

#### AGENDA FOR REGULAR MEETING VILLAGE OF TINLEY PARK PLAN COMMISSION

October 19, 2023 – 7:00 P.M. Council Chambers Village Hall – 16250 S. Oak Park Avenue

Regular Meeting Called to Order Pledge of Allegiance Roll Call Taken Communications Approval of Minutes: Minutes of the October 5, 2023 Regular Meeting

# ITEM #1PUBLIC HEARING – TINLEY BOWL – CONCESSIONS BUILDING ADDITION –<br/>7601 183<sup>RD</sup> STREET – SPECIAL USE, SITE PLAN/ARCHITECTURAL APPROVAL<br/>Consider recommending that the Village Board grant Cassie Beno on behalf of Tinley Bowl a<br/>Special Use for a Substantial Deviation of the Hickory Creek Business Center for the development<br/>of a concessions building and athletic courts at 7601 183rd Street. Site Plan/Architectural<br/>Approval is also being considered at the meeting.

#### ITEM #2 PUBLIC HEARING – SPLISH SPLASH CAR WASH – 7130 171<sup>st</sup> STREET – SPECIAL USE, VARIATION, FINAL PLAT, PLAT OF DEDICATION, SITE PLAN/ARCHITECTURAL APPROVAL

Consider recommending that the Village Board grant Iftekhar Syed of Tinley Park Properties LLC (dba Splish Splash Car Wash) a Special Use for an Automobile Car Wash and a Variation from Section III.H.2. (Permitted Encroachments in Required Yards, Commercial Zoning District, Driveways) of the Zoning Code. The petitioner is requesting the Special Use and Variation to permit site improvements to convert an existing nonconforming manual bay car wash to an automated tunnel car wash at 7130 171st Street in the B-3 (General Business & Commercial) zoning district. Site Plan and Plat approvals will also be considered at the meeting.

#### ITEM #3 PUBLIC HEARING – WEST POINT AT HARMONY SQUARE, 67<sup>TH</sup> CT. & NORTH ST. SPECIAL USE, VARIATIONS, REZONING, TEXT AMENDMENT, FINAL PLAT, AND SITE PLAN/ARCHITECTURAL APPROVAL

Consider recommending that the Village Board grant West Point Builders, Inc. on behalf of Tinley Park Main Street, LLC a Special Use, Final Plat of Subdivision, Plat of Vacation, Rezoning, and Variations for the mixed-use development West Point at Harmony Square. A Text Amendment to the Zoning Ordinance is also proposed to facilitate the development by relocating a segment of the "Street-Level Commercial Required" designation in the Legacy Downtown Core Regulating Plan. The project includes a five-story mixed-use building on North Street with commercial space on the first floor and 63 residential units located above. Additionally, the development includes 63 townhome units at the former site of Central Middle School. Site Plan and Final Plat approval are also being considered at the meeting.

Receive Comments from the Public Good of the Order Adjourn Meeting



#### MINUTES OF THE REGULAR MEETING OF THE PLAN COMMISSION, VILLAGE OF TINLEY PARK, COOK AND WILL COUNTIES, ILLINOIS

#### October 5, 2023

The meeting of the Plan Commission, Village of Tinley Park, Illinois, was held in the Council Chambers located in the Village Hall of Tinley Park, 16250 Oak Park Avenue, Tinley Park, IL on October 5, 2023, 2023.

**CALL TO ORDER** – ACTING CHAIR WEST called to order the Regular Meeting of the Plan Commission for October 5, 2023 at 7:00 p.m.

Jarell Blakey, Management Analyst, called the roll.

Present Plan Commissioners:	Acting Chair Kehla West James Gaskill Eduardo Mani Andrae Marak Steve Sepessy Kurt Truxal
Absent Plan Commissioners:	Chairman Garrett Gray Angela Gatto Terry Hamilton
Village Officials and Staff:	Dan Ritter, Community Development Director Michael O. Whalen, Associate Planner Jarell Blakey, Management Analyst
Petitioners:	
Members of the Public:	none
COMMUNICATIONS -	

Jarell Blakey, Management Analyst noted that COMMISSIONER WEST was filling in for CHAIRMAN GARRET GRAY in his absence.

Dan Ritter, Community Development Director, noted that the Petitioner for Item 2 was requesting a continuance to complete and submit updated plans. He requested that the Commission move to amend the agenda to place Item 2 first on the agenda. COMMISSIONER SEPESSY made a motion to amend the agenda to hear Item 2 first. COMMISSIONER MANI seconded the motion. ACTING CHAIR WEST requested a voice vote on the motion; all were in favor. She declared the motion carried.

APPROVAL OF THE MINUTES - Minutes of the September 21, 2023, Regular Meeting of the Plan Commission were presented for approval. A motion was made by COMMISSIONER GASKILL, seconded

by COMMISSIONER SEPESSY to approve the September 21, 2023 minutes. ACTING CHAIR WEST asked for a voice vote; all were in favor. She declared the motion carried.

#### TO: VILLAGE OF TINLEY PARK PRESIDENT AND BOARD OF TRUSTEES

#### FROM: VILLAGE OF TINLEY PARK PLAN COMMISSION

SUBJECT: MINUTES OF THE OCTOBER 5, 2023 REGULAR MEETING

#### ITEM 2: PUBLIC HEARING – WEST POINT AT HARMONY SQUARE, 67TH CT. & NORTH ST. SPECIAL USE, VARIATIONS, REZONING, TEXT AMENDMENT, FINAL PLAT, AND SITE PLAN/ARCHITECTURAL APPROVAL

Consider recommending that the Village Board grant West Point Builders, Inc. on behalf of Tinley Park Main Street, LLC a Special Use, Final Plat of Subdivision, Plat of Vacation, Rezoning, and Variations for the mixed-use development West Point at Harmony Square. A Text Amendment to the Zoning Ordinance is also proposed to facilitate the development by relocating a segment of the "Street-Level Commercial Required" designation in the Legacy Downtown Core Regulating Plan. The project includes a five-story mixed-use building on North Street with commercial space on the first floor and 63 residential units located above. Additionally, the development includes 63 townhome units at the former site of Central Middle School. Site Plan and Final Plat approval are also being considered at the meeting.

Present Plan Commissioners:	Acting Chair Kehla West James Gaskill Eduardo Mani Andrae Marak
	Kurt Truxal
Absent Plan Commissioners:	Chairman Garrett Gray Angela Gatto Terry Hamilton
Village Officials and Staff:	Dan Ritter, Community Development Director Michael O. Whalen, Associate Planner Jarell Blakey, Management Analyst
Petitioners:	Absent
Members of the Public:	None

ACTING CHAIR WEST introduced Item 2.

ACTING CHAIR WEST requested a motion to continue the public hearing for Item 2. COMMISSIONER GASKILL made a motion to continue Item 2 to the October 19, 2023 Plan

Commission meeting. COMMISSIONER TRUXAL seconded the motion. ACTING CHAIR WEST asked for a voice vote; all were in favor. She declared the motion carried.

#### TO: VILLAGE OF TINLEY PARK PRESIDENT AND BOARD OF TRUSTEES

#### FROM: VILLAGE OF TINLEY PARK PLAN COMMISSION

SUBJECT: MINUTES OF THE OCTOBER 5, 2023 REGULAR MEETING

#### ITEM 1: WORKSHOP – SPLISH SPLASH CAR WASH – 7130 171st STREET – SPECIAL USE, VARIATION, FINAL PLAT, PLAT OF DEDICATION, SITE PLAN/ARCHITECTURAL APPROVAL

Consider recommending that the Village Board grant Iftekhar Syed of Tinley Park Properties LLC (dba Splish Splash Car Wash) a Special Use for an Automobile Car Wash and a Variation from Section III.H.2. (Permitted Encroachments in Required Yards, Commercial Zoning District, Driveways) of the Zoning Code. The petitioner is requesting the Special Use and Variation to permit site improvements to convert an existing nonconforming manual bay car wash to an automated tunnel car wash at 7130 171st Street in the B-3 (General Business & Commercial) zoning district. Site Plan and Plat approvals will also be considered at the meeting.

Acting Chair Kehla West
James Gaskill
Eduardo Mani
Andrae Marak
Steve Sepessy
Kurt Truxal
Chairman Garrett Gray
Angela Gatto
Terry Hamilton
Dan Ritter, Community Development Director
Michael O. Whalen, Associate Planner
Jarell Blakey, Management Analyst
Present
None

ACTING CHAIR WEST introduced Item 1. She asked staff to begin the presentation.

Michael O. Whalen, Associate Planner, presented the staff report.

ACTING CHAIR WEST confirmed that the Petitioner was present.

ACTING CHAIR WEST asked the Commission for comments and questions, beginning with COMMISSIONER GASKILL.

COMMISSIONER GASKILL had no comments.

COMMISSIONER MARAK asked whether the existing sign would be retained. Michael O. Whalen said the sign would be retained and could be maintained and refaced. He also noted that, as part of the Special Use Permit, the Commission could recommend bringing the nonconforming sign into compliance with Section IX of the Zoning Ordinance. COMMISSIONER MARAK had no further comment.

COMMISSIONER SEPESSY asked whether there were any future plans to add a detail center. Michael O. Whalen said the Petitioner has not stated any future plans and that there is not space to add a detail center. COMMISSIONER SEPESSY had no further questions.

COMMISSIONER MANI said he was concerned about the use of wall pack light fixtures casting glare onto roadways at night. He added that he was pleased to see the site redeveloped.

COMMISSIONER TRUXAL asked whether a traffic study was conducted. Michael O. Whalen confirmed. COMMISSIONER TRUXAL said the area will be much busier with the carwash operational.

ACTING CHAIR WEST asked the Petitioner how long it takes for a vehicle to pass through the carwash. The Petitioner, from the audience, responded that it takes about a minute. ACTING CHAIR WEST said the queue space for the carwash would probably not cause a problem. The Petitioner added that the speed of the carwash can be accelerated during busy times.

ACTING CHAIR WEST noted the public hearing for Item 1 is scheduled for the October 19, 2023 Plan Commission meeting.

Michael O. Whalen confirmed that the Commission wanted the wall pack fixtures removed. ACTING CHAIR WEST confirmed that refacing the sign is feasible. The Petitioner confirmed.

COMMISSIONER SEPESSY asked whether exiting traffic would be right-turn only. Dan Ritter, Community Development Director, said there will be a right-turn only sign however there is no raised median.

Michael O. Whalen confirmed that the Commission was okay with the Petitioner retaining the nonconforming sign.

ACTING CHAIR WEST concluded the workshop discussion.

#### Good of the Order

Dan Ritter provided updates on current and completed projects.

#### **Receive Comments from the Public**

None were present.

#### Adjournment

ACTING CHAIR WEST requested a motion to adjourn the meeting.

COMMISSIONER MARAK made a motion to adjourn the meeting; COMMISSIONER SEPESSY seconded the motion. ACTING CHAIR WEST requested a voice vote; all were in favor. She declared the meeting adjourned at 7:23 p.m.



## PLAN COMMISSION STAFF REPORT

October 19, 2023 – Public Hearing

#### Petitioner

Cassie Beno of Tinley Bowl

**Property Location** 

7601 183<sup>rd</sup> Street

#### PIN

19-09-01-100-002-0000

#### Zoning

ORI-PD (Office and Restricted Industrial, Hickory Creek Business Center PUD)

#### **Approvals Sought**

- Special Use Permit
- Site Plan/Arch. Approval

#### **Project Planner**

Michael O. Whalen, AICP Associate Planner

#### **Tinley Bowl – Concessions Building**

7601 183<sup>rd</sup> Street



#### **EXECUTIVE SUMMARY**

The Petitioner, Cassie Beno of Tinley Bowl, is requesting a Special Use Permit for a substantial deviation from the Hickory Creek Business Center Planned Unit Development to build an expanded concessions building for the Tinley Bowl Backyard patio area at 7601 183<sup>rd</sup> Street in the ORI-PD (Office and Restricted Industrial – Hickory Creek PUD) Zoning District. The Petitioner is also seeking Site Plan/Architectural approval.

Tinley Bowl is an existing business in Tinley Park. The Zoning Ordinance requires that the proposed project amend the Hickory Creek Business Center PUD to expand the existing concessions building. The proposal also requires Site Plan/Architectural Approval.

#### **EXISTING SITE, ZONING, AND NEARBY LAND USES**



Aerial Location Map

Zoning Map

The subject property at 7601 183<sup>rd</sup> Street is an existing bowling alley with outdoor athletic courts. The property has a small outbuilding that is used as an outdoor bar. The property is at the southwest corner of 183<sup>rd</sup> Street and 76<sup>th</sup> Avenue surrounded by an industrial park. The former Tinley Park Mental Health Center is across 183<sup>rd</sup> Street.

The subject property is located within the ORI-PD (Office and Restricted Industrial – Hickory Creek Business Center PUD) Zoning District. The PUD (Ord. No. 2006-O-028) was approved in 2006 after the subject property had already been developed. The property is also located in the Urban Design Overlay District (UD-1). The overlay was established after the adoption of the Hickory Creek Business Center PUD; therefore, the provisions of the overlay district do not apply.

The table below indicates the surrounding zoning and land uses in the area:

Direction	Zoning	Land Use
North	ORI	Former Tinley Park Mental Health Center
East	ORI-PD (North Creek Business Park)	Office/Warehouse buildings
South	ORI-PD (Hickory Creek Business Center)	Vacant land Office/Warehouse buildings
West	ORI-PD (Hickory Creek Business Center)	Office/Warehouse buildings

The subject property is located at the intersection of 183<sup>rd</sup> Street and 76<sup>th</sup> Avenue. 183<sup>rd</sup> Street is a road owned and operated by the Cook County Department of Transportation and Highways. 183<sup>rd</sup> Street is five lanes (including a left turn lane), does not have sidewalks, and has a 40-mph posted speed limit in the vicinity. 76<sup>th</sup> Avenue is a street owned and operated by the Village. It does not have pavement markings or sidewalks and has a 25-mph posted speed limit. Pace routes 356 and 386 are nearby at West Creek Drive, but there is no sidewalk connection between the bus stops and the subject property.

#### PROPOSED USE

The Petitioner proposes demolishing the existing outbuilding to build an expanded bar with bathrooms for customers. The Petitioner also intends to expand the athletic courts so more league teams can play each day.

#### **SPECIAL USE PERMIT**

A Special Use Permit is required for a substantial deviation (Sec. VII.B.6.a.) from the Hickory Creek Business Center PUD. This deviation is necessary because the project proposal will increase the intensity of the development.



#### SITE PLAN AND ARCHITECTURAL APPROVAL

#### Site Plan.

A bowling alley and small concession building exist on the subject site and are connected by a walkway. There is an asphalt pad between the two buildings with a shed—the area is used for storage and is completely enclosed. Two parking lots of similar size are on either side of the bowling alley building. A drive-aisle connects the parking lots between the building and 183<sup>rd</sup> Street. The "Backyard" area has a patio near the concession building, beanbag areas, a volleyball court, and horseshoe pits.

The Petitioner is seeking to build an expanded concession building to include a larger full bar and restrooms. The proposed building would also make room for some indoor seating, with overhead doors to open the building up when the weather allows. The proposal would remove the horseshoe pits and replace them with two additional volleyball pits. The proposal also includes a larger patio.

#### Architecture.



West building elevation (left); north elevation (top right), south elevation (bottom right)

The proposed final building design will have a hipped roof and be entirely clad in face brick with Hardie board details in neutral colors. A portion of the patio will be covered by a roof overhang supported by columns on the west side. The building design meets the masonry requirements of the Zoning Ordinance.

#### <u>Signage.</u>

The Petitioner submitted elevation drawings that indicate the conceptual locations of future signage but is not seeking any relief from the Zoning Ordinance sign regulations. Future signage must comply with the signage provisions in the Zoning Ordinance.

#### Lighting.

The Petitioner submitted a photometric plan that is compliant with the glare provisions in the Zoning Ordinance.

#### Landscaping.

The site is deficient in landscaping. Given the nature of the project as a redevelopment/site addition, the Petitioner is seeking relief from the landscape ordinance. Sec. V.C.8.A. of the Zoning Ordinance requires that "a reasonable sum of money" be spent on landscaping. Ch. 158 of the Village Code requires compliance with the Landscaping and Bufferyards provisions when the value of a building renovation or enlargement is greater than 50% of the value of the existing building. The Petitioner agreed to install some street trees and other site plantings, which is reasonable given the scope and scale of the project. The Petitioner proposes four street trees along 183<sup>rd</sup> Street, base plantings around the existing sign at the intersection, and plantings along the fence between the west parking lot and the "Backyard" area.



Proposed landscape plan

Section X.J.5. of the Zoning Ordinance lists standards that need to be considered by the Plan Commission. The Plan Commission is encouraged to consider these standards (listed below) when analyzing a Special Use request. Staff has provided draft Findings in the Staff Report for the Public Hearing.

X.J.5. Standards: No Special Use shall be recommended by the Plan Commission unless said Commission shall find:

- a. That the establishment, maintenance, or operation of the Special Use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare;
  - The proposed Special Use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare. The proposed special use is safe for the public, employees, and neighboring properties.
- b. That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood;
  - The proposal will not be injurious to the use and enjoyment of other property in the immediate vicinity, nor will it substantially diminish or impair property values within the neighborhood. The special use will support an existing business's operation within the Village.
- c. That the establishment of the Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district;
  - Neighboring properties are already developed, and the proposal will not negatively affect any future development or redevelopment of neighboring properties.
- d. That adequate utilities, access roads, drainage, and/or other necessary facilities have been or are being provided;
  - The site is already developed with adequate utilities and no additional utilities are needed. Any utility work will be performed on the property.
- e. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets; and
  - The site is already developed with a driveway and parking areas. Traffic impacts will be minimal.
- f. That the Special Use shall, in all other respects, conform to the applicable regulations of the district in which it is located, except as such regulations may in each instance be modified by the Village Board pursuant to the recommendation of the Plan Commission. The Village Board shall impose such conditions and restrictions upon the premises benefited by a Special Use Permit as may be necessary to ensure compliance with the above standards, to reduce or minimize the effect of such permit upon other properties in the neighborhood, and to better carry out the general intent of this Ordinance. Failure to comply with such conditions or restrictions shall constitute a violation of this Ordinance.
  - The Special Use will comply with all Village ordinances.
- g. The extent to which the Special Use contributes directly or indirectly to the economic development of the community as a whole.
  - The Special Use will allow a long-time Tinley Park business to grow and provide better service to its customers.

Section III.T.2. of the Zoning Ordinance requires that the conditions listed below must be met and reviewed for Site Plan approval. Specific findings are not required but all standards shall be considered to have been met upon review from the Plan Commission.

#### <u>Architecture.</u>

- a. Building Materials: The size of the structure will dictate the required building materials (Section V.C. Supplementary District Regulations). Where tilt-up or pre-cast masonry walls (with face or thin brick inlay) are allowed vertical articulation, features are encouraged to mask the joint lines. Concrete panels must incorporate architectural finishes that comply with "Building Articulation" (Section III.U.5.h.) standards. Cast in place concrete may be used as an accent alternate building material (no greater than 15% per façade) provided there is sufficient articulation and detail to diminish it's the appearance if used on large, blank walls.
- b. Cohesive Building Design: Buildings must be built with approved materials and provide architectural interest on all sides of the structure. Whatever an architectural style is chosen, a consistent style of architectural composition and building materials are to be applied on all building facades.
- c. Compatible Architecture: All construction, whether it be new or part of an addition or renovation of an existing structure, must be compatible with the character of the site, adjacent structures and streetscape. Avoid architecture or building materials that significantly diverge from adjacent architecture. Maintain the rhythm of the block in terms of scale, massing and setback. Where a development includes outlots they shall be designed with compatible consistent architecture with the primary building(s). Site lighting, landscaping and architecture shall reflect a consistent design statement throughout the development.
- d. Color: Color choices shall consider the context of the surrounding area and shall not be used for purposes of "attention getting" or branding of the proposed use. Color choices shall be harmonious with the surrounding buildings; excessively bright or brilliant colors are to be avoided except to be used on a minor scale for accents.
- e. Sustainable architectural design: The overall design must meet the needs of the current use without compromising the ability of future uses. Do not let the current use dictate an architecture so unique that it limits its potential for other uses (i.e. Medieval Times).
- f. Defined Entry: Entrance shall be readily identifiable from public right-of-way or parking fields. The entry can be clearly defined by using unique architecture, a canopy, overhang or some other type of weather protection, some form of roof element or enhanced landscaping.
- g. Roof: For buildings 10,000 sf or less a pitched roof is required or a parapet that extends the full exterior of the building. For buildings with a continuous roof line of 100 feet of more, a change of at least five feet in height must be made for every 75 feet.
- h. Building Articulation: Large expanses of walls void of color, material or texture variation are to be avoided. The use of material and color changes, articulation of details around doors, windows, plate lines, the provision of architectural details such as "belly-bands" (decorative cladding that runs horizontally around the building), the use of recessed design elements, exposed expansion joints, reveals, change in texture, or other methods of visual relief are encouraged as a means to minimize the oppressiveness of large expanses of walls and break down the overall scale of the building into intermediate scaled parts. On commercial buildings, facades greater than 100 feet must include some form of articulation of the façade through the use of recesses or projections of at least 6 inches for at least 20% of the length of the façade. For industrial buildings efforts to break up the long façade shall be accomplished through a change in building material, color or vertical breaks of three feet or more every 250 feet.
- i. Screen Mechanicals: All mechanical devices shall be screened from all public views.
- j. Trash Enclosures: Trash enclosures must be screened on three sides by a masonry wall consistent with the architecture and building material of the building it serves. Gates must be kept closed at all times and constructed of a durable material such as wood or steel. They shall not be located in the front or corner side yard and shall be set behind the front building façade.

- a. Building/parking location: Buildings shall be located in a position of prominence with parking located to the rear or side of the main structure when possible. Parking areas shall be designed so as to provide continuous circulation avoiding dead-end parking aisles. Drive-through facilities shall be located to the rear or side of the structure and not dominate the aesthetics of the building. Architecture for canopies of drive-through areas shall be consistent with the architecture of the main structure.
- b. Loading Areas: Loading docks shall be located at the rear or side of buildings whenever possible and screened from view from public rights-of-way.
- c. Outdoor Storage: Outdoor storage areas shall be located at the rear of the site in accordance with Section III.O.1. (Open Storage). No open storage is allowed in front or corner side yards and are not permitted to occupy areas designated for parking, driveways or walkways.
- d. Interior Circulation: Shared parking and cross access easements are encouraged with adjacent properties of similar use. Where possible visitor/employee traffic shall be separate from truck or equipment traffic.
- e. Pedestrian Access: Public and interior sidewalks shall be provided to encourage pedestrian traffic. Bicycle use shall be encouraged by providing dedicated bikeways and parking. Where pedestrians or bicycles must cross vehicle pathways a cross walk shall be provided that is distinguished by a different pavement material or color.

#### **MOTION TO CONSIDER**

If the Plan Commission wishes to act on the Petitioner's requests, the appropriate wording of the motions is listed below. The protocol for the writing of a motion is to write it in the affirmative so that a positive or negative recommendation correlates to the Petitioner's proposal. By making a motion, it does not indicate a specific recommendation in support or against the plan, it only moves the request to a vote. The conditions listed below are recommended by staff but can be added to, changed, or removed by the Commission based on the Public Hearing testimony.

#### Motion 1 (Special Use)

"...make a motion to recommend the Village Board grant a Special Use Permit for a Substantial Deviation to the Hickory Creek Business Center PUD to allow for the construction of an accessory building and athletic courts to the Petitioner, Cassie Beno of Tinley Bowl, at 7601 183<sup>rd</sup> Street in the ORI-PD (Office and Restricted Industrial, Hickory Creek Business Center PUD) Zoning District, in accordance with the plans submitted and adopt the Findings of Fact as proposed in the October 19, 2023 staff report."

#### Motion 2 (Site Plan/Architectural Approval)

"...make a motion to grant Site Plan/Architectural Approval to the Petitioner, Cassie Beno of Tinley Bowl, to allow for the construction of an accessory building addition and athletic courts at 7601 183<sup>rd</sup> Street in accordance with the plans submitted and adopt the Findings of Fact as proposed in the October 19, 2023 staff report, subject to the following condition:

a) The Petitioner must submit evidence to the Village of the Petitioner's application, if necessary, to the Cook County Department of Transportation and Highways to install required parkway tree(s) prior to the issuance of any building permit.

Submitted S	heet Name	Prepared By	Date On Sheet
Applicatior	ns with Narrative	Petitioner	6/20/23
Site Plan		RKG Design	9/28/23
Preliminar	y Engineering Documents	IMEG	6/20/23
Floorplan		RKG Design	9/28/23
Elevations	and Materials	RKG Design	9/28/23
Existing Co	nditions Photos	RKG Design	9/28/23
Landscape	Plan	K-Lee Inc.	9/19/23
Photometr	ic Plan	PG Enlighten	2/20/23



#### VILLAGE OF TINLEY PARK, ILLINOIS PLANNING AND ZONING GENERAL APPLICATION

#### **REQUEST INFORMATION**

\*Additional Information is Required for Specific Requests as Outlined in Specific Addendums

Special Use for: Substantial Deviation to the PUD
Planned Unit Development (PUD) Concept Preliminary Final Deviation
Variation Residential Commercial for
Annexation
Rezoning (Map Amendment) From to to
Plat (Subdivision, Consolidation, Public Easement) Preliminary Final
Site Plan
Landscape Change Approval
Other:

#### **PROJECT & PROPERTY INFORMATION**

Project Name:	Patio Concessions Building Addition		
Project Description:	Expansion of existing concessions building supporting exterior activities "Backyard"		
Project Address:	7601 W. 183rd Street	Property Index No. (PIN):	09-01-100-002-0000
Zoning District:	Hickory Creek Business PUD	Lot Dimensions & Area:	471'x463
Estimated Project Cost: \$			

#### **OWNER OF RECORD INFORMATION**

Please supply proper documentation of ownership and/or designated representative for any corporation.

Name of Owner:	CRAIG BOAT
Street Address:	3711 HENRY DRIVE
E-Mail Address:	cassieboat@yahoo.com

Company: T	INLEY BOWL	
City, State & Zi	ip: LOGANSPORT, IN 46947	
Phone Numbe	r: 708-582-0228	

#### **APPLICANT INFORMATION**

Same	as	Owner	of	Record
Jame	a3	Owner	01	Record

All correspondence and invoices will be sent to the applicant. If applicant is different than owner, "Authorized Representative Consent" section must be completed.

Name of Applicant:	CASSIE BENO	Company: TINLEY BOWL
<b>Relation To Project:</b>	MANAGER	
Street Address:	24208 S WILLIAM DRIVE	City, State & Zip: MANHATTAN, IL 60442
E-Mail Address:	cassieboat@yahoo.com	Phone Number: 708-582-0228



#### VILLAGE OF TINLEY PARK, ILLINOIS

PLANNING AND ZONING GENERAL APPLICATION

#### Authorized Representative Consent

It is required that the property owner or his designated representative be present at all requests made to the Plan Commission and Zoning Board of Appeals. During the course of a meeting, questions may arise regarding the overall project, the property, property improvements, special conditions attached to recommendations among other aspects of any formal request. The representative present must have knowledge of the property and all aspects of the project. They must have the authority to make commitments related to the project and property. Failure to have the property owner or designated representative present at the public meeting can lead to substantial delays to the project approval. If the owner cannot be present or does not wish to speak at the public meeting, the following statement must be signed by the owner for an authorized repetitive.

# I hereby authorize CASSIE BENO

\_\_\_\_\_ (print clearly) to act on my behalf and advise that they have full authority to act as my/our representative in regards to the subject property and project, including modifying any project or request. I agree to be bound by all terms and agreements made by the designated representative.

**Property Owner Signature:** 

**Property Owner Name (Print):** 

Bast N ČRAIG<sup>®</sup>W. BOAT

#### **Acknowledgements**

- Applicant acknowledges, understands and agrees that under Illinois law, the Village President (Mayor), Village Trustees, • Village Manager, Corporation Counsel and/or any employee or agent of the Village or any Planning and Zoning Commission member or Chair, does not have the authority to bind or obligate the Village in any way and therefore cannot bind or obligate the Village. Further, Applicant acknowledges, understands and agrees that only formal action (including, but not limited to, motions, resolutions, and ordinances) by the Board of Trustees, properly voting in an open meeting, can obligate the Village or confer any rights or entitlement on the applicant, legal, equitable, or otherwise.
- Members of the Plan Commission, Zoning Board of Appeals, Village Board as well as Village Staff may conduct inspections • of subject site(s) as part of the pre-hearing and fact finding review of requests. These individuals are given permission to inspect the property in regards to the request being made.
- Required public notice signs will be obtained and installed by the Petitioner on their property for a minimum of 10 days • prior to the public hearing. These may be provided by the Village or may need to be produced by the petitioner.
- The request is accompanied by all addendums and required additional information and all applicable fees are paid before • scheduling any public meetings or hearings.
- Applicant verifies that all outstanding fees and monies owed to the Village of Tinley Park have been paid. •
- Any applicable recapture, impact, engineering, contracted review or other required fees and donations shall be paid prior . to issuance of any building permits, occupancy permits, or business licenses.
- The Owner and Applicant by signing this application certify that the above information and all supporting addendums and documentation is true and correct to the best of their knowledge

Property Owner Signature:	Crup W Boat
Property Owner Name (Print):	CRAIG W. BOAT
Applicant Signature: (If other than Owner)	Carni Bens
Applicant's Name (Print):	CASSIE BENO
Date:	06/20/2023



#### VILLAGE OF TINLEY PARK, ILLINOIS SPECIAL USE ADDENDUM

#### **APPLICATION & SUBMITTAL REQUIREMENTS**

A complete application consists of the following items submitted in a comprehensive package. If materials are submitted separately or are incomplete they may not be accepted and may delay the review and hearing dates until a complete application package is received. The following information is being provided in order to assist applicants with the process of requesting a **Special Use** permit from the terms of the Zoning Ordinance (Section 5-B). This information is a summary of the application submittal requirements and may be modified based upon the particular nature and scope of the specific request.

Depending upon meeting schedules, legal notification requirements, and the specific type and scope of the request, this process generally takes between 45 to 60 days from the date of submission of a complete application package. Please schedule a pre-application meeting with Planning Department staff to review the feasibility of the proposal, discuss applicable Ordinance requirements, discuss submittal requirements, and receive some preliminary feedback on any concept plans prior to making a submittal.

□General Application form is complete and is signed by the property owner(s) and applicant (if applicable).

□Ownership documentation is submitted indicating proper ownership through a title report or title policy. If a corporation or partnership, documentation of the authorized agent must be supplied as well. All beneficiaries of a property must be disclosed.

□ A written project narrative detailing the general nature and specific aspects of the proposal being requested. Details on any employee numbers, parking requirements, property changes, existing uses/tenants, hours of operation or any other business operations should be indicated. Any additional requests such as Site Plan approval or a Variation should be indicated in the narrative as well.

 $\Box$ A Plat of Survey of the property that is prepared by a register land surveyor and has all up-todate structures and property improvements indicated.

□Site Plan and/or Interior layout plans that indicate how the property and site will be utilized.

 $\Box$  Responses to all Standards for a Special Use on the following page (can be submitted separately along with the narrative, but all standards must be addressed).

 $\Box$ \$400 Special Use hearing fee.

#### **STANDARDS AND CRITERIA FOR A SPECIAL USE**

Section X.J. of the Village of Tinley Park Zoning Ordinance requires that no Special Use be recommended by the Plan Commission unless the Commission finds that all of the following statements, A-G listed below, are true and supported by facts. Petitioners must respond to and confirm each and every one of the following findings by providing the facts supporting such findings. The statements made on this sheet will be made part of the official public record, will be discussed in detail during the public meetings and will be provided to any interested party requesting a copy. Please provide factual evidence that the proposed Special Use meets the statements below. If additional space is required, you may provide the responses on a separate document or page.

A. That the establishment, maintenance, or operation of the Special Use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare.

The exterior activities area and supporting concessions building have peacefully existed for a number of years and there is no reason to believe the expanded building capabilities will change that.

B. That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood.

The site property to the west is an industrial property with no windows facing this property. All other sides of the property are public ways. Again, the usage has existed for years.

C. That the establishment of the Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district.

There will be no future development of the adjacent property.

D. That adequate utilities, access roads, drainage, and/or other necessary facilities have been or are being provided.

The building currently does not have water or sanitary services. The main reason for the expansion is to provide for toilet rooms and a more sanitary concessions operation. No site circulation will be modified.

E. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets.

No site circulation is being modified.

F. That the Special Use shall in all other respects conform to the applicable regulations of the district in which it is located, except as such regulations may in each instance be modified by the Village Board pursuant to the recommendation of the Plan Commission.

We are not aware of any deviations of the applicable regulations of the district.

G. The extent to which the Special Use contributes directly or indirectly to the economic development of the community as a whole.

The current programs offered will be expanded to facilitate additional recreational activities opportunities for residents and visiting patrons and provide additional sales tax for the village.



#### VILLAGE OF TINLEY PARK, ILLINOIS SITE PLAN ADDENDUM

#### **APPLICATION & SUBMITTAL REQUIREMENTS**

A complete application consists of the following items submitted in a comprehensive package. If materials are submitted separately or are incomplete they may not be accepted and may delay the review or meeting dates until a complete application package is received. The following information is being provided in order to assist applicants with the process of requesting **Site Plan** approval. This information is a summary of the application submittal requirements and may be modified based upon the particular nature and scope of the specific request.

Depending upon meeting schedules, legal notification requirements, and the specific type and scope of the request, this process generally takes between 45 to 60 days from the date of submission of a complete application package. Please schedule a pre-application meeting with Planning Department staff to review the feasibility of the proposal, discuss applicable Ordinance requirements, discuss submittal requirements, and receive some preliminary feedback.

General Application form is complete and is signed by the property owner(s) and applicant (if applicable).

Ownership documentation is submitted indicating proper ownership through a title report or title policy. If a corporation or partnership, documentation of the authorized agent must be supplied. All beneficiaries of a property must be disclosed.

□ A written project narrative detailing the general nature and specific aspects of the proposal being requested. Details on existing conditions, any parking requirements, property changes, landscaping, building design, proposed uses/tenants, public improvements or any other site design details should be described. Any additional requests such as a Special Use or Variation should be indicated in the narrative as well.

 $\Box$  A Plat of Survey of the property that is prepared by a register land surveyor and has all up-todate structures and property improvements indicated.

□Plans and Surveys including all details listed on the Site Plan checklist (next page).

□ Submit all applications, plans and documents stated above electronically via email/USB drive/ShareFile upload to Community Development Staff (Note: Village email attachment size is limited to 10MB. Please utilize ShareFile if your submission exceeds 10MB). Staff may also request up to three (3) paper copy of full-size Arch D (24" x 36") plans.

□ Site Plan Fee: Site Plan Review (Non-Residential & Multi-Family) - \$500 New/First Approval, \$300 Amendment

□ Engineering Review Fees: Administrative Fee - \$250 (0-5 acres), \$50 (5.01-40 acres), \$2,000 + \$20/acre over 40 acres. (40.01+ acres) and Concept/Preliminary Review Fee - \$300 (0-2 acres), \$600 (2.01-4acres), \$900 (4.01-9acres), \$1,500(9.01acres+)

	Required Plan Submittal Items	Applicant Submitted	Village Received
1.	Site Plan Approval Application		
2.	Complete list and contact information for all project staff and design professionals (Architect, Engineer, Landscape Architect, etc.)		
3.	<ul> <li>Plat of Survey, including:</li> <li>a. Existing conditions and dimensions;</li> <li>b. Legal Description;</li> <li>c. Surveyor information; and</li> <li>d. Date of completion.</li> </ul>		
4.	<ul> <li>Site Plan, including:</li> <li>a. Fully-dimensioned property boundaries;</li> <li>b. All building elements and physical improvements;</li> <li>c. Setbacks from all property lines;</li> <li>d. Identification as to whether all elements are "Existing" or "Proposed";</li> <li>e. Dimensioned parking spaces and drive aisles per Section VIII of the Zoning Ordinance;</li> <li>f. Dimensioned sidewalks (within rights-of-way and interior to the site);</li> <li>g. Trash enclosure location and screening/gate materials;</li> <li>h. Loading spaces as required by Section VIII of the Zoning Ordinance;</li> <li>i. Fire hydrant locations as required by the Village Fire Prevention Bureau;</li> <li>j. Lighting standard locations; and</li> <li>k. Ground signs with setbacks noted.</li> </ul>		
5.	<ul> <li>Zoning Analysis Table <ul> <li>a. Showing existing, proposed, and required zoning conditions for all Lot and Bulk Regulations of the Zoning Ordinance, including but not limited to: <ul> <li>i. Land area in acres and square feet (exclusive of rights-of-way);</li> <li>ii. Building area in square feet (including a breakdown by use for parking calculation);</li> <li>iii. Setbacks;</li> <li>iv. Floor Area Ratio (FAR);</li> <li>v. Lot coverage;</li> <li>vi. Height of all buildings and structures (see definition of height in Zoning Ordinance);</li> <li>vii. Percentage of greenspace; and</li> <li>viii. Parking spaces (with calculations).</li> </ul> </li> </ul></li></ul>		
6.	<ul> <li>Landscape Plan, including: <ul> <li>a. Bufferyards (please include a table indicating required and proposed plant units);</li> <li>b. Parking lot landscape islands;</li> <li>c. Screening/fencing locations;</li> <li>d. Berms (if proposed);</li> <li>e. Plant lists, including: <ul> <li>i. Latin and common names</li> <li>ii. Number of each planting material to be provided</li> <li>iii. Size at planting</li> </ul> </li> </ul></li></ul>		
7.	<ul> <li>Photometric Plan, including:</li> <li>a. Location of light fixtures;</li> <li>b. A cut sheet of light fixtures with indication of cut-offs or shielding; and</li> <li>c. Indicating lighting levels in foot-candles at the following locations: <ol> <li>Interior of the subject property;</li> <li>At the property lines (contact staff about maximum light levels); and</li> <li>iii. Ten (10) feet beyond the property lines.</li> </ol> </li> </ul>		

8.	Floor P	ans, including:	
	a.	Preliminary floor plan layout of all buildings;	
	b.	Labels for the type of use of the area; and	
	с.	Labels for square footage of the area and types of uses.	
9.	Prelimi	nary Engineering Plans, including but not limited to:	
	a.	Drainage and water flow patterns or routes;	
	b.	On-site detention;	
	с.	Existing and proposed roadway configurations (adjacent public streets and interior	
		roadways/driveways);	
	d.	Utility connections and locations;	
	e.	Future roadway or access connections (if necessary); and	
	f.	Cross access easement(s).	
10	Signage	Plans including:	
10.	Signage	Dimensioned color elevations of ground well and directional signage	
	d. h	A diagram showing the leastion of the proposed signeds with esthely from proporty	
	D.	A diagram showing the location of the proposed signage with setbacks from property	
	_	ines and internal drive alses or parking lots; and	
	С.	include description of sign materials and method of illumination.	
11.	Elevatio	ons and Renderings	
	a.	Building elevations showing all four sides of all buildings.	
		i. Elevations should be fully-dimensioned including height, width, and depth of all	
		major building elements and components, and identify all building materials; and	
	b.	Color renderings or 3D model of site.	
	с.	Elevation of trash enclosure area with building materials identified (if applicable).	
12.	Building	g Material Samples (may be submitted after initial Staff Review, but prior to placement on	
	a Plan (	Commission agenda)	
	a.	Samples of proposed materials including, but not limited to:	
		i. Wall materials such as bricks, stone, and siding;	
		ii. Roofing;	
		iii. Light fixtures; and	
		iv. Windows, moldings, shutters, and awnings.	
		b. Provide final information on all building materials with vendor, color, and sizes,	
		where relevant, in a table format.	
13.	Prelimi	nary Plat(s) (if applicable)	
		· · · · · · · · · · · · · · · · · · ·	

The above information is intended as an outline of the Submission Requirements for Site Plan Approval and is neither mutually exclusive nor inclusive. The Village's Zoning Ordinance, Landscape Ordinance, Building Codes, and Subdivision Regulations can be found online at the Village website at <u>http://www.tinleypark.org</u>. Questions about Site Plan Approval and other Planning processes may be directed to the Planning Department at:

> Village of Tinley Park Planning Department 16250 S. Oak Park Avenue Tinley Park, IL 60477 Phone: (708) 444-5100 Email: planning@tinleypark.org



#### Professional Fee and Cost Reimbursement Agreement

This Professional Fee and Cost Reimbursement Agreement ("Agreement") entered into this \_\_\_\_\_day of \_\_\_\_\_\_, 20\_\_\_\_, between The Village of Tinley Park, Cook and Will Counties, a home rule municipality (hereinafter referred to as "VILLAGE"), and \_\_\_\_\_\_ (hereinafter individually and collectively referred to as "DEVELOPER").

WHEREAS, as a result of the DEVELOPER's project, the VILLAGE must have its professional service providers and staff analyze review and comment upon and perform other services solely on the VILLAGE's behalf from the time of inception of the project through its completion; and

**WHEREAS,** the DEVELOPER acknowledges it should pay the VILLAGE's fees, costs and expenses for professional service providers' services and staffs' services, rather than impose the costs upon the VILLAGE's residents;

**NOW, THEREFORE,** in consideration of the mutual covenants and conditions contained herein and other good and valuable consideration, the receipt and sufficiency of which is expressly acknowledged by the parties by the execution hereof, it is hereby agreed as follows:

SECTION ONE. PROFESSIONAL FEES. The DEVELOPER shall pay the VILLAGE any and all professional service provider and staff fees, costs and expenses incurred by the Village as a result of or in conjunction with the DEVELOPER's project from this date and prior thereto, through the project's completion as determined by the VILLAGE and/or VILLAGE's acceptance of all public improvements associated with the project, whichever occurs last. The VILLAGE's professional service providers and staff includes, but is not limited to, its attorneys, engineers, land planners, traffic and transportation consultants, etc. Fees shall include, but not be limited to, all time associated with any review, analysis, discussions, meetings, inspections, planning and all other work or services to be performed on behalf of the VILLAGE in conjunction with the project. The VILLAGE's professional service providers and staff fees shall be billed to the DEVELOPER in the amount as authorized by the VILLAGE to be paid for such services.

SECTION TWO SECURITY. Upon written request from the VILLAGE, the DEVELOPER shall post with the VILLAGE the sum of \$5,000 cash or certified funds as security for the DEVELOPER's payment of such professional fees, costs, and expenses or another amount as approved from time to time as the standard security deposit amount by the Community Development Director. The VILLAGE is specifically authorized to apply this security in payment of such fees, costs and expenses in the event the DEVELOPER fails to make timely payments to the VILLAGE as required under this Agreement. The DEVELOPER is obligated to continuously maintain the original deposit amount with the VILLAGE until the project's completion and DEVELOPER expressly waives any claims for interest related to funds it deposits with the VILLAGE.

**SECTION THREE. PAYMENT.** The VILLAGE shall provide the DEVELOPER with an itemized statement of fees. The DEVELOPER shall pay the VILLAGE within thirty (30) days upon receipt of the statement from the VILLAGE. If the DEVELOPER does not pay the statement within

the thirty (30) day period, The VILLAGE may direct that all professional service providers and staff cease work on the project of the DEVELOPER, until all statements due and owing are paid in full. In the event that the DEVELOPER does not make payment to the VILLAGE in adequate time, the amount of all statements due and owing will be deducted from the security deposit and work by the VILLAGE will cease until the developer has replenished the account to a minimum of \$5000.

**SECTION FOUR.** COOPERATION. The DEVELOPER shall fully cooperate with the VILLAGE, its officials and professional staff with respect to its project.

**SECTION FIVE. REPRESENTATION OF VILLAGE ONLY.** The DEVELOPER acknowledges that the VILLAGE's professional service providers and staff solely represents the VILLAGE and the VILLAGE's interest and do not represent the DEVELOPER

**SECTION SIX. CONFLICT.** If any of the terms and provisions of this Agreement conflict with any ordinance of the VILLAGE or agreement between the parties, the terms and provisions of this Agreement shall supersede and control any other terms and provisions.

SECTION SEVEN. ATTORNEY'S FEES. In the event any suit or other action is brought to enforce or which otherwise affects this Agreement, or any of its provisions, the DEVELOPER, in addition to all other fees, costs and expenses shall pay the VILLAGE's attorney's fees, expert witness fees, costs and any other associated expenses. The venue for such suit shall be in the Circuit Court of Cook County, Illinois.

<u>SECTION EIGHT.</u> SEVERABILITY. The invalidity of any paragraph or subparagraph of this Agreement shall not impair the validity of any other paragraph or subparagraph. If any provision of this Agreement is to be determined unenforceable, such provision shall be determined severable and the Agreement may be enforced with such provision severed or as modified.

SECTION NINE. ENTIRE AGREEMENT. This Agreement embodies the entire agreement and understanding between parties and there are no other agreements, representations or understandings, oral or written, between the parties with respect to the subject matter of this Agreement. No alteration, modification, amendment or change of this Agreement shall be valid unless agreed by the parties in writing.

**SECTION TEN. OTHER FEE ORDINANCES.** The DEVELOPER acknowledges that it has been advised that this Agreement is intended to secure the VILLAGE's recovery of professional fees, costs and expenses as hereinabove described, and under circumstances where such fees, costs and expenses may not otherwise have been recovered. Notwithstanding the foregoing or anything else herein to the contrary, nothing herein shall be understood to relieve the DEVELOPER of its responsibilities hereunder and under any applicable ordinances of the VILLAGE, including, but not limited to, any fees payable pursuant to Section XI: Comprehensive Fee Schedule of the Village Municipal Code of Ordinances, provided; however, that the VILLAGE shall take such action as it may deem appropriate to avoid invoicing for, or collecting, duplicate reimbursements of the same expenses or costs.

[Remainder of page left blank]

Dated at Tinley Park, Cook and Will Counties, Illinois on the date written above.

VILLAGE OF TINLEY PARK, ILLINOIS COOK AND WILL COUNTIES, an Illinois Home Rule Community.

(Corporate Seal)

Ву\_\_\_\_\_

Community Development Director

ATTEST:

By:

Village Clerk

DEVELOPER

(Corporate Seal)

By:

President

		R6	8 21726		
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a corporation created a and duly authorized to sideration of Ten (\$1	nd existing under and by virtue of transact business in the State of 11 0.00}	the laws of the State of I llinois	llinois for and in con- DOLLARS,		
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In Witness Whereof, sa its name to be signed to Secretar	uid Grantor has caused its corporate these presents by its ry, this the day of December <u>Tinley Bowling La</u>	e seal to be hereto affixed, President, an . , 1945 .	and has caused d attested by its	"RIDERS" OR REV	
CORFORATE BEAL HERE State of Illinois, County the County and State al	ATTERT (Arthur C: Be (Arthur C: Be (Aileen E. Bo (Aileen E. Bo) (Aileen E. Bo (Aileen E. Bo) (Aileen E. Bo (Aileen E. Bo) (Aileen E. Bo) (Ail	Soul Bat at) he undersigned, a Notary F hat Arthur C. Boat Tipley Bowling La	PRESIDENT SECRETARY Public, in and for	AFFIX	
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CORFORATE BEAL HERE State of Illinois, County the County and State at personally known to me impress NOTARIAL SEAL HERE Given under my hand a Commission expires MAIL TO:	<u> <u>av</u> <u>(Arthur C. Br</u> <u>(Arthur C. Br</u> <u>(Aileen E. Bo</u>) y of Will <u>ss.</u> I, t Toresaid, DO HEREBY CERTIFY, ti to be the President of the corporation, and Aileen E. I the Secretary of me to be the same persons who instrument, appeared before me edged that as such E signed and delivered the said ins Secretary of said co said corporation to be affixed the Board of Directors of s act, and as the free and voluntar uses and purposes therein set fort and official seal, this <u> <u>August 22</u> <u>1968</u> <u> <u> </u> <u> </u></u></u></u>	Abord at) the undersigned, a Notary F the at Arthur C. Boat at) Timley Bowling La: Boat personally kn is said corporation, and person see names are subscribed to this day in person and ser- resident and trument as reporation, and caused the de- ereto, pursuant to authori- aid corporation as their free y act and deed of said corp. h. day of December No- NOTARY PUBLIC ADDRE THE AB	PRESIDENT escoretary Public, in and for nes, Inc., own to me to be sonally known to to the foregoing verally acknowl- Secretary, they President and corporate seal of ty, given by the ee and voluntary poration, for the 19.62. ISS OF PROPERTY: Chonge	XILLY DOCUMENT NUMBER STATISTICAL	R68 21720



#### State of Illinois Domestic/Foreign Corporation Annual Report

Year

2023 56877738

FILED May 24, 2023

Alexi Giannoulias, Secretary of State

**Corporation File No** 

1.	Corporate Name_TINLEY PARK BO	WLING LANES, INC.			
	Registered Agent DAVID L. ANDERS				
	Registered Office 7851 185TH ST S	STE 105	Lange and the second	and the second	
	City, IL, Zip Code, County TINLEY	PARK, IL 60477-6251 WILL		Y	
•		7601 183RD STREET			
2.	Principal address of Corporation	TINLEY PARK, IL 60477			
3a.	State or Country of Incorporation	ILLINOIS	3b. Date Incorporated/Qualified 06-22-1992		

#### 4. The names and addresses of ALL officers & directors MUST be listed here!

Officers	
Title Name & Address	PRESIDENT CRAIG W. BOAT, 7601 W. 183RD S T., TINLEY PARK, IL 60477
Title Name & Address	SECRETARY CASSANDRA BOAT-BENO, 7601 W. 1 83RD ST., TINLEY PARK, IL60477
Title Name & Address	DIRECTOR CRAIG W. BOAT 7601 WEST 183RD STREET TINLEY PARK, IL 60477

5. If 51% or more of the stock is owned by a minority or female, please check the appropriate box

	Female
--	--------

#### 6. Number of shares authorized and issued as of <u>3-31-2023</u>

Class	Series	Par Value	Number Authorized	Number Issued
COMM		0.000000	1000	1000.000
				an a

7. The amount of paid-in-capital as of 3-31-2023 is \$ 23000

Both

8. All property owned by the corporation is located in Illinois and all business transacted by the corporation is in Illinois.

9. Under the penalty of perjury and as an authorized officer, I declare that this annual report, pursuant to provisions of the Business Corporation Act, has been examined by me and is, to the best of my knowledge and belief, true, correct and complete.

**Title & Date** 

Fee Summary Franchise Tax: \$0,00 Filing Fee: \$75.00 Penalty: \$0.00 Interest: \$0.00

By	CASSANDRA BO	AT-BENO	รังสัมพร้างผู้ที่สารสารสารสารสารสารสารสารสารสารสารสารสารส
	SECRETARY	May 24, 2023	

Total Fee: \$75.00

This document was electronically generated at www.ilsos.gov

#### <u>OWNER</u>

Tinley Bowl c/o Cassie Boat-Beno 7601 W. 183<sup>rd</sup> Street Tinley Park, IL 60477 708-532-2955 cassieboat@yahoo.com

#### ARCHITECT

RKG Design Group, LLC 15255 S. 94<sup>th</sup> Avenue Orland Park, IL 60462 708-403-1812 Robert Goes, Principal Architect (c) 630-742-3793 bgoes@RKGdesigngroup.com

#### **CIVIL ENGINEER**

IMEG CORP. 623 26<sup>TH</sup> Avenue Rock Island, IL 61201 547-894-6137 Steven Grant

#### **STRUCTURAL ENGINEER**

IMEG CORP. 623 26<sup>TH</sup> Avenue Rock Island, IL 61201 630-753-8551 Karl Pennings

#### **MECHANICAL & PLUMBING ENGINEER**

Three Sixty MEP PLLC 35W503 Fox River Drive Saint Charles, IL 60174 630-205-6379 Michael Wright

#### **ELECTRICAL ENGINEER**

Brookman Group Design, Inc. 1203 Spring Beach Way Cary, IL 60013 847-438-5630 Bill Brookman

#### WRITTEN NARRATIVE

The project is to take the current 579 sf concessions building and increase the size to 1,376 sf. The additional size will accommodate a more functional bar area with hand wash sinks, water dispenser and floor drains. There will be two overhead garage doors to open the bar up to the recreational area during good weather and also allow for some space inside the bar during poor weather events.

The additional footage will also accommodate men's and women's toilet rooms, a janitor's closet and a liquor/pop storage area.

The current usage of the lot will not change. Currently, sand volleyball and bean bag tournaments are offered. We are only proposing to expand the recreational opportunities currently being offered and the ability to provide concessions to the players and spectators in a more sanitary environment.

The existing slab-on-grade patio will be increased in size. Some of the patio will be under the cover of the roof overhang with ceiling fans, TV's and a foot washing station. A portion of the patio slab will project out beyond the roof for completely open air seating.

The site has been modified to accommodate 2 additional sand volleyball courts, referee stands and lighting. The existing horseshoe pits will be eliminated.

Employee staffing quantities are expected to increase by one or two. Current employees are two.

No parking, site circulation or other property changes are being contemplated.

Hours of operation are projected to be M-F 5:00 pm to 12:00 am; Saturday 2:00 pm to 12:00 am; and Sunday 2 pm to 11:00 pm, May 1 – October 31

Because the property was added to the Hickory Creek PUD in 2006, we are also seeking a "Substantial Deviation" to the PUD.





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	LEGEND	
PROPOSED	FXISTING	
	EXISTING	
	0	STORM INLET
	4	FLARED END SECTION
		SANITARY/STORM CLEANOUT
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	X	LIGHT POLE
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		CONIFER TREE
	(Ö)	DECIDUOUS TREE
	5.5	BUSH/SHRUB
	5	
		R.O.W. MARKER. FOUND
		RAILROAD SPIKE, FOUND
		REBAR, FOUND
	X	CHISELED "X" IN CONCRETE, FOUND
	$\otimes$	CHISELED "X" IN CONCRETE, SET
	$\odot$	P.K. NAIL, FOUND
	۲	P.K. NAIL, SET
	0	PIPE, FOUND
		CONCRETE MONUMENT, FOUND
	×100.00 TC=100.00	SPOT ELEVATION
	FL=100.00	
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		EASEMENT LINE
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		FLOODWAY
		CONSTRUCTION LIMITS

Tinley Park Pol Departme 183rd St Gatto's Italian 📢 Restaurant & Bar Bath Mitchen enix Q 185th St Hailstorm Brewing Bettinardi G Graphics D T Trucks - Mokena, IL Allegiance Heating

CIVIL SH	HEET INDEX
SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	MWRD DETAILS
3	TOPOGRAPHIC SURVEY
4	DEMOLITION PLAN
5	SITE PLAN
6	GRADING PLAN
7	UTILITY PLAN
8	EROSION CONTROL PLAN
9	DETAIL SHEET



**TOPOGRAPHIC FEATURE AS NOTED** 

COUNTY\_WILL SECTION NO. \_1

# **TINLEY BOWL BUILDING RENOVATION** VILLAGE OF TINLEY PARK WILL COUNTY, ILLINOIS



# NOT TO SCALE

CALL JULIE 811 or 1-800-892-0123 WITH THE FOLLOWING:

T35N-R12E TOWNSHIP NAME OR NO.

**48 HOURS BEFORE YOU DIG** (TWO WORKING DAYS)

### GENERAL NOTES

1. THE CONTRACTOR SHALL NOTIFY: INCLUDING:

800-892-0123 "JULIE"

72 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION. UTILITY COMPANIES WILL ESTABLISH, ON THE GROUND, THE LOCATION OF UNDERGROUND PIPES, MAINS, CONDUITS OR CABLES ADJOINING OR CROSSING PROPOSED CONSTRUCTION

- CONTRACTOR SHALL NOTIFY THE MUNICIPALITY AND THE ENGINEER A MINIMUM OF 24 HOURS IN ADVANCE OF PERFORMING ANY WORK. RENOTIFICATION SHALL BE REQUIRED IF ANY PHASE OF WORK IS SUSPENDED FOR MORE THAN TWO (2) DAYS.
- THE FOLLOWING CODES AND STANDARDS, AS APPLICABLE, SHALL GOVERN CONSTRUCTION UNDER THIS CONTRACT:
  - STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", AND THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", LATEST EDITION AND ALL SUBSEQUENT REVISIONS THERETO, HEREINAFTER REFERRED TO AS THE HIGHWAY STANDARDS
- B. THESE "GENERAL NOTES
- C. ILLINOIS URBAN MANUAL
- UTILITIES SHOWN IN THE PLANS ARE FOR THE CONTRACTOR'S CONVENIENCE AND ARE PPROXIMATE ONLY. THE UTILITIES ARE LOCATED FROM THE BEST AVAILABLE INFORMATION THE CONTRACTOR SHALL VERIFY IN THE FIELD ALL TYPES, SIZES AND LOCATIONS OF EXISTING UTILITIES. CAUTION: THERE MAY BE OVERHEAD AND BURIED POWER LINES WHICH COULD POSSIBLY INTERFERE OR BE A SAFETY HAZARD WITH EQUIPMENT OPERATIONS
- PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL HAVE IN HIS POSSESSION ALL REQUIRED PERMITS FOR THE CONSTRUCTION OF THIS PROJECT AS NECESSARY (E.G., ILLINOIS DEPARTMENT OF TRANSPORTATION, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, LAKE COUNTY HIGHWAY DEPARTMENT, RAILROADS, PUBLIC UTILITY COMPANIES ETC.). THESE PERMITS WILL BE OBTAINED AS SPECIFIED IN THE "SPECIAL PROVISIONS"
- WHEN LOOSE MATERIAL IS DEPOSITED IN DITCHES OR GUTTERS. IT SHALL BE REMOVED BEFORE THE END OF EACH WORKING DAY. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL FEATURES DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL STATE, OR BETTER. ALL RESTORATION WORK REQUIRED BEYOND THE SCOPE OF THE PLANS AND SPECIFICATIONS SHALL BE DONE AT THE CONTRACTOR'S EXPENSE UNLESS WORK WAS DONE AT THE DIRECTION OF THE OWNER ENGINEER AND COMPENSATION WAS AGREED UPON PRIOR TO EXECUTION OF WORK.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL NECESSARY PAVEMENT OPENINGS AND CONSTRUCTION DEBRIS LEFT IN THE PUBLIC RIGHT-OF-WAY WITH LIGHTED DEVICES. THE CONTRACTOR SHALL MAINTAIN HIGH VISIBILITY OF ALL TEMPORARY HAZARDS TO PEDESTRIANS AND MOTORISTS. REMOVAL OF ANY SUCH TEMPORARY HAZARDS SHALL BE DONE AS SOON AS POSSIBLE. CONTRACTOR SHALL MAINTAIN HIGH VISIBILITY OF ALL TEMPORARY HAZARDS SHALL BE DONE AS SOON AS POSSIBLE
- ALL EXISTING DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS SHALL BE CLEANED TO 9. THE SATISFACTION OF THE ENGINEER. ALL COSTS ASSOCIATED WITH THIS SHALL BE INCLUDED IN THE APPLICABLE UNIT PRICES.
- 10. THE GRADING AND CONSTRUCTION OF PROPOSED IMPROVEMENTS SHALL NOT CAUSE PONDING OF STORM WATER. GRADING SHALL BE DONE TO ALLOW POSITIVE DRAINAGE. "DITCH CHECKS" AND/OR SILT FENCES, UNLESS OTHERWISE SPECIFIED, SHALL BE INSTALLED, IF NECESSARY, TO PREVENT EROSION. COST OF THIS WORK SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
- 11. PLACEMENT OF TOPSOIL AND SEEDING OR SODDING SHALL BE COMPLETED WITHIN 10-15 DAYS AFTER THE COMPLETION OF CURB AND GUTTER, PAVING AND/OR DRIVEWAY REPLACEMENT OPERATIONS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER
- 12. UTILITY SERVICES TO RESIDENTS OR BUSINESSES WHICH ARE INTERRUPTED BY CONSTRUCTION SHALL BE RESTORED AT THE EXPENSE OF THE CONTRACTOR SO THAT NO SERVICE IS INTERRUPTED FOR MORE THAN FOUR (4) HOURS. IF TEMPORARY SERVICE IS REQUIRED, THE EXPENSE FOR SAME SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 13. THE EDGES OF ALL IMPROVED SURFACES WHICH ARE DISTURBED DURING CONSTRUCTION SHALL BE SAW CUT PRIOR TO RESTORATION. ANY SAW CUTTING OF PAVEMENT PATCHES, BUTT JOINTS, CONCRETE CURBS, SIDEWALKS, OR ANY OTHER AREAS NECESSARY TO COMPLETE THIS PROJECT WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, UNLESS OTHERWISE SPECIFIED.
- 14. MANHOLE RIM ELEVATIONS ARE PROVIDED TO ASSIST THE CONTRACTOR IN ORDERING MATERIALS. THESE ELEVATIONS ARE FOR INFORMATION ONLY, AND FINAL ADJUSTMENT OF STRUCTURES TO MEET SITE CONDITIONS WILL BE NECESSARY. NO PAYMENT WILL BE MADE FOR FINAL ADJUSTMENT OF STRUCTURES, AND THE COST THEREOF SHALL BE INCIDENTAL TO AND INCLUDED IN THE CONTRACT UNIT PRICE FOR SAID STRUCTURE.
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ALL STREETS USED BY THE CONTRACTOR, SUB-CONTRACTORS, AND SUPPLIERS CLEAN AND FREE OF ALL DIRT, MUD, AND OTHER CONSTRUCTION DEBRIS, AND WILL BE REQUIRED TO CLEAN THEM AS IS NECESSARY IN ORDER TO MAINTAIN THEM IN A SAFE, DRIVEABLE CONDITION. THE CONTRACTOR SHALL BE ESPECIALLY RESPONSIVE TO REQUESTS FROM THE ENGINEER, ENGINEER'S REPRESENTATIVE, DIRECTOR OF PUBLIC WORKS, SUPERINTENDENT OF STREETS, POLICE AND FIRE DEPARTMENTS, OR ANY OFFICIAL OF THE OWNER TO PRACTICE GOOD HOUSEKEEPING THROUGHOUT THE DURATION OF THIS PROJECT. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, UNLESS OTHERWISE SPECIFIED.

### SOIL EROSION AND SEDIMENT CONTROL NOTES

- A. SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF HYDROLOGIC DISTURBANCE OF UPLAND AREAS.
- FOR THOSE DEVELOPMENTS THAT REQUIRE AN INSPECTOR, INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM: UPON COMPLETION OF SEDIMENT AND RUNOFF CONTROL MEASURES (INCLUDING PERIMETER CONTROLS AND DIVERSIONS), PRIOR TO PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING AFTER EVERY SEVEN (7) CALENDAR DAYS OR STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.
- C. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES. THE PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES
- A STABILIZED MAT OF CRUSHED STONE MEETING IDOT GRADATION CA-1 UNDERLAIN WITH FILTER FABRIC AND IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL. OR OTHER VPROPRIATE MEAURE(S) AS APPROVED BY THE ENFORCEMENT OFFICER. SHALL B INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS VARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA
- TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN.
- DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) CALENDAR DAYS FOLLOWING THE END OF ACTIVE HYDROLOGIC DISTURBANCE OR RE-DISTURBANCE.
- G. ALL STOCKPILES SHALL HAVE APPROPRIATE MEASURES TO PREVENT EROSION. STOCKPILES SHALL NOT BE PLACED IN FLOOD PRONE AREAS OR WETLANDS AND DESIGNATED BUFFERS.
- SLOPES STEEPER THAN 3H:1V SHALL BE STABILIZED WITH APPROPRIATE MEASURE
- APPROPRIATE EROSION CONTROL BLANKET SHALL BE INSTALLED ON ALL INTERIOR DETENTION BASIN SIDE SLOPES BETWEEN THE NORMAL WATER LEVEL AND THE HIGH WATER LEVEL.
- STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY AN APPROPRIATE SEDIMENT CONTROL MEASURE
- K. IF DE-WATERING DEVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DISCHARGES SHALL BE ROUTED THROUGH AN APPROVED ANIONIC POLYMER DE-WATERING SYSTEM OR A SIMILAR MEASURE. DE-WATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. AN APPROVED REPRESENTATIVE, MUST BE PRESENT AT THE COMMENCEMENT OF DE-WATERING ACTIVITIES.
- L. IF INSTALLED SOIL EROSION AND SEDIMENT CONTROL MEASURES DO NOT MINIMIZE SEDIMENT LEAVING THE DEVELOPMENT SITE, ADDITIONAL MEASURES SUCH AS ANIONIC POLYMER OR FILTRATION SYSTEMS MAY BE REQUIRED
- M. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE PROPERTY OWNER SHALL BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE AND REPAIR.
- N. ALL TEMPORARY SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.
- O. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, OR OTHER GOVERNING AGENCY.

# SITE RESTORATION

ALL DISTURBED LANDSCAPE AREAS SHALL BE RESTORED AS FOLLOWS: TOPSOIL PLACEMENT, 4", CONFORMING TO SECTION 211 OF THE HIGHWAY STANDARDS. A) SEEDING, CLASS 1, CONFORMING TO SECTION 250 OF THE HIGHWAY STANDARDS. MULCH, METHOD 2 OR 3, OR EROSION CONTROL BLANKET CONFORMING TO SECTION 251 C) OF THE HIGHWAY STANDARDS.



**IMEG CORPORATION GURNEE DIVISION** 

OFILL Date 3/2/2 **STEVEN F. GRANT** ILLINOIS LICENSED PROFESSIONAL ENGINEER NO. 062-062539 EXPIRATION DATE 11/30/23

062-062539

LICENSED PROFESSIONAL

ENGINEER

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A. REFERENCED SPECIFICATIONS

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS: \* STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), BY THE
- ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION;
- \* STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST
- EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION; \* VILLAGE OF TINLEY PARK DESIGN STANDARDS AND VILLAGE CODE OF ORDINANCES
- \* THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD) WATERSHED MANAGEMENT ORDINANCE AND TECHNICAL GUIDANCE MANUAL; \* IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHAL PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

**B. NOTIFICATIONS** 

- 1. THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WO DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 708-588-4055 OR SEND EMAIL NOTIFICAT) PROJECT NAME, LOCATION AND PERMIT NUMBER TO WMOJOBSTART@MWRD.ORG).
- 2. THE VILLAGE OF TINLEY PARK ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHA
- 3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR EXACT LOCATIONS OF UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATE NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123
- C. GENERAL NOTES
- 1. ALL ELEVATIONS SHOWN ON PLANS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NA CONVERSION FACTOR IS 0 FT.
- 2. MWRD, THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHOR? INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.
- 3. THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ARCHITECT, ENGINEER, MUNICIPALITY, MWRD, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.
- 4. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PL AS APPROVED BY MWRD AND THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY MWRD, THE MUNICIPALITY, OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.
- 5. THE LOCATION OF VARIOUS UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.
- 6. ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIO AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
- 7. MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREME OF THE MUNICIPALITY, MWRD, AND OWNER.
- 8. THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.
- 9. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUC SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.
- 10. RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOC UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, OR BENDS SHALL BE TIED TO A FIRE HYDRANT.
- D. SANITARY SEWER
- 1. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY POLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.
- 2. A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEW CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AND/OR MWRD AFTER THE SEWERS HAVE BEE TESTED AND ACCEPTED.
- 3. DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPR FROM THE MUNICIPALITY OR MWRD.
- 4. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATION FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (LATEST EDITION).
- 5. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.
- 6. ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.
- 7. ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO THE FOLLOWING:

	PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS	E.
/		ASTM C-76	ASTM C-123	1.
			ASTM C-443	2
			ASTM C-304	Ζ.
		ANSI A21.51	ANSI AZI.II	3.
L TAKE	6-INCH TO 15-INCH DIAMETER SDR 26 18-INCH TO 27-INCH DIAMETER F/DY=46	ASTM D-3034 ASTM F-679	ASTM D-3212 ASTM D-3212	4.
	HIGH DENSITY POLYETHYLENE (HDPE)	ASTM D-3350 ASTM D-3035	ASTM D-3261,F-2620 (HEAT FUSION) ASTM D-3212,F-477 (GASKETED)	5.
rking Ion With	WATER MAIN QUALITY PVC 4-INCH TO 36-INCH 4-INCH TO 12-INCH 14-INCH TO 48-INCH	ASTM D-2241 AWWA C900 AWWA C905	ASTM D-3139 ASTM D-3139 ASTM D-3139	
24 Hours				6.
ASE.	THE FOLLOWING MATERIALS ARE ALLOWE APPROVAL PRIOR TO PERMIT ISSUANCE.	d on a qualified basis A special condition wil	SUBJECT TO DISTRICT REVIEW AND L BE ADDED TO THE PERMIT WHEN	01
RTHE	THE PIPE MATERIAL BELOW IS USED FOR	SEWER CONSTRUCTION OF	R A CONNECTION IS MADE.	7.
LY ·	<u>PIPE MATERIAL</u> POLYPROPYLENE (PP) PIPE	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS	
	12-INCH TO 24-INCH DOUBLE WALL	ASTM F-2736	D-3212, F-477	0
VD88).	30-INCH TO 60-INCH TRIPLE WALL	ASTM F-2764	D3212, F-477	8.
RITY TO				•
				9.
,	8. ALL SANITARY SEWER CONSTRUCTION REQUIRES STONE BEDDING WITH STO TO 14 THE OUTSIDE DIAMETER OF THE	(AND STORM SEWER CONS NE ¼ ″ TO 1″ IN SIZE, WIT	TRUCTION IN COMBINED SEWER AREAS), H MINIMUM BEDDING THICKNESS EQUAL	10.
LANS	THAN EIGHT (8) INCHES. MATERIAL SH ABOVE THE TOP OF THE PIPE WHEN US	ALL BE CA-7, CA-11 OR CA-	-13 AND SHALL BE EXTENDED AT LEAST 12"	11.
S, MUST	9. NON-SHEAR FLEXIBLE-TYPE COUPLINGS OF DISSIMILAR PIPE MATERIALS.	5 SHALL BE USED IN THE CO	ONNECTION OF SEWER PIPES	
AND	10. ALL MANHOLES SHALL BE PROVIDED V CONSTRUCTED WITH A CONCEALED PI	VITH BOLTED, WATERTIGH	T COVERS. SANITARY LIDS SHALL BE F GASKET WITH THE WORD "SANITARY"	12.
DNS	11. WHEN CONNECTING TO AN EXISTING	SEWER MAIN BY MEANS OT	THER THAN AN EXISTING WYE, TEE, OR	
	AN EXISTING MANHOLE, ONE OF THE a) A CIRCULAR SAW-CUT OF SEWER	FOLLOWING METHODS SHA MAIN BY PROPER TOOLS (	ALL BE USED: `SHEWER-TAP" MACHINE OR SIMILAR)	14.
NTS	AND PROPER INSTALLATION OF H b) REMOVE AN ENTIRE SECTION OF	IUBWYE SADDLE OR HUB-T PIPE (BREAKING ONLY THE	EE SADDLE. E TOP OF ONE BELL) AND REPLACE WITH	15.
	A WYE OR TEE BRANCH SECTION. c) WITH PIPE CUTTER, NEATLY AND OF PROPER FITTING, USING "BAN	ACCURATELY CUT OUT DES D SEAL" OR SIMILAR COUP	SIRED LENGTH OF PIPE FOR INSERTION PLINGS TO HOLD IT FIRMLY IN PLACE.	16.
CTION	12. WHENEVER A SANITARY/COMBINED SE DISTANCE FROM THE TOP OF THE SEV	EWER CROSSES UNDER A W	VATERMAIN, THE MINIMUM VERTICAL HE WATERMAIN SHALL BE 18 INCHES.	17.
on as Held	FURTHERMORE, A MINIMUM HORIZON SEWERS AND WATERMAINS SHALL BE TRENCH, KEEPING A MINIMUM 18" VER	TAL DISTANCE OF 10 FEET MAINTAINED UNLESS: THE RTICAL SEPARATION; OR T	BETWEEN SANITARY/COMBINED SEWER IS LAID IN A SEPARATE HE SEWER IS LAID IN THE SAME	
IN RED. TEES	TRENCH WITH THE WATERMAIN LOCA EARTH, KEEPING A MINIMUM 18" VERT	TED AT THE OPPOSITE SID	E ON A BENCH OF UNDISTURBED HER THE VERTICAL OR HORIZONTAL	18.
	DISTANCES DESCRIBED CANNOT BE M THE SEWER SHALL BE CONSTRUCTED	AINTAINED, OR THE SEWEI TO WATER MAIN STANDAR	R CROSSES ABOVE THE WATER MAIN, DS OR IT SHALL BE ENCASED WITH A	
D		WITH THE ENDS SEALED.		10
D	GRANULAR MATERIAL OR REMOVED.	BE ABANDONED. ABANDOI	NED TANKS SHALL BE FILLED WITH	19.
/ER CE EN	14. ALL SANITARY MANHOLES, (AND STOR MINIMUM INSIDE DIAMETER OF 48 INC CONCRETE.	M MANHOLES IN COMBINE CHES, AND SHALL BE CAST	D SEWER AREAS), SHALL HAVE A IN PLACE OR PRE-CAST REINFORCED	
	15. ALL SANITARY MANHOLES, (AND STOR PRECAST "RUBBER BOOTS" THAT CON	M MANHOLES IN COMBINE FORM TO ASTM C-923 FOR	D SEWER AREAS), SHALL HAVE ALL PIPE CONNECTIONS. PRECAST	20
OVAL	SECTIONS SHALL CONSIST OF MODIFI		RUBBER GASKET TYPE JOINTS.	21
ONS	NON-SHRINK CONCRETE OR MORTAR I	PLUG.	II LINDO VIIIII AT LLAOT 2 FEET LUNG	
	17. EXCEPT FOR FOUNDATION/FOOTING E ASSOCIATED WITH VOLUME CONTROL PIPES ARE NOT ALLOWED TO BE CONN	PRAINS PROVIDED TO PRO FACILITIES, DRAIN TILES/ NECTED TO OR TRIBUTARY	TECT BUILDINGS, OR PERFORATED PIPES FIELD TILES/UNDERDRAINS/PERFORATED TO COMBINED SEWERS, SANITARY	22
5	SEWERS, OR STORM SEWERS TRIBUTA CONSTRUCTION OF NEW FACILITIES O PERFORATED PIPES ENCOUNTERED W SHALL NOT BE CONNECTED TO COMBI TO COMBINED SEWERS.	ARY TO COMBINED SEWERS OF THIS TYPE IS PROHIBITE ITHIN THE PROJECT AREA S NED SEWERS, SANITARY SI	S IN COMBINED SEWER AREAS. ED; AND ALL EXISTING DRAIN TILES AND SHALL BE PLUGGED OR REMOVED, AND EWERS, OR STORM SEWERS TRIBUTARY	23
	18. A BACKFLOW PREVENTER IS REQUIRED REQUIRED BACKFLOW PREVENTERS SH	) For all detention bas Hall be inspected and ex	SINS TRIBUTARY TO COMBINED SEWERS. XERCISED ANNUALLY BY THE PROPERTY	

OWNER TO ENSURE PROPER OPERATION, AND ANY NECESSARY MAINTENANCES SHALL BE PERFORMED TO ENSURE FUNCTIONALITY. IN THE EVENT OF A SEWER SURCHARGE INTO AN OPEN DETENTION BASIN TRIBUTARY TO COMBINED SEWERS, THE PERMITTEE SHALL ENSURE THAT CLEAN UP AND WASH OUT OF SEWAGE TAKES PLACE WITHIN 48 HOURS OF THE STORM EVENT.

- EROSION AND SEDIMENT CONTROL THE CONTRACTOR SHALL INSTALL THE EROSION AND SEDIMENT CO APPROVED EROSION AND SEDIMENT CONTROL PLAN.
- EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE FUNCTION DISTURBANCE OF THE SITE.
- ALL DESIGN CRITERIA, SPECIFICATIONS, AND INSTALLATION OF ERC PRACTICES SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN M
- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SITE AT ALL TIMES.
- INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A M a) UPON COMPLETION OF INITIAL EROSION AND SEDIMENT CONT SOIL DISTURBANCE.
- SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO
- IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE D SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONT
- A STABILIZED MAT OF CRUSHED STONE MEETING THE STANDARDS ( SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTE SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-C AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS AC TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
- CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ACCO URBAN MANUAL AND SHALL BE INSTALLED PRIOR TO ANY ON SITE ( CONCRETE.
- MORTAR WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ADDITION FACILITIES FOR ANY BRICK AND MORTAR BUILDING ENVELOPE CONS
- TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIME CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIME
- DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIE PERMANENTLY CEASED SHALL BE STABILIZED WITH TEMPORARY OF SEVEN (7) DAYS.
- ALL FLOOD PROTECTION AREAS AND VOLUME CONTROL FACILITIES PROTECTED WITH A DOUBLE-ROW OF SILT FENCE (OR EQUIVALENT
- . VOLUME CONTROL FACILITIES SHALL NOT BE CONSTRUCTED UNTIL DRAINAGE AREA HAS BEEN STABILIZED.
- SOIL STOCKPILES SHALL, AT A MINIMUM, BE PROTECTED WITH PE SOIL STOCKPILES SHALL NOT BE PLACED IN FLOOD PROTECTION A
- . EARTHEN EMBANKMENT SIDE SLOPES SHALL BE STABILIZED WITH . BLANKET.
- . STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CON BY APPROPRIATE SEDIMENT CONTROL MEASURES.
- . THE CONTRACTOR SHALL EITHER REMOVE OR REPLACE ANY EXIST THEM INTO THE DRAINAGE PLAN FOR THE DEVELOPMENT. DRAIN SANITARY OR COMBINED SEWER. DRAIN TILES ALLOWED IN COME GREEN INFRASTRUCTURE PRACTICES.
- . IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND BE PROTECTED FROM EROSION AND SEDIMENTATION. DEWATERIN DAILY DURING OPERATIONAL PERIODS. THE SITE INSPECTOR MUS COMMENCEMENT OF DEWATERING ACTIVITIES.
- . THE CONTRCTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERIN INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATERMA AND OTHER APPURTENANCES, ANY TRENCH DEWATERING, WHICH THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE S ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILT UPSLOPE AREA. SEDIMENT LADEN WATERS SHALL NOT BE DISCHAR PROTECTION AREAS OR THE COMBINED SEWER SYSTEM.
- . ALL PERMANENT EROSION CONTROL PRACTICES SHALL BE INITIATI FOLLOWING THE COMPLETION OF SOIL DISTURBING ACTIVITIES.
- . ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAIN ON A YEAR-ROUND BASIS DURING CONSTRUCTION AND ANY PERIO UNTIL PERMANENT STABILIZATION IS ACHIEVED.
- . ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SH THIRTY (30) DAYS AFTER PERMANENT SITE STABILIZATION.
- . THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON TH REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DI SITE INSPECTOR, OR MWRD.

		DATE		
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AL PRIOR TO HYDROLOGIC				
OSION AND SEDIMENT CONTROL IANUAL.				
SHALL BE MAINTAINED ON THE				
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OF THE ILLINOIS URBAN MANUAL RING OR LEAVING A CONSTRUCTION F-WAY, STREET, ALLEY OR PARKING CCUMULATIONS WARRANT AND			PH: 847.336. www.imegcorp i4.007637-0014	
RDANCE WITH THE ILLINOIS ONSTRUCTION ACTIVITIES INVOLVING		5	egistration #18	
N TO CONCRETE WASHOUT STRUCTION ACTIVITIES.			JUE ign Firm R	
TO DIRECT ALL RUNOFF FROM NT TRAP OR BASIN. VOLUME IT BASINS.			GRAND AVEN JEE, IL 60031 Illinois Des	
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RIMETER SEDIMENT CONTROLS. REAS OR THEIR BUFFERS.	-	7		
PPROPRIATE EROSION CONTROL		0		
STRUCTION SHALL BE PROTECTED		AV(		
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DISCHARGE LOCATIONS SHALL G SYSTEMS SHOULD BE INSPECTED F BE PRESENT AT THE		-DING RK, ILLI	DETA	
IG AND EXCAVATION FOR THE INS AS WELL AS THEIR SERVICES CONTAINS SEDIMENT SHALL PASS EDIMENT CONTROL DEVICE. IER BAG OR EXISTING VEGETATED RGE TO WATERWAYS, FLOOD		JWL BUII TINLEY PA	MWRD	
D WITHIN SEVEN (7) DAYS		n ∑		
TAINED AND REPAIRED AS NEEDED DS OF CONSTRUCTION SHUTDOWN		NLF		
ALL BE REMOVED WITHIN	ŀ	=		
E PLANS ARE THE MINIMUM RECTED BY THE ENGINEER,				
	IME 23007 © C ALL Fie Dra Ch Da	EG Proje 230029 e Name: 2940.00 - TINLI COPYRIGHT RIGHTS RE eld Book awn By: ecked B te: 6/20	ect No: 40.00 EY BOWL.dwg 2023 ESERVED No:#### PJR y: SFG /2023	
		2		

Sheet 2 of 9

b) ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOUR WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIV



2 10



PM 0294 4 K


2:32:07 PM 023\2300294







04:58 3\2300



2: 47: 31 023\230(



- NOTES: 1. TRENCH SHALL BE IN ACCORDANCE WITH OSHA SAFETY STANDARDS.
- 2. BEDDING SHALL BE REQUIRED TO BE A MINIMUM THICKNESS EQUAL TO 1/4 OF THE OUTSIDE DIAMETER OF THE PIPE BUT SHALL NOT BE LESS THAN 4". BEDDING AND HAUNCHING MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION." THE GRADATION SHALL BE CA-7.
- 3. FOR PVC PIPE THE BEDDING MATERIAL SHALL BE PLACED A MINIMUM 12" OVER THE TOP OF THE PIPE AND GRADATION SHALL BE CA-7 AND SHALL BE CAREFULLY PLACED SO AS TO FILL THE SPACE UNDER AND AROUND THE PIPE.
- 4. TRENCH BACKFILL SHALL BE CA-7 TO WITHIN 12" OF THE TOP OF THE TRENCH. TOP FINAL 12" SHALL BE FILLED WITH CA-6.

TRENCH BACKFILL DETAIL FOR SANITARY SEWER



NOTES: 1. TRENCH SHALL BE IN ACCORDANCE WITH OSHA SAFETY STANDARDS. 2. TRENCH BACKFILL (CA-7) SHALL PROVIDE 12" MINIMUM COVER ON WATERMAIN.

## TRENCH BACKFILL FOR WATERMAIN



Tinley Park

**BEVISION DATE: 9/13/2** 









PEA GRAVEL, CRUSHED STONE OR SLAG, 1/4" TO 3/4" IN SIZE. AS A MINIMUM THE MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF ART. 1004.01 OF THE STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION OF THE STATE OF ILLINOIS.

NOTE: 1. BUFFALO BOX ON WATER SERVICE LINES SHALL BE INSTALLED IN THE CENTER OF 1. BUFFALO BOX ON WATER SERVICE LINES SHALL BE INSTALLED IN THE CENTER OF THE LOT, 7'-8' FROM PROPERTY LINE, AND NEVER IN SIDEWALK OR DRIVEWAY. VALVE SHALL BE MINNEAPOLIS STYLE.

7'–8'

SEVICE PIPE 1"

1 ¼"

(SEE TOP VIEW)

CORP STOP

1"

1 1/4"







ROOF PEAK +19'-7 1/4"	
FIRST FL. CLG.	
T/FOUNDATION +0'-0"	
GRADE	
₩ -0'-6"	

ROOF PEAK +19'-7 1/4"	6  2 6
FIRST FL. CLG.	
DARK BRONZE ALUMINUM	STONE OR SOLDIER BRICK HEADER (TYP.)
T/FOUNDATION +0'-0"	POTENTIAL FUTURE
	1   

MATERIAL MATRIX												
		WALLS										
	NO	RTH	ΕA	ST	501	JTH	ME	ST				
MATERIAL	SF	%	SF	%	SF	%	SF	%				
FIELD BRICK/HEADERS	7	50.65	407	64.81	156	67.53	272	43.31				
STONE SILL	8	3.46	22	3.50	8	3.47	13	2.07				
BASE STONE	67	29.00	171	27.23	67	29.00	95	15.13				
DOOR/FRAME	39	16.89	28	4.46	0	0	248	39.49				
TOTAL	231	100	628	100	231	100	628	100				
					EGT WUC							

SQUARE FOOTAGES HAVE BEEN ROUNDED TO THE NEAREST WHOLE NUMBER.

















Luminaire Schedule - Part numbers are provided by the manufacturer and are only intended to be used as a refere										
Symbol	Qty	Tag	Arrangement	Luminaire Lumens	Arr. Lum. Lumens	Luminaire				
	3	P1	Single	43945	43945	398				
	2	P2	Back-Back	34504	69008	398				

Calculation Summary	Calculation Summary							Luminaire Location Summary					
Label	CalcType	Units	Avg	Max	Min	Max/Min	Avg/Min	Description	LumNo	Label	Mtg Ht	Orient	Tilt
FENCED AREA CALC	Illuminance	Fc	6.02	12.5	0.5	25.00	12.04	@ GRADE LEVEL	1	RZR-G-PLED-IV-FT-120LED-1050m	25	90	0
PATIO AREA CALC	Illuminance	Fc	4.47	8.4	1.1	7.64	4.06	@ GRADE LEVEL	2	RZR-G-PLED-IV-FT-120LED-1050m	25	90	0
PROPERTY LINE CALC	Illuminance	Fc	0.01	0.2	0.0	N.A.	N.A.	@ GRADE LEVEL	3	RZR-G-PLED-IV-FT-120LED-1050m	25	270	0
BAG AREA CALC	Illuminance	Fc	4.47	7.6	1.8	4.22	2.48	@ GRADE LEVEL	4	RZR-G-PLED-IV-FT-120LED-1050m_1_1	25	90	0
VOLLEYBALL COURT #1	Illuminance	Fc	8.01	9.6	6.6	1.45	1.21	@ GRADE LEVEL	5	RZR-G-PLED-IV-FT-120LED-1050m_1_1	25	90	0
VOLLEYBALL COURT #2	Illuminance	Fc	6.09	9.0	3.8	2.37	1.60	@ GRADE LEVEL					



Not to Scale

## rence to output and optics used.

e Watts	Arr. Watts
	398
	796

## Manufacturer

LLF

0.900

0.900

U.S. ARCHITECTURAL LIGHTING U.S. ARCHITECTURAL LIGHTING

## Description

RZR-G-PLED-IV-FT-120LED-1050mA-40K RZR-G-PLED-IV-FT-120LED-1050mA-40K-HS

## NOTES

PG-ENLIGHTEN IS NEITHER LICENSED NOR INSURED TO DETERMINE CODE COMPLIANCE. CODE COMPLIANCE REVIEW BY OTHERS.

ANY VARIANCE FROM REFLECTANCE VALUES, OBSTRUCTIONS, LIGHT LOSS FACTORS OR DIMENSIONAL DATA WILL AFFECT THE ACTUAL LIGHT LEVELS OBTAINED. THIS ANALYSIS IS A MATHEMATICAL MODEL AND CAN BE ONLY AS ACCURATE AS IS PERMITTED BY THE THIRD-PARTY SOFTWARE AND THE IES STANDARDS USED.

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CALCULATION GRID VALUES 10'-0" O.C.



U:



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## Description

RZR-G-PLED-IV-FT-120LED-1050mA-40K RZR-G-PLED-IV-FT-120LED-1050mA-40K-HS

Luminaire Location Summary										
LumNo	Label	Mtg Ht	Orient	Tilt						
1	RZR-G-PLED-IV-FT-120LED-1050m	25	90	0						
2	RZR-G-PLED-IV-FT-120LED-1050m	25	90	0						
3	RZR-G-PLED-IV-FT-120LED-1050m	25	270	0						
4	RZR-G-PLED-IV-FT-120LED-1050m_1_1	25	90	0						
5	RZR-G-PLED-IV-FT-120LED-1050m_1_1	25	90	0						

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CALCULATION GRID VALUES 10'-0" O.C.



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Page 2 of 3

PRO

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Symbol	Qty	Tag	Arrangement	Luminaire Lumens	Arr. Lum. Lumens	Luminaire Watts				
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## Manufacturer

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## Description

RZR-G-PLED-IV-FT-120LED-1050mA-40K RZR-G-PLED-IV-FT-120LED-1050mA-40K-HS

Luminaire Location Summary						
LumNo	Label	Mtg Ht	Orient	Tilt		
1	RZR-G-PLED-IV-FT-120LED-1050m	25	90	0		
2	RZR-G-PLED-IV-FT-120LED-1050m	25	90	0		
3	RZR-G-PLED-IV-FT-120LED-1050m	25	270	0		
4	RZR-G-PLED-IV-FT-120LED-1050m_1_1	25	90	0		
5	RZR-G-PLED-IV-FT-120LED-1050m_1_1	25	90	0		



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CALCULATION GRID VALUES 10'-0" O.C.





B≺ D≺ WN H BUI CONTACT: SYCHTA  $\mathcal{O}$ **DURT**  $|-|\alpha|$ REVISIONS L VOLLEYB GOES BOB  $\propto$ ATIO GROUP DESIGN BO NAME: Щ TINL RK Date:2/23/2023

PROJEC

Page 3 of 3

PROJECT NAME:

### PROJECT TYPE:

## RAZAR SERIES - LED LOW PROFILE AREA LUMINAIRE

### **Optical Housina**

Heavy cast, low copper aluminum assembly (A356 alloy, <.2% copper) minimum wall thickness .188". LED Module mounting area is machined to within a 0.002" surface flatness variance for maximum surface contact and thermal conductivity from the LED modules to the radiating fins. Passive radiating fins above the LED Optics provide superior thermal management and long LED life. The optical and electrical compartments are integrated with the support arm to create one assembly. Cast and hinged driver compartment cover allows access to the drivers and wiring.

### Electrical Housing w/ Integrated Arm

Heavy cast low copper aluminum (A356 alloy; <0.2% copper) assembly with integral cooling ribs surrounding the electrical compartment and a flat surface on the top of the arm to accommodate a photocell receptacle. Solid barrier wall separates optical and electrical compartments. The optical compartment and electrical compartment with the integrated support arm combine to create one assembly. Minimum wall thickness is .188". Cast and hinged driver assembly cover is integrated with wiring compartment cover.

#### PLED<sup>\*\*</sup> Optics

Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. LED optics completely seal each individual emitter to meet an IP66 rating. In asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side and functions as a house side shielding element. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Any one Panel, or group of Panels in a luminaire, have the same optical pattern. LED refractors produce standard site/area distributions. Panels are field replaceable and field rotatable in 90° increments.

### LED Driver(s)

Constant current electronic with a power factor of >.90 and a minimum operating temperature of -40°F/-40°C. Driver(s) is/are UL and cUL recognized and mounted directly against the Electrical Housing to facilitate thermal transfer, held down by universal clamps to facilitate easy removal. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50,60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field accessible installation.)

### **LED Emitters**

High output LED's are utilized with drive currents ranging from 350mA to 1050mA. 70CRI Minimum. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

### Amber LED's

**TRA** (True Amber) LED's utilize material that emits light in the amber spectral bandwidth only without the use of phosphors.

### Finish

Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step media blast and iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability.

### Mast Arm Fitter/Electrical Housing

Replaces standard Electrical Housing. Fits standard 2 3/8" O.D. horizontal tenon. Two (2) straps with two (2) bolts each encircle the lower half of the tenon. Upper half of the tenon rests on self-centering steps that position the angle of the luminaire at  $0^{\circ}$ , +1.5°, +1.5 or +3° up from the horizontal. All hardware is stainless steel.



(MODELS: RZRM, RZR, RZR-G & RZR-MAF\*)

PATENT PENDING







### **SPECIFICATIONS**

### POLE DRILLING TEMPLATE





### **ORDERING INFORMATION**

Spec/Order Example: RZR/PLED-IV/80LED-700mA/CW/277/RAL-8019-S

Luminaire	Optics		LED Mode		Voltage	Mounting	Finish	Options		
Luminaire	Optics		L	LED		Voltage	Mounting	Finish	Options	
	PLED <sup>™</sup> Distribution Type		# of LEDs <b>RZR-G</b>	Drive Current	Color Temp - CCT		Arm Mount	Standard Textured Finish		
🗌 RZR-G	Type II PLED-II		□ 120LED □ 80LED	□ 1050mA <sup>1</sup> □ 875mA <sup>1</sup>	□ 27K (2700K) □ 30K (3000K)	□ 120 □ 208	□ ı ■•	Black RAL-9005-T	☐ Internal House Side S inc. LED Count (Example: HS-PLED/48)	ihield <b>HS-PLED</b>
	Type II Front Row PLED-II-FR			□ 700mA <sup>1</sup>	□ <b>40K</b> (4000K)	□ 240	2-180 💼	RAL-9003-T	External Glare Shield 4 Sided	EGS4
	Type III Median Illuminator			☐ 525mA ☐ 350mA	<b>50K</b> (5000K)	□ 277 □ 347	🗆 2-90 📲	Grey RAL-7004-T	External Glare Shield 3 Sided Rear Wedge	EGS3W
□ RZR □ RZR-MAF	PLED-II-MIL Type III Med. PLED-III		RZR/RZR-MA	٨F	L TRA True Amber <sup>2</sup> Consult Factory	□ 480	□ 3-90	Dark Bronze RAL-8019-T	Twist Lock Receptabl	e TPR
	Type III Wide PLED-III-W	Ø	∐ 40LED		for Other LED Color, CCT, & CRI Options		□ 3-120 <b>**</b>	RAL-6005-T	7-Pin Twist Lock Receptable Only	TPR7
	Type IV PLED-IV	e					□ 4-90 <b>•</b>	Premium Finishes	High-Low Dimming for Switch by Others/Selec Levels 50/100 or 25/100	:† )
🗌 RZRM	Type IV PLED-IV-FT	O	RZRM	NOTES: 1 - 700mA and with TRA LEI	1050mA not for use D's		Wall Mount	Rust     Patina     Cannor	(Example: HLSW/25) Photo Cell + Voltage (Example: PC120V)	HLSW PC+V
	Type V Narrow PLED-VSQ-N		24LED	2 - Available in drive curre	350mA & 525mA nts only			PC	Single Fuse (120V, 277V)	SF
	Type V Med. PLED-V-SQ-M	۰		Consult Other Dr	Factory for		WM - Wall Mount	For smooth finish replace suffix "T"	Double Fuse (208V, 240V)	DF
	Type V Wide PLED-V-SQ-W			Sinci Di			provided with mounting bracket and cover.	with suffix "S" (Example: RAL-9500-S) Consult factor for custom colors	Blue-Tooth Programm Photo/Motion Sensor (Factory - Motion 50/100, Photo 75fc)	MS-F311
							·	1	1	

U.S. Pole Company Inc. 660 West Avenue O. Paimdale. CA 93551 An Employee Owned Company Phone (661) 233-2000 www.usatig.com





24 LED Module

### **OPTIONS**



### High Low Dimming For Switches (HLSW)

The HLSW is a Small Electronic Switch which Provides High Low Dimming Control Through the LED Driver's 0-10V Control. Switching is Done by Adding a Seconday AC Switched Hot Trigger Line to the HLSW in Addition to the Normal AC Power Line. When the Secondary Trigger Line is Powered, the Fixture will go to 100% Dimming. With no Power to the Trigger, the Fixture will operate at 50% or 25% Dimming. Switches for the Trigger Line can be a Normal AC Switch/Breaker or Timed Switch/Breaker.

#### Wireless and Other Fixture Controls

Contact Factory for Wireless and Other Fixture Controls and Recomendations. Most Controls Can be Integrated and Factory Installed.

#### **EXTERNAL GLARE SHIELDS**



**EGS4 - 4 Sided Shield** Minimum Cutoff =  $12^{\circ}$ Average Cutoff =  $23^{\circ}$ 



EGS3W - 3 Sided Shield

Minimum Rear Cutoff =  $12^{\circ}$ Average Rear Cutoff =  $23^{\circ}$ Minimum Side Cutoff =  $4^{\circ}$ Average Side Cutoff =  $16^{\circ}$ 

Glare Shields are rotatable on RZR and RZRM. Consult factory for custom applications.





### **INSTALLATION DETAIL**







## **RZR SERIES - LED**

### **PHOTOMETRIC DATA GUIDE - LM-80 LUMEN MAINTENANCE**

LED Life / Operating Hours	Lumen Depreciation	Lumen Depreciation Scale Factor
60,000 (10x Test Time Calculated)	L94	0.94x
100,000 (Theoretical Calculated)	L92	0.92x
150,000 (Theoretical Calcualted)	L89	0.89x

Lumen Depreciation Calculations Done in Accordance With IESNA TM-21 & LM-80 (25°C Ambient) TM-21 6x Test Time Dicatates that L94 > 60,000 Hours.

### **ELECTRICAL DATA GUIDE - AMPERAGE CHARTS**

# of LEDs	mA	System Watts	120V	208V	277V	347V	480V
24	350	28	0.24	0.14	0.10	0.08	0.06
24	525	42	0.35	0.20	0.15	0.12	0.09
24	700	56	0.47	0.27	0.20	0.16	0.12
24	875	68	0.57	0.33	0.24	0.20	0.14
24	1050	82	0.68	0.39	0.30	0.24	0.17
48	350	53	0.44	0.25	0.19	0.15	0.11
48	525	79	0.66	0.38	0.29	0.23	0.16
48	700	105	0.88	0.51	0.38	0.30	0.22
48	875	132	1.10	0.63	0.48	0.38	0.27
48	1050	160	1.33	0.77	0.58	0.46	0.33
40	350	43	0.36	0.21	0.15	0.12	0.09
40	525	65	0.54	0.31	0.23	0.19	0.13
40	700	87	0.72	0.42	0.31	0.25	0.18
40	875	108	0.90	0.52	0.39	0.31	0.23
40	1050	128	1.07	0.62	0.46	0.37	0.27
80	350	85	0.71	0.41	0.31	0.25	0.18
80	525	129	1.08	0.62	0.47	0.37	0.27
80	700	174	1.45	0.83	0.63	0.50	0.36
80	875	216	1.80	1.04	0.78	0.62	0.45
80	1050	256	2.14	1.23	0.93	0.74	0.53
120	350	130	1.08	0.63	0.47	0.37	0.27
120	525	192	1.60	0.92	0.69	0.55	0.40
120	700	260	2.17	1.25	0.94	0.75	0.54
120	875	329	2.74	1.58	1.19	0.95	0.69
120	1050	398	3.32	1.91	1.44	1.15	0.83





### **PHOTOMETRIC DATA GUIDE - ISOFOOTCANDLE PLOTS**



IES File downloads for this product can be found at www.usaltg.com/downloads/asr.html





### **PHOTOMETRIC DATA GUIDE - ISOFOOTCANDLE PLOTS**



IES File downloads for this product can be found at www.usaltg.com/downloads/asr.html





## **PHOTOMETRIC DATA GUIDE - ISOFOOTCANDLE PLOTS**



### RZRG-PLED-120LED-700mA-40K 30' Pole Height

IES File downloads for this product can be found at www.usaltg.com/downloads/asr.html

**-** 1.0fc

0.50fc

-



- 0.10fc

- 0.25fc





## PLAN COMMISSION STAFF REPORT

October 19, 2023 – Public Hearing

## Splish Splash Car Wash

7130 171<sup>st</sup> Street



### **EXECUTIVE SUMMARY**

The Petitioner, Iftekhar Syed of Tinley Park Properties LLC is requesting Site Plan/Architectural Approval, a Special Use Permit for a car wash, a Variation, and Plat approvals for the proposed Splish Splash Car Wash at 7130 171<sup>st</sup> Street (former Montego Bay manual car wash). The granting of these requests will allow for an automated car wash use, along with architectural and site improvements.

The owner proposes to convert the existing nonconforming manual car wash with individual bays to a single automated tunnel with a new drive path. Site work includes removing and replacing the existing pavement, adjusting site access to one curb cut, installation of new drive aisles, parking, and vacuum parking spaces, as well as landscaping and lighting. Architectural changes include building additions to the south and west, façade and roofing updates, adjusting building entries (vehicular and pedestrian), as well as providing canopied pay stations. Landscape waivers are requested.

Per Zoning Ordinance Section 6.E, a nonconforming use (car wash in the B-3 zoning district) may be converted to a Special Use.

The Variation request will be to increase the maximum curb cut width from 30 feet permitted by code to a maximum of 41.3 feet.

Plat approvals are proposed for dedication to right-of-way (southern frontage along 171<sup>st</sup> Street), and for a future cross access easement. Changes from the October 5, 2023 Plan Commission workshop are indicated in **Red**.

### Petitioner

Iftekhar Syed of Tinley Park Properties LLC

**Property Location** 7130 171<sup>st</sup> Street

**PIN** 28-30-112-004-0000

**Zoning** B-3 (General Business & Commercial)

### **Approvals Sought**

Special Use Permit Variation Plat Approvals Site Plan Approval

### **Project Planner**

Lori Kosmatka, AICP Associate Planner

### EXISTING SITE & HISTORY

The subject property is the former Montego Bay car wash, located on the north side of 171<sup>st</sup> street, one property east of the intersection with Harlem Avenue. There are two curb cuts to the property along 171<sup>st</sup> Street. The property is approximately 30,000 sq. ft. 100 feet wide. It was annexed into the Village in 1964. The business recently ceased operations, and is currently vacant. The Petitioner purchased the property last year.

The property has an existing 1 1/2 story masonry building, containing six self-service manual car wash bays accessed on the east/west sides of the building. There are three vacuum stalls on site and a nonconforming pole sign along the 171<sup>st</sup> Street frontage.

### **ZONING & NEARBY LAND USES**

The property is located in the **B-3 (General Business & Commercial) Zoning District**. The Zoning Ordinance states the B-3 zoning district "*is designed to accommodate a wide range of specialized commercial uses, including highway-oriented services and commercial types of establishments to serve the needs of motorists. This district is intended to include those uses which would not be compatible in a neighborhood or community-type shopping center*".

Automobile Car Washes, not attached to a service station, are prohibited except for by-right allowances in the B-5 Automotive Service Business zoning district and the MU-1 (Mixed Use Duvan Drive) overlay district. The existing car wash use on the subject property thus is nonconforming.



Location Map



Existing Building



Zoning Map

The table below indicates the surrounding zoning and land uses in the area:

Direction	Zoning	Land Use
North	B-3 General Business & Commercial District	South Suburban Hearing Health Center
East (northerly) East (southerly)	B-3 General Business & Commercial District B-3 General Business & Commercial District	(vacant) Currency Exchange, Dragon Palace restaurant
South	B-3 General Business & Commercial District	Shell gas station
West	B-3 General Business & Commercial District	Tinley Park Dental Care, Peter Francis Geraci Law LLC

### PROPOSED USE

The Petitioner proposes to convert the existing nonconforming car wash with manual bays to a single automated tunnel with a new drive path. Vacuum stalls will also be available for use. Two employees and a manager will be on-site. Employee #1 will check incoming traffic and monitor the flow into the facility and car wash. Employee #2 will guide the traffic flow through the tunnel. Both employees also help customers with the pay station. The manager will oversee the facility operations and manage the employees on site. The proposed building will be two stories. The ground floor consists of the tunnel, mechanical/electrical rooms, utility sink, and stairs. The second floor will have a 441 sq. ft. accessible storage room with the water heater and furnace, and the remainder of that floor is existing attic not for storage.

The Petitioner's narrative indicates they have relevant experience of over 30 years in gasoline and car wash retail operations. The narrative lists some of the car washes which the Petitioner has operated: 1100 Corliss Avenue, Chicago (operator), 7455 West Archer Summit II (operator, new construction), and 11900 South Marshfield Ave Calumet Park (operator, renovation, expansion).

### SPECIAL USE & VARIATION APPROVALS NEEDED

A Special Use approval is required for the proposal, along with Site Plan and Architectural Review. Section 6.E. of the Zoning Code states any nonconforming use may be converted to a permitted Special Use by the granting of a Special Use Permit. The code further states the conversion may only occur when it is shown that the nonconforming use is providing a particular service to the residents of Tinley Park and that the use is not detrimental to the Village as a whole or to adjacent properties.

Additionally, a Variation approval is required. Section III.H.2. of the Zoning Code (Permitted Encroachments in Required Yards, Commercial Zoning Districts, Driveways) states driveways shall be no greater than thirty (30) foot in the apron at its intersection with the Village Right of Way. Village Engineering has reviewed the proposed Variation request of 41.3 feet width at the apron (*see blue on in the Civil Site Plan Figure*), and is supportive of the design which will facilitate fire truck access, including maneuvers from the east. The KLOA traffic study contains an autoturn exhibit depicting a fire truck maneuvering from the east. Though the Petitioner's original narrative does not reference the Variation, but their latest submittal states they "revised the curb cut but we still did not comply fully with the ordinance and we need a variance".

### SITE PLAN

The subject property's redevelopment includes removal of existing elements including asphalt & concrete (surface, pads, islands, bases, etc.), light poles, transformers, grate drains, payboxes, trash enclosure, and guardrail. The fire hydrant and gas meter will be relocated.

Building modifications and site improvements are proposed to convert the site to an automated car wash. Two additions are proposed to the south and east parts of the existing building to accommodate the length of the automated tunnel and associated mechanicals (*see gray shading in Civil Site Plan Figure*).



As-Built Demolition Arch. Site Plan (left) & Civil Site Plan (right)

### Access/Circulation

Access to the site is proposed as one curb cut on 171<sup>st</sup> Street. The curb cut will serve as the access drive with one inbound lane and one outbound lane. Vehicles will enter the site going north. They may either use the adjacent row of vacuum stalls on the left (along the east edge of the building), or else continue straight to the pay stations. Three pay stations are proposed separated by concrete curb islands. The drive aisle is two-way, 26 ft. wide to allow vehicles to travel southbound to exit the site after using the vacuum stalls. Vehicles follow the rounded path and proceed south by either entering the automated tunnel or using the bypass lane if needed, which then merges at the end of the tunnel. A Do Not Enter sign oriented is proposed at that tunnel/bypass exit area to deter any vehicles from heading north. The trash enclosure is also located in that area. South of the trash enclosure & tunnel & bypass exits is a short two-way aisle to serve as a future cross access easement, currently shown with three parking spaces to the west. Leaving the site at the south end, a Stop Sign and a No Left Turn sign are proposed at the curb cut per requirement by Village Engineering. Throughout the site, directional arrows on the pavement are indicated on both the Architectural and Civil Site Plans.

The Petitioner has provided an autoturn analysis of a fire truck and an "SU-30" truck vehicle (to meet the required size for a garbage truck). Fire Department has confirmed that access around the entire building is not required as long as the building is fully sprinklered and with a fire alarm system installed.

A single curb cut is proposed approximately 240 feet east of Harlem Avenue. The proposed curb cut width is 41.3 feet wide at the apron including flares at the south end of the site (*see blue on in the Civil Site Plan Figure*). This will require Variation approval. Section III.H.2. of the Zoning Code driveways shall be no greater than thirty (30) foot in the apron at its intersection with the Village Right of Way. Village Engineering has reviewed the proposal and is supportive of the request to facilitate fire truck access into the development, including maneuvers from the east. The civil site plan notes the neck (narrowest point) of the site's drive access as 26 ft. No dimension is shown for the drive access's curb cut along the northern boundary of the area proposed for dedication to right-of-way, but since that location does not include the full flares, it is smaller than the 41.3' requested Variation (with the full flares, located within the proposed area for dedication).

### Other Site Improvements

Per the Civil Site Plan, the site will also have Unilock permeable pavers to help with volume control, within the east drive aisle as well as the west bypass lane. A recommended condition states that the selection of the permeable pavers within the east drive aisle and the west bypass lane will be subject to Village staff review and approval in the permitting process.

Exterior mechanical equipment is shown. Ten vacuum hoses will be at the stalls with three trash receptacles. The vacuum motor will be in front of the building near the exit of the tunnel. The transformer will be on a concrete pad between the



building and bypass lane, with gas & electrical meters nearby. Three bollards will protect the transformer.

### **Open Item #1: Discuss access and circulation around the site.**

### PLATS

Cross access and dedication to the Village will be provided for the site. The Village has required these associated plats be provided for review and approval within this zoning entitlement process. The plans identify these (*see diagonal hatching in the Civil Site Plan Figure above*) as:

- 26 ft. wide cross egress easement
- Dedicated area to the right-of-way

### Plat of Cross-Access Easement

The properties to the east and west have drive aisles with opportunity to connect. Village staff has suggested the cross-access to help achieve this connection. Per Section III.H.2. of the Zoning Code, driveways may be shared between adjoining properties with an approved site plan and cross-access easement recorded. The Petitioner provided a proposed Plat of Cross-Access Easement.

### Plat of Dedication for Public Street to Village

The plat of survey shows part of the 171<sup>st</sup> Street roadway exists in the southern portion of the lot, with a set area (shown as 100 ft. on the south edge, 15 ft. on the west edge, and 10 ft. on the east edge) as an exception previously recorded with Cook County. The Petitioner noted the dimensions align with the adjacent properties to the west and east. The Petitioner provided this exception document "Plat of Dedication for Public Street To the Village of Tinley Park", dating from 1989. 171<sup>st</sup> Street is a municipal Village roadway, and the Village does not have record of this dedication. This Plat of Dedication is proposed for approval to provide a Village record via Resolution document. Village Engineering has not yet had an opportunity to review this plat, and will be reviewed in the permitting process.

A recommended condition states Special Use approval is subject to the approval of the Plat of Cross-Access Easement and Plat of Dedication of Right-of-Way by the Village Board and recording of the Plat of Cross-Access Easement with the County Recorder of Deeds prior to issuance of any permits.

### **Open Item #2: Provide Plat of Cross-Access Easement and Plat of Dedication.**

### LANDSCAPING

The proposal is landscaped to a great extent within the proposed layout constraints of the site, and largely meets code with some waivers requested, as identified by Staff's calculations. Staff is supportive of the requested waivers. The Petitioner has worked with Staff on improving the landscaping from previous review submittals. The Petitioner has stated they plan to increase the size of certain trees to a four inch caliper to help reduce the impact of the waiver requests, however the landscape plan does not identify the caliper. A recommended condition may state that all the canopy trees will require four inch caliper at installation.





### <u>Bufferyards – Waivers</u>

Bufferyards are classified based on the adjacent land use type per the Landscape Code, where the north, west, and east southerly (177') sides are each class "B", and the south and east northerly (118') are each class "C". Bufferyard waivers notably include deficiencies in minimum widths on the east, as well as some canopy tree deficiencies.

Firstly, code requires widths of the east northerly (class "C") be at least ten feet, and the east southerly (class "B") be at least five feet. Though there are substantial widths at the corners of the east side, the majority of the east length of the site is only one foot wide. The Petitioner has noted there is only grass in this area as it is too narrow for plants to assure survival.

Secondly, regarding bufferyard planting counts: canopy tree deficiencies are 1 (north), 5 (east northerly), 7 (east southerly), and 7 (west), while south meets code. The calculations assume the two large trees in the south bufferyard toward the west are canopy trees (labeled as "2-1"). The Petitioner noted that root systems do not have enough room for canopy trees along the west property line. The only understory tree deficiency is 3 (east northerly), while the other bufferyards meet or exceed code. The understory surpluses are 4 (north), 8 (south), and 14 (west). Shrub deficiencies are 15 (north), 11 (east northerly), 34 (east southerly), and 20 (west), while south exceeds code by four.

### <u> Parkway - Waiver</u>

Code requires 1 tree per 25 lineal feet (excluding drive aisle), thus requiring three trees. The Petitioner is already providing three south bufferyard trees in this area along 171<sup>st</sup> Street. Due to the narrow parkway and existing utility lines and ground sign, there is not space available to locate additional trees for the Parkway requirement.

### Parking Lot – Waiver

Code requires at least 15% of the parking lot to be landscaped. The Village Landscape Architect calculated the parking lot area as 14,552 sq. ft. thus requiring 2,183 sq. ft. to be landscaped. At least 1,395 sq. ft. is provided.

### <u>Screening – Waivers</u>

Code requires screening for parking lots and exterior mechanical equipment. Continuous screening of adjacent properties and streets is required for parking lots. Notably, the south/front side of the three parking spaces and row of vacuum stalls have screening from 171<sup>st</sup> Street, as well as screening on the west side of the three parking spaces to the neighboring property, however there is no screening on the east side of the site. The vacuum motor and transformer are both screened.

### Foundational, Interior Lot, Parking Lot Islands

Foundational plantings, interior lot landscaping, and parking lot island meet/exceed code. Code requires at least 70% of landscape coverage on the building foundation facing the public right-of-way at 10' minimum width, and plans indicate more than 70% coverage. Code requires at least one tree per 10,000 sq. ft. of lot area, thus three trees are required for the 30,000 sq. ft. lot. The Petitioner agreed to provide four canopy trees in the large island on the northeast corner of the building. The plan image indicates four canopy trees plus seven understory trees. The parking lot island requires at least 1 tree and 1 shrub per 200 sq. ft. of island area. One understory tree and four shrubs are provided along the stall depth.

### Ground Sign Plantings

Ground sign plantings exceed code. Zoning Code requires at least two sq. ft. per one sq. ft. of sign face area, but in no case shall the total landscaping area be less than 20 sq. ft. and need not be greater than 200 sq. ft. The table in the landscape plan identifies 275 sq. ft. of ground sign landscaping.

## Open Item #3: Discuss landscape waiver requests, including 4" caliper condition for canopy trees and lack of bufferyard to the east.

### ARCHITECTURE

The existing building will remain and be modified to accommodate the tunnel and mechanicals. The existing doors and frames (bays) will be removed, and closed off with windows, while the double wythe masonry façade will remain. The existing roof will be removed and replaced with new architectural shingles. To allow for connection to

proposed additions, part of the roof toward the north will be replaced with a pitch to match the rest of the building, and the existing south end dormer will be removed.

The building will have two additions, with a proposed building footprint of 3,442 sq. ft. and two stories. The height will minimally increase from existing 27'-6" to 28'-6" (per the Bulk Regulations table in the architectural site plan). This complies with the Zoning Code's maximum allowances of 35 ft. height and 3 stories. The west addition (for mechanicals) will be a projection 8' in depth by 42' wide, and the south addition (for tunnel) will extend out 10'-6" in depth by 26'-1" (the general building width). A portion of the west addition will be single story with a new shed roof.

Other building improvements are shown. The building will have two overhead doors (north & south) as well as four man doors (1 north, 1 east, 2 west). Four new awnings are proposed 9'-2" high: one over the south exit of the tunnel (building frontage to 171<sup>st</sup> Street), two at the adjacent west and east southern building corners, and one further north over the east man door.



Previously at the Workshop, one large pay station canopy was proposed without detail. Now, three individual curved canopies are proposed over each of the three new pay stations, with the Petitioner stating the easternmost canopy adjusted to fit the minimum code required five foot setback. A specification detail sheet has been provided, along with the previously submitted image in the architectural drawings, noted as "example to match for reference purposes only" (*see Figure in Signage section*). The civil site plan notes shows the easternmost canopy will be five feet from the east property line, which meets Zoning Code.



### Materials/Details:

There will be new masonry brick on the new construction, stating it will match the existing brick (which appears off-white). The Petitioner states the existing brick, originally off-white, was previously painted over in another shade of white. Their intention is to strip the paint and then source a matching off-white brick. They identified two thin brick veneer options for the new brick to match. One option is identified as "white wash", and the other as a plain off-white ("seashell"). Face brick minimums required by code cannot be painted. They are awaiting the arrival of the



Proposed New Brick Options -"White Wash" & "Seashell"

physical samples. The outcome of the existing brick's color will depend on the result of the paint stripping, and may affect final selection of new brick. A recommended condition states final colors and materials shall be subject to review and approval by Village staff at permitting to ensure uniformity. All new and existing brick must match.

Existing stucco will remain on the dormers. The windows will have white aluminum frames and transparent glass. The awnings will be red metal. The roofing will have a combination of architectural 30 year shingles (dark gray) and metal (burnt red or burgundy color). Other façade details include sconce lights, downspouts, aluminum soffits, Hardie trim boards and Hardie frieze boards ("Woodstock brown"). The Petitioner stated the pay station canopies will complement the roof material.



Material percentages, excluding glazing, are largely brick and stone, including 88.4% (east), 96.2% (south), 100% (west), and 98.4% (north). There is 2'-10" of new stone veneer with a 3" concrete cap at the base of the building. This complies with the Village's masonry code requirements, Section V.C.7.F.2. where structures greater than 3,000 sq. ft. and less than 40,000 sq. ft. have at least 75% of Material Ratios Table per Architectural sheet A7 each façade with face brick and optionally 25% of that area be decorative stone.

Material Ratios							
	Stone VeneerBrick Proposed Brick Existing Total Brick & Stone Paint/Stucco Total (se						
Next	70	350	0	420	7	427	
North	16.39%	81.97%	0.00%	98.36%	1.64%		
Freed	330	217	561	1108	145	1253	
East	26.34%	17.32%	44.77%	88.43%	11.57%		
Couth	54.5	500	0	554.5	22	576.5	
South	9.45%	86.73%	0.00%	96.18%	3.82%		
Mart	330	217	815	1362	0	1362	
west	24.23%	15.93%	59.84%	100.00%	0.00%		

### Open Item #4: Discuss architectural design and materials and colors, including red metal and how new brick will match.

### SIGNAGE

The petitioner has provided conceptual exterior signage. Signage will require a separate sign permit.

Wall Signs: Three Wall signs are proposed with dimensioned conceptual bounding boxes (spaces) on the building's

elevation line drawings. Sign Code requires a maximum one sq. ft. per one lineal foot of building frontage not to exceed 120 sq. ft. Staff has discussed the Village's Sign Code requirements with the Petitioner. The Petitioner plans to meet code.

<u>Freestanding/Ground/Monument Sign</u>: The petitioner currently proposes for the existing "pole" sign to remain, but with new design and color which was not provided. The existing "pole" sign does not comply with code, but may remain and be requested to reface, as long as no structural changes are proposed. If the Petitioner wishes to propose structural changes or a new ground sign, it will either need to comply to code or else a Variation will be required. One code provision requires ground signs be at least ten feet from property lines and at least two feet from drive aisles, parking stalls or sidewalks. At the Workshop, it was noted this nonconforming ground sign can be refaced and maintained. The



Existing "Pole" Sign

### Commission was amenable to allowing the nonconforming sign to remain.

Pay Station Area Signage: No specific proposed signage details were provided. A photograph of another pay station canopy area was provided, but is noted as "example to match for reference purposes only". All signage will need to conform to Sign Code or else a Variation will be required. The "Pay here" sign would not be permitted as it would be considered a Roof Sign due to its location on top of the canopy (accessory structure). Menu board(s) and clearance bar(s) are considered Signs Accessory to Drive-Thru Uses per Sec. IX.3.L.3. The "Open/Closed" signage is considered "Directional Signs On a Wall" per Sec. IX.L.2.c. The image presented does not provide dimensions to identify if they are code compliant. The Civil Site Plan states "the canopy signs and details are part of the canopy



package and will be provided to the Village for review and approval."

A condition is recommended to state that proposed signage (including but not limited to Wall Signs on building and canopy) are not approved with the zoning entitlement, and will require code compliance or future Variation request and approval. The existing nonconforming "pole" ground sign may be maintained and refaced per Sign Code provisions.

### PARKING

The proposed site plan provides twelve total parking spaces (however listed as 13 on the architectural site plan's Parking Calculations table). There will be nine vacuum stalls, eight of which are standard, and one as an accessible stall plus an access aisle. Three stalls are also currently proposed at the southwest area of the site. The Petitioner identified that two employees plus a manager will be on-site. Zoning Code requires one space for each employee (per the related use of an Automobile Service Station).

A condition is recommended to state if the three southwest parking stalls are removed to utilize the cross-access easement in the future, then the three southern stalls in the main row shall be for the three employees. The Petitioner has stated they are in agreement. The Civil Site Plan states "the parking stalls located within the cross easement access will be relocated in the future to the east parking stalls designated for vacuums when the access is open". The plat of easement will provide this future cross-access to the adjacent sites.

### Stacking & Traffic

The KLOA traffic study identifies a total of approximately 19 vehicles to stack without blocking the vacuum stalls. Approximately nine of the 19 vehicles will queue before the pay stations without blocking the vacuum stalls, and ten vehicles queue between the pay stations and the tunnel. The KLOA stacking exhibit (see Figure) shows these queues as well as maximum stacking of an additional 14 vehicles if blocking the vacuum stalls.

The study's recommendations included wayfinding/directional signage and a Do Not Enter sign at the tunnel exit. At peak demand, the study recommends providing staff at the pay stations and exit of the car wash, increasing the stacking to 33 vehicles limiting vacuum access, and increasing service rate of the tunnel. No roadway or traffic signal modifications were recommended. The traffic study noted the access drive will be adequate to accommodate traffic estimated to be generated by the proposed car wash.



Traffic Study Stacking

At the Workshop, the Commission asked how long it takes for a vehicle to pass through the
carwash. The Petitioner responded that it takes about a minute, and that the speed of the carwash can be accelerated during busy times. The Commission did not express concern for the queuing of the carwash.

# **Open Item #5: Discuss stacking capacity.**

# LIGHTING

The Petitioner proposes three types external lights. The proposal meet's the Zoning Code's maximum 2.0 foot candles (horizontal) requirement at the property line. The Petitioner has stated all light fixtures (building and parking area) will have no uplight (rating U0) with no light above a 90 degree plane. At the Workshop, the Commission expressed concern for two wallpack fixtures proposed as the "Type B" lighting. A Commissioner noted wallpacks can cast glare onto roadways at night. The Commission wanted to see the wallpack fixtures removed. Zoning Code Section V.3.1. states "floodlighting and wallpack lighting fixtures are discouraged, and if used, shall be rated *U0... with no light above a 90 degree plane to prevent disability glare for drivers or pedestrians and light trespass beyond* the property line".

The currently proposed lighting fixtures are noted below and meet Zoning Code glare requirements:

- Type "A": Two light poles with two fixtures each are proposed; one south of the • building near the vacuum motor, and the other north of the building. The mounting height will be 25 feet.
- Type "B": Two lights similar in appearance to Type "A" are proposed on the upper Types A&B Proposed light • portion of the east side of the building. The northerly one is proposed as mounted 22' high, and the southerly is proposed as 20' high.
- Type "C": Nine architectural lantern wall sconces are proposed; four on the east, and five on the west. They will be mounted 8' high. Finish color is not selected.
- Pay Station Canopy Lights: The Petitioner additionally stated they may include downward-facing lights beneath the canopies if necessary, and if implemented, it will adhere to all zoning requirements and specified in the photometric plan at time of permitting.





Type C Proposed light

**Open Item #6: Discuss proposed lighting fixtures including wallpacks.** 

# STANDARDS FOR A SPECIAL USE

Section X.J.5. of the Zoning Ordinance lists standards that need to be considered by the Plan Commission. The Plan Commission is encouraged to consider these standards (listed below) when analyzing a Special Use request. Staff has provided draft Findings in the Staff Report for the Public Hearing.

X.J.5. Standards: No Special Use shall be recommended by the Plan Commission unless said Commission shall find:

- a. That the establishment, maintenance, or operation of the Special Use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare;
  - There is no danger to the public with the proposed conversion of an existing manual car wash to an automated tunnel car wash. The proposal will not be detrimental to the Village, its residents, and its visitors.
- b. That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood;
  - The proposal does not affect neighboring property enjoyment or impair property values. Neighboring properties are within a commercially developed business district.
- c. That the establishment of the Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district;
  - The proposal will not negatively affect any future development or redevelopment of the neighboring properties. The proposed Special Use is consistent with the B-3 (General Business and Commercial) zoning district and the Comprehensive Plan 2000 Land Use Plan, which designates the area for commercial development. Properties in the area share similar and compatible zoning and future land use designations.
- d. That adequate utilities, access roads, drainage, and/or other necessary facilities have been or are being provided;
  - The area is already developed with adequate utilities and drainage facilities; the development will be engineered and designed to support the proposed conversion to an automated tunnel car wash accordingly with one curb cut.
- e. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets; and
  - Site circulation is designed to allow for safe circulation by trucks, employees, and the public with one curb cut. The driveway into the site, though proposed to be wider, provides adequate ingress and egress.
- f. That the Special Use shall, in all other respects, conform to the applicable regulations of the district in which it is located, except as such regulations may in each instance be modified by the Village Board pursuant to the recommendation of the Plan Commission. The Village Board shall impose such conditions and restrictions upon the premises benefited by a Special Use Permit as may be necessary to ensure compliance with the above standards, to reduce or minimize the effect of such permit upon other properties in the neighborhood, and to better carry out the general intent of this Ordinance. Failure to comply with such conditions or restrictions shall constitute a violation of this Ordinance.
  - The proposal, with approval for the variation of curb cut width, will conform to all other Village code requirements.
- g. The extent to which the Special Use contributes directly or indirectly to the economic development of the community as a whole.
  - The proposal will contribute positively to the economic growth and development of the community. The proposal will improve the currently vacant non-operational property, and will add more property value to the community.

# STANDARDS FOR A VARIATION

Section X.G.4. of the Zoning Ordinance states the Plan Commission shall not recommend a Variation of the regulations of the Zoning Ordinance unless it shall have made Findings of Fact, based upon the evidence presented for each of the Standards for Variations listed below. The Plan Commission must provide findings for the first three standards; the remaining standards are provided to help the Plan Commission further analyze the request. Staff draft Findings of Fact are provided below for the Commission's review and approval.

- a. The property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations in the district in which it is located.
  - The property cannot yield a reasonable return if following the current regulations. Emergency vehicles including fire trucks must be able to access the site. Village Engineering has determined the entire proposed width of the driveway and curb cut is needed as currently proposed.
- b. The plight of the owner is due to unique circumstances.
  - The property has unique circumstances including spatial constraints and one frontage with one curb cut. This requires additional width for emergency vehicle circulation. Village Engineering is supportive of the request to facilitate fire truck access into the development, including maneuvers from the east.
- c. The Variation, if granted, will not alter the essential character of the locality.
  - The proposal will not alter the essential character of the locality. The surrounding development follows a commercial business development and the proposed curb cut width is compatible.. The curb cut, is appropriately situated, noted by the traffic study as distanced approximately 240 feet from Harlem Avenue.
- d. Additionally, the Plan Commission shall also, in making its determination whether there are practical difficulties or particular hardships, take into consideration the extent to which the following facts favorable to the Petitioner have been established by the evidence:
  - a. The particular physical surroundings, shape, or topographical condition of the specific property involved would result in a particular hardship upon the owner, as distinguished from a mere inconvenience, if the strict letter of the regulations were carried out;
  - b. The conditions upon which the petition for a Variation is based would not be applicable, generally, to other property within the same zoning classification;
  - c. The purpose of the Variation is not based exclusively upon a desire to make more money out of the property;
  - d. The alleged difficulty or hardship has not been created by the owner of the property, or by a previous owner;
  - e. The granting of the Variation will not be detrimental to the public welfare or injurious to other property or improvements in the neighborhood in which the property is located; and
  - f. The proposed Variation will not impair an adequate supply of light and air to an adjacent property, or substantially increase the congestion in the public streets, or increase the danger of fire, or endanger the public safety, or substantially diminish or impair property values within the neighborhood.

# STANDARDS FOR SITE PLAN & ARCHITECTUAL APPROVAL

Section III.T.2. of the Zoning Ordinance requires that the conditions listed below must be met and reviewed for Site Plan approval. Specific findings are not required but all standards shall be considered to have been met upon review from the Plan Commission.

# <u>Architectural</u>

- a. Building Materials: The size of the structure will dictate the required building materials (Section V.C. Supplementary District Regulations). Where tilt-up or pre-cast masonry walls (with face or thin brick inlay) are allowed vertical articulation, features are encouraged to mask the joint lines. Concrete panels must incorporate architectural finishes that comply with "Building Articulation" (Section III.U.5.h.) standards. Cast in place concrete may be used as an accent alternate building material (no greater than 15% per façade) provided there is sufficient articulation and detail to diminish it's the appearance if used on large, blank walls.
- b. Cohesive Building Design: Buildings must be built with approved materials and provide architectural interest on all sides of the structure. Whatever an architectural style is chosen, a consistent style of architectural composition and building materials are to be applied on all building facades.
- c. Compatible Architecture: All construction, whether it be new or part of an addition or renovation of an existing structure, must be compatible with the character of the site, adjacent structures and streetscape. Avoid architecture or building materials that significantly diverge from adjacent architecture. Maintain the rhythm of the block in terms of scale, massing and setback. Where a development includes outlots they shall be designed with compatible consistent architecture with the primary building(s). Site lighting, landscaping and architecture shall reflect a consistent design statement throughout the development.
- d. Color: Color choices shall consider the context of the surrounding area and shall not be used for purposes of "attention getting" or branding of the proposed use. Color choices shall be harmonious with the surrounding buildings; excessively bright or brilliant colors are to be avoided except to be used on a minor scale for accents.
- e. Sustainable architectural design: The overall design must meet the needs of the current use without compromising the ability of future uses. Do not let the current use dictate an architecture so unique that it limits its potential for other uses (i.e. Medieval Times).
- f. Defined Entry: Entrance shall be readily identifiable from public right-of-way or parking fields. The entry can be clearly defined by using unique architecture, a canopy, overhang or some other type of weather protection, some form of roof element or enhanced landscaping.
- g. Roof: For buildings 10,000 sf or less a pitched roof is required or a parapet that extends the full exterior of the building. For buildings with a continuous roof line of 100 feet of more, a change of at least five feet in height must be made for every 75 feet.
- h. Building Articulation: Large expanses of walls void of color, material or texture variation are to be avoided. The use of material and color changes, articulation of details around doors, windows, plate lines, the provision of architectural details such as "belly-bands" (decorative cladding that runs horizontally around the building), the use of recessed design elements, exposed expansion joints, reveals, change in texture, or other methods of visual relief are encouraged as a means to minimize the oppressiveness of large expanses of walls and break down the overall scale of the building into intermediate scaled parts. On commercial buildings, facades greater than 100 feet must include some form of articulation of the façade through the use of recesses or projections of at least 6 inches for at least 20% of the length of the façade. For industrial buildings efforts to break up the long façade shall be accomplished through a change in building material, color or vertical breaks of three feet or more every 250 feet.
- i. Screen Mechanicals: All mechanical devices shall be screened from all public views.

j. Trash Enclosures: Trash enclosures must be screened on three sides by a masonry wall consistent with the architecture and building material of the building it serves. Gates must be kept closed at all times and constructed of a durable material such as wood or steel. They shall not be located in the front or corner side yard and shall be set behind the front building façade.

# <u>Site Design</u>

- a. Building/parking location: Buildings shall be located in a position of prominence with parking located to the rear or side of the main structure when possible. Parking areas shall be designed so as to provide continuous circulation avoiding dead-end parking aisles. Drive-through facilities shall be located to the rear or side of the structure and not dominate the aesthetics of the building. Architecture for canopies of drive-through areas shall be consistent with the architecture of the main structure.
- b. Loading Areas: Loading docks shall be located at the rear or side of buildings whenever possible and screened from view from public rights-of-way.
- c. Outdoor Storage: Outdoor storage areas shall be located at the rear of the site in accordance with Section III.O.1. (Open Storage). No open storage is allowed in front or corner side yards and are not permitted to occupy areas designated for parking, driveways or walkways.
- d. Interior Circulation: Shared parking and cross access easements are encouraged with adjacent properties of similar use. Where possible visitor/employee traffic shall be separate from truck or equipment traffic.
- e. Pedestrian Access: Public and interior sidewalks shall be provided to encourage pedestrian traffic. Bicycle use shall be encouraged by providing dedicated bikeways and parking. Where pedestrians or bicycles must cross vehicle pathways a cross walk shall be provided that is distinguished by a different pavement material or color.

# MOTIONS TO CONSIDER

If the Plan Commission wishes to act on the Petitioner's requests, the appropriate wording of the motions are listed below. The protocol for the writing of a motion is to write it in the affirmative so that a positive or negative recommendation correlates to the Petitioner's proposal. By making a motion, it does not indicate a specific recommendation in support or against the plan. The Commission may choose to modify, add, or delete from the recommended motions and any recommended conditions.

# Motion 1 (Special Use Permit):

"...make a motion to recommend that the Village Board grant a Special Use Permit to the Petitioner, Iftekhar Syed of Tinley Park Properties LLC to permit an Automobile Car Wash at 7130 171<sup>st</sup> Street in the B-3 (General Business & Commercial) zoning district, in accordance with the plans submitted and listed herein and adopt Findings of Fact as proposed in the October 19<sup>th</sup>, 2023 Staff Report, subject to the following conditions:

- 1. Approval is subject to final engineering plan review and approval.
- 2. Approval is subject to the approval of the Plat of Cross-Access Easement and Plat of Dedication of Right-of-Way by the Village Board and recording of the Plat of Cross-Access Easement with the County Recorder of Deeds prior to issuance of a building permit.
- 3. Proposed signage (including but not limited to Wall Signs on building and canopy) are not approved with the zoning entitlement, and will require code compliance or future Variation request and approval. The existing nonconforming "pole" ground sign may be maintained and refaced per Sign Code provisions.
- 4. If the three southwest parking stalls are removed to utilize the cross-access easement in the future, then the three southern stalls in the main row shall be for the three employees.

# Motion 2 (Variation):

"...make a motion to recommend that the Village Board grant the Petitioner, Iftekhar Syed of Tinley Park Properties LLC a variation from Section III.H.2. (Permitted Encroachments in Required Yards, Commercial Zoning District, Driveways) of the Zoning Ordinance to increase the property's maximum curb cut width from thirty feet (30') to forty-one and three/tenths feet (41.3'), in accordance with the plans submitted and listed herein and adopt Findings of Fact as proposed in the October 19<sup>th</sup>, 2023 Staff Report.

# Motion 3 (Site Plan/Architecture):

"...make a motion to grant the Petitioner, Iftekhar Syed of Tinley Park Properties LLC, Site Plan and Architectural Approval to permit building and site improvements to convert an existing nonconforming manual bay car wash to an automated tunnel car wash on the property located at 7130 171st Street in the B-3 (General Business & Commercial) zoning district, in accordance with the plans submitted and listed herein and subject to the following conditions:

- 1. Site Plan Approval is subject to the approval of the Special Use Permit, Plat of Cross-Access Easement and Plat of Dedication of Right-of-Way by the Village Board.
- 2. Site Plan Approval is subject to final engineering plan review and approval.
- 3. Final colors and materials shall be subject to review and approval by Village staff at permitting to ensure uniformity. All new and existing brick must match.
- 4. Selection of the permeable pavers within the east drive aisle and the west bypass lane will be subject to Village staff review and approval in the permitting process.
- 5. All canopy trees will require four inch caliper at installation.

# Motion 4 (Plat of Cross-Access Easement):

"...make a motion to recommend that the Village Board grant approval for the Petitioner, Iftekhar Syed of Tinley Park Properties LLC, Plat of Cross-Access Easement for the property located at 7130 171st Street, dated October 10, 2023, subject to the condition that the Plat is subject to final review and approval by the Village Engineer and Village Attorney prior to recording."

# Motion 5 (Plat of Dedication of Public Street to the Village):

"...make a motion to recommend that the Village Board grant approval for the Petitioner, Iftekhar Syed of Tinley Park Properties LLC, Plat of Dedication for Public Street To The Village for the property located at 7130 171st Street, dated May 16, 1989, subject to the condition that the Plat is subject to final review and approval by the Village Engineer and Village Attorney.

# LIST OF REVIEWED PLANS

Submitted Sheet Name	Prepared By	Date On Sheet
Application	Petitioner	2/7/2023
Narrative and Response to Standards	Petitioner	8/31/2023
ALTA Plat of Survey	MJE *	1/18/2023
Architectural and Landscaping Drawings	Damas *	9/13/2023,
		Update rec'd
		10/4/2023
Photometric Plan (Sheet E1)	Damas *	9/13/2023,
		Update rec'd
		10/11/2023
Light Fixture Manufacturer Cut Sheet – Type A & Ty	be B (site Lithonia	Rec'd 9/15/2023
light & upper wall sconce)		
Light Fixture Manufacturer Cut Sheet – Type C (arch	itectural Wave	Rec'd 9/15/2023
lantern wall sconce)		
Lighting Report	Dialux	Rec'd
		10/12/2023
Curved Pay Station Canopies Manufacturer Cut She	et (2023 TSS *	Rec'd
Catalog)		10/11/2023
Materials – Brick Veneer Manufacturer Cut Sheet	Brick it	Rec'd
		10/11/2023
Materials – Stone Veneer Manufacturer Cut Sheet	Brick it	Rec'd
		10/10/2023
Materials – Hardie (trim) Manufacturer Cut Sheet	James Hardie	Rec'd
		10/10/2023
Civil Drawings Excluding outdated Civil Site Plan (Sh	eet C-2.0) Damas *	8/31/2023
Civil Drawings Civil Site Plan	Damas *	8/31/2023
		, Update rec'd
		10/13/2023
Plat of Cross-Access Easement	MJE *	10/10/2023
Plat of Dedication for Public Street to the Village	CB *	5/16/1989
Traffic Study	KLOA *	9/15/2023

\* MJE = Michael J. Emmert Surveys, Inc.

\* Damas = Damas Consulting Group

\*TSS = TSS Car Wash Experts

\* CB = Cleto Bonanotte (surveyor)

\* KLOA = Kenig, Lindgren, O'Hara, Aboona, Inc.

PL-2023-04-00386



Village of Tinley Park Community Development Dept. 16250 S. Oak Park Ave. Tinley Park, IL 60477 708-444-5100

# VILLAGE OF TINLEY PARK, ILLINOIS PLANNING AND ZONING GENERAL APPLICATION

# **REQUEST INFORMATION**

\*Additional Information is Required for Specific Requests as Outlined in Specific Addendums

Special Use	for:		
Planned Uni	t Development (PUD) Conc	ept Preliminary F	inal 🔲 Deviation
<b>₩</b> Variation	Residential Commercia	/ for	
Annexation			
□ Rezoning (M	ap Amendment) From	to	
Plat (Subdivi	sion, Consolidation, Public Eas	ement) Prelimin	ary Final
🗹 Site Plan			
✓Landscape (	Change Approval		
Other:			
PROJECT & PRO	OPERTY INFORMATION		
Project Name:	UPGRADES TO EXISTING CAI	RWASH	
Project Description	Addition and upgrades to existing	g facility, new drives ar	nd new landscaping
Project Description:	7120 171ct Street		28-30-112-004-0000
Project Address:		Property Index No. (PIN):	
Zoning District:	B 3	Lot Dimensions & Area:	300'X100' ; 30,000 SF
Estimated Project Co	st: \$ \$ 300,000.		
	+ <u></u>		
OWNER OF REC	CORD INFORMATION		
Please supply prop	er documentation of ownership and/o	r designated representativ	ve for any corporation.
Name of Owner:	tekhar Syed	Company: Tinley Pa	ark Properties, LLC
		City Chate & Tim	
Street Address:			
E-Mail Address:		Phone Number:	

# APPLICANT INFORMATION

# Same as Owner of Record

All correspondence and invoices will be sent to the applicant. If applicant is different than owner, "Authorized Representative Consent" section must be completed.

Name of Applicant:	Company:	
Relation To Project:		
Street Address:	City, State & Zip:	
E-Mail Address:	Phone Number:	



Village of Tinley Park Community Development Dept. 16250 S. Oak Park Ave. Tinley Park, IL 60477 708-444-5100

# VILLAGE OF TINLEY PARK, ILLINOIS

# PLANNING AND ZONING GENERAL APPLICATION

# Authorized Representative Consent

It is required that the property owner or his designated representative be present at all requests made to the Plan Commission and Zoning Board of Appeals. During the course of a meeting, questions may arise regarding the overall project, the property, property improvements, special conditions attached to recommendations among other aspects of any formal request. The representative present must have knowledge of the property and all aspects of the project. They must have the authority to make commitments related to the project and property. Failure to have the property owner or designated representative present at the public meeting can lead to substantial delays to the project approval. If the owner cannot be present or does not wish to speak at the public meeting, the following statement must be signed by the owner for an authorized repetitive.

John C Schiess

I hereby authorize \_\_\_\_\_\_\_\_ (print clearly) to act on my behalf and advise that they have full authority to act as my/our representative in regards to the subject property and project, including modifying any project or request. I agree to be bound by all terms and agreements made by the designated representative.

**Property Owner Signature:** 

Property Owner Name (Print): Ifktekhar Syed

# **Acknowledgements**

- Applicant acknowledges, understands and agrees that under Illinois law, the Village President (Mayor), Village Trustees, Village Manager, Corporation Counsel and/or any employee or agent of the Village or any Planning and Zoning Commission member or Chair, does not have the authority to bind or obligate the Village in any way and therefore cannot bind or obligate the Village. Further, Applicant acknowledges, understands and agrees that only formal action (including, but not limited to, motions, resolutions, and ordinances) by the Board of Trustees, properly voting in an open meeting, can obligate the Village or confer any rights or entitlement on the applicant, legal, equitable, or otherwise.
- Members of the Plan Commission, Zoning Board of Appeals, Village Board as well as Village Staff may conduct inspections of subject site(s) as part of the pre-hearing and fact finding review of requests. These individuals are given permission to inspect the property in regards to the request being made.
- Required public notice signs will be obtained and installed by the Petitioner on their property for a minimum of 10 days prior to the public hearing. These may be provided by the Village or may need to be produced by the petitioner.
- The request is accompanied by all addendums and required additional information and all applicable fees are paid before scheduling any public meetings or hearings.
- Applicant verifies that all outstanding fees and monies owed to the Village of Tinley Park have been paid.
- Any applicable recapture, impact, engineering, contracted review or other required fees and donations shall be paid prior to issuance of any building permits, occupancy permits, or business licenses.
- The Owner and Applicant by signing this application certify that the above information and all supporting addendums and documentation is true and correct to the best of their knowledge.

Property Owner Signature:		
	Ifktekhar Syed	W
Property Owner Name (Print):		1
Applicant Signature: (If other than Owner)		
Applicant's Name (Print):	lfktekhar Syed	
Date:	February 7, 2023	

# SITE PLAN ADDENDUM Narrative

The applicant and owner of the property (owner-applicant) wishes to apply for a Site Plan Addendum to allow for an addition and renovation of an existing car wash. The current car wash operates as a self-serve car wash. The owner-applicant will operate the new facility as an automatic car wash.

By way of introduction, Mr. Syed Iftekhar, the owner and applicant, has been in the Gasoline and carwash retail operations for 30 years. Listed below are some of his operations and investments:

Carwash 1100 Corliss Avenue, Chicago - operator 7455 west Archer Summit II – operator, new construction 11900 South Marshfield Ave Calment Park - operator, renovation, and expansion

Mr. Syed will employ two persons as on site persons to assist in the operations of this facility.

Employee #1 responsible for checking incoming traffic and monitoring the traffic flow through flow into the facility and into the carwash. Also helps customers with the pay station.

Employee #2 guides the traffic flow through the tunnel of the carwash. Also helps customers with the pay station.

Additionally, a manager responsible for overseeing the facility operations and managing the employees will be on site.

The owner-applicant has hired a design team that has reviewed the conditions of the existing facility, including a traffic consultant, civil engineer, architect, and landscape architect. This team has developed a set of drawings, plans, renderings, and other materials that have been incorporated into this application.

Once reviewed by Village staff and consultants for the Village, the owner-applicant believes that they will concur with the assessment that the development proposed here will have a positive impact on the Tinley Park community.

As such, the owner-applicant hereby submits the necessary drawings, plans, renderings, and other materials necessary for the approval process. After such approvals, the owner-applicant will apply for any necessary permits to construct the facility as approved.

As part of this application, we seek a Site Plan and Landscape approval.

We look forward to starting the approval process.

# SPECIAL USE ADDENDUM

# Narrative

The applicant and owner of the property (owner-applicant) wishes to apply for a special use permit to allow for an addition and renovation of an existing car wash. The current car wash operates as a self-serve car wash. The owner-applicant will operate the new facility as an automatic car wash.

The owner-applicant has hired a design team that has reviewed the conditions of the existing facility, including a traffic consultant, civil engineer, architect, and landscape architect. This team has developed a set of drawings, plans, renderings, and other materials that have been incorporated into this application.

Once reviewed by Village staff and consultants for the Village, the owner-applicant believes that they will concur with the assessment that the development proposed here will have a positive impact on the Tinley Park community.

As such, the owner-applicant hereby submits the necessary drawings, plans, renderings, and other materials necessary for the approval process. After such approvals, the owner-applicant will apply for any necessary permits to construct the facility as approved.

As part of this application, we seek a Special Use Approval.

We look forward to starting the approval process.

# Standards and Responses

1. That the establishment, maintenance, or operation of the Special Use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare.

The existing facility is not detrimental to or endanger the public health, safety, morals, comfort, or general welfare. The Owner-Applicant proposes a similar use with certain operational characteristics that will improve the facility. See architectural and engineering plans for existing conditions and proposed plans, elevations, and renderings. Additionally, see the traffic consultant's conclusions relating to the impact of traffic on nearby roadways and intersections.

Therefore, it can reasonably be concluded based on the evidence listed above that the proposed development will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare. 2. That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood.

As similarly stated in Standard #1, the existing facility is not injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood. The Owner-Applicant also proposes a similar use with certain operational characteristics that will improve the facility. See architectural plans for existing conditions and proposed plans, landscape plans, elevations, and renderings. Additionally, see the photometric plan on Sheet E1 and the sound Note on Sheet A1 that assures compliance with zoning established standards for light and sound transmission beyond property lines.

Therefore, it can reasonably be concluded Proposed use is the same.

3. That the establishment of the Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district.

The current facility does not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district. The Owner-Applicant also proposes a similar use with certain operational characteristics that will improve the facility while not negatively impacting normal and orderly development and improvement of surrounding property for uses permitted in the district. See architectural and engineering plans for existing conditions and proposed plans, landscape plans, elevations, and renderings. The Owner-Applicant also proposes a similar use with certain operational characteristics that will improve the facility. See architectural plans for existing conditions and proposed plans, landscape plans, elevations, and renderings.

Therefore, it can reasonably be concluded Proposed use is the same.

# 4. That adequate utilities, access roads, drainage, and/or other necessary facilities have been or are being provided.

The Owner-Applicant's design team has reviewed the existing conditions at the subject property and has reviewed Village records of existing infrastructure and concluded that adequate utilities, access roads, drainage, and/or other necessary facilities have been or are being provided. See the site plan, utility plan and other engineering plans provided as part of this application.

5. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets.

The Owner-Applicant's design team has reviewed the existing conditions at the subject property including a traffic report with conclusions that support the conclusion that adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets.

 That the Special Use shall in all other respects conform to the applicable regulations of the district in which it is located, except as such regulations may in each instance be modified by the Village Board pursuant to the recommendation of the Plan Commission.

Applicant will accept reasonable regulations that may be modified by the Village Board pursuant to the recommendation of the Plan Commission.

7. The extent to which the Special Use contributes directly or indirectly to the economic development of the community as a whole.

Anticipated additional real estate tax revenue \$3,000 times 8% year over year is \$1,500 in 5 years

# VARIATION ADDENDUM

The owner-applicant believes that the development as presented in this application is compliant with all applicable zoning metrics except for Use, and further believes that the Special Use Addendum portion of this application addresses that portion. Specifically, the applicant's design team submits a zoning table that demonstrates the following:

- Use special use permit covers this
- Density FAR, compliant
- Building Height, compliant
- All setbacks, compliant
- Lot coverage, compliant
- Required parking spaces, compliant

# PLAT OF SURVEY ALTA \NSPS LAND TITLE SURVEY by Michael J. Emmert Surveys, Inc.

# Legally described as:

LEGAL DESCRIPTION AS SHOWN ON TITLE COMMITMENT NUMBER 22CSC013446HH AS PREPARED BY CHICAGO TITLE INSURANCE COMPANY

LOT 7 IN BLOCK 10 IN ELMORE'S OAK PARK AVENUE ESTATES, BEING A SUBDIVISION OF THE NORTHWEST FRACTIONAL QUARTER OF SECTION 30, TOWNSHIP 36 NORTH, RANGE 13 EAST OF THE THIRD PRINCIPAL MERIDIAN, (EXCEPT THAT PART TAKEN FOR ROAD PURPOSES BY DOCUMENT 89420336), AS PER PLAT OF SUBDIVISION RECORDED APRIL 25, 1929 AS DOCUMENT NUMBER 10351098, IN COOK COUNTY, ILLINOIS.





	1/8	1/4	3/8	1/2	5/8	3/4	7/8	
0 AND	.01	.02	.03	.04	.05	.06	.07	.08 = 1 INCH
1 AND	.09	.10	.11	.125	.14	.15	.16	.17 = 2 INCHES
2 AND	.18	.19	.20	.21	.22	.23	.24	.25 = 3 INCHES
3 AND	.26	.27	.28	.29	.30	.31	.32	.33 = 4 INCHES
4 AND	.34	.35	.36	.375	.39	.40	.41	.42 = 5 INCHES
5 AND	.43	.44	.45	.46	.47	.48	.49	.50 = 6 INCHES
6 AND	.51	.52	.53	.54	.55	.56	.57	.58 = 7 INCHES
7 AND	.59	.60	.61	.625	.64	.65	.66	.67 = 8 INCHES
8 AND	.68	.69	.70	.71	.72	.73	.74	.75 = 9 INCHES
9 AND	.76	.77	.78	.79	.80	.81	.82	.83 = 10 INCHES
10 AND	.84	.85	.86	.875	.89	.90	.91	.92 = 11 INCHES
11 AND	.93	.94	.95	.96	.97	.98	.99	1.0 = 1 FOOT

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.

THE FIELD WORK WAS COMPLETED ON 18TH. JANUARY, 2023.

DATED THIS 18TH. BAY OF JANUARY, 2023 n

BY: MICHAEL J. EMMERT SURVEYS, INC. MICHAEL J. EMMERT PRESIDENT PROFESSIONAL ILLINOIS LAND SURVEYOR NO. 2499



-171ST. -STREET

mike@mjesurveys.com Michael J. Emmert Surveys, Inc 185 East Vallette Street Elmhurst, Illinois 60126 Office 630-516-0383 A.C. – AIR CONDITIONER W.M.–WATER METER G.M.–GAS METER T.I.–TELEPHONE INTERFACE C.S.–CABLE SERVICE E.M.–ELECTRIC METER

# 7130 171ST. STREET TINLEY PARK, ILLINOIS

SCALE: 1" = 16'	CHKD. / AP'V'D:		
DATE: JANUARY 18, 2023	APPROVED:		
DWN. BY: MJE	LAST REVISED: 2-9-2023		
CHKD. BY: ADE			

# Upgrades to existing Carwash for: Damas Consulting Group 7130 171st Street Tinley Park, IL 60477



EXISTING FRONT NORTHEAST ELEVATION





EXISTING SITE PHOTOGRAPH - BIRD'S EYE VIEW

RELY ON PRINTED DIMENSIONS ONLY - DO NOT SCALE

# **BUILDING CODES**

Village of Tinley Park Building Codes 2016 2012 International Building Code 2012 International Mechanical Code 2012 International Fire Gas Code including Appendix A 2012 International Fire Code including Appendix B and D 2021 International Property Maintenance Code 2012 International Swimming Pool and Spa Code 2015 International Energy Conservation Code 2014 Illinois State Plumbing Code 2017 National Electric Code (NEC)



PROPOSED FRONT NORTHEAST ELEVATION



RELY ON PRINTED DIMENSIONS ONLY - DO NOT SCALE

# REVISION 1 - 6/26/23 REVISION 2 - 9/13/23

CONSULTANT Damas Consulting Group Khaled Mansour 2208 Arbor Circle, Apt 6 Downers Grove, IL 60515

khaled@damascc.com

CONTRACTOR TBD

# ARCHITECT

LaPage Architects, Ltd. Ronald N. LaPage, AIA, ALA 951 W. Liberty Drive Wheaton, IL 60187 630.665.0006 R.LaPage@LaPageArchitects.com

# CIVIL ENGINEER

Damas Consulting Group Khaled Mansour 2208 Arbor Circle, Apt 6 Downers Grove, IL 60515 khaled@damascc.com

# **BUILDING DATA**

Parcel ID Number: 28-30-112-004 Existing Property Zoning/Use Group: B-3 Proposed Property Zoning/Use Group: B-3 / B-5 Existing & Proposed Occupancy: Previous use: Business Proposed use: Business Existing Construction Type: II-B Fire Sprinklers: Yes Fire Alarm System: Yes

Proposed Building Height: South (Front) Addition = 28'-6''

# SCOPE OF INTERIOR REMODELING

PROPOSED RENOVATION AND ADDITION TO AN EXISTING CARWASH TO INCLUDE STRUCTURAL, PLUMBING, AND ELECTRICAL MODIFICATIONS. BUILDING ADDITIONS INCLUDE A MECHANICAL ROOM ON THE WEST SIDE AND A LENGTHENING OF THE BUILDING ON THE SOUTH SIDE TO HOUSE THE REQUIRED CAR WASH EQUIPMENT LINE WHILE CREATING A NEW DECORATIVE FRONT FACADE. SITE WORK INCLUDES REMOVING AND REPLACING THE EXISTING PARKING PAVEMENT AND PROVIDE ENTRY INTO THE REAR OF THE BUILDING, NEW VACUUM PARKING SPACES, AND A DRIVE PATH AROUND THE BUILDING. SITE WORK ALSO INCLUDES REVISED LIGHTING AND WATER RECLAMATION.

# DRAWING SHEET INDEX

STILLT	DLJUNIFTION
T1	Title Sheet, Project Site Map, Location Map
D1	As-Built / Demolition Site Plan
D2	As-Built / Demolition Floor Plan
D3	As-Built / Demolition Second Floor Plan
D4	As-Built / Demolition Elevations
A1	Architectural Site Plan
A2	Landscape Plan
A3	First Floor Plan
A4	Second Floor Plan
A5	South and East Elevations (Renderings)
A6	North and West Elevations (Renderings)
A7	South and East Elevations (Line Drawings)
A8	North and West Elevations (Line Drawings)
A9	Landscaping Details
E1	Photometric Plan

# CERTIFICATION

I HEREBY CERTIFY THAT THESE DRAWINGS WERE PREPARED UNDER MY DIRECT SUPERVISION AND TO THE BEST OF MY KNOWLEDGE COMPLY WITH ALL APPLICABLE CODES & ORDINANCES FOR THE CITY OF TINLEY PARK.

RONALD LAPAGE, AIA, ALA ILLINOIS LICENSED ARCHITECT ARCHITECT'S LICENSE No. 001-009836 PROFESSIONAL DESIGN FIRM: 184-006116

DATE:





# GENERAL DEMOLITION NOTES

- THE GENERAL CONTRACTOR SHALL VISIT THE SITE AND PRIOR TO BIDDING AND ACTUAL WORK AND BEFORE DEMOLITION WORK GENERAL CONTRACTOR SHALL PERFORM COMPLETE DEMOLITION AND REMOVAL OF ALL EXISTING WALLS, CEILINGS, FLOORS, ELECTRICAL, TELEPHONE AND PLUMBING CONSTRUCTIONS PER PLANS.
- 2. ALL CONTRACTORS SHALL VERIFY LOCATION OF ALL EXISTING UNDERGROUND UTILITIES, PIPES, CONDUITS ETC. PRIOR TO ANY SAUCUTTING. PROVIDE X-RAY OF THE EXISTING FLOOR SLAB AS REQUIRED.
- 3. THE PLUMBING CONTRACTOR SHALL VERIFY THE LOCATION AND THE DEPTH OF EXISTING SEWER PIPE FOR ADEQUATE AND PROPER PITCH PRIOR TO SUBMITTING THE PLUMBING BID. IF REQUIRED, FURNISH AND INSTALL A EJECTOR PIT INCLUDING BUT NOT LIMITED TO INSTALLATION OF THE UNIT, ALL ELECTRICAL CONNECTIONS, SAUCUTTING AND PATCHING THE FLOOR ETC. FOR OVERHEAD SEWER TO ACHIEVE PROPER PITCH.
- 4. VERIFY ALL STRUCTURAL ELEMENTS WITHIN THE WORK AREA PRIOR TO ANY DEMOLITION. PROTECT AND SHORE UP ALL EXISTING STRUCTURAL AND RATED WALLS, AND ASSEMBLIES AS REQUIRED.
- 5. INCLUDE IN DEMOLITION, BUT NOT LIMITED TO, REMOVAL OF ALL CASEWORK, FLOORING, STUDS, GYPSUM BOARD, ELECTRICAL WIRING, CONDUIT, BASE TRIM, CEILINGS, GAS LINES IF ANY, LIGHTS, HYAC BRANCH DUCTS, PLUMBING FIXTURES, LOCKERS, DOORS AND JAMBS, FURNISHINGS, ETC.
- 6. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE ALL AREAS DUE TO DEMOLITION AND ACTUAL CONSTRUCTION TO A "LIKE NEW" CONDITION AND SHALL MATCH EXISTING CONSTRUCTION AND PATCH ALL AREAS WITH MATERIALS AND FINISHES MATCHING EXISTING OUTSIDE AND INSIDE THE CONSTRUCTION AREA.
- 7. ALL EXISTING WALLS, BEAMS, COLUMNS AND SURFACES WHICH ARE NOT SCHEDULED TO DEMOLISH SHALL BE REPAIRED AND PATCHED AND READY FOR INSTALLATION OF ALL FINISHES. ALL GYPSUM BOARD DAMAGED DUE TO DEMOLITION OR ACTUAL CONSTRUCTION SHALL BE PATCHED, MUDDED, TAPED & SANDED TO SMOOTH CONDITION AND BE
- READY FOR WALL COVERING APPLICATION AND OR PAINT. 8. ALL ELECTRICAL, PLUMBING, HVAC DEMOLITION SHALL BE DONE BY EACH RESPONSIBLE CONTRACTOR. 9. REMOVE ALL DEBRIS FROM THE SITE WITHOUT ANY DISTURBANCE TO
- OTHER OCCUPANTS AND UNITS. 10. PROVIDE TEMPORARY WALLS AND PARTITIONS AS REQUIRED TO PROVIDE
- REQUIRED PROTECTION FOR WALLS, FLOORS, OUTSIDE OF THIS UNIT DURING DEMOLITION AND DEBRIS REMOVAL. PROTECT ALL FLOORS, ELEVATORS, CEILING, ETC.
- II. ALL REQUIRED WORK INCLUDING, CORING, ROUTING, PENETRATIONS, ETC. FOR ELECTRICAL, PLUMBING, FIRE PROTECTION OR MECHANICAL WORK
- SHALL BE THE RESPONSIBILITY OF THE SPECIFIC CONTRACTOR. 12. IDENTIFY AND SCHEDULE ALL DEMOLITION AND ACTUAL CONSTRUCTION WORK WITH OTHER BUILDING OCCUPANTS AND ADJACENT UNITS PRIOR TO START OF ANY WORK.
- 13. ALL UNUSED HVAC, PLUMBING, ELECTRICAL, TELEPHONE OR OTHER BUILDING SERVICES AND EQUIPMENT, IN THE AREA OF WORK SHALL BE REMOVED AND CAPPED AT THE MAIN DUCT, PANEL, PIPE , CONDUIT, ETC. PROTECT ALL SERVICES, DUCTS, PIPES, CONDUITS, ETC. IN THE WORK AREA FOR THIS AND OTHER UNITS. RELOCATE ANY DUCT, PIPE, CONDUITS, WIRING, ETC. AS REQUIRED.

NOTE: PRIOR TO THE DISPOSAL OF ANY REUSABLE ITEMS SUCH AS (BUT NOT LIMITED TO) LIGHT FIXTURES, DOORS, SUPPLY/RETURN GRILLES, PLUMBING FIXTURES, FURNITURE, ETC. VERIFY WITH OWNER IF THOSE ITEMS ARE TO BE REUSED, RELOCATED OR SOLD.

X = REMOVE

\_\_\_\_\_ = TO BE REMOVED. SHORE UP EXISTING STRUCTURE PRIOR TO DEMOLITION. PATCH WALLS, CEILING, FLOOR, ETC. AS REQ'D., TYP.











# AS-BUILT / DEMOLITION SECOND FLOOR PLAN

REMOVE HIP ROOF

RELY ON PRINTED DIMENSIONS ONLY - DO NOT SCALE



\_\_\_\_\_

TO BE REMOVED. SHORE UP EXISTING STRUCTURE PRIOR TO DEMOLITION. PATCH WALLS, CEILING, FLOOR, ETC. AS REQ'D., TYP.

<u>NOTE</u>: PRIOR TO THE DISPOSAL OF ANY REUSABLE ITEMS SUCH AS (BUT NOT LIMITED TO) LIGHT FIXTURES, DOORS, SUPPLY/RETURN GRILLES, PLUMBING FIXTURES, FURNITURE, ETC. VERIFY WITH OWNER IF THOSE ITEMS ARE TO BE REUSED, RELOCATED OR SOLD.

DEMOLITION LEGEND

- () REMOVE ENTIRE WALL STRUCTURE, INCLUDING, BUT NOT LIMITED TO, GYPSUM, STUDS, INSULATION, ELECTRICAL WIRING, CONDUIT AND BASE TRIM, INSOFAR AS TO PREPARE AREA FOR PROPOSED CONSTRUCTION.
- 2) AREA OF EXISTING CONCRETE/ASPHALT SLAB & CURB TO BE REMOVED TO PREPARE FOR NEW CONSTRUCTION. CONTRACTOR TO VERIFY AND COORDINATE EXTENT OF DEMOLITION REQUIRED FOR PROPOSED EQUIPMENT.
  (3) REMOVE EXISTING DOOR AND FRAME.
- (4) REMOVE EXISTING ELECTRICAL/ COMMUNICATION FIXTURES AND RECEPTACLES INCLUDING ELECTRICAL WIRING AND CONDUIT, INSOFAR AS TO PREPARE AREA FOR PROPOSED CONSTRUCTION.
- (5) REMOVE EXISTING PLUMBING FIXTURES. REWORK AND/OR REMOVE ALL PIPING SERVING THE REMOVED FIXTURE AND CAP OFF PER PROPOSED PLANS AND CODE REQUIREMENTS.

22032 Project # \_\_\_\_ Drawn: JMP 9-12-22 Date: Issue/Revision Date: Preliminary 8-20-22 Permit Submittal 3-14-23 7-06-23 Rev 1 Rev 2 9-13-23 16 Grou AVE 6051 GH (GH ,  $\simeq$ ONS. Ц NOT ting Carwash Consulting Street , IL 60477 Upgrades to Existing O Damas Con 7130 171st Street Tinley Park, IL 60477 Drawing AS- BUILT/ DEMO SECOND FLOOR PLAN Sheet



Setback & Buffer Requirements							
Property Line	Adj. Property Zoning	Setback Min	Setback Provided	Buffer Depth Min	Buffer Depth Provided	Waiver Request (Buffer Depth)	
North - Rear	(B)	50'	76'-3''	5'	5'-4'' w/ Fence	NO	
East (North) - Right Side	(C)	10'	47'-1 1/2''	30'	1'-0''	Yes	
East (South) - Right Side	(B)	10'	47'-1 1/2''	5'	1'-0''	Yes	
South - Front	(C)	50'	104'-4 1/2''	5'	Partial 30'-0''	Yes	
West - Left Side	(B)	10'	16'-8 1/2''	5'	5'-0''	NO	



Parking Calculations					
Maximum 2 Employees on-site per owner					
Required Parking Spaces	Provided Parking Space				
2	12				
	1 Handicap Space				
	3 Regular Space				
	9 Vacuum Area Spaces				

		SIGNA	GE LANDS	CAPING S	TANDARDS		
Location		Requirement	Provided	Deficit	RESPONSE The revised plans have 275 sqft of landscaping around the front monument sign		Comme
Ground- Mounted Signs	2 sc fo si	η. ft. of landscaping r each 1 sq. ft. of gn face (200 s.f. required)	112 s.f.	-88 SF			Assum 50 s.f. o face per
		INTERIOR	LOT LANDS	CAPING I	REQUIREMENTS		
Location Req		Requ	uirement		Proposed	Deficit	Comm
Foundation		Landscape cove building foundatio right- 10' wide landsca 70% = 9 LF	erage along on that face of-way; uped area (` <b>REQUIREI</b>	70%of s public 13 LF x <b>)</b>	100% (13 LF)	0 LF	
Interior		3 cano	py trees		3 CT	-	



As required by Tinley Park Zoning Ordinance 9.A.1. Peak dB not to exceed 85 dB at property line. The maximum sound level from the proposed carwash equipment, coming from the blowers, is 86.6 dB at a location 10'-0" radial distance from the blowers.



		Plant Schedule								
	W	lslan d 2641	Spread	Mature Height (ft)	Name	Botanical Name				
	5	4	20	15-20	Amur Maple	Acer ginnala				
t	3	4	10	10-20	Red Buckeye	Aesculus pavia				
	1	6	10	12-20	White Fringetree	Chionanthus virginicus				
			10	6-10	Sargent Crabapple	Malus sargentii				
	21	5	3 to 4	10-15	Emerald Green Arborvitae	Thuja occidentalis				
	20	14	3	2-4	Boxwood Shrubs	Buxus spp.				
	16	15	3	1-3	Daylilies (Perennial)	Hemerocallis spp.				
	29	11	3	3-5	Feather Reed Grass	Calamagrostis x acutiflora				
	5	11	3	1-2	Lavender (Perennial)	Lavandula spp.				
	8	19	3	1-3	Coneflowers (Perennial)	Echinacea spp.				
	10									
	5	4	CT = Cano	opy Tree						
	5									
	4									
	25	15	US = Unde	erstory Tree						
	54									
	78	70	SH = Shru	b, Ornamental G	Grass, Group of Perrenials					















PROPOSED EAST (RIGHT SIDE) ELEVATION - RENDERING



# PROPOSED EAST (RIGHT SIDE) ELEVATION

SCALE: 1/4"=1'-Ø"









SCALE: 1/4"=1'-Ø"



VACUUM SYSTEM EXAMPLE TO MATCH FOR REFERENCE PURPOSES ONLY



# PROPOSED WEST (LEFT SIDE) ELEVATION

Material Ratios								
	Stone Veneer Brick Proposed Brick Existing Total Brick & Stone Paint/Stucco Total (sqft)							
North	70	350	0	420	7	427		
North	16.39%	81.97%	0.00%	98.36%	1.64%			
Fact	330	217	561	1108	145	1253		
EdSL	26.34%	17.32%	44.77%	88.43%	11.57%			
South	54.5	500	0	554.5	22	576.5		
	9.45%	86.73%	0.00%	96.18%	3.82%			
West	330	217	815	1362	0	1362		
vvest	24.23%	15.93%	59.84%	100.00%	0.00%			



# PROPOSED EAST (RIGHT SIDE) ELEVATION

SCALE: 3/16"=1'-Ø"







# PROPOSED WEST (LEFT SIDE) ELEVATION







0.03	• <sup>0.04</sup>	*°° 0	5 ,0.0	16 <sup>+</sup> D'I	08 <u>'</u> 0'	10 1	0.12	+0.12	+0.1	1 .0.	11 1	3.11	+0.12	, ⁺D' 1	2 <u>,</u> 0.,	14 ,0,	15 ,0	1. 14 .	0, 13	<b>,</b> 0, 12	+0.1/	1 ,0.1	4 .0.'	20 .0.	.31 +0	0.32	0.30	6.J4				0,10,1	ם יםי כ	9 <u>,</u> 0.11	,0.10	2 +0.1	B _0.2	3 ,0.30	1 +0.28	i +0.28	, <b>0.</b> 22	,0.13	*0°08
0.07	•a <sup>•</sup> 08	₊0. 1	z	16 <u>,</u> D.	22 .0.	27	1-FT	,0.28	+0,2	+ +0.	24 1	3.20	_0,2<	ı <sub>+</sub> 0.2	÷.0.	30 .0,	35 .0	.33 ,	,0, 28	+0,24	+0.22	, <sup>1</sup> 0.5	4 .0.	33 <u>,</u> 0,	. <del>52</del> <sub>+</sub> (	J.55 -	0.53	- + <sup>0.47</sup>	-0, 3	I <sub>+</sub> 0. 17	° .0.1	3 _0.1	2 ,0.1	3 <sub>1</sub> 0. 1	1 ,0.16	5 <u>+</u> 0.2	ө <sub>+</sub> 0.ч	, <mark>0.5</mark>	1 ,0.50	1 +0.45	- _0.33	+010	+0.13
0,15	.21	,0.2	7 .a.3	87 <b>5</b> 8.)	49 .0.	62 .	0. <i>7</i> 4	+O' 80	†0.84	۰ <sub>۲</sub> ۵۰	84_1	3.77	<u>_0.8</u> 9	,_D.8	<u>م</u> . ا	<u>эч</u> о.	80 <u>,</u> 0	.69	<u>.0.</u> 59	+ <sup>0,49</sup>	<u>,</u> D. 47	1 to'3	8 .0.9	58 .0.	.88 10	J.93 .	0.89	₊0. <u>73</u>	<u>_0.47</u>	0.24	0_1	7 <u>10.</u> 1	7 +0 <u>.1</u>	3 <u>,</u> 0.2	<u>1</u> ,0.29	5_ <u>+</u> D.4	8 <u>,</u> 0,8	+ <u>0.9</u>	2 <u>0,93</u>	+0.8 <u>1</u>	<u>10.54</u>		<u>+</u> 0.20
0.20	,a. 30	, <sup>0,ч</sup>	3 fare	io .o.	82 <sub>+</sub> 1.	o .	1.3	+ <sup>1.5</sup>	+ <sup>1.7</sup>	,1. =	9 +	1.9	+1.9	, <b>1.</b> ₿	+1.1	i ₊1.	4 <sub>1</sub> 1	1.2	,0.96	₊0,79	+ <sup>0,65</sup>	, <sub>1</sub> 0.5	a 'o'i	89 ,1.	3 +	1.4	,1.4	+1.1	<b>,</b> 0.67	+D. 39	i <u>,</u> 0.2	5 <u>,</u> 0.2	5 .0.29	a 'o'3a	5 ,0,44	+ + <sub>D'B</sub>	4 +1.4	, <sup>-1.6</sup>	+ <sup>1.7</sup>	+ <sup>1.5</sup>	+ <sup>1.0</sup>	, <u>0,66</u>	+ <sup>0,49</sup>
.0,20	.D. 32	.0.\$	,	<sup>7</sup> 5 <sub>+</sub> 1,	1 ,1.	ч <sub>+</sub> ,	1,8	<u>,</u> 2,3	<u>+</u> 2.8	- - -	+	3,5	+3.4	<b>,</b> 2,9	+ <sup>2</sup> (	<u>،2</u>	9 .	· 6 ·	· <sup>1.3</sup>	, <b>1</b> ,0	+D+ 84	+ <b>_</b> 0,7	ч ₊1.	3 ,2,	.0 .	2,2	2.0	₊ <sup>1,5</sup>	<b>,</b> 0,8€	) <sub>+</sub> D,47	'₊Q∘3	5 .0,3	9 <sub>+</sub> 0,40	5 <sub>+</sub> 0,50	5 .0.72	2 +7.4	<b>,</b> 2,3	,2. <i>7</i>	,2,7	+2·4	<b>,</b> 2,0	=	<b>₊</b> 1,6
0.23	<b>,</b> 0, 34	. <b>4</b> .5	3 ₊0₊€	10 <sub>+</sub> 1,	Z +1.	6	A.S.	¥3,1	+4.0	1 to		5,1	+4.9	+ <sup>4</sup> • 2	+3.S	₂ ,2,	5 +1	.9 ,	,1,5 r	+1.2	,1.D	0.9	5_44+	2-3	2	3.5	2,8	+1.9	1.1 R	↓D+61	ı <sub>+</sub> 0∘5	8 <b>.</b> 0.s	5 .0.6	5 <u>,</u> 0,8	2 41.0	+ <sup>1,9</sup>	<b>₊</b> 3,6	+ <sup>4</sup> •2	<b>,</b> 3,9	43.4	<b>,</b> 2,9	μ - -	+2,7
0,29	.D. 43	<b>,</b> Ф, Б	3 .O.9	90 <sub>+</sub> 1,3	2 .7	# 4	2.3	<b>,</b> 3,2	+ <sup>4</sup> • <sup>4</sup>	<b>,</b> 5,	÷ +	5,8	<b>,</b> 5,5	+ <sup>4</sup> • E	⁺3'	، <del>ح</del> .	₹2 15	<mark>8.1</mark> '−4"	2.0	,1.8 15	$=\frac{1}{2}$	₊1, 3	<b>,</b> 2.	3 . <sup>4</sup> ,	. В		,3.8 ' - 1/2	+2.5 (	-16	,D,96	l ₊1₀1	₊¹₊¹ 14'	,₁,2 - 11 "	+ <sup>1, 4</sup>  2	,1.5 5 - 4	+2.5 1/2"	,5,3 8'-8	.б.0 2 к	<b>,</b> 5,2	4.3	<b>,</b> 3,9	. <b>4</b> .D	+4.5
0.31	₽₽ 47	-de	3 ,1.0	1 + <sup>1,1</sup>	4  a		2.9	+ <sup>4</sup> •1	<b>,</b> 5,6	<b>,</b> Б,		A c	<b>.</b> 6.8	<b>,</b> 5,9	•••• [	5 <u>1</u> 3,	3 ,3	s.o.,	,3, 4	,3,1 C	<u></u> ,2,0	<u>,</u> 1,4	.₂Z.º	B s.	. 6	5.8	,4,7	+3,7	+2.7 C	11.9	±2°.4	.,Z,4	.,2·5	,2,B C	.2.3	,2,B	B <sup>6, 3</sup>	7.0	¢۰,5	4,6	+ <sup>4</sup> , 4	, <b>5</b> .D	s.e
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1.21	.D. 33	<b>,</b> 0,5	o .o.;	76 + 30c	× .	5.	1.9	±2.4	+3.O	<b>,</b> 3,	6 +	3,9	+3.8	<sub>+</sub> 3, 3	±2.1	24	5																					26-	<u>+</u> 2.2	±2,7	<b>,</b> 3,7	.++ <i>.</i> 9	±5.7
<u>,</u> 0,20	,0,31	+0,4	4 .0.8	54 <sub>+</sub> D,1	B7 ₊1.	1 7		A.B.	,1.8	+ <sup>2</sup> ,	a +	2,0	+ <sup>2.</sup> 2	2.1	1_1	1,	7		30'-1	10"			-										4(	6'- <u>6</u> "					2.0	2.5	)]3.1	+3.B	+4.4
<u>л</u> . 16.	0.23	,U, 3	, u.,	11 LU-1	54 <sub>+</sub> U,		J.82	+U-92	10.9×	N.	u t	1.90	+1.1	1.1	+1.·		15'	- 4½		15	'= <b>5</b> "	, UT 80			ļ	125.08				8'-0"		C		Ē		, DE	<del>ہ ال ح</del>	±_1.2	+7.5	200	+2.1	+2.4	+2.5
0.00	, 0, 03	-,u, 1	, "n". 2 U'.	16 DI	23 .u.			0, 43	10,20	, u.	10		10,21	+U, 3	7 0 1		25 0	, 20 t	0.22	+ <sup>-1</sup> • 2	+0+07		9	54 1		2.0	19	C	4 3		+ <sup>1</sup> +1	, 15				, <sup>†</sup> D'2	0 0 2	н <sub>1</sub> 0.0	3 0 50	1 (1 <del>-</del> 1 - 2	11.3	0 44	
д. 05 . П. П2	.0.07	-0.0	3 n n	13 .D.I	04 0	05 0	7. 06	.0. DZ	.0.02	, 10.		1, DA	P	+0;	à -n		13 0	. 46		-0, 30	+0+25		15	<u></u>	-	13'-	41/2"		+''' 2'-9			<u>ч</u> п9	1 - D - 7	<del>ا ا</del>		1 .0.1		5 . 17 . 14	10.00	0.21	.D. 19	0. 19	+0.3
л. 02 П. 02	0.02	-0.0	р_п.с	13 10 1	<del>us .</del> .	05 ↓ ∩ч—1	7.00	+0+0*	- <u>0.0</u>	+0.		1.06	-0.05		9-0-0	<u>, 01 - 10</u>	<u>, e, c</u>	), 40 -	0. 11	.0. 13	<u>10, 1</u>		1 0	45 0	-19 (	1.94	n. 74	-0.25	.0.29	<u> </u>	<u></u> A 1	3 .0 4	7- <u>n-</u> 4	7 .0 . 2.	<u>10,20</u>	<u>, 1</u> 0, 1	<u>9 0 0</u>	<u>, n n</u>		, <sup>1</sup> 0, 5,	D. 10	90.04	<u></u>
, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10	+0,02	1010	- 10.0	10,1	77 to.	J. 1		10103	101.01	10.	23 t		10,00	10,0	7 1011	10,	40			101.11	101 10	. ta	40.	101	1 2.			2	2 N	Ń	n (	יר	10, 1	1011	101.10	10.0	1 1010	10100	. 10,00	, taroa	101 10	10,00	10.0.

. 11 , 0. 14 , 0. 20 , 0. 31 , 0. 32 , 0. 30 , 0. 0 , 0. 0 , 0. 10 , 0. 10 , 0. 12 , 0. 30 , 0. 28 , 0. 28 , 0. 22 , 0. 13 , 0. 09

# RELY ON PRINTED DIMENSIONS ONLY - DO NOT SCALE

3.8 2.5 4.5 1.6 1.98 1.1 1.1 1.2 1.4 1.5 2.5 5.3 5.0 5.2 4.3 3.9 4.0 4.55'-1/2" 16'-6" 14'-11" 16'-4/2" 8'-8/2"1.3 .2.3 .4.B .5 15 ч<u>+1.ч</u>,2.В.5.3 +2.7 +1.9 +2.4 4.7 ,2.4 ,2.5 ,2.B ,2.3 17.0 ,5.9 4.6 ,4.4 ,5.D ,5. +<sup>2,8</sup> B<sup>6,3</sup> **-6**" m-17'-4" 5.4 \$1 15.2 15.9 26'-1 2.2 2.7 3.7 4.9 5.7 2.0 2.5 3.1 +3.8 +4.4 1.2 ,1.5 ,2.4 ,2.1 ,2.4 ,2.5 1.97 .0.58 .0.71 .0.81 .7.00 .1.2 .1.3 .1.5 .1.5 1.5 1 29 40 29 40.40 40 

ALL LIGHT FIXTURES (BUILDING AND PARKING AREA) SHALL HAVE NO UPLIGHT (RATING UØ) AND HAVE NO LIGHT ABOVE A 90 DEGREE PLANE.

			Lighting Schedule			
.D.	Qua ntity	Brand	Description	Mounting Height	Lumens per Lamp	Wattage
A	4	Lithonia	RSX Area Luminaire Size 1 P2 Lumen Package 4000K CCT Type R2 Distribution	25.0 ft	9878	72.9
В	2	Lithonia	RSX Area Luminaire Size 1 P1 Lumen Package 3000K CCT Type R2 Distribution	22 ft (North) 20 ft (South)	6482	51.3 W
С	9	Wave	1-(44LED) 5"DIA 18W LED BOARD w/CLEAR ACRYLIC LED LENS 21"TALL HEXAGON WALL MNT LANTERN LUMINAIRE w/FROSTED ACRYLIC SIDE LENSES	8.0 ft	1078	18

17	⁺D°08	, <b>0.</b> D6	,o.os	+0.05	,О. Dч	+0.04	*D. 03	*0°03	<b>,</b> 0.02	+0.02	±0.02	+ <b>D</b> . 01	<u>,</u> a.oı	
19	*D° 08	+0 • 08	<b>,</b> 0,07	+D.OB	,0,05	,o.os	+0.04	*0°03	,o.o3	+0.02	±0.02	, <b>0.</b> 02	<b>,</b> 0.01	
13	<b>_0.1</b> 2	+0. 11	<b>,0,40</b>	<u>, D10</u>	<u>a 09</u>	.0.07	+0.06	,0.05	.04	+0. 03	10.82	,o.o2	<b>,</b> 0.02	
20	<u>_D. 1</u> 8	+0.17	<u>,</u> 0, 19	_D.21	,0.21	↓0. 17	,D. 13	•0.09	+0.08	+0.05	10.D4	+D. 04	+0.D3	
s	+D. 41	+ <sup>0.47</sup>	,a.52	+0.55	₊0.51	+ <sup>0.43</sup>	+D. 33	,0.25	<b>,</b> □. 18	+ <sup>0</sup> . 14	+0. 1n	*or 08	<b>,</b> 0.D6	
i	+ <sup>1,5</sup>	+ <sup>1</sup> •5	<b>,</b> 1,∃	+1,2	+1• D	<b>,</b> 0,81	↓D,63	₊0,47	<b>,</b> D.34	+0,24	+0-17	.D. 11	<b>.</b> 0.D7	
P	20	+ <sup>2</sup> ∗5	<b>₊</b> 2 <b>.</b> 2	. <sup>-1, ₿</sup>	+ <sup>1,5</sup>	<b>₊</b> 1 <b>.</b> 2	+D+90	<b>,</b> 0,62	.+D. 43	+0,2B	+0, 18	,D, 12	₊O,D7	
i	+ <sup>4</sup> •6	4.1	,3,3	↓2,6	.2.D	+ <sup>1,4</sup>	+1.D	.0.53	10.45	32.0.	±0, 18	,D, 12	₊O,D8	C T C A C
3	₽2° B	<b>.</b> 5.2	<b>.</b> 4.0	+2.B	.2.D	<b>₊</b> 1,5	+7.0	.a.75	.51	₊0,35	<b>1</b> 0.23	₊D, 15	₊O,D9	
)	A <sup>6,6</sup>	6.D	<b>,</b> 4,8	±3,4	<b>,</b> 2,4	<b>₊1,</b> 7	±1•2	.0.6Z	"D <u>. 60</u>	].0.40	<b>_</b> @.25	.D. 17	.0,1D	
	A.5	.€∘D	+4.7	+3.4		<b>⊣</b> 1'=-	4"	<b>,</b> 0,87	. <b>0.</b> 59	+0, 40	<b>↓0</b> .25	₽D, 17	+0,10	~
1	<b>,</b> 5,8	<b>,</b> 5 <b>,</b> 2	<b>.</b> 4.0	<b>,</b> 2.8	₊2.D	<b>,</b> 1,5	±1.0	₊0.74	<b>.</b> 0.51	₊0.34	+7.23	₁D, 15	₊0.D9	
ł	+4.5	+ <b>4</b> •D	<b>,</b> 3,2	+ <sup>2.5</sup>	+ <sup>1,9</sup>	+1.4	,1.D	<b>,</b> 0,69	.º.45	.0. <mark>28</mark>	<b>,0</b> , 18	.,D. 12	₊O.D8	
i	<b>,</b> 2,5	+2.4	.1 ₽	+1-8	+ <sup>1,5</sup>	<b>₊1.</b> 2	,D.89	<b>,</b> 0,62	<b>.</b> ₽.42	+0 2B	<b>0</b> . 1B	.∎D. 11	<b>.</b> 0.D7	
i come come	YNS	<u>, 1</u>	E.	±1.2	<b>,</b> 0,97	<b>,</b> 0,79	↓D.61	<sub>+</sub> О,ЧБ	<b>.</b> 0.34	.0.23	0.17	.D. 11	₊O.D7	
17	.,D, 35	±0-42	<b>,0</b> ,47	+0.51	,0, 49	<b>₊</b> 0.41	↓D.31	+O.24	<b>↓</b> 0.17	₊0. 13	d. 1D	.D.08	₊O.D5	
15	<b>.</b> ₽14	<b>↓</b> 0, 14	↓ <b>0</b> , 17	₊D, 19	<u>,</u> 0, 19	<b>↓</b> 0, 16	<b>_₽1</b> 2	+0.OB	.D.07	.o.D5	10.04	.D.03	₊O.D3	
e	+D.09	₊0.D9-	+0.09	+0.08	+0.DD	<b>.06</b>	+0.05	+ <sup>0.04</sup>	.0.03	+0.D3	1,0.02	<b>₊0.0</b> 2	₊O.D2	

Project #
Damas Consulting Group 5625 MIDDAUGH AVE Downers Grove, IL. 60516 Ph 630-991-3299 FAX 630-541-2382
Upgrades to Existing Carwash Upgrades to Existing Carwash Damas Consulting 7130 171st Street Tinley Park, IL 60477
Sheet E1







# **Specifications**

EPA (ft²@0°):	0.57 ft² (0.05 m²)
Length:	21.8″ (55.4 cm) (SPA mount)
Width:	13.3" (33.8 cm)
Height:	3.0" (7.6 cm) Main Body 7.2" (18.4 cm) Arm
Weight: (SPA mount):	22.0 lbs (10.0 kg)

# Catalog Numbe Notes

Туре

# Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX1 delivers 7,000 to 17,000 lumens allowing it to replace 70W to 400W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral slipfitter and other mounting configurations are available.



Н

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect. \*See ordering tree for details

EXAMPLE: RSX1 LED P4 40K R3 MVOLT SPA DDBXD



# **Ordering Information**

### **RSX1 LED** Performance Color Series Distribution Voltage Mounting Package Temperature RSX1 LED P1 Type 2 Wide **MVOLT** (120V-277V)<sup>2</sup> SPA 30K 3000K R2 Square pole mounting (3.0" min. SQ pole for 1 at 90°, 3.5" min. SQ pole for 2, 3, 4 at 90°) Round pole mounting (3.2" min. dia. RND pole for 2, 3, 4 at 90°, 3.0" min. dia. RND pole for 1 at 90°, 2 at 180°, 3 at 120°) P2 40K 4000K R3 Type 3 Wide HVOLT (347V-480V)<sup>3</sup> RPA P3 50K R3S 5000K Type 3 Short **XVOLT** (277V-480V)<sup>4</sup> Mast arm adaptor (fits 2-3/8" OD horizontal tenon) MA (use specific voltage for options as noted) P4 R4 Type 4 Wide Adjustable slipfitter (fits 2-3/8" OD tenon) 6 IS R4S Type 4 Short Wall bracket 1 120<sup>3</sup> 277 5 WBA R5 Type 5 Wide <sup>1</sup> 208<sup>3</sup> 347 5 WBASC Wall bracket with surface conduit box R5S Type 5 Short <sup>1</sup> 240<sup>3</sup> AASP Adjustable tilt arm square pole mounting 6 480 5 AFR Automotive Front Row AARP Adjustable tilt arm round pole mounting 6 AFRR90 Automotive Front Row AAWB Adjustable tilt arm with wall bracket <sup>6</sup> **Right Rotated** AAWSC Adjustable tilt arm wall bracket and surface conduit box <sup>6</sup> AFRL90 Automotive Front Row Left Rotated

Options				Finish	
Shipped In	stalled	Shipped Inst	talled	DDBXD	Dark Bronze
HS	House-side shield 7	*Standalone	e and Networked Sensors/Controls (factory default settings, see table page 9)	DBLXD	Black
PE	Photocontrol, button style 8,9	NLTAIR2 PIRHN	nLight AIR generation 2, with Networked, Bi-Level motion/ambient sensor 9, 12, 13, 14	DNAXD	Natural Aluminum
PER7	Seven-wire twist-lock receptacle only (no controls) 9,10,11	BAA	Buy America(n) Act Compliant	DWHXD	White
SF	Single fuse (120, 277, 347) <sup>5</sup>	CCE	Coastal Construction <sup>15</sup>	DDBTXD	Textured Dark Bronze
DF	Double fuse (208, 240, 480) 5	*Note: NLTAIR	2 PIRHN with nLight Air can be used as a standalone or networked solution. Sensor	DBLBXD	Textured Black
SPD20KV	20KV Surge pack (10KV standard)	coverage patt	ern is affected when luminaire is tilted.	DNATXD	Textured Natural Aluminum
FA0	Field adjustable output 9	Shipped Sep	arately (requires some field assembly)	DWHGXD	Textured White
DMG	0-10V dimming extend out back of housing for external	EGS	External glare shield 7		
	control (control ordered separate) <sup>9</sup>	EGFV	External glare full visor (360° around light aperture) 7		
		BS	Bird spikes 16		



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COMMERCIAL OUTDOOR

Lithonia RSX1 Area LED Rev. 06/27/23 Page 1 of 9

# **Ordering Information**

# Accessories

RSX1HS     RSX1 House side shield (includes 1 shield)       RSX1HSAFRR U     RSX1House side shield (or AFR rotated optics (in RSX1EGS (FINISH) U       RSXTEGFV (FINISH) U     External glares hield (specify finish)       RSXRPA (FINISH) U     External glares hield (specify finish)       RSXRPA (FINISH) U     RSXUniversal round pole adaptor plate (specify RSXWBA (FINISH) U       RSXSRPA (FINISH) U     RSX WBA wall bracket (specify finish) <sup>1</sup> RSXSCB (FINISH) U     RSX Surface conduit box (specify finish, for use DL127F 1.5 JU       Photocell -SSL twist-lock (120-277V) <sup>17</sup> DL1430F 1.5 CULJU     Photocell -SSL twist-lock (480V) <sup>17</sup> DSHORT SBK U     Shoting cap <sup>17</sup>	01001	ed and simpped separately.
RSX1HSAFRR U     RSX1House side shield for AFR rotated optics (i       RSX1EGS7 (FINISH) U     External glares hield (specify finish)       RSX1EGS7 (FINISH) U     External glares hield (specify finish)       RSXTPA (FINISH) U     External glares hield specify finish)       RSXRPA (FINISH) U     RSXUmersal round pole adaptor plate (specify finish)       RSXRPA (FINISH) U     RSXUBA wall bracket (specify finish) 'I       RSXSCB (FINISH) U     RSX Surface conduit box (specify finish, for use DL1127F 1.5 /UL JU       DL1127F 1.5 /UL JU     Photocell -SSL twist-lock (120-277V) 'I'       DL1430F 1.5 CUL JU     Photocell -SSL twist-lock (480V) 'I'       DSHORT SBK U     Shorting cap''	RSX1HS	RSX1 House side shield (includes 1 shield)
RSXTEGS (FINISH) U     External glares hield (specify finish)       RSXTEGY (FINISH) U     External glare full visor (specify finish)       RSXRPA (FINISH) U     RSX Universal round pole adaptor plate (specify finish)       RSXWBA (FINISH) U     RSX Universal round pole adaptor plate (specify finish) <sup>1</sup> RSXSCB (FINISH) U     RSX WBA wall bracket (specify finish) <sup>1</sup> RSXSCB (FINISH) U     RSX Surface conduit box (specify finish, for use)       DL1127F 1.5 JU     Photocell-SSL twist-lock (120-2770) <sup>17</sup> DL1340F 1.5 CULJU     Photocell-SSL twist-lock (480V) <sup>17</sup> DSHORT SBK U     Shorting cap <sup>17</sup>	RSX1HSAFRR U	RSX1 House side shield for AFR rotated optics (in
RSX1EGFV (FINISH) U     External glare full visor (specify finish)       RSXRPA (FINISH) U     RSX Universal round pole adaptor plate (specify finish)       RSXWBA (FINISH) U     RSX WBA wall bracket (specify finish) <sup>1</sup> RSXWBA (FINISH) U     RSX WBA wall bracket (specify finish) <sup>1</sup> RSXS GFINISH) U     RSX Surface conduit box (specify finish, for use v)       DL127F 1.5 JU     Photocell -SSL twist-lock (120-277V) <sup>17</sup> DL1347F 1.5 CUL JU     Photocell -SSL twist-lock (347V) <sup>17</sup> DL1480F 1.5 CUL JU     Photocell -SSL twist-lock (480V) <sup>17</sup> DSHORT SBK U     Shorting cap <sup>17</sup>	RSX1EGS (FINISH) U	External glares hield (specify finish)
RSXRPA (FINISH) U     RSX Universal round pole adaptor plate (specify RSXWBA (FINISH) U     RSX WBA wall bracket (specify finish) <sup>1</sup> RSXSUB (FINISH) U     RSX Surface conduit box (specify finish, for use v DL127F 1.5 JU     Photocell -SSL twist-lock (120-277V) <sup>17</sup> DL1347F 1.5 CUL JU     Photocell -SSL twist-lock (347V) <sup>17</sup> DL1480F 1.5 CUL JU       DL1430F 1.5 CUL JU     Photocell -SSL twist-lock (480V) <sup>17</sup> DSHORT SBK U	RSX1EGFV (FINISH) U	External glare full visor (specify finish)
RSXWBA (FINISH) U     RSX WBA wall bracket (specify finish) '       RSXSCB (FINISH) U     RSX Surface conduit box (specify finish, for use v       DL127F 1.5 JU     Photocell -SSL twist-lock (120-277V) ''       DLL430F 1.5 CUL JU     Photocell -SSL twist-lock (347V) ''       DL480F 1.5 CUL JU     Photocell -SSL twist-lock (480V) ''       DSHORT SBK U     Shorting cap ''	RSXRPA (FINISH) U	RSX Universal round pole adaptor plate (specify
RSXSCB (FINISH) U     RSX Surface conduit box (specify finish, for use v       DL127F 1.5 JU     Photocell -SSL twist-lock (120-277V) <sup>17</sup> DL1347F 1.5 CUL JU     Photocell -SSL twist-lock (347V) <sup>17</sup> DL1480F 1.5 CUL JU     Photocell -SSL twist-lock (480V) <sup>17</sup> DSHORT SBK U     Shorting cap <sup>17</sup>	RSXWBA (FINISH) U	RSX WBA wall bracket (specify finish) 1
DLL127F 1.5 JU     Photocell -SSL twist-lock (120-277V) ''       DLL347F 1.5 CUL JU     Photocell -SSL twist-lock (247V) ''       DLL480F 1.5 CUL JU     Photocell -SSL twist-lock (480V) ''       DSHORT SBK U     Shorting cap ''	RSXSCB (FINISH) U	RSX Surface conduit box (specify finish, for use
DLL347F 1.5 CUL JU     Photocell -SSL twist-lock (347V) <sup>17</sup> DLL480F 1.5 CUL JU     Photocell -SSL twist-lock (480V) <sup>17</sup> DSHORT SBK U     Shorting cap <sup>17</sup>	DLL127F 1.5 JU	Photocell -SSL twist-lock (120-277V) 17
DLL480F 1.5 CUL JU Photocell -SSL twist-lock (480V) 17   DSHORT SBK U Shorting cap 17	DLL347F 1.5 CUL JU	Photocell -SSL twist-lock (347V) 17
DSHORT SBK U Shorting cap 17	DLL480F 1.5 CUL JU	Photocell -SSL twist-lock (480V) 17
	DSHORT SBK U	Shorting cap 17

# **External Shields**

### NOTES

- Any Type 5 distribution, is not available with WBA.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
- XVOLT driver not available with P1 or P2. XVOLT driver operates on any line voltage from 277V-480V (50/60 Hz). XVOLT not available with fusing 4
- (SF or DF) and not available with PE. Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 5 208V, 240V or 480V.
- 6 Maximum tilt is 90° above horizontal.
- It may be ordered as an accessory.
- Requires MVOLT or 347V. 8
- Two or more of the following options cannot be combined including PE, DMG, PER7, FAO and NLTAIR2 PIRHN. (Exception: PE and FAO can be 9 combined; also PE and DMG can be combined.)
- 10 Compatible with standard twist-lock photocells for dusk to dawn operation or advanced control nodes that provide 0-10V dimming

signals. Wire 4/Wire 5 wired to dimming leads on driver. Wire6/Wire7 capped inside luminaire. Twistlock photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.

- For units with option PER7, the mounting must be restricted to +/- 45° from horizontal aim per ANSI C136.10-2010. 11
- 12 Must be ordered with PIRHN.
- Requires MVOLT or HVOLT. 13
- Must be ordered with NLTAIR2. For additional information on PIRHN 14 visit
- CCE option not available with WBA, WBASC, AASP, AARP, AAWB, 15 AAWBSC, EGS, EGFV and BS.
- 16 Must be ordered with fixture for factory pre-drilling. Requires luminaire to be specified with PER7 option. Ordered and 17 shipped as a separate line item from Acuity Brands Controls.



**External Glare Shield** 

**External 360 Full Visor** 

AS3-5 320

AST25-320

AST35-320

Round Pole Only

DM32AS

4 @ 90

2.03

2.13

6.26

7.24

7.91

8.31

8.47

bv Sid

1.31

1.36

1.23

1.31

1.35

1.75

2.49

3.62

4.22

4.62

5.43

5.52

5.51

5.45

AS3-5 390

AST25-390

AST35-390

3 @ 90

Side B C & D

DM39AS

by Side

1.7

1.8

1.54

1.7

2.03

2.62

3.73

5.43

6.33

694

8.14

8.27

8.27

8.18

2 at 90

AS3-5 290

AST25-290

AST35-290

Side B & C

DM29AS

1.36

1.46

4 4 4

5.15

5.47

5.76

5.91

AS3-5 280

AST25-280

AST35-280

2@180

Side B & D

DM28AS

\*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

3 @ 90

1.52

1.62

4 52

5.21

5.67

5.97

6.11

2 @ 180

1.05

1.15

3.72

4.38

4.54

4.62

4.64

# **Pole/Mounting Informatiion**

Accessories including bullhorns, cross arms and other adpaters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit Accessories.

AS3-5 190

AST25-190

AST35-190

Single

Side B

DM19AS

2 @ 90

1.03

1.08

**Round Tenon Mount - Pole Top Slipfitters** RSY Mor

RPA AARP

RPA, AARP

RPA, AARP

Drill/Side Location by Configuration Type

nting Opt Head Location

**Drill Nomenclature** 

Tilt

0°

50°

60°

70°

80°

90°

Single

0.57

0.62

2.31

2.71

2.78

2.76

2.73

2 - 3/8

2 - 7/8'

4"

#8

RSX1 - Luminaire EPA

Fixture Quantity & Mounting Configuration

**Mounting Type** 

SPA - Square Pole Adaptor

RPA - Round Pole Adaptor

Arm Square/Round Pole

### HANDHOLE ORIENTATION



### **RSX POLE DRILLING**



### **RSX STANDARD ARM & ADJUSTABLE ARM**



### MA - Mast Arm Adaptor 0.49 0.95 0.89 1.36 1.2 1.87 0° 0.57 1.03 1.05 1.52 1.36 2.03 10° 0.68 1.34 1.33 2 1.74 2.64 20° 0.87 1.71 1.73 2.56 2.26 3.42 30° 1.24 2.19 2.3 3.21 2.87 4.36 40° 1.81 2.68 2.98 3.85 3.68 5.30 IS - Integral Slipfitter AASP/AARP - Adjustable 45° 2.11 2.92 3.44 4.2 4.08 5.77

3.17

3.66

3.98

4.18

4.25



4 at 90°

AS3-5490

AST25-490

AST35-490

4 @ 90

Side A B C & D

DM49AS

4 Side

2.26

2.36

2.1

2.26

2.71

3.49

4.97

7.24

8.44

925

10.86

11.03

11.03

10.97

D Handhole

Isofootcandle plots for the RSX1 LED P4 40K. Distances are in units of mounting height (20').













# **Performance Data**

### Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
5°C	41°F	1.04
10°C	50°F	1.03
15℃	59°F	1.02
20°C	68°F	1.01
25℃	77°F	1.00
30°C	86°F	0.99
35℃	95°F	0.98
40°C	104°F	0.97
45°C	113°F	0.96
50°C	122°F	0.95

# **Electrical Load**

			Current (A)									
Performance Package	System Watts (W)	120V	208V	240V	277V	347V	480V					
P1	51W	0.42	0.25	0.21	0.19	0.14	0.11					
P2	72W	0.60	0.35	0.30	0.26	0.21	0.15					
P3	109W	0.91	0.52	0.45	0.39	0.31	0.23					
P4	133W	1.11	0.64	0.55	0.48	0.38	0.27					

### **Projected LED Lumen Maintenance**

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.97	>0.95	>0.92

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.



### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance	System Watts	Distribution.		(3000	30K IK, 70 CR	I)			40K (4000K, 70 CRI)					50K (5000K, 70 CRI)						
Раскаде		Туре	Lumens	В	U	G	LPW	Lumens	В	U	G	LPW	Lumens	В	U	G	LPW			
		R2	6,482	1	0	1	126	7,121	1	0	1	139	7,121	1	0	1	139			
		R3	6,459	1	0	2	127	7,096	1	0	2	139	7,096	1	0	2	139			
		R3S	6,631	1	0	1	129	7,286	1	0	2	142	7,286	1	0	2	142			
		R4	6,543	1	0	2	128	7,189	1	0	2	141	7,189	1	0	2	141			
D1	51W	R4S	6,313	1	0	1	124	6,936	1	0	1	136	6,936	1	0	1	136			
r i	5100	R5	6,631	3	0	2	130	7,286	3	0	2	143	7,286	3	0	2	143			
		R5S	6,807	3	0	1	133	7,479	3	0	1	147	7,479	3	0	1	147			
		AFR	6,473	1	0	1	127	7,112	1	0	1	139	7,112	1	0	1	139			
		AFRR90	6,535	2	0	2	127	7,179	2	0	2	140	7,179	2	0	2	140			
		AFRL90	6,562	2	0	1	128	7,210	2	0	2	140	7,210	2	0	2	140			
		R2	8,991	2	0	1	123	9,878	2	0	1	135	9,878	2	0	1	135			
		R3	8,959	2	0	2	124	9,843	2	0	2	137	9,843	2	0	2	137			
		R3S	9,198	2	0	2	126	10,106	2	0	2	139	10,106	2	0	2	139			
		R4	9,077	2	0	2	126	9,972	2	0	2	139	9,972	2	0	2	139			
50	72W	R4S	8,757	1	0	2	122	9,622	2	0	2	134	9,622	2	0	2	134			
rz	/200	R5	9,198	4	0	2	128	10,106	4	0	2	140	10,106	4	0	2	140			
		R5S	9,443	3	0	1	131	10,374	3	0	1	144	10,374	3	0	1	144			
		AFR	8,979	2	0	1	125	9,865	2	0	1	137	9,865	2	0	1	137			
		AFRR90	9,064	3	0	2	124	9,959	3	0	2	137	9,959	3	0	2	137			
		AFRL90	9,102	3	0	2	125	10,001	3	0	2	137	10,001	3	0	2	137			
		R2	12,808	2	0	1	117	14,072	2	0	2	129	14,072	2	0	2	129			
				R3	12,763	2	0	2	117	14,023	2	0	2	129	14,023	2	0	2	129	
		R3S	13,104	2	0	2	120	14,397	2	0	2	132	14,397	2	0	2	132			
		R4	12,930	2	0	2	119	14,206	2	0	2	130	14,206	2	0	2	130			
D2	100W	R4S	12,475	2	0	2	114	13,707	2	0	2	126	13,707	2	0	2	126			
C1	10900	R5	13,104	4	0	2	120	14,397	4	0	2	132	14,397	4	0	2	132			
		R5S	13,452	3	0	2	123	14,779	3	0	2	136	14,779	3	0	2	136			
		AFR	12,791	2	0	1	117	14,053	2	0	2	129	14,053	2	0	2	129			
		AFRR90	12,913	3	0	3	118	14,187	3	0	3	130	14,187	3	0	3	130			
		AFRL90	12,967	3	0	2	118	14,247	3	0	3	130	14,247	3	0	3	130			
		R2	14,943	2	0	2	112	16,417	2	0	2	123	16,417	2	0	2	123			
		R3	14,890	2	0	3	112	16,360	2	0	3	123	16,360	2	0	3	123			
		R3S	15,287	2	0	2	115	16,796	2	0	2	126	16,796	2	0	2	126			
		R4	15,085	2	0	3	113	16,574	2	0	3	125	16,574	2	0	3	125			
D4	133W	R4S	14,554	2	0	2	109	15,991	2	0	2	120	15,991	2	0	2	120			
F4		R5	15,287	4	0	2	115	16,796	4	0	2	126	16,796	4	0	2	126			
		R5S	15,693	4	0	2	118	17,242	4	0	2	130	17,242	4	0	2	130			
		AFR	14,923	2	0	2	112	16,395	2	0	2	123	16,395	2	0	2	123			
		AFRR90	15,065	3	0	3	113	16,551	3	0	3	124	16,551	3	0	3	124			
		AFRL90	15,128	3	0	3	114	16,621	3	0	3	125	16,621	3	0	3	125			



# **Dimensions & Weights**

### Luminaire Weight by Mounting Type

Mounting Configuration	Total Luminaire Weight
SPA	22 lbs
RPA	24 lbs
MA	22 lbs
WBA	25 lbs
WBASC	28 lbs
IS	25 lbs
AASP	25 lbs
AARP	27 lbs
AAWB	28 lbs
AAWSC	31 lbs

### **RSX1 with Round Pole Adapter (RPA)**



Length: 22.8" (57.9 cm) Width: 13.3" (33.8 cm) Height: 3.0" (7.6 cm) Main Body 7.2" (18.4 cm) Arm

### **RSX1 with Mast Arm Adapter (MA)**



Length: 23.2" (59.1 cm) Width: 13.3" (33.8 cm) Height: 3.0" (7.6 cm) Main Body 3.5" (8.9 cm) Arm

# **RSX1 with Adjustable Slipfitter (IS)**



Length: 20.7" (52.7 cm) Width: 13.3" (33.8 cm) Height: 3.0" (7.6 cm) Main Body 7.6" (19.3 cm) Arm





7/16" locking thru bolt/nut provided	
7/8" KO - fits 1/2" NPT water- tight fitting	

Note: RPA — Round Pole mount can also be used to mount on square poles by omitting

the round pole adapter plate shown here.



Н

COMMERCIAL OUTDOOR

### **RSX1 with Wall Bracket (WBA)**



Length: 23.6" (59.9 cm) Width: 13.3" (33.8 cm) Height: 3.0" (7.6 cm) Main Body 8.9" (22.6 cm) Arm





### Wall Bracket (WBA) Mounting Detail



### RSX1 with Wall Bracket with Surface Conduit Box (WBASC)







Length: 25.3" (64.3 cm) Width: 13.3" (33.8 cm) Height: 3.0" (7.6 cm) Main Body 9.2" (23.4 cm) Arm

### Surface Conduit Box (SCB) Mounting Detail





RSX1 with Adjustable Tilt Arm - Square or Round Pole (AASP or AARP)



### Notes

AASP: Requires 3.0" min. square pole for 1 at 90°. Requires 3.5" min. square pole for mounting 2, 3, 4 at 90°. AARP: Requires 3.2" min. dia. round pole for 2, 3, 4 at 90°. Requires 3.0" min. dia. round pole for mounting 1 at 90°, 2 at 180°, 3 at 120°.

### RSX1 with Adjustable Tilt Arm with Wall Bracket (AAWB)




#### RSX1 with Adjustable Tilt Arm with Wall Bracket and Surface Conduit Box (AAWSC)



Automotive Front Row - Rotated Optics (AFRL90/R90)



(Example: 2@180 - arrows indicate direction of light exiting the luminaire)



#### nLight Control - Sensor Coverage and Settings



Dimmed State High Level Photocell Dwell Time Ramp-up	
Option (unoccupied) (when occupied) Operation (occupancy time delay) (from unoccupied	fime Ramp-down Time to occupied) (from occupied to unoccupied)
NLTAIR2 PIRHN Approx. 30% Output 100% Output Enabled @ 1.5FC 7.5 minutes 3 second	ds 5 minutes

\*Note: NLTAIR2 PIRHN default settings including photocell set-point, high/low dim rates, and occupancy sensor time delay are all configurable using the Clairity Pro App. Sensor coverage pattern shown with luminaire at 0°. Sensor coverage pattern is affected when luminaire is titled.

#### **FEATURES & SPECIFICATIONS**

#### INTENDED USE

The RSX LED area family is designed to provide a long-lasting, energy-efficient solution for the onefor-one replacement of existing metal halide or high pressure sodium lighting. The RSX1 delivers 7,000 to 17,000 lumens and is ideal for replacing 70W to 400W HID pole-mounted luminaires in parking lots and other area lighting applications.

#### CONSTRUCTION

The RSX LED area luminaire features a rugged die-cast aluminum main body that uses heatdissipating fins and flow-through venting to provide optimal thermal management that both enhances LED performance and extends component life. Integral "no drill" mounting arm allows the luminaire to be mounted on existing pole drillings, greatly reducing installation labor. The light engines and housing are sealed against moisture and environmental contaminants to IP66. The low-profile design results in a low EPA, allowing pole optimization. All mountings are rated for minimum 1.5 G vibration load per ANSI C136.31. 3G Mountings: Include SPA, RPA, MA, IS, AASP, and AARP rated for 3G vibration. 1.5G Mountings: Include WBA, WBASC, AAWB and AAWSC rated for 1.5G vibration.

#### FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures superior adhesion as well as a minimum finish thickness of 3 mils. The result is a high-quality finish that is warrantied not to crack or peel.

#### COASTAL CONSTRUCTION (CCE)

ptional corrosion resistant construction is engineered with added corrosion rotection in materials and/or pre-treatment of base material under superYurable paint. Provides additional corrosion protection for applications nearUoastal areas. Finish is salt spray tested to over 5,000 hours per ASTM B117 with cribe rating of 10. Additional lead-times apply.

#### OPTICS

Precision acrylic refractive lenses are engineered for superior application efficiency, distributing the light to where it is needed most. Available in short and wide pattern distributions including Type 2, Type 3, Type 4, Type 45, Type 5, Type 5S, AFR (Automotive Front Row), and AFR rotated AFRR90 and ARFL90.

#### ELECTRICAL

Light engine(s) configurations consist of high-efficacy LEDs mounted on metal-core circuit boards and aluminum heat sinks to maximize heat dissipation. Light engines are IP66 rated. LED lumen maintenance is >L92/100,000 hours. CCT's of 3000K, 4000K and 5000K (minimum 70 CRI) are available. Fixtures ship standard with 0-10v dimming driver. Class 1 electronic drivers ensure system power factor >90% and THD <20%. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

#### STANDARD CONTROLS

The RSX LED area luminaire has a wide assortment of control options. Dusk to dawn controls include MVOLT and 347V button-type photocells and NEMA twist-lock photocell receptacles.

#### nLIGHT AIR CONTROLS

The RSX LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing with photocontrol functionality and is suitable for mounting heights up to 40 feet. No commissioning is required when using factory default settings that provide basic stand-alone motion occupancy dimming that is switched on and off with a built-in photocell. See chart above for motion sensor default out-of-box settings. For more advanced wireless functionality, such as group dimming, nLight AIR can be commissioned using a smartphone and the easy-to-use CLAIRITY app. nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be chueved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

#### INSTALLATION

Integral "no-drill" mounting arm allows for fast, easy mounting using existing pole drillings. Select the "SPA" option for square poles and the "RPA" option to mount to round poles. Note, the RPA mount can also be used for mounting to square poles by omitting RPA adapter plate. Select the "MA" option to attach the luminaire to a 2 3/8" horizontal mast arm or the "IS" option for an adjustable slipfitter that mounts on a 2 3/8" OD tenon. The adjustable slipfitter has an integral junction box and offers easy installation. Can be tilted up to 90° above horizontal. Additional mountings are available including a wall bracket, adjustable til arm for direct-to-pole and wall and a surface conduit box for wall mount applications.

#### LISTINGS

CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at <a href="http://www.designlights.org/QPL">www.designlights.org/QPL</a> to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only. U.S. Patent No. D882, 146S

#### BUY AMERICAN ACT

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to <u>www.acuitybrands.com/buy-american</u> for additional information.

#### WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.





PROJECT

TYPE

VOLTAGE

# OUTDOOR WALL FIXTURE \$11V

# OUTDOOR DECORATIVE EVERSTONE

EXTENDS: 12 3/4" H/CTR: 5 1/4" BACKPLATE: 10 5/8" X5 1/2"

# SPECIFICATIONS

- Black, White, Sand, Gray, & Bronzestone
- Nylon Mounting Hardware Included
- Oceanside Approved
- Clear or Frosted Acrylic Diffuser
- Wall Mount Only
- Minimum Starting Temp -20°F
- UL Listed for Wet Locations
- Composite Construction



#### GUIDE CODE: S11VC-LR12W-WH-PC

Wave Lighting's S11V provides a level of beauty to any outdoor space. EverStone<sup>™</sup> is a proprietary compression molded composite material that provides a level of non-corrosive durability that is unavailable in traditional metallic lighting fixtures. Wave Lighting's S11V is designed for wall applications and non-corrosive mounting hardware is included.



# LED SOURCE OPTIONS

#### LIGHTWAVE LED - LR/LT

- 120V, 50/60 Hz
- AC Driver-On-Board Array
- Estimated 50,000 Hrs L<sub>70</sub>
- Low Flicker (LT models)
- Surge Supression
- Dimmable (see compatible dimmer list)
- High Efficacy LED Light Source
- 3000K or 4000K CCT 80 or 90CRI
- 5 Year Warranty
- Energy Star

### E26 MEDIUM BASE - LE26

- 120V, 50/60Hz
- "Screw-In" Medium Base A19/E26 LED Lamp
- Estimated 15,000 Hrs L<sub>70</sub>
- Low Flicker (3K models)
- Dimmable (see compatible dimmer list)
- 3000K CCT 90CRI or 4000K CCT 80CRI
- 3 Year Warranty
- Energy Star

#### CALL FOR PHOTOMETRIC INFORMATION

ITEM #	LENS	LIGHT SOURCE	сст	COLOR	OPTIONS
S11V	IV ACRYLIC E26 MEDIUM BASE		<b>C</b> -4K	<b>BK</b> -Blackstone	PC-Photocell
<b>C</b> -Clear <b>F</b> -Frosted	(1) 100W MAX Medium Base <b>LE26</b> -9.5W 800Im (E26 LED Lamp) <b>+ ★</b>	<b>W</b> -3K	WH-Whitestone SN-Sandstone GY-Graystone BZ-Bronzestone		
		120V LIGHTWAVE LED			
		LR12-13W 1000lm 80CRI ★ LR15-15W 1400lm 80CRI ★ LT12-12W 1040lm 90CRI LT15-16W 1400lm 90CRI			

+ Lamp included. ★Energy Star qualified product.

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# Product data sheets

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LED LENS 21"TALL HEXAGON WALL MNT LANTERN LUMINAIRE w/FROSTED	
ACRYLIC SIDE LENSES (1x)	
Not yet a DIALux member - RSX Area Luminaire Size 1 P1 Lumen Package 3000K	
CCT Type R2 Distribution (1x)	
Not yet a DIALux member - RSX Area Luminaire Size 1 P2 Lumen Package 4000K	
CCT Type R2 Distribution (1x)	

# Site 1

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# Luminaire list

Φ <sub>total</sub> 62178	Im	P <sub>tota</sub> 556	i 2 W	Luminous efficacy 111.8 lm/W				
pcs.	Manufact	urer	Article No.	Article name		Ρ	Φ	Luminous efficacy
2	Not yet a DIALux member		RSX1 LED P1 30K R2	RSX Area Luminaire Size 1 F CCT Type R2 Distribution	51.3 W	6482 lm	126.2 lm/W	
4	Not yet a DIALux member		RSX1 LED P2 40K R2	RSX Area Luminaire Size 1 P2 Lumen Package 4000K 72. CCT Type R2 Distribution		72.9 W	9878 lm	135.4 lm/W
9	Not yet a DIALux member		S11VF- LE1200C- WH	1-(44LED) 5"DIA 18W LED B LED LENS 21"TALL HEXAGC LUMINAIRE w/FROSTED AC	OARD W/CLEAR ACRYLIC N WALL MNT LANTERN RYLIC SIDE LENSES	18.0 W	1078 lm	59.9 lm/W

# Product data sheet

Not yet a DIALux member - 1-(44LED) 5"DIA 18W LED BOARD w/CLEAR ACRYLIC LED LENS 21"TALL HEXAGON WALL MNT LANTERN LUMINAIRE w/FROSTED ACRYLIC SIDE LENSES



Article No.	S11VF-LE1200C-WH
Ρ	18.0 W
$\Phi_{Luminaire}$	1078 lm
Luminous efficacy	59.9 lm/W
ССТ	3000 K
CRI	100



Polar LDC

# Product data sheet

Not yet a DIALux member - RSX Area Luminaire Size 1 P1 Lumen Package 3000K CCT Type R2 Distribution

Article No.	RSX1 LED P1 30K R2
Р	51.3 W
ΦLuminaire	6482 lm

Р	51.3 W
Φ <sub>Luminaire</sub>	6482 lm
Luminous efficacy	126.2 lm/W
ССТ	3000 K
CRI	100



Polar LDC

# Product data sheet

Not yet a DIALux member - RSX Area Luminaire Size 1 P2 Lumen Package 4000K CCT Type R2 Distribution

1	
()	

Article No.	RSX1 LED P2 40K R2
Ρ	72.9 W
$\Phi_{Luminaire}$	9878 lm
Luminous efficacy	135.4 lm/W
ССТ	3000 K
CRI	100



Polar LDC

# Site 1 Luminaire layout plan



# Site 1 Luminaire layout plan

Manufacturer	Not yet a DIALux member	Р	51.3 W
		$\Phi_{Luminaire}$	6482 lm
Article No.	RSX1 LED P1 30K R2		
Article name	RSX Area Luminaire Size 1 P1 Lumen Package 3000K CCT Type R2 Distribution		
Fitting	1x		

### Individual luminaires

Х	Y	Mounting height	Luminaire
180.862 ft	-60.344 ft	20.000 ft	14
109.170 ft	-59.369 ft	20.000 ft	15

# Site 1 Luminaire layout plan

Manufacturer	Not yet a DIALux member	Р	72.9 W
	member	Φιuminaira	9878 lm
Article No.	RSX1 LED P2 40K R2		
Article name	RSX Area Luminaire Size 1 P2 Lumen Package 4000K CCT Type R2 Distribution		
Fitting	1x		

## Individual luminaires

Х	Y	Mounting height	Luminaire
46.475 ft	-57.916 ft	25.000 ft	1
46.475 ft	-59.211 ft	25.000 ft	2
222.523 ft	-68.176 ft	25.000 ft	3
222.523 ft	-67.192 ft	25.000 ft	4

# Site 1 Luminaire layout plan

Manufacturer	Not yet a DIALux member	Р	18.0 W
		$\Phi_{Luminaire}$	1078 lm
Article No.	S11VF-LE1200C-WH		
Article name	1-(44LED) 5"DIA 18W LED BOARD w/CLEAR ACRYLIC LED LENS 21"TALL HEXAGON WALL MNT LANTERN LUMINAIRE w/FROSTED ACRYLIC SIDE LENSES		
Fitting	1x		

### Individual luminaires

Х	Y	Mounting height	Luminaire
149.285 ft	-62.741 ft	8.308 ft	5
85.414 ft	-89.554 ft	8.308 ft	6
165.727 ft	-89.519 ft	8.308 ft	7
164.155 ft	-62.780 ft	8.308 ft	8
132.781 ft	-62.803 ft	8.308 ft	9
85.137 ft	-62.516 ft	8.308 ft	10
150.386 ft	-89.525 ft	8.308 ft	11
130.127 ft	-97.500 ft	8.308 ft	12
116.748 ft	-97.573 ft	8.308 ft	13

# Site 1 Luminaire list

Φ <sub>total</sub> 62178	Im	P <sub>tota</sub> 556	I .2 W	Luminous efficacy 111.8 lm/W				
pcs.	Manufact	turer	Article No.	Article name		Ρ	Φ	Luminous efficacy
2	Not yet a DIALux member		RSX1 LED P1 30K R2	RSX Area Luminaire Size 1 F CCT Type R2 Distribution	P1 Lumen Package 3000K	51.3 W	6482 lm	126.2 lm/W
4	Not yet a DIALux member		RSX1 LED P2 40K R2	RSX Area Luminaire Size 1 F CCT Type R2 Distribution	2 Lumen Package 4000K	72.9 W	9878 lm	135.4 lm/W
9	Not yet a DIALux member		S11VF- LE1200C- WH	1-(44LED) 5"DIA 18W LED B LED LENS 21"TALL HEXAGC LUMINAIRE w/FROSTED AC	OARD w/CLEAR ACRYLIC DN WALL MNT LANTERN RYLIC SIDE LENSES	18.0 W	1078 lm	59.9 lm/W

Site 1 (Light scene 1)
Calculation objects





# Site 1 (Light scene 1) Calculation objects

# Surface result objects

Properties	Ø	min	max	<b>g</b> 1	<b>g</b> <sub>2</sub>	Index
Surface result object 16 Perpendicular illuminance (adaptive) Height: 0.000 ft	0.75 fc	0.004 fc	7.29 fc	0.005	0.001	RS1
Surface result object 16 Luminance Height: 0.000 ft	0.52 cd/m <sup>2</sup>	0.003 cd/m <sup>2</sup>	5.00 cd/m <sup>2</sup>	0.006	0.001	RS1

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

# Site 1 (Light scene 1) Surface result object 16



	JRS1
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Surface result object 16 Perpendicular illuminance (adaptive) Height: 0.000 ft	0.75 fc	0.004 fc	7.29 fc	0.005	0.001	RS1

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

Site 1 (Light scene 1)
Surface result object 16



DC1
KSL

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Properties	Ø	min	max	g1	<b>g</b> <sub>2</sub>	Index
Surface result object 16 Luminance Height: 0.000 ft	0.52 cd/m <sup>2</sup>	0.003 cd/m <sup>2</sup>	5.00 cd/m <sup>2</sup>	0.006	0.001	RS1

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))



# Dual Post CURVED PAY STATION CANOPIES



+ Sleek & modern design to improve your wash image.

+ Protects your expensive and sensitive electronics.

+ The post will be wrapped with your choice of baked

enamel colored aluminum.

## NON-ILLUMINATED CANOPY

ITEM	DESCRIPTION	WIND LOAD	PSF ROOF LOAD	PRICE
CPSHD	Dual Post Non-Illuminated Curved Pay Station Canopy	130MPH	40PSF	\$ <b>5,974</b> <sup>62</sup>

**Dimensions** Up to 108" W x 96" H x 72" D

Volts/AMPs 100~240VAC / 4AMPs

Construction

Top is heavy duty aluminum tubing 2" x 4" x .250" wrapped with baked enamel

aluminum. Middle beam is supported by

2 CNC cut bars 3/8" x 3 1/2" x 24" and

Heavy 4" x 4" x 3/8" cross beams. Top is heavy duty aluminum tubing 2" x 4" x .250"

wrapped with baked enamel aluminum.

Posts are heavy steel 4" x 6" x 3/16"

#### **EDGE ILLUMINATED CANOPY**

ITEM	DESCRIPTION	WIND LOAD	PSF ROOF LOAD	PRICE
CPSHDI	Dual Post Edge Illuminated Curved Pay Station Canopy	130MPH	30PSF	\$ <b>8,102</b> <sup>25</sup>

ACCESSO	DRIES	ACCESSORIES			
ITEM	DESCRIPTION	PRICE	ITEM	DESCRIPTION	PRICE
CB1	60" W Non-Illuminated Clearance/Alert Bar	\$155 <sup>01</sup>	RFKIT	RFID Reader Canopy Mount	\$ <b>372</b> <sup>92</sup>
DUALA	RECOMMENDED J-Anchor Assembly	\$ <b>246</b> <sup>51</sup>	ELED8	Single Sided OPEN/CLOSE LED Fixture	\$ <b>562</b> <sup>54</sup>
BEABC	Baked Enamel Bottom Canopy Cover	\$ <b>316</b> <sup>03</sup>	ILCTC	Illuminated Curved Canopy Topper with built-in photo eye	<b>\$716</b> <sup>34</sup>

# White Wash Handmade Molded | Wall Thin Brick Veneer

brickit.com/products/brick-product-details/white\_wash

### Back to list

# Option 1







SEE INFORMATION BELOW











## **Order Sample**

Genuine bricks on these boards are presented as a guideline and give a broad general idea of the product. They are routinely chosen from random lots. The final product range of color & texture variations are typical.

Price:

\$19.99 (per sample board)

Brick Size:

(Minimum quantity: 1)



# Customers also considered

View all

# Seashell Wirecut | Wall Thin Brick Veneer

brickit.com/products/brick-product-details/sea-shell

### Back to list

Option 2







# SEASHELL WIRECUT

## USE ORDER CONFIGURATOR

Calculate your project with many options in brick sizes, shapes (flats & corners), and installation systems. Create a bill of materials and estimate your project's exact costs with multiple shipping options.

START YOUR ORDER

## **BUY BRICKS BY A BOX**

Brick Size: Modular (MOD) [ H 2 1/4" x L 7 5/8" x T 9/16" ]

As low as \$7.34 / sq ft / Units: 56 bricks / BOX (covers 8.16 sq ft).

(Minimum quantity: 4)

Calculate product sq ft coverage with corners »

Total: **\$239.68** 

## **BUY BRICK SAMPLE**



Order our thin brick sample to experience the texture, color, and size. We highly recommend acquiring a sample board before purchasing this product.

## **Customers also considered**

View all

# Brick it PRODUCT PROFILE



Revised 1/2019

# Clay Thin Brick (1/2", 3/4" and 1" thick)

### General

We provide clay thin brick in a multitude of shades and textures to accommodate the visual and application requirements of most projects. Sizes range from 8 to 16 inch and from extruded to handmade providing the widest range of thin brick available for any application.

The thickness of the thin brick available is based on the method of manufacture and the desired texture/uniformity.

Extruded thin brick available in 1/2" thickness are typically extruded as thin brick with unique surface textures and colors meeting Type TBS tolerances.

The greatest variety of thin brick are available in molded and extruded 3/4" thickness. This thickness allows units to be cut from full units often specifically manufactured with larger coring and thinner webs to facilitate cutting while reducing the quantity of raw material required for manufacture. Material cut from the thin brick can be ground and reused to manufacture thin or full size units. In addition, Brick It's unique large scale custom cutting operation allows thin brick to be cut from a specific lot of full brick to ensure color matching of both full and thin brick.

Handmade thin brick are available in 3/4" thickness to accommodate the inherent variation expected from handmade units.

Today's thin brick are installed in a wide variety of different wall systems including thickset, thinset, metal panel systems (such as Brick It DMG<sup>®</sup> Panels) as well as precast and tilt-up concrete wall systems. The appearance of thin brick, as well as the method of manufacture, affects the potential use of the

thin brick in the various wall systems available. The thickness of the individual thin brick typically has minimal, if any, effect on any of the applications. While each of the three categories of thin brick previously listed can be installed in most of thin brick wall systems, the precast and tilt-up concrete wall systems require thin brick with very rigid tolerances and surface textures limited to smooth or velour (wirecut) textures. In addition the cleaning techniques utilized by concrete panel manufacturers may also limit colors typical of full size units. See additional information at the end of this Profile regarding thin brick for use with precast and tilt-up concrete wall systems.

Additional information is available from your Brick It representative for each thin brick wall system.

#### **Unit Specifications**

Thin brick is typically manufactured to conform to the require-ments of American Society for Testing

and Materials (ASTM) Standard Specification C 1088, Grade Exterior. Depending upon the particular product selected, Type TBA, TBS, or TBX may be available. These products also conform to the requirements of ASTM C 1088, Grade Interior. When specifying this product, the specifications should cite:

- 1) The product name and state "as distributed by Brick It."
- 2) Conformance to the requirements ASTM C 1088, Grade Exterior.
- 3) The actual unit dimensions listed as thickness x height x length.

Example: Harding Blend thin brick as distributed by Brick It to conform to the requirements of ASTM C 1088, Grade Exterior, Type TBS. The units shall have dimensions of 3/4" X 2-1/4" X 7-5/8".



#### **Design Criteria**

#### Size:

Table 1 provides the many sizes in which Brick It distributes thin brick.

#### **Dimensional Tolerances:**

Thin brick is manufactured to provide specific dimensional toler-ances. The dimensional tolerances of the product are intended to be within the requirements of ASTM C 1088, Type TBS for general use. Some products are manufactured to meet Type TBX. Products with colors matching Handmade bricks are manufactured to meet Type TBA. The product ordered will generally contain a number of units which are over or under the specified dimensions.



CONTINUED ON PAGE 3

TABLE 1	
Thin Brick Size, Coverage and V	<b>Neight</b>

	Specified Dimension								
Thin Brick Size	Thickn (inches)	iess (mm)	HeightLength(inches)(mm)(inches)(mm)		Thin Brick per square footAverage Wei per unit		ight (kg)		
Queen	3/4	20	2-3/4	70	7-5/8	194	5.63	1.6	0.7
Lightweight Modular	3/4	20	2-1/4	57	7-5/8	194	6.75	1.0	0.5
Lightweight Engineer Modular	3/4	20	2-3/4	70	7-5/8	194	5.63	1.0	0.5
1/2-Modular (extruded)	1/2	13	2-1/4	57	7-5/8	194	6.75	0.7	0.3
3/4-Modular (extruded/molded)	3/4	20	2-1/4	57	7-5/8	194	6.75	1.1	0.5
Modular (handmade)	1	25	2-1/4	57	7-5/8	194	6.75	1.1	0.5
1/2-Engineer Modular	1/2	13	2-3/4	70	7-5/8	194	5.63	0.8	0.4
3/4- Engineer Modular	3/4	20	2-3/4	70	7-5/8	194	5.63	1.6	0.7
Econo	3/4	20	3-5/8	92	7-5/8	194	4.50	1.5	0.7
Standard	3/4	20	2-1/4	57	8	203	6.55	1.1	0.5
Engineer Standard	3/4	20	2-3/4	70	8	203	5.39	1.7	0.8
Handmade Oversized	1	25	2-3/4	70	8-1/2	216	5.00	1.7	0.8
King Narrow-Bed	3/4	20	2-3/4	70	9-5/8	244	4.55	1.5	0.7
Engineer King	3/4	20	2-3/16	71	9-5/8	244	4.55	1.5	0.7
King	3/4	20	3-5/8	92	9-5/8	244	4.55	1.5	0.7
Roman	3/4	20	1-5/8	41	11-5/8	295	6.00	1.0	0.5
Norman	3/4	20	2-1/4	57	11-5/8	295	4.50	1.5	0.7
Utility	3/4	20	3-5/8	57	11-5/8	295	3.00	2.4	1.1
Kingston	3/4	20	2-3/4	70	11-5/8	295	3.75	1.9	0.9
Viking			1-5/8	41	15-58	397	4.50	XX	XX
Saxon	3/4	20	2-1/4	57	15-5/8	397	3.38	2.0	0.9
Titan	3/4	20	3-5/8	92	15-5/8	397	2.25	3.0	1.4

CONTINUED FROM PAGE 2

The dimensional variations are related to the raw materials, forming, drying and firing processes, and the desired finish and color. Thus, for some products, all the units may be slightly over or slightly under the specified dimensions.

Inquiries should be made regarding the dimensional variations which might be expected if project detailing requires precise coursing.

Specialty products or gauged products may be desirable when thin brick are incorporated into precast or tilt-up concrete wall systems. Many of Brick It's extruded products include dimensional tolerances tighter than those required by ASTM and can be utilized for precast concrete wall systems. Brick It also offers edge-grinding of units to create tighter tolerances if required.

#### **Configurations:**

These units are manufactured to conform to the requirements of ASTM C 1088.

#### Weight:

The weight of the brick units vary with the raw material, size, manufacturing processes. While actual weight of specific thin brick should be confirmed, average weight of each size thin brick manufactured by Brick It is included in Table 1.

#### Finishes:

Thin brick is available in a variety of textures. The textures include smooth, velour, bar, rug, matt, paper cut, scored, rockface, slurry and sand finishes. The availability of a particular finish is usually dependent on the specific product.

Glazed thin brick meeting ASTM C126 surface requirements are also available.

#### Color:

Thin brick is available in a multitude of color blends. The colors

available include various shades of red, brown, gray, buff, and white. Some colors are the natural colors of the fired raw materials, while others are produced by fusing a surface treatment onto the surface of the brick during firing or adding minerals to the bodies of the brick. If through body colors are desired, inquiries should be made regarding the availability of the desired colors. The color selection may also be limited by the product selected and the desired finish. Consult with your Brick It representative for products acceptable in specific applications.

#### Shapes:

Common thin brick shapes are shown in Figure A.

Shapes dimensioned for coursing with other brick sizes, and custom shapes having configurations to fit specific project requirements are also available. These nonstandard shapes require detailed dimension drawings which must be submitted to and approved by Brick It.

All shapes should be identified early in the project design because certain shape configurations may require special forming, drying, or firing processes. These processes may require more time or different scheduling than standard thin brick.

### **Physical Properties of Units**

#### **Compressive Strength:**

Because thin brick are individually attached to substrates, compressive strength is not a relevant quality of thin bricks. ASTM C 1088 does not require reporting of compressive strength because testing tall, thin sections of brick for compressive strength are not indicative of performance.

#### Water Absorption:

Extruded products: The average maximum hot-water absorp-tion by submersion in boiling water for five hours is less than 17% and will typically be less than 9%. The average

saturation coefficient is generally less than 0.78. In instances where the saturation coefficient exceeds 0.78, the cold water absorption for Brick It brick is less than 8% and the units meet the requirements of ASTM C1088, Grade Exterior.

Molded and Handmade products: The average maximum

hot-water absorption by submersion in boiling water for five hours is less than 17% and will typically be less than 15%. The average saturation coefficient is generally less than 0.65.

#### Initial Rate of Absorption (IRA):

Extruded products: The initial rate of absorption (suction) normally does not exceed 30 grams per 30 square inches per minute under laboratory conditions.

Molded and Handmade products: The initial rate of absorption (suction) normally may exceed 30 grams per 30 square inches per minute under laboratory conditions.

### **Properties of Walls**

#### Compressive Strength:

Compressive strength of a thin brick wall system is not typically affected by the thin brick units provided.

Nominal 3/8 Inch Mortar Joints					
	FL	ATS	SHAPES		
Thin Brick Size	Stretcher	Soldier	Corner (Vertically)	Header (Horizontally)	
Queen	1.50	3.75	3.75	1.57	
Lightweight Modular	1.50	4.50	4.50	1.57	
Lightweight Engineer Modular	1.50	3.75	3.75	1.57	
Modular	1.50	4.50	4.50	1.57	
Engineer Modular	1.50	3.75	3.75	1.57	
Econo	1.50	3.00	3.00	1.57	
Standard	1.43	4.50	4.50	1.50	
Engineer Standard	1.43	3.75	3.75	1.50	
Handmade Oversized	1.33	3.75	3.75	1.41	
King Narrow-Bed	1.20	3.75	3.75	1.25	
Engineer King	1.20	4.26	3.75	1.25	
King	1.20	3.75	3.75	1.25	
Roman	1.00	6.00	1.50	1.03	
Norman	1.00	4.50	4.50	1.03	
Utility	1.00	3.00	3.00	1.03	
Kingston	1.00	3.75	3.75	1.03	
Viking	XX	XX	XX	XX	
Saxon	0.75	4.50	*	0.77	
Titan	0.75	3.00	*	0.77	

### TABLE 3 Units Per Linear Foot in Various Positions

\*12-inch units could be used at corner to allow proper 1/2-bond coursing.

#### **Thermal Performances:**

The thermal resistance of Brick It thin brick is approximately 0.11 (hr • sq. ft.• deg f)/(Btu• in.). Therefore thin brick thermal performance is as follows:

Thin Brick Thickness (inch)	Thermal Resistance (hr • sq. ft.• deg f)/(Btu• in.)
<b>`1/2</b> ´	0.05
3/4	0.08
1	0.11

The thermal resistance is used to predict the thermal performance of wall elements under steady-state conditions. The mass and specific heat of this product provide additional benefit when subjected to the dynamic conditions of the natural environment. As described in the American Society of Heating Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 90.1, the effects of mass, specific heat, and the color of the brick should be considered. Reference: BIA Technical Notes on Brick Construction 4 Revised, "Heat Transmission Coefficients of Brick Masonry Walls", 4B Revised, "Energy Code Compliance of Brick Masonry Walls" and 43D, "Brick Passive Solar Heating Systems, Part IV - Material Properties."

#### **Sound Transmission:**

The sound transmission of thin brick has not been measured and is typically dependent upon the overal wall system.

#### Fire Resistance:

Fire resistance ratings for thin brick are dependent upon the entire wall system utilized. Prescriptive one-hour and two-hour fire-resistance-rated exterior walls constructed with adhered thin veneer brick units on steel or wood studs are included in the International Code Council (ICC) International Building Code (IBC). These designs can be used by architects/engineers/designers of building construction projects in those jurisdictions that adopt and enforce the IBC where the nonbearing exterior walls of a building are required to have a one-hour or two-hour fire-resistance rating.

#### **Coefficient of Thermal Expansion:**

Thin brick has a coefficient of thermal expansion of approximately 0.000004 in. (in.  $\bullet^\circ F$ ) as listed in The

Building Code Requirements for Masonry Structures (TMS 402/ACI 530/ASCE 5).

#### **Coefficient of Moisture Expansion:**

Brick It thin brick veneer have a coefficient of moisture expansion which is less than 0.0005 in./in. Most of the moisture expansion of Brick It thin brick occurs immediately after the bricks are fired, before the brick arrive at the job site.

### Construction

#### **Storage and Protection:**

Store brick in their packaging off ground to avoid contamination by water, mud, dust or materials likely to cause staining or other defects. Do not use packages of thin brick as supports or work surfaces. Cover packages with a weather resistant membrane held securely in place or otherwise protect packages from the elements.

#### Wetting:

As deemed necessary (see IRA), wet units prior to contact with mortar. Wetting procedures vary by thin brick application and environment. Contact your Brick It representative for specific information.

#### Weather Extremes:

When using Portland cement mortars, follow the procedures required by The International Building Code (IBC). The IBC references cold and hot weather construction provisions for masonry that are based on those found in Specification for Masonry Structures (TMS 602/ACI 530.1/ASCE 6) and required by Building Code Requirements for Masonry Structures (TMS 402/ACI 530/ASCE 5). While specific cold and hot weather provisions are not included within the International Residential Code (IRC) the IRC states that mortar for use in masonry construction shall comply with ASTM C 270, which requires mortar for other than masonry veneer to be prepared in accordance with the Masonry Industry Council's "Hot and Cold Weather Masonry Construction Manual." Further information is also available in the BIA Technical Notes on Brick Construction 1, "Cold and Hot Weather Construction."

When using proprietary attachment systems, adhesives or preblended cements, consult the manufacturer's written instructions for cold and hot weather requirements.

#### Installation:

When using Portland cement mortars in thickset applications butter the backs of the units and set units in full mortar joints. Use a Portland cement lime mortar conforming to ASTM C 270. A prepackaged mortar mix conforming to these specifications is Brick It Color Mortar Blend. Reference: Brick It Product Profile "Brick It Color Mortar Blend." Joints must be completely filled to ensure performance.

When using proprietary attachment systems or preblended adhesives or cements, consult the manufacturer's written instructions for installation.

#### **Tooling:**

When thumbprint hard, tool all joints to produce a concave, grapevine, or vee joint finish.

#### **Protection of Work:**

At the end of each day and before each shut down period, cover work with a strong weather resistant membrane which is held in place securely. Scaffold boards closest to the wall should be tilted up at days end to prevent splatter during rain. Care should also be taken to protect brickwork located near the ground from mud and dirt.

#### **Cleaning:**

When the attachment system uses Portland cement mortars, remove excess mortar with a stiff bristle brush at the end of each shift. Clean with wooden paddles and stiff fiber brushes using clean water. If a cleaning agent is necessary, presoak the wall with clean water prior to applying the cleaning agent and thoroughly rinse the wall with clean water after cleaning. Prior to determining a final cleaning solution, test the procedure and cleaning agent on a small sample area to observe the effectiveness of the overall cleaning solution and, most importantly, to detect any possible deleterious effects

or changes in appearance of the brick. Additional information is available in the Brick It website. }

Check with your Brick It Distributor or District Sales Manager prior to making a final selection of a cleaning procedure and solution. When using Type N mortars, clean down should never occur prior to 7 days after work is completed to assure appropriate curing of the mortar. Reference: BIA Technical Notes on Brick Construction 20, "Cleaning Brickwork."

When using proprietary attachment systems, adhesives or preblended cements, consult the manufacturer's written instructions for cleaning.

#### **Estimating:**

The quantities of brick and mortar required for a project vary with the size of the brick unit, the wall construction, the number of field cuts necessary, and the workmanship. Table 2 provides the guantities of brick and mortar guantities per 1,000 brick units. The figures are based on the units being placed in the wall as stretchers in stack or running bond. The values provided are estimates of the quantities in the finished wall and do not account for waste. These values represent the actual number of units per linear foot for the various brick sizes placed on the four most frequently used positions in the wall. The values are based on a

nominal three-eight inch mortar joint. Reference: BIA Technical Notes on Brick Construction 10, "Dimensioning and Estimating Brick Masonry."

# PRECAST AND TILT-UP CONCRETE WALL PANEL APPLICATIONS

Concrete panel manufacturers, including precast and tilt-up wall systems, offer a unique and well performing walls for a variety of applications that typically involve relatively repetitive wall panels. Such systems allow the use of thin brick in wall systems that previously did not include thin brick. With the advent of various thin brick liners that hold the brick in place, as well as advancements in concrete technology, thin brick can be placed face down in the concrete liner. The liner holds the thin brick in place as concrete is poured and the brick form the finished surface. In such systems the thin brick must be uniform enough to reduce potential leakage between the liner and the edge of the brick.

In addition, the finished faces of the thin brick are typically required to be waxed in order to prevent concrete, which passes between the liner and the edge of the clay unit, from sticking to the finished surface of the brick. The wax and concrete is removed after the panel is removed from the liner utilizing a hot water pressure washer.

While Brick It produces a wide

variety of colors, textures and sizes available in thin brick, precast and tilt-up concrete panels typically require very uniform products that are often tighter than grade TBX, with textures limited to smooth or wirecut to reduce concrete leakage between the thin brick and the liner. Cleaning procedures typically limit surface coatings to very light sand or spray coatings that are not removed by the high pressure cleaning techniques.

Brick It is capable of providing a wide variety of thin brick meet such requirements, including many thru-body and surface coated brick, as well as smooth and wirecut textures capable of withstanding concrete panel cleaning techniques.

In addition, Brick It offers edge-grinding of thin brick to ensure such uniformity and waxing of finished faces often required by concrete panel manufacturers; as well as standard thin brick shapes and many custom shapes for unique thin brick possibilities.

Be sure to contact your local Brick It representative to determine available thin brick for such applications.

For further information contact: Brick It:



631.244.3993 *customerservice*@brickit.com www.brickit.com

This document is furnished for informational purposes only and is NOT intended as an EXPRESSED WARRANTY. Brick It accepts no liability for the use of this material. All information should be independently evaluated by a qualified design professional in the context of the specific circumstances in which it is to be applied.

Seller warrants title to said goods and that the goods supplied shall meet applicable specifications where such are designated in the Buyer's order. Should the said goods fail to conform to the foregoing warranty, Seller will, at its option replace the same, F.O.B. job site or refund the portion of purchase price paid for such non-conforming goods. SELLER SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR ANY BREACH OF THESE WARRANTIES. THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESS OR IMPLIED, WRITTEN OR ORAL, INCLUDING, WITHOUT LIMITATION, WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.



# **SAFETY DATA SHEET**

Revision date: 04-January-2019

Page 1 of 7

# **1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE**

Product Identifier Material Name:

#### **THIN BRICK**

Trade Name: Chemical Family: Formula: Thin Brick Predominately Aluminum Silicates Mixture

Relevant Identified Uses of the Substance or Mixture and Uses Advised AgainstIntended Use:Building material used for structural support.

Emergency telephone number: Corporate Office: (610) 374-4011 Technical Services: (610) 562-3076

## 2. HAZARDS IDENTIFICATION

Appearance:	Granular brick-shaped solid; comes in wide range of colors
Hazard Classification of the Substance or Mixture:	Skin irritation 2 Eye irritation 2A Skin sensitization 1B Carcinogenicity 1A Specific target organ toxicity - Single exposure 3 Specific target organ toxicity - Repeated exposure 1
Signal Word:	Danger
Hazard Statement:	Thin Brick dust may contain crystalline silica, a chemical that has been determined by certain agencies to cause cancer. See Section 11 for more information on health hazards.
Pictograms:	

Revision date: 04-January-2019

#### 2. HAZARDS IDENTIFICATION **Precautionary Statements:** Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Do not breathe dust. **Response:** If exposed or concerned: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If thin brick dust is inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. Storage: Not Applicable **Disposal:** Dispose of unused or unwanted thin brick products in accordance with all local, regional, national and international regulations.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	% Weight
Aluminum Silicates	Various	50 – 85
Quartz	14808-60-7	Varies
Chromium compounds	Various	0 – 3
Manganese compounds	Various	0 – 3
Iron Compounds as granular body additives	Various	0 – 3
Calcium compounds	Various	0 – 3

**Additional Information:** 

The above chemistries are provided for industrial hygiene and environmental purposes and are not intended to represent product specifications. This information has been compiled from data believed to be reliable. Elements such as aluminum, arsenic, boron, calcium, chromium, cobalt, copper, lead, molybdenum, nickel, tin, titanium, vanadium, and zirconium may be present in trace amounts. Thin brick products as shipped do not present an exposure hazard.

# **4. FIRST AID MEASURES**

Description of First Aid Measures Eye Contact:

Flush with running water. Obtain medical assistance if irritation continues.

#### Material Name: Thin Brick

#### Revision date: 04-January-2019

5. FIRE-FIGHTING MEASURES					
	Specific Treatments:	In case of accident or if you feel unwell, seek medical advice immediately.			
Recommendations for Immediate Medical Attention and Special Treatment Needed           Notes to Physician:         Symptoms may not appear immediately.					
	Medical Conditions Aggravated by Exposure:	Excessive dust exposure may aggravate any existing respiratory disorders or diseases. Possible complications or allergies resulting in irritation to skin, eyes, and respiratory tract may occur from excessive exposure to dusts.			
Most	Important Symptoms and Effect Symptoms and Effects of Exposure:	t <b>s, Both Acute and Delayed</b> For information on potential signs and symptoms of exposure, See Section 2 - Hazards Identification and/or Section 11 - Toxicological Information.			
	Inhalation:	Remove from exposure to airborne particulates. Consult a physician if breathing does not return to normal.			
	Ingestion:	None (no known acute effects).			
	Skin Contact:	Wash with soap and water. If an allergic reaction causes a rash that does not heal within a few days consult a physician. Treat abrasions as any other scrape or cut with disinfectants and bandages.			

Extinguishing Media:Not applicableSpecial Hazards Arising from the Substance or Mixture

Hazardous Combustion No data available Products:

**Fire / Explosion Hazards:** Thin bricks as shipped do not pose a fire or explosion hazard.

#### Advice for Fire-Fighters

None

# 6. ACCIDENTAL RELEASE MEASURES

# Personal Precautions and Protective Equipment

Use personal protection recommended in Section 8.

#### Emergency Procedures

Not applicable.

# Methods and Material for Containment and Cleaning Up Not applicable.

### **Cleanup Procedures**

Not applicable.

Revision date: 04-January-2019

## 7. HANDLING AND STORAGE

#### **Precautions for Safe Handling**

Minimize dust generation and accumulation. Avoid breathing dust. Use wet methods, especially when cutting thin brick to reduce the generation of dust.

#### Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions:

Always stack and store thin bricks in a stable manner to avoid falling hazards.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Aluminum Silicates OSHA PEL ACGIH TLV	15 mg/m <sup>3</sup> 10 mg/m <sup>3</sup>
Quartz OSHA PEL ACGIH TLV	10 / %SiO <sub>2</sub> + 2 mg/m <sup>3</sup> 0.025 mg/m <sup>3</sup> (respirable)
Chromium Compounds OSHA PEL ACGIH TLV	Not available Not available
Manganese Compounds OSHA PEL ACGIH TLV	Not available Not available
Iron Compounds as granular body ac OSHA PEL ACGIH TLV	dditives Not available Not available
Calcium Compounds OSHA PEL ACGIH TLV	Not available Not available
Exposure Controls Engineering Controls: Personal Protective Equipment: Feet: Eyes and Face: Skin: Respiratory protection:	Provide adequate ventilation to maintain exposures below the OSHA PEL and ACGIH TLV for quartz and other substances. Refer to applicable national standards and regulations in the selection and use of personal protective equipment (PPE). Use of steel toe shoes is recommended when handling thin brick. Face shields should be used when sawing thin brick. Use gloves and or protective clothing if abrasions or allergic reactions are experienced. For airborne concentration exceeding the OSHA PEL or ACGIH TLV use a NIOSH and/or MSHA approved respirator.
Other:	Use of wet sawing methods is recommended anytime that thin bricks must be cut.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Granular solid	Color:
Odor: Molecular Formula:	Essentially odorless Mixture	Odor Threshold: Molecular Weight:
Solvent Solubility: Water Solubility: pH: Melting/Freezing Point (°C): Boiling Point (°C): Partition Coefficient: (Method, pH, E No data available	No data available Negligible No data available. No data available No data available No data available	
Decomposition Temperature (°C):	No data available.	
Evaporation Rate (Gram/s): Vapor Pressure (kPa): Vapor Density (g/ml): Relative Density: Viscosity:	No data available No data available No data available No data available No data available	
Flammablity: Autoignition Temperature (Solid) (°C): Flammability (Solids): Flash Point (Liquid) (°C): Upper Explosive Limits (Liquid) (% by Vol.): Lower Explosive Limits (Liquid) (% by Vol.):		No data available No data available No data available No data available No data available No data available

### **10. STABILITY AND REACTIVITY**

**Reactivity: Chemical Stability:** Possibility of Hazardous Reactions: **Oxidizing Properties: Incompatible Materials: Hazardous Decomposition** Products:

Thin bricks as shipped are not reactive Stable under normal conditions of use

No data available No data available No data available

# **11. TOXICOLOGICAL INFORMATION**

#### Effects of Short Term and Long Term Exposure:

#### Short Term

Thin bricks as shipped do not present an inhalation, ingestion or contact hazard. However, operations such as sawing and grinding may result in the following effects.

Eye:

May cause irritation by abrasion with dust or chips.

Thin bricks come in a wide range of colors No data available Mixture

11. TOXICOLOGICAL INFORMATION		
Skin:	Thin brick dust or chips may cause allergic reactions in hypersensitive individuals; May cause cuts and skin abrasions.	
Inhalation:	Thin brick dust or chips may cause congestion and irritation in nasal and respiratory passages.	
Ingestion:	No known acute effects.	
Long Term Excessive exposures to respirable partic diseases such as silicosis.	ulates (dust) over an extended period of time may result in the development of pulmonary	
Information on Toxicological Effects General Information:	Toxicological properties of the formulation have not been investigated. The information in this section describes the potential hazards of crystalline silica. Thin brick dust may contain crystalline silica, a chemical that has been determined by certain agencies to cause cancer and other chemicals known to cause cancer, birth defects and other reproductive harm. Inhalation of thin brick dust above established or recommended exposure levels should be avoided by use of wet sawing or shaping and/or use of a NIOSH and/or MSHA approved respirator.	
Carcinogen Status:	The following carcinogenicity classifications for crystalline silica have been established by the following agencies:	
OSHA:	Not regulated as a carcinogen	
IARC:	Group 1 carcinogenic in humans	
NIOSH:	Carcinogen, with no further categorization	
NTP:	Known carcinogen	

# **12. ECOLOGICAL INFORMATION**

There are no known environmental impacts. No ecological consideration when used according to directions.

## **13. DISPOSAL CONSIDERATIONS**

Waste Treatment Methods:

Dispose of waste in accordance with all applicable laws and regulations. State specific and Community specific provisions must be considered. It is recommended that waste minimization be practiced.

# **14. TRANSPORT INFORMATION**

#### This material is not regulated for transportation as a hazardous material/dangerous good.

DOT: Thin bricks as shipped are not hazardous materials per DOT regulations.

#### Revision date:04-January-2019

### **15. REGULATORY INFORMATION**

#### Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

RCRA	Thin brick in its solid form is typically considered a non-hazardous waste for disposal, but local regulation may vary, therefore all waste must be disposed/recycled/reclaimed in accordance with federal, state, and local environmental control regulations. Water containing thin brick solids, such as from wet sawing operations, should also be disposed of in accordance with federal, state and local environmental regulation. Thin brick waste should not be used as a blasting agent.
EPCRA Section 311/312:	Thin bricks as shipped are not a Section 311/312 reportable product.
EPCRA Section 313:	Thin bricks as shipped are not subject to the Section 313, Toxic Chemical Release Inventory reporting requirements.
DOT:	Thin bricks as shipped are not hazardous materials per DOT regulations.
California Proposition 65:	This product contains crystalline silica, a substance known to the State of California to cause cancer. This product may contain trace amounts of heavy metals known to the State of California to cause cancer, birth defects, or other reproductive harm.

# **16. OTHER INFORMATION**

Brick It Corporation considers our product an "article" as defined in 30 CFR 1200(b)(g)(iv) and 40 CFR 372.38. As an article, an SDS is not required and the product is exempt from all other requirements of the hazard communication standard. OSHA requires an SDS for thin brick because it is occasionally dry sawed. We recommend only wet sawing of thin brick.

Data Sources:	The data contained in this SDS may have been gathered from third party sources, raw material suppliers, or from the published literature.
Reasons for Revision:	Updated company logo as a supplier of this product.
Prepared by:	The Glen-Gery Corporation, revised by Brick It.

This SDS was prepared with information believed accurate at the time of preparation and was prepared and provided in good faith. However, the Brick It Corporation assumes no responsibility as to the accuracy or suitability of such information and no warranty expressed or implied is made.

End of Safety Data Sheet

# **Boral Cobblefield San Francisco**

brickit.com/products/thin-stone-details/boral-cobblefield-san-francisco













Price:
\$135.13

/ per unit ( Minimum quantity: 1 )

Total: **\$135.13** 

- Lengths: 4" to 20"
- Heights: 2" to 8"
- Thickness: 1" to 2 ?"
- Corner Returns: 3" to 12"
- Coverage based on <sup>1</sup>/<sub>2</sub>" mortar joint:
  - Flat Packaging: 11¼ square feet per box / 90 square feet per big box
  - Corner Packaging: 8 linear feet per box / 64 linear feet per big box

### **Technical Information**

<u>SDS</u>

Technical Data Sheet

Installation Guide

Stone Dimension Reference Guide

Architect Submittal Package

### Resources





architects corner: specs, test reports, instructions, warranties, cad, bim, green...

### View Resources

### SCULTURED STONE.

A BORAL<sub>®</sub> Brand

# TECHNICAL DATA

The **Cultured Stone**<sup>®</sup> collection of manufactured stone veneers is engineered to meet or exceed specifications for all major code approvals. Manufacturers who offer "just like" or a so-called "equivalent" to Cultured Stone manufactured stone veneer products should be asked to document claims of test results and research reports.

Complete copies of these Cultured Stone manufactured stone veneer building code evaluation reports, research reports, approvals and listings are available upon request:

• ICC-ES ESR-1364

MATERIALS

- Tested and listed by Underwriters Laboratories, Inc.
- Texas Department of Insurance– Product Evaluation Report, EC-21

- Florida Product Approval FL15047
- HUD Materials Release No. 1316
- BMEC Authorization

Note: Local building codes may vary; always check with your local building code authority prior to installation.

Results of tests conducted by an independent testing agency confirm that the Cultured Stone collection of manufactured stone veneers conforms to or exceeds the following test requirements as specified in ICC Evaluation Service Acceptance Criteria 51 for Precast Stone Veneer:

CEMENT	ASTM C 150 or ACI 318 Section 3.2.1			
SAND	ASTM C 144 or C 33	ASTM C 144 or C 33		
AGGREGATE	ASTM C 33 or C 330 (except gradation), C 331			
TESTING				
SHEAR BOND TEST (ADHESION)	Tested in accordance with ASTM C 482	> 50 psi		
WATER ABSORPTION	Tested in accordance with UBC 15-5	9%-22% depending on texture		
FREEZE/THAW CHARACTERISTICS	Testing procedures follow those outlined in ASTM C 67	< 3% mass loss		
COMPRESSIVE STRENGTH	Tested in accordance with ASTM C 39	> 1800 psi @ 28 days		
UNIT WEIGHT	Density is determined in accordance with ASTM C 567	< 15 lbs. per square foot		
TENSILE STRENGTH	Tested in accordance with ASTM C 190	Reported		
FLEXURAL STRENGTH	Tested in accordance with ASTM C 348	Reported		
THERMAL PROPERTIES	Tested in accordance with ASTM C 177-71	R-value is .620 based on a 1.75" thick sample. Average thickness may vary on different Cultured Stone veneer products, and the R-value will vary accordingly.		
NONCOMBUSTIBLE	Tested and listed by Underwriters Laboratories, Inc.	Cultured Stone brand products showed zero flame spread and zero smoke development.		

### **Statement Collection**<sup>®</sup> **Products**

It's your turn to let your home stand out with our Statement Collection® products. Curated by our design experts, this collection of Hardie® siding and trim products with ColorPlus® Technology finishes are unique to your home's region. This gorgeous selection is locally stocked in your area, making it easier than ever to find the exterior style of your dreams.

### COLORPLUS<sup>®</sup> TECHNOLOGY

ColorPlus® Technology finishes combine distinct beauty and high performance in a way that no other finish does. They're the easiest way to choose a gorgeous pre-finished color for your house, and feel confident in its staying power.



Scan code to request a sample.





Hardie®	Trim
Length	12 ft

Hardie<sup>®</sup> Plank

Thickness 5/16 in

4/4 Roughsawn

Thickness .75 in

Width 3.5 in\* 5.5 in\* 7.25 in 9.25 in\* 11.25 in\*

5/4 Roughsawn

Thickness 1 in

Width 3.5 in 5.5 in 7.25 in 9.25 in\* 11.25 in\*

\*This size is only available in Arctic White



Iron

Gray

Timber

Bark

Arctic

White

Cobble

Stone

Midnight

Black

Arctic

White

	Hardie <sup>®</sup> Thickness Length	Shingle 1/4 in 48 in		
nooth	Straight Edg	ge Panel	Staggered E	dge Panel
t	Height	15.25 in	Height	15.25 in
	Exposure	7 in	Exposure	6 in

### Hardie<sup>®</sup> Trim

12 ft

### 4/4 Smooth

Hardie<sup>®</sup> Panel

Thickness 5/16 in

Thickness .75 in

3.5 in\* 5.5 in 7.25 in 9.25 in\* 11.25 in\*

### 5/4 Smooth

Thickness 1 in

3.5 in 5.5 in 7.25 in 9.25 in\* 11.25 in

\*This size is only available in Arctic White



### **Batten Boards**

### **Smooth & Rustic Grain**

Thickness	.75 in
Width	2.5 in





# STYLES

### find your perfect mix of exterior products



HARDIE<sup>®</sup> PANEL & HARDIE® TRIM BATTEN

HARDIE®TRIM



HARDIE<sup>®</sup> SHINGLE



HARDIE<sup>®</sup> PLANK



BIRCH TREE

WEATHERED CLIFFS





IT'S ABOUT THYME

### STONE BEACH

### TEXTURES

For more detailed product size and availability information,

visit jameshardie.com/magnolia.

choose the texture you prefer



HARDIE<sup>®</sup> SIDING SELECT CEDARMILL<sup>®\*</sup>

\* Textures available for siding and soffit. Hardie<sup>®</sup> Shingle only offered in Select Cedarmill<sup>®</sup>.

HARDIE<sup>®</sup> SOFFIT

# **DESIGN** the

### HOME YOU'VE ALWAYS IMAGINED

Visualize Hardie<sup>®</sup> products on a 3D model of your home with HOVER<sup>®</sup> Design Studio, brought to you by James Hardie.

HARDIE<sup>®</sup> TRIM RUSTIC GRAIN

Every home tells a story. What will yours be? Start your free design.





DRIED EUCALYPTUS



CHISELED GREEN

SLATE STEPS

PEPPERY ASH





VISUALIZE THE COLLECTION ON YOUR HOME

### COLORS

select the hue that's right for you



RUSTIC ROAD



RUGGED PATH



STONE PAVER



WARM CLAY



WANDERING GREEN



MUDFLATS



LAST EMBERS



MIDNIGHT SOOT

# A classic look that stands the test of time.

# **Hardie**<sup>®</sup> Plank

From Victorians to Colonials, Hardie® Plank is the perfect siding for your style, and has the durability and long-lasting beauty that can transform your home exterior. With endless gorgeous color and plank pairings available, you'll discover a Hardie® Plank style that transforms your home's aesthetic.



# Hardie<sup>®</sup> Plank



			Thickness 5	5/16 in Leng	th 12 ft planks
	5.25 in	6.25 in	7.25 in	8.25 in	9.25 in*
	4 in	5 in	6 in	7 in	8 in
	360	308	252	230	190
9	324	280	252	210	_
	25.0	20.0	16.7	14.3	12.5

	5.25 in	6.25 in	7.25 in	8.25 in	9.25 in*
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	•	•	•	•	٠

	5.25 in	6.25 in	7.25 in	8.25 in	9.25 in*
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### **Beaded Select Cedarmill**

	8.25 in	
	7 in	
9	210	
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# Designed for versatility and beautiful performance.

# Hardie® Panel

Hardie<sup>®</sup> Panel delivers style and substance. When combined with Hardie® Trim Batten, it achieves the rustic board-and-batten look that defines your charming cottage or modern farmhouse. Its crisp, clean lines and ability to pair beautifully with other siding products make Hardie® Panel a smart choice for the home of your dreams.



# Hardie<sup>®</sup> Panel



















Smooth

Prime

### **Stucco**

Size

Statement Collection Dream Collection

Prime

### Sierra 8

Size Statemen Collection Dream Collection

Prime

Sierra 8

Stucco

			Thickness 5/16 in
Size	4 ft x 8 ft	4 ft x 9 ft	4 ft x 10 ft
Prime Pcs/Pallet	50	50	50
ColorPlus <sup>®</sup> Pcs/Pallet	50	-	50
Pcs/Sq.	3.2	2.8	2.5

### Select Cedarmill®

Size	4 ft x 8 ft	4 ft x 9 ft	4 ft x 10 ft
Statement Collection®			•
Dream Collection®	•		•
Prime	•	•	•

	4 ft x 8 ft	4 ft x 9 ft	4 ft x 10 ft
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	•	•	٠

	4 ft x 8 ft	4 ft x 9 ft	4 ft x 10 ft
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0	•		•
	•	•	•

	4 ft x 8 ft	4 ft x 9 ft	4 ft x 10 ft
t ®			
ø			
	•	•	•

# A finished look starts with beautiful trim.

# Hardie<sup>®</sup> Trim

Form meets function at every intersection with Hardie® Trim boards. With an authentic look, Hardie® Trim boards provide design flexibility for columns, friezes, doors, windows and other accent areas.

With higher performance to withstand damage from the elements compared to wood trim, Hardie<sup>®</sup> Trim is the perfect option for a long-lasting home. Hardie<sup>®</sup> Trim is a low-maintenance and durable accent for your exterior — adding an extra component of beauty to your home.



# Hardie<sup>®</sup> Trim



4/4 Roughsawn		Thickn	<b>ess</b> .75 in	Length 12 ft boards		
Width	3.5 in	5.5 in	7.25 in	9.25 in	11.25 in	
Prime Pcs/Pallet	312	208	156	104	104	
ColorPlus <sup>®</sup> Pcs/Pallet	312	208	156	104	104	
Statement Collection <sup>®</sup>	AW	AW	•	AW	AW	
Dream Collection®	•	•	•	•	•	
Prime	•	•	•	•	•	

5/4 Roughsa	awn		Thickne	ss 1 in	Length 1	2 ft boards	5/4 Smooth			Thick	iness 1 in	Length	I2 ft boards
Width	3.5 in	4.5 in	5.5 in	7.25 in	9.25 in	11.25 in	Width	3.5 in	4.5 in	5.5 in	7.25 in	9.25 in	11.25 in
Prime Pcs/Pallet	240	200	180	120	80	80	Prime Pcs/Pallet	240	200	160	120	80	80
ColorPlus® Pcs/Pallet	240	200	180	120	80	80	ColorPlus <sup>®</sup> Pcs/Pallet	240	200	160	120	80	80
Statement Collection®	•		•	•	AW	AW	Statement Collection®	•		•	•	AW	•
Dream Collection®	•	•	•	•	•	•	Dream Collection®	•	•	•	•	•	•
Prime	•	•	•	•	•	•	Prime	•	•	•	•	•	•

### **Batten Boards**

Thickness	.75 in
Length	12 ft
Width	2.5 in
Prime Pcs/Pallet	437
ColorPlus® Pcs/Pallet	190





4/4 Smooth		Thickne	ess .75 in	Length 12 ft boards	
Width	3.5 in	5.5 in	7.25 in	9.25 in	11.25 in
Prime Pcs/Pallet	312	208	156	104	104
ColorPlus® Pcs/Pallet	312	208	156	104	104
Statement Collection®	AW	•	•	AW	AW
Dream Collection®	•	•	•	•	•
Prime	•	•	•	•	•

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tement lection <sup>®</sup>	•
am lection®	•
ne	•

Smooth	
Statement	_
<b>Collection</b> <sup>®</sup>	•
Dream	_
Collection®	•
Prime	•

# Protection in every detail, complete confidence in every area.

# Hardie<sup>®</sup> Soffit

Every part of your home's exterior matters. With Hardie<sup>®</sup> Soffit panels, you can live confidently, knowing that gaps between eaves and exterior walls are covered to provide trusted protection.

### DID YOU KNOW?

Using vented soffit improves ventilation and reduces the chance of water-vapor condensation that can promote mold, mildew and stains and which can damage your home's framing over time.

In warm climates, vented soffit allows hot, humid air to escape, which not only helps prevent condensation in the attic, but also helps reduce air-conditioning costs.

In cool climates, vented soffit helps prevent condensation from forming on the interior side of the roof sheathing and reduces the chances of roof-damaging ice dams.



# Hardie<sup>®</sup> Soffit



Length	12 ft
Width	12 in
Prime Pcs/Pallet	200
ColorPlus <sup>®</sup> Pcs/Pallet	216

#### **Vented Smooth**

Size	12 ft x 12 in	12 ft x 16 in	8 ft x 24 in
Statement Collection®			
Dream Collection®	•	•	•
Prime	•	•	•

#### **Vented Cedarmill®**

Size	12 ft x 12 in	12 ft x 16 in	8 ft x 24 in
Statement Collection®	•		
Dream Collection®	•	•	•
Prime	•	•	•

Beaded Porch Panel Thickness Size Bead Size Prime Pcs/Pallet



Non-Vented Smooth Non-Vented Select Cedarmill®

Thickness 1/4 in

12 ft	8 ft	8 ft
16 in	24 in	48 in
150	100	50
156	108	-

### **Non-Vented Smooth**

Size	12 ft x 12 in	12 ft x 16 in	8 ft x 24 in	8 ft x 48 in
Statement Collection <sup>®</sup>				
Dream Collection <sup>®</sup>	•	•	•	
Prime	•	•	•	•

### Non-Vented Cedarmill®

Size	12 ft x 12 in	12 ft x 16 in	8 ft x 24 in	8 ft x 48 in
Statement Collection®	•			
Dream Collection®	•	•	•	
Prime	•	•	•	•

ess	1/4 in	Statement Collection®	
	4 ft x 8 ft	Dream Collection®	•
ize	2 in o.c.	Prime	•
Pcs/Pallet	50		

Bead edge lands on long edge of sheet to hide seams.

# Tougher than the elements.



A home's exterior is its first line of defense against extreme weather and fire. Prepare your home for the unpredictable with siding that is non-combustible, won't burn and is recognized by fire departments nationwide.\*

• Listed for use in wildfire-prone Wilderness Urban Interface (WUI) zones in the western US.

### **Cal-Fire Compliant**

Fiber Cement Siding



\*Hardie" siding complies with ASTM E136 as a noncombustible cladding and is recognized by fire departments across the U.S. including Marietta, GA, Flagstaff, AZ and Orange County, CA. Fiber cement fire resistance does not extend to applied paints or coatings, which may be damaged or char when exposed to flames.













Mother Nature's creatures can wreak havoc on wood-based siding. It can be pecked by birds or damaged by termites or other pests. Hardie® fiber cement holds no appeal for these critters, saving you the maintenance hassle.



Your siding is exposed to Mother Nature all day, every day. You deserve to feel confident that it can hold its own throughout it all — from the changing seasons to extreme weather.

- FEMA Class 5 flood damage resistance (highest rating)
- Rated for use in High Velocity Hurricane zones by Miami-Dade County, Florida



# Water Resistant

From rain to ice to snow, Mother Nature's precipitation patterns leave wood exteriors at risk to cracking, swelling and warping. Take shelter from the storm knowing that your siding is built to resist water damage.



ColorPlus<sup>®</sup> Technology finishes provide a durable finish that helps resist fading and discoloration that other paint applications may see more quickly over time, so your exterior can keep its good looks longer.

# The highest-quality materials for your highest satisfaction.

# **Unique Formulation** HZ5<sup>®</sup> Substrate

Not all fiber cement is the same. The Hardie® HZ5® product formulation contains the highest-quality raw materials. Our unique formulation, combined with innovative product design and manufacturing processes, creates a substrate that is specifically engineered to resist moisture, cracking, shrinking and swelling, for increased durability and workability.

### **Proprietary enhancements** create durable Hardie<sup>®</sup> siding

### Perfect balance of strength and workability

Our balance of high-quality Portland cement, sand and cellulose fiber delivers the best combination of strength and workability.

### Enhanced moisture resistance for unmatched durability

Patented and proprietary additives are chemically bonded within the HZ5® substrate matrix to provide durable moisture resistance. In addition, Hardie® Plank in HZ5® substrates come with a drip edge to provide improved water management.

### Increased dimensional stability

Our siding is engineered at the microscopic level to create a fiber cement composite with superior dimensional stability that helps protect against shrinking and splitting.







10 manufacturing facilities in the United States which source 80% of their raw materials locally

### Unmatched investment in manufacturing scale and production innovation

- Largest manufacturer of fiber cement in North America
- Over 7x the North American manufacturing capacity of our nearest fiber cement competitors
- More than 100 process and product quality checks
- Over 95 scientists and engineers in R&D providing dedicated resources for
- continuous innovation in manufacturing and product development
- · More U.S. fiber cement patents than any competitor

# Building sustainable communities.

# Sustainability is built into our DNA.

At James Hardie, our business is about building better communities that have a lower impact on our environment and are built to last. We operate with a global mindset and at the same time take great care in how our business affects households, our James Hardie community, the local communities in which we live and operate, and across the largest shared community of all, our global ecosystem. Building sustainable communities is at the forefront of our strategy and integral to our success.





Scan code to find out more about our sustainability efforts.





### Adding value to our communities

We recognize our ability to impact the communities in which we live and work. While maintaining a global mindset, we put great care into how our business affects local communities. We contribute by sourcing, employing, delivering and giving locally.

### **Creating an impact**

We invest in the local community and aim to locate the plants close to suppliers, customers and potential new employees, as well as sustainable transportation opportunities.



\*Above statistics are the James Hardie impact from fiscal year 2022.

### The right kind of impact

Having a sustainable impact means minimizing our impact on the environment while supporting resilient local communities. We are committed to minimizing our environmental impact, prioritizing the management of waste, water, energy and emissions.

### 2030 goals



**Energy & Emissions** We aim to minimize our Scope 1+2 Greenhouse gas intensity by 40% from 2019 baseline.



### Waste

We aim to minimize manufacturing waste intensity by 50% from 2019 baseline.



#### Water

We aim to increase water recycling by 20 Million cubic feet/year from 2019 baseline.

# on track → **21%**

reduction in scope 1+2 GHG intensity in CY21 (MT CO2e/\$ revenue) (CY19 baseline)

ON TRACK  $\rightarrow$ 



reduction in landfill waste intensity in CY21 (MT/\$ revenue) (CY19 baseline)



additional cubic feet of water recycled in CY21 (CY19 baseline)

# Warranty for peace of mind

Help protect your home with North America's #1 brand of siding, backed by exceptional warranties. Unlike other companies, James Hardie doesn't prorate Hardie® siding and trim substrate warranty coverage. We stand 100% behind Hardie® siding for 30 years and Hardie® trim for 15 years.

- Hardie® siding and soffit products come with a 30-year non-prorated limited substrate warranty.
- Hardie® trim products come with a 15-year non-prorated limited substrate warranty. ٠
- ColorPlus® Technology finishes come with a 15-year prorated limited finish warranty. ٠

### Non-Prorated Siding Substrate Warranty Coverage by James Hardie



# Endorsements a reputation built on trust

For decades, our fiber cement products have been used to create better places to live. Each new home stands as a testament to our uncompromising quality. That proven track record has earned us the loyalty of millions of homeowners and the endorsements of trusted authorities across the building industry.



Featured on Magnolia Network's Fixer Upper: Welcome Home 2021



HGTV's Urban Oasis 2022



Green Builder Magazine Readers' Choice, "Most Sustainable Product" 2020



Scan code to view the Cost vs. Value Report.

# Make your home stand up and stand out.

### Increase your home's re-sale value\*

Re-siding with fiber cement siding is one of the top ways to increase your home's re-sale value\*.





\*According to the Remodeling 2023 Cost vs. Value Report (www.costvsvalue.com). © 2023 Zonda Media, a Delaware Corporation. Complete data from the Remodeling 2023 Cost vs. Value Report can be downloaded free at www.costvsvalue.com.



### FOR THE PROS

# Protection that performs at every layer.

# Hardie<sup>™</sup> **Weather Barrier**

No exterior cladding can prevent 100% of water intrusion. Your home should have an additional line of defense. Hardie<sup>™</sup> Weather Barrier provides a superior balance of water resistance and breathability, keeping the area within the wall drier. This helps prevent moisture accumulation that may lead to mold and mildew growth.

### INSTALLATION ADVANTAGES

- Thicker, more durable material for easier, quicker installation
- Superior tear resistance helps prevent water infiltration
- Can be installed with staples in place of cap nails for cost savings
- Provides a higher level of performance, no matter what type of cladding you specify



### Weather Barrier Thickness 11 mil

Length 100 ft 100 ft 150 ft 3 ft 9 ft Width 9 ft

### **Pro-Flashing**

Thickness 20 mil 75 ft 75 ft 75 ft Length Width 4 in 6 in 9 in

#### **Flex Flashing** Thickness 60 mil Length 75 ft 75 ft 6 in 9 in Width

### Seam Tape

Thickness 3.2 mil Length 164 ft 1-7/8 in Width

# **Installation Done Right**

INSTALLATION ACCESSORIES

### Hardie<sup>™</sup> Blade Saw Blades

Manufactured by Diablo, the Hardie<sup>™</sup> Blade saw blade is designed specifically to cut fiber cement products and is the only saw blade James Hardie recommends. The blade creates clean, precise cuts while helping to reduce the amount of airborne dust produced.

### PacTool<sup>®</sup> Gecko Gauge

The PacTool® Gecko Gauge is designed to improve the installation experience, allowing one person to hang Hardie® Plank lap siding during installation. Studies suggest the Gecko Gauge can improve the speed of solo installation by 30%.

### **Finishing Touches**

**COLORPLUS® TECHNOLOGY ACCESSORIES** 

### **Touch-Up Kits**

Specially formulated to match ColorPlus® Technology finishes, our touch-up kits offer resistance to aging, color change and chalking. Estimated one kit per 4,000 sq ft of siding or 1,600 sq ft of trim.

### **Color-Matched Caulk**

OSI<sup>®</sup> QUAD<sup>®</sup> MAX sealant offers a high-performance sealant solution to color match Statement Collection<sup>™</sup> products.\* About 18-20 linear feet per tube. Refer to packaging for manufacturer's recommendations.

\*For matching Dream Collection® products, contact your local James Hardie representative.

### TRIM ACCESSORIES

### Flat Tabs

Eliminate face nails and improve the aesthetic of trim applications around windows, doors and band boards.

### **Corner Tabs**

Use corner tabs to eliminate face nail holes that would detract from the finished look of corner trim installations.













Scan code to view install and technical documents.



171ST. STREET



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### EXISTING LEGEND



WOOD UTILITY POLE SANITARY MANHOLE LIGHT POLE CATCH BASIN STORM SEWER SANITARY SEWER

EXISTING CONDITION			
TOTAL LOT AREA	29,342 SF		
BUILDING FOOTPRINT (CN =98)	2880.0 SF		
ASPHALT (CN=98)	19,892 SF		
CONCRETE (CN=98)	1,022 SF		
GRASS (CN=74)	5,548 SF		
IMPERVIOUS AREA	23,794 SF		

PERCENTAGE EXISTING LOT COVER=(23,794/29,342)X100=81.09% PERCENTAGE OF GREEN SPACE=(5,548 / 29,342)X100=18.9% FAR= (2,880 / 29,342)X100=9.82%

# **DEMOLITION NOTES:**

THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN AND INCLUDES, BUT IS NOT LIMITED TO:

- 1. REMOVAL OF ALL UTILITIES, OVERHEAD LINES AND POLES, PAVING, VEGETATION AND OTHER SITE FEATURES WHICH CONFLICT WITH THE CONSTRUCTION OF THE NEW PARKING LOT, OR ARE DESIGNATED TO BE REMOVED.
- 2. CONDUCT DEMOLITION OPERATIONS AND REMOVAL OF DEBRIS AND SPOILS TO INSURE MINIMAL INTERFERENCE WITH BUILDING OPERATIONS.
- 3. INSURE SAFE PASSAGE OF PERSONS AROUND AREAS OF DEMOLITION. REMOVE FROM SITE ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM DEMOLITION AND LAWFULLY DISPOSE OF SAME.
- 4. NOTIFY OWNER 48 HOURS IN ADVANCE OF ANY UTILITY SHUTDOWN.
- 5. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER FOR ALL ITEMS DESIGNATED TO BE REMOVED OR RELOCATED.
- 6. IF ANY ITEMS ARE ENCOUNTERED IN THE FIELD THAT ARE NOT SHOWN ON THE PLAN WHICH REQUIRE DEMOLITION OR RELOCATION, THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY.
- 7. THE SURVEY BASE PROVIDED HEREIN IS FOR INFORMATIONAL PURPOSES ONLY. THE OWNER/ARCHITECT/ENGINEER ARE NOT RESPONSIBLE FOR ANY MISCHARTED OF UNCHARTED UTILITIES, OR OTHER ERRORS DETECTED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL SITE CONDITIONS.
- 8. THE CONTRACTOR WILL PROTECT ALL UTILITIES DESIGNATED TO REMAIN. ANY DAMAGE BY THE CONTRACTOR TO UTILITIES, ALLEYWAYS, STREETS OR ADJACENT PROPERTIES WILL BE REPLACED/REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE ALL EXISTING SERVICES AND APPURTENANCES TO DEMOLISHED SITE FEATURES AND CAP/TERMINATE AS REQUIRED BY THE UTILITY COMPANY. CONTRACTOR SHOULD CONTACT ARCHITECT/ENGINEER IF ANY QUESTION ARISES REGARDING THE VIABILITY OF A UTILITY STRUCTURE.





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$\underline{\Lambda}$	06-14-2023	PER THE VILLAGE COMMENTS
2	08-31-2023	PER THE VILLAGE COMMENTS

PROJECT AT:7130 171S ST, TINLEY PARK,
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GRADING PLAN

SCALE 1:20



CATCH BASIN

STORM SEWER

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LEGEND	
	PROPOSED WATER SERVICE
	PROPOSED STORM SEWER
«	PROPOSED PERFORATED PIPE
v v	SII T FENCE
	CHAIN LINK CONSTRUCTION FENCE
	SEWER MANHOLE
۲	PROPOSED CATCH BASIN
$\overline{\mathbf{\Theta}}$	PROPOSED WATER VALVE VAULT
<b>K</b>	PROPOSED FIRE HYDRANT
	INLET FILTER BAG
	5" PCC ON 4" CA-6 CONCRETE SIDEWALK
	B-6.12 CURB AND GUTTER
	CONSTRUCTION ENTRANCE
	EXISTING BUILDING
	ACCESSES EASEMENT
	AREA DEDICATED TO ROW
T/C 595.35 F/L 594.85	TOP OF CURB ELEVATION FLOW LINE OF GUTTER ELEVATION
597.15	SPOT ELEVATION
兌	OVERLAND OVERFLOW ROUTE
EXISTI	NG LEGEND
) à	WOOD UTILITY POLE
	SANITARY MANHOLE
×.	LIGHT POLE
	CATCH BASIN
>	STORM SEWER
	SANITARY SEWER

# PROPOSED CONDITION

TOTAL DISTURBED AREA	29,342 SF
BUILDING FOOTPRINT (CN =98)	3329.0 SF
ASPHALT (CN=98)	11,826 SF
CONCRETE WALKWAYS PAVEMENT (CN=98)	1,130 SF
CONCRETE CURB AND GUTTER(CN=98)	1,743 SF
PERMEABLE PAVERS	2,516 SF
GRASS (CN=74)	8,253 SF
IMPERVIOUS AREA	18,028 SF

# PERCENTAGE PROPOSED LOT COVER=(18,028/ 29,342)X100=61.4%







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PROPOSED WATER SERVICE PROPOSED STORM SEWER PROPOSED SANITARY SERVICE PROPOSED PERFORATED PIPE SILT FENCE CHAIN LINK CONSTRUCTION FENCE SEWER MANHOLE PROPOSED CATCH BASIN

PROPOSED WATER VALVE VAULT

PROPOSED FIRE HYDRANT INLET FILTER BAG

5" PCC ON 4" CA-6 CONCRETE SIDEWALK

B-6.12 CURB AND GUTTER

CONSTRUCTION ENTRANCE

EXISTING BUILDING ACCESSES EASEMENT

AREA DEDICATED TO ROW

T/C 595.35 TOP OF CURB ELEVATION F/L 594.85 FLOW LINE OF GUTTER ELEVATION

SPOT ELEVATION

### OVERLAND OVERFLOW ROUTE

### EXISTING LEGEND

- WOOD UTILITY POLE 6
- SANITARY MANHOLE
- 菜 LIGHT POLE
- CATCH BASIN \_\_\_\_ ) \_\_\_\_

597.15 -

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STORM SEWER \_\_\_\_ >\_\_\_\_ SANITARY SEWER

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CONSTRUCTION

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T/C 595.35

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SILT FENCE CHAIN LINK CONSTRUCTION FENCE SEWER MANHOLE

PROPOSED CATCH BASIN

PROPOSED FIRE HYDRANT

INLET FILTER BAG

5" PCC ON 4" CA-6 CONCRETE SIDEWALK

B-6.12 CURB AND GUTTER CONSTRUCTION ENTRANCE EXISTING BUILDING ACCESSES EASEMENT AREA DEDICATED TO ROW TOP OF CURB ELEVATION F/L 594.85 FLOW LINE OF GUTTER ELEVATION SPOT ELEVATION

OVERLAND OVERFLOW ROUTE

### EXISTING LEGEND

WOOD UTILITY POLE  $\bigcirc$ SANITARY MANHOLE ЭČЕ

LIGHT POLE CATCH BASIN STORM SEWER

-----> SANITARY SEWER

### PROPOSED WATER SERVICE PROPOSED STORM SEWER PROPOSED SANITARY SERVICE PROPOSED PERFORATED PIPE

PROPOSED WATER VALVE VAULT

# **EROSION CONTROL NOTES:**

- 1. THE SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SOIL AND SEDIMENTATION CONTROL OF LOCAL GOVERNMENT AGENCIES, PROCEDURES AND STANDARDS FOR URBAN SOIL AND SEDIMENTATION CONTROL IN ILLINOIS, AND IEPA STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION.
- 2. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- 3. PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED TO, ADDITIONAL PHASES DEVELOPMENT AND OFF-SITE BORROW OR WASTE AREAS) A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED TO THE OWNER FOR REVIEW.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE OWNER.
- 5. DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO SEDIMENT BASINS OR SILT TRAPS. DEWATERING DIRECTLY INTO THE FIELD TILES OR STORMSEWER IS PROHIBITED.
- 6. PERMANENT OR TEMPORARY SOIL STABILIZATION MUST BE APPLIED WITHIN 15 CALENDAR DAYS OF THE END OF ACTIVE SOIL DISTURBANCE.
- 7. TRIANGULAR SILT DIKE BARRIER SHALL BE INSTALLED AND MAINTAINED AROUND THE INLET AND OUTLET STRUCTURES MANUFACTURED BY TRIANGULAR SILT DIKE COMPANY OR EQUAL.
- 8. SEDIMENTATION BASINS, BARRIERS, AND ALL APPROPRIATE EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SORT OF SITE DISTURBING.
- 9. THE CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES WEEKLY AND AFTER ANY STORM EVENT IN EXCESS OF 1/2".
- 10. SHOULD THE VOLUME, VELOCITY, SEDIMENT LOAD, OR PEAK FLOW RATES OF STORMWATER RUNOFF TEMPORARILY INCREASE DURING CONSTRUCTION, THEN ADDITIONAL MEASURES TO PROTECT ADJACENT PROPERTIES SHALL BE UNDERTAKEN.
- 11. PROVIDE MINIMUM OF 6" TOP SOIL IN ALL UNPAVED DISTURBED AREAS. PLANTING, SEEDING AND SODDING WILL BE PROVIDED BY OWNER. SEE LANDSCAPE AND ENVIRONMENTAL FOR NEW PLANTING SOIL REQ.
- 12. THE TEMPORARY EROSION MEASURES SHALL REMAIN IN PLACE UNTIL ALL THE PERMANENT EROSION CONTROL ITEMS ARE FULLY FUNCTIONAL.
- 13. GRAVELED ROADS, ACCESS DRIVES, PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH, AND VEHICLES WASHDOWN FACILITIES, SHALL BE PROVIDED TO PREVENT THE DEPOSIT OF SOIL FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SOIL REACHING A PUBLIC OR PRIVATE ROADWAY SHALL BE REMOVED CONTINUOUSLY.
- 14. CONTRACTOR TO MAINTAIN A DRY SUBBASE SURFACE PRIOR TO BUILDING SLAB OR PAVEMENT CONSTRUCTION.
- 15. NO WORK MAY BEGIN ON SITE UNTIL ALL SOIL EROSION CONTROL MEASURES ARE IN PLACE.





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# 32-14-13.19 Unilock Permeable

For any additional information or assistance with this spec please contact your Unlicck Representative.



DESIGNERS NOTES:

- 1. THE CONTRACTOR TO PROVIDE NECESSARY SHORING TO THE EAST RETAINING WALL BEFORE PROCEEDING WITH ANY EXCAVATION TO INSTALL THE PROPOSED CURB.
- 2. FOR PREFABRICATED CANOPY, VACUUM SYSTEM AND MOTOR, SUPPORTING COLUMN FOR THE VACUUM SYSTEM AND CANOPY PLEASE REFER TO SHOP DRAWINGS.
- 3. THE OWNER DOES NOT HAVE A CONTRACT YET WITH THE MANUFACTURE. THE SHOP DRAWINGS WILL BE PROVIDED TO THE VILLAGE FOR REVIEW AND APPROVAL DURING FULL ARCHITECTURAL REVIEW.
- 4. THE CANOPY SIGNS AND DETAILS ARE PART OF THE CANOPY PACKAGE AND WILL BE PROVIDED TO THE VILLAGE FOR REVIEW AND APPROVAL.
- 5. THE PARKING STALLS LOCATED WITHIN THE CROSS EASEMENT ACCESS WILL BE RELOCATED IN THE FUTURE TO THE EAST PARKING STALLS DESIGNATED FOR VACUUMS WHEN THE ACCESS IS OPEN.



<u>DETAIL 5</u>

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HANDICAPPED PAINTED SYMBOL <u>DETAIL 6</u>

HANDICAPPED

PARKING SIGN

2**\***×2**\***×.188 STEEL TUBE PAINTED

INSTALLATION OF SIGN INTO CONC. BY G.C.

6'Ø POURED

CONCRETE BASE

EGEND	
¥	PROPOSED WATER SERVICE
	PROPOSED STORM SEWER
> > >	PROPOSED SANITARY SERVICE
«	PROPOSED PERFORATED PIPE
— x — x —	SILT FENCE
	CHAIN LINK CONSTRUCTION FENCE
	SEWER MANHOLE
۲	PROPOSED CATCH BASIN
$\bigcirc$	PROPOSED WATER VALVE VAULT
X	PROPOSED FIRE HYDRANT
$\boxtimes$	INLET FILTER BAG
	5" PCC ON 4" CA-6 CONCRETE SIDEWALK
	B-6.12 CURB AND GUTTER
	CONSTRUCTION ENTRANCE
	EXISTING BUILDING
	ACCESSES EASEMENT
	AREA DEDICATED TO ROW
T/C 595.35	TOP OF CURB ELEVATION
F/L 594.85	FLOW LINE OF GUTTER ELEVATION
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EXISTI	NG LEGEND
$\mathcal{A}$	WOOD UTILITY POLE
$\bigcirc$	SANITARY MANHOLE
÷.	LIGHT POLE
	CATCH BASIN
) )	STORM SEWER
>	SANITARY SEWER

# PROPOSED CONDITION

TOTAL DISTURBED AREA	29,342 SF
BUILDING FOOTPRINT (CN =98)	3329.0 SF
ASPHALT (CN=98)	11,826 SF
CONCRETE WALKWAYS PAVEMENT (CN=98)	1,130 SF
CONCRETE CURB AND GUTTER(CN=98)	1,743 SF
PERMEABLE PAVERS	2,516 SF
GRASS (CN=74)	8,253 SF
IMPERVIOUS AREA	18,028 SF

# PERCENTAGE PROPOSED LOT COVER=(18,028/29,342)X100=61.4%



HANDICAPPED PARKING SIGN <u>DETAIL 7</u>



SCALE 1:20

82 റാ Damas Consi 5625 MIDD/ Downers Gro 530-991-3299 F Ó Рһ





INLEY PARK, IL 60477	
Т АТ:7І30 I7IS ST, Т	

DATE STARTED:	DRAWN BY:
08-14-22	Khaled mansour
JOB NO:	FILE NO:

HEET NO:		
С	-2	. 0



TAKEN FOR ROAD PURI DOCUMENT 89420336

171ST. STREET

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0.



Michael J. Emmert Surveys, Inc., does hereby certify that we have prepared the plat hereon drawn for the uses and purposes herein set forth and that said plat correctly represents said easement.

Dated this 10th. day of October, 2023

By:

President

3

Professional Illinois Land Surveyor No. 2499 License expires on November 30, 2024 Professional design Firm Land Surveyor Corporation no. 184.004811

.... LAND mike@mjesurveys.com Michael J. Emmert Surveys, Inc. 185 East Vallette Street Elmhurst, Illinois 60126 Office 630-516-0383

ΠF 11

No.

MICHAEL

EMMERT 2499



OFFICIAL BUSING TEXPENCE M. Basside 16250 S. Ook Park a . DEDICATION PLAT OF TINCEY Park, 160407 FOR PUBLIC STREET 59420336 1.25 . . TO THE VILLAGE & TIRLEY PARK ٠ That part of Ict 7, Block 10 in Elmore's Oak Park Avenue Estates, being a subdivision in the Northwest One Quarter of Section 30, Township 36 North, Range 13 East of the Third Principal Meridian, bounded and described as follows: Beginning at the Southwest corner of said lot 7 and running those on an assumed bearing of North 0 degrees 08 minutes 29 seconds East on the west line thereof 15.00 feet; thence South 86 degrees 48 minutes 42 seconds East 100.14 feet to a point on the east line of said lot 7 distant 10.00 feet North of the south line of said lot 7; thence South 00 degrees 08 minutes 29 seconds West 10.00 feet to the south line of lot 7; thence No.th 89 degrees 40 minutes 25 seconds West on said south line 100.00 feet to the point of beginning in Cook County, Illinois. . 1- ----STATE OF ILLINOIS ) STATE OF ILLINOIS ) 55 COUNTY OF COOK COUNTY OF COOK

\*\*.



APPROVED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF DAY OF TINLEY PARK, ILLINOIS AT A MEETING HELD THIS A.D. 1989 uand • Attest:\_\_\_\_ By: Village Clerk APPROVED BY THE PLAN COMMISSION OF THE VILLAGE OF TINLEY PARK, ILLINOIS AT A MEETING HELD THIS 24th DAY OF 1989 By: Chairman - Hian Commission DRFERRED INSTALLMENTS OF NO FIND SPECIAL ASSESSMENTS DUE AGAINST THE PROPERTY OUTSTANDING UNPAID DESCRIBED HEREON.

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MATTESON-RICHTON BANK SLOBBAX DURAN B MATTE BY: ATTEST: MATTEST: MATTEST:

SS

STATE OF ILLINOIS COUNTY OF COOK

I, <u>CARACTIONED</u> A NOTARY PUBLIC IN AND FOR GAID COUNTY IN THE STATE AFORESAID, DO HEREBY CERTIFY THAT <u>ALVAL</u> <u>FOURAGE</u> AND <u>JONILLE KAPLE</u> OF THE MATTESON-RICHTON BANK, PERSONALLY KNOWN TO ME TO BE THE SAME PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING INSTRUMENT AS SUCH <u>SC. TRUET</u> OF AND <u>ASCE TRUET</u> OF .RESPECTIVELY, APPEARED BEFORE ME THIS DAY IN PERSON AND ACKNOWLEDGED THAT THEY SIGNED AND DELIVERED THE SAID INSTRUMENT AS THEIR FREE AND VOLUN-TARY ACT, AND AS THE FREE AND VOLUNTARY ACT OF SAID BANK, AS TRUSTEE, FOR THE USES AND PURPOSES THEREIN SET FORTH; AND THAT THE SAID DID ALSO THEN AND THERE ACKNOWLEDGE THAT HE, AS CUSTODIAN OF THE CORPORATE SEAL OF SAID BANK, DID AFFIX SAID SEAL OF SAID BANK TO SAID INSTRUMENT AS HIS OWN FREE AND VOLUNTARY ACT, AND AS THE FREE AND VOLUNTARY ACT OF SAID BANK, FOR THE USES AND PURPOSES THEREIN SET FORTH. \* \* \*

••

GIVEN UNDER MY HAND AND NOTARIAL SEAL THIS 10 H DAY OF JULY A.D. 1969.

NY CONDITION COP. OCT. 27,1992

Notary Public

OFFICIAL MAL RICHARD L. THEICHEL HOTARY FURLIC STATE OF ILLINOIS NT COMMENSION ED. OCT. 37,1992





# I CERTIFY THAT THIS IS A TRUE AND CORRECT COPY









# Traffic Impact Study Proposed Car Wash

Tinley Park, Illinois



Prepared For:

# Tinley Park Properties, LLC



September 15, 2023

# **1. Introduction**

This report presents the methodologies, findings, and recommendations of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the proposed car wash to be located at 7130 171<sup>st</sup> Street in Tinley Park, Illinois. The site, which is currently occupied by a self-service car wash, will be redeveloped to contain a tunnel car wash with 12 parking spaces of which eight will be regular vacuum stalls, one will be an accessible parking space, and the rest will be used as employee parking. Access to the proposed car wash will be provided via the existing east access drive off 171<sup>st</sup> Street.

The purpose of this study was to examine background traffic conditions, assess the impact that the proposed car wash will have on traffic conditions in the area, and determine if any roadway or access improvements are necessary to accommodate traffic generated by the proposed car wash. **Figure 1** shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site.

The sections of this report present the following:

- Existing roadway conditions
- A description of the proposed facility
- Directional distribution of the facility traffic
- Vehicle trip generation for the facility
- Future traffic conditions including access to the facility
- Traffic analyses for the weekday morning, weekday evening, and Saturday midday peak hours
- Operation and stacking of the facility
- Recommendations with respect to adequacy of the site access and adjacent roadway system

Traffic capacity analyses were conducted for the weekday morning, weekday evening, and Saturday midday peak hours for the following conditions:

- 1. Existing Conditions Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.
- 2. No-Build Conditions Analyzes the capacity of the existing roadway system using the ambient area growth not attributable to any particular development and any additional developments not associated with the proposed development.
- 3. Projected Conditions Analyzes the capacity of the future roadway system using the traffic volumes that include the existing traffic volumes, ambient area growth not attributable to any particular development, and the traffic estimated to be generated by the proposed facility.





### **Site Location**

Figure 1





Aerial View of Site

Figure 2



# **2. Existing Conditions**

Existing transportation conditions were documented based on field visits conducted by KLOA, Inc. in order to obtain a database for projecting future conditions. The following provides a description of the geographical location of the site, physical characteristics of the area roadway system including lane usage and traffic control devices, and existing peak hour traffic volumes.

### Site Location

The site is located at 7130 171<sup>st</sup> Street in Tinley Park, Illinois. This site is currently occupied by a self-service car wash. Land uses in the vicinity of the site are commercial and residential. Commercial land uses include Tinley Park Dental Care and Peter Francis Geraci Law LLC to the west, Illinois Currency Exchange and Dragon Palace restaurant to the east, Shell fuel center and Goodyear tire shop to the south, and South Suburban Hearing Health Center to the north.

### Existing Roadway System Characteristics

The characteristics of the adjacent roadways and access drives within the study area are described below and illustrated in **Figure 3**.

*Harlem Avenue (IL Route 43)* is a north-south arterial roadway that in the vicinity of the site provides two through lanes in each direction separated by a raised barrier median. At its signalized intersection with 171<sup>st</sup> Street, Harlem Avenue provides an exclusive left-turn lane, a through lane and a shared through/right-turn lane on the northbound and southbound approaches. Standard style crosswalks are provided on the north and east legs and high visibility crosswalks are provided on the south and west legs of this intersection. Pedestrian signals are provided on all the legs on the intersection. Harlem Avenue is under the jurisdiction of the Illinois Department of Transportation (IDOT), is classified as a Strategic Regional Arterial (SRA) route, carries an annual average daily traffic (AADT) volume of 27,100 vehicles (IDOT 2021) north of 171<sup>st</sup> Street and 29,800 vehicles (IDOT 2021) south of 171<sup>st</sup> Street and has a posted speed limit of 40 miles per hour.

*171st Street* is an east-west collector roadway that in the vicinity of the site provides two through lanes in each direction separated by a mountable/striped median. At its signalized intersection with Harlem Avenue, 171st Street provides an exclusive left-turn lane, a through lane and a shared through/right-turn lane on the eastbound and westbound approaches. At its unsignalized intersection with the west access drive, 171st Street provides two through lanes on the eastbound and westbound approaches. At its unsignalized intersection with the west access drive, 171st Street provides two through lanes on the eastbound and westbound approaches. At its unsignalized intersection with the east access drive, 171st street provides a through lane and a shared left-turn/through lane on the eastbound approach and a through lane and a shared through/right-turn lane on the westbound approach. West of Harlem Avenue, 171st Street is under the jurisdiction of the Cook County Department of Transportation and Highways (CCDOTH), carries an AADT volume of 16,000 vehicles (IDOT AADT 2018) and has a posted speed limit of 40 miles per hour. East of Harlem Avenue, 171st Street is under the jurisdiction of the Village of Tinley Park, carries an AADT volume of 11,800 vehicles (IDOT AADT 2018), and has a posted speed limit of 35 miles per hour.





### Existing Traffic Volumes

In order to determine current traffic conditions in the vicinity of the site, KLOA, Inc. conducted peak period vehicle, pedestrian, and bicycle movement traffic counts on Thursday, March 16, 2023 during the weekday morning (7:00 to 9:00 A.M.) and weekday evening (4:00 to 6:00 P.M.) peak periods and on Saturday, March 18, 2023 during the midday (11:30 A.M. to 2:00 P.M.) peak period at the following intersections:

- Harlem Avenue with 171<sup>st</sup> Street
- 171<sup>st</sup> Street with the East access drive
- 171<sup>st</sup> Street with the West access drive

The results of the traffic counts showed that the weekday morning peak hour of traffic generally occurs from 7:00 A.M. to 8:00 A.M., the weekday evening peak hour of traffic generally occurs from 4:00 P.M. to 5:00 P.M., and the Saturday midday peak hour of traffic generally occurs from 11:15 P.M. to 12:15 P.M.

**Figure 4** illustrates the existing traffic volumes. Copies of the traffic count summary sheets are included in the Appendix.







### Crash Data Summary

KLOA, Inc. obtained crash data<sup>1</sup> for the most recent available past five years (2017 to 2021) for the intersection of Harlem Avenue with 171<sup>st</sup> Street. The crash data is summarized in **Table 1**. During the surveyed period, no fatal crashes were reported at this during the surveyed period.

Year	Type of Crash Frequency								
	Angle	Head On	Object	Rear End	Sideswipe	Turning	Other	Total	
2017	1	1	0	4	1	6	0	13	
2018	0	0	1	6	0	7	0	14	
2019	1	0	0	9	0	4	0	14	
2020	1	0	1	6	0	7	0	15	
2021	6	0	0	10	0	0	0	16	
Total	9	1	2	35	1	24	0	72	
Average	1.8	<1.0	<1.0	7.0	<1.0	4.8		14.4	

Table 1 HARLEM AVENUE WITH 171<sup>ST</sup> STREET– CRASH SUMMARY

<sup>&</sup>lt;sup>1</sup> IDOT DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. Any conclusions drawn from analysis of the aforementioned data are the sole responsibility of the data recipient(s). Additionally, for coding years 2015 to present, the Bureau of Data Collection uses the exact latitude/longitude supplied by the investigating law enforcement agency to locate crashes. Therefore, location data may vary in previous years since data prior to 2015 was physically located by bureau personnel.



### **3. Traffic Characteristics of the Proposed Car Wash**

To properly evaluate future traffic conditions in the surrounding area, it was necessary to determine the traffic characteristics of the proposed car wash, including the directional distribution and volumes of traffic that it will generate.

### Proposed Site and Car Wash Plan

As proposed, the site will be redeveloped to provide an automatic car wash tunnel and 12 parking spaces, eight of which will be regular vacuum parking spaces and one will be an accessible parking space, the rest will be used as employee parking. Access to the proposed car wash will be provided via the existing east access drive which is located approximately 240 feet east of Harlem Avenue. This access drive will provide one inbound lane and one outbound lane with the outbound movements under stop sign control.

A copy of the preliminary site plan is included in the Appendix.

### Car Wash Operations and Circulation

The car wash tunnel building will replace the existing self-service car wash building in the center of the site, oriented north-south. The vacuum stalls will be located on the east side of the car wash building.

Vehicles will enter the site from the access drive and continue north towards the three paying stations which will be located north of the vacuum stalls. After paying at the pay stations, the cars will merge to create a single queue to enter the tunnel carwash making a left-turn. The entrance of the tunnel will be located on the north side of the car wash tunnel. An emergency exit lane is proposed to be provided before the entrance to the car wash. Vehicles will enter the car wash facing south, proceed through the car wash, and exit on the south end of the building. Vehicles will turn left to reach the vacuum stalls or exit the site on 171<sup>st</sup> Street.

### Car Wash Stacking

According to the site plan, there will be stacking for an approximately nine vehicles to queue before the pay stations without blocking the vacuum stalls. In addition, there will be stacking for approximately 10 vehicles between the pay stations and the entrance to the tunnel. As such, the plan provides stacking for a total of approximately 19 vehicles from the drive aisle to the entrance to the tunnel. A stacking exhibit is included in the Appendix.



### Car Wash Wayfinding and Traffic Control Signage

The following wayfinding and traffic control signage is recommended:

- Wayfinding signage should be posted to guide vehicles to the respective car wash stacking area to minimize vehicle turning movements within the internal site circulation area.
- Wayfinding signage should be posted at the exit of the car wash tunnel to direct vehicles exiting the car wash to either the vacuum stalls or the access drive to exit.
- A "Do Not Enter" sign should be posted at the exit of the car wash tunnel to deter opposing traffic from entering the car wash tunnel from the one-way exit direction.

### Vacuum stalls

The nine vacuum stalls will be located on the east side of the car wash tunnel of which one will be accessible parking space. A two-way drive aisle will be provided, allowing flexibility for vehicles to access the vacuum stalls before or after the car wash. Vehicles exiting the vacuum stalls will utilize the two-way drive aisle to exit the site at the access drive.

### Peak Day Operations

Typical of any car wash, its peak operations (design day) typically occur after a weather event such as a snowfall or a rain event. Based on historical data from other car washes, this typically occurs 12 to 15 times per year. When this peak demand occurs, the following operational procedures should be implemented:

- Increase the service rate of the tunnel to the maximum it can process.
- Increase stacking on site via three queue lanes which will increase stacking to 33 vehicles. Access to the vacuum stalls during these periods will be limited. A copy of the stacking exhibit is included in the Appendix.
- Provide staff at critical locations within the circulation system during peak periods at the car wash to help direct and manage the flow of traffic through the site. Critical internal locations where staff should be located include at the pay stations and at the exit of the car wash.

### Directional Distribution of Site Traffic

The directions from which traffic will approach and depart the site were estimated based on existing travel patterns and road types, as determined from the traffic counts. **Figure 5** illustrates the directional distribution of vehicles to/from the proposed car wash.





### Facility-Generated Traffic Volumes

The number of peak hour trips estimated to be generated by the proposed car wash was based on vehicle trip generation rates contained in *Trip Generation Manual*, 11<sup>th</sup> Edition, published by the Institute of Transportation Engineers (ITE). The "Automated Car Wash" (Land-Use Code 948) rate was utilized for the proposed car wash tunnel.

It is important to note that surveys conducted by ITE have shown that a considerable number of trips made to car washes are diverted from the existing traffic on the roadway system. This is particularly true during the weekday morning and evening peak hours when traffic is diverted from the home-to-work and work-to-home trips. Such diverted trips are referred to as pass-by traffic. However, in order to present a worst-case scenario, no reduction in the site-generated traffic was taken into account.

The ITE Manual does not provide data for the morning peak hour for an automated car wash. For the purposes of the evaluation, it was assumed to be approximately one-third of the weekday evening peak hour trip generation.

**Table 2** summarizes the estimated peak hour trips. A copy of the ITE trip generation sheets is included in the Appendix.

ITE Land-	Туре	Weekday Morning Peak Hour		Weekday Evening Peak Hour			Saturday Midday Peak Hour			
Use Code		In	Out	Total	In	Out	Total	In	Out	Total
948	Car Wash (1 tunnel)	13	13	26	39	39	78	19	22	41

# Table 2CAR WASH ESTIMATED PEAK HOUR TRAFFIC VOLUMES


### 4. Projected Traffic Conditions

The total projected traffic volumes include the existing traffic volumes, increase in background traffic due to growth, and the traffic estimated to be generated by the proposed car wash.

### Car Wash Traffic Assignment

The estimated weekday morning, weekday evening, and Saturday midday peak hour traffic volumes that will be generated by the proposed car wash were assigned to the roadway system in accordance with the previously described directional distribution (Figure 5). The traffic assignment for the car wash is illustrated in **Figure 6**.

### Background (No-Build) Traffic Conditions

The existing traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on Year 2050 projections provided by the Chicago Metropolitan Agency for Planning (CMAP) in a letter, an increase of 0.73 percent per year over six years (buildout year plus five years) for a total of 4.0 percent was applied to the existing traffic volumes to determine the projected Year 2029 no-build traffic volumes. **Figure 7** illustrates the Year 2029 no-build traffic conditions. A copy of the CMAP 2050 projections letter is included in the Appendix.

### Year 2029 Total Projected Traffic Volumes

The Year 2029 total projected traffic volumes include the no-build traffic volumes (Figure 7) and the traffic estimated to be generated by the proposed car wash (Figure 6). **Figure 8** shows the Year 2029 total projected traffic volumes.









### 5. Traffic Analysis and Recommendations

The following provides an evaluation conducted for the weekday morning, weekday evening, and Saturday midday peak hours. The analysis includes conducting capacity analyses to determine how well the roadway system and access drives currently operate and are projected to operate and whether any roadway improvements or modifications are required.

### Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning, weekday evening, and Saturday midday peak hours peak hours for the existing and Year 2029 nobuild and total conditions.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual* (HCM), 6<sup>th</sup> Edition and analyzed using Synchro/SimTraffic 11 software. The analysis for the traffic-signal controlled intersections were accomplished using actual phasings to determine the average overall vehicle delay and levels of service.

The analyses for the unsignalized intersections determine the average control delay to vehicles at an intersection. Control delay is the elapsed time from a vehicle joining the queue at a stop sign (includes the time required to decelerate to a stop) until its departure from the stop sign and resumption of free flow speed. The methodology analyzes each intersection approach controlled by a stop sign and considers traffic volumes on all approaches and lane characteristics.

The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter from A to F based on the average control delay experienced by vehicles passing through the intersection. The *Highway Capacity Manual* definitions for levels of service and the corresponding control delay for signalized intersections and unsignalized intersections are included in the Appendix of this report.

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the existing and Year 2029 no-build and total conditions are presented in **Tables 3** through **6**. A discussion of each intersection follows. Summary sheets for the capacity analyses are included in the Appendix.



Table 3	
CAPACITY ANALYSIS RESULTS –HARLEM AVENUE WITH 171 <sup>ST</sup> STREET– SIGNALIZED	
	-

	Deals Hour	E	astbound	W	estbound	No	orthbound	So	uthbound	Overall
	Реак поиг	L	T/R	L	T/R	L	T/R	L	T/R	Overall
S	Weekday	D	D	С	D	В	С	В	С	C
ion	Morning	39.0	49.0	32.8	54.0	19.6	23.0	12.9	27.3	313
dit	withing		D-45.7		D-48.4		<u>C – 22.5</u>		C – 26.2	51.5
ono	Weekday	D	E	D	E	D	С	В	D	D
Ũ	Evening	55.0	71.9	46.7	66.7	44.7	28.7	19.6	36.3	42.6
ing	Lyching		E – 66.9		E – 61.7		C – 31.1		C – 34.9	.2.0
isti	Saturday	D	E	D	E	Е	С	С	D	D
Đxi	Midday	48.2	63.7	44.5	58.7	66.9	26.8	21.2	36.6	40.8
	iiiuuu		E – 59.0		D – 54.6		<u>C – 33.4</u>		D-35.2	
ld	Weekdav	D	D	С	D	C	С	В	С	С
uil	Morning	39.7	48.9	32.7	53.9	24.2	25.0	13.9	29.0	32.8
o-B ns		_	D – 45.8	-	D – 48.4		C – 24.9	~	C – 27.9	
N. Itio	Weekdav	Е	E	D	E	E		C	D	D
29 ndi	Evening	57.6	74.4	48.3	67.4	58.1	30.8	24.3	<u>39.1</u>	45.6
20 ∁0]	8	Р	E – 69.5	D	E - 62.5	Б	<u>C – 34.9</u>	C	D-3/.9	
ar (	Saturday	D 50.2	E (4.2	D	E 500	E 75.5		27.2	D 20.0	D
Ye	Midday	30.2	04.3 E 60.0	43.8	<u> </u>	/3.3	28.3	27.5	39.9 D 29.7	43.3
		D	E = 00.0	C	E - 33.1	0	D - 30.0		D – 38./	
pa	Weekday	D 20.5	D		D		25.5	B		С
sete	Morning	39.3	48./	32.8	<u> </u>	24.8	$\begin{array}{c} 25.3 \\ \hline \end{array}$	14.2	<u> </u>	33.0
oje ns	0	Б	D – 43./	Л	D – 48.5 E	Б	C - 23.4	C	C = 28.0	
Pr	Weekday	E 588	E 76.5	D 50.5	E 68 7	50 /	21.0	20.4	D 20.5	D
29 Idi	Evening	50.0	F 713	50.5	E 64.0	<u> </u>	$D_{360}$	29.4	D 386	46.8
20) 00		D	E = 71.5 F	D	E - 04.0	F	D = 30.0	C	D - 38.0	
ar (	Saturday	507	64 8	479	593	76.6	28.7	30.8	40.0	D
Ye	Midday	50.7	E 60.5	17.5	E 560	70.0	D 265	50.0	10.0 D 20.2	43.8
			E - 60.3		E - 30.0		D - 30.3		D – 39.2	
Letter denot	es Level of Serv	ice L	– Left Turn R –	- Right Tu	ırn					
Delay is me	asured in second	s. 1	– Inrough							



### Table 4 UNSIGNALIZED – EXISTING CONDITIONS

Intersection	Weekday Peak	y Morning Hour	Weekday Peak	v Evening Hour	Saturday Peak	<sup>y</sup> Midday Hour
	LOS	Delay	LOS	Delay	LOS	Delay
171 <sup>st</sup> Street with West Ac	cess Drive <sup>1</sup>	_				
• Southbound Approach	А	0.1	А	0.1	А	0.1
171 <sup>st</sup> Street with East Acc	cess Drive <sup>1</sup>					
• Southbound Approach	А	0.1	А	0.1	А	9.9
• Eastbound Left-Turn	А	0.1	А	0.1	А	0.1
LOS = Level of Service Delay is measured in seconds.	1 – One-way	y stop control				

### Table 5 UNSIGNALIZED – YEAR 2029 NO-BUILD CONDITIONS

Intersection	Weekday Peak	<sup>7</sup> Morning Hour	Weekday Peak	v Evening Hour	Saturday Peak	y Midday Hour
	LOS	Delay	LOS	Delay	LOS	Delay
171 <sup>st</sup> Street with West Ac	cess Drive <sup>1</sup>					
<ul> <li>Southbound Approach</li> </ul>	А	0.1	А	0.1	А	0.1
171st Street with East Acc	cess Drive <sup>1</sup>					
<ul> <li>Southbound Approach</li> </ul>	А	0.1	А	0.1	В	10.0
• Eastbound Left-Turn	А	0.1	А	0.1	А	0.1
LOS = Level of Service Delay is measured in seconds.	1 – One-way	y stop control				



### Table 6 UNSIGNALIZED – YEAR 2029 TOTAL CONDITIONS

Intersection	Weekday Peak	' Morning Hour	Weekday Peak	<sup>7</sup> Evening Hour	Saturday Peak	y Midday Hour
	LOS	Delay	LOS	Delay	LOS	Delay
171 <sup>st</sup> Street with East Acc	cess Drive <sup>1</sup>					
• Southbound Approach	В	11.2	В	12.7	В	11.9
• Eastbound Left-Turn	А	8.6	А	8.8	А	8.6
LOS = Level of Service Delay is measured in seconds.	1 – One-way	stop control				



### **Discussion and Recommendations**

The following summarizes how the intersections are projected to operate and identifies any roadway and traffic control improvements necessary to accommodate the development-generated traffic.

### Harlem Avenue with 171st Street

The results of the capacity analysis indicate that the intersection currently operates at Level of Service (LOS) C during the weekday morning peak hour and LOS D during the weekday evening and Saturday midday peak hours. The eastbound and westbound approaches operate at LOS E or better during all three peak hours. The northbound and southbound major approaches operate at LOS D or better during the peak hours.

Under Year 2029 no-build conditions, the intersection is projected to continue operating at LOS C during the weekday morning peak hour and to operate at LOS D during the weekday evening and Saturday midday peak hours with increases in delay of approximately three seconds or less. The eastbound and westbound approaches are projected to operate at LOS E or better during all three peak hours with increases in delay of less than three seconds. The northbound and southbound approaches are projected to operate at LOS D or better during all three peak hours with increases in delay of less than three seconds.

Under Year 2029 total projected conditions, the intersection is projected to continue operating at LOS C during the weekday morning peak hour and at LOS D during the weekday evening and Saturday midday peak hours with increases in delay of less than two seconds over no-build conditions. All the approaches are projected to continue operating at the same levels of service as in no-build conditions during all three peak hours with increases in delay of less than two seconds. The maximum 95<sup>th</sup> percentile queue for the westbound through lane is projected to be approximately 285 feet and will occur during the weekday evening peak hour. A review of the traffic simulation indicated that the queues will clear the intersection during one cycle. The car wash is only projected to increase traffic traversing the intersection has adequate capacity to accommodate the traffic projected to be generated by the car wash and no roadway or traffic signal modifications are required.

### 171<sup>st</sup> Street with West Access Drive

The results of the capacity analysis indicate that the southbound approach currently operates at LSO A during all three peak hours.

Under Year 2029 no-build conditions, the southbound approach is projected to continue operating at LOS A during all three peak hours with minimal increases in delay.

Under Year 2029 total conditions, this access drive will be demolished.





### 171<sup>st</sup> Street with East Access Drive

The results of the capacity analysis indicate that the southbound approach and the eastbound leftturn movement currently operate at LSO A during all three peak hours.

Under Year 2029 no-build conditions, the southbound approach and the eastbound left-turn movement are projected to continue operating at LOS A during all three peak hours with minimal increases in delay except for the southbound approach that is projected to operate at LOS B during the Saturday midday peak hour.

Under Year 2029 total projected conditions, the existing west access drive will be demolished and access to the site will only be provided via east access drive. The results of the capacity analysis indicate that the southbound approach is projected to operate at LOS B during the weekday morning, weekday evening, and Saturday midday peak hours while the eastbound left-turn movement is projected to operate at LOS A during all three peak hours. As such, this access drive will be adequate to accommodate the traffic estimated to be generated by the proposed car wash and will ensure flexible and efficient access to the site.



### 6. Conclusion

Based on the preceding analyses and recommendations, the following conclusions have been made:

- The results of the capacity analysis indicated that the existing roadway system will have sufficient reserve capacity to accommodate the traffic that will be generated by the proposed car wash and no additional roadway improvements, or traffic control modifications are required.
- Access to the proposed car wash will be provided via the existing east access drive off 171<sup>st</sup> street. Outbound movements should be under stop sign control.
- In order to enhance the flow of traffic through the car wash site on peak days, the operator should consider implementing the following recommendations:
  - Increase the service rate of the tunnel to the maximum it can process.
  - Increase stacking on site via three queue lanes which will increase stacking to 33 vehicles. Access to the vacuum stalls during these periods will be limited.
  - Provide staff at critical locations within the circulation system during peak periods at the car wash to help direct and manage the flow of traffic through the site. Critical internal locations where staff should be located include at the pay stations and at the exit of the car wash.



# Appendix

Traffic Count Summary Sheets Site Plan Stacking and Auto-turn Exhibits ITE Trip Generation Summary Sheets CMAP 2050 Projections Letter Level of Service Criteria Capacity Analysis Summary Sheets

# Traffic Count Summary Sheets

# Study Name 171st Street with Car Wash Access Drives TMC Start Date Thursday, March 16, 2023 7:00 AM End Date Saturday, March 18, 2023 2:00 PM Site Code Saturday, March 18, 2023 2:00 PM

Report Summary

				East	bound					Westb	ound				S	outhea	astboun	d			5	outhwe	estbour	nd				Cross	walk
Time Period	Class.			BL						BR	HR					BL	HR					BR				Total		destria	Total
Peak 1	Lights	0	0	0	316	316	374	0	374	0	0	374	316	0	0	0	0	0	0	0	0	0	0	0	0	690	EB	0	0
Specified Period	%	0%	0%	0%	98%	98%	98%	0%	98%	0%	0%	98%	98%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	98%		0%	
7:00 AM - 8:00 AM	Buses	0	0	0	8	8	4	0	4	0	0	4	8	0	0	0	0	0	0	0	0	0	0	0	0	12	WB	0	0
One Hour Peak	%	0%	0%	0%	2%	2%	1%	0%	1%	0%	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%		0%	
7:00 AM - 8:00 AM	ngle-Unit Truc	0	0	0	0	0	3	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	SEB	0	0
	%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	
	ticulated Truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	SWB	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	
	icycles on Roa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
	Total	0	0	0	324	324	381	0	381	0	0	381	324	0	0	0	0	0	0	0	0	0	0	0	0	705			
	PHF	0	0	0	0.78	0.78	0.82	0	0.82	0	0	0.82	0.78	0	0	0	0	0	0	0	0	0	0	0	0	0.8			
	Approach %					46%	54%					54%	46%					0%	0%					0%	0%				
Peak 2	Lights	1	0	0	563	564	548	0	547	0	0	547	563	0	0	0	0	0	0	0	0	0	0	0	0	1111	EB	0	0
Specified Period	%	100%	0%	0%	99%	99%	99%	0%	99%	0%	0%	99%	99%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	99%		0%	
4:00 PM - 5:00 PM	Buses	0	0	0	3	3	2	0	2	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	5	WB	1	1
One Hour Peak	%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		100%	
4:00 PM - 5:00 PM	ngle-Unit Truc	0	0	0	1	1	2	0	2	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3	SEB	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	
	ticulated Truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	SWB	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	
	icycles on Roa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	1
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
	Total	1	0	0	567	568	552	0	551	0	0	551	567	0	0	0	0	0	0	0	0	0	0	0	0	1119			
	PHF	0.25	0	0	0.94	0.94	0.93	0	0.93	0	0	0.93	0.94	0	0	0	0	0	0	0	0	0	0	0	0	0.94			
	Approach %					51%	49%					49%	51%					0%	0%					0%	0%				

# Study Name 171st Street with Car Wash Access Drives TMC Start Date Thursday, March 16, 2023 7:00 AM End Date Saturday, March 18, 2023 2:00 PM Site Code Saturday, March 18, 2023 2:00 PM

Report Summary

				East	bound					Westb	ound				S	outhea	astboun	d			5	outhwe	estbour	nd				Cross	walk
Time Period	Class.			BL						BR	HR					BL	HR					BR				Total		destria	Total
Peak 1	Lights	0	0	0	316	316	374	0	374	0	0	374	316	0	0	0	0	0	0	0	0	0	0	0	0	690	EB	0	0
Specified Period	%	0%	0%	0%	98%	98%	98%	0%	98%	0%	0%	98%	98%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	98%		0%	
7:00 AM - 8:00 AM	Buses	0	0	0	8	8	4	0	4	0	0	4	8	0	0	0	0	0	0	0	0	0	0	0	0	12	WB	0	0
One Hour Peak	%	0%	0%	0%	2%	2%	1%	0%	1%	0%	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%		0%	
7:00 AM - 8:00 AM	ngle-Unit Truc	0	0	0	0	0	3	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	SEB	0	0
	%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	
	ticulated Truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	SWB	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	
	icycles on Roa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
	Total	0	0	0	324	324	381	0	381	0	0	381	324	0	0	0	0	0	0	0	0	0	0	0	0	705			
	PHF	0	0	0	0.78	0.78	0.82	0	0.82	0	0	0.82	0.78	0	0	0	0	0	0	0	0	0	0	0	0	0.8			
	Approach %					46%	54%					54%	46%					0%	0%					0%	0%				
Peak 2	Lights	1	0	0	563	564	548	0	547	0	0	547	563	0	0	0	0	0	0	0	0	0	0	0	0	1111	EB	0	0
Specified Period	%	100%	0%	0%	99%	99%	99%	0%	99%	0%	0%	99%	99%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	99%		0%	
4:00 PM - 5:00 PM	Buses	0	0	0	3	3	2	0	2	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	5	WB	1	1
One Hour Peak	%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		100%	
4:00 PM - 5:00 PM	ngle-Unit Truc	0	0	0	1	1	2	0	2	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3	SEB	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	
	ticulated Truc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	SWB	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	
	icycles on Roa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	1
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
	Total	1	0	0	567	568	552	0	551	0	0	551	567	0	0	0	0	0	0	0	0	0	0	0	0	1119			
	PHF	0.25	0	0	0.94	0.94	0.93	0	0.93	0	0	0.93	0.94	0	0	0	0	0	0	0	0	0	0	0	0	0.94			
	Approach %					51%	49%					49%	51%					0%	0%					0%	0%				

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			Int. Total	835	782	815	780	3212	701	699	636	695	2701		1019	1038	976	1006	4039	891	923	796	755	3365		868	667	1050	1011	3926	902	965	1009	959	3835	958	901	941
			App. Total	273	259	274	256	1062	220	188	202	213	823	-	361	338	318	351	1368	299	285	269	259	1112	-	285	356	365	347	1353	331	365	366	361	1423	324	309	329
			Peds	0	1	0	0	1	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0
	enue	pun	Right	42	49	40	44	175	27	17	22	26	92		44	50	45	39	178	57	40	38	43	178		42	60	48	52	202	47	56	47	54	204	37	35	54
	Harlem Av	Southbo	Thru	213	192	209	190	804	178	149	159	171	657		282	258	257	277	1074	219	222	206	197	844	-	217	263	282	264	1026	256	276	290	282	1104	254	239	236
			Left	18	18	25	22	83	15	22	20	16	73		34	30	16	35	115	23	23	24	19	89		26	33	35	31	125	28	33	29	25	115	33	35	39
			Tum	0	0	0	0	0	0	0	-	0	1		1	0	0	0	1	0	0	1	0	1	-	0	0	0	0	0	0	0	0	0	0	0	0	0
			pp. otal U-	18	71	76	74	139	76	63	38	52	029	-	56	08	49	87	200	21	49	66	70	239	-	02	72	81	86	141	19	48	37	31	335	37	29	35
			ds A	3	2	2	2	11	) 2	2	2	2	10		3	4	3	) 3	15	3	3	2	2	12		3	3	3	3	1 12	3	3	3	3	13	3	3	3
	P		ht Pe	1		0	1	9	9	8		0			0	1	)	)	4		0	1	0	0		~		0	9	) (	0	0	0			0		
	lem Avenu	orthbound	u Rig	3 14	1 17	10	2 14	2 55	3 13	5 18	31 15	3 18	9 (	•	34	34	17 0	) 26	9 11	3 26	7 22	3 24	7 22	3 96		1	3 24	5	3 15	3 86	11	5 15	t 22	1 24	1 76	9 17	18	18
_	Har	ž	Thr	256	194	22(	222	892	216	205	186	193	800	•	260	320	279	300	115	243	277	226	207	953	-	24/	286	296	306	113	251	275	274	251	105	269	260	262
Data			n Left	47	58	46	36	187	44	40	37	40	161		58	53	52	58	221	50	49	48	41	188		40	59	57	64	220	54	53	41	55	203	51	51	54
ment			U-Turr	1	2	0	2	5	3	0	0	-	4	'	4	1	1	0	9	0	٢	1	0	2		0	-	0	1	2	3	+	0	-	5	0	0	-
Move			App. Total	114	93	110	110	427	97	70	88	87	342	•	132	124	110	96	462	116	133	94	66	442		103	120	134	116	473	120	94	149	136	499	137	125	104 104
l guir	)		Peds	0	1	0	0	1	0	0	0	0	0		0	0	0	0	0	0	2	0	0	2		0	0	0	0	0	0	0	0	0	0	0	0	0
Tun	Street	punoc	Right	13	9	25	24	68	20	10	13	13	56		17	18	25	21	81	20	25	25	22	92		16	23	30	23	92	22	6	24	24	79	35	25	14
	171st	West	Thru	77	56	58	56	247	49	44	59	50	202		84	74	41	42	241	60	82	41	48	231		59	67	67	54	247	64	57	83	78	282	74	65	51
			Left	24	31	27	30	112	28	16	16	24	84		31	32	44	33	140	36	26	28	29	119		28	30	37	39	134	34	28	42	34	138	28	35	39
			U-Turn	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0
			App. Total	130	159	155	140	584	108	148	108	143	507		170	168	199	172	209	155	156	134	127	572	-	178	149	170	162	659	132	158	157	131	578	160	138	173
			Peds	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	-	0	0	-		0	0	0	0	0	0	0	0	0	0	0	0	0
	eet	pu	Right	35	31	31	29	126	26	35	8	38	133		39	39	45	42	165	29	40	41	29	139	-	38	37	33	36	144	32	37	45	37	151	38	40	48
	171st Str	Eastbou	Lhru	59	72	66	66	263	52	60	46	55	213		81	76	93	83	333	70	69	47	59	245		75	66	83	69	293	54	66	63	56	239	73	60	68
			.eft	36	56	58	45	95	30	53	28	50	61		50	53	61	47	11	56	47	46	39	88		65	46	54	57	22	46	55	49	38	88	49	38	57
			Tum	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0 2	0	0	0	0	0	0	0	0
			<u>'</u> -'					-					-	**					_					_	**					-					_			
			Start Time	7:00 AM	7:15 AM	7:30 AM	7:45 AM	Hourly Tota	8:00 AM	8:15 AM	8:30 AM	8:45 AM	Hourly Tota	*** BREAK *	4:00 PM	4:15 PM	4:30 PM	4:45 PM	Hourly Tota	5:00 PM	5:15 PM	5:30 PM	5:45 PM	Hourly Tota	*** BREAK *	11:00 AM	11:15 AM	11:30 AM	11:45 AM	Hourly Tota	12:00 PM	12:15 PM	12:30 PM	12:45 PM	Hourly Tota	1:00 PM	1:15 PM	1:30 PM

938	3738	24816			24441	98.5	89	0.4	177	0.7	109	0.4	0	0.0		
299	1261	8402		33.9	8243	98.1	30	0.4	76	0.9	53	9.0	0	0.0	,	,
0	0	1				I					1				+	100.0
32	158	1187	14.1	4.8	1163	98.0	10	0.8	12	1.0	2	0.2	0	0.0		
237	996	6475	77.1	26.1	6355	98.1	16	0.2	55	0.8	49	0.8	0	0.0		
30	137	737	8.8	3.0	722	98.0	4	0.5	6	1.2	2	0.3	0	0.0		
0	0	3	0.0	0.0	3	100.0	0	0.0	0	0.0	0	0.0	0	0.0	,	,
393	1394	9077		36.6	8940	98.5	22	0.2	68	0.7	47	0.5	0	0.0	,	
0	0	1				1				I	1			I	~	100.0
15	68	559	6.2	2.3	548	98.0	3	0.5	7	1.3	-	0.2	0	0.0	,	
315	1106	7094	78.2	28.6	6982	98.4	12	0.2	57	0.8	43	9.0	0	0.0		
63	219	1399	15.4	5.6	1385	99.0	7	0.5	4	0.3	3	0.2	0	0.0	,	
0	1	25	0.3	0.1	25	100.0	0	0.0	0	0.0	0	0.0	0	0.0		
109	475	3120		12.6	3089	99.0	12	0.4	15	0.5	4	0.1	0	0.0	,	
0	0	3			-			-				-		I	3	100.0
25	66	567	18.2	2.3	556	98.1	3	0.5	6	1.1	2	0.4	0	0.0	,	
53	243	1693	54.3	6.8	1679	99.2	8	0.5	6	0.4	0	0.0	0	0.0		
31	133	860	27.6	3.5	854	99.3	1	0.1	3	0.3	2	0.2	0	0.0		
0	0	0	0.0	0.0	0		0		0		0		0		,	
137	608	4217		17.0	4169	98.9	25	0.6	18	0.4	5	0.1	0	0.0	,	
0	0	1			-			-				-		I	-	100.0
88	164	1022	24.2	4.1	1008	98.6	9	0.6	4	0.4	4	0.4	0	0.0	,	
55	256	1842	43.7	7.4	1826	99.1	8	0.4	8	0.4	0	0.0	0	0.0	,	
44	188	1353	32.1	5.5	1335	98.7	11	0.8	9	0.4	-	0.1	0	0.0	,	
0	0	0	0.0	0.0	0		0	1	0		0		0		,	,
1:45 PM	Hourly Total	Grand Total	Approach %	Total %	Lights	% Lights	Buses	% Buses	Single-Unit Trucks	% Single-Unit Trucks	Articulated Trucks	% Articulated Trucks	Bicycles on Road	% Bicycles on Road	Pedestrians	% Pedestrians

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			nt. Total	835	782	815	780	3212			0.962	3060	95.3	58	1.8	51	1.6	43	1.3	0	0.0		,
			App. Total Ir	273	259	274	256	1062	-	33.1	0.969	1009	95.0	18	1.7	16	1.5	19	1.8	0	0.0	-	,
			Peds	0	1	0	0	1			1		-			-				-		1	100.0
	enue	pur	Right	42	49	40	44	175	16.5	5.4	0.893	165	94.3	7	4.0	3	1.7	0	0.0	0	0.0	-	
	Harlem Av	Southbol	Thru	213	192	209	190	804	75.7	25.0	0.944	768	95.5	7	0.9	11	1.4	18	2.2	0	0.0	-	
			Left	18	18	25	22	83	7.8	2.6	0.830	76	91.6	4	4.8	2	2.4	+	1.2	0	0.0	-	
			J-Tum	0	0	0	0	0	0.0	0.0	0.000	0	-	0		0		0		0		-	
			App. Total	318	271	276	274	1139	-	35.5	0.895	1080	94.8	16	1.4	23	2.0	20	1.8	0	0.0	-	
			Peds	0	0	0	0	0			-		-			-				-		0	
(M)	enue	pur	Right	14	17	10	14	55	4.8	1.7	0.809	49	89.1	2	3.6	4	7.3	0	0.0	0	0.0	-	
:00 A	Harlem Av	Northbol	Thru	256	194	220	222	892	78.3	27.8	0.871	846	94.8	8	0.9	19	2.1	19	2.1	0	0.0	-	
ata (7			Left	47	58	46	36	187	16.4	5.8	0.806	180	96.3	6	3.2	0	0.0	1	0.5	0	0.0	-	
our D			J-Tum	1	2	0	2	5	0.4	0.2	0.625	5	100.0	0	0.0	0	0.0	0	0.0	0	0.0	-	
eak H			App. Total	114	93	110	110	427	-	13.3	0.936	410	96.0	8	1.9	7	1.6	2	0.5	0	0.0	-	,
ent Pe			Peds	0	-	0	0	-			-		-			-				-		1	100.0
veme	eet	pur	Right	13	6	25	24	68	15.9	2.1	0.680	60	88.2	1	1.5	5	7.4	2	2.9	0	0.0	-	
ng Mo	171st Str	Westbou	Thru	77	56	58	56	247	57.8	7.7	0.802	238	96.4	7	2.8	2	0.8	0	0.0	0	0.0	-	
Turnii			Left	24	31	27	30	112	26.2	3.5	0.903	112	100.0	0	0.0	0	0.0	0	0.0	0	0.0	-	
			J-Turn	0	0	0	0	0	0.0	0.0	0.000	0		0		0		0		0		-	
			App. Total	130	159	155	140	584	-	18.2	0.918	561	96.1	16	2.7	5	0.9	2	0.3	0	0.0	-	
			Peds	0	0	0	0	0			-		-			-				-		0	
	reet	pur	Right	35	31	31	29	126	21.6	3.9	0.900	119	94.4	4	3.2	1	0.8	2	1.6	0	0.0	-	
	171st St	Eastbou	Thru	59	72	66	66	263	45.0	8.2	0.913	258	98.1	3	1.1	2	0.8	0	0.0	0	0.0	-	
			Left	36	56	58	45	195	33.4	6.1	0.841	184	94.4	6	4.6	2	1.0	0	0.0	0	0.0	-	
			U-Tum	0	0	0	0	0	0.0	0.0	0.000	0		0		0		0		0		-	
			Start Time	7:00 AM	7:15 AM	7:30 AM	7:45 AM	Total	Approach %	Total %	PHF	Lights	% Lights	Buses	% Buses	Single-Unit Trucks	% Single-Unit Trucks	Articulated Trucks	% Articulated Trucks	Bicycles on Road	% Bicycles on Road	Pedestrians	% Pedestrians

Kenig, Lindgren, Orlara, Aboona, Inc. Kenig Lindgren O'Hara, Aboona, Inc. 9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018 (847)518-9990 sainkeshavarzi@kloainc.com

			Int. Total	1019	1038	976	1006	4039			0.973	4013	99.4	4	0.1	11	0.3	11	0.3	0	0.0	,	
			App. Total	361	338	318	351	1368		33.9	0.947	1356	99.1	2	0.1	6	0.4	4	0.3	0	0.0		
			Peds	0	0	0	0	0		-			-			-						0	
	venue	punc	Right	44	50	45	39	178	13.0	4.4	0.890	177	99.4	1	0.6	0	0.0	0	0.0	0	0.0	,	,
	Harlem A	Southb	Thru	282	258	257	277	1074	78.5	26.6	0.952	1063	99.0	1	0.1	6	0.6	4	0.4	0	0.0	,	,
			Left	34	30	16	35	115	8.4	2.8	0.821	115	100.0	0	0.0	0	0.0	0	0.0	0	0.0	,	,
			U-Tum	+	0	0	0	+	0.1	0.0	0.250	٢	100.0	0	0.0	0	0.0	0	0.0	0	0.0	,	
-			App. Total	356	408	349	387	1500		37.1	0.919	1490	99.3	1	0.1	3	0.2	6	0.4	0	0.0		
			Peds	0	0	0	0	0		-			-	-		-				-	ı	0	
(Mc	venue	punc	Right	34	34	17	29	114	7.6	2.8	0.838	114	100.0	0	0.0	0	0.0	0	0.0	0	0.0	,	,
4:00 F	Harlem A	Northbo	Thru	260	320	279	300	1159	77.3	28.7	0.905	1149	99.1	1	0.1	3	0.3	9	0.5	0	0.0	,	,
ata (			Left	58	53	52	58	221	14.7	5.5	0.953	221	100.0	0	0.0	0	0.0	0	0.0	0	0.0	,	,
lour D			U-Tum	4	1	1	0	6	0.4	0.1	0.375	9	100.0	0	0.0	0	0.0	0	0.0	0	0.0	,	
eak F			App. Total	132	124	110	96	462		11.4	0.875	459	99.4	1	0.2	1	0.2	<del>.</del>	0.2	0	0.0	,	,
ent P			Peds	0	0	0	0	0		-			-	-		-	ı			-	ı	0	
ovem	treet	pund	Right	17	18	25	21	81	17.5	2.0	0.810	81	100.0	0	0.0	0	0.0	0	0.0	0	0.0	,	,
ng M	171st S	Westbo	Thru	84	74	41	42	241	52.2	6.0	0.717	239	99.2	1	0.4	1	0.4	0	0.0	0	0.0	,	,
Turni			Left	31	32	44	33	140	30.3	3.5	0.795	139	99.3	0	0.0	0	0.0	<del>.</del>	0.7	0	0.0	,	,
			U-Turn	0	0	0	0	0	0.0	0.0	0.000	0		0		0		0		0		,	,
-			App. Total	170	168	199	172	709		17.6	0.891	708	99.9	0	0.0	1	0.1	0	0.0	0	0.0		,
			Peds	0	0	0	0	0		-			-	-		-				-		0	
	treet	pund	Right	39	39	45	42	165	23.3	4.1	0.917	165	100.0	0	0.0	0	0.0	0	0.0	0	0.0	,	,
	171st S	Eastbo	Thru	81	76	93	83	333	47.0	8.2	0.895	332	99.7	0	0.0	1	0.3	0	0.0	0	0.0	,	,
			Left	50	53	61	47	211	29.8	5.2	0.865	211	100.0	0	0.0	0	0.0	0	0.0	0	0.0	,	,
			U-Tum	0	0	0	0	0	0.0	0.0	0.000	0		0		0		0		0		,	,
			Start Time	4:00 PM	4:15 PM	4:30 PM	4:45 PM	Total	Approach %	Total %	PHF	Lights	% Lights	Buses	% Buses	Single-Unit Trucks	% Single-Unit Trucks	Articulated Trucks	% Articulated Trucks	Bicycles on Road	% Bicycles on Road	Pedestrians	% Pedestrians

Kenig, Lindgren, Orlara, Aboona, Inc. Kenig Lindgren O'Hara, Aboona, Inc. 9575 W. Higgins Rd., Suite 400

80/0 W. ruguris Ku., Julie 400 Rosemont, Illinois, United States 60018 (847)518-9990 sainkeshavarzi@kloainc.com

			Int. Total	997	1050	1011	902	3960			0.943	3937	99.4	2	0.1	18	0.5	e	0.1	0	0.0	,	
			App. Total	356	365	347	331	1399	-	35.3	0.958	1387	99.1	0	0.0	10	0.7	2	0.1	0	0.0	,	-
			Peds	0	0	0	0	0		-	-		-									0	-
	/enue	pund	Right	60	48	52	47	207	14.8	5.2	0.863	205	0.06	0	0.0	2	1.0	0	0.0	0	0.0	,	-
	Harlem A	Southbo	Thru	263	282	264	256	1065	76.1	26.9	0.944	1055	99.1	0	0.0	8	0.8	2	0.2	0	0.0	,	-
			Left	33	35	31	28	127	9.1	3.2	0.907	127	100.0	0	0.0	0	0.0	0	0.0	0	0.0	,	-
			U-Tum	0	0	0	0	0	0.0	0.0	0.000	0	-	0		0		0		0		,	-
	•		App. Total	372	381	386	319	1458	-	36.8	0.944	1451	99.5	0	0.0	9	0.4	-	0.1	0	0.0	,	-
			Peds	0	0	0	0	0		-	-	-	-		-	,						0	-
AM)	venue	pun	Right	24	29	15	11	79	5.4	2.0	0.681	79	100.0	0	0.0	0	0.0	0	0.0	0	0.0	,	-
1:15 /	Harlem Av	Northbo	Thru	288	295	306	251	1140	78.2	28.8	0.931	1135	9.6	0	0.0	4	0.4	-	0.1	0	0.0	,	-
ata (1			Left	59	57	64	54	234	16.0	5.9	0.914	232	99.1	0	0.0	2	0.0	0	0.0	0	0.0	,	-
our Da			U-Tum	1	0	1	3	5	0.3	0.1	0.417	5	100.0	0	0.0	0	0.0	0	0.0	0	0.0	,	-
eak Ho			App. Total	120	134	116	120	490		12.4	0.914	490	100.0	0	0.0	0	0.0	0	0.0	0	0.0		-
ent Pe			Peds	0	0	0	0	0		-	-		-								ı	0	-
veme	treet	pund	Right	23	30	23	22	98	20.0	2.5	0.817	98	100.0	0	0.0	0	0.0	0	0.0	0	0.0	,	-
ng Mc	171st S	Westbo	Thru	67	67	54	64	252	51.4	6.4	0.940	252	100.0	0	0.0	0	0.0	0	0.0	0	0.0	,	-
Turnir			Left	30	37	39	34	140	28.6	3.5	0.897	140	100.0	0	0.0	0	0.0	0	0.0	0	0.0	,	-
			U-Turn	0	0	0	0	0	0.0	0.0	0.000	0	-	0		0	-	0		0		,	-
			App. Total	149	170	162	132	613		15.5	0.901	609	99.3	2	0.3	2	0.3	0	0.0	0	0.0	,	
			Peds	0	0	0	0	0		-	I	-	-		-							0	-
	Street	punc	Right	37	33	36	32	138	22.5	3.5	0.932	138	100.0	0	0.0	0	0.0	0	0.0	0	0.0	,	-
	171st 9	Eastbo	Thru	66	83	69	54	272	44.4	6.9	0.819	269	98.9	2	0.7	-	0.4	0	0.0	0	0.0	,	-
			Left	46	54	57	46	203	33.1	5.1	0.890	202	99.5	0	0.0	-	0.5	0	0.0	0	0.0	,	-
			U-Tum	0	0	0	0	0	0.0	0.0	0.000	0	-	0		0		0		0		,	-
			Start Time	11:15 AM	11:30 AM	11:45 AM	12:00 PM	Total	Approach %	Total %	PHF	Lights	% Lights	Buses	% Buses	Single-Unit Trucks	% Single-Unit Trucks	Articulated Trucks	% Articulated Trucks	Bicycles on Road	% Bicycles on Road	Pedestrians	% Pedestrians

# Site Plan



PROPOSED WATER SERVICE PROPOSED STORM SERVICE PROPOSED SANITARY SERVICE PROPOSED PERFORATED PIPE SLLT FENCE CHAIN LINK CONSTRUCTION FENCE	SEWER MANHOLE PROPOSED CATCH BASIN PROPOSED WATER VALVE VAULT PROPOSED FIRE HYDRANT INLET FILTER BAG	5" PCC ON 4" CA4 CONCRETE SIDEWALK B4.12 CURB AND GUTTER CONSTRUCTION ENTRANCE EXISTING BUILDING ACCESSES EASEMENT AREA DEDICATED TO ROW TOP OF CURB ELEVATION TOP OF CURB ELEVATION FLOW LING OF GUTTER ELEVATION FLOW LING OF GUTTER ELEVATION OVERLAND OVERFLOW ROUTE WG DUCHT POLE SANITARY MANHOLE ULGAT POLE	CATCH BASIN STORM SEWER SANITARY SEWER SED CONDITION
LEGEND	● © ♥ ⊻	EXAMPLE 1	●     ● ↓ ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●

CONCRETE WALKWAYS PAVEMENT (CN=98)	1,130 SF
CONCRETE CURB AND GUTTER(CN=98)	1,743 SF
PERMEABLE PAVERS	2,516 SF
GRASS (CN=74)	8,253 SF

# PERCENTAGE PROPOSED LOT COVER=(18,028/ 29,342)X100=61.4%

18,028 SF

IMPERVIOUS AREA

Γ				П			LL





Damas Consulting Group 5625 MIDDAUGH AVE Downers Grove, IL. 60516 Ph 630-991-3299 FAX 630-541-2382



DATTE DRAWING (SSU) More 14-2023 PER THE VILLAGE COMMEN Des 21-2023 PER THE VILLAGE COMMEN

> 29,342 SF 3329.0 SF

TOTAL DISTURBED AREA BUILDING FOOTPRINT (CN =98)

ASPHALT (CN=98)

II,826 SF

PROJECT AT:7130 171S ST, TINLEY PARK, IL 60477

# Stacking and Auto-turn Exhibit



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and the second		-	Kem		
	THE HOU				
		17107 070			
		1/151 5186	EI		
	7 1				
STACKING	G = 33 VEHICLES	100			
		5 UT		1	- 0
7130 171ST STREET TINLEY PARK, ILLINOI	s PASSENGER VEHIC	LE STACKING	DRAWN: MD C DATE: 03-02-23 R PROJECT #: 23-059 EXHIBIT: A	HECKED: LA KEV: 08-13-23 Kenig,Lindgren,O'Hara,	Aboona,Inc.



# ITE Trip Generation Summary Sheets

### Land Use: 948 Automated Car Wash

### Description

An automated car wash is a facility that allows for the mechanical cleaning of the exterior of vehicles. Manual cleaning service may also be available at the facility. Self-service car wash (Land Use 947) and car wash and detail center (Land Use 949) are related uses.

### **Additional Data**

The sites were surveyed in the 1990s and the 2000s in New Jersey, New York, and Washington.

### **Source Numbers**

552, 555, 585, 599, 954



### Automated Car Wash (948)

### Vehicle Trip Ends vs: Car Wash Tunnels

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

### Setting/Location: General Urban/Suburban

Number of Studies: 3

Avg. Num. of Car Wash Tunnels: 1

Directional Distribution: 50% entering, 50% exiting

### Vehicle Trip Generation per Car Wash Tunnel

Average Rate	Range of Rates	Standard Deviation
77.50	50.00 - 104.50	33.07

### **Data Plot and Equation**



### Automated Car Wash (948)

### Vehicle Trip Ends vs: Car Wash Tunnels

On a: Saturday, Peak Hour of Generator

### Setting/Location: General Urban/Suburban

Number of Studies: 1

Avg. Num. of Car Wash Tunnels: 1

Directional Distribution: 46% entering, 54% exiting

### Vehicle Trip Generation per Car Wash Tunnel

Average Rate	Range of Rates	Standard Deviation
41.00	41.00 - 41.00	***

### **Data Plot and Equation**

Caution – Small Sample Size





# CMAP 2050 Projections Letter



433 West Van Buren Street Suite 450 Chicago, IL 60607

> 312-454-0400 cmap.illinois.gov

March 28, 2023

Shahrzad Ainkeshavarzi Traffic Engineer Kenig, Lindgren, O'Hara, Aboona, Inc. 9575 West Higgins Road Suite 400 Rosemont, IL 60018

### Subject: 171st Street @ Harlem Avenue IDOT

Dear Ms. Ainkeshavarzi:

In response to a request made on your behalf and dated March 28, 2023, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
Harlem Avenue N of 171st Street	27,100	32,700
Harlem Avenue S of 171st Street	29,800	37,300
171st Street E of Harlem Avenue	11,800	14,600
171st Street W of Harlem Avenue	16,000	20,700

Traffic projections are developed using existing ADT data provided in the request letter and the results from the October 2022 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP Senior Planner, Research & Analysis

cc: Rios (IDOT) 2023\_TrafficForecasts\TinleyPark\ck-47-23\ck-47-23.docx

# Level of Service Criteria

### LEVEL OF SERVICE CRITERIA

Signalized Intersections										
Level of			Average Control Delay							
Service	Interpretation		(seconds per vehicle)							
A	Favorable progression. Most vehicles arrive green indication and travel through the intersect stopping.	e during the ction without	≤10							
В	Good progression, with more vehicles stopp Level of Service A.	ing than for	>10 - 20							
С	Individual cycle failures (i.e., one or more que are not able to depart as a result of insuffici during the cycle) may begin to appear. Numbe stopping is significant, although many vehicl through the intersection without stopping.	ued vehicles ent capacity er of vehicles les still pass	>20 - 35							
D	The volume-to-capacity ratio is high and either is ineffective, or the cycle length is too lo vehicles stop and individual cycle failures are	r progression ong. Many noticeable.	>35 - 55							
E	Progression is unfavorable. The volume-to-c is high, and the cycle length is long. Indi- failures are frequent.	apacity ratio vidual cycle	>55 - 80							
F	The volume-to-capacity ratio is very high, provery poor, and the cycle length is long. Most of clear the queue.	rogression is cycles fail to	>80.0							
	Unsignalized Intersection	15								
	Level of Service Aver	rage Total Del	ay (SEC/VEH)							
	А	0 -	10							
	В	> 10 -	15							
	С	> 15 -	25							
	D	> 25 -	35							
	E	> 35 -	50							
	F	> 50	)							
Source: Highwa	ty Capacity Manual, 2010.									

## Capacity Analysis Summary Sheets Existing Weekday Morning Peak Hour

### Lanes, Volumes, Timings 1: Harlem Avenue & 171st Street

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	5	<b>≜1</b> 4		5	≜ts		5	<b>A</b> 12		5	<b>≜1</b> 5	
Traffic Volume (vph)	195	263	126	112	247	68	192	892	55	83	804	175
Future Volume (vph)	195	263	126	112	247	68	192	892	55	83	804	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	150		0	160		0	190		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	145			145			125			125		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.951			0.968			0.991			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd, Flow (prot)	1703	3324	0	1805	3305	0	1736	3396	0	1671	3366	0
Flt Permitted	0.342			0.451			0.168			0.223		-
Satd, Flow (perm)	613	3324	0	857	3305	0	307	3396	0	392	3366	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		212			138			383			516	
Travel Time (s)		3.6			2.7			6.5			8.8	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	6%	2%	6%	0%	4%	12%	4%	5%	11%	8%	4%	6%
Shared Lane Traffic (%)	0,0	270	0,0	0,0	170	1270	170	0,0	1170	0,0	170	0,0
Lane Group Flow (vph)	203	405	0	117	328	0	200	986	0	86	1020	0
Turn Type	pm+pt	NA	Ū	pm+pt	NA	Ū	pm+pt	NA	•	pm+pt	NA	v
Protected Phases	ې ور 7	4		3	8		5	2		ې ور 1	6	
Permitted Phases	4	•		8	•		2	_		6	•	
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase	-	-		-	-		-	_		-	-	
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0		9.5	24.0	
Total Split (s)	19.0	36.0		14.0	31.0		14.0	56.0		14.0	56.0	
Total Split (%)	15.8%	30.0%		11.7%	25.8%		11.7%	46.7%		11.7%	46.7%	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	38.7	23.0		30.4	18.2		73.9	62.1		67.6	57.0	
Actuated g/C Ratio	0.32	0.19		0.25	0.15		0.62	0.52		0.56	0.48	
v/c Ratio	0.62	0.64		0.40	0.65		0.62	0.56		0.28	0.64	
Control Delay	39.0	49.0		32.8	54.0		19.6	23.0		12.9	27.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	39.0	49.0		32.8	54.0		19.6	23.0		12.9	27.3	
LOS	D	D		С	D		В	С		В	С	
Approach Delav	_	45.7		-	48.4			22.5		_	26.2	
Approach LOS		D			D			C			C	
Queue Length 50th (ft)	119	153		65	127		64	277		26	314	
Queue Length 95th (ft)	174	196		104	169		113	392		54	423	

AMEX Existing Weekday Morning Peak Hour Conditions 11:59 pm 02/11/2019 23059 - Car Wash - Tinley Park sa

### Lanes, Volumes, Timings 1: Harlem Avenue & 171st Street

03/29/2023

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		132			58			303			436	
Turn Bay Length (ft)	160			150			160			190		
Base Capacity (vph)	338	831		305	688		329	1757		340	1597	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.60	0.49		0.38	0.48		0.61	0.56		0.25	0.64	
Intersection Summary												
Area Type: O	ther											
Cycle Length: 120												
Actuated Cycle Length: 120												
Offset: 0 (0%), Referenced to	phase 2:	NBTL and	I 6:SBTL,	Start of (	Green							
Natural Cycle: 75												
Control Type: Actuated-Coord	dinated											
Maximum v/c Ratio: 0.65												
Intersection Signal Delay: 31.	3			In	tersectior	n LOS: C						
Intersection Capacity Utilization	on 74.9%			IC	U Level o	of Service	D					
Analysis Period (min) 15												
Splits and Phases: 1: Harle	em Avenue	e & 171st	Street									
Ø1 Ø2 (R)						4	Ø3	4	04			
14 s 56 s						14 s		36 s				
▲ Ø5 🕴 Ø6 (R)						1	Ø7		¥ ø8			
0												
-------	-----------------------------------------------------------	--------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------						
EBL	EBT	WBT	WBR	SBL	SBR							
	- 11	- 11		Y								
0	401	427	0	0	0							
0	401	427	0	0	0							
0	0	0	0	0	0							
Free	Free	Free	Free	Stop	Stop							
-	None	-	None	-	None							
-	-	-	-	0	-							
, # -	0	0	-	0	-							
-	0	0	-	0	-							
80	80	80	80	80	80							
0	2	2	0	0	0							
0	501	534	0	0	0							
	0 EBL 0 0 Free - # - 80 0 0	0 EBL EBT 0 401 0 401 0 0 Free Free - None - None - 0 80 80 0 2 0 501	0 EBL EBT WBT ↑↑↑ ↑↑↑ 0 401 427 0 401 427 0 0 0 Free Free Free - None -  ,# - 0 00 0 0 80 80 80 80 80 0 2 2 0 501 534	BBL  EBT  WBT  WBR    ●  ●  ●  ●  ●    0  401  427  0    0  401  427  0    0  401  427  0    0  401  427  0    0  0  0  0    0  0  0  0    Free  Free  Free  Free    0  0  0  0    1  -  -  -    4  0  0  0  -    4  0  0  0  -    4  0  0  0  -    5  0  0  0  -    8  80  80  80  0    0  501  534  0  -	BBL  EBT  WBT  WBR  SBL    ●●●  ●●●  ●●●  ●●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●  ●●	BEBL  EBT  WBT  WBR  SBL  SBR    ●●●●  ●●●  ●●●  ●●●  ●●●  ●  ●●  ●  ●●  ●  ●●  ●  ●●  ●  ●●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ●  ● <t< td=""></t<>						

Major/Minor	Major1	1	Major2	Ν	1inor2			
Conflicting Flow All	-	0	-	0	785	267		
Stage 1	-	-	-	-	534	-		
Stage 2	-	-	-	-	251	-		
Critical Hdwy	-	-	-	-	6.8	6.9		
Critical Hdwy Stg 1	-	-	-	-	5.8	-		
Critical Hdwy Stg 2	-	-	-	-	5.8	-		
Follow-up Hdwy	-	-	-	-	3.5	3.3		
Pot Cap-1 Maneuver	0	-	-	0	334	737		
Stage 1	0	-	-	0	558	-		
Stage 2	0	-	-	0	774	-		
Platoon blocked, %		-	-					
Mov Cap-1 Maneuve	r -	-	-	-	334	737		
Mov Cap-2 Maneuve	r -	-	-	-	334	-		
Stage 1	-	-	-	-	558	-		
Stage 2	-	-	-	-	774	-		
Approach	EB		WB		SB			
HCM Control Delay,	s 0		0		0			
HCM LOS					А			
Minor Lane/Major Mv	mt	EBT	WBT S	BLn1				
Capacity (veh/h)		-	-	-				
HCM Lane V/C Ratio		-	-	-				
HCM Control Delay (	s)	-	-	0				
HCM Lane LOS		-	-	А				
HCM 95th %tile Q(ve	h)	-	-	-				

Int Delay, s/veh	0						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		- <b>4</b> ↑	- <b>†</b> 1-		۰¥		
Traffic Vol, veh/h	0	401	427	0	0	0	
Future Vol, veh/h	0	401	427	0	0	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	-	-	-	-	0	-	
Veh in Median Storage	,# -	0	0	-	0	-	
Grade, %	-	0	0	-	0	-	
Peak Hour Factor	80	80	80	80	80	80	
Heavy Vehicles, %	0	2	2	0	0	0	
Mvmt Flow	0	501	534	0	0	0	

Major/Minor	Major1	Ν	/lajor2	I	Minor2	
Conflicting Flow All	534	0	-	0	785	267
Stage 1	-	-	-	-	534	-
Stage 2	-	-	-	-	251	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1044	-	-	-	334	737
Stage 1	-	-	-	-	558	-
Stage 2	-	-	-	-	774	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	r 1044	-	-	-	334	737
Mov Cap-2 Maneuver	r -	-	-	-	334	-
Stage 1	-	-	-	-	558	-
Stage 2	-	-	-	-	774	-
Approach	ER		\//R		CB	
HCM Control Dolov of			0		00	
HCM LOS	5 0		0		0	
					A	
Minor Lane/Major Mv	mt	EBL	EBT	WBT	WBR S	BLn1
Capacity (veh/h)		1044	-	-	-	-
HCM Lane V/C Ratio		-	-	-	-	-
HCM Control Delay (s	s)	0	-	-	-	0
HCM Lane LOS		А	-	-	-	A
HCM 95th %tile Q(ve	h)	0	-	-	-	-

# Capacity Analysis Summary Sheets Existing Weekday Evening Peak Hour

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Lane Group E	BL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	۳.	<b>4</b> 15		۳	<b>4</b> 16		ሻ	<b>≜</b> 16		5	<b>≜</b> 15	
Traffic Volume (vph)	211	338	165	140	331	81	226	1159	114	116	1074	178
Future Volume (vph)	211	338	165	140	331	81	226	1159	114	116	1074	178
Ideal Flow (vphpl) 19	00	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	60		0	150		0	160		0	190		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	45			145			125			125		
Lane Util. Factor 1	.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.951			0.970			0.987			0.979	
Flt Protected 0.9	950			0.950			0.950			0.950		
Satd, Flow (prot) 18	305	3410	0	1787	3474	0	1805	3531	0	1805	3499	0
Flt Permitted 0.2	236			0.205			0.084			0.120		-
Satd, Flow (perm)	48	3410	0	386	3474	0	160	3531	0	228	3499	0
Right Turn on Red			No			No			No			No
Satd, Flow (RTOR)												
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		212			138			383			516	
Travel Time (s)		3.6			2.7			6.5			8.8	
Peak Hour Factor 0	97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	1%	0%	1%	1%	0%	0%	1%	0%	0%	1%	1%
Shared Lane Traffic (%)		. / 0	• / •	.,.	. / 0	• / •	• / •	. , •	•,•	• /•	. , •	.,.
Lane Group Flow (vph)	218	518	0	144	425	0	233	1313	0	120	1291	0
Turn Type pm	+pt	NA	Ŭ	pm+pt	NA	•	pm+pt	NA	•	pm+pt	NA	Ŭ
Protected Phases	7	4		3	8		5	2		p pt	6	
Permitted Phases	4	•		8	Ū		2	-		6	Ū	
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase	-	•			•		•	_			•	
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0		9.5	24.0	
Total Split (s) 2	0.0	29.0		20.0	29.0		24.0	73.0		18.0	67.0	
Total Split (%) 14.	3%	20.7%		14.3%	20.7%		17.1%	52.1%		12.9%	47.9%	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag Le	ad	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	'es	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode No	ne	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s) 4	2.5	24.5		38.1	22.2		89.1	73.4		78.2	66.1	
Actuated g/C Ratio 0	.30	0.18		0.27	0.16		0.64	0.52		0.56	0.47	
v/c Ratio 0	.76	0.87		0.61	0.77		0.77	0.71		0.51	0.78	
Control Delay 5	5.0	71.9		46.7	66.7		44.7	28.7		19.6	36.3	
Queue Delav	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay 5	5.0	71.9		46.7	66.7		44.7	28.7		19.6	36.3	
LOS	D	E		D	F		D	C		B	D	
Approach Delay	-	66.9		_	61.7		-	31.1		_	34.9	
Approach LOS		E			E			С			С	
Queue Length 50th (ft)	52	241		96	196		126	471		42	531	
Queue Length 95th (ft) #2	42	#354		154	257		221	598		69	647	

PMEX Existing Weekday Evening Peak Hour Conditions 9:18 am 03/29/2023 23059 - Car Wash - Tinley Park sa

03/29/2023

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		132			58			303			436	
Turn Bay Length (ft)	160			150			160			190		
Base Capacity (vph)	295	597		278	570		342	1851		298	1651	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.74	0.87		0.52	0.75		0.68	0.71		0.40	0.78	
Intersection Summary												
Area Type:	Other											
Cycle Length: 140												
Actuated Cycle Length: 140	)											
Offset: 0 (0%), Referenced	to phase 2:	NBTL and	6:SBTL	Start of (	Green							
Natural Cycle: 90												
Control Type: Actuated-Coc	ordinated											
Maximum v/c Ratio: 0.87												
Intersection Signal Delay: 4	2.6			In	tersectior	n LOS: D						
Intersection Capacity Utiliza	ation 88.0%			IC	U Level o	of Service	E					
Analysis Period (min) 15												
# 95th percentile volume e	exceeds cap	bacity, qu	eue may	be longer								
Queue shown is maximum after two cycles.												
Splits and Phases: 1: Ha	rlem Avenue	e & 171st	Street									

Ø1	1 (R)	<b>√</b> Ø3	<u>→</u> <sub>Ø4</sub>
18 s	73 s	20 s	29 s
<b>Ø</b> 5	🖉 🗸 🖗 Ø6 (R)		<b>₩</b> Ø8
24 s	67 s	20 s	29 s

0

## Intersection

Int Delay, s/veh

EBU	EBL	EBT	WBT	WBR	SBL	SBR
		- 11	- 11		۰¥	
1	0	567	551	0	0	0
1	0	567	551	0	0	0
0	0	0	0	0	0	0
Free	Free	Free	Free	Free	Stop	Stop
-	-	None	-	None	-	None
-	-	-	-	-	0	-
, # -	-	0	0	-	0	-
-	-	0	0	-	0	-
94	94	94	94	94	94	94
0	0	1	1	0	0	0
1	0	603	586	0	0	0
	EBU 1 1 Free - # - 94 0 1	EBU  EBL    1  0    1  0    0  0    Free  -    -  -    #  -    94  94    0  0    1  0	EBU  EBL  EBT    1  0  567    1  0  567    0  0  0    Free  Free  Free    -  -  None    -  -  0    #  -  0    94  94  94    0  0  1    1  0  603	EBU  EBL  EBT  WBT    ↑↑  ↑↑  ↑↑    1  0  567  551    1  0  567  551    0  0  0  0    Free  Free  Free  Free    -  None  -  -    #  -  0  0  0    \$\mathcal{4}\$  -  0  0  0    \$\mathcal{4}\$  -  0  0  0    \$\mathcal{4}\$  94  94  94  0    \$\mathcal{4}\$  0  0  1  1    1  0  603  586  586	EBU  EBL  EBT  WBT  WBR    1  0  567  551  0    1  0  567  551  0    1  0  567  551  0    0  0  0  0  0    0  0  0  0  0    Free  Free  Free  Free  Free    -  -  None  -  None    -  -  0  0  -    #  -  0  0  -    #  -  0  0  -    94  94  94  94  94    0  0  1  1  0    1  0  603  586  0	EBU  EBL  EBT  WBT  WBR  SBL

Major/Minor	Major1		Ν	lajor2	Ν	linor2		
Conflicting Flow All	586	-	0	-	0	890	293	
Stage 1	-	-	-	-	-	586	-	
Stage 2	-	-	-	-	-	304	-	
Critical Hdwy	6.4	-	-	-	-	6.8	6.9	
Critical Hdwy Stg 1	-	-	-	-	-	5.8	-	
Critical Hdwy Stg 2	-	-	-	-	-	5.8	-	
Follow-up Hdwy	2.5	-	-	-	-	3.5	3.3	
Pot Cap-1 Maneuver	618	0	-	-	0	286	709	
Stage 1	-	0	-	-	0	525	-	
Stage 2	-	0	-	-	0	728	-	
Platoon blocked, %			-	-				
Mov Cap-1 Maneuver	618	-	-	-	-	285	709	
Mov Cap-2 Maneuver	-	-	-	-	-	285	-	
Stage 1	-	-	-	-	-	524	-	
Stage 2	-	-	-	-	-	728	-	
Approach	EB			WB		SB		
HCM Control Delay, s	0			0		0		
HCM LOS						А		
Minor Lane/Major Mvn	nt	EBT	WBT S	BLn1				
Capacity (veh/h)		-	-	-				
HCM Lane V/C Ratio		-	-	-				
HCM Control Delay (s)	)	-	-	0				
HCM Lane LOS		-	-	Α				
HCM 95th %tile Q(veh	ı)	-	-	-				

0						
EBL	EBT	WBT	WBR	SBL	SBR	
	- <b>4</b> ↑	- <b>†</b> 1-		Y		
0	567	551	0	0	0	
0	567	551	0	0	0	
0	0	0	0	0	0	
Free	Free	Free	Free	Stop	Stop	
-	None	-	None	-	None	
-	-	-	-	0	-	
# -	0	0	-	0	-	
-	0	0	-	0	-	
94	94	94	94	94	94	
0	1	1	0	0	0	
0	603	586	0	0	0	
	0 EBL 0 0 Free -	0 EBL EBT ↓ 0 567 0 567 0 0 Free Free - None - None ↓ 4 0 94 94 0 1 0 603	0 EBL EBT WBT ↓ ↓ ↓ 0 567 551 0 567 551 0 0 0 Free Free Free ↓ None - ↓ 0 0 ↓ 0 ↓ 0 94 94 94 0 1 1 0 603 586	BBL  EBT  WBT  WBR    ●  ●  ●  ●    0  567  551  0    0  567  551  0    0  567  551  0    0  567  551  0    0  0  0  0    Free  Free  Free  Free    0  0  0  0    1  0  0  0    94  94  94  94    94  01  1  0    0  603  586  0	BBL  EBT  WBT  WBR  SBL    ●  ●  ●  ●  ●  ●    0  567  551  00  0    0  567  551  0  0    0  567  551  0  0    0  0  0  0  0    Free  Free  Free  Stop    -  -  None  -    -  -  None  -    -  0  0  0  0    #  0  0  -  0    #  0  0  -  0    94  94  94  94  94    0  1  1  0  0    0  603  586  0  0	BLB  EBT  WBT  WBR  SBL  SBR    ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲  ▲▲  ▲▲ ▲▲

Major/Minor	Major1	Ν	/lajor2	1	Vinor2	
Conflicting Flow All	586	0	-	0	888	293
Stage 1	-	-	-	-	586	-
Stage 2	-	-	-	-	302	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	999	-	-	-	287	709
Stage 1	-	-	-	-	525	-
Stage 2	-	-	-	-	730	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	r 999	-	-	-	287	709
Mov Cap-2 Maneuver	r -	-	-	-	287	-
Stage 1	-	-	-	-	525	-
Stage 2	-	-	-	-	730	-
Approach	EB		WB		SB	
HCM Control Delay, s	s 0		0		0	
HCM LOS					А	
Minor Lane/Major Mv	mt	EBL	EBT	WBT	WBR S	BLn1
Capacity (veh/h)		999	-	-	-	-
HCM Lane V/C Ratio		-	-	-	-	-
HCM Control Delay (s	s)	0	-	-	-	0
HCM Lane LOS		А	-	-	-	Α
HCM 95th %tile Q(ve	h)	0	-	-	-	-

# Capacity Analysis Summary Sheets Existing Saturday Midday Peak Hour

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	<b>N</b>	<b>A</b> 12		<b>N</b>	<b>≜1</b> 6		5	<b>≜</b> 15		<b>N</b>	<b>≜1</b> 5	
Traffic Volume (vph)	203	323	138	140	252	98	239	1140	79	127	1065	207
Future Volume (vph)	203	323	138	140	252	98	239	1140	79	127	1065	207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	150		0	160		0	190		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	145			145			125			125		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.955			0.958			0.990			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3424	0	1805	3458	0	1787	3574	0	1805	3488	0
Flt Permitted	0.304			0.248			0.066			0.124		
Satd. Flow (perm)	578	3424	0	471	3458	0	124	3574	0	236	3488	0
Right Turn on Red			No			No			No			No
Satd, Flow (RTOR)						-						
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		212			138			383			516	
Travel Time (s)		3.6			2.7			6.5			8.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	1%	1%
Shared Lane Traffic (%)	• / •	. , •	• / •	• • • •	• • • •	• / •	. , •	• / •	•,•	• • • •	. , •	.,.
Lane Group Flow (vph)	216	491	0	149	372	0	254	1297	0	135	1353	0
Turn Type	pm+pt	NA	Ū	pm+pt	NA	Ū	pm+pt	NA	Ū	pm+pt	NA	Ŭ
Protected Phases	ې ور 7	4		3	8		5	2		ې ور 1	6	
Permitted Phases	4	•		8	•		2	_		6	•	
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase	-	-		-	-		-	_		-	-	
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0		9.5	24.0	
Total Split (s)	18.0	30.0		16.0	28.0		20.0	70.0		14.0	64.0	
Total Split (%)	13.8%	23.1%		12.3%	21.5%		15.4%	53.8%		10.8%	49.2%	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	39.2	22.7		34.5	20.4		82.6	67.5		72.2	60.6	
Actuated g/C Ratio	0.30	0.17		0.27	0.16		0.64	0.52		0.56	0.47	
v/c Ratio	0.70	0.82		0.61	0.69		0.90	0.70		0.56	0.83	
Control Delay	48.2	63.7		44.5	58.7		66.9	26.8		21.2	36.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	48.2	63.7		44.5	58.7		66.9	26.8		21.2	36.6	
LOS	D	E		D	E		E	С		С	D	
Approach Delay	-	59.0		_	54.6			33.4			35.2	
Approach LOS		E			D			С			D	
Queue Length 50th (ft)	139	209		92	155		157	439		44	533	
Queue Length 95th (ft)	211	274		149	210		#313	534		77	637	

SATEX Existing Saturday Midday Peak Hour Conditions 9:18 am 03/29/2023 23059 - Car Wash - Tinley Park sa

03/29/2023

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		132			58			303			436	
Turn Bay Length (ft)	160			150			160			190		
Base Capacity (vph)	312	632		256	585		293	1855		260	1626	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.69	0.78		0.58	0.64		0.87	0.70		0.52	0.83	
Intersection Summary												
Area Type:	Other											
Cycle Length: 130												
Actuated Cycle Length: 130												
Offset: 0 (0%), Referenced t	to phase 2:	NBTL and	16:SBTL,	Start of	Green							
Natural Cycle: 90												
Control Type: Actuated-Coo	rdinated											
Maximum v/c Ratio: 0.90												
Intersection Signal Delay: 40	0.8			In	tersectior	n LOS: D						
Intersection Capacity Utiliza	tion 87.3%			IC	U Level o	of Service	E					
Analysis Period (min) 15												
# 95th percentile volume e	exceeds cap	oacity, qu	eue may	be longer	r.							
Queue shown is maximu	m after two	cycles.										
		0 474 4	<u>.</u>									

Splits and Phases: 1: Harlem Avenue & 171st Street



Int Delay, s/veh	0						
Movement	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			- 11	- 11		Y	
Traffic Vol, veh/h	2	0	527	488	0	0	0
Future Vol, veh/h	2	0	527	488	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0	-
Veh in Median Storage	, # -	-	0	0	-	0	-
Grade, %	-	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	1	0	1	0	0
Mvmt Flow	2	0	592	548	0	0	0

Major/Minor	Major1		Ν	lajor2	Ν	linor2		
Conflicting Flow All	548	-	0	-	0	848	274	
Stage 1	-	-	-	-	-	548	-	
Stage 2	-	-	-	-	-	300	-	
Critical Hdwy	6.4	-	-	-	-	6.8	6.9	
Critical Hdwy Stg 1	-	-	-	-	-	5.8	-	
Critical Hdwy Stg 2	-	-	-	-	-	5.8	-	
Follow-up Hdwy	2.5	-	-	-	-	3.5	3.3	
Pot Cap-1 Maneuver	654	0	-	-	0	304	730	
Stage 1	-	0	-	-	0	549	-	
Stage 2	-	0	-	-	0	731	-	
Platoon blocked, %			-	-				
Mov Cap-1 Maneuver	654	-	-	-	-	302	730	
Mov Cap-2 Maneuver	-	-	-	-	-	302	-	
Stage 1	-	-	-	-	-	546	-	
Stage 2	-	-	-	-	-	731	-	
Approach	EB			WB		SB		
HCM Control Delay, s	0			0		0		
HCM LOS						А		
Minor Lane/Major Mvn	nt	EBT	WBT S	BLn1				
Capacity (veh/h)		-	-	-				
HCM Lane V/C Ratio		-	-	-				
HCM Control Delay (s	)	-	-	0				
HCM Lane LOS		-	-	А				
HCM 95th %tile Q(veh	ı)	-	-	-				

Int Delay, s/veh	0							
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations		-4†	<b>≜</b> î≽		۰¥			
Traffic Vol, veh/h	0	527	487	2	0	1		
Future Vol, veh/h	0	527	487	2	0	1		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Free	Free	Free	Free	Stop	Stop		
RT Channelized	-	None	-	None	-	None		
Storage Length	-	-	-	-	0	-		
Veh in Median Storage	, # -	0	0	-	0	-		
Grade, %	-	0	0	-	0	-		
Peak Hour Factor	89	89	89	89	89	89		
Heavy Vehicles, %	0	1	1	0	0	0		
Mvmt Flow	0	592	547	2	0	1		

Major/Minor	Major1	Ν	/lajor2	1	Vinor2	
Conflicting Flow All	549	0	-	0	844	275
Stage 1	-	-	-	-	548	-
Stage 2	-	-	-	-	296	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1031	-	-	-	306	729
Stage 1	-	-	-	-	549	-
Stage 2	-	-	-	-	735	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1031	-	-	-	306	729
Mov Cap-2 Maneuver		-	-	-	306	-
Stage 1	-	-	-	-	549	-
Stage 2	-	-	-	-	735	-
Approach	EB		WB		SB	
HCM Control Delay, s	s 0		0		9.9	
HCM LOS					А	
Minor Lane/Major Mv	mt	EBL	EBT	WBT	WBR S	SBLn1
Capacity (veh/h)		1031	-	-	-	729
HCM Lane V/C Ratio		-	-	-	-	0.002
HCM Control Delay (s	6)	0	-	-	-	9.9
HCM Lane LOS		А	-	-	-	А
HCM 95th %tile Q(vel	h)	0	-	-	-	0

# Capacity Analysis Summary Sheets Year 2029 No-Build Weekday Morning Peak Hour

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>≜1</b> 5		5	<b>4</b> 16		5	<b>≜</b> 15		5	<b>≜1</b> 5	
Traffic Volume (vph)	203	274	131	116	257	71	200	928	57	86	836	182
Future Volume (vph)	203	274	131	116	257	71	200	928	57	86	836	182
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	150		0	160		0	190		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	145		-	145		-	125		-	125		-
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.952			0.968			0.991			0.973	
Flt Protected	0.950	0.002		0.950	0.000		0.950			0.950	01010	
Satd, Flow (prot)	1703	3327	0	1805	3305	0	1736	3396	0	1671	3366	0
Flt Permitted	0.331		,	0.432		Ţ	0.149		•	0.198		
Satd Flow (perm)	593	3327	0	821	3305	0	272	3396	0	348	3366	0
Right Turn on Red	000	0021	No	021		No			No	010	0000	No
Satd Flow (RTOR)						110						
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		212			138			383			516	
Travel Time (s)		36			27			6.5			8.8	
Peak Hour Factor	0.96	0.0	0.96	0.96	0.96	0.96	0.96	0.0	0.96	0.96	0.0	0.96
Heavy Vehicles (%)	6%	2%	6%	0.00	1%	12%	1%	5%	11%	8%	1%	6%
Shared Lane Traffic (%)	0 /0	270	070	0 /0	7/0	12/0	7/0	J /0	11/0	0 /0	7/0	070
Lane Group Flow (vph)	211	/121	0	121	3/12	0	208	1026	٥	90	1061	٥
	nm+nt		U	nm⊥nt	042 ΝΛ	U	nm+nt	NIA	0	nm+nt	NA	U
Protected Phases	יוויףנ 7	1		pini pi	8		5	2		1 1	6	
Pormitted Phases	1	4		J 8	0		2	2		6	0	
Detector Phase	7	1		3	8		5	2		1	6	
Switch Phase	1	-		5	0		J	2		1	U	
Minimum Initial (c)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s)	0.5	24.0		0.5	24.0		0.5	24.0		0.5	24.0	
Total Split (s)	10.0	36.0		1/ 0	24.0		1/ 0	56.0		1/ 0	24.0 56.0	
Total Split (%)	15.8%	30.0%		11 7%	25.8%		11 7%	16.7%		11 7%	16.7%	
Vollow Time (c)	15.0 %	30.0 %		25	20.0 /0		35	40.7 /0		25	40.7 /0	
All Red Time (s)	0.0	4.0		0.0	4.0		0.0	4.0		0.0	4.0	
Lost Time Adjust (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	
Total Lost Time (s)	0.0	0.0		0.0	0.0		0.0	6.0		0.0	0.0 6.0	
	J.o.d	0.0		J.O	0.0		Jood	0.0		J.o.d	0.0	
Leau/Lay	Voo	Lay		Voo	Lay		Vee	Lay		Voo	Lay	
	None	None		None	Nono		Nono	C Min		Nono	C Min	
Act Effet Creen (a)				21.0	10.7			C-IVIIII				
Act Effect Green (S)	39.3	23.5		31.0	10.7		73.1	59.5		00.5	55.7 0.46	
Actuated g/C Ratio	0.33	0.20		0.20	0.10		0.01	0.50		0.00	0.40	
V/C Ratio	0.64	0.65		0.42	0.67		0.67	0.61		0.32	0.68	
Control Delay	39.7	48.9		32.7	53.9		24.2	25.0		13.9	29.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	39.7	48.9		32.7	53.9		24.2	25.0		13.9	29.0	
LUS	D	D		C	D		C	C		В	C	
Approach Delay		45.8			48.4			24.9			27.9	
Approach LOS		D			D			С			C	
Queue Length 50th (ft)	124	159		67	133		67	296		27	340	
Queue Length 95th (ft)	179	202		106	175		#158	420		56	447	

AMNB Year 2029 No-Build Weekday Morning Peak Hour Conditions 10:50 am 03/29/2023 23059 - Car Wash - Tinley Park Inchro 11 Report sa

03/29/2023

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		132			58			303			436	
Turn Bay Length (ft)	160			150			160			190		
Base Capacity (vph)	337	831		302	688		315	1683		316	1563	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.63	0.51		0.40	0.50		0.66	0.61		0.28	0.68	
Intersection Summary												
Area Type: O	ther											
Cycle Length: 120												
Actuated Cycle Length: 120												
Offset: 0 (0%), Referenced to	phase 2:I	NBTL and	I 6:SBTL,	Start of (	Green							
Natural Cycle: 80												
Control Type: Actuated-Coord	linated											
Maximum v/c Ratio: 0.68												
Intersection Signal Delay: 32.8	8			In	tersectior	LOS: C						
Intersection Capacity Utilization	on 77.3%			IC	U Level o	of Service	D					
Analysis Period (min) 15												
# 95th percentile volume ex	ceeds cap	bacity, qu	eue may	be longer								
Queue shown is maximum	after two	cycles.										

Splits and Phases: 1: Harlem Avenue & 171st Street

Ø1	Ø2 (R)	<b>√</b> Ø3	<u>⊿<sub>04</sub></u>
14 s	56 s	14 s	36 s
Ø5	Ø6 (R)		<b>★</b> Ø8
14 s	56 s	19 s	31 s

Int Delay, s/veh	0						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		<b>^</b>	- 11		Y		
Traffic Vol, veh/h	0	417	444	0	0	0	
Future Vol, veh/h	0	417	444	0	0	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	-	-	-	-	0	-	
Veh in Median Storage,	# -	0	0	-	0	-	
Grade, %	-	0	0	-	0	-	
Peak Hour Factor	80	80	80	80	80	80	
Heavy Vehicles, %	0	2	2	0	0	0	
Mvmt Flow	0	521	555	0	0	0	

Major/Minor	Major1	ľ	Major2	Ν	1inor2		
Conflicting Flow All	-	0	-	0	816	278	
Stage 1	-	-	-	-	555	-	
Stage 2	-	-	-	-	261	-	
Critical Hdwy	-	-	-	-	6.8	6.9	
Critical Hdwy Stg 1	-	-	-	-	5.8	-	
Critical Hdwy Stg 2	-	-	-	-	5.8	-	
Follow-up Hdwy	-	-	-	-	3.5	3.3	
Pot Cap-1 Maneuver	0	-	-	0	319	725	
Stage 1	0	-	-	0	544	-	
Stage 2	0	-	-	0	765	-	
Platoon blocked, %		-	-				
Mov Cap-1 Maneuve	r -	-	-	-	319	725	
Mov Cap-2 Maneuve	r -	-	-	-	319	-	
Stage 1	-	-	-	-	544	-	
Stage 2	-	-	-	-	765	-	
Approach	EB		WB		SB		
HCM Control Delay,	s 0		0		0		
HCM LOS					А		
Minor Lane/Major Mv	rmt	EBT	WBT S	BLn1			
Capacity (veh/h)		-	-	-			
HCM Lane V/C Ratio		-	-	-			
HCM Control Delay (	s)	-	-	0			
HCM Lane LOS		-	-	А			
HCM 95th %tile Q(ve	h)	-	-	-			

AMNB Year 2029 No-Build Weekday Morning Peak Hour Conditions 10:50 am 03/29/2023 23059 - Car Wash - Tinley Patynchro 11 Report Page 1 sa

0					
EBL	EBT	WBT	WBR	SBL	SBR
	-4 <b>†</b>	_ <b>∱</b> î≽		Y	
0	417	444	0	0	0
0	417	444	0	0	0
0	0	0	0	0	0
Free	Free	Free	Free	Stop	Stop
-	None	-	None	-	None
-	-	-	-	0	-
# -	0	0	-	0	-
-	0	0	-	0	-
80	80	80	80	80	80
0	2	2	0	0	0
0	521	555	0	0	0
	0 EBL 0 0 Free - # - 80 0 0	0 EBL EBT 417 0 417 0 417 0 0 Free Free - None - None - 0 80 80 0 2 0 521	0 EBL EBT WBT ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	BBL  EBT  WBT  WBR    ●  ●  ●  ●    0  417  444  00    0  417  444  00    0  417  444  00    0  0  0  0    0  0  0  0  0    Free  Free  Free  Free    0  0  0  0    1  0  0  0    1  0  0  0    1  0  0  0    1  0  0  0    1  0  0  0    1  0  0  0    1  0  0  0    1  0  0  0    1  0  2  0    0  0  555  0	BL  EBT  WBT  WBR  SBL    ▲↑↑  ▲↑↑  ↓↑↓  ↓↓  ↓↓    0  417  444  00  0    0  417  444  00  0    0  417  444  00  0    0  417  444  00  0    0  0  0  0  0    Free  Free  Free  Stop    -  None  -  None    -  0  0  0  0    #  0  0  0  0    #  0  0  0  0    #  0  0  0  0    #  0  0  0  0  0    #  0  0  0  0  0    #  0  0  0  0  0    #  0  0  0  0  0

Major/Minor	Major1	Ν	/lajor2	1	Minor2	
Conflicting Flow All	555	0	-	0	816	278
Stage 1	-	-	-	-	555	-
Stage 2	-	-	-	-	261	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1026	-	-	-	319	725
Stage 1	-	-	-	-	544	-
Stage 2	-	-	-	-	765	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1026	-	-	-	319	725
Mov Cap-2 Maneuver	· -	-	-	-	319	-
Stage 1	-	-	-	-	544	-
Stage 2	-	-	-	-	765	-
Approach	EB		WB		SB	
HCM Control Delay, s	s 0		0		0	
HCM LOS					А	
Minor Lane/Major Mv	mt	EBL	EBT	WBT	WBR S	BLn1
Capacity (veh/h)		1026	-	-	-	-
HCM Lane V/C Ratio		-	-	-	-	-
HCM Control Delay (s	6)	0	-	-	-	0
HCM Lane LOS	,	A	-	-	-	A
HCM 95th %tile Q(vel	h)	0	-	-	-	-

AMNB Year 2029 No-Build Weekday Morning Peak Hour Conditions 10:50 am 03/29/2023 23059 - Car Wash - Tinley Patynchro 11 Report Page 2 sa

# Capacity Analysis Summary Sheets Year 2029 No-Build Weekday Evening Peak Hour

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>≜1</b> 5		5	<b>4</b> 16		5	<b>≜</b> 15		5	<b>≜1</b> 5	
Traffic Volume (vph)	219	352	172	146	344	84	235	1205	119	121	1117	185
Future Volume (vph)	219	352	172	146	344	84	235	1205	119	121	1117	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	150		0	160		0	190		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ff)	145		· ·	145			125		•	125		v
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.951			0.970			0.986	0.00		0 979	0.00
Flt Protected	0 950	0.001		0 950	0.0.0		0 950	0.000		0 950	01010	
Satd Flow (prot)	1805	3410	0	1787	3474	0	1805	3527	0	1805	3499	0
Flt Permitted	0 223	0110	Ŭ	0 183	0111	Ű	0.066	0021	Ŭ	0 102	0100	Ű
Satd Flow (perm)	424	3410	0	344	3474	0	125	3527	0	194	3499	0
Right Turn on Red	121	0110	No	011	0111	No	120	0021	No	101	0100	No
Satd Flow (RTOR)			110									
Link Sneed (mnh)		40			35			40			40	
Link Distance (ff)		212			138			283			516	
Travel Time (s)		36			27			65			8.8	
Peak Hour Factor	0 97	0.07	0.07	0.97	0.07	0.97	0.97	0.5	0 97	0.97	0.0	0.97
Heavy Vehicles (%)	0.97	1%	0.97	1%	1%	0.97	0.97	1%	0.97	0.97	1%	0.97
Sharod Lano Traffic (%)	0 /0	1 /0	0 /0	I /0	I /0	0 /0	0 /0	1 /0	0 /0	0 /0	I /0	1 /0
	226	540	٥	151	110	٥	242	1265	٥	105	12/2	٥
	220 nm+nt	540 NA	0	nm+nt	44Z	0	242	1303 NA	0	nm+nt	1343 NA	0
Protoctod Phases	pin+pi 7	INA A		pin+pi 2	N/A Q		pm+pt	2		pin+pi 1	NA 6	
Protected Phases	1	4		0	0		2	2		6	0	
Permilleu Phases	4	Λ		0	0		2	0		1	6	
Switch Bhose	1	4		3	0		5	2		I	0	
Minimum Initial (a)	20	0 0		2.0	0 0		20	15.0		2.0	15.0	
Minimum Split (a)	5.0 0.5	0.0		0.5	0.0		3.0 0.5	24.0		0.5	24.0	
Minimum Spiit (S)	9.5	24.0		9.5	24.0		9.5	Z4.0		9.0	24.0	
Total Split (%)	20.0	29.0		20.0	29.0		24.0	73.0		10.0	07.0	
Total Split (%)	14.3%	20.7%		14.5%	20.7%		17.1%	52.1%		12.9%	47.9%	
	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	
All-Red Time (S)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
l otal Lost Time (s)	3.5	0.0		3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Min		None	C-IVIIN	
Act Effet Green (s)	42.9	24.8		38.9	22.6		88.5	72.2		//.6	64.8	
Actuated g/C Ratio	0.31	0.18		0.28	0.16		0.63	0.52		0.55	0.46	
v/c Ratio	0.79	0.89		0.64	0.79		0.83	0.75		0.56	0.83	
Control Delay	57.6	74.4		48.3	67.4		58.1	30.8		24.3	39.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
I otal Delay	57.6	74.4		48.3	67.4		58.1	30.8		24.3	39.1	
LOS	E	E		D	E		E	С		С	D	
Approach Delay		69.5			62.5			34.9			37.9	
Approach LOS		E			E			С			D	
Queue Length 50th (ft)	159	254		101	205		154	505		43	575	
Queue Length 95th (ft)	#248	#378		161	267		#269	643		87	687	

PMNB Year 2029 No-Build Weekday Evening Peak Hour Conditions 10:50 am 03/29/2023 23059 - Car Wash - Tinley Park Page 1 Page 1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		132			58			303			436	
Turn Bay Length (ft)	160			150			160			190		
Base Capacity (vph)	292	604		272	570		325	1818		280	1619	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.77	0.89		0.56	0.78		0.74	0.75		0.45	0.83	
Intersection Summary												
Area Type:	Other											
Cycle Length: 140												
Actuated Cycle Length: 140	0											
Offset: 0 (0%), Referenced	to phase 2:I	NBTL and	6:SBTL	Start of (	Green							
Natural Cycle: 90												
Control Type: Actuated-Co	ordinated											
Maximum v/c Ratio: 0.89												
Intersection Signal Delay: 4	45.6			In	tersectior	n LOS: D						
Intersection Capacity Utilization	ation 90.8%			IC	U Level o	of Service	E					
Analysis Period (min) 15												
# 95th percentile volume	exceeds cap	bacity, qu	eue may	be longer								
Queue shown is maxim	um after two	cycles.										
Splits and Phases: 1: Ha	arlem Avenue	e & 171st	Street									

Ø1	<1 <b>₽</b> 2 (R)	<b>√</b> Ø3	<u>↓</u> <sub>Ø4</sub>
18 s	73 s	20 s	29 s
<b>Ø</b> 5	● ● Ø6 (R)		<b>↓</b> Ø8
24 s	67 s	20 s	29 s

PMNB Year 2029 No-Build Weekday Evening Peak Hour Conditions 10:50 am 03/29/2023 23059 - Car Wash - Tinley Patynchro 11 Report sa Page 2

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#### Intersection

Int Delay, s/veh

Movement	EBU	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			- 11	- 11		- ¥	
Traffic Vol, veh/h	1	0	590	573	0	0	0
Future Vol, veh/h	1	0	590	573	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0	-
Veh in Median Storage	, # -	-	0	0	-	0	-
Grade, %	-	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	1	1	0	0	0
Mvmt Flow	1	0	628	610	0	0	0

Major/Minor	Major1		Ν	lajor2	Ν	1inor2		
Conflicting Flow All	610	-	0	· -	0	926	305	
Stage 1	-	-	-	-	-	610	-	
Stage 2	-	-	-	-	-	316	-	
Critical Hdwy	6.4	-	-	-	-	6.8	6.9	
Critical Hdwy Stg 1	-	-	-	-	-	5.8	-	
Critical Hdwy Stg 2	-	-	-	-	-	5.8	-	
Follow-up Hdwy	2.5	-	-	-	-	3.5	3.3	
Pot Cap-1 Maneuver	597	0	-	-	0	271	697	
Stage 1	-	0	-	-	0	510	-	
Stage 2	-	0	-	-	0	718	-	
Platoon blocked, %			-	-				
Mov Cap-1 Maneuver	597	-	-	-	-	270	697	
Mov Cap-2 Maneuver	-	-	-	-	-	270	-	
Stage 1	-	-	-	-	-	508	-	
Stage 2	-	-	-	-	-	718	-	
Approach	EB			WB		SB		
HCM Control Delay, s	0			0		0		
HCM LOS						А		
Minor Lane/Major Mvn	nt	EBT	WBT S	BLn1				
Capacity (veh/h)		-	-	-				
HCM Lane V/C Ratio		-	-	-				
HCM Control Delay (s)	)	-	-	0				
HCM Lane LOS		-	-	Α				
HCM 95th %tile Q(veh	ı)	-	-	-				

PMNB Year 2029 No-Build Weekday Evening Peak Hour Conditions 10:50 am 03/29/2023 23059 - Car Wash - Tinley Patynchro 11 Report sa

Int Delay, s/veh	0						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		- <b>4</b> ↑	- <b>†</b> 1,-		Y		
Traffic Vol, veh/h	0	590	573	0	0	0	
Future Vol, veh/h	0	590	573	0	0	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	-	-	-	-	0	-	
Veh in Median Storage	, # -	0	0	-	0	-	
Grade, %	-	0	0	-	0	-	
Peak Hour Factor	94	94	94	94	94	94	
Heavy Vehicles, %	0	1	1	0	0	0	
Mvmt Flow	0	628	610	0	0	0	

Major/Minor	Major1	Ν	/lajor2	ľ	Minor2	
Conflicting Flow All	610	0	-	0	924	305
Stage 1	-	-	-	-	610	-
Stage 2	-	-	-	-	314	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	979	-	-	-	272	697
Stage 1	-	-	-	-	510	-
Stage 2	-	-	-	-	720	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuve	r 979	-	-	-	272	697
Mov Cap-2 Maneuve	r -	-	-	-	272	-
Stage 1	-	-	-	-	510	-
Stage 2	-	-	-	-	720	-
Approach	EB		WB		SB	
HCM Control Delay,	s 0		0		0	
HCM LOS					A	
Minor Lane/Major Mv	vmt	EBL	EBT	WBT	WBR S	BLn1
Capacity (veh/h)		979	-	-	-	-
HCM Lane V/C Ratio	)	-	-	-	-	-
HCM Control Delay (	s)	0	-	-	-	0
HCM Lane LOS		А	-	-	-	А
HCM 95th %tile Q(ve	eh)	0	-	-	-	-

PMNB Year 2029 No-Build Weekday Evening Peak Hour Conditions 10:50 am 03/29/2023 23059 - Car Wash - Tinley Parknehro 11 Report Page 2 sa

# Capacity Analysis Summary Sheets Year 2029 No-Build Saturday Midday Peak Hour

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	5	<b>≜1</b> 5		5	<b>4</b> 16		5	<b>≜1</b> 5		5	<b>≜1</b> 5	
Traffic Volume (vph)	211	336	144	146	262	102	249	1186	82	132	1108	215
Future Volume (vph)	211	336	144	146	262	102	249	1186	82	132	1108	215
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	150		0	160		0	190		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	145		-	145		-	125		-	125		-
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.955			0.958			0.990			0.976	
Flt Protected	0.950	01000		0.950	0.000		0.950	0.000		0.950	01010	
Satd, Flow (prot)	1805	3424	0	1805	3458	0	1787	3574	0	1805	3488	0
Flt Permitted	0.290	•.=.	,	0.235	• • • • •		0.063	•••	•	0.107	0.00	
Satd Flow (perm)	551	3424	0	446	3458	0	119	3574	0	203	3488	0
Right Turn on Red	001	0.21	No	110	0.00	No	110	0011	No	200	0100	No
Satd Flow (RTOR)												
Link Speed (mph)		40			35			40			40	
Link Distance (ft)		212			138			383			516	
Travel Time (s)		36			27			6.5			8.8	
Peak Hour Factor	0 94	0.0	0 94	0 94	0.94	0 94	0 94	0.0	0 94	0 94	0.0	0 94
Heavy Vehicles (%)	0.04	1%	0.04	0.04	0.04	0.04	1%	0.04	0.04	0.04	1%	1%
Shared Lane Traffic (%)	0 /0	170	0 /0	0 /0	0 /0	0 /0	170	070	0 /0	0 /0	170	170
Lane Group Flow (vph)	22/	510	0	155	388	٥	265	13/10	٥	1/0	1/08	٥
	nm+nt	NA	U	nm+nt	NIA	U	nm+nt	NA	0	nm+nt	NIA	U
Protected Phases	7	1		pini pi	8		5	2		1 1	6	
Pormitted Phases	1	4		J 8	0		2	2		6	0	
Detector Phase	7	1		3	8		5	2		1	6	
Switch Phase	1	-		5	0		J	2		1	U	
Minimum Initial (s)	3.0	8.0		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Solit (s)	0.5	24.0		0.0 0.5	24.0		0.0 0.5	24.0		0.0 0.5	24.0	
Total Split (s)	18.0	24.0		16.0	24.0		20.0	70.0		14.0	64.0	
Total Split (%)	13.8%	23.1%		12.3%	20.0		15.4%	53.8%		10.8%	10 2%	
Vellow Time (s)	3.5	20.170		3.5	21.570		3.5	10		3.5	43.270	
All Red Time (s)	0.0	4.0 2.0		0.0	4.0 2.0		0.0	+.0 2.0		0.0	+.0 2.0	
Lost Time Adjust (s)	0.0	2.0		0.0	2.0		0.0	2.0		0.0	2.0	
Total Lost Time (s)	0.0	6.0		3.5	6.0		3.5	6.0		3.5	6.0	
	0.0 Load	0.0		Load	0.0		J.J.	0.0		Load	0.0	
Leau/Lay	Voc	Lay		Voc	Lay		Voc	Voc		Voc	Lay	
	None	None		None	None		None	C Min		None	C Min	
Act Effet Groop (c)	20.8			35.1	20.0		82.0	8 33		71.5	50.8	
Actuated a/C Patio	0.31	2J.Z		0.27	20.9		0.20	00.0		0.55	0.46	
Actualed g/C Ratio	0.31	0.10		0.27	0.10		0.03	0.51		0.00	0.40	
Vic Nalio Control Dolov	0.74 50.2	64.2		15.04	50 0		75.5	0.73		0.02	20.00	
	0.0	04.3		45.0	0.0		75.5	20.3		21.3	39.9	
Queue Delay	0.0 50.0	64.2		0.0	0.0 E0.0		0.0 75 5	0.0		0.0	20.0	
	50.2	04.3 F		40.0	0.0 Г		75.5	20.3		21.3	29.9	
LUS Approach Dolou	U	E		U			E	20.0		U	D 20.7	
Approach Delay		0.00			55.1 F			30.0			30.7	
Approach LOS	445	E		00	E 400		470			10	U	
Queue Length 50th (ft)	145	218		96	163		1/0	468		46	5/0	
Queue Length 95th (ft)	#225	#286		154	219		#338	567		98	#684	

SATNB Year 2029 No-Build Saturday Midday Peak Hour Conditions 10:51 am 03/29/2023 23059 - Car Wash - Tinley Pasignchro 11 Report sa

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		132			58			303			436	
Turn Bay Length (ft)	160			150			160			190		
Base Capacity (vph)	308	632		253	585		288	1837		243	1604	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.73	0.81		0.61	0.66		0.92	0.73		0.58	0.88	
Intersection Summary												
Area Type: C	Other											
Cycle Length: 130												
Actuated Cycle Length: 130												
Offset: 0 (0%), Referenced to	phase 2:I	NBTL and	I 6:SBTL,	Start of 0	Green							
Natural Cycle: 90												
Control Type: Actuated-Coord	dinated											
Maximum v/c Ratio: 0.94												
Intersection Signal Delay: 43	.3			In	tersectior	n LOS: D						
Intersection Capacity Utilizati	on 90.1%			IC	U Level o	of Service	E					
Analysis Period (min) 15												
# 95th percentile volume ex	ceeds cap	bacity, qu	eue may	be longer								
Queue shown is maximun	n after two	cycles.										

Splits and Phases: 1: Harlem Avenue & 171st Street



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#### Intersection

Int Delay, s/veh

EBU	EBL	EBT	WBT	WBR	SBL	SBR
		- 11	- 11		- ¥	
2	0	548	508	0	0	0
2	0	548	508	0	0	0
0	0	0	0	0	0	0
Free	Free	Free	Free	Free	Stop	Stop
-	-	None	-	None	-	None
-	-	-	-	-	0	-
, # -	-	0	0	-	0	-
-	-	0	0	-	0	-
89	89	89	89	89	89	89
0	0	1	0	1	0	0
2	0	616	571	0	0	0
	EBU 2 0 Free - # - 89 0 2	EBU  EBL    2  0    2  0    0  0    Free  -    -  -    #  -    89  89    0  0    2  0	EBU  EBL  EBT    2  0  548    2  0  548    2  0  548    0  0  0    Free  Free  Free    -  -  None    -  -  0    #  -  0    89  89  89    0  0  1    2  0  616	EBU  EBL  EBT  WBT    1  ↑↑  ↑↑    2  0  548  508    2  0  548  508    2  0  548  508    0  0  548  508    0  0  548  508    0  0  0  0    Free  Free  Free  Free    -  -  None  -    -  -  0  0    #  -  0  0    89  89  89  89    0  0  1  0    2  0  616  571	EBU  EBL  WBT  WBR    2  0  548  508  0    2  0  548  508  0    2  0  548  508  0    2  0  548  508  0    0  0  548  508  0    0  0  548  508  0    0  0  0  0  0    Free  Free  Free  Free  Free    -  -  None  -  None    -  -  0  0  -    #  -  0  0  0  -    #  -  0  0  0  -    #  -  0  0  0  -    #  0  1  0  1  0    #  0  616  571  0	EBU  EBL  EBT  WBT  WBR  SBL    ↑↑  ↑↑  ↑↑  ↑↑  ↑↑    2  0  548  508  0  0    2  0  548  508  0  0    2  0  548  508  0  0    0  0  548  508  0  0    0  0  548  508  0  0    0  0  0  0  0  0  0    Free  Free  Free  Free  Stop  -    -  -  None  -  None  -    -  -  0  0  0  0  0    #  -  0  0  0  0  0  0    #  -  0  0  0  0  0  0    #  -  0  0  0  0  0  0

Major/Minor	Major1		Ν	lajor2	Ν	1inor2		
Conflicting Flow All	571	-	0	· -	0	883	286	
Stage 1	-	-	-	-	-	571	-	
Stage 2	-	-	-	-	-	312	-	
Critical Hdwy	6.4	-	-	-	-	6.8	6.9	
Critical Hdwy Stg 1	-	-	-	-	-	5.8	-	
Critical Hdwy Stg 2	-	-	-	-	-	5.8	-	
Follow-up Hdwy	2.5	-	-	-	-	3.5	3.3	
Pot Cap-1 Maneuver	632	0	-	-	0	289	717	
Stage 1	-	0	-	-	0	534	-	
Stage 2	-	0	-	-	0	721	-	
Platoon blocked, %			-	-				
Mov Cap-1 Maneuver	632	-	-	-	-	288	717	
Mov Cap-2 Maneuver	-	-	-	-	-	288	-	
Stage 1	-	-	-	-	-	531	-	
Stage 2	-	-	-	-	-	721	-	
Approach	EB			WB		SB		
HCM Control Delay, s	0			0		0		
HCM LOS						А		
Minor Lane/Major Mvn	nt	EBT	WBT S	BLn1				
Capacity (veh/h)		-	-	-				
HCM Lane V/C Ratio		-	-	-				
HCM Control Delay (s)	)	-	-	0				
HCM Lane LOS		-	-	А				
HCM 95th %tile Q(veh	ı)	-	-	-				

SATNB Year 2029 No-Build Saturday Midday Peak Hour Conditions 10:51 am 03/29/2023 23059 - Car Wash - Tinley Pasignchro 11 Report sa

Int Delay, s/veh	0							
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations		- <b>4</b> ↑	- <b>†</b> 1-		Y			
Traffic Vol, veh/h	0	548	506	2	0	1		
Future Vol, veh/h	0	548	506	2	0	1		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Free	Free	Free	Free	Stop	Stop		
RT Channelized	-	None	-	None	-	None		
Storage Length	-	-	-	-	0	-		
Veh in Median Storage,	# -	0	0	-	0	-		
Grade, %	-	0	0	-	0	-		
Peak Hour Factor	89	89	89	89	89	89		
Heavy Vehicles, %	0	1	1	0	0	0		
Mvmt Flow	0	616	569	2	0	1		

Major/Minor	Major1	Ν	/lajor2	1	Minor2	
Conflicting Flow All	571	0	-	0	878	286
Stage 1	-	-	-	-	570	-
Stage 2	-	-	-	-	308	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1012	-	-	-	291	717
Stage 1	-	-	-	-	535	-
Stage 2	-	-	-	-	725	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	r 1012	-	-	-	291	717
Mov Cap-2 Maneuver	r -	-	-	-	291	-
Stage 1	-	-	-	-	535	-
Stage 2	-	-	-	-	725	-
Approach	EB		WB		SB	
HCM Control Delay, s	s 0		0		10	
HCM LOS					В	
Minor Lane/Major Mv	mt	EBL	EBT	WBT	WBR S	BLn1
Capacity (veh/h)		1012	-	-	-	717
HCM Lane V/C Ratio		-	-	-	-	0.002
HCM Control Delay (s	s)	0	-	-	-	10
HCM Lane LOS		А	-	-	-	В
HCM 95th %tile Q(ve	h)	0	-	-	-	0

SATNB Year 2029 No-Build Saturday Midday Peak Hour Conditions 10:51 am 03/29/2023 23059 - Car Wash - Tinley Pallynchro 11 Report Page 2 sa

Capacity Analysis Summary Sheets Year 2029 Total Projected Weekday Morning Peak Hour

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Lane Group EBI	. EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	i 416		5	<b>≜1</b> 6		5	<b>≜</b> 15		5	<b>≜1</b> 5	
Traffic Volume (vph) 203	277	131	120	260	75	200	928	61	90	836	182
Future Volume (vph) 203	3 277	131	120	260	75	200	928	61	90	836	182
Ideal Flow (vphpl) 1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft) 160	)	0	150		0	160		0	190		0
Storage Lanes		0	1		0	1		0	1		0
Taper Length (ft) 145	5	-	145		-	125		-	125		-
Lane Util, Factor 1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Frt	0.952			0.966			0.991			0.973	
Flt Protected 0.950	)		0.950			0.950			0.950		
Satd. Flow (prot) 1703	3328	0	1805	3296	0	1736	3395	0	1671	3366	0
Flt Permitted 0.326	)		0.428			0.149			0.194		
Satd. Flow (perm) 584	3328	0	813	3296	0	272	3395	0	341	3366	0
Right Turn on Red		No			No			No			No
Satd, Flow (RTOR)											
Link Speed (mph)	40			35			40			40	
Link Distance (ft)	212			138			383			516	
Travel Time (s)	3.6			27			6.5			8.8	
Peak Hour Factor 0.96	6 0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%) 6%	2%	6%	0%	4%	12%	4%	5%	11%	8%	4%	6%
Shared Lane Traffic (%)	, 2,0	0,0	0,0	170	1270	170	070	11/0	070	170	070
Lane Group Flow (vph) 211	425	0	125	349	0	208	1031	0	94	1061	0
Turn Type pm+n	t NA	v	nm+nt	NA	Ū	nm+nt	NA	v	nm+nt	NA	v
Protected Phases	<u> </u>		3	8		5	2		1 1	6	
Permitted Phases			8	Ū		2	-		6	Ŭ	
Detector Phase	4		3	8		5	2		1	6	
Switch Phase	·		•	•			_		•	•	
Minimum Initial (s) 3.0	0.8		3.0	8.0		3.0	15.0		3.0	15.0	
Minimum Split (s) 9.5	5 24.0		9.5	24.0		9.5	24.0		9.5	24.0	
Total Split (s) 19.(	36.0		14.0	31.0		14.0	56.0		14.0	56.0	
Total Split (%) 15.8%	30.0%		11.7%	25.8%		11.7%	46.7%		11.7%	46.7%	
Yellow Time (s) 3.5	5 4.0		3.5	4.0		3.5	4.0		3.5	4.0	
All-Red Time (s) 0.0	) 2.0		0.0	2.0		0.0	2.0		0.0	2.0	
Lost Time Adjust (s) 0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s) 3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize? Yes	s Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s) 39.5	5 23.7		31.3	19.0		72.7	59.0		66.5	55.6	
Actuated g/C Ratio 0.33	0.20		0.26	0.16		0.61	0.49		0.55	0.46	
v/c Ratio 0.64	0.65		0.43	0.67		0.67	0.62		0.33	0.68	
Control Delay 39.5	5 48.7		32.8	53.8		24.8	25.5		14.2	29.2	
Queue Delay 0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay 39.5	5 <u>48.7</u>		32.8	53.8		24.8	25.5		14.2	29.2	
LOS	) D		C	D		C	C		В	C	
Approach Delay	45.7		-	48.3			25.4		_	28.0	
Approach LOS				5.5			0			0	
	D			D			C			C	
Queue Length 50th (ft) 12.	D 3 160		69	D 135		68	301		29	342	

AMPR Year 2029 Total Projected Weekday Morning Peak Hour Conditions 10:50 am 03/29/2023 23059 - Car Wash - TisigaydRaok11 Report sa

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		132			58			303			436	
Turn Bay Length (ft)	160			150			160			190		
Base Capacity (vph)	336	832		303	686		313	1670		312	1558	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.63	0.51		0.41	0.51		0.66	0.62		0.30	0.68	
Intersection Summary												
Area Type: C	Other											
Cycle Length: 120												
Actuated Cycle Length: 120												
Offset: 0 (0%), Referenced to	phase 2:I	NBTL and	6:SBTL	Start of (	Green							
Natural Cycle: 80												
Control Type: Actuated-Coor	dinated											
Maximum v/c Ratio: 0.68												
Intersection Signal Delay: 33	.0			In	tersectior	LOS: C						
Intersection Capacity Utilizat	ion 77.5%			IC	U Level o	of Service	D					
Analysis Period (min) 15												
# 95th percentile volume ex	xceeds cap	bacity, qu	eue may	be longer	•							
Queue shown is maximur	n after two	cycles.										

Splits and Phases: 1: Harlem Avenue & 171st Street

Ø1	Ø2 (R)	<b>√</b> Ø3	<u>⊿<sub>04</sub></u>
14 s	56 s	14 s	36 s
Ø5	Ø6 (R)		<b>★</b> Ø8
14 s	56 s	19 s	31 s

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		-4†	<b>≜î</b> ≽		Y	
Traffic Vol, veh/h	11	417	444	2	2	11
Future Vol, veh/h	11	417	444	2	2	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	_	_	_	_	0	_

RT Channelized	-	None	-	None	-	None		
Storage Length	-	-	-	-	0	-		
Veh in Median Storage,	# -	0	0	-	0	-		
Grade, %	-	0	0	-	0	-		
Peak Hour Factor	80	80	80	80	80	80		
Heavy Vehicles, %	0	2	2	0	0	0		
Mvmt Flow	14	521	555	3	3	14		

Major/Minor	Major1	Ν	/lajor2	1	Vinor2	
Conflicting Flow All	558	0	-	0	846	279
Stage 1	-	-	-	-	557	-
Stage 2	-	-	-	-	289	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1023	-	-	-	305	724
Stage 1	-	-	-	-	543	-
Stage 2	-	-	-	-	741	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	r 1023	-	-	-	299	724
Mov Cap-2 Maneuver	r -	-	-	-	299	-
Stage 1	-	-	-	-	533	-
Stage 2	-	-	-	-	741	-
Approach	EB		WB		SB	
HCM Control Delay, s	s 0.3		0		11.2	
HCM LOS					В	
Minor Lane/Major Mv	mt	EBL	EBT	WBT	WBR S	SBLn1
Capacity (veh/h)		1023	-	-	-	594
HCM Lane V/C Ratio		0.013	-	-	-	0.027
HCM Control Delay (s	s)	8.6	0.1	-	-	11.2
HCM Lane LOS		A	A	-	-	В
HCM 95th %tile Q(ve	h)	0	-	-	-	0.1

<u>Capacity Analysis Summary Sheets</u> Year 2029 Total Projected Weekday Evening Peak Hour

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Lane Group EBL EBT EBR WBL WBT WBR NBL	NBT NBF	r SBL	SBT	SBR
Lane Configurations 7 15	<b>≜1</b> ≽	ሻ	<b>≜</b> t≽	
Traffic Volume (vph) 219 360 172 158 352 96 235	1205 13	1 133	1117	185
Future Volume (vph) 219 360 172 158 352 96 235	1205 13 <sup>-</sup>	1 133	1117	185
Ideal Flow (vphpl) 1900 1900 1900 1900 1900 1900 1900	1900 1900	0 1900	1900	1900
Storage Length (ft) 160 0 150 0 160	(	0 190		0
Storage Lanes 1 0 1 0 1	(	0 1		0
Taper Length (ft) 145 145 125		125		
Lane Util. Factor 1.00 0.95 0.95 1.00 0.95 0.95 1.00	0.95 0.95	5 1.00	0.95	0.95
Frt 0.952 0.968 0	0.985		0.979	
Fit Protected 0.950 0.950 0.950		0.950		
Satd. Flow (prot) 1805 3414 0 1787 3467 0 1805	3524 (	0 1805	3499	0
Flt Permitted 0.210 0.174 0.064		0.095		
Satd. Flow (perm) 399 3414 0 327 3467 0 122	3524 (	0 180	3499	0
Right Turn on Red No No	No	0		No
Satd. Flow (RTOR)		-		
Link Speed (mph) 40 35	40		40	
Link Distance (ff) 212 138	383		516	
Travel Time (s) 3.6 2.7	6.5		8.8	
Peak Hour Factor 0.97 0.97 0.97 0.97 0.97 0.97	0.97 0.97	7 0.97	0.97	0.97
Heavy Vehicles (%) 0% 1% 0% 1% 0% 0%	1% 0%	% 0%	1%	1%
Shared Lane Traffic (%)	1,0 0,	0,0	170	170
Lane Group Flow (vph) 226 548 0 163 462 0 242	1377 (	0 137	1343	0
Turn Type pm+pt NA pm+pt NA pm+pt	NA	pm+pt	NA	Ū
Protected Phases 7 4 3 8 5	2	1	6	
Permitted Phases 4 8 2	_	6	•	
Detector Phase 7 4 3 8 5	2	1	6	
Switch Phase	_		-	
Minimum Initial (s) 3.0 8.0 3.0 8.0 3.0	15.0	3.0	15.0	
Minimum Split (s) 9.5 24.0 9.5 24.0 9.5	24.0	9.5	24.0	
Total Split (s) 20.0 29.0 20.0 29.0 24.0	73.0	18.0	67.0	
Total Split (%) 14.3% 20.7% 14.3% 20.7% 17.1% 5	2.1%	12.9%	47.9%	
Yellow Time (s) 3.5 4.0 3.5 4.0 3.5	4.0	3.5	4.0	
All-Red Time (s) 0.0 2.0 0.0 2.0 0.0	2.0	0.0	2.0	
Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0	0.0	0.0	0.0	
Total Lost Time (s) 3.5 6.0 3.5 6.0 3.5	6.0	3.5	6.0	
Lead/Lag Lead Lag Lead Lag Lead	Lag	Lead	Lag	
Lead-Lag Optimize? Yes Yes Yes Yes Yes	Yes	Yes	Yes	
Recall Mode None None None None O	C-Min	None	C-Min	
Act Effct Green (s) 43.1 24.7 39.6 23.0 88.1	71.3	77.8	64.4	
Actuated g/C Ratio 0.31 0.18 0.28 0.16 0.63	0.51	0.56	0.46	
v/c Ratio 0.80 0.91 0.68 0.81 0.84	0.77	0.61	0.83	
Control Delay 58.8 76.5 50.5 68.7 59.4	31.9	29.4	39.5	
Queue Delay 0.0 0.0 0.0 0.0 0.0	0.0	0.0	0.0	
Total Delay 58.8 76.5 50.5 68.7 59.4	31.9	29.4	39.5	
LOS E E D E F	С	C	D	
Approach Delay 71.3 64.0	36.0	-	38.6	
Approach LOS E E	D		D	
Queue Length 50th (ft) 159 261 110 216 156	-		-	
	522	48	575	

PMPR Year 2029 Total Projected Weekday Morning Peak Hour Conditions 10:50 am 03/29/2023 23059 - Car Wash - TisigaydRaok11 Report sa Page 1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		132			58			303			436	
Turn Bay Length (ft)	160			150			160			190		
Base Capacity (vph)	288	603		270	569		323	1794		272	1610	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.78	0.91		0.60	0.81		0.75	0.77		0.50	0.83	
Intersection Summary												
Area Type:	Other											
Cycle Length: 140												
Actuated Cycle Length: 140												
Offset: 0 (0%), Referenced t	to phase 2:	NBTL and	I 6:SBTL,	Start of (	Green							
Natural Cycle: 90												
Control Type: Actuated-Coo	rdinated											
Maximum v/c Ratio: 0.91												
Intersection Signal Delay: 40	6.8			In	tersectior	n LOS: D						
Intersection Capacity Utiliza	tion 91.4%			IC	U Level of	of Service	F					
Analysis Period (min) 15												
# 95th percentile volume e	exceeds cap	bacity, qu	eue may	be longer								
Queue shown is maximu	m after two	cycles.										
Splits and Phases: 1: Har	lem Avenue	e & 171st	Street									

Ø1	<1 <b>₽</b> 2 (R)	<b>√</b> Ø3	<u>↓</u> <sub>Ø4</sub>
18 s	73 s	20 s	29 s
<b>Ø</b> 5	● ● Ø6 (R)		<b>↓</b> Ø8
24 s	67 s	20 s	29 s

Int Delay, s/veh	0.7								
Movement	EBL	EBT	WBT	WBR	SBL	SBR			
Lane Configurations		- <b>4</b> ↑	<b>∱</b> î,		Y				
Traffic Vol, veh/h	32	590	573	7	7	32			
Future Vol, veh/h	32	590	573	7	7	32			
Conflicting Peds, #/hr	0	0	0	0	0	0			
Sign Control	Free	Free	Free	Free	Stop	Stop			
RT Channelized	-	None	-	None	-	None			
Storage Length	-	-	-	-	0	-			
Veh in Median Storage	, # -	0	0	-	0	-			
Grade, %	-	0	0	-	0	-			
Peak Hour Factor	94	94	94	94	94	94			
Heavy Vehicles, %	0	1	1	0	0	0			
Mvmt Flow	34	628	610	7	7	34			

Major/Minor	Major1	Ν	/lajor2	1	Minor2	
Conflicting Flow All	617	0	-	0	996	309
Stage 1	-	-	-	-	614	-
Stage 2	-	-	-	-	382	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	973	-	-	-	245	693
Stage 1	-	-	-	-	508	-
Stage 2	-	-	-	-	665	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	<sup>.</sup> 973	-	-	-	232	693
Mov Cap-2 Maneuver	· -	-	-	-	232	-
Stage 1	-	-	-	-	481	-
Stage 2	-	-	-	-	665	-
Approach	EB		WB		SB	
HCM Control Delay, s	<u> </u>		0		12.7	
HCM LOS			•		B	
			EDT			
Minor Lane/Major MV	mt	EBL	FRI	<b>WRI</b>	WBK 3	SBLN1
Capacity (veh/h)		973	-	-	-	511
HCM Lane V/C Ratio		0.035	-	-	-	0.081
HCM Control Delay (s	5)	8.8	0.2	-	-	12.7
HCM Lane LOS		A	A	-	-	В
HCM 95th %tile Q(vel	h)	0.1	-	-	-	0.3

PMPR Year 2029 Total Projected Weekday Morning Peak Hour Conditions 10:50 am 03/29/2023 23059 - Car Wash - TislyaydRaok11 Report Page 1 sa

<u>Capacity Analysis Summary Sheets</u> Year 2029 Total Projected Saturday Midday Peak Hour
### Lanes, Volumes, Timings 1: Harlem Avenue & 171st Street

Lane Group EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT	SBR
Lane Configurations 7 46 7 46 7 46	
Traffic Volume (vph) 211 340 144 153 266 109 249 1186 88 138 1108	215
Future Volume (vph) 211 340 144 153 266 109 249 1186 88 138 1108	215
Ideal Flow (vphpl) 1900 1900 1900 1900 1900 1900 1900 190	1900
Storage Length (ft) 160 0 150 0 160 0 190	0
Storage Lanes 1 0 1 0 1 0 1	0
Taper Length (ft) 145 145 125 125	
Lane Util. Factor 1.00 0.95 0.95 1.00 0.95 0.95 1.00 0.95 0.95 1.00 0.95	0.95
Frt 0.955 0.956 0.990 0.976	
Flt Protected 0.950 0.950 0.950 0.950	
Satd. Flow (prot) 1805 3423 0 1805 3451 0 1787 3574 0 1805 3488	0
Flt Permitted 0.282 0.227 0.063 0.103	-
Satd. Flow (perm) 536 3423 0 431 3451 0 119 3574 0 196 3488	0
Right Turn on Red No No No	No
Satd. Flow (RTOR)	
Link Speed (mph) 40 35 40 40	
Link Distance (ff) 212 138 383 516	
Travel Time (s) 3.6 2.7 6.5 8.8	
Peak Hour Factor 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94	0.94
Heavy Vehicles (%) 0% 1% 0% 0% 0% 0% 1% 0% 0% 1%	1%
Shared Lane Traffic (%)	170
Lane Group Flow (vph) 224 515 0 163 399 0 265 1356 0 147 1408	0
Turn Type pm+pt NA pm+pt NA pm+pt NA pm+pt NA	·
Protected Phases 7 4 3 8 5 2 1 6	
Permitted Phases 4 8 2 6	
Detector Phase 7 4 3 8 5 2 1 6	
Switch Phase	
Minimum Initial (s) 3.0 8.0 3.0 8.0 3.0 15.0 3.0 15.0	
Minimum Split (s) 9.5 24.0 9.5 24.0 9.5 24.0 9.5 24.0	
Total Split (s) 18.0 30.0 16.0 28.0 20.0 70.0 14.0 64.0	
Total Split (%) 13.8% 23.1% 12.3% 21.5% 15.4% 53.8% 10.8% 49.2%	
Yellow Time (s) 3.5 4.0 3.5 4.0 3.5 4.0 3.5 4.0	
All-Red Time (s) 0.0 2.0 0.0 2.0 0.0 2.0 0.0 2.0	
Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	
Total Lost Time (s) 3.5 6.0 3.5 6.0 3.5 6.0 3.5 6.0	
Lead/Lag Lead Lag Lead Lag Lead Lag Lead Lag	
Lead-Lag Optimize? Yes Yes Yes Yes Yes Yes Yes Yes	
Recall Mode None None None None C-Min None C-Min	
Act Effct Green (s) 39.9 23.3 35.4 21.1 81.8 66.5 71.6 59.7	
Actuated g/C Ratio 0.31 0.18 0.27 0.16 0.63 0.51 0.55 0.46	
v/c Ratio 0.74 0.84 0.67 0.71 0.94 0.74 0.66 0.88	
Control Delay 50.7 64.8 47.9 59.3 76.6 28.7 30.8 40.0	
Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	
Total Delay 50.7 64.8 47.9 59.3 76.6 28.7 30.8 40.0	
LOS DE DE EC CD	
Approach Delay 60.5 56.0 36.5 39.2	
Approach LOS E E D D	
Queue Length 50th (ft) 145 221 101 168 170 475 48 570	
Queue Length 95th (ft) #228 #292 162 225 #338 572 110 #684	

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### Lanes, Volumes, Timings 1: Harlem Avenue & 171st Street

03/29/2023

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		132			58			303			436	
Turn Bay Length (ft)	160			150			160			190		
Base Capacity (vph)	306	633		251	584		286	1827		239	1601	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.73	0.81		0.65	0.68		0.93	0.74		0.62	0.88	
Intersection Summary												
Area Type: Of	ther											
Cycle Length: 130												
Actuated Cycle Length: 130												
Offset: 0 (0%), Referenced to	phase 2:I	NBTL and	I 6:SBTL,	Start of (	Green							
Natural Cycle: 90												
Control Type: Actuated-Coord	inated											
Maximum v/c Ratio: 0.94												
Intersection Signal Delay: 43.8	3			In	tersectior	LOS: D						
Intersection Capacity Utilization	on 90.5%			IC	U Level o	of Service	E					
Analysis Period (min) 15												
# 95th percentile volume exe	ceeds cap	acity, qu	eue may	be longer								
Queue shown is maximum	after two	cycles.										

Splits and Phases: 1: Harlem Avenue & 171st Street



### Intersection

Int Delay, s/veh	0.4									
Movement	EBL	EBT	WBT	WBR	SBL	SBR				
Lane Configurations		-4 <b>†</b>			۰¥					
Traffic Vol, veh/h	16	548	506	5	4	18				
Future Vol, veh/h	16	548	506	5	4	18				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	-	-	0	-				
Veh in Median Storage,	# -	0	0	-	0	-				
Grade, %	-	0	0	-	0	-				
Peak Hour Factor	89	89	89	89	89	89				
Heavy Vehicles, %	0	1	1	0	0	0				
Mvmt Flow	18	616	569	6	4	20				

Major/Minor	Major1	Ν	/lajor2	1	Vinor2	
Conflicting Flow All	575	0	-	0	916	288
Stage 1	-	-	-	-	572	-
Stage 2	-	-	-	-	344	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1008	-	-	-	275	715
Stage 1	-	-	-	-	534	-
Stage 2	-	-	-	-	695	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1008	-	-	-	268	715
Mov Cap-2 Maneuver	· -	-	-	-	268	-
Stage 1	-	-	-	-	520	-
Stage 2	-	-	-	-	695	-
Approach	EB		WB		SB	
HCM Control Delay, s	s 0.3		0		11.9	
HCM LOS					В	
Minor Lane/Major Mvi	mt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)		1008	-	-	-	549
HCM Lane V/C Ratio		0.018	-	-	-	0.045
HCM Control Delay (s	5)	8.6	0.1	-	-	11.9
HCM Lane LOS		А	А	-	-	В
HCM 95th %tile Q(vel	h)	0.1	-	-	-	0.1

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### Petitioner

West Point Builders, Inc. on behalf of Tinley Park Main Street, LLC

### **Property Location**

North Street, 67<sup>th</sup> Court & 67<sup>th</sup> Avenue

### PINs

28-30-407-007-0000, 28-30-407-008-0000, 28-30-404-025-0000, & 173<sup>rd</sup> St. right-of-way

### Zoning

DG (Downtown General) & DC (Downtown Core)

### **Approvals Sought**

- Special Use Permit
- Site Plan/Arch. Approval
- Variations
- Final Plat Approvals
- Rezoning
- Text Amendment

### **Project Planner**

Daniel Ritter, AICP Com. Dev. Director

Jason Engberg, AICP Planning Manager

### PLAN COMMISSION STAFF REPORT

October 19, 2023 – Public Hearing

### West Point at Harmony Square

67<sup>th</sup> Court and North Street

### **EXECUTIVE SUMMARY**

The Petitioner is requesting Site Plan/Architecture Approval, a Special Use, Final Plat of Subdivision, Plat of Vacation, Rezoning, Variations, and a Text Amendment for the mixeduse West Point at Harmony Square development. The project includes a 5-story mixeduse building on North Street with approximately 4,350 sq. ft. of commercial space (fronting the future Harmony Square Plaza) and 63 residential units. Amenities include a rooftop terrace overlooking the plaza, a fitness center, bike storage, community room, covered parking, open space, and onsite office. Additionally, the development includes 60 townhome units at the former site of Central Middle School (revised from the originally proposed 63 townhome units). The project is proposed to be constructed in one phase, but construction is expected to begin on the townhome portion first due to utility and engineering work required closer to the plaza.

The text amendment request is based on staff feedback and will relocate the required street-level commercial space from North Street to front the Harmony Square Plaza. The commercial space facing the plaza will help activate the space (which was not originally contemplated at this location). The project includes the vacation of approximately .531 acres of right-of-way (ROW) along 173<sup>rd</sup> Street that will be deeded to the developer and consolidated with the property to support this development. The development includes improvements to the adjacent sidewalks and streetscape areas. The development scale is consistent with the vision of the Legacy Plan and Transit Oriented Development (TOD) principles by providing residential density near mass transit. Through these principles, the Village will be able to attract stable commercial users that will serve residents of the project and the community, thereby contributing to the economic health and vitality of the downtown area and Village as a whole.

### CONTINUATION OF THE PUBLIC HEARING

The public hearing for these requests was opened and conducted on September 7, 2023. After the public and Petitioner made their comments on the proposed requests, the Plan Commission voted to continue the public hearing to the next regularly scheduled meeting and directed the petitioner to look at possible revisions based on that feedback. The public hearing for these requests was continued at the September 21<sup>st</sup> and October 5th meetings to allow time for revisions to be made.

The Petitioner has taken the comments given at the initial meeting and is attempting to alter the layout of the townhome development to provide more parking options and availability. Parking has now been supplied behind each garage unit and the total available parking has increased from 120 to 240 spaces for 60 units (reduced from 63). The revised layout includes removal of the private open space area originally proposed along 67<sup>th</sup> Avenue. Additionally, the townhomes architecture side elevations were adjusted to improve the appearance for units with building sides that face towards 67<sup>th</sup> Avenue. These changes were made to give it the same feel and appearance as the buildings' front elevations.

The Petitioner has not altered the previous zoning requests except to add an additional curb cut needed for circulation and is still seeking a positive recommendation from the Plan Commission.

Staff notes that any on-street parking and roadway planning shown on the plan documents is conceptual and the final design and layout of all rights-of-way is subject to the Village's final engineering and Public Works review/approval. The overall design and location of on-street parking is yet to be determined.

It is also noted that it is expected a temporary public parking lot will be constructed on property owned by the Village that is on the west side of Oak Park Avenue, north of Midlothian Creek and south of Evon's Trophies. The parking lot is meant to assist in parking demand needed during the busiest events like the Downtown Block Party and Music in the Plaza.

### Traffic Analysis

A traffic report was conducted for the development by transportation planning consultant KLOA (Kenig Lindgren O'Hara Aboona). The report indicates sufficient capacity in the existing roadway system to accommodate the additional trips from the proposed development. The overall roadway system aligns with the adopted Legacy Plan from 2009, which included a more in-depth analysis of the downtown and roadway framework to ensure it could support the desired development. The plan anticipated a higher density of residential and commercial areas along North Street than proposed in the Petitioner's current submittal. School traffic (vehicles, pickup/drop-offs, and buses) prior to the 2004 demolition of the school also adequately functioned within the existing roadway network.

### **PROPOSED REQUESTS**

The in-depth details of this request can be found in the attached Staff Report from the September 7, 2023, meeting. The only change in the Petitioner's requests from the original proposal, was to add an additional curb cut on 67<sup>th</sup> Ave. Requests are summarized as follows:

### Text Amendment - Public Hearing

A text amendment to *Section XII.2.A.3* to relocate a segment of the frontage designated as "Street-Level Commercial Required" from a certain segment of North Street to a certain segment of the 67th Court extension.

### **Rezoning - Public Hearing**

Rezone the vacated portion of 173rd Street right-of-way to the DC (Downtown Core) Zoning District.

### Special Use - Public Hearing

A special use request to allow accessory residential uses on the street level in a mixed-use building.

### Variations - Public Hearing

- 1. Five studio units to be permitted at a minimum of 705 sq. ft. instead of the minimum 800 sq. ft. size. For a residential dwelling (Sec. V.C.2).
- 2. Permit residential parking that is not within or below the building envelope or an attached parking structure. 24 required stalls are required to still have a carport covering or approved parking structure (Sec. XII.3.C.3.d.).
- 3. Permit floors 2-5 to be setback 24' instead of the permitted maximum of five feet (5') (Sec. XII.2.A.2.9.).
- 4. Permit a reduction of the required 60% of all street frontage facades on a commercial building to be transparent windows. Opaque, non-mirrored" windows shall be permitted on the three non-primary facades (Sec. XII.3.B.6.a.).
- 5. Permit 57.5 sq. ft. development wall signs on the west (67th Ct.) and south (North Street) facades to be placed at the top of the 5th floor parapet as shown on the elevation (Sec. XII.4.E.8.).
- 6. Permit 6 sq. ft. in size, 4 ft. high identification signs at the private park and dog park areas (Sec. XII.4.E.16.).
- 7. Permit two 15 sq. ft. in size, 68 inch high townhome development entrance ground signs to be setback a minimum of two feet from the property lines (Sec. XII.4.E.14.).

- 8. Permit Commercial Depth of 45' instead of the minimum 50' where street-level commercial is required (Sec. XII.2.A.4.).
- 9. Permit additional driveway curb cut/access points along 67<sup>th</sup> Ave and North Ave. This would permit 6 access points instead of the maximum of 2.

### Final Plats - Review/By-Right

*Plat of Vacation* The vacation of a 0.531-acre area of the 173<sup>rd</sup> Street right-of-way.

### Plat of Subdivision

Consolidation of existing lots into two lots for the townhome development and mixed-use structure development.

### Site Plan/Architectural Approval – Review/By-Right

The submitted plans for a mixed-use structure on Lot 2 of the site and for approximately 63 townhome units (as amended) on Lot 1 of the site. All plans are attached to this Staff Report.

### ADDITIONAL LEGACY CODE STANDARDS

In addition to any other specific standards set forth herein the Plan Commission shall not recommend a Special Use, variance, appeal, or map amendment from the regulations of this ordinance unless it shall have made findings of fact, based upon evidence presented to it, in each specific case that the following standards are met. Staff has provided draft Findings for the Commission's review. The Commission may adopt the Findings as provided or make any additions, deletions, or modifications based on testimony provided at the hearing.

- a. The proposed improvement meets the Legacy Plan and its Principles, as presented in Section 1.A-B: Purpose and Intent, of this ordinance.
  - The Legacy Plan specifically calls for maximizing the number of people living within walking distance of the train station. The project will have the potential to bring, at a minimum, 126 new residents to the downtown area near the commuter line. The new commercial storefronts adjacent to the Harmony Square Plaza and overall site design are in conformance with the goal of having a walkable downtown with a strong economic center.
- b. The new improvement is compatible with uses already developed or planned in this district and will not exercise undue detrimental influences upon surrounding properties.
  - The mixed-use building and townhomes are permitted within their respective Zoning Districts and are compatible with the commercial service uses preferred in the downtown area.
- c. Any improvement meets the architectural standards set forth in the Legacy Code.
  - The mixed-use and townhome buildings provide for a consistent style of architecture without being monotnous. The first-floor retail storefront provides for varying materials with the use of brick, stone, fabric and metal awnings, light fixtures, and recessed doorways. The upper floors utilize balconies and a mixture of brick, stone, fiber cement panel siding, cornices, and trim to create interest. The overall appearance is traditional in nature to help complement the existing downtown buildings.
- d. The improvement will have the effect of protecting and enhancing the economic development of the Legacy Plan area.
  - The proposed improvements provide new commercial space, increasing the availability of downtown commercial space, and will add residents within walking distance to support downtown businesses. The Village will be able to attract commercial users that will serve residents of the project, the community and beyond, thereby contributing to the economic health of the downtown area and the village overall.

### STANDARDS FOR A SPECIAL USE

Section X.J.5. of the Zoning Ordinance lists standards that need to be considered by the Plan Commission. The Plan Commission is encouraged to consider these standards (listed below) when analyzing a Special Use request. Staff has provided the following draft Findings for the Commission's review. The Commission may adopt the Findings as provided or make any additions, deletions, or modifications based on testimony provided at the hearing.

X.J.5. Standards: No Special Use shall be recommended by the Plan Commission unless said Commission shall find:

- a. That the establishment, maintenance, or operation of the Special Use will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare;
  - The incorporation of ground-floor residential amenities will not be detrimental to or endanger the public health, safety, morals, comfort, or general welfare. The uses are incorporated with the overall design of the first-floor lobby area and will be built to meet all building codes.
- b. That the Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood;
  - The inclusion of ground-floor residential amenities will not be injurious to the use and enjoyment of other properties in the immediate vicinity. There is a train station across the street and a mix of commercial and residential uses surrounding the property.
- c. That the establishment of the Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district;
  - Having residential amenities on the first floor will not impede the normal development of the downtown, however these uses will not generate sales tax revenue the community hopes to achieve with downtown redevelopment. In the future, the amenity space could be converted in whole or part to commercial space.
- d. That adequate utilities, access roads, drainage, and/or other necessary facilities have been or are being provided;
  - As part of this development, the adjacent roadways will be reconstructed according to the Village's streetscape and roadway plans. A regional pond, which was established on the Panduit Site, is providing the necessary stormwater management that normally would have been required on site.
- e. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets; and
  - The residential amenities will only be accessed from the interior lobby area of the mixed-use building. Since these areas will only be utilized by the residents living in the apartments, there will not be any issues of increased traffic on the public streets.
- f. That the Special Use shall, in all other respects, conform to the applicable regulations of the district in which it is located, except as such regulations may in each instance be modified by the Village Board pursuant to the recommendation of the Plan Commission. The Village Board shall impose such conditions and restrictions upon the premises benefited by a Special Use Permit as may be necessary to ensure compliance with the above standards, to reduce or minimize the effect of such permit upon other properties in the neighborhood, and to better carry out the general intent of this Ordinance. Failure to comply with such conditions or restrictions shall constitute a violation of this Ordinance.
  - The DC (Downtown Core) District for this area requires first floor commercial space. The residential amenity space is permitted by Special Use.

- g. The extent to which the Special Use contributes directly or indirectly to the economic development of the community as a whole.
  - The Special Use will add required commercial space along the future 67<sup>th</sup> Court extension at the corner of South Street, adjacent to the future Harmony Square Plaza. The DC (Downtown Core) District requires ground floor commercial space. Although a portion of the ground floor of the mixed-use building will be occupied by resident amenity space, the development adds available commercial space downtown. The amenity space will not generate additional foot traffic for businesses; however it will enhance the living experience of future residents of the building.

It is important to recognize that a Special Use Permit does not run with the land and instead the Special Use Permit is tied to the Petitioner. This is different from a process such as a variance, since a variance will forever apply to the property to which it is granted. Staff encourages the Plan Commission to refer to Section X.J.6. to examine the conditions where a Special Use Permit will expire and a new owner would be required to receive a new approval.

### **STANDARDS FOR A VARIATION**

Section X.G.4. of the Zoning Ordinance states the Plan Commission shall not recommend a Variation of the regulations of the Zoning Ordinance unless it shall have made Findings of Fact, based upon the evidence presented for each of the Standards for Variations listed below. The Plan Commission must provide findings for the first three standards; the remaining standards are provided to help the Plan Commission further analyze the request. Staff has provided the following draft Findings for the Commission's review. The Commission may adopt the Findings as provided or make any additions, deletions, or modifications based on testimony provided at the hearing.

- 1. The property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations in the district in which it is located.
  - The Variations are based upon the existing market conditions and available space on the property. The requests have been minimized whenever possible but allow the preferred development pattern to occur. Resident amenities have been maximized where there is available space.
- 2. The plight of the owner is due to unique circumstances.
  - Most of the Legacy and Zoning Code requirements have been met by the Petitioner with only a few changes that have been minimized where possible that allow for the project to be financially viable and fit within the site's size constraints. The overall proposal fits within the visions and plan for their respective Districts.
- 3. The Variation, if granted, will not alter the essential character of the locality.
  - The Variations do not change the character of the area and have been minimized where possible to keep in line with the existing development pattern, Legacy Plan and Legacy Code requirements.
- 4. Additionally, the Plan Commission shall also, in making its determination whether there are practical difficulties or particular hardships, take into consideration the extent to which the following facts favorable to the Petitioner have been established by the evidence:
  - a. The particular physical surroundings, shape, or topographical condition of the specific property involved would result in a particular hardship upon the owner, as distinguished from a mere inconvenience, if the strict letter of the regulations were carried out;
  - b. The conditions upon which the petition for a Variation is based would not be applicable, generally, to other property within the same zoning classification;
  - c. The purpose of the Variation is not based exclusively upon a desire to make more money out of the property;
  - d. The alleged difficulty or hardship has not been created by the owner of the property, or by a previous owner;
  - e. The granting of the Variation will not be detrimental to the public welfare or injurious to other property or improvements in the neighborhood in which the property is located; and
  - f. The proposed Variation will not impair an adequate supply of light and air to an adjacent property, or substantially increase the congestion in the public streets, or increase the danger of fire, or endanger the public safety, or substantially diminish or impair property values within the neighborhood.

### STANDARDS FOR SITE PLAN AND ARCHITECTURAL APPROVAL

Section III.T.2. of the Zoning Ordinance requires that the conditions listed below must be met and reviewed for Site Plan approval. Specific findings are not required but all standards shall be considered to have been met upon review by the Plan Commission.

### <u>Architectural</u>

- a. Building Materials: The size of the structure will dictate the required building materials (Section V.C. Supplementary District Regulations). Where tilt-up or pre-cast masonry walls (with face or thin brick inlay) are allowed vertical articulation, features are encouraged to mask the joint lines. Concrete panels must incorporate architectural finishes that comply with "Building Articulation" (Section III.U.5.h.) standards. Cast in place concrete may be used as an accent alternate building material (no greater than 15% per façade) provided there is sufficient articulation and detail to diminish it's the appearance if used on large, blank walls.
- b. Cohesive Building Design: Buildings must be built with approved materials and provide architectural interest on all sides of the structure. Whatever an architectural style is chosen, a consistent style of architectural composition and building materials are to be applied on all building facades.
- c. Compatible Architecture: All construction, whether it be new or part of an addition or renovation of an existing structure, must be compatible with the character of the site, adjacent structures and streetscape. Avoid architecture or building materials that significantly diverge from adjacent architecture. Maintain the rhythm of the block in terms of scale, massing and setback. Where a development includes outlots they shall be designed with compatible consistent architecture with the primary building(s). Site lighting, landscaping and architecture shall reflect a consistent design statement throughout the development.
- d. Color: Color choices shall consider the context of the surrounding area and shall not be used for purposes of "attention getting" or branding of the proposed use. Color choices shall be harmonious with the surrounding buildings; excessively bright or brilliant colors are to be avoided except to be used on a minor scale for accents.
- e. Sustainable architectural design: The overall design must meet the needs of the current use without compromising the ability of future uses. Do not let the current use dictate an architecture so unique that it limits its potential for other uses (i.e. Medieval Times).
- f. Defined Entry: Entrance shall be readily identifiable from public right-of-way or parking fields. The entry can be clearly defined by using unique architecture, a canopy, overhang or some other type of weather protection, some form of roof element or enhanced landscaping.
- g. Roof: For buildings 10,000 sf or less a pitched roof is required or a parapet that extends the full exterior of the building. For buildings with a continuous roof line of 100 feet of more, a change of at least five feet in height must be made for every 75 feet.
- h. Building Articulation: Large expanses of walls void of color, material or texture variation are to be avoided. The use of material and color changes, articulation of details around doors, windows, plate lines, the provision of architectural details such as "belly-bands" (decorative cladding that runs horizontally around the building), the use of recessed design elements, exposed expansion joints, reveals, change in texture, or other methods of visual relief are encouraged as a means to minimize the oppressiveness of large expanses of walls and break down the overall scale of the building into intermediate scaled parts. On commercial buildings, facades greater than 100 feet must include some form of articulation of the façade through the use of recesses or projections of at least 6 inches for at least 20% of the length of the façade. For industrial buildings efforts to break up the long façade shall be accomplished through a change in building material, color or vertical breaks of three feet or more every 250 feet.
- i. Screen Mechanicals: All mechanical devices shall be screened from all public views.
- j. Trash Enclosures: Trash enclosures must be screened on three sides by a masonry wall consistent with the architecture and building material of the building it serves. Gates must be kept closed at all times and constructed of a durable material such as wood or steel. They shall not be located in the front or corner side yard and shall be set behind the front building façade.

### <u>Site Design</u>

- a. Building/parking location: Buildings shall be located in a position of prominence with parking located to the rear or side of the main structure when possible. Parking areas shall be designed so as to provide continuous circulation avoiding dead-end parking aisles. Drive-through facilities shall be located to the rear or side of the structure and not dominate the aesthetics of the building. Architecture for canopies of drive-through areas shall be consistent with the architecture of the main structure.
- b. Loading Areas: Loading docks shall be located at the rear or side of buildings whenever possible and screened from view from public rights-of-way.
- c. Outdoor Storage: Outdoor storage areas shall be located at the rear of the site in accordance with Section III.O.1. (Open Storage). No open storage is allowed in front or corner side yards and are not permitted to occupy areas designated for parking, driveways or walkways.
- d. Interior Circulation: Shared parking and cross access easements are encouraged with adjacent properties of similar use. Where possible visitor/employee traffic shall be separate from truck or equipment traffic.
- e. Pedestrian Access: Public and interior sidewalks shall be provided to encourage pedestrian traffic. Bicycle use shall be encouraged by providing dedicated bikeways and parking. Where pedestrians or bicycles must cross vehicle pathways a crosswalk shall be provided that is distinguished by a different pavement material or color.

### **MOTIONS TO CONSIDER**

If the Plan Commission wishes to act on the Petitioner's requests, the appropriate wording of the motions is listed below. The protocol for the writing of a motion is to write it in the affirmative so that a positive or negative recommendation correlates to the Petitioner's proposal. By making a motion, it does not indicate a specific recommendation in support or against the plan, it only moves the request to a vote. The conditions listed below are recommended by staff but can be added to, changed, or removed by the Commission based on their discussion of the approval of recommendation.

### Motion 1 (Text Amendment)

"...make a motion to recommend the Village Board amend Sec. XII.2.A.3. of the Zoning Ordinance (Legacy District) "Downtown Core Regulating Plan" to relocate a segment of the frontage designated as "Street-Level Commercial Required" from a certain segment of North Street to a certain segment of the 67<sup>th</sup> Court extension as proposed in the October 19, 2023 staff report."

### Motion 2 (Zoning)

"...make a motion to recommend the Village Board grant West Point Builders, Inc., on behalf of Tinley Park Main Street, LLC, a rezoning of the vacated portion of the 173<sup>rd</sup> Street right-of-way to the DC (Downtown Core) Zoning District, subject to the condition that the Plat of Vacation is reviewed and approved by the Village Attorney, Village Engineer, and Village Board."

### Motion 3 (Special Use)

"...make a motion to recommend the Village Board grant a Special Use Permit to allow "Accessory Residential Uses on the Street Level in a mixed-use building" to the Petitioner, West Point Builders, Inc., on behalf of Tinley Park Main Street, LLC, in the DC (Downtown Core) Zoning District, where street-level commercial is required in accordance with the plans submitted and adopt the Findings of Fact as proposed in the October 19, 2023 staff report, subject to the following conditions:

- a) The "Accessory Residential Uses on the Street Level in a mixed-use building" must not occupy more than 93 feet 8 inches (49%) of the proposed building frontage on the 67<sup>th</sup> Court extension.
- *b)* Approval is subject to final engineering reviews and approval.
- c) Approval is subject to approval by the Village Board of all other related zoning requests.
- d) As required by Village Ordinance, any changes in ownership require a new Special Use Approval.
- e) The commercial architectural character of the residential uses must be maintained to create a uniformed commercial frontage appearance. The architecture and character of the exterior frontage of the "Accessory Residential Uses on the Street Level in a mixed-use building" must be designed and maintained to give the appearance of a storefront substantially similar to that of the commercial spaces occupying the ground floor.

### **Motion 4 (Variations)**

"...make a motion to recommend the Village Board grant nine Variations from the Zoning Ordinance as listed in the October 19, 2023, Staff Report to the Petitioner, West Point Builders, Inc., on behalf of Tinley Park Main Street, LLC, to permit the construction of a development consisting of townhomes and a mixed-use five-story building at North Street and 67<sup>th</sup> Court, in accordance with the plans submitted and adopt the Findings of Fact as proposed in Staff Report, subject to the following conditions:

- a) Revised plans with all updates to the design of the parking lot, garage entrances, and elevations as noted in the staff report and discussed during the public hearing must be revised prior to the Village Board approval.
- *b)* Approval is subject to final engineering review and approval, and may, at the sole discretion of the Village, require revisions to the proposed streetscape to comply with the Village's forthcoming streetscape plan.
- c) All required parking stalls for dwelling units must be covered, situated within the mixed-use building garage, or, if approved by the Village, covered by carport canopies or within accessory garages. either interior to the building,
- *d) "Faux"/opaque windows specifications and design must be reviewed and approved by staff prior to permitting and installation. Windows must not be mirrored.*

### Motion 5 (Site Plan/Architectural Approval)

"...make a motion to g2023, Site Plan/Architectural Approval to the Petitioner, West Point Builders, Inc., on behalf of Tinley Park Main Street, LLC, for the development of 63 townhomes and a 5-story mixed-use building with commercial space and 63 units at North Street and 67th Court in accordance with the plans submitted and adopt the Findings of Fact as proposed in the October 19, 2023 staff report, subject to the following conditions:

- a) Revised plans with all updates to the parking lot, garage entrance, and elevations as noted in the staff report and public hearing, must be revised prior to the Village Board approval.
- *b)* "Public Event signage" areas on the North Street facade must be comprised of glazing to give the appearance of windows when not utilized. "Public Event Signage" must not be used for commercial signage purposes and must be left empty when not utilized by the Village, or other public agency.
- *c)* Commercial signage must be of a consistent style and mounting design as noted on the plans. Any signage without a variation must comply with the zoning code requirements.
- d) Approval is subject to final engineering reviews and approval, and may, at the sole discretion of the Village, require revisions to the proposed streetscape to comply with the Village's forthcoming streetscape plan. Site-work, grading, and utility permits require prior approval by MWRD, as well as submittal of the Final Plat with all applicable signatures for recording. Foundation-only permits are not permitted unless complying with the Village's policy and are approved by the Village Board.
- *e)* The developer must obtain the necessary construction easements from the Village for the use of their property during construction.
- *f)* A minimum of one parking space to one residential unit must be provided on-site for the duration of the construction process related to any phasing of occupancies.
- *g)* All lighting fixtures and the photometric plan are subject to Village review to confirm compliance with all applicable standards.
- *h)* All rooftop HVAC and mechanical equipment must be screened by the parapet wall and must not be visible at ground level.

### Motion 6 (Plat of Vacation and Subdivision)

"...make a motion to recommend approval of the Final Plat of Vacation dated June 7, 2023 and the Harmony Square Final Plat of Subdivision dated August 16, 2023 to the Petitioner, West Point Builders, Inc. on behalf of Tinley Park Main Street, LLC, subject to the following condition that it is subject to final review and approval by the Village Engineer and Village Attorney."

### LIST OF REVIEWED PLANS

	Submitted Sheet Name	Prepared By	Date On Sheet
1	Overall Site Plan (Updated)	WMA	10/6/23
2	Illustrative Plan and Landscape Plan (Updated)	WPB/SL	10/6/23
3	Preliminary Traffic Impact Statement	KLOA	10/2/23
4	Updated Townhome Side Elevations	SL	10/5/23
5	Application	WPB	6/19/23
6	Combined Arch and Elevations 20230811	SL	7/27/23
7	Tinley Park Exteriors with Brick	Eleni	
8	Townhome Elevations and Floor Plans	SL	7/27/23
9	Townhome Anti-monotony plan	SL	7/27/23
10	Final Plat of Subdivision	WMA	7/18/23
11	Plat of Vacation Harmony Square 2023-06-19	Robinson	6/7/23
12	Lot 1 Engineering	WMA	7/19/23
13	Lot 2 Engineering	WMA	7/19/23
14	Sight Distance Exhibit	WMA	7/19/23
15	Photometric Plan and Fixture Cut Sheets	ITG	7/27/23
16	Harmony Square Sign Package 20230810	VanBruggen	8/10/23
17	Workshop Presentation	WestPoint/Petitioner	8/17/23
18	Updated Mixed-Use Layout with Trash Enclosure and Garage Access	WPB/SL	8/27/23



### SITE DATA

Lot			1		2			
Zoning		D	G	l.	DC			
Land Area		2.98	acres	ĺ	1.44 acres	-		
Use		Town	homes		Mixed Use			
		Allowable	Proposed	Total Units	Allowable	Proposed		Total Units
FAR								
Building Height		Min. 3 Stories	3 stories		Min. 3 stories	5 stories		
Building Setback	Front (67th Ave)	5'-15'	10.8'	i i	5' Max. (North St.)	8'		
	Front (67th Ct.)	5'-15'	8.7'	) [	5' Max. (Cut Thru)	1'		
	Front (172nd St.)	5'-15'	9.3'		5' Max. (67th)	1.2'		
	Side	N/A			5' Min. (north)	81'		
	Rear (south)	5' Min.	13.3'	įį.				
Parking Setback	Front	N/A			20'	5'		
	Corner Side Yard	N/A		1				1
	Side	N/A	[	į. į	0'	0'		
	Rear	N/A			5'			
		1.00						1
MF TH Unit Size		1,200 SF Min.	1,500 SF to 1,800 SF	60				
MF Apt. Unit Size					UNIT TYPES	Rentable SF	Total Rentable SF	Total
in the state of the	2			-	A. Studio	704.00	3.520	5
					B- One Bedroom	808.00	3,232	4
-					B1- One Bedroom	933.00	3 732	4
				-	B2- One Bedroom	831.00	8 310	10
					C- One Bedroom/office	880.00	2 640	3
					D- One Bedroom/office	880.00	7 040	8
					F- Two Bedroom	1 075 00	4 304	4
					E1- Two Bedroom	1,070.00	4,376	4
					E- Two Bedroom corner	1,054.00	18 624	16
					G- Two Bedroom	1,104.00	3 813	3
1	2			1	H- Three Bedroom corner	1,271.00	1 476	1
					I- Three Bedroom	1,470.00	1,470	1
Apartment SET atal	i.				TOTAL SE	1,445.00	62 512	
Apartment SF10tal	2				TOTAL SP		02,512	62
				2		(Aug CE (Up th)		002.2
Average Apt. SF			· · · · · · · · · · · · · · · · · · ·			(Avg SF/Unit)		992.3
Commercial SF	7							4,352.0
A SUCCESSION OF THE		T	201		0	251		
Aisle Width	i.	Two-way - Max 20	20	-1	One-way Max 20	25		1
Parking				-				
		TH-1 per unit Req.			MF-1 per unit Req. (63 spaces) Commercial -			
Garage -TH		(00 5)4005)	120		Hone			
Tandem Anron Sna	res		120	(				-
randem Apron Spa	ices		8					
	Total TH Parking		248	4.1/Unit				
	Total In Faiking		*TH Parking Total Ex	4.1/Ont	Stroot Spacer	-		
			65 Bike Stalle	1/Unit	i Street Spaces			
Carago Apartman			05 DIKE Stalls	1/0111-		20		-
Garage -Apartmen	**					37		
surface- Apartmen	Tatal Ast Darking					3/		1.2/11-12
	rotal Apt. Parking					/b		1.2/Unit
	4					08 Bike Stalls	autoric-A	1/Unit
C	<u>(</u>					(63 Interior/ 5	exterior)	5
commercial	THE					20.0		7/1 000 /
	Total Comm. Parking					29 Spaces		//1,000 sf
						5 BIKE Spaces	ling Correc	
						1- 40 X 8 LOad	ing space	

22023-06-15 - Project Submittal Issued

<u></u> July IT, 2023 ▲ Nug 27, 2023 ▲ Oct. 6, 2023 ▲ DATE: West P Square Harmony nois Ħ ark, Illi 3 Point ۵ West Tinley

JOB NO: LP230045.00 PROJ MGR: TJS DRAWN: TJS CHECKED: --ILLUSTRATIVE PLAN





SHAE KEY	DE TREES SCIENTIFIC NAME	COMMON NAME	SIZE	
AFm	Acer rubrum 'Autumn Blaze'	Autumn Blaze Maple	2.5 " BB Typ. 4.0 " BB Speci	ial
со	Celtis occidentallis 'Ultra'	Ultra Hackberry	2.5 " BB Typ. 4.0 " BB Spec	ial
GTIs	Gleditsia tricanthos inermis 'Skyline'	Skyline Honey Locust	2.5 " BB Typ. 4.0 " BB Speci	ial
LI PLa	Lirodendron tulipifera Platanus acerifolia	Tulip Tree	2.5 " BB 2.5 " BB Typ.	
QB	Quercus bicolor	Swamp White Oak	2.5 " BB	
QI	Quercus imbricaria	Shingle Oak	2.5 " BB	
QRu	Quercus rubra	Red Oak	2.5 " BB	_
TCco	Tilia cordata 'Corinthian'	Corinthian Littleleaf Linden	3.0 " BB	_
UAN		Homestead Elm	2.5 " BB	
IN I Eł KEY	RMEDIATE AND EVERGREEN TRE	ES COMMON NAME	SIZE	
AC	Amelanchier canadensis	Serviceberry	10' CL. BB	
CCa	Carpinus carolina	Carolina Hornbeam	2.5" BB	_
CCi	Craetegus crus-galli inermis	Thornless Cockspur Hawthorn	2.5" BB	_
HV	Hamamellis vernalis	Vernal Witchhazel	6' HT. BB	_
MDw	Malus 'Donald Wyman'	Donald Wyman Crab	2.5 DD 2.5" BB	-
Mrr	Malus 'Royal Raindrops'	Royal Raindrop's Crab	2.5" BB	
ov	Ostrya virginiana	Hornbeam	2.5" BB	_
VP	Viburnum prunifolium	Blackhaw Viburnum	8' BB	_
PGd	Picea glauca 'Densata'	Black Hills Spruce	10' HT BB- Spe	ec
SHR KEY	UBS SCIENTIFIC NAME	COMMON NAME	SIZE	
AM	Aronia melanocarpa	Black Chokeberry	3 Gal Cont.	
BMk	Buxus microphylla 'Koreana'	Korean Littleleaf Boxwood	3 Gal Cont.	
BMg	Buxus microphylla 'Green Mountain'	Green Mountain Boxwood	3 Gal Cont	
CS	Cornus sericea	Redtwig Dogwood	5 Gal Cont.	_
CSad	Cornus sericea 'Alleman's Dwarf'	Alleman's Dwarf Redtwig Dogwood	3 Gal Cont.	_
DRk	Diervilla rivularis 'Kodiak'	Kodiak Black Bush Honeysuckle	3 Gal Cont.	_
	Hydrangea arborescens 'Invincibelle'	Invincibelle Hydrangea	3 Gal Cont.	_
HPr	Hydrangea paniculata Limenght	Rendia Hydrangea	5 Gal Cont	_
HPt	Hydrangea paniculata 'Tardiya'	Tardiva Hydrangea	5 Gal Cont.	_
HII	Hydrangea 'Little Lamb'	Little Lamb Hydrangea	3 Gal Cont.	
Hts	Hydrangea 'Tuff Stuff'	Tuff Stuff Hydrangea	3 Gal Cont.	
HQ	Hydrangea quercifolia	Oakleaf Hydrangea	5 Gal Cont.	_
HK	Hypericum kalmianum (Include One Ma	Kalm St. John's Wort	3 Gal Cont.	+
IVa ICar	Ilex verticillata 'Red Sprite' Plant / Planting)	Red Sprite Holly	3 Gal Cont.	+
POId	Physocarous opulfolius 'Little Devil'	Little Devil Nine Bark	3 Gal Cont	_
POs	Physocarpus opulfolius 'Seward'	Seward Nine Bark	5 Gal. Cont	_
RAg	Ribes alpinum 'Green Mound'	Green Mound Alpine Currant	3 Gal Cont.	
Rgl	Rhus aromatica 'Grow-Low' (36" On Center)	Grow-Low Sumac	3 Gal Cont.	
SBt	Spiraea betulifolia 'Tor'	Tor Birchleaf Spirea	3 Gal Cont.	+
TCc	Taxus cuspidata 'Capitata'	Upright Yew	36" BB	_
TMt	Taxus medii 'Tauntoni'	Taunton's Yew	18" BB	_
TOor	Thuja occidentallis 'Technyi'	Ferrald Groop Arbonitae		-
VDbm	Viburnum dentatum 'Blue Muffin'	Blue Muffin Arrow Wood Vib	3 Gal Cont	-
VDw	Viburnum dentatum 'Synnesvedt'	Synnesvedt Arrowwood Vib.	5 Gal Cont.	_
VJ	Viburnum judii	Judd Viburnum	3 Gal Cont.	
VCc	Viburnum carlesii 'Compactum'	Compact Koreanspice Vib.	3 Gal Cont.	+
VOc	Viburnum opulus 'Compactum'	Compact Euro. Cranberry Vib.	24" BB	
	ENNIALS AND GROUNDCOVER		9175	
				24" 0- 0
	Amsonia hubrichtii	Biazing Star	1 Gal.	24" On Center
CMid	Carex morrowi 'Ice Dance'	Ice Dance Sedue	1 OT Cont	18" On Center
CP	Carex pennsylvanicum	Pennsylvania Sedae	1 QT Cont	18" On Center
Asb	Allium 'Summer Beauty'	Summer Beauty Onion	1 QT Cont	18" On Center
GSr	Geranium sanguineum 'Rosanne'	Rosanne Geranium	1 Gal	24" On Center
HMa	Hakonechloa macra	Japanese Forest Grass	1 Gal.	24" On Center
Hsd	Hemerocallis 'Stella D'Oro'	Stella D'Oro Daylilly	1 Gal.	24" On Center
Hhb	Hosta 'Hadsen Blue'	Hadspen Blue Hosta	1 Gal.	24" On Center
HM MFi	Heuchera 'Cherry Truttles'	Cherry Truttles Heuchera	1 Gal	24" On Center
NF	Nepeta fasseni 'Walker's Low'	Walker's Low Catmint	1 Gal.	24" On Center
PA	Pennisetum alopecuroides	Fountain Grass	1 Gal.	24" On Center
PAlb	Pennisetum alopecuroides Little Bunny	Litle Bunny Fountain Grass	1 Gal.	18" On Center
PVs	Pannicum virgatum 'Shennandoah'	Shenanndoah Switch Grass	1 Gal.	24" On Center
SHt	киорескіа neumanii "Little Goldstar" Sporabolis heterolepsis 'Tara'	Tara Prairie Dropseed	1 Gal	24 On Center
SH	Sporabolis heterolepsis	Prairie Dropseed	1 Gal.	24" On Center
VM	Vinca minor	Periwinkle	1 Qt.	12" On Center

22023-06-15 - Project Submittal Issue

JOB NO: LP230045.00 PROJ MGR: TJS DRAWN: TJS CHECKED: --AREA ONE LANDSCAPE PLAN

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Alla Rev. Villa

July 17, 2023 小 Aug. 27, 2023 全 Oct. 6, 2023 全

Square

Harmony

at

Point

West

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ark,

Tinley





SHAE KEY	DE TREES SCIENTIFIC NAME	COMMON NAME	SIZE	
AFm	Acer rubrum 'Autumn Blaze'	Autumn Blaze Maple	2.5 " BB Typ. 4 0 " BB Spec	ial
со	Celtis occidentallis 'Ultra'	Ultra Hackberry	2.5 " BB Typ 4.0 " BB Spec	ial
GTIs	Gleditsia tricanthos inermis 'Skyline'	Skyline Honey Locust	2.5 " BB Typ 4.0 " BB Spec	ial
LT	Lirodendron tulipifera	Tulip Tree	2.5 " BB	_
PLa	Platanus acerifolia	London Planetree	4.0 " BB Spec	ial
	Quercus imbricaria	Swamp White Oak	2.5 " BB	_
ORu			2.5 BB	_
TCco	Tilia cordata 'Corinthian'	Corinthian Littleleaf Linden	3.0 " BB	
UAh	Ulmus americana 'Homestead'	Homestead Elm	2.5 " BB	
INTE	RMEDIATE AND EVERGREEN TRE	ES		
KEY	SCIENTIFIC NAME		SIZE	_
AC	Amelanchier canadensis	Serviceberry	10' CL. BB	
CCa	Carpinus carolina	Carolina Hornbeam	2.5" BB	_
	Craetegus crus-galli inermis	Thornless Cockspur Hawthorn	2.5" BB	_
ME	Malus floribunda (Standard-Tree Form)		2 5" BB	_
MDw	Malus 'Donald Wyman'	Donald Wyman Crab	2.5" BB	
Mrr	Malus 'Royal Raindrops'	Royal Raindrop's Crab	2.5" BB	
ov	Ostrya virginiana	Hornbeam	2.5" BB	
VP	Viburnum prunifolium	Blackhaw Viburnum	8' BB	_
PGd	Picea glauca 'Densata'	Black Hills Spruce	10' HT BB- Sp	ec
SHR   kfy	UBS SCIENTIFIC NAME	COMMON NAME	SI7F	
AM	Aronia melanocarpa	Black Chokeberry	3 Gal Cont	
BMk	Buxus microphylla 'Koreana'	Korean Littleleaf Boxwood	3 Gal Cont.	
BMa	Buxus microphylla 'Green Mountain'	Green Mountain Boxwood	3 Gal Cont	 t
cs	Cornus sericea	Redtwig Dogwood	5 Gal Cont.	
CSad	Cornus sericea 'Alleman's Dwarf'	Alleman's Dwarf Redtwig Dogwood	d 3 Gal Cont.	
DRk	Diervilla rivularis 'Kodiak'	Kodiak Black Bush Honeysuckle	3 Gal Cont.	
HAi	Hydrangea arborescens 'Invincibelle'	Invincibelle Hydrangea	3 Gal Cont.	
HPIt	Hydrangea paniculata 'Limelight'	Limelight Hydrangea	5 Gal Cont.	
HPr	Hydrangea paniculata 'Rendia'	Rendia Hydrangea	5 Gal Cont.	_
HPt	Hydrangea paniculata 'Tardiva'	Tardiva Hydrangea	5 Gal Cont.	_
HII	Hydrangea 'Little Lamb'	Little Lamb Hydrangea	3 Gal Cont.	_
Hts	Hydrangea 'Tuff Stuff'	Tuff Stuff Hydrangea	3 Gal Cont.	_
HQ HK	Hydrangea quercifolia	Oakleaf Hydrangea	5 Gal Cont.	_
IVa	Ilex verticillata 'Bed Sprite' (Include One Ma	e Red Sprite Holly	3 Gal Cont	
JCsq	Juniperus chinensis 'Sea Green'	Sea Green Juniper	7 Gal Cont.	+
POld	Physocarpus opulfolius 'Little Devil'	Little Devil Nine Bark	3 Gal Cont.	
POs	Physocarpus opulfolius 'Seward'	Seward Nine Bark	5 Gal. Cont	
RAg	Ribes alpinum 'Green Mound'	Green Mound Alpine Currant	3 Gal Cont.	
Rgl	Rhus aromatica 'Grow-Low' (36" On Center)	Grow-Low Sumac	3 Gal Cont.	_
SBt	Spiraea betulifolia 'Tor'	Tor Birchleaf Spirea	3 Gal Cont.	
TCc	Taxus cuspidata 'Capitata'	Upright Yew	36" BB	_
TMt	Taxus medii 'Tauntoni'	Taunton's Yew	18" BB	_
TOrr	Thuja occidentallis 'Lechnyi'	Techny Arborvitae	6' Ht. BB	_
VDbm	Viburoum doptatum 'Plue Muffin'	Plue Muffin Arrow Wood Vib	3 Cal Cont	_
VDw	Viburnum dentatum 'Synnesyedt'	Synnesvedt Arrowwood Vib	5 Gal Cont	_
VJ	Viburnum judii	Judd Viburnum	3 Gal Cont	+
VCc	· Viburnum carlesii 'Compactum'	Compact Koreanspice Vib.	3 Gal Cont.	
VOc	Viburnum opulus 'Compactum'	Compact Euro. Cranberry Vib.	24" BB	
PER	ENNIALS AND GROUNDCOVER	· ·		
KEY	SCIENTIFIC NAME		SIZE	
АН	Amsonia hubrichtii	Blazing Star	1 Gal.	24" On Center
Afr	Astilbe 'Fanal Red'	Fanal Red Astilbe	1 Gal.	24" On Center
CMid	Carex morrowi 'Ice Dance'	Ice Dance Sedge	1 QT Cont	18" On Center
СР	Carex pennsylvanicum	Pennsylvania Sedge	1 QT Cont	18" On Center
Asb	Allium 'Summer Beauty'	Summer Beauty Onion	1 QT Cont	18" On Center
Gor LIMA	Geranium sanguineum 'Rosanne'	Rosanne Geranium		
⊓ivia Hed		Stella D'Oro Douillu	1 Gal	24 On Center
Hhh	Hosta 'Hadsen Rlue'		1 Gal	24 On Center
НМ	Heuchera 'Cherry Truffles'	Cherry Truffles Heuchera	1 Gal.	24" On Center
MFi	Monarda didyma 'Raspberry Wine'	Raspberry Wine Bee Balm	1 Gal.	24" On Center
NF	Nepeta fasseni 'Walker's Low'	Walker's Low Catmint	1 Gal.	24" On Center
PA	Pennisetum alopecuroides	Fountain Grass	1 Gal.	24" On Center
PAlb	Pennisetum alopecuroides Little Bunny'	Litle Bunny Fountain Grass	1 Gal.	18" On Center
PVs DNI-	Pannicum virgatum 'Shennandoah'	Shenanndoah Switch Grass	1 Gal.	24" On Center
KINIG SHt	киарескіа neumanii 'Little Goldstar'	LITTIE GOIDSTAT BIACKEYED Sus.	1 Gal.	24" On Center
SH	Sporabolis heterolepsis	Prairie Dropseed	1 Gal.	24" On Center
√М	Vinca minor	Periwinkle	1 Qt.	12" On Center
				-

22023-06-15 - Project Submittal Issu

JOB NO: LP230045.00 PROJ MGR: TJS DRAWN: TJS CHECKED: --AREA TWO LANDSCAPE PLAN



ISSUE DATE: 06-15-2023 REVISIONS July IT, 2023 A VIIlage Comments Aug. 27, 2023 A VIIlage Comments Oct. 6, 2023 A Rev. Site Plan



West Point at Harmony Square Tinley Park, Illinois



SHAE KEY	DE TREES SCIENTIFIC NAME	COMMON NAME	SIZE	
AFm	Acer rubrum 'Autumn Blaze'	Autumn Blaze Maple	2.5 " BB Typ 4.0 " BB Spec	ial
со	Celtis occidentallis 'Ultra'	Ultra Hackberry	2.5 " BB Typ 4.0 " BB Spec	ial
GTIs	Gleditsia tricanthos inermis 'Skyline'	Skyline Honey Locust	2.5 " BB Typ. 4.0 " BB Spec	ial
LT	Lirodendron tulipifera	Tulip Tree	2.5 " BB 2.5 " BB Typ	
OB	Quercus bicolor	Swamp White Oak	4.0 " BB Spec	ial
	Quercus imbricaria	Shingle Oak	2.5 "BB	_
QRu	Quercus rubra	Red Oak	2.5 " BB	
TCco	Tilia cordata 'Corinthian'	Corinthian Littleleaf Linden	3.0 " BB	
UAh	Ulmus americana 'Homestead'	Homestead Elm	2.5 " BB	
INTE	RMEDIATE AND EVERGREEN TREI	ES	0.75	
KEY				
		Carolina Horphoam		
CCi			2.5 BB	_
HV	Hamamellis vernalis	Vernal Witchhazel	6' HT. BB	_
MF	Malus floribunda (Standard-Tree Form)	Floribunda Crab	2.5" BB	
MDw	Malus 'Donald Wyman'	Donald Wyman Crab	2.5" BB	_
Mrr	Malus 'Royal Raindrops'	Royal Raindrop's Crab	2.5" BB	_
OV	Ostrya virginiana	Hornbeam	2.5" BB	_
PG4	Viburnum prunifolium Picea glauca 'Densata'	Blackhaw Viburnum Black Hills Spruce		
	URS		קכ -סמ דדר אי <sub>דון</sub>	
KEY	SCIENTIFIC NAME	COMMON NAME	SIZE	
AM	Aronia melanocarpa	Black Chokeberry	3 Gal Cont.	_
BMk	Buxus microphylla 'Koreana'	Korean Littleleaf Boxwood	3 Gal Cont.	_
BMg	Buxus microphylla 'Green Mountain'	Green Mountain Boxwood	3 Gal Con	<u>.                                    </u>
CS	Cornus sericea	Redtwig Dogwood	5 Gal Cont.	_
CSad	Cornus sericea 'Alleman's Dwarf'	Alleman's Dwarf Redtwig Dogwood	3 Gal Cont.	_
DRk	Diervilla rivularis 'Kodiak'	Kodiak Black Bush Honeysuckle	3 Gal Cont	_
HAI	Hydrangea arborescens 'Invincibelle'	Invincibelle Hydrangea	3 Gal Cont.	_
	Hydrangea paniculata 'Limelight	Limelight Hydrangea	5 Gal Cont.	_
HPt	Hydrangea paniculata Kendia	Tardiya Hydrangea	5 Gal Cont	_
н	Hydrangea 'Little Lamb'	Little Lamb Hydrangea	3 Gal Cont.	_
Hts	Hydrangea 'Tuff Stuff'	Tuff Stuff Hydrangea	3 Gal Cont.	_
НQ	Hydrangea quercifolia	Oakleaf Hydrangea	5 Gal Cont.	_
нк	Hypericum kalmianum	Kalm St. John's Wort	3 Gal Cont.	
IVa	Ilex verticillata 'Red Sprite' (Include One Ma Plant / Planting)	e Red Sprite Holly	3 Gal Cont.	
JCsg	Juniperus chinensis 'Sea Green'	Sea Green Juniper	7 Gal Cont.	_
POld	Physocarpus opulfolius 'Little Devil'	Little Devil Nine Bark	3 Gal Cont.	_
POs	Physocarpus opulfolius 'Seward'	Seward Nine Bark	5 Gal. Cont	_
RAG	Ribes alpinum Green Mound	Green Mound Alpine Currant	3 Gal Cont.	+
SBt	Spiraea betulifolia 'Tor'	Tor Birchleaf Spirea	3 Gal Cont	_
TCc	Taxus cuspidata 'Capitata'	Upright Yew	36" BB	
TMt	Taxus medii 'Tauntoni'	Taunton's Yew	18" BB	
TOt	Thuja occidentallis 'Technyi'	Techny Arborvitae	6' Ht. BB	
TOeg	Thuja occidentallis 'Emerald Green'	Emerald Green Arborvitae	6' Ht. BB	
VDbm	Viburnum dentatum 'Blue Muffin'	Blue Muffin Arrow Wood Vib.	3 Gal Cont.	_
VDw	Viburnum dentatum 'Synnesvedt'	Synnesvedt Arrowwood Vib.	5 Gal Cont.	+
VJ	Viburnum judii	Judd Viburnum	3 Gal Cont.	_
	Viburnum carlesii 'Compactum'	Compact Koreanspice Vib.	3 Gal Cont.	
		Compact Euro. Cranberry Vib.	24" BB	
PERI   KEY	LININIALS AND GROUNDCOVER SCIENTIFIC NAME	COMMON NAME	SIZE	
AH	Amsonia hubrichtii	Blazing Star	1 Gal.	24" On Center
Afr	Astilbe 'Fanal Red'	Fanal Red Astilbe	1 Gal.	24" On Center
CMid	Carex morrowi 'Ice Dance'	Ice Dance Sedge	1 QT Cont	18" On Center
CP	Carex pennsylvanicum	Pennsylvania Sedge	1 QT Cont	18" On Center
Asb	Allium 'Summer Beauty'	Summer Beauty Onion	1 QT Cont	18" On Center
GSr	Geranium sanguineum 'Rosanne'	Rosanne Geranium	1 Gal	24" On Center
HMa	Hakonechloa macra	Japanese Forest Grass	1 Gal.	24" On Center
Hsd	Hemerocallis 'Stella D'Oro'	Stella D'Oro Daylilly	1 Gal.	24" On Center
Hhb ⊔⊾₄	House Hadsen Blue	Hadspen Blue Hosta	1 Gal.	
MFi	Monarda didvma 'Raspherry Wine'	Raspberry Wine Bee Balm	i Gal	24 On Center
NF	Nepeta fasseni 'Walker's Low'	Walker's Low Catmint	1 <u>G</u> al.	24" On Center
PA	Pennisetum alopecuroides	Fountain Grass	1 Gal.	24" On Center
PAlb	Pennisetum alopecuroides Little Bunny'	Litle Bunny Fountain Grass	1 Gal.	18" On Center
PVs	Pannicum virgatum 'Shennandoah'	Shenanndoah Switch Grass	1 Gal.	24" On Center
RNIg	Rudbeckia neumanii 'Little Goldstar'	Little Goldstar Blackeyed Sus.	1 Gal.	24" On Cente
ы СП СП	Sporabolis neterolepsis 'Lara'	rara Prairie Dropseed	1 Gal.	24" On Cente
VM	Vinca minor	Periwinkle	1 Ot	12" On Center
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**J**S Submittal Project ŋ 6 22023

JOB NO: LP230045.00 PROJ MGR: TJS DRAWN: TJS CHECKED: --AREA THREE LANDSCAPE PLAN

L1.3





B. CONTRACTORS LIABILITY INSURANCE

1.02 CONTRACTOR USE OF PREMISES

A. General: During the construction period the Contractor shall have full use of the premises for construction operations, including use of the site. The Contractor's use of the premises is limited only by the Owner's right to perform construction operations with its own forces or to employ separate contractors on portions of the project.

are not to be disturbed.

Keep driveways and entrances serving the premises clear and available to the Owner and the Owner's employees at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on site.

4. Contractor shall take care to assure access for emergency vehicles at all times to adjacent residences.

No material or equipment may be stored on the public street and driving and parking areas within the school site that interferes with safe usage of the street and drives or creates a dangerous condition, and unless approved in advance by the Owner's Representative.

6. Areas used for storage shall be restored to original condition and to the satisfaction of the Owner's Representative. 1.03 COOPERATION OF UTILITIES

A. The Contractor shall notify all utilities (J.U.L.I.E. - 811 OR, (800) 892-0123) including the Owner, all affected utility companies and local authorities at least 48 hours prior to commencement of any construction which may interfere with existing utility lines, conduits, cables, etc. The Contractor shall make his own investigation to determine the existence, nature and location of all utility lines and appurtenances within the limits of the improvement.

B. Contractor shall stake plant locations in field and thereafter inform Owner's Representative AND Irrigation Consultant before beginning planting operations. No planting operations may begin until after Owner's Representative and Irrigation Consultant has reviewed staked locations of plant material;

1.04 COORIDINATION

A. Coordination: Coordinate construction activities included under various Sections of these Specifications to assure efficient and orderly installation of each part of the Work. Coordinate construction operations included under different Sections of the Specifications that are dependent upon each other for proper installation, connection, and operations. B. Where availability of space is limited, coordinate installation of different component to assure maximum accessibility for required maintenance, service and repair.

1.05 GENERAL INSTALLATION PROVISIONS

A. Inspection of Conditions: Require the Installer of each major component to inspect both the substrata and conditions under which Work is to be performed. Do not proceed until unsatisfactory conditions have been corrected in an acceptable manner.

B. Inspection by Owner: The construction shall be under the observation of the Owner's Representative. No work requiring the Owner's Representative's observation shall be performed no earlier than 7:00 a.m. or after 5:00 p.m. or on Saturdays, Sundays or legal holidays, without the approval of the Owner's Representative.

C. Inspect materials or equipment immediately upon deliver and again prior to installation. Reject damaged and defective items.

D. Install each component during weather conditions and Project status that will ensure the best possible results. Isolate each part of the completed construction from incompatible material as necessary to prevent deteriorations.

1.06 CLEANING AND PROTECTION

A. During handling and installation, clean and protect construction in progress and adjoining materials in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.

B. Clean and maintain completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

1.07 JOB SAFETY AND PROTECTION

- Protect all products and equipment from damage.
- Methods:
- Store finished products and equipment in an enclosed building, on or off site.
- Maintain integrity or shipping cartons until ready for installation.
- Provide separate storage for combustible and non-combustible products. Follow storage recommendations of product and equipment manufacturers.

6. Other methods shall be subject to Owner's prior written approval.

C. The Contractor shall take the necessary precautions when working near or above existing utilities to protect these utilities from an damage resulting from his operations. All work and material necessary to repair or replace any sewer that is damaged due to non-compliance with the provision shall be provided, as directed by the Owner's Representative, at the Contractor's expense, with no extra compensations being allowed.

A. Included by reference are the "General Conditions of the Contract for Construction", Current Edition, Standard AIA Document A-201-recent edition of the American Institute of Architects, which form is hereby specifically made a part of the Contract Documents with the same force and

Contractor's liability insurance shall include the coverage's stipulated as minimum amounts in the following sub-subparagraphs:

1. Confine operations to areas within Contract limits indicated. Portions of the site beyond areas in which construction operations are indicated

3. Storage of materials, location of construction trailers, contractor parking will all be limited to the area within the project work limits.

Store off grade and cover with impervious material all moisture or water vulnerable materials.

D. The Contractor shall be entirely responsible for all injuries to water pipes, irrigation lines, electric conduits, or cables, drains, sewers, gas mains, poles, telephones and telegraph lines, streets, pavements, sidewalks, curbs, culverts, retain walls or other structures of any kind met with during the progress of the Work, and shall be liable for damages to public or private property resulting therefrom.

E. Lawn areas shall be left in as satisfactory condition as before the starting of the Work. Where sod is removed, it shall be carefully removed and later replaced, or the area where sod has been removed shall be restored by seeding or sodding the manner described under the appropriate work section. All ruts created by heavy equipment shall be repaired by the Contractor at his expense.

1.9 APPLICATIONS FOR PAYMENT:

A. Payment for the work included in this contract will be authorized upon its completion and acceptance on behalf of the Client. No payment will be made for work which is found to be unacceptable. The Client reserves the right to replace or otherwise correct, after thirty (30) days of its rejection, any portion of the Work that has been deemed unacceptable by the Client and remains uncorrected by the Contractor be deducted from monies due or to become due the Contractor

B. Waivers of Mechanics Lien: With each Application for Payment submit waivers of mechanics liens from subcontractors and suppliers for the construction period covered by the previous application.

- 1. Submit partial waivers on each item for the amount requested, prior to deduction for retainage, on each item.
- . When an application shows completion of an item, submit final or full waivers.
- 3. The Owner reserves the right to designate which entities involved in the Work must submit waivers. 4. Waiver Delays: Submit each Application for Payment with the Contractor's waiver of mechanics lien for the period of construction covered by the applications.
  - a. Submit final Application for Payment with or preceded by final waivers from every
  - entity involved with performance of Work covered by the application who could lawfully be entitled to a lien.
- 5. Waiver Forms: Submit waivers of lien on forms, and executed in a manner, acceptable to Owner.
- C. Payments by Owner: The owner will pay ninety percent (90%) of the amount due the Contractor on the account of progress payments, until Work is one hundred percent (100%) complete.

D. Final Payment Application: Administrative actions and submittals which must precede or coincide with submittal of the final payment Application for Payment include the following:

- 1. Completion of Project closeout requirements.
- 2. Completion of items specified for completion after Substantial Completion.
- Assurance that unsettled claims will be settled. Assurance that Work not complete and accepted will be completed without undue delay.
- 5. Transmittal or required Project construction records to Owner.
- 6. Proof that taxes, fees and similar obligations have been paid.
- . Removal of temporary facilities and services.
- 8. Removal of surplus materials, rubbish and similar elements.

1.10 SUBMITTALS

A. Unless otherwise stated, prior to commencement of work, submit for review and approval by the Owner, three copies of certificates for all landscape materials used on the project. Provide sources for all plant materials and photgraphs of all plant material being used. The Owner reserves the right to field tag shade, intermdiate and evergreen tree materials once the Contractor has identified the plant sources.

1.11 GENERAL LANDSCAPE NOTES

A. Unless stated otherwise herein, all seeding, sodding and landscape planting work shall be performed in accordance with the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction (latest edition) as specified in Section 200 (Earthwork, Landscaping and Erosion Control).

B. Unless stated herein, all materials shall meet the requirements of the following Articles of Standard the IDOT Specifications for Road and Bridge Construction Section 1000 - Materials.

Item	Article
Trees, Shrubs, Vines and Seedlings	1081.01
Topsoil	1081.05a
Mulch Material	1081.06b
Lawn Seeding	1081.04 (Class 1)
Sodding	1081.03
Fertilizer	1081.08

1.12 TOPSOIL/FINE GRADING

- A. Approved topsoil shall be supplied and installed at the following depths:
- a. Seeded and sodded areas 6" depth
- b. Shrub bed areas and landscaped islands 12" depth
- c. Groundcover/perennial areas 12" depth (amended soil mix as shown in detail)

B. Approved topsoil shall be free of roots, noxious weed seeds, sticks, rocks or miscellaneous debris which may impair plant growth. Topsoil shall not be worked or graded while frozen or in an excessively wet or dry condition. Topsoil shall not be accessibly acidic or alkaline and shall not contain any herbicide residue. The Owner reserves the right to have representative samples of the topsoil tested by a qualified soil testing laboratory at no cost to the Owner.

C. All top-soiled areas shall be fine graded to elevations indicated on the grading plan prior to receiving sod or landscaping. All areas shall drain properly so that there are no puddles or standing water in any lawn or plant bed areas. Areas improperly graded shall be regarded at the Contractor's expense

D. Remove rocks, stones and other foreign debris while spreading and grading. If necessary, had spread topsoil around buildings, structures, walks, drives or trees to avoid damage.

E. Where graded areas interface with non-graded undisturbed edges, remove turf along edge to create a straight smooth transition line between graded and non-graded areas. Fine grade transition area so that finis grades of graded and non graded areas are flush.

A. Seeding work shall conform to Class 1 Seeding described in Section 250 of IDOT Standard Specifications for Road and Bridge Construction, , latest edition. Mulching of seeded areas shall conform to Method 2 described in Section 251 of IDOT Standard Specifications for Road and Bridge Construction

B. Prior to work, submit three copies of seed vendor's certificate for grass seed mixture, indicating weight, and percentages of purity, germination and weed seed.

C. Sodding work shall conform to standard Sod (a) as described in Section 252 of IDOT Standard Specifications for Road and Bridge Construction, latest edition .

D. Prior to work, submit three copies of sod grower's location for approval. Sod shall be from a locally grown source. Sod shall be in healthy growing condition, free of weeds, pests and cut to the specified thickness. The Owner has the right to reject unacceptable sod at the growing site.

E. All fine grading for seeded and sodded areas shall be approved by the Owner prior to work.

F. Install seeding on prepared, finished graded areas and in favorable weather conditions within the following periods: April 1st through May 31st; and August 15th through October 15th.

K. Maintain seeded and sodded areas for a period of 45 days following installation. Maintenance shall consist of watering, mowing and weeding. Repair and reseed bare spots or seeded and sodded areas that have not established or have washed out due to erosion.

B. All tree, shrub and groundcover planting shall be performed between the dates of March 15 and May 31, and August 15 and October 15. Actual planting shall be performed only during periods within this season when weather and soil conditions are suitable and in accordance with locally accepted practice, as approved by the Owner's Representative.

C. Location for all trees, intermediate trees and evergreen trees shall be staked and outlines of bed areas shall be clearly marked on the ground by a qualified landscape representative of the Contractor, and shall be subject to approval by the Owner's Representative prior to commencement of planting.

D. All shrub beds shall be mulched with 3" of shredded hardwood bark mulch. Groundcover beds shall be mulched with 2" of mushroom compost Provide shredded hardwood bark mulch rings (3" depth) for all shade and flowering trees. Diameter of mulch rings shall be equal to diameter of root ball.

E. Mulch shall comprise partially decomposed shred hardwood bark. Mulch shall be a brown-black color, and, free of oversized pieces (1/2" x4") and fine particles. Prior to work, Contractor shall submit three mulch samples for approval for use prior to work.

F. Imported topsoil, if necessary, shall consist of fertile, friable natural topsoil typical for this locality. It shall not contain a mixture of subsoil or slag and free of lumps, stones, plants and their roots, stalks and other extraneous matter and shall not be used while in a frozen or muddy condition. Topsoil shall have a pH range of 6.0-7.0 and shall not contain less than 12 percent organic matter.

Establishment Period. For a period of 60 days after planting of trees, shrubs, and groundcovers, (not including dormancy periods), the Contractor shall properly care for all plants, and planning beds including watering, weeding fertilizing, cultivating, adjusting or bracings or other maintenance work which is necessary to keep the plants in a healthy condition and in a plumb position. All plants shall be watered as season conditions require, and as directed by the Owner, until provisional acceptance of the planting.

2. Provisional Acceptance. At the end of the Establishment period, the planting shall be inspected by the Owner for provisional acceptance of the planting. Any plant material which is dead, damaged, untrue to natural form of the species, or otherwise unhealthy, shall be replaced by the Contractor at his expense. The Owner shall accept maintenance responsibilities of the planting after the provisional acceptance.

3. Guarantee and Final Acceptance. The Contractor shall guarantee that all plants shall be in a healthy and vigorous condition one full growing season after the provisional acceptance. The planting shall be inspected by the Owner at the end of the guarantee period. Any plant material which is dead, damaged, untrue to natural for of the species, or otherwise unhealthy, shall be replaced by the Contractor at his expense.

4. Provisional acceptance and guaranteed periods of landscaped plantings may be in part or whole.

G. Install sodded areas per Section 252.04 of the IDOT Standard Specifications for Road and Bridge Construction.

H. Fertilize seeded areas per Section 250.04 of the IDOT Standard Specifications for Road and Bridge Construction.

I. Fertilize sodded areas per Section 252.03 of the IDOT Standard Specifications for Road and Bridge Construction.

J. Guarantee all seeding and sodding work for a period of one year following final acceptance. Areas not accepted upon completion of the guarantee period shall be resodded to fill in voids and areas not covered in seed or sod.

L. Initial mowing shall be done at a 3" cutting height so than not more than 33% of the grass is removed in a single mowing. Cutting heights on follow up mowings can be readjusted to a 2.5" grass blade height.

1.14 TREE, SHRUB AND GROUNDCOVER PLANTING

A. The Owner reserves the right to inspect all material at the nursery. Only nursery grown stock will be permitted to be used on the Project.

G. Tree, Shrub and Groundcover Establishment Period, Inspections and Guarantees.

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JOB NO: LP230045.00 PROJ MGR: TJS DRAWN: TJS CHECKED: LANDSCAPE NOTES/DETAILS











Dog Park Fence

Scale: 1/16"=1'-0"



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Square Harmony S llino at Point Park, West Tinley

JOB NO: LP230045.00 PROJ MGR: TJS DRAWN: TJS CHECKED: --HARDSCAPE MATERIALS

L1.6

Urban Accessories - Model D- Black Finish









E:\ACTIVE-PROJECTS\44741-303613-Cook\ENGR-BMB\44741 Civil-Lot 1 Townhomes.dgn, Model: SP-1, Date: 10/4/2023

### UNITS = BUILDING AREA = 28,127 sq-ft EXISTING IMPERVIOUS AREA= 0.36 acres PROPOSED IMPERVIOUS AREA= 1.41 acres 0.36 acres PROPOSED PERVIOUS AREA = DISTURBED AREA = 1.74 acres SURFACE PARKING = 76 Spaces (4 ADA) PAVEMENT LEGEND: CONCRETE SIDEWALK 5" Concrete (8" at drives) 4" CA-6 Base (6" at drives) HMA PAVEMENT 1.5" HMA Surface, N50 2.5" HMA Binder, N50 10" CA-6 Base, Type B CONCRETE PAVEMENT 8" Concrete 6" CA-6 Base PERMEABLE PAVERS Type and Layout as Provided by the Village VILLAGE ROADWAY IMPROVEMENTS

2.98 acres 63 52,825 sq-ft 0.42 acres 2.31 acres 0.67 acres

LOT 1 SITE DATA

UNITS =

PROPERTY AREA =

BUILDING AREA =

DISTURBED AREA =

LOT 2 SITE DATA

PROPERTY AREA =

EXISTING IMPERVIOUS AREA=

PROPOSED IMPERVIOUS AREA=

PROPOSED PERVIOUS AREA =

2.98 acres 1.74 acres 63 28,127 sq-ft 0.36 acres





MEMORANDUM TO:	John Urbanski, CPWP-M Public Works Director Village of Tinley Park
FROM:	Michael A. Werthmann, P.E., PTOE Principal
DATE:	October 2, 2023
SUBJECT:	Preliminary Traffic Statement Proposed Residential Development Tinley Park, Illinois

This memorandum summarizes the results and findings of a preliminary traffic statement prepared by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for a proposed residential development to be located in Tinley Park, Illinois. The site, which is currently vacant, is bounded by 172<sup>nd</sup> Street on the north, 67<sup>th</sup> Avenue on the east, the proposed Harmony Square Plaza on the south, and 67<sup>th</sup> Court on the west. As proposed, the site it to be developed as follows:

- The northern portion of the site is to contain 60 townhomes with access provided via three access roads on 67<sup>th</sup> Avenue, one access road on 67<sup>th</sup> Court, and one access road on 172<sup>nd</sup> Street.
- The southern portion of the site is to contain a midrise building with 63 units and 4,200 square feet of commercial space. Access to the building is proposed via three access drives on 67<sup>th</sup> Avenue.

As part of the development, 173<sup>rd</sup> Street is proposed to be vacated between 67<sup>th</sup> Court and 67<sup>th</sup> Avenue. Further, to minimize the impact of the vacation of 173<sup>rd</sup> Street, the Village of Tinley Park is proposing a new one-way, southeast-bound road that is to extend between 67<sup>th</sup> Court and North Street and will be located between the proposed residential development and Harmony Square Plaza. A copy of the site plan is located in the Appendix.

It should be noted that the Tinley Park Metra train station is located immediately southeast of the subject site and that Pace Bus Route 386 runs along Oak Park Avenue. In addition, the site is generally located in downtown Tinley Park. As such, given the site's proximity to the public transportation serving the area and its location within downtown Tinley Park, the residential development is considered a transit oriented development (TOD).

The purpose of this memorandum is to summarize the existing roadway conditions, estimate the volume of traffic that will be generated by the proposed development, review the access system, and examine the impact of the vacation of  $173^{rd}$  Street. **Figure 1** shows an aerial view of the site.



Aerial View of Site

Figure 1

### **Existing Roadway Characteristics**

The following summarizes the physical and operating characteristics of the area roadways.

*Oak Park Avenue* is a north-south, major collector road. North of North Street/173<sup>rd</sup> Place, Oak Park Avenue generally has one lane in each direction with parking permitted on both sides of the road. South of North Street/173<sup>rd</sup> Place, Oak Park Avenue generally has one vehicle lane and one bike lane divided by a median with parking prohibited on both sides of the road. Oak Park Avenue has an at-grade crossing with the Northeast Illinois Regional Commuter Corporation Railroad tracks located between just south of North Street/173<sup>rd</sup> Place. At its signalized intersection with North Street and 173<sup>rd</sup> Place, Oak Park Avenue has a separate left-turn lane and a shared through/right-turn lane on both approaches. Oak Park Avenue is under the jurisdiction of the Village of Tinley Park, has a posted speed limit of 30 mph, and has an Annual Average Daily Traffic (AADT) volume of 8,000 vehicles south of North Street/173<sup>rd</sup> Place and 13,700 vehicles north of North Street/173<sup>rd</sup> Place (IDOT 2022).

67<sup>th</sup> Avenue, 67<sup>th</sup> Court, 172<sup>nd</sup> Street, 173<sup>rd</sup> Street, and North Street are all two-lane, local roadways. The following summarizes the traffic control at the intersections in the vicinity of the site:

- The intersection of North Street with Oak Park Avenue and 173<sup>rd</sup> Place is under traffic signal control.
- The 172<sup>nd</sup> Street and 173<sup>rd</sup> Street approaches are under stop sign control at their respective intersections with Oak Park Avenue.
- The intersection of 172<sup>nd</sup> Street with 67<sup>th</sup> Court is under all-way stop sign control.
- The  $67^{\text{th}}$  Avenue approach is under stop sign control at its intersection with  $172^{\text{nd}}$  Street.
- The 67<sup>th</sup> Avenue approaches are under stop sign control at their intersection with 173<sup>rd</sup> Street.

Access to the parking lot located on the north side of the Tinley Park Metra train station is provided via two access drives located on North Street.

### Area Public Transportation

The area is served via the following public transportation:

- The *Rock Island Metra Commuter Rail Line* extends between the LaSalle Street station in Chicago and Joliet. Local access is provided via the Tinley Park Metra train station located directly southeast of the subject site.
- *Pace Bus Route 386* generally extends along Harlem Avenue and Oak Park Avenue from Midway Airport to North Creek Business Center. Local stops are provided along Oak Park Avenue in the vicinity of the site.

### **Trip Generation Estimates**

The number of peak hour vehicle trips estimated to be generated by the proposed townhomes and apartment building was estimated based on Multi-Family – Low-Rise (Land-Use Code 220) trip rates published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11<sup>th</sup> Edition. It is important to note that the ITE trip generation rates are generally based on suburban rates where the private automobile is the primary mode of transportation. As discussed previously, the development is considered a TOD given its proximity to the Tinley Park Metra train station and Pace bus route as well as its location in the downtown area. Census data shows that approximately ten percent of the residents in the immediate area commute to work via public transportation or alternative modes of transportation. As such, the number of trips to be generated by the 123 units during the weekday morning and evening peak hours. It should be noted that the volume of new traffic to be generated by the 4,200 square feet of commercial space is projected to be limited given (1) the limited size of the commercial space and (2) its proximity to the downtown area and the Tinley Park train station.

Type/Size	Wee I	kday Mo Peak Hou	rning Ir	Weekday Evening Peak Hour			
	In	Out	Total	In	Out	Total	
Residential Development (123 Units)							
• Vehicle Trips (90 Percent)	14	41	55	41	25	66	
• Alternative Modes of Transportation Trips (10 Percent)	1	5	6	5	2	7	
Total	15	46	61	46	27	73	

### Table 1PROJECTED SITE-GENERATED TRAFFIC VOLUMES

From Table 1 it can be seen that the proposed residential development is projected to generate between 55 and 66 new trips during the morning and evening peak hours, which averages approximately only one new trip per minute. Further, the traffic to be generated by the development will be distributed over three different roads serving the site, which will further reduce the impact of the development on the roadway system.

### Access System

Access to the townhome portion of the development is to be provided via three access roads on 67<sup>th</sup> Avenue, one access road on 67<sup>th</sup> Court, and one access road on 172<sup>nd</sup> Street. Access to the apartment building is proposed to be provided via three access drives on 67<sup>th</sup> Avenue. All of the access roads/drives will provide one inbound lane and one outbound lane with the outbound lanes under stop sign control. Given the lower traffic volumes and speeds along the area roadways and the limited volume of traffic projected to traverse any of the access roads/drives, no separate left-turn or right-turn lanes are required on any of the roads serving the access roads/drives. Further, both the townhome development and the apartment development have access on 63<sup>rd</sup> Street, which provides direct controlled access to Oak Park Avenue via its signalized intersection with North Street/173<sup>rd</sup> Place. As such, the proposed access system will provide efficient and orderly access to and from the development with limited impact on the existing roadway system.

### Vacation of 173<sup>rd</sup> Street

As part of the development, 173<sup>rd</sup> Street is to be vacated between 67<sup>th</sup> Avenue and 67<sup>th</sup> Court. As discussed previously, to help mitigate the impact of the vacation, the Village of Tinley Park is proposing to provide a one-way, southeast-bound road that will extend between 67<sup>th</sup> Court and North Street and will be located just south of 173<sup>rd</sup> Street. The impact of the 173<sup>rd</sup> Street vacation should have a limited impact on area traffic conditions as outlined below:

- Only one block of 173<sup>rd</sup> Street is proposed to be vacated.
- Several convenient alternative routes to the vacated portion of 173<sup>rd</sup> Street are/will be provided given the grid roadway system serving the area and the addition of the proposed one-way southeast-bound road. It should be noted that 172<sup>nd</sup> Street is located only approximately 600 feet to the north of 173<sup>rd</sup> Street and the proposed one-way road and Oak Park Avenue are located just south and approximately 850 feet southwest of 173<sup>rd</sup> Street, respectively.
- The area roadway system has sufficient capacity to accommodate the rerouting of the traffic currently using the section of 173<sup>rd</sup> Street proposed to be vacated.

### Appendix





July IT. 2023 <u>A</u> VIIIage Comments. Avg. 27, 2023 <u>A</u> VIIIage Comments.

06-15-SIONS

ISSUE DATE: REVISI

### Concept Plan C 8 Internal Surface Spaces 120 Apron Spaces

60 Units



PART'L. COURT ELEVATION



# WEST POINT AT HARMONY SQUARE

# ALTERNATE END CONDITION 1700 PLAN

RIGHT ELEVATION

SCHWARZ - LEWIS

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# 1700 A





1550 Spring Rd., Suite 100 Oak Brook, IL 60523 630-537-1416 www.schwarzlewis.com

 $\angle$ 

SCHWARZ LEWIS Design Group, Inc.

## LT.



PART'L. COURT ELEVATION

# 1800 ALT.



# WEST POINT AT HARMONY SQUARE

# ALTERNATE END CONDITION 1800 PLAN

LEFT ELEVATION SCALE: 1/4"=1'-Ø"

SCHWARZ - LEWIS

 $\sim$ 

# 1800





1550 Spring Rd., Suite 100 Oak Brook, IL 60523 630-537-1416 www.schwarzlewis.com

SCHWARZ LEWIS Design Group, Inc.







# 1800



# HARMONY SQUARE

RIGHT ELEVATION





1550 Spring Rd., Suite 100 Oak Brook, IL 60523 630-537-1416 www.schwarzlewis.com

SCHWARZ LEWIS Design Group, Inc.

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SCHWARZ • LEWIS

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## WEST POINT AT HARMONY SQUARE









 $\searrow$ 







### COURT ELEVATION ~ 4 UNIT

SCALE: 1/4"=1'-Ø"



 $\searrow$ 

## WEST POINT AT HARMONY SQUARE



SCHWARZ • LEWIS

TOWNHOMES 07.27.23








### LEFT ELEVATION

SCALE: 1/4"=1'-Ø"



# WEST POINT AT HARMONY SQUARE





### PART'L. COURT ELEVATION

SCALE: 1/4"=1'-Ø"



## WEST POINT AT HARMONY SQUARE

### ALTERNATE END CONDITION

### **RIGHT ELEVATION** SCALE: 1/4"=1'-Ø"

### 1700





### REAR ELEVATION ~ 4 UNIT

SCALE: 1/4"=1'-0"



# 

## WEST POINT AT HARMONY SQUARE







# WEST POINT AT HARMONY SQUARE

### TOWNHOMES 07.27.23

SCHWARZ LEWIS Design Group, Inc.

1550 Spring Rd., Suite 100 Oak Brook, IL 60523 630-537-1416

www.schwarzlewis.com





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# WEST POINT AT HARMONY SQUARE



















# WEST POINT AT HARMONY SQUARE

COURT ELEVATION ~ 3 UNIT







+ + +



# WEST POINT AT HARMONY SQUARE





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SCALE: 1/8"=1'-Ø"



LOWER LEVEL CONTROL PLAN ~ 5 UNIT SCALE: 1/8"=1'-0"



# WEST POINT AT HARMONY SQUARE























### WEST POINT AT HARMONY SQUARE



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### TOWNHOMES 07.27.23

SECOND FLOOR PLAN ~ 1700

SCALE: 1/4"=1'-Ø"



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# HARMONY SQUARE

UNIT M	$1 \times$
UNITS	# OF UNITS
1800	1=
1700	1=
1600	14
1500	14

COLOR	PACKAGE
COLORS	# OF BUILDINGS
	5
2	4
3	4
4	4







### I. Lighting

### 1. Intent

The intent of these lighting standards is to increase safety and provide clear views both to and within a site while preventing unnecessary light pollution and promoting pedestrian-scaled fixtures.

### 2. Applicability

The lighting standards herein shall apply to all districts and developments within the Legacy Code Area.

### 3. Location

Figure 3.I.1 and Table 3.I.1 show the permitted location on the lot of light sources based upon the height and style of the fixture. Minimum and maximum lighting standards shall be determined by the Village as based upon a submitted photometric plan. The following standards also apply to each of the lighting zones identified:

a. Alley Lighting Zone:

All lots with alleys shall have lighting fixtures within 7 feet of the alley's edge of pavement. When a structure in the lot is within 7 feet of the alley's edge, the lighting fixture shall be attached to the structure and not to a freestanding pole.

b. Parking Lot Lighting Zone:

All lots with surface parking facilities shall have free standing lighting fixtures located no closer than 3 feet to any property line or alley. When a parking lot abuts a structure in the lot, the lighting fixture shall be attached to the structure and not to a freestanding pole.

c. Public Frontage Lighting Zone:

Pedestrian street lights must be placed 2 feet from the back of curb on each side of the street with a maximum average spacing (per block face) of 60 feet on center.

*Building Lighting Zone*: Exterior lights shall be mounted between 6 feet and 14 feet above adjacent grade.

### 4. Lighting Elements

Lighting elements shall be compact fluorescent, metal halide, LED, or halogen only.



### 5. Glare

Fixtures where light is visible to the public in a clear or frosted lamp shall be equipped with refractors to direct light downward and prevent glare.

### 6. Spillage

All fixtures shall include refractors to direct light away from property lines. The maximum allowable footcandles at any property line shall be 0.5 footcandles, unless it can be demonstrated to the satisfaction of the Village that:

- *a.* Additional illumination is required for security, outdoor dining, or other use.
- *b.* Such illumination can be provided without negative impacts on adjacent properties.

### 7. Standards

The Village shall keep on file, and provide to property owners, the specifications for all lighting fixtures and components located on public property and/or maintained by the Village.

List Tet		Permittee		Standard.	
Light Type	Alley	Parking Lot	Public Frontage	Building	Stanaaras
Cobra Head	•				Height: 20' max. Color: No restrictions
Pipe	•	•			Height: 20' max. Color: Black or copper
Post		•			Height: 15' max. Color: Black or copper
Column		•	•		Height: 12' max. Color: Black or copper
Bollard		•			Height: 4' max. Color: no restrictions
	Building Mount	ed Examples	•	<ol> <li>Structure mounted alley or parking lot light.</li> <li>Commercial Structure mounted accent light.</li> <li>Residential Structure mount- ed accent light</li> </ol>	

Table 3.I.1



### ENHR20Q EasyLED Stella Post Top Lantern

### PROJECT INFORMATION:

PROJECT NAME:	FIXTURE TYPE:
COMPLETE CATALOG #:	DATE:
COMMENTS:	



The Endeavor Stella Post Top Historic Series are available in Type I, II, III, IV or V distributions designed to replace HID lighting systems up to 250w MH or HPS. The fixture mounts to a pole top tenon. Typical area lighting applications include parking areas, walkways, and street lighting applications. Mounting heights of 12 to 30 feet can be used based on light level and uniformity requirements.

### Specifications and Features:

### Housing:

Die Cast Aluminum Housing, Integral Heat Sinking. Photocell Adaptable.

### Listing & Ratings:

CSA: Listed for Wet Locations, ANSI/UL 1598, 8750; IP66 Sealed LED Engine.

### Finish:

Black Powdercoat Finish Over a Chromate Conversion Coating. Custom Colors Available Upon Request.

### Lens:

Clear UV-Stabilized Polycarbonate Vandal-Resistant Array Lens with Integral Optics or SoftLED LumaLens Opal UV-Stabilized Polycarbonate Vandal-Resistant Array Lens. Gasketed to Seal LED Array.

### Mounting:

Post Top Accommodates "P3" 2%" 0.D. x 3" Tenon, Wall Mount Includes Cast Aluminum Arm (Wall Attachment Hardware NOT Included, Must be Selected and Provided By Contractor), and Pendant Mount Includes 15" Swivel Stem for Mounting on Flat or Sloped Ceilings.

### EasyLED LED: Aluminum Boards

### Wattage:

19w Array: 19w, System: 20w; (35-50w HID Equivalent) 36w Array: 36w, System: 39w; (70-100w HID Equivalent) 53w Array: 53w, System: 58w; (100-150w HID Equivalent) 80w Array: 80w, System: 87w; (150-250w HID Equivalent)

### Driver:

Electronic Driver, 120-277V, 50/60Hz or 347-480V 50/60Hz; Less Than 20% THD and PF>0.90. Standard Internal Surge Protection 6kV. 0-10V Dimming Standard for a Dimming Range of 100% to 10%; Dimming Source Current is 150 Microamps.

### Controls:

Fixtures Ordered with Factory-Installed Photocell or Motion Sensor Controls are Internally Wired for Switching and/or 1-10V Dimming Within the Housing. Remote Direct Wired Interface of 1-10V Dimming is Not Implied and May Not Be Available, Please Consult Factory. Fixtures are Tested with Endeavor Controls and May Not Function Properly With Controls Supplied By Others. Fixtures are NOT Designed for Use with Line Voltage Dimmers.

### Warranty: 5-Year Warranty for -40°C to +50°C Environment.

See Page 4 for Projected Lumen Maintenance Table.



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225,000 HOURS



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BUY AMERICAN ACT COMPLIANT

> L I G H I Specifications subject to change without notice.

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### ENHR20Q EasyLED Stella Post Top Lantern

### ORDERING



### ORDER INFORMATION EXAMPLE: ENHR20QF1X53U5K0BSP

### DIMENSIONS



 Height (A)
 24¾ ~ (628mm)

 Length (B)
 16¼ ~ (415mm)

 Width (C)
 16¼ ~ (415mm)

### FACTORY INSTALLED HOUSE SIDE SHIELD



### ACCESSORIES & REPLACEMENT PARTS:

MOUNTING / (ORDER SEP	ACCESSORIES ARATELY, FIELD INSTALLED)	ACCESSORIES (ORDER SEPARATELY, FIELD INSTALLED)			REPLACEMENT PARTS (ORDER SEPARATELY, FIELD INSTALLED)							
ENPSRTN*	Retrofit Tenon Adaptor, Die Cast with Powdercoat Finish, Hardware Included. Converts a 2% x 4" Pole Tenon to a	ENP18131	Twist Lock Non-Shorting (Open) Cap Disconnects Service to Fixture for Temporary or Permanent Disabling (Fixture			e ENHR20PCLL SoftLED LumaLens Opal UV-Stabilized Po Vandal-Resistant Lens			Stabilized Poly	carbonate	9	
*Specify Colo	27% x 3° Tenon. r: B=Black, C=Custom (Consult Factory)	ENP18132	Twist Lock Shor	ting Cap Provid	es Fixed Servic	e to Fixture	ENPK3415	Pendant Mount H ¾" Dia X 15" L Do	Kit Includes T ownrod, and I	op & Bottom C Hardware. Pov	over, Brac vdercoat F	ckets, Finish
		ENP18140	110-120VAC Ins	tant Twist Lock	Photocell	ungsten.	ENP17125	Internal Microwa Heights of 8 to 20	ave Sensor w 6´. 120-277V	ith Dimming fo AC, 50/60Hz	r Mountin	g
		ENP18152	277VAC Time De	elay Twist Lock I	Photocell		For Replace	ment Battery Back	(up, see the E	ndeavor LED E	Battery Ba	ckup
		ENP18156	120-277VAC Un	iversal Twist Lo	ck Photocell		Specificatio	il Sheet.				
ENPSRTN		ENP18157 480VAC Time Delay Twist Lock Photocell. For 480V use only.				V		Т				
		ENP17126 Remote Programming Tool for ENP17125										
	ENP17120 Remote Programming Tool for ENP13				ENP18132 ENP18132 ENP18156, ENP18157	ENP18140	ENHR2OP	_/ CLL ENP	PK3415	ENP1712	5	
тμ	F AMERI		N	\ <b>\</b> / \	V	$\cap$	F		GН	тΙ	N	G

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Rev. 081023



### ENHR20 EasyLED Stella Post Top Lantern

### EPA (EFFECTIVE PROJECTED AREA)



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Rev. 081721

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### ENHR20Q EasyLED Stella Post Top Lantern

### PHOTOMETRIC PERFORMANCE

WATTAGE (CATALOG LOGIC) INPUT WATTS		19W (1X19)	36W (1X36)	53W (1X53)	80W (1X80)
		20.4	38.5	56.4	87.3
OPTIC CCT			DELIVERE	DLUMENS	
	3000K	-	-	-	9,058
Type I Optic	4000K	-	-	-	9,349
Open Frame	5000K	-	-	-	9,714
	BUG Rating	-	-	-	B3-U0-G3
	3000K	3,334	4,211	6,317	9,534
Type II Optic	4000K	3,441	4,347	6,520	9,841
Open Frame	5000K	3,575	4,516	6,774	10,224
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G1	B2-U0-G2
	3000K	3,412	4,309	6,464	9,933
Type III Optic	4000K	3,521	4,448	6,672	10,253
Open Frame	5000K	3,658	4,621	6,931	10,652
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3
	3000K	3,482	4,398	6,597	9,920
Type IV Optic	4000K	3,594	4,540	6,810	10,239
Open Frame	5000K	3,734	4,717	7,075	10,638
	<b>BUG</b> Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3
	3000K	3,580	4,522	6,783	10,527
Type V Optic	4000K	3,695	4,668	7,001	10,865
Open Frame	5000K	3,839	4,850	7,274	11,289
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B4-U0-G2
	3000K	1,992	3,774	5,556	8,386
Type V Optic	4000K	2,056	3,895	5,735	8,656
LumaLens	5000K	2,136	4,047	5,958	8,993
	BUG Rating	B1-U3-G2	B2-U4-G3	B2-U5-G3	B3-U5-G4

### PROJECTED LUMEN MAINTENANCE

DATA SHOWN FOR 4000 CCT	COMPARE TO MH					
TM-21-11	INPUT WATTS	INITIAL	25,000 HRS	50,000 HRS	100,000 HRS	CALCULATED LED LIFE
L70 Lumen Maintenance @ 25°C / 77°F	All wattages up to and including 87w	1.00	0.95	0.90	0.81	154,000
L70 Lumen Maintenance @ 50°C / 122°F		1.00	0.97	0.93	0.86	145,000
L80 Lumen Maintenance @ 40°C / 104°F		1.00	0.93	0.87	0.74	76,000

WAY

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NOTES:

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1. Projected per IESNA TM-21-11. Data references the extrapolated performance projections for the base model in a 25°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08. 2. Compare to MH box indicates suggested Light Loss Factor (LLF) to be used when comparing to Metal Halide (MH) systems.

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ΙGΗ Specifications subject to change without notice.

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Rev. 081721

Shaft Styles



### FEATURES

- Strong, lightweight and easy to install
- Extruded aluminum shaft welded to a decorative cast aluminum base
- 3" OD x 3" tall tenon included for luminaire mounting
- Access door for wiring secured with stainless steel screws
- Ground lug included inside base
- Durable powder coat finish
- 1/2" x 18" Anchor Bolts & Template included

### MATERIALS

- Base Cast Aluminum (A356)
- Shaft Extruded Aluminum (6061-T6)
- Tenon Cast Aluminum (A356)
- Anchor Bolts Hot Dipped Galvanized
- Hardware—Stainless Steel

### ACCESSORIES

- **GFCI** Box with weatherproof WIUC (Additional accessories below ordered separately) (See Accessories Page for ordering guide)
- Clamp on banner arms
- Direct bury extension
- Clamp on flag pole holder

### ANCHORAGE

- 1/2" x 18" x 3" Hot-dipped galvanized steel L-type anchor bolts.
- (4) Bolts with (2) nuts, (2) washers per bolt included

GP53-xx	GP54-xx	GP55-xx	GP56-xx	Actual Height
GP53-08	GP54-08	GP55-08	GP56-08	8'5″
GP53-10	GP54-10	GP55-10	GP56-10	10'5"
GP53-12	GP54-12	GP55-12	GP56-12	12'5"
GP53-14	GP54-14	GP55-14	GP56-14	14'5"
GP53-16	GP54-16	GP55-16	GP56-16	16'5"







Bolts

(8) 1/2" Galvanized Steel Hex Nuts

(8) 1/2" Galvanized Steel Flat Washers

(8) 3/4" Galvanized Steel Flat Washers

### <u>Finish</u>

The post will be finished with an electrostatically applied polyester powder coat suitable for exterior use. The poles are pretreated using industry standard environmentally responsible processes for a long lasting and durable finish.

<u>Standard Finishes</u>	<u>Premium Finishes</u>
BK - Black (Gloss)	<b>WH</b> - White (Gloss)
BT - Black (Textured)	CV - Copper Vein
<b>SB</b> - Statuary Bronze	GV - Green Vein
<b>GN</b> - Green	CF - Custom Finishes

### <u>Tenons</u>

3" OD x 3" Tall Tenon Standard

**TNS54** - 4" OD x 3" Tall Tenon slip fits over 5" smooth shaft **TNF54** - 4" OD x 3" Tall Tenon slip fits over 5" fluted shaft **LT** - Less Tenon

Other tenons available upon request

Check fixture and/or arm spec sheet for tenon requirements

### **Accessories**

**GFCI** - Provision for Ground Fault Circuit Interrupter outlet with NEC required wet location while in use type cover (WIUC). The cover is made of die cast aluminum and will be painted to match.

**GFCI Orientation** is stated as degrees from access door and **GFCI Placement** on shaft must be specified in ordering guide below.

**TOP** - placement will be 6" from top of pole. **BOT** - placement will be 6" above the base.



### (Additional accessories below ordered separately) (See Accessories Page for ordering guide)

Flag Pole Holder Di

Direct Bury Extension Single a

Single and Double Sided Field Rotatable Banner Arm



Ordering Guide

90°

3″

18"

	Pole/Shaft Style	Height	Tenon	Accessory	<b>GFCI</b> Orientation	<b>GFCI</b> Placement	Finish
EXAMPLE	GP54 —	14	Leave blank for standard	GFCI	– BOT –	- 180 /	BT
	GP53	08	TNS54	GFCI	ТОР	0	ВК
	GP54	10	TNF54		BOT	90	BT
	GP55	12	LT			180	SB
	GP56	14				270	GN
		16					Premium Finishes
							WH, CV, GV, CF
	Require	d		0	ptional		Choose Finish



### LED LIGHT SOURCE CONFIGURATIONS

G2LED40—1 Driver, 1 LED Module, 1 Optic G2LED65—1 Driver, 1 LED Module, 1 Optic G2LED80—2 Drivers, 2 LED Modules, 2 Optics G2LED115—2 Drivers, 2 LED Modules, 2 Optics

### DRIVER

0-10v Dimming Compatible 120 to 277 Auto Sensing Class 2, Class P Minimum Rating IP66



### **FEATURES**

- Stylish and efficient 6 sided traditional lighting fixture for post top mounting
- Lightweight cast aluminum fixture base with stainless steel set screws for installation
- Slip fits over common 2 7/8" and 3" OD tenons on most decorative poles
- Durable Powder Coat Finish
- 0-10v Dimming Capability
- 10kV/10kA Surge Protection Standard
- ETL Listed

### LED LIGHT SOURCE OPTIONS

- 4 Power Levels
- 3 Color Temperatures
- 4 Light Distributions

(HID Version Available-Consult Factory)

### MATERIALS

- Base, Cage, Hat, Finial Cast Aluminum (A356)
- Hardware Stainless Steel
- Lenses Acrylic

### LENS OPTION

- NL No Lens (Highest LPW)
- CA Clear Acrylic
- TA Textured Acrylic
- PA Prismatic Acrylic
- FA Frosted Acrylic
- WA White Acrylic

### ACCESSORIES

- PCLL PCL for LED Fixtures
- HSS90 90° House Side Shield
- HSS180 180° House Side Shield

### LED MODULE

12 High efficacy multi-die packages 2x6 LED Configuration 80CRI—2700, 3000, 4000 CCT

### LED OPTICS

2x6 Multi Lens PMMA (Acrylic) IES Type II, III, IV, V Silicone Gasket IP66 System

### **SURGE PROTECTION**

10 kV / 10 kA



### LED Light Source Options

Light Source Po	ower	Distribution	ССТ
<b>G2LED40</b> 4:	1 W	Type II ( <b>T2)</b> Type III ( <b>T3)</b>	2700K ( <b>27K</b> )
<b>G2LED65</b> 63	3 W	Type IV ( <b>T4)</b>	3000K ( <b>30K</b> )
<b>G2LED80</b> 82	2 W	Type V ( <b>T5</b> )	4000K ( <b>40K</b> )

LED Drivers are auto voltage sensing, standard 120V through 277V (347, 480V Version Available-Consult Factory)

### <u>Finish</u>

The fixture will be finished with an electrostatically applied polyester powder coat suitable for exterior use. The fixtures are pretreated using industry standard environmentally responsible processes for a long lasting and durable finish.

<u>Standard Finishes</u> BK - Black (Gloss) BT - Black (Textured) SB - Statuary Bronze GN - Green <u>Premium Finishes</u> WH - White (Gloss) CV - Copper Vein GV - Green Vein CF - Custom Finishes

### LED Light Source Performance Data For Fixture with CA LENS

GT1623-CA			2700K (27K)		3000K	(30K)	4000K (40K)		
MODULE	NOM	LIGHT	DELIVERED	EFFICACY	DELIVERED	EFFICACY	DELIVERED	EFFICACY	
NAME	WATT	DISTRIBUTION	LUMENS	(LPW)	LUMENS	(LPW)	LUMENS	(LPW)	
		T2	-	-	-	-	-	-	
		Т3	-	-	-	-	-	-	
G2LED40	41	T4	-	-	-	-	-	-	
		Т5	-	-	-	-	-	-	
		T2	-	-	-	-	-	-	
		Т3	-	-	-	-	-	-	
G2LED65	63	T4	-	-	-	-	-	-	
		Т5	-	-	-	-	-	-	
		T2	-	-	-	-	-	-	
	07	Т3	-	-	-	-	-	-	
G2LED80	82	T4	-	-	-	-	-	-	
		T5	-	-	-	-	-	-	

### Ordering Guide

	Luminaire		Lens Material		LED Light Distribution Source Type		ion	ССТ		Optional Photocell		Optional House Side Shield		Finish	
EXAMPLE	GT1623	_	NL	/	G2LED80	—	Т3	_	40K	/	PCLL	/	HSS180	/	BT
	GT1623		NL		G2LED40		T2		27K		PCLL		HSS90		ВК
			CA		G2LED65		Т3		30K				HSS180		ВТ
			TA		G2LED80		T4		40K						SB
			PA		G2LED115		T5								GN
			FA											Pre	mium Finishes
			WA											W	'H, CV, GV, CF
				Rec	quired							Opt	ional	C	hoose Finish



PROJECT NAME:

CATALOG NUMBER:

FIXTURE SCHEDULE:

Page: 1 of 3

### LANTERN **ML4 SERIES - LAMP INCLUDED**







Ranch Style with Motion Sensor and dusk to dawn photocell



\*Excludes ML4E121PLBK27

### **FEATURES**:

• Includes a flicker free standard bulb (E26 base)

### **CONTROLS:**

 Available with dusk to dawn photocell or daylight harvesting motion sensors

### DIMMING

• 120V, Triac dimming (10%)

### **CONSTRUCTION:**

- Pagoda Style: Die cast Aluminum housing with frosted polycarbonate lens
- Ranch Style: Formed steel housing with high transmission glass lens
- Powder coat finish

### LISTINGS:

- cETLus/cULus listed. Outdoor wet locations
- ENERGY STAR certified (exclude item ML4LE109SPLBK2)
- Supports T24 Part 6 high efficacy lighting requirements

### WARRANTY:

5-year standard warranty (further details available at www.maxlite.com/warranties) Product may be eligible for a warranty extension to 10 years, for an additional fee. Contact MaxLite for details.

### **PAGODA STYLE - ORDERING STRUCTURE**

FAMILY	ТҮРЕ	OUTPUT	STYLE	FINISH	ССТ	OPTIONS
ML4= Lanterns	<b>LE=</b> Edison Base, E26	<b>121=</b> 1 × 11W	PL= Pagoda Style	<b>BK=</b> Black	<b>27=</b> 2700K	[BLANK]= Dusk to Dawn Photocell

### **RANCH STYLE - ORDERING STRUCTURE**

FAMILY	ТҮРЕ	OUTPUT	STYLE	FINISH	ССТ	OPTIONS	GENERATION
ML4= Lanterns	LE= Edison Base, E26	<b>109=</b> 1 × 09W <b>171=</b> 1 × 15W	SPL= Low Output, Ranch Style RL= Ranch Style	BK= Black WH1= White	<b>27=</b> 2700K	[BLANK]= Dusk to Dawn Photocell MSC <sup>2</sup> = DHL Motion Sensor and dusk to dawn photocell	[BLANK]= Blank -V3 <sup>2</sup> = Gen 3

<sup>1</sup>Contact MaxLite for lead time.

<sup>2</sup> Only used with the 15W models







### LANTERN ML4 SERIES - LAMP INCLUDED

### **ORDER CODE**

ORDER CODES	MODEL NUMBER	ENERGY STAR PRODUCT ID	PRODUCT IMAGE
101077	ML4E121PLBK27	2334204	•
101309	ML4LE109SPLBK2	N/A	C
103726	ML4LE171RLBK27-V3	2334207	$\square$
14098826	ML4LE171RLBK27MSC-V3	2334207	1

### DIMMERS

DIMMER BRAND	MODELS
LEVITON	6631, 603-6631-A, 6631-A, 6631-LA
LUTRON	AYCL-153P-WH, AYCL-153PH, S-603PH-WH, TGCL-153PH-WH

SPECIFICATIONS	ML4LE109SPL	ML4LE109SPL ML4E121PL							
SPECIFICATION		DETAILS							
Nominal Wattage (W)	09	11	15						
Source Lumens (Im)	800	1100	1600						
Equivalency	60W INC	75W INC	100W INC						
CRI	80	90	90						
Efficacy (Im/W)	89	100	106						
Color Temperature (K)									
L70 Lifetime (hrs)	≥25,000 Hrs								
Voltage	120V, Triac dimming ( 10%)								
Power Factor	≥0.90								
Housing	Formed Steel	Die Cast AL	Formed Steel						
Lens	Glass	Polycarbonate	Glass						
Mounting		Wall	Wall						
Operating Temperature	-4°F to 104°F								
Listings	cETLus, FCC	cULus, ENERGY STAR, FCC, JA8 Compliant bulb, Title 24	cETLus, ENERGY STAR, FCC, JA8 Compliant bulb, Title 24						
Environment	Wet locations, Outdoor								
Warranty 5 Years									





### LANTERN ML4 SERIES - LAMP INCLUDED

Page: 3 of 3

### **PRODUCT DIMENSIONS**





ML4E121PLBK27



ML4LE109SPLBK2



ML4LE171RLBK27



ML4LE171RLBK27MSC-V3



Luminaire Scheo	dule					
Symbol	Tag	Qty	LLF	Arrangement	Lum. Watts	Description
$\rightarrow \bigcirc$	W1	82	0.900	Single	9.5	ML4LE109SPLBK2
	P1	11	0.900	Single	65	GT1623-CA_G2LED65-T4
	P2	1	0.900	Single	65	GT1623-CA_G2LED65-T

Calculation Summary						
Label	CalcType	Units	Avg	Max	Min	Max/N
PARKING LOT - 17 SPACES	Illuminance	Fc	2.23	5.8	0.2	29.00
PARKING LOT - 37 SPACES	Illuminance	Fc	1.68	5.5	0.2	27.50
PRIVATE DRIVE	Illuminance	Fc	0.41	1.9	0.0	N.A.
PROPERTY LINE	Illuminance	Fc	0.03	0.3	0.0	N.A.

NOTES:

MOUNTING HEIGHTS AS SHOWN

-4-40K 5-40K

/lin 









### ILLUMINATED SIGN FINAL SIGN COLORS TO BE DETERMINED

FABRICATED ALUMINUM TENANT SIGN PANEL (3" DEEP) WITH INTERNALLY ILLUMINATED DIMENSIONAL LETTERS LOGO, NAMES/COLORS VARY PER TENANT

WESTPOINT BUILDERS

WEST STOREFRONT SIGNS

Drawing No. 23-127.10





### ILLUMINATED SIGN FINAL SIGN COLORS TO BE DETERMINED




#### FINAL SIGN COLORS TO BE DETERMINED

WESTPOINT B	UILDERS
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#### DOG PARK SIGN

7-27-23	By	ËD			Drawing No.	03 107 7C
		7-27-23				20-127.70





#### FINAL SIGN COLORS TO BE DETERMINED

	WEST	POIN	ΤB	UILDERS	6
МС	NUMEI	NT TO	WNF	HOMES S	SIGN
<b>3у</b> ЕD 7-27-23				Drawing No.	23-127.100



### Team

Developers:

Land Planner/Landscape Architect:

Architect:

Land Use Attorneys:

Civil Engineer:

Marketing Consultant:

<u>West Point Builders</u> Contact – Pat Curran/Bill Hardy

BSB Design Contact - Terry Smith

<u>SCHWARZ LEWIS Design Group, Inc</u> Contact - Bill Schwarz/Brad Lewis/Paige Richards

Sosin, Arnold & Schoenbeck, LTD Contact – David Sosin

Webster, McGrath & Ahlberg, Ltd. Contact – Ben Bussman

<u>Housing Trends, LLC</u> Contact – Lance Ramella





#### **Proposed Site Plan**

- Mixed Use Building- 63 Units
- Townhomes 63 Units
- Resident Amenities
- All Rental Program

	AIA	١		
ot	1	ı		
oning	D	G		
ind Area	2.98 :	acres		
se	Townh	nomes		
	Allowable	Proposed	Total Units	Alle
AR				

Use		Town	homes		Mixed Use			
		Allowable	Proposed	Total Units	Allowable	Proposed		Total Unit
FAR								
Building Height		Min. 3 Stories	3 stories		Min. 3 stories	5 stories		
Building Setback Fr	ont (67th Ave)	5'-15'	10.8		5' Max. (North St.)	8		
Fr	ant (67th Ct.)	5'-15'	8.7		5' Max. (Cut Thru)	1'		
Fr	ant (172nd St.)	5'-15'	9.3'		5' Max (67th)	1.2'		
Si	de	N/A	515		5' Min. (porth)	81'		
Re	ar (south)	5' Min	13.3'		5			
Parking Sathack Fr	ant	N/A			201	5'		
Contraction Contraction Contraction	Corner Side Yard	N/A			20			
6	do.	N/A			0'	0		
Dr.	are and	N/A			c'	0		
ine ine	:01	17/5			,			
ME TH Unit Cine		1.200 67 55 6	1 E00 EE to 1 900 EE	63				
ME Ant Unit Size		1,200 JF WITT.	1,000 31 10 1,000 31		LINIT TYPES	Pontable SE	Total Pontable SE	Total
WP Apt. Unit size					ONIT TIPES	Rentable SP	Total Rentable SP	Total
					A, Studio	704.00	3,320	
					p- one sedroom	808.00	3,232	4
					B1- One Bedroom	933.00	3,732	4
					B2- One Bedroom	831.00	8,310	10
					C- One Bedroom/office	880.00	2,640	3
					D- One Bedroom/office	880.00	7,040	8
					E- Two Bedroom	1,076.00	4,304	4
					E1- Two Bedroom	1,094.00	4,376	4
					F- Two Bedroom corner	1,164.00	18,624	16
					G- Two Bedroom	1,271.00	3,813	3
					H- Three Bedroom corner	1,476.00	1,476	1
					I- Three Bedroom	1,445.00	1,445	1
Apartment SFTotal					TOTAL SF		62,512	
Unit Total								63
Average Apt. SF						(Avg SF/Unit)		992.3
Commercial SF								4,352.0
Aisle Width		Two-way - Max 20'	22'		One-way Max 20'	25'		
Parking								
T diftering					ME A second b Base (CD			
					MP-1 per unit Red. (65			
		TH-1 per unit keq.			spaces) commercial -			
a		(63 Spaces)	124		None			
Garage - TH			126					
Snared Surface Spaces	with Lot Une		8					
To	ital TH Parking		134	2.1/Unit				
			*TH Parking Total Ex	cludes 21 Or	Street Spaces			
			65 Bike Stalls	1/Unit				
Garage - Apartment			-			39		
Carport Parking						24		
Surface- Apartments						13		
To	ital Apt. Parking					76		1.2/Uni
						68 Bike Stalls		1/Unit
						(63 interior/ 5	exterior)	
Commercial					-			
To	tal Comm. Parking					29 Spaces		7/1,000 s
						5 Bike Spaces		
						1-40' X 8' Load	ing Space	

### Concept Site Plan



#### **Proposed Site Plan- Town Home Parking**

- Two Garage Spaces/Unit= 126 Total
- Lot One Surface Spaces = 8 Total
  - 134 Total

#### Additional Parking

On Street Spaces = 21 Tota

### **Proposed Parking**





### Site Amenities

#### **Proposed Mixed Use Building-**



Perspective Rendering- 173<sup>rd</sup> Street (Harmony Square)



#### Proposed Mixed Use Building-First Floor Uses

- 4,352 SF Commercial
- 3,500 SF Community Room/Leasing
- BOH- Trash/ Bike Storage
- 39 Space Parking Garage









#### **Proposed Mixed Use Building-Residential- Second-Fifth Floors**

- 63 Units/ Five Floors
- 5 -Studios 705 sf
- 29 -One BR 808-880 sf
- 27 -Two BR 1,076-1,271 sf
- 2 -Three BR 1,476-1,445 sf





#### Proposed Mixed Use Building-Residential- Second-Fifth Floors

- 63 Units/ Five Floors
- 5 -Studios 705 sf
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- 2 -Three BR 1,476-1,445 sf

### Package One Multi Family Option

#### Hardie



#### Stone - Muli family



Monterey Taupe >

Brampton Brick- Ripley Front Door: SW Homberg Gray 7622 Shutters: Gray



### Package Two

#### Hardie





Artic White Brick General Shale- LWQ Shawdow Grey Tudor

Front Door: SW Iron Ore 7069 Shutters: Black



All roofs – GAF Charcoal

### **Building Materials**

#### Package Three

### Package Four (Multifamily Option)

#### Hardie





Aged Pewter >

INTERIORS

Brampton Brick- Brownstone

Front Door: Sherwin Williams Pewter Green SW6208 Shutters: Black

#### Hardie

### Stone for Multi Family



#### Brampton Brick- Graystone

Front Door: Sherwin Williams Auric 6692 | Safer Choice Sherwin Williams Cityscape SW7061

Shutters: Pale Gray



### **Building Materials**

## Building Materials



#### **Mixed Use Building**



Front Elevation- Courtyard/Street

#### Proposed Townhome Elevations

Townhome Character



**Side Elevation** 



**Street Facing- Side Elevation** 





**Rear Elevation- Auto court** 



Front Elevation- Courtyard/Street



**Rear Elevation- Auto court** 

#### **Proposed Townhome Elevations**

Townhome Character
 Alternate Elevation



**Side Elevation** 



#### **Second Floor Control Plan**



#### **Proposed Townhome Floor Plans**



**Lower Level Control Plan** 

# West Point at Harmony Square

Tinley Park, Illinois



#### Proposed Townhome Color Coordination Plan

 Townhome Façade Colors and Materials Coordinated to Avoid Monotonous Streetscape



Anti Monotony Key Plan

# West Point at Harmony Square

Tinley Park, Illinois



#### Site Plan and Building Design Changes Site Plan

- Additional Parking for Townhomes
- Additional Covered Parking for Mixed Use Building Residential Units
- Additional Surface Parking Along 67<sup>th</sup> Court
- Additional Landscape Enhancements

#### Building Design

- Additional Commercial Depth and Commercial SF Area
- Enhancement of Second Floor Patio Decks on Mixed Use Building
- Enhancement of North Street Building
  Façade
- Increase of Studio Unit Area
- Townhome Material and Color Coordination

Plan Changes Made During the Submittal Process

#### Mixed Use Building



#### **Original Southeast Elevation- North Street**



**Revised Southeast Elevation- North Street** 

#### Site Plan and Building Design Changes Building Design

 Enhancement of North Street Building Façade

### Plan Changes Made During the Submittal Process

#### Mixed Use Building



Original First Floor Plan 2,875 SF

#### Site Plan and Building Design Changes Building Design

 Additional Commercial Depth and Commercial SF Area



Revised First Floor Plan 4,352 SF Plan Changes Made During the Submittal Process

# West Point at Harmony Square

### Tinley Park, Illinois

#### Site Plan Elements Signage and Landscaping



#### **Building and Site Signage**

#### Site Plan and Building Design Changes Building Design

• Outdoor Retail Patio Area



**Outdoor Patio Space** 

### Thank you. We are happy to answer any questions.

