security devices are not permitted on the exterior of the building. If located inside a building, they may not be visible from the sidewalk or public right-of-way during business hours.
- E. **Parking Areas.** A minimum of six (6) square feet of clear window area for every forty (40) linear feet or portion thereof of the wall(s) of a building that faces a parking area shall be required. The window shall be placed so that the parking area may be readily viewed from inside the building.

-
- F. *Stairwells.* Where stairwells are introduced to the outer building wall of a development, the exterior of the stairwell and exit door shall be at least seventy (70) percent transparent.
- G. *Cash Register Viewing Window.* The cash register for a convenience/package goods store use shall be clearly visible from the street. The viewing window shall be at least twenty (20) square feet in size and consist of clear glass. No signs shall be posted on the viewing window.
- H. *Exceptions.* Transparency requirements do not apply to portions of structures in assembly area of theaters, auditoriums, religious institutions, and similar uses, provided that the building wall is enhanced by architectural detailing, artwork, landscaping or similar features. Façade variation requirements contained elsewhere in this Chapter shall be met.
- I. *Administrative Departures.*
1. Administrative Departures may be granted for any requirement of this Section.
 2. Approved Administrative Departures may be required to provide mitigation measures such as the addition of architectural elements, display windows with a minimum 12-inch depth, a green wall or landscaping.
 3. Administrative Departures may be granted where:
 - a. It is demonstrated by the applicant that transparency would be significantly detrimental to the operation or security of the proposed use;
 - b. Sloping grades would make the introduction of windows impractical;
 - c. All sides of a building are adjacent to the public right-of-way and/or an urban open space;
 - d. Any side of a building abuts an outdoor service area, such as loading spaces, trash removal operations, ground level mechanical facilities, or similar use; or
 - e. A building that has a side yard setback less than five (5) feet which abuts an interior lot and transparency requirements are in conflict with the City's building codes.

§ 50-5.5. Street-facing facades.

A. Street-facing facade. The following are requirements on street-facing building facades.

- (1) Transparency: measurement of the percentage of a facade that has clear, nonreflective windows that allow clear vision into a building's occupied space. Refer to Figure 5.5-1, Measuring Transparency: Ground Floor, Upper Floor, and Full Facade.

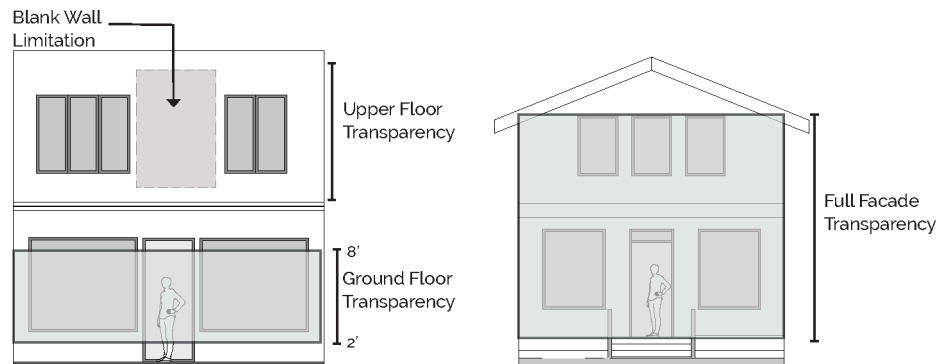


Figure 5.5-1 Measuring Transparency: Ground Floor, Upper Floor, and Full Facade

- (a) Ground floor. Transparency is determined by entrance treatment, unless otherwise noted in the lot type.
 - (b) Upper floor. Transparency is noted by lot type.
 - (c) Full facade. Transparency is measured using the entire front facade rather than only one story of the building.
- (2) Blank wall limitations: the maximum area on a facade permitted to be windowless.
- B. Entrance. Required entrance locations and treatments.
- (1) Location: location of the primary, functioning, public entrance of the principal building, noted by facade.
 - (2) Entrance treatment: the entrance treatments required on street-facing facades. Entrance treatment standards apply to the entire ground story of all front facades, and corner side facades when facing a primary street.
 - (a) Storefront. Storefronts are a highly transparent ground story treatment typically used as display areas for retail and other commercial uses. Refer to Figure 5.5-2, Storefront Entrance Type.



Figure 5.5-2. Storefront Entrance Type

- [1] Transparency. Minimum transparency is 70%, measured between two and eight feet above the grade of the sidewalk. Refer to Figure 5.5-1, Measuring Transparency: Ground Floor, Upper Floor, and Full Facade.
 - [2] Elevation. Storefronts shall be located no more than one foot above the sidewalk.
 - [3] Recess. Entrances may be recessed up to eight feet.
 - [4] Building entrance. The primary building entrance shall be located off the storefront.
 - [5] Interior access. Additional entrances to access uses in the upper stories or rear of the ground floor are permitted without having to adhere to the above requirements.
- (b) Stoop. Refer to Figure 5.5-3, Stoop.

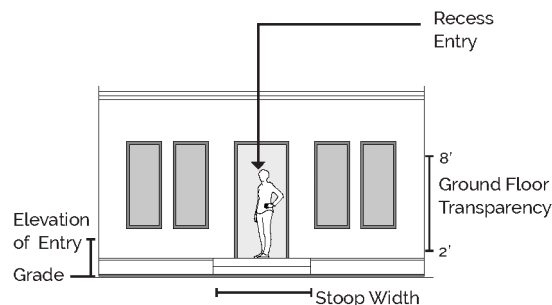


Figure 5.5-3. Stoop

- [1] Transparency. Minimum transparency is 50%, measured between two and eight feet above the grade of the sidewalk. Refer to Figure 5.5-1, Measuring Transparency: Ground Floor, Upper Floor, and Full Facade.
- [2] Elevation. Stoops shall not be elevated more than three feet six inches above the sidewalk, except with a visible

basement.

- [3] Stoop size. Stoops shall be a minimum of three feet deep and six feet wide.
 - [4] Recess. Entrances may be recessed up to five feet.
 - [5] Building entrance. Entrances shall be located off the stoop.
 - [6] Interior access. Additional entrances to access uses in the upper stories or rear of the ground floor are permitted without having to adhere to the above requirements.
- (c) Arcade. An arcade is a covered pedestrian walkway within the recess of a ground story. Refer to Figure 5.5-4, Arcade.

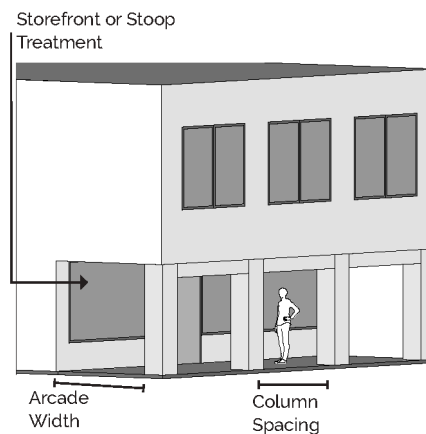


Figure 5.5-4. Arcade

- [1] Interior treatment. Arcades must be used in conjunction with storefront or stoop treatment.
 - [2] Arcade width. An open air public walkway must be a minimum of six feet.
 - [3] Column spacing. Columns shall be spaced between 10 and 12 feet on center.
 - [4] Arcade opening. The opening shall not be flush with the interior arcade ceiling and may be arched or straight.
- (d) Porch entrance type. A porch is a raised, roofed platform. Porches can be fully enclosed. Refer to Figure 5.5-5, Porch Entrance Type.

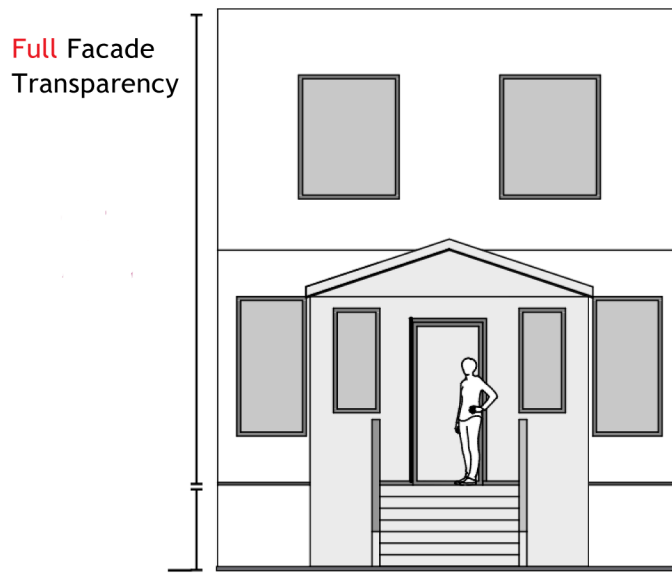


Figure 5.5-5. Porch Entrance Type

- [1] Transparency. Per lot type, unless the porch is fully enclosed, in which case a minimum of 40% is applied. Refer to Figure 5.5-1, Measuring Transparency: Ground Floor, Upper Floor, and Full Facade.
 - [2] Elevation. Porches shall be located a maximum of four feet six inches above the sidewalk or average grade measured at the front facade.
 - [3] Height. A porch may be up to two stories in height to provide a balcony for the second story.
 - [4] Building entrance. The primary building entrance shall be located off the porch.
- (3) Entrances on street-facing facades: the maximum spacing between entrances on a street-facing building facade.
 - (4) Entrances on other facades. An entrance is required on side and rear facades when fronting parking areas.
- C. Roof type. All roof styles are permitted in the lot types, provided that a defined roof style is utilized; special roof types, tower and spire, are permitted per lot type.
- (1) Tower. A tower is a rectilinear or cylindrical, vertical building element. Refer to Figure 5.5-6, Tower.

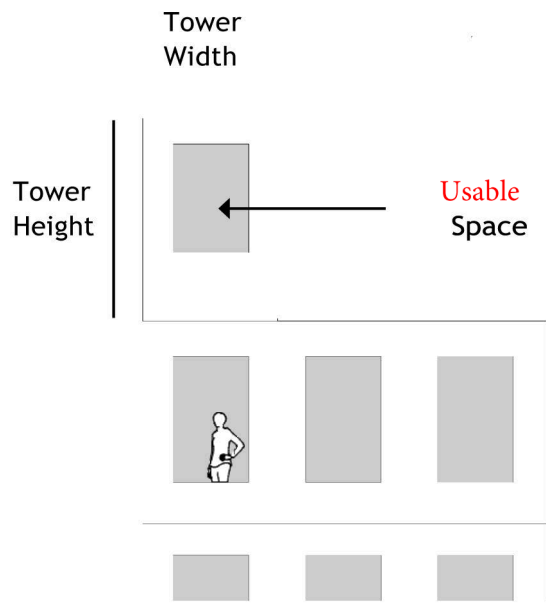


Figure 5.5-6. Tower

- (a) Height. The maximum tower height is equal to the height of one upper story floor of the building onto which the tower is applied.
 - (b) Width. The maximum tower width along all facades is $\frac{1}{3}$ the width of the building or 30 feet, whichever is less.
 - (c) Use. Towers may be utilized by the same uses allowed in the upper stories of the front type in which it is located.
- (2) Spire. A spire is a long, tapering design element attached to a tower or the roof of a building. Refer to Figure 5.5-7, Spire.

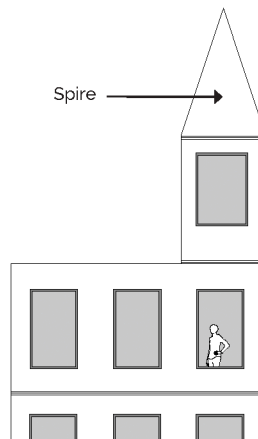


Figure 5.5-7. Spire

- (a) Use. The spire may not contain an occupied space.

Forecourt Frontage: A frontage option where the facade of the building that faces the front street is at or near the right-of-way line and a small percentage of the facade is set back, creating a small courtyard space. The courtyard area is not covered. Forecourts used in conjunction with Mixed-Use Building Types shall have a storefront where the forecourt and courtyard space shall be used as an additional shopping space or restaurant seating area.

Form Based Code Area: The area on the City of Muskegon Zoning Map (located in Article III, Section 300 of the City Zoning Ordinance) that is designated as a Form Based Code District. Lots or parcels located in the Form Based Code Area are regulated by the Muskegon Form Based Code.

Front Street: The property lines of a parcel that are along the street of address for the parcel or building. Refer also to side street. The waterfront is considered an additional front street in instances where buildings face the waterfront and a street of address.

Frontage Type: The privately owned area between the frontage line and the building façade. Private frontages are applied to Building Types to ensure that the building adequately engages the street, sidewalk and public realm. Private frontages are specific to Building Types and are defined in subsections for each specific Building Type in Section 2006. Each Building Type has many options for frontage types and therefore the specific project requirements will determine what frontage may be used. Selection of frontages are at the discretion of the land owner or development team.

G

DEFINITIONS "G"

Glass, Clear: Glass having a Visual Light Transmittance (VLT) of seventy (70) percent minimum. Heavily tinted or reflective glass shall not be considered clear.

Green Infrastructure: Infrastructure that provides and promotes a network of natural systems within the urban environment. Green infrastructure manages storm water, mitigates heat island effect, provides small green spaces, improves air quality, and provides habitats for birds and animals. Green infrastructure includes trees, storm water planters (including inlet/outlet and overflow mechanisms), rain gardens, bioswales, surface and subsurface storm water storage structures, pervious pavements, and water efficient irrigation. Green infrastructure, when used, shall be placed in The Sidewalk Furnishing and Tree Zone of the Public Realm Types.

Ground Cover: Grass, vegetative cover, or other living landscape.

Ground Sign: A free-standing permanent sign that is mounted directly on the ground or ground level foundation and is often used to mark a place of significance or the entrance to a location.

H

DEFINITIONS "H"

Height, Building: The number of stories permitted by the Context Area (Section 2005), with the actual measurement of individual story height determined according to specific Building Types in Section 2006. Measurement of story height is the distance between the floor and ceiling of that story.

Horizontal Expression Band: An architectural element on buildings that acts as an upper termination for the storefront frontage. Horizontal Expression Lines extend the entire width of the building facade above a storefront and may contain signs. Synonymous with Sign Band.

I

DEFINITIONS "I"

Illuminated Sign: A sign that is illuminated by an internal or external light fixture.

Internally Illuminated Sign: A sign that is illuminated by an internal light fixture.

Impervious Surface: Any hard surfaced, man-made area that does not readily absorb or retain water including but not limited to building roofs, parking and driveway areas, sidewalks and streets.

J

DEFINITIONS "J"

No definitions for this section.

K

DEFINITIONS "K"

No definitions for this section.

- b. *Middle*. The middle area of the building includes upper stories, and is visually defined by the molding or cornice that defines the base of the building and a cornice or eaves line that defines the cap of the building. There are no specific requirements for the middle of the building. Building material transitions may take place between the base and the middle portions of the façade, or within the middle portion of the façade for buildings 4 stories or greater where the design intent is to create a more substantial appearing base.
 - c. *Cap*. Pitched roofs shall be sloped no less than 5:12, except that roofs for porches and attached sheds may be no less than 2:12. Flat roofs shall be enclosed by parapets a minimum of 30 inches high, or higher if required to conceal mechanical equipment from view from the front street or from any single family residential property. Flat roofs shall include a cornice to define the top of the building.
2. Building Transparency.
 - a. *Minimum First Floor Transparency*. The minimum transparency on the first floor front façade shall be 65% for buildings with nonresidential first floor uses and 40% for buildings with residential first floor uses.
 - b. *Maximum Upper Floor Transparency*. The maximum transparency on upper stories shall not exceed 60%.
 - c. *Proportion of Openings*. Building openings, including doors and windows, shall be square or vertical in proportion except on the first floor front façade, where windows may have a horizontal proportion. Individual windows with a vertical proportion may be grouped together even if the group of windows will have an overall horizontal proportion.

Horizontal window bands may be approved as a modification following the procedures of [Article 6, Chapter 6](#) provided that mullions or framing elements are included that create a vertical proportion for panes of glass within the horizontal band.
 - d. *Ground Floor Glass*. All ground floor windows shall use transparent, non-reflective, non-tinted glass.
3. Ground Story Design.
 - a. *Entrances*. All buildings shall have their principal entrance on the front façade of the building. Entrances may be recessed up to 5 feet from the front building wall of the building.
 - b. *Ground Story Height*. A minimum clear height of 12 feet shall be provided for the ground story in a streetfront building.
 - c. *Bulkhead Below First Floor Windows*. First floor windows may not extend down to grade level. A bulkhead or kickplate with a minimum height of one foot shall be provided below ground story windows. The bulkhead should use primary materials, and the chosen material should appear heavier visually than the material used for the walls.
4. Alignment of Building Features. Windowsills, moldings, and cornices shall align with those of adjacent buildings to create a consistent design pattern. The bottom and top line defining the edge of the windows (the “windowsill alignment”) shall not vary more than two feet from the alignment of surrounding buildings. If the adjoining buildings have windowsill alignment that varies by more than two feet from one another, the proposed building shall align with one of the adjoining buildings.
5. Buildings wider than 75 feet shall incorporate vertical elements in the principal façade to mimic smaller-scale development.
6. Encroachments.
 - a. *Balconies* on upper stories may project up to 6 feet from the face of the building, and may encroach into setback areas.
 - b. *Awnings* on the ground story may encroach up to 6 feet from the face of the building, and may encroach into setback areas. All awnings shall have a minimum of 8 feet clear space between the sidewalk and the bottom of the awning or any support structure, and shall not exceed a height of 12 feet to the highest point of the canopy. Awnings may not be internally illuminated.
7. Mechanical Equipment and Service Areas.

4. Compliance with LEED-NC Standards. LEED certification for new buildings is encouraged. Absent certification for the entire building, compliance with the following building material credits is encouraged: MR 4.1 or MR 4.2, MR 5.1 or MR 5.2, MR 6, and MR 7.

C. **Façade Transparency.**

1. Window glazing shall be clear with a visible light transmittance of not less than 65% (0.65) on ground floors, and 45% (0.45) on upper floors, per glass manufacturer specifications.
2. Ground Floor Non-Residential Uses shall maintain a minimum of 70% façade transparency, measured between 2 feet and 8 feet above grade.
3. Upper Floor Non-Residential Uses shall maintain a minimum of 30% façade transparency on street-side facades measured from floor to floor.
4. Ground Floor Residential Uses shall maintain a minimum of 25% façade transparency measured from exterior grade level to the second story floor level.
5. Upper Floor Residential Uses shall maintain a minimum of 20% façade transparency measured from floor to floor

Section 138-6.305 **Parking and Loading**

The following parking requirements are applicable in the BD, Brooklands district and replace similar requirements set forth in [Article 11](#). Any requirement of [Article 11](#) that is not superseded by one of the following parking requirements shall remain in effect in the district.

A. **Minimum Parking Required.**

1. Residential.
 - a. 0.75 spaces per studio dwelling unit
 - b. 1 space per dwelling unit with 1 bedroom
 - c. 1.5 spaces per dwelling unit with 2 or more bedrooms
 - d. 1 visitor space shall be provided for every 3 units
2. 1 parking space per 400 square feet of nonresidential building space.

- B. **Maximum Parking Permitted.** The maximum surface parking requirement shall be 200% of the minimum parking requirement. The maximum parking requirement may be modified by the reviewing authority if the applicant can submit evidence that additional parking will be required to accommodate maximum parking demand on a typical day. Parking spaces in parking garages are exempt from the maximum parking standard.

- C. **On-Street Parking.** Shall be counted toward the minimum parking requirement. On-street spaces that have at least 50% of the parking stall length fronting the site shall be counted.

- D. **Public Parking.** The minimum parking requirement for nonresidential building space only may be reduced by 20% if a public parking lot is located within 500 feet of the nonresidential use, as measured from property line to property line.

- E. The Planning Commission may further modify the numerical requirements for off-street parking in accordance with [Section 138-11.202](#).

Township Center District (Continued) 3.1.22

iii. Building massing.

- a. Building massing shall be varied to create a logical hierarchy of building forms; to break up long expanses of facade; to create shade and shadow; and to create “human scale”.
- b. At least one (1) pedestrian pass-through, a minimum of ten (10) feet wide, from the front of the building to the back shall be provided every two hundred (200) feet of building width. The pass-through may be covered or uncovered. If covered, the pass-through shall be lit at minimum site lighting standards indicated in Section 5.6. If a building is placed adjacent to the rear yard and a pass-through would not connect the front of the building with a parking lot, pedestrian area, place of interest, or similar feature, and alternative architectural elements are proposed that have the effect of breaking up the building mass, a pass-through is not required. The display of goods for sale may be permitted in the pass-through, provided that such goods are stored within the business when the business is closed and a five (5) foot minimum pedestrian through-way is maintained. A pass-through shall not be used for storage.

iv. Building materials.

- a. Primary materials. Buildings shall mainly be comprised of high quality building materials such as brick, stone, cultured stone, decorative wood, integrally colored concrete masonry units (that are similar in appearance to clay brick units), decorative block (e.g. split- or smooth-faced), decorative fiber-reinforced cement siding (such as Hardie board or plank), decorative metal panels, tile, decorative glass, and the like, as determined to be similar by the approving body. Materials shall be left in their natural state and shall not be painted or otherwise modified, with the exception of siding, stucco, or other similar materials. Clear or lightly tinted glass (with a final visible light transmission (VLT) value of not less than seventy five (75) percent) is required on the ground floor to encourage pedestrian traffic.

Materials dissimilar to those described above may be permitted when incorporating other characteristics such as scale, form, architectural detailing and color to make the building compatible with the area.

- b. Secondary materials. Individual “corporate image” architectural design elements and colors shall only be incorporated as secondary elements to the development and not as the dominant element. Such elements shall be consistent and blend with the larger development area. Materials requiring low maintenance are recommended over high maintenance materials. For instance, materials with integral color are generally recommended over materials that require painting. Non-durable materials such as EIFS shall only be permitted above the first floor and only as an accent material, not to exceed 20% of the building façade.
- v. Service and mechanical areas. Shared trash and recycling containers and compactors are encouraged to reduce the amount of site dedicated to trash service. All service and mechanical areas shall be designed as architectural features of the building and entirely screened from view. Screening shall be equal in height to the top of the trash and recycling containers. In no instance shall the containers or screening exceed eight (8) feet in height. Refer to Section 5.16 for additional requirements.

H. LIGHTING

- i. Site lighting in the Township Center district shall comply with the Township Center Lighting Standard that is on file with the Township Planning Department. For additional lighting requirements, refer to Section 5.6.
- ii. Building lighting shall be architecturally integrated with the building style, material, and color.
 - a. Exterior building lighting that utilizes exposed neon tubing or similar outline lighting device is prohibited.
 - b. Building-mounted lighting shall be fully shielded and directed downward to prevent off-site glare. Fixed (not adjustable) downward directed fixtures shall be used.

1 Purpose and Introduction

2 Definitions

3 Zoning Districts

4 Use Standards

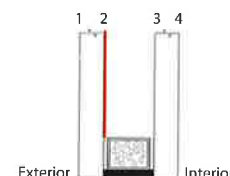
5 Site Standards

6 Development Procedures

7 Admin and Enforcement



Insulating Glass Data



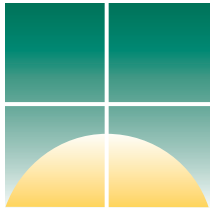
Product	Outboard - Inboard Substrate	Appearance	Transmittance			Reflectance			U-Value Winter Nighttime		Relative Heat Gain	Solar Heat Gain Co-efficient	Light to Solar Gain (LSG)
			Visible Light %	Ultra-violet %	Solar Energy %	Visible Light Out %	Visible Light In %	Solar Energy Out %					
									Air	Argon			
SuperNeutral			Coating #2 Surface - unless noted (#3)									6 mm/12.7 mm a.s./6 mm	
SNX 62/27	UltraClear - UltraClear	Ultra Clear	64	8	24	11	13	51	0.29	0.24	65	0.27	2.40
	Clear - Clear	Clear	62	6	23	11	12	39	0.29	0.24	65	0.27	2.31
	Green - Clear	Green	52	3	18	9	12	10	0.29	0.24	59	0.24	2.13
	CrystalGray - Clear	Light Gray	44	3	16	8	11	19	0.29	0.24	54	0.22	1.98
	Gray - Clear	Gray	31	3	12	6	11	19	0.29	0.24	45	0.18	1.71
SNX 51/23	CrystalBlue - Clear	Blue	40	4	15	7	11	25	0.29	0.24	51	0.21	1.91
	UltraClear - UltraClear	Light Blue	53	14	20	14	14	46	0.29	0.24	57	0.23	2.28
	Clear - Clear	Light Blue	51	11	19	14	14	36	0.29	0.24	57	0.23	2.19
	Green - Clear	Blue-Green	43	5	15	11	13	10	0.29	0.24	52	0.22	1.99
	CrystalGray - Clear	Light Gray	36	6	14	9	13	18	0.29	0.24	48	0.20	1.85
SN 68	Gray - Clear	Gray	26	5	10	7	13	17	0.29	0.24	41	0.16	1.57
	CrystalBlue - Clear	Blue	33	7	13	9	13	23	0.29	0.24	46	0.19	1.78
	UltraClear - UltraClear	Ultra Clear	71	40	37	11	13	43	0.29	0.25	94	0.39	1.80
	Clear - Clear	Clear	68	30	33	11	12	33	0.29	0.25	90	0.38	1.80
	Green - Clear	Green	57	13	23	9	12	9	0.29	0.25	72	0.30	1.92
SN 54	CrystalGray - Clear	Light Gray	48	17	23	8	11	16	0.29	0.25	71	0.30	1.64
	Gray - Clear	Gray	34	13	18	6	11	16	0.29	0.25	61	0.25	1.37
	CrystalBlue - Clear	Blue	44	19	23	7	11	21	0.29	0.25	70	0.29	1.51
	UltraClear - UltraClear	Ultra Clear	56	22	26	13	19	44	0.29	0.24	69	0.29	1.96
	Clear - Clear	Clear	54	16	24	13	18	35	0.29	0.24	68	0.28	1.92
SNR 43	Green - Clear	Green	45	7	17	11	18	10	0.29	0.24	58	0.24	1.89
	CrystalGray - Clear	Light Gray	38	9	17	9	18	17	0.29	0.24	56	0.23	1.67
	Gray - Clear	Gray	27	7	13	7	17	16	0.29	0.24	48	0.19	1.40
	CrystalBlue - Clear	Blue	35	10	16	8	17	22	0.29	0.24	54	0.22	1.57
	UltraClear - UltraClear	Light Silver	45	24	21	28	14	54	0.29	0.24	56	0.23	1.96
High Performance	Clear - Clear	Light Silver	43	17	19	28	14	43	0.29	0.24	56	0.23	1.89
	Green - Clear	Green	36	8	14	21	14	14	0.29	0.24	50	0.20	1.78
	CrystalGray - Clear	Silver Gray	31	9	13	16	14	21	0.29	0.24	47	0.19	1.59
	Gray - Clear	Silver Gray	22	8	10	10	13	19	0.29	0.24	41	0.17	1.31
	CrystalBlue - Clear	Silver Blue	28	11	13	14	13	26	0.29	0.24	46	0.19	1.50
Neutral 78/65(#3)	UltraClear - UltraClear	Ultra Clear	81	54	66	13	13	23	0.31	0.27	171	0.72	1.12
	Clear - Clear	Clear	78	39	55	13	13	19	0.31	0.27	156	0.66	1.18
	UltraClear - UltraClear	Ultra Clear	81	54	66	13	13	22	0.31	0.27	160	0.68	1.19
	Clear - Clear	Clear	78	39	55	13	13	18	0.31	0.27	147	0.62	1.26
	Clear - Clear	Neutral Blue	50	31	32	16	11	20	0.33	0.29	95	0.39	1.27
Neutral 78/65	Green - Clear	Green	42	13	20	13	10	9	0.33	0.29	68	0.28	1.50
	Clear - Clear	Neutral Gray	40	27	25	21	12	23	0.33	0.29	78	0.32	1.25
	Green - Clear	Green	34	11	16	16	12	10	0.33	0.29	59	0.24	1.40
	UltraClear - UltraClear	Light Silver	52	43	33	28	19	41	0.30	0.25	86	0.36	1.45
	Clear - Clear	Light Silver	50	30	29	27	19	34	0.30	0.25	82	0.34	1.48
Neutral 50	Green - Clear	Green	42	12	18	21	18	13	0.30	0.25	61	0.25	1.66
	CrystalGray - Clear	Silver Gray	35	16	20	16	18	18	0.30	0.25	64	0.26	1.34
	Gray - Clear	Silver Gray	25	12	16	10	18	16	0.30	0.25	57	0.23	1.08
	CrystalBlue - Clear	Silver Blue	32	17	20	14	18	21	0.30	0.25	65	0.27	1.20
	UltraClear - UltraClear	Light Silver	45	38	30	30	15	40	0.30	0.26	80	0.33	1.34
AG 50	Clear - Clear	Light Silver	43	26	26	30	15	33	0.30	0.26	76	0.31	1.37
	Green - Clear	Green	36	11	16	22	15	13	0.30	0.26	57	0.23	1.55
	CrystalGray - Clear	Silver Gray	30	14	18	17	14	18	0.30	0.26	60	0.25	1.23
	Gray - Clear	Silver Gray	21	11	15	11	14	15	0.30	0.26	54	0.22	0.98
	CrystalBlue - Clear	Silver Blue	28	15	18	15	14	20	0.30	0.26	61	0.25	1.10
Solar Control													
Silver 20	Clear - Clear	Silver	18	16	14	30	30	26	0.37	0.33	56	0.22	0.81
	Green - Clear	Green	15	7	8	23	30	12	0.37	0.33	46	0.18	0.83

- The performance values shown are nominal and subject to variations due to manufacturing tolerances.
- Guardian performance data are calculated for center-of-glass only (no spacer or framing) in accordance with the LBNL Window 7 program.
- Relative Heat Gain, Solar Heat Gain Coefficient and/or LSG may change slightly when using argon gas fill.
- A slight shift in visible light reflectance or transmission may be noticed after heat-treatment.
- Guardian reserves the right to change product performance characteristics without notice or obligation.

City Glazing/Transparency Requirements

In the table shown below are the first floor facade transparency and tinting requirements (also referred to as “glazing”) for various Michigan municipalities as set forth in their respective zoning ordinances.

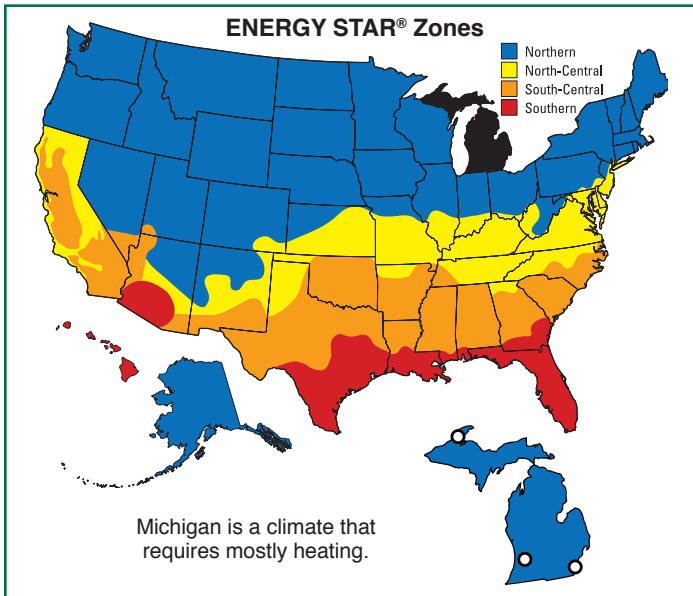
First Floor Transparency and Tinting Requirements by City		
Municipality	Transparency Requirement	Tinting Requirement
City Grand Rapids	Minimum of 60% transparency measured between 2 ft. and 8 ft. on storefront/ground floor facade	Minimum of 70% visible light transmission (VLT)
City of Traverse City	70-90% of total storefront/ground floor facade	Minimum of 70% VLT
City of Ferndale	50% of building facade at street level shall consist of windows	No tinting
City of Muskegon	60 – 80% transparency of first floor storefront/ground floor facade	Minimum of 70% VLT
West Bloomfield Township	N/A	Minimum of 75% VLT
Village of Douglas	Minimum of 60% transparency of storefront/ground level facade	Minimum of 70% VLT
City of Wyoming	60-80% transparency of storefront/ground level facade	Minimum of 70% VLT
City of Pontiac	50% minimum of storefront/ground level facade	No tinting



Selecting Energy Efficient Replacement Windows in Michigan

www.efficientwindows.org

January 2016



U-factor	SHGC	Air Leakage
Windows: $U \leq 0.27$	Windows: Any	Windows: $AL \leq 0.30$
Windows: $U = 0.28$	Windows: $SHGC \geq 0.32$	Skylights: $AL \leq 0.30$
Windows: $U = 0.29$	Windows: $SHGC \geq 0.37$	
Windows: $U = 0.30$	Windows: $SHGC \geq 0.42$	
Skylights: $U \leq 0.50$	Skylights: Any	

For superior energy performance, select windows with a U-factor of 0.25 or less. If air conditioning is not a concern, look for a higher Solar Heat Gain Coefficient (SHGC) of 0.35–0.60 so winter solar heat can help offset the heating energy need. If cooling is a significant concern and no shading is available, select windows with a SHGC less than 0.32.

U-factor	SHGC	Air Leakage
Windows: $U \leq 0.30$	Windows: $SHGC \leq 0.40$	Windows: $AL \leq 0.30$
Skylights: $U \leq 0.53$	Skylights: $SHGC \leq 0.35$	Skylights: $AL \leq 0.30$

The larger your heating bill, the more important a low U-factor becomes. For superior energy performance, select windows with a U-factor of 0.25 or less. A low SHGC value reduces summer cooling demand, but also reduces free winter solar heat gain. If you have significant air conditioning costs or summer overheating issues, look for SHGC values of 0.25 or less.

U-factor	SHGC	Air Leakage
Windows: $U \leq 0.30$	Windows: $SHGC \leq 0.25$	Windows: $AL \leq 0.30$
Skylights: $U \leq 0.53$	Skylights: $SHGC \leq 0.28$	Skylights: $AL \leq 0.30$

A low U-factor is useful during cold days when heating is needed and is also helpful during hot days when it is important to keep the heat out. Windows with low SHGC values help reduce summer cooling demand. If you have significant air conditioning costs or summer overheating issues, look for SHGC values of 0.25 or less.

U-factor	SHGC	Air Leakage
Windows: $U \leq 0.40$	Windows: $SHGC \leq 0.25$	Windows: $AL \leq 0.30$
Skylights: $U \leq 0.60$	Skylights: $SHGC \leq 0.28$	Skylights: $AL \leq 0.30$

A low SHGC is the important window property in warm to hot climates. For superior energy performance, select windows with a SHGC of 0.25 or less. A low U-factor is useful during cold days when heating is needed and is also helpful during hot days when it is important to keep the heat out.

1. Meet the Energy Code & Look for the ENERGY STAR®

Windows must comply with your local energy code. Windows that are ENERGY STAR certified often meet or exceed energy code requirements. To verify if specific window energy properties comply with the local code requirements, look for the NFRC label.



2. Look for Efficient Properties on the NFRC Label

The National Fenestration Rating Council (NFRC) label is needed for verification of energy code compliance. The NFRC label displays whole-window energy properties and appears on all fenestration products which are part of the ENERGY STAR program (www.nfrc.org).

World's Best Window Co. Millennium 2000® Double-Pane Vinyl Frame Product Type: Vertical Slider	
ENERGY PERFORMANCE RATINGS	
U-Factor (U.S. I-P)	Solar Heat Gain Coefficient
0.27	0.25
ADDITIONAL PERFORMANCE RATINGS	
Visible Transmittance	Air Leakage (U.S. I-P)
0.51	≤0.30
Condensation Resistance	
51	—

3. Compare Annual Energy Costs for a Typical House

Use computer simulations for a typical house to compare the annual energy performance of different window types. A comparison of the performance of a set of windows for this climate begins on Page 3 or use the Window Selection Tool on the EWC web site or the Window Selection Tool Mobile App (www.efficientwindows.org).



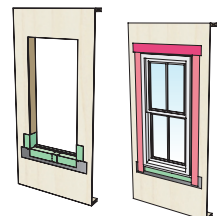
4. Customize Energy Use for a Specific House

A simulation program, such as RESFEN, lets you compare window options by calculating performance based on utility rates for your climate, house design, and window design options (windows.lbl.gov/software).



5. Ensure Proper Installation

Proper window and skylight installation is necessary for optimal performance, to avoid air and water leakage. Always follow manufacturers' installation guidelines and use trained professionals for window and skylight installation.





Benefits of High Performance Windows

Heating & Cooling Season Savings

In climates with a significant heating season, standard windows can represent a major source of unwanted heat loss. Low-E coatings, gas fills, and insulating spacers and frames result in a lower U-factor, meaning less winter heat loss. In climates that mainly require cooling, non-energy efficient windows can be a major source of unwanted heat gain. Low-solar-gain low-E coatings can reduce solar heat gain while still providing comfort, daylight and views.

Improved Daylight and View

Daylight and view are two fundamental attributes of a window. Low-E coatings can significantly reduce solar heat gain with a minimal loss of light and view.

Improved Comfort

High performance windows can make a home more comfortable. Cold glass can create uncomfortable drafts as air next to the window is cooled and drops to the floor. Windows with low U-factors will result in higher interior window temperatures in the heating seasons and thus greater comfort. Also, during cooling seasons, strong direct sunlight can create overheating and discomfort. Windows with a low SHGC will reduce the solar radiation (heat) coming through the glass.

Less Condensation

High performance windows with warm edge technology and insulating frames have a warm interior surface so that condensation on interior surfaces is significantly reduced or eliminated.

Reduced Fading

Coatings on glass or plastic films within the window or skylight assembly can significantly reduce the ultraviolet (UV) and other solar radiation which causes fading of fabrics and furnishings.

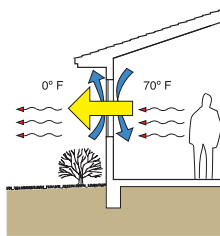
Lower Mechanical Equipment Costs

Efficient windows reduce annual heating and cooling bills as well as peak heating and cooling loads. Peak loads determine the size of the home's furnace, heat pump, air conditioner, and fans. Reducing peak load may allow homeowners to install a smaller heating or cooling system.

A Quieter Home

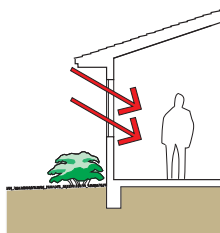
High performance windows provide reduced sound transmission, resulting in an Indoor-Outdoor Transmission Class (IOTC) rating that is often 5–10 points below a standard window.

Efficient Window Properties



U-Factor

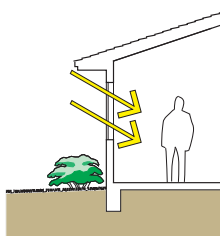
The rate of heat loss is indicated in terms of the U-factor (U-value). This rate of non-solar heat loss or gain through a whole window assembly is measured in Btu/hr-sf-°F. The lower the U-factor, the greater a window's resistance to heat flow and the better its insulating value.



Solar Heat Gain Coefficient (SHGC)

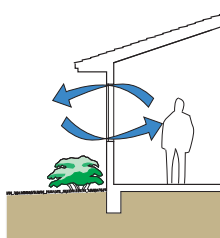
The SHGC is the fraction of incident solar radiation admitted through a window. SHGC is expressed as a number between 0 and 1. The lower a window's solar heat gain coefficient, the less solar heat it transmits.

Whether a higher or lower SHGC is desirable depends on the climate, orientation, shading conditions, and other factors.



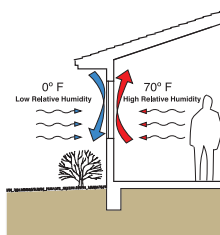
Visible Transmittance (VT)

The VT is an optical property that indicates the amount of visible light transmitted. VT is a whole window rating and includes the impact of the frame which does not transmit any visible light. While VT theoretically varies between 0 and 1, most values are between 0.3 and 0.7. The higher the VT, the more light is transmitted.



Air Leakage (AL)

AL is expressed in cubic feet of air passing through a square foot of window area (cfm/sf). The lower the AL, the less air will pass through cracks in the assembly. AL is very important, but not as important as U-factor and SHGC.



Condensation Resistance (CR)

CR measures how well a window resists the formation of condensation on the inside surface. CR is expressed as a number between 1 and 100. The higher the number, the better a product is able to resist condensation. CR is meant to compare products and their potential for condensation formation. CR is an optional rating on the NFRC label.



Comparing Window Performance in Detroit, Michigan

The annual energy performance figures shown here assume a typical existing 1700 sq. ft. single-story house with 15% window-to-floor area. The windows are equally distributed on all four sides of the house and include typical shading (partially deployed interior shades, overhangs, trees and neighboring buildings).



WINDOW SYSTEM							STANDARDS		PERFORMANCE		ENERGY		COMFORT		
ID	Panes	Glass	Frame	U-factor	SHGC	VT	ENERGY STAR	2012 IECC	Annual Energy Cost		Heat	Cool	Total	Winter	Summer Cond.
18	3	HSG Low-E	Non-metal, Improved	≤0.22	0.41-0.60	0.41-0.50	Yes	Yes							
19	3	MSG Low-E	Non-metal, Improved	≤0.22	0.21-0.40	0.41-0.50	Yes	Yes							
15	2	HSG Low-E	Non-metal, Improved	0.23-0.30	0.41-0.60	0.51-0.60	Maybe	Yes							
20	3	LSG Low-E	Non-metal, Improved	≤0.22	≤0.20	≤0.40	Yes	Yes							
16	2	MSG Low-E	Non-metal, Improved	0.23-0.30	0.26-0.40	0.51-0.60	Maybe	Yes							
17	2	LSG Low-E	Non-metal, Improved	0.23-0.30	≤0.25	0.41-0.50	Maybe	Yes							
9	2	HSG Low-E	Metal, Improved	0.41-0.55	0.41-0.60	0.51-0.60	No	No							
10	2	MSG Low-E	Metal, Improved	0.41-0.55	0.26-0.40	0.51-0.60	No	No							
11	2	LSG Low-E	Metal, Improved	0.41-0.55	≤0.25	0.51-0.60	No	No							
4	2	HSG Low-E	Metal	0.56-0.70	>0.60	>0.60	No	No							
5	2	MSG Low-E	Metal	0.56-0.70	0.26-0.40	0.51-0.60	No	No							
6	2	LSG Low-E	Metal	0.56-0.70	≤0.25	0.51-0.60	No	No							
13	2	Clear	Non-metal	0.41-0.55	0.41-0.60	0.51-0.60	No	No							
14	2	Tint	Non-metal	0.41-0.55	0.41-0.60	≤0.40	No	No							
7	2	Clear	Metal, Improved	0.56-0.70	>0.60	>0.60	No	No							
8	2	Tint	Metal, Improved	0.56-0.70	0.41-0.60	0.41-0.50	No	No							
2	2	Clear	Metal	0.71-0.99	>0.60	>0.60	No	No							
3	2	Tint	Metal	0.71-0.99	0.41-0.60	0.51-0.60	No	No							
12	1	Clear	Non-metal	0.71-0.99	>0.60	>0.60	No	No							
1	1	Clear	Metal	≥1.00	>0.60	>0.60	No	No							

\$0 \$300 \$600 \$900 \$1200

worst best

Note: "HSG," "MSG," and "LSG" stand for high-solar-gain, moderate-solar-gain, and low-solar-gain respectively. "Improved" includes warm-edge spacer technology and thermally improved frame. The annual energy performance figures shown here were generated using RESFEN6 provided by Lawrence Berkeley National Laboratory. U-factor and SHGC are for the total window including frame. The costs shown here are annual costs for space heating and space cooling only and thus will be less than total utility bills. Costs for lights, appliances, hot water, cooking, and other uses are not included in these figures. The mechanical system uses a gas furnace for heating and air conditioning for cooling. Natural gas prices used are projections of the average natural gas price for the heating seasons of 2012-2014. Electricity prices used are the average electricity price for the cooling seasons of 2012-2014. All pricing information provided by the Energy Information Administration (www.eia.doe.gov). A simple comfort analysis was performed using EPW weather files for each location to determine how often the winter night and summer day temperatures exceed beyond an acceptable number of hours. The room condition contains a large, west-facing window with a single person facing the window. A large window was used because a large view factor will have a greater impact on comfort. The two extremes of summer day and winter night conditions were only considered. A simple condensation analysis was performed using heating season design temperatures for each location, performance properties of the glazing system, edge performance properties of the framing system, and interior glass temperatures of a glazing system simulated in WINDOW6 to determine if the interior glass temperature falls to a level in which condensation may occur. See the www.efficientwindows.org for more information on all the energy, comfort, and condensations metrics.



Comparing Window Performance in Grand Rapids, Michigan

The annual energy performance figures shown here assume a typical existing 1700 sq. ft. single-story house with 15% window-to-floor area. The windows are equally distributed on all four sides of the house and include typical shading (partially deployed interior shades, overhangs, trees and neighboring buildings).



WINDOW SYSTEM							STANDARDS		PERFORMANCE		ENERGY		COMFORT		
ID	Panes	Glass	Frame	U-factor	SHGC	VT	ENERGY STAR	2012 IECC	Annual Energy Cost		Heat	Cool	Total	Winter	Summer Cond.
18	3	HSG Low-E	Non-metal, Improved	≤0.22	0.41-0.60	0.41-0.50	Yes	Yes							
19	3	MSG Low-E	Non-metal, Improved	≤0.22	0.21-0.40	0.41-0.50	Yes	Yes							
20	3	LSG Low-E	Non-metal, Improved	≤0.22	≤0.20	≤0.40	Yes	Yes							
15	2	HSG Low-E	Non-metal, Improved	0.23-0.30	0.41-0.60	0.51-0.60	Maybe	Yes							
16	2	MSG Low-E	Non-metal, Improved	0.23-0.30	0.26-0.40	0.51-0.60	Maybe	Yes							
17	2	LSG Low-E	Non-metal, Improved	0.23-0.30	≤0.25	0.41-0.50	Maybe	Yes							
9	2	HSG Low-E	Metal, Improved	0.41-0.55	0.41-0.60	0.51-0.60	No	No							
10	2	MSG Low-E	Metal, Improved	0.41-0.55	0.26-0.40	0.51-0.60	No	No							
11	2	LSG Low-E	Metal, Improved	0.41-0.55	≤0.25	0.51-0.60	No	No							
4	2	HSG Low-E	Metal	0.56-0.70	>0.60	>0.60	No	No							
5	2	MSG Low-E	Metal	0.56-0.70	0.26-0.40	0.51-0.60	No	No							
6	2	LSG Low-E	Metal	0.56-0.70	≤0.25	0.51-0.60	No	No							
13	2	Clear	Non-metal	0.41-0.55	0.41-0.60	0.51-0.60	No	No							
14	2	Tint	Non-metal	0.41-0.55	0.41-0.60	≤0.40	No	No							
7	2	Clear	Metal, Improved	0.56-0.70	>0.60	>0.60	No	No							
8	2	Tint	Metal, Improved	0.56-0.70	0.41-0.60	0.41-0.50	No	No							
2	2	Clear	Metal	0.71-0.99	>0.60	>0.60	No	No							
3	2	Tint	Metal	0.71-0.99	0.41-0.60	0.51-0.60	No	No							
12	1	Clear	Non-metal	0.71-0.99	>0.60	>0.60	No	No							
1	1	Clear	Metal	≥1.00	>0.60	>0.60	No	No							

\$0 \$300 \$600 \$900 \$1200

worst best

Note: "HSG," "MSG," and "LSG" stand for high-solar-gain, moderate-solar-gain, and low-solar-gain respectively. "Improved" includes warm-edge spacer technology and thermally improved frame. The annual energy performance figures shown here were generated using RESFEN6 provided by Lawrence Berkeley National Laboratory. U-factor and SHGC are for the total window including frame. The costs shown here are annual costs for space heating and space cooling only and thus will be less than total utility bills. Costs for lights, appliances, hot water, cooking, and other uses are not included in these figures. The mechanical system uses a gas furnace for heating and air conditioning for cooling. Natural gas prices used are projections of the average natural gas price for the heating seasons of 2012-2014. Electricity prices used are the average electricity price for the cooling seasons of 2012-2014. All pricing information provided by the Energy Information Administration (www.eia.doe.gov). A simple comfort analysis was performed using EPW weather files for each location to determine how often the winter night and summer day temperatures exceed beyond an acceptable number of hours. The room condition contains a large, west-facing window with a single person facing the window. A large window was used because a large view factor will have a greater impact on comfort. The two extremes of summer day and winter night conditions were only considered. A simple condensation analysis was performed using heating season design temperatures for each location, performance properties of the glazing system, edge performance properties of the framing system, and interior glass temperatures of a glazing system simulated in WINDOW6 to determine if the interior glass temperature falls to a level in which condensation may occur. See the www.efficientwindows.org for more information on all the energy, comfort, and condensations metrics.



Comparing Window Performance in Houghton, Michigan

The annual energy performance figures shown here assume a typical existing 1700 sq. ft. single-story house with 15% window-to-floor area. The windows are equally distributed on all four sides of the house and include typical shading (partially deployed interior shades, overhangs, trees and neighboring buildings).



WINDOW SYSTEM							STANDARDS		PERFORMANCE	ENERGY		COMFORT			
ID	Panes	Glass	Frame	U-factor	SHGC	VT	ENERGY STAR	2012 IECC	Annual Energy Cost	Heat	Cool	Total	Winter	Summer	Cond.
18	3	HSG Low-E	Non-metal, Improved	≤0.22	0.41-0.60	0.41-0.50	Yes	Yes							
15	2	HSG Low-E	Non-metal, Improved	0.23-0.30	0.41-0.60	0.51-0.60	Maybe	Yes							
19	3	MSG Low-E	Non-metal, Improved	≤0.22	0.21-0.40	0.41-0.50	Yes	Yes							
20	3	LSG Low-E	Non-metal, Improved	≤0.22	≤0.20	≤0.40	Yes	Yes							
16	2	MSG Low-E	Non-metal, Improved	0.23-0.30	0.26-0.40	0.51-0.60	Maybe	Yes							
9	2	HSG Low-E	Metal, Improved	0.41-0.55	0.41-0.60	0.51-0.60	No	No							
17	2	LSG Low-E	Non-metal, Improved	0.23-0.30	≤0.25	0.41-0.50	Maybe	Yes							
10	2	MSG Low-E	Metal, Improved	0.41-0.55	0.26-0.40	0.51-0.60	No	No							
4	2	HSG Low-E	Metal	0.56-0.70	>0.60	>0.60	No	No							
11	2	LSG Low-E	Metal, Improved	0.41-0.55	≤0.25	0.51-0.60	No	No							
5	2	MSG Low-E	Metal	0.56-0.70	0.26-0.40	0.51-0.60	No	No							
6	2	LSG Low-E	Metal	0.56-0.70	≤0.25	0.51-0.60	No	No							
13	2	Clear	Non-metal	0.41-0.55	0.41-0.60	0.51-0.60	No	No							
14	2	Tint	Non-metal	0.41-0.55	0.41-0.60	≤0.40	No	No							
7	2	Clear	Metal, Improved	0.56-0.70	>0.60	>0.60	No	No							
8	2	Tint	Metal, Improved	0.56-0.70	0.41-0.60	0.41-0.50	No	No							
2	2	Clear	Metal	0.71-0.99	>0.60	>0.60	No	No							
3	2	Tint	Metal	0.71-0.99	0.41-0.60	0.51-0.60	No	No							
12	1	Clear	Non-metal	0.71-0.99	>0.60	>0.60	No	No							
1	1	Clear	Metal	≥1.00	>0.60	>0.60	No	No							

\$0 \$300 \$600 \$900 \$1200 \$1500

worst best

Note: "HSG," "MSG," and "LSG" stand for high-solar-gain, moderate-solar-gain, and low-solar-gain respectively. "Improved" includes warm-edge spacer technology and thermally improved frame. The annual energy performance figures shown here were generated using RESFEN6 provided by Lawrence Berkeley National Laboratory. U-factor and SHGC are for the total window including frame. The costs shown here are annual costs for space heating and space cooling only and thus will be less than total utility bills. Costs for lights, appliances, hot water, cooking, and other uses are not included in these figures. The mechanical system uses a gas furnace for heating and air conditioning for cooling. Natural gas prices used are projections of the average natural gas price for the heating seasons of 2012-2014. Electricity prices used are the average electricity price for the cooling seasons of 2012-2014. All pricing information provided by the Energy Information Administration (www.eia.doe.gov). A simple comfort analysis was performed using EPW weather files for each location to determine how often the winter night and summer day temperatures exceed beyond an acceptable number of hours. The room condition contains a large, west-facing window with a single person facing the window. A large window was used because a large view factor will have a greater impact on comfort. The two extremes of summer day and winter night conditions were only considered. A simple condensation analysis was performed using heating season design temperatures for each location, performance properties of the glazing system, edge performance properties of the framing system, and interior glass temperatures of a glazing system simulated in WINDOW6 to determine if the interior glass temperature falls to a level in which condensation may occur. See the www.efficientwindows.org for more information on all the energy, comfort, and condensations metrics.



In 1989 the glazing and fenestration industry self-organized to create the National Fenestration Rating Council (NFRC). Nine years later the Efficient Windows Collaborative (EWC) was formed and since that time, market share for high performance windows has grown from roughly 30% to over 80% in the residential sector. During that growth, the EWC has been at the forefront of educating manufacturers about how to communicate the value of energy efficiency to consumers and providing performance comparisons across generic products. First incorporating NFRC labels and then ENERGY STAR for fenestration labels, the EWC has maintained a clear and consistent message regarding product performance. The purpose of the EWC is to provide unbiased information, outreach, education, and research dissemination to the general public on the energy efficiency, technical, and human considerations that influence window and façade design, selection, and use.

CONNECT WITH US



<https://www.facebook.com/EfficientWindows>



<https://twitter.com/EWCwindows>



<https://www.linkedin.com/groups?home=&gid=4286505&trk>



<https://itunes.apple.com/us/app/window-selection-tool/id911802627?mt=8>

The mission of the Efficient Windows Collaborative is to lead and support — through the use of advanced window, façade and skylight technologies — the transformation of the built environment toward greater energy efficiency.

The Efficient Windows Collaborative is a nonprofit, 501(c)3 organization that partners with window, door, skylight, and component manufacturers, research organizations, federal, state & local government agencies, and others interested in expanding the market for high-efficiency fenestration products.

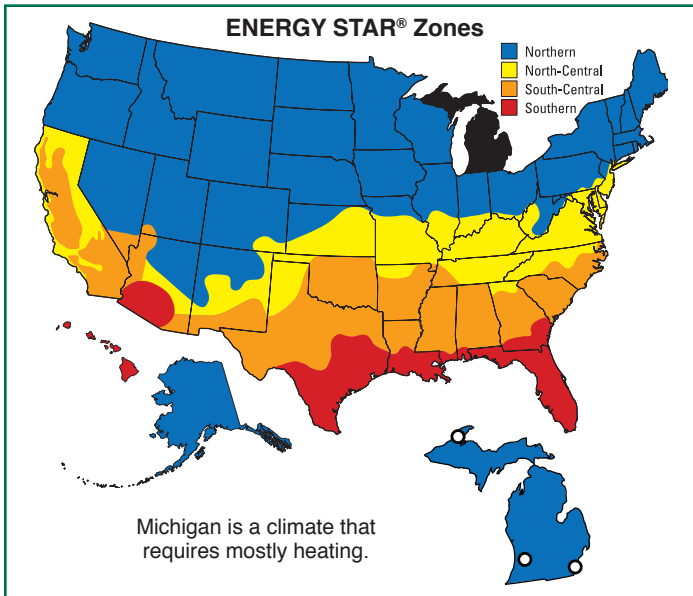




Selecting Energy Efficient New Windows in Michigan

www.efficientwindows.org

January 2016



U-factor	SHGC	Air Leakage
Windows: $U \leq 0.27$ Windows: $U = 0.28$ Windows: $U = 0.29$ Windows: $U = 0.30$ Skylights: $U \leq 0.50$	Windows: Any Windows: $SHGC \geq 0.32$ Windows: $SHGC \geq 0.37$ Windows: $SHGC \geq 0.42$ Skylights: Any	Windows: $AL \leq 0.30$ Skylights: $AL \leq 0.30$

For superior energy performance, select windows with a U-factor of 0.25 or less. If air conditioning is not a concern, look for a higher Solar Heat Gain Coefficient (SHGC) of 0.35–0.60 so winter solar heat can help offset the heating energy need. If cooling is a significant concern and no shading is available, select windows with a SHGC less than 0.32.

U-factor	SHGC	Air Leakage
Windows: $U \leq 0.30$ Skylights: $U \leq 0.53$	Windows: $SHGC \leq 0.40$ Skylights: $SHGC \leq 0.35$	Windows: $AL \leq 0.30$ Skylights: $AL \leq 0.30$

The larger your heating bill, the more important a low U-factor becomes. For superior energy performance, select windows with a U-factor of 0.25 or less. A low SHGC value reduces summer cooling demand, but also reduces free winter solar heat gain. If you have significant air conditioning costs or summer overheating issues, look for SHGC values of 0.25 or less.

U-factor	SHGC	Air Leakage
Windows: $U \leq 0.30$ Skylights: $U \leq 0.53$	Windows: $SHGC \leq 0.25$ Skylights: $SHGC \leq 0.28$	Windows: $AL \leq 0.30$ Skylights: $AL \leq 0.30$

A low U-factor is useful during cold days when heating is needed and is also helpful during hot days when it is important to keep the heat out. Windows with low SHGC values help reduce summer cooling demand. If you have significant air conditioning costs or summer overheating issues, look for SHGC values of 0.25 or less.

U-factor	SHGC	Air Leakage
Windows: $U \leq 0.40$ Skylights: $U \leq 0.60$	Windows: $SHGC \leq 0.25$ Skylights: $SHGC \leq 0.28$	Windows: $AL \leq 0.30$ Skylights: $AL \leq 0.30$

A low SHGC is the important window property in warm to hot climates. For superior energy performance, select windows with a SHGC of 0.25 or less. A low U-factor is useful during cold days when heating is needed and is also helpful during hot days when it is important to keep the heat out.

1. Meet the Energy Code & Look for the ENERGY STAR®

Windows must comply with your local energy code. Windows that are ENERGY STAR certified often meet or exceed energy code requirements. To verify if specific window energy properties comply with the local code requirements, look for the NFRC label.



2. Look for Efficient Properties on the NFRC Label

The National Fenestration Rating Council (NFRC) label is needed for verification of energy code compliance. The NFRC label displays whole-window energy properties and appears on all fenestration products which are part of the ENERGY STAR program (www.nfrc.org).

		World's Best Window Co. Millennium 2000® Double Glazing, Vertical, 1/2" x 6" Product Type: Vertical Slider
ENERGY PERFORMANCE RATINGS		
U-Factor (U.S. I-P)	Solar Heat Gain Coefficient	
0.27	0.25	
ADDITIONAL PERFORMANCE RATINGS		
Visible Transmittance	Air Leakage (U.S. I-P)	
0.51	≤0.30	
Condensation Resistance		
51	—	

3. Compare Annual Energy Costs for a Typical House

Use computer simulations for a typical house to compare the annual energy performance of different window types. A comparison of the performance of a set of windows for this climate begins on Page 3 or use the Window Selection Tool on the EWC web site or the Window Selection Tool Mobile App (www.efficientwindows.org).



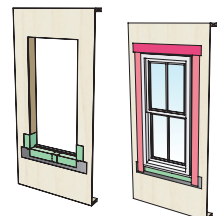
4. Customize Energy Use for a Specific House

A simulation program, such as RESFEN, lets you compare window options by calculating performance based on utility rates for your climate, house design, and window design options (windows.lbl.gov/software).



5. Ensure Proper Installation

Proper window and skylight installation is necessary for optimal performance, to avoid air and water leakage. Always follow manufacturers' installation guidelines and use trained professionals for window and skylight installation.





Benefits of High Performance Windows

Heating & Cooling Season Savings

In climates with a significant heating season, standard windows can represent a major source of unwanted heat loss. Low-E coatings, gas fills, and insulating spacers and frames result in a lower U-factor, meaning less winter heat loss. In climates that mainly require cooling, non-energy efficient windows can be a major source of unwanted heat gain. Low-solar-gain low-E coatings can reduce solar heat gain while still providing comfort, daylight and views.

Improved Daylight and View

Daylight and view are two fundamental attributes of a window. Low-E coatings can significantly reduce solar heat gain with a minimal loss of light and view.

Improved Comfort

High performance windows can make a home more comfortable. Cold glass can create uncomfortable drafts as air next to the window is cooled and drops to the floor. Windows with low U-factors will result in higher interior window temperatures in the heating seasons and thus greater comfort. Also, during cooling seasons, strong direct sunlight can create overheating and discomfort. Windows with a low SHGC will reduce the solar radiation (heat) coming through the glass.

Less Condensation

High performance windows with warm edge technology and insulating frames have a warm interior surface so that condensation on interior surfaces is significantly reduced or eliminated.

Reduced Fading

Coatings on glass or plastic films within the window or skylight assembly can significantly reduce the ultraviolet (UV) and other solar radiation which causes fading of fabrics and furnishings.

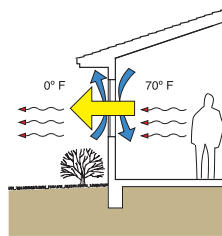
Lower Mechanical Equipment Costs

Efficient windows reduce annual heating and cooling bills as well as peak heating and cooling loads. Peak loads determine the size of the home's furnace, heat pump, air conditioner, and fans. Reducing peak load may allow homeowners to install a smaller heating or cooling system.

A Quieter Home

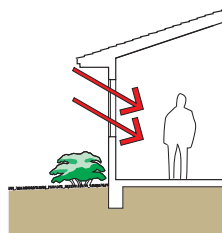
High performance windows provide reduced sound transmission, resulting in an Indoor-Outdoor Transmission Class (IOTC) rating that is often 5–10 points below a standard window.

Efficient Window Properties



U-Factor

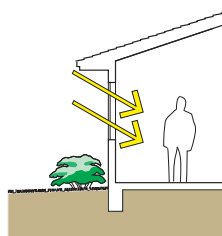
The rate of heat loss is indicated in terms of the U-factor (U-value). This rate of non-solar heat loss or gain through a whole window assembly is measured in Btu/hr-sf-°F. The lower the U-factor, the greater a window's resistance to heat flow and the better its insulating value.



Solar Heat Gain Coefficient (SHGC)

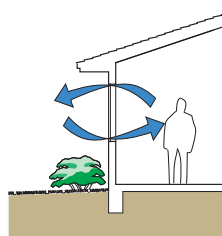
The SHGC is the fraction of incident solar radiation admitted through a window. SHGC is expressed as a number between 0 and 1. The lower a window's solar heat gain coefficient, the less solar heat it transmits.

Whether a higher or lower SHGC is desirable depends on the climate, orientation, shading conditions, and other factors.



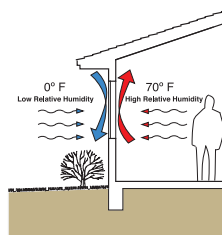
Visible Transmittance (VT)

The VT is an optical property that indicates the amount of visible light transmitted. VT is a whole window rating and includes the impact of the frame which does not transmit any visible light. While VT theoretically varies between 0 and 1, most values are between 0.3 and 0.7. The higher the VT, the more light is transmitted.



Air Leakage (AL)

AL is expressed in cubic feet of air passing through a square foot of window area (cfm/sf). The lower the AL, the less air will pass through cracks in the assembly. AL is very important, but not as important as U-factor and SHGC.



Condensation Resistance (CR)

CR measures how well a window resists the formation of condensation on the inside surface. CR is expressed as a number between 1 and 100. The higher the number, the better a product is able to resist condensation. CR is meant to compare products and their potential for condensation formation. CR is an optional rating on the NFRC label.



Comparing Window Performance in Detroit, Michigan

The annual energy performance figures shown here assume a typical new 1700 sq. ft. single-story house with 15% window-to-floor area. The windows are equally distributed on all four sides of the house and include typical shading (partially deployed interior shades, overhangs, trees and neighboring buildings).



WINDOW SYSTEM							STANDARDS		PERFORMANCE		ENERGY		COMFORT		
ID	Panes	Glass	Frame	U-factor	SHGC	VT	ENERGY STAR	2012 IECC	Annual Energy Cost		Heat	Cool	Total	Winter	Summer Cond.
18	3	HSG Low-E	Non-metal, Improved	≤0.22	0.41-0.60	0.41-0.50	Yes	Yes							
19	3	MSG Low-E	Non-metal, Improved	≤0.22	0.21-0.40	0.41-0.50	Yes	Yes							
20	3	LSG Low-E	Non-metal, Improved	≤0.22	≤0.20	≤0.40	Yes	Yes							
15	2	HSG Low-E	Non-metal, Improved	0.23-0.30	0.41-0.60	0.51-0.60	Maybe	Yes							
16	2	MSG Low-E	Non-metal, Improved	0.23-0.30	0.26-0.40	0.51-0.60	Maybe	Yes							
17	2	LSG Low-E	Non-metal, Improved	0.23-0.30	≤0.25	0.41-0.50	Maybe	Yes							
9	2	HSG Low-E	Metal, Improved	0.41-0.55	0.41-0.60	0.51-0.60	No	No							
10	2	MSG Low-E	Metal, Improved	0.41-0.55	0.26-0.40	0.51-0.60	No	No							
11	2	LSG Low-E	Metal, Improved	0.41-0.55	≤0.25	0.51-0.60	No	No							
4	2	HSG Low-E	Metal	0.56-0.70	>0.60	>0.60	No	No							
5	2	MSG Low-E	Metal	0.56-0.70	0.26-0.40	0.51-0.60	No	No							
6	2	LSG Low-E	Metal	0.56-0.70	≤0.25	0.51-0.60	No	No							
13	2	Clear	Non-metal	0.41-0.55	0.41-0.60	0.51-0.60	No	No							
14	2	Tint	Non-metal	0.41-0.55	0.41-0.60	≤0.40	No	No							
7	2	Clear	Metal, Improved	0.56-0.70	>0.60	>0.60	No	No							
8	2	Tint	Metal, Improved	0.56-0.70	0.41-0.60	0.41-0.50	No	No							
2	2	Clear	Metal	0.71-0.99	>0.60	>0.60	No	No							
3	2	Tint	Metal	0.71-0.99	0.41-0.60	0.51-0.60	No	No							
12	1	Clear	Non-metal	0.71-0.99	>0.60	>0.60	No	No							
1	1	Clear	Metal	≥1.00	>0.60	>0.60	No	No							

\$0 \$200 \$400 \$600 \$800

worst best

Note: "HSG," "MSG," and "LSG" stand for high-solar-gain, moderate-solar-gain, and low-solar-gain respectively. "Improved" includes warm-edge spacer technology and thermally improved frame. The annual energy performance figures shown here were generated using RESFEN6 provided by Lawrence Berkeley National Laboratory. U-factor and SHGC are for the total window including frame. The costs shown here are annual costs for space heating and space cooling only and thus will be less than total utility bills. Costs for lights, appliances, hot water, cooking, and other uses are not included in these figures. The mechanical system uses a gas furnace for heating and air conditioning for cooling. Natural gas prices used are projections of the average natural gas price for the heating seasons of 2012-2014. Electricity prices used are the average electricity price for the cooling seasons of 2012-2014. All pricing information provided by the Energy Information Administration (www.eia.doe.gov). A simple comfort analysis was performed using EPW weather files for each location to determine how often the winter night and summer day temperatures exceed beyond an acceptable number of hours. The room condition contains a large, west-facing window with a single person facing the window. A large window was used because a large view factor will have a greater impact on comfort. The two extremes of summer day and winter night conditions were only considered. A simple condensation analysis was performed using heating season design temperatures for each location, performance properties of the glazing system, edge performance properties of the framing system, and interior glass temperatures of a glazing system simulated in WINDOW6 to determine if the interior glass temperature falls to a level in which condensation may occur. See the www.efficientwindows.org for more information on all the energy, comfort, and condensations metrics.



Comparing Window Performance in Grand Rapids, Michigan

The annual energy performance figures shown here assume a typical new 1700 sq. ft. single-story house with 15% window-to-floor area. The windows are equally distributed on all four sides of the house and include typical shading (partially deployed interior shades, overhangs, trees and neighboring buildings).



WINDOW SYSTEM							STANDARDS		PERFORMANCE		ENERGY		COMFORT		
ID	Panes	Glass	Frame	U-factor	SHGC	VT	ENERGY STAR	2012 IECC	Annual Energy Cost		Heat	Cool	Total	Winter	Summer Cond.
18	3	HSG Low-E	Non-metal, Improved	≤0.22	0.41-0.60	0.41-0.50	Yes	Yes							
19	3	MSG Low-E	Non-metal, Improved	≤0.22	0.21-0.40	0.41-0.50	Yes	Yes							
20	3	LSG Low-E	Non-metal, Improved	≤0.22	≤0.20	≤0.40	Yes	Yes							
15	2	HSG Low-E	Non-metal, Improved	0.23-0.30	0.41-0.60	0.51-0.60	Maybe	Yes							
16	2	MSG Low-E	Non-metal, Improved	0.23-0.30	0.26-0.40	0.51-0.60	Maybe	Yes							
17	2	LSG Low-E	Non-metal, Improved	0.23-0.30	≤0.25	0.41-0.50	Maybe	Yes							
9	2	HSG Low-E	Metal, Improved	0.41-0.55	0.41-0.60	0.51-0.60	No	No							
10	2	MSG Low-E	Metal, Improved	0.41-0.55	0.26-0.40	0.51-0.60	No	No							
11	2	LSG Low-E	Metal, Improved	0.41-0.55	≤0.25	0.51-0.60	No	No							
4	2	HSG Low-E	Metal	0.56-0.70	>0.60	>0.60	No	No							
5	2	MSG Low-E	Metal	0.56-0.70	0.26-0.40	0.51-0.60	No	No							
6	2	LSG Low-E	Metal	0.56-0.70	≤0.25	0.51-0.60	No	No							
13	2	Clear	Non-metal	0.41-0.55	0.41-0.60	0.51-0.60	No	No							
14	2	Tint	Non-metal	0.41-0.55	0.41-0.60	≤0.40	No	No							
7	2	Clear	Metal, Improved	0.56-0.70	>0.60	>0.60	No	No							
8	2	Tint	Metal, Improved	0.56-0.70	0.41-0.60	0.41-0.50	No	No							
2	2	Clear	Metal	0.71-0.99	>0.60	>0.60	No	No							
3	2	Tint	Metal	0.71-0.99	0.41-0.60	0.51-0.60	No	No							
12	1	Clear	Non-metal	0.71-0.99	>0.60	>0.60	No	No							
1	1	Clear	Metal	≥1.00	>0.60	>0.60	No	No							

\$0 \$200 \$400 \$600 \$800

worst best

Note: "HSG," "MSG," and "LSG" stand for high-solar-gain, moderate-solar-gain, and low-solar-gain respectively. "Improved" includes warm-edge spacer technology and thermally improved frame. The annual energy performance figures shown here were generated using RESFEN6 provided by Lawrence Berkeley National Laboratory. U-factor and SHGC are for the total window including frame. The costs shown here are annual costs for space heating and space cooling only and thus will be less than total utility bills. Costs for lights, appliances, hot water, cooking, and other uses are not included in these figures. The mechanical system uses a gas furnace for heating and air conditioning for cooling. Natural gas prices used are projections of the average natural gas price for the heating seasons of 2012-2014. Electricity prices used are the average electricity price for the cooling seasons of 2012-2014. All pricing information provided by the Energy Information Administration (www.eia.doe.gov). A simple comfort analysis was performed using EPW weather files for each location to determine how often the winter night and summer day temperatures exceed beyond an acceptable number of hours. The room condition contains a large, west-facing window with a single person facing the window. A large window was used because a large view factor will have a greater impact on comfort. The two extremes of summer day and winter night conditions were only considered. A simple condensation analysis was performed using heating season design temperatures for each location, performance properties of the glazing system, edge performance properties of the framing system, and interior glass temperatures of a glazing system simulated in WINDOW6 to determine if the interior glass temperature falls to a level in which condensation may occur. See the www.efficientwindows.org for more information on all the energy, comfort, and condensations metrics.



Comparing Window Performance in Houghton, Michigan

The annual energy performance figures shown here assume a typical new 1700 sq. ft. single-story house with 15% window-to-floor area. The windows are equally distributed on all four sides of the house and include typical shading (partially deployed interior shades, overhangs, trees and neighboring buildings).



WINDOW SYSTEM							STANDARDS		PERFORMANCE		ENERGY		COMFORT		
ID	Panes	Glass	Frame	U-factor	SHGC	VT	ENERGY STAR	2012 IECC	Annual Energy Cost		Heat	Cool	Total	Winter	Summer Cond.
18	3	HSG Low-E	Non-metal, Improved	≤0.22	0.41-0.60	0.41-0.50	Yes	Yes							
15	2	HSG Low-E	Non-metal, Improved	0.23-0.30	0.41-0.60	0.51-0.60	Maybe	Yes							
19	3	MSG Low-E	Non-metal, Improved	≤0.22	0.21-0.40	0.41-0.50	Yes	Yes							
20	3	LSG Low-E	Non-metal, Improved	≤0.22	≤0.20	≤0.40	Yes	Yes							
16	2	MSG Low-E	Non-metal, Improved	0.23-0.30	0.26-0.40	0.51-0.60	Maybe	Yes							
17	2	LSG Low-E	Non-metal, Improved	0.23-0.30	≤0.25	0.41-0.50	Maybe	Yes							
9	2	HSG Low-E	Metal, Improved	0.41-0.55	0.41-0.60	0.51-0.60	No	No							
10	2	MSG Low-E	Metal, Improved	0.41-0.55	0.26-0.40	0.51-0.60	No	No							
11	2	LSG Low-E	Metal, Improved	0.41-0.55	≤0.25	0.51-0.60	No	No							
4	2	HSG Low-E	Metal	0.56-0.70	>0.60	>0.60	No	No							
5	2	MSG Low-E	Metal	0.56-0.70	0.26-0.40	0.51-0.60	No	No							
6	2	LSG Low-E	Metal	0.56-0.70	≤0.25	0.51-0.60	No	No							
13	2	Clear	Non-metal	0.41-0.55	0.41-0.60	0.51-0.60	No	No							
14	2	Tint	Non-metal	0.41-0.55	0.41-0.60	≤0.40	No	No							
7	2	Clear	Metal, Improved	0.56-0.70	>0.60	>0.60	No	No							
8	2	Tint	Metal, Improved	0.56-0.70	0.41-0.60	0.41-0.50	No	No							
2	2	Clear	Metal	0.71-0.99	>0.60	>0.60	No	No							
3	2	Tint	Metal	0.71-0.99	0.41-0.60	0.51-0.60	No	No							
12	1	Clear	Non-metal	0.71-0.99	>0.60	>0.60	No	No							
1	1	Clear	Metal	≥1.00	>0.60	>0.60	No	No							

\$0 \$200 \$400 \$600 \$800

worst best

Note: "HSG," "MSG," and "LSG" stand for high-solar-gain, moderate-solar-gain, and low-solar-gain respectively. "Improved" includes warm-edge spacer technology and thermally improved frame. The annual energy performance figures shown here were generated using RESFEN6 provided by Lawrence Berkeley National Laboratory. U-factor and SHGC are for the total window including frame. The costs shown here are annual costs for space heating and space cooling only and thus will be less than total utility bills. Costs for lights, appliances, hot water, cooking, and other uses are not included in these figures. The mechanical system uses a gas furnace for heating and air conditioning for cooling. Natural gas prices used are projections of the average natural gas price for the heating seasons of 2012-2014. Electricity prices used are the average electricity price for the cooling seasons of 2012-2014. All pricing information provided by the Energy Information Administration (www.eia.doe.gov). A simple comfort analysis was performed using EPW weather files for each location to determine how often the winter night and summer day temperatures exceed beyond an acceptable number of hours. The room condition contains a large, west-facing window with a single person facing the window. A large window was used because a large view factor will have a greater impact on comfort. The two extremes of summer day and winter night conditions were only considered. A simple condensation analysis was performed using heating season design temperatures for each location, performance properties of the glazing system, edge performance properties of the framing system, and interior glass temperatures of a glazing system simulated in WINDOW6 to determine if the interior glass temperature falls to a level in which condensation may occur. See the www.efficientwindows.org for more information on all the energy, comfort, and condensations metrics.



In 1989 the glazing and fenestration industry self-organized to create the National Fenestration Rating Council (NFRC). Nine years later the Efficient Windows Collaborative (EWC) was formed and since that time, market share for high performance windows has grown from roughly 30% to over 80% in the residential sector. During that growth, the EWC has been at the forefront of educating manufacturers about how to communicate the value of energy efficiency to consumers and providing performance comparisons across generic products. First incorporating NFRC labels and then ENERGY STAR for fenestration labels, the EWC has maintained a clear and consistent message regarding product performance. The purpose of the EWC is to provide unbiased information, outreach, education, and research dissemination to the general public on the energy efficiency, technical, and human considerations that influence window and façade design, selection, and use.

CONNECT WITH US



<https://www.facebook.com/EfficientWindows>



<https://twitter.com/EWCwindows>



<https://www.linkedin.com/groups?home=&gid=4286505&trk>



<https://itunes.apple.com/us/app/window-selection-tool/id911802627?mt=8>

The mission of the Efficient Windows Collaborative is to lead and support — through the use of advanced window, façade and skylight technologies — the transformation of the built environment toward greater energy efficiency.

The Efficient Windows Collaborative is a nonprofit, 501(c)3 organization that partners with window, door, skylight, and component manufacturers, research organizations, federal, state & local government agencies, and others interested in expanding the market for high-efficiency fenestration products.



A GUIDE TO Glass Codes

YOUR GUIDE TO UNDERSTANDING:

- Energy Codes
- Safety Glazing Codes
- Wildlife Codes
- Fire Safety Codes
- And More

Sponsored by



Architectural Glass



Formerly PPG Glass

DAIMLER



Capture clarity.

Fit the bill—and the build—with new *Acuity*™ Low-Iron Glass.

Elevate aesthetics for a modest investment, without sacrificing performance. New *Acuity*™ Glass by Vitro Architectural Glass (formerly PPG Glass) is an affordable low-iron solution available with *Solarban*® solar control low-e coatings, offering vivid views with no green cast. Where conventional clear glass was once a given, pure clarity is now within reach.

Request samples and learn more at vitroglazings.com/acuity



Contents

2

Glass

Take a closer look at the unique beauty of glass.

4

Codes for the Planet

Glass can help architectural building projects look good and increase energy performance at the same time. Understanding the energy code requirements is key to designing an attractive, efficient building that features ample use of glass.

8

Codes that Bind

What you need to know about the structural performance requirements of building codes governing the use of glass and glazing materials.

12

Codes for Safety and Health

Safety glazing codes are designed to preserve the lives of and/or reduce injuries to any individual who comes in contact with glass in a particular opening. Read more here about the many codes that relate to this important material.

14

Codes for Birds and Marine Life

While today's high-performance glass products provide a comfortable living space for building occupants, there are also other options created specifically with wildlife in mind.

16

Fire-Rated Glazing Codes

From different types of products and testing, to applications and codes, here's what you need to know about fire-rated glass products.

18

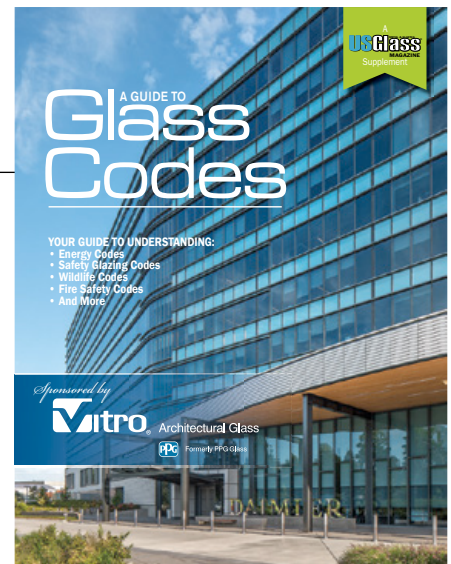
Glass Education

Learning about glass doesn't have to be boring. Vitro Architectural Glass offers a number of helpful and informative online tools that can guide you through your next glazing project.

20

Resources and Information

Find a list of all industry acronyms and more information on some of the codes referenced in this guide.



On the Cover

The Daimler Trucks North America Headquarters in Portland, Ore., features Vitro Architectural Glass' Solarban® R100 Solarblue® glass fabricated by Hartung Glass and installed by Benson Industries.

Photography: Tom Kessler

Published By:

Key Media & Research
20 P G A Drive, Suite 201
Stafford, VA 22554 USA

Publisher

Debra A. Levy

Editor

Ellen Rogers

Art Director/Managing Editor

Dawn Campbell

Art Director

Sandra Hutchison

© 2018 USGlass magazine.
540/720-5584 All rights reserved.
Reprinted with permission.

The Nemours/Alfred I. duPont Hospital for Children in Wilmington, Del.

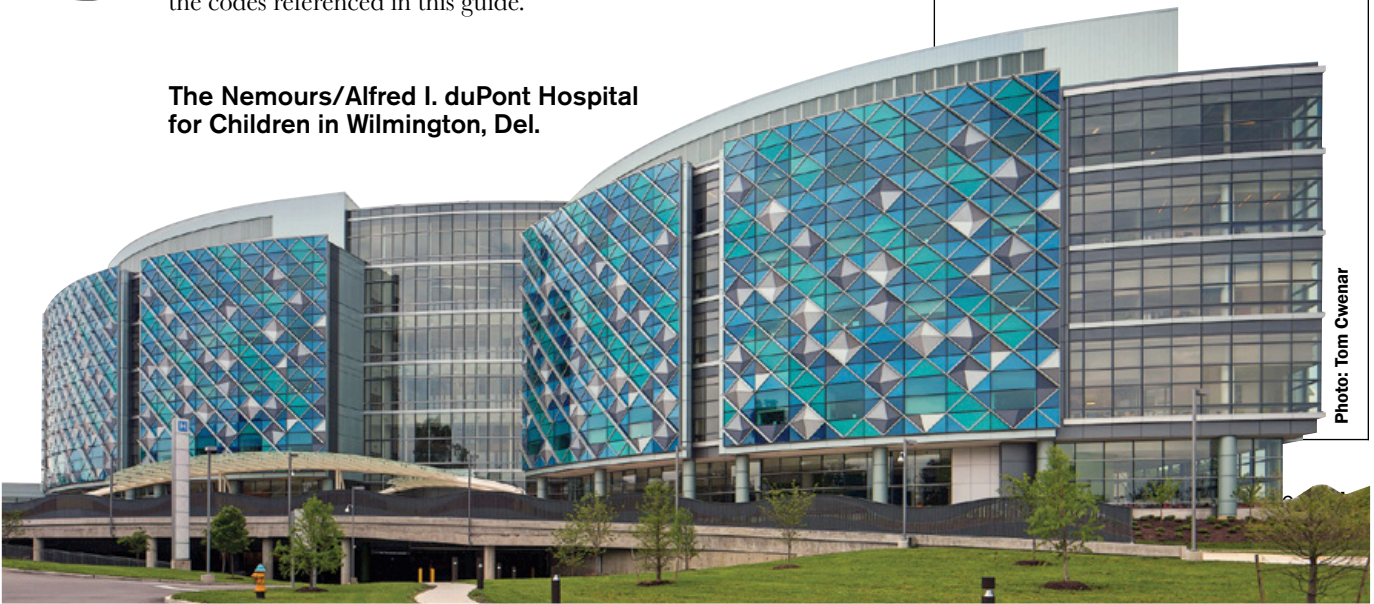


Photo: Tom Cwenar

Glass



Photo: Tom Kessler

Photo: Tom Kessler

*It is both the artist and the canvas.
The destination and thoroughfare.
It illuminates, reflects and obscures.
There is no other thing on earth like it.*

*Glass is glorious.
Imagine, for a moment, a glassless world.
How different life would be.
No mirror to reflect our sense of self.
No insulating glass to keep us comfortable
while allowing a view. No vantage point into
cars or out of small spaces.
No security with a vista.*

*There is no thing on earth like glass.
It is a chameleon to be celebrated.
It changes shape and depth and color to meet
the needs of its surroundings.
A delightfully durable material of strength
and whimsy.
Give bricks, concrete, wood and metal their due.
But nothing does what glass is.* ♦

Our sponsors at Vitro Architectural Glass commissioned this educational brochure to help those who design and build with glass to understand its characteristics and the building codes that affect it. We hope it proves helpful to you as you work with a material that knows no bounds.



Photo: Tom Kessler



Vitro projects, clockwise from left:

VIA 57 West, New York, New York, Solarban® 70XL glass;
UCSD Jacobs Medical Center, La Jolla, Calif., Solarban® 70XL
glass coated on Starphire Ultra-Clear® glass and Solarban® 72
glass; Chicago O'Hare Airport, Terminal 5, Chicago, Starphire®
glass; The Terry Thomas, Seattle, Solarban® 70XL glass; The
Tower at PNC Plaza, Pittsburgh, Sungate® 400 passive low-E
glass and Starphire-Ultra-Clear® glass.



Photo: Goldray Industries



Photo: Tom Cwenar



Photo: Weber Thompson

Codes for the Planet

Green & Energy Regulations



Energy codes set the minimum efficiency requirements for both new and renovated buildings. There are a number of building codes that affect the use of glass and glazing products. The two primary standards that apply to the energy performance requirements for exterior fenestration and glazing systems are ASHRAE 90.1 and the International Energy Conservation Code. In addition, some states have developed their own codes for energy performance, and other organizations have combined efforts to create one stringent “green” code.

ASHRAE 90.1

ASHRAE 90.1, “Energy Standard for Buildings Except Low-Rise Residential Buildings” provides the minimum requirements for energy-efficient design of most buildings, except low-rise residential buildings. There are multiple versions of the standard, which are referenced by different states across the country (*see map below*).

The most recent version is ASHRAE 90.1—2016 and it is currently being reviewed by the states for consideration based on more stringent requirements. It is important to recognize that the performance requirements for these standards are for the fully framed glazing systems and not just for the center-of-glass performance.

IECC

The second referenced standard is the IECC, which was developed by the International Code Council (ICC). The most recent version was published in 2018. The IECC is in use or adopted in 48 states, the District of Columbia, Puerto Rico and the U.S. Virgin Islands. California’s energy codes requirements conform to the 2016 California Title 24 Building Energy Efficiency Standards, and Indiana references the 2010 Indiana Energy Conservation Code based on ASHRAE 90.1-2007.

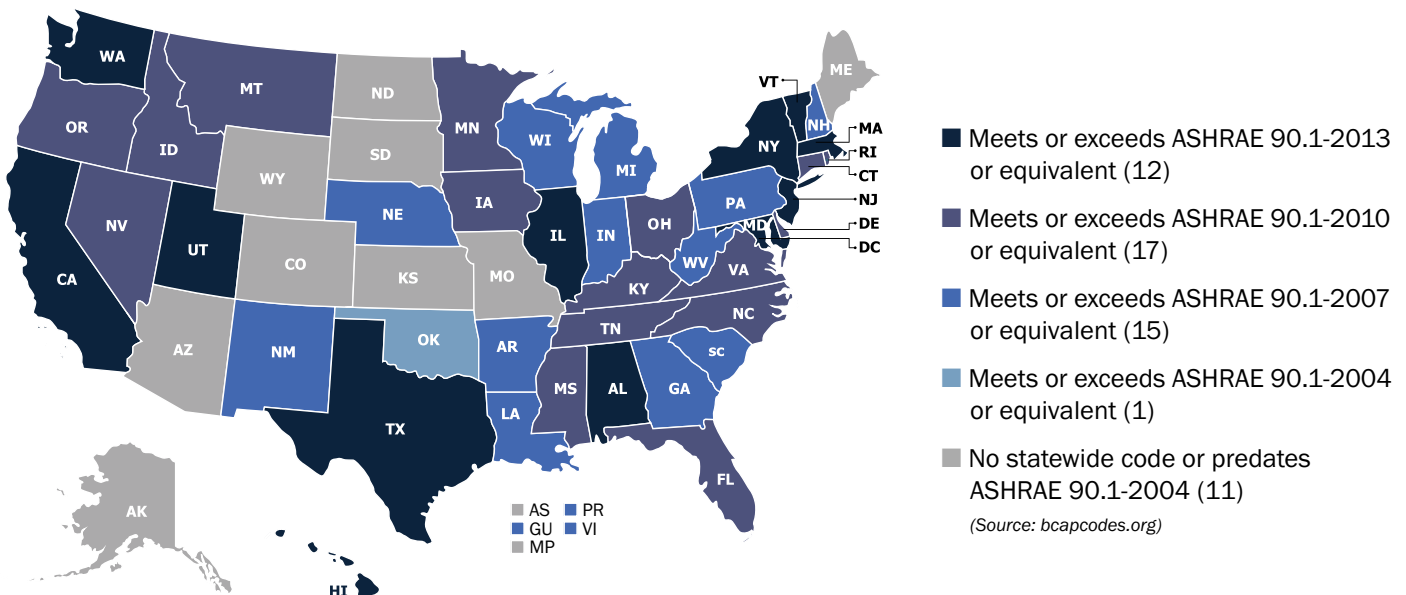
A comparison of the U-factor and Solar Heat Gain Coefficient (SHGC) requirements of the IECC and various versions of ASHRAE 90.1 is illustrated in the chart on the following page.

Title 24

California’s Title 24 mandates stringent energy performance requirements. These include lower U-factors based on product type, such as curtainwall and storefront. Other fixed windows and operable windows require low-E double glazing with a thermally broken frame in most cases, as well as argon and warm edge spacers. In addition, triple-silver low-E coatings likely will be necessary given the code’s low SHGC and minimum Visible

continued on page 6

Commercial Code Status



IECC U-Factor and Solar Heat Coefficients

Vertical Fenestration U-Factors									
Climate Zone	1	2	3	4	5	6	7	8	Specification
Non-Metal Framing	1.2	0.75	0.65	0.4	0.35	0.35	0.35	0.35	ASHRAE 90.1-2010
	0.5	0.4	0.35	0.35	0.32	0.32	0.32	0.32	ASHRAE 90.1-2013
	0.5	0.37	0.33/0.35	0.31	0.31	0.3	0.28	0.25	ASHRAE 90.1-2016
	Same as metal framing fixed or operable								
IECC 2012-2018									
Metal Framing - Fixed	1.2	0.7	0.6	0.5	0.45	0.45	0.4	0.4	ASHRAE 90.1-2010
	0.57	0.57	0.5	0.42	0.42	0.42	0.38	0.38	ASHRAE 90.1-2013
	0.57	0.54	0.33/0.35	0.31	0.31	0.3	0.28	0.25	ASHRAE 90.1-2016
	0.5	0.5	0.46	0.38	0.38	0.36	0.29	0.29	IECC 2012-2018
Metal Framing - Operable	1.2	0.75	0.65	0.55	0.55	0.55	0.45	0.45	ASHRAE 90.1-2010
	0.65	0.65	0.6	0.5	0.5	0.5	0.4	0.4	ASHRAE 90.1-2013
	0.65	0.65	0.6	0.46	0.46	0.45	0.4	0.35	ASHRAE 90.1-2016
	0.65	0.65	0.6	0.45	0.45	0.43	0.37	0.37	IECC 2012-2018
Metal Framing - Entrance Doors	1.2	1.1	0.9	0.85	0.8	0.8	0.8	0.8	ASHRAE 90.1-2010
	0.65	0.65	0.6	0.5	0.5	0.5	0.4	0.4	ASHRAE 90.1-2013
	1.1	0.83	0.77	0.68	0.68	0.68	0.68	0.68	ASHRAE 90.1-2016
	1.1	0.83	0.77	0.77	0.77	0.77	0.77	0.77	IECC 2012-2018
Vertical Fenestration SHGC									
Climate Zone	1	2	3	4	5	6	7	8	Specification
SHGC	0.25	0.25	0.25	0.4	0.4	0.4	0.45	0.45	ASHRAE 90.1-2010 & 2013
									IECC 2012 & 2015
	0.25	0.25	0.25	0.36	0.38	0.4	0.45	0.45	ASHRAE 90.1-2016
									IECC 2018
Source: IECC									

The chart above compares the differences in U-factor and SHGC requirements of the IECC and various versions of ASHRAE 90.1 for different glazing products.

IgCC ASHRAE U-Factor Requirements

Vertical Fenestration U-Factors									
Climate Zone	1	2	3	4	5	6	7	8	Specification
Non-Metal Framing	0.45	0.36	0.32	0.32	0.29	0.29	0.29	0.29	ASHRAE 189.1-2014
	0.48	0.35	0.31	0.29	0.29	0.29	0.27	0.24	ASHRAE 189.1-2017 & 2018 IgCC
									2015 IgCC
	same as metal framing fixed or operable								
Metal Framing - Fixed	0.51	0.51	0.45	0.38	0.38	0.38	0.34	0.34	ASHRAE 189.1-2014
	0.54	0.51	0.43	0.36	0.36	0.36	0.31	0.28	ASHRAE 189.1-2017 & 2018 IgCC
	0.48	0.48	0.44	0.36	0.36	0.34	0.28	0.28	2015 IgCC
Metal Framing - Operable	0.59	0.59	0.54	0.45	0.45	0.45	0.36	0.36	ASHRAE 189.1-2014
	0.63	0.57	0.44	0.44	0.43	0.38	0.33	0.4	ASHRAE 189.1-2017 & 2018 IgCC
	0.62	0.62	0.57	0.43	0.43	0.41	0.35	0.35	2015 IgCC
Metal Framing - Entrance Doors	0.99	0.75	0.69	0.69	0.69	0.69	0.69	0.69	ASHRAE 189.1-2014
	1.05	0.79	0.73	0.65	0.65	0.65	0.65	0.65	ASHRAE 189.1-2017 & 2018 IgCC
	1.05	0.79	0.73	0.73	0.73	0.73	0.73	0.73	2015 IgCC
Source: IgCC/ASHRAE									

The chart above illustrates maximum U-factor requirements for vertical fenestration for several versions of the ASHRAE and IgCC standards.

Transmittance (VT) requirements. The requirements also allow area-weighted averaging across the façade, which can be useful when balancing the higher U-factors of certain products, such as vents and awnings, with the lower U-factors of a high-performance curtainwall.

It's not unusual for architects and designers in California to follow the building performance path. By following this path, you do not have to meet each and every individual prescriptive requirement as long as the energy equivalence of the overall building design can be shown.

California Title 24 has statewide maximum requirements for U-factor, SHGC and VT for all non-residential fenestration and glazed systems (*see chart below*).

California Title 24 – Commercial

2013 and 2016 Title 24			
	Max U-Factor	Max SHGC	Max VT
Curtainwall/Storefront	0.41	0.26	0.46
Fixed Windows	0.36	0.25	0.42
Operable Windows	0.46	0.22	0.31

IgCC

In addition to the national energy codes, there are also the more stringent “green” codes. Traditionally, there have been three national green standards: ICC’s International Green Construction Code (IgCC); ASHRAE 189.1, Design of High Performance Buildings, except Low-Rise Residential Buildings; and the LEED green building program. In 2016, the three governing bodies agreed to merge the requirements of these three standards into one document.

The IgCC was created to provide a whole-systems approach to the design, construction and operation of buildings. The 2015 IgCC is the currently available version of the code; the 2018 version is under development.

These codes call for higher-performing glass and glazing products, with both the U-value (*see chart on page 7*) and the SHGC set slightly beyond the base energy code. In addition, daylighting is also a major focus of the IgCC. These requirements call for minimum top-lighting in large, open areas, such as warehouses, as well as minimum sidelighting in offices, classrooms and other similar facilities. Other areas covered by the green codes include shading and sun-shading, renewable energy, such as building integrated photovoltaics, and sustainable materials.

Energy Code Awareness

Energy codes, like all building codes, can be challenging to understand. Vitro Architectural Glass offers a number of tools and resources to help you select the right glass to meet your project’s specific high-performance needs. Visit www.vitroglazings.com to start your search.

Product Assurance: Environmental Product Declarations

Environmental Product declarations (EPD) are voluntary transparent reports created by companies regarding the life-cycle impacts of their products on the environment. Reporting and documentation for product-specific EPDs address energy use and emissions associated with a product’s manufacture and packaging, as well as the extraction, transportation and processing of related raw materials.

Vitro Architectural Glass has published third-party-verified, product-specific Type III Environmental Product Declarations (EPDs) for both its flat glass and processed glass products. The product-specific flat glass EPD is valid for all annealed and untreated glass products manufactured by Vitro. The product-specific processed glass EPD is valid for products that undergo secondary treatment, such as the addition of magnetron sputtered vapor deposition coatings, heat-strengthening or fabrication into multi-pane insulating glass units.

Both EPDs are certified by ASTM International as conform-

ing to the requirements of ISO 14025. Life-cycle assessments for flat glass and processed glass products were performed according to ISO 14040, ISO 14044 and EN 15804 following the product category rules for each product type.

“EPDs continue to grow in value as green building certification programs and sustainable design become more mainstream,” says Paul W. Bush, Vitro’s director of quality and technical services. “Today’s architects demand greater transparency and Vitro Glass is committed to meeting their expanded requirements. As part of that commitment, we decided to pursue the publication of product-specific, third-party-verified EPDs and to post them publicly with the goal of making it easier for architects to confirm the information we provide and to include our EPDs in their sustainability and certification documentation.”

The EPDs and other information about Vitro Architectural Glass’ sustainability efforts are available through the company’s website: www.vitroglazings.com. ❖



Clearly Evolving

Introducing the latest evolution in low-e glass.

Architects strive for continuous improvement—in fact, you might say it's in their DNA. Developed with guidance from architects and featuring proprietary technology by Vitro Architectural Glass (formerly PPG Glass), *Solarban*® 90 glass provides the superior solar control performance and optimal occupant comfort architects have always wanted with the aesthetics of clear glass.

For a sample, call 855-887-6457 or visit vitroglazings.com/sb90

Vitro and Solarban are trademarks owned by Vitro. The PPG logo is a trademark of PPG Industries Ohio, Inc.



Codes That Bind

Structural Regulations

Photo: Tom Kessler

Vitro Architectural Glass products have been used in glazing projects in all regions of the U.S. Examples include VIA 57 West in New York (left), which features Solarban® 70XL glass fabricated by Tecnoglass and installed by

Building codes are written with one goal in mind: safety. Meeting them requires extensive planning, meetings and inspections, and they are critical to the success of any building.

The International Building Code (IBC), developed by the International Code Council (ICC), is in use or adopted in all 50 states, the District of Columbia, the U.S. Virgin Islands, Guam and the Northern Marianas Islands. The most recent version (which at press time was the 2018 IBC) was published in August 2017. However, most jurisdictions lag behind in their adoption of the code, so it is important to continue to reference the 2012 or 2015 versions. The IBC establishes the structural performance requirements for glass, glazing and fenestration installed in all buildings. There are some exceptions, such as detached one- and two-family dwellings and multiple single-family dwellings (i.e., town-

houses) not more than three stories above grade plane in height. The requirements for these structures are found in the International Residential Code (IRC).

Here's a closer look at the structural performance requirements of the IBC.¹

Structural Design

Windloads on buildings are determined in accordance with Chapters 26 to 30 of American Society of Civil Engineers (ASCE) 7 or provisions of the alternate all-heights method in Section 1609.6 of the IBC. In accordance with Section 2404.1,

"Glass sloped 15 degrees (0.26 rad) or less from vertical in windows, curtain and window walls, doors and other exterior applications shall be designed to resist the windloads due to ultimate design wind speed, Vult, in Section 1609 for components and cladding. Glass in glazed curtainwalls, glazed storefronts and glazed partitions shall meet the seismic require-

ments of ASCE 7, Section 13.5.9. The load resistance of glass under uniform load shall be determined in accordance with ASTM E1300."

Glass Strength

ASTM E1300, "Standard Practice for Determining Load Resistance of Glass in Buildings," describes procedures to determine the load resistance of monolithic and laminated glass, including combinations of glass types used in a sealed insulating glass unit. It does not apply to any form of wired, patterned, sandblasted, drilled, notched, or grooved glass or to glass with surface or edge treatments that reduce the glass strength.

IBC 2015 requirements for framing members that support glass and glazing systems are found in Section 2403.3, "Framing" as follows:

"To be considered firmly supported, the framing members for each individual pane of glass shall be designed so the deflection

1. While the requirements for glazing and fenestration are predominantly the same between the 2012 and 2015 versions of the IBC, these sections reference the 2015 version.



Photo: Tom Kessler

Enclos, as well as the Grove at Grand Bay in Miami, which features Solarban® 72 Starphire® glass, also fabricated by Tecnoglass. Giovanni Monti and Partners was the glazing contractor.

of the edge of the glass perpendicular to the glass pane shall not exceed $1/175$ of the glass edge length or $3/4$ inch (19.1 mm), whichever is less, when subjected to the larger of the positive or negative load where loads are combined as specified in Section 1605.”

The requirements for fully framed exterior windows and doors are found in Section 1709.5:

“Exterior windows and sliding doors shall be tested and labeled as conforming to AAMA/WDMA/CSA101/I.S.2/A440. The label shall state the name of the manufacturer, the approved labeling agency and the product designation as specified in AAMA/WDMA/CSA101/I.S.2/A440. Exterior side-hinged doors shall be tested and labeled as conforming to AAMA/WDMA/CSA101/I.S.2/A440 or comply with Section 1709.5.2. Products tested and labeled as conforming to AAMA/WDMA/CSA101/I.S.2/A440 shall not be subject to the requirements of Sections 2403.2 and 2403.3.

1709.5.2 Exterior windows and door assemblies not provided for in Section

1709.5.1.

Exterior window and door assemblies shall be tested in accordance with ASTM E330. ... Exterior window and door assemblies containing glass shall comply with Section 2403. The design pressure for testing shall be calculated in accordance with Chapter 16. Each assembly shall be tested for 10 seconds at a load equal to 1.5 times the design pressure.”

Impact Performance

Exterior glazed products installed in windborne debris regions, such as South Florida and certain other coastal regions, are required to be impact-resistant or protected with an impact-resistant covering meeting the requirements of an approved impact-resistant standard or ASTM E1996 and ASTM E1886 as follows. Per the 2015 IBC:

- “1. Glazed openings located within 30 feet (9144 mm) of grade shall meet the requirements of the large missile test of ASTM E1996.
2. Glazed openings located more than

30 feet (9144 mm) above grade shall meet the provisions of the small missile test of ASTM E1996.”

In accordance with Chapter 2 of the IBC, a wind-borne debris region is defined as:

“Areas within hurricane-prone regions located:

1. Within 1 mile (1.61 km) of the coastal mean high water line where the ultimate design wind speed, Vult, is 130 mph (58 m/s) or greater; or
2. In areas where the ultimate design wind speed is 140 mph (63.6 m/s) or greater.”

Tools and Resources

Vitro Architectural Glass offers a number of resources that can help you navigate your code questions related to glass and glazing products. Our team of dedicated experts also can help answer questions and get you on the right track to designing and specifying a structurally sound and safe building. Visit www.vitroglazings.com to learn more. ❖

A city skyline, likely New York City, is shown from a low angle, with numerous skyscrapers and buildings. The sky is a deep blue gradient. The city is reflected in a white surface at the bottom of the image.

Fit the bill—and the build.

Capture clarity with new Acuity™ Low-Iron Glass.

Meet the aesthetic demands of architects and the performance demands of owners, all for a modest investment. Developed to withstand value-engineering, new Acuity™ Glass by Vitro Architectural Glass (formerly PPG Glass) joins Starphire Ultra-Clear® Glass in the Vitro family of low-iron brands. An affordable low-iron option available with Solarban® solar control low-e coatings, Acuity™ glass offers vivid views with no green cast.

Request samples and learn more at vitroglazings.com/acuity




Acuity[™]
Low-Iron Glass


Vitro[®]
Architectural Glass

Codes for Safety and Health

Safety Regulations

Skyline Design fabricated Starphire® glass for the 1K Fulton project in Chicago. Glass Solutions Inc. was the contract glazier.

Glass is central to most of the building-related codes in the United States, including residential, energy codes and fire codes, among others. The safety glazing codes are chief among these because they are focused on human life safety. Safety glazing codes are designed to preserve the lives of and/or reduce injuries to any individual who comes in contact with glass in a particular opening. Glass is one of the few building materials with some of its use regulated by the Federal government in addition to regulation by code groups. The Code

of Federal Regulations, Title 16 Commercial Practices, Chapter II Consumer Product Safety Commission (CPSC), Subchapter B—Consumer Product Safety Act Regulations, includes Title 16, part 1201—Safety Standard for Architectural Glazing.

Federal Regulations

The CPSC regulations detail how to test and certify safety glass products used in architectural applications.

When first put in place in the 1970s, the Federal Code regulated the use of glass in doors and side panels. It did not address most other hazardous loca-

tions. That has changed over the years and today 16 CFR 1201 applies only to glass in doors; the International Building Code (IBC) produced by the International Code Council, regulates glass in other locations. It covers glass adjacent to a door or in the same plane as a door; glass in hazardous locations such as pools, spas, certain walking surfaces, shower enclosures, handrails, etc. Let's look at the Federal CPSC regulation first.

It generally requires safety glazing in:

- Storm doors
- Combination doors;

The Right One for Your Project



Photo: Goldray Industries

Goldray applied a digitally printed pattern to Starphire® glass used in Terminal 5 at the Chicago O'Hare Airport.

So for strength and breakage-resistance, tempered glass is often the first consideration. For flexibility, UV-resistance, security and sound considerations, laminated glass is often the product of choice. Both are considered safety glazing materials and can be obtained in a variety of thicknesses and colors or tints. Both are easy to clean and maintain when installed properly.

Typically, laminated glass products are slightly more expensive than tempered products of the same type and thickness. The optical clarity for both laminated and tempered glass is excellent, and either product will provide many years of satisfactory service in your application.



Photo: Scott Shigley

- Doors;
 - Bathtub doors and enclosures;
 - Shower doors and enclosures;
 - Sliding doors, such as the patio type.
- It has exemptions for:
- Louvers of jalousie doors;
 - Certain wired glass applications;
 - Carved, dalle or leaded glass if the glazing meets certain criteria.

State and National Building Codes

Local and national building codes such as the IBC address glazing in hazardous locations.

Hazardous locations include:

- Doors (though the language about doors is harmonized with the language in 16 CFR 1201);
- Glazing adjacent to doors;
- Windows;
- Glazing in guardrails and railings;
- Glazing near wet surfaces;
- Glazing next to stairways and ramps or next to a stairway landing.

The IBC also covers glass in a variety of applications. Specifically:

- Chapter 24—Glass and Glazing
- 2405—Sloped Glazing and Skylights
- 2406—Safety Glazing
- 2407—Glass in Handrails and Guards
- 2408—Glazing in Athletic Facilities

- 2409—Glass in Walkways and Elevators.

In rare cases, states and larger municipalities adopt their own glazing codes or modify those provided by the ICC.

What is Safety Glass?

CPSC uses the testing procedures detailed in ANSI Z97.1-2015, *the American National Standard for Safety Glazing Materials in Buildings—Safety Performance Specifications and Methods of Test* to determine whether a particular glass is considered safety glazing or not.

ANSI Z97.1-2015 is a voluntary standard that codifies both performance specifications and testing methods for safety glazing. It also has two categories. CPSC Cat I glass is generally equivalent to ANSI Class B; CPSC Cat II is generally equivalent to ANSI Class A. Either terminology is acceptable.

The CPSC's Safety Standard defines two different types of safety glass—simply named Category I and Category II for their reference in the regulations. CPSC 16 CFR 1201-1 (Cat 1) defines safety glass as glass that is subject to human impact but has an area of less than or equal to 9 square feet. CPSC 16 CFR 1201 -2 (Cat 2) defines glass used in any area greater than 9 square inches.

Which Glasses are Safety Glasses?

When selecting safety glass for an application, whether decorative or functional, two choices often arise: tempered or laminated glass. Both qualify as “safety glazing materials” meaning they comply with the current safety glazing codes, so they can be used in doors, in sidelites, railings and other locations that may be deemed hazardous.

TEMPERED (TOUGHENED) GLASS

Tempered glass is made by heating and cooling a piece of standard glass in a tempering furnace. The glass, which must be pre-cut and edged before going into the furnace, is heated to approximately 1200°F then cooled rapidly.

This process is also known as quenching. The quenching process leaves the glass hardened so that it is now approximately four to five times stronger, and therefore more resistant to breakage than it was before the tempering process. If it does break, tempered glass shatters into small pieces that are less likely to cause injury or damage than non-tempered glass.

PROS AND CONS OF LAMINATED GLASS

Laminated glass basically is a glass sandwich. It is typically made of two or more lites of glass with a vinyl interlayer in between (sandwiched, if you will, as in a car's windshield). The glass will tend to stay together in case one lite is broken.

The other key advantages of laminated glass is that it blocks 99 percent of the UV-light transmission, has sound reduction properties, can be cut and its edges polished after laminating, and lead times are generally faster because most glass shops stock laminated glass. Certain thicker, multilayered forms of laminated glass can even qualify as burglar- and bullet-resistant glass.

Because laminated glass holds together after impact better than most other types of glass, it is used in modern windshields. The sandwiched interlayer gives the glass structural integrity and keeps it from shattering apart as tempered glass might. This is key for effective airbag deployment and helping to keep occupants inside the vehicle in the event of a crash. ❖

Codes for Birds and Marine Life

Nature's Regulations

Glazing products that can “go green” extend beyond those that can help increase the energy efficiency and performance requirements of buildings. Glazing products also can be beneficial in mitigating the potentially harmful impact to the surrounding environment, including wildlife.

Turtle Codes

Coastal areas are prime locations for the use of large spans of glass. Lighting from inside homes and buildings onto shorelines, however, is an important design consideration, as it can be detrimental to nearby sea turtles.

The sea turtle nesting season in Florida runs from May through October. After hatchlings emerge, they head toward the light over the ocean, but, in many cases they are disoriented by the light inside homes and buildings along the beach and head the wrong way. This can be a danger to the hatchlings, which can die or be killed before finding their way to the ocean.

Because sea turtles are protected by the Federal Endangered Species Act of 1973, Florida Endangered and Threatened Species Act of 1977, and Florida's Marine Turtle Protection Act of 1995 (379.2431), the state of Florida developed a Model Lighting Ordinance for Marine Turtle Protection. This prohibits light from having a negative effect on nesting and hatching turtles. The ordinance requires that tinted glass be used on all windows and doors in new con-



BioSteel Centre in Toronto features AviProTek® bird-friendly glass by Walker Textures® glass, acid-etched on tinted Optiblue® glass and Solarban® R100 glass. Trulite was the glass fabricator.

struction of single or multi-story structures within line-of-sight of the beach.

Tinted glass, according to the ordinance, refers to “glass treated to achieve an industry-approved, inside-to-outside light transmittance value of 45 percent or less. Such transmittance is limited to the visible spectrum (400 to 700 nanometers) and is measured as the percentage of light that is transmitted through the glass.”

Vitro Architectural Glass offers a number of products that can be used to meet these requirements. Combining a tinted substrate with one of the low-E coatings from Vitro Architectural Glass in an insulating glass unit (IGU), for example, creates many options that provide a visible light transmittance (VLT) of 45 percent or less.

For existing buildings, the ordinance lays out a number of measures to reduce or eliminate the negative effects of inte-

rior light coming from doors and windows within line-of-sight of the beach. These actions include updating windows to meet the 45 percent light transmittance requirements, applying tint or film that meets these same standards, and using window treatments, among other actions.

The 45 percent or less VLT is also beneficial in reducing glare and solar heat gain. Hurricane-rated glass also can be constructed to meet these requirements.

Bird-Friendly Glass

Each year, more than 600 million birds die from collisions with glass in the United States alone. Although bird-friendly building regulations continue to increase in North America, glazing options have been limited.

Vitro Architectural Glass and Walker Glass have partnered to create

AviProtek®E glass: a line of sustainable glass options that deliver both exceptional energy efficiency and bird safety, with minimal impact on VLT.

Experts agree that the best way to deter birds from striking glass is through visual markers on the #1 or outside surface of the glass. By combining a Walker AviProtek® acid-etched pattern on surface #1 with a Solarban® high-performance low-E coated glass by Vitro on surface #2 in an IGU, architects and building owners get an environmentally responsible glass that does double duty.

AviProtek® E glass is available in standard or custom patterns on clear or Starphire Ultra-Clear® glass by Vitro Glass, combined with Solarban® 60, Solarban® 67 or Solarban® 70XL solar control low-E glass coatings, exclusively from members of the Vitro Certified™ Network.

Bird Safe Glazing Standards and Guidelines

Published Standards or Guidelines:

- Toronto, Canada, Bird-Friendly Development Guidelines (2007)
- San Francisco, Standards for Bird-safe Buildings (2011)
- State of Minnesota, Sustainable Building 2030 (SB 2030); Energy Standards (2010)
- Cook County, Ill., Building Construction Ordinance (2008)
- Oakland, Calif., Bird Safety Measures (2013)
- Portland, Ore., Resource Guide for Bird-friendly Building Design (2012)
- State of California, Green Building Standards Code, Appendix C: Bird-friendly Building Design (2010)
- Calgary, Canada, Bird-Friendly Urban Design Guidelines (2011)
- San Jose, Calif., Bird Friendly Guidelines (2015)
- Vancouver, Canada, Bird Strategy and Bird-Friendly Design Guidelines and Bird-Friendly Landscape Operational Guidelines (2015)

Proposed or Pending Standards or Guidelines:

- Federal Bird-Safe Buildings Act of 2011
- State of New York, Bird-friendly Buildings Act (2011)
- Sunnyvale, Calif., Bird Friendly Guidelines (2015)

Bird-Friendly Glass Checklist

Not sure what to look for in bird-friendly glazing? These guidelines can serve as a starting point to help address and manage bird-window collisions. This checklist provides guidance on treatments and techniques for both new and retrofit construction.

At Grade Conditions:

The bird-friendly treatment should be applied to at least 85 percent of the contiguous glass panel area if each panel area is greater than two square meters and within 16 meters from the finished grade.

Roof Landscape Conditions:

The bird-friendly treatment should be applied to at least 85 percent of the contiguous glass panel area if each panel area is greater than two square meters and within 16 meters from the roof-level finished grade; the development should not contain any glass panel within 16 meters from the roof-level finished grade.

Patterns (one or more should apply):

- **Stripes:** Horizontal strips are spaced less than 5 cm on center; vertical strip spacing is less than 10 cm on center; horizontal strip widths should be greater than 3.1 mm; and vertical strip widths should be greater than 6.1 mm.
- **Dots:** The dot size is larger than 5 mm; horizontal strip spacing is less than 5 cm on center; and vertical strip spacing is less than 10 cm on center.
- **Specifications:** The pattern should be applied as fritting or etching on the glass; and the pattern color should be a high contrast in relation to the background. ❖



The bird-friendly glass in the Humber College Centre for Entrepreneurship in Toronto was fabricated by Trulite. The project incorporates AviProTek® bird-friendly glass by Walker Textures® glass, acid-etched on tinted Solarban® 70XL glass.

Fire-Rated Glazing Codes

More Safety Regulations

At first glance, fire-rated glass might not seem all that different than traditional glass products. Yet fire-rated glazing is very different in not only its composition, but also in how and where it can be used in building projects. Fire-rated glass is a life safety product, and its use is governed by the International Building Code (IBC). While regular glass breaks easily during a fire, fire-rated glass products are designed to stay in the opening, keeping smoke and flames away.

A Closer Look

There are two types of fire-rated glass: fire-protective glass and fire-resistive glass. Fire-protective glass includes ceramics, specialty fire protective glass, and wired glass. It is tested to National Fire Protection Association (NFPA) 252/257 or Underwriters Laboratories (UL) 9/10B/10C and is designed to compartmentalize smoke and flames.



Photo: SAFTI FIRST

Fire-rated glass products can be used in a variety of applications, including building exteriors, such as The Kensington, located in Boston.

It does not radiate heat, and therefore is subject to application, area and size limitations under the IBC. Fire-protective

glass typically is used in doors and openings up to 45 minutes (*see box on page 19*) and cannot exceed 25 percent of the total wall area. It can be used in 60- and 90-minute doors, but is limited to 100 square inches. Fire-protective glass is marked with either a D for door or O for openings. If it meets the hose stream test (*see box on left*) it will be marked with an H.

Fire-resistive glass is tested to American Society for Testing and Materials (ASTM) E-119/UL 263 and is designed to compartmentalize smoke and flames and limit radiant heat transmission. Unlike fire-protective glass, fire-resistive glass doesn't have size or application restrictions. When installed within an equally rated fire-resistive framing system, it can be used in wall-to-wall and floor-to-ceiling applications, and is considered a "transparent wall." This type



What is the Hose Stream Test?

The hose stream involves heating the glazing product in a furnace to more than 1600° F for 45 minutes, and even higher temperatures for longer ratings. Immediately after heating, the hot glass is sprayed with water from a fire hose at specified pressures. If the glass remains intact without exceeding the tolerable openings, it passes the test. The NFPA 257 hose stream test allows for a 30 percent loss of glazing around the perimeter and a 5 percent loss at the center.

NFPA 251, ICC model codes and ASTM E-119 exclude fire-rated construction of less than one hour from the hose stream test requirement; 45-minute glazing, which is limited to no more than

25 percent of the total wall area, must pass the hose stream test. Twenty-minute glazing products are exempt.



Passing the Test

Fire-rated glazing products are required to undergo a fire-endurance rating test, which is conducted in a nationally recognized testing laboratory. During the test, the fire-rated glass is placed in a test furnace where it follows a specific time and temperature curve that mimics the normal progression of a fire. Temperatures in the furnace can reach up to 1900° F. If the specimen remains in the frame with no through openings and limits flames, it is certified with a fire-endurance rating of either 20, 45, 60, 90, or 120 minutes, depending on what it passes.

of glass is marked with a W for walls. Because the code recognizes it as a wall, it can be used in place of gypsum or masonry where a one- or two-hour fire-resistive rating is required. It also can be used in glass floor applications as fire barriers and fire-resistance-rated horizontal assemblies. Examples include fire-resistive tempered and multi-laminates. During a fire, the intumescent interlayers expand and react to the heat, forming a solid wall that contains smoke, flames and limits the transmission of radiant heat significantly. This helps provide building occupants a safe path of egress.

Codes to Know

International Building Code (IBC), Chapter 7, Fire-Resistance Rated Construction

Per the IBC, this chapter governs “the materials and assemblies used for structural fire resistance and fire-resistance-rated construction separation of adjacent spaces to safeguard against the spread of fire and smoke within a building and the spread of fire to or from buildings.”

NFPA 252: Standard Methods of Fire Tests of Door Assemblies

This standard outlines methods of fire-testing door assemblies used by testing labs and manufacturers to determine the assembly’s degree of fire protection,

as well as its suitability when fire resistance of a specific duration is required.

NFPA 257: Standard on Fire Test for Window and Glass Block Assemblies

This document establishes test protocols to measure how well window and glass block assemblies prevent or slow the spread of fire. It provides a standardized method for comparing the relative performance of different fire window assemblies.

UL 9, Standard for Fire Tests of Window Assemblies

These fire test methods apply to window assemblies for use in the protection of openings in vertical fire-resistive assemblies.

UL 10B, Standard for Fire Tests of Door Assemblies

These fire test methods apply to door assemblies of various materials and types of construction for use in wall openings to delay the passage of fire.

UL 10C, Standard for Positive Pressure Fire Tests of Door Assemblies

These fire test methods apply to swinging door assemblies, including door frames with lites and panels, of various materials and types of construction for use in wall openings to delay the passage of fire. Swinging door assemblies, when not part of a larger assembly (such

as a sliding fire door), or when used as an elevator entrance, are not included.

UL 263, Standard for Fire Tests of Building Construction and Materials

These fire tests apply to masonry unit assemblies and to composite assemblies of structural materials for buildings, including bearing and other walls and partitions, columns, girders, beams, slabs, and composite slab and beam assemblies for floors and roofs. They also apply to assemblies and structural units that constitute permanent integral parts of a finished building.

ASTM E-119, Standard Test Methods for Fire Tests of Building Construction and Materials

These test methods apply to assemblies of masonry units and to composite assemblies of structural materials for buildings, including load-bearing and other walls and partitions, columns, girders, beams, slabs and composite slab and beam assemblies for floors and roofs. They also apply to other assemblies and structural units that constitute permanent integral parts of a finished building. The test methods evaluate the duration for which these building elements contain a fire, retain their structural integrity or exhibit both properties during a predetermined test exposure. ❖

Glass Education



Photo: Tom Kessler

The Nemours/Alfred I. duPont Hospital for Children in Wilmington, Del., features Solarban® 60 Azuria® and Solarban® 70XL glasses fabricated by Cristacurva and Oldcastle BuildingEnvelope® and installed by RA Kennedy.

Glass is one of the most sought-after building materials in today's architectural market, and for good reason. Not only is it aesthetically pleasing, but it also provides plenty of high-performance features and benefits. With so many product options available—and hundreds of building code requirements driving what to use when and where—it's common to have questions. To help architects navigate their glass and glazing product selections, Vitro Architectural Glass has developed a series of online tools to make design and specification easy for your next project.

Start by taking a look at the online Vitro Glass Education Center, a comprehensive website to help architects, specifiers, students and construction industry professionals learn more about designing, specifying and building with glass. It is divided into three sections; Glass Topics, Glass FAQs and a Glossary and includes a comprehensive mix of informative videos, colorful illustrations and educational features that address issues such as preventing thermal glass breakage, specifying large insulating glass units (IGUs), how low-emissivity (low-E) glass works, and how heat-treated glass differs from heat-

strengthened glass.

By hovering over the Glass Topics section, visitors will see numerous articles such as “How Glass is Made,” “The Benefits of Designing with Reflective Glass,” and “How to Prevent a Thermal Break.”

These topics and many more are all important when researching a new project. There is also an article titled “Why Specify Which Type of Glass?” and a slide show that highlights the different types of glass, and what is appropriate to use in various architectural situations.

The Vitro Glass Education Center

Spec Check

One unique feature of the Education Center is the Spec Check tool, a helpful resource for checking glass specification. Correct specifications are extremely important to ensure projects are designed correctly and that the proper codes and standards are followed. The Spec Check can be used on every project, to make sure products that meet specifications are chosen correctly.

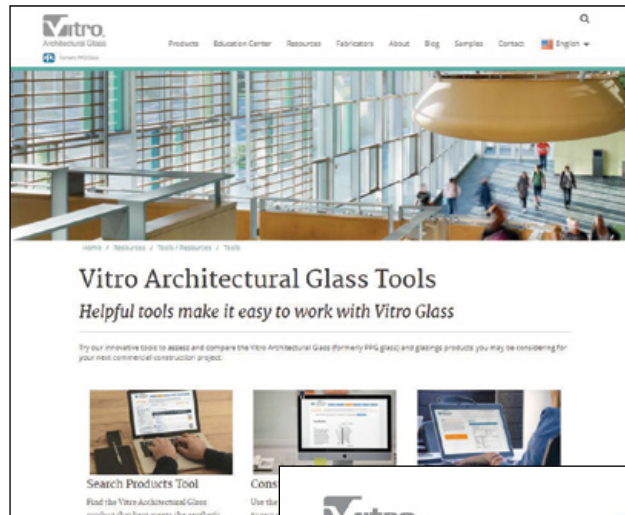
Architectural Glass Tools

Another resource available from Vitro is its online Architectural Glass Tools. This unique feature offers four tools to help architects select the right glass for their projects, including the Search Products Tool, Construct Tool, Thermal Stress Analysis Tool and more. These tools allow architects to compare and assess different products, while learning more about Vitro's many glass options.

Construct Tool

With the Construct Tool from Vitro Architectural Glass, users can quickly generate 3-part specifications in the Construction Specifiers Institute (CSI) format, the basis for all building construction documentation in North America.

The tool allows users to search, construct and compare virtual configurations for monolithic glazings, multi-pane insulating glass units, decorative glasses and spandrel glasses. With the new feature, they can generate, with a single keystroke or mouse-click, industry-standard 3-part CSI specifications for any such configuration they create using



Vitro offers a number of online educational resources to help architects and specifiers find the right glass products for their projects.

the Construct Tool, as long as it contains 100-percent Vitro Glass products.

"Our Construct Tool is widely used because it enables architects and industry professionals to save time by comparing multiple glazing configurations online for performance and aesthetics," says Steve Marino, technical support manager, Vitro Architectural Glass. "The new feature makes the Construct tool even more versatile and valuable by instantly generating required construction documents for those configurations as well."

The 3-part CSI specification lists performance data for individual glazing configurations such as glass thickness, visible light transmittance, interior and exterior reflectance, winter nighttime u-value, solar heat gain coefficient and light-to-solar gain ratio. It also contains descriptions for the glass products used in the glazing configuration, along with related



certification standards, testing and compliance requirements, sourcing information and more.

The Construct tool incorporates several other exclusive features including:

- Password-free access to the Lawrence Berkeley National Laboratory International Glazing Database for use with the WINDOW 7.3 software; and
- The ability to customize reports according to user-defined criteria, and to personalize them with the name of a building project, the logo of the architectural firm and other user-provided artwork.

► www.vitroglazings.com

Information

American Architectural Manufacturers Association (AAMA).....	www.aamanet.org
American Bird Conservancy (Bird-friendly codes)	www.abcbirds.org
American National Standards Institute (ANSI).....	www.ansi.org
American Society of Civil Engineers (ASCE).....	www.asce.org
American Society of Heating Refrigerating and Air-Conditioning Engineers (ASHRAE).....	www.ashrae.org
American Society of Testing Materials (ASTM).....	www.astm.org
ANSI Z97.1 Safety Glazing Materials Used in Buildings - Safety Performance Specifications and Methods of Test.....	www.ansiz97.com/standard/
Consumer Product Safety Commission (CPSC).....	www.cpsc.gov
Canadian Standards Association (CSA)	www.csagroup.org
Florida Administrative Codes and Administrative Register (Turtle-Friendly Codes).....	https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62b-55
Ask the Glass Detective, Glass.com®	www.glass.com
International Code Council (ICC).....	www.iccsafe.org
Insulating Glass Certification Council (IGCC)	www.igcc.org
Insulating Glass Manufacturers Alliance (IGMA).....	www.igmaonline.org
International Standards Organization (ISO)	www.iso.org
Leadership in Energy & Environmental Design (LEED).....	www.leed.usgbc.org
National Fire Protection Association (NFPA)	www.nfpa.org
National Fenestration Rating Council (NFRC)	www.nfrc.org
Safety Glazing Certification Council (SGCC).....	www.sgcc.org
Underwriters Laboratories (UL).....	www.ul.com
Vitro Glass Education Center	www.vitroglazings.com
Window & Door Manufacturers Association (WDMA)	www.wdma.com



Photo: Jim Scafer

The Phipps Conservatory and Botanical Gardens, Center for Sustainable Landscaping in Pittsburgh features Vitro Architectural Glass Products.

NOTE: The publisher does not provide design, code, material or engineering advice. This material has been prepared for informational purposes only, and is not intended to provide, and should not be relied on for design, code, engineering or any other advice. You should consult your own advisors before engaging in any project.



Humber College Centre for Entrepreneurship in Toronto incorporates AviProTek® bird-friendly glass by Walker Textures® glass, acid-etched on tinted Solarban® 70XL glass.

Resources:

ANSI

1899 L Street, NW, 11th Floor
Washington, DC 20036

ANSI z 97.1

<http://www.ansiz97.com/standard/>

ASTM

100 Barr Harbor Drive
P.O. Box C700
West Conshohocken, PA 19428-2959

Florida Administrative Code & Florida Administrative Register, Model Lighting Ordinance for Marine Turtle Protection

<https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62b-55>

Glass.com

20 P G A Dr., Suite 201
Stafford, VA 22554

U.S. Consumer Product Safety Commission

U.S. Code of Federal Regulations,
Title 16 Volume 2, Consumer Product
Safety Commission 16 CFR 1201
4330 East West Hwy.
Bethesda, MD 20814

Common Acronyms

Abbreviation	Full Name	Website
AAMA	American Architectural Manufacturers Association	www.aamanet.org
ANSI	American National Standards Institute	www.ansi.org
ASCE	American Society of Civil Engineers.....	www.asce.org
ASHRAE	American Society of Heating Refrigerating and Air-Conditioning Engineers.....	www.ashrae.org
ASTM.....	American Society of Testing Materials.....	www.astm.org
CPSC.....	Consumer Product Safety Commission.....	www.cpsc.gov
CSA Group.....	Canadian Standards Association.....	www.csagroup.org
ICC	International Code Council.....	www.iccsafe.org
IGCC.....	Insulating Glass Certification Council.....	www.igcc.org
ISO	International Standards Organization.....	www.iso.org
LEED.....	Leadership in Energy & Environmental Design.....	www.leed.usgbc.org
NFPA.....	National Fire Protection Association.....	www.nfpa.org
NFRC.....	National Fenestration Rating Council.....	www.nfrc.org
SGCC.....	Safety Glazing Certification Council	www.sgcc.org
UL.....	Underwriters Laboratories.....	www.ul.com
WDMA.....	Window & Door Manufacturers Association	www.wdma.com



Accept no substitutes.

See the beauty — not the glass — only with *Starphire*® glass

Don't accept imitations. Only *Starphire Ultra-Clear*® Glass by Vitro Architectural Glass (formerly PPG Glass) allows views so brilliant, you'll forget the glass is even there. For interiors, exteriors as well as heavy and safety glass applications in thicknesses up to ¾ inch, no low-iron glass consistently maintains its transparency, color fidelity, vivid beauty and distinctive blue edge like *Starphire*® glass.

Request samples at www.starphireglass.com




STARPHIRE
 ULTRA-CLEAR® GLASS

 **itro**®
 Architectural Glass



MEMORANDUM

Planning Division

DATE: May 11, 2022

TO: Planning Board Members

FROM: Nicholas Dupuis, Planning Director

SUBJECT: 770 S. Adams – Perennial – Final Site Plan & Design Review

The applicant has submitted an application for Final Site Plan & Design Review for the construction of a 4-6 story mixed-use building in the B2 (General Business) and MU3/MU5 Zoning Districts. The proposed development spans two parcels that are currently separate. The subject sites currently contain 2-story office/commercial buildings, street trees and landscaping, and associated parking and site improvements. The proposed new building spans nearly the entire block running from Adams (east) to Worth (west) and Haynes (north) to the public alley (south). Notably, the proposal does not contain the parcel at the northeast corner of the block, which was formerly home to the Plant Station.

On March 31, 2022, the Planning Board moved to accept the Community Impact Study for 770 S. Adams – Perennial – with the following conditions:

1. The applicant must submit details as to how they plan to mitigate noise, dust, debris, and other nuisances during the construction process;
2. The applicant engage with City Staff to discuss the Worth Plaza.

Additionally, on March 31, 2022, the Planning Board also moved to approve the Preliminary Site Plan Review for 770 S. Adams – Perennial – with the following conditions:

1. The applicant must provide full screening details for all proposed mechanical units at Final Site Plan;
2. That the applicant bring specific samples of proposed synthetic materials at final site plan for consideration of the Board, or revise the landscaping plan to include living plant material, or obtain a variance from the Board of Zoning Appeals;
3. The applicant must submit revised plans showing a loading space that meets the requirements of Article 4, Section 4.24 (C) of the Zoning Ordinance;
4. The applicant must submit lighting and material specifications, samples, photometric plan and all other required information for the proposed building to complete the Design Review at Final Site Plan;
5. The applicant must comply with the requests of all City Departments;
6. The applicant must engage with Staff with respect to Worth Plaza; and,
7. That the applicant enter into an agreement with the City for the contribution of up to \$20,000 to mitigate potential pedestrian crossing issues on Adams Road in the future, and \$100,000 to be used in connection with the implementation of Worth Park.

At this time, the applicant has largely satisfied all of the conditions noted above. In terms of the two conditions related to Worth Plaza and the monetary contributions, the applicant has reached out to the City and is currently working through the logistics of such.

1.0 Land Use & Zoning

- 1.1 **Existing Land Use** – The existing land use is commercial, and currently contains 2-story office buildings and associated off-street parking facilities.
- 1.2 **Zoning** – The subject site exists within the B2 (General Business), MU3 (Mixed-Use 3), and MU5 (Mixed-Use 5) Zoning Districts.
- 1.3 **Summary of Adjacent Land Use & Zoning** – The following chart summarizes existing land use and zoning classifications of the adjacent and/or nearby properties:

	North	South	East	West
Existing Land Use	Commercial/ Office	Commercial/ Office	Commercial/ Office	Commercial
Existing Zoning District	B2 (General Business)	B2 (General Business)	B2 (General Business) & O2 (Office-Commercial)	B2 (General Business)
Overlay Zoning District	MU3 & MU5	MU3 & MU5	N/A	MU5 & MU7

2.0 Setback & Height Requirements

The attached zoning compliance summary analysis provides the required and proposed bulk, area, and placement regulations for the proposed project. The applicant appears to meet the bulk, area and placement requirements of the Triangle District.

In terms of the additional height permissions within Article 3, Section 3.08 (E) of the Zoning Ordinance, the applicant is required to provide 2 or more of the following with the proposed development:

1. Structured public parking, or a payment in lieu to the City for construction of a public parking structure at an offsite location.
2. Dedication of an improved public plaza.
3. Mixed use building with a minimum 50% residential use.
4. LEED building design accredited based upon the rating system of the United States Green Building Council.
5. Transfer of development rights for additional floor area that zoning would permit on a site containing an historic building or resource designated under Section 127 of the Birmingham Code.

The applicant has submitted plans indicating that they will be pursuing a bonus story in both the MU3 and MU5 zoning districts for a total of 4 stories and 6 stories respectively. The applicant has indicated that the building will be designed for LEED certification and will be mixed-use, satisfying the minimum requirements for bonus stories. In addition, each bonus story is set back 10 ft. as required.

3.0 Screening & Landscaping

3.1 Dumpster Screening – The applicant is proposing two trash rooms on the first floor, which appear to collect from the first floor, as well as floors 2-5. The first trash room is located on the west side of the building adjacent to the loading and receiving area, while the second trash room is located at the east side of the building adjacent to the first level of the parking facility. There are no indications of the type or quantity of refuse containers noted in the plans. In terms of screening, the receptacles are all proposed inside the building envelope, thus fully screened by the building.

3.2 Parking Lot Screening – The applicant is proposing a 4.5-level, 266 space above ground parking facility. The facility is located at the south side of the property along the alley, with the entrance to the facility being located off Worth St. to the west.

Due to the proposed parking facilities location within the building envelope, the parking facility appears to be fully screened by the building and will require no additional screening at the ground level.

3.3 Mechanical Equipment Screening – The site plans proposed show a number of rooftop and ground-mounted mechanical units that will require screening.

The proposed rooftop units (RTU's) are all centrally located (in terms of depth) on the roof in various locations. The applicant has indicated extensive coated wire mesh screening enclosures on the elevation drawings, and has included the location of such on the roof plan. The RTU specifications provided range from small exhaust fans to large package HVAC units that measure 9 ft. in height (not including any curbs).

Sheet SD.15.0 appears to demonstrate the dimension of the proposed screen walls at 3 ft. 5 in. in height. In addition, the applicant has provided a "line of sight" demonstration that draws an imaginary line at a 45-degree angle from the top of the screen wall. Article 4, Section 4.54(C)(8) requires rooftop equipment to be obscured by a screen wall composed of materials compatible with the building. The screen wall barrier shall also be designed, to the best extent possible, not extend above the top edge of an imaginary plane extending upward no more than 45 degrees from the eave line and shall not exceed 10 ft. in height.

At this time, the Planning Division does not feel as though the proposed 3 ft. 5 in. screen wall will adequately screen the larger units, which range from 7 ft. to 9 ft.

in height. **The applicant will be required to submit revised site plans with RTU screening that adequately obscures the proposed RTU's.**

In terms of the ground-mounted mechanical units, Sheet SD.1.2 indicates that 6 ground-mounted units will be located at the south side of the building along the public alley. The types of units include a generator, transformers, and a switch. Sheet SD.22.0 details the proposed transformer at 6 ft. high, the switch unit at 4 ft. high, and the generator at 9 ft. high.

Article 4, Section 4.54 (B)(8) states that when required to screen a trash receptacle or ground-mounted mechanical or electrical equipment, a masonry screen wall with wood gates is required. The screen wall shall match the material of the principal building. Based on the elevation drawings submitted, the proposed screen wall will be roughly 13 ft. in height and will be constructed of masonry with wood gates.

- 3.4 Landscaping – The applicant has submitted a landscaping plan for the courtyard that includes predominantly shrub and evergreen plantings. A summary of the landscaping elements on Sheet L105 and their location is provided below:

Landscaping Element	Qty.	Location
Emerald Green Arborvitae	29	Northeastern property line
Blue Arrow Juniper	10	Northeastern property line
Green Mountain Boxwood	40	North side of courtyard
Blue Prince Holly	60	Patio screening on north/west units
Walkers Low Catmint	100	North side of courtyard
Hicks Yew	74	Patio screening on south/east units
Seasonal flowers	N/A	6 Planters on turf
Synthetic Turf	N/A	Turf area in central courtyard

Based on a review of the courtyard live planting species, none are considered prohibited and are permissible under Article 4, Section 4.20 of the Zoning Ordinance.

However, Article 4, Section 4.20 (D)(1) states that all landscaping shall consist of approved natural materials or living plant materials. The proposed synthetic turf is not considered live planting material. Thus, **the applicant must revise the landscaping plans to remove all non-living planting material or obtain a variance from the Board of Zoning Appeals.**

- 3.5 Streetscape Elements – The applicant has provided a number of street trees, streetlights, benches, trash receptacles, and bike racks on the site plans submitted. In terms of street trees, Article 4, Section 4.20 (G) requires at least 1 street tree for each 40 linear feet of frontage along a street. A breakdown of the required and proposed street trees is provided below:

Street	Linear Frontage (ft.)	Required	Provided
Worth	306	8	8
Adams	228	6	6
Haynes	198	5	5
Total	732	19	19

As far as streetlights, the applicant appears to be proposing 8 street lights along Worth, 4 along Haynes, and 6 along Adams. Each streetlight is spaced 40 ft. apart and set in between street trees. All streetlights proposed are expected to meet the streetscape standards for the Triangle District.

Furthermore, the applicant has proposed 5 total benches: 3 along Adams and 2 along Haynes. There are 6 bike racks proposed on Haynes, and 3 bike racks along Adams. Finally, 5 total trash receptacles are proposed to be located adjacent to the benches on the site plans submitted. **The Planning Board may wish to require the applicant to include additional benches, bike racks, or trash receptacles along each street frontage.**

4.0 Parking, Loading & Circulation

- 4.1 Parking – Article 4, Section 4.46 of the Zoning Ordinance requires the applicant to provide the following off-street parking for the uses proposed in the site plans submitted:

Proposed Use	Requirements	Area or Units	Spaces
Retail	1 per 300 sq. ft.	4,035	14
Other Commercial	1 per 550 sq. ft.	2,365	4
2 or less room unit	1 space per unit	46	46
3 or more room unit	1.25 spaces per unit	111	139
Total Required	-	-	203
Total Proposed	-	-	266
Total w/ On-Street	-	-	281

Article 3, Section 3.08 (G)(6) states that on-street parking located along a lot's frontage in the Triangle District may be credited towards meeting the parking requirements for that use, provided the streetscape is improved to meet the requirements of Section 3.12. The site plans submitted show a total of 15 on-street parking spaces available to be counted towards the commercial uses, which is included in the table above.

In the above calculations, the "Other Commercial" area consists of the leasing lobby/concierge space on the west side of the building. The other areas within the building that are amenities strictly for the residents of the building such as storage rooms, workshare space, package area, fitness center and other areas were not considered as area requiring additional off-street parking spaces, as these areas will be used by residents only and thus the parking is already accounted for.

Based on the calculations above, the applicant meets the parking requirements for the proposed development. As discussed during Preliminary Site Plan review, the 266 off-street spaces are accessed via a gate system and are predominantly intended for residential access, which left the 18 spaces required for commercial unaccounted for in the off-street parking facility.

The applicant indicated that the 15 on-street spaces lining the property will be used for commercial requirements, which the 3 outstanding spaces for use by the commercial areas will be provided in the off-street parking facility using the current excess spaces provided within the parking structure.

- 4.2 Loading – Based on the commercial space within the proposed development (6,400 sq. ft.), the applicant is required to provide one off-street loading space with the following minimum dimensions: 40 feet long, 12 feet wide and 14 feet high. The applicant has marked the loading area dimension on the plans, which provides ample space (43 ft. x 21 ft.) within the loading and receiving room on the west side of the building. In addition, the elevation drawing on Sheet SD.9.0 indicates that the entrance to the loading and receiving room is 14 ft. high, which accommodates the height requirements of the loading area.
- 4.3 Vehicle Circulation & Access – The site plans submitted indicate that the main vehicle access to the site will be through an opening on the west side of the building that leads to the interior parking structure. The opening measures 24 ft. wide and contains controlled gated entry.
- 4.4 Pedestrian Circulation & Access – Pedestrian access is varied with a main lobby entrance for the residential units located on the west side of the building. The 3 units on the first floor on the east side of the building along Adams and the 3 units on the north side along Haynes also have street-level entrances. Access to the retail space along Haynes is proposed via 3 doors that open to the north side of the building.

5.0 Lighting

The applicant has submitted an exterior lighting design concept, specification sheets for proposed light fixtures, and a photometric plan detailing the illuminance level across the property pursuant to Article 4, Section 4.21 (C).

The specification sheets submitted suggest that the lighting concept consists of predominantly down lighting and accent lighting across the development. A review of the light fixtures proposed suggests that most fixtures are cutoff or full cutoff as required and as defined by Section 9.02, and are placed in a manner that is consistent and coordinated, and positioned away from abutting properties where appropriate. However, the Cooper accent lights, Hess & We-Ef light columns, Hubbell micro flood lights, BEGA wall luminaires, and DesignPlan recessed fixtures that are proposed across the site are not considered cutoff or full cutoff. Exception to cutoff luminaires can be made at the discretion of the Planning Board under any of the following conditions:

- a. The distribution of upward light is controlled by means of refractors or shielding to the effect that it be used solely for the purpose of decorative enhancement of the luminaire itself and does not expel undue ambient light into the nighttime environment.
- b. The luminaire is neither obtrusive nor distracting, nor will it create a traffic hazard or otherwise adversely impact public safety, with appropriate methods used to eliminate undesirable glare and/or reflections.
- c. The luminaire is consistent with the intent of the Master Plan, Urban Design Plan(s), Triangle district plan, Rail District plan and/or Downtown Birmingham 2016 Report, as applicable.
- d. The scale, color, design or material of the luminaire will enhance the site on which it is located, as well as be compatible with the surrounding buildings or neighborhood.
- e. Lighting designed for architectural enhancement of building features (i.e. architectural enhancement lighting). Appropriate methods shall be used to minimize reflection and glare.
- f. The site lighting meets all requirements set forth in this ordinance including, but not limited to, light trespass and nuisance violations.

While considering the exception as explained above, it is important that the Planning Board fully understand the placement of all of the proposed the fixtures. The applicant has not submitted elevation or site drawings that indicate the location of all outdoor fixtures as required by Article 4, Section 4.21 (C)(1).

In addition to the issues noted above, the photometric plans submitted contain a number of issues. Firstly, Section 4.21 (E) of the Zoning Ordinance requires that light intensity shall be measured at 6' above ground level on a vertical plane. The photometric plans submitted contain a note that photometric levels are illustrated at grade. Secondly, Section 4.21 (E) also requires the intensity of light on a site to not exceed 1.5 maintained foot-candles at any property line with the exception of those sites which provide a front setback of less than 5 ft., which permits intensity to be measure 5 ft. beyond the front property line. The photometric plans submitted demonstrate light intensity that exceeds 1.5 maintained foot-candles at several points along the measurement boundaries.

In summary, the applicant must submit revised lighting and photometric plans that meet the requirements of Article 4, Section 4.21 of the Zoning Ordinance.

6.0 Departmental Reports

- 6.1 Engineering Department – Please see attached Engineering Department comments dated May 6, 2022.
- 6.2 Department of Public Services – The Department of Public Services has no additional comments at this time.
- 6.3 Fire Department – The Fire Department has no additional comments at this time.
- 6.4 Police Department – The Police Department has no comments at this time.

6.5 Building Department – Please see the attached Building Division comments dated May 6, 2022.

6.6 Parking Manager – The Parking Manager has no comments at this time.

7.0 Design Review

The applicant has submitted detailed elevation drawings and material specifications for the proposed development. Due to the proposed developments location within the Triangle Overlay District, there are specific architectural standards that the development must meet as outlined in Article 3, Section 3.09 of the Zoning Ordinance. These standards contain requirements for front façades, windows and doors, roof design, building materials, awnings, and corner buildings. The proposed building design appears to meet all of the requirements of the Triangle District Overlay architectural standards. Additional details are provided below.

Façade Materials

In terms of façade materials, the applicant is proposing a variety of high quality materials. A summary of the proposed façade materials is provided below:

Material	Location	Color
Urban Brick	Haynes & Worth upper stories, central vertical elements	Polar
Urban Brick	All Facades	Oxenden
Urban Brick	Adams & alley façade upper stories	Galaxy
Textured Block	First floor, all facades	N/A
Black Granite	Base & lobby entrance surround	Black
Metal Panel	4 th floor façade (Adams), 6 th floor façade (Haynes, Worth, Alley), window headers	Gray
Fiber Cement	Interior courtyard elevations	Mixed Greys
Aluminum	Window frames	Charcoal
Aluminum & Wire Mesh	Balcony railings	Metallic
Aluminum Louvers	1 st floor above canopies	Metallic
Glass	All façade windows/doors	Clear
Coated Wire Mesh	Mechanical screening	Metallic

Specifically related to building materials, Section 3.09 (D) requires the following exterior finish materials on the front façade and any façade facing a street, plaza, park or parking area.:

1. All walls exposed to public view from the street, or parking area shall be constructed of not less than 60% brick, stone or glass. Panel brick and tilt-up brick textured paneling shall not be permitted.
2. The remaining façade may include wood siding or fiber cement siding. Exterior insulation finish systems (EFIS) may be used for architectural detailing above the first floor.

3. Buildings that have upper stories shall be designed to create a distinct and separated ground floor area through the use of accent such as a string course, change in material or textures, or an awning or canopy between the first and second stories.

Based on the elevation drawings submitted, it is clear that the applicant meets the requirements noted above.

Signage

Article 1, Section 1.04 (A) of the Sign Ordinance requires all newly constructed or exterior renovated buildings to provide an overall building sign design plan to be approved by the appropriate reviewing body, in accordance with Section 2.02: Sign Review. The applicant has not submitted a sign design plan for the proposed building. Thus, **the applicant must provide revised site plans with a sign design plan.**

Glazing

In terms of glazing requirements, the proposed development is required to provide a minimum of 70% transparent area between 1 and 8 ft. above grade on all storefront/ground-floor facades. In addition, a maximum of 50% of the total façade area on upper floors may be transparent.

Sheet SD.23.0 demonstrates the proposed glazing calculations for the Adams, Haynes and Worth facades:

Street	Required	Provided
Adams (1 st floor)	70% minimum	22%
Adams (Upper Floors)	50% maximum	49%
Haynes (1 st Floor)	70% minimum	69%
Haynes (Upper Floors)	50% maximum	50%
Worth (1 st Floor)	70% minimum	71.1%
Worth (Upper Floors)	50% maximum	51.6%

As observed in the table above, many of the glazing calculations provided above do not meet the requirements of the Triangle District Overlay. Additionally, it appears as though the glazing sheet was not updated to reflect the most current elevation drawings. One issue noted is that the Adams frontage still contains walk-up apartments along the entire façade. A second issue is the Worth façade's loading area, which now contains a coiled garage door that appears to have been considered as clear glazing area.

In addition to the glazing percentages above, the applicant has not provided specification sheets for the proposed glass on the ground or upper floors to ensure that the clear glazing requirement of 80% Visual Light Transmittance is met.

In summary, **the applicant must submit revised glazing calculations and glass specifications that meet the requirements of the Triangle Overlay District, or obtain a variance from the Board of Zoning Appeals.**

Projections into the Right-of-Way

Article 4, Section 4.74 (D) outlines the requirements for encroachments into the right-of-way that include removable and permanent encroachments that apply to the proposed development.

Removable architectural elements such as awnings, canopies, marquees may be approved by the Planning Board to project into the right of way provided that they are constructed to support applicable loads without any ground mounted supports on public property. Encroachments with less than 15 ft. of clearance above the sidewalk shall not extend into or occupy more than two-thirds of the width of the sidewalk or 5 ft, whichever is less, and must not interfere with any existing or planned streetscape elements or infrastructure.

Permanent architectural features such as windows, balconies, overhangs and other architectural features that encroach into the right of way above 8 ft. may be approved by the Planning Board, Design Review Board and/or the Historic District Commission provided that they do not extend 2' or more into the right of way or create an obstruction and that the encroachment complies with the design review standards set forth in Article 07 of the Birmingham Chapter 126 - Zoning. Encroachments that extend more than 2' into the right of way will also require the approval of the City Commission through a lease agreement.

As far as removable architectural elements, the applicant is proposing painted metal canopies on all facades of the development. Based on the site plans and scale submitted, it appears as though the proposed canopies do not extend beyond the property line in any significant dimension. However, the plans do not provide explicit dimensions for the projections of the canopies beyond the property lines.

Similarly, the applicant is proposing permanent encroachments in the form of balconies that project into the right-of-way. Using the scale provided on the site plans, the balconies appear to extend roughly 4 ft. beyond the building face, but it is unclear as to how much of the projection lies within the public right-of-way.

Therefore, **the applicant must submit revised site plans indicating the encroachment dimensions of the canopies and balconies into the right-of-way.**

Rooftop Use

Article 5, Section 5.10 (K) outlines Rooftop Use Standards for the B2 zoning district:

1. Rooftop amenities such as pergolas, trellises and other similar items are permitted on a rooftop, provided:
 - i. They are set back at least 5 feet from the eave line.
 - ii. They are of sufficient weight or anchored to the building to resist anticipated wind loads.
 - iii. They do not have full enclosures.
 - iv. They do not include eisenglass or similar enclosure materials.

2. Rooftop structures and amenities may not contain habitable space.

The applicant is proposing a rooftop use that contains a significant number of amenities that include a pool, seating, umbrellas, and what appear to be 4 grills. The rooftop use appears to be integrated into the construction of the parking structure as opposed to location the roof of the 4-story portion or 6-story portion of the proposed development. **Although it appears as though the Rooftop Use Standards are met, the Planning Board may wish to request more information from the applicant to ensure that the amenities to not contain full enclosures.**

8.0 Required Attachments

	Submitted	Not Submitted	Not Required
Existing Conditions Plan	☒	☐	☐
Detailed and Scaled Site Plan	☒	☐	☐
Certified Land Survey	☒	☐	☐
Interior Floor Plans	☒	☐	☐
Landscape Plan	☒	☐	☐
Photometric Plan	☒	☐	☐
Colored Elevations	☒	☐	☐
Material Specification Sheets	☒	☐	☐
Material Samples	☐	☐	☒
Site & Aerial Photographs	☒	☐	☐

9.0 Approval Criteria

In accordance with Article 7, section 7.27 of the Zoning Ordinance, the proposed plans for development must meet the following conditions

- 9.1 The location, size and height of the building, walls and fences shall be such that there is adequate landscaped open space so as to provide light, air and access to the persons occupying the structure.
- 9.2 The location, size and height of the building, walls and fences shall be such that there will be no interference with adequate light, air and access to adjacent lands and buildings.
- 9.3 The location, size and height of the building, walls and fences shall be such that they will not hinder the reasonable development of adjoining property and not diminish the value thereof.
- 9.4 The site plan, and its relation to streets, driveways and sidewalks, shall be such as to not interfere with or be hazardous to vehicular and pedestrian traffic.
- 9.5 The proposed development will be compatible with other uses and buildings in the neighborhood and will not be contrary to the spirit and purpose of this chapter.

- 9.6 The location, shape and size of required landscaped open space is such as to provide adequate open space for the benefit of the inhabitants of the building and the surrounding neighborhood.

10.0 Recommendation

Based on a review of the site plans submitted and the requirements outlined in Article 7, Section 7.27 of the Zoning Ordinance, the Planning Division recommends that the Planning Board **APPROVE** the Final Site Plan and Design Review application for 770 S. Adams – Perennial – with the following conditions:

1. The applicant will be required to submit revised site plans with RTU screening that adequately obscures the proposed RTU's;
2. The applicant must revise the landscaping plans to remove all non-living planting material or obtain a variance from the Board of Zoning Appeals;
3. The applicant must submit revised lighting and photometric plans that meet the requirements of Article 4, Section 4.21 of the Zoning Ordinance;
4. The applicant must provide revised site plans with a sign design plan;
5. The applicant must submit revised glazing calculations and glass specifications that meet the requirements of the Triangle Overlay District, or obtain a variance from the Board of Zoning Appeals;
6. The applicant must submit revised site plans indicating the encroachment dimensions of the canopies and balconies into the right-of-way; and
7. The applicant comply with the requests of all City Departments.

11.0 Sample Motion Language

Motion to **APPROVE** the Final Site Plan and Design Review application for 770 S. Adams – Perennial – with the following conditions:

1. The applicant will be required to submit revised site plans with RTU screening that adequately obscures the proposed RTU's;
2. The applicant must revise the landscaping plans to remove all non-living planting material or obtain a variance from the Board of Zoning Appeals;
3. The applicant must submit revised lighting and photometric plans that meet the requirements of Article 4, Section 4.21 of the Zoning Ordinance;
4. The applicant must provide revised site plans with a sign design plan;
5. The applicant must submit revised glazing calculations and glass specifications that meet the requirements of the Triangle Overlay District, or obtain a variance from the Board of Zoning Appeals;
6. The applicant must submit revised site plans indicating the encroachment dimensions of the canopies and balconies into the right-of-way; and
7. The applicant comply with the requests of all City Departments.

OR

Motion to **POSTPONE** the Final Site Plan and Design Review application for 770 S. Adams – Perennial – pending receipt of the following:

1. _____
2. _____
3. _____

OR

Motion to **DENY** the Final Site Plan and Design Review application for 770 S. Adams – Perennial – for the following reasons:

1. _____
2. _____
3. _____

**Zoning Compliance Summary Sheet
Final Site Plan Review
770 S. Adams**

Existing Site: 2 story commercial & office buildings

Zoning: B2 (General Business) & MU3/MU5 (Triangle District Overlay)

Land Use: Commercial/Office

Existing Land Use and Zoning of Adjacent Properties:

	North	South	East	West
Existing Land Use	Commercial/ Office	Commercial/ Office	Commercial/ Office	Commercial
Existing Zoning District	B2 (General Business)	B2 (General Business)	B2 (General Business) & O2 (Office-Commercial)	B2 (General Business)
Overlay Zoning District	MU3 & MU5	MU3 & MU5	N/A	MU5 & MU7

Land Area:	Existing:	2.05 ac
	Proposed:	2.05 ac
Dwelling Units:	Existing:	0 units
	Proposed:	157 units
Minimum Lot Area/Unit:	Required:	N/A
	Proposed:	N/A
Min. Floor Area /Unit:	Required:	600 sq. ft. (efficiency and one bedroom) 800 sq. ft. (two or more bedroom)
	Proposed:	627-963 sq. ft. (one bedroom) 1,066-1,855 (two or more bedroom)
Max. Total Floor Area:	Required:	N/A
	Proposed:	N/A
Min. Open Space:	Required:	N/A
	Proposed:	N/A

Max. Lot Coverage:	Required:	N/A
	Proposed:	N/A
Front Setback:	Required:	0 ft. minimum
	Proposed:	0 ft.
Side Setbacks	Required:	0 ft. with walls facing side lot line w/ no windows
	Proposed:	0 ft.
Rear Setback:	Required:	10 ft.
	Proposed:	10 ft.
Min. Front+Rear Setback	Required:	N/A
	Proposed:	N/A
Max. Bldg. Height:	Permitted:	66 ft., 5 stories (MU3) 78 ft., 6 stories (MU5)
	Proposed:	53 ft., 4 stories (MU3) 77 ft., 6 stories (MU5)
Min. Eave Height:	Required:	N/A
	Proposed:	N/A
Floor-Floor Height:	Required:	14 ft. minimum (1 st story)
	Proposed:	20 ft.
Front Entry:	Required:	On frontage line
	Proposed:	On frontage line
Absence of Bldg. Façade:	Required:	N/A
	Proposed:	N/A
Opening Width:	Required:	N/A
	Proposed:	N/A
Parking:	Required:	203 off-street spaces
	Proposed:	266 off-street spaces
Min. Parking Space Size:	Required:	180 sq. ft.
	Proposed:	180 sq. ft.
Parking in Frontage:	Required:	N/A
	Proposed:	N/A

Loading Area:	Required:	1 off-street loading space 40 ft. x 12 ft. x 14 ft.
	Proposed:	1 off-street loading spaces 43 ft. x 21 ft. x 14 ft.

Screening:

<u>Parking:</u>	Required:	6 ft. masonry screen wall
	Proposed:	Screened by building facade

<u>Loading:</u>	Required:	Screened from view
	Proposed:	Interior loading area screened by building

<u>Rooftop Mechanical:</u>	Required:	Screened from view
	Proposed:	3.5 ft. screen wall

<u>Elect. Transformer:</u>	Required:	Obscured from public view
	Proposed:	13 ft. masonry screen wall with wood gates

<u>Dumpster:</u>	Required:	Masonry screen wall with wood gates
	Proposed:	Two fully interior trash rooms fully screened by building facade

DATE: May 6, 2022

TO: Nicholas Dupuis, Planning Director

FROM: Scott D. Zielinski, Assistant City Engineer

SUBJECT: Preliminary Site Plan Review – 770 S. Adams (Adams/Haynes Development)

The Engineering Department has completed a review of the newly submitted architectural drawings prepared by Christopher J Longe AIA for Preliminary Site Plan, and the preliminary site plans dated 12/16/2021 04/25/2022 prepared by PEA Group with respect to conformance with City ordinances and engineering standards. Previous comments that have been addressed have been crossed out, additional comments are in Orange. The Engineering Department has the following comments:

GENERAL:

- ~~• Site Plans will be required to show changes in planned grade elevations.~~
- ~~• Elevations on design plans shall be based on the City's datum, this must be clearly noted on the plans. Please note that the City's datum is not NAVD88.~~
- An agreement with the City for construction of City streetscape features and City utilities must be established with the development prior to construction of development.

SEWER:

- ~~• An existing 42" combined sewer exists along Adams Road, this is the sewer that the new development should be connected to.~~
- ~~• Separate connections for both Storm Sewer and Sanitary Sewer shall be established.~~
- ~~• Plans do not indicate how roof drainage will be handled. Note that City Ordinance prohibits downspouts from being directly connected to the sewer system.~~

STORM WATER RUNOFF:

- For the proposed site development, Engineering have made the determination that the proposed construction site on Unit 2 is considered the "affected area" with respect to City's Storm Water Runoff Ordinance (Chapter 114, Article III, Division 4, Sec 114-271 to 114-274). Therefore, the allowable runoff from the site for a 10-year storm event is 1.0 cfs/acre, or 0.2 cfs, whichever is greater.
- ~~• Provide calculations for required storm water detention, and show how the excess storm water will be detained and released at the allowable discharge rate.~~
- Restrictor size calculations are incorrect please revise. Total flow from site not to exceed 2.06 cfs.

WATER SYSTEM:

- ~~There is an existing 12" water main on Adams. We assume your development will require an 8" connection to this water main.~~
- All existing site connections to water mains must be properly abandoned.
- ~~Show the proposed water service for domestic supply and fire suppression on the plans.~~
- ~~The proposed 8" water tap should be converted to an 8" City water main extending the length of the alley connecting the 12" main on Adams to the 8" main on S Worth St. Gate valves should be placed at either end of the new water main section.~~
 - ~~An 8"x 8" T can be placed in the alley at the planned service location for the 8" fire supply with the 4" Domestic tap connected to the 8" service.~~
 - ~~An 8"x6" T can be placed from the constructed 8" alley main to the proposed hydrant at the SE corner of the development.~~

The city believes by connecting the proposed facility to the water supply in this fashion will provide the best possible water quality and pressure.

PERMITS FOR CONSTRUCTION:

- Right-of-Way Permit for any excavations or work in Adams St. right-of-way.
- Street Obstruction Permit for any temporary traffic interference on any surrounding road, or for pedestrian traffic interference on public sidewalks.
- Sidewalk/Drive Approach Permit for any pavement installed in the public right-of-way.

GENERAL CONSTRUCTION:

- Inspections will be required for planned Streetscape work, including sidewalk preparation and concrete placement.
- Power System plans for building must be shown on final plans (we do not anticipate the use of City ROW space for power)

Please note these are our initial comments and the City should be provided an opportunity to review [any design changes completed for](#) engineered drawings prior to final submission. [Engineering design changes could impact the](#) Engineering Department comments, which could impact design requirements.

CITY OF BIRMINGHAM
Community Development – Building Department
151 Martin Street, Birmingham, MI 48009

May 6, 2022

RE: Final Site Plan Review Comments
770 S. Adams, Proposed 4 & 5 Story Building

As requested, the Building Department has examined the plans for the proposed project referenced above. The plans were provided to the Planning Department for site plan review purposes only and present conceptual elevations and floor plans. Although the plans lack sufficient detail to perform a code review, the following comments are offered for Planning Design Review purposes and applicant consideration:

Applicable Building Codes:

- **2015 Michigan Building Code.** Applies to all buildings other than those regulated by the *Michigan Residential Code*.
- **2015 Michigan Mechanical Code.** (Residential requirements for mechanical construction in all detached one and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with a separate means of egress and their accessory structures are contained in the Michigan Residential Code)
- **2018 Michigan Plumbing Code.** (Residential requirements for plumbing construction in all detached one and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with a separate means of egress and their accessory structures are contained in the Michigan Residential Code)
- **2017 National Electrical Code along with the Michigan Part 8 Rules.** (Residential requirements for electrical construction in all detached one and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with a separate means of egress and their accessory structures are contained in the Michigan Residential Code)

Review Comments:

1. The west interior exit stairway by the elevator does not discharge directly to the exterior of the building. This is permissible per the building code as long as the requirements of Exception 1 to Section 1028.1 are achieved.

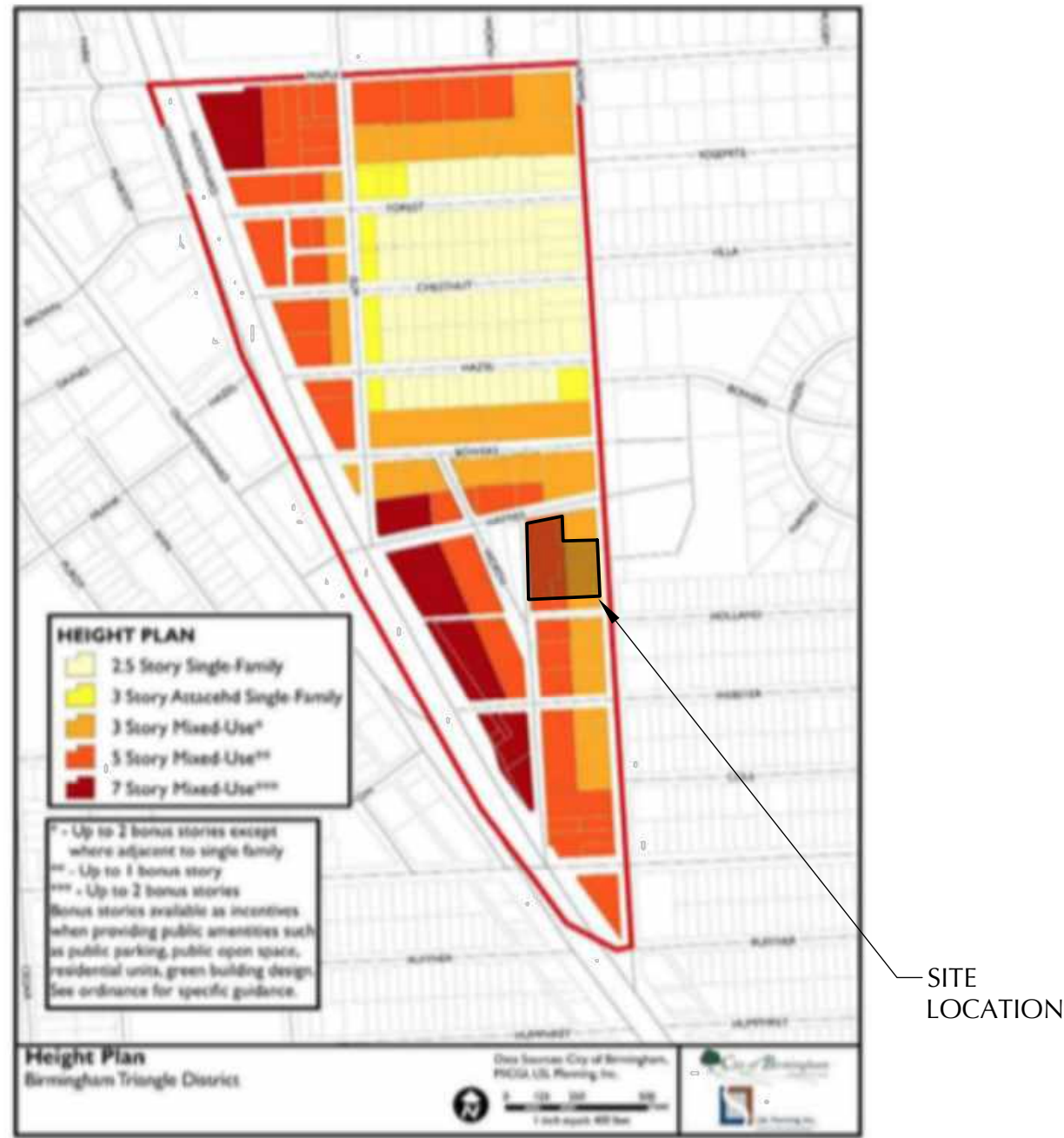


Haynes @ Worth (NW Corner) looking South

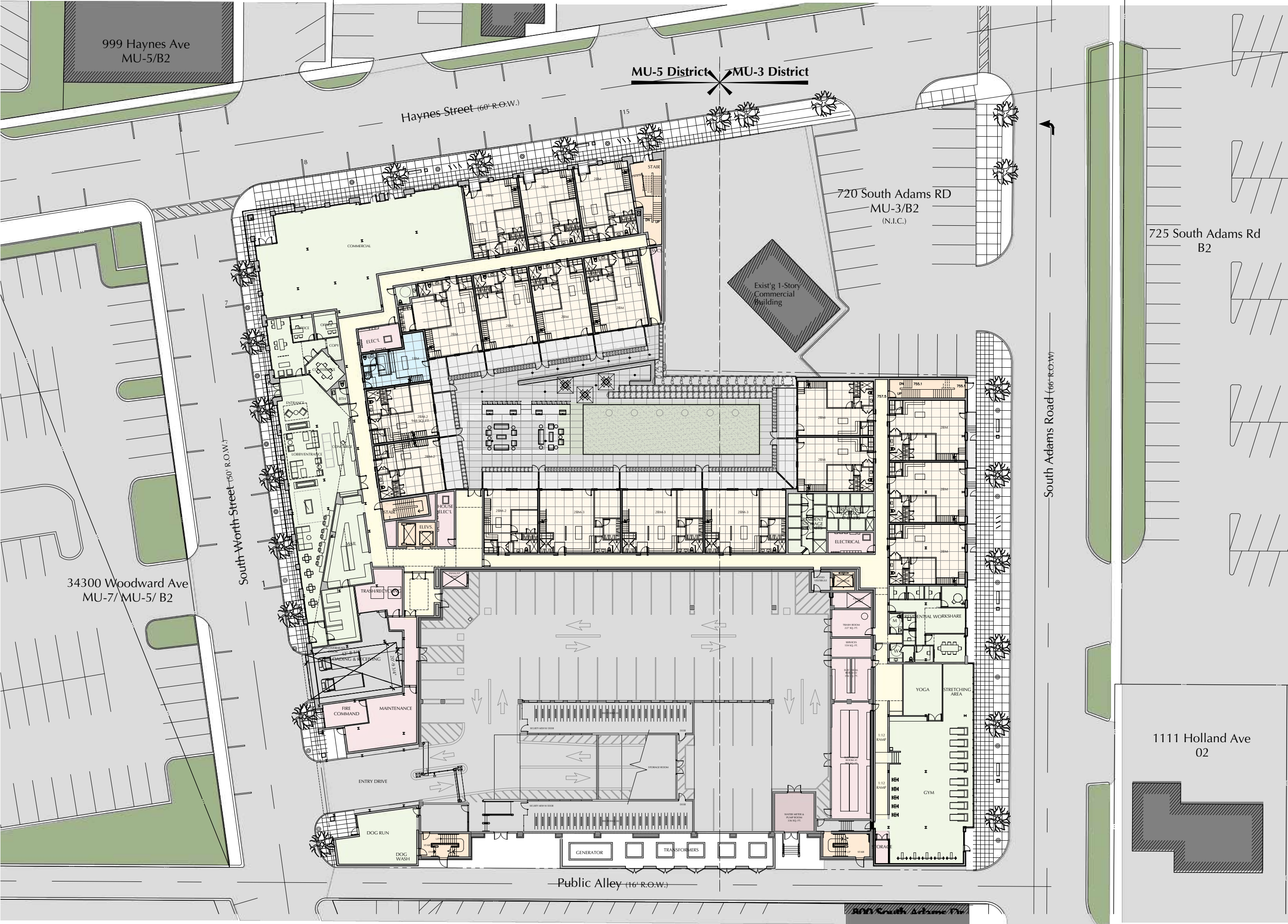
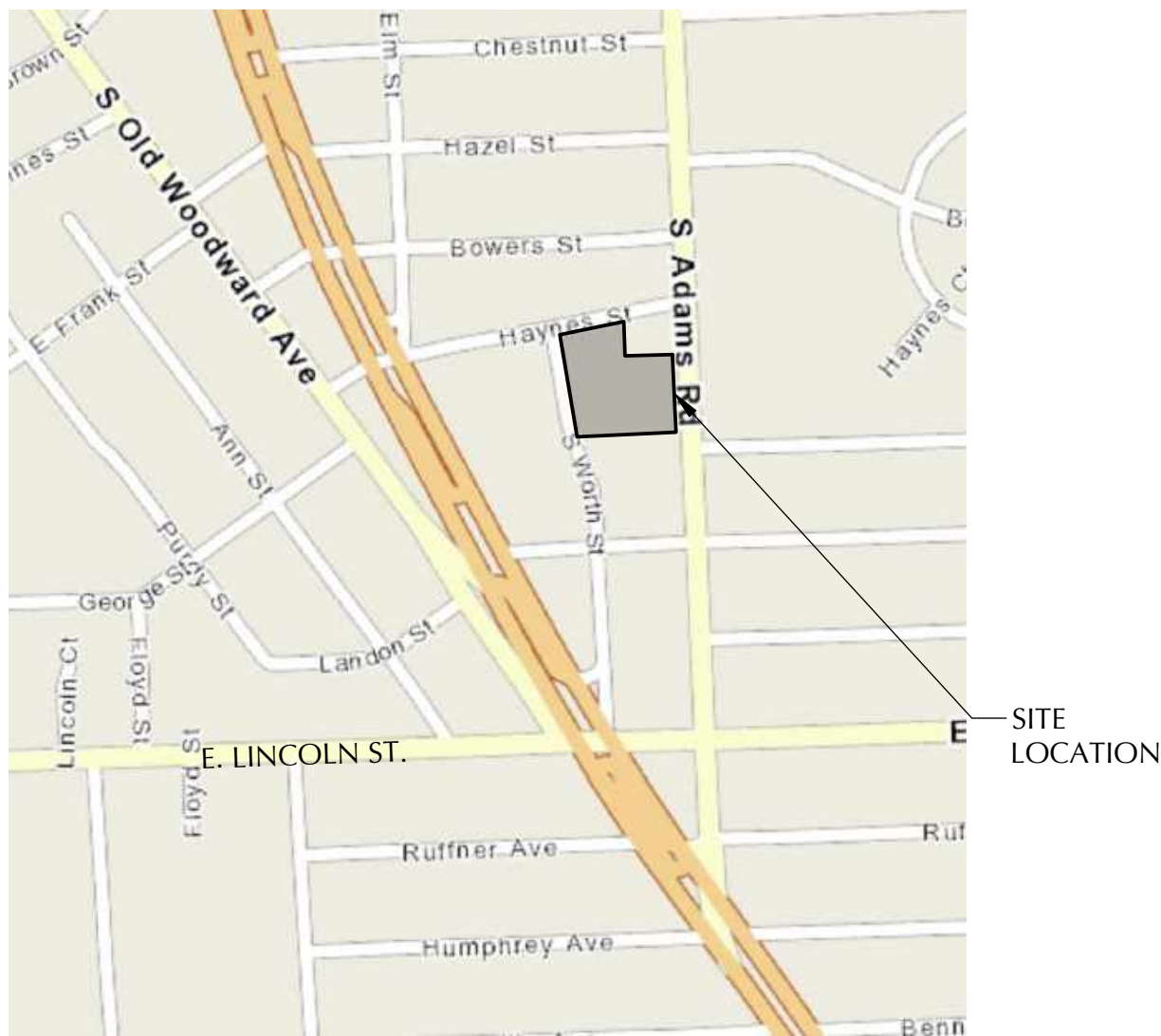


Adams @ Haynes (NE Corner) looking West

TRIANGLE DISTRICT HEIGHT MAP



LOCATION MAP



Worth @ Alley (SW Corner) looking North



Adams @ Alley (SE Corner) looking North



SITE DATA

Site Addresses	1000 Haynes Ave., 770 S. Adams Rd.
Sidwell/Property ID Numbers	19-36-283-024, 19-36-283-016
Current Zoning/Use	B-2/Bank, Office (MU-3 & MU-5 District)
Proposed Zoning/Use	B-2/Mixed Use Residential, Retail (MU-3 & MU-5 District)
Adjacent Zoning	B-2, O-2
Setbacks	None Required, 0'-0" to 1'-0" Provided

BUILDING HEIGHT

Item	Minimum	MU-3 District Maximum	MU-5 District Maximum	Provided
Ground Level	14'-0"			20'-0"
Level 4		54'-0" (w/Stepback)		54'-0"
Level 5		66'-0"	66'-0"	66'-0"
Level 6 (ADDITIONAL BONUS STORY)		24'-0"	12'-0"	11'-0"
Mechanical		12'-0"	12'-0"	12'-0"

BUILDING USE DATA

Level	Use	Use Group
Ground Level	Retail, Lobby & Resident Services, Building Services, Resident Workshare & Storage, Parking, Apartments	M, B, S-2, R-2
Level 2	Resident Amenities, Apartments	R-2, B
Level 3	Apartments	R-2
Level 4	Apartments	R-2
Level 5	Apartments (Haynes/Worth only)	R-2
Level 6	Apartments (Haynes/Worth only)	R-2
Total No. of Apartments		157 Units

PARKING DATA

RESIDENTIAL APARTMENTS	153 APARTMENTS X 1 (1-2 BEDROOM APARTMENTS)	REQUIRED 153.0 SPACES	PROVIDED 266.0 SPACES
	4 APARTMENTS X 1.25 (3 BEDROOM APARTMENTS)	5.0 SPACES	
RETAIL RETAIL	4,035 / 300 SF	14.0 SPACES	
TOTAL	157 APARTMENTS	172.0 SPACES	266.0 SPACES
TOTAL (INCLUDING 15 STREET PARKING SPACES)			281.0 SPACES

FACADE DATA

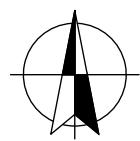
Elevation	Brick, Stone, Glass (60% Minimum)	Main Level Glazing (70% Minimum)	Glazing Above 8'-0" (50% Maximum)
North (Haynes Ave.)	Meets	Meets	Meets
East (Adams Rd.)	Meets	No Frontage	Meets
West (Worth St.)	Meets	Meets	Meets
South (Alley)	No Frontage	No Frontage	Meets
Cumulative Totals			

SQUARE FOOT AREA DATA - w/Room Below-Based Mezzanines

6th level Apartments Area =	19,346 GSF	
5th Level Apartments Area =	22,879 GSF	
Indoor Amenity Area =	4,817 GSF	
Total 5th Level Area =	27,696 GSF	
Total 4th Level Apartments Area =	46,370 GSF	
Total 3rd Level Apartments Area =	48,196 GSF	
Total 2nd Level Apartments Area =	48,196 GSF	
1st Level Apartments Area =	27,614 GSF	
Fitness Center =	3,275 GSF	
Resident Workshare =	1,300 GSF	
Retail Area =	4,035 GSF	
Lobby, Leasing, Mail & Pkgs. Area =	4,863 GSF	
Loading/Receiving Area =	1,880 GSF	
Trash Collection Area =	390 GSF	
Dog Run & Wash Area =	1,075 GSF	
Maintenance Area =	1,240 GSF	
Total 1st Level Area =	45,672 GSF	
Total Building Indoor Area =		235,475 GSF
Total Rentable Area =		212,601 SF

Total Mezzanine Area = 5,543 SF
Outdoor 5th Level Amenity Deck Area = 14,800 GSF
Outdoor 1st Level Amenity Lawn Area = 7,580 GSF
Parking Deck Total Area = 102,036 GSF (Includes 6 Electrical Rooms, Water Meter & Pump Room, 4 Trash Rooms & 8 Vestibules)
Balconies = 4,842 GSF
Terraces = 1,614 GSF
Patio = 2,802 GSF

NOTE: Total Mezzanine area must be added to Total Building Indoor Area for actual constructed square footage.

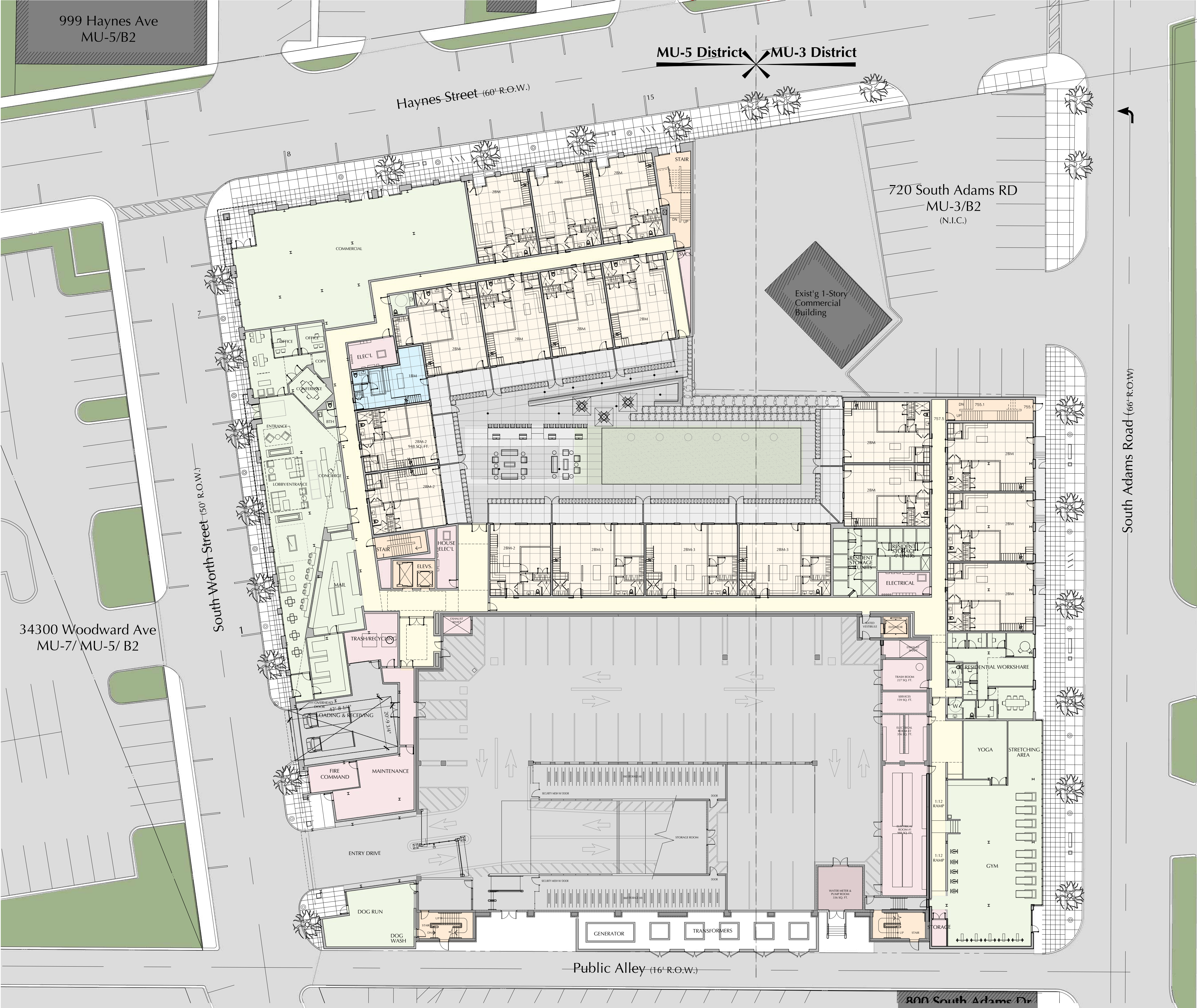


SITE PLAN

CHRISTOPHER J LONGE AIA
ARCHITECTURE
INTERIORS
124 Peabody, Birmingham, Michigan 48009 205.238.8940

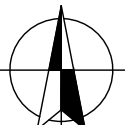
NOT TO SCALE

FHS BIRMINGHAM
Birmingham, Michigan 48009



LEGEND									
	PARKING								
	RETAIL + RESIDENT SERVICES								
	ANCILLARY								
	EGRESS								
	CIRCULATION								
	STUDIO								
	1 BEDROOM								
	1 BEDROOM + DEN								
	1 BEDROOM - 2 LEVELS								
	2 BEDROOM								
	2 BEDROOM + DEN								
	2 BEDROOM - 2 LEVELS								
	2 BEDROOM + DEN - 2 LEVELS								
	3 BEDROOM								

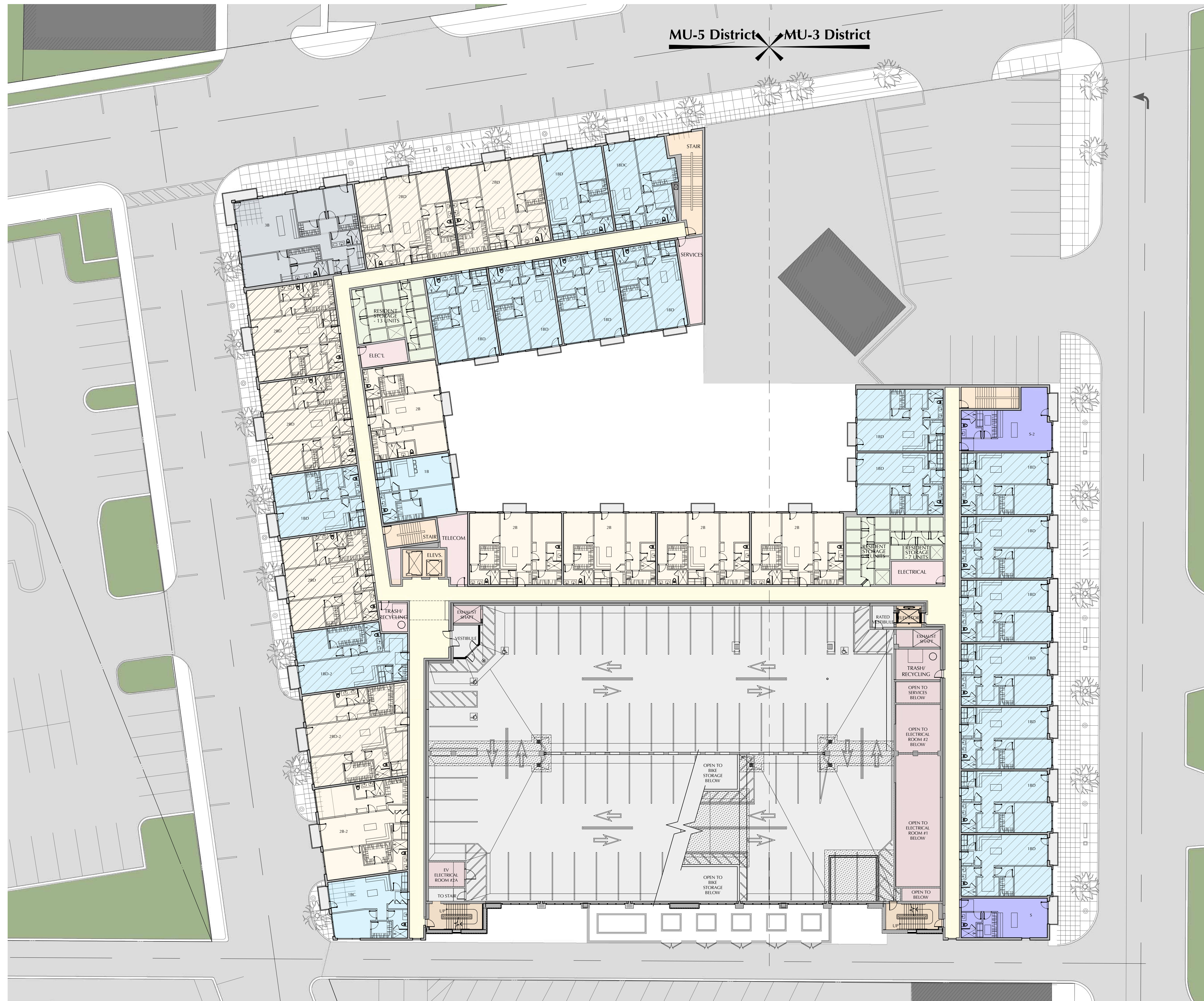
UNIT DATA									
Type	# of Units						Unit Mix		
	Lvl 1	Lvl 2	Lvl 3	Lvl 4	Lvl 5	Lvl 6	Total	%	
Studio (S, S-2)	0	2	2	0	0	0	4	2.5%	2.5%
1 Bedroom (1B, 1BC)	0	2	2	7	2	4	17	10.8%	
1 Bedroom + Den (1BD, 1BD-2, 1BDC)	0	17	16	9	8	6	56	35.7%	48.4%
1 Bedroom, 2 Levels (1BM)	1	0	0	0	0	0	3	1.9%	
2 Bedroom (2B, 2B-2)	0	6	6	8	2	7	29	18.5%	
2 Bedroom + Den (2BD, 2BD-2, 2BDC)	0	6	7	7	6	1	27	17.2%	45.9%
2 Bedroom, 2 Levels (2BM, 2BM-2, 2BM-3)	18	0	0	0	0	0	16	10.2%	
3 Bedroom (3BM)	0	1	1	1	1	1	5	3.2%	3.2%
Total	19	34	34	32	19	19	157	100%	100%
TOTAL PARKING 266 SPACES (12 BARRIER FREE) 1.71/UNIT			TOTAL BIKE STORAGE 96 SPACES			TOTAL RESIDENT STORAGE 129 UNITS			



1ST LEVEL
(AMENITIES/APARTMENTS)

CHRISTOPHER J LONGE AIA
ARCHITECTURE
INTERIORS
124 Peabody, Birmingham, Michigan 48009 248.258.6940

FHS BIRMINGHAM
Birmingham, Michigan 48009



LEGEND

- | | |
|---|----------------------------|
|  | PARKING |
|  | RETAIL + RESIDENT SERVICES |
|  | ANCILLARY |
|  | EGRESS |
|  | CIRCULATION |
|  | STUDIO |
|  | 1 BEDROOM |
|  | 1 BEDROOM + DEN |
|  | 1 BEDROOM - 2 LEVELS |
|  | 2 BEDROOM |
|  | 2 BEDROOM + DEN |
|  | 2 BEDROOM - 2 LEVELS |
|  | 2 BEDROOM + DEN - 2 LEVELS |
|  | 3 BEDROOM |

UNIT DATA

	# of Units							Unit Mix	
Type	Lvl 1	Lvl 2	Lvl 3	Lvl 4	Lvl 5	Lvl 6	Total	%	
Studio (S, S-2)	0	2	2	0	0	0	4	2.5%	2.5%
1 Bedroom (1B, 1BC)	0	2	2	7	2	4	17	10.8%	48.4%
1 Bedroom + Den (1BD, 1BD-2, 1BDC)	0	17	16	9	8	6	56	35.7%	
1 Bedroom, 2 Levels (1BM)	1	0	0	0	0	0	3	1.9%	
2 Bedroom (2B, 2B-2)	0	6	6	8	2	8	30	19.1%	46.5%
2 Bedroom + Den (2BD, 2BD-2, 2BDC)	0	6	7	7	6	1	27	17.2%	
2 Bedroom, 2 Levels (2BM, 2BM-2, 2BM-3)	18	0	0	0	0	0	16	10.2%	
3 Bedroom (3BM)	0	1	1	1	1	0	4	2.5%	2.5%
Total	19	34	34	32	19	19	157	100%	100%
TOTAL PARKING 266 SPACES (12 BARRIER FREE) 1,711 UNIT	TOTAL BIKE STORAGE 96 SPACES				TOTAL RESIDENT STORAGE 129 UNITS				

2ND LEVEL
(AMENITIES/APARTMENTS)

FHS BIRMINGHAM
Birmingham, Michigan 48009



MU-5 District MU-3 District

MU-5 DISTRICT MU-3 DISTRICT

LEGEND

- PARKING
- RETAIL + RESIDENT SERVICES
- ANCILLARY
- EGRESS
- CIRCULATION
- STUDIO
- 1 BEDROOM
- 1 BEDROOM + DEN
- 1 BEDROOM - 2 LEVELS
- 2 BEDROOM
- 2 BEDROOM + DEN
- 2 BEDROOM - 2 LEVELS
- 2 BEDROOM + DEN - 2 LEVELS
- 3 BEDROOM

UNIT DATA

Type	# of Units							Unit Mix	
	Lvl 1	Lvl 2	Lvl 3	Lvl 4	Lvl 5	Lvl 6	Total	%	
Studio (S, S-2)	0	2	2	0	0	0	4	2.5%	2.5%
1 Bedroom (1B, 1BC)	0	2	2	7	2	4	17	10.8%	
1 Bedroom + Den (1BD, 1BD-2, 1BDC)	0	17	16	9	8	6	56	35.7%	48.4%
1 Bedroom, 2 Levels (1BM)	1	0	0	0	0	0	3	1.9%	
2 Bedroom (2B, 2B-2)	0	6	6	8	2	8	30	19.1%	
2 Bedroom + Den (2BD, 2BD-2, 2BDC)	0	6	7	7	6	1	27	17.2%	46.5%
2 Bedroom, 2 Levels (2BM, 2BM-2, 2BM-3)	18	0	0	0	0	0	16	10.2%	
3 Bedroom (3BM)	0	1	1	1	1	0	4	2.5%	2.5%
Total	19	34	34	32	19	19	157	100%	100%

TOTAL PARKING
266 SPACES
(12 BARRIER FREE 1:7.1/UNIT)

TOTAL BIKE STORAGE
96 SPACES

TOTAL RESIDENT STORAGE
129 UNITS

3RD LEVEL
(APARTMENTS)

FHS BIRMINGHAM
Birmingham, Michigan 48009



LEGEND	
	PARKING
	RETAIL + RESIDENT SERVICES
	ANCILLARY
	EGRESS
	CIRCULATION
	STUDIO
	1 BEDROOM
	1 BEDROOM + DEN
	1 BEDROOM - 2 LEVELS
	2 BEDROOM
	2 BEDROOM + DEN
	2 BEDROOM - 2 LEVELS
	2 BEDROOM + DEN - 2 LEVELS
	3 BEDROOM

UNIT DATA									
Type	# of Units							Unit Mix	
	Lvl 1	Lvl 2	Lvl 3	Lvl 4	Lvl 5	Lvl 6	Total	%	
Studio (S, S-2)	0	2	2	0	0	0	4	2.5%	2.5%
1 Bedroom (1B, 1BC)	0	2	2	7	2	4	17	10.8%	
1 Bedroom + Den (1BD, 1BD-2, 1BDC)	0	17	16	9	8	6	56	35.7%	48.4%
1 Bedroom, 2 Levels (1BM)	1	0	0	0	0	0	3	1.9%	
2 Bedroom (2B, 2B-2)	0	6	6	8	2	8	30	19.1%	46.5%
2 Bedroom + Den (2BD, 2BD-2, 2BDC)	0	6	7	7	6	1	27	17.2%	
2 Bedroom, 2 Levels (2BM, 2BM-2, 2BM-3)	18	0	0	0	0	0	16	10.2%	
3 Bedroom (3BM)	0	1	1	1	1	0	4	2.5%	2.5%
Total	19	34	34	32	19	19	157	100%	100%
TOTAL PARKING 266 SPACES (12 BARRIER FREE) 1:7.1/UNIT		TOTAL BIKE STORAGE 96 SPACES				TOTAL RESIDENT STORAGE 129 UNITS			

4TH LEVEL
(APARTMENTS)

FHS BIRMINGHAM
Birmingham, Michigan 48009



5TH LEVEL
(APARTMENTS)

LEGEND

- PARKING
- RETAIL + RESIDENT SERVICES
- ANCILLARY
- EGRESS
- CIRCULATION
- STUDIO
- 1 BEDROOM
- 1 BEDROOM + DEN
- 1 BEDROOM - 2 LEVELS
- 2 BEDROOM
- 2 BEDROOM + DEN
- 2 BEDROOM - 2 LEVELS
- 2 BEDROOM + DEN - 2 LEVELS
- 3 BEDROOM

UNIT DATA

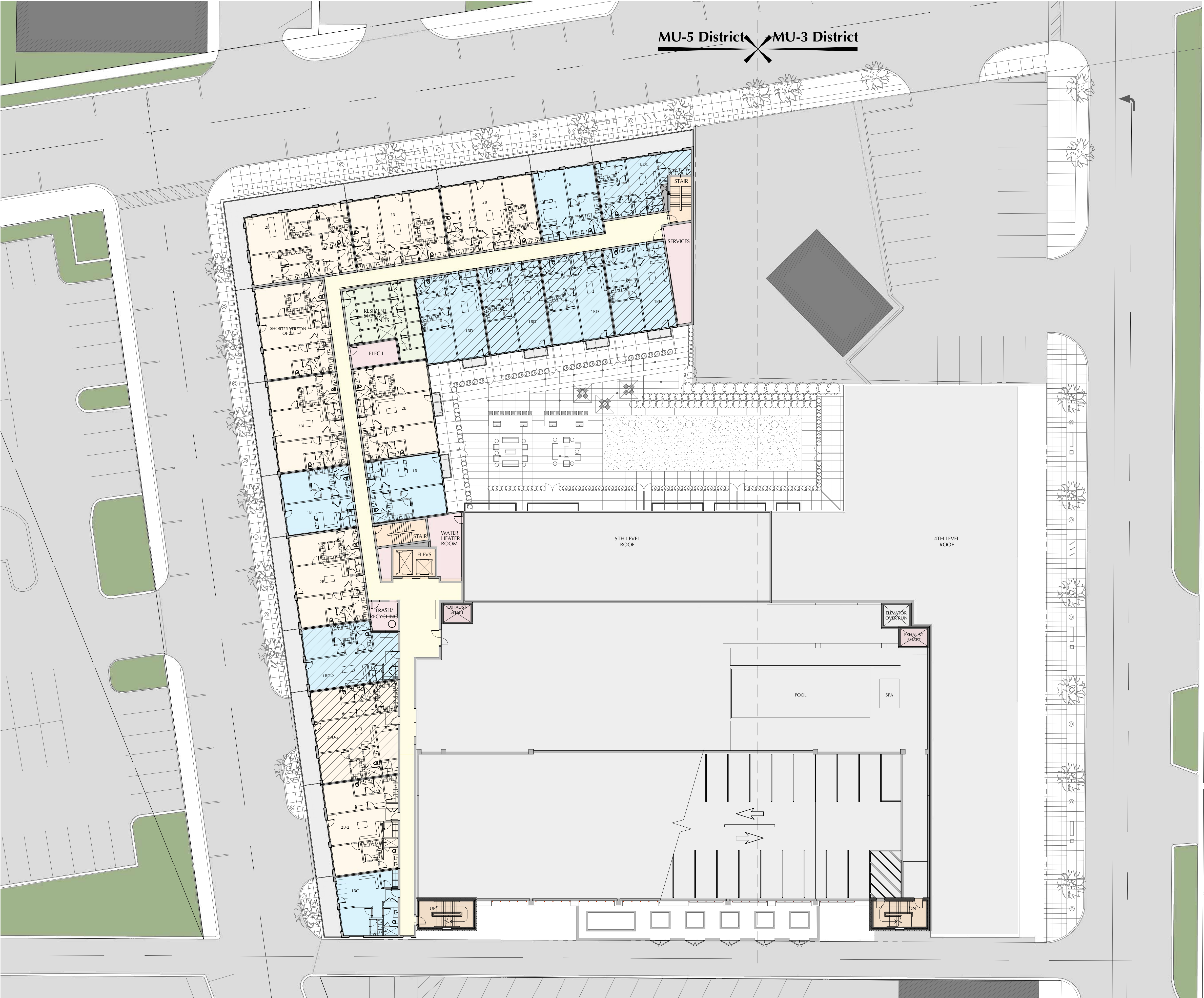
Type	# of Units							Unit Mix	
	Lvl 1	Lvl 2	Lvl 3	Lvl 4	Lvl 5	Lvl 6	Total	%	
Studio (S, S-2)	0	2	2	0	0	0	4	2.5%	2.5%
1 Bedroom (1B, 1BC)	0	2	2	7	2	4	17	10.8%	48.4%
1 Bedroom + Den (1BD, 1BD-2, 1BDC)	0	17	16	9	8	6	56	35.7%	
1 Bedroom, 2 Levels (1BM)	1	0	0	0	0	0	3	1.9%	46.5%
2 Bedroom (2B, 2B-2)	0	6	6	8	2	8	30	19.1%	
2 Bedroom + Den (2BD, 2BD-2, 2BDC)	0	6	7	7	6	1	27	17.2%	10.2%
2 Bedroom, 2 Levels (2BM, 2BM-2, 2BM-3)	18	0	0	0	0	0	16	10.2%	
3 Bedroom (3BM)	0	1	1	1	1	0	4	2.5%	2.5%
Total	19	34	34	32	19	19	157	100%	100%

TOTAL PARKING
266 SPACES
(12 BARRIER FREE) 1.7/UNIT

TOTAL BIKE STORAGE
96 SPACES

TOTAL RESIDENT STORAGE
129 UNITS

FHS BIRMINGHAM
Birmingham, Michigan 48009



6TH LEVEL
(APARTMENTS)

LEGEND	
	PARKING
	RETAIL + RESIDENT SERVICES
	ANCILLARY
	EGRESS
	CIRCULATION
	STUDIO
	1 BEDROOM
	1 BEDROOM + DEN
	1 BEDROOM - 2 LEVELS
	2 BEDROOM
	2 BEDROOM + DEN
	2 BEDROOM - 2 LEVELS
	2 BEDROOM + DEN - 2 LEVELS
	3 BEDROOM

UNIT DATA

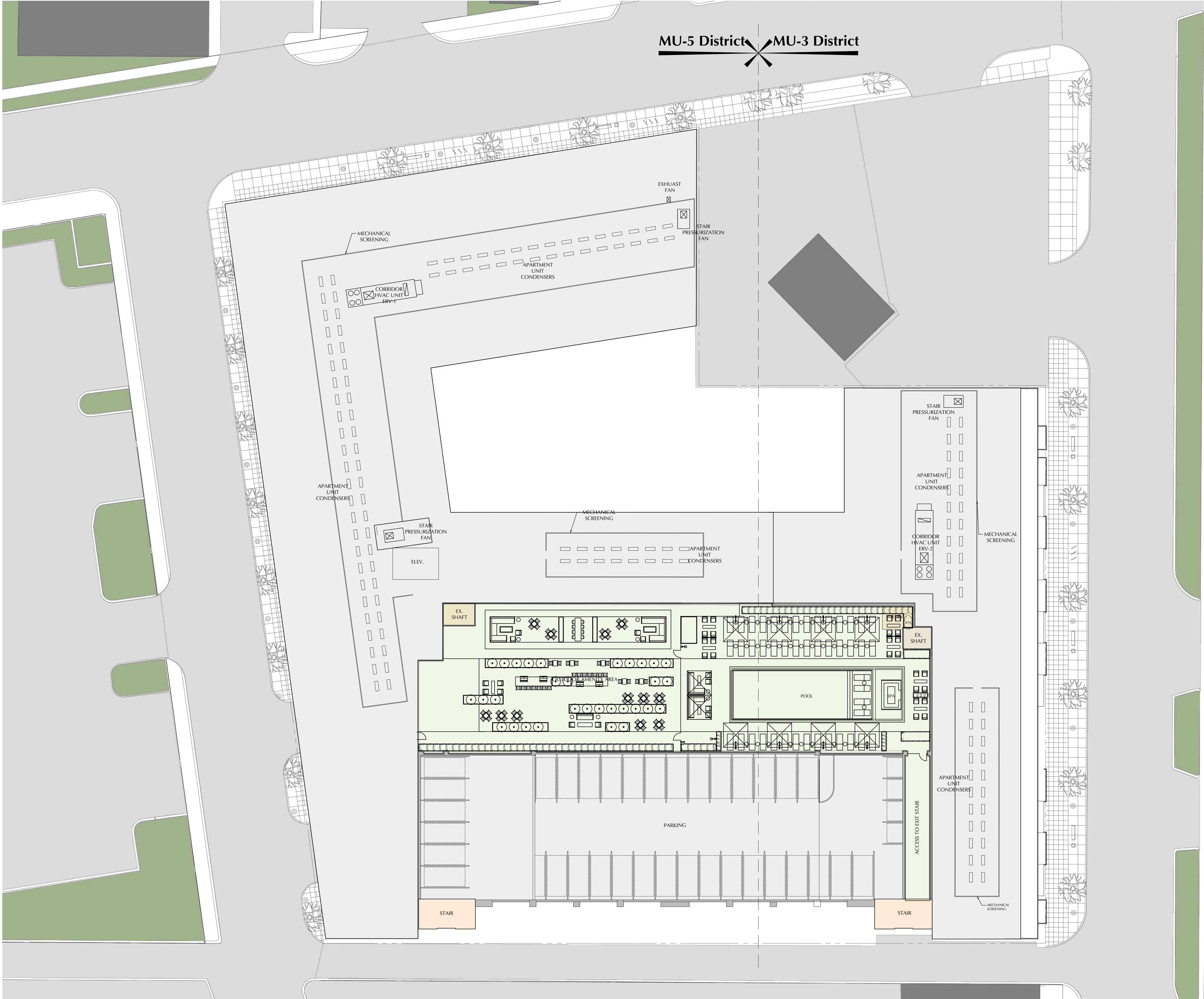
Type	# of Units							Unit Mix	
	Lvl 1	Lvl 2	Lvl 3	Lvl 4	Lvl 5	Lvl 6	Total	%	
Studio (S, S-2)	0	2	2	0	0	0	4	2.5%	2.5%
1 Bedroom (1B, 1BC)	0	2	2	7	2	4	17	10.8%	
1 Bedroom + Den (1BD, 1BD-2, 1BDC)	0	17	16	9	8	6	56	35.7%	48.4%
1 Bedroom, 2 Levels (1BM)	1	0	0	0	0	0	3	1.9%	
2 Bedroom (2B, 2B-2)	0	6	6	8	2	8	30	19.1%	
2 Bedroom + Den (2BD, 2BD-2, 2BDC)	0	6	7	7	6	1	27	17.2%	46.5%
2 Bedroom, 2 Levels (2BM, 2BM-2, 2BM-3)	18	0	0	0	0	0	16	10.2%	
3 Bedroom (3BM)	0	1	1	1	1	0	4	2.5%	2.5%
Total	19	34	34	32	19	19	157	100%	100%

TOTAL PARKING
266 SPACES
(12 BARRIER FREE) 1.71/UNIT

TOTAL BIKE STORAGE
96 SPACES

TOTAL RESIDENT STORAGE
129 UNITS

FHS BIRMINGHAM
Birmingham, Michigan 48009

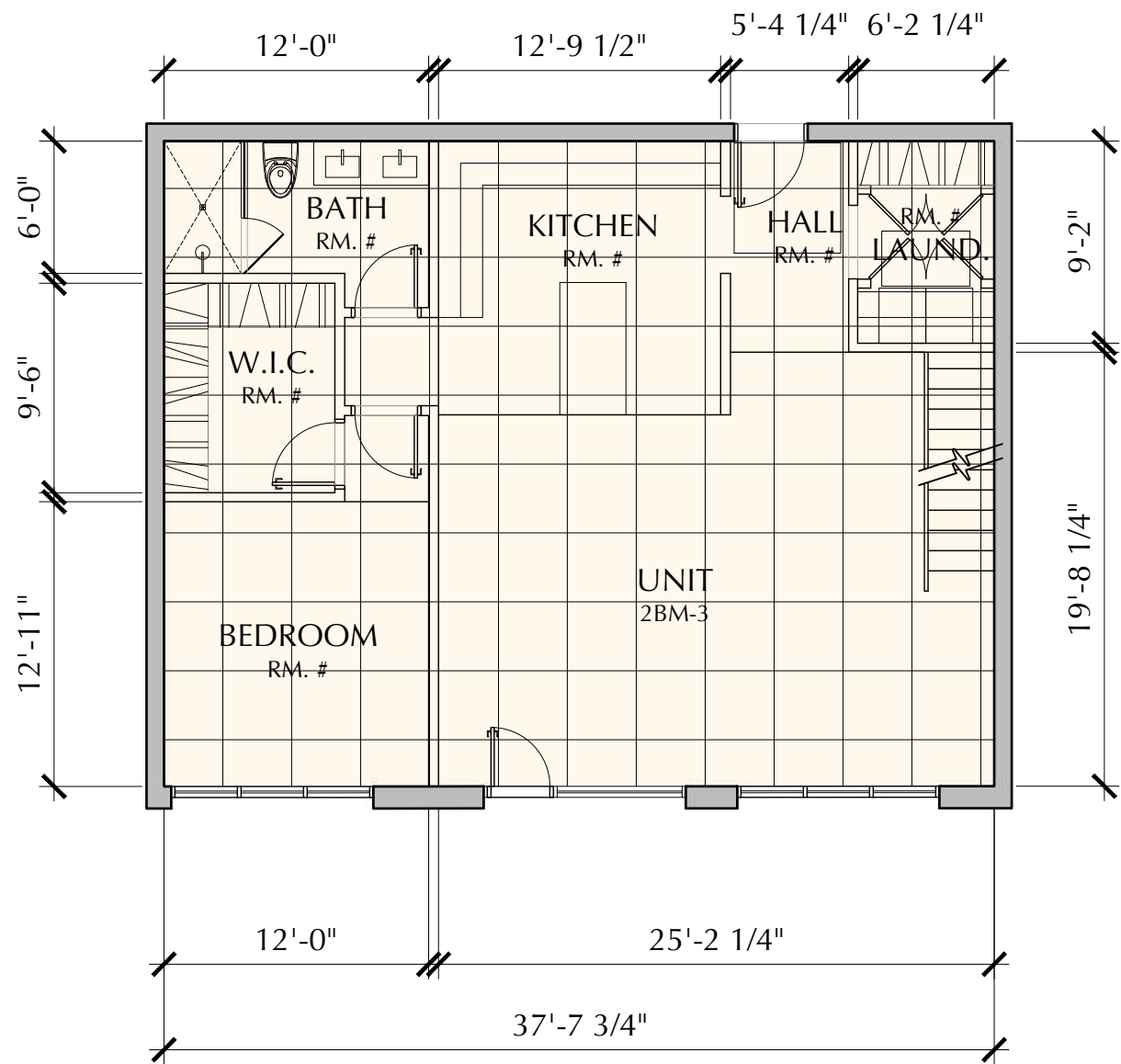


LEGEND

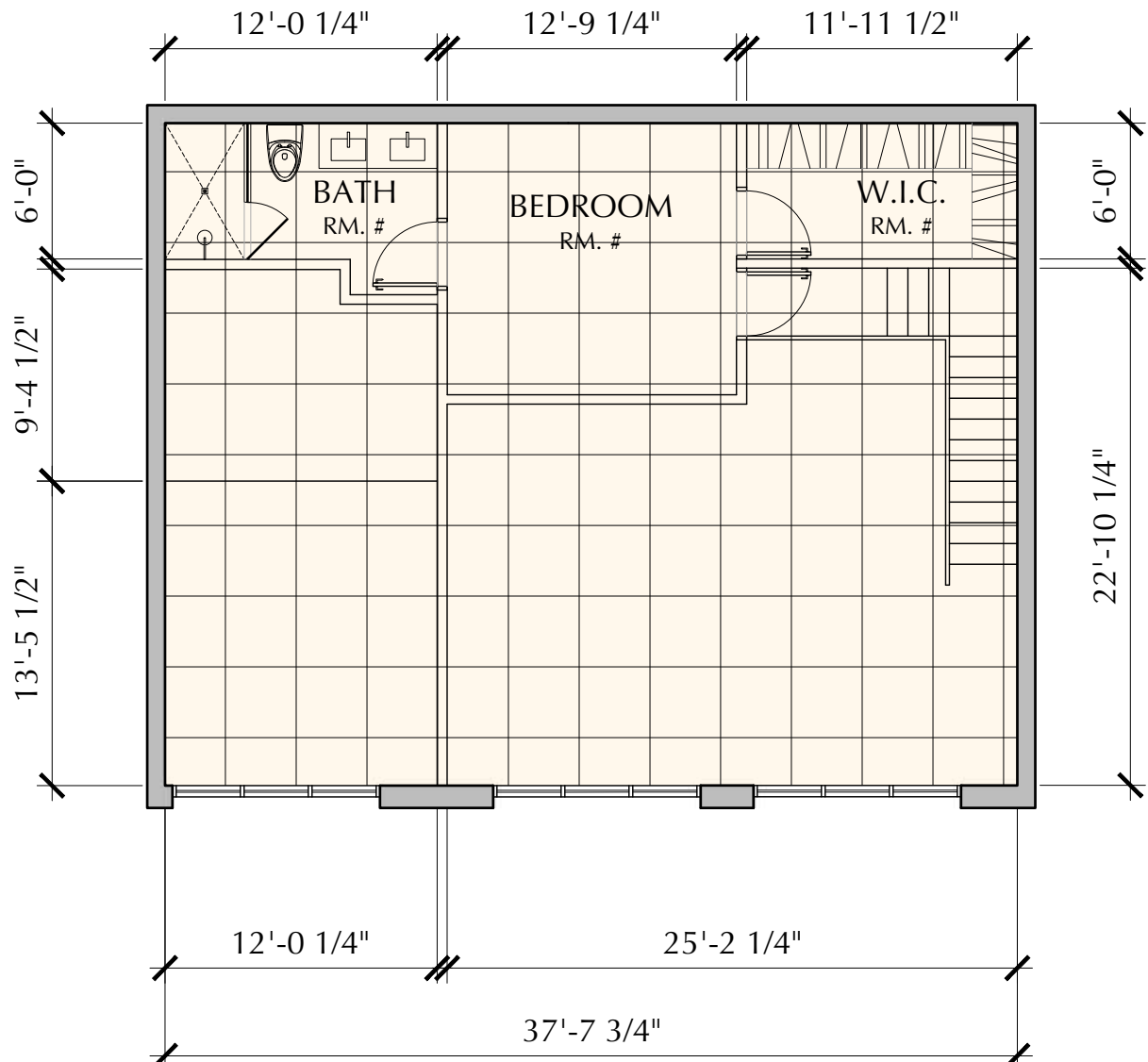
	PARKING
	RETAIL + RESIDENT SERVICES
	ANCILLARY
	EGRESS
	CIRCULATION
	STUDIO
	1 BEDROOM
	1 BEDROOM + DEN
	1 BEDROOM - 2 LEVELS
	2 BEDROOM
	2 BEDROOM + DEN
	2 BEDROOM - 2 LEVELS
	2 BEDROOM + DEN - 2 LEVELS
	3 BEDROOM

ROOF PLAN
(AMENITIES)

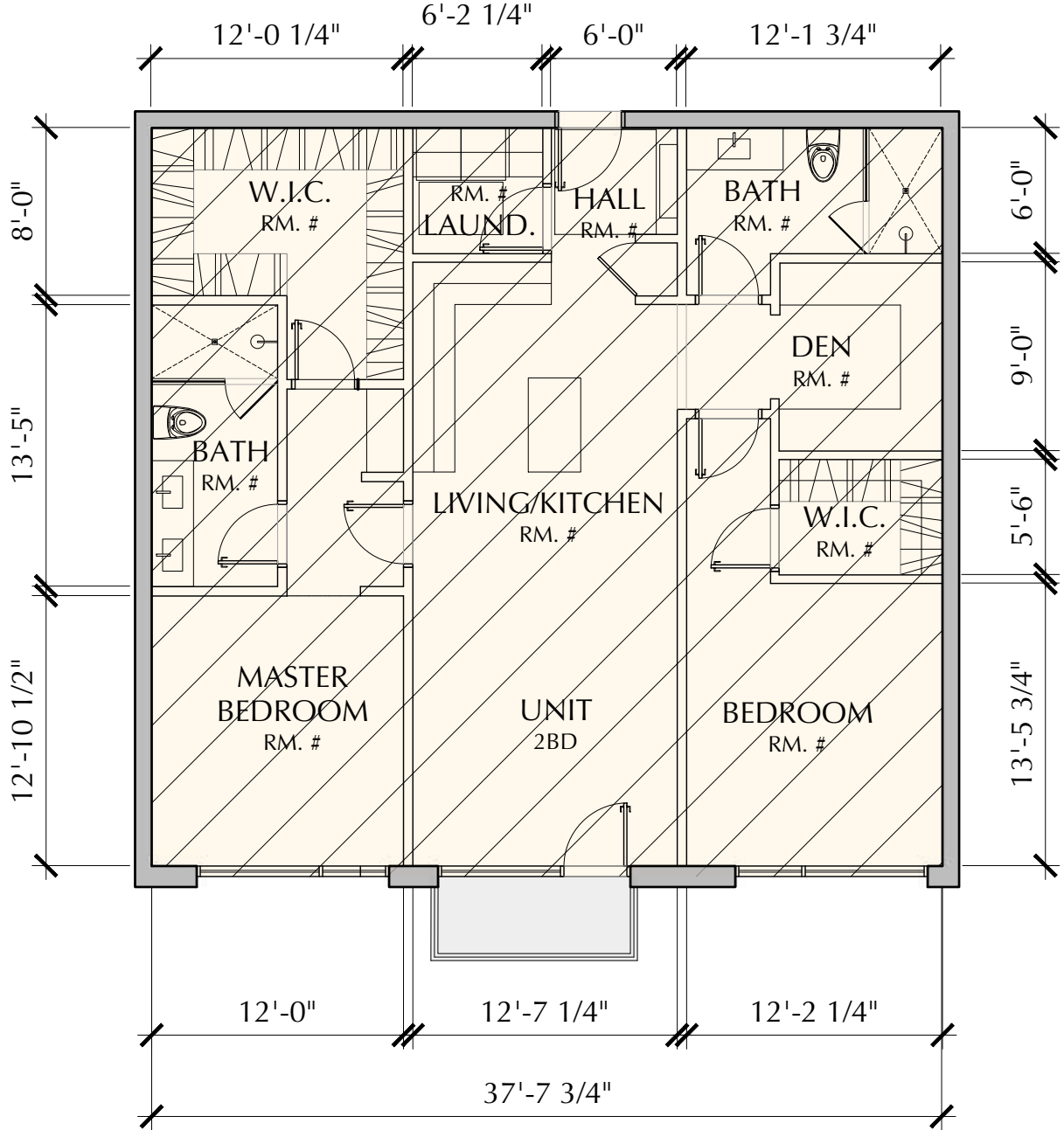
FHS BIRMINGHAM
Birmingham, Michigan 48009



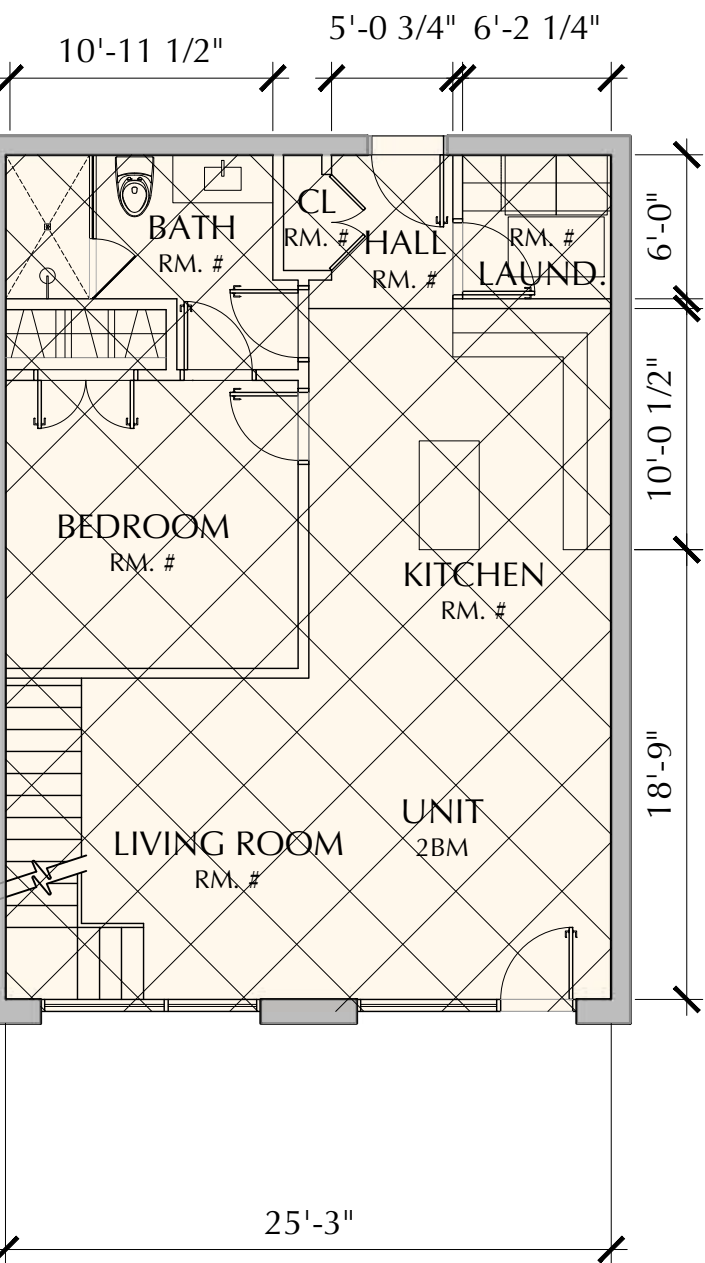
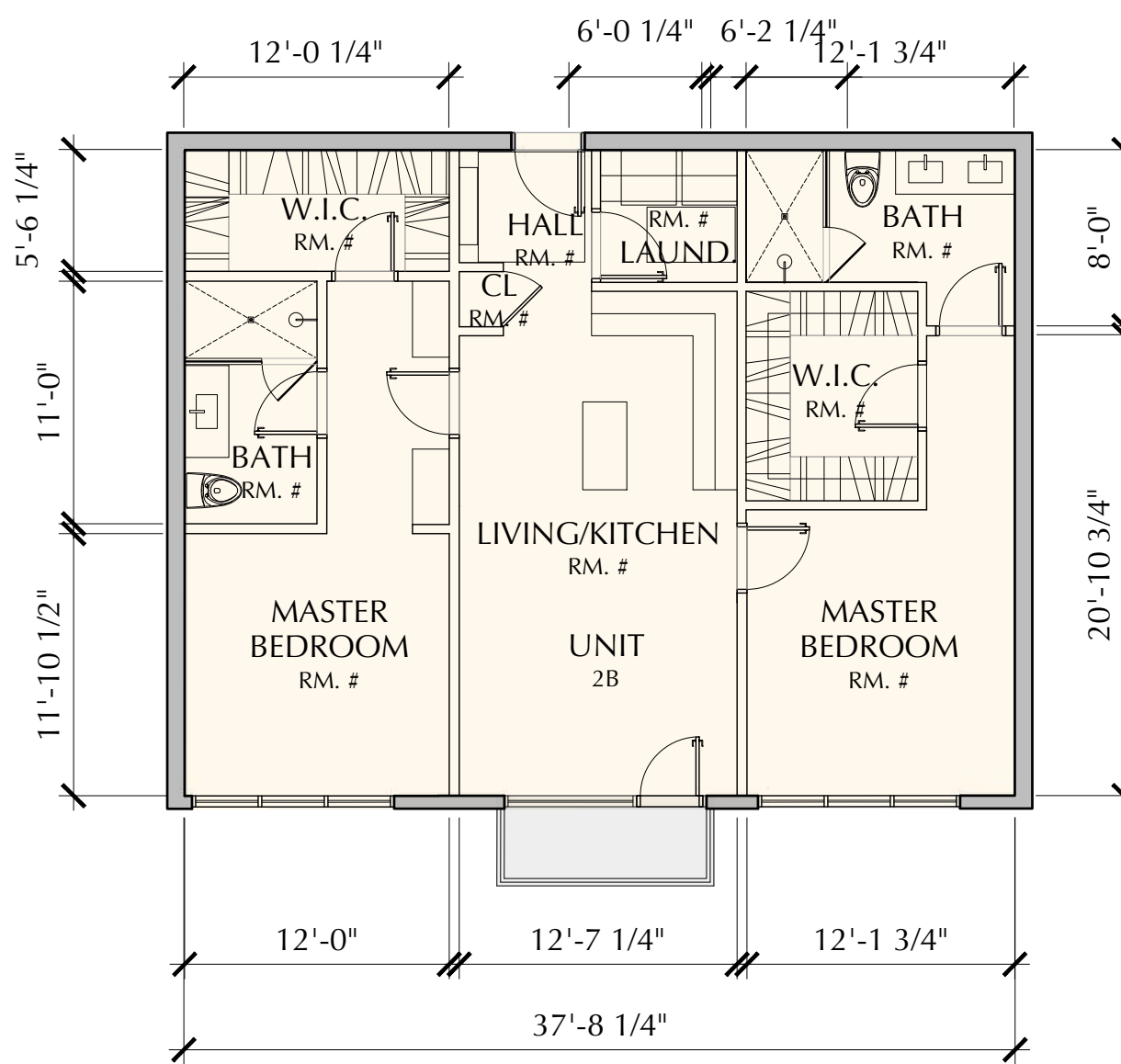
2 Bedroom + Den 2 Level Unit (below No Den Units):
2BM-3
1st Level = 1,101 sf
Room Below = 774 sf
Mezzanine = 309 sf (< 50% Room Below)
3 @ 1,608 sf



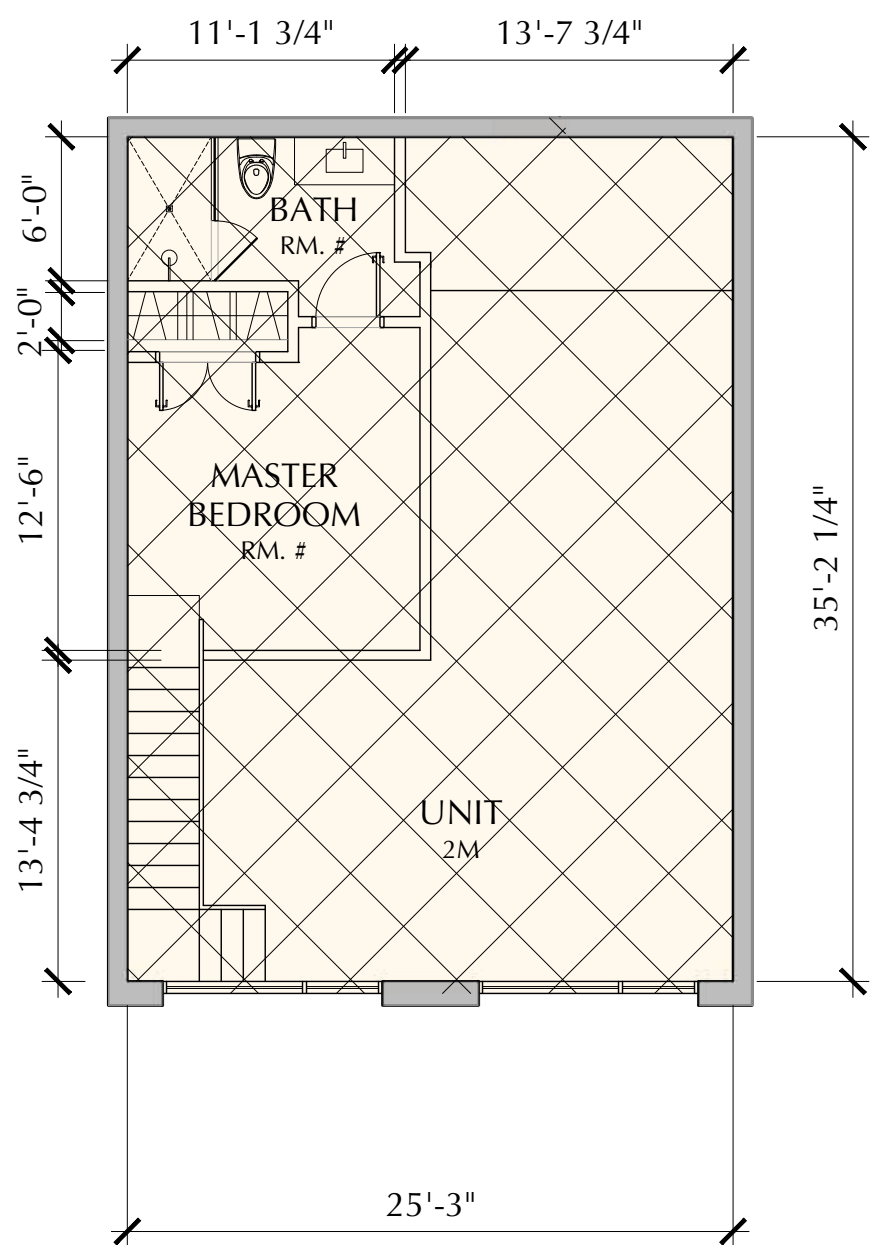
2 Bedroom + Den Unit - 24 @ 1,423 sf
2BD
SF: 1,326



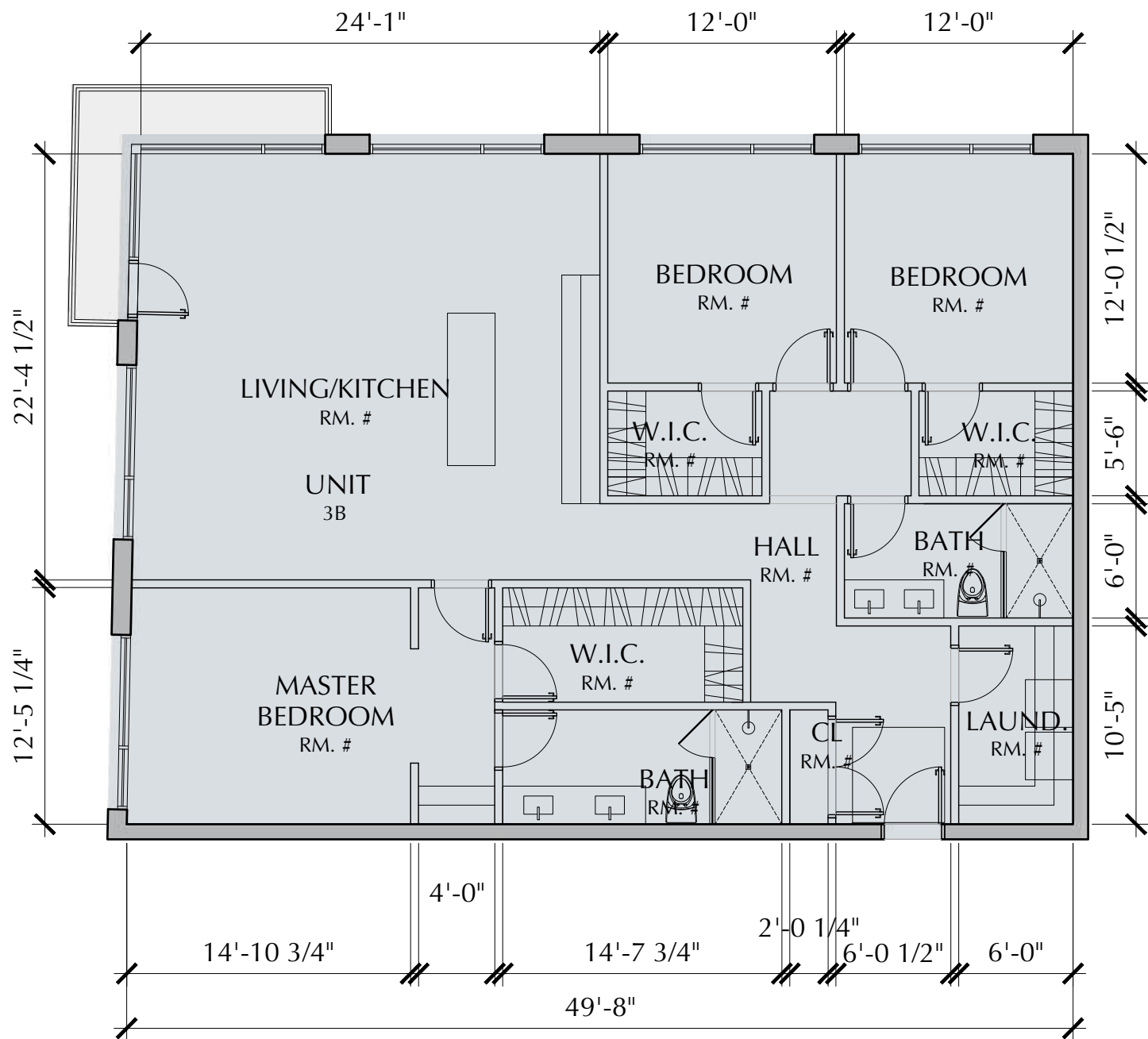
2 Bedroom Unit - 22 @ 1,229 sf
2B
SF: 1102



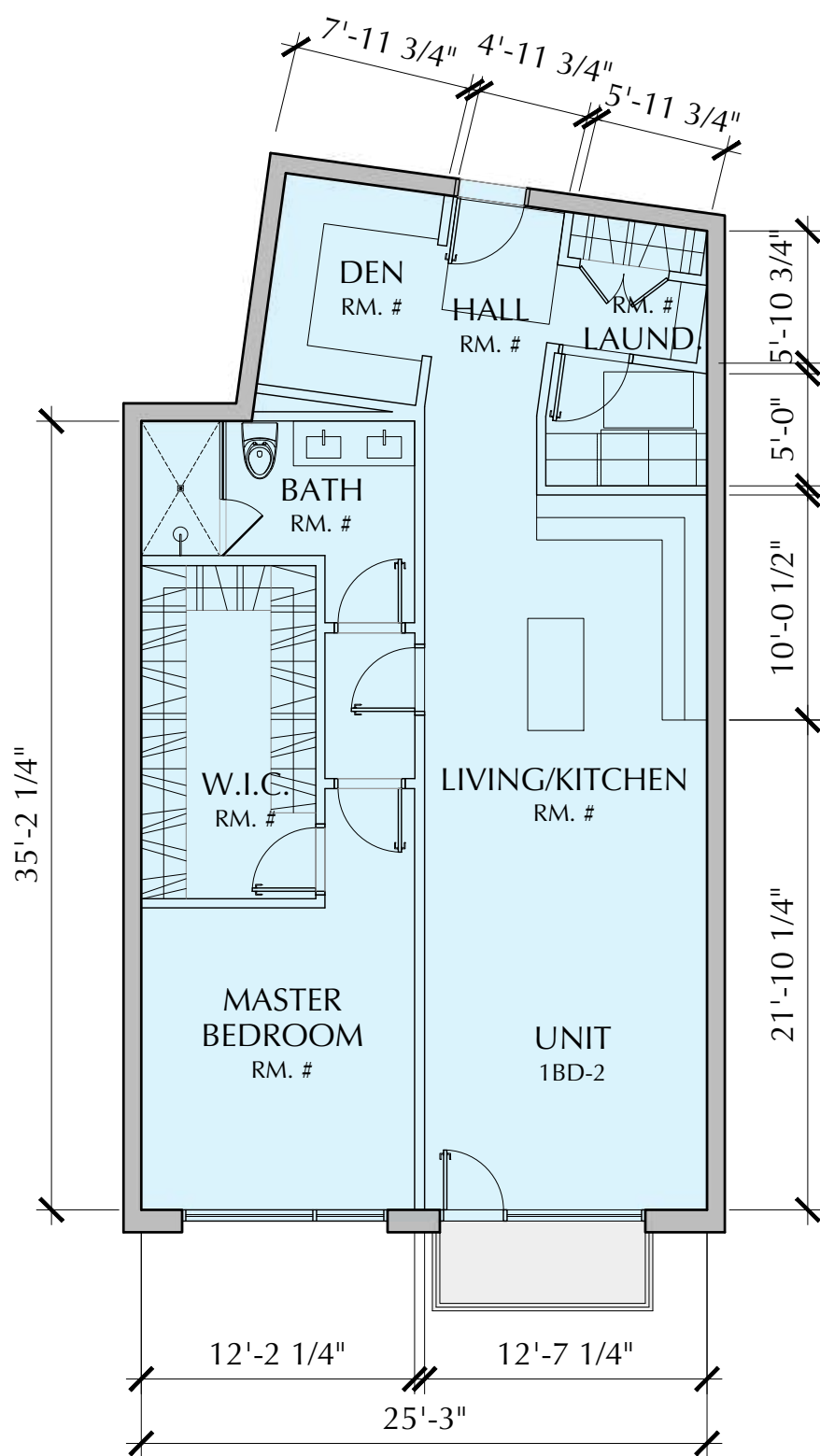
2 Bedroom 2 Level Unit (below + Den Units):
2BM
1st Level = 888 sf
Mezzanine = 255 sf (< 50% Room Below)
13 @ 1,143 sf



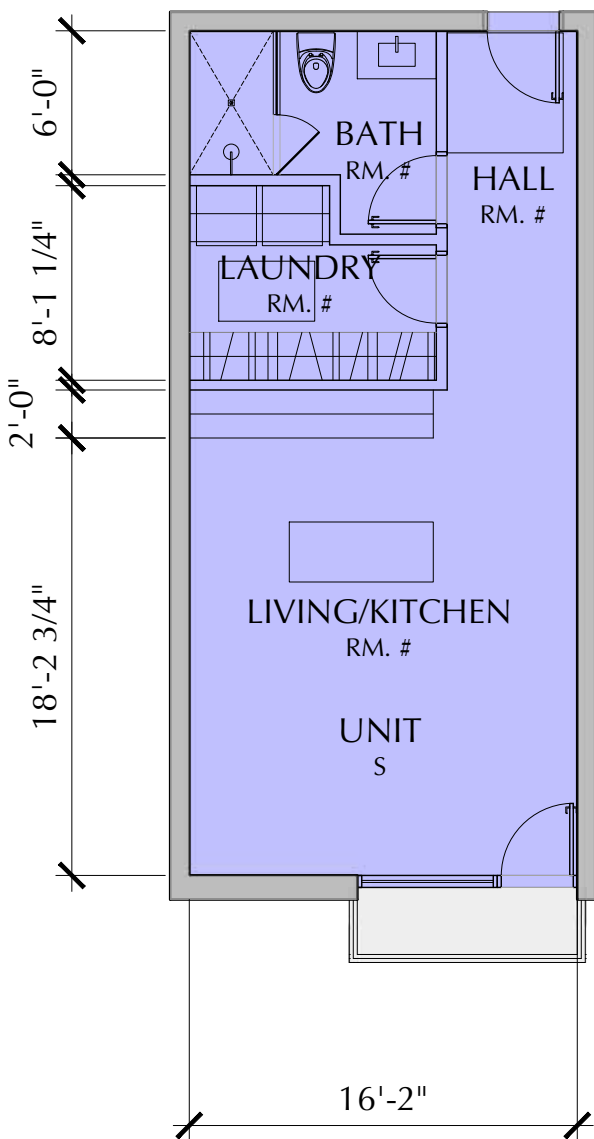
3 Bedroom Unit 4 @ 1855 SF.
3B
SF: 1734



1 Bedroom Worth/Alley Corner 4@ 1080 SF.
1BD-2
SF: 1080



STUDIO
5
SF : 568

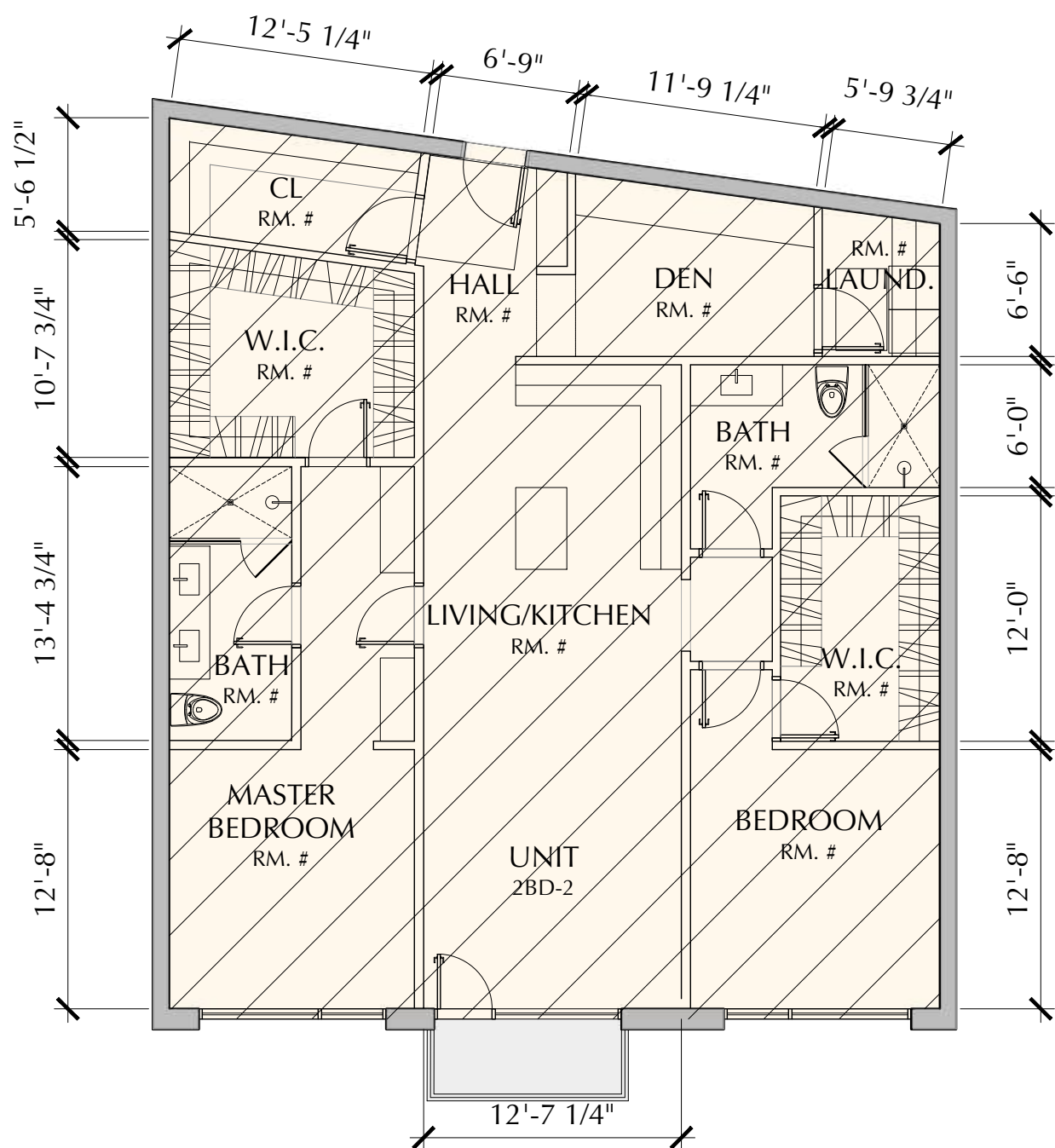


LEGEND

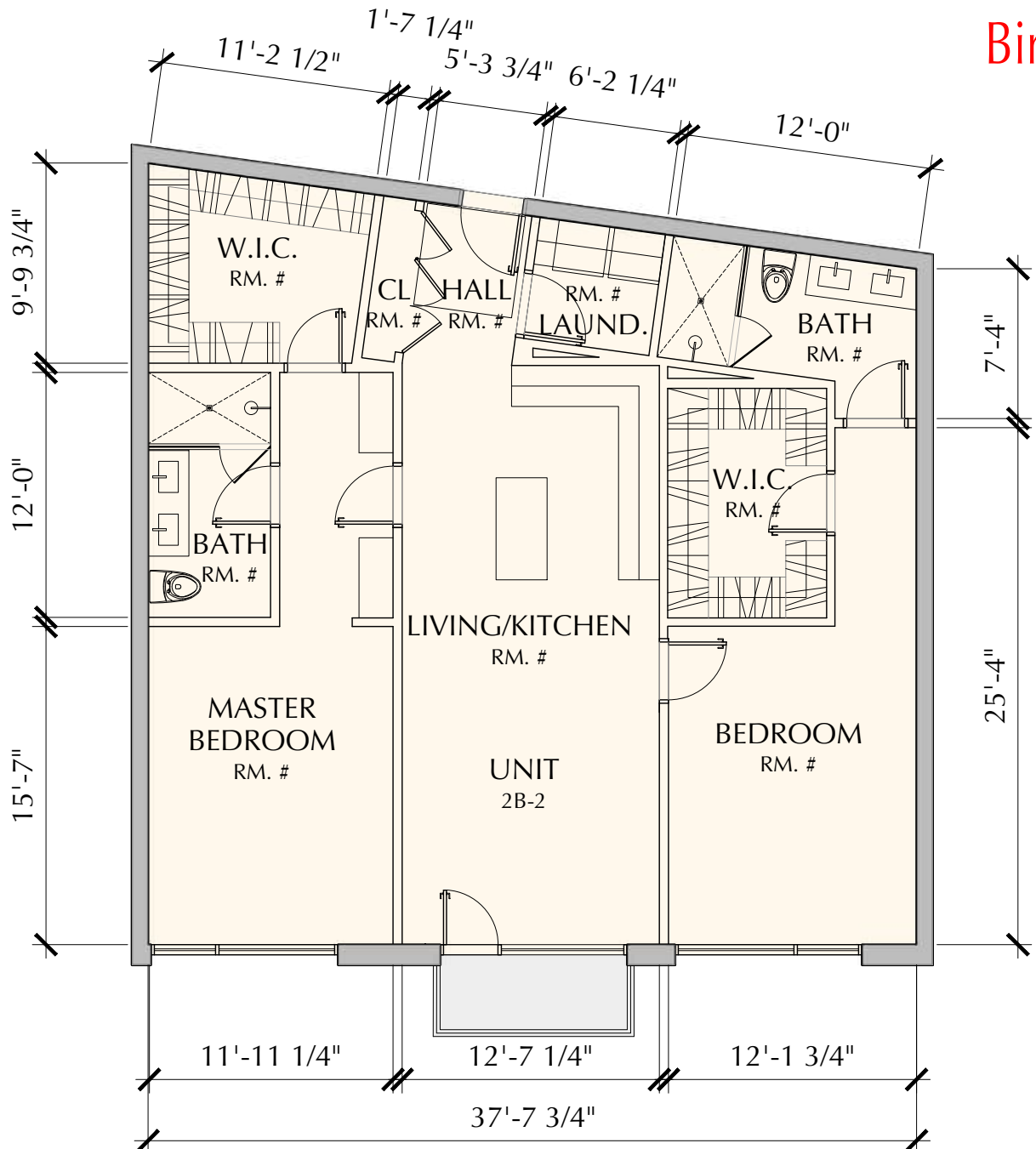
- PARKING
- RETAIL + RESIDENT SERVICES
- ANCILLARY
- EGRESS
- CIRCULATION
- STUDIO
- 1 BEDROOM
- 1 BEDROOM + DEN
- 1 BEDROOM - 2 LEVELS
- 2 BEDROOM
- 2 BEDROOM + DEN
- 2 BEDROOM - 2 LEVELS
- 2 BEDROOM + DEN - 2 LEVELS
- 3 BEDROOM

UNIT LAYOUTS

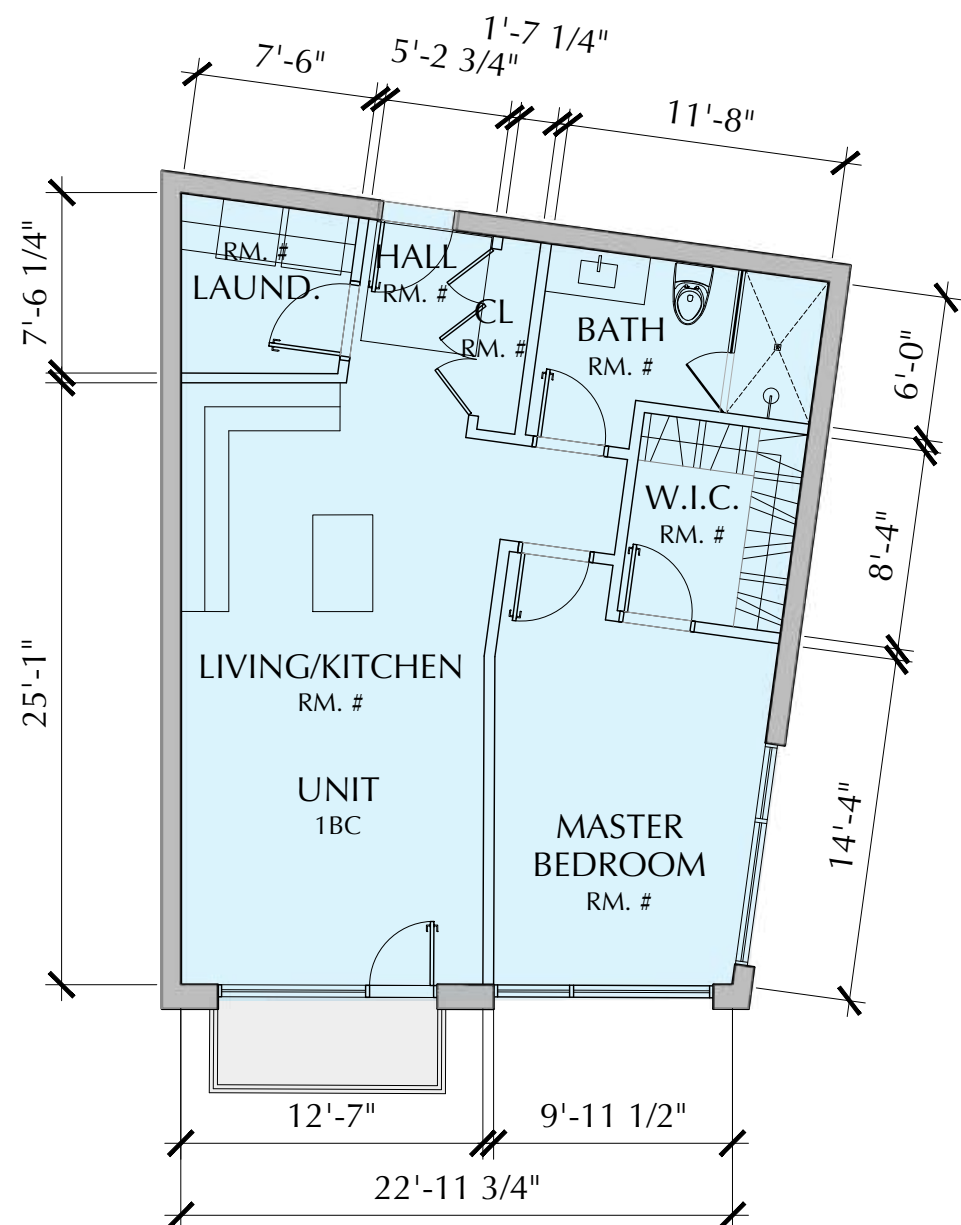
CHRISTOPHER J LONGE AIA
ARCHITECTS
INTERIORS
124 Peabody, Birmingham, Michigan 48009 248.258.6940



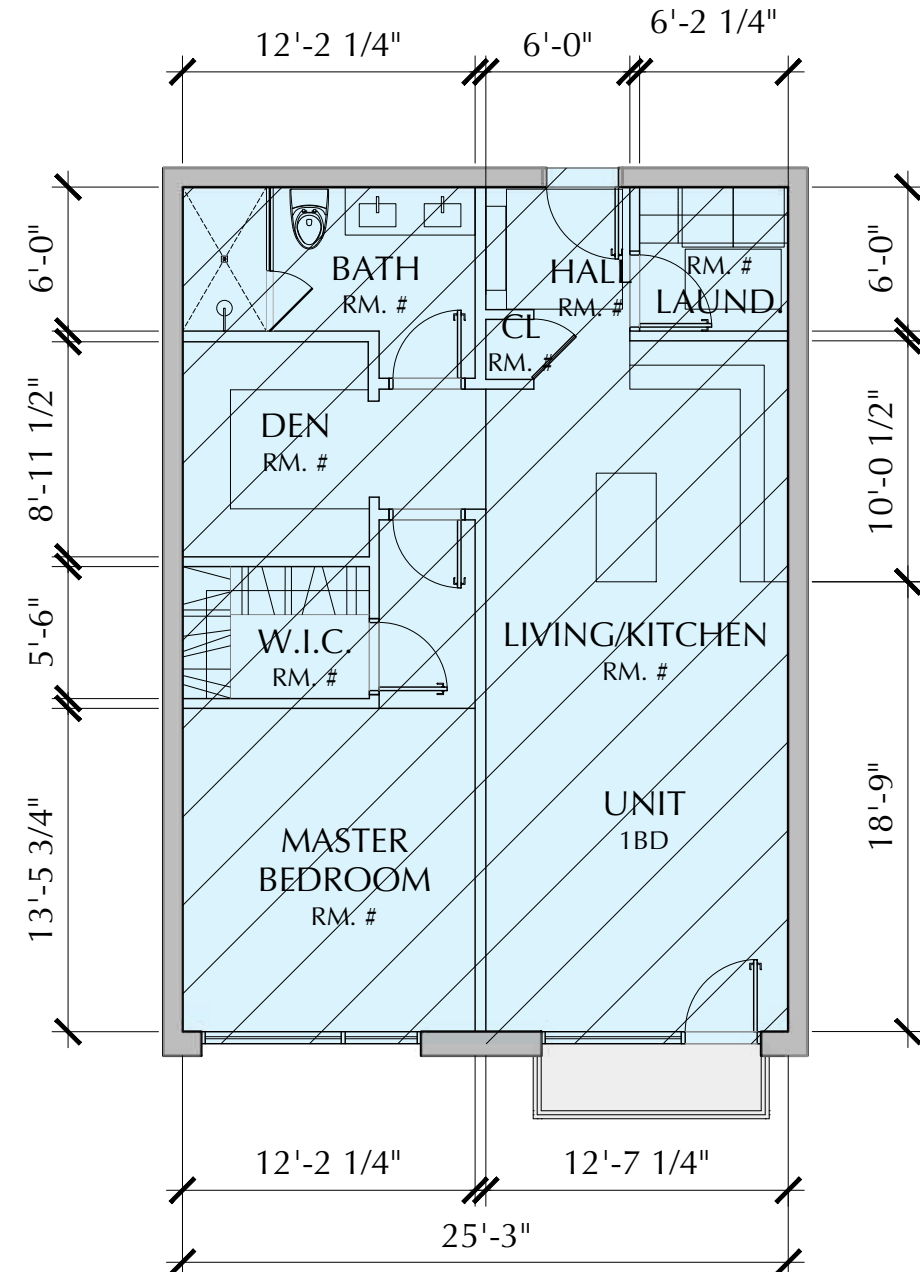
2 Bedroom+Den Worth/Alley Corner 4 @1544 SF.
2BD-2
SF: 1544



2 Bedroom Worth/Alley Corner
4 @ 1,343 sf
2B-2



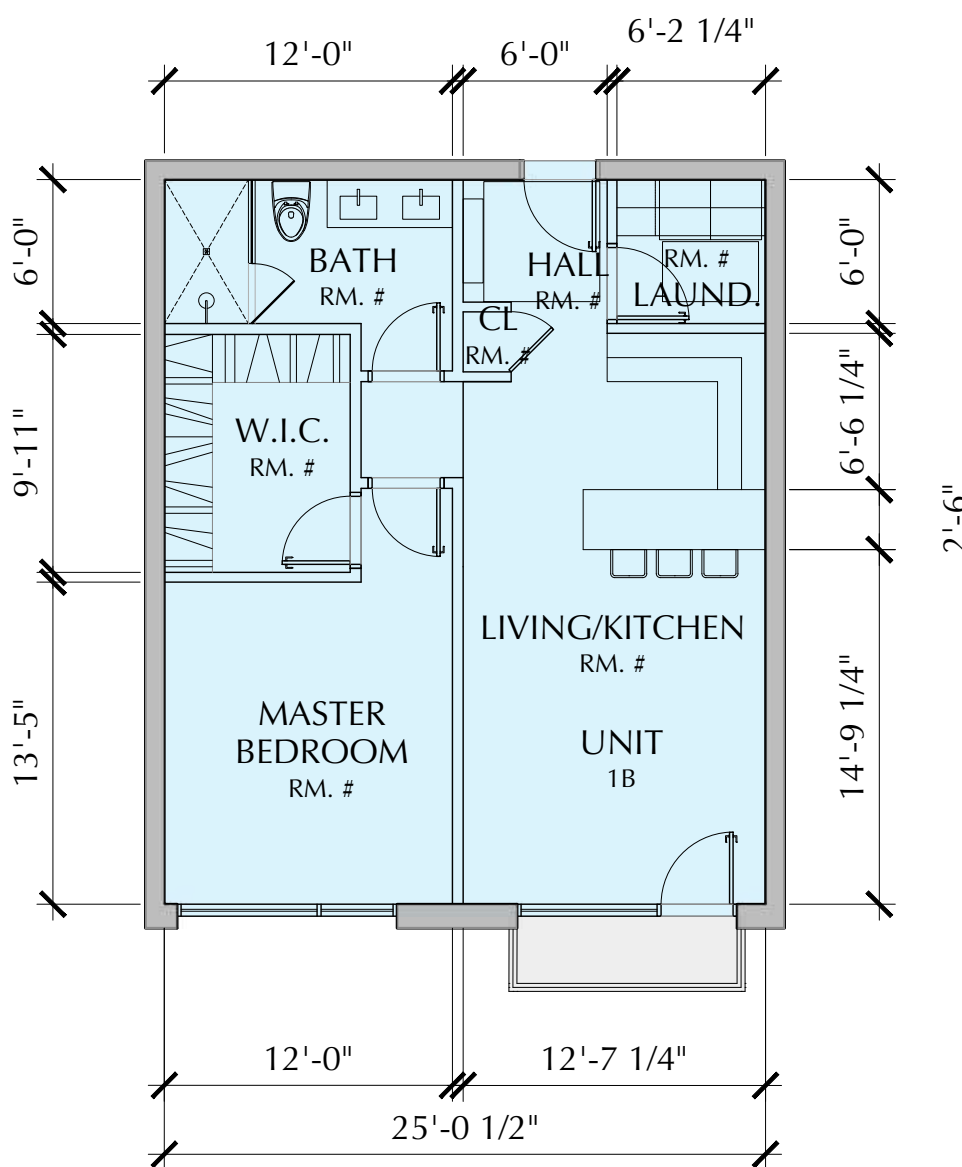
1 Bedroom Worth/Alley Corner
4 @ 782 sf
1BC



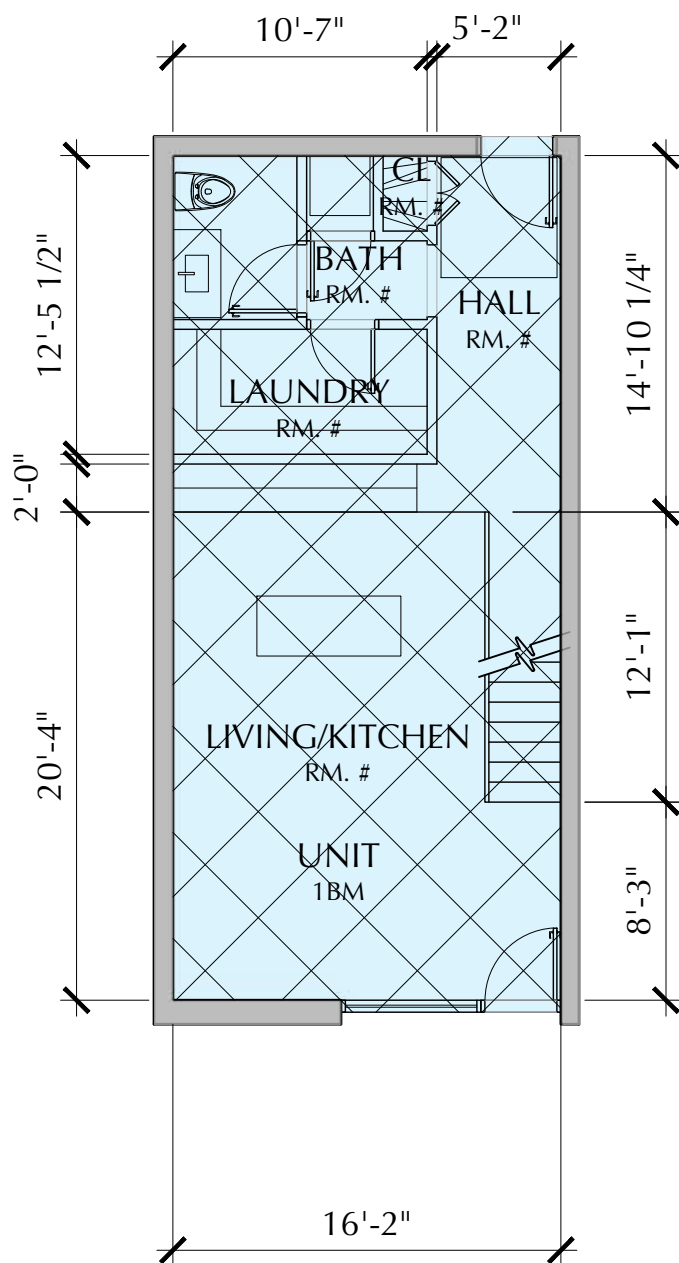
1 BEDROOM + DEN
1BD
SF: 888

LEGEND

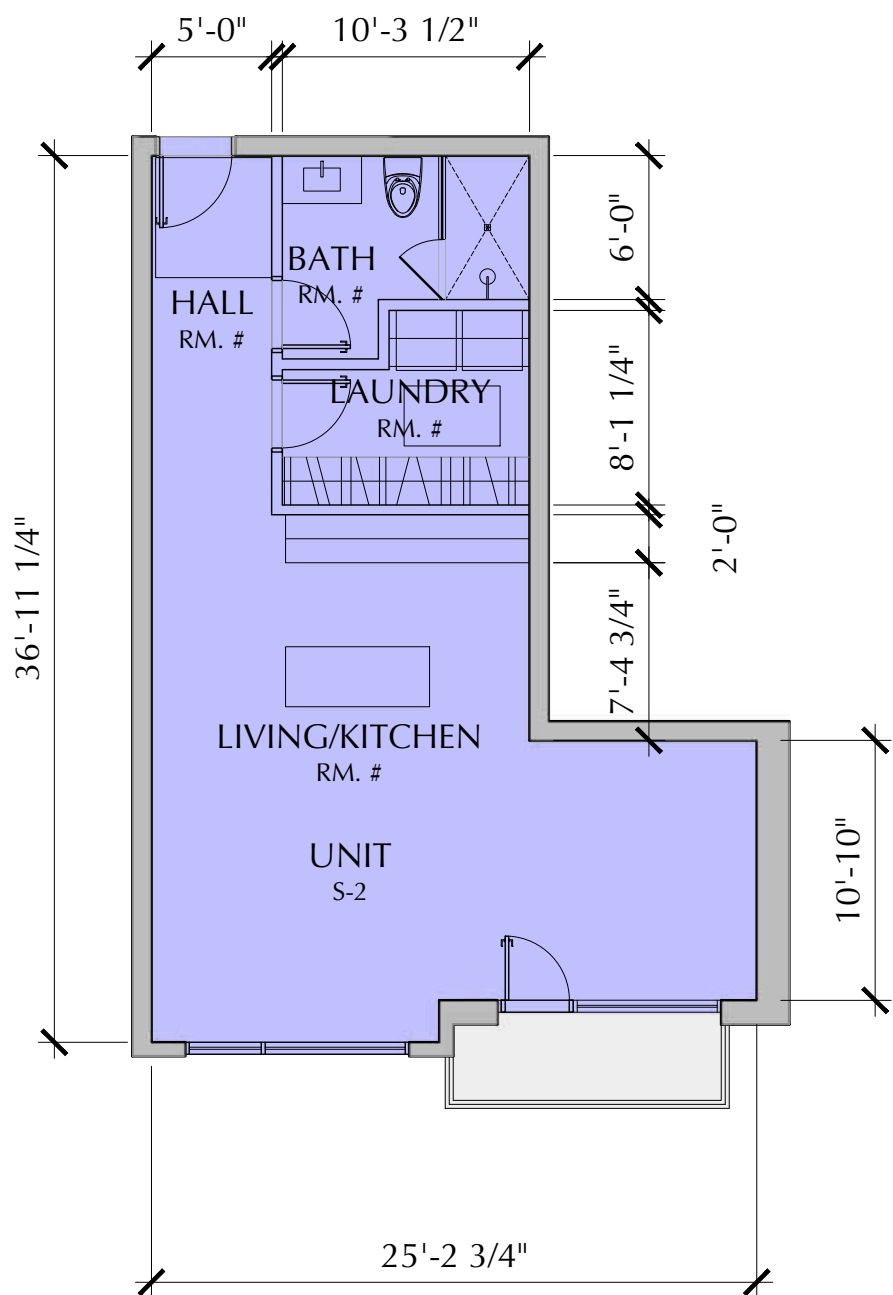
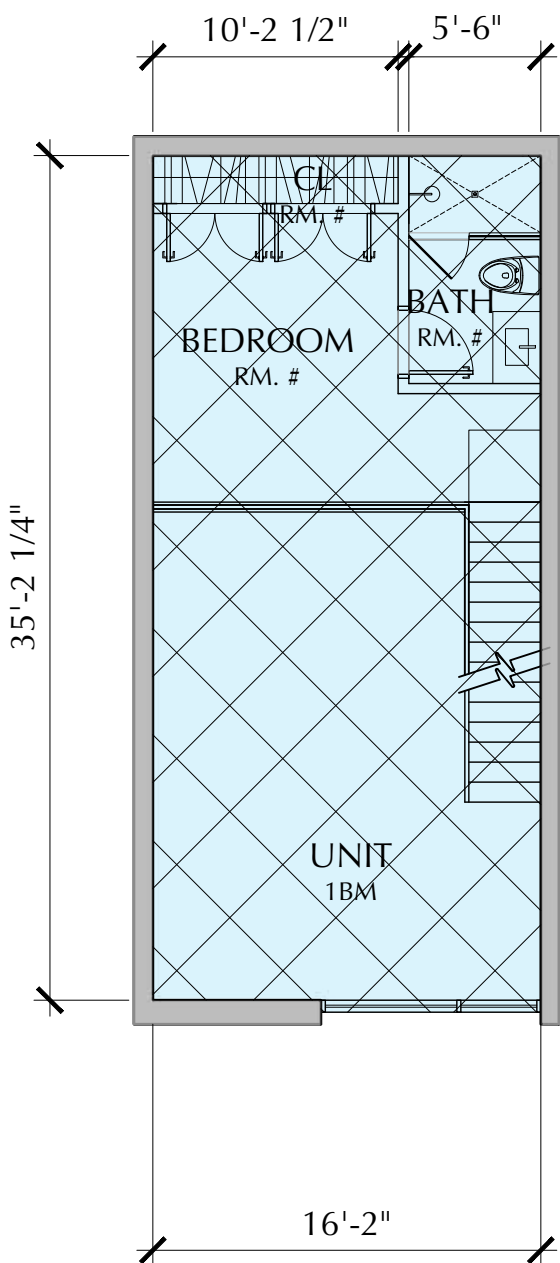
	PARKING
	RETAIL + RESIDENT SERVICES
	ANCILLARY
	EGRESS
	CIRCULATION
	STUDIO
	1 BEDROOM
	1 BEDROOM + DEN
	1 BEDROOM - 2 LEVELS
	2 BEDROOM
	2 BEDROOM + DEN
	2 BEDROOM - 2 LEVELS
	2 BEDROOM + DEN - 2 LEVELS
	3 BEDROOM



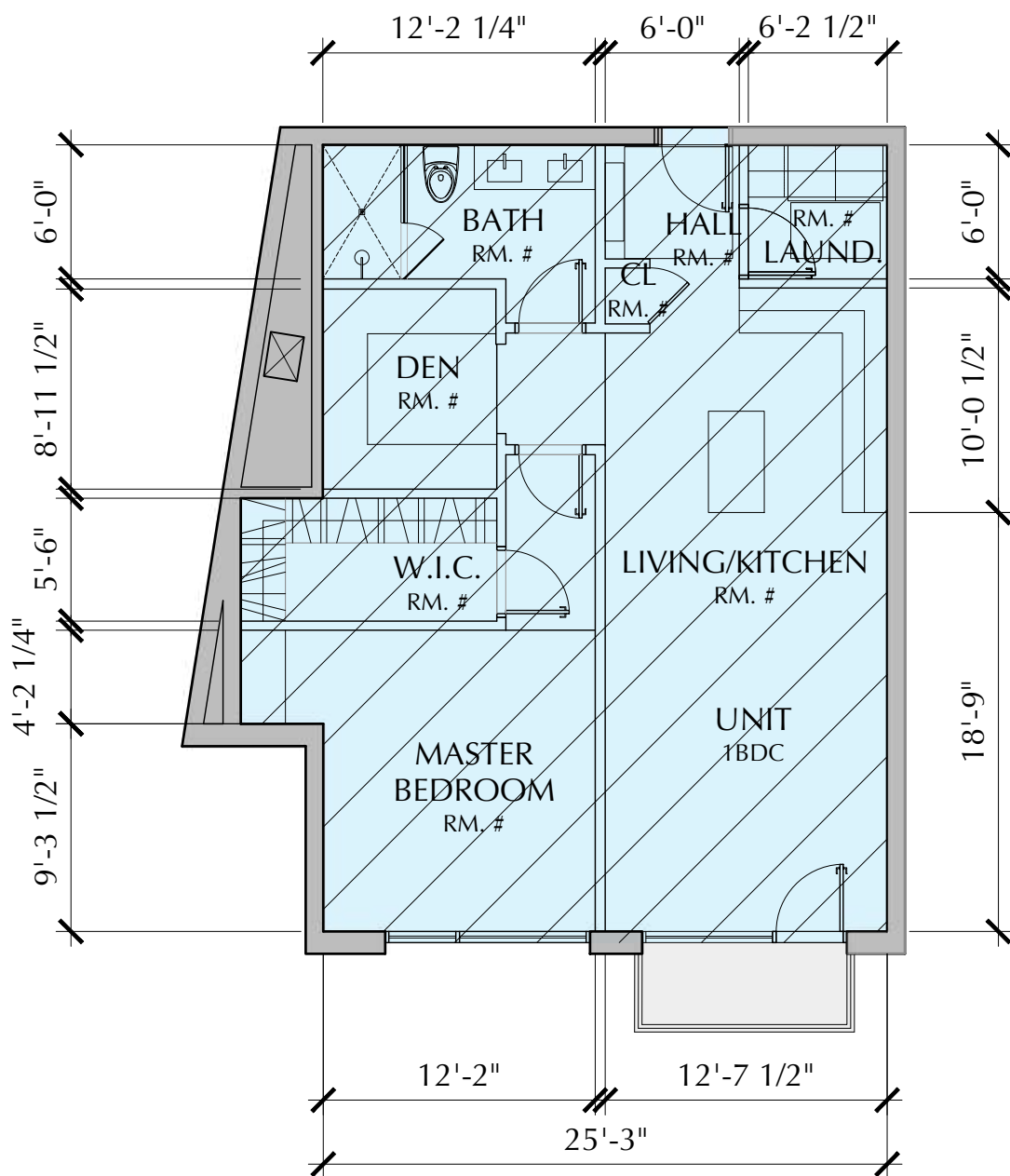
1 BEDROOM
1B
SF : 756



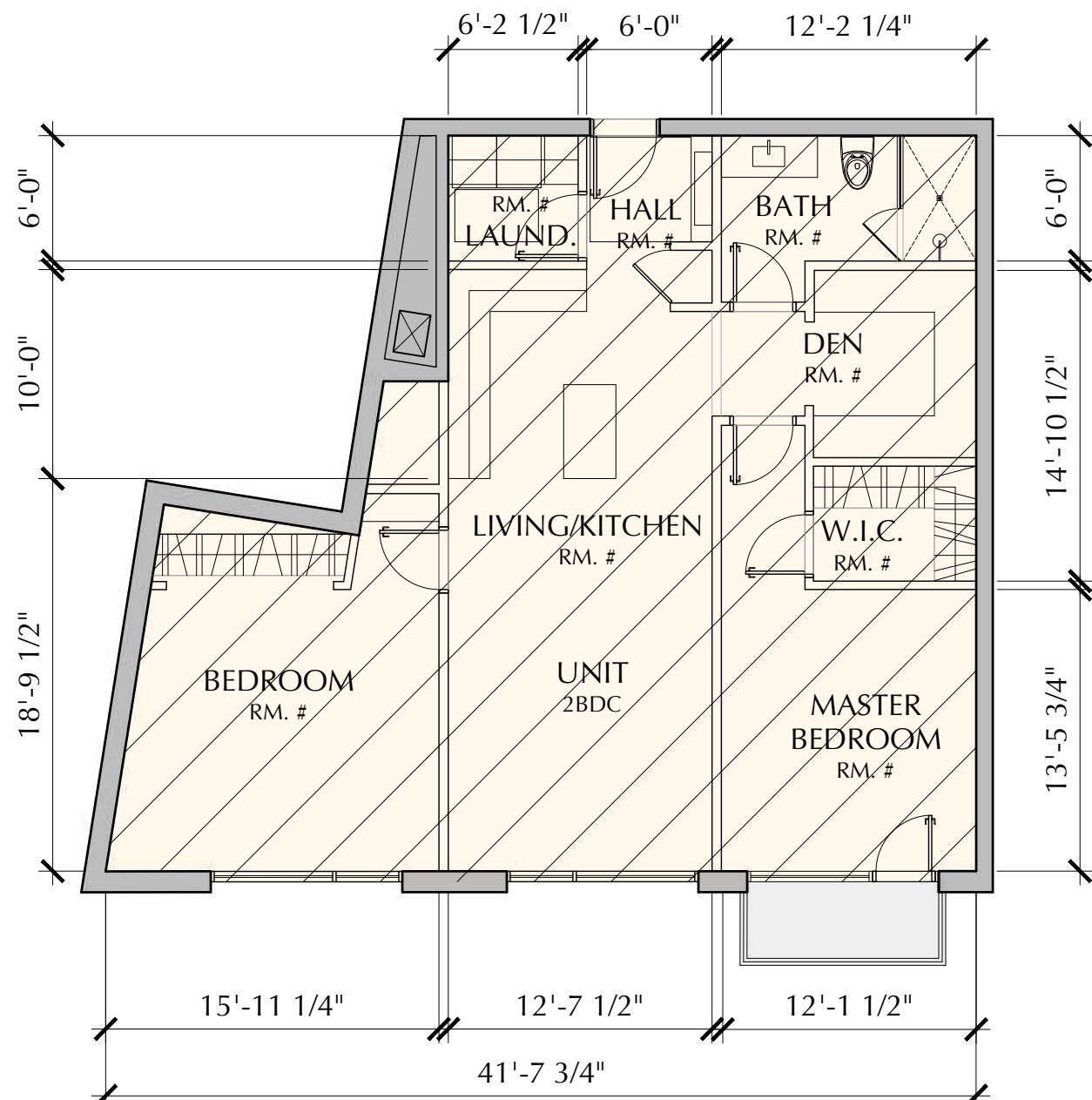
1 BEDROOM AND MEZZANINE UNIT
1BM
SF: 819



STUDIO
S-2
SF: 677



1 Bedroom + den
1BDC
SF: 925



2 Bedroom + den
2BDC
SF : 1165

UNIT LAYOUTS

FHS BIRMINGHAM
Birmingham, Michigan 48009

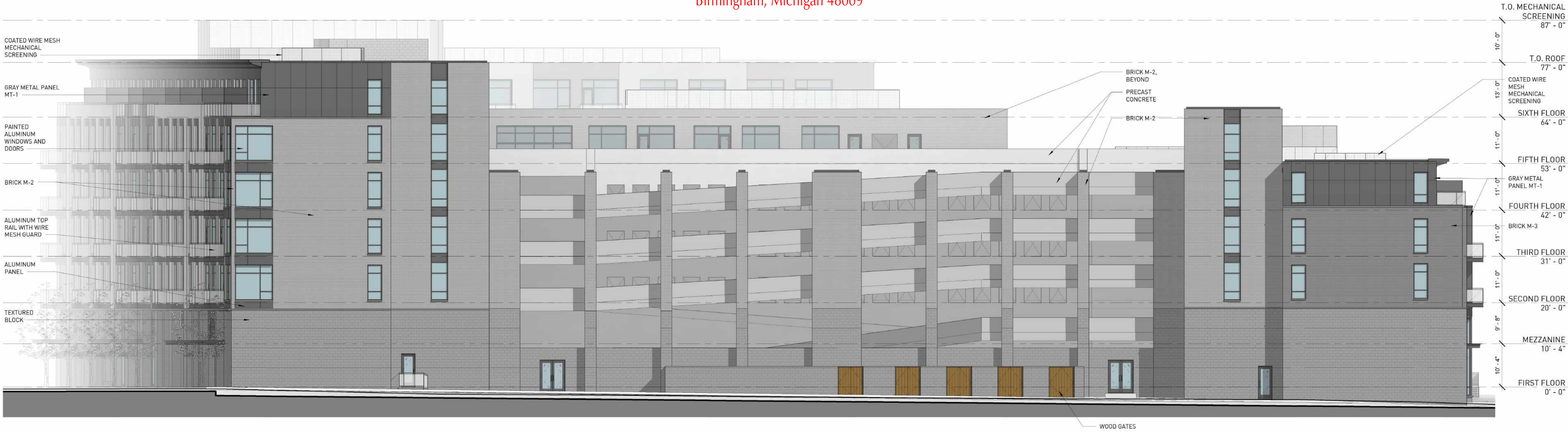


1 NORTH ELEVATION (HAYNES)
SCALE: 3/32" = 1'-0"



2 WEST ELEVATION (WORTH ST.)

FHS BIRMINGHAM
Birmingham, Michigan 48009



1 SOUTH ELEVATION (ALLEY)
SCALE: 3/32" = 1'-0"



2 EAST ELEVATION (ADAMS ST.)
SCALE: 3/32" = 1'-0"

FHS BIRMINGHAM
Birmingham, Michigan 48009



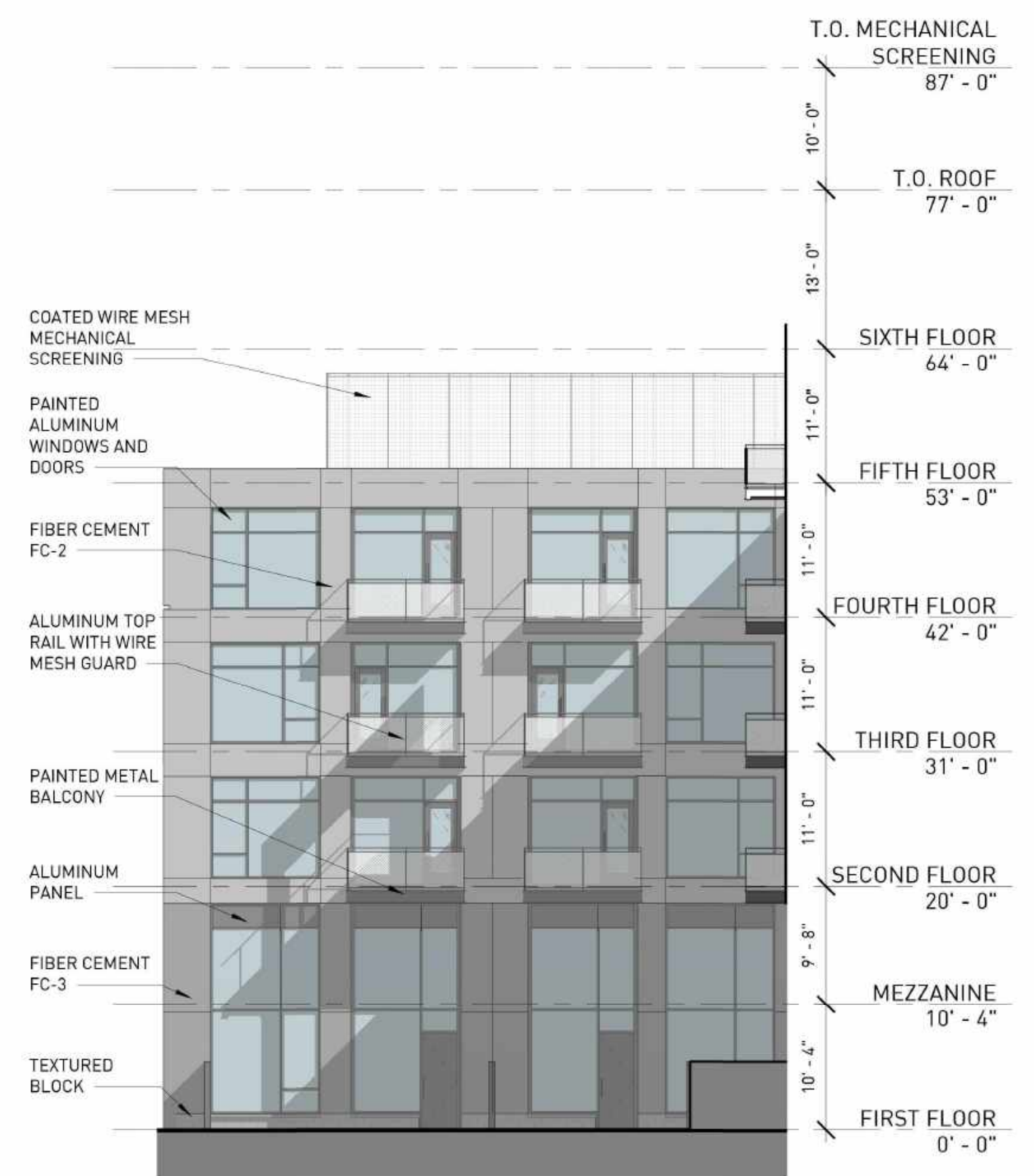
1 COURTYARD NORTH ELEVATION 3/32
SCALE: 3/32" = 1'-0"



2 COURTYARD WEST ELEVATION 3/32
SCALE: 3/32" = 1'-0"

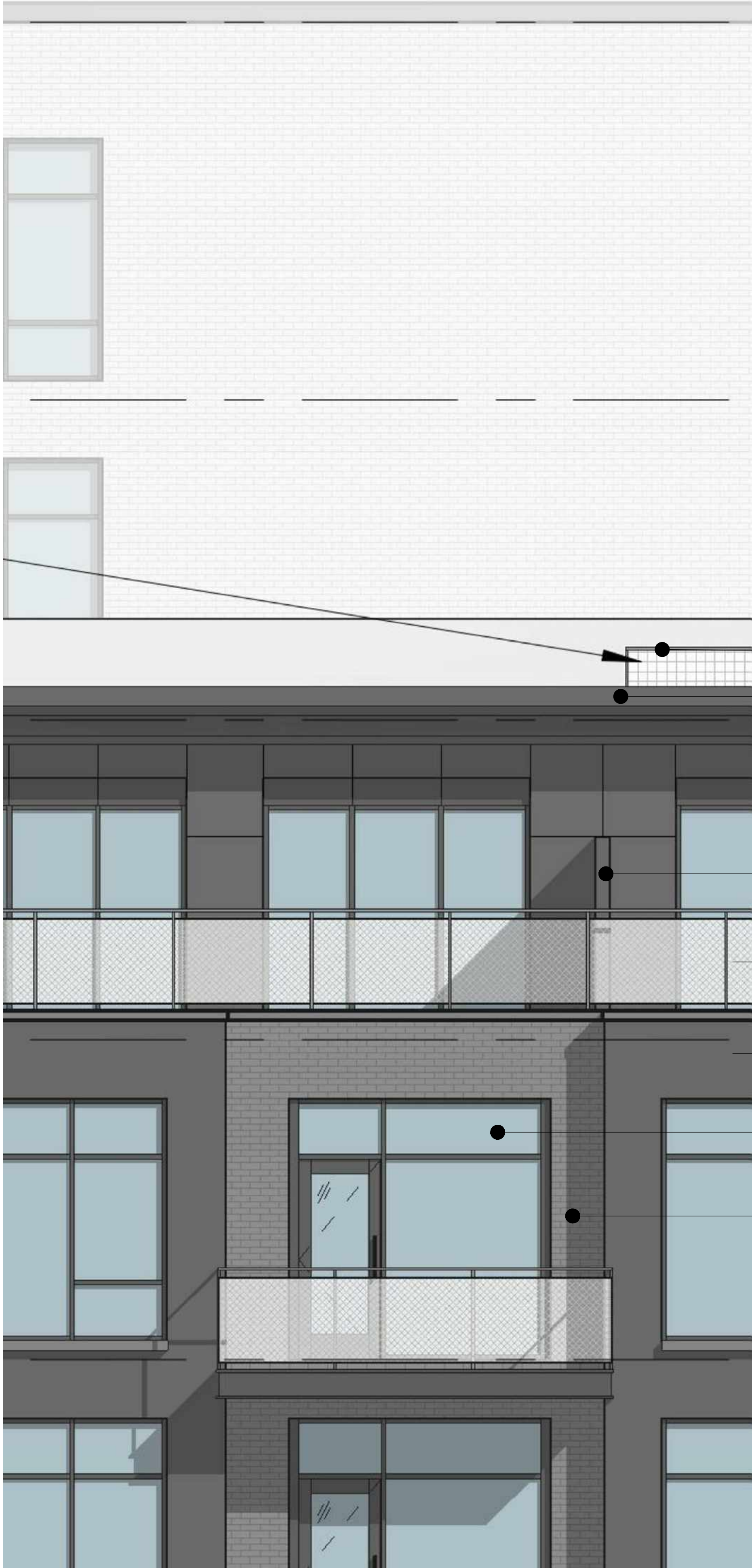


3 COURTYARD SOUTH ELEVATION 3/32
SCALE: 3/32" = 1'-0"



4 COURTYARD EAST ELEVATION 3/32
SCALE: 3/32" = 1'-0"

FHS BIRMINGHAM
Birmingham, Michigan 48009



COATED WIRE MESH
MECHANICAL SCREENING
COMPOSITE METAL COPING
(MT-1)

GRAY METAL PANELS
(MT-1)

GRAY METAL PANELS
(MT-1)

ALUMINUM TOP RAIL WITH
WIRE MESH GUARD

COMPOSITE METAL PANELS
(MT-1)

PAINTED ALUMINUM FRAME
WINDOW AND DOORS
(CLEAR GLASS)

BRICK
(M-3)

PAINTED METAL BALCONIES

COMPOSITE METAL PANELS
(MT-1)

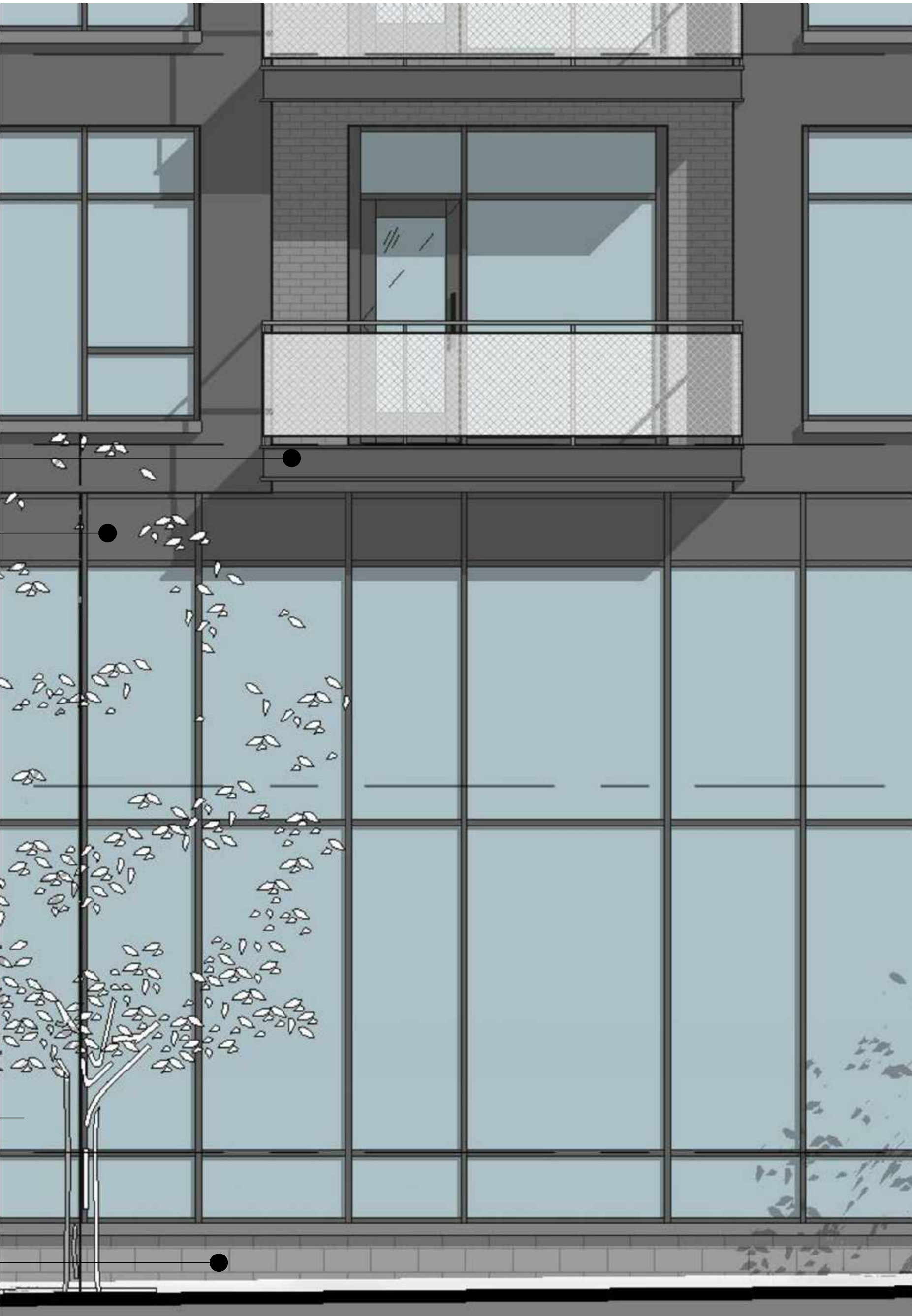
PAINTED ALUMINUM FRAME
WINDOW AND DOORS
(CLEAR GLASS)

TEXTURED BLOCK

ENLARGED ELEVATION
(SOUTH)



ELEVATION KEY



FHS BIRMINGHAM
Birmingham, Michigan 48009



COATED WIRE MESH
MECHANICAL SCREENING

COMPOSITE METAL COPING
(MT-1)

COMPOSITE METAL PANELS
(MT-1)

ALUMINUM TOP GUARD

COMPOSITE METAL PANELS
(MT-1)

PAINTED ALUMINUM FRAM
WINDOW AND DOORS
(CLEAR GLASS)

ALUMINUM TOP RAIL WITH
WIRE GUARD

PAINTED METAL BALCONIE

BRICK
(M-2)

PAINTED ALUMINUM FRAM
WINDOW AND DOORS
(CLEAR GLASS)

BREAK METAL EXTRUSION
(MT-1)

ALUMINUM METAL PANELS
(MT-1)

ALUMINUM LOUVERS

PAINTED METAL CANOPY

ALUMINUM WINDOW
AND DOOR SYSTEM

TEXTURED BLOCK

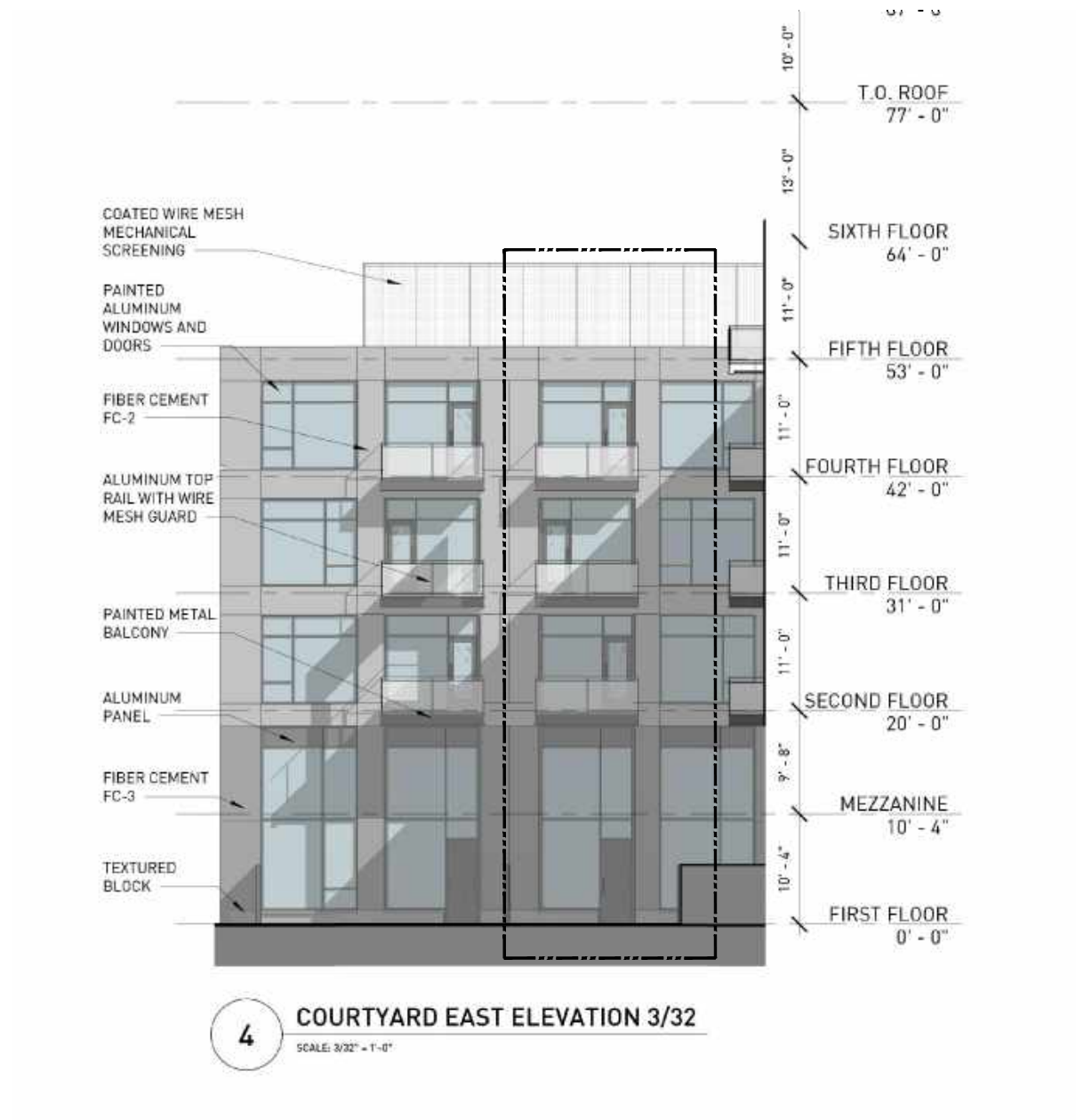
STONE SURROUND AND BASE



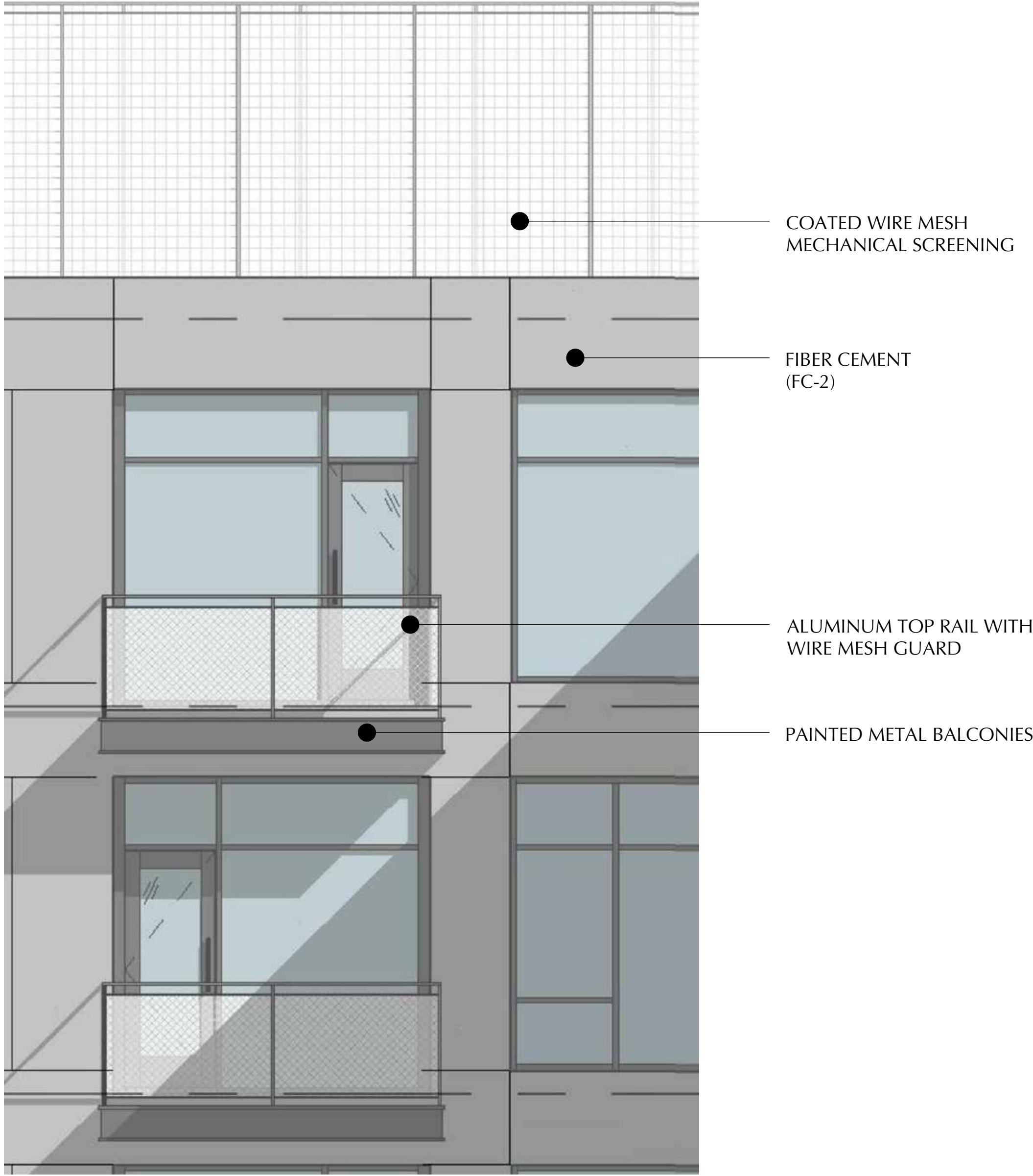
ELEVATION KEY



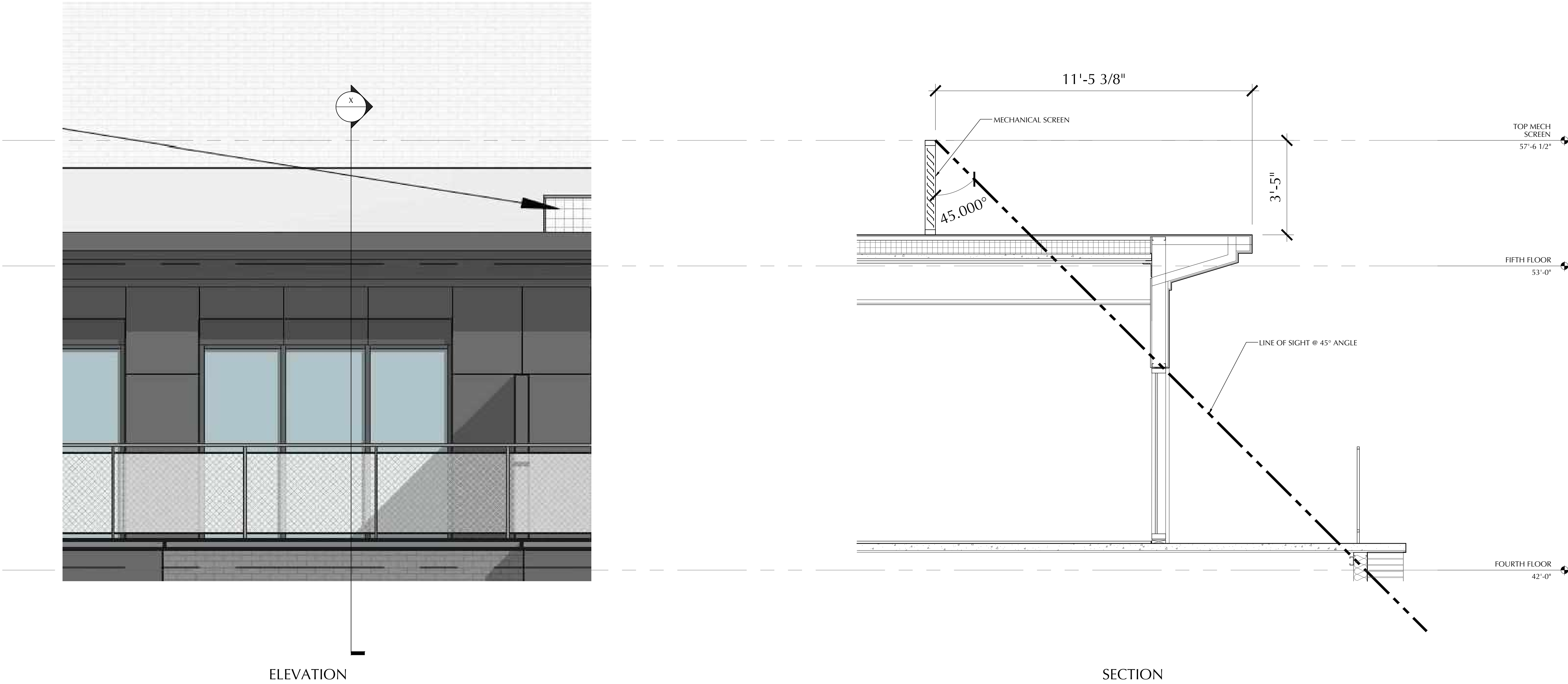
ENLARGED ELEVATION
(WEST)



ELEVATION KEY



ENLARGED ELEVATION
(COURTYARD)



MECHANICAL SCREENING



HAYNES AND WORTH
(STREET VIEW)

CHRISTOPHER J LONGE AIA
ARCHITECTURE
INTERIORS
124 Peabody, Birmingham, Michigan 48009 248.258.8940



WORTH STREET VIEW
(STREET VIEW)



ADAMS VIEW
(STREET VIEW)



ADAMS VIEW
(STREET VIEW)



ADAMS VIEW
(NORTH)



ADAMS VIEW
(SOUTH)



DTE PAD-MOUNTED TRANSFORMER
DIMENSIONS (THE PAD IS 7'-2" WIDE BY 6'-2" DEEP).
TRANSFORMER IS APPROXIMATELY 6" SHORTER IN EACH
DIMENSION. 72" HIGH.



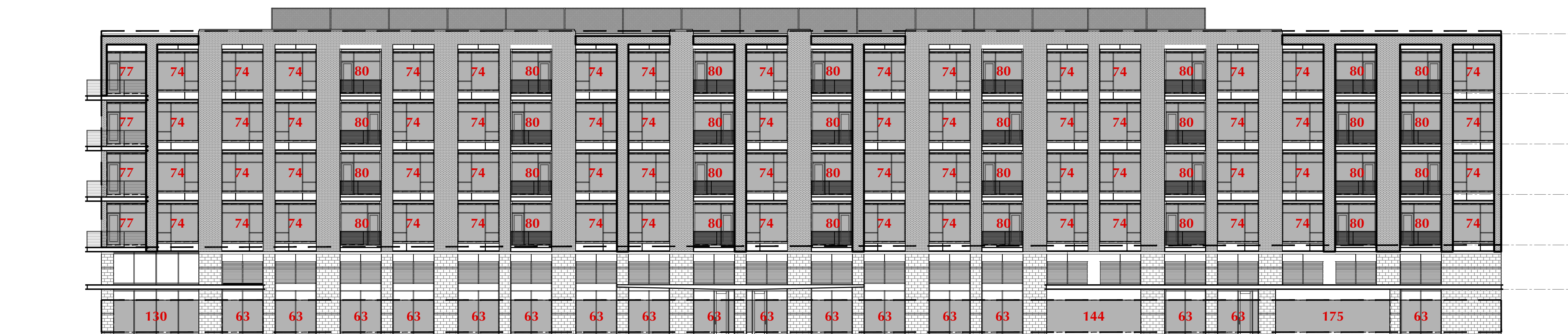
DTE PRIMARY SWITCH
PAD IS APPROXIMATELY 36" WIDE BY 44"
DEEP. SWITCH IS ABOUT 44" HIGH.



GENERATOR DIMENSIONS
222" LONG, 86" WIDE, 108" HIGH.

GROUND MOUNTED EQUIPMENT

FHS BIRMINGHAM
Birmingham, Michigan 48009

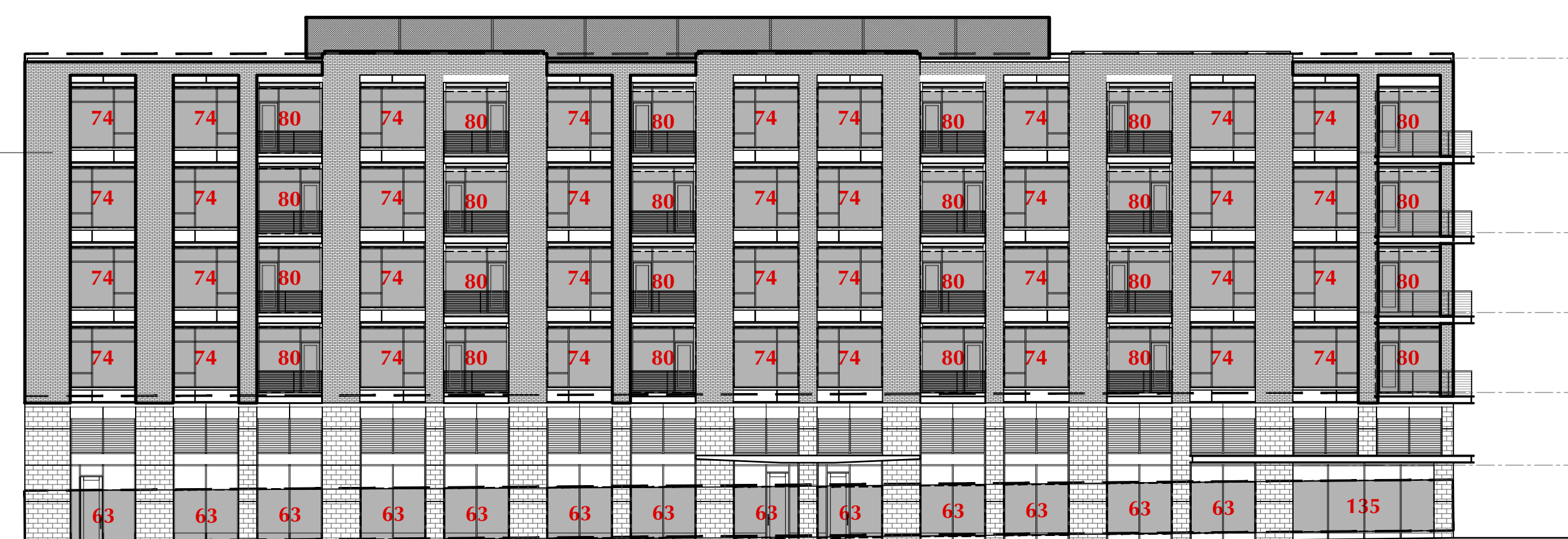


SOUTH WORTH STREET

REQUIRED VLT:
1ST FLOOR BETWEEN 1 AND 8 FT. MUST BE 70% MIN. VLT
UPPER FLOORS MUST BE 50% MAX. VLT

$(1,520 \times 100) / 2,135 = 71.1\%$

SOUTH WORTH STREET UPPER LEVEL GLAZING
 CLASS SF = 7,180 SOLID SF = 14,290
 (7,180x100) / 14,290 = 51.6%



HAYNES STREET

REQUIRED VLT:
1ST FLOOR BETWEEN 1 AND 8 FT. MUST BE 70% MIN. VLT
UPPER FLOORS MUST BE 50% MAX. VLT

HAYNES STREET 1ST LEVEL FROM 1'-0" TO 8'-0"
ABOVE GRADE IN ALL OCCURRENCE WITH OCCURRENCE:
GLASS SF = 954 SOLID SF = 1,383

$$(954 \times 100) / 1,383 = 69\%$$

HAYNES STREET UPPER LEVEL GLAZING:
GLASS SF = 4,584 SOLIDS SF = 9,210
(4,584x100) / 9,210 = 50%



SOUTH ADAMS STREET

REQUIRED VLT:
1ST FLOOR BETWEEN 1 AND 8 FT. MUST BE 70% MIN. VLT
UPPER FLOORS MUST BE 50% MAX. VLT

SOUTH ADAMS STREET 1ST LEVEL FROM 1'-0" TO 8'-
ABOVE GRADE IN ACCORDANCE WITH ORDINANCE
GLASS SF = 351 SOLID SF = 1,500

$$(353 \times 100) / 1,596 = 22\%$$

SOUTH ADAMS STREET UPPER LEVEL GLAZING
GLASS SF = 3,854 SOLID SF = 7,854
(3,854x100) / 7,854 = 49%

GLAZING CALCULATIONS

CHRISTOPHER J LONGE AIA
ARCHITECTURE
INTERIORS
124 Peabody, Birmingham, Michigan 48009 248.258.6940

NOT TO SCALE

FHS BIRMINGHAM
Birmingham, Michigan 48009



URBAN BRICK SMOOTH - POLAR
(M-1)



URBAN BRICK SMOOTH - OXENDEN
(M-2)



URBAN BRICK SMOOTH - GALAXY
(M-3)



TEXTURED BRICK



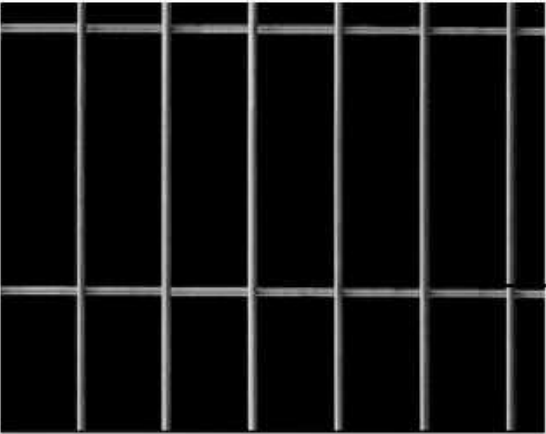
FIBER CEMENT
(FC-1)



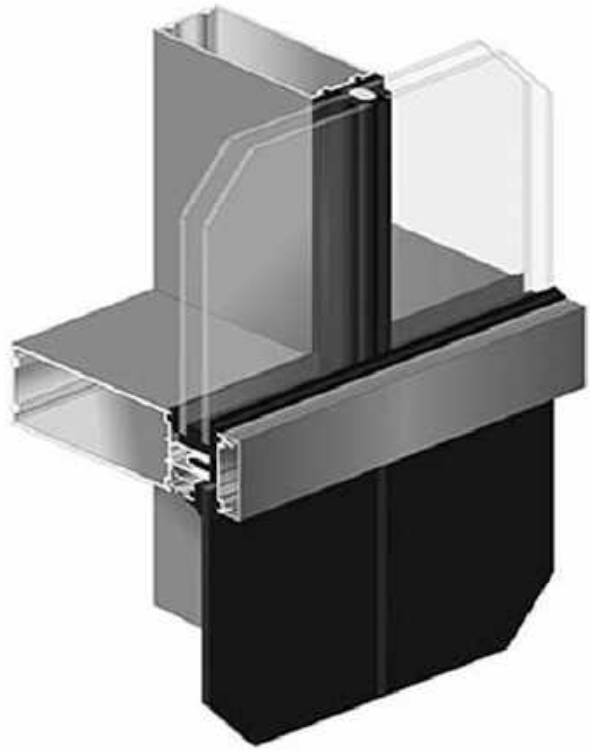
FIBER CEMENT
(FC-2)



FIBER CEMENT
(FC-3)



COATED METAL MESH
MECHCANICAL SCREENING



GLASS DOOR AND WINDOW
PAINTED ALUMINUM FRAME



FRAME COLOR: CHARCOAL



URBAN BRICK SMOOTH
(M-1)



CANOPY



FRAMELESS GLASS DOORS



ALUMINUM TOP RAIL WITH
WIRE MESH GUARD



LOUVER

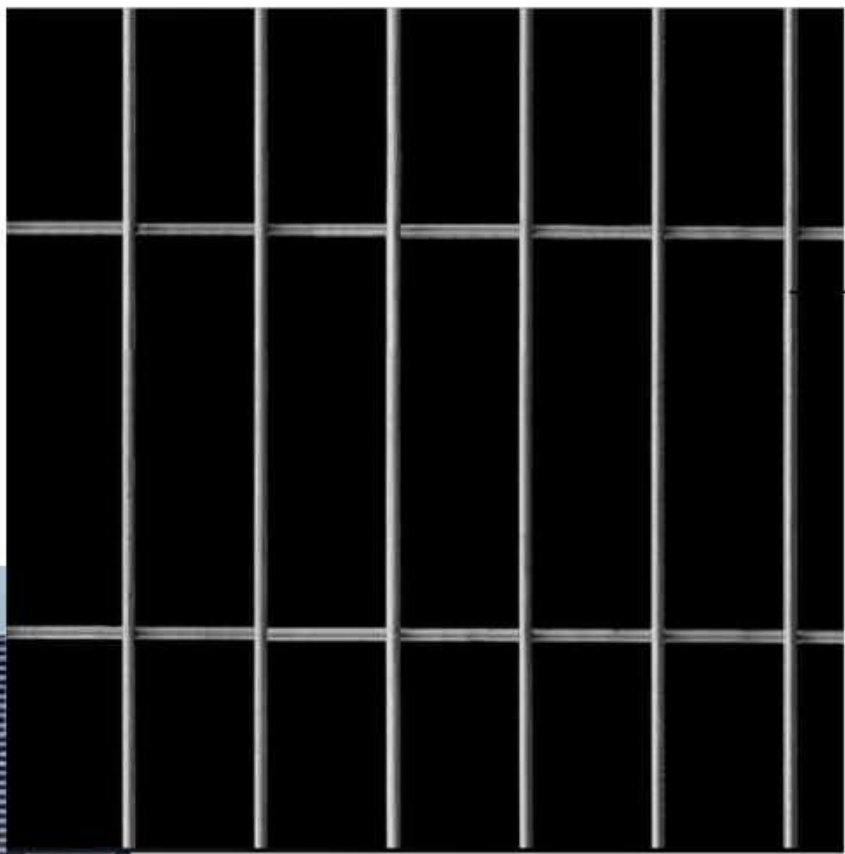
TEXTURE BRICK



BLACK GRANITE BASE AND
SURROUND

MATERIALS

FHS BIRMINGHAM
Birmingham, Michigan 48009



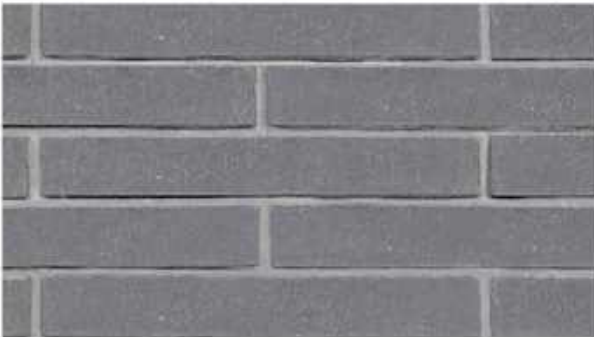
COATED METAL MESH
MECHANICAL SCREENING



URBAN BRICK SMOOTH - POLAR
(M-1)



URBAN BRICK SMOOTH - OXENDEN
(M-2)



URBAN BRICK SMOOTH - GALAXY
(M-3)



FIBER CEMENT
(FC-1)



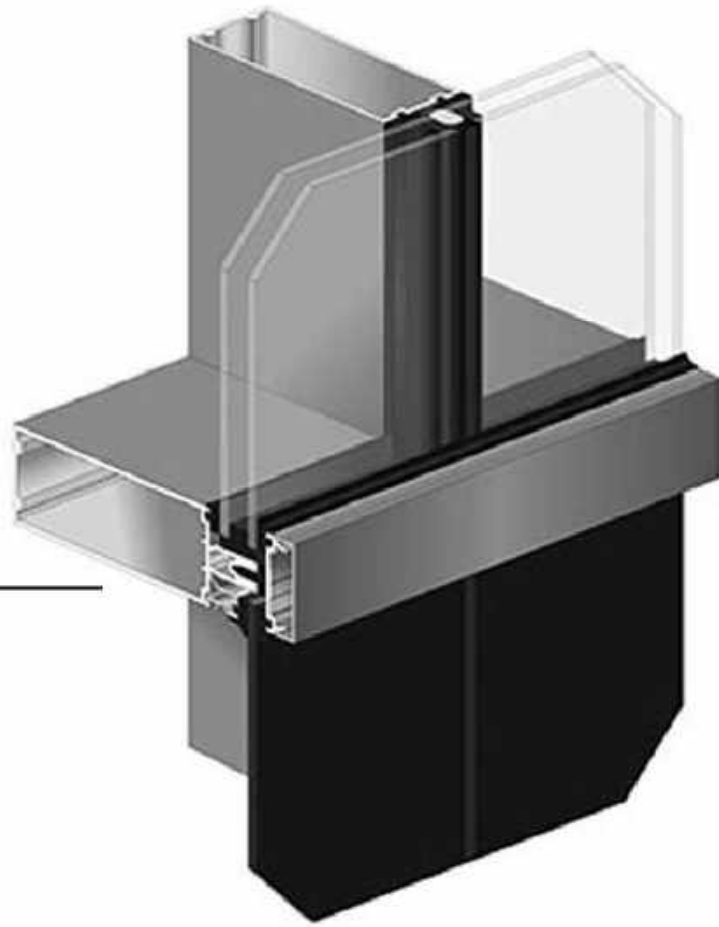
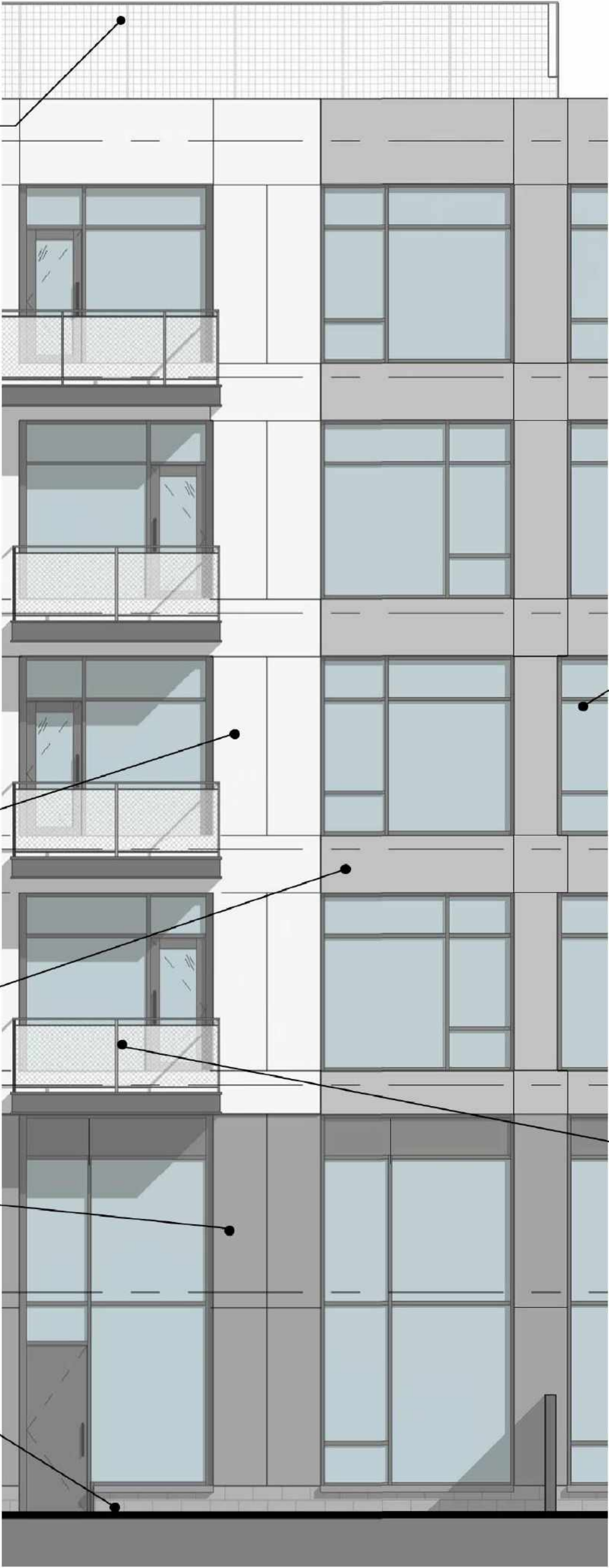
FIBER CEMENT
(FC-2)



FIBER CEMENT
(FC-3)



TEXTURED BRICK



GLASS DOOR AND WINDOW
PAINTED ALUMINUM FRAME

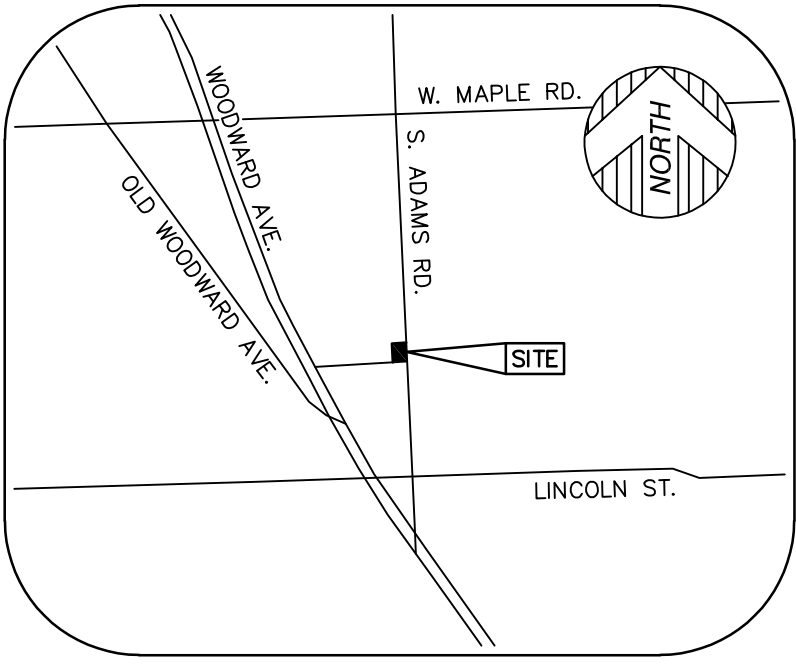


FRAME COLOR: CHARCOAL



ALUMINUM TOP RAIL WITH WIRE MESH GUARD

MATERIALS



VICINITY MAP
(NOT TO SCALE)

PARKING

HANDICAP PARKING = 2 STALLS
STANDARD PARKING = 53 STALLS

PARCEL AREA

28,760± SQUARE FEET = 0.660± ACRES

BASIS OF BEARING

SOUTH 03°28'46" EAST, BEING THE WEST LINE OF ADAMS ROAD, PER GPS OBSERVATION, MICHIGAN STATE PLANE COORDINATE SOUTH ZONE

BENCHMARK

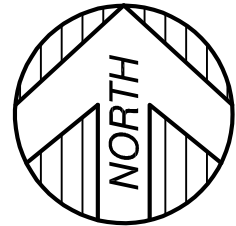
SITE BENCHMARK
MAG NAIL IN THE EAST FACE OF THE UTILITY POLE NEAR THE SOUTHWEST PROPERTY CORNER
ELEVATION = 756.13' (NAVD 88 DATUM)

SURVEYOR'S NOTE

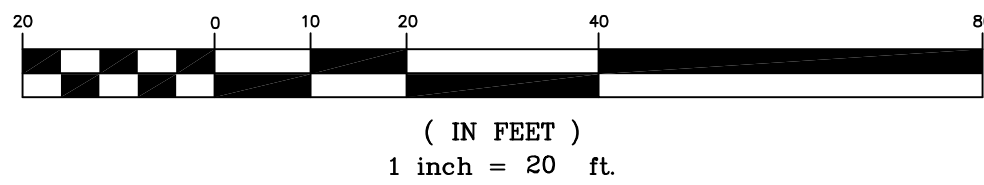
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES OTHER THAN THE STRUCTURE INVENTORY SHOWN HEREON.

LEGEND

●	SET 1/2" REBAR WITH CAP P.S. 47976
●	FOUND MONUMENT (AS NOTED)
(R&M)	RECORD AND MEASURED DIMENSION
(R)	RECORD DIMENSION
(M)	MEASURED DIMENSION
X 0.00	GROUND ELEVATION
⊠	ELECTRIC PANEL
⊠	UTILITY POLE
⊠	GAS METER
⊠	GAS VALVE
⊠	GENERATOR
⊠	TELEPHONE MANHOLE
⊠	CLEANOUT
⊠	SANITARY MANHOLE
⊠	ROUND CATCH BASIN
⊠	SQUARE CATCH BASIN
⊠	WATER VALVE
⊠	LIGHTPOST/LAMP POST
⊠	MAIL BOX
⊠	SINGLE POST SIGN
⊠	HANDICAP PARKING
⊠	DECIDUOUS TREE (AS NOTED)
⊠	CONIFEROUS TREE (AS NOTED)
---	PARCEL BOUNDARY LINE
---	PLATTED LOT LINE
---	BUILDING
---	BUILDING OVERHANG
---	CONCRETE CURB
---	PARKING
---	EDGE OF CONCRETE (CONC.)
---	EDGE OF ASPHALT (ASPH.)
X	FENCE (AS NOTED)
---	WALL (AS NOTED)
---	OVERHEAD UTILITY LINE
---	COMMUNICATION LINE
---	GAS LINE
---	SEWER LINE
---	WATER LINE
---	MINOR CONTOUR LINE
---	MAJOR CONTOUR LINE
---	BUILDING AREA
---	ASPHALT
---	CONCRETE



GRAPHIC SCALE



PROPERTY DESCRIPTION

THE LAND IS LOCATED IN THE CITY OF BIRMINGHAM, COUNTY OF OAKLAND, STATE OF MICHIGAN, AND DESCRIBED AS FOLLOWS:

LOTS 15, 16 AND 17, O.E. SHATTUCK SUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN LIBER 8 OF PLATS, PAGE 14, OAKLAND COUNTY RECORDS.

TITLE REPORT NOTE

ONLY THOSE EXCEPTIONS CONTAINED WITHIN THE WESTCOR LAND TITLE INSURANCE COMPANY FILE No. LIB153701, DATED 4/1/2021, AND RE-LISTED BELOW WERE CONSIDERED FOR THIS SURVEY. NO OTHER RECORDS RESEARCH WAS PERFORMED BY THE CERTIFYING SURVEYOR.

NO SPECIFIC EASEMENTS LISTED

FLOOD NOTE

SUBJECT PARCEL LIES WITHIN:

OTHER AREA (ZONE X): AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.

AS SHOWN ON FLOOD INSURANCE RATE MAP: MAP NUMBER 26125C0537F, DATED 9/29/2006, PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

MANHOLE SCHEDULE

SEWER CATCH BASIN (#15125) RIM=753.70' T/WATER=751.80' BOTTOM=750.40'	SEWER MANHOLE (#15301) RIM=752.81' INV. 12" RCP, SE=747.11' INV. 12" RCP, NW=746.64' INV. 12" RCP, S=748.21'
SEWER CATCH BASIN (#15304) RIM=755.77' UNABLE TO OPEN	SEWER MANHOLE (#15300) RIM=753.00' INV. 12" RCP, NW=746.55' INV. 42" RCP, N=741.20' INV. 42" RCP, S=741.20'
SEWER CATCH BASIN (#15010) RIM=754.59' INV. RCP, NE=749.62'	SEWER CATCH BASIN (#15010) RIM=751.69' INV. 12" RCP, NW=750.17' INV. 12" RCP, W=750.47'
SEWER CATCH BASIN (#15230) RIM=754.33' INV. 12" RCP, NW=750.17' INV. 12" RCP, SE=747.49'	SEWER CATCH BASIN (#15230) RIM=752.36' INV. 12" RCP, NE=747.26' INV. 12" RCP, W=744.06' INV. 42" RCP, N=742.66' INV. 42" RCP, S=742.56'
SEWER MANHOLE (#15231) RIM=754.33' INV. 42" N=743.56' INV. 42" S=743.56'	SEWER MANHOLE (#10434) RIM=752.36' INV. 12" RCP, NE=747.26' INV. 12" RCP, W=744.06' INV. 42" RCP, N=742.66' INV. 42" RCP, S=742.56'
SEWER MANHOLE (#15232) RIM=754.66' INV. 12" RCP, SE=749.76' INV. 42" RCP, N=742.09' INV. 42" RCP, S=742.02'	SEWER CATCH BASIN (#10433) RIM=753.14' INV. 12" RCP, SE=747.99'
SEWER MANHOLE (#15222) RIM=754.38' INV. 12" RCP, E=750.68'	SEWER CATCH BASIN (#15124) RIM=753.70' T/WATER=751.80' BOTTOM=750.40'

SURVEYOR'S CERTIFICATION

TO WESTCOR LAND TITLE INSURANCE COMPANY; LIBERTY TITLE AGENCY; AND SOAVE REAL ESTATE GROUP:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 7A, 7B1, 7C, 8, 9, 11A, AND 11B OF TABLE A, THEREOF. THE FIELD WORK WAS COMPLETED ON 05/03/21.

DATE OF PLAT OR MAP: 05/04/21

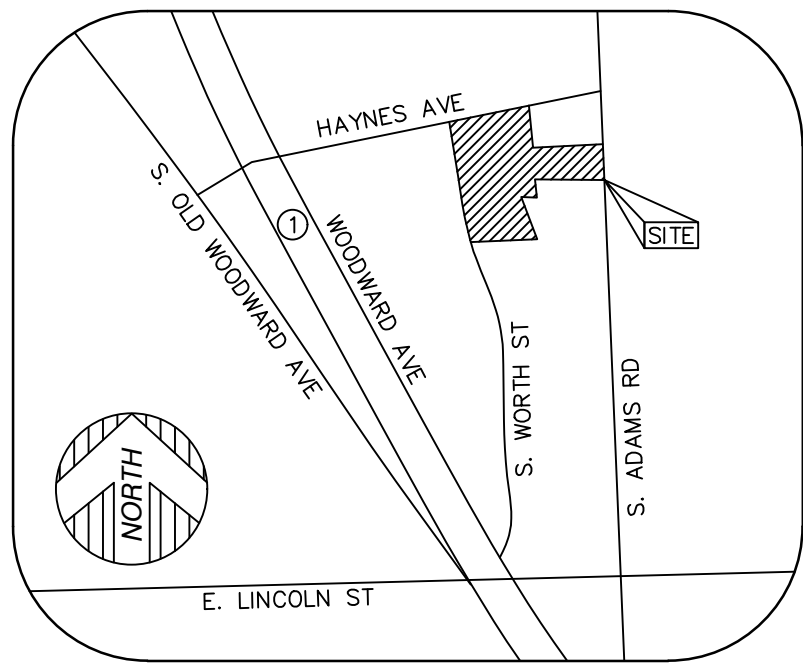
DRAFT

ANTHONY T. SYCKO, JR., P.S.
PROFESSIONAL SURVEYOR
MICHIGAN LICENSE NO. 47976
22556 GRATIOT AVE., EASTPOINTE, MI 48021
TSycko@kemttec-survey.com

ALTA / NSPS LAND TITLE SURVEY
PREPARED FOR: SOAVE REAL ESTATE GROUP
770 S. ADAMS RD., BIRMINGHAM, MICHIGAN,
PART OF SECTION 36,
TOWN 2 NORTH, RANGE 10 EAST

KEM-TEC
PROFESSIONAL ENGINEERING,
SURVEYING & ENVIRONMENTAL
SERVICES
A GROUP OF COMPANIES
Grand Blanc
Ann Arbor
Detroit
Eastpointe
(800) 367-1222 FAX (810) 694-0887
www.kemttecgroupofcompanies.com

DRAWN BY:	NS/MRJ	05/04/21
CHECKED BY:	ATS	05/04/21
DATE:	MAY 04, 2021	
PROJECT NO:	21-01434	SCALE: 1" = 20'



VICINITY MAP
(NOT TO SCALE)

PARKING

HANDICAP PARKING = 3 STALLS
STANDARD PARKING = 62 STALLS

PARCEL AREA

60,759± SQUARE FEET = 1.39± ACRES

BASIS OF BEARING

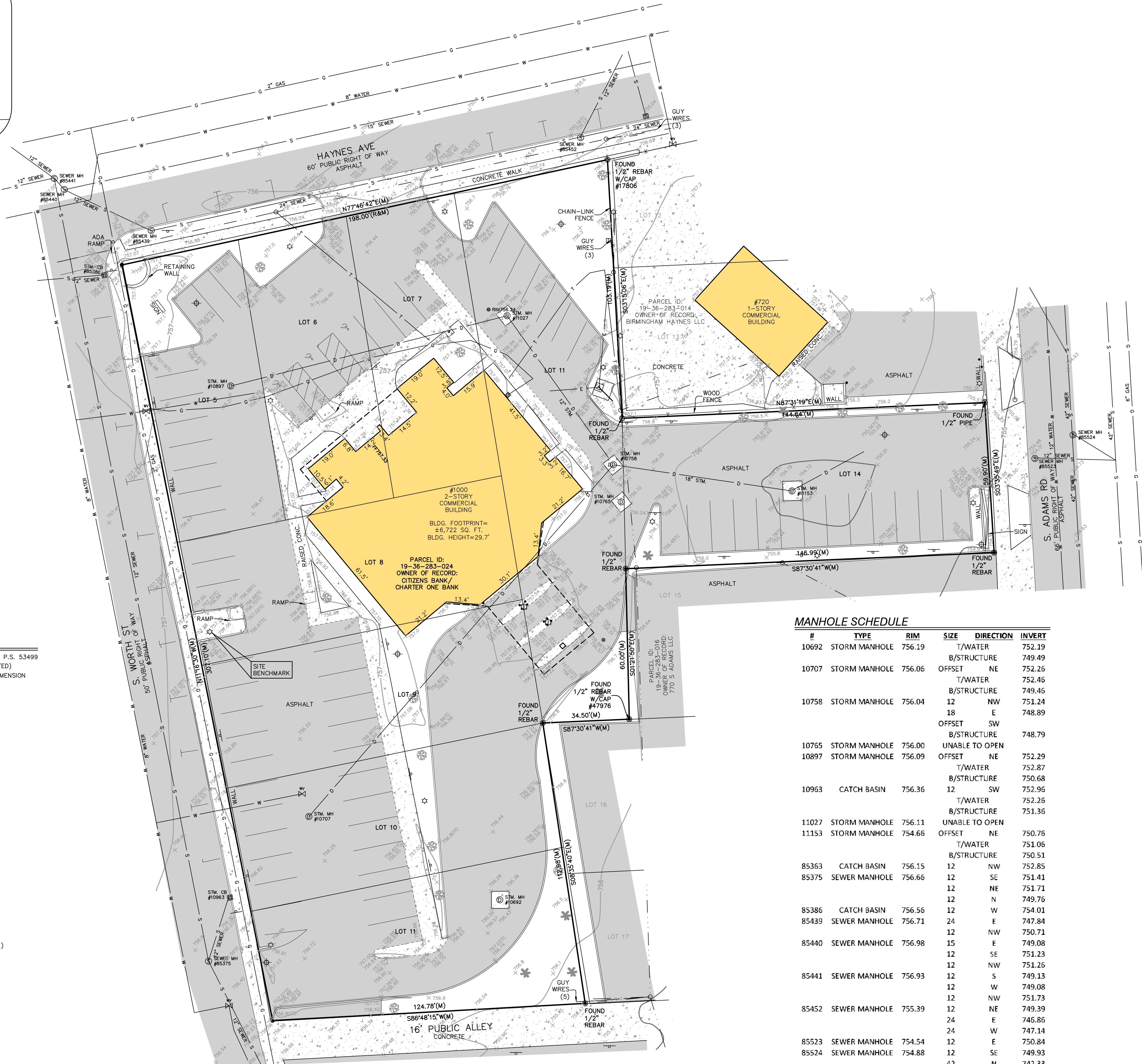
NORTH 77°32'52" EAST, BEING THE SOUTH LINE OF HAYNES ROAD, BASED ON GPS OBSERVATION, MICHIGAN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NAD83.

BENCHMARK

MAG NAIL IN UTILITY POLE.
ELEVATION = 757.70' (NAVD 88 DATUM)

LEGEND

●	SET 1/2" REBAR WITH CAP P.S. 53499
●	FOUND MONUMENT (AS NOTED)
(R&M)	RECORD AND MEASURED DIMENSION
(R)	RECORD DIMENSION
(M)	MEASURED DIMENSION
△	TRANSFORMER
○	UTILITY POLE
⊗	GAS METER
⊙	CLEANOUT
⊕	SEWER MANHOLE
⊕	SQUARE CATCH BASIN
⊕	STORM DRAIN MANHOLE
⊕	WATER GATE MANHOLE
⊕	WATER VALVE
⊕	BANK CHUTE
⊕	BOLLARD
⊕	FLAGPOLE
⊕	LIGHTPOST/LAMP POST
⊕	SINGLE POST SIGN
⊕	SOIL BORING
⊕	HANDICAP PARKING
---	PARCEL BOUNDARY LINE
---	PLATTED LOT LINE
---	BUILDING
---	BUILDING OVERHANG
---	ASPHALT CURB
---	CONCRETE CURB
---	RAISED CONCRETE
---	PARKING
---	EDGE OF CONCRETE (CONC.)
---	EDGE OF ASPHALT (ASPH.)
---	FENCE (AS NOTED)
---	WALL (AS NOTED)
---	OVERHEAD UTILITY LINE
---	SEWER LINE
---	STORM LINE
---	WATER LINE
---	GAS LINE
---	BUILDING AREA
---	ASPHALT
---	CONCRETE



MANHOLE SCHEDULE

#	TYPE	RIM	SIZE	DIRECTION	INVERT
10692	STORM MANHOLE	756.19	12	T/WATER	752.19
				B/STRUCTURE	749.49
10707	STORM MANHOLE	756.06	12	OFFSET NE	752.26
				T/WATER	752.46
10758	STORM MANHOLE	756.04	12	NW	751.24
			18	E	748.89
			OFFSET SW		748.79
			B/STRUCTURE		
10765	STORM MANHOLE	756.00	12	UNABLE TO OPEN	
10897	STORM MANHOLE	756.09	12	OFFSET NE	752.29
			T/WATER		752.87
			B/STRUCTURE		750.68
10963	CATCH BASIN	756.36	12	SW	752.96
			T/WATER		752.26
			B/STRUCTURE		751.36
11027	STORM MANHOLE	756.11	12	UNABLE TO OPEN	
11153	STORM MANHOLE	754.66	12	OFFSET NE	750.76
			T/WATER		751.06
			B/STRUCTURE		750.51
85363	CATCH BASIN	756.15	12	NW	752.85
85375	SEWER MANHOLE	756.66	12	SE	751.41
			12	NE	751.71
			12	N	749.76
85386	CATCH BASIN	756.56	12	W	754.01
85439	SEWER MANHOLE	756.71	24	E	747.84
			12	NW	750.71
85440	SEWER MANHOLE	756.98	15	E	749.08
			12	SE	751.23
			12	NW	751.26
85441	SEWER MANHOLE	756.93	12	S	749.13
			12	W	749.08
			12	NW	751.73
85452	SEWER MANHOLE	755.39	12	NE	749.39
			24	E	746.86
			24	W	747.14
85523	SEWER MANHOLE	754.54	12	E	750.84
85524	SEWER MANHOLE	754.88	12	SE	749.93
			42	N	742.33
			42	S	742.23

PROPERTY DESCRIPTION

LAND SITUATED IN THE CITY OF BIRMINGHAM, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS FOLLOWS:

LOTS 11 AND 14, D. E. SHATTUCK SUBDIVISION, VILLAGE, NOW CITY OF BIRMINGHAM, OAKLAND COUNTY, MICHIGAN, ACCORDING TO THE RECORDED PLAT THEREOF, AS RECORDED IN LIBER 8 OF PLATS, PAGE 14, OAKLAND COUNTY RECORDS.

LOTS 5 THROUGH 11, INCLUSIVE, RURAL SUBDIVISION OF LOTS 5, 6, 7, 8, 9 AND 10 OF O.E. SHATTUCK SUBDIVISION IN THE VILLAGE OF BIRMINGHAM, ACCORDING TO THE RECORDED PLAT THEREOF AS RECORDED IN LIBER 16 OF PLATS, PAGE 14, OAKLAND COUNTY RECORDS.

TITLE REPORT NOTE

ONLY THOSE EXCEPTIONS CONTAINED WITHIN THE CHICAGO TITLE INSURANCE COMPANY COMMITMENT No. 63127970NBU, REVISION 3, DATED APRIL 1, 2021, AND RELISTED BELOW WERE CONSIDERED FOR THIS SURVEY. NO OTHER RECORDS RESEARCH WAS PERFORMED BY THE CERTIFYING SURVEYOR.

3. COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, INCLUDING BUT NOT LIMITED TO THOSE BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, AS SET FORTH IN THE DOCUMENT RECORDING NO: LIBER 2725, PAGE 284 (SEE DOCUMENT FOR TERMS AND CONDITIONS)

FLOOD NOTE

SUBJECT PARCEL LIES WITHIN:

OTHER AREA (ZONE X): AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.

AS SHOWN ON FLOOD INSURANCE RATE MAP: MAP NUMBER 26125C0537F, DATED 9/29/2006, PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

SURVEYOR'S NOTE

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES OTHER THAN THE STRUCTURE INVENTORY SHOWN HEREON.

SURVEYOR'S CERTIFICATION

TO CHICAGO TITLE INSURANCE COMPANY; CHICAGO TITLE OF MICHIGAN, INC., ARJA HAYNES, LLC, A MICHIGAN LIMITED LIABILITY COMPANY; AND SOAVE REAL ESTATE GROUP.

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 7A, 7B1, 7C, 8, 9, 11A, AND 11B OF TABLE A, THEREOF. THE FIELD WORK WAS COMPLETED ON 05/11/21.

DATE OF PLAT OR MAP: 05/12/21

DRAFT

DANIEL J. JACKSON
PROFESSIONAL SURVEYOR
MICHIGAN LICENSE NO. 53499
22556 GRATIOT AVE., EASTPOINT, MI 48021
d.jackson@kemtec-survey.com



Thuja occidentalis - Emerald Green Arborvitae



Juniperus 'Blue Arrow' - Blue Arrow Juniper



Buxus 'Green Mountain' - Green Mountain Boxwood



Ilex x meserveae 'Blue Prince' - Blue Prince Holly



Nepeta x faassenii 'Walker's Low' - Walker's Low Catmint



Taxus x media 'Hicksii' - Hicks Yew

Planter Schedule

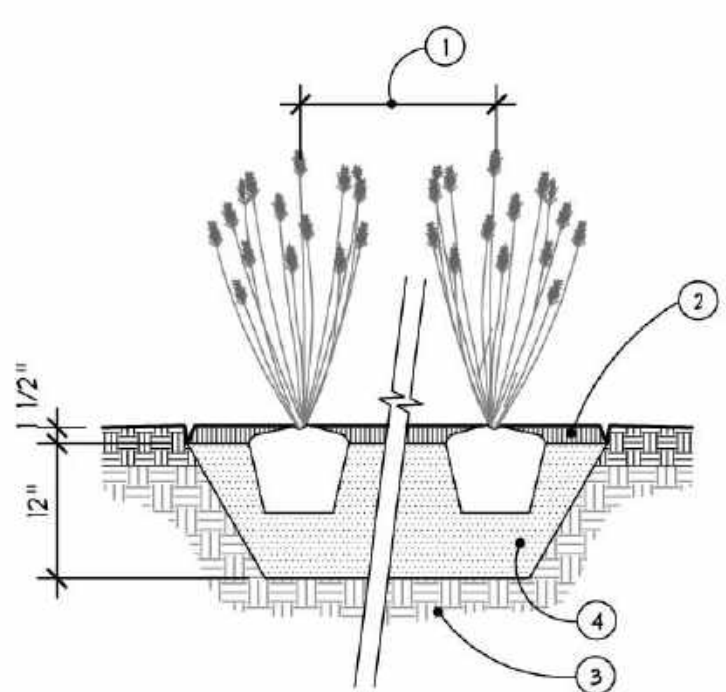
CODE	MODEL/TYPE	QTY	MANUFACTURER	OVERALL SIZE	COLOR/FINISH	MATERIAL	OPTIONS/ACCESSORIES
PLT-01	Stone Planter	6	Vardon 1-786-351-0274 www.vardon.com	60" L x 32" W x 47 1/2" H	Matte Ice White	Polystyrene Resin	RGBW LED DMX internal light, Professional XLR DMX transmitter
PLT-02	Rectangular Planter	2	See General Notes below	6'-0" L x 2'-0" W x 2'-0" H	Matte Charcoal	Fiberglass	

General Planter Notes:

1. APPROVED PLANTER MANUFACTURERS -
UL FIBERGLASS ENGINEERING COMPANY
840-768-4800
WWW.FIBERGLASS-PLANTERS.COM
THE CHANDLER COMPANY
714-975-4032
WWW.TECHCHANDLERCOMPANY.COM
FORM AND FIBER, INC.
669-314-6692
WWW.FORMANDFIBER.COM
STREETSCAPE PRODUCTS, LTD.
669-343-4693
WWW.STREETSCAPE.LTD.COM
2. REFER TO PLANTER DETAILS FOR ADDITIONAL INFORMATION.

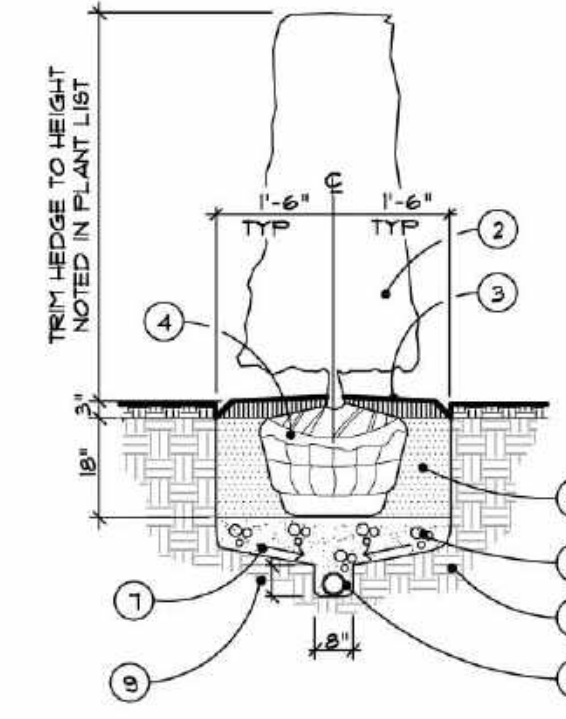
Plant List

CODE	QTY	DESCRIPTION	SIZE	COMMENTS
TO	29	Thuja occidentalis Emerald Green Arborvitae	12' H	B&S, matched height
JE	10	Juniperus 'Blue Arrow' Blue Arrow Juniper	12' H	B&S, matched height
BO	40	Buxus 'Green Mountain' Green Mountain Boxwood	30" H, x 18" W	plant 24" o.c. B&S
IM	60	Ilex x meserveae 'Blue Prince' Blue Prince Holly	42" H, x 24" W	plant 24" o.c. B&S, hedge to level tops at 42"
NF	100	Nepeta x faassenii 'Walker's Low' Walker's Low Catmint	#1	plant 18" o.c.
TM	74	Taxus x media 'Hicksii' Hicks Yew	42" H, x 24" W	plant 24" o.c. B&S, hedge to level tops at 42"



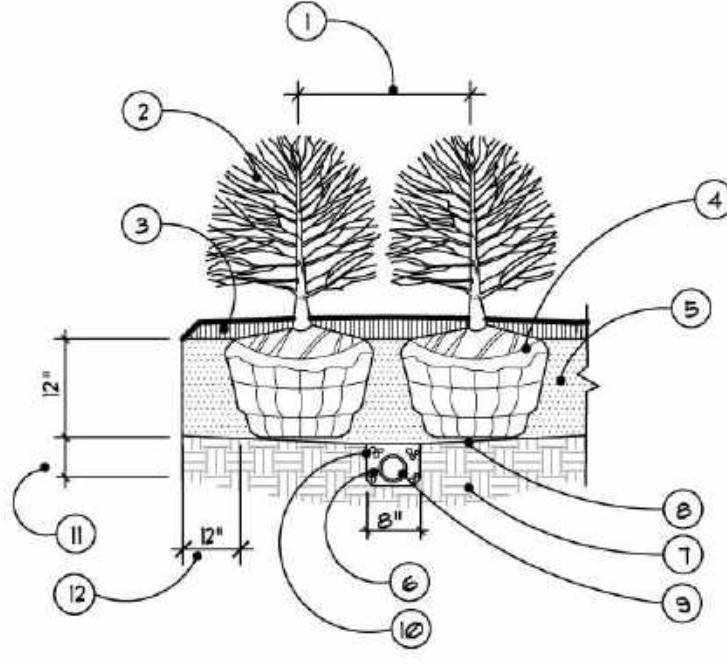
3 Perennial Planting Detail
NOT TO SCALE

- CONTRACTOR TO VERIFY PERCOLATION OF PLANTING PIT PRIOR TO INSTALLATION
- 1 SEE PLANT LIST FOR SPACING
 - 2 1-1/2" DEPTH DOUBLE PROCESSED SHREDDED BARK MULCH
 - 3 UNDISTURBED SUBGRADE
 - 4 EXCAVATE EXISTING SOIL 2" DEEP FILL WITH PLANT MIX (SEE SPECS.)



2 Hedge Planting with Drain Tile
NOT TO SCALE

- CONTRACTOR TO VERIFY PERCOLATION OF PLANTING PIT PRIOR TO INSTALLATION
- 1 UNDISTURBED SUBGRADE
 - 2 SHRUB PLANTS
 - 3 SHREDDED BARK MULCH 3" DEPTH TYPICAL
 - 4 REMOVE BURLAP & CUT TUNE FROM TOP 1/2 OF BALL
 - 5 EXCAVATE EXISTING SOIL 18" DEEP FILL WITH PLANT MIX (SEE SPECS.)
 - 6 6" DEPTH MIN. PEA GRAVEL WRAPPED WITH NON-WOVEN FILTER FABRIC, SEE SPECS
 - 7 PITCH SUBGRADE TO DRAIN
 - 8 PERF. DRAIN TILE, SEE SPECS.
 - 9 DEPTH VARIES, SEE PLAN

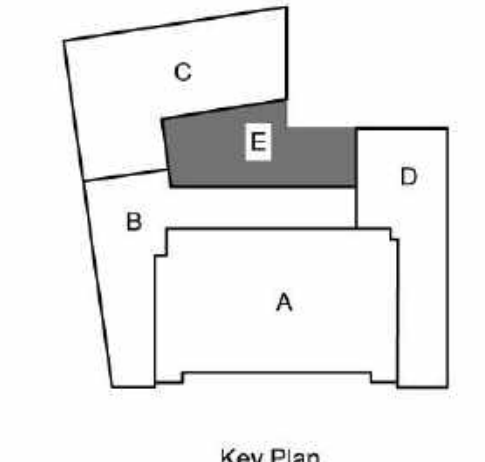


1 Shrub Planting Detail with Drain Tile
NOT TO SCALE

- CONTRACTOR TO VERIFY PERCOLATION OF PLANTING PIT PRIOR TO INSTALLATION
- 1 SEE PLAN FOR SPACING
 - 2 SHRUB PLANTS
 - 3 3" DEPTH DOUBLE PROCESSED SHREDDED BARK MULCH TYP.
 - 4 REMOVE BURLAP AND CUT TUNE FROM TOP 1/2 OF BALL
 - 5 EXCAVATE EXISTING SOIL 12" DEEP FILL WITH PLANT MIX (SEE SPECS.)
 - 6 CLEAN WASHED PEA GRAVEL, TYP. - REFER TO SPECS
 - 7 UNDISTURBED SUBGRADE
 - 8 PITCH SUBGRADE TO DRAIN
 - 9 PERF. DRAIN TILE, SEE SPECS.
 - 10 NON WOVEN FILTER FABRIC WRAPPED AROUND FILTER STONE - REFER TO SPECS
 - 11 DEPTH VARIES, SEE PLAN 6" DEPTH MIN. STARTING INV. MIN. 18" BELOW FINISH GRADE
 - 12 2" MIN. BETWEEN ROOTBALL AND EDGE OF PLANT

Note Key:

- 1 UNIT TERRACES - REFER TO ARCHITECTURAL PLANS
- 2 DECORATIVE SCREEN AND GATE, TYP. - REFER TO ARCHITECTURAL PLANS
- 3 GRILLING ISLAND - REFER TO PAVING PLAN
- 4 SEAT WALL - REFER TO PAVING PLAN
- 5 18"-6" HEIGHT ORNAMENTAL METAL FENCE - REFER TO PAVING PLAN
- 6 SYNTHETIC TURF - REFER TO DETAIL
- 7 CONCRETE FOUNDATION FOR PLANTERS, TYP.
- 8 PAVED AREA - REFER TO PAVING PLAN
- 9 LIGHT, TYP. - REFER TO ELECTRICAL PLANS
- 10 SEASONAL FLOWERS, TYP. CONTRACTOR SHALL PROVIDE SEASONAL FLOWER ROTATION ONE ROTATION PER QUARTER YEAR FROM TIME OF INSTALLATION TO END OF ONE YEAR WARRANTY PERIOD. ROTATION SHALL BE REVIEWED FOR APPROVAL BY LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
- 11 SHREDDED BARK MULCH TO STEEL EDGING ALONG PROPERTY LINE



Key Plan

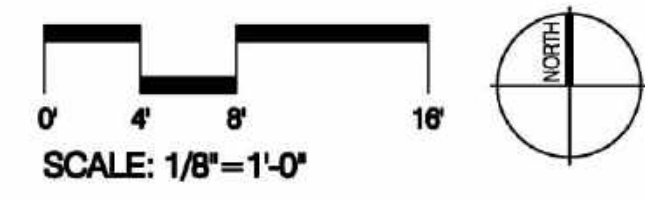
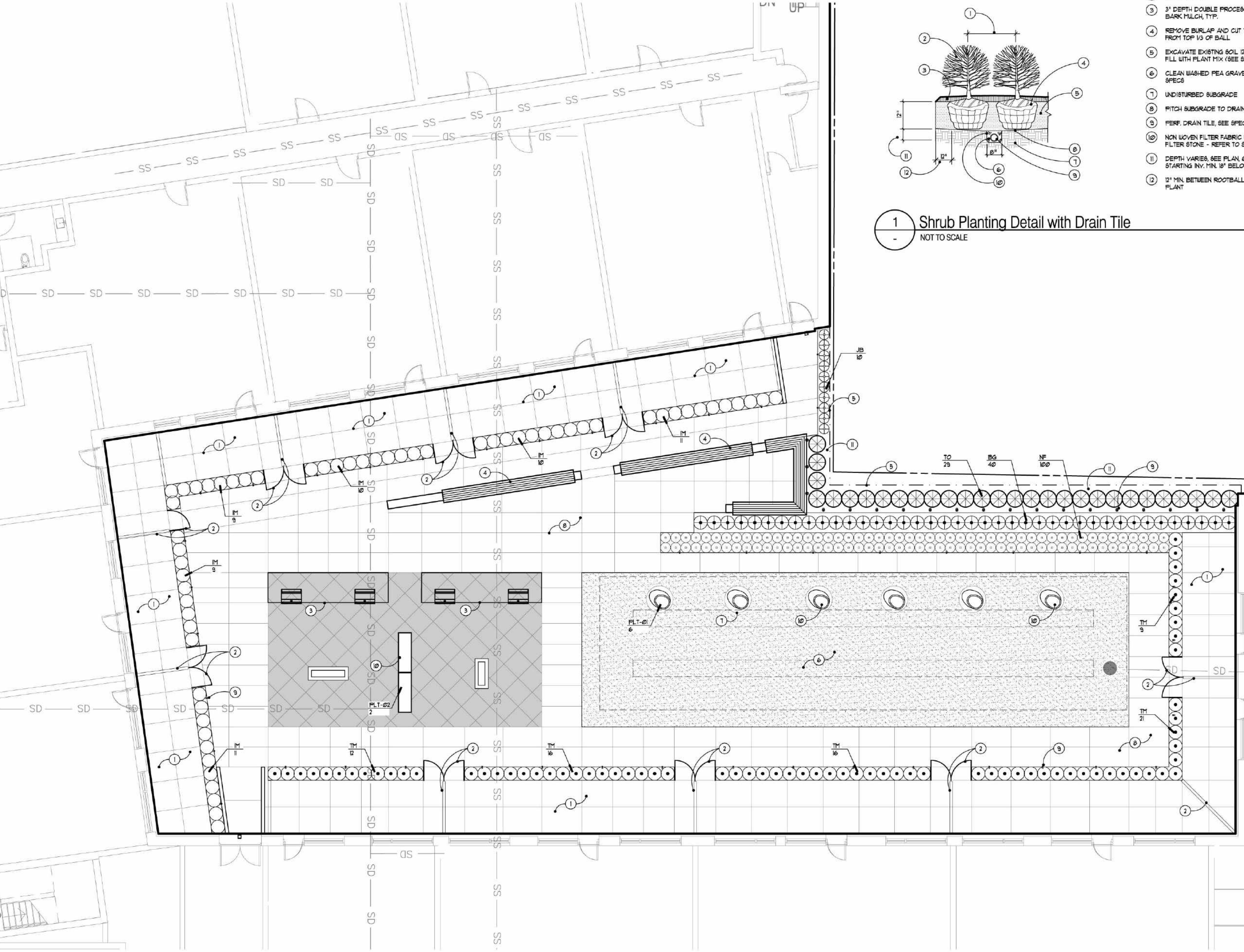
Issued for

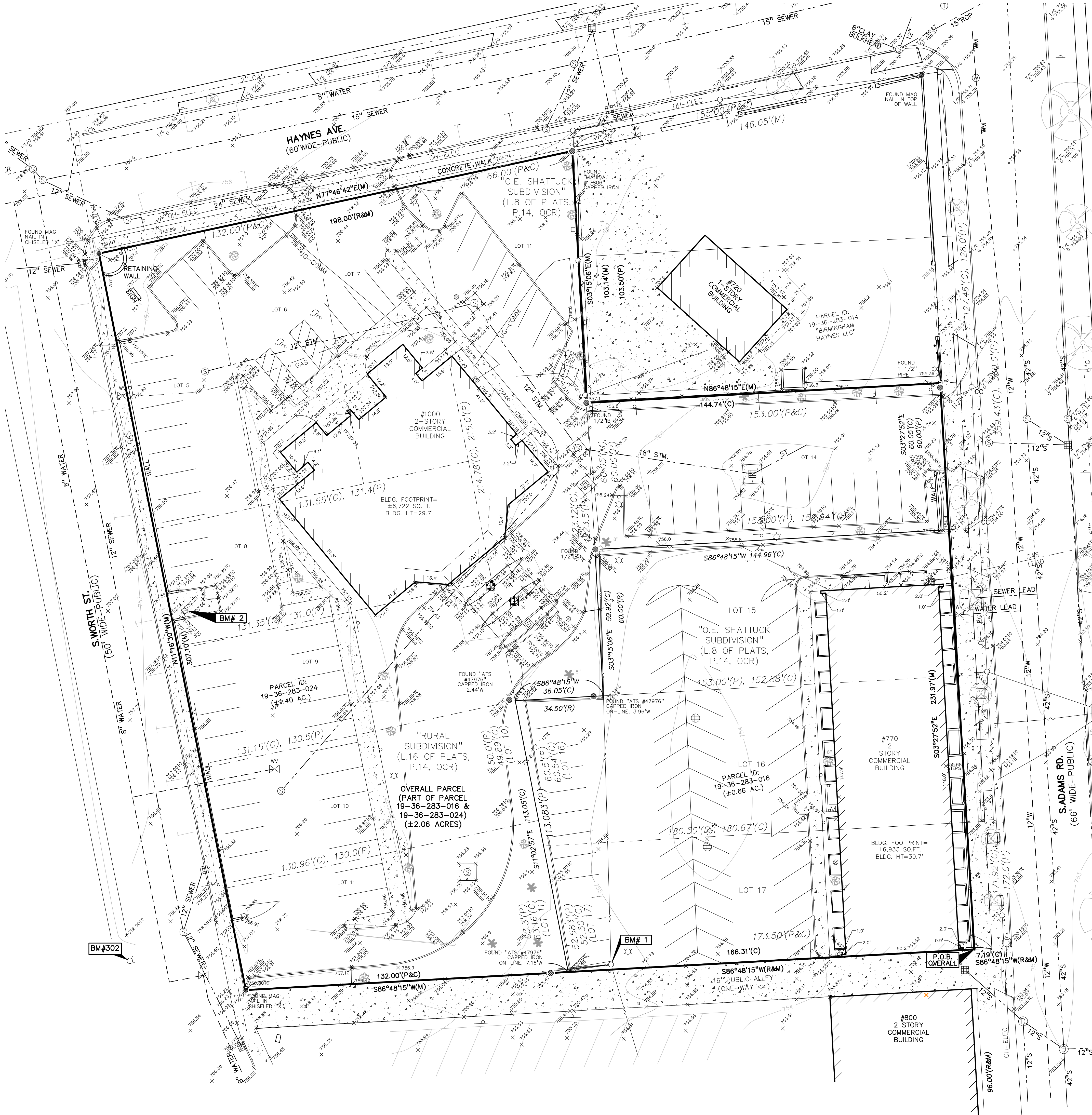
General Landscape Notes:

1. PROTECT ALL UTILITIES, LIGHTS, PAVEMENT, POLES, ETC. DURING CONSTRUCTION AS INDICATED ON THE PLANS.
2. RESTORE ANY DAMAGED LANDSCAPE OR INFRASTRUCTURE TO PRE-CONSTRUCTION STATE PER SPECIFICATIONS.
3. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITION INFORMATION SHOWN PRIOR TO CONSTRUCTION. NOTIFY THE LANDSCAPE ARCHITECT OF ANY CONCERNS PRIOR TO PROCEEDING.
4. PROVIDE MULCH IN ALL SHRUB AND PERENNIAL BEDS, TYP. - REFER TO SPECS. SEE PLANTING DETAILS FOR MULCH DEPTH.
5. CONTRACTOR SHALL INCLUDE IN THEIR BID COST FOR RECEIVING PRE-PURCHASED PLANT MATERIAL, HEALING IN WATERING AND MAINTAINING AS REQUIRED WITHIN A PRE-DETERMINED LOCATION ON SITE TO ENSURE SURVIVAL OF ALL MATERIAL UNTIL THE TIME OF INSTALLATION. CONTRACTOR SHALL ALSO INCLUDE COST FOR INSTALLATION AND MAINTENANCE DURING WARRANTY PERIOD OF ALL PRE-PURCHASED PLANT MATERIAL.
6. COORDINATE ALL REQUIRED SLAB PENETRATIONS WITH OTHER TRADES.

Irrigation Scope Notes:

- CONCEPTUAL OPERATION OF SITE SHALL BE AS FOLLOWS:
- MECHANICAL TRADERS WILL PROVIDE A WATERSOURCE WITH BACKFLOW PREVENTER CAPABLE OF APPROXIMATELY 50 GPM TO THE SITE. ALL PLANT MATERIAL ON THE SITE WILL BE IRRIGATED.
- CONTROL SYSTEM:
- CONTROL TIER(S) WILL BE INSTALLED TO OPERATE ZONE VALVES. THE CONTROL SYSTEM WILL BE A TWO-TIER, IRRIGATION SYSTEM CONTROLLER CAPABLE OF ZONE-BASED SYSTEM MONITORING AND CONTROL. THE ADDITION OF A FLOW METER AND MASTER VALVE WILL ALLOW REAL-TIME FLOW MONITORING. A RAIN SENSOR WILL BE INSTALLED WITH THE CONTROLLER(S). CONTROLLER(S) TO BE BUILDING MOUNTED AT GRADE FOR ACCESS BY MAINTENANCE STAFF.
- PLANTING BED IRRIGATION:
- ALL PLANT MATERIAL ON THE SITE WILL BE IRRIGATED BY AN AUTOMATIC IRRIGATION SYSTEM. IRRIGATION WILL INCLUDE DRIFT LINE IN BEDS AND PRE-EXISTING PLANTING. OPERATION OF DRIFT LINE WILL BE FROM AUTOMATIC VALVES POSITIONED ALONG THE PRESSURIZED IRRIGATION SYSTEM MAINLINE. ZONING OF DRIFT LINE TO BE BASED ON PLANT MATERIAL TYPE (PERENNIALS / TREES / SHRUBS, ETC.) AND SPECIFIC EXPOSURE.
- IRRIGATION EQUIPMENT:
- ALL MAJOR IRRIGATION EQUIPMENT SHALL BE MANUFACTURED BY RAIN BIRD, TONDO OR HUNTER.





BENCHMARKS (CITY OF BIRMINGHAM DATUM)

BM #1
MAG NAIL IN THE EAST FACE OF THE UTILITY POLE NEAR THE SOUTHWEST PROPERTY CORNER
ELEVATION = 757.13'

BM #2
MAG NAIL IN UTILITY POLE.
ELEVATION = 758.70'

BM #300
ARROW ON HYDRANT AT THE SOUTHWEST CORNER OF HAYNES & S. WORTH STREET.
ELEVATION = 761.29'

BM #301
ARROW ON HYDRANT AT THE NORTHWEST CORNER OF HAYNES & ADAMS STREET.
ELEVATION = 759.53'

BM #302
ARROW ON HYDRANT, WEST SIDE OF S. WORTH STREET, APPROX 15' NORTH OF ALLEY.
ELEVATION = 760.55'

FLOODPLAIN NOTE:
BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE 'X'. AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FLOOD INSURANCE RATE MAP NUMBER 26125C0537F DATED SEPTEMBER 29, 2006.

LEGEND

EXISTING

- OH-ELEC- OH. LINE, POLE & GUY WIRE
- UG-CATV- UNDERGROUND CABLE TV, CATV PEDESTAL
- UG-PHONE- TELEPHONE U.S. CABLE, PEDESTAL & MANHOLE
- UG-ELEC- ELECTRIC U.S. CABLE, MANHOLE METER & HANDHOLE
- WATER- GAS MAIN, VALVE & GAS LINE MARKER
- WATER- WATERMAIN, HYD. GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & REINFORCED CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SEIN
- CONC. CONCRETE
- ASPH. ASPHALT

0 10 20 40
SCALE: 1" = 20'

NORTH

LEGAL DESCRIPTION
(PER PEA GROUP)

OVERALL PARCEL
LAND SITUATED IN THE CITY OF BIRMINGHAM, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS FOLLOWS:

A PARCEL OF LAND BEING ALL OF LOT 11 AND PART OF LOTS 14, 15, 16 AND 17 OF "O. E. SHATTUCK SUBDIVISION", VILLAGE, NOW CITY OF BIRMINGHAM, OAKLAND COUNTY, MICHIGAN, AS RECORDED IN LIBER 8 OF PLATS, PAGE 14, OAKLAND COUNTY RECORDS, AND LOTS 5 THROUGH 11, INCLUSIVE, "RURAL SUBDIVISION OF LOTS 5, 6, 7, 8, 9 AND 10 OF O.E. SHATTUCK SUBDIVISION" IN THE VILLAGE OF BIRMINGHAM, AS RECORDED IN LIBER 16 OF PLATS, PAGE 14, OAKLAND COUNTY RECORDS.

SAID LAND BEING MORE PARTICULARLY DESCRIBED AS: COMMENCING AT THE SOUTHEAST CORNER OF SAID LOT 17 OF "O. E. SHATTUCK SUBDIVISION"; THENCE ALONG THE SOUTH LINE OF SAID LOT 17, S86°48'15"W, 7.19 FEET TO THE WEST LINE OF ADAMS ROAD AND THE POINT OF BEGINNING; THENCE CONTINUING ALONG SAID SOUTH LINE OF SAID LOT 17, S86°48'15"W, 166.31 FEET, SAID LINE ALSO BEING THE NORTH LINE OF AN 18' WIDE PUBLIC ALLEY TO THE SOUTHEAST CORNER OF LOT 11; THENCE ALONG THE SOUTH LINE OF LOT 11 OF "RURAL SUBDIVISION OF LOTS 5, 6, 7, 8, 9 AND 10 OF O.E. SHATTUCK SUBDIVISION", SAID LINE ALSO BEING THE NORTH LINE OF AN 16' WIDE PUBLIC ALLEY, S86°48'15"W, 132.00 FEET TO THE EAST LINE OF WORTH STREET (50 FOOT WIDE); THENCE ALONG SAID EAST LINE, N11°16'30"W, 307.10 FEET TO THE SOUTH LINE OF HAYNES AVENUE (60 FOOT WIDE), SAID POINT ALSO BEING THE NORTHWEST CORNER OF LOT 5 OF "RURAL SUBDIVISION"; THENCE ALONG SAID SOUTH LINE, N77°46'42"E, 198.00 FEET TO THE EAST LINE OF LOT 11 OF AFOREMENTIONED "O. E. SHATTUCK SUBDIVISION"; THENCE ALONG SAID EAST LINE, S03°15'06"E, 103.14 FEET TO THE NORTH LINE OF LOT 14 OF SAID SUBDIVISION; THENCE ALONG SAID LINE, N86°48'15"E, 144.74 FEET TO THE WEST LINE OF ADAMS ROAD; THENCE ALONG SAID WEST LINE, S03°27'52"E, 231.97 FEET TO THE AFOREMENTIONED SOUTH LINE OF SAID LOT 17 AND THE POINT OF BEGINNING, CONTAINING 2.06 ACRES OF LAND, MORE OR LESS.

LEGAL DESCRIPTION
(Per Chicago Title Insurance Company, Commitment No. 631127970NB, Dated 1-13-21, Revision No. 2)

Land situated in the City of Birmingham, Oakland County, Michigan, described as follows: Lots 11 and 14, O. E. Shattuck Subdivision, Village, now City of Birmingham, Oakland County, Michigan, according to the recorded plat thereof, as recorded in Liber 8 of Plats, Page 14, Oakland County Records.

Lots 5 through 11, inclusive, Rural Subdivision of Lots 5, 6, 7, 8, 9 and 10 of O.E. Shattuck Subdivision in the Village of Birmingham, according to the recorded plat thereof as recorded in Liber 16 of Plats, Page 14, Oakland County Records.

1000 Haynes Ave., Birmingham, MI
Parcel No. 08-19-36-283-024

LEGAL DESCRIPTION
(Per Liberty Title Agency, File No. LIB153701, Dated 4-16-21, Revision No. 1)

The land referred to in this Commitment is located in the City of Birmingham, County of Oakland, State of Michigan, and described as follows: Lots 15, 16 and 17, O.E. Shattuck Subdivision, according to the plat thereof, as recorded in Liber 8 of Plats, Page 14, Oakland County Records.

770 S Adams, Birmingham, MI
Parcel No. 08-19-36-283-016

MANHOLE SCHEDULE		
SEWER CATCH BASIN (#10433) RM=753.14' INV. 12" RCP, SE=747.99' T/WATER=751.80' BOTTOM=750.40' RM=752.36' INV. 12" RCP, NE=747.26' INV. 12" RCP, W=744.06' INV. 42" RCP, NW=742.80' INV. 42" RCP, S=742.56'	SEWER CATCH BASIN (#15124) RM=753.07' T/WATER=751.80' BOTTOM=750.40' SEWER CATCH BASIN (#15125) RM=753.07' T/WATER=751.80' BOTTOM=750.40' SEWER MANHOLE (#15222) RM=754.36' INV. 12" RCP, E=750.66' SEWER CATCH BASIN (#15230) RM=754.27' INV. 12" RCP, NW=750.11' INV. 12" RCP, W=750.47' SEWER MANHOLE (#15231) RM=754.37' INV. 42" RCP, NE=747.56' INV. 42" RCP, NW=745.24' INV. 42" RCP, S=742.56'	SEWER MANHOLE (#15301) RM=753.07' INV. 12" RCP, SE=747.11' INV. 12" RCP, NW=746.64' INV. 12" RCP, S=746.21' SEWER MANHOLE (#55363) RM=753.15' 12" W 752.85 SEWER MANHOLE (#55375) RM=756.66' 12" SE 751.41 12" NE 751.71 12" N 748.76 SEWER CATCH BASIN (#55386) RM=756.56' 12" W 754.01 SEWER MANHOLE (#55439) RM=756.71' 24" E 747.84 24" W 750.71 SEWER MANHOLE (#55440) RM=756.81' INV. 12" RCP, SE=748.76' INV. 42" RCP, NW=742.09' INV. 42" RCP, S=742.02' SEWER CATCH BASIN (#15141) RM=753.07' T/WATER=751.80' BOTTOM=750.40' SEWER MANHOLE (#15297) RM=751.69' INV. 12" RCP, SE=747.74' INV. 12" RCP, NW=747.49' SEWER MANHOLE (#15300) RM=753.07' INV. 12" RCP, NW=746.55' INV. 42" RCP, NW=741.20' 42" RCP, S=741.20'

TOPOGRAPHIC AND BOUNDARY SURVEY DISCLAIMER:

TOPOGRAPHIC AND BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, EXISTING ELEVATIONS, EXISTING PHYSICAL FEATURES AND STRUCTURES WAS PROVIDED BY KEM-TEC & ASSOCIATES

KEM-TEC & ASSOCIATES
22556 GRATIOT AVE.
EASTPOINT, MI 48021

PEA, INC. WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN ERRORS/OMISSIONS RESULTING FROM SURVEY INACCURACIES.

architecture

NEUMANN SMITH

SOUTHFIELD • DETROIT

400 Galleria Officentre
Suite 555
Southfield, Michigan 48034
phone 248.352.8310
fax 248.352.1821
www.neumannsmith.com

CHRISTOPHER J LONGE AIA
ARCHITECTURE
INTERIORS
124 Peabody, Birmingham, Michigan 48009 248.258.6940

FHS-BHM
Adams/Haynes Mixed
Use Development

PEA GROUP
t: 844.813.2949
www.peagroup.com
PEA JOB #2021-0401

Issued for

04.25.2022 Design Development

Drawn ☒ Preliminary ☐ Construction ☐ Record

Checked **RMM**

Approved **MW**

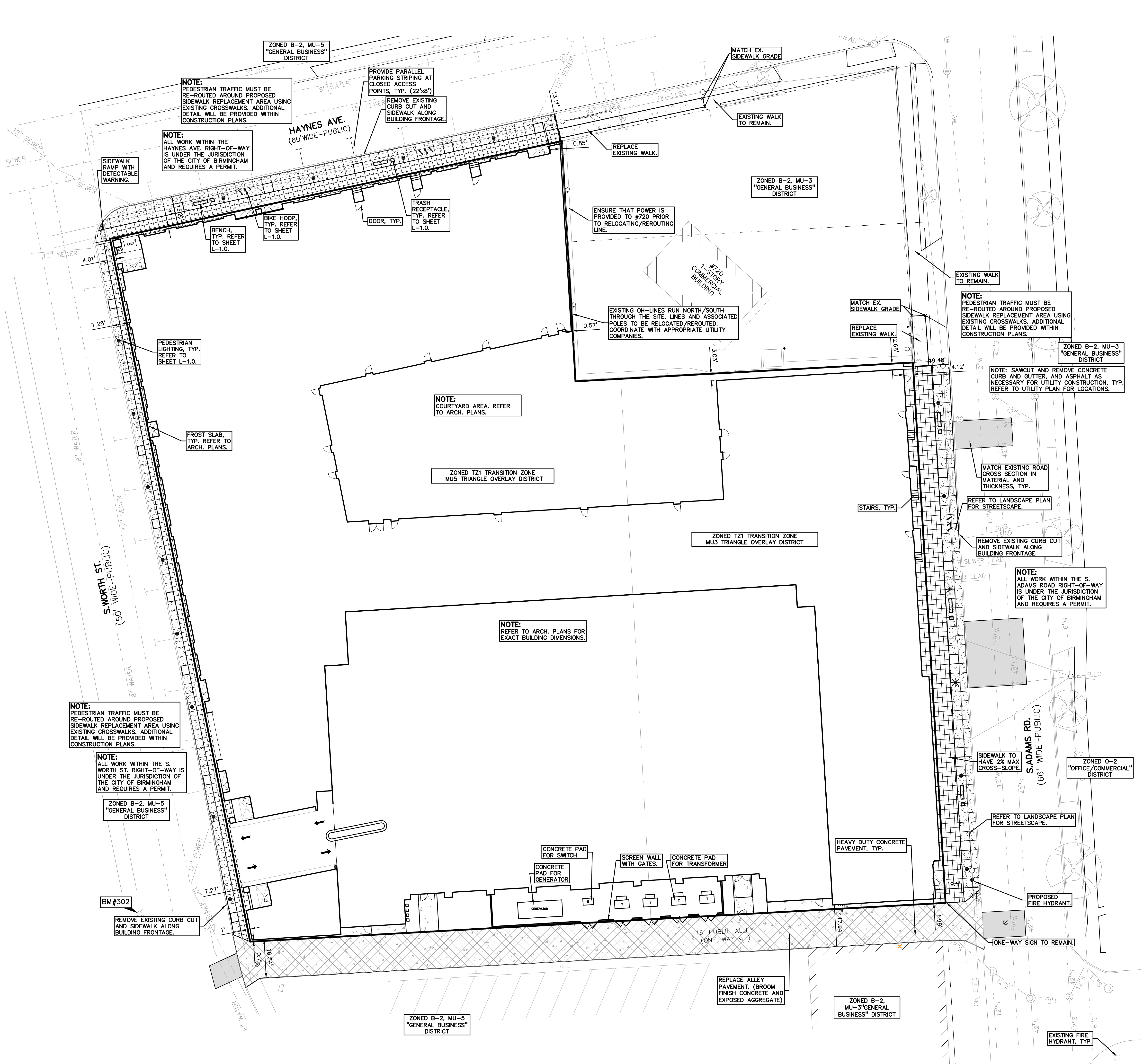
Bidpak Number

Do not scale
Use figured
dimensions only

Job Number
2021089

Title
TOPOGRAPHIC SURVEY

Sheet
C-1.0



LEGEND

EXISTING

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SEC. CORNER FOUND
- R. RECORDED
- M. MEASURED
- C. CALCULATED

PROPOSED

- OH-ELEC
- UG-CATV
- UG-PHONE
- UG-ELEC
- WATERMAIN
- SANITARY SEWER
- STORM SEWER
- COMBINED SEWER
- SQUARE, ROUND & REINFORCED CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONC.
- ASPH.

SCALE: 1" = 20'

NORTH

DEMOLITION NOTES:
REMOVE THE FOLLOWING ON-SITE ITEMS:
PARKING LOT, STORM SEWER, LANDSCAPING,
LIGHTPOLES, SIDEWALK AND BUILDING.

SITE DATA TABLE:

1) TOTAL SITE AREA	= 2.06 ACRES
2) ZONED: TZ1 TRANSITION ZONE	MU3 (AT ADAMS) AND MU5 (AT REAR) TRIANGLE OVERLAY DISTRICT
3) PROPOSED USE:	MULTI-FAMILY RESIDENTIAL
4) BUILDING SETBACKS:	REQUIRED: FRONT: 0' REAR: N/A SIDE: 0' INTERIOR
	PROVIDED: VARIES VARIES VARIES
5) MAX BUILDING HEIGHT:	66', 5 STORIES OR 78', 6 STORIES
	PROPOSED: 5 STORIES / 6 STORIES

TOPOGRAPHIC AND BOUNDARY SURVEY DISCLAIMER:
TOPOGRAPHIC AND BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, EXISTING ELEVATIONS, EXISTING PHYSICAL FEATURES AND STRUCTURES WAS PROVIDED BY KEM-TEC & ASSOCIATES
KEM-TEC & ASSOCIATES
22556 GRATIOT AVE
EASTPOINTE, MI 48021
PEA, INC. WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN ERRORS/OMISSIONS RESULTING FROM SURVEY INACCURACIES.

GENERAL NOTES:
THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.
1. ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF BIRMINGHAM CURRENT STANDARDS AND REGULATIONS.
3. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
4. ANY WORK WITHIN THE STREET OR HIGHWAY RIGHT-OF-WAYS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WELLS ETC.) WITHIN GRADED AND /OR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.

architecture

NEUMANN SMITH

SOUTHFIELD • DETROIT

400 Galleria Officentre
Suite 555
Southfield, Michigan 48034
phone 248.352.8310
fax 248.352.1821
www.neumannsmith.com

CHRISTOPHER J LONGE AIA
ARCHITECTURE
INTERIORS
124 Peabody, Birmingham, Michigan 48009 248.258.6940

FHS-BHM
Adams/Haynes Mixed
Use Development

STATE OF MICHIGAN
JOHN BRUCE THOMPSON
ENGINEER
NO. 43292

PEA GROUP
t: 844.813.2949
www.peagroup.com
PEA JOB #2021-0401

Issued for

04.25.2022 Design Development

Drawn ☒ Preliminary ☐ Construction ☐ Record

Checked **RMM**

Approved **MW**

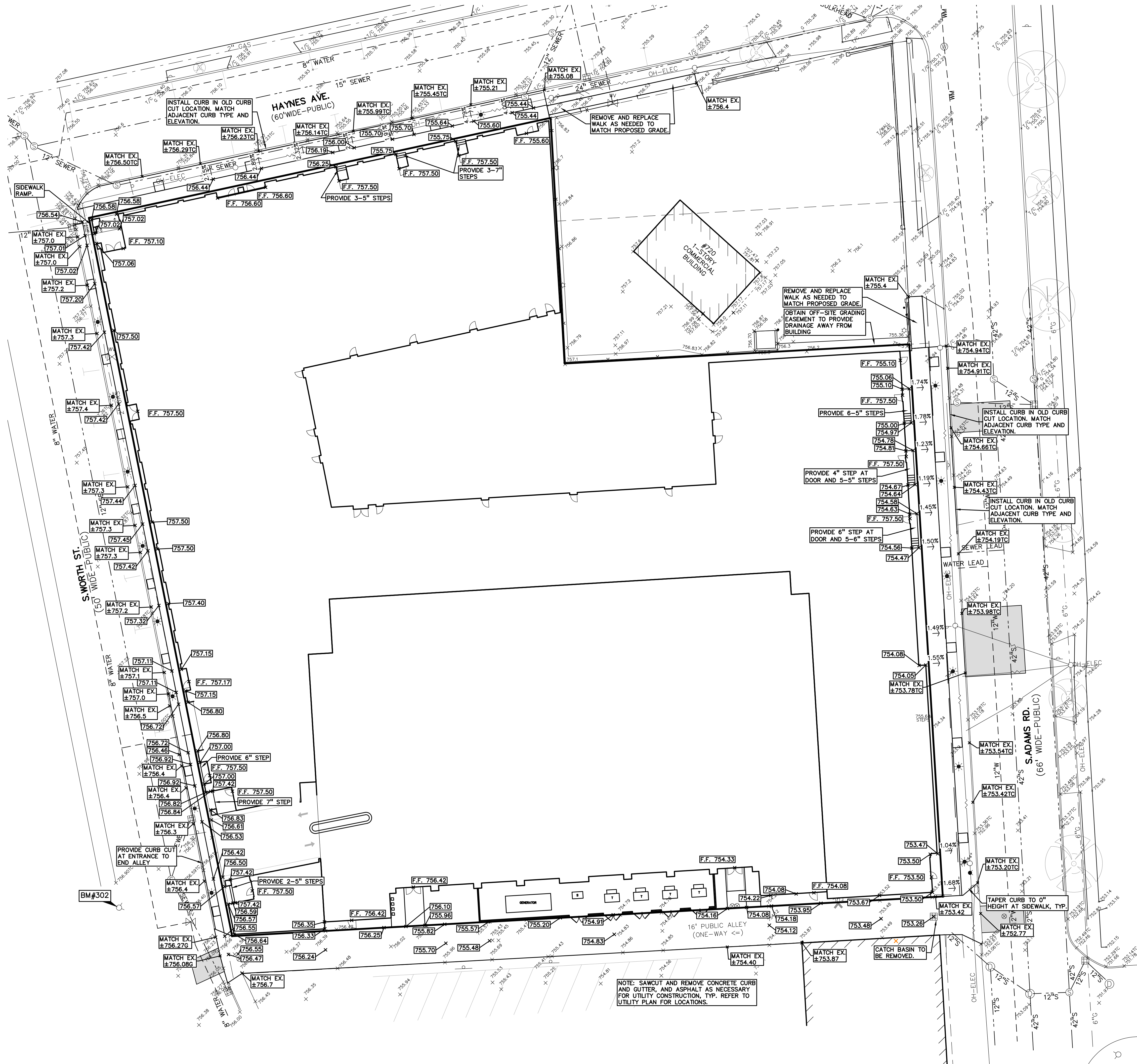
Bidpak Number

Do not scale
Use figured dimensions only

Job Number
2021089

Title
PRELIMINARY SITE PLAN

Sheet
C-2.0



LEGEND

EXISTING

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SEC. CORNER FOUND
- R. RECORDED
- M. MEASURED
- C. CALCULATED

PROPOSED

- OH-ELEC-W-O-ELEC. PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
- UG-CATV-UG. CABLE, PEDESTAL & MANHOLE
- UG-PHONE-UG. CABLE, PEDESTAL & MANHOLE
- UG-ELEC-UG. CABLE, PEDESTAL & MANHOLE
- WATERMAIN, HYD. GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & RETRAIVE CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/DRYANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONC. CONCRETE
- ASPH. ASPHALT

SCALE: 1" = 20'

NORTH

TOPOGRAPHIC AND BOUNDARY SURVEY DISCLAIMER:

TOPOGRAPHIC AND BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, EXISTING ELEVATIONS, EXISTING PHYSICAL FEATURES AND STRUCTURES WAS PROVIDED BY KEM-TEC & ASSOCIATES

KEM-TEC & ASSOCIATES
22556 GRATIOT AVE
EASTPOINT, MI 48021

PEA, INC. WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN ERRORS/OMISSIONS RESULTING FROM SURVEY INACCURACIES.

SYMBOLS: GRADING

PROPOSED SPOT ELEVATION:
TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES

ABBREVIATIONS:
TO = TOP OF CURB
G = GUTTER GRADE
T/P = TOP OF PAVEMENT
T/S = TOP OF SIDEWALK
F.G. = FINISH GRADE
RIM = RIM ELEVATION

architecture

NEUMANN SMITH

SOUTHFIELD • DETROIT

400 Galleria Officentre
Suite 555
Southfield, Michigan 48034
phone 248.352.8310
fax 248.352.1821
www.neumannsmith.com

CHRISTOPHER J LONGE AIA
ARCHITECTURE
INTERIORS

124 Peabody, Birmingham, Michigan 48009 248.258.6940

FHS-BHM
Adams/Haynes Mixed
Use Development

PEA GROUP

t: 844.813.2949
www.peagroup.com
PEA JOB #2021-0401

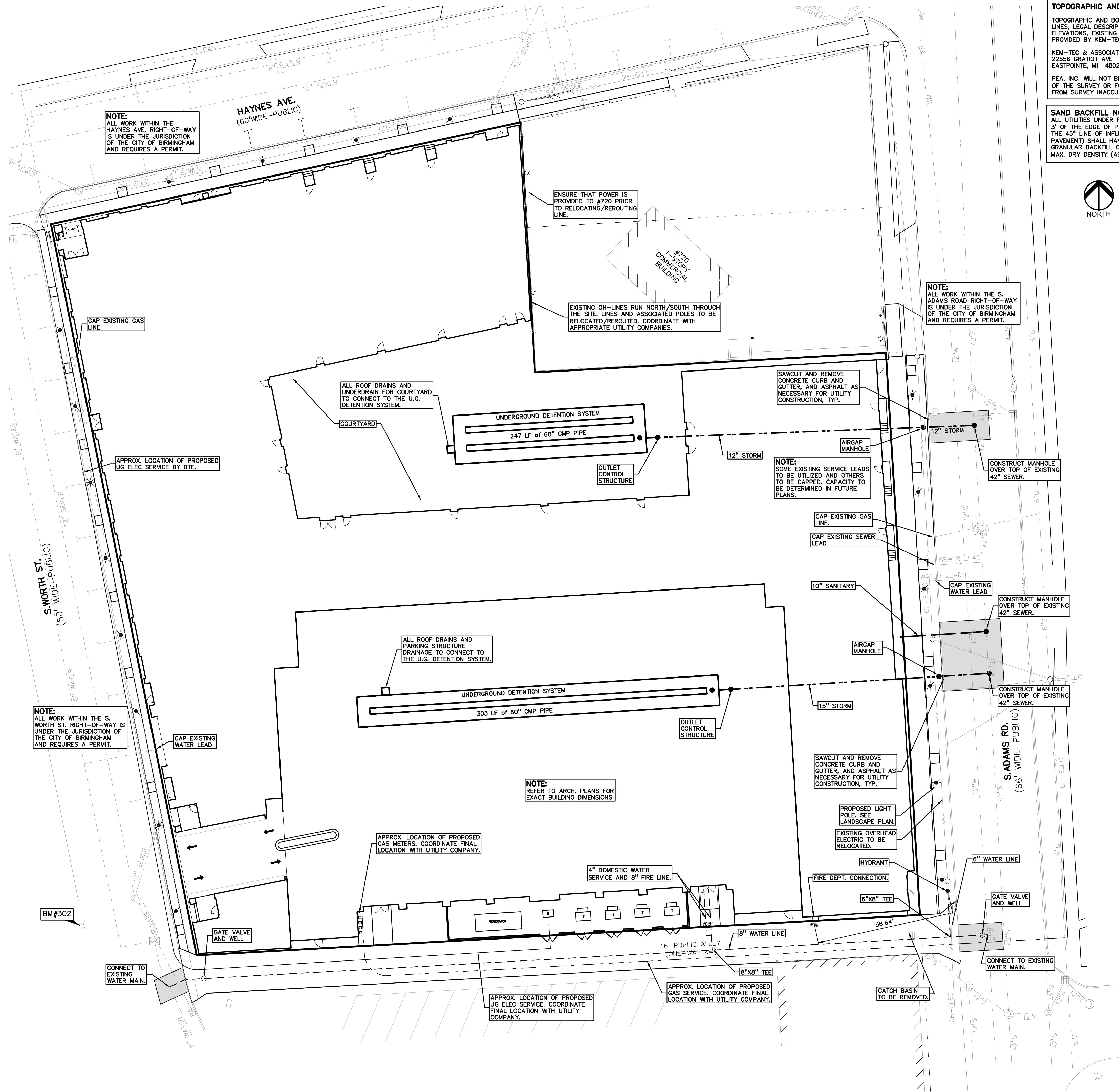
Issued for

04.25.2022 Design Development

Drawn ☒ Preliminary
☐ Construction
Checked ☐ Record

RMM
Approved ☐ Do not scale
MW Use figured dimensions only
Bidpak Number

Job Number
2021089
Title
PRELIMINARY GRADING PLAN



TOPOGRAPHIC AND BOUNDARY SURVEY DISCLAIMER:
TOPOGRAPHIC AND BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, EXISTING ELEVATIONS, EXISTING PHYSICAL FEATURES AND STRUCTURES WAS PROVIDED BY KEM-TEC & ASSOCIATES
KEM-TEC & ASSOCIATES
22556 GRATIOT AVE
EASTPOINTE, MI 48021
PEA, INC. WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN ERRORS/OMISSIONS RESULTING FROM SURVEY INACCURACIES.

SAND BACKFILL NOTE:
ALL UTILITIES UNDER PAVEMENT OR WITHIN 3' OF THE EDGE OF PAVEMENT (OR WITHIN THE 45° LINE OF INFLUENCE OF PAVEMENT) SHALL HAVE M.D.O.T. CLASS II GRANULAR BACKFILL COMPACTED TO 95% MAX. DRY DENSITY (ASTM D-1557).



LEGEND	
	IRON FOUND
	IRON SET
	NAIL FOUND
	NAIL & CAP SET
	BRASS PLUG SET
	MONUMENT FOUND
	MONUMENT SET
	SEC. CORNER FOUND
	RECORDED
	MEASURED
	CALCULATED
EXISTING	
	OH-ELEC
	UG-CATV
	UG-PHONE
	UG-ELEC
	WATER MAIN
	SANITARY SEWER
	STORM SEWER
	COMBINED SEWER
	SQUARE, ROUND & RECT. CATCH BASIN
	POST INDICATOR VALVE
	WATER VALVE
	FIRE HYDRANT
	MAILBOX
	TRANSFORMER
	IRRIGATION CONTROL VALVE
	UNDERSIZED STRUCTURE
	SPOT ELEVATION
	CONTOUR LINE
	FENCE
	GUARD RAIL
	STREET LIGHT
	SIGN
	CONCRETE
	ASPHALT
PROPOSED	
	PROPOSED OH-ELEC
	PROPOSED UG-CATV
	PROPOSED UG-PHONE
	PROPOSED UG-ELEC
	PROPOSED WATER MAIN
	PROPOSED SANITARY SEWER
	PROPOSED STORM SEWER
	PROPOSED COMBINED SEWER
	PROPOSED SQUARE, ROUND & RECT. CATCH BASIN
	PROPOSED POST INDICATOR VALVE
	PROPOSED WATER VALVE
	PROPOSED FIRE HYDRANT
	PROPOSED MAILBOX
	PROPOSED TRANSFORMER
	PROPOSED IRRIGATION CONTROL VALVE
	PROPOSED UNDERSIZED STRUCTURE
	PROPOSED SPOT ELEVATION
	PROPOSED CONTOUR LINE
	PROPOSED FENCE
	PROPOSED GUARD RAIL
	PROPOSED STREET LIGHT
	PROPOSED SIGN
	PROPOSED CONCRETE
	PROPOSED ASPHALT

TEN YEAR STORM DETENTION DESIGN
(CITY OF BIRMINGHAM CHAP. 114, ART. III, DIV 4, SEC 114-271 TO 114-274)

Contributing Area (A)	2.06	AC.
Allowable Discharge (Qa)	2.06	1.0 cfs/acre or 0.2 cfs, whichever is greater
Coefficient of Runoff (C)	0.94	

Calculation of Required Discharge/Acre

$Qo = ((Qa)/(A)(C))$	1.06
$T = -25 + ((6562.5/Qo))0.5$	53.54

Storage Volume Required:

$Vs = (10500(T)/(T+25)) - 40Qo(T)$	4879.46
$Vt = (Vs)(A)(C)$	9448.58 c.f.

PIPE STORAGE PROVIDED:

L=	550 ft.
SIZE=	60 in.
C.F./FT.=	19.625 c.f./ft.
VOLUME=	19.625 c.f./ft.

COURTYARD

DETENTION PROVIDED:

PIPE STORAGE:	
L=	247 ft.
SIZE=	60 in.
C.F./FT.=	19.63 c.f./ft.
VOLUME=	4.847.38 c.f.

OC Restrictor Sizing:

Storage Elevation =	751.47
Outlet Elevation =	745.47
Hmax=	6.00 ft.
10 Year Outlet Restriction:	
Qallow =	2.06 cfs
A = (Qallow)/((0.62*((32.2*Hmax)^0.5))	0.1690 sf
10 Year Hole Dia. Provided =	5.5 in.
10 Year Hole Area Provided =	0.1649 sf
Qactual (total) =	2.010 cfs c/= 2.06

PARKING DECK

DETENTION PROVIDED:

PIPE STORAGE:	
L=	303 ft.
SIZE=	60 in.
C.F./FT.=	19.63 c.f./ft.
VOLUME=	5.946.38 c.f.

OC Restrictor Sizing:

Storage Elevation =	751.15
Outlet Elevation =	745.15
Hmax=	6.00 ft.
10 Year Outlet Restriction:	
Qallow =	2.06 cfs
A = (Qallow)/((0.62*((32.2*Hmax)^0.5))	0.1690 sf
10 Year Hole Dia. Provided =	5.5 in.
10 Year Hole Area Provided =	0.1649 sf
Qactual (total) =	2.010 cfs c/= 2.06

GENERAL UTILITY NOTES:

- ALL UTILITY LINES, STRUCTURES AND TRENCHES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF THE CITY OF BIRMINGHAM.
- NO PHYSICAL CONNECTION TO THE EXISTING WATER MAIN CAN BE MADE UNTIL ALL NEW WATER MAIN PASSES PRESSURE AND BACTERIOLOGICAL TESTS TO THE SATISFACTION OF THE CITY.
- ALL WATER MAIN AND FITTINGS (4" DIAMETER AND LARGER) SHALL BE DUCTILE IRON, CLASS 54.
- ALL WATER MAIN SHALL BE PROVIDED WITH 5.5' OF COVER UNLESS OTHERWISE NOTED.
- ALL FIRE HYDRANTS SHALL BE PER CITY OF BIRMINGHAM STANDARDS.
- ALL NECESSARY FITTINGS, THRUST BLOCKS, RESTRAINING GLANDS, BLOW OFFS, ETC. FOR WATER MAIN ARE CONSIDERED INCIDENTAL TO THIS PROJECT. THE CONTRACTOR SHALL INSTALL THESE ITEMS AS NECESSARY AND AS REQUIRED BY THE CITY OF BIRMINGHAM.
- THE WATER MAIN CONTRACTOR SHALL NOTIFY THE INSPECTION SECTION OF THE DETROIT WATER AND SEWER DEPARTMENT AT (313) 833-4682 AT LEAST THREE WORKING DAYS IN ADVANCE OF STARTING CONSTRUCTION.
- ALL SANITARY SEWER LEADS SHALL BE POLYVINYL CHLORIDE (PVC) SDR 23.5 PIPE AND FITTINGS. ALL JOINTS TO BE ELASTOMERIC GASKET JOINTS PER ASTM D3034 UNLESS OTHERWISE NOTED.
- SANITARY LEADS SHALL BE PROVIDED WITH CLEANOUTS EVERY 100 FEET AND AT EVERY BEND AS SHOWN. ALL CLEANOUTS TO BE PROVIDED WITH E.J.I.W. #1565 BOX OR EQUAL.
- ALL STORM SEWER 12" DIAMETER OR LARGER SHALL BE REINFORCED CONCRETE PIPE (RCP C-76) CLASS IV WITH PREMIUM JOINTS, UNLESS OTHERWISE NOTED.
- ALL STORM SEWER LEADS SHALL BE PVC SCHEDULE 40 WITH GLUED JOINTS UNLESS OTHERWISE NOTED.
- PIPE LENGTHS ARE GIVEN FROM CENTER OF STRUCTURE AND TO END OF FLARED END SECTION UNLESS NOTED OTHERWISE.
- THE CITY OF BIRMINGHAM STANDARD DETAIL SHEETS ARE INCORPORATED INTO AND MADE A PART OF THESE PLANS. CONTRACTOR TO REFER TO THE CITY OF BIRMINGHAM STANDARD DETAIL SHEETS FOR ALL STRUCTURAL PIPE MATERIALS, BENDING TESTING, ETC. NOTES AND DETAILS.

architecture
NEUMANN SMITH
SOUTHFIELD • DETROIT
400 Galleria Officentre
Suite 555
Southfield, Michigan 48034
phone 248.352.8310
fax 248.352.1821
www.neumannsmith.com

CHRISTOPHER J LONGE AIA
ARCHITECTS
INTERIORS
124 Peabody, Birmingham, Michigan 48009 248.258.6940

FHS-BHM
Adams/Haynes Mixed
Use Development



PEA GROUP
t: 844.813.2949
www.peagroup.com
PEA JOB #2021-0401

Issued for

04.25.2022 Design Development

Drawn ☒ Preliminary
☐ Construction
Checked ☐ Record
RMM
Approved ☐ Do not scale
MW Use figured dimensions only
Bidpak Number

Job Number
2021089

Title
PRELIMINARY UTILITY PLAN

Sheet

C-4.0

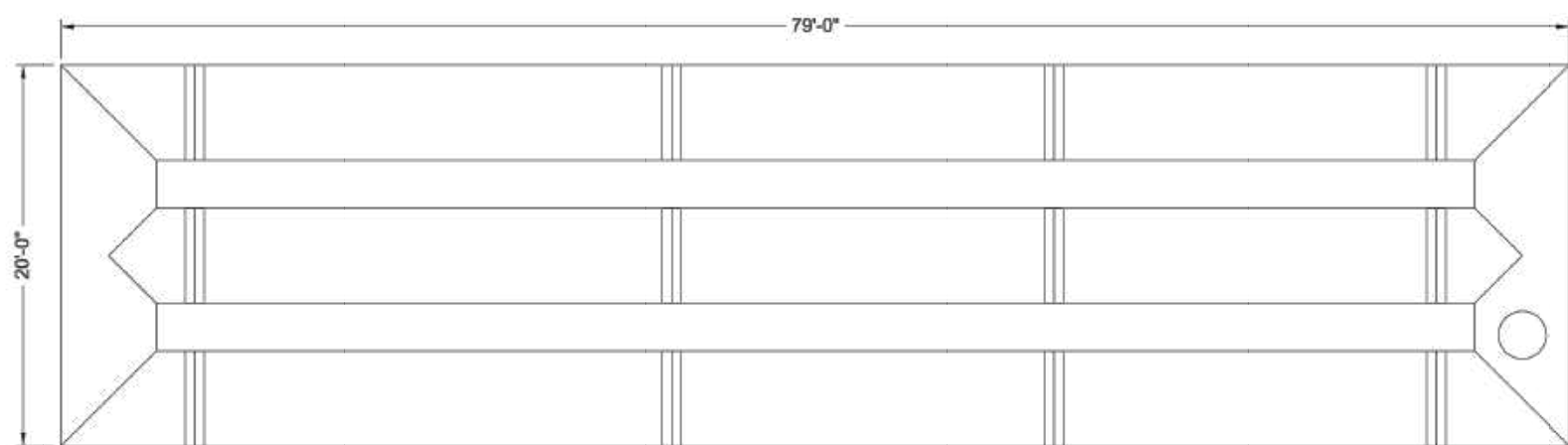
PROJECT SUMMARY

CALCULATION DETAILS
• LOADING = HS20HS25
• APPROX. LINEAR FOOTAGE = 247 LF

STORAGE SUMMARY
• STORAGE VOLUME REQUIRED = N/A
• PIPE STORAGE VOLUME = 4,850 CF
• BACKFILL STORAGE VOLUME = 0 CF
• TOTAL STORAGE PROVIDED = 5,451 CF

PIPE DETAILS
• DIAMETER = 60"
• CORRUGATION = 5x1
• GAGE = 16
• COATING = ALT2
• WALL TYPE = SOLID
• BARREL SPACING = 30"

BACKFILL DETAILS
• WIDTH AT ENDS = 12"
• ABOVE PIPE = 0"
• WIDTH AT SIDES = 12"
• BELOW PIPE = 0"



NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A988.
- ALL RISERS AND STUBS ARE 24" x 1/2" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 10'

CONTECH
ENGINEERED SOLUTIONS LLC
www.ContechES.com

9025 Centre Pointe Dr., Suite 400, West Chester, OH 45590
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH
CMP DETENTION SYSTEMS
CONTECH
DYODS
DRAWING

DYO15995 FHS-Birmingham
Landscape area
Birmingham, MI
DETENTION SYSTEM

PROJECT NO:	REQ. NO:	DATE:
15995	15995	4/19/2022
DESIGNED:	DYO	DYO
CHECKED:	DYO	APPROVED:
		DYO
SHEET NO:		1

PROJECT SUMMARY

CALCULATION DETAILS
• LOADING = HS20HS25
• APPROX. LINEAR FOOTAGE = 303 LF

STORAGE SUMMARY
• STORAGE VOLUME REQUIRED = 6,000 CF
• PIPE STORAGE VOLUME = 5,949 CF
• BACKFILL STORAGE VOLUME = 0 CF
• TOTAL STORAGE PROVIDED = 5,949 CF

PIPE DETAILS
• DIAMETER = 60"
• CORRUGATION = 5x1
• GAGE = 16
• COATING = ALT2
• WALL TYPE = SOLID
• BARREL SPACING = 30"

BACKFILL DETAILS
• WIDTH AT ENDS = 12"
• ABOVE PIPE = 0"
• WIDTH AT SIDES = 12"
• BELOW PIPE = 0"



NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A988.
- ALL RISERS AND STUBS ARE 24" x 1/2" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 20'

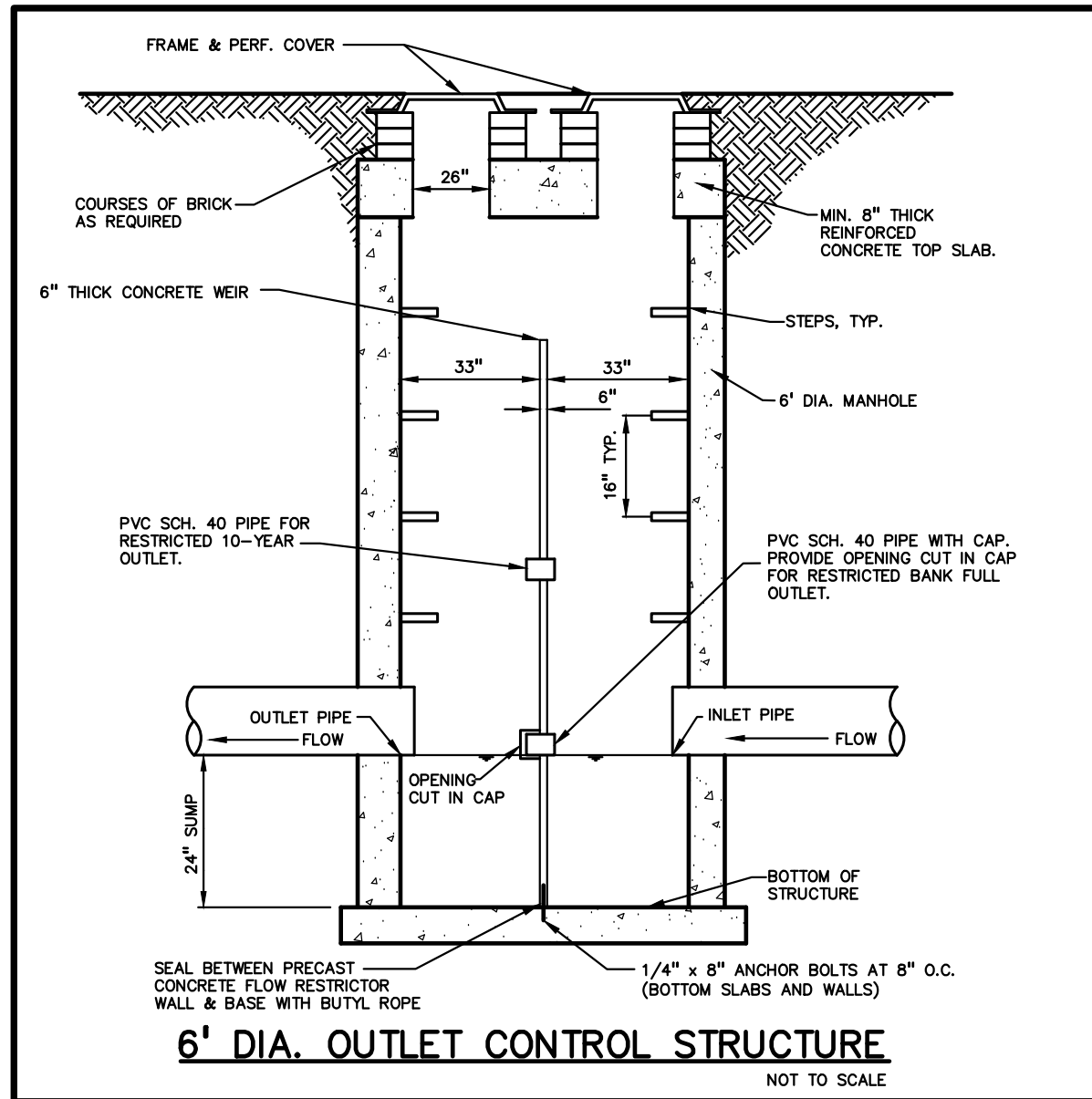
CONTECH
ENGINEERED SOLUTIONS LLC
www.ContechES.com

9025 Centre Pointe Dr., Suite 400, West Chester, OH 45590
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH
CMP DETENTION SYSTEMS
CONTECH
DYODS
DRAWING

DYO16005 FHS-Birmingham
Parking Deck
Birmingham, MI
DETENTION SYSTEM

PROJECT NO:	REQ. NO:	DATE:
16005	16005	4/19/2022
DESIGNED:	DYO	DYO
CHECKED:	DYO	APPROVED:
		DYO
SHEET NO:		1



architecture
NEUMANN SMITH

SOUTHFIELD • DETROIT

400 Galleria Officentre
Suite 555
Southfield, Michigan 48034
phone 248.352.8310
fax 248.352.1821
www.neumannsmith.com

CHRISTOPHER J LONGE AIA
ARCHITECTURE
INTERIORS
124 Peabody, Birmingham, Michigan 48009 248.258.6940

FHS-BHM
Adams/Haynes Mixed
Use Development



PEA
GROUP
t: 844.813.2949
www.peagroup.com
PEA JOB #2021-0401

Issued for

04.25.2022 Design Development

Drawn ☒ Preliminary
☐ Construction
☐ Record
Checked **RMM**
Approved **MW** Do not scale
Bidpak Number Use figured dimensions only

Job Number

2021089

Title **DETAIL SHEET**

Sheet

C-5.0



HADCO LUMINAIRE C8191B
120-277 VAC
LED FIXTURE
4000K COLOR TEMP.
3000 LUMENS
QUANTITY: 18

NOTE:
THE DEVELOPER SHALL CONTACT DTE TO
COORDINATE AND CONTRACT THE INSTALLATION OF
THE LIGHTING FIXTURES TO THE CITY'S SYSTEM. THIS
WILL BE FUNDED BY THE DEVELOPER.

5 PEDESTRIAN LIGHTING

NOT TO SCALE



35 SIT BACKED BENCH, 72"
35 COLLECTION
SURFACE MOUNT
POWDER COAT: SILVER
LANDSCAPE FORMS
PHONE: 800.521.2546
QUANTITY: 5

4 BENCH

NOT TO SCALE



35 PITCH LITTER RECEPTACLE
35 COLLECTION
SIDE OPENING, SURFACE MOUNT
POWDER COAT: SILVER
BLACK POLYETHYLENE
LANDSCAPE FORMS
PHONE: 800.521.2546
QUANTITY: 5

3 TRASH RECEPTACLE

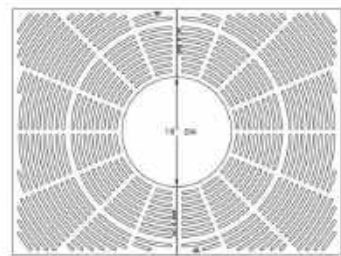
NOT TO SCALE



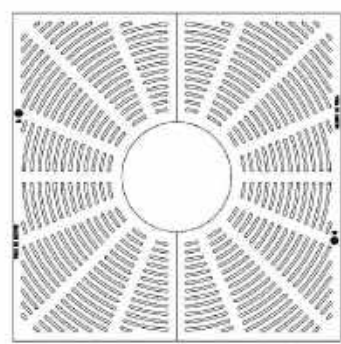
LOOP BIKE RACK
SURFACE MOUNT
POWDER COAT: SILVER
LANDSCAPE FORMS
PHONE: 800.521.2546
QUANTITY: 9

2 BIKE HOOP

NOT TO SCALE



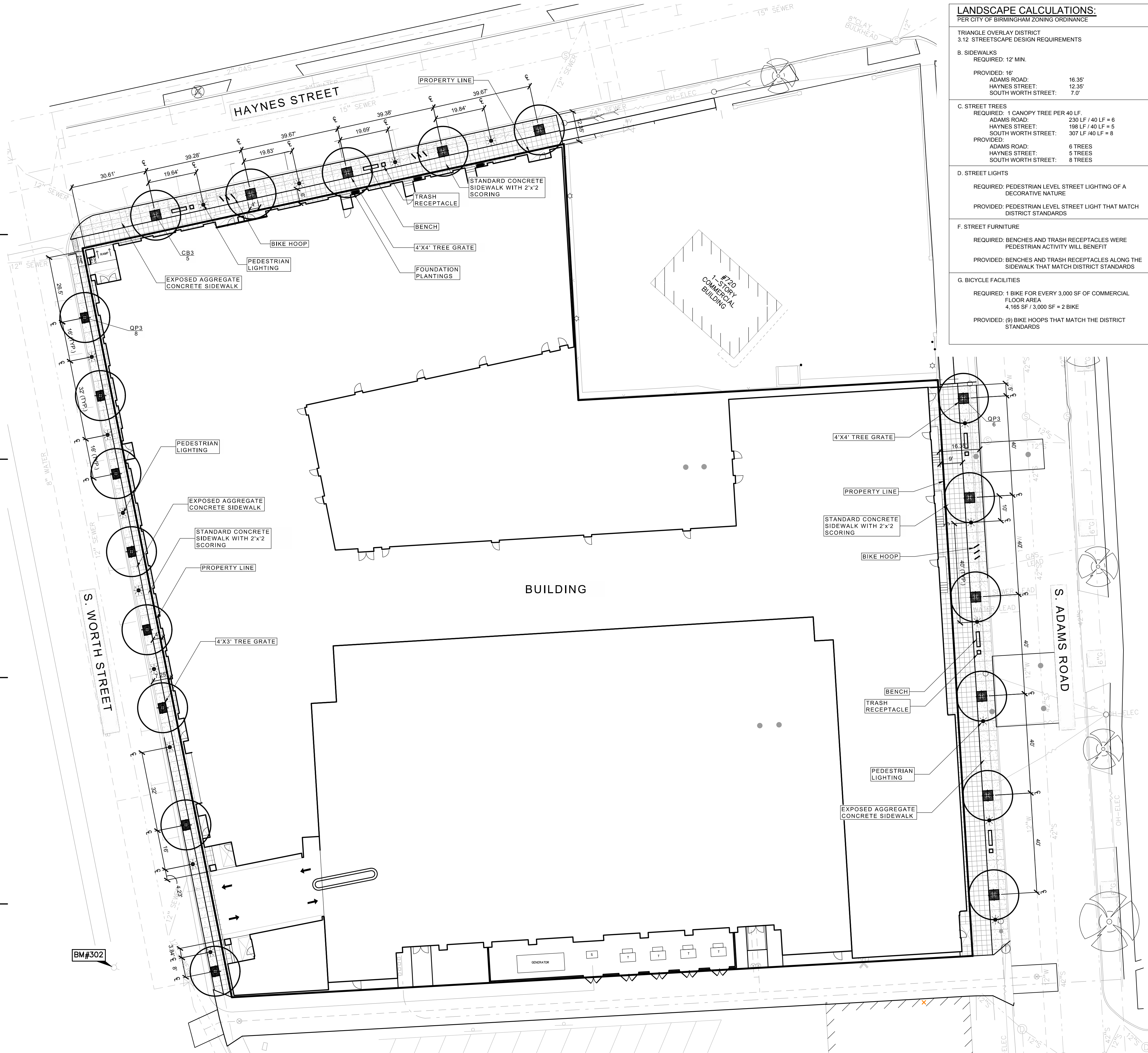
8650 48" X 36" TREE GRATE SET
PRODUCT NUMBER: 00869000
MATERIAL: GRAY IRON
MANUFACTURER: EJ
PHONE: 800.626.4653
QUANTITY: 8



V8954-1 PLAZA 48" SQUARE TREE GRATE
PRODUCT NUMBER: 48954100
MATERIAL: GRAY IRON
MANUFACTURER: EJ
PHONE: 800.626.4653
QUANTITY: 11

1 TREE GRATES

NOT TO SCALE



LANDSCAPE CALCULATIONS:

PER CITY OF BIRMINGHAM ZONING ORDINANCE

3.12 STREETScape DESIGN REQUIREMENTS

B. SIDEWALKS
REQUIRED: 12' MIN.

PROVIDED: 16'
ADAMS ROAD: 16.35'
HAYNES STREET: 12.35'
SOUTH WORTH STREET: 7.0'

C. STREET TREES
REQUIRED: 1 CANOPY TREE PER 40 LF

ADAMS ROAD: 230 LF / 40 LF = 6
HAYNES STREET: 188 LF / 40 LF = 5
SOUTH WORTH STREET: 307 LF / 40 LF = 8

PROVIDED: 6 TREES
ADAMS ROAD: 6 TREES
HAYNES STREET: 5 TREES
SOUTH WORTH STREET: 8 TREES

D. STREET LIGHTS

REQUIRED: PEDESTRIAN LEVEL STREET LIGHTING OF A
DECORATIVE NATURE

PROVIDED: PEDESTRIAN LEVEL STREET LIGHT THAT MATCH
DISTRICT STANDARDS

F. STREET FURNITURE

REQUIRED: BENCHES AND TRASH RECEPTACLES WERE
PEDESTRIAN ACTIVITY WILL BENEFIT

PROVIDED: BENCHES AND TRASH RECEPTACLES ALONG THE
SIDEWALK THAT MATCH DISTRICT STANDARDS

G. BICYCLE FACILITIES

REQUIRED: 1 BIKE FOR EVERY 3,000 SF OF COMMERCIAL
FLOOR AREA
4,165 SF / 3,000 SF = 2 BIKE

PROVIDED: (9) BIKE HOOPS THAT MATCH THE DISTRICT
STANDARDS

DECIDUOUS TREE PLANT LIST:

QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
5	CB3	Upright European Hornbeam	<i>Carpinus betulus 'Fastigiata'</i>	3" Cal.	B&B, Single Stem, Matched Specimens
14	QP3	Regal Prince Oak	<i>Quercus robur x bicolor 'Long' (columnar)</i>	3" Cal.	B&B, Matched Specimens
19	TOTAL DEC.				

architecture
NEUMANN SMITH

SOUTHFIELD • DETROIT

400 Galleria Officentre

Suite 555

Southfield, Michigan 48034

phone 248.352.8310

fax 248.352.1821

www.neumannsmith.com

CHRISTOPHER J LONGE AIA
ARCHITECTURE
INTERIORS

124 Peabody, Birmingham, Michigan 48009 248.258.6940

FHS-BHM
Adams/Haynes Mixed
Use Development



Noah Birmelin

PEA GROUP

t: 844.813.2949

www.peagroup.com

PEA JOB #2021-0401

Issued for

04.25.2022 Design Development

Drawn ☒ Preliminary

Checked ☐ Construction

RMM ☐ Record

Approved **Do not scale**

MW Use figured dimensions only

Biopak Number

Job Number

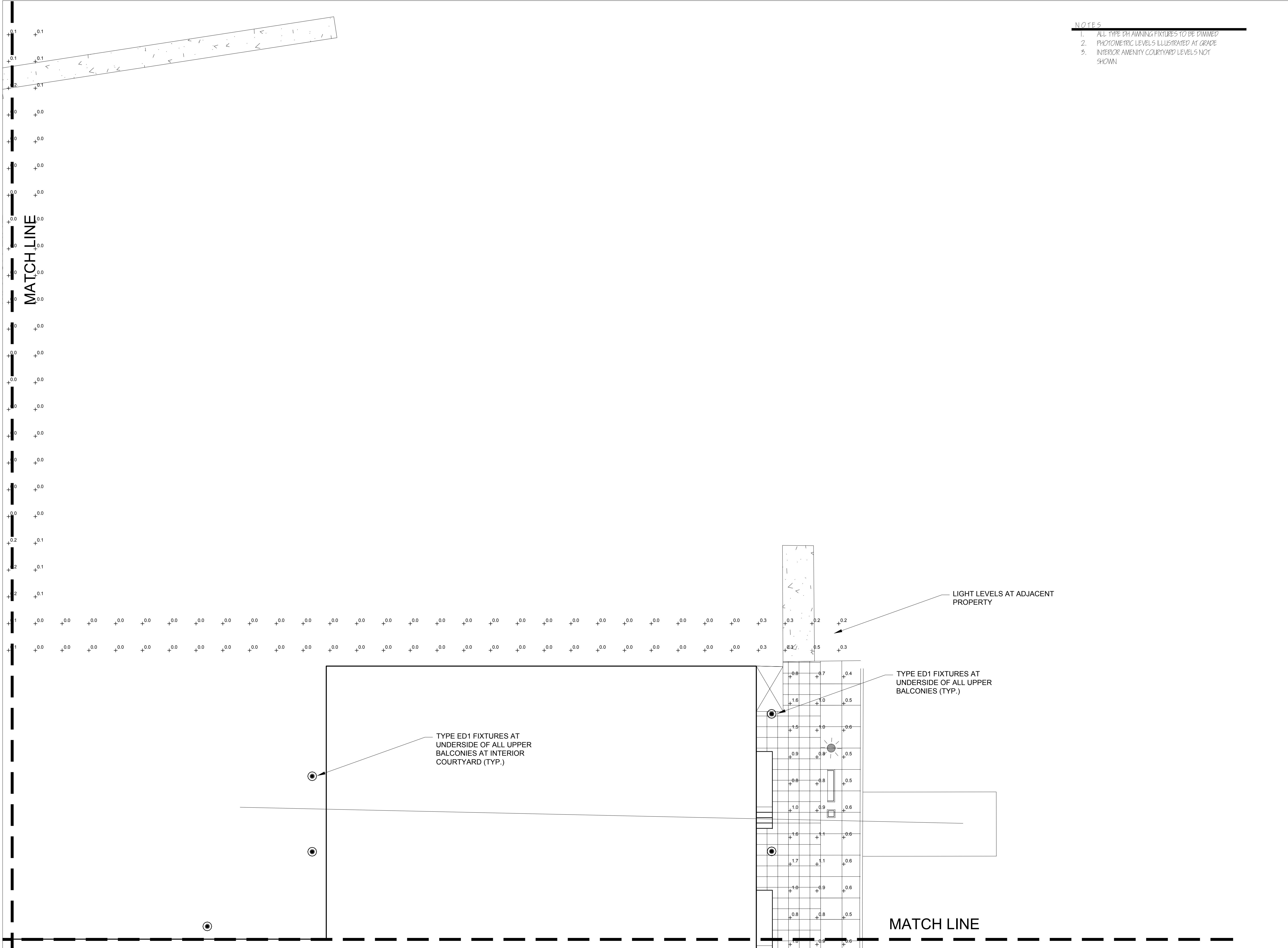
2021089

Title

**PRELIMINARY
LANDSCAPE
PLAN**

Sheet

L-1.0



- NOTES
1. ALL TYPE CHAWNING FIXTURES TO BE DIMMED
 2. PHOTOMETRIC LEVELS ILLUSTRATED AT GRADE
 3. INTERIOR AMENITY COURTYARD LEVELS NOT SHOWN

architecture
NEUMANN SMITH

SOUTHFIELD • DETROIT

400 Galleria Officecentre
Suite 555
Southfield, Michigan 48034
phone 248.352.8310
fax 248.352.1821
www.neumannsmith.com

CHRISTOPHER J LONGE AIA
ARCHITECTURE
INTERIORS
124 Peabody, Birmingham, Michigan 48009 248.258.6940

Oakewood Design

31805 Bond, Blvd.
Farmington Hills, MI
248-254-3420

FHS-BHM
Adams/Haynes Mixed
Use Development

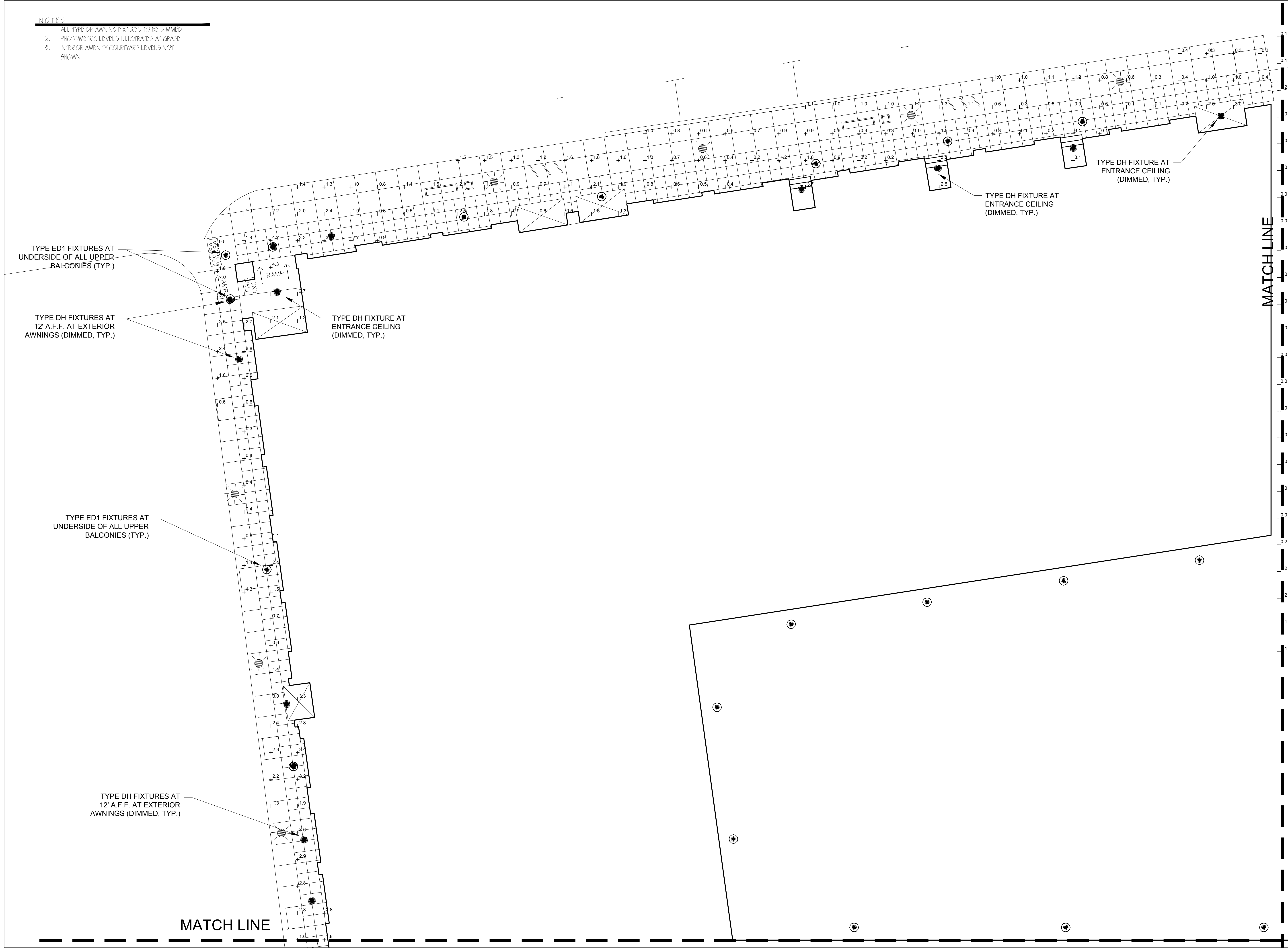
Issued for

Drawn 00 5-2-22 ☐ Preliminary
Checked ☐ Construction
Approved ☐ Record
Bidpak Number ☐ Do not scale
Use figured dimensions only

Job Number
2021089
Title

Sheet

- NOTES
1. ALL TYPE DH AWNING FIXTURES TO BE DIMMED
 2. PHOTOMETRIC LEVELS ILLUSTRATED AT GRADE
 3. INTERIOR AMENITY COURTYARD LEVELS NOT SHOWN



architecture
**NEUMANN
SMITH**

SOUTHFIELD • DETROIT
400 Galleria Officecentre
Suite 555
Southfield, Michigan 48034
phone 248.352.8310
fax 248.352.1821
www.neumannsmith.com

CHRISTOPHER J LONGE AIA
ARCHITECTURE
INTERIORS
124 Peabody, Birmingham, Michigan 48009 248.258.6940

Oakewood Design
31805 Bond, Blvd.
Farmington Hills, MI
248-254-3420

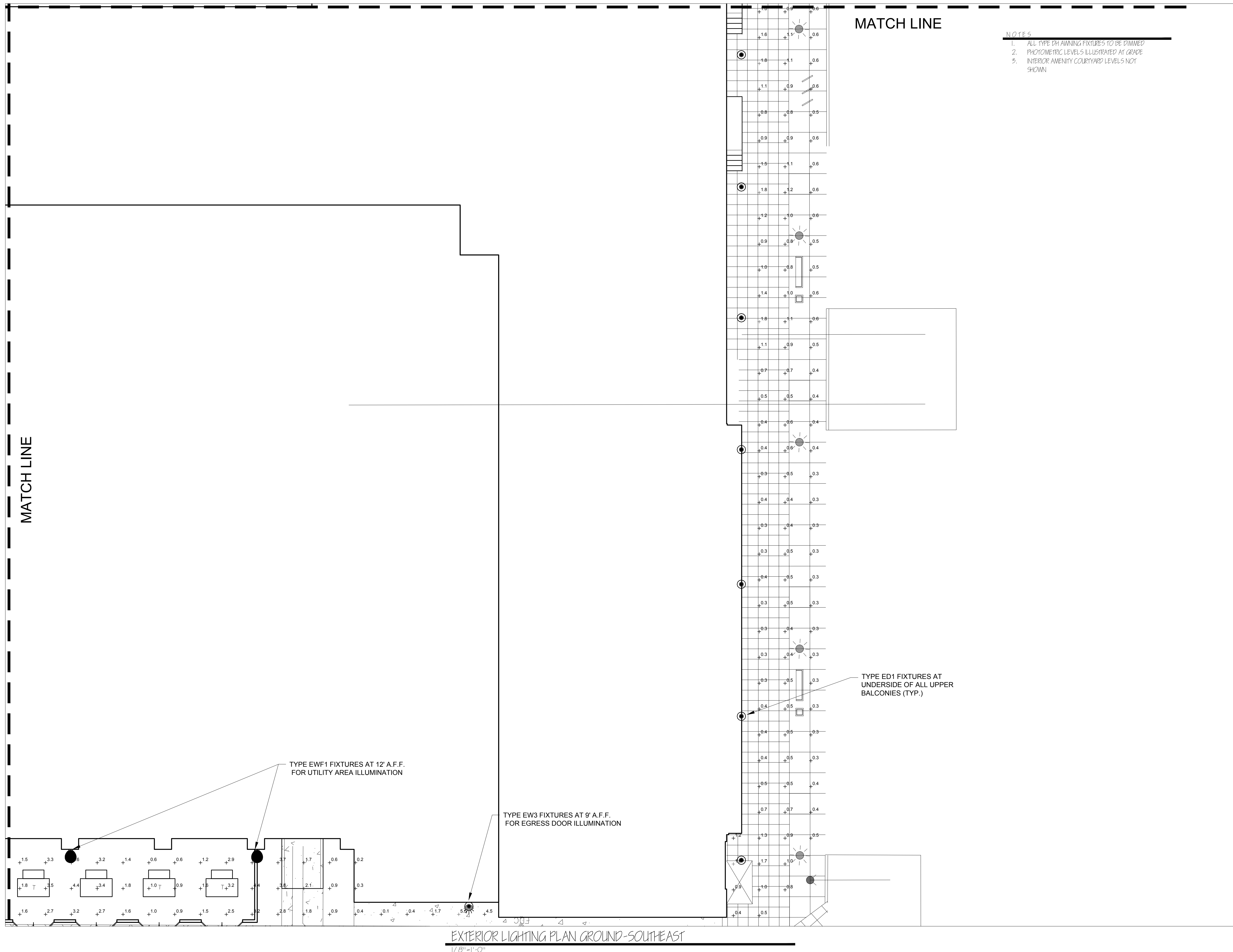
FHS-BHM
Adams/Haynes Mixed
Use Development

Issued for

Drawn 00 5-2-22 ☐ Preliminary
Checked ☐ Construction
☐ Record
Approved ☐ Do not scale
Use figured dimensions only
Bidpak Number

Job Number
2021089
Title

Sheet



www.neumannsmith.com



246-234-3420

Use Development

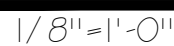
Issued for

☐ Record

ammoniochloride em.

Title

Sheet



MATCH LINE



Final Site Plan & Design Review Application Planning Division

Form will not be processed until it is completely filled out.

1. Applicant

Name: FHS BIRMINGHAM, LLC
Address: 3400 EAST LAFAYETTE
DETROIT, MICHIGAN 48207
Phone Number: 248.760.6291
Fax Number: _____
Email address: NICO.SCHULTZ@SOAVE.COM

2. Property Owner

Name: FHS BIRMINGHAM, LLC
Address: 3400 EAST LAFAYETTE
DETROIT, MICHIGAN 48207
Phone Number: 248.760.6291
Fax Number: _____
Email address: NICO.SCHULTZ@SOAVE.COM

3. Applicant's Attorney/Contact Person

Name: RICK RATTNER (WWRP)
Address: 380 NORTH OLD WOODWARD
BIRMINGHAM, MICHIGAN 48009
Phone Number: 248.642.0333
Fax Number: _____
Email address: RDR@WWRPLAW.COM

4. Project Designer/Developer

Name: CHRISTOPHER J. LONGE, AIA.
Address: 124 PEABODY
BIRMINGHAM, MICHIGAN 48009
Phone Number: 248.258.6940
Fax Number: _____
Email address: CJLONGE@CJLONGEAIA.COM

5. Required Attachments

- I. Two (2) paper copies and one (1) digital copy of all project plans including:
 - i. A detailed Existing Conditions Plan including the subject site in its entirety, including all property lines, buildings, structures, curb cuts, sidewalks, drives, ramps and all parking on site and on the street(s) adjacent to the site, and must show the same detail for all adjacent properties within 200 ft. of the subject sites property lines;
 - ii. A detailed and scaled Site Plan depicting accurately and in detail the proposed construction, alteration or repair;
 - iii. A certified Land Survey;
 - iv. Interior floor plans;
 - v. A Landscape Plan;
 - vi. A Photometric Plan;
 - vii. Colored elevation drawings for each building elevation;
- II. Specification sheets for all proposed materials, light fixtures and mechanical equipment;
- III. Samples of all proposed materials;
- IV. Photographs of existing conditions on the site including all structures, parking areas, landscaping and adjacent structures;
- V. Current aerial photographs of the site and surrounding properties;
- VI. Warranty Deed, or Consent of Property Owner if applicant is not the owner;
- VII. Any other data requested by the Planning Board, Planning Department, or other City Departments.

6. Project Information

Address/Location of the property: 770 SOUTH ADAMS / 1000 HAYNES STREET
Name of development: _____
Sidwell #: 19.36.283.016 (770) / 19.36.283.024 (1000)
Current Use: VACANT OFFICE / BANK
Proposed Use: APARTMENTS -R3
Area of Site in Acres: _____
Current zoning: MU-3 / MU-5
Is the property located in the floodplain? NO
Name of Historic District Site is Located in: _____
Date of Historic District Commission Approval: _____

Date of Application for Preliminary Site Plan: 01.03.2022
Date of Preliminary Site Plan Approval: 03.31.2022
Date of Application for Final Site Plan: _____
Date of Final Site Plan Approval: _____
Date of Application for Revised Final Site Plan: _____
Date of Revised Final Site Plan Approval: _____
Date of Design Review Board Approval: _____
Will proposed project require the division of platted lots? _____
Will proposed project require the combination of platted lots? _____

7. Details of the Proposed Development (attach separate sheet if necessary)

770 SOUTH ADAMS ROAD- NEW 4 STORY APARTMENT

1000 HAYNES STREET- NEW 6 STORY APARTMENT

8. Buildings and Structures

Number of Buildings on Site: 1
Height of Buildings & # of Stories: 77 FT (MU-3) 6
53 FT (MU-5) 4

Use of Buildings: APARTMENT
Height of Rooftop Mechanical Equipment: SEE PLANS

9. Floor Use and Area (in Square Feet)**Proposed Commercial Structures:**

Total basement floor area: N/A
Number of square feet per upper floor:
Total floor area:
Floor area ratio (total floor area ÷ total land area):
Open space:
Percent of open space:

Office Space:
Retail Space:
Industrial Space:
Assembly Space:
Seating Capacity:
Maximum Occupancy Load:

Proposed Residential Structures:

Total number of units: 157
Number of one bedroom units: 80
Number of two bedroom units: 72
Number of three bedroom units: 5
Open space: N/A
Percent of open space: N/A

Rental units or condominiums? RENTAL
Size of one bedroom units: 627 TO 963 SF
Size of two bedroom units: 1,066 TO 1,643 SF
Size of three bedroom units: 1,855 SF
Seating Capacity: -
Maximum Occupancy Load:

Proposed Additions:

Total basement floor area, if any, of addition: N/A
Number of floors to be added:
Square footage added per floor:
Total building floor area (including addition):
Floor area ratio (total floor area ÷ total land area):
Open Space:
Percent of open space:

Use of addition:
Height of addition:
Office space in addition:
Retail space in addition:
Industrial space in addition:
Assembly space in addition:
Maximum building occupancy load (including addition):

10. Required and Proposed Setbacks

Required front setback: 0
Required rear setback: 0
Required total side setback: 0
Side setback: 0 FT

Proposed front setback: 1 FT
Proposed rear setback: 1 FT
Proposed total side setback: 2 FT
Second side setback: 1 FT

11. Required and Proposed Parking

Required number of parking spaces: 209
Typical angle of parking spaces: 90 DEGREES
Typical width of maneuvering lanes: 20'
Location of parking on site: INTERIOR PARKING
Location of parking off site: INTERIOR PARKING
Number of light standards in parking area: N/A
Screenwall material: INTERIOR PARKING

Proposed number of parking spaces: 281
Typical size of parking spaces: 9 X 20
Number of spaces <180 sq. ft.: 0
Number of handicap spaces: 12
Shared parking agreement? N/A
Height of light standards in parking area: N/A
Height of screenwall: N/A

12. Landscaping

Location of landscape areas: N/A

Proposed landscape material: _____

13. Streetscape

Sidewalk width: VARIES
Number of benches: 5
Number of planters: _____
Number of existing street trees: _____
Number of proposed street trees: 19
Streetscape Plan submitted? _____

Description of benches or planters: WROUGHT IRON
Species of existing trees: UNKNOWN
Species of proposed trees: _____
5 - UPRIGHT EUROPEAN HORNBEAM
14 - REGAL PRINCE OAK

14. Loading

Required number of loading spaces: 0
Typical angle of loading spaces: _____
Screenwall material: 1
Location of loading spaces on site: SOUTH PROPERTY LINE

Proposed number of loading spaces: 1
Typical size of loading spaces: 22 WIDE X 50 LONG X 20 HIGH
Height of screenwall: _____
Typical time loading spaces are used: SCHEDULED

15. Exterior Waste Receptacles

Required number of waste receptacles: TBD.
Location of waste receptacles: _____
Screenwall material: _____

Proposed number of waste receptacles: _____
Size of waste receptacles: _____
Height of screenwall: _____

16. Mechanical Equipment

Utilities and Transformers:

Number of ground mounted transformers: 4 ESTIMATED
Size of transformers (L•W•H): 6X6X6
Number of utility easements: TBD
Screenwall material: GATED/WALLED

Location of all utilities & easements: _____
SOUTH PROPERTY LINE
& WEST PROPERTY LINE
Height of screenwall: _____

Ground Mounted Mechanical Equipment:

Number of ground mounted units: N/A
Size of ground mounted units (L•W•H): _____
Screenwall material: _____

Location of all ground mounted units: SOUTH (ALLEY)
PROPERTY LINE
Height of screenwall: 10'-4"

Rooftop Mechanical Equipment:

Number of rooftop units: SEE PLAN
Type of rooftop units: _____
Screenwall material: SEE SPECIFICATIONS
Location of screenwall: SEE PLAN

Location of all rooftop units: SEE PLAN
Size of rooftop units (L•W•H): _____
Percentage of rooftop covered by mechanical units: _____
Height of screenwall: VARIES/SEE PLANS
Distance from rooftop units to all screenwalls: _____

17. Accessory Buildings

Number of accessory buildings: N/A
Location of accessory buildings: _____

Size of accessory buildings: _____
Height of accessory buildings: _____

18. Building Lighting

Number of light standards on building: _____
Size of light fixtures (L•W•H): _____

Type of light standards on building: _____
Height from grade: _____

Maximum wattage per fixture: _____
Light level at each property line: _____

Proposed wattage per fixture: _____

19. Site Lighting

Number of light fixtures: _____
Size of light fixtures (L•W•H): _____
Maximum wattage per fixture: _____
Light level at each property line: _____

Type of light fixtures: _____
Height from grade: _____
Proposed wattage per fixture: _____
Holiday tree lighting receptacles: _____

20. Adjacent Properties

Number of properties within 200 ft.: _____

Property #1

Number of buildings on site: _____ 909 HAYNES
Zoning district: _____ MU-5 (B2)
Use type: _____ OFFICE
Square footage of principal building: _____ UNKNOWN
Square footage of accessory buildings: _____
Number of parking spaces: _____

Property Description: _____ 19.36.281.030

North, south, east or west of property? _____ NORTH

Property #2

Number of buildings on site: _____ 999 HAYNES
Zoning district: _____ MU-5 (B2)
Use type: _____ OFFICE
Square footage of principal building: _____ UNKNOWN
Square footage of accessory buildings: _____
Number of parking spaces: _____

Property Description: _____ 19.36.281.029

North, south, east or west of property? _____ NORTH

Property #3

Number of buildings on site: _____ 1006 HAYNES
Zoning district: _____ MU-5 (B2)
Use type: _____ OFFICE
Square footage of principal building: _____ UNKNOWN
Square footage of accessory buildings: _____
Number of parking spaces: _____

Property Description: _____ 19.36.281.017

North, south, east or west of property? _____ NORTH

Property #4

Number of buildings on site: _____ 600 SOUTH ADAMS
Zoning district: _____ MU-3 (B2)
Use type: _____ OFFICE
Square footage of principal building: _____ UNKNOWN
Square footage of accessory buildings: _____
Number of parking spaces: _____

Property Description: _____ 19.36.281.031

North, south, east or west of property? _____ NORTH

Property #5

Number of buildings on site: _____ 725 SOUTH ADAMS
Zoning district: _____ B2
Use type: _____ RETAIL / OFFICE
Square footage of principal building: _____ UNKNOWN
Square footage of accessory buildings: _____
Number of parking spaces: _____

Property Description: _____ 20.31.151.002

North, south, east or west of property? _____ EAST

Property #6

Number of buildings on site: _____ 1165 HOLLAND
Zoning district: _____ R3
Use type: _____ RESIDENTIAL
Square footage of principal building: _____ UNKNOWN
Square footage of accessory buildings: _____
Number of parking spaces: _____

Property Description: _____ 20.31.151.023

North, south, east or west of property? _____ EAST

Maximum wattage per fixture: _____
Light level at each property line: _____

Proposed wattage per fixture: _____

19. Site Lighting

Number of light fixtures: _____
Size of light fixtures (L•W•H): _____
Maximum wattage per fixture: _____
Light level at each property line: _____

Type of light fixtures: _____
Height from grade: _____
Proposed wattage per fixture: _____
Holiday tree lighting receptacles: _____

20. Adjacent Properties

Number of properties within 200 ft.: _____

Property #7

Number of buildings on site: _____ 1137 HOLLAND
Zoning district: _____ O-2
Use type: _____ OFFICE
Square footage of principal building: UNKNOWN
Square footage of accessory buildings: _____
Number of parking spaces: _____

Property Description: _____ 20.31.151.022

North, south, east or west of property? _____ EAST

Property #8

Number of buildings on site: _____ 1111 SOUTH ADAMS
Zoning district: _____ O-2
Use type: _____ OFFICE
Square footage of principal building: UNKNOWN
Square footage of accessory buildings: _____
Number of parking spaces: _____

Property Description: _____ 20.31.151.021

North, south, east or west of property? _____ EAST

Property #9

Number of buildings on site: _____ 801 SOUTH ADAMS
Zoning district: _____ O-2
Use type: _____ OFFICE
Square footage of principal building: UNKNOWN
Square footage of accessory buildings: _____
Number of parking spaces: _____

Property Description: _____ 20.31.153.066

North, south, east or west of property? _____ EAST

Property #10

Number of buildings on site: _____ 1164 HOLLAND
Zoning district: _____ R3
Use type: _____ RESIDENTIAL
Square footage of principal building: UNKNOWN
Square footage of accessory buildings: _____
Number of parking spaces: _____

Property Description: _____ 20.31.153.003

North, south, east or west of property? _____ EAST

Property #11

Number of buildings on site: _____ 1155 WEBSTER
Zoning district: _____ R3
Use type: _____ RESIDENTIAL
Square footage of principal building: UNKNOWN
Square footage of accessory buildings: _____
Number of parking spaces: _____

Property Description: _____ 20.31.153.034

North, south, east or west of property? _____ EAST

Property #12

Number of buildings on site: _____ 877 SOUTH ADAMS
Zoning district: _____ O-2
Use type: _____ OFFICE
Square footage of principal building: UNKNOWN
Square footage of accessory buildings: _____
Number of parking spaces: _____

Property Description: _____ 20.31.153.062

North, south, east or west of property? _____ SOUTH

Maximum wattage per fixture: _____
Light level at each property line: _____

Proposed wattage per fixture: _____

19. Site Lighting

Number of light fixtures: _____
Size of light fixtures (L•W•H): _____
Maximum wattage per fixture: _____
Light level at each property line: _____

Type of light fixtures: _____
Height from grade: _____
Proposed wattage per fixture: _____
Holiday tree lighting receptacles: _____

20. Adjacent Properties

Number of properties within 200 ft.: 18

Property # 13

Number of buildings on site: 800 SOUTH ADAMS
Zoning district: MU3 & MU5 (B2)
Use type: OFFICE
Square footage of principal building: UNKNOWN
Square footage of accessory buildings: _____
Number of parking spaces: _____

Property Description: 19.36.283.009

North, south, east or west of property? SOUTH

Property # 14

Number of buildings on site: VACANT
Zoning district: MU3 (B2)
Use type: PARKING LOT
Square footage of principal building: _____
Square footage of accessory buildings: _____
Number of parking spaces: _____

Property Description: 19.36.283.025

North, south, east or west of property? SOUTH

Property # 15

Number of buildings on site: 875 SOUTH WORTH
Zoning district: MU5 (B2)
Use type: OFFICE
Square footage of principal building: UNKNOWN
Square footage of accessory buildings: _____
Number of parking spaces: _____

Property Description: 19.36.283.021

North, south, east or west of property? SOUTH

Property # 16

Number of buildings on site: 34200 WOODWARD AVE
Zoning district: MU5 & MU7 (B2)
Use type: RETAIL
Square footage of principal building: UNKNOWN
Square footage of accessory buildings: _____
Number of parking spaces: _____

Property Description: 19.36.282.005

North, south, east or west of property? _____

Property # 17

Number of buildings on site: 34300 WOODWARD AVE
Zoning district: MU3 & MU5 (B2)
Use type: RETAIL / OFFICE
Square footage of principal building: UNKNOWN
Square footage of accessory buildings: _____
Number of parking spaces: _____

Property Description: 19.36.282.006

North, south, east or west of property? _____

Property # 18

Number of buildings on site: 720 SOUTH ADAMS
Zoning district: MU3 (B2)
Use type: RETAIL (VACANT)
Square footage of principal building: UNKNOWN
Square footage of accessory buildings: _____
Number of parking spaces: _____

Property Description: 19.36.283.014

North, south, east or west of property? _____

The undersigned states the above information is true and correct, and understands that it is the responsibility of the applicant to advise the Planning Division and / or Building Division of any additional changes made to an approved site plan. The undersigned further states that they have reviewed the procedures and guidelines for Site Plan Review in Birmingham, and have complied with same. The undersigned will be in attendance at the Planning Board meeting when this application will be discussed.

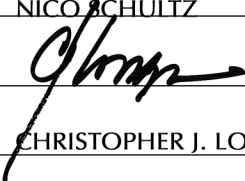
By providing your e-mail to the City, you agree to receive news notifications from the City. If you do not wish to receive these messages, you may unsubscribe at any time.

Signature of Owner: _____ Date: 04.15.2022

Print Name: _____ NICO SCHULTZ

Signature of Applicant: _____ Date: 04.15.2022

Print Name: _____ NICO SCHULTZ

Signature of Architect:  _____ Date: 04.15.2022

Print Name: _____ CHRISTOPHER J. LONGE, AIA.

Office Use Only

Application #: _____ Date Received: _____ Fee: _____

Date of Approval: _____ Date of Denial: _____ Accepted by: _____

- ☒ 13. Existing and proposed layout of streets, open space and other basic elements of the plan;
- ☒ 14. Existing and proposed utilities and easements and their purpose;
- ☒ 15. Location of natural streams, regulated drains, 100-year flood plains, floodway, water courses, marshes, wooded areas, isolated preserve-able trees, wetlands, historic features, existing structures, dry wells, utility lines, fire hydrants and any other significant feature(s) that may influence the design of the development;
- ☒ 16. General description, location, and types of structures on site;
- ☒ 17. Location of sidewalks, curb cuts, and parking lots on subject site and all sites within 200 ft. of the property line;
- ☒ 18. Details of existing or proposed lighting, signage and other pertinent development features;
- ☒ 19. Elevation drawings showing proposed design;
- ☒ 20. Screening to be utilized in concealing any exposed mechanical or electrical equipment and all trash receptacle areas;
- ☒ 21. Location of all exterior lighting fixtures;
- ☒ 22. A Photometric Plan depicting proposed illuminance levels at all property lines;
- ☒ 23. A Landscape Plan showing all existing and proposed planting and screening materials, including the number, size, and type of plantings proposed and the method of irrigation; and
- ☒ 24. Any other information requested in writing by the Planning Division, the Planning Board, or the Building Official deemed important to the development.

Elevation Drawings

Complete elevation drawings detailing the proposed changes for which approval is requested shall be drawn at a scale no smaller than 1" = 100' (unless the drawing will not fit on one 24" X 36" sheet) and shall include:

- ☒ 25. Color elevation drawings showing the proposed design for each façade of the building;
- ☒ 26. List of all materials to be used for the building, marked on the elevation drawings;
- ☒ 27. Elevation drawings of all screenwalls to be utilized in concealing any exposed mechanical or electrical equipment, trash receptacle areas and parking areas;
- ☒ 28. Details of existing or proposed lighting, signage and other pertinent development features;
- ☒ 29. A list of any requested design changes;
- ☒ 30. Itemized list and specification sheets of all materials, light fixtures, and mechanical equipment to be used, including exact size specifications, color, style, and the name of the manufacturer;
- ☒ 31. Location of all exterior lighting fixtures, exact size specifications, color, style and the name of the manufacturer of all fixtures, and a photometric analysis of all exterior lighting fixtures showing light levels to all property lines; and
- ☒ 32. Any other information requested in writing by the Planning Division, the Planning Board, or the Building Official deemed important to the development.



Notice Signs - Rental Application Community Development

1. Applicant

Name: FHS BIRMINGHAM, LLC
Address: 3400 EAST LAFAYETTE
DETROIT, MICHIGAN 48207
Phone Number: 248.760.6291
Fax Number: _____
Email address: _____

Property Owner

Name: FHS BIRMINGHAM, LLC
Address: 3400 EAST LAFAYETTE
DETROIT, MICHIGAN 48207
Phone Number: 248.760.6291
Fax Number: _____
Email address: _____

2. Project Information

Address/Location of Property: 770 SOUTH ADAMS / 1000 HAYNES
Name of Development: 2.1
Area in Acres: _____

Name of Historic District site is in, if any: N/A
Current Use: OFFICE
Current Zoning: MU3 & MU5 (B2)

3. Date of Board Review

Board of Building Trades Appeals: _____
City Commission: _____
Historic District Commission: _____
Planning Board: _____

Board of Zoning Appeals: _____
Design Review Board: _____
Housing Board of Appeals: _____

The undersigned states the above information is true and correct, and understands that it is the responsibility of the applicant to post the Notice Sign(s) at least 15 days prior to the date on which the project will be reviewed by the appropriate board or commission, and to ensure that the Notice Sign(s) remains posted during the entire 15 day mandatory posting period. The undersigned further agrees to pay a rental fee and security deposit for the Notice Sign(s), and to remove all such signs on the day immediately following the date of the hearing at which the project was reviewed. The security deposit will be refunded when the Notice Sign(s) are returned undamaged to the Community Development Department. Failure to return the Notice Sign(s) and/or damage to the Notice Sign(s) will result in forfeiture of the security deposit.

Signature of Applicant: _____ Date: _____

Office Use Only		
Application #: _____	Date Received: _____	Fee: _____
Date of Approval: _____	Date of Denial: _____	Reviewed by: _____

Supplemental Information

FHS Birmingham

770 South Adams Road + 1000 Haynes Street
Birmingham, Michigan 48009



Prepared By
Christopher J. Longe, AIA
124 Peabody Street
Birmingham, Michigan 48009

Owner
FHS Birmingham, LLC
3400 East Lafayette
Detroit, Michigan 48207

Lighting Specifications

FHS-BHM Exterior Amenity Lighting
Preliminary Lighting Specifications
12-16-21

INFORMATION ONLY



Oakewood Design

Description

Recessed LED module with interchangeable 2-inch round or square lens pinhole apertures are available in various finishes to suit any décor. Use with 4-inch nominal recessed housings suitable for residential and shallow plenum commercial construction or can be used to retrofit existing installations. Field interchangeable primary optics provide various distribution patterns and spacing to mounting height ratios. Use for general and task lighting in low to medium height ceilings where energy savings, long life and optical control are required.

Specification Features

Module

- Field interchangeable and upgradable LED module consists of LED array, primary optic and driver.
- Integral die cast aluminum heat sink provides passive thermal cooling achieving L70 at 50,000 hours in IC and non-IC applications.

Retention

- Heat treated compression springs hold module securely in the housing, can be removed thru the aperture for service or replacement

LED Array

- Proximity phosphors over chip on board LEDs provide a uniform source with high efficiency and no pixilation.
- Available in 90 CRI minimum, R9 greater than 50 and color accuracy within 3 SDCM provide color accuracy and uniformity.
- Compatible with Zhaga book 12 standards for interchangeability and can be replaced in the field

Gaskets

- Closed cell gaskets achieve restrictive airflow requirements without additional caulking

Primary Optic

- Precision molded TIR optic organizes source flux into useful beams without stray lumens in the field.
- Two-piece construction with matte black mounting ring and polarized turn and lock mounting aligns optic to source and minimizes backlight in the housing.
- Exceeds ENERGY STAR® color angular uniformity requirements, color deviation is typically less than 0.002 u' v'.

- Available in narrow flood, flood and wide flood distributions, ordered separately, ships with narrow flood installed.
- Also available in asymmetric distribution providing vertical illumination

Trims

- Die formed steel trims are available in 2-inch round or square pinhole apertures and can be interchanged in the field.
- Available in a broad range of painted or plated finishes, can be painted in the field to match any décor.
- Magnetic attachment holds trim tightly to ceiling and eliminates light leaks.

Shielding

- Diffuse clear lens provides light control and source shielding.

Driver

- Integral UNV 120 - 277V 50/60 Hz constant current driver provides noise free operation.
- Continuous, flicker-free dimming from 100% to 5% with select leading or trailing edge 120V phase cut dimmers.
- Driver can be replaced in the field.
- Inline electrical quick connect and E26 adapter not provided.

Compliance

- cULus listed / certified for use with Halo housings, classified for use with other's housings, see instruction sheet for conditions of acceptability.
- Wet location listed in covered ceilings and IP65 certified.
- Airtight per ASTM-E283.
- Suitable for use in clothes closets when installed in accordance with the NEC 410.16 spacing requirements
- EMI/RFI emissions per FCC 47CFR Part 15 B.
- Contains no mercury or lead and RoHS compliant.
- Photometric testing in accordance with IES LM-79-08.
- Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11.
- Can be used for State of California Title 24 high efficacy luminaire compliance, reference the California Energy Commission Title 20 Appliance Efficiency Database for current listings.
- ENERGY STAR® listed, reference qualified product listings.
- Meets State of California voluntary lamp standards.
- Zhaga book 12 compatible.

Warranty

Five year limited warranty, consult website for details.
www.eaton.com/lighting/Legal

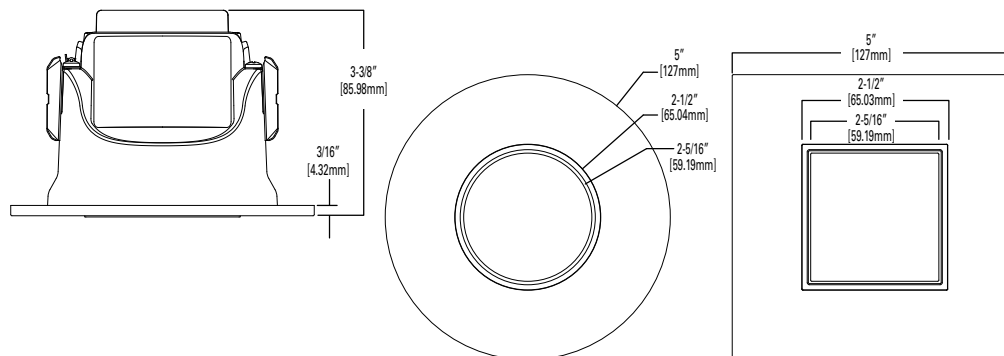


Refer to ENERGY STAR® Qualified Products List. Can be used to comply with California Title 24 High Efficacy requirements. Certified to California Appliance Efficiency Database under JAB8. Indoor LED nominal CCT of 4000K or less.



Eaton is a founding member of the Zhaga Consortium

Dimensions



ML4D

TL43R

TL44S

900 Lumen Series

LED

2-Inch Round and Square Lens Pinhole Downlight



ENERGY DATA		
Lumens	900 Series	
Input Voltage	120V	277V
Input Current	101.6 (mA)	45.7 (mA)
Input Power	12.1 (W)	11.9 (W)
Efficiency	84.93 %	83.45 %
Inrush (A)	1.3	4.7
THD: ≤ 20%		
PF: ≥ 0.90		
T Ambient -40 - +40°C		
Sound Rating ≤ 20dba		

Ordering Information

SAMPLE NUMBER: ML4D09NFL927E - TL43R2GMWWB

A complete luminaire consists of a housing, LED module and trim, order separately.

Models	Lumens	Distribution	CRI/CCT	Driver	Accessories
ML4D = 4" LED module	09 =900 lumens (nominal)	NFL =25 degree narrow flood FL =40 degree flood	927 =90 CRI , 2700K 930 =90 CRI , 3000K 935 =90 CRI , 3500K 940 =90 CRI , 4000K	E =UNV 120 - 277V 50-60Hz, LE & TE phase cut 5% dimming at 120V only	TIR50AWW25 =asymmetric wall wash TIR50NFL25 =25° narrow flood TIR50FL40 =40° flood TIR50WFL55 =55° wide flood LH501MB12PK =Media holder for (1) 50mm lens, matte black, 12 pack HE26LED =Edison base adapter for retrofit HE26LED-24PK =Edison base adapter for retrofit 24 pack
Trims	Shielding	Flange Finish	Accessories		
TL43R = 2" round lens pinhole TL44S = 2" square lens pinhole	2G =Diffuse clear	MWWB =Matte white flange, white lens frame MWBB =Matte white flange, black lens frame MBBB =Matte black flange, black lens frame BNBB =Brushed nickel flange, black lens frame ORBBB =Oil rubbed bronze flange, black lens frame GBBB =German bronze flange, black lens frame BCuBB =Brushed copper, black lens frame	T24HWKIT =Title 24 hard wire kit, converts incandescent, low voltage and compact fluorescent housings to LED H4NCMF =4" new construction mounting frame compatible with H245RICAT, H99RTAT, H1499RICAT, and E4RTATSB remodeler housings.		

Housings

Halo Ultra-shallow LED Housings

H245ICAT=4" IC, airtight ultra-shallow new construction housing, LED, 120 - 277V

H245RICAT=4" IC, airtight ultra-shallow remodeler housing, LED, 120 - 277V

Halo LED Housings

H995ICAT=4" IC, airtight shallow new construction housing, LED, 120 - 277V

H995RICAT=4" IC, airtight shallow remodeler housing, LED, 120 - 277V

Halo Housings

H99TAT=4" non-IC, airtight shallow new construction housing, E26, 120V

H99RTAT=4" non-IC, airtight shallow remodeler housing, E26, 120V

H99ICAT=4" IC, airtight shallow new construction housing, E26, 120V

E4TATSB=4" non-IC, airtight shallow new construction housing, adjustable socket bracket, E26, 120V

E4RTATSB=4" non-IC, airtight shallow remodeler housing, adjustable socket bracket, E26, 120V

E4ICATSB=4" non-IC, airtight shallow new construction housing, adjustable socket bracket, E26, 120V

Halo Surface Mount Housings

HS4R=Surface round, 120-277V

HS4S=Surface square, 120-277V



HE26LED
Edison Base Adapter for retrofit (order separately)

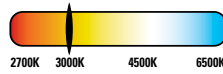
Photometry

ML4D09NFL930-TIR50NFL25-TL43R2G_X_TL44S2GX

Description	Halo 2 Inch ML4 Round And Square Lensed Downlight-Narrow Flood Distribution
Test Number	P189395
Module	900 Series, 90CRI, Narrow Flood optic
Trim	2" Aperture, Open Round DL
Lumens	916 Lm
Efficacy	79.83
Spacing Criteria	0.39
CPCB	4688.3
Beam Angle (FWHM)	26.6

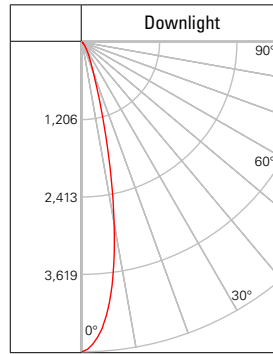
Color Metric Summary

TM-30-15	R _f = 91.5
	R _g = 97.7
CRI/ CIE	R _a = 92.8
	R ₉ = 57.4



25°

Candlepower Distribution



Candelas at Nadir

Angle	0-deg
0	4688
5	4166
10	2790
20	504
30	139
40	39
50	11
60	5
70	3
80	2
90	0

Foot-candle Values at Nadir

0 deg Aiming Angle		
DD	FC	DIA
5.5'	155	2
7'	95.7	2.6
8'	73.3	3
9'	57.9	3.4
10'	46.9	3.8
12'	32.6	4.6

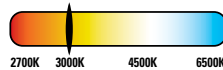
DD = distance down to illuminated work plane
FC = initial foot-candles at nadir
DIA = diameter

ML4D09NFL930-TIR50FL40-TL43R2G_X_TL44S2GX

Description	Halo 2 Inch ML4 Round And Square Lensed Downlight- Flood Distribution
Test Number	P189401
Module	900 Series, 90CRI, Flood optic
Trim	2" Aperture, Open Round DL
Lumens	919 Lm
Efficacy	78.94
Spacing Criteria	0.64
CPCB	1868
Beam Angle (FWHM)	39.3

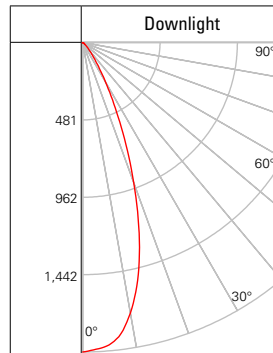
Color Metric Summary

TM-30-15	R _f = 91.4
	R _g = 97.7
CRI/ CIE	R _a = 92.7
	R ₉ = 57.2



40°

Candlepower Distribution



Candelas at Nadir

Angle	0-deg
0	1868
5	1832
10	1658
20	903
30	278
40	70
50	21
60	8
70	4
80	2
90	0

Foot-candle Values at Nadir

0 deg Aiming Angle		
DD	FC	DIA
5.5'	61.8	3.4
7'	38.1	4.4
8'	29.2	5
9'	23.1	5.8
10'	18.7	6.4
12'	13	7.6

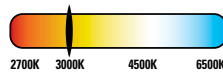
DD = distance down to illuminated work plane
FC = initial foot-candles at nadir
DIA = diameter

ML4D09NFL930-TIR50WFL55-TL43R2G_X_TL44S2GX

Description	Halo 2 Inch ML4 Round And Square Lensed Downlight-Wide Flood Distribution
Test Number	P189407
Module	900 Series, 90CRI, Wide Flood optic
Trim	2" Aperture, Open Round DL
Lumens	857 Lm
Efficacy	74.41
Spacing Criteria	0.78
CPCB	1032.3
Beam Angle (FWHM)	52.1

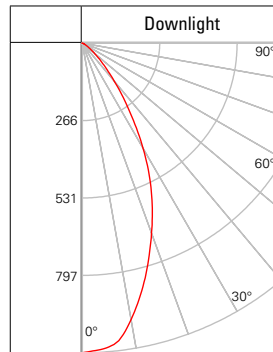
Color Metric Summary

TM-30-15	R _f = 91.4
	R _g = 97.6
CRI/ CIE	R _a = 92.7
	R ₉ = 57.1



55°

Candlepower Distribution



Candelas at Nadir

Angle	0-deg
0	1032
5	1017
10	936
20	675
30	406
40	166
50	54
60	16
70	5
80	1
90	0

Foot-candle Values at Nadir

0 deg Aiming Angle		
DD	FC	DIA
5.5'	34.1	4.2
7'	21.1	5.4
8'	16.1	6.2
9'	12.7	7
10'	10.3	7.8
12'	7.2	9.2

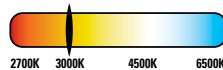
DD = distance down to illuminated work plane
FC = initial foot-candles at nadir
DIA = diameter

ML4D09NFL930-TIR50AWW25-TL43R2GMWWB_TL44S2GMWWB

Description	Halo 2 Inch ML4 Round And Square Lensed Downlight-Asymmetric
Test Number	P189448
Module	900 Series, 90CRI, Asymmetric
Trim	2" Aperture, Open Round DL
Lumens	683 Lm
Efficacy	61.03
Spacing Criteria	1.51
Peak intensity	2070
Peak angle	23

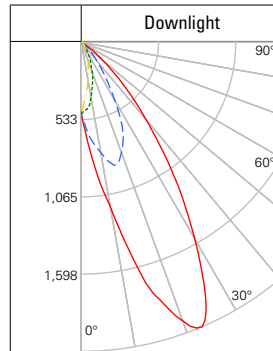
Color Metric Summary

TM-30-15	R _f = 91.4
	R _g = 97.6
CRI/ CIE	R _a = 92.7
	R ₉ = 57.0



22.5° 25°

Candlepower Distribution



Candelas at Nadir

Angle	0-deg
0	479
5	751
10	1115
20	1986
30	1520
40	675
50	190
60	27
70	2
80	2
90	0

Single Unit Footcandles
2.5' from wall
(distance from fixture along wall)

DD	•
1'	0.4
2'	12.2
3'	28.9
4'	31.8
5'	26.5
6'	18.8
7'	12
8'	7.8
9'	5.2
10'	3.6

Multiplier Table

CCT Option	2700K	3000K	3500K	4000K
CCT Multiplier	0.946	1.000	1.020	1.042

Representative photometric test report for 3000K color temperature, 90CRI.
Multipliers may be used to determine relative lumen values with other color temperatures.

Project		Catalog #		Type	
Prepared by		Notes		Date	



Lumière

Cambria 203

LED / Halogen
Accent / Flood

Typical Applications

- Hospitality • Commercial Landscape • Outdoor Area/Site • Residential
- Architectural

Interactive Menu

- Order Information [page 2](#)
- Cambria 203 MR16 Halogen Photometric Data [page 3](#)
- Cambria 203 LED Photometric Data [page 4](#)
- Product Warranty

Product Certification



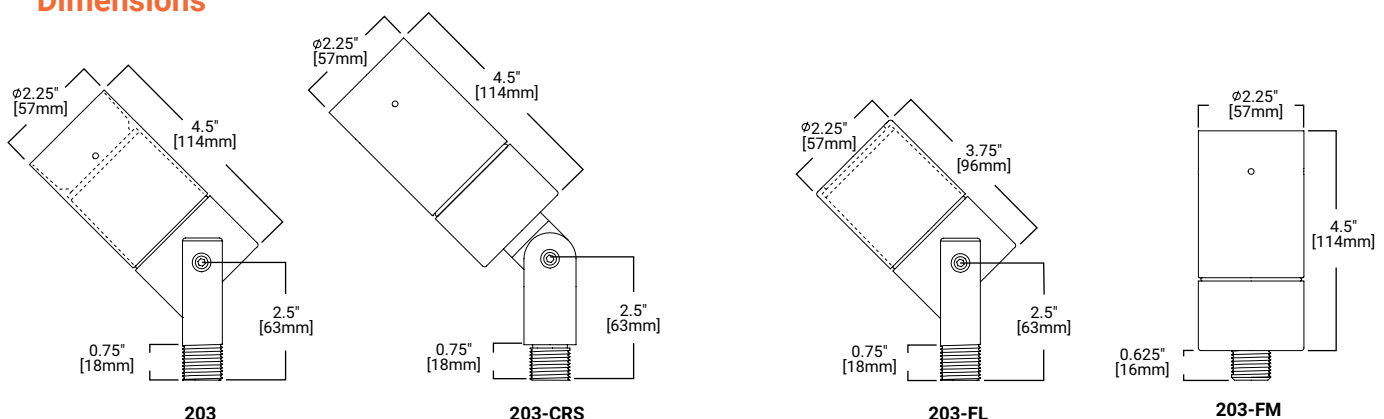
Product Features



Top Product Features

- 340° tilt, 360° rotation
- Precision-machined aluminum, brass, bronze, copper or stainless steel
- Stainless steel hardware
- Siphon Protection System (S.P.S.)
- Holds up to three optical accessories
- Three-year warranty

Dimensions



TECHNICAL DATA
8W LED, L70/60,000 hours at 25°C
Low Voltage: 50W Halogen MR16

Order Information

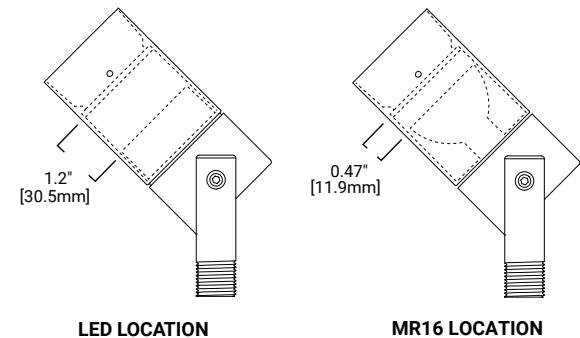
SAMPLE ORDER NUMBER: 203-FL-50MR16-12-NSS

Series	Construction	Source (for LED, select from each column and combine)	Voltage	Finish
Series	Construction	Source (for LED, select from each column and combine)	Voltage	Finish
203=LED or MR16 Cambria Accent Fixture	____=Standard Side Swivel Stem, 1/2" NPS CRS=Center Rear Swivel Stem, 1/2" NPS FM=Rear Flush Mount, 1/2" NPS FL=Flush Lens, Side Swivel Stem, 1/2" NPS	50MR16=50W max. Halogen MR16 (lamp not included) 8LED=8W LED 27=2700K 30=3000K 40=4000K* 5LED=5W LED AM=Amber* (585-595nm) 25=25° Narrow	12=12V	Painted BK=Black BZ=Bronze CS=City Silver VE=Verde WT=White Premium Finish NBR=Natural Brass NCP=Natural Copper NBZ=Natural Bronze* NSS=Natural Stainless Steel
Notes	Notes	Notes * Not Title 20 compliant.	Notes	Notes * For natural bronze ROHS material consult factory.

Optical Accessories - Order Separately

Filters (2.00" Diameter)	Optical Lenses (2.00" Diameter)	Optical Louvers (2.00" Diameter)
F71 =Peach Dichroic F72 =Amber Dichroic F73 =Green Dichroic F74 =Medium Blue F75 =Yellow Dichroic F76 =Red Dichroic F77 =Dark Blue Dichroic F78 =Light Blue Dichroic F79 =Neutral Density Dichroic F80 =Magenta Dichroic F22 =Red Color F33 =Blue Color F44 =Green Color F55 =Yellow Color F66 =Mercury Vapor	LSL =Linear Spread Lens (elongates standard beam spread) DIF =Diffused lens (provides even illumination) OSL =Overall Spread Lens (increases standard beam spread)	LVR =45° Hex Cell Louver (reduces glare)
Notes	Notes	Notes

Lamp or LED Module Replacement



Mounting Accessories - Order Separately

Ground Mounting	Surface / Wall Mounting	Low Voltage Tree Mounting
Ground Mounting	Surface / Wall Mounting -specify powder paint finish (BK,BZ,CS,VE,WT)	Low Voltage Tree Mounting -specify finish (BK,BZ,CS,VE,WT)
GS01 =1-1/2" x 6-3/4" (38mm x 171mm) cast zinc ground spike. GS03 =2-3/8" x 6-5/8" (96mm x 168mm) aluminum ground spike with integral 12V wiring compartment. Specify powder paint finish (BK,BZ,CS,VE,WT) GS04 =1" x 16-1/2" (25mm x 419mm) aluminum ground spike with integral 12V wiring compartment. Specify powder paint finish (BK,BZ,CS,VE,WT) GS05 =1" x 16-1/2" (48mm x 438mm) black polycarbonate ground spike with 2"-13" height adjustment - requires fixture with extended stem. GS08 =1-7/8" x 8" (48mm x 203mm) black ABS ground spike. GS13 =3-3/4" x 4-1/2" (95mm x 114mm) brass/stainless steel 3 prong ground spike.	FS1 =2-7/8" x 4-5/8" (73mm x 117mm) rectangular wall plate or box cover with single 1/2 NPS mounting hole. FS2 =2-7/8" x 4-5/8" (73mm x 117mm) rectangular wall plate or box cover with dual 1/2 NPS mounting holes. RS1 =4-1/2" (144mm) machined aluminum standard round wall plate with single 1/2 NPS mounting hole. RS2 =4-1/2" (114mm) machined aluminum standard round wall plate with single 1/2 NPS mounting hole. TM01 =2-3/16" x 1-1/2" (71mm x 38mm) round mount for installation on trees or other wood surfaces with 1/2 NPS mounting hole. TM05 =3-7/8" x 2" (98mm x 51mm) rectangular tree/surface mount with wiring compartment and single 1/2 NPS mounting hole.	TM04 =2-1/2" x 4-1/4" (64mm x 108mm) expanding tree strap with self adjusting tension release for one fixture mount. Designed for a maximum tree diameter of 24" (610mm). TM04-2 =two fixture mount. TM04-3 =three fixture mount. TM04-4 =four fixture mount. TM07 =tree friendly ring with adjustable stand-offs. Accommodates 18"-24" (457mm - 610mm) tree diameter. TM07-2 =two fixture mount. TM07-3 =three fixture mount. TM07-4 =four fixture mount. TM07-6 =six fixture mount.
Notes	Notes	Notes

Product Specifications

Material

- Housing, hood and mounting stem are precision-machined from corrosion-resistant billet stock 6061-T6 aluminum, C360 brass, C932 bronze*, C110 copper or 303/304 stainless steel

Finish

- Fixtures constructed from 6061-T6 aluminum are double protected by an ROHS* compliant chemical film undercoating and polyester powdercoat paint finish, surpassing the rigorous demands of the outdoor environment
- A variety of standard colors are available

Brass, Bronze*, Copper or Stainless Steel

- Fixtures constructed from brass, bronze*, copper or stainless steel are left unpainted to reveal the natural beauty of the material
- Brass, bronze* and copper will patina naturally over time

Hood

- Hood is removable for easy relamping and accepts up to three internal accessories at once (lenses, louvers, filters) to achieve multiple lighting effects
- Model 203, 203-CRS & 203-FM: Weep holes prevent water and mineral stains from collecting on the lens, even in the straight-up position
- Model 203-FL: The flush lens design reduces fixture length, minimizes debris collection and prevents water and mineral stains from collecting on the lens

Gasket

- Housing and hood are sealed with a high temperature silicone o-ring gasket to prevent water intrusion

Lens

- Tempered glass lens, factory sealed with high temperature adhesive to prevent water intrusion and breakage due to thermal shock

Mounting Stem

- Model 203 and 203-FL include fully adjustable side-mounted swivel stem, providing 340° tilt and 360° rotation for easy aiming
- Center rear swivel (203-CRS) or stationary rear flush mount (203-FM) models are also available
- All models include 1/2" NPS threaded male fitting
- Stainless steel aim-locking mechanisms are standard (not available on 203-FM)
- Lumière's exclusive Siphon Protection System (S.P.S.) prevents water from siphoning into the fixture through its own lead wires

Hardware

- Stainless steel hardware is standard to provide maximum corrosion-resistance

Socket

- Ceramic socket with 250° C Teflon® coated lead wires and GU5.3 bi-pin base.

Electrical

- Remote 12V transformer required (not included)
- Initial power draw on LED equipped fixtures is 12 watts
- When sizing transformer use 12 watts per LED fixture
- Nominal power draw after start up is 8 watts
- LEDs are more voltage sensitive than standard halogen MR16 lamps
- The LED module is designed to operate within the range 12V +/- 1.2V. Any less or more voltage can cause premature failures

Lamp

- Halogen lamp not included
- SORAA LED modules are included
- Available in three color temperatures (2700, 3000 and 4000) or Amber (585-595nm)
- Three distributions (spot, narrow, and flood)
- Both color temperature and distribution must be specified when ordering. Soraa lamp compatible (8W Max)

Compliance

- Tested to IESNA LM-79 and LM-80

Warranty

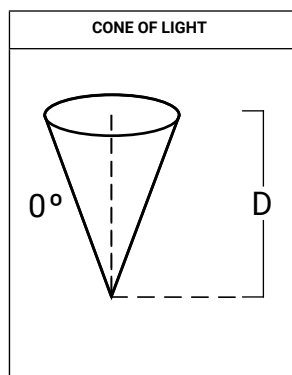
- Three year warranty standard.

*For natural bronze ROHS material consult factory.

Cambria 203 MR16 Halogen Photometric Data

[View IES files](#)

Horizontal Illuminance on Surface - Cambria 203 Standard Recessed Hood - 50W MR16



Filename	203-50MR16-12-BK-NSP.ies	
Lamp	50W MR16 NSP	
CBCP	11,000	
Distance	FC	Beam Diameter
2'	2550	1'6"
4'	638	1'0"
6'	283	1'6"
8'	159	2'0"
10'	102	3'0"
15'	45	4'0"

Filename	203-50MR16-12-BK-NFL.ies	
Lamp	50W MR16 NFL	
CBCP	3,200	
Distance	FC	Beam Diameter
2'	725	1'0"
4'	181	2'6"
6'	81	4'0"
8'	45	5'0"
10'	29	6'6"
15'	13	10'0"

CCT MULTIPLIER TABLE

LAMP WATTAGE	MULTIPLIER
20W	0.32
35W	0.57

Filename	203-50MR16-12-BK-FL.ies	
Lamp	50W MR16 FL	
CBCP	2,000	
Distance	FC	Beam Diameter
2'	431	1'6"
4'	106	3'0"
6'	48	5'0"
8'	27	6'6"
10'	17	8'0"
15'	7	12'0"

Filename	203-50MR16-12-BK-WFL.ies	
Lamp	50W MR16 WFL	
CBCP	1,200	
Distance	FC	Beam Diameter
2'	269	2'0"
4'	67	4'6"
6'	30	7'6"
8'	17	9'0"
10'	11	11'6"
15'	5	17'0"

NOTES AND FORMULAS

- Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot.
- Footcandle values are initial. Apply appropriate light loss factors where necessary.
- Bare lamp data shown. Consult lamp manufacturers to obtain detailed specifications for their lamps.

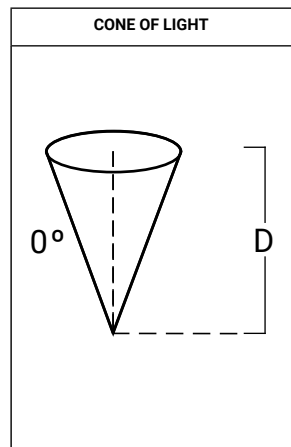
Cambria 203 LED Photometric Data

LED Lumen and CBCP Table - 3000K

 View IES files

		Flush Hood			Regressed Hood (Black)			Regressed Hood (Silver)		
		CBCP	LUMENS	LPW	CBCP	LUMENS	LPW	CBCP	LUMENS	LPW
10	BASE	7758	456	57	7188	387	48.4	6554	385	51.4
	+DIFF	1278	372	46.5	1256	286	35.7	1206	303	40.3
	+LSL	1700	402	50.3	1685	328	41	1557	328	43.7
	+LVR	6837	315	39.9	6276	305	38.2	6010	292	38.9
	+OSL	1700	402	50.3	1685	328	41	1557	328	43.7
25	BASE	3454	536	68.7	3285	480	60.8	3026	465	63.6
	+DIFF	977	435	55.7	936	344	43.5	924	361	46.3
	+LSL	1021	482	61.8	999	406	51.4	923	401	54.1
	+LVR	1864	492	63.1	1815	443	56.1	1705	438	57.6
	+OSL	1864	492	63.1	1815	443	56.1	1705	438	57.6
36	BASE	1469	525	68.2	683	339	43.5	1444	474	60.8
	+DIFF	696	432	56.1	616	392	50.3	645	345	44.8
	+LSL	624	476	61.9	1279	324	41.5	622	408	53.6
	+LVR	1322	344	44.7	1197	434	56.3	1242	323	42.5
	+OSL	624	476	61.9	1279	324	41.5	622	408	53.6

Horizontal Illuminance on Surface - Cambria 203 Standard Recessed Hood - 3000K



Filename: 203-SS-8LED3010-12-BK.ies			
Test No.: P349415			
Distance	FC	Beam Diameter	
2'	1797.1	0.4	
4'	449.3	0.8	
6'	199.7	1.2	
8'	112.3	1.6	
10'	71.9	2	
15'	31.9	3.2	
20'	18	4.2	
30'	8	6.4	
40'	4.5	8.4	

Filename: 203-SS-8LED3025-12-BK.ies			
Test No.: P349495			
Distance	FC	Beam Diameter	
2'	821.4	0.6	
4'	205.3	1.2	
6'	91.3	1.8	
8'	51.3	2.4	
10'	32.9	3	
15'	14.6	4.6	
20'	8.2	6	
30'	3.7	9.2	
40'	2.1	12.2	

Filename: 203-SS-8LED3036-12-BK.ies			
Test No.: P349480			
Distance	FC	Beam Diameter	
2'	361.1	1	
4'	90.3	2.2	
6'	40.1	3.4	
8'	22.6	4.6	
10'	14.4	5.8	
15'	6.4	8.6	
20'	3.6	11.6	
30'	1.6	17.4	
40'	0.9	23.2	

CCT MULTIPLIER TABLE

CCT (K) / COLOR	MULTIPLIER
2700K	1.04
3000K	1.00
4000K	0.78

Note: Multiplier can be used to calculate center beam candle power (CBCP), Lumens and footcandle (FC) values.

Horizontal Illuminance on Surface - Cambria 203 Flush Lens Hood - 3000K

Filename: 203-FL-8LED3010-12-BK.ies			
Test No.: P349420			
Distance	FC	Beam Diameter	
2'	1939.5	0.4	
4'	484.9	0.8	
6'	215.5	1.2	
8'	121.2	1.6	
10'	77.6	2	
15'	34.5	3	
20'	19.4	4.2	
30'	8.6	6.2	
40'	4.8	8.4	

Filename: 203-FL-8LED3025-12-BK.ies			
Test No.: P349500			
Distance	FC	Beam Diameter	
2'	863.4	0.6	
4'	215.9	1.2	
6'	95.9	1.8	
8'	54	2.4	
10'	34.5	3	
15'	15.3	4.6	
20'	8.6	6.2	
30'	3.8	9.2	
40'	2.2	12.4	

Filename: 203-FL-8LED3036-12-BK.ies			
Test No.: P349485			
Distance	FC	Beam Diameter	
2'	367.2	1	
4'	91.8	2.2	
6'	40.8	3.4	
8'	22.9	4.6	
10'	14.7	5.8	
15'	6.5	8.6	
20'	3.7	11.6	
30'	1.6	17.4	
40'	0.9	23.2	

TECHNICAL INFORMATION

1. Dimming is dependant on remote transformer compatibility with LED module. Please see compatibility for dimmer switch and transformer selection.
2. When using a magnetic dimmer switch there are two recommended LED compatible 120V magnetic dimming switches: Lutron Ariadni AVLV-600P and Lutron Diva DVLV-600P
3. IMPORTANT: When sizing transformer use 12 watts per LED fixture. Nominal power draw after start up is 8 watts. Any less or more voltage can cause premature failures.

RUBIX - model: WS-W2504, WS-W2505

LED Wall Mount

WAC LIGHTING
Responsible Lighting®



Fixture Type:

Catalog Number:

Project:

Location:

PRODUCT DESCRIPTION

Available in single- and twin-light configurations, this die cast aluminum LED wall luminaire is wet location listed for a broad range of exterior lighting applications. Designed with a square profile, this version of Rubix mounts upwards or downwards.

FEATURES

- Energy Star® rated
- CEC Title 24 Compliant
- Mounts up or down
- IP65 Rated, ETL & cETL Wet Location Listed
- Die-Cast Aluminum Construction
- Universal Voltage Input (120V - 277V)
- Dimming: ELV (120V) or 0-10V

SPECIFICATIONS

Construction: Aluminum with etched glass.

Power: Integral driver in luminaire. 120V - 277V input.

Light Source: High output LED

Mounting: Mounts directly to junction box

Dimming: 0-10V Dimming: 100%-10%

ELV Dimming: 100%-15% (120V only)

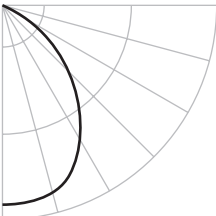
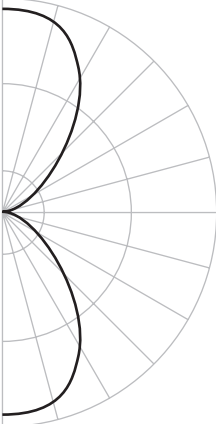
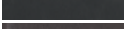
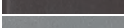
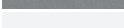
Finish: Brushed Aluminum (AL), Black (BK), Bronze (BZ), Graphite (GH), White (WT)

Color Temp: 3000K

CRI: 90

Rated Life: 70,000 hours

Standards: Energy Star® rated, IP65 Rated, ETL & cETL Wet Location Listed, CEC Title 24 Compliant, Dark Sky Friendly.

	Beam	Photometry	Voltage	Watt	Lumens	Finish
 Single Light  WS-W2504 Dark Sky Friendly 86° Energy Star®			120V - 277V	16W	750	
 Double Light  WS-W2505 86°			120V - 277V	30W	1400	
						AL Brushed Aluminum  BK Black  BZ Bronze  GH Graphite  WT White 

 -

Example: **WS-W2504-GH**

waclighting.com
Phone (800) 526.2588
Fax (800) 526.2585

Headquarters/Eastern Distribution Center
44 Harbor Park Drive
Port Washington, NY 11050

Central Distribution Center
1600 Distribution Ct
Lithia Springs, GA 30122

Western Distribution Center
1750 Archibald Avenue
Ontario, CA 91760



LED STEP LIGHTS SL-60 SERIES

GO GREEN

TYPE

SPECIFICATIONS

CONSTRUCTION: Die Cast Aluminum, Brass or Stainless Steel step light

LIGHT SOURCE: Integrated 12v 3w LED or 120v 4w LED with Driver On Board (No need for separate LED driver); 200 Lumens, warm white 3000K

LIFETIME RATING: 50,000 hours

SOCKET: None

GASKET: Black neosponge closed cell; .190" thickness

WIRING 12V: 6" black 18 gauge zip cord.

WIRING 120V: Standard Black (line), White (neutral), Green (ground)

SINGLE GANG BOX: Focus FA-SG-BOX fiberglass box included.

Fixture insert only without Back Box is available (SL60NB) if back box is supplied by others or is already installed;

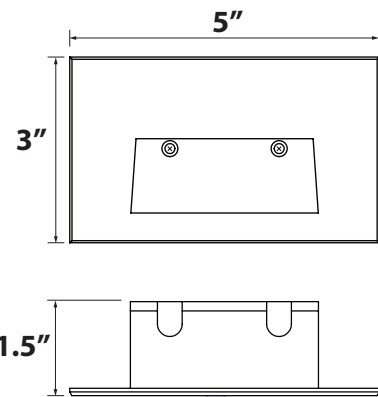
NOTE: If box is supplied by others it must have minimum inside dimensions of 3"(l) x 2"(w) x 2.5"(d) and plate mounting holes 3.22" to 3.30" apart on center.

MOUNTING: Stainless Steel bracket and hardware for mounting in single gang junction box; Face plate attaches to bracket with two provided screws

FINISH: Aluminum - Black texture polyester powder coat; optional finishes available
Brass - Unfinished; optional finishes available
Stainless Steel-Brushed



SL-60-LED12VBLT



SL60NB insert

ORDERING INFORMATION

CATALOG NO.	DESCRIPTION	LIGHT SOURCE	WEIGHT
SL60-LED12V-BLT	12v Aluminum LED Step Light	3w LED Module	2.0 lbs.
SL60-LED12V-BRS	12v Brass LED Step Light	3w LED Module	3.0 lbs.
SL60-LED12V-SS	12v Stainless LED Step Light	3w LED Module	2.0 lbs.
SL60-LED120-BLT	120v Aluminum LED Step Light	4w LED Module	2.0 lbs.
SL60-LED120-BRS	120v Brass LED Step Light	4w LED Module	3.0 lbs.
SL60-LED120-SS	120v Stainless LED Step Light	4w LED Module	2.0 lbs.

NO BACK BOX MODELS:

SL60NB-LED12V-BLT	12v Aluminum LED Step Light Insert	3w LED Module	2.0 lbs.
SL60NB-LED12V-BRS	12v Brass LED Step Light Insert	3w LED Module	3.0 lbs.
SL60NB-LED12V-SS	12v Stainless LED Step Light Insert	3w LED Module	2.0 lbs.

SL60NB-LED120-BLT	120v Aluminum LED Step Light Insert	4w LED Module	2.0 lbs.
SL60NB-LED120-BRS	120v Brass LED Step Light Insert	4w LED Module	3.0 lbs.
SL60NB-LED120-SS	120v Stainless LED Step Light Insert	4w LED Module	2.0 lbs.

FASG-BOX	Plastic Single Gang Box only	1.0 lbs.
----------	------------------------------	----------



FA-SG-BOX Single Gang Box



JOB INFORMATION

Type:	Date:
Job Name:	
Cat. No.:	
Lamp(s):	
Specifier:	
Contractor:	
Notes:	

FOCUS INDUSTRIES INC.
25301 COMMERCENTRE DRIVE
LAKE FOREST, CA 92630

www.focusindustries.com
sales@focusindustries.com
(949) 830-1350 • FAX (949) 830-3390

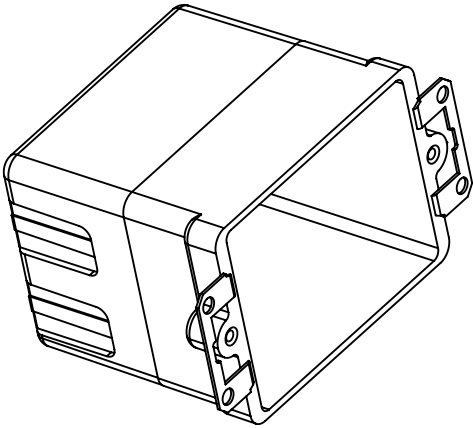
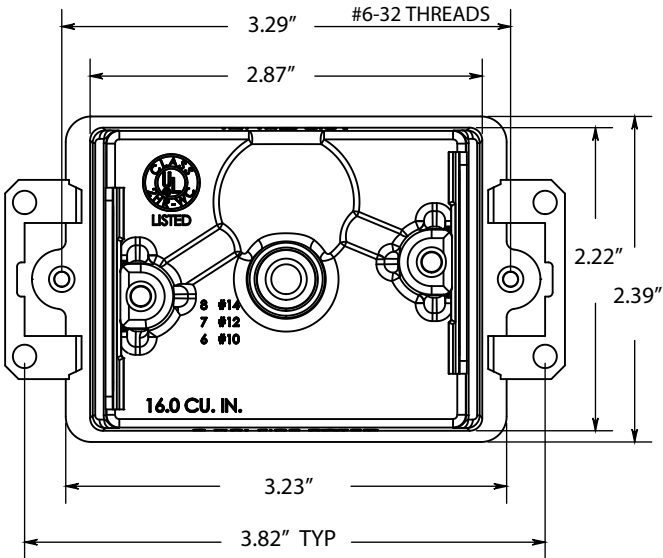
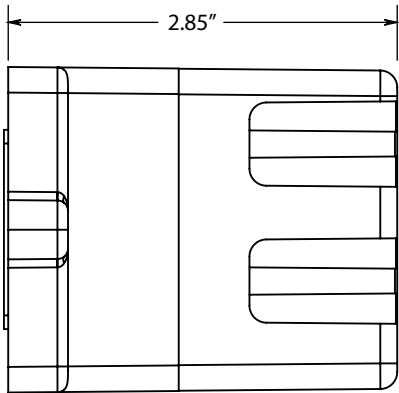
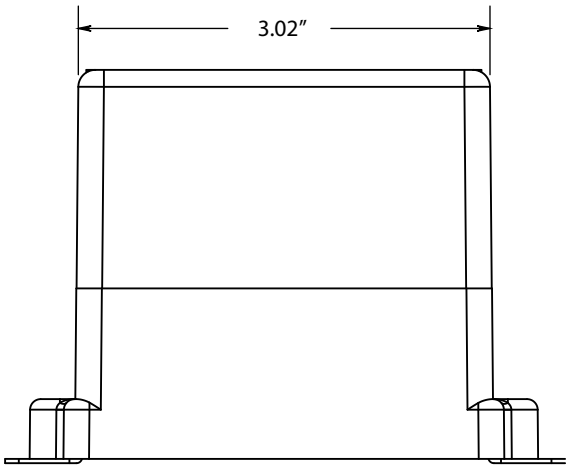
Black Texture (Standard)	Antique Verde	Bronze Texture	Camel	White Texture	Hunter Texture	Rust	Weathered Iron	Weathered Brown	Stucco	Rubbed Verde	Chrome Powder	Acid Rust	Acid Verde	Black Acid Treatment
-BLT	-ATV	-BRT	-CAM	-WTX	-HTX	-RST	-WIR	-WBR	-STU	-RBV	-CPR	-BAR/CAR	-BAV/CAV	-BAT



LED STEP LIGHTS SL-60 SERIES

TYPE

FA-SG-BOX
Single Gang Box



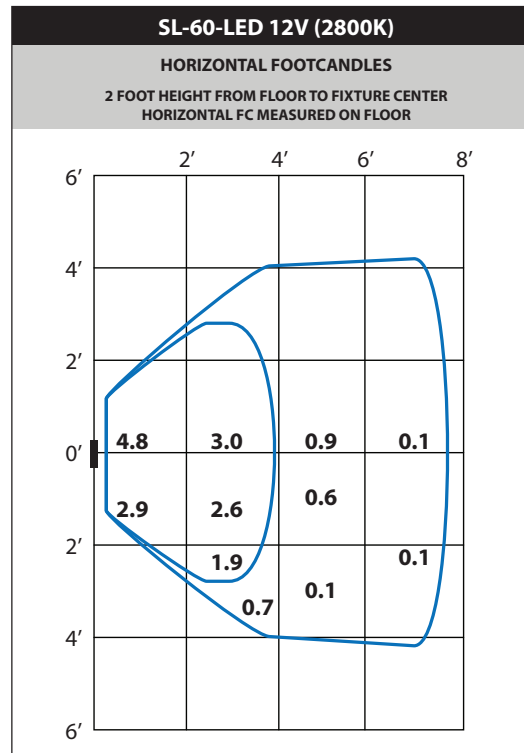
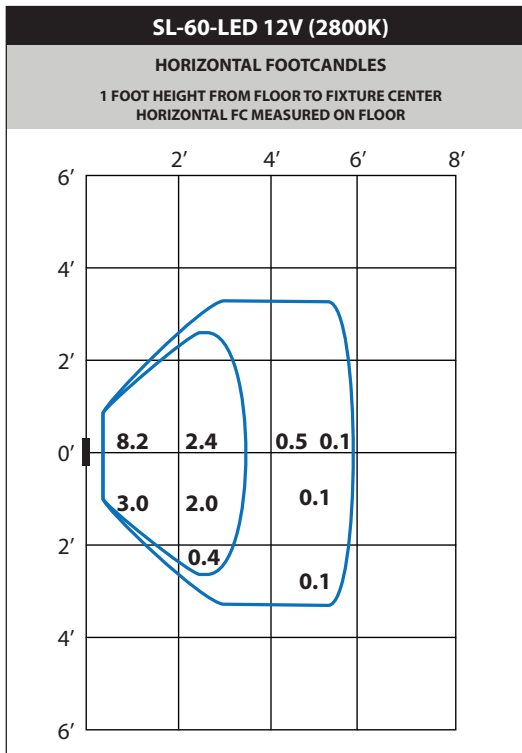
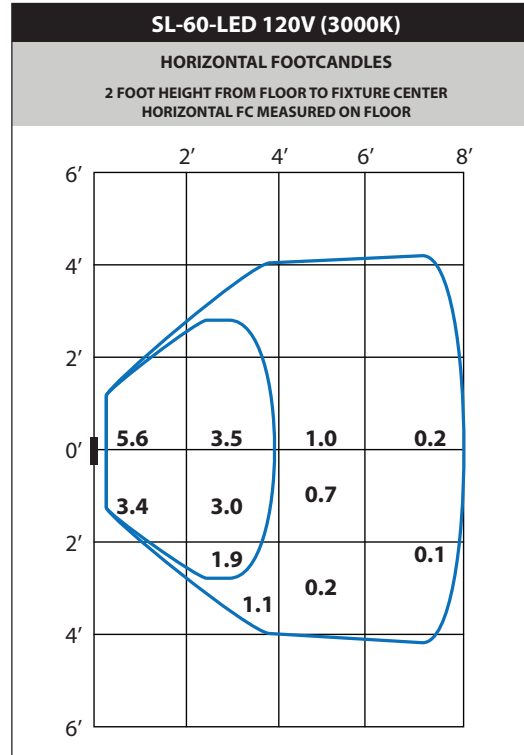
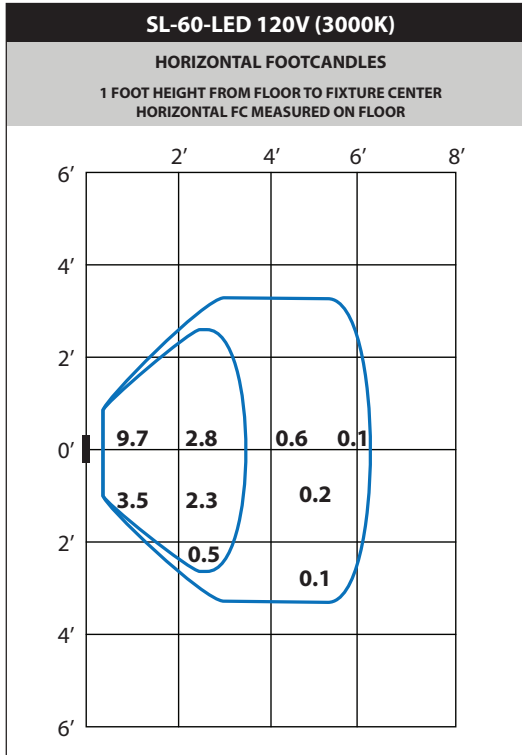
Black Texture (Standard)	Antique Verde	Bronze Texture	Camel	White Texture	Hunter Texture	Rust	Weathered Iron	Weathered Brown	Stucco	Rubbed Verde	Chrome Powder	Acid Rust	Acid Verde	Black Acid Treatment
-BLT	-ATV	-BRT	-CAM	-WTX	-HTX	-RST	-WIR	-WBR	-STU	-RBV	-CPR	-BAR/CAR	-BAV/CAV	-BAT



LED STEP LIGHTS SL-60 SERIES

TYPE

LIGHT DISTRIBUTIONS AND PHOTOMETRICS



Black Texture (Standard)	Antique Verde	Bronze Texture	Camel	White Texture	Hunter Texture	Rust	Weathered Iron	Weathered Brown	Stucco	Rubbed Verde	Chrome Powder	Acid Rust	Acid Verde	Black Acid Treatment
-BLT	-ATV	-BRT	-CAM	-WTX	-HTX	-RST	-WIR	-WBR	-STU	-RBV	-CPR	-BAR/CAR	-BAV/CAV	-BAT

JOB _____ TYPE _____

NOTES _____ APPROVALS _____

FEATURES

- Unique swivel mount provides superior aiming without loosening over time
- IP66 Certified to keep dust and moisture out
- Available in 3000K, 4000K and 5000K standard CCT
- Spot, Narrow Flood and Wide Flood distributions

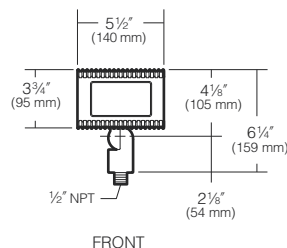
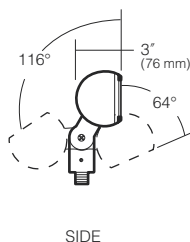
Certifications



SPECIFICATIONS



Approx. Weight = 3.16 lbs.



ORDERING CODE

EL218						
Fixture¹	Distribution	Drive Current	Electrical Module			Fixture Finish
	S Spot	3 350mA, 10W	Source	Color Temperature	Voltage	Aluminum
	F Narrow Flood	5 550mA, 16W	8L 8 LEDs	3K 3000K	UV 120 to 277V with a ±10% tolerance	BL Black
	W Wide Flood			4K 4200K		DB Dark Bronze
				5K 5100K		GR Verde Green

Fixture Options
<u>Barn Doors</u>
BD215BL Black
BD215DB Dark Bronze
BD215GR Verde Green
<u>Fixed Hood</u>
FH215BL Black
FH215DB Dark Bronze
FH215GR Verde Green

Mounting Options
Refer to 120 Volt Mounting Options Spec Sheet http://cdn.kimlighting.com/content/products/specs/specs_files/kl_120vmounting_spec.pdf for individual mounting options.

¹ U.S. PATENT D298,656

Kim Lighting reserves the right to change specifications without notice.

LUMINAIRE PERFORMANCE

Spectroradiometric			
	3000K	4200K	5100K
Correlated Color Temp. CCT (K)	2800 to 3175K	3800 to 4600K	4600 to 5600K
Color Rendering Index (CRI)	≥72	≥72	≥72
Power Factor	>.90 @ 120V	>.90 @ 120V	>.90 @ 120V

Electrical Drive Current					
350mA			550mA		
Volts -AC	Amps - AC	System Watts	Volts -AC	Amps - AC	System Watts
120	0.08	10	120	0.13	16
208	0.05	10	208	0.08	16
240	0.04	10	240	0.07	16
277	0.04	10	277	0.06	16

Absolute Lumens				
Temp.	mA	Spot	Narrow Flood	Wide Flood
3000K	350	1078	938	889
4200K		1143	992	925
5100K		1152	1008	953
3000K	550	1608	1411	1331
4200K		1691	1487	1386
5100K		1703	1511	1422

Main Beam Candela and Beam Angle							
Temp.	mA	Spot (3 x 3)	Beam°	Narrow Flood (4 x 4)	Beam°	Wide Flood (6 x 6)	Beam°
3000K	350	7865	19°	2722	32°	665	53°
4200K		8742	18°	2962	31°	694	52°
5100K		8578	18°	2656	30°	709	53°
3000K	550	11962	19°	4024	32°	1009	53°
4200K		13129	18°	4408	31°	1050	52°
5100K		12974	18°	4655	32°	1066	52°

LED performance and lumen output continues to improve at a rapid pace. Log onto www.kimlighting.com to download the most current photometric files from Kim Lighting's IES File Library. For custom optics and color temperature configurations, contact factory.

Projected Lumen Maintenance		
TM21-11*	100,000 hrs	Calculated (L70)
.96	.95	927,000 hrs

* 60,000 hrs, 350mA, Ts 57°C / 25°C ambient.

Kim Lighting reserves the right to change specifications without notice.

SPECIFICATIONS

Housing and Lens Frame:

- Die-cast low copper alloy (<0.6% Cu) aluminum.

Swivel:

- Die-cast aluminum with locking teeth and 1/2" solid brass NPT mount. Provides horizontal rotation independent of the threaded mount. Swivel locked by 1/4-20 stainless set screw. Clear anodized prior to powder coating for added corrosion resistance.

Gasketing:

- Silicone gaskets throughout.

Fasteners:

- Stainless steel.

Wiring:

- No. 18AWM rated 105°C.

Optical System:

- High performance acrylic optic securely attached to internal heat sink for maximum thermal dissipation.

Driver:

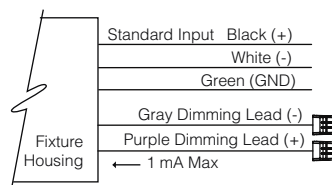
- Universal Voltage from 120 to 277V with a $\pm 10\%$ tolerance. Driver has a 0-10V dimming interface for multi-level illumination options. Driver is Underwriters Laboratories recognized.

Finish:

- Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidyl isocyanurate (TGIC) polyester powdercoat finish. Standard colors include (BL) Black, (DB) Dark Bronze, (GR) Verde Green.

Dimming:

- Dimming range from 10% to 100% through the use of the standard 0-10V interface on the programmable driver.
- Modular wiring harness in the service area provides user access to the dimming circuitry.
- Dimming circuitry compatible with 0-10V, user-defined, control devices.
- Optional factory programmed dimming profile.
- IP710 dimmer recommended.



Certifications and Listings:

- UL 1598 Standard for Luminaires.
- UL 8750 Standard for Safety for Light Emitting Diode (LED) Equipment for use in Lighting Products.
- IP66 certified.
- CSA C22.2#250.0 Luminaires.
- RoHS compliant.

CAUTION:

- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

WARRANTY:

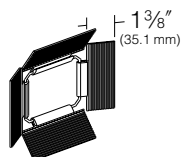
- For full warranty see <http://www.hubbellighting.com/resources/warranty>

OPTIONS

Barn Doors

BD215

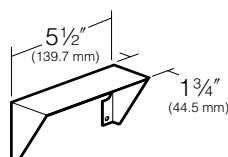
Extruded aluminum, fully adjustable. Provides beam and glare control. Available in Black, Dark Bronze or Verde Green finish.



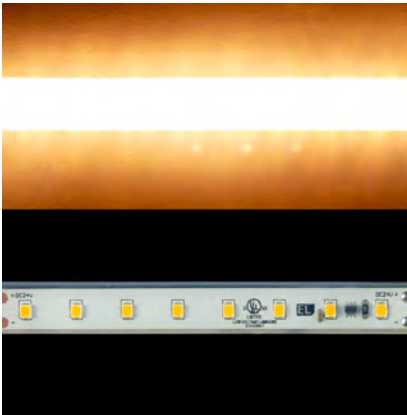
Fixed Hood

FH215

Formed .062" thick aluminum. Provides glare control. Available in Black, Dark Bronze or Verde Green finish.



Kim Lighting reserves the right to change specifications without notice.



Waterproof High Efficacy 2835 LED Strip Light - 3,000K - 80/m - CurrentControl - 10m Reel

Product No.: wp-3000K-CC2835HE-80-10-10m

SHIPS IN: 1 day, typically

View the Product Description Page for required parts, accessories, photos and videos.



Product Features

Sold by the 10 meter reel, foot and sample kit.

Efficacy in the lighting industry refers to the amount of light produced by a light source within a certain wattage. It is an important factor when budgeting for lighting costs. Waterproof High Efficacy 2835 LED Strip Light from Environmental Lights achieves one of the best lumen to watt ratios for any LED strip light. This means that you can be sure you are getting the most light for your money. Our Waterproof High Efficacy 2835 LED Strip Light produces 138.71 lumens per watt, making it a great value. It includes 80 LED chips per meter and features a 10 mm wide circuit board. Each reel of Waterproof High Efficacy 2835 LED Strip Light is 10 meters long and is powered by 24 VDC. The inclusion of current control chips on the strip means that you can achieve longer run lengths without any visible effects of voltage drop. This strip light is perfectly suited for situations where it is important to get a high lumen to watt ratio from your lighting, making it a great choice for large scale retail and gaming installations.

Features List:

- 138.71 lumens per watt
- Luminous flux of 1290 lm/m
- 80 LEDs per meter
- 3,000K
- CurrentControl
- UL Listed

Specifications

Ambient Temperature	-20°C to 50°C
Average Lifetime	50,000 hours
Beam Angle	120°
Brightness	1290 lumens/meter
Efficacy	138.7 lumens/watt
Brightness 2	4100 mW/meter
Efficacy 2	440.9 mWatt/watt
CCT	3,000K
CRI	80+
Circuit Type	CurrentControl
Height (English)	0.22 in
Height (Metric)	5.5 mm
IP Rating	IP65
Input Current	3875 mA
Input Voltage	24 DC
LED Density	80 LEDs/meter
LED Node Size	2835
LED Spacing (English)	0.49 in
LED Spacing (Metric)	12.5 mm
Length (English)	32.8 ft
Length (Metric)	10 m
Manufacturer	EnvironmentalLights
Min. Cutting Increment (English)	3.94 in
Min. Cutting Increment (Metric)	100 mm
Power (Watts)	93
Power (Watts/ft)	2.80
Power (Watts/m)	9.30
Rating	UL Listed, RoHS
Strip Width	10 mm
Warranty	3 years limited
Width (English)	0.55 in
Width (Metric)	14 mm

SIERRA 4000 G LED

Specification

Pure in form yet bold in statement, Sierra provides a striking appearance, day or night. The translucent matte acrylic lens diffuses light uniformly along its length through direct and indirect reflector elements. Extruded aluminum body features a horizontal cut at the transition to the lens. Illuminated column in ceramic metal halide lamp is top mounted in the cap for easy relamping and increased efficiency. RGBW model is for visual accenting only. Electrical assembly is housed in a weatherproof enclosure, accessible through the handhole. A complementary low-level bollard is also available.



Model	Lamp	Color Temperature	Volt	Pole	Finish	Option
SE4000G	LED	WW - 3000K	UNV - 120-277V	13RB - 13' Column	SG - Silver Grey	DIM - 0-10vDC Dimming
		NW - 4000K		16RB - 16' Column	DG - Dark Grey	EFBC - External flange with base cover and anchor bolts
		R - Red			GG - Graphite Grey	N - None
		G - Green			BLK - Matte Black	
		B - Blue			BRZ - Dark Bronze	
		RB - Royal Blue			CC - Custom RAL Color	
		A - Amber				

Ordering Information

SE4000G	LED	WW	UNV	13RB	DG	DIM
---------	-----	----	-----	------	----	-----

Specifications are subject to change without notification

HessAmerica > Products > Lighting Products > Illuminating Columns > SIERRA 4000 G

https://www.hessamerica.com/Products/Lighting/Illuminating_Columns/SIERRA_4000_G/

SIERRA 4000 G LED

Specification

DESCRIPTION

Contemporary LED light column for pathway or area illumination.

HOUSING

Cylindrical base with horizontal cut at top of shaft is constructed from 0.197" nominal wall, 6082 aluminum tubing. Hand hole cover is plasma cut with kerf not to exceed 1/8" and includes triangular tamper-resistant locking device. Cylindrical lens is impact-resistant matte acrylic. Lens assembly is secured with stainless steel socket head cap screws from inside the base. Fabricated aluminum top cap is gasketed to create a weather-tight seal to the lens. Top cap is secured to the lens with two socket head cap screws. Nominal column height is 13' or 16'.

OPTICS

LED column designed for pathway or area illumination. Cylindrical lens is impact-resistant, non-yellowing, matte acrylic. Lens shall have excellent diffusion properties to produce homogeneous, uniform horizontal and vertical distribution. The textured lens surface is fingerprint and scratch resistant for enhanced service life.

Single high-power white LED engine is mounted at the base of the matte acrylic cylindrical lens. The LED, combined with a high-efficiency reflector, projects light upward onto specular reflector located in the top cap to provide even illumination of the lens.

Single color LED models consist of an array of nine 3 watt high brightness LEDs arranged in a circular pattern mounted at the base of the matte acrylic cylindrical lens. LEDs fitted with narrow beam lenses project light upward onto the specular reflector located in the top cap to provide even illumination of the cylindrical lens.

ELECTRICAL

Universal LED driver is mounted in a weather-proof enclosure at the base of the column. Input voltage to universal driver is 120v through 277v AC, 50/60 Hz.

BUG RATING

B1-U4-G2 for all white LED models

DELIVERED LUMEN OUTPUT (WHITE) / POWER CONSUMPTION

3000K: 3738 lumens / 37 watts

4000K: 3831 lumens / 37 watts

LED LUMEN OUTPUT (Not Delivered) / POWER CONSUMPTION

Blue: 330 lumens / 41 watts

Royal Blue: 3820 mW / 41 watts

Green: 737 lumens / 41 watts

Red: 337 lumens / 30 watts

Amber: 220 lumens / 30 watts

MOUNTING

Standard mounting is internal flange with anchor bolts consisting of four hot-dip galvanized anchor bolts (Ø5/8" x 18" x 3") with two leveling nuts and washers per bolt. Optional mounting for external flange with anchor bolts and base cover. Base cover is fabricated from 0.080" spun aluminum and finished to match luminaire. Four hot-dip galvanized anchor bolts (Ø1/2" x 15" x 3") with two leveling nuts and washers per bolt. Anchor bolts may be pre-shipped in advance upon request.

WEIGHT: 13' column = 80lbs / 16' column =

EPA: 13' column = 7.75 sq. ft / 16' column = 9.6 sq.ft.

Specifications are subject to change without notification

HessAmerica > Products > Lighting Products > Illuminating Columns > SIERRA 4000 G

https://www.hessamerica.com/Products/Lighting/Illuminating_Columns/SIERRA_4000_G/

FINISH

Standard finishes are finely textured matte silver grey metallic, dark grey, graphite grey, matte black, or dark bronze. Special colors available on request.

CERTIFICATION

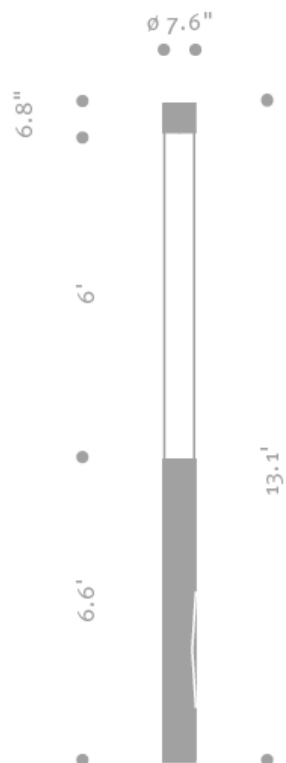
CSA/US Certified for Wet Locations

WARRANTY

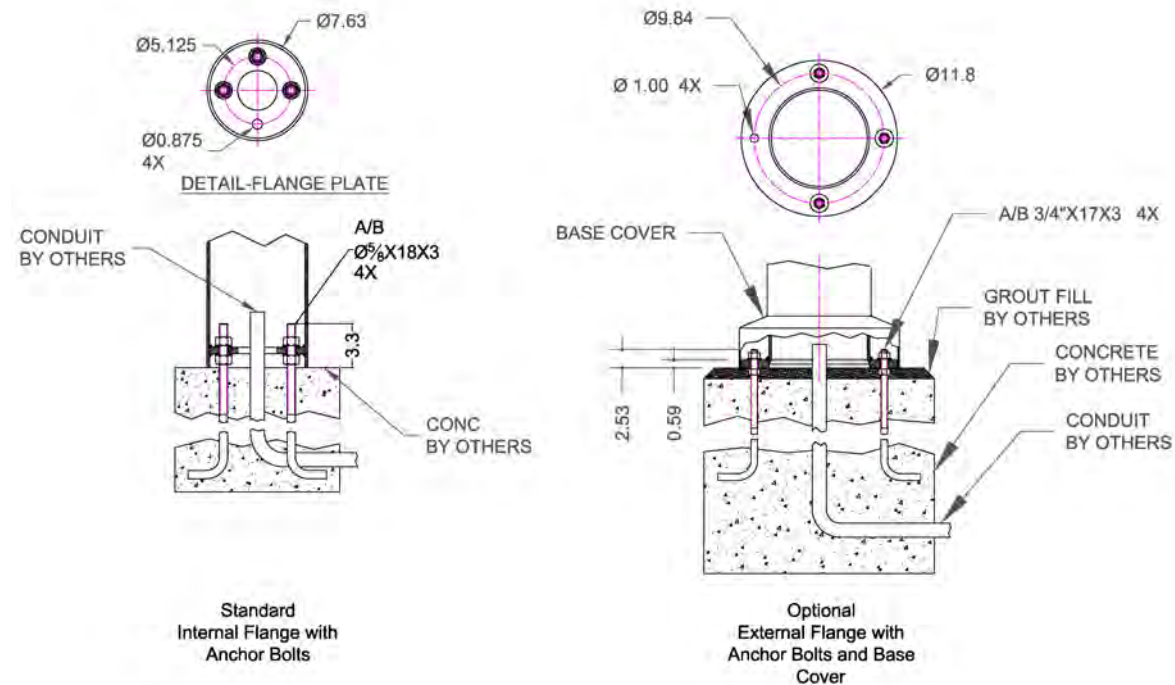
Limited product warranty period including LEDs is five years. Driver shall carry the manufacturer's limited warranty.

Additional information

Dimensions



Mounting detail



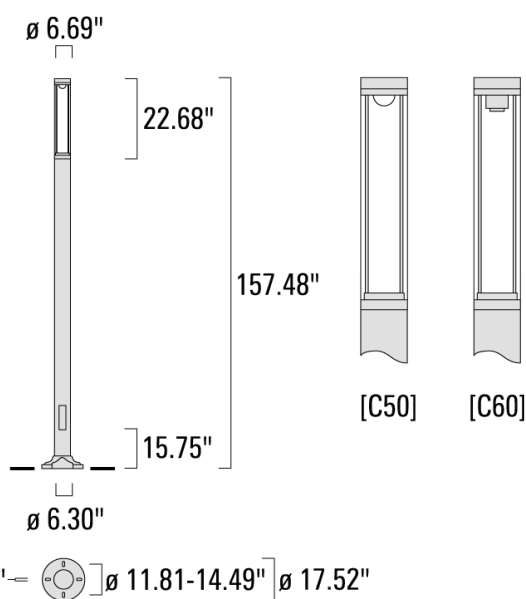
Specifications are subject to change without notification

LTM440 LED-FT

Light Columns

1/5

we-ef



Description

IP66. Light column with shielded light source. Suitable for installation in landscaped areas.

LTM440 LED-FT

Light Columns

2/5

we-ef

Specifications

Material Specification

Body:	Luminaire head, base plate and base plate cover constructed in die cast aluminum
Lens:	Clear polycarbonate lens.
Colours:	RAL9004 Black RAL9007 Grey Metallic RAL9016 White RAL8019 Dark Bronze
 ETL	ETL, UL-1598 equivalent, CSA-C22.2#250.0. Suitable for Wet Locations.
Gasket:	Silicone rubber gasket
Fasteners:	PCS Polymer Coated Stainless Steel hardware
Ingress protection:	IP66
Impact protection:	IK10
Corrosion protection:	5CE
Mounting:	Light column suitable for installation in landscaped areas on concrete foundations, or in landscaped areas using optional planted root, 697-9307
Listings:	ETL listed. Suitable for wet locations.

Electrical Specification

Power supply:	Integral [ECG] LED driver in 120-277V
Driver / Ballast:	Integral EC electronic converter

Lifetime

Ta=25°/40° L70B50 > 90000h

LTM440 LED-FT

Light Columns

3/5



Choices

Light Distributions	Nominal Lumen	Nominal Watt	Colour Temperatures	Colours
 [C50] Type V Short	2890	17	 2700 K	 RAL9004 Black
	2935	24		
 symmetric distribution [C60]	3010	37	 3000 K	 RAL9007 Grey Metallic
	3930			
	4050		 4000 K	 RAL9016 White
	4100			
	6145			
	6330			 RAL8019 Dark Bronze
	6695			

LTM440 LED-FT

Light Columns

4/5



Configurations

Light Distributions	Part ID	Light Source	Delivered Lumens	Rated Input Power	CRI	Weight	Link
 [C50] Type V Short	115-1778	LED-FT-17W (2700K)	2397.8	20	80	55.10	 
	115-1521	LED-FT-17W (3000K)	2508.1	20	80	55.10	 
	115-1522	LED-FT-17W (4000K)	2614.3	20	80	55.10	 
	115-1779	LED-FT-24W (2700K)	3308.7	27	80	55.10	 
	115-1523	LED-FT-24W (3000K)	3447.6	27	80	55.10	 
	115-1524	LED-FT-24W (4000K)	3594.6	27	80	55.10	 
	115-1837	LED-FT-37W (2700K)	5020.2	42	80	55.10	 
	115-1565	LED-FT-37W (3000K)	5171.3	42	80	55.10	 
	115-1566	LED-FT-37W (4000K)	5469.5	42	80	55.10	 
 symmetric distribution [C60]	115-1517	LED-FT-17W (3000K)			80	55.10	 
	115-1518	LED-FT-17W (4000K)	2030.7	20	80	55.10	 
	115-1519	LED-FT-24W (3000K)			80	55.10	 
	115-1520	LED-FT-24W (4000K)			80	55.10	 

Related Families / LTM400

Family		Dimensions	Wattage	Nominal Lumen	Links	
					Links	Download Data Sheet
LTM440 LED-FT		157.48	17 -37 W	2890 -6695	 	 
LTM444 LED		157.48	18 -27 W	2097 -4050	 	 

LTM440 LED-FT

Light Columns

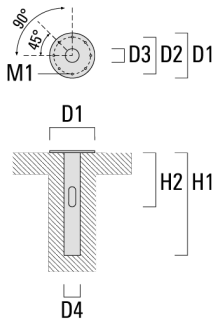
5/5



Mounting Accessories

Planted root

	D1	D2	D3	D4	H1	H2	M1	Weight (lbs)
■ 300-0949 Planted root ESV10	415	340	126	133	1000	500	18	55.78 lbs



DESCRIPTION

Cambria 213 is a small, low voltage dimmable LED and halogen MR16 luminaire. It features a unique hanging design that allows placement where standard mounting methods are not possible. Various lenses, louvers and color or dichroic filters can be combined - up to three at once - to create multiple lighting effects. The Lumière exclusive Siphon Protection System (S.P.S.) prevents water from siphoning into the fixture through its own lead wires.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

A ... Material

Housing and hood are precision-machined from corrosion-resistant billet stock 6061-T6 aluminum, C360 brass, C932 bronze, C110 copper or 303/304 stainless steel. Mounting ring is die-cast zinc with brass mounting collar, both finished to match housing and hood.

B ... Finish Painted

Fixtures constructed from 6061-T6 aluminum are double protected by an ROHS compliant undercoating and polyester powdercoat paint finish, surpassing the rigorous demands of the outdoor environment. A variety of standard colors are available.

C ... Brass, Bronze, Copper or Stainless Steel

Fixtures constructed from brass, bronze, copper or stainless steel are left unpainted to reveal the natural beauty of the material. Brass, bronze and copper will patina naturally over time.

D ... Hood

Hood is removable for easy relamping and accepts up to three internal accessories at once (lenses, louvers, filters) to achieve multiple lighting effects.

E ... Gasket

Housing and hood are sealed with a high temperature silicone o-ring gasket to prevent water intrusion.

F ... Lens

Tempered glass lens, factory sealed with high temperature adhesive to prevent water intrusion and breakage due to thermal shock.

G ... Socket

Ceramic socket with 250° C Teflon® coated lead wires and GU5.3 bi-pin base.

H ... Electrical

Remote 12V transformer required (not included). NOTE: initial power draw on LED equipped fixtures is 15 watts. When sizing transformer use 15 watts per LED fixture. Nominal power draw after start up is 6 watts or 10 watts accordingly. Also, LEDs are more voltage sensitive than standard halogen MR16 lamps. The LED module is designed to operate between 10 and 13 volts. Any less or more voltage can cause premature failures.

I ... Lamp

Halogen lamp not included. Available from Lumière as an accessory - see reverse side for details and catalog logic. LED modules are included and are available in four color temperatures (2700, 3000, 4000 and 5700) and three distributions (spot, narrow, and flood). Both color temperature and distribution must be specified when ordering - see reverse side for details and catalog logic.

J ... Labels & Approvals

UL and cUL listed, standard wet label. IP65 rated. Manufactured to ISO 9001-2000 Quality Systems Standard. IBEW union made. Approved by New York City Dept. of Buildings, Bureau of Electrical Control for use in NYC, NY.

K ... Warranty

Lumière warrants its fixtures against defects in materials & workmanship for three (3) years. Auxiliary equipment such as transformers, ballasts and lamps carry the original manufacturer's warranty.

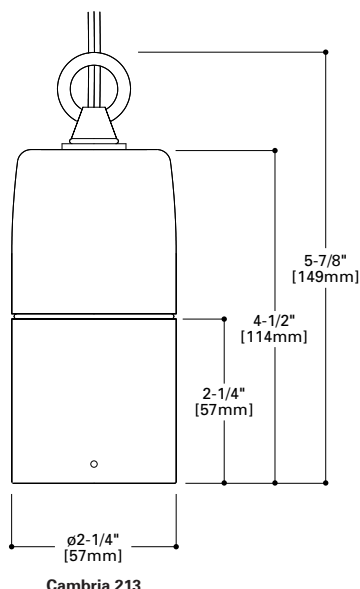


**CAMBRIA
213**

**10W LED
6W LED
50W (max.) MR16**
Halogen
Low Voltage

Accent/Flood

IP65



ORDERING INFORMATION

Sample Number: 213-6LED2712-12-BK				
Series 213=LED or MR16 Cambria Hanging Downlight		Voltage 12=12V		Accessories Glare Shield FH203=Angled Glare Shield, MR16 Glare Shield Finish BK: Black CS: City Silver WT: White NCP: Copper Filters F71: Peach Dichroic Filter, 2.00" Dia F73: Green Dichroic Filter, 2.00" Dia F75: Yellow Dichroic Filter, 2.00" Dia F77: Dark Blue Dichroic Filter, 2.00" Dia F79: Neutral Density Dichroic Filter, 2.00" Dia F22: Red Color Filter, 2.00" Dia F44: Green Color Filter, 2.00" Dia F66: Mercury Vapor Color Filter, 2.00" Dia Optical Lenses LSL: Linear Spread Lens (elongate standard beam spread), 2.00" Dia DIF: Diffused Lens (provide even illumination), 2.00" Dia Optical Louver LVR=Hex Cell Louver (reduce glare), 2.00" Dia Lamps MR8-12-20N=20W MR8 GZ4 Bi-Pin Narrow Beam FTB=20W MR11 GU4 Bi-Pin Narrow Spot FTC=20W MR11 GU4 Bi-Pin Spot FST=20W MR11 DC Bayonet Base Spot FTE=35W MR11 GU4 Bi-Pin Narrow Spot FTH=35W MR11 GU4 Bi-Pin Narrow Flood BAW=35W MR11 DC Bayonet Base Narrow Flood ESX=20W MR16 GU5.3 Bi-Pin Narrow Spot FRB=35W MR16 GU5.3 Bi-Pin Narrow Spot FMW=35W MR16 GU5.3 Bi-Pin Flood EXZ=50W MR16 GU5.3 Bi-Pin Narrow Flood FNV=50W MR16 GU5.3 Bi-Pin Very Wide Flood EYJ=75W MR16 GU5.3 Bi-Pin Narrow Flood TAL20-FL=20W MR16 Turn and Lock Flood TAL50-FL=50W MR16 Turn and Lock Flood HP3650-NSP=50W PAR36 Halogen Narrow Spot, 12V HP3650-FL=50W PAR36 Halogen Flood, 12V HP56240-MFL=240W PAR56 Halogen Medium Flood, 12V, Mogul Eng Prong Base HGT435=35W T4 GY6.35 Base Halogen, 12V HP2035-NSP=35W PAR20 Halogen Narrow Spot, Medium Base HP2050-NSP=50W PAR20 Halogen Narrow Spot, Medium Base HP2050-NFL=50W PAR20 Halogen Narrow Flood, Medium Base HP3050-SP=50W PAR30 Halogen Spot, Medium Base HP3075-NSP=75W PAR30 Halogen Narrow Spot, Medium Base HP3075-NFL=75W PAR30 Halogen Narrow Flood, Medium Base HP38150-SP= 150W PAR38 Halogen Spot, Medium Base HP38250-SP= 250W PAR38 Halogen Spot, Medium Base HP56300-MFL= 300W PAR56 Halogen Medium Flood, Mogul Eng Prong Base MHT639= 39W T6 Metal Halide MHT6150= 150W T6 Metal Halide MHP2039-FL= 39W PAR20 Metal Halide Flood MHP3039-FL= 39W PAR30 Metal Halide Flood MHP3070-FL= 70W PAR30 Metal Halide Flood MHP3870-FL= 70W PAR38 Metal Halide Flood MHP38100-SP= 100W PAR38 Metal Halide Spot MHP38100-WFL= 100W PAR38 Metal Halide Wide Flood CFL9= 9W Compact Fluorescent Lamp CFL26= 26W Compact Fluorescent Lamp CFL42= 42W Compact Fluorescent Lamp
Source 50MR16= 50W Max Halogen MR16, GU5.3 Base 6LED2712= 6W 2700K, 12 Degree Spot, GU5.3 Base 6LED2721= 6W 2700K, 21 Degree Narrow, GU5.3 Base 6LED2741= 6W 2700K, 41 Degree Wide, GU5.3 Base 6LED3012= 6W 3000K, 12 Degree Spot, GU5.3 Base 6LED3021= 6W 3000K, 21 Degree Narrow, GU5.3 Base 6LED3041= 6W 3000K, 41 Degree Wide, GU5.3 Base 6LED4012= 6W 4000K, 12 Degree Spot, GU5.3 Base 6LED4021= 6W 4000K, 21 Degree Narrow, GU5.3 Base 6LED4041= 6W 4000K, 41 Degree Wide, GU5.3 Base 6LED5712= 6W 5700K, 12 Degree Spot, GU6.3 Base 6LED5721= 6W 5700K, 21 Degree Narrow, GU5.3 Base 6LED5741= 6W 5700K, 41 Degree Wide, GU5.3 Base 10LED2712= 10W 2700K, 12 Degree Spot, GU5.3 Base 10LED2721= 10W 2700K, 21 Degree Narrow, GU5.3 Base 10LED2741=10W 2700K, 41 Degree Wide, GU5.3 Base 10LED3012=10W 3000K, 12 Degree Spot, GU5.3 Base 10LED3021=10W 3000K, 21 Degree Narrow, GU5.3 Base 10LED3041=10W 3000K, 41 Degree Wide, GU5.3 Base 10LED4012=10W 4000K, 12 Degree Spot, GU5.3 Base 10LED4021=10W 4000K, 21 Degree Narrow, GU5.3 Base 10LED4041=10W 4000K, 41 Degree Wide, GU5.3 Base 10LED5712=10W 5700K 12 Degree Spot, GU5.3 Base 10LED5721=10W 5700K, 21 Degree Narrow, GU5.3 Base 10LED5741=10W 5700K, 41 Degree Wide, GU5.3 Base		Finish Painted BK: Black BZ: Bronze CS: City Silver VE: Verde WT: White Metal NBR: Brass NBZ: Bronze NCP: Copper NSS: Stainless Steel		BZ: Bronze VE: Verde NBR: Brass F72: Amber Dichroic Filter, 2.00" Dia F74: Medium Blue Dichroic Filter, 2.00" Dia F76: Red Dichroic Filter, 2.00" Dia F78: Light Blue Dichroic Filter, 2.00" Dia F80: Magenta Dichroic Filter, 2.00" Dia F33: Blue Color Filter, 2.00" Dia F55: Yellow Color Filter, 2.00" Dia OSL: Overall Spread Lens (increase beam spread), 2.00" Dia MR8-12-20W =20W MR8 GZ4 Bi-Pin Wide Beam FTD =20W MR11 GU4 Bi-Pin Narrow Flood FSS =20W MR11 DC Bayonet Base Narrow Spot FSV =20W MR11 DC Bayonet Base Narrow Flood FTF =35W MR11 GU4 Bi-Pin Spot GDx =35W MR11 DC Bayonet Base Narrow Spot EZX =20W MR16 GU5.3 Bi-Pin Very Narrow Spot BAB =20W MR16 GU5.3 Bi-Pin Flood FRA =35W MR16 GU5.3 Bi-Pin Spot EXT =50W MR16 GU5.3 Bi-Pin Narrow Spot EXN =50W MR16 GU5.3 Bi-Pin Flood EYF =75W MR16 GU5.3 Bi-Pin Narrow Spot EYC =75W MR16 GU5.3 Bi-Pin Flood TAL20-SP =20W MR16 Turn and Lock Spot TAL50-SP =50W MR16 Turn and Lock Spot HP3650-SP =50W PAR36 Halogen Spot, 12V HP3650-WFL =50W PAR36 Halogen Wide Flood, 12V HGT420 =20W T4 GY6.35 Base Halogen, 12V HGT450 =50W T4 GY6.35 Base Halogen, 12V HP2035-NFL =35W PAR20 Halogen Narrow Flood, Medium Base HP2050-SP =50W PAR20 Halogen Spot, Medium Base HP3050-NSP =50W PAR30 Halogen Narrow Spot, Medium Base HP3050-NFL =50W PAR30 Halogen Narrow Flood, Medium Base HP3075-SP =75W PAR30 Halogen Spot, Medium Base HP3075-FL =75W PAR30 Halogen Flood, Medium Base HP38150-FL = 150W PAR38 Halogen Flood, Medium Base HP38250-FL = 250W PAR38 Halogen Flood, Medium Base MHT439 = 39W T4 Metal Halide MHT670 = 70W T6 Metal Halide MHP2039-SP = 39W PAR20 Metal Halide Spot MHP3039-SP = 39W PAR30 Metal Halide Spot MHP3070-SP = 70W PAR30 Metal Halide Spot MHP3870-SP = 70W PAR38 Metal Halide Spot MHP3870-WFL = 70W PAR38 Metal Halide Wide Flood MHP38100-FL = 100W PAR38 Metal Halide Flood CFL5 = 5W Compact Fluorescent Lamp CFL13 = 13W Compact Fluorescent Lamp CFL32 = 32W Compact Fluorescent Lamp

PHOTOMETRIC DATA

Cambria 213		
Lamp=50MR16/NSP		
(EXT)		
CBCP=11,000		
Cone of Light		
Distance to Illuminated Plane	Initial Nadir Footcandles	Beam Diameter
2'0"	2550	0'6"
4'0"	638	1'0"
6'0"	283	1'6"
8'0"	159	2'0"
10'0"	102	3'0"
15'0"	45	4'0"
Lamp Wattage Multiplier		
20W x 0.32		

Cambria 213		
Lamp=50MR16/FL		
(EXN)		
CBCP=2000		
Cone of Light		
Distance to Illuminated Plane	Initial Nadir Footcandles	Beam Diameter
2'0"	431	1'6"
4'0"	106	3'0"
6'0"	48	5'0"
8'0"	27	6'6"
10'0"	17	8'0"
15'0"	7	12'0"
Lamp Wattage Multiplier		
20W x 0.30		
35W x 0.57		

LAMP INFORMATION

Lamp	Watts	Beam Spread	CBCP	°K	Life (hrs.)	Base	Volts
6LED2712	6	12°	3358	2700	50000	GU5.3 bi-pin	12
6LED2721	6	21°	937	2700	50000	GU5.3 bi-pin	12
6LED2741	6	41°	472	2700	50000	GU5.3 bi-pin	12
6LED3012	6	12°	3694	3000	50000	GU5.3 bi-pin	12
6LED3021	6	21°	1019	3000	50000	GU5.3 bi-pin	12
6LED3041	6	41°	646	3000	50000	GU5.3 bi-pin	12
6LED4012	6	12°	4280	4000	50000	GU5.3 bi-pin	12
6LED4021	6	21°	1179	4000	50000	GU5.3 bi-pin	12
6LED4041	6	41°	754	4000	50000	GU5.3 bi-pin	12
6LED5712	6	12°	4496	5700	50000	GU5.3 bi-pin	12
6LED5721	6	21°	1275	5700	50000	GU5.3 bi-pin	12
6LED5741	6	41°	792	5700	50000	GU5.3 bi-pin	12
10LED2712	10	12°	5037	2700	50000	GU5.3 bi-pin	12
10LED2721	10	21°	1406	2700	50000	GU5.3 bi-pin	12
10LED2741	10	41°	708	2700	50000	GU5.3 bi-pin	12
10LED3012	10	12°	5513	3000	50000	GU5.3 bi-pin	12
10LED3021	10	21°	1521	3000	50000	GU5.3 bi-pin	12
10LED3041	10	41°	964	3000	50000	GU5.3 bi-pin	12
10LED4012	10	12°	6389	4000	50000	GU5.3 bi-pin	12
10LED4021	10	21°	1759	4000	50000	GU5.3 bi-pin	12
10LED4041	10	41°	1125	4000	50000	GU5.3 bi-pin	12
10LED5712	10	12°	6711	5700	50000	GU5.3 bi-pin	12
10LED5721	10	21°	1903	5700	50000	GU5.3 bi-pin	12
10LED5741	10	41°	1182	5700	50000	GU5.3 bi-pin	12
50MR16/NSP	50	12°	11,000	3050	4000	GU5.3 bi-pin	12
50MR16/NSL	50	25°	3200	3050	4000	GU5.3 bi-pin	12
50MR16/FL	50	40°	2000	3050	4000	GU5.3 bi-pin	12
50MR16/WFL	50	60°	1200	3050	4000	GU5.3 bi-pin	12

NOTES AND FORMULAS

- Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot.
- Footcandle values are initial. Apply appropriate light loss factors where necessary.

BRIGHT 3.F

The Bright 3.F is a small, powerful IP69K outdoor recessed fixture. It is available in white light with 7 different optics options and can be installed in-grade, wall or ceiling mount. Not suitable for use in swimming pools or fountains. Drive-over rated up to 11,000 lbs. **The Bright 3, Smoothy 5 and Litus 5 series all use the same LED.**

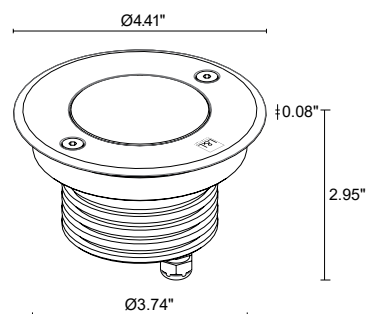
TECHNICAL DATA

Wattage / Input	10W, 13W (24VDC)
Power Supply	Remote, not included. See page 2.
Construction	Body: Anodized Aluminum EN AW 6082 Trim: AISI 316L Stainless Steel Lens: Tempered Serigraphed-Gray and Transparent Extra-Clear Glass Cable Length: 4.92' standard
CCT	2700K, 3000K, 4000K
CRI	>80, >90
Delivered Lumens	See Delivered Lumens Chart
Efficacy	84.5-75.9 lm/W (10W), 86.5 lm/W-70.1 (13W)
Optics	7 Standard (see below)
Finishes	Stainless Steel
Fixture Dimensions	Ø4.41" x 2.95" h
Cut-out Size	Ø3.78" (for ceiling or wall installations)
Fixture Weight	1.72 lbs
LED Source	1 COB LED High Density
Lumen Maintenance	L95, B10 >50,000hrs (Ta 25°C)
Color Consistency	3-Step MacAdam
Operating Temp.	-4°F to +113°F
IP Rating	IP68, IP69K
IK Rating	IK10



Cut-out Dimensions for ceiling/wall installations with fixing spring = Ø3.78"

Fixture Dimensions



Delivered Lumens (3000K, 55°)	10W	13W
CRI 80	845 lm	1125 lm
CRI 90	759 lm	911 lm

ORDERING INFORMATION

Example: CB3F001000F0MI or CB3F001000F0MI-1. Accessories / Power Supplies ordered separately.

					I	-	
Model No.	CRI	Optical Accessories	CCT	Optics	Finish	Cable Length	
CB3F00 (10W)	0 - CRI>80	000 - None	F0 - 2700K	S - 16°	I - Stainless Steel	4.92' standard	
CB3F01 (13W)	1 - CRI>90	010 - Anti-Glare Screen <i>Not available with diffuse optics.</i>	50 - 3000K	M - 21°		1 - 16.40'	
		001 - Honeycomb Louvre <i>Honeycomb Louvre only available with 16°, 21°, 38°, 55° optics</i>	90 - 4000K	L - 38°		2 - 32.81'	
				K - 55°		3 - 49.21'	
				P - 58° sharp		4 - 65.62'	
		020 - None - Diffuse		W - 16°x69°			
				D - Diffuse			

Job Name/Date:

Fixture Type Designation:

SUGGESTED POWER SUPPLIES

24VDC

Part Number	Description	Input/Output	# of Fixtures 10W / 13W	
PPLT00481	Non-Dim	120-277VAC to 24VDC, 24W, Class 2	1-1	1-1
PPLT00056	Non-Dim	120-277VAC to 24VDC, 26W, Class 2, IP66	1-2	1-1
PPLT00157	Non-Dim	120-277VAC to 24VDC, 60W, Class 2	1-4	1-3
PPLT00158	Non-Dim	120-277VAC to 24VDC, 100W, Class 2	1-8	1-6
PPLT00543	0-10V Dimming to 10%	120-277VAC to 24VDC, 100W, Class 2	1-8	1-6

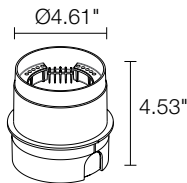
For other power supply options consult factory.

ACCESSORIES

Installation

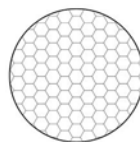


WC0105
Outer Casing
For in-grade use

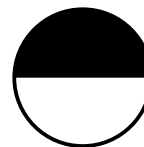


WG0400
Fixing Spring
For ceiling/wall use

Anti-glare



Honeycomb Louvre*
Can be provided on all fixed optics except for the sharp, diffuse and elliptical optics.
*Order together with lighting fixture

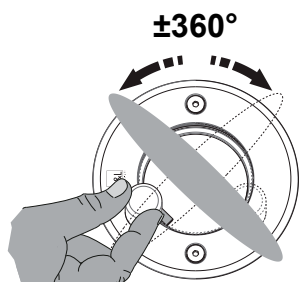


Anti-Glare Screen*
Can be provided on all optics except for diffuse optics.
*Order together with lighting fixture

Optional



WE0201
Magnet for 16°x69° adjustable optics



16°, 21°: optical system consisting of a high-efficiency TIR lens combined with a high-quality technical filter, 38°, 55°: optical system consisting of a high-efficiency TIR lens, sharp 58°: SHARP optical system consisting of a plano-convex lens for an extremely well-defined light beam, combined with a high-quality technical filter, 16°x69° adjustable through 360°: optical system consisting of a high-efficiency TIR lens combined with a high-quality elliptical technical filter and integrated with magnetic material for adjusting the ellipsis (patented), diffuse

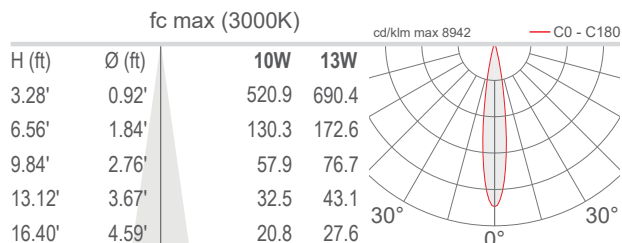
Job Name/Date:

Fixture Type Designation:

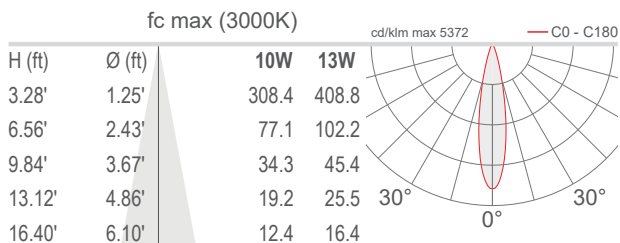
PHOTOMETRIC DATA

Note all Photometry is 3000K

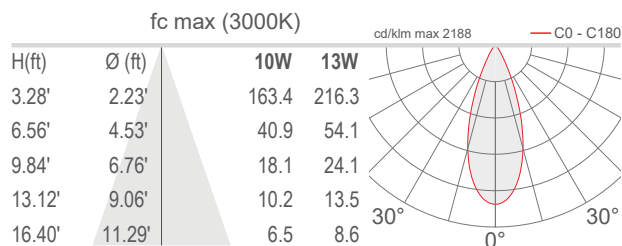
S - 16°



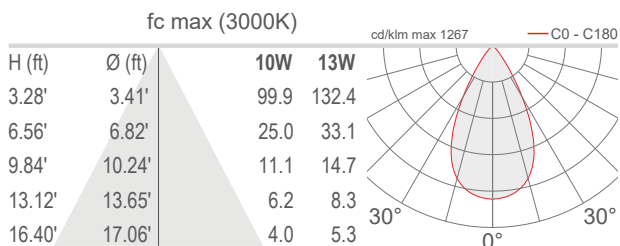
M - 21°



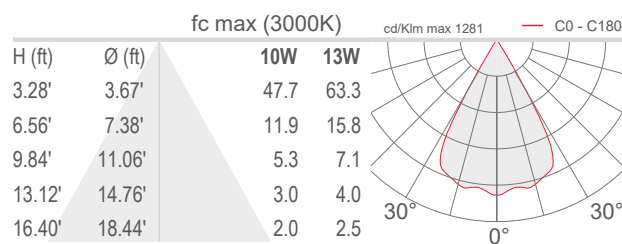
L - 38°



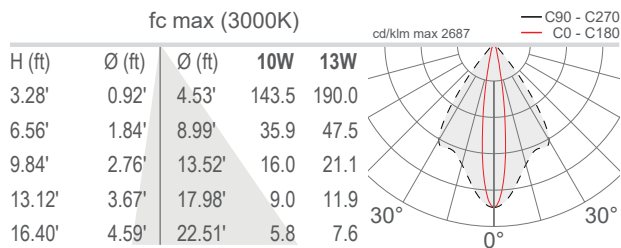
K - 55°



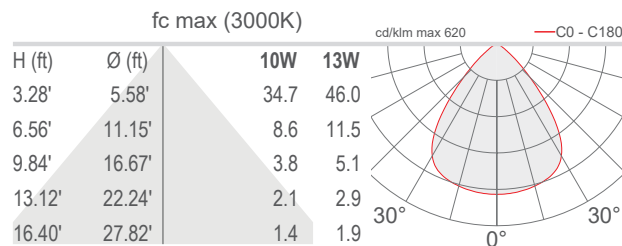
P - 58° Sharp



W - 16°x69° Orientabile / Adjustable



D - Diffuso / Diffuse



Job Name/Date:

Fixture Type Designation:

FHS-BHM Exterior Facade
Preliminary Lighting Specifications
12-16-21

INFORMATION ONLY



Oakewood Design

Description

Recessed LED module with interchangeable 2-inch round or square lens pinhole apertures are available in various finishes to suit any décor. Use with 4-inch nominal recessed housings suitable for residential and shallow plenum commercial construction or can be used to retrofit existing installations. Field interchangeable primary optics provide various distribution patterns and spacing to mounting height ratios. Use for general and task lighting in low to medium height ceilings where energy savings, long life and optical control are required.

Specification Features

Module

- Field interchangeable and upgradable LED module consists of LED array, primary optic and driver.
- Integral die cast aluminum heat sink provides passive thermal cooling achieving L70 at 50,000 hours in IC and non-IC applications.

Retention

- Heat treated compression springs hold module securely in the housing, can be removed thru the aperture for service or replacement

LED Array

- Proximity phosphors over chip on board LEDs provide a uniform source with high efficiency and no pixilation.
- Available in 90 CRI minimum, R9 greater than 50 and color accuracy within 3 SDCM provide color accuracy and uniformity.
- Compatible with Zhaga book 12 standards for interchangeability and can be replaced in the field

Gaskets

- Closed cell gaskets achieve restrictive airflow requirements without additional caulking

Primary Optic

- Precision molded TIR optic organizes source flux into useful beams without stray lumens in the field.
- Two-piece construction with matte black mounting ring and polarized turn and lock mounting aligns optic to source and minimizes backlight in the housing.
- Exceeds ENERGY STAR® color angular uniformity requirements, color deviation is typically less than 0.002 u' v'.

- Available in narrow flood, flood and wide flood distributions, ordered separately, ships with narrow flood installed.
- Also available in asymmetric distribution providing vertical illumination

Trims

- Die formed steel trims are available in 2-inch round or square pinhole apertures and can be interchanged in the field.
- Available in a broad range of painted or plated finishes, can be painted in the field to match any décor.
- Magnetic attachment holds trim tightly to ceiling and eliminates light leaks.

Shielding

- Diffuse clear lens provides light control and source shielding.

Driver

- Integral UNV 120 - 277V 50/60 Hz constant current driver provides noise free operation.
- Continuous, flicker-free dimming from 100% to 5% with select leading or trailing edge 120V phase cut dimmers.
- Driver can be replaced in the field.
- Inline electrical quick connect and E26 adapter not provided.

Compliance

- cULus listed / certified for use with Halo housings, classified for use with other's housings, see instruction sheet for conditions of acceptability.
- Wet location listed in covered ceilings and IP65 certified.
- Airtight per ASTM-E283.
- Suitable for use in clothes closets when installed in accordance with the NEC 410.16 spacing requirements
- EMI/RFI emissions per FCC 47CFR Part 15 B.
- Contains no mercury or lead and RoHS compliant.
- Photometric testing in accordance with IES LM-79-08.
- Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11.
- Can be used for State of California Title 24 high efficacy luminaire compliance, reference the California Energy Commission Title 20 Appliance Efficiency Database for current listings.
- ENERGY STAR® listed, reference qualified product listings.
- Meets State of California voluntary lamp standards.
- Zhaga book 12 compatible.

Warranty

Five year limited warranty, consult website for details.
www.eaton.com/lighting/Legal

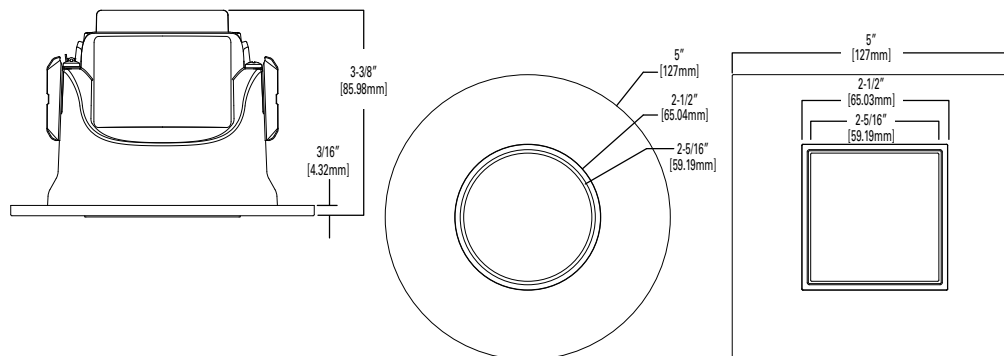


Refer to ENERGY STAR® Qualified Products List. Can be used to comply with California Title 24 High Efficacy requirements. Certified to California Appliance Efficiency Database under JAB8. Indoor LED nominal CCT of 4000K or less.



Eaton is a founding member of the Zhaga Consortium

Dimensions



ML4D

TL43R

TL44S

900 Lumen Series

LED

2-Inch Round and Square Lens Pinhole Downlight



ENERGY DATA		
Lumens	900 Series	
Input Voltage	120V	277V
Input Current	101.6 (mA)	45.7 (mA)
Input Power	12.1 (W)	11.9 (W)
Efficiency	84.93 %	83.45 %
Inrush (A)	1.3	4.7
THD: ≤ 20%		
PF: ≥ 0.90		
T Ambient -40 - +40°C		
Sound Rating ≤ 20dba		

Ordering Information

SAMPLE NUMBER: ML4D09NFL927E - TL43R2GMWWB

A complete luminaire consists of a housing, LED module and trim, order separately.

Models	Lumens	Distribution	CRI/CCT	Driver	Accessories
ML4D = 4" LED module	09 =900 lumens (nominal)	NFL =25 degree narrow flood FL =40 degree flood	927 =90 CRI , 2700K 930 =90 CRI , 3000K 935 =90 CRI , 3500K 940 =90 CRI , 4000K	E =UNV 120 - 277V 50-60Hz, LE & TE phase cut 5% dimming at 120V only	TIR50AWW25 =asymmetric wall wash TIR50NFL25 =25° narrow flood TIR50FL40 =40° flood TIR50WFL55 =55° wide flood LH501MB12PK =Media holder for (1) 50mm lens, matte black, 12 pack HE26LED =Edison base adapter for retrofit HE26LED-24PK =Edison base adapter for retrofit 24 pack
Trims	Shielding	Flange Finish	Accessories		
TL43R = 2" round lens pinhole TL44S = 2" square lens pinhole	2G =Diffuse clear	MWWB =Matte white flange, white lens frame MWBB =Matte white flange, black lens frame MBBB =Matte black flange, black lens frame BNBB =Brushed nickel flange, black lens frame ORBBB =Oil rubbed bronze flange, black lens frame GBBB =German bronze flange, black lens frame BCuBB =Brushed copper, black lens frame	T24HWKIT =Title 24 hard wire kit, converts incandescent, low voltage and compact fluorescent housings to LED H4NCMF =4" new construction mounting frame compatible with H245RICAT, H99RTAT, H1499RICAT, and E4RTATSB remodeler housings.		

Housings

Halo Ultra-shallow LED Housings

H245ICAT=4" IC, airtight ultra-shallow new construction housing, LED, 120 - 277V

H245RICAT=4" IC, airtight ultra-shallow remodeler housing, LED, 120 - 277V

Halo LED Housings

H995ICAT=4" IC, airtight shallow new construction housing, LED, 120 - 277V

H995RICAT=4" IC, airtight shallow remodeler housing, LED, 120 - 277V

Halo Housings

H99TAT=4" non-IC, airtight shallow new construction housing, E26, 120V

H99RTAT=4" non-IC, airtight shallow remodeler housing, E26, 120V

H99ICAT=4" IC, airtight shallow new construction housing, E26, 120V

E4TATSB=4" non-IC, airtight shallow new construction housing, adjustable socket bracket, E26, 120V

E4RTATSB=4" non-IC, airtight shallow remodeler housing, adjustable socket bracket, E26, 120V

E4ICATSB=4" non-IC, airtight shallow new construction housing, adjustable socket bracket, E26, 120V

Halo Surface Mount Housings

HS4R=Surface round, 120-277V

HS4S=Surface square, 120-277V



HE26LED
Edison Base Adapter for retrofit (order separately)

FIN - model: WP-LED1

Endurance Wallpack

WAC LIGHTING

Responsible Lighting®

Fixture Type:

Catalog Number:

Project:

Location:



PRODUCT DESCRIPTION

Die cast aluminum factory sealed housings with patent pending design for a water and dust proof IP66 rated outdoor luminaire

FEATURES

- Factory-Sealed LED Light Engine
- 20° Forward Throw Illumination
- Photo/Motion Sensor Compatible (Sold Separately)
- Built-in Level For Easy Adjustment
- Suitable to install in all directions
- Multi-Function Dimming: ELV (120V) or 0-10V
- 85 CRI
- 100,000 hour rated life

SPECIFICATIONS

Construction: Die-cast aluminum

Power: Integral driver in luminaire. Universal voltage input (120V-277V)

Dimming: 100% - 30% with 0 - 10V dimmer (120V - 277V)

100% - 15% with Electronic Low Voltage (ELV) dimmer (120V only)

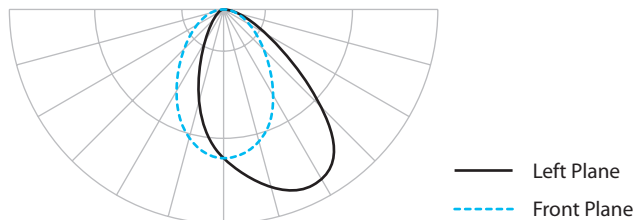
Finish: Architectural Bronze, Graphite, and White

Standards: Energy Star®, DLC rated, IP66, Wet Location, ETL & cETL Listed

Total Harmonic Distortion: 35%

Operating Temperature: -40°C (-40°F) to 40°C (104°F)

PHOTOMETRY

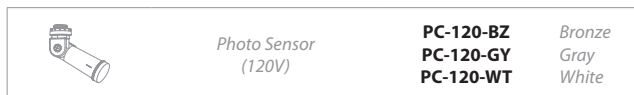
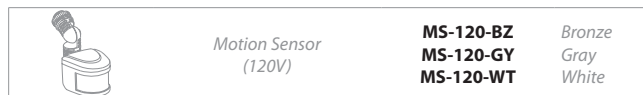


ORDER NUMBER

		Power	Comparable	Delivered Lumens		Color Temp	Finish
				3000K	5000K		
	WP-LED119	19W	39W HID	1390	1460	30 3000K 50 5000K	aBZ Architectural Bronze
	WP-LED127	27W	70W HID	2075	2135		aGH Architectural Graphite
	WP-LED135	35W	100W HID	2750	2825		aWT Architectural White

Example: WP-LED119-50-BZ

ACCESSORIES



WAC Lighting

www.waclighting.com

Phone (800) 526.2588 • Fax (800) 526.2585

Headquarters/Eastern Distribution Center

44 Harbor Park Drive • Port Washington, NY 11050

Phone (516) 515.5000 • Fax (516) 515.5050

Western Distribution Center

1750 Archibald Avenue • Ontario, CA 91760

Phone (800) 526.2588 • Fax (800) 526.2585

RUBIX - model: WS-W2504, WS-W2505

LED Wall Mount

WAC LIGHTING
Responsible Lighting®



Fixture Type:

Catalog Number:

Project:

Location:

PRODUCT DESCRIPTION

Available in single- and twin-light configurations, this die cast aluminum LED wall luminaire is wet location listed for a broad range of exterior lighting applications. Designed with a square profile, this version of Rubix mounts upwards or downwards.

FEATURES

- Energy Star® rated
- CEC Title 24 Compliant
- Mounts up or down
- IP65 Rated, ETL & cETL Wet Location Listed
- Die-Cast Aluminum Construction
- Universal Voltage Input (120V - 277V)
- Dimming: ELV (120V) or 0-10V

SPECIFICATIONS

Construction: Aluminum with etched glass.

Power: Integral driver in luminaire. 120V - 277V input.

Light Source: High output LED

Mounting: Mounts directly to junction box

Dimming: 0-10V Dimming: 100%-10%

ELV Dimming: 100%-15% (120V only)

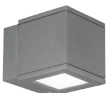
Finish: Brushed Aluminum (AL), Black (BK), Bronze (BZ), Graphite (GH), White (WT)

Color Temp: 3000K

CRI: 90

Rated Life: 70,000 hours

Standards: Energy Star® rated, IP65 Rated, ETL & cETL Wet Location Listed, CEC Title 24 Compliant, Dark Sky Friendly.

	Beam	Photometry	Voltage	Watt	Lumens	Finish
 Single Light	5" x 6.5" x 5"	WS-W2504 Dark Sky Friendly 86° Energy Star®	120V - 277V	16W	750	
 Double Light	5" x 6.5" x 5"	WS-W2505 86°	120V - 277V	30W	1400	
AL Brushed Aluminum BK Black BZ Bronze GH Graphite WT White						

 -

Example: **WS-W2504-GH**

wacighting.com
Phone (800) 526.2588
Fax (800) 526.2585

Headquarters/Eastern Distribution Center
44 Harbor Park Drive
Port Washington, NY 11050

Central Distribution Center
1600 Distribution Ct
Lithia Springs, GA 30122

Western Distribution Center
1750 Archibald Avenue
Ontario, CA 91760

RUBIX - model: WS-W2504, WS-W2505

LED Wall Mount

WAC LIGHTING
Responsible Lighting®



Fixture Type:

Catalog Number:

Project:

Location:

PRODUCT DESCRIPTION

Available in single- and twin-light configurations, this die cast aluminum LED wall luminaire is wet location listed for a broad range of exterior lighting applications. Designed with a square profile, this version of Rubix mounts upwards or downwards.

FEATURES

- Energy Star® rated
- CEC Title 24 Compliant
- Mounts up or down
- IP65 Rated, ETL & cETL Wet Location Listed
- Die-Cast Aluminum Construction
- Universal Voltage Input (120V - 277V)
- Dimming: ELV (120V) or 0-10V

SPECIFICATIONS

Construction: Aluminum with etched glass.

Power: Integral driver in luminaire. 120V - 277V input.

Light Source: High output LED

Mounting: Mounts directly to junction box

Dimming: 0-10V Dimming: 100%-10%

ELV Dimming: 100%-15% (120V only)

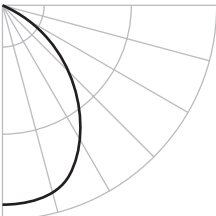
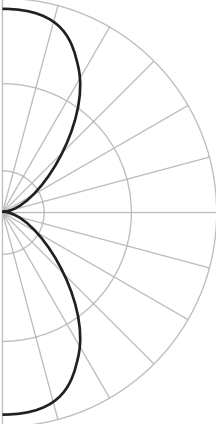
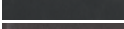
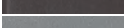
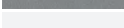
Finish: Brushed Aluminum (AL), Black (BK), Bronze (BZ), Graphite (GH), White (WT)

Color Temp: 3000K

CRI: 90

Rated Life: 70,000 hours

Standards: Energy Star® rated, IP65 Rated, ETL & cETL Wet Location Listed, CEC Title 24 Compliant, Dark Sky Friendly.

	Beam	Photometry	Voltage	Watt	Lumens	Finish
 Single Light  WS-W2504 Dark Sky Friendly 86° Energy Star®			120V - 277V	16W	750	
 Double Light  WS-W2505 86°			120V - 277V	30W	1400	
						AL Brushed Aluminum  BK Black  BZ Bronze  GH Graphite  WT White 

 -

Example: **WS-W2504-GH**

waclighting.com
Phone (800) 526.2588
Fax (800) 526.2585

Headquarters/Eastern Distribution Center
44 Harbor Park Drive
Port Washington, NY 11050

Central Distribution Center
1600 Distribution Ct
Lithia Springs, GA 30122

Western Distribution Center
1750 Archibald Avenue
Ontario, CA 91760

Application

LED wall mounted luminaires with directed light designed to be mounted at various heights for general purpose illumination or glare free illumination when below eye level.

Materials

Luminaire housing constructed of die-cast marine grade, copper free ($\leq 0.3\%$ copper content) A360.0 aluminum alloy
Matte safety glass
Silicone applied robotically to casting, plasma treated for increased adhesion
High temperature silicone gasket
Mechanically captive stainless steel fasteners

NRTL listed to North American Standards, suitable for wet locations
Protection class IP 65
Weight: 3.1 lbs

Electrical

Operating voltage	120-277V AC
Minimum start temperature	-40° C
LED module wattage	6.1 W
System wattage	8.0 W
Controllability	0-10V, TRIAC, and ELV dimmable
Color rendering index	Ra > 90
Luminaire lumens	504 lumens (3000K)
Lifetime at Ta=15° C	> 500,000 h (L70)
Lifetime at Ta=35° C	322,000 h (L70)

LED color temperature

4000K - Product number + **K4**
3500K - Product number + **K35**
3000K - Product number + **K3**
2700K - Product number + **K27**

BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

Finish

All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.

Available colors	Black (BLK)	White (WHT)	RAL:
	Bronze (BRZ)	Silver (SLV)	CUS:

Type:

BEGA Product:

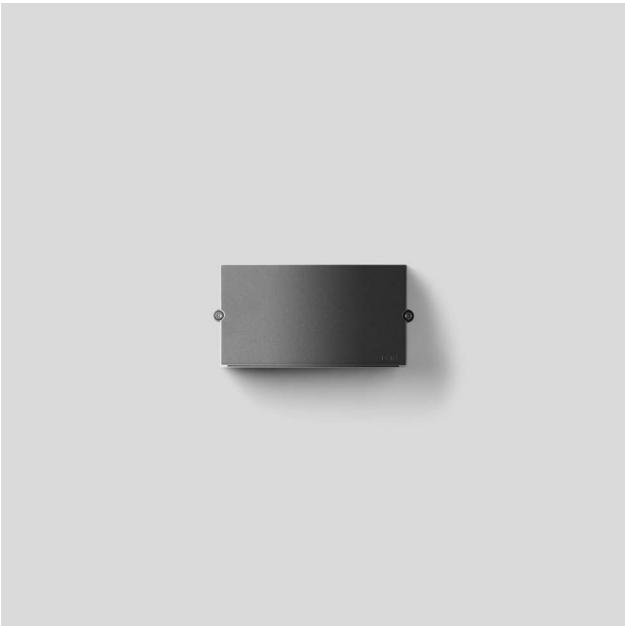
Project:

Modified:



LED wall luminaires - directed

	LED	A	B	C
24 372	ADA 6.1 W	7 7/8	4 3/8	3 3/8



2-1/2" x 4-3/4" LED Step Light

120V Input

Fits a single gang box

Electrical Data

Catalog Number	Wattage	Source Lumens	Efficacy
SS3007	4W	120lm	30lpw

Construction

Die-cast aluminum housing with solite lens. Surface mount luminaire illuminates stairs, steps or pathways. Energy-saving LED emits through the solite glass lens.

LED Light Engine

- Wattage: 4W
- Lumens: 120lm
- Color Temperature: 2700K (available in amber, see SS3007-AMB)
- Color Rendering Index: 90 CRI

Electrical

- Integral 120V input driver
- Non-dimmable

Finishes

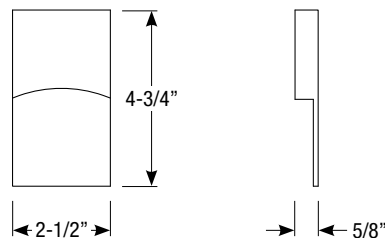
Available in bronze, silver metallic or white.

Installation

Fits in standard single-switch box, and a 2" x 3" handy box. Junction box mounts vertically.

Listings

- UL listed to US and Canadian standards for wet locations
- ADA compliant



Order Matrix

Step Light Order Matrix (Example: SS3007-BZ)

Series
SS3007-BZ (Bronze LED Step Light)
SS3007-SM (Silver Metallic LED Step Light)
SS3007-WT (White LED Step Light)



LED STEP LIGHTS SL-60 SERIES

GO GREEN

TYPE

SPECIFICATIONS

CONSTRUCTION: Die Cast Aluminum, Brass or Stainless Steel step light

LIGHT SOURCE: Integrated 12v 3w LED or 120v 4w LED with Driver On Board
(No need for separate LED driver); 200 Lumens, warm white 3000K

LIFETIME RATING: 50,000 hours

SOCKET: None

GASKET: Black neosponge closed cell; .190" thickness

WIRING 12V: 6" black 18 gauge zip cord.

WIRING 120V: Standard Black (line), White (neutral), Green (ground)

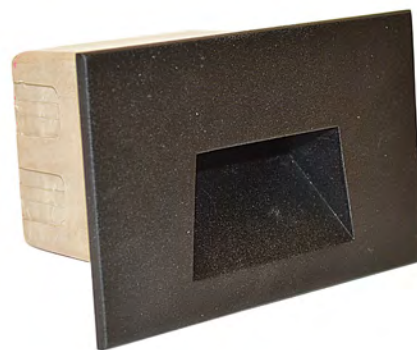
SINGLE GANG BOX: Focus FA-SG-BOX fiberglass box included.

Fixture insert only without Back Box is available (SL60NB) if back box is supplied by others or is already installed;

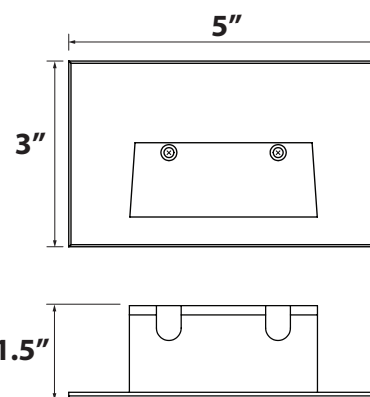
NOTE: If box is supplied by others it must have minimum inside dimensions of 3"(l) x 2"(w) x 2.5"(d) and plate mounting holes 3.22" to 3.30" apart on center.

MOUNTING: Stainless Steel bracket and hardware for mounting in single gang junction box; Face plate attaches to bracket with two provided screws

FINISH: Aluminum - Black texture polyester powder coat; optional finishes available
Brass - Unfinished; optional finishes available
Stainless Steel-Brushed



SL-60-LED12VBLT



SL60NB insert

ORDERING INFORMATION

CATALOG NO.	DESCRIPTION	LIGHT SOURCE	WEIGHT
SL60-LED12V-BLT	12v Aluminum LED Step Light	3w LED Module	2.0 lbs.
SL60-LED12V-BRS	12v Brass LED Step Light	3w LED Module	3.0 lbs.
SL60-LED12V-SS	12v Stainless LED Step Light	3w LED Module	2.0 lbs.
SL60-LED120-BLT	120v Aluminum LED Step Light	4w LED Module	2.0 lbs.
SL60-LED120-BRS	120v Brass LED Step Light	4w LED Module	3.0 lbs.
SL60-LED120-SS	120v Stainless LED Step Light	4w LED Module	2.0 lbs.

NO BACK BOX MODELS:

SL60NB-LED12V-BLT	12v Aluminum LED Step Light Insert	3w LED Module	2.0 lbs.
SL60NB-LED12V-BRS	12v Brass LED Step Light Insert	3w LED Module	3.0 lbs.
SL60NB-LED12V-SS	12v Stainless LED Step Light Insert	3w LED Module	2.0 lbs.

SL60NB-LED120-BLT	120v Aluminum LED Step Light Insert	4w LED Module	2.0 lbs.
SL60NB-LED120-BRS	120v Brass LED Step Light Insert	4w LED Module	3.0 lbs.
SL60NB-LED120-SS	120v Stainless LED Step Light Insert	4w LED Module	2.0 lbs.

FASG-BOX	Plastic Single Gang Box only	1.0 lbs.
----------	------------------------------	----------



FA-SG-BOX Single Gang Box



JOB INFORMATION

Type:	Date:
Job Name:	
Cat. No.:	
Lamp(s):	
Specifier:	
Contractor:	
Notes:	

FOCUS INDUSTRIES INC.
25301 COMMERCENTRE DRIVE
LAKE FOREST, CA 92630

www.focusindustries.com
sales@focusindustries.com
(949) 830-1350 • FAX (949) 830-3390

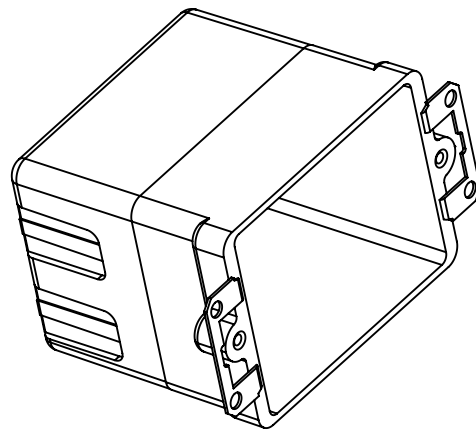
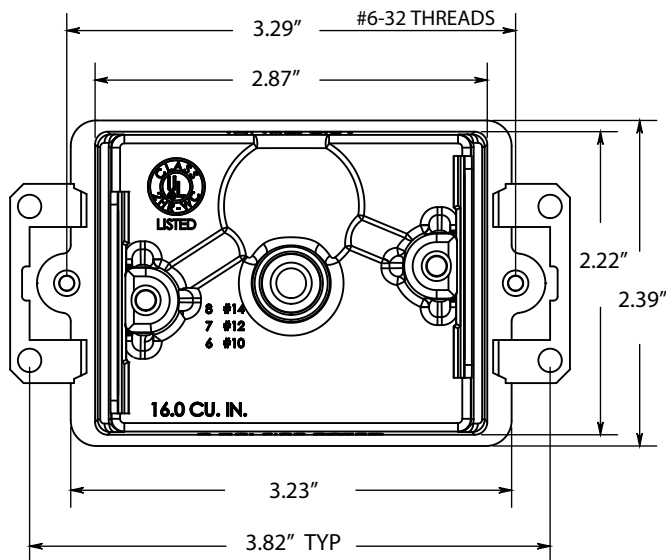
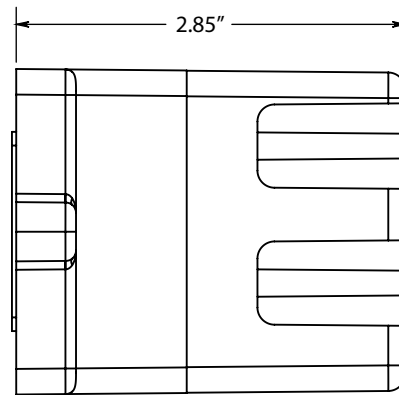
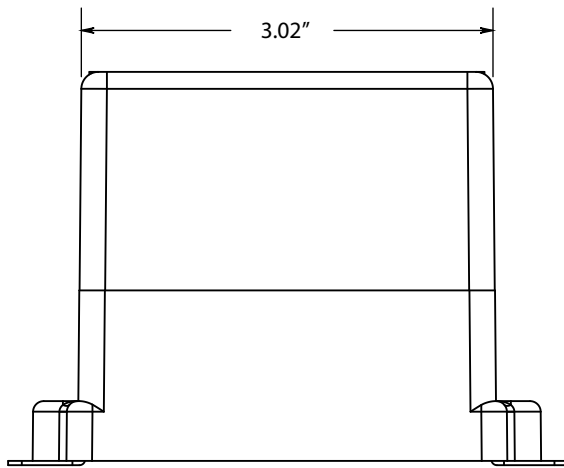
Black Texture (Standard)	Antique Verde	Bronze Texture	Camel	White Texture	Hunter Texture	Rust	Weathered Iron	Weathered Brown	Stucco	Rubbed Verde	Chrome Powder	Acid Rust	Acid Verde	Black Acid Treatment
-BLT	-ATV	-BRT	-CAM	-WTX	-HTX	-RST	-WIR	-WBR	-STU	-RBV	-CPR	-BAR/CAR	-BAV/CAV	-BAT



LED STEP LIGHTS SL-60 SERIES

TYPE

FA-SG-BOX
Single Gang Box



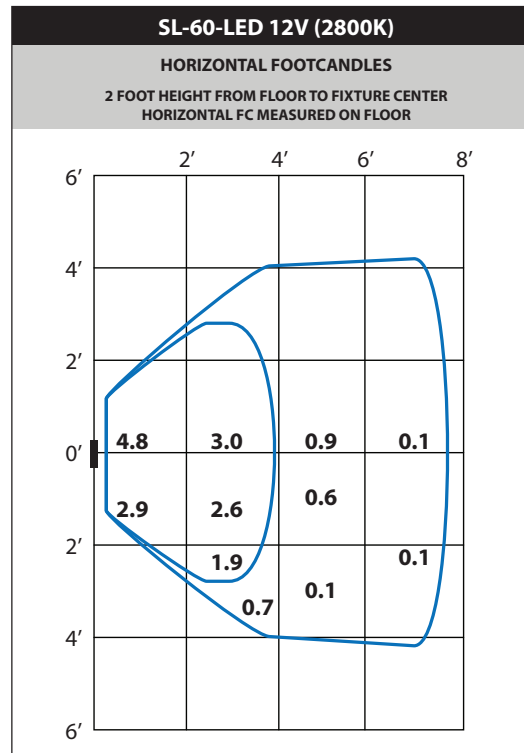
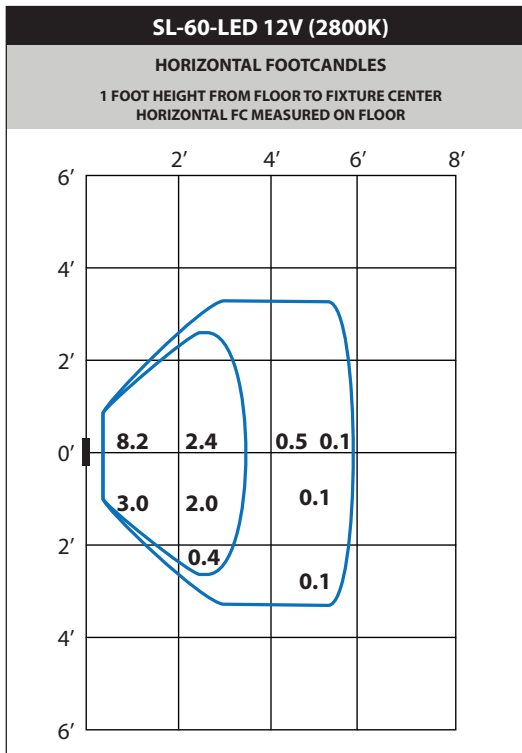
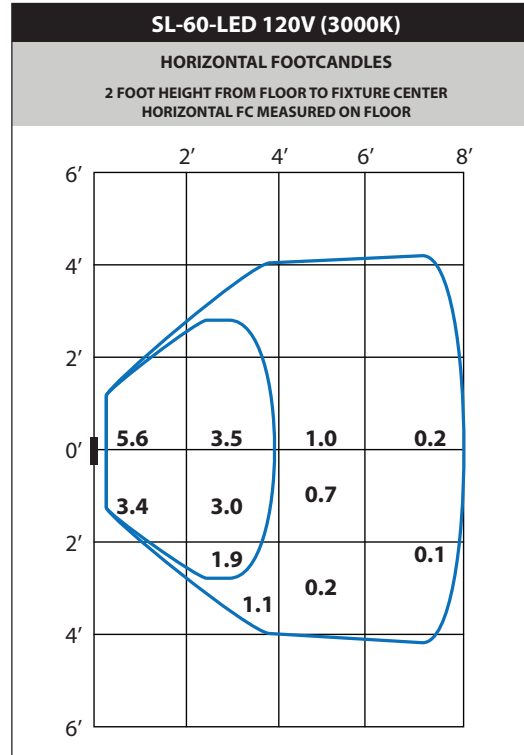
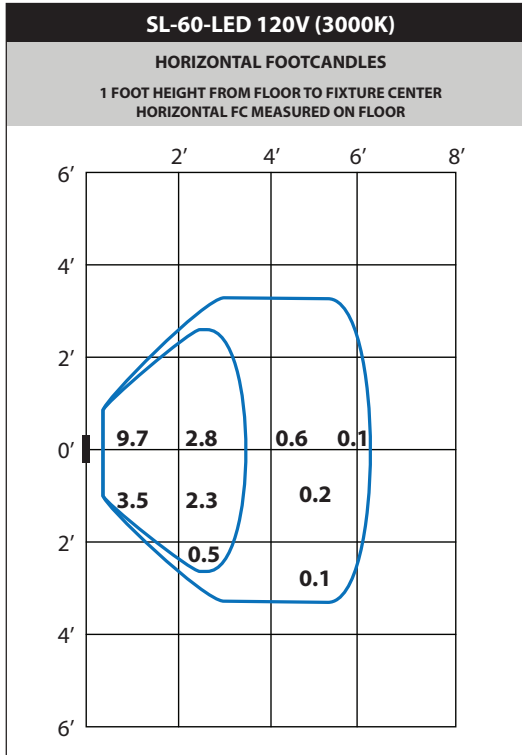
Black Texture (Standard)	Antique Verde	Bronze Texture	Camel	White Texture	Hunter Texture	Rust	Weathered Iron	Weathered Brown	Stucco	Rubbed Verde	Chrome Powder	Acid Rust	Acid Verde	Black Acid Treatment
-BLT	-ATV	-BRT	-CAM	-WTX	-HTX	-RST	-WIR	-WBR	-STU	-RBV	-CPR	-BAR/CAR	-BAV/CAV	-BAT



LED STEP LIGHTS SL-60 SERIES

TYPE

LIGHT DISTRIBUTIONS AND PHOTOMETRICS



Black Texture (Standard)	Antique Verde	Bronze Texture	Camel	White Texture	Hunter Texture	Rust	Weathered Iron	Weathered Brown	Stucco	Rubbed Verde	Chrome Powder	Acid Rust	Acid Verde	Black Acid Treatment
-BLT	-ATV	-BRT	-CAM	-WTX	-HTX	-RST	-WIR	-WBR	-STU	-RBV	-CPR	-BAR/CAR	-BAV/CAV	-BAT

Application

This LED wall luminaire with an asymmetric light distribution can be used to illuminate ceiling or ground surfaces in front of the mounting surface. Can be used for uplight or downlight applications.

Materials

Luminaire housing constructed of die-cast marine grade, copper free (≤0.3% copper content) A360.0 aluminum alloy
Clear safety glass
Reflector made of pure anodized aluminum
Silicone applied robotically to casting, plasma treated for increased adhesion
High temperature silicone gasket
Mechanically captive stainless steel fasteners

NRTL listed to North American Standards, suitable for wet locations
Protection class IP 65
Weight: 6.8lbs

Electrical

Operating voltage	120-277V AC
Minimum start temperature	-30° C
LED module wattage	17.9 W
System wattage	23 W
Controllability	0-10V dimmable
Color rendering index	Ra > 90
Luminaire lumens	2352 lumens (3000K)
Lifetime at Ta = 15° C	>500,000 h (L70)
Lifetime at Ta = 25° C	133,000 h (L70)

LED color temperature

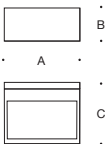
4000K - Product number + **K4**
3500K - Product number + **K35**
3000K - Product number + **K3 (EXPRESS)**
2700K - Product number + **K27**

BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

Finish

All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.

Available colors	Black (BLK)	White (WHT)	RAL:
	Bronze (BRZ)	Silver (SLV)	CUS :



LED wall luminaire · asymmetric light distribution				
	LED	A	B	C
22 386	17.9 W	9 1/2	4 1/8	7 7/8

Type:
BEGA Product:
Project:
Modified:



Application

This LED wall luminaire with an asymmetric light distribution can be used to illuminate ceiling or ground surfaces in front of the mounting surface. Can be used for uplight or downlight applications.

Materials

Luminaire housing constructed of die-cast marine grade, copper free (≤0.3% copper content) A360.0 aluminum alloy
Clear safety glass
Reflector made of pure anodized aluminum
Silicone applied robotically to casting, plasma treated for increased adhesion
High temperature silicone gasket
Mechanically captive stainless steel fasteners

NRTL listed to North American Standards, suitable for wet locations
Protection class IP 65
Weight: 11 lbs

Electrical

Operating voltage	120-277V AC
Minimum start temperature	-40° C
LED module wattage	43.4 W
System wattage	50 W
Controllability	0-10V dimmable
Color rendering index	Ra > 80
Luminaire lumens	4549 lumens (3000K)
Lifetime at Ta = 15° C	50,000 h (L70)

LED color temperature

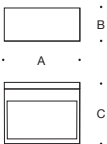
4000K - Product number + **K4**
3500K - Product number + **K35**
3000K - Product number + **K3**
2700K - Product number + **K27**

BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

Finish

All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.

Available colors	Black (BLK)	White (WHT)	RAL:
	Bronze (BRZ)	Silver (SLV)	CUS:



LED wall luminaire · asymmetric light distribution				
	LED	A	B	C
33 386	43.4 W	12 1/2	5	8 5/8

Type:
BEGA Product:
Project:
Modified:



JOB _____ TYPE _____

NOTES _____ APPROVALS _____

FEATURES

- Unique swivel mount provides superior aiming without loosening over time
- IP66 Certified to keep dust and moisture out
- Available in 3000K, 4000K and 5000K standard CCT
- Spot, Narrow Flood and Wide Flood distributions

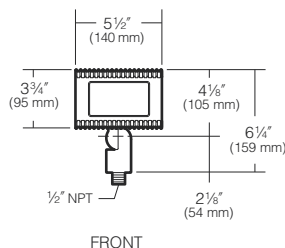
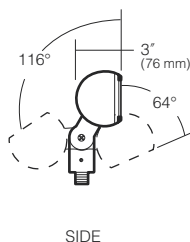
Certifications



SPECIFICATIONS



Approx. Weight = 3.16 lbs.



ORDERING CODE

EL218						
Fixture¹	Distribution	Drive Current	Electrical Module			Fixture Finish
	S Spot	3 350mA, 10W	Source	Color Temperature	Voltage	Aluminum
	F Narrow Flood	5 550mA, 16W	8L 8 LEDs	3K 3000K	UV 120 to 277V with a ±10% tolerance	BL Black
	W Wide Flood			4K 4200K		DB Dark Bronze
				5K 5100K		GR Verde Green

Fixture Options	Mounting Options
<u>Barn Doors</u>	Refer to 120 Volt Mounting Options Spec Sheet http://cdn.kimlighting.com/content/products/specs/specs_files/kl_120vmounting_spec.pdf for individual mounting options.
BD215BL Black	
BD215DB Dark Bronze	
BD215GR Verde Green	
<u>Fixed Hood</u>	
FH215BL Black	
FH215DB Dark Bronze	
FH215GR Verde Green	

¹ U.S. PATENT D298,656

Kim Lighting reserves the right to change specifications without notice.

LUMINAIRE PERFORMANCE

Spectroradiometric			
	3000K	4200K	5100K
Correlated Color Temp. CCT (K)	2800 to 3175K	3800 to 4600K	4600 to 5600K
Color Rendering Index (CRI)	≥72	≥72	≥72
Power Factor	>.90 @ 120V	>.90 @ 120V	>.90 @ 120V

Electrical Drive Current					
350mA			550mA		
Volts -AC	Amps - AC	System Watts	Volts -AC	Amps - AC	System Watts
120	0.08	10	120	0.13	16
208	0.05	10	208	0.08	16
240	0.04	10	240	0.07	16
277	0.04	10	277	0.06	16

Absolute Lumens				
Temp.	mA	Spot	Narrow Flood	Wide Flood
3000K	350	1078	938	889
4200K		1143	992	925
5100K		1152	1008	953
3000K	550	1608	1411	1331
4200K		1691	1487	1386
5100K		1703	1511	1422

Main Beam Candela and Beam Angle							
Temp.	mA	Spot (3 x 3)	Beam°	Narrow Flood (4 x 4)	Beam°	Wide Flood (6 x 6)	Beam°
3000K	350	7865	19°	2722	32°	665	53°
4200K		8742	18°	2962	31°	694	52°
5100K		8578	18°	2656	30°	709	53°
3000K	550	11962	19°	4024	32°	1009	53°
4200K		13129	18°	4408	31°	1050	52°
5100K		12974	18°	4655	32°	1066	52°

LED performance and lumen output continues to improve at a rapid pace. Log onto www.kimlighting.com to download the most current photometric files from Kim Lighting's IES File Library. For custom optics and color temperature configurations, contact factory.

Projected Lumen Maintenance		
TM21-11*	100,000 hrs	Calculated (L70)
.96	.95	927,000 hrs

* 60,000 hrs, 350mA, Ts 57°C / 25°C ambient.

Kim Lighting reserves the right to change specifications without notice.

SPECIFICATIONS

Housing and Lens Frame:

- Die-cast low copper alloy (<0.6% Cu) aluminum.

Swivel:

- Die-cast aluminum with locking teeth and 1/2" solid brass NPT mount. Provides horizontal rotation independent of the threaded mount. Swivel locked by 1/4-20 stainless set screw. Clear anodized prior to powder coating for added corrosion resistance.

Gasketing:

- Silicone gaskets throughout.

Fasteners:

- Stainless steel.

Wiring:

- No. 18AWM rated 105°C.

Optical System:

- High performance acrylic optic securely attached to internal heat sink for maximum thermal dissipation.

Driver:

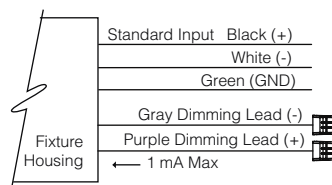
- Universal Voltage from 120 to 277V with a $\pm 10\%$ tolerance. Driver has a 0-10V dimming interface for multi-level illumination options. Driver is Underwriters Laboratories recognized.

Finish:

- Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidyl isocyanurate (TGIC) polyester powdercoat finish. Standard colors include (BL) Black, (DB) Dark Bronze, (GR) Verde Green.

Dimming:

- Dimming range from 10% to 100% through the use of the standard 0-10V interface on the programmable driver.
- Modular wiring harness in the service area provides user access to the dimming circuitry.
- Dimming circuitry compatible with 0-10V, user-defined, control devices.
- Optional factory programmed dimming profile.
- IP710 dimmer recommended.



Certifications and Listings:

- UL 1598 Standard for Luminaires.
- UL 8750 Standard for Safety for Light Emitting Diode (LED) Equipment for use in Lighting Products.
- IP66 certified.
- CSA C22.2#250.0 Luminaires.
- RoHS compliant.

CAUTION:

- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

WARRANTY:

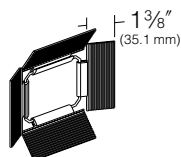
- For full warranty see <http://www.hubbellighting.com/resources/warranty>

OPTIONS

Barn Doors

BD215

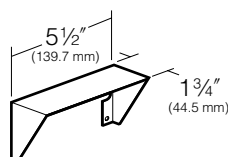
Extruded aluminum, fully adjustable. Provides beam and glare control. Available in Black, Dark Bronze or Verde Green finish.



Fixed Hood

FH215

Formed .062" thick aluminum. Provides glare control. Available in Black, Dark Bronze or Verde Green finish.

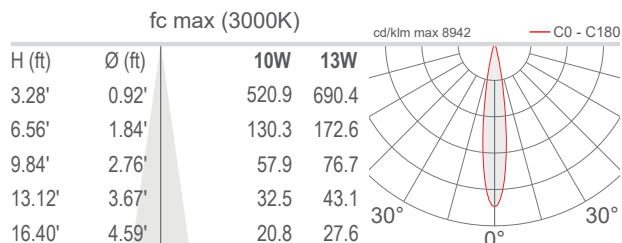


Kim Lighting reserves the right to change specifications without notice.

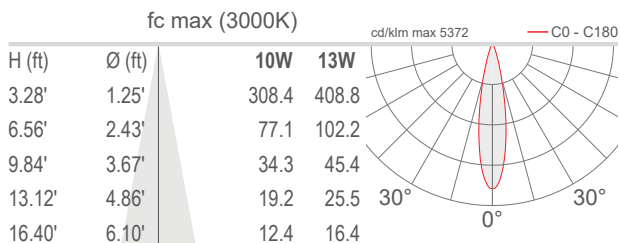
PHOTOMETRIC DATA

Note all Photometry is 3000K

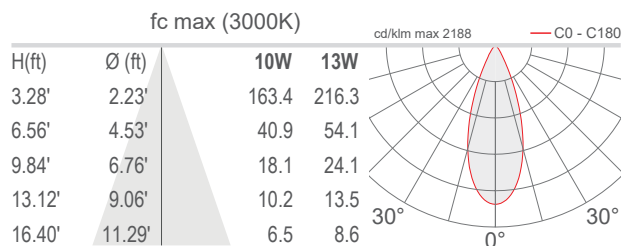
S - 16°



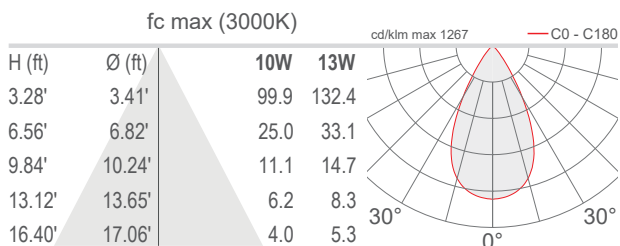
M - 21°



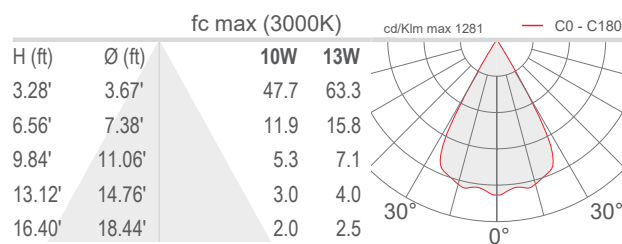
L - 38°



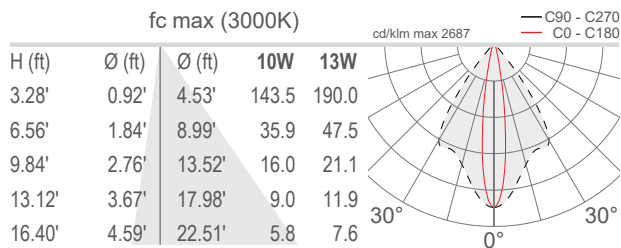
K - 55°



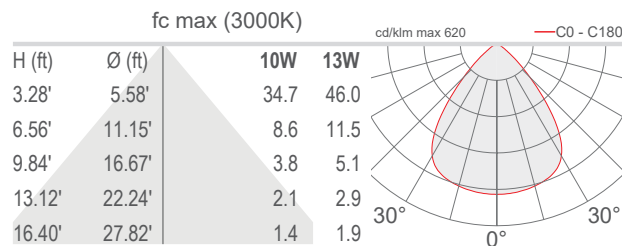
P - 58° Sharp



W - 16°x69° Orientabile / Adjustable



D - Diffuso / Diffuse



Job Name/Date:

Fixture Type Designation:

Dust Noise Memo



DATE: April 13, 2022
TO: Whom It May Concern
FROM: Jason Rewold, LEED GA

RE: Adams Haynes Mixed Use Development Dust and Noise Plan

Construction for this project will comply with the following provisions while under a valid permit for construction.

Noise:

PER THE CITY OF BIRMINGHAM CONSTRUCTION SITE PROVISIONS ALL COMMERCIAL CONSTRUCTION, REPAIR, REMODELING, DEMOLITION, DRILLING, WOODCUTTING OR EXCAVATING, AND SIMILAR CONSTRUCTION ACTIVITIES CONDUCTED BETWEEN 7:00 A.M. AND 7:00 P.M. MONDAY THROUGH SATURDAYS, EXCEPT LEGAL HOLIDAYS, WHICH DOES NOT PRODUCE A SOUND LEVEL EXCEEDING 100 DBA AT OR BEYOND THE PROPERTY LINE OF THE PROPERTY ON WHICH THE WORK IS BEING CONDUCTED.

Dust:

A DUST MITIGATION PLAN WILL BE INCLUDING IN BIDDING AND PERMIT APPLICATION DOCUMENTS. THIS PLAN WILL INCLUDE TEMPORARY STONE ACCESS ROADS TO REDUCE DUST, WETTING DOWN OF CONSTRUCTION ACTIVITIES TO REDUCE DUST, AND STREET SWEEPING PLANS TO ENSURE DUST/MUD IS CONTROLLED DURING CONSTRUCTION ACTIVITIES.

Jason Rewold, LEED GA

Vice President

o: 248.601.1245
a: 303 E. Third Street | Suite 300
Rochester, MI 48307

FRANK REWOLD & SONS

[WEB](#) | [FACEBOOK](#) | [IG](#) | [TWITTER](#)

FRANK REWOLD & SONS INC.

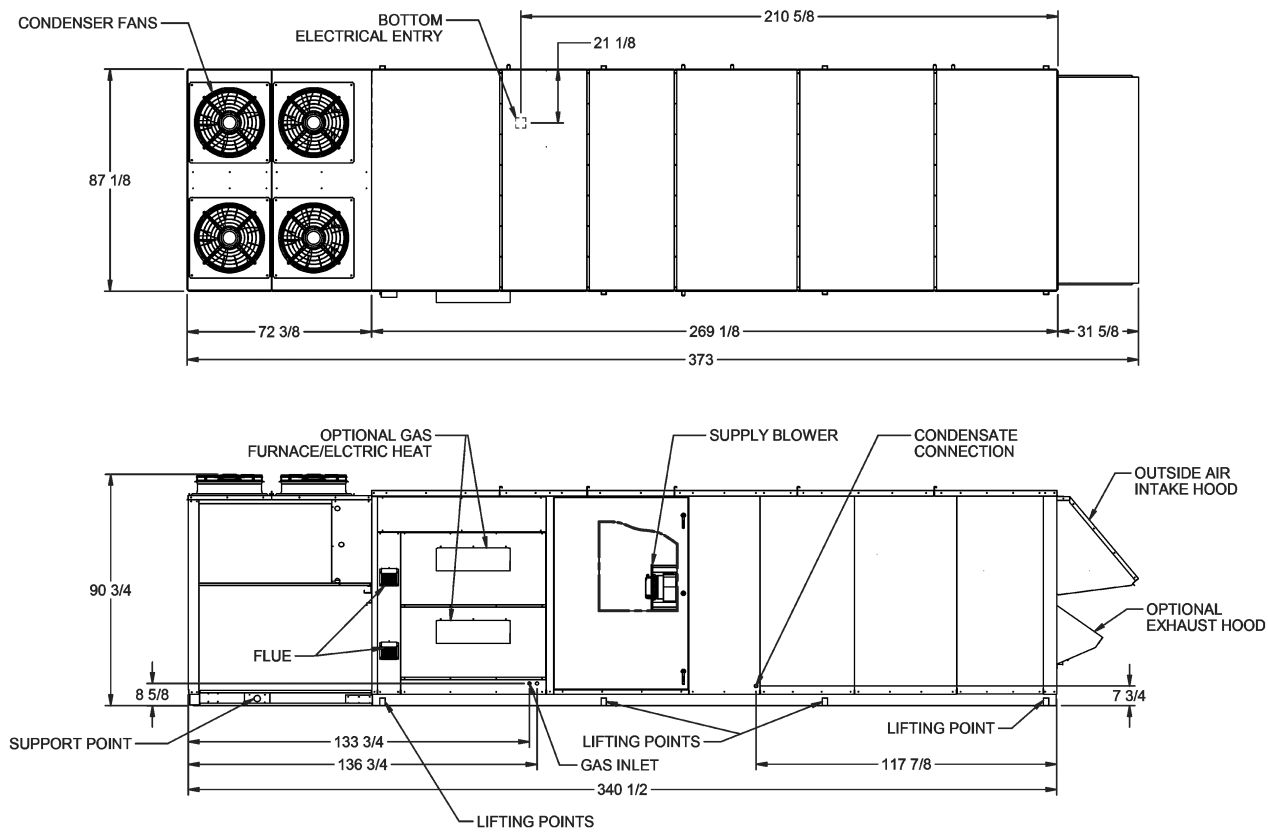
CONSTRUCTION MANAGER | GENERAL CONTRACTOR
303 E. THIRD STREET | SUITE 300 | ROCHESTER, MICHIGAN 48307 | 248.651.7242



Roof Top Mechanical Specifications

0504I-2598 - *R D4XL CAB-1

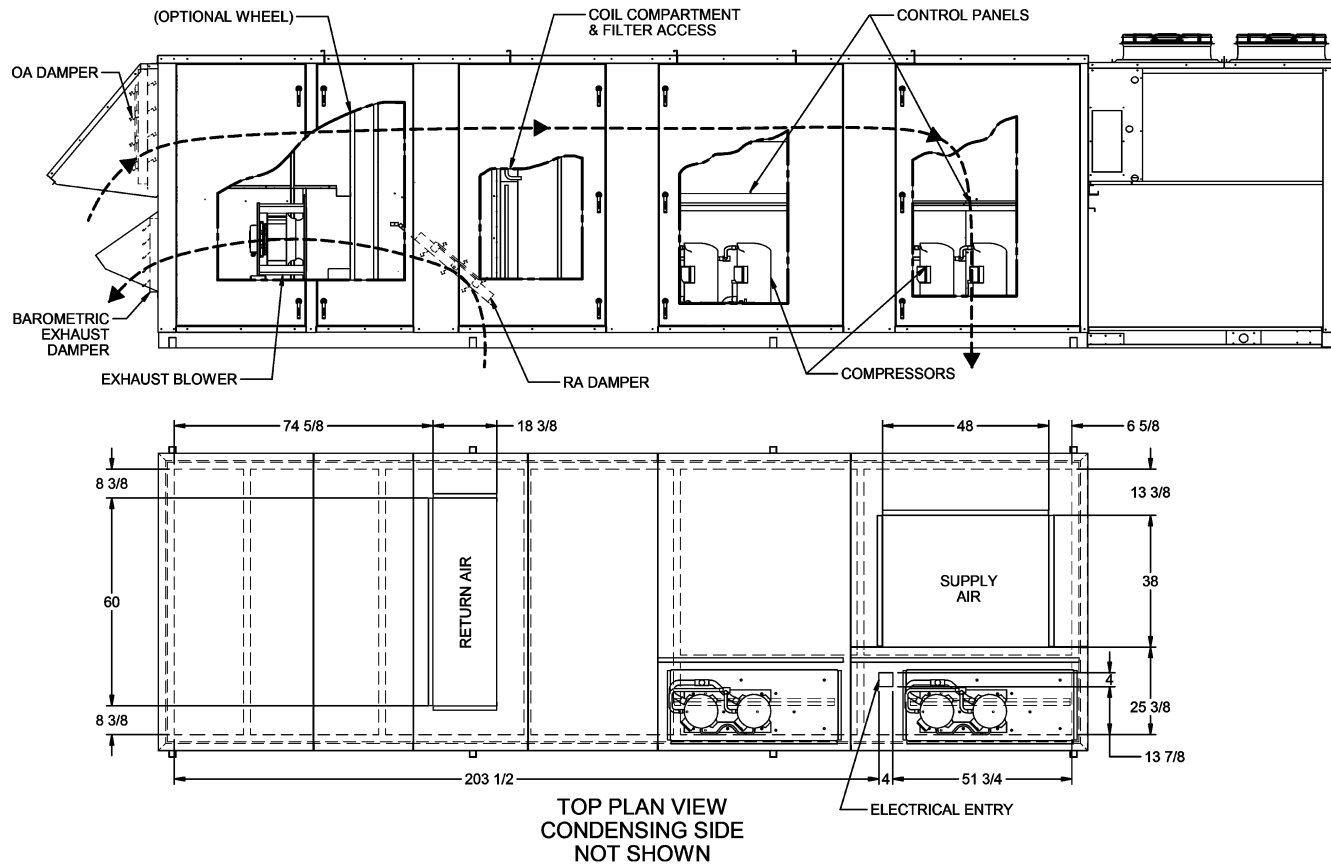
Qty: 1 Tags: ERV-1



0504I-2598 - 1
*R D4XL CAB
05/2017

0504I-2598 - *R D4XL CAB-2

Qty: 1 Tags: ERV-1

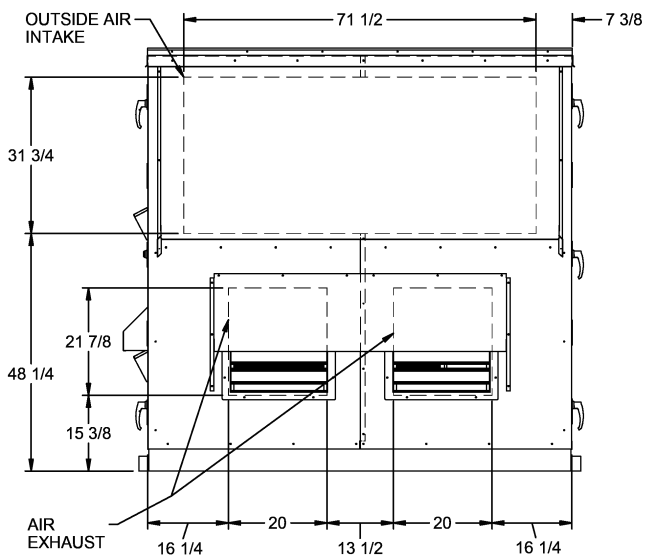


0504I-2598 - 2
*R D4XL CAB
05/2017

0504I-2598 - *R D4XL CAB-3

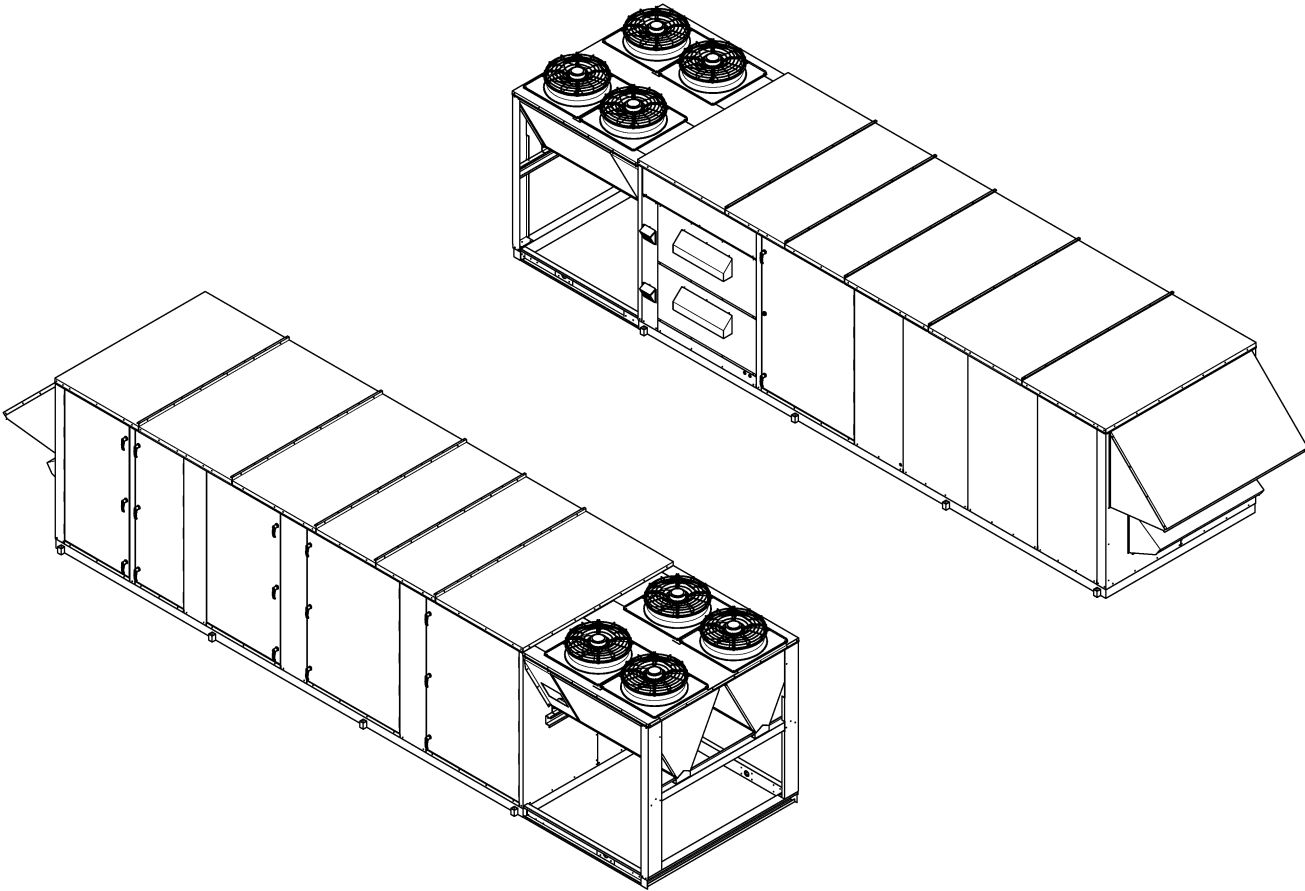
Qty: 1 Tags: ERV-1

0504I-2598 - 3
*R D4XL CAB
05/2017



0504I-2598 - *R D4XL CAB-4

Qty: 1 Tags: ERV-1

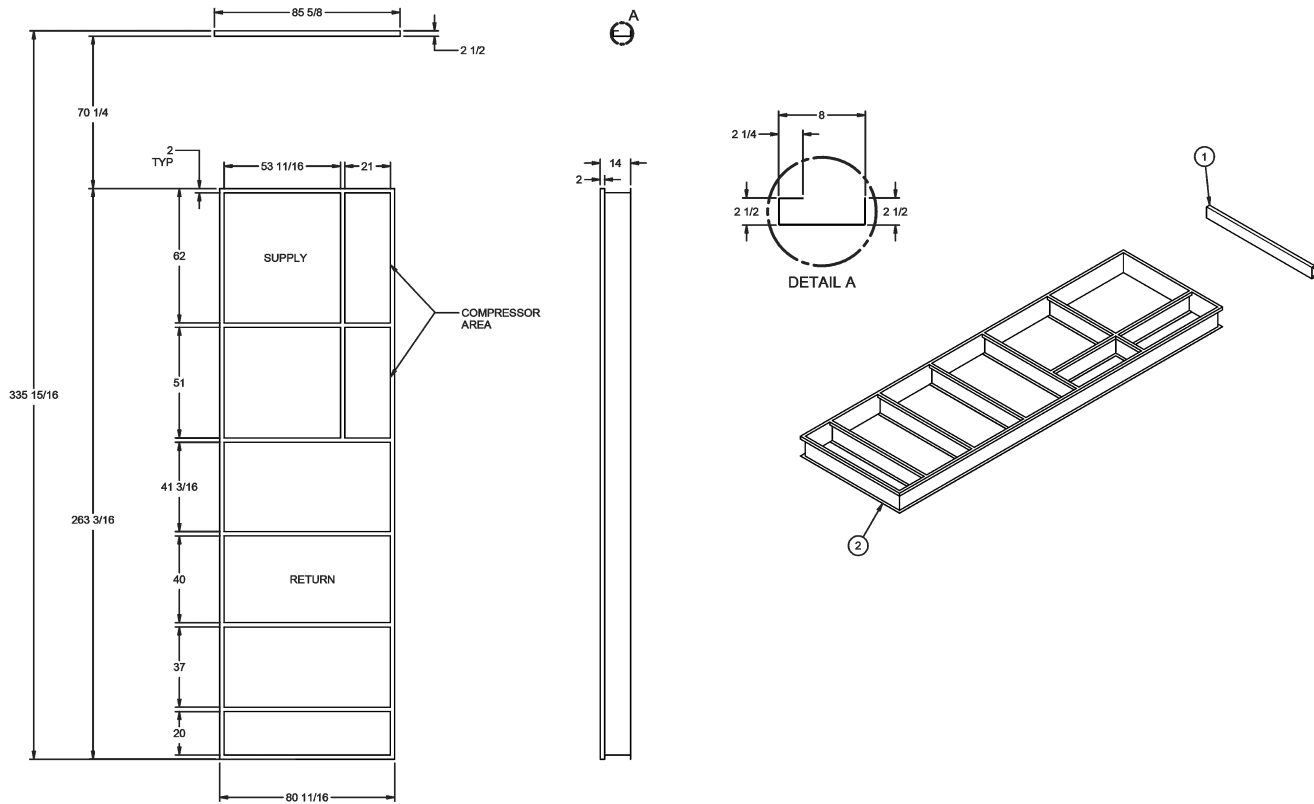


0504I-2598 - 4
*R D4XL CAB
05/2017

0851I-1900---CURB,EXH,PR-D4XL

Qty: 1 Tags: ERV-1

0851I-1900
*R D4XL CAB CURB
ESTIMATED WEIGHT: 416 LBS
05/2017





Submittal

Project number: 16002

Project name: FHS BHM - 124 Peabody

Representative:

Location:

Note: This submittal is based on equipment and options listed on the attachment(s) and represents our interpretation of your requirements. It is the representative's responsibility to review this submittal and verify that it meets the job specifications.

Project Information

Project name: FHS BHM - 124 Peabody

Location: _____

Owner: _____

Architect: _____

MEP firm: _____

Mechanical contractor: _____

Date: 11/23/2021

Sales Representative

Submitted by: _____

Email: _____

Phone number: _____

Product Summary

Qty	Model Description	Unit Size	Tag(s)
1	JROA - Package Unit - DOAS	300	ERV-2

Product Data - Package Unit - DOAS

Size	Qty	Description	Model Number
300	1	Package Unit - DOAS	JROA300G4A4DABGAG1B63FKB0E270EBCBFFE100JLL1 AA00G0ACGD

Tag(s): ERV-2

Unit Voltage: 460-3-60

MCA Range: 60.1-100

MOCP: 80 Amps

Cabinets: CXL Cab with 4 cond fan with Microchannel Condenser Coil (Copper tube / Aluminum fin on heat pumps)

Cabinet Options: Vertical Supply/Vertical Return

Cooling Coil: 6 row Copper Tube Aluminum Fin DX Coil

Compressor Type: Dual Scroll/Dual Circuit with lead Circuit VFD

Refrigeration Controls: Hot Gas Bypass (Dual Circuit)

Refrigeration Controls: Hot Gas Reheat, Modulating (Single Circuit)

Refrigeration Controls: Liquid Sub Cooling, Switchable, All Circuits

CAV VAV: CAV - Constant Air Volume

Evaporator Motor Type: High efficiency ODP with VFD

Evaporator Motor Horsepower: 10 Horsepower

Supply Blower Size: 20" Direct Drive, Backward Inclined Supply Blower

Supply Blower Options: Rubber Isolation (Standard Only)

Energy Recovery & Conservation: ECW 484

Energy Recovery Options: VFD Temp Defrost

Exhaust Blower Motor Horsepower: 5 Horsepower exhaust blower motor

Exhaust/Return Blower Motor type: High efficiency ODP with VFD

Exhaust Blower Size: 18" Direct Drive, Backward Incline Exhaust Blower

Exhaust Blower Options: Gravity Relief Damper+Rubber Isolation (Standard Only)

Heating Types: Natural Gas Heat

Heater Control: Modulating 10:1 (5:1 on LP Gas)

Gas Furnace: 800 MBH (400+400 MBH)

Controls: ALC, Standard Program, DOAS

Ventilation & Controls: Motorized 2-Position OA Damper with 2-Position Actuator (ALC, Field DDC, EM)

Control Options: Exhaust Fan Interlock

ALC Ship With Options: ZS "Standard" Zone Sensor With Humidity

Maintenance Options: 115v Convenience Outlet (Field Wired)

Maintenance Options: Clogged Filter Indicator

Maintenance Options: Condensate Overflow Switch

Safety Controls: None

Filters: 2 in. MERV 8 Pleated and 4 in. MERV 14 Pleated

Disconnect: Non Fused Disconnect

Roof Curbs: C XL Cab Roof Curb 14" with 4 Cond fan With Exhaust

Corrosion Protection - Package: None

Blower HP - 10

Blower RPM - 2154

Supply Fan - BI 20

Exhaust RPM - 2214

Exhaust HP - 5

Exhaust Fan - BI 18



Tag: ERV-2

JROA300G4A4DABGAG1B63FKB0E270EBCBFFE100JLL1AA00G0ACGD

Unit Information**Package Unit - DOAS**

Model:	JROA	Unit Length:	281	in	Altitude:	0	ft
Size:	300 C4XL	Unit Width:	87.125	in	Unit Weight:	5041	lb.
Quantity:	1	Unit Height:	81	in			

Design Conditions

Supply Airflow:	6000	CFM	Ambient Air DB:	95.0	F
Outside Airflow:	6000	CFM			

Filter Information

Filters:	25x20(2), 25x16(2)
Pleated Filter Media:	40 sq.ft

Cooling Performance

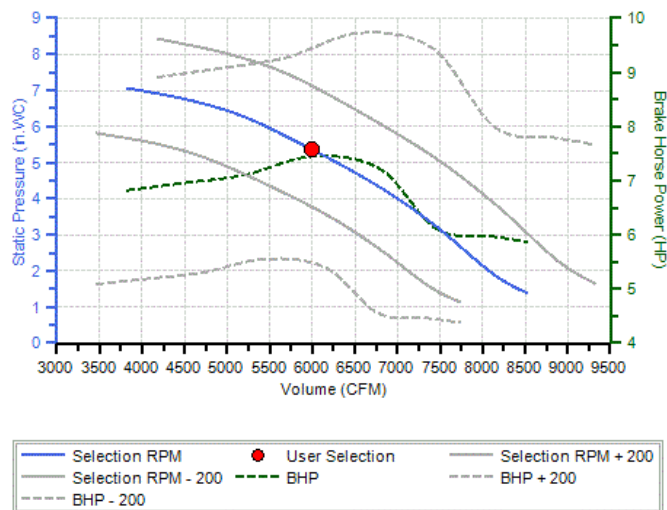
Gross Total Capacity:	360.1	MBh	Evaporator Face Area:	16	sq ft
Gross Sensible Capacity:	212.4	MBh	Evaporator Rows:	6	
Net Total Capacity:	341.1	MBh	Evaporator FPI:	12	
Net Sensible Capacity:	193.4	MBh	Condenser Face Area:	53.44	sq ft
Entering Air DB / WB (Coil):	82.9 / 70.1	F	Condenser Rows:	1	
Leaving Air DB / WB (Coil):	50.9 / 50.8	F	Condenser FPI:	19	
Leaving Air DB / WB (Subcooling):	59.2 / 54.3	F	Air Velocity:	375	ft/min
Leaving Air DB / WB (Max. Reheat):	74.6 / 60.3	F	Cooling Coil Air PD:	0.54	in H2O
Leaving Air DB / WB (Unit):	77.5 / 61.4	F			
EER:	15.8		MRE:	7.93	lb/kWh
Watts:	33539		MRC:	266.08	lb/h

Heating Performance

Heat Type:	Gas	Entering Air DB:	-10.0	F	
Input Capacity:	800.0	MBh	Leaving Air DB:	88.8	F
Output Capacity:	640.0		Heating Coil Air PD:	0.12	in H2O

Energy Conservation Wheel ECW 484

Cooling			Heating					
Outside Airflow:	6000	CFM	Outside Air DB / WB:	95.0 / 78.0	F	Outside Air DB / WB:	0.0 / 0.0	F
Pre-treated OA:	6000	CFM	Pre-treated OA DB / WB:	82.9 / 70.2	F	Pre-treated OA DB / WB:	37.3 / 35.6	F
Return Airflow:	0	CFM	Return Air DB / WB:	75.0 / 63.0	F	Return Air DB / WB:	70.0 / 58.0	F
Exhaust Airflow:	5400	CFM	Exhaust Air DB / WB:	87.7 / 72.5	F	Exhaust Air DB / WB:	22.1 / 25.0	F
			Supply Air PD:	1.30	in H2O	Supply Air PD:	1.50	in H2O
			Exhaust Air PD:	1.22	in H2O	Exhaust Air PD:	1.22	in H2O
			Total Capacity:	190.09	MBh	Total Capacity:	333.25	MBh
Filters:			Latent Effectiveness:	58	%	Latent Effectiveness:	62	%
Pleated Filter Media:	sq.ft		Sensible Effectiveness:	64	%	Sensible Effectiveness:	70	%
			Total Effectiveness:	60	%	Total Effectiveness:	67	%

Supply Fan BI 20**Supply Pressure Drop Summary**

External Static Pressure: **3.00** in H₂O

Internal Pressure Drop: **2.37** in H₂O

Total Static Pressure: **5.37** in H₂O

Supply Fan Conditions

Fan Motor BHP: **7.45** BHP

Fan RPM: **2154** RPM

Internal Pressure Drop Breakdown

Cabinet: **0.16** in H₂O

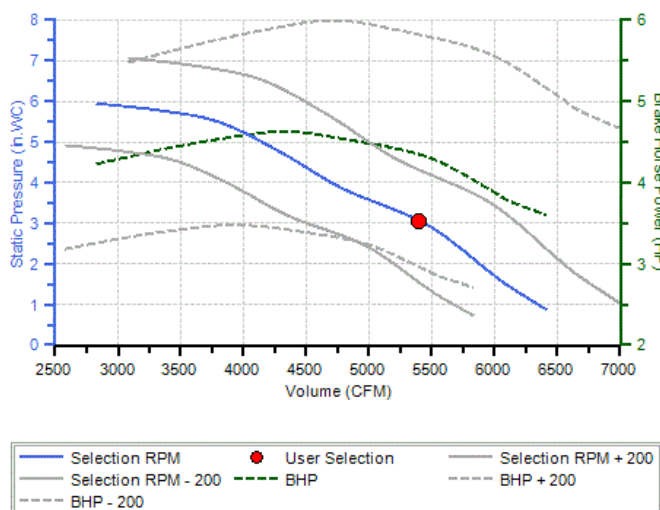
Filter: **0.2** in H₂O

Cooling Coil: **0.54** in H₂O

Hot Gas Reheat & Subcooling: **0.03** in H₂O

Heating Coil: **0.12** in H₂O

Energy Conservation Wheel: **1.3** in H₂O

Exhaust Fan BI 18**Exhaust Pressure Drop**

External Static Pressure: **1.50** in H₂O

Total Static Pressure: **3.04** in H₂O

Exhaust Fan Conditions

Fan Motor BHP: **4.34** BHP

Fan RPM: **2214** RPM

Unit Electrical Data

Unit Voltage-Ph-Hz: **460-3-60**
 Unit Amps - FLA: **63.63** Amps
 Min Circuit Ampacity - MCA: **68.3** Amps
 Maximum Fuse Size - MFS: **80** Amps

Motors

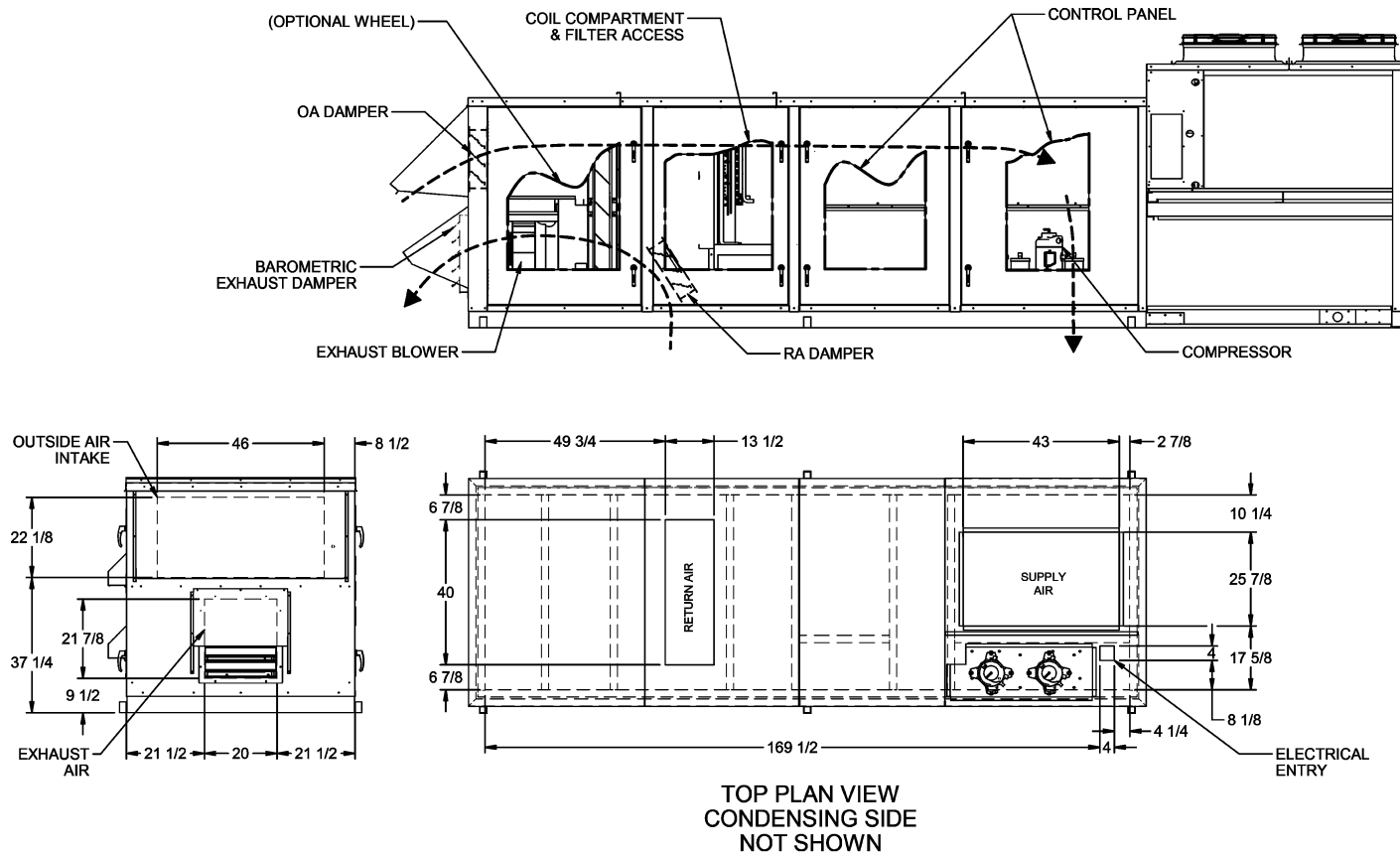
<u>Name/Type</u>	<u>Fan Service</u>	<u>Qty</u>	<u>HP (ea.)</u>	<u>FLA (ea.)</u>	<u>RLA (ea.)</u>	<u>LRA (ea.)</u>
ECW		1	0.5	1.3		
460-3 ODP Hi E (4 pole)	Exhaust	1	5	6.3		
Scroll		2			18.6	125.0
460-3 ODP Hi E (4 pole)	Supply	1	10	12.4		
630mm AC Condenser Fan	Condenser	4	1.3	1.6		

Sound Data

	<u>63Hz</u>	<u>125Hz</u>	<u>250Hz</u>	<u>500Hz</u>	<u>1KHz</u>	<u>2KHz</u>	<u>4KHz</u>	<u>8KHz</u>	<u>Total DBA</u>
Cabinet	69.5	87.1	85	89.9	88.3	83.5	78	72.8	92.01
Supply	55	62	74	75.0	78.0	78.0	78	70	84
Exhaust	50	58	71	72.0	72.0	72.0	72	64	79

0504I-2553 - *R C4XL CAB-2

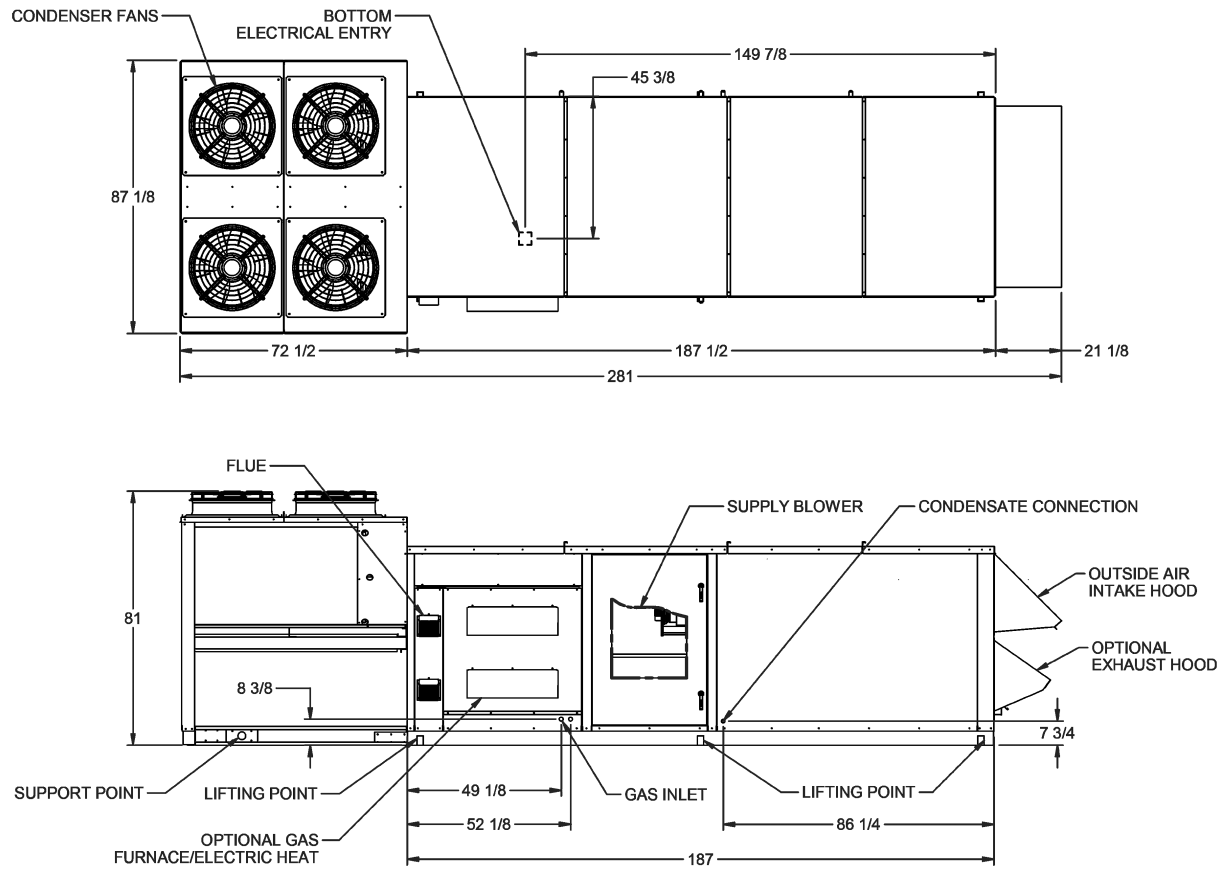
Qty: 1 Tags: ERV-2



0504I-2553 - 2
*R C4XL CAB
05/2017

0504I-2553 - *R C4XL CAB-1

Qty: 1 Tags: ERV-2

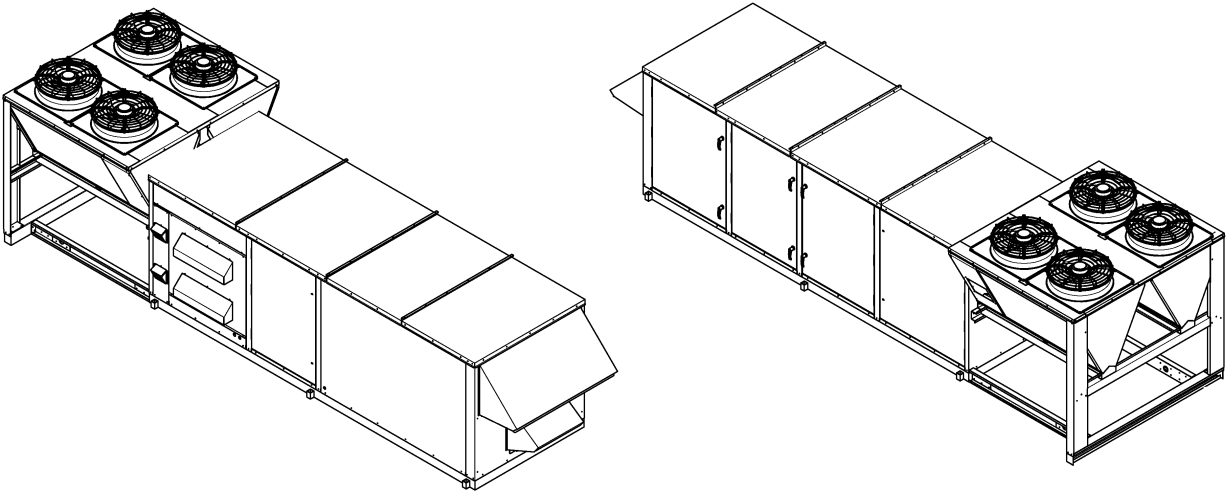


0504I-2553 - 1
*R C4XL CAB
05/2017

0504I-2553 - *R C4XL CAB-3

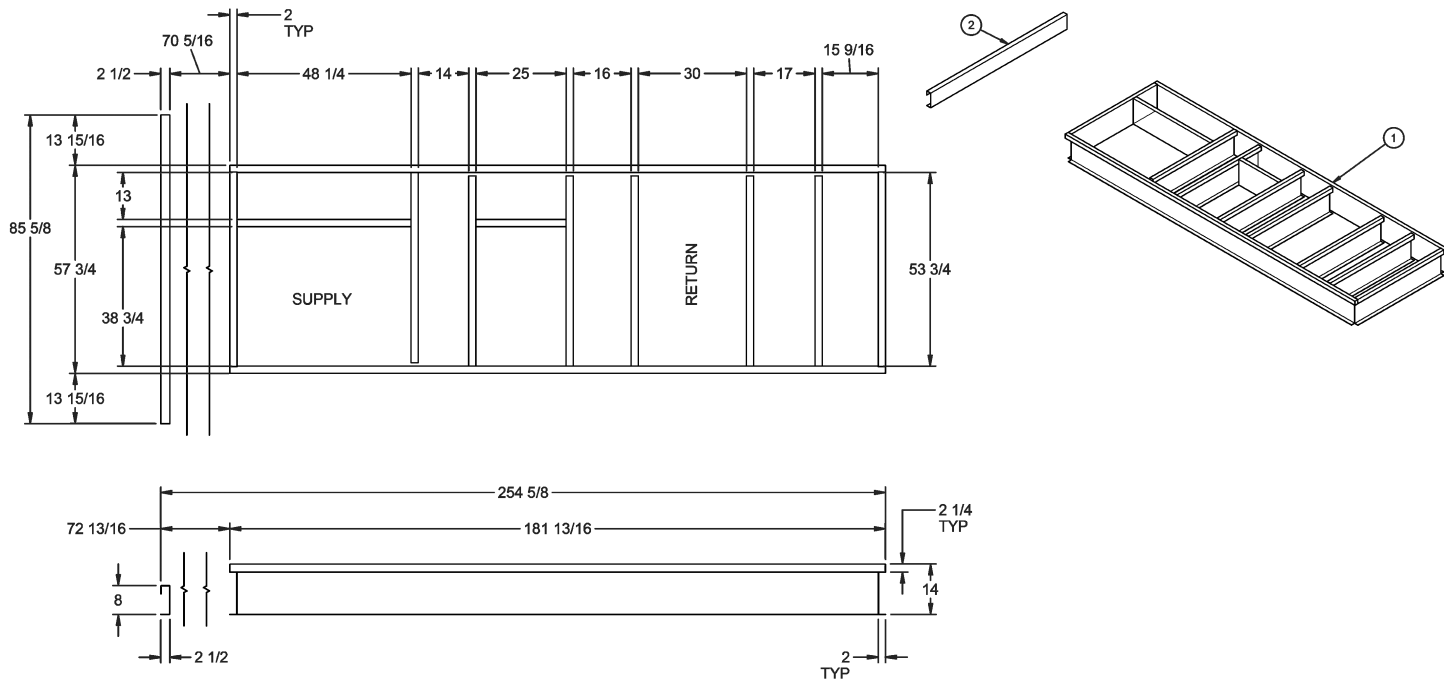
Qty: 1 Tags: ERV-2

0504I-2553 - 3
*R C4XL CAB
05/2017



0851I-1890---CURB,EXH,PR-C4XL-CAB

Qty: 1 Tags: ERV-2



0851I-1890
 *R C4XL CAB CURB
 ESTIMATED WEIGHT: 314 LBS
 05/2017

Mechanical Specifications - Tag(s): ERV-2**Application/Unit Type JROA**

JROA Series are designed for dedicated 100% outside air pre-conditioning. Units are DX air-source cooling only with or without optional heat, energy recovery wheel or exhaust.

Unit JROA

The JR Series packaged unit is a fully assembled heating and/or cooling system, ETL listed, with a single refrigerant circuit (sizes 036–096) or dual refrigerant circuits (sizes 120–1680). Standard features are hoods for outside air and exhaust (if included), factory wiring with a single point power connection, phase and voltage monitor, refrigerant piping, safeties and refrigerant/oil charge (R-410A). Also included are temperature controls (either factory or terminals for field furnished) and optional features listed below.

Unit Cabinet JROA

Cabinet is double wall design with heavy-duty frame and reinforced base. Double wall panels are constructed of G-90 galvanized steel inside and out with a polyester exterior finish for up to 2,500 hour salt-spray protection. Fixed panels on sides and top have two-inch thick, closed cell foam insulation; access panels have two-inch foam injection insulation provides an R-13 rating to reduce heat transfer losses. Access panels are fitted with one-quarter turn self-tightening latches (one lockable) and stainless steel hinges. Top panels are raised to improve water run-off and include drip edge. Heavy Duty 16-gauge base pan has 0.375 inch closed cell insulation on the underside to serve as sound attenuation and as a moisture/thermal barrier and a positive seal to the curb. Bottom openings include a minimum one-half inch turned up flange. Stainless steel and/or MAGNI® 555-coated hardware reduce fastener corrosion. Efficient micro-channel condenser coils are standard (heat-pumps have fin and tube). The condenser section on units with four or more fans has removable channels for proper roof clearance. A double-sloped, extra-large, stainless steel drain pan equipped with drain fitting positioned on exterior of cabinet to facilitate removal of condensate and eliminate standing water.

Fans JROA

Direct-drive (air foil or backward inclined) supply and exhaust (if included) blowers are provided with high-efficiency, ODP or TEFC motors (optional ECM) and variable frequency drives (VFD). VFD's may be used to field-adjust airflow. Condenser fans have external rotor, direct driven, axial cast profiled blades with a 5-1/2" spun venturi for high efficiency and low noise. Motors are Totally Enclosed Air Over (TEAO) and operated with pre-programmed VFD for accurate head pressure control.

Cabinet Options: Vertical Supply/Vertical Return

Airflow Configuration, vertical (downflow) supply and return; may or may not have exhaust/relief

Cooling Coil: 6 row Copper Tube Aluminum Fin DX Coil

Cooling Coil, 6-row copper tube, aluminum fin DX coil will be enhanced surface aluminum fins, formed on multiple rows of seamless rifled copper tubing, arranged in staggered tube configuration with galvanized steel header plates. These tubes are mechanically expanded, firmly bonding the tube to the shoulder of each fin. Dual circuit units will have intertwined coils for optimal dehumidification at part-load operation.

Compressor Type: Dual Scroll/Dual Circuit with lead Circuit VFD

Compressors are hermetic scroll type with crankcase heaters, overload protection, short cycle protection and minimum on and off timers. Installed in an insulated compartment accessible through hinged access doors compressors are mounted on rubber-in-shear isolators and isolated from the treated air stream. Refrigerant lines include circuit access/service valves and reaction torque loops. Crankcase heaters will only be activated during compressor off mode. The lead refrigeration circuit has a variable capacity, variable speed compressor with a variable speed drive and modulating hot gas bypass for additional control. The control system will be capable of modulating the compressor from 100% capacity down to 58% capacity while staging the lag compressor. Unit sizes 480 and larger have tandem type compressors. The second compressor on each tandem set is staged via a refrigeration pressure control.

Refrigeration Controls: Hot Gas Bypass (Dual Circuit)

Refrigeration Controls/Options, Hot Gas Bypass, modulating valves without Head Pressure Control (Dual Circuit)

Refrigeration Controls: Hot Gas Reheat, Modulating (Single Circuit)

Refrigeration Controls/Options, Hot Gas Reheat, Modulating with Variable Speed Head Pressure Control (Single Circuit), Includes one-row coil and Electronic valve

Refrigeration Controls: Liquid Sub Cooling, Switchable, All Circuits

Refrigeration Controls/Options, One-row Liquid Sub-cooling/reheat coil on all circuits, face-split for dual circuits with bypass piping, solenoid valves and additional refrigerant charge.

Evaporator Motor Type: High efficiency ODP with VFD

Supply Motor Type, the motor(s) will be premium efficiency, open drip proof nominal 1800 or 3600 RPM. For 1.0 horsepower and larger and it is externally protected (manual reset). Motors will be furnished with sealed ball bearings. A factory-mounted Variable Frequency Drive will be furnished for each motor

Evaporator Motor Horsepower: 10 Horsepower

Supply Motor Type, 10.0 horsepower

Supply Blower Size: 20" Direct Drive, Backward Inclined Supply Blower

Supply Blower size/Type, 20" diameter/backward-inclined; the direct-drive impeller is painted steel, statically and dynamically balanced to a grade of G=2,5 (ATE G=6,3) and designed along with the matching inlet cone to achieve the best possible aerodynamic performance. They are secured to the motor shaft with a steel hub that incorporates a keyway and locking screw.

Supply Blower Options: Rubber Isolation (Standard Only)

Supply Blower Options, reinforced neoprene pad isolation in between the blower frame and mount plus a flexible connection at the fan wall.

Energy Recovery & Conservation: ECW 484

The factory-installed enthalpy wheel shall be certified to meet the requirements of AHRI Standard 1060 and shall be AHRI listed. The rotor shall be constructed of alternating layers of flat and corrugated synthetic fibrous media and shall be fluted or formed honeycomb geometry so as to eliminate internal wheel bypass. The wheel shall include a desiccant that is permanently bound and uniformly dispersed throughout the matrix. The desiccant material shall be a 4 angstrom or smaller molecular sieve to minimize cross contamination. The wheel frames shall be evenly spaced steel spokes with a galvanized steel outer band and rigid center hub. The wheel seals shall be full contact nylon brush type. Wheel cassettes shall be constructed of galvanized steel and shall have an integral purge section minimizing cross contamination of supply air. Bearings shall be inboard mounted, permanently sealed roller type or externally flanged type. The wheel cassette shall slide out of the cabinet side for service. Wheels up to 60" shall be driven by a fractional horsepower AC motor and larger wheels shall have a 1.0 or 1.5 horsepower premium efficiency AC motor via a multilink drive belt. Outside and exhaust air streams include 2" MERV 8 filters.

Energy Recovery Options: VFD Temp Defrost

Energy Recovery Options, VFD defrost, wheel speed is slowed as frost condition occurs

Exhaust Blower Motor Horsepower: 5 Horsepower exhaust blower motor

Exhaust Motor size, 5.0 horsepower

Exhaust/Return Blower Motor type: High efficiency ODP with VFD

"Exhaust Motor Type

The motor(s) will be premium efficiency, open drip proof, nominal 1800 or 3600 RPM. For 1.0 horsepower and larger and it is externally protected (manual reset). Motors will be furnished with sealed ball bearings. A factory-mounted Variable Frequency Drive will be furnished for each motor

"

Exhaust Blower Size: 18" Direct Drive, Backward Incline Exhaust Blower

Exhaust Blower size/Type, 18" diameter/backward-inclined; the direct-drive impeller is painted steel, statically and dynamically balanced to a grade of G=2,5 (ATE G=6,3) and designed along with the matching inlet cone to achieve the best possible aerodynamic performance. They are secured to the motor shaft with a steel hub that incorporates a keyway and locking screw.

Exhaust Blower Options: Gravity Relief Damper+Rubber Isolation (Standard Only)

Exhaust Blower Options, exhaust air hood with gravity relief damper, reinforced neoprene pad isolation in between the blower frame and mount plus a flexible connection at the fan wall (Standard only).

Heating Types: Natural Gas Heat

Natural Gas Heat, Gas heaters are induced-draft combustion type with energy saving direct spark ignition systems and redundant main gas valves. The tubular section type heat exchanger is constructed of a minimum of 20-gage type 409 stainless steel. Burners are in-shot type constructed of aluminum coated steel.

Heater Control: Modulating 10:1 (5:1 on LP Gas)

Heater control, modulating 10:1 (Gas furnace)

Gas Furnace: 800 MBH (400+400 MBH)

Gas Heating Capacity, 800.0 (400.0 + 400.0) MBH input, 80% AFUE

Controls: ALC, Standard Program, DOAS

Controls, ALC I/O OPTICORE LS-1628u digital controller, factory-mounted and wired with standard program for 100% outside air. Includes low voltage control circuit, remote access support over internet/intranet or modem and BACnet and Modbus protocols.

Ventilation & Controls: Motorized 2-Position OA Damper with 2-Position Actuator (ALC, Field DDC, EM)

Ventilation Option, outside air intake hood with birdscreen plus motorized Class 1 damper with 2-position actuator – may be used with ALC or field-installed DDC or electro-mechanical 24 Volt controls

Control Options: Exhaust Fan Interlock

Control Options, exhaust fan interlock relay factory-installed and wired. Provides start/stop of a remote exhaust fan with the supply fan.

ALC Ship With Options: ZS "Standard" Zone Sensor With Humidity

ZS-H-BNK wall-mounted standard zone temperature and humidity sensor. This is used with PRR and PRM units.

Maintenance Options: 115v Convenience Outlet (Field Wired)

Maintenance Options, 115 volt GFCI convenience outlet with cover– field wired.

Maintenance Options: Clogged Filter Indicator

Maintenance Options, clogged filter switch with visual indicator and tubing for the filters ahead of the cooling coil factory-mounted. Includes terminals for connection to a DDC controller. If an ALC is included the switch is pre-wired.

Maintenance Options: Condensate Overflow Switch

Maintenance Options, condensate overflow switch mounted at the coil drain pan. The switch is wired to stop the unit if high water level is sensed.

Safety Controls: None

Safety Options, None

Filters: 2 in. MERV 8 Pleated and 4 in. MERV 14 Pleated

Pre-filter options, 2 in. plus 4 in. filter racks with 2 in. MERV 8 and 4 in. MERV 14 (pleated) filters pre-loaded in unit

Roof Curbs: C XL Cab Roof Curb 14" with 4 Cond fan With Exhaust

ROOF CURB, 14" high, un-insulated curb with sleeper for PR_A/PR_H-C4 XL cabinet with exhaust fan and four condenser fans. Curb will be formed of minimum 16-gage galvanized steel with wood nailer strip and will be capable of supporting entire unit weight Curb ships knocked down and requires to be assembled in the field.

Corrosion Protection - Package: None

Corrosion Protection, none



Tag: DOAS-1

JROA600J6A4DAEHEH1B64FKB0E480NBCEGUG100JLS1AA00E0ACZZ

Unit Information**Package Unit - DOAS**

Model:	JROA	Unit Length:	429.5 in	Altitude:	0 ft
Size:	600 E6XL	Unit Width:	108 in	Unit Weight:	12183 lb.
Quantity:	1	Unit Height:	108 in		

Design Conditions**Filter Information**

Supply Airflow:	15000 CFM	Ambient Air DB:	95.0 F	Filters:	
Outside Airflow:	15000 CFM			Pleated Filter Media:	sq.ft

Cooling Performance

Gross Total Capacity:	764.8	MBh	Evaporator Face Area:	41.67	sq ft
Gross Sensible Capacity:	472.9	MBh	Evaporator Rows:	6	
Net Total Capacity:	714.9	MBh	Evaporator FPI:	12	
Net Sensible Capacity:	423	MBh	Condenser Face Area:	119.17	sq ft
Entering Air DB / WB (Coil):	83.3 / 70.5	F	Condenser Rows:	1	
Leaving Air DB / WB (Coil):	54.8 / 54.8	F	Condenser FPI:	21	
Leaving Air DB / WB (Subcooling):	62.4 / 57.8	F	Air Velocity:	359	fpm
Leaving Air DB / WB (Max. Reheat):	78.7 / 63.72	F	Cooling Coil Air PD:	0.51	in H2O
Leaving Air DB / WB (Unit):	81.8 / 64.8	F			
EER:	15.3		MRE:	6.8	lb/kWh
Watts:	76812		MRC:	522.55	lb/h

Heating Performance

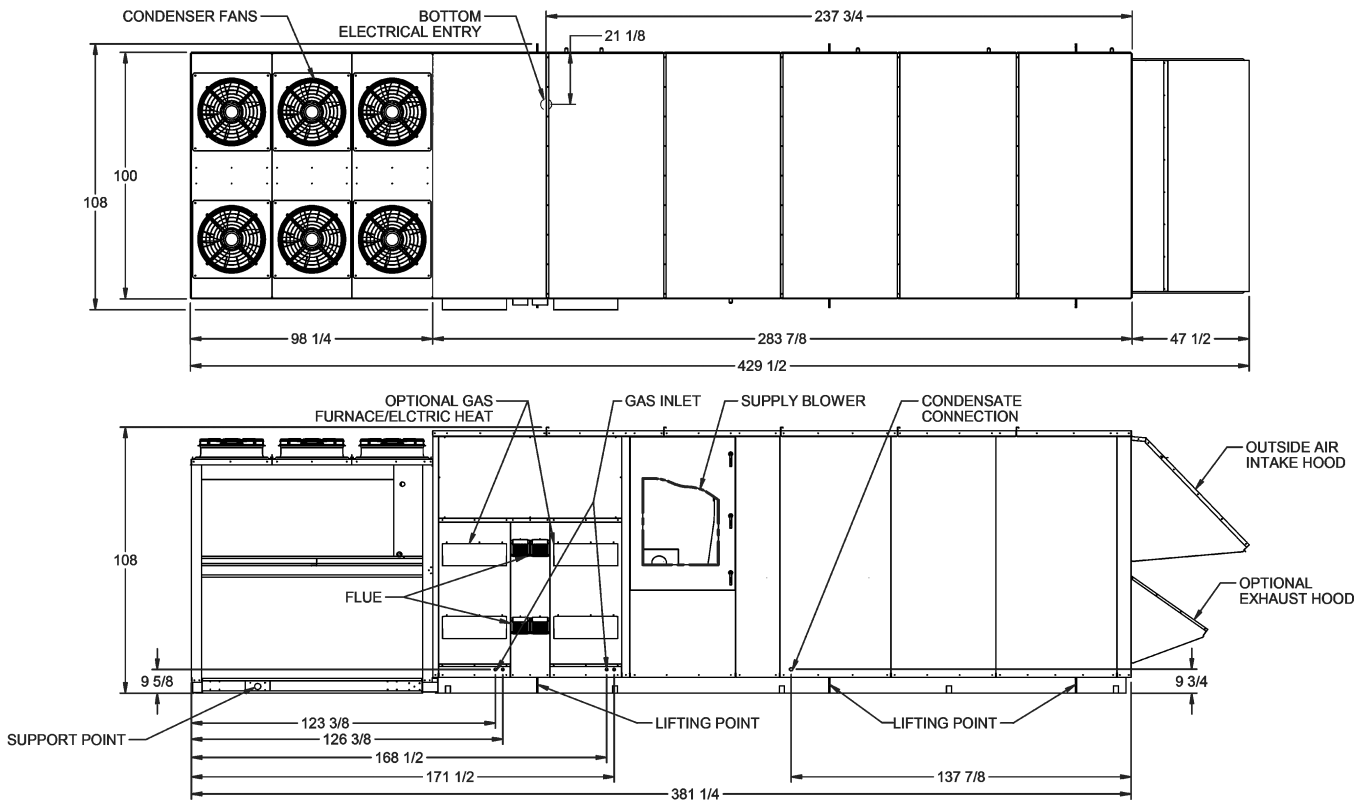
Heat Type:	Gas	Entering Air DB:	0.0 F
Input Capacity:	1600.0 MBh	Leaving Air DB:	79.0 F
Output Capacity:	1280.0	Heating Coil Air PD:	0.36 in H2O

Energy Conservation Wheel ECW 724**Cooling****Heating**

Outside Airflow:	15000 CFM	Outside Air DB / WB:	95.0 / 78.0 F	Outside Air DB / WB:	0.0 / 0.0 F
Pre-treated OA:	15000 CFM	Pre-treated OA DB / WB:	83.3 / 70.4 F	Pre-treated OA DB / WB:	36.4 / 34.7 F
Return Airflow:	0 CFM	Return Air DB / WB:	75.0 / 63.0 F	Return Air DB / WB:	70.0 / 58.0 F
Exhaust Airflow:	14000 CFM	Exhaust Air DB / WB:	86.9 / 71.9 F	Exhaust Air DB / WB:	24.9 / 27.6 F
		Supply Air PD:	1.50 in H2O	Supply Air PD:	1.60 in H2O
		Exhaust Air PD:	1.40 in H2O	Exhaust Air PD:	1.40 in H2O
		Total Capacity:	458.62 MBh	Total Capacity:	808.38 MBh
Filters:		Latent Effectiveness:	53 %	Latent Effectiveness:	57 %
Pleated Filter Media:	sq.ft	Sensible Effectiveness:	60 %	Sensible Effectiveness:	65 %
		Total Effectiveness:	56 %	Total Effectiveness:	63 %

0504I-2680 - *R E6XL CAB-1

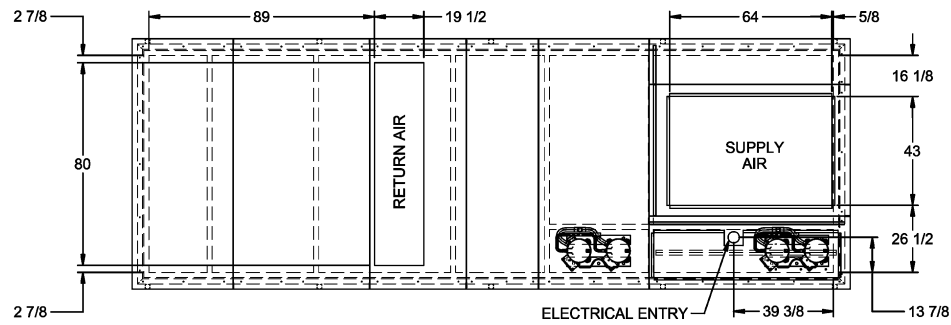
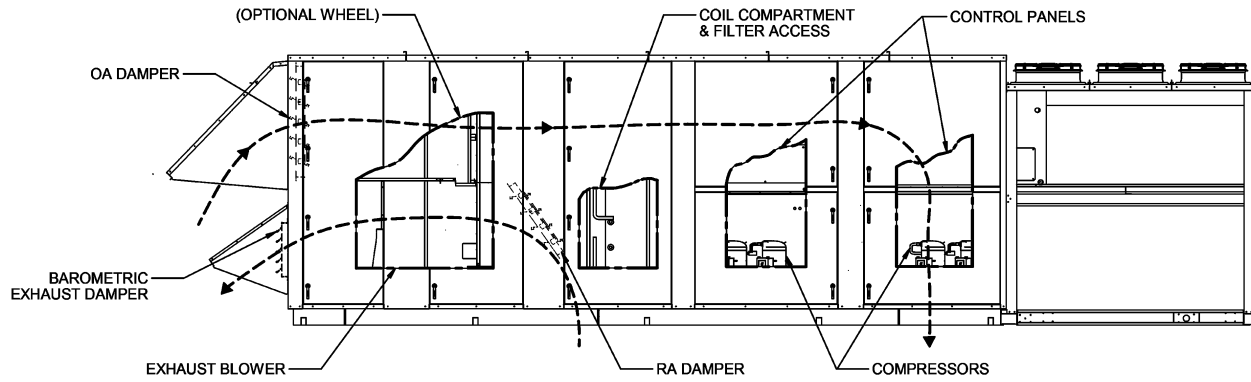
Qty: 1 Tags: DOAS-1



0504I-2680 - 1
*R E6XL CAB
05/2017

0504I-2680 - *R E6XL CAB-2

Qty: 1 Tags: DOAS-1

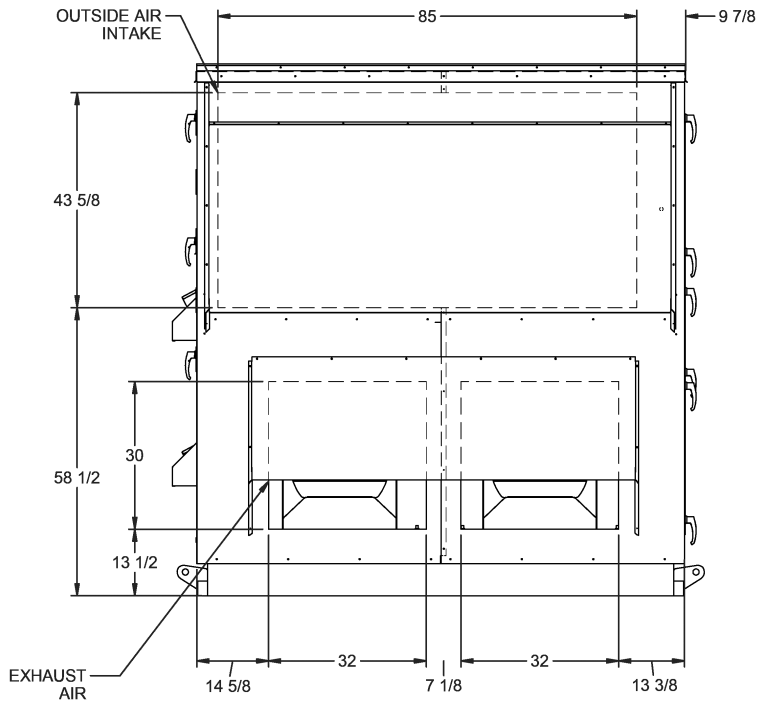


TOP PLAN VIEW
CONDENSING SIDE
NOT SHOWN

0504I-2680 - 2
*R E6XL CAB
05/2017

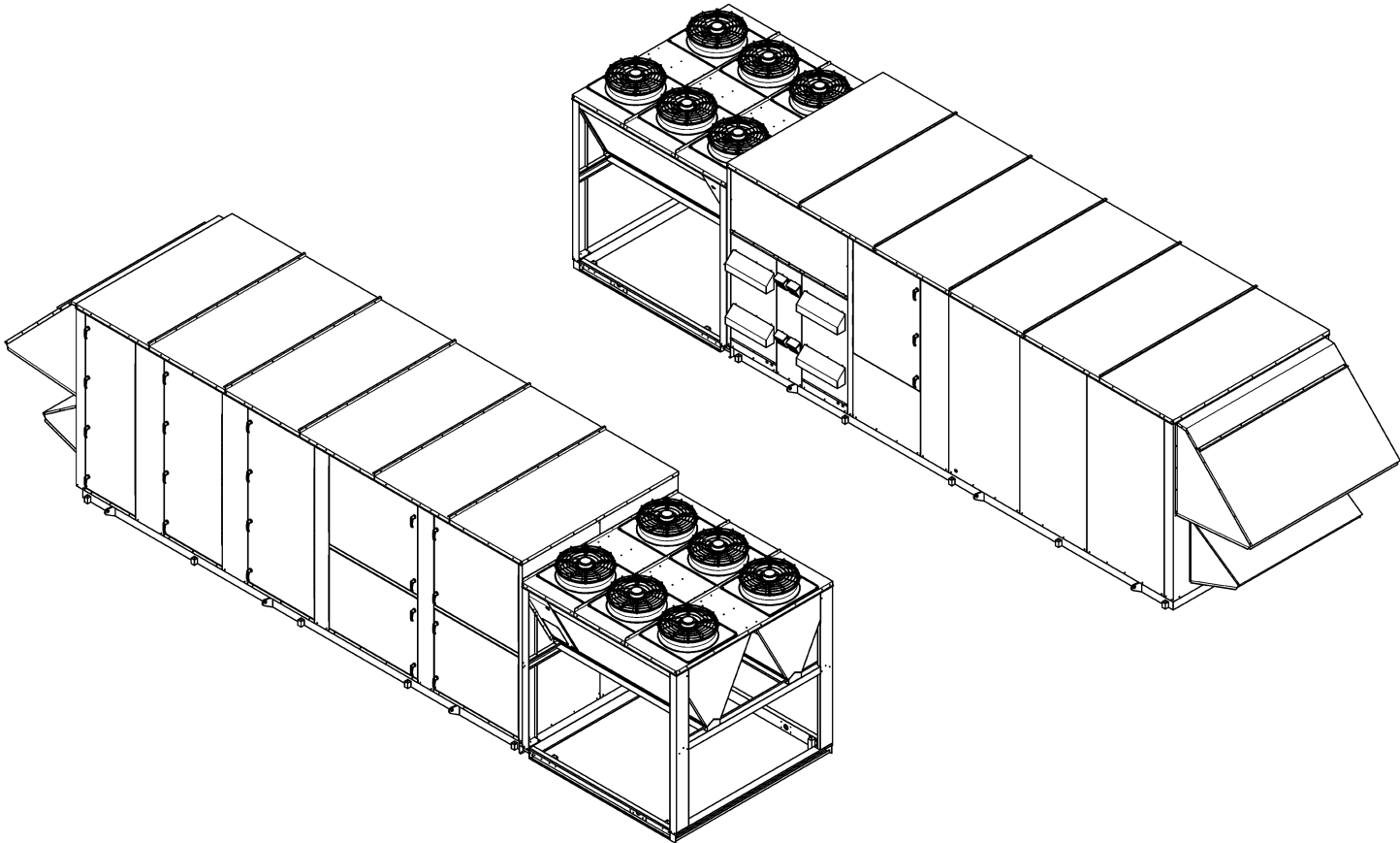
Qty: 1 Tags: DOAS-1

0504I-2680 - 3
*R E6XL CAB
05/2017



0504I-2680 - *R E6XL CAB-4

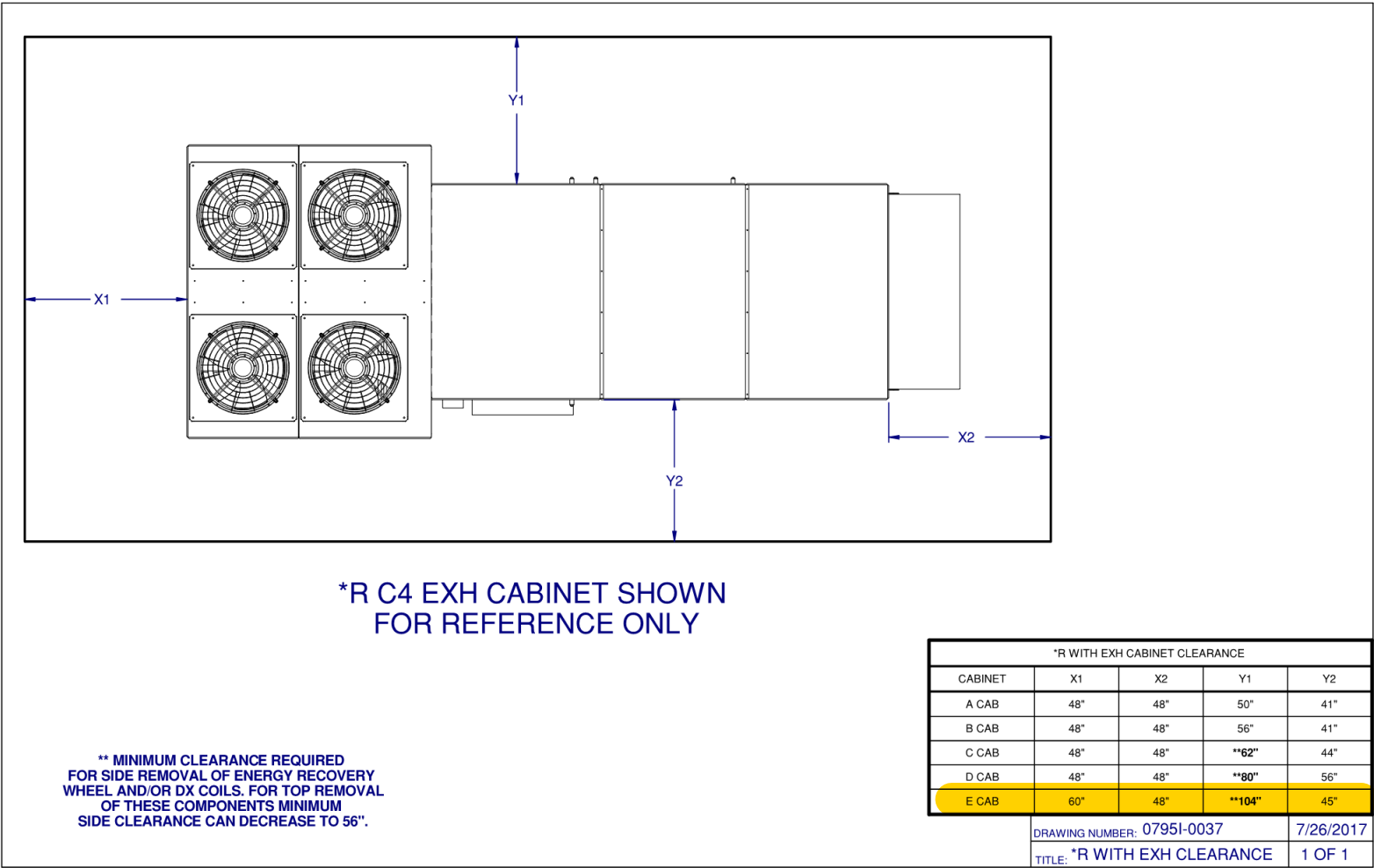
Qty: 1 Tags: DOAS-1



0504I-2680 - 4
*R E6XL CAB
05/2017

07951-0037 - *R EXH CLEARANCE

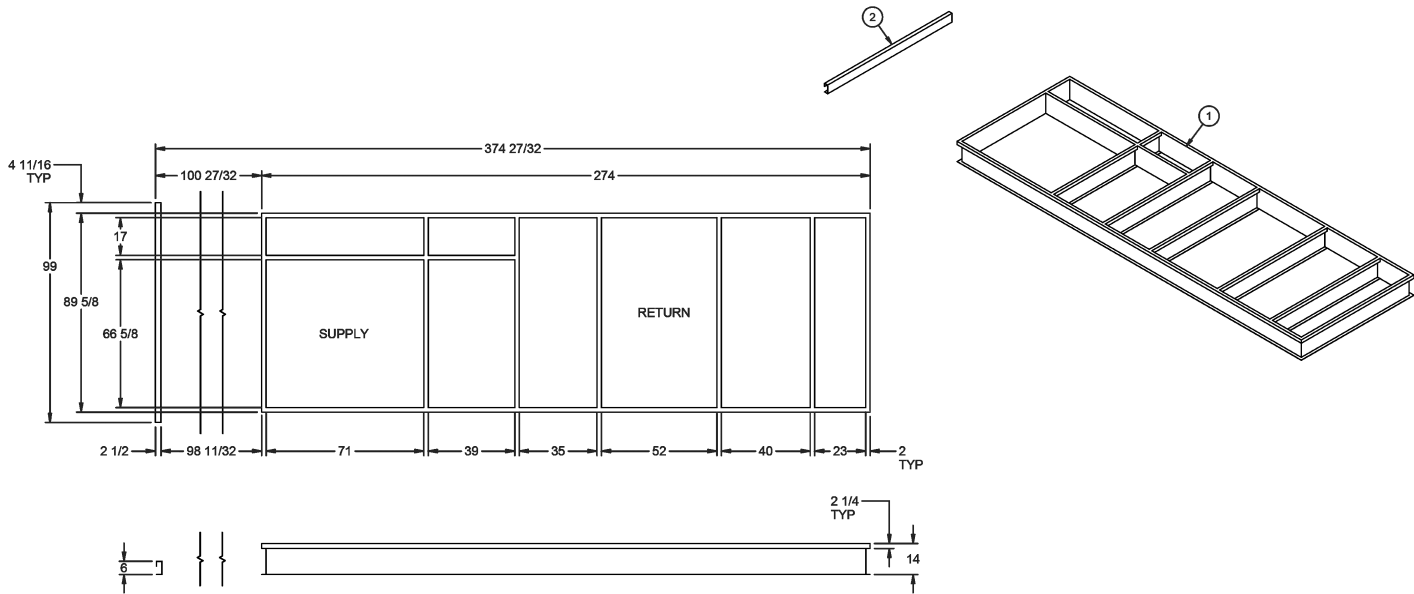
Qty: 1 Tags: DOAS-1



08511-1964---CURB,EXH,PR-E6XL (CURB PROVIDED BY THIRD PARTY)

Qty: 1 Tags: DOAS-1

08511-1964
*R E6XL CAB CURB
ESTIMATED WEIGHT: 450 LBS
05/2017





Tag: DOAS-2

JROA300H4A4DABJEH1B63FKB0H280HBCBGUF100JLM10000E0BB00

Unit Information**Package Unit - DOAS**

Model:	JROA	Unit Length:	373 in	Altitude:	0 ft
Size:	300 D4XL	Unit Width:	87.125 in	Unit Weight:	7569 lb.
Quantity:	1	Unit Height:	90.75 in		

Design Conditions**Filter Information**

Supply Airflow:	8000 CFM	Ambient Air DB:	95.0 F	Filters:	25x20(2), 25x16(2)
Outside Airflow:	8000 CFM			Pleated Filter Media:	40 sq.ft

Cooling Performance

Gross Total Capacity:	397.4	MBh	Evaporator Face Area:	28.89	sq ft
Gross Sensible Capacity:	246.5	MBh	Evaporator Rows:	6	
Net Total Capacity:	373.4	MBh	Evaporator FPI:	12	
Net Sensible Capacity:	222.5	MBh	Condenser Face Area:	53.44	sq ft
Entering Air DB / WB (Coil):	82 / 69.4	F	Condenser Rows:	1	
Leaving Air DB / WB (Coil):	54.2 / 53.7	F	Condenser FPI:	19	
Leaving Air DB / WB (Subcooling):	61.9 / 56.8	F	Air Velocity:	276	fpm
Leaving Air DB / WB (Max. Reheat):	78.1 / 62.8	F	Cooling Coil Air PD:	0.30	in H2O
Leaving Air DB / WB (Unit):	80.9 / 63.8	F			
EER:	17.5		MRE:	7.38	lb/kWh
Watts:	37047		MRC:	273.41	lb/h

Heating Performance

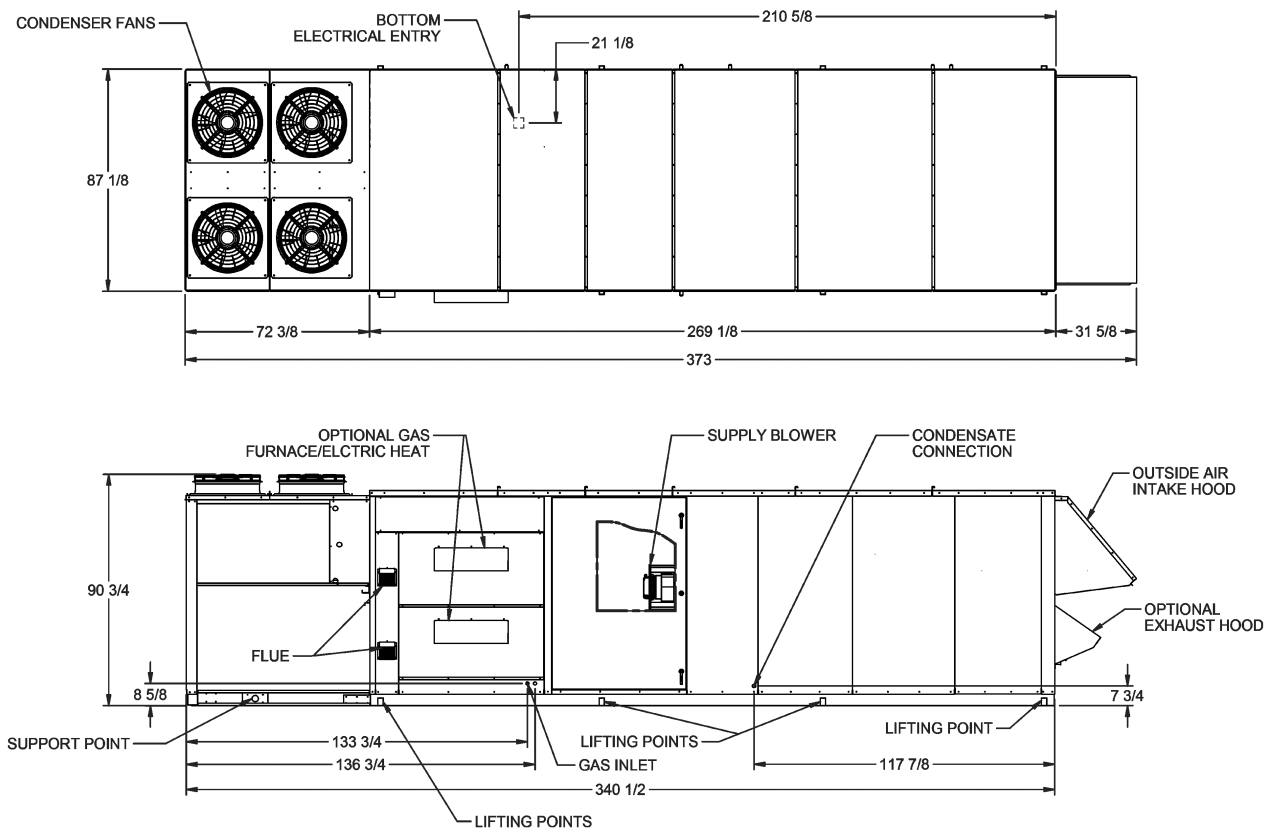
Heat Type:	Gas	Entering Air DB:	0.0 F
Input Capacity:	1000.0 MBh	Leaving Air DB:	92.6 F
Output Capacity:	800.0	Heating Coil Air PD:	0.53 in H2O

Energy Conservation Wheel ECW 604

Cooling			Heating		
Outside Airflow:	8000 CFM	Outside Air DB / WB:	95.0 / 78.0 F	Outside Air DB / WB:	0.0 / 0.0 F
Pre-treated OA:	8000 CFM	Pre-treated OA DB / WB:	82.0 / 69.4 F	Pre-treated OA DB / WB:	40.4 / 38.1 F
Return Airflow:	0 CFM	Return Air DB / WB:	75.0 / 63.0 F	Return Air DB / WB:	70.0 / 58.0 F
Exhaust Airflow:	7500 CFM	Exhaust Air DB / WB:	88.0 / 72.8 F	Exhaust Air DB / WB:	20.4 / 23.4 F
		Supply Air PD:	1.10 in H2O	Supply Air PD:	1.20 in H2O
		Exhaust Air PD:	1.07 in H2O	Exhaust Air PD:	1.07 in H2O
		Total Capacity:	275.48 MBh	Total Capacity:	482.90 MBh
Filters:		Latent Effectiveness:	61 %	Latent Effectiveness:	66 %
Pleated Filter Media:	sq.ft	Sensible Effectiveness:	67 %	Sensible Effectiveness:	72 %
		Total Effectiveness:	64 %	Total Effectiveness:	70 %

0504I-2598 - *R D4XL CAB-1

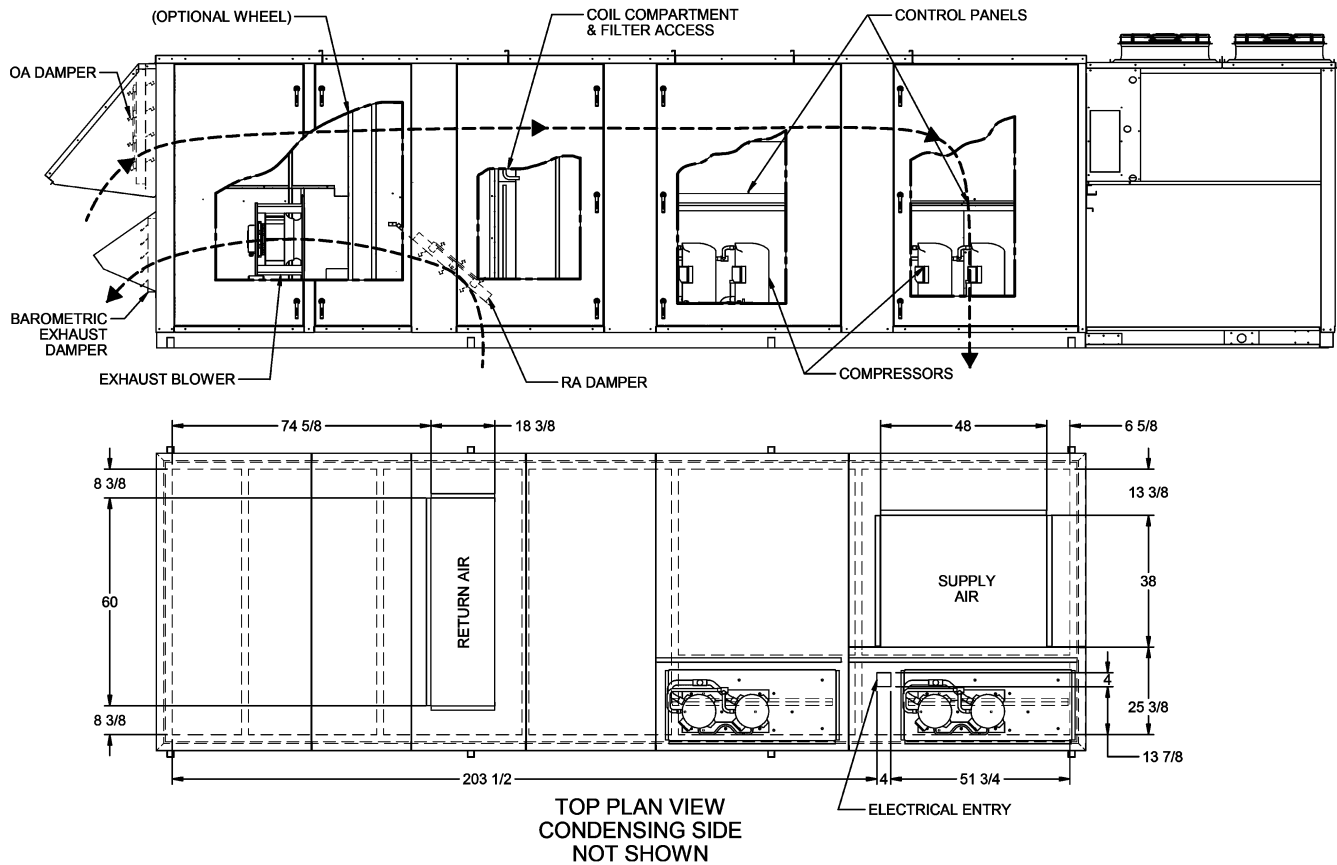
Qty: 1 Tags: DOAS-2



0504I-2598 - 1
*R D4XL CAB
05/2017

0504I-2598 - *R D4XL CAB-2

Qty: 1 Tags: DOAS-2

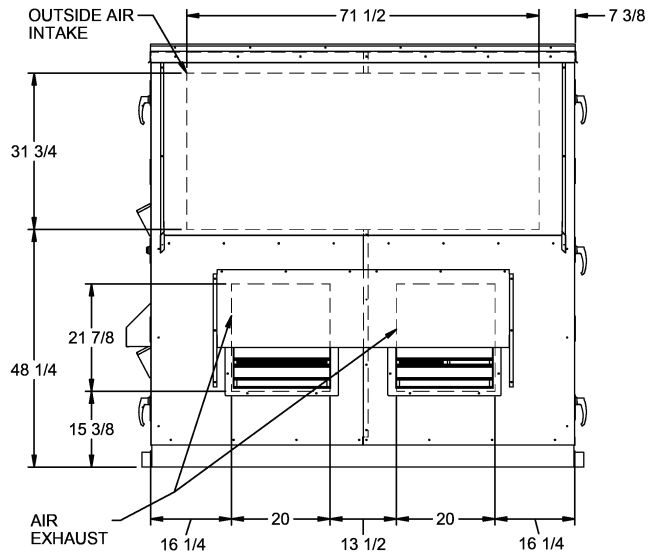


0504I-2598 - 2
*R D4XL CAB
05/2017

0504I-2598 - *R D4XL CAB-3

Qty: 1 Tags: DOAS-2

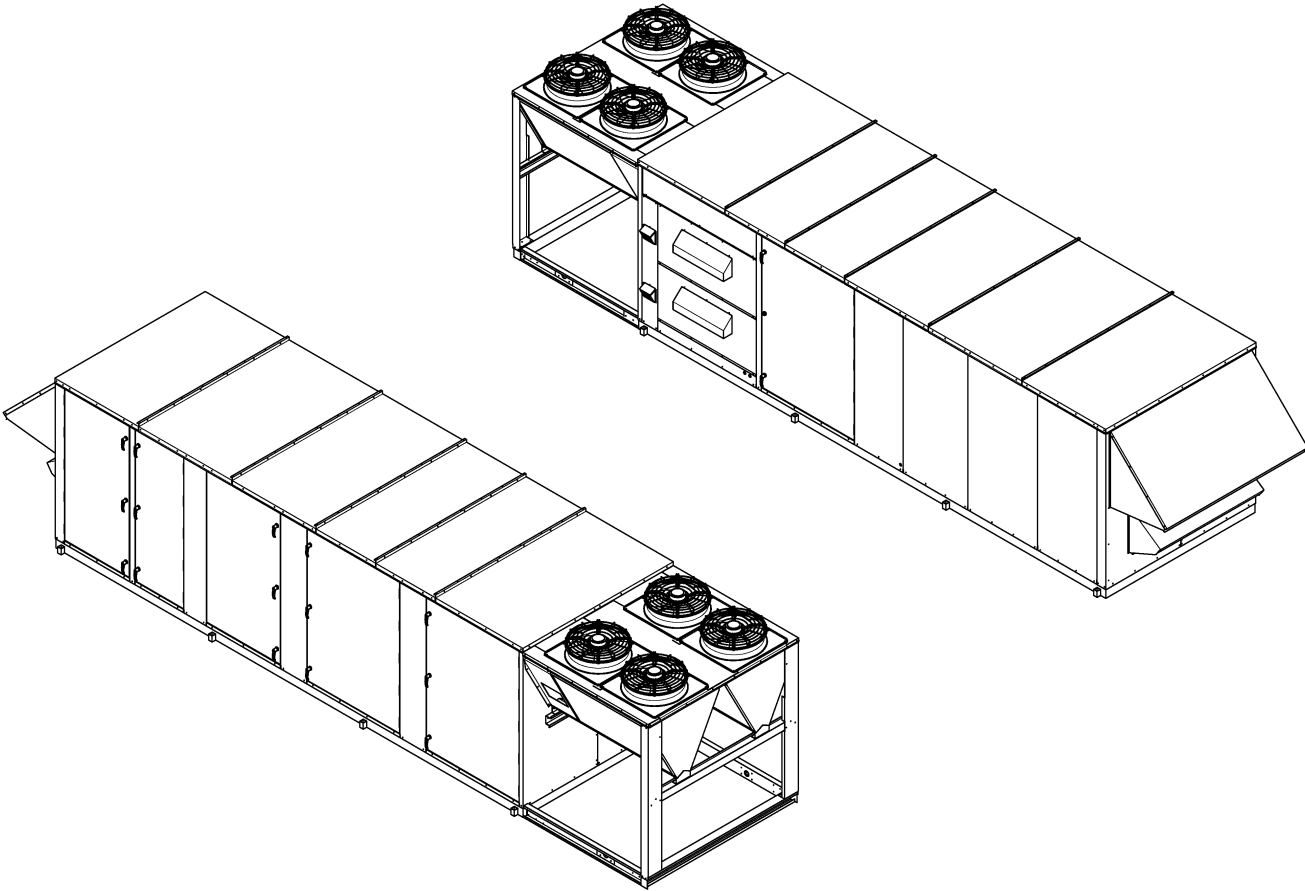
0504I-2598 - 3
*R D4XL CAB
05/2017



0504I-2598 - *R D4XL CAB-4

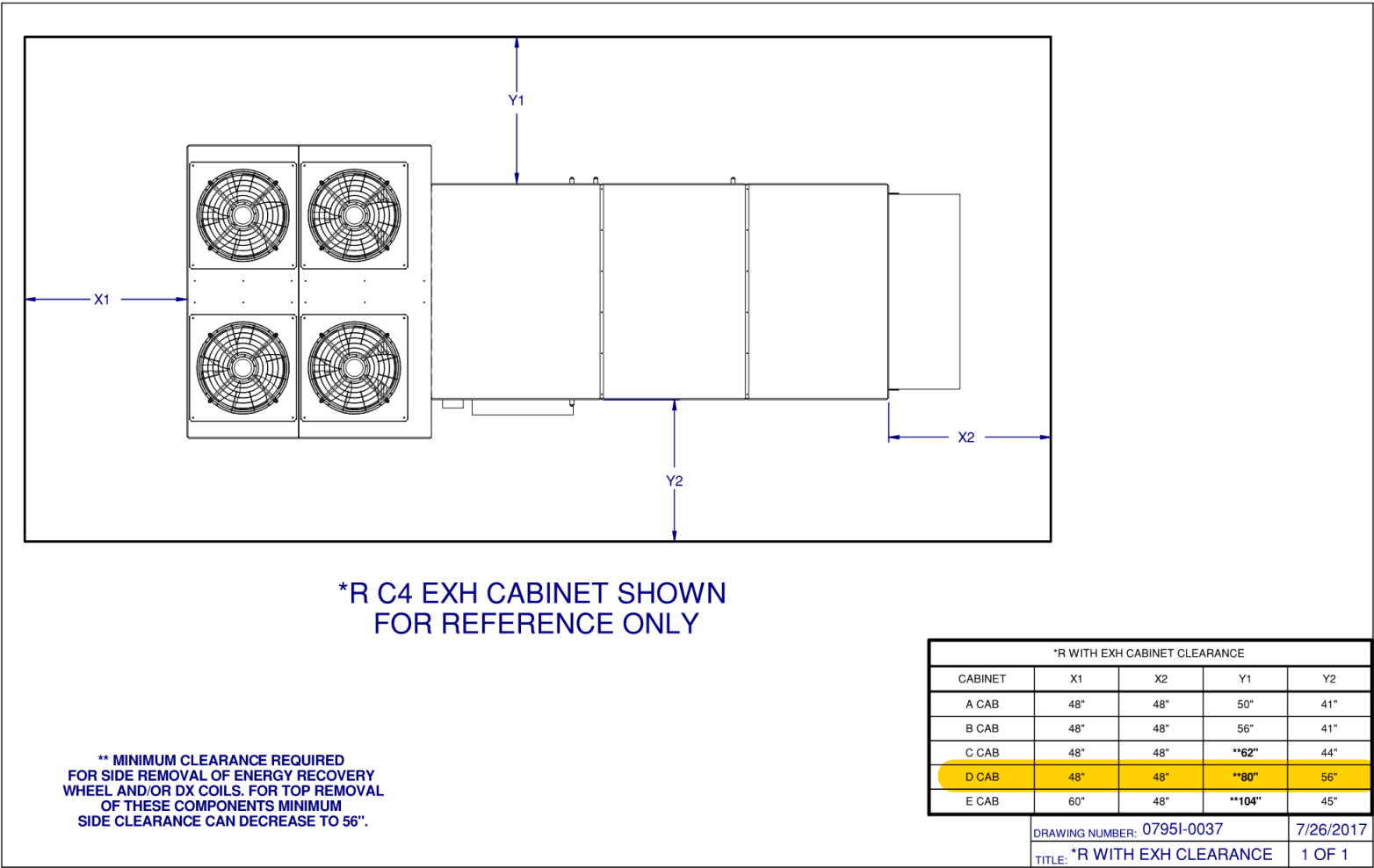
Qty: 1 Tags: DOAS-2

0504I-2598 - 4
*R D4XL CAB
05/2017



07951-0037 - *R EXH CLEARANCE

Qty: 1 Tags: DOAS-2



Johnson Controls Single Package R-410A Air Conditioner

Project Name: **FHS-BHM**

Unit Model #: **AD20T3DH4T1CUT12H1**

Quantity: **1** Tag #: **RTU-1**

System: **AD20T3DH4T1CUT12H1**

Cooling Performance

Total gross capacity	229.4 MBH
Sensible gross capacity	166.0 MBH
Total net capacity	215.4 MBH
Sensible net capacity	152.0 MBH
Efficiency (at ARI)	10.80 EER
Integrated eff. (at ARI)	14.00 IEER
Ambient DB temp.	95.0 °F
Entering DB temp.	80.0 °F
Entering WB temp.	67.0 °F
Leaving DB temp.	56.4 °F
Leaving WB temp.	55.6 °F
Leaving air temp dew point	55.10 °F
Power input (w/o blower)	19.45 kW
Sound power	82 dB(A)

Refrigerant

Refrigerant type	R-410A
Sys1	10 lbs 10 oz
Sys2	11 lbs 10 oz

Gas Heating Performance

Entering DB temp.	60 °F
Heating output capacity (Max)	324 MBH
Supply air	6500 CFM
Heating input capacity (Max)	400 MBH
Leaving DB temp.	106.2 °F
Air temp. rise	46.2 °F
SSE	81.0 %

Supply Air Blower Performance

Supply air	6500 CFM
Ext. static pressure	1.98 IWG
Addl. Unit Losses (Options/Accessories)	0.02 IWG
Blower speed	1168 RPM
Max BHP of Motor (including service factor)	10.00 HP
Duct location	Bottom
Motor rating	10.00 HP
Actual required BHP	4.41 HP
Power input	4.12 kW
Elevation	0 ft.
Drive type	BELT

Exhaust Air Blower Performance

Supply Air	4093 CFM
Ext. static pressure	0.10 IWG
Blower speed	1044 RPM
Speed tap	Hi
Motor rating	1.5 HP
Power input	1.70 kW
Drive type	DIRECT
Unit static resistance	.02 IWG
Duct location	Bottom

Outside/Mixed Air

Outside Air Cfm	1950 CFM
-----------------	----------

Electrical Data

Power supply	460-3-60
Unit min circuit ampacity	70.5 Amps
Unit max over-current protection	80 Amps

Dimensions & Weight

Hgt	49 in.	Len	144 in.	Wth	89 in.
Weight with factory installed options	2395 lbs.				

Clearances

Right	42 in.	Front	80 in.	Rear	0 in.
Top	120 in.	Bottom	0 in.	Left	18 in.

Note: Please refer to the tech guide for listed maximum static pressures



20 Ton

- Manufactured at an ISO 9001 Registered Facility and Each Rooftop is Completely Computer-Run Tested Prior to Shipment.

Unit Features

- Four Stage Cooling
- Full Perimeter Base Rails with Built in Rigging Capabilities
- Dual Enthalpy Economizer w/Barometric Relief and Factory Installed Modulating Power Exhaust with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511)
- 10 HP High Static Belt Drive Blower
- 2" Pleated Filters (MERV 8)
- Replacement Filters: 6 (20" x 25" x 2" or 4"). Unit accepts 2" or 4" wide filters.
- Units are provided with the selected 2-inch or 4-inch filter and can easily be converted in the field to accept either size in the standard filter rack
- Utility Connections - Gas and electrical utility locations are supplied in the unit underside as well as the side of the unit. Utility connections can be made quickly and with a minimum amount of field labor
- Dirty Filter Indicator Switch
- Copper tube/Aluminum fin evaporator coils
- Microchannel condenser coils

Standard Unit Controller: Smart Equipment Control Board

- An Integrated Low-Ambient Control, Anti-Short Cycle Protection, Lead-Lag, Fan On and Fan off Delays, Low Voltage Protection, On-Board Diagnostic and Fault Code Display. Allows all units to operate in the cooling mode down to 0 °F outdoor ambient without additional components or intervention.
- Safety Monitoring - Monitors the High and Low-Pressure Switches, the Freezestats, the Gas Valve, if Applicable, and the Temperature Limit Switch on Gas and Electric Heat Units. The Unit Control Board will Alarm on Ignition Failures, Safety Lockouts and Repeated Limit Switch Trips.

BAS Controller

- Smart Equipment Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors. BACnet MS/TP, Modbus and N2 Communication Card.

Warranty

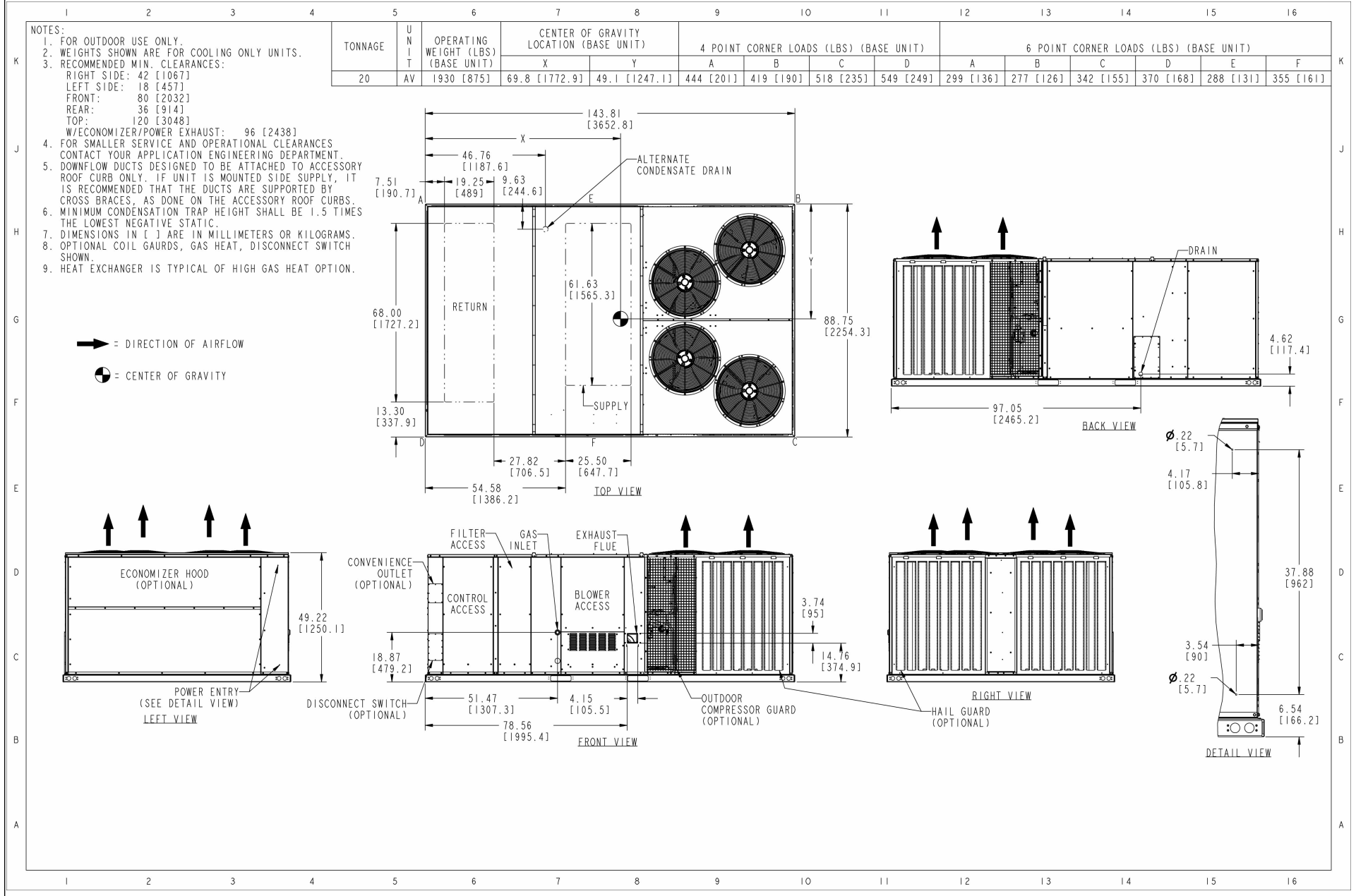
- One (1) Year Limited Warranty on the Complete Unit
- Five (5) Year Warranty - Compressors and Electric Heater Elements
- Fifteen (15) Year Warranty - Stainless Steel Tubular Heat Exchangers
- All Factory installed VFDs come with a 5-year manufacturer warranty

Project Name: **FHS-BHM**

Unit Model #: **AD20T3DH4T1CUT12H1**

Quantity: **1** Tag #: **RTU-1**

20 Ton Consolidated Drawing



Johnson Controls Single Package R-410A Air Conditioner

Project Name: **FHS-BHM**

Unit Model #: **AD25T3DH4T1CUT12H1**

Quantity: **1** Tag #: **RTU-2**

System: **AD25T3DH4T1CUT12H1**

Cooling Performance

Total gross capacity	294.6 MBH
Sensible gross capacity	217.6 MBH
Total net capacity	271.8 MBH
Sensible net capacity	194.8 MBH
Efficiency (at ARI)	10.00 EER
Integrated eff. (at ARI)	14.00 IEER
Ambient DB temp.	95.0 °F
Entering DB temp.	80.0 °F
Entering WB temp.	67.0 °F
Leaving DB temp.	57.6 °F
Leaving WB temp.	56.6 °F
Leaving air temp dew point	56.00 °F
Power input (w/o blower)	23.92 kW
Sound power	84 dB(A)

Refrigerant

Refrigerant type	R-410A
Sys1	15 lbs 4 oz
Sys2	16 lbs

Gas Heating Performance

Entering DB temp.	60 °F
Heating output capacity (Max)	324 MBH
Supply air	9000 CFM
Heating input capacity (Max)	400 MBH
Leaving DB temp.	93.3 °F
Air temp. rise	33.3 °F
SSE	81.0 %

Supply Air Blower Performance

Supply air	9000 CFM
Ext. static pressure	1.89 IWG
Addl. Unit Losses (Options/Accessories)	0.11 IWG
Blower speed	1332 RPM
Max BHP of Motor (including service factor)	10.00 HP
Duct location	Bottom
Motor rating	10.00 HP
Actual required BHP	7.16 HP
Power input	6.68 kW
Elevation	0 ft.
Drive type	BELT
Requires field-supplied drive	true

Exhaust Air Blower Performance

Supply Air	4093 CFM
Ext. static pressure	0.10 IWG
Blower speed	1044 RPM
Speed tap	Hi
Motor rating	1.5 HP
Power input	1.70 kW
Drive type	DIRECT
Unit static resistance	.11 IWG
Duct location	Bottom

Outside/Mixed Air

Outside Air Cfm	2700 CFM
-----------------	----------

Electrical Data

Power supply	460-3-60
Unit min circuit ampacity	80.2 Amps
Unit max over-current protection	90 Amps

Dimensions & Weight

Hgt	57 in.	Len	144 in.	Wth	89 in.
Weight with factory installed options	2575 lbs.				

Clearances

Right	42 in.	Front	80 in.	Rear	0 in.
Top	120 in.	Bottom	0 in.	Left	18 in.

Note: Please refer to the tech guide for listed maximum static pressures



25 Ton

- Manufactured at an ISO 9001 Registered Facility and Each Rooftop is Completely Computer-Run Tested Prior to Shipment.

Unit Features

- Four Stage Cooling
- Full Perimeter Base Rails with Built in Rigging Capabilities
- Dual Enthalpy Economizer w/Barometric Relief and Factory Installed Modulating Power Exhaust with Economizer Fault Detection & Diagnostic (Meets ASHRAE 90.1-2013, IECC 2015, California Title 24, AMCA 511)
- 10 HP High Static Belt Drive Blower
- 2" Pleated Filters (MERV 8)
- Replacement Filters: 9 (16" x 25" x 2" or 4"). Unit accepts 2" or 4" wide filters.
- Units are provided with the selected 2-inch or 4-inch filter and can easily be converted in the field to accept either size in the standard filter rack
- Utility Connections - Gas and electrical utility locations are supplied in the unit underside as well as the side of the unit. Utility connections can be made quickly and with a minimum amount of field labor
- Dirty Filter Indicator Switch
- Copper tube/Aluminum fin evaporator coils
- Microchannel condenser coils

Standard Unit Controller: Smart Equipment Control Board

- An Integrated Low-Ambient Control, Anti-Short Cycle Protection, Lead-Lag, Fan On and Fan off Delays, Low Voltage Protection, On-Board Diagnostic and Fault Code Display. Allows all units to operate in the cooling mode down to 0 °F outdoor ambient without additional components or intervention.
- Safety Monitoring - Monitors the High and Low-Pressure Switches, the Freezestats, the Gas Valve, if Applicable, and the Temperature Limit Switch on Gas and Electric Heat Units. The Unit Control Board will Alarm on Ignition Failures, Safety Lockouts and Repeated Limit Switch Trips.

BAS Controller

- Smart Equipment Controller including Discharge Air, Return Air, and Outdoor Air Temperature Sensors. BACnet MS/TP, Modbus and N2 Communication Card.

Warranty

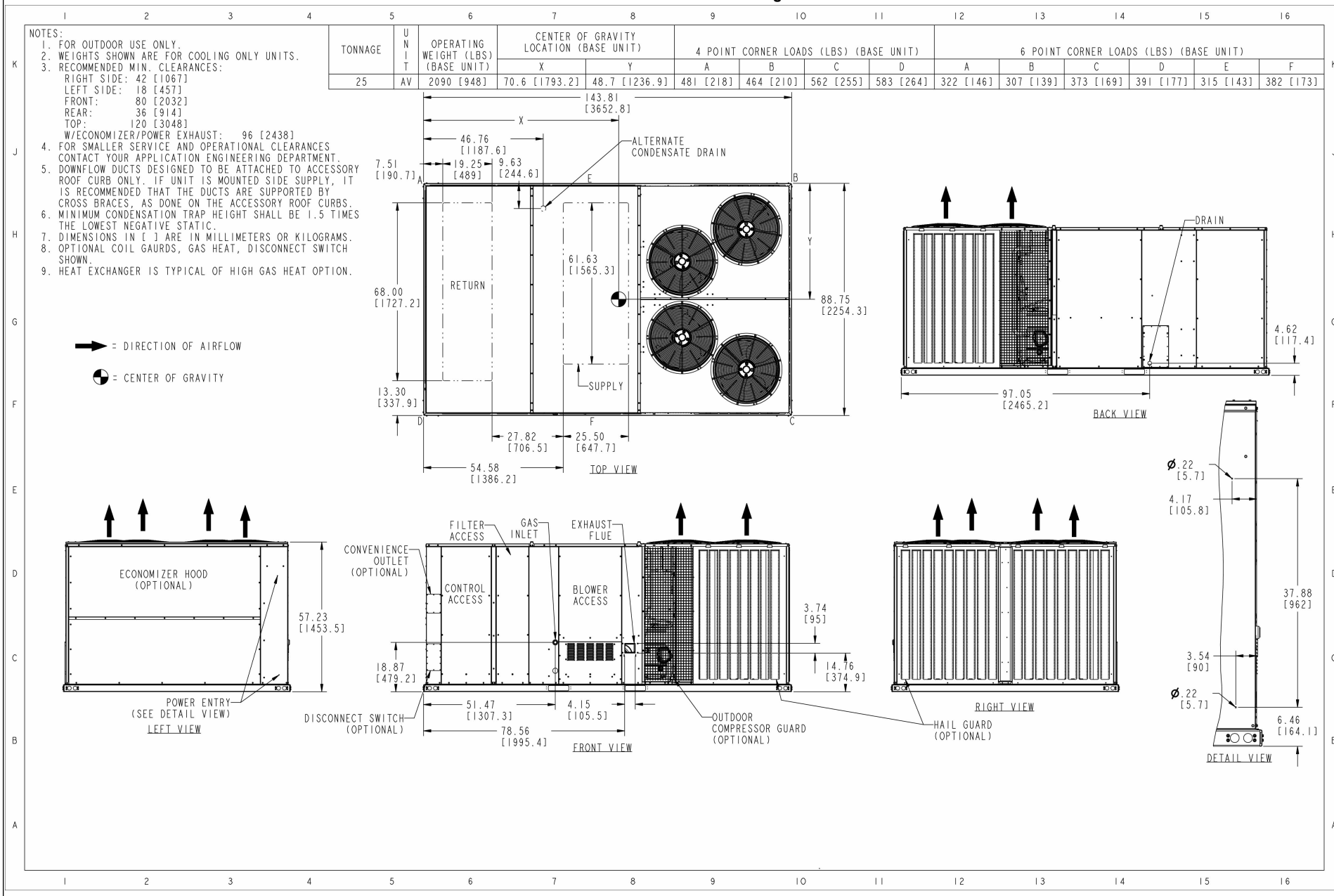
- One (1) Year Limited Warranty on the Complete Unit
- Five (5) Year Warranty - Compressors and Electric Heater Elements
- Fifteen (15) Year Warranty - Stainless Steel Tubular Heat Exchangers
- All Factory installed VFDs come with a 5-year manufacturer warranty

Project Name: **FHS-BHM**

Unit Model #: **AD25T3DH4T1CUT12H1**

Quantity: **1** Tag #: **RTU-2**

25 Ton Consolidated Drawing



PEA Response Letter

2430 Rochester Court, Suite 100
Troy, MI 48063

844.813.2949
peagroup.com



April 25, 2022
Project No.: 2021-0401

Nicholas Dupuis, Planning Director
151 Martin Street
Birmingham, MI, 48009

**RE: Preliminary Site Plan Review
770 S. Adams (Adams/Haynes Development)
Birmingham, MI**

Dear Mr. Dupuis:

The PEA Group has received review comments dated February 23, 2022 from the Engineering Department and we offer this response:

Sewer:

- Plans do not indicate how roof drainage will be handled. Note that City Ordinance prohibits downspouts from being directly connected to the sewer system.
Response: Roof drainage will be tied into the underground detention system.

Storm Water Runoff:

- For the proposed site development, I have made the determination that the proposed construction site on Unit 2 is considered the "affected are" with respect to City's Storm Water Runoff Ordinance (Chapter 114, Article III, Division 4, Sec 114-271 to 114-274). Therefore, the allowable runoff from the site for a 10-year storm event is 1.0 cfs/acre, or 0.2 cfs, whichever is greater.
Response: Calculations have been included on the plans.
- Provide calculations for required storm water detention, and show how the excess storm water will be detained and released at the allowable discharge rate.
Response: Storm water detention has been provided in the courtyard area and in the parking deck area. Airgap manholes have been provided in the sidewalk along Adams Road at both outlets. A sample of the outlet control manhole has been added to the utility sheet. Final design will be provided on the construction drawings.

Water System:

- All existing site connections to water mains must be property abandoned.
Response: Existing site connections will be property abandoned. Additional notes will be added to the construction plan phase of the project.
- Show the proposed water service for domestic supply and fire suppression on the plans.
Response: Water service and fire lines are shown on the utility plan – they enter the building from the alley.

- The proposed 8" water tap should be concerted to an 8" City water main extending the length of the alley connecting the 12" main on Adams to the 8" main on S Worth St. Gate valves should be placed at either end of the new water main section.
 - An 8"x8" T can be placed in the alley at the planned service location for the 8" fire supply with the 4" domestic tap connected to the 8" service.
 - An 8"x6" T can be placed from the constructed 8" alley main to the proposed hydrant at the SE corner of the development.

Response: An 8" water main has been shown along the length of the alley with gate valves at each end. The water service and fire lines are shown to "T" off the 8" water main in the alley. The 6" hydrant lead has also been rotated to "T" off the 8" water main in the alley.

Permits for Construction:

- Right-of-Way Permit for any excavation of work in Adams St. right-of-way.

Response: Permit applications will be applied for in the construction phase of the project. We understand that a Right-of-Way Permit will be required.
- Street Obstruction Permit for any temporary traffic interference on any surrounding road, or for pedestrian traffic interference on public sidewalks.

Response: Permit applications will be applied for in the construction phase of the project. We understand that a Street Obstruction Permit will be required.
- Sidewalk/Drive Approach Permit for any pavement installed in the public right-of-way.

Response: Permit applications will be applied for in the construction phase of the project. We understand that a Sidewalk/Drive Approach Permit will be required.

General Construction:

- Inspections will be required for planned Streetscape work, including sidewalk preparation and concrete placement.

Response: We understand that inspections will be required.
- Power System plans for building must be shown on the final plans (we do not anticipate the use of City ROW space for power)

Response: We understand that Power Systems for the building will not be in the City ROW.

If you have any questions, please feel free to contact us.

Sincerely,

PEA Group



John B. Thompson, PE
Senior Project Manager

01-14-22

C. Chair's Comments

Vice-Chair Williams welcomed everyone to the meeting and reviewed the meeting's procedures.

01-15-22

D. Review Of The Agenda

01-16-22

E. Unfinished Business

None.

01-17-22

F. Rezoning Applications

None.

01-18-22

G. Community Impact Studies

1. **770 S. Adams – Request for a new 4 & 5-story mixed use building**

Ms. Ramin recused herself from the item due to a business relationship and departed the meeting at 7:37 p.m.

Vice-Chair Williams and PD Dupuis noted that Chair Klein, Messrs. Koseck and Emerine, and Ms. Ramin each recused themselves from this item due either to business relationships with the ownership team or business relationships with a member (or members) of the development team.

Chris Longe, architect, and Nico Schultz, of Soave Enterprises, spoke on behalf of the project. Mr. Longe noted that the three principals in the project are the Forbes Group, Hunter Pasteur Homes, and Soave Enterprises.

PD Dupuis reviewed the item.

Vice-Chair Williams noted the Board received a letter from Ms. Kroll dated January 25, 2022, and a response from the applicant team dated January 26, 2022. He noted those letters had not yet been made available to the public. He noted the Board also received a summary of the project's preliminary site plan from the City's Engineering Department after the agenda packets were sent out. He stated that the late receipt of materials puts undue pressure on the Board members. He

stated that Board needs to review its procedures in order to ensure that all required materials for a project are included in the agenda packet when it is sent out so the Board and the public have sufficient time for review.

Ms. Kroll reviewed her findings. She noted she received the information late the week of the January 17, 2022 and put together her findings over the weekend. She said that there was not enough information in the traffic study for her to make an informed recommendation on the traffic aspects of the project. Ms. Kroll stated that the remaining traffic items could be addressed prior to final site plan approval.

Mr. Share said the Board would need to better understand the potential impacts of the project on the Lincoln-Adams intersection.

Paul O'Meara, traffic engineer for the applicant team, said he did not think it would take much time for the applicant to resolve the listed items in Ms. Kroll's letter.

Mr. Schultz concurred.

Vice-Chair Williams noted that the applicant's January 26, 2022 memorandum indicated that the developer would provide at least two dedicated parking spaces in the structure for employees.

Mr. Longe stated that the applicant would meet the City's requirements for on-site stormwater detention and for mitigation of dust, noise, and debris.

Mr. Longe noted that accommodating the Worth Street realignment as currently proposed would require the applicant to relinquish a bit over a half an acre of the property, which is equivalent to a third of the entire property, to the City.

Mr. Schultz said the applicant team was willing to have the conversation about Worth Plaza with the City and described a potential alteration to the Worth Plaza plans that he thought might be more appropriate.

Mr. Longe contended that commercial tends not to be successful along S. Adams, especially with limited parking available, and that the applicant's proposal for residential along S. Adams would be a better use.

Mr. Jeffares disagreed with Mr. Longe. He said putting residential on S. Adams would fail to activate the street and expressed concern that this area could end up similar to All Seasons. He said he had not seen a vacancy in Adams Square last longer than a couple of months. He noted this area was sufficiently close to a **the proposed** parking deck to support retail. He noted that he was enthusiastic about the project in general but not about this aspect.

In reply to Mr. Boyle, Mr. Longe noted that there is a minimum requirement for domestic noise suppression per building code, and that this project intends to exceed those requirements.

Public Comment

Mr. Bloom recommended that the City explore jointly expanding the parking offered by this project in order to make some of it accessible to public. He also asked whether the residential on S. Adams would have accessible design that could accommodate potential senior residents.

Motion by Mr. Boyle

Seconded by Ms. Whipple-Boyce to accept the Community Impact Study (CIS) as provided by the applicant for the proposed development at 770 S. Adams with the following conditions:

- 1. The applicant engage with City Staff to discuss the Worth Plaza; and,**
- 2. The applicant in consultation with Staff undertake completion of the transportation requirements as stated in the reports tabled tonight.**

Vice-Chair Williams said he would be more comfortable if the Engineering Department and Ms. Kroll's comments were resolved before advancing the CIS. He said he felt that Mr. Jeffares' comments could be addressed as part of the site plan conversation.

Ms. Whipple-Boyce said she thought the CIS could be advanced even with the remaining issues.

Mr. Share said he was reluctant to advance the CIS since the traffic issue, which was not yet resolved, could impact the site plan review.

Mr. Jeffares said he would be comfortable advancing the motion if the conditions had to be met within a certain amount of time.

Vice-Chair Williams concurred with Mr. Jeffares.

Public Comment

Mr. Longe assured the Board that the applicant could quickly resolve the traffic and engineering issues.

Motion failed, 2-3.

ROLL CALL VOTE

Yeas: Boyle, Jeffares

Nays: Whipple-Boyce, Share, Williams

Motion by Mr. Share

Seconded by Ms. Whipple-Boyce to postpone consideration of the Community Impact Study as provided by the applicant for the proposed development at 770 S. Adams to February 23, 2022.

Vice-Chair Williams noted that this should be a relatively brief discussion at the February 23, 2022 meeting since the traffic and engineering issues are the only remaining ones to be addressed.

Motion carried, 5-0.

ROLL CALL VOTE

Yeas: Boyle, Whipple-Boyce, Share, Williams, Jeffares

Nays: None

01-19-22

H. Special Land Use Permits

1. 100 Townsend – Townsend Hotel – Request for a new outdoor dining platform in the Townsend right-of-way

PD Dupuis summarized the request to postpone.

Motion by Mr. Share

Seconded by Ms. Whipple-Boyce to amend the rules of procedure to permit a combined meeting on March 9, 2022 during which study session items and site plan reviews can be conducted.

Motion carried, 5-0.

ROLL CALL VOTE

Yeas: Share, Whipple-Boyce, Jeffares, Boyle, Williams

Nays: None

Motion by Mr. Share

Seconded by Mr. Boyle to postpone consideration of the special land use permit and final site plan and design review for 100 Townsend – Townsend Hotel to March 9, 2022.

Mr. Share asked that the Board be provided a schematic that shows all of the parking on Townsend in relation to the location of the other dining deck and in relation to the Townsend's proposed deck.

Motion carried, 5-0.

VOICE VOTE

Yeas: Share, Boyle, Whipple-Boyce, Jeffares, Williams

Nays: None

01-20-22

I. Site Plan & Design Reviews

1. 100 Townsend – Townsend Hotel – Request for a new outdoor dining platform in the Townsend right-of-way

Postponed as part of the motion in Item H1.

2. 159 N. Eton – Canelle – Request for new outdoor dining patio and site changes

Motion by Mr. Share

Seconded by Mr. Jeffares to postpone consideration of the site plan and design review for 159 N. Eton – Canelle to March 9, 2022.

Motion carried, 5-0.

VOICE VOTE

Yeas: Share, Jeffares, Boyle, Whipple-Boyce, Williams

Nays: None

3. 770 S. Adams – Request for a new 4 & 5-story mixed use building

PD Dupuis reviewed the item.

Mr. Williams said the design of the south side of the building would be important because it would impact a potential development to the south.

Mr. Boyle noted that the low quality of some of the images included made it very difficult to review the plans.

Mr. Longe confirmed that the loading dock would meet the ordinance requirements.

Ms. Whipple-Boyce echoed Mr. Jeffares' previous statement that retail would be better than residential on S. Adams. She said that the current design of the residential on S. Adams could not be less inviting in terms of pedestrian activation. She noted that the excess parking available in the parking garage could help support the retail on S. Adams.

If the applicants were not willing to add retail on S. Adams, Ms. Whipple-Boyce said it would be more beneficial to swap the location of the first-floor amenities and the first-floor residential. Each Board member shared their general agreement with this recommendation, noting that even if some of the amenities were moved to S. Adams, or if some retail and some amenities were located on S. Adams, it would be a better design.

The Board was also not in favor of the drive-through ATM proposal.

Ms. Whipple-Boyce said she had been hoping to see more affordable units, and was sorry to see that the square footage increased per unit from the proposal previously approved for this site. She noted that the corridors are very long, and the distance from the elevators to the units is long. She noted that resulted from the larger-than-required parking garage. She said she found that unfortunate.

In reply to an inquiry from Ms. Whipple-Boyce, Mr. Longe stated that there were three three-bedroom units proposed for the site.

Randy Wertheimer of Hunter Pasteur Homes summarized the rooftop amenities.

Mr. Boyle said this proposal did not have enough residential units for the Triangle, and that this plan gave more room to 'parking tin' instead. He said there was too much attention paid to the rooftop pool which could only be used in warmer weather. He said that the indoor amenities on the ground floor could be made more attractive. He explained that he was glad to see a project proposed for this area and also that he thought improvements could be made.

Mr. Share echoed Mr. Jeffares' concern that S. Adams could resemble All Seasons. Mr. Share said that the plan had a lot of things the City wants, and that allowing this project could possibly encourage more projects that will activate S. Adams in the future. He said he liked the project, and hoped the applicant would take the Board's suggestions to heart to make the project better.

Mr. Jeffares said amenities like a hot tub or a fire pit would get more rooftop use in winter. He encouraged the applicant to work with the City regarding Worth, noting that even if the City's initial plans are not fully implemented it could still be beneficial for both parties. He said that since this is the first development in this area he would be willing to compromise on some things, but that the applicant could still better align the project with the intent of the Triangle Plan.

Ms. Whipple-Boyce asked the applicants to consider installing a sidewalk on their property in the abutting alley.

Vice-Chair Williams said he was not troubled by the proportion of retail to residential proposed, and agreed with Mr. Boyle that the Triangle is the prime area in the City to add multi-family residential.

Ms. Whipple-Boyce noted that the building could be made taller, which could also allow them to remove the residential from S. Adams. She said that in addition to swapping the location of the first-floor amenities and the first-floor residential, the applicant should consider other ways of potentially improving the project during the item's postponement.

Mr. Schultz said the applicant team would take the Board's feedback into consideration. He said that making the building taller would add to the developer's expense, and said that they believed the residences required more than 1.25 parking spaces per unit but less than two, hence the parking in excess of the ordinance requirement.

Motion by Ms. Whipple-Boyce

Seconded by Mr. Jeffares to postpone consideration of the Preliminary Site Plan for the proposed development at 770 S. Adams to February 23, 2022.

Motion carried, 5-0.

ROLL CALL VOTE

Yeas: Whipple-Boyce, Jeffares, Boyle, Share, Williams

02-38-22

C. Chair's Comments

Vice-Chair Williams responded to a resident's comment made at the February 21, 2022 Commission meeting which asserted that the Planning Board did not have a quorum at its January 26, 2022 meeting.

Vice-Chair Williams noted the Planning Board did, in fact, have a quorum at its January 26, 2022 meeting, and that the Board deliberated during that meeting for a lengthy period of time.

Vice-Chair Williams then noted that the City's traffic engineer had not yet provided the traffic analyses for 770 S. Adams and 294 E. Brown. He noted the lack of those analyses would impede the Board in its review of the traffic aspects of 770 S. Adams and 294 E. Brown during the present meeting.

Vice-Chair Williams reviewed the meeting's procedures.

02-39-22

D. Review Of The Agenda

02-40-22

E. Unfinished Business

None.

02-41-22

F. Rezoning Applications

None.

02-42-22

G. Community Impact Studies

1. 770 S. Adams – Request for a new 4-6 story mixed use building

Messrs. Emerine and Koseck recused themselves from the item at 7:38 p.m., citing a current and previous business relationship, respectively.

PD Dupuis reviewed the item.

Mr. Boyle said:

- He was pleased that the development both increased the height and number of units being proposed. These increases align with the City's plans for the area;
- This development does not accomplish Worth Park but moves the area in the right direction in terms of having an open space requirement. He said the plans do not do what the City has hoped, but that the open space does add to the City itself;
- The project team made some improvements to the Adams Street elevation based on previous Board comments, which he said 'would get 50% from me'. He had some concerns

about the finishes and the large block pillars on either end, but said the elevation was largely moving in the correct direction;

- He would strongly suggest the ATM be removed from the plans;
- The developer should consider a finish for the interior open space more like a Japanese garden which would incorporate different forms of material instead of either real grass or turf; and,
- The item should not be passed at the present meeting since the Board had not been able to review the traffic engineer's comments.

Vice-Chair Williams said there seemed to be a discrepancy between the Triangle Plan and the zoning ordinance. He said that while he thought the zoning ordinance would control, the City Attorney should opine.

Chris Longe, architect, and Nico Schultz, of Soave Enterprises, spoke on behalf of the project.

Vice-Chair Williams noted that the proposed use of artificial turf could be discussed at the final site plan if and when the project advances to that stage.

PD Dupuis noted that presently it is the Planning Department's interpretation of the ordinance that all plantings used for a project are required to be live.

Mr. Longe said the proposal for the use of artificial turf should be seen as a placeholder for now.

Vice-Chair Williams told the applicants there was unanimity among the Board members that plans for a drive-through ATM in the alley should be nixed. He said he would be willing to consider an ATM located elsewhere on-site.

In reply to Mr. Longe, Mr. Share encouraged the applicants to discuss the designs for the open space amongst themselves and with Planning Staff to create a proposal that would benefit both the project and the neighborhood.

In reply to Mr. Share, Mr. Schultz said the drive-through ATM proposal had remained because the applicant modified the plans in an attempt to address the concerns raised by the Board at the January 26, 2022 meeting. He said they tried to retain the drive-through ATM since the current building on Haynes has a bank as a tenant. He said it was now clear that the Board had a total disinterest in the drive-through ATM.

In reply to Vice-Chair Williams, Mr. Schultz said the applicant team was concerned that vacant retail on Adams would be damaging to the area, and that having the three proposed residences on Adams would not be. He said that the activation the building could control had been shifted over to Adams after the feedback received at the January 26, 2022 Board meeting.

In reply to Mr. Schultz, Vice-Chair Williams stated that the Board could not move the item forward without the opportunity to review the City traffic engineer's findings.

Vice-Chair Williams said he appreciated the changes to the south wall and the activities that were moved from Haynes to Adams. He said he did not have strong feelings about three residences

remaining on Adams. He said that the amenities proposed by the applicant team do not exist in the City currently and would benefit the City. He said he liked the proposal for Worth as well, including how the retail could tie-in to a future Worth Park.

Ms. Whipple-Boyce said:

- The changes to the plans represented a significant improvement over the plans shown at the January 26, 2022 Board meeting and commended Mr. Longe on the improvements;
- The revised plans were much more in line with what the Board would have expected to see in the first place;
- She remained concerned about Adams, noting that she appreciated the small change of moving the workout room to Adams but did not think that would particularly activate the street;
- The workout room would not be accessible to the public and does nothing to draw people down Adams or to that side of the building;
- Keeping three residences on Adams would likely be as detrimental to activation of the street as vacant retail would be since the residences' blinds will likely remain drawn as thousands of vehicles a day travel Adams;
- Retail is viable on Adams since there will be 300 people living in the development and more in the nearby area. There should be an element on Adams that pulls people in the surrounding area to the building;
- Residences make sense on both Worth and Haynes; and,
- She could not support the project until the three residential units on Adams are removed, and doing so would align with the Triangle Plan. She hoped the applicant team could find a way to do that.

Mr. Jeffares said the proposal was impressive and that the goal should be a win for both the applicant team and the City. He noted that there are few large parcels in the area of the proposed development. He explained that if the Board were to give a pass on the City's aims for the area with this development, the City might not have the chance to achieve those goals with another development. He reiterated comments from the January 26, 2022 Board meeting regarding All Seasons and how their on-street residences resulted in drawn blinds and a lack of street activation. Given its size, Mr. Jeffares said this proposal should adequately embody many of the aims of the Triangle Plan. He noted that while there seemed to be sufficient residential, the plan remained light on retail. He said he was willing to consider compromising on some aspects of the project but concurred with Ms. Whipple-Boyce that the street level needs to be active. He noted that not only will there be 300 residents in the building, but that the most dense neighborhood in the City is across the street.

Mr. Share prefaced his comments by saying they could change subsequent to the review of the City traffic engineer's report. Continuing, he said he was having a hard time imagining that people would drive over to patronize retail on Adams at this time. He said in the future he could see people coming in from the western part of the Triangle. He said he appreciated the efforts the applicant team had made towards activating the street, and said he was skeptical more could be done given the traffic on Adams and the lack of on-street parking. He said he liked the plan and the increase in density. He said that preliminarily he did not like the drive-through ATM but was willing to review it in the context of the City traffic engineer's report and the Triangle Plan.

Mr. Boyle noted that he made the majority of his points at the beginning of the item. He said he would like to see the applicant propose a way of at least somewhat increasing the interaction between the Adams frontage and the adjacent neighborhood.

Motion by Mr. Boyle

Seconded by Mr. Share to hold a special meeting on Thursday, March 31, 2022 at 7:30 p.m. in the City Commission Room, and to postpone the community impact study and preliminary site plan review for 770 S. Adams to March 31, 2022.

Motion carried, 5-0.

ROLL CALL VOTE

Yeas: Share, Jeffares, Williams, Whipple-Boyce, Boyle

Nays: None

2. 294 E. Brown St. – Request for new 4-story mixed-use building

Vice-Chair Williams called for a brief recess at 8:56 p.m.

At 9:01 p.m., the meeting reconvened and Messrs. Koseck and Emerine rejoined the meeting.

PD Dupuis presented the item. He noted that contrary to what was written in his report, the applicant did indicate how they would control noise, dust, and the like in point #20 in the community impact study (CIS). He said he would consider it no longer an issue.

Vice-Chair Williams directed PD Dupuis to ensure that the City's traffic engineer review the traffic report submitted by Rowe Engineering, with particular focus on the traffic likely to be generated by the RH development.

In reply to Mr. Jeffares, PD Dupuis said he would ask the Police Department whether there was an issue with construction workers parking in the neighborhoods during the Daxton's construction.

Victor Saroki, architect, spoke on behalf of the project. He explained:

- The development would be open to any sort of permitted retail use that would be appropriate and attractive;
- Recycling chutes would be provided on each floor next to the trash chutes;
- The building will incorporate green practices;
- The applicant team will work with its general contractor to prevent construction parking in the neighborhoods;
- The applicant team will design a route for deliveries to the retail spaces if necessary;

In reply to Mr. Share, Mr. Saroki stated that the two borings selected on this site were selected because of the previous furrier location. He stated that contaminants were only found on the RH site.

Mr. Share said that at the next review of this project he would like to know whether the Michigan Department of Environment, Great Lakes, and Energy had any response to the project's submitted environmental assessment.

Vice-Chair Williams said that any action on the CIS would be handled once discussion of the preliminary site plan was complete.

02-43-22

H. Special Land Use Permits

None.

02-44-22

I. Site Plan & Design Reviews

1. 770 S. Adams – Request for a new 4-6 story mixed use building

Discussed during Item G1.

2. 294 E. Brown St. – Request for new 4-story mixed-use building

PD Dupuis reviewed the item.

In reply to Mr. Share, PD Dupuis said he would look into what the Board's options might be to address the distance to the trash rooms in the building if the Board found it necessary. He said he would also check with City departments to determine whether there are any possible issues with the location of this building's loading docks on Daines and the RH loading docks, which may also be on Daines.

Mr. Saroki spoke on behalf of the project and introduced his team.

Victor Saroki, architect, stated that the view from the RH restaurant would be enhanced, rather than blocked, by the proposed building at 294 E. Brown. He said the rooftop of 294 E. Brown would be in view of the RH building.

In reply to Mr. Boyle, Mr. Saroki said the courtyard on the ground floor would be accessible to the public.

Mr. Saroki said the project was considering synthetic materials for two planters where plants would be unlikely to otherwise grow due to the lighting conditions. He acknowledged that the ordinance may not allow synthetic materials at this time, and said if that is the case that the Board should consider an exception in its review of the ordinance for cases when the conditions prohibit live plantings.

Mr. Emerine said he personally had no objection to synthetic materials as long as they are well-designed and executed.

City Of Birmingham
Special Meeting Of The Planning Board
Thursday, March 31, 2022

City Commission Room
151 Martin Street, Birmingham, Michigan

Minutes of the special meeting of the City of Birmingham Planning Board held on March 31, 2022.
Chair Scott Clein convened the meeting at 7:30 p.m.

A. Roll Call

Present: Chair Scott Clein; Board Members Robin Boyle, Stuart Jeffares, Daniel Share, Janelle Whipple-Boyce, Bryan Williams; Alternate Board Member Jason Emerine; Student Representative MacKinzie Clein

Absent: Board Member Bert Koseck; Alternate Board Member Nasseem Ramin; Student Representative Andrew Fuller

Administration:

Nick Dupuis, Planning Director
Laura Eichenhorn, City Transcriptionist

03-73-22

B. Minutes

None.

03-74-22

C. Chair's Comments

Chair Clein welcomed everyone to the meeting and reviewed the meeting's procedures.

03-75-22

D. Review Of The Agenda

03-76-22

E. Unfinished Business

None.

03-77-22

F. Rezoning Applications

None.

03-78-22

G. Community Impact Study

1. 770 S. Adams – Request for a new 4-6 story mixed use building

Chair Clein and Mr. Emerine recused themselves from Item G1 and H1 at 7:35 p.m., both citing business relationships with members of the applicant team.

Vice-Chair Williams assumed facilitation of the meeting. Vice-Chair Williams introduced the item.

PD Dupuis summarized the updates to the item.

Vice-Chair Williams and Mr. Share noted that the applicant's traffic consultant and the City's traffic consultant had satisfactorily resolved any potential traffic issues.

Motion by Mr. Share

Seconded by Mr. Boyle to accept the Community Impact Study as provided and updated for the proposed development at 770 S. Adams with the following conditions:

- 1. The applicant must submit details as to how they plan to mitigate noise, dust, debris, and other nuisances during the construction process;**
- 2. The applicant engage with City Staff to discuss the Worth Plaza.**

Motion carried, 5-0.

ROLL CALL VOTE

Yeas: Share, Boyle, Jeffares, Whipple-Boyce, Williams

Nays: None

03-79-22

H. Site Plan & Design Review

1. 770 S. Adams – Request for a new 4-6 story mixed use building

PD Dupuis summarized the updates to the item.

Randy Wertheimer of Hunter Pasteur spoke on behalf of the request. He stated:

- The remaining three residential units on Adams would be more similar to the townhomes on Brown than to All Seasons, which some Board members had previously compared the units on Adams to;
- The applicant was offering to make a \$100,000 contribution to the build-out of Worth Park, with no time restrictions;
- That if the City determines that additional pedestrian facilities on Adams are necessary, the applicant is willing to contribute \$20,000 towards those improvements;
- While there were differences of opinion regarding whether the Adams side of the project should feature some residential or be entirely commercial, the project would still serve as a catalyst for development in the Triangle either way.

In reply to Mr. Share, Mr. Wertheimer said the commitment for the \$100,000 and the \$20,000 contributions would run with the property, but he said that if the owners were ever to sell the property there could also be a condition that both amounts are contributed at that time. He said the hope is that the \$100,000 contribution would encourage the City to pursue the development of Worth Park sooner.

For final site plan and design review, Mr. Boyle asked the applicant to bring images, samples, and examples if available of the proposed synthetic landscaping materials.

In reply to Mr. Jeffares, Mr. Wertheimer said his team would provide the product specifications for the synthetic landscaping materials at final site plan as well.

Ms. Whipple-Boyce explained:

- While she appreciated the applicant's modifications to Adams since the original plan, she believes it is a mistake that there will not be shops and retail on Adams;
- The problem is that retail along Adams is not required by the ordinance the way she would like to see it;
- The Triangle Plan establishes a 'vision' that describes retail on the first floor and residential above it;
- The Board needs to review that aspect of the ordinance since the City will receive more applications for development in the Triangle in the future;
- It would be disappointing to see apartments on the first floor of other parts of Adams when retail could be there instead;
- This project, as proposed, misses the mark on the intent of the redevelopment of the Triangle, which is a failure on the City's part;
- This project technically satisfies the zoning requirements;
- She remained disappointed in the applicant's unwillingness to provide first-floor retail;
- She challenged the applicant along the way, and Adams received a slight increase activation, but the amenities moved to Adams will not draw in the public;
- Retail is viable on Adams, as evidenced by the retail from Woodward to Bowers;
- 300 people will be living in the building, next to a densely populated residential area, which establishes a significant customer base for any retail/commercial uses in the building;
- She believed the applicant was unwilling to add retail to Adams because they were unwilling to give up any of their parking to satisfy the retail requirements; and,
- This project could be perfect with the addition of retail on Adams.

Ms. Whipple-Boyce concluded by telling the applicants that they still have time to replace the residential on Adams with retail, and that she hoped they would.

Mr. Jeffares shared comments he stated he had written in advance. He explained:

- His comments would be similar to Ms. Whipple-Boyce's;
- The City needs to put more effort into making sure its plans come to fruition;
- He spent five years working in strategic planning with a Fortune 50 company, and he knows if further steps are not taken after a plan is completed then it is just a document that remains on a bookshelf;
- The ordinance does not define 'mixed use';
- The current proposal before the Board offers 2% retail, which technically complies with 'mixed use' but is really residential with minimal incidental retail;
- The zoning ordinance is not specific enough to deliver the directions the Triangle Plan set out;
- The City often uses SLUPs to deliver on goals when the ordinances are not specific enough, but they do not seem like the right tool in this case;
- The City has also not been proactive in achieving other goals set out in the Triangle Plan, such as acquiring land for public space or efficient parking;

- The Triangle Plan also calls for 'streets lined with pedestrian-oriented buildings', a 'vibrant, mixed-use neighborhood', 'brownstones and townhomes on local streets' - not primary streets;
- On primary streets the Plan calls for 'apartments and condominiums above offices and storefronts', but the ordinance has not been modified to require this;
- The Plan also calls for 'buildings oriented towards primary streets', but this project proposes a leasing office and a front door on a largely unused street;
- Of all the commercially-zoned property in the Triangle, this project alone represents 7%;
- This property is the largest parcel in the Triangle;
- There are 33 parcels in the Triangle that are .3 acres or larger;
- Of these parcels, about 25%, or 7.8 acres, could likely redevelop within the next 10-15 years;
- This project represents a quarter of that 7.8 acres, and is offering only one 4,000 sq. ft. space for retail out of an approximately 88,000 sq. ft. footprint;
- While the ordinance does not call for first-floor retail, the proposed three residential units on Adams are inconsistent with the area's current development;
- If one were to walk on Adams from Lincoln to where single-family homes begin, the street level is entirely commercial and retail;
- This proposal will stand out from its surrounding environs in a significant way;
- The City needs to review its ordinances, standards, and definitions to ensure that they reflect the vision of the area and master plans the City creates; and,
- Otherwise, the City is inefficiently using the time of its boards, Staff, and community.

Mr. Jeffares concluded by saying that while this project will be good, he agreed with Ms. Whipple-Boyce that this could be perfect with the addition of first floor retail. He said that allowing a project to provide 2% retail in exchange for two more floors is something the City needs to review. In light of his comments, Mr. Jeffares said he would not be voting to support the development.

Mr. Share addressed his colleagues, stating that it is not the developer's fault or responsibility that the City did not put into code things that the City may have wanted. He cautioned that the perfect should not be the enemy of the good in this case, and agreed with Mr. Wertheimer that the project will likely catalyze development in the Triangle. He said that many in the City believed that no development in the Triangle would occur without a public deck, and this project will occur without one. He said he would be supporting the project.

Mr. Boyle concurred with Mr. Share, saying he was concerned the Board was asking a private developer to accommodate goals the City itself did not implement. He said politics and financing were the reasons the Triangle Plan was not pushed forward at the time, and that the City should not hold the development back for the City's mistakes. He said that while he was disappointed as well, the development has improved immensely through discussion. Mr. Boyle stated he hopes this development will be a catalyst for development to the south of the area.

Vice-Chair Williams explained:

- The City did nothing towards developing Worth Plaza for 15 years, and that lack of implementation is not the developer's responsibility. The responsibility is on the City;

- The lesson to be learned from this development is that plans are not codes or ordinances. There has been a misconception during the 2040 Plan process that the Plan rezones properties. This project is a prime example of the fact that a plan alone does not change ordinance or code;
- He agreed with his colleagues that the City has not adequately ensured that its ordinances reflect its plans' visions, and that needs to be corrected going forward;
- The City should use the 2040 Plan process to update ordinances for the Triangle, citing Lincoln and Woodward as one area that will need ordinance changes to reflect the vision of the 2040 Plan;
- He said the City should now focus on getting its goals into ordinances quickly;
- The Commission could ask the Board to translate the vision of the Triangle Plan into appropriate ordinance and code immediately if so desired;
- When the City was looking for additional residential areas in the City that would not adversely affect single family residential, this was one of the designated areas;
- The developer choosing to locate residential in this area is a huge boon to the City; and,
- The City needs additional residential which this project in part provides.

He concluded that while he understood Ms. Whipple-Boyce's and Mr. Jeffares' concerns, he did not share the same level of concern regarding retail on Adams. He stated his decision would be governed by code and ordinance, and he agreed with Mr. Share on his points.

Motion by Mr. Share

Seconded by Mr. Boyle to approve the Preliminary Site Plan for 770 S. Adams, based on a review of the site plans submitted and the requirements outlined in Article 7, Section 7.27 of the Zoning Ordinance, with the following conditions:

- 1. The applicant must provide full screening details for all proposed mechanical units at Final Site Plan;**
- 2. That the applicant bring specific samples of proposed synthetic materials at final site plan for consideration of the Board, or revise the landscaping plan to include living plant material, or obtain a variance from the Board of Zoning Appeals;**
- 3. The applicant must submit revised plans showing a loading space that meets the requirements of Article 4, Section 4.24 (C) of the Zoning Ordinance;**
- 4. The applicant must submit lighting and material specifications, samples, photometric plan and all other required information for the proposed building to complete the Design Review at Final Site Plan;**
- 5. The applicant must comply with the requests of all City Departments;**
- 6. The applicant must engage with Staff with respect to Worth Plaza; and,**
- 7. That the applicant enter into an agreement with the City for the contribution of up to \$20,000 to mitigate potential pedestrian crossing issues on Adams Road in the future, and \$100,000 to be used in connection with the implementation of Worth Park.**

Vice-Chair Williams asked the applicant to confirm that the language regarding the \$20,000 and \$100,000 contributions was acceptable.

Mr. Wertheimer confirmed that the language regarding the \$20,000 and \$100,000 contributions was acceptable.

Motion carried, 4-1.

ROLL CALL VOTE

Yeas: Share, Boyle, Whipple-Boyce, Williams

Nays: Jeffares

Vice-Chair Williams advised the applicant to consider Board comment regarding the three residential units on Adams in advance of the final site plan review.

03-80-22

I. Special Land Use Permit

1. 220 Merrill – Request for new outdoor dining platform in Merrill St. right-of-way

Chair Clein and Mr. Emerine returned at 8:23 p.m. Chair Clein resumed facilitation of the meeting at 8:23 p.m.

PD Dupuis presented the item.

Zaid Elia, owner of 220 Merrill, spoke on behalf of project.

In reply to Mr. Boyle, Mr. Elia stated that there have been no traffic incidents, accidents or police reports that would indicate an issue with the dining platform in its two years of operation.

Steve Ferich, In-House Valet, described 220 Merrill's valet operations.

In reply to Mr. Share, Mr. Ferich said that of the valet operations he runs in the City 220 Merrill is one of the least challenging.

In reply to Mr. Emerine, Mr. Elia stated he has an easement with the owners of the private alley to the south and the circular area allowing shared access.

In reply to Board inquiry, Mr. Elia stated that the rail and ramp are interior to the platform and do not extend onto the sidewalk.

In reply to Ms. Whipple-Boyce, PD Dupuis said he would double-check with the Building Department to determine whether there are any concerns about the distance between the railing on the platform and the backs of the chairs.

In reply to Mr. Jeffares' comment regarding the total amount of proposed outdoor dining, Mr. Elia stated that compared to some other operators in the City 220 Merrill has a lower ratio of indoor to outdoor seating. He opined that the proposed outdoor dining was proportional to the size of the restaurant overall.

MEMORANDUM

DATE: April 28, 2022
TO: All Boards and Committees
FROM: Mary M. Kucharek
SUBJECT: Update Concerning Open Meetings Act

This memorandum will serve as an update regarding the Open Meetings Act regarding committees and member participation.

The Open Meetings Act is a Michigan statute which basically provides that all meetings of a public body shall be open to the public and shall be held in places available to the general public. According to the Michigan Court, the intent of the Open Meetings Act is to facilitate public access and transparency to governmental decision making. The statute should be broadly interpreted, and its exemptions strictly construed. Discussions have ensued, questioning whether committees and subcommittees, which are advisory in nature, are subject to the Open Meetings Act and its regulations. In order to determine whether a meeting or situation requires regulations of the Open Meetings Act, four questions need to be asked:

1. Whether the committee or subcommittee is a public body.

According to the Open Meetings Act:

“Public body’ means any state or local legislative or governing body, including a board, commission, committee, subcommittee, authority, or council, that is empowered by state constitution, statute, charter, ordinance, resolution, or rule to exercise governmental or proprietary authority or perform a governmental or proprietary function; a lessee of such a body performing an essential public purpose and function pursuant to the lease agreement; or the board of a nonprofit corporation formed by a city under section 40 of the home rule city act.”

To simplify, a public body is a group whose work and purpose is part of the process of government. A committee or a subcommittee which has been created by recommendation, resolution or direction by the legislative body (in our case the City Commission) would be a public body.

2. Whether there is a meeting of the public body.

"Meeting" is defined in the Open Meetings Act as:

"The convening of a public body at which a quorum is present for the purpose of deliberating toward or rendering a decision on a public policy."

The inquiry is whether or not, when the group of people meet, are they working towards or rendering a decision, in order to make an advisory recommendation to the legislative body? If the group is deliberating and collectively decide a recommendation, then pursuant to the Michigan Court of Appeals, it is, in fact, a meeting.

3. Whether a decision effectuating public policy will be made.

Pursuant to the Open Meetings Act, a decision is "a determination, action, vote or disposition upon a motion, proposal, recommendation, resolution, order, ordinance, bill or measure on which a vote by members of a public body is required and by which a public body effectuates the form of public policy." In *Schmiedicke v Clare School Board*, 1998, the Court of Appeals analyzed whether or not a committee was, in fact, making a "decision" according to the Open Meetings Act. The Court ruled it is important to determine if a recommendation is actually made. The recommendation is a delegation of authority to perform an act. "The focus of inquiry is the authority delegated to the committee not the authority it exercised." The Court of Appeals pointed out "the primary purpose of the Open Meetings Act is to ensure that public entities conduct all their decision making activities in open meetings and not simply hold open meetings

where rubber stamped decisions were previously made behind closed doors.” Therefore, when a subcommittee makes a recommendation, and if that subcommittee was not open to the public, it effectively forecloses any involvement by members of the public, and essentially means that the decision made by the subcommittee at a closed meeting is fait accompli. The definition of fait accompli means “a thing that has already happened or decided before those affected hear about it, leaving them with no option but to accept.”

4. Whether any exceptions are applicable.

Exceptions are listed in the Open Meetings Act with specificity.

The Attorney General of Michigan has created an *Open Meetings Act Handbook*. One paragraph in the handbook states, “Open Meetings Act does not apply to committees and subcommittees composed of less than a quorum of the full public body, if they are merely advisory and capable of making recommendations concerning the exercise of governmental authority.” I contacted the Attorney General’s Office and spoke with James Kelley, who is an expert regarding the Open Meetings Act. I asked him how that paragraph as written by Attorney General Frank Kelley in 1997, be true in light of the *Schmiedicke* case? Mr. Kelley advised the cited paragraph applies when an advisory committee is meeting and their purpose is to collect information, report and then make a recommendation to the governing body. They may do so without being an open meeting only if the recommendations that they give to the governing body, include all of the potential options available before they make a recommendation. As an example, if a committee is collecting information and then come before the governing body, and state, for instance, there were five (5) different choices to an issue, and then state, we believe choice number three (3) is the correct way to go, they may do so as long as they advise about all five (5) choices. In this example, there is not an “open meeting” because they did not make a

decision. However, if the members of the advisory committee discuss, weigh and determine ahead of time at their meeting before presenting to the governing body their choice of one option, and then they make a recommendation to the Commission and do not advise about all possible options, then they were making a "decision," and are, therefore, in violation of the Open Meetings Act.

Mr. Kelley believes the practice of failing to notice all committees, even those that are advisory in nature, is a "slippery slope." His recommendation is to notice each and every meeting that occurs, including every committee, subcommittee, ad hoc committee, etc.

It is my recommendation that the City simply notice every meeting. Notice is easily achieved by a simple posting notice on the City doors. The likelihood is participation is minimal to these meetings, but if they are noticed, there can never be an opportunity for an accusation or violation of the Open Meetings Act.

Furthermore, a question has been posed inquiring if a board member is unable to attend a board or a committee meeting in person, including public deliberating and voting on a particular issue, is there any law or rule of procedure that would allow the member to participate as a private citizen and make comments during public comment via Zoom?

The answer is "no." The Open Meetings Act, specifically MCL § 15.263(2) states absent members of a public body may only attend remotely due to active military duty or a disability that has been recognized by Title II of the ADA requiring a reasonable accommodation in order to actively participate in a public meeting. Therefore, when members of committees or boards are absent due to any other reason, no exception exists permitting them to attend, participate or vote remotely as a public body, board or committee member. While certainly board or committee members can watch remotely, no comment should be made virtually by appointed members, whether the comment is made during public comment or any other time. In fact, one should

only watch anonymously and not have their names advertised on Zoom. Courts have opined that any comment made by fellow board members can be influential and, therefore, part of the deliberative process of the public body which can only be accomplished in person. The purpose of the OMA is to ensure transparency of all decision making and deliberations of the public body.

While some board members may find this challenging, or feel that this impinges their First Amendment rights, the courts have deemed that you are still a member of the public legislative body and, therefore, cannot simply relinquish the duties you are sworn to uphold by simply saying you are only speaking as a private citizen.

In conclusion, I recommend that absent board members simply watch the meeting of their public board or committee, if possible. It is the best practice for all board and committee members to not speak remotely when they are absent so as to avoid a potential OMA violation, keeping in mind that an OMA violation is a criminal misdemeanor under Michigan law.



Nicholas Dupuis <ndupuis@bhamgov.org>

2040 Master Plan Comments

1 message

Kevin Kozlowski <kevin.kozlowski@gmail.com>
To: ndupuis@bhamgov.org

Wed, May 4, 2022 at 9:31 AM

May 4, 2022

To the City Commission and Planning Board,

I am writing to express my disappointment with the direction the Birmingham 2040 Master Plan has taken. I was generally excited about the first draft of the plan and find the current direction, or lack thereof, depressing. This plan is an opportunity to dedicate the city to embodying its motto of walkability. There are still elements of the current draft which do this, but most of the city will see no improvements to walkability at all. Also, I am very concerned about the volume of municipal parking the current draft proposes to be constructed. I think this will hurt our walkability and be a potential financial disaster.

There are citizens of Birmingham who would enjoy a more walkable, urban lifestyle. My wife and I recently moved to Birmingham because of its walkability. While the Master Plan has some exciting new walkable developments, they are largely restricted to areas immediately adjacent to downtown, which is already the densest part of the city. As we all know, walkability goes hand-in-hand with density. It seems that many of my fellow residents are against increasing density and introducing commercial properties near residential ones. The concerns they have are valid, but are not really about density or mixed-use zoning. They are rather about more fundamental issues of noise, traffic, and property values. I believe it is possible to have the benefits of a denser urban fabric without suffering from these problems.

First, I would note that noise and traffic are closely related. I live very close to both Woodward and the Poppleton Place apartments. The noise from Woodward is a chronic frustration, while I haven't had a single issue with noise from the apartment building. In general, buildings and people aren't loud - cars are. This can be mitigated primarily by reducing speeds, which I'm pleased to see is part of the current draft of the Master Plan. As far as traffic itself is concerned, I would first say that slowing speeds would make the traffic less of a nuisance to residents and less of a safety hazard as well. Eliminating parking requirements, also discussed in the plan, would likely also discourage driving. The best way, however, to deal with traffic is to make car travel less necessary. The more trips which can be made on foot or bicycle, the fewer cars will be on the road. Adding more commercial properties close to neighborhoods and improving pedestrian and cycling infrastructure will allow residents to leave their cars at home. Reducing parking will help encourage walking and cycling.

Regarding the fear that increasing density will decrease property values, I think this is a complete canard. Anyone can go on Zillow and compare the prices of two similar homes, one close to downtown and one east of Woodward or even Adams, and immediately see that properties are more valuable when they are part of a more dense fabric. In general, people want to be where the action is - close to restaurants, theaters, libraries, parks, and shopping. Also, if a lot is upzoned or rezoned to mixed-use, its value will immediately increase simply because more options are available to the owner. For all of these reasons, I request that the future land use changes on Madison Street off of Woodward be restored to the way they were in the first draft. I live in the first house on Madison off of Woodward and would love to see some new development here that further increases our density and walkability.

I would also request that the plan remove all its calls for construction of additional municipal parking. Parking is antithetical to walkability. It reduces walkability first by encouraging driving. Every car is a nuisance to pedestrians, creating noise, air pollution, and physical threat. The more parking there is, the more cars will come, and the worse the experience of every pedestrian (and cyclist) will be. Parking reduces walkability secondly by simply taking up space. Every square foot of real estate dedicated to parking is effectively dead space to pedestrians. They are areas which could have been something useful to a human, but are instead dedicated to temporary car storage. For these reasons I was particularly dismayed to see that under "Encourage Housing in Mixed-use Districts", the Master Plan Actions have almost nothing to do with housing at all. They are all about parking, and 4 of 7 are explicitly about adding more parking. The rest are about unbundling parking. The fact that the city is to be responsible for increasing the parking supply is particularly frustrating to me as a walker and taxpayer. The simultaneous unbundling of parking strikes me as self-defeating. As I understand it, the purpose of unbundled parking is that it creates an incentive for people to own fewer vehicles, thereby requiring less parking. Why would the city invest millions in parking garages if our goal is to discourage car ownership? If our goal is less driving and more walking, we should keep the unbundled parking, but rely on private developers to supply the parking. Let the market determine the proper quantity and price. Private garages have the added benefit of paying property taxes. If we have an acute capacity issue in the existing public garages, a price increase would free up some

spots.

A final reason to not add this new parking is that it is risky. We may be on the cusp of a transportation revolution with respect to autonomous vehicles and ride-sharing. It is possible that by 2040 many people in Birmingham will not even bother to own personal vehicles. Remote work and online shopping will also accelerate this trend. My wife and I both work remotely and only own one car between the two of us. Most days it sits unused in our garage. It seems likely to me that families like mine will make up an increasing share of Birmingham residents as time goes on. The Master Plan dismisses autonomous vehicles as too distant a technology to worry about, but I disagree. If we begin work on these garages 5 years from now and fund them with 30-year bonds, we need parking to be valuable for 35 years. I don't even have faith in the value of parking for the next 18 years, and I think most of us would agree that we have no idea what the world will look like in 2050. It would be disastrous for the future of this city if we were to build tens of millions of dollars of parking only to watch demand for parking fizzle out, leaving us with empty, useless structures and a massive pile of debt. Once again, if we let the private sector build the parking, the risk is on their books, and if the need for parking evaporates, it's not our problem.

Focusing on increasing walkability and density will not only bring Birmingham closer to embodying its motto, but will have a number of other benefits as well. Land values will increase as more lots gain walkable access to amenities. More valuable properties will generate more tax revenue per lot, leading to better city services and lower per-capita taxes. More housing options will mean downsizing opportunities for seniors, and a reversal of Birmingham's decreasing population - which is particularly important with respect to BPS student enrollment and funding. I would like to see the plan do more to move the city in this direction, and to remove all recommendations to construct parking, which will move us away from it while saddling us with costly debt. The vision of Birmingham as A Walkable Community can be achieved, but only by making decisions that focus on people.

Thank you for your consideration,

Kevin Kozlowski
[421 Madison St.](#)
[Birmingham, MI 48009](#)
Kevin.Kozlowski@gmail.com



280 N. Old Woodward
Suite 12
Birmingham, MI 48009
O 248.385.3112
C 248.835.2068
F 888.450.1682

jphowe@jphowe.com
www.jphowe.com

April 27, 2022

Mr. A. A. ON

Mr. Ni
Lannin
City of Birmingham
151 Martin St.
Birmingham, MI 48009

Re: Request for Late Land Use Application and Use Permit Hearing
Applicant: Ortiz
Address: 110 Grant St.
Birmingham, MI 48009

Dear Mr. Dupuis,

As a follow up to our discussion yesterday, we respectfully request that you and the Planning Board consider scheduling the hearing for the Special Land Use Application filed by Ortiz duCare, LLC at the next site plan meeting in May. As it stands right now, we understand that this Application is scheduled for the June 22nd site plan meeting. Our client is attempting to open this new Child Care Center in September 2022. We have a very short timeline to process the necessary City and State permitting, and to complete interior renovations. My client has a waiting list of families hoping that she is able to open in September, but we are unable to commit to those families until we have the required approvals in place.

If there is anything that you can do to place this Application at the end of the May site plan meeting agenda, it would significantly increase the likelihood of my client being able to open in September.

On behalf of my client and the families she is hoping to serve, thank you for your consideration of this request.

Very truly yours,

J. Patrick Howe

J. Patrick Howe

AGENDA
REGULAR MEETING OF THE BIRMINGHAM PLANNING BOARD
WEDNESDAY MAY 25, 2022
151 MARTIN ST., CITY COMMISSION ROOM 205, BIRMINGHAM MI *
*******7:30 pm*******

Michigan and Oakland County are at a substantial rate of COVID-19 community transmission. Per Occupational Safety and Health Administration (OSHA) mask guidance for areas of high or substantial community transmission levels, and to continue to protect essential government operations and functions, the city requires masks in City Hall for all employees, and for board and commission members. Masks are recommended for members of the public who attend city meetings. The city continues to provide KN-95 respirators for all in-person meeting attendees.

- A. Roll Call**
- B. Review and Approval of the Minutes of the Regular Meeting of **May 11, 2022****
- C. Chairpersons' Comments**
- D. Review of the Agenda**
- E. Unfinished Business**
- F. Rezoning Applications**
- G. Community Impact Studies**
 - 1. **320 Martin St. – Request for new 5-story mixed-use building.**
- H. Special Land Use Permits**
 - 1. **185 N. Old Woodward – Bell Bistro – Request for interior / exterior renovations to existing Mad Hatter Bistro and new outdoor dining plan.**
 - 2. **310 E. Maple – Pernoï – Request for eisnglass enclosure at existing outdoor dining patio.**
- I. Site Plan & Design Reviews**
 - 1. **320 Martin St. – Preliminary Site Plan request for new 5-story mixed-use building.**
 - 2. **185 N. Old Woodward – Bell Bistro – Final Site Plan & Design Review request for interior / exterior renovations to existing Mad Hatter Bistro and new outdoor dining plan.**
 - 3. **310 E. Maple – Pernoï – Final Site Plan & Design Review request for eisnglass enclosure at existing outdoor dining patio.**
- J. Study Session**
- K. Miscellaneous Business and Communications:**
 - 1. Pre-Application Discussions
 - 2. Communications
 - 3. Administrative Approval Correspondence
 - 4. Draft Agenda – **June 8, 2022**
 - 5. Action List - 2022
 - 6. Other Business
- L. Planning Division Action Items**
 - 1. Staff Report on Previous Requests
 - 2. Additional Items from Tonight's Meeting
- M. Adjournment**

* Please note that board meetings will be conducted in person once again. Members of the public can attend in person at Birmingham City Hall OR may attend virtually at:

Link to Access Virtual Meeting: <https://zoom.us/j/111656967>
Telephone Meeting Access: 877-853-5247 US Toll-Free
Meeting ID Code: 111656967

NOTICE: Due to Building Security, public entrance during non-business hours is through the Police Department—Pierce St. Entrance only. Individuals with disabilities requiring assistance to enter the building should request aid via the intercom system at the parking lot entrance gate on Henrietta St.

Persons with disabilities that may require assistance for effective participation in this public meeting should contact the City Clerk's Office at the number (248) 530-1880, or (248) 644-5115 (for the hearing impaired) at least one day before the meeting to request help in mobility, visual, hearing, or other assistance.

Las personas con incapacidad que requieren algún tipo de ayuda para la participación en esta sesión pública deben ponerse en contacto con la oficina del escribano de la ciudad en el número (248) 530-1800 o al (248) 644-5115 (para las personas con incapacidad auditiva) por lo menos un día antes de la reunión para solicitar ayuda a la movilidad, visual, auditiva, o de otras asistencias. (Title VI of the Civil Rights Act of 1964).

AGENDA
REGULAR MEETING OF THE BIRMINGHAM PLANNING BOARD
WEDNESDAY JUNE 8, 2022
151 MARTIN ST., CITY COMMISSION ROOM 205, BIRMINGHAM MI *
*******7:30 pm*******

Michigan and Oakland County are at a substantial rate of COVID-19 community transmission. Per Occupational Safety and Health Administration (OSHA) mask guidance for areas of high or substantial community transmission levels, and to continue to protect essential government operations and functions, the city requires masks in City Hall for all employees, and for board and commission members. Masks are recommended for members of the public who attend city meetings. The city continues to provide KN-95 respirators for all in-person meeting attendees.

- A.** Roll Call
- B.** Review and Approval of the Minutes of the Regular Meeting of **May 25, 2022**
- C.** Chairpersons' Comments
- D.** Review of the Agenda
- E.** Unfinished Business
- F.** Rezoning Applications
- G.** Community Impact Studies
- H.** Special Land Use Permits
- I.** Site Plan & Design Reviews
- J.** Study Session
 - 1. **Window Standards – Study Session**
 - 2. **Side Yard A/C Units – Study Session**
- K.** Miscellaneous Business and Communications:
 - 1. Pre-Application Discussions
 - 2. Communications
 - 3. Administrative Approval Correspondence
 - 4. Draft Agenda – **June 22, 2022**
 - 5. Action List - 2022
 - 6. Other Business
- L.** Planning Division Action Items
 - 1. Staff Report on Previous Requests
 - 2. Additional Items from Tonight's Meeting
- M.** Adjournment

*Please note that board meetings will be conducted in person once again. Members of the public can attend in person at Birmingham City Hall OR may attend virtually at:

Link to Access Virtual Meeting: <https://zoom.us/j/111656967>
Telephone Meeting Access: 877-853-5247 US Toll-Free
Meeting ID Code: 111656967

NOTICE: Due to Building Security, public entrance during non-business hours is through the Police Department—Pierce St. Entrance only. Individuals with disabilities requiring assistance to enter the building should request aid via the intercom system at the parking lot entrance gate on Henrietta St.

Persons with disabilities that may require assistance for effective participation in this public meeting should contact the City Clerk's Office at the number (248) 530-1880, or (248) 644-5115 (for the hearing impaired) at least one day before the meeting to request help in mobility, visual, hearing, or other assistance.

Las personas con incapacidad que requieren algún tipo de ayuda para la participación en esta sesión pública deben ponerse en contacto con la oficina del escribano de la ciudad en el número (248) 530-1800 o al (248) 644-5115 (para las personas con incapacidad auditiva) por lo menos un día antes de la reunión para solicitar ayuda a la movilidad, visual, auditiva, o de otras asistencias. (Title VI of the Civil Rights Act of 1964).

Planning Board Action List – 2022 (Approved)

Topic	General Goals	City Commission Directive?	Quarter	Status	
				In Progress	Complete
2040 Master Plan	Adopt a new comprehensive master plan.	☒	Ongoing	☒	☐
Outdoor Dining	Study the Outdoor Dining Ordinance re: enclosures, expansions, etc.	☒	1 st (January-March)	☒	☐
Window Standards (Glazing)	Update window standards to help support building renovation and the Energy Code requirements.	☐	1 st (January-March)	☒	☐
Barrier-Free Ramps	Reduce unintentional restrictions on handicap ramps in the front setbacks.	☐	2 nd (April-June)	☒	☐
Side Yard A/C	Update the ordinance to address issues with side yard a/c units.	☐	2 nd (April-June)	☒	☐
Front Setback Rules	Consider revisions to the setback ordinances in R1-R3 to address 200 ft. calculations rule.	☐	3 rd (July-September)	☒	☐
Lighting Standards	Remove conflicting regulations regarding photometric plans.	☐	3 rd (July-September)	☐	☐
Impervious Surface Definition	Clarify definition to promote the infiltration of storm water.	☐	4 th (October-December)	☐	☐
Health Club/Studio Use	Consider allowing health/fitness type activities in more areas of the City.	☐	4 th (October-December)	☐	☐

Next Up...

Topic	General Goals	City Commission Directive?	Quarter	Status	
				In Progress	Complete
Dumpster Enclosures	Expand the materials permitted/not permitted in dumpster enclosures.	☐	-	☐	☐
Balcony/Terrace Enclosures	Clarify and add regulations for the enclosure of outdoor living space.	☐	-	☐	☐
Lot Combination Process	Review the process for lot combinations to add clarity to approval standards.	☐	-	☐	☐
Mixed Use Requirements	Consider changing the requirements for the stacking of mixed uses.	☐	-	☐	☐
Review Processes for Public Projects	Clarify review process for projects on public property.	☐	-	☐	☐
SLUP Application Process	Clarify the SLUP process in terms of the order of board/commission review.	☐	-	☐	☐
Retail Definition	Revisit the retail definition to address any concerns about first floor uses.	☐	-	☐	☐
Medical Marijuana & CBD	Update the Zoning Ordinance to help regulate Medical Marijuana and CBD through ordinance language.	☐	-	☐	☐
Sustainability Initiatives	Prepare a sustainability agenda to increase Birmingham's resilience.	☐	-	☐	☐
Lighting Standards	Review lighting standards for residential districts to reduce light pollution and nuisance.	☐	-	☐	☐
Landscaping Standards	Consider amendments to permit synthetic planting materials.	☐	-	☐	☐
Social Districts	Study the state regulations and the City to help draw district boundaries.	☒	-	☐	☐
Food Trucks	Study the application of food trucks in the City in terms of locations, restrictions, etc.	☒	-	☐	☐
Leaf Blowers	Study the potential to restrict leaf blowers in regards to noise/pollution	☐	-	☐	☐