

LOYOLA  ACADEMY

AMENDED APPLICATION FOR AMENDMENT
TO EXISTING SPECIAL USE PERMIT, FOR
ISSUANCE OF A NEW SPECIAL USE PERMIT,
AND FOR CERTAIN VARIATIONS FOR
OUTDOOR ATHLETIC FIELD LIGHTING

AUGUST 17, 2023



THE
LAKOTA
GROUP.



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SECTION 1:

Introduction

PROJECT NARRATIVE

Loyola Academy is seeking Village approval to install new outdoor lighting at its 1100 Laramie Avenue campus athletic field. Currently, no light fixtures exist at this facility. For that reason, Loyola is unable to use the athletic field after sundown. The lights Loyola seeks to install, which Loyola has determined are necessary for the continued success of the institution, are typical for high school-level athletic facilities. As described in detail below, the lighting will be professionally designed, and the post-sundown use of the athletic field will be carefully and thoughtfully planned, regulated, operated and managed, to mitigate negative impacts on the surrounding neighborhood and nearby residential properties.

SUMMARY OF LIGHTING PLAN

Loyola's plans call for the installation of four light poles around the running track and football field. The poles will be 80 feet tall with LED fixtures affixed to a rack on top. Illumination from these lights will point directly down at the field so they produce no glare or spillage across residential property lines adjacent to the athletic field.

PROPOSED CONDITIONS

The operational controls listed below are proposed as conditions of approval for inclusion in the Special Use Permit Loyola is seeking. They relate specifically to the use of the lights, not the use of the athletic field generally:

WHO	The lights will only be used for Loyola Academy athletic or student events in which Loyola Academy athletes are participating.
WHEN	60 lighted events during the Fall athletic season (August to November) and Spring athletic season (March to May). Use will be limited to Monday – Friday, with the exception of limited use on Saturdays. No lighted events will take place on Sundays.
CUT-OFF TIME	<ul style="list-style-type: none">• 7:00 p.m. for 30 athletic practices on the field during the week• 9:00 p.m. for 25 non-football game nights• 10:30 p.m. for 5 Friday night football games.
FRIDAY NIGHT FOOTBALL GAMES	<ul style="list-style-type: none">• Lights off by 10:30 PM or 30 minutes after conclusion of game.• Maximum of five per year.• Lights dimmed immediately after play ends to provide only essential safety and security lighting for attendees to exit the premises.

Lighted events on Saturdays, if needed, are anticipated to be lightly attended and comprise a small number of the 25 allowable non-football lighted events. They will be restricted to Loyola Academy non-football athletic contests (lacrosse, soccer, track and field) and a football game delayed, rescheduled, or suspended due to unforeseen circumstances (i.e. Acts of God). A 9:00 p.m. lighting curfew would apply to all lighted events on Saturdays.

LOYOLA'S NEED FOR THE LIGHTING

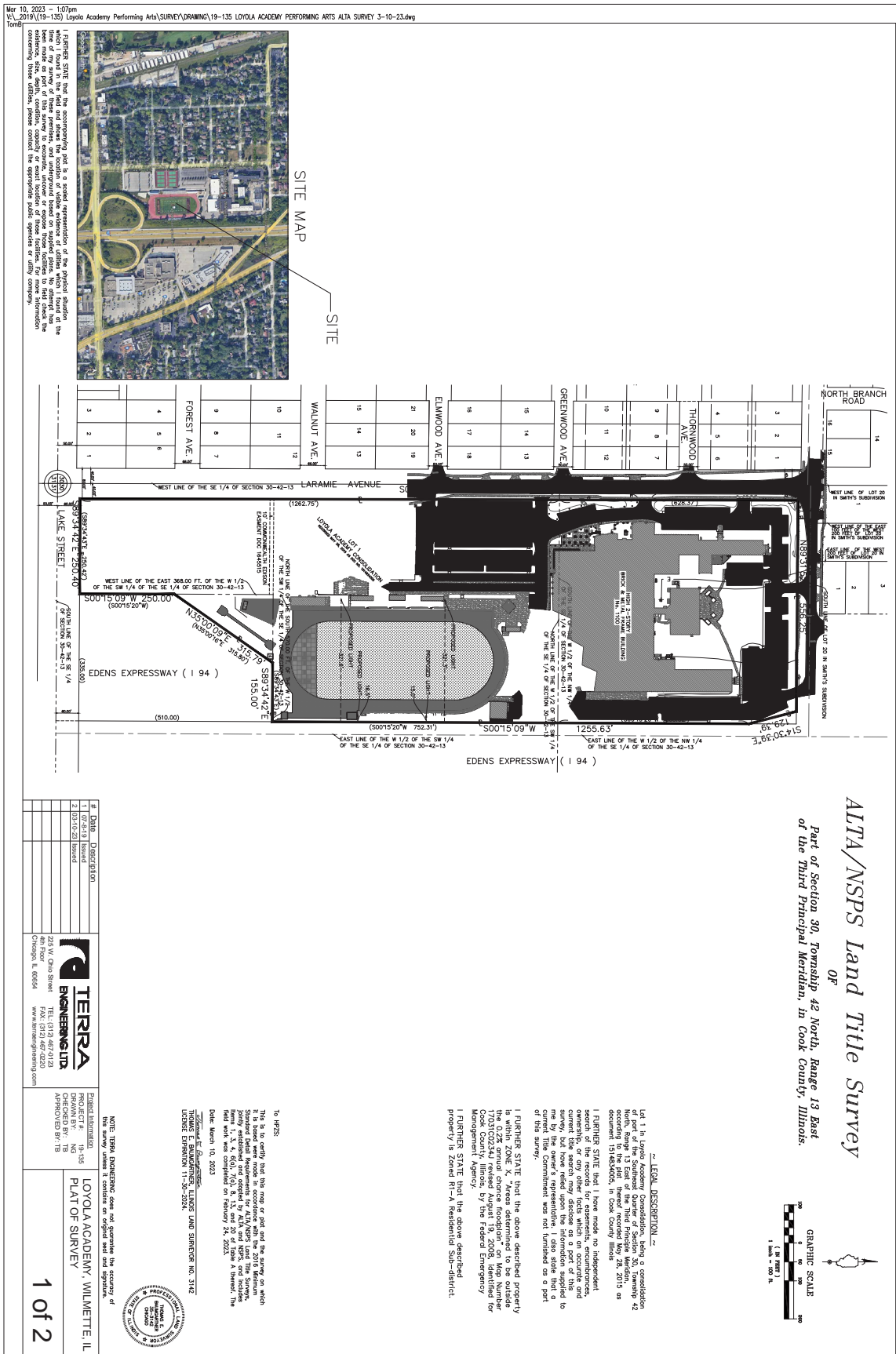
Loyola Academy has made the decision to install outdoor lighting at its athletic field after giving deliberate and serious consideration of the need for such lighting and the potential impact of post-sundown use of the athletic field on the surrounding neighborhood. This investment is based on a number of important factors:

- Cura personalis, a Latin phrase that means “care for the person,” is one of the core imperatives of Jesuit education. In the spirit of cura personalis, Loyola seeks to design an environment that simultaneously supports and challenges its students. Cura personalis also impels us to increase access to a Jesuit education at Loyola for young people from every culture and community. We believe our request for athletic field lighting provides us with an immense opportunity to strengthen our tradition of cura personalis, through:
 - » the deepening formation of all adult members of the school community in our Ignatian spiritual and Jesuit traditions;
 - » enhancing our athletic and co-curricular programming and promoting the participation of under-engaged students;
 - » building opportunities to foster community engagement of a geographic, socioeconomic, ethnic and racial diverse student body; and
 - » providing necessary support for minority students and foster the development of a welcoming school community.
- In the implementation of Loyola’s campus master plan, a key component was to improve traffic flow in and around the neighborhood. In its implementation of new procedures, Loyola lost access to a practice field on campus. The result has forced football programming to be moved off campus, which has decreased Loyola’s ability to support the health and safety of its student athletes in a time efficient manner.
- The school currently rents facilities from other organizations for team practices because daytime-only use of the fields does not allow enough time for all current student activities. Loyola currently spends over \$40,000 annually on off-site rentals and transportation costs. Installation of the proposed athletic field lighting will make use of the field after sundown possible and obviate the need to rent practice facilities elsewhere and bus student athletes to those facilities.
- Loyola’s football program is popular and a big part of the student experience. On average, Loyola hosts four or five regular season home games per season. At present, these games are held on Saturday afternoons because darkness prevents scheduling them on Friday evenings. Loyola draws students from 90+ zip codes. With the lighting of our athletic field, we hope to provide students from all backgrounds and areas the ability to attend games throughout the season. Student attendance has declined over the years, and we believe home football games on Friday nights will increase student engagement and build community within this broad and diverse student body. This is no different than all other neighboring community high schools.
- Scheduling football games on Saturday afternoons conflicts with other important programs that take place on Saturdays, such as ACT & SAT testing. If games can be held on Friday evenings instead, weekend activity on the campus will be significantly reduced, which will reduce traffic and parking impacts in the area on Saturdays.
- Loyola Academy is one of the few high schools in the state of Illinois that does not have lights on its athletic field. It is the only school in the Chicago Catholic League that doesn’t have them. We believe that almost every public high school in the north and northwest suburbs has football stadium lights. Loyola’s proposed design is entirely consistent with best practices used in similar installations. Having athletic field lighting will provide the essential flexibility our Athletic Department needs for schedule programming.
- Loyola’s commitment to the arts was evident in Phases 1 and 2 of our campus master plan. However, Loyola’s marching band cannot practice or march on the field due to a lack of availability during the week. With outdoor lighting installed, the band will be able to practice after school in the daylight. The lighting of the field will broaden the impact on the student experience by supporting opportunities in the arts.
- Installation of athletic field lighting will help Loyola Academy remain competitive in the market by furthering our commitment to provide engaging and inclusive experiences for our students and community. We believe this will enhance the experiences of our parents and students and build new avenues to draw prospective students to our institution.

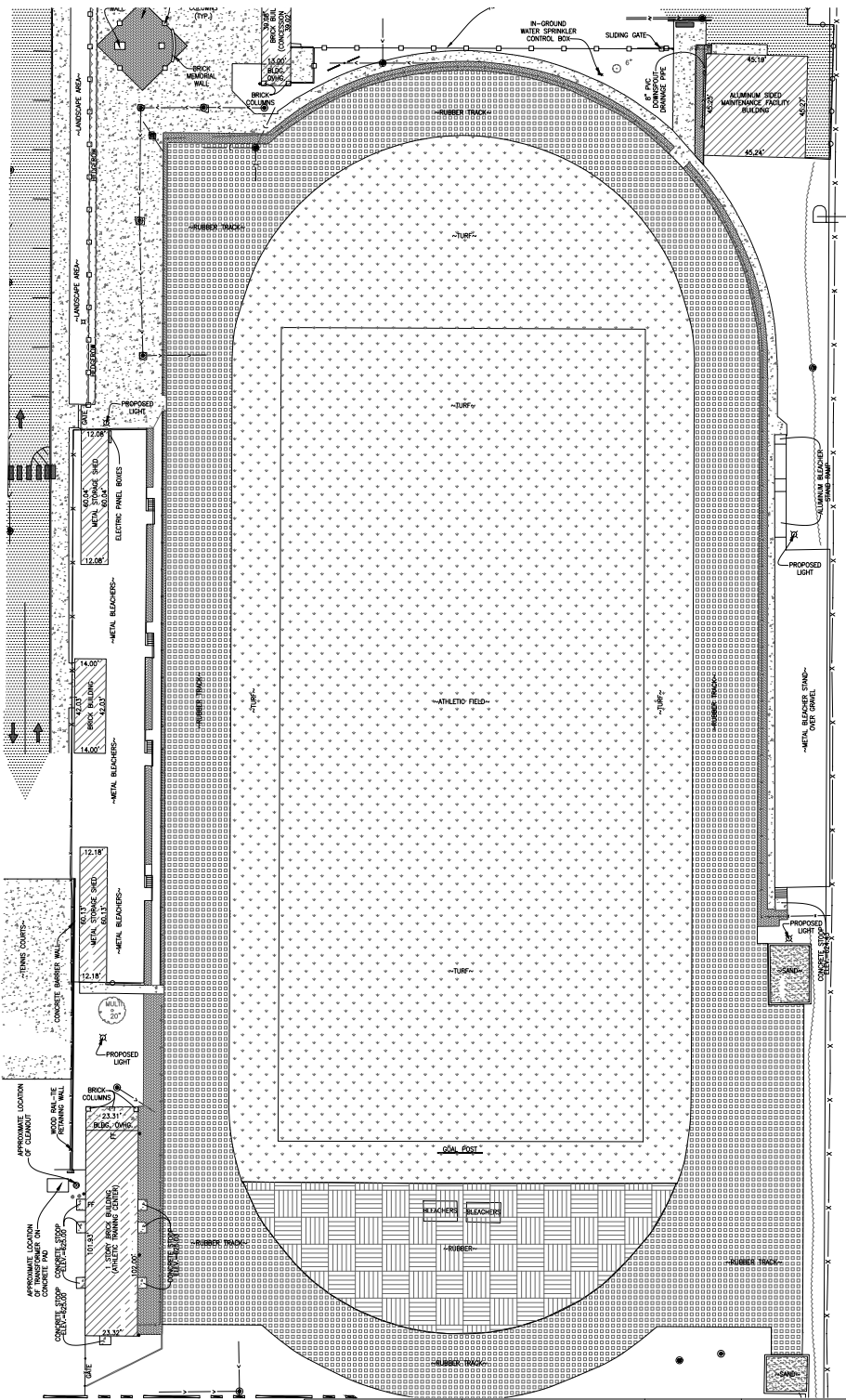
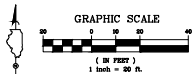
REGIONAL CONTEXT MAP



SITE PLAN



ALTA/NSPS Land Title Survey



Map 10, 2023 - 11'x14' (1' = 20'x20')
Loyola Academy Performing Arts ALTA SURVEY 1-10-23.dwg
11/10/2023 11:15 AM
Terra

#	Date	Description
1	07-6-19	Issued
1	03-10-23	Issued

**TERRA**
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Project Information
PROJECT #: 19-135
DRAWN BY: NG
CHECKED BY: TB
APPROVED BY: TB

LOYOLA ACADEMY, WILMETTE, IL
PLAT OF SURVEY

LIGHTING PLAN LAYOUT

LIGHTING PROPOSAL

Loyola Academy is proposing to install new outdoor lighting at the athletic field on its campus at 1100 Laramie Avenue. The proposed lighting will be 'state of the art' high school-level athletic facility lighting. Loyola Academy has determined these improvements are necessary for the continued success of the school. The lighting will be carefully and thoughtfully designed to mitigate negative impacts on nearby residential properties. Further, operational controls will limit usage of the lights on the field.



ZONING RELIEF REQUESTS

ZONING RELIEF BEING REQUESTED

In furtherance of its request to install outdoor lighting on its athletic field, Loyola Academy seeks the following zoning relief from the Village:

1. **Expansion of Special Use Permit:** Pursuant to Section 30-5.3(i)(l) of the Zoning Ordinance, Loyola seeks an expansion of its existing special use for the Laramie Avenue campus, which was approved by Ordinance No. 93-0-36, an Ordinance Granting a Special Use Permit to Loyola Academy, and subsequently amended by Ordinance No. 2017-0-63 and Ordinance No. 2020-0-38.
2. **New Special Use Permit:** Pursuant to Section 30-13.3.c.1.B of the Zoning Ordinance, Loyola seeks approval of a new special use permit to allow for the installation of outdoor recreational field lighting on its Laramie Avenue campus athletic field.
3. **Brightness at Property Line:** Section 30-13.3.a.1.C of the Zoning Ordinance limits light levels to no greater than .5 footcandle at the property line. Loyola seeks a variation to allow for light levels reaching 6.0 footcandles along Loyola's east and south property lines where the property abuts the Edens Expressway and expressway on-ramp.
4. **Light Pole Height:** Section 30-13.3.c.1.A of the Zoning Ordinance limits the height of lighting for non-residential uses to 18 feet in height. Loyola seeks a variation to allow for athletic field lighting poles that will be 80 feet tall.
5. **Setback Relief:** Section 30-8.3 of the Zoning Ordinance requires land uses in the R1-A zoning district that are other than single-family residences to maintain a 20-foot side yard adjoining a street that is open and unobstructed from the ground to the sky. Loyola seeks a variation to allow for up to a five-foot encroachment into the required side yard adjoining a street (i.e., the I-94 right-of-way) so that it can place two light poles within it. Those two light poles will be located 15 feet and 16 feet, 6 inches, respectively, from the east property line.
6. **Sound Levels:** Section 30-13.7 of the Zoning Ordinance limits sound levels in residential zoning districts to 50 decibels between 7:00 a.m. and 7:00 p.m. and to 45 decibels between 7:00 p.m. and 7:00 a.m. Loyola seeks a variation from the provisions of Section 30-13.7 to allow for a maximum 1-second sound level along the boundaries of Loyola's campus property between the hours of 7:00 p.m. and 10:30 p.m. of 94 decibels on nights a football game is being played on the Loyola Academy athletic field (in other words, a maximum variation of 49 decibels). It should be noted that on a one-hour time-averaged (LEQ) basis, which is how the state of Illinois measures sound, the noise generated by a night football game is projected to generate sound at a level of between 66 and 69 decibels, which is generally only four to seven decibels above the sound level of traffic being generated on the nearby Edens Expressway.

STANDARDS OF REVIEW

As indicated earlier, Loyola Academy has applied for a new Special Use Permit to allow the installation of outdoor lighting at its athletic field. This also requires amending an existing Special Use Permit that the school operates under. Lastly, Loyola Academy is requesting several variations under the Wilmette Zoning Code to allow the installation of the lights as proposed.

The Zoning Code establishes a series of standards by which Special Use Permits and variations are evaluated. Below are detailed explanations of how these standards are satisfied by Loyola Academy's application.

STANDARDS OF REVIEW: VARIATIONS

Loyola Academy is requesting the following variations from the Wilmette Zoning Ordinance for the lighting it seeks to install at its athletic field:

1. Section 30-13.3(a)(1)(C) (Exterior Lighting) limits exterior light levels to no greater than one half (0.5) footcandle at any property line. Along portions of Loyola Academy's east and south property lines adjacent to the Edens Expressway and the expressway on-ramp, the level of the lights Loyola Academy seeks to install could be as high as six (6.0) footcandles. Importantly, residential property lines are over 200 feet away and no ground-level light spillage from the athletic field lights will impact these property lines.
2. Section 30-13.3(c)(1)(A) (Exterior Lighting) limits the height of light poles on private property not used for residential purposes to 18 feet. The light poles Loyola Academy is proposing to erect will be 80 feet in height.
3. Section 30-8.3 (Bulk and Yard Regulations) and Table 8-3 (R1 Sub-District Residential Zoning Districts Bulk and Yard Regulations) require land uses in the R1 A zoning district that are other than single-family residences to maintain a 20-foot side yard adjoining a street that is open and unobstructed from the ground to the sky. Loyola Academy seeks approval of a variation to allow for a five-foot maximum encroachment into a 20-foot side yard adjoining a street (i.e., the I-94 right-of-way) so that it can place two light poles within that yard. Those two light poles will be located 15' and 16'6", respectively, from the east property line.
4. Section 30-13.7 (Environmental Performance Standards) and Table 13-3 (A-Weighted Sound Limits) limit sound levels in residential zoning districts to 50 decibels between the hours of 7:00 a.m. and 7:00 p.m. and to 45 decibels between the hours of 7:00 p.m. and 7:00 a.m. Loyola seeks a variation from the provisions of Section 30-13.7 to allow for a maximum 1-second sound level along the boundaries of Loyola's campus property between the hours of 7:00 p.m. and 10:30 p.m. of 94 decibels on nights a football game is being played on the Loyola Academy athletic field (in other words, a maximum variation of 49 decibels). It should be noted that on a one-hour time-averaged (LEQ) basis, which is how the state of Illinois measures sound, the noise generated by a night football game is projected to generate sound at a level of between 66 and 69 decibels, which is generally only four to seven decibels above the sound level of traffic being generated on the nearby Edens Expressway.

Pursuant to Section 5.4 of the Wilmette Zoning Ordinance, any application for variations must include evidence that each of the following standards is satisfied:

- The particular physical conditions, shape, or surroundings of the property would impose upon the owner a practical difficulty or particular hardship, as opposed to a mere inconvenience, if the requirements of the Zoning Ordinance were strictly enforced.
 - » Response (Exterior Lighting and Bulk and Yard Regulation Variation Requests): The presence of a residential neighborhood around Loyola Academy's campus and athletic field and the proximity of the campus and athletic field to the Edens Expressway impose hardships on Loyola Academy.

The outdoor lighting Loyola Academy is seeking to install must be placed in specific locations to provide adequate lighting on the football field while avoiding the creation of glare or light spillage or nuisance onto adjacent properties. Installing the high-output LED light fixtures Loyola Academy is proposing to install at a height of up to 80 feet will allow for that lighting to be aimed at a steeper downward angle than would be possible at a lower mounting height. To achieve adequate brightness on the playing field at lower pole heights would require a higher angle of light shine and the installation of a greater number of light poles on the property, which would increase the likelihood of negative impacts on surrounding properties.

The height limit of 18 feet for non-residential outdoor lighting makes sense in the context of parking lot lights or similar illumination needs on private property. However, athletic field lighting is unique in its need to provide significant illumination over large areas of land. Recognizing that many public park and school athletic facilities are in residentially-zoned areas, relief for recreational field lighting is common and has been granted in communities around the area to accommodate similar facilities.

Installing the lights in the proposed side yard locations on the campus' east property line will ensure that adequate and safe illumination of Friday night football games is provided. The need for this variation is not being created by Loyola Academy, but by the proximity of the I-94/Edens Expressway right-of-way.

- » Response (Noise Variation Request): Loyola Academy, like many area high schools, is situated in a residential zoning district. To require Loyola Academy to conform to the Zoning Ordinance's noise limits for athletic events which are already taking place on campus would create a practical difficulty and real hardship for the school.

As indicated in the Acoustic Associates, Ltd. Noise Evaluation dated April 24, 2023, as supplemented by the Acoustic Associates, Ltd. Supplemental Noise Evaluation dated August 15, 2023 (collectively, the "Applicant's Sound Study"), motor vehicle traffic on the Edens Expressway, which lies immediately to the east of the Loyola Academy campus, already generates sound that is far in excess of the noise limits of the Zoning Ordinance for residential zoning districts. Specifically, as indicated in the Applicant's Sound Study, the expressway traffic generates nighttime sound that, on a time averaged (LEQ) basis, reaches a sound level of between sixty-two decibels (62 dBA) and sixty-five decibels (65 dBA), which is significantly over the Zoning Ordinance's limit for nighttime noise. For this reason, it is impractical to apply this limit to the Loyola Academy campus. It should be noted that the Zoning Ordinance specifically states that the noise limitations established by Table 13-3 do not apply to "noises not directly under the control of the owner or occupant of the property" or to "transient noises emanating from moving sources, such as trucks, automobiles, airplanes and railroads" (See Section 13-7(a)(4)(D) of the Zoning Ordinance).

- The plight of the property owner was not created by the owner and is due to unique circumstances.
 - » Response (Exterior Lighting, Bulk and Yard Regulations and Noise Variation Requests): Again, the need for the exterior lighting, side yard setback and noise variation requests is created by the fact that Loyola Academy is located in a land-locked portion of a residentially zoned area that is immediately adjacent to the Edens Expressway, and not by Loyola Academy.
- The difficulty or hardship is peculiar to the property in question and is not generally shared by other properties classified in the same zoning district and/or used for the same purposes. This includes the need to accommodate desirable existing site landscape or reflect unique conditions created by the age and character of the property.
 - » Response (Exterior Lighting, Bulk and Yard Regulations and Noise Variation Requests): The requested variations are peculiar to the Loyola Academy campus because, unlike most of the other properties in the nearby, fully-developed R1 A zoning district in which the campus sits, it is a large institutional/educational facility that is situated in close proximity to the Edens Expressway.

Residences within the zoning district do not share the need to install recreational lighting of the proposed scale and intensity, or to obtain relief from the noise limitations of the Zoning Ordinance in order to undertake activities on their properties; nor are they immediately adjacent to the I-94/Edens Expressway right-of-way.

- The difficulty or hardship resulting from the application of the Zoning Ordinance would prevent the owner from making a reasonable use of the property. However, the fact the property could be utilized more profitably with the variation than without the variation is not considered as grounds for granting the variation.
 - » Response (Exterior Lighting, Bulk and Yard Regulations and Noise Variation Requests): Loyola Academy is seeking approval of the exterior lighting, side yard setback and noise variation requests for the reasons set forth in the Project Narrative it has submitted with its amended application. It is not seeking the approval of such variations to increase its “profitability”. As all are aware, Loyola Academy is a not-for-profit educational institution.
- The proposed variations will not impair an adequate supply of light and air to adjacent property or otherwise injure other property or its use, will not substantially increase the danger of fire or otherwise endanger the public health, safety and welfare, and will not substantially diminish or impair property values within the neighborhood.

- » Response (Exterior Lighting, Bulk and Yard Regulations and Noise Variation Requests): The installation of the four proposed 80-foot tall light poles in the locations being proposed and the use of a lighted Loyola Academy athletic field will have no impact on the supply of light and air to adjacent property, injure other property in the neighborhood or its use, increase the danger of fire in the neighborhood, or, for the reasons stated hereafter, otherwise endanger the public health, safety and welfare.

The outdoor lights Loyola Academy is seeking to install will be state-of-the-art LED lights which are comparable to or better than the lights that have been installed on similarly situated athletic facilities on the North Shore and in other residentially zoned areas. The installation of the lights in accordance with the lighting plan designed by Loyola Academy’s professional lighting consultants in the locations identified on such plan will provide safe and effective lighting on the field while minimizing glare and light spillage onto adjacent properties.

Effective implementation of Loyola Academy’s Amended Transportation Management Plan, and particularly, the newly added section for traffic management and parking for Special Events Conditions, which was recently updated by Kimley-Horn Associates, Inc. and included with Loyola Academy’s amended application, provides a strategy for effectively addressing parking needs during Friday night football games so that the health, safety and welfare of Loyola Academy’s neighbors is not endangered when those games are played.

As indicated by the Market Impact Analysis undertaken by MaRous & Company dated August 9, 2023, which has been included with Loyola Academy’s amended application, the installation of the improvements Loyola Academy is proposing to install and the use of a lighted athletic field, under the conditions and with the limitations being proposed, will not diminish property values in the neighborhood.

- The variation, if granted, will not alter the essential character of the neighborhood and will be consistent with the goals, objectives and policies set forth in the Comprehensive Plan.
 - » Response (Exterior Lighting, Bulk and Yard Regulations and Noise Variation Requests): The variations, if granted, under the conditions and with the limitations being proposed, will not alter the essential character of the Loyola Academy’s surrounding neighborhood. Those conditions and limitations include the following:

1. Loyola Academy has agreed to use the lighted athletic field no more than 60 days per year. Those 60 days of use will include a maximum of five Friday night football games, up to 25 non-football game contests (for example, soccer, lacrosse, and field hockey), and up to 30 nights of athletic practices.
2. According to Loyola Academy's sound consultant, (i) a Friday night football game is anticipated to generate noise, when measured on a one-hour time-averaged (LEQ) basis, at a level of between 66 dBA, for a typical Loyola football game, and 69 dBA, for a rivalry game; (ii) this is not significantly greater than the noise currently being generated by nearby Edens Expressway traffic, which was determined to be at between 62 dBA and 65 dBA when measured on a one hour time-averaged (LEQ) basis; and (iii) the 3 to 4 or 4 to 7 decibel increase in noise that a football game could be anticipated to generate will give rise to only a "slight" or "mild" noise impact on the surrounding neighborhood.
3. There will only be a handful of times during a Friday night football game that the Zoning Ordinance's 1-second evening noise limit of 45 dBA will be exceeded. These increases in noise will occur only a handful of times each school year, will be short-term and will be scheduled in advance.
4. Loyola Academy has agreed to turn off the athletic field lights after a Friday night football game by no later than 10:30 p.m., or 30 minutes after the conclusion of the game.
5. Loyola Academy has agreed that, if the exterior lights are used for the non-football game contests described above, they will be turned off by 9:00 p.m., and if they are used for the practices described above they will be turned off by 7:00 p.m.
6. Loyola Academy has agreed that the exterior lights will not be used for events hosted by third parties who are unrelated to the Academy.
7. Loyola Academy has agreed that the exterior lights will not be used for concerts.
8. Loyola Academy has agreed that the exterior lights will only be used for athletic events in which Loyola Academy students are participating.
9. Illumination from the proposed exterior lighting will be designed to shine directly onto the athletic field, and not spill onto adjacent properties.
10. Loyola Academy has agreed to implement a strategy, which is outlined in the Academy's Amended Transportation Management Plan, to address traffic circulation and the demand for parking that would be generated by a Friday night football game. For rivalry games which are anticipated to generate significant fan interest, that strategy involves the use of off-site parking lots and other nearby areas for fan parking; the use of signage and horses to block football fan access to neighborhood streets; and an increase to \$100 of the fine the Village can impose for parking on neighborhood streets without a "neighborhood placard".

In addition, granting the variations will allow for activities to be undertaken on the Loyola Academy campus which advance Loyola Academy's core purposes, as described in greater detail in the Project Narrative included with the Academy's amended application, and make it possible for the Academy to remain an active, vibrant educational institution within the community, as envisioned by the Comprehensive Plan.

- With respect to building materials, unforeseen advances in technology, appearance or quality render a prohibited material to be suitable and in keeping with the appearance goals of this code when used in the form presented by the applicant.
 - » Response (Exterior Lighting , Bulk and Yard Regulations and Noise Variation Requests): This standard is inapplicable to Loyola Academy's current variation requests.

- Where an application is a request for a fence, the following approval standards apply, in addition to those of the variation. However, no one of these factors shall be conclusive in determining whether a practical difficulty or particular hardship exists.
 - » Response (Exterior Lighting, Bulk and Yard Regulations and Noise Variation Requests): This standard is inapplicable to Loyola Academy's current variation requests.

STANDARDS OF REVIEW: SPECIAL USES

Pursuant to Section 30-5.3(i)(l) of the Zoning Ordinance, Loyola Academy seeks an expansion of its existing special use for its Laramie Avenue campus, which was approved by Ordinance No. 93-0-36, an Ordinance Granting a Special Use Permit to Loyola Academy, which ordinance was subsequently amended by Ordinance No. 2017-0-63 and Ordinance No. 2020-0-38, and pursuant to Section 30 13.3.c.1.B of the Zoning Ordinance, the Academy seeks approval of a new special use permit to allow for the installation of outdoor recreational field lighting on its campus athletic field.

Pursuant to Section 5.3 of the Village's Zoning Ordinance, any application to establish or amend a Special Use must present evidence to support each of the following standards:

- The proposed use in the specific location will be consistent with the goals and policies of the Comprehensive Plan.
 - » Response: The proposed amendment to Loyola Academy's existing special use permit and its request for a new special use permit to allow for the lighting and evening use of its Laramie Avenue campus athletic field is consistent with the goals and policies of the Village's Comprehensive Plan. One such goal is to promote parks, open space, recreation, arts and culture and educational opportunities for Village residents. The proposed special use amendment and new special use permit will further Loyola Academy's mission, as described in detail in the Project Narrative the Academy has included with its amended application, help fortify its reputation as a premier educational institution in the state and region, and increase educational and recreational opportunities for Village residents who are students at Loyola Academy.

Policies in the Village's Comprehensive Plan include balancing potentially positive effects of all proposed changes in land use against the potentially negative impacts on nearby areas and either limit or prohibit changes that are likely to create an impact that is substantially inconsistent with the character of the area. Loyola Academy's installation of lights at its athletic field and its proposed evening use of the field will be consistent with this policy given Loyola Academy's plan to install state of the art LED lights at the field, which will limit light intrusion into the neighboring area, and its commitment to limit the evening use of the lighted athletic field in the manner described in its amended application in order to minimize negative impacts on surrounding neighbors and neighborhoods.
- The establishment, maintenance, or operation of the proposed use in the specific location will not be detrimental to or endanger the public health, safety and welfare.
 - » Response: Again, the state-of-the-art LED lighting Loyola Academy is proposing to install, the operational controls and limits Loyola Academy is proposing for evening use of the athletic field to minimize the potential for negative impacts on surrounding neighbors and neighborhoods, and the strategy the school is proposing to implement to address Friday night football game parking, as described in detail in Loyola Academy's Amended Traffic Management Plan, will ensure that evening use of the lighted athletic field will not be detrimental to or endanger the public health, safety, and welfare.

» Facts supportive of this conclusion include the following:

1. Loyola Academy has agreed to use the lighted athletic field no more than 60 days per year. Those 60 days of use will include a maximum of five Friday night football games, up to 25 non-football game contests (for example, soccer, lacrosse, and field hockey), and up to 30 nights of athletic practices.
2. According to Loyola Academy's sound consultant, (i) a Friday night football game is anticipated to generate noise, when measured on a one-hour time-averaged (LEQ) basis, at a level of between 66 dBA, for a typical Loyola football game, and 69 dBA, for a rivalry game; (ii) this is not significantly greater than the noise currently being generated by nearby Edens Expressway traffic, which was determined to be at between 62 dBA and 65 dBA when measured on a one hour time-averaged (LEQ) basis; and (iii) the 3 to 4 or 4 to 7 decibel increase in noise that a football game could be anticipated to generate will give rise to only a "slight" or "mild" noise impact on the surrounding neighborhood.
3. There will only be a handful of times during a Friday night football game that the Zoning Ordinance's 1-second evening noise limit of 45 dBA will be exceeded. These increases in noise will occur only a handful of times each school year, will be short-term and will be scheduled in advance.
4. Loyola Academy has agreed to turn off the athletic field lights after a Friday night football game by no later than 10:30 p.m., or 30 minutes after the conclusion of the game.
5. Loyola Academy has agreed that, if the exterior lights are used for the non-football game contests described above, they will be turned off by 9:00 p.m., and if they are used for the practices described above they will be turned off by 7:00 p.m.
6. Loyola Academy has agreed that the exterior lights will not be used for events hosted by third parties who are unrelated to the Academy
7. Loyola Academy has agreed that the exterior lights will not be used for concerts.
8. Loyola Academy has agreed that the exterior lights will only be used for athletic events in which Loyola Academy students are participating.
9. Illumination from the proposed exterior lighting will be designed to shine directly onto the athletic field, and not spill onto adjacent properties.
10. Loyola Academy has agreed to implement a strategy, which is outlined in the Academy's Amended Transportation Management Plan, to address traffic circulation and the demand for parking that would be generated by a Friday night football game. For rivalry games which are anticipated to generate significant fan interest, that strategy involves the use of off-site parking lots and other nearby areas for fan parking; the use of signage and barriers to block football fan access to neighborhood streets; and an increase to \$100 of the fine the Village can impose for parking on neighborhood streets without a "neighborhood placard".
11. Loyola Academy has agreed to work with the Wilmette Police Department and to station up to six police officers in the area of its campus on Friday nights when a "rivalry game" has been scheduled.

- The proposed use in the specific location will not be injurious to the use or enjoyment of other property in the neighborhood for the purposes permitted in the district.

» Response: Again, given the operational controls and limits Loyola Academy has proposed to minimize the potential for negative impacts on the surrounding neighborhood, the state-of-the art LED lighting it is proposing to install, and the strategy it is proposing to implement to address Friday night football game parking, will ensure that the proposed evening use of the lighted athletic field will not be injurious to the use or enjoyment of residential properties in the neighborhood. See Response to Standard b above.

- The establishment of the special use in the specific location will not impede the normal and orderly development and improvement of surrounding properties for uses permitted in the zoning district.
 - » Response: The area surrounding Loyola Academy is fully developed and has been for decades. The operational controls and limits Loyola Academy has proposed for its use of the exterior lights will ensure that the proposed amendment to Loyola Academy's existing special use permit and its request for a new special use permit will not impede the normal and orderly improvement of surrounding properties for uses permitted in the R1-A residential zoning district.
- The proposed use in the specific location will not substantially diminish property values in the neighborhood.
 - » Response: As indicated by the Market Impact Analysis undertaken by MaRous & Company dated August 9, 2023, which has been included with Loyola Academy's amended application, the installation of the improvements Loyola Academy is proposing to install and the evening use of a lighted athletic field, under the conditions and with the limitations being proposed, will not diminish property values in the neighborhood.
- Adequate utilities, road access, drainage, and other necessary facilities already exist or will be provided to serve the proposed use.
 - » Response: Adequate utilities, road access, drainage and other necessary facilities already exist for the Loyola Academy campus. The proposed amendment to Loyola Academy's existing special use permit and its request for a new special use permit will not require the construction of any new utilities (other than the proposed exterior lighting improvements Loyola is proposing to install), road access improvements, drainage improvements or other facilities.
- Adequate measures already exist or will be taken to provide ingress and egress to the proposed use in a manner that minimizes traffic congestion in the public streets.
 - » Response: Ingress and egress to the Loyola campus already exists and is able to accommodate the use of Loyola Academy's athletic field currently. While the frequency of use of the athletic field may expand into hours after sundown, the intensity will not increase such that existing ingress and egress will no longer be adequate. When Friday night football games occur, Loyola Academy will implement a strategy to address what might be extraordinary demand for football game parking. That strategy is outlined in the Amended Transportation Management Plan the Academy has included with its amended application.
- The proposed use in the specific location will be consistent with the community character of the neighborhood of the parcel proposed for the special use.
 - » Response: Many of the activities that will be occurring on the Loyola Academy campus after sundown if the proposed amendment to the existing special use permit and the new special use permit are approved are already taking place on the campus. The Loyola Academy athletic field has been used for decades. The Academy is a part of the fabric of the community. Outdoor athletic field lighting is a customary and incidental function of most high schools in the region and in the state. As confirmed by the MaRous & Company Market Impact Analysis, the presence of a lighted athletic field and its evening use do not diminish the values of properties in the surrounding areas.
- Development of the proposed use will not substantially adversely affect a known archaeological, historical, or cultural resource located on or off of the proposed site.
 - » Response: There are no known archaeological, historical or cultural resources located on or in the vicinity of the Loyola Academy campus.
- The applicant has made adequate legal provision to guarantee the provision and development of any buffers, landscaping, public open space and other improvements associated with the proposed use.

» Response: There are no buffers, landscaping, or public open space or other improvements associated with the proposed amendment to the existing special use permit or the new special use permit being requested. However, if the proposed amendment and new special use permit are approved, it is assumed that any ordinance of approval will incorporate the conditions and limitations on evening use of the athletic field that Loyola Academy has proposed and require implementation of the special events parking strategy described in the Kimley-Horn Amended Transportation Management Plan.

- The proposed use will meet any and all additional use standards specified in Article 12 of the Zoning Ordinance for such a use:

Article 12(J): Educational Facility, Primary, Secondary, College and Vocational:

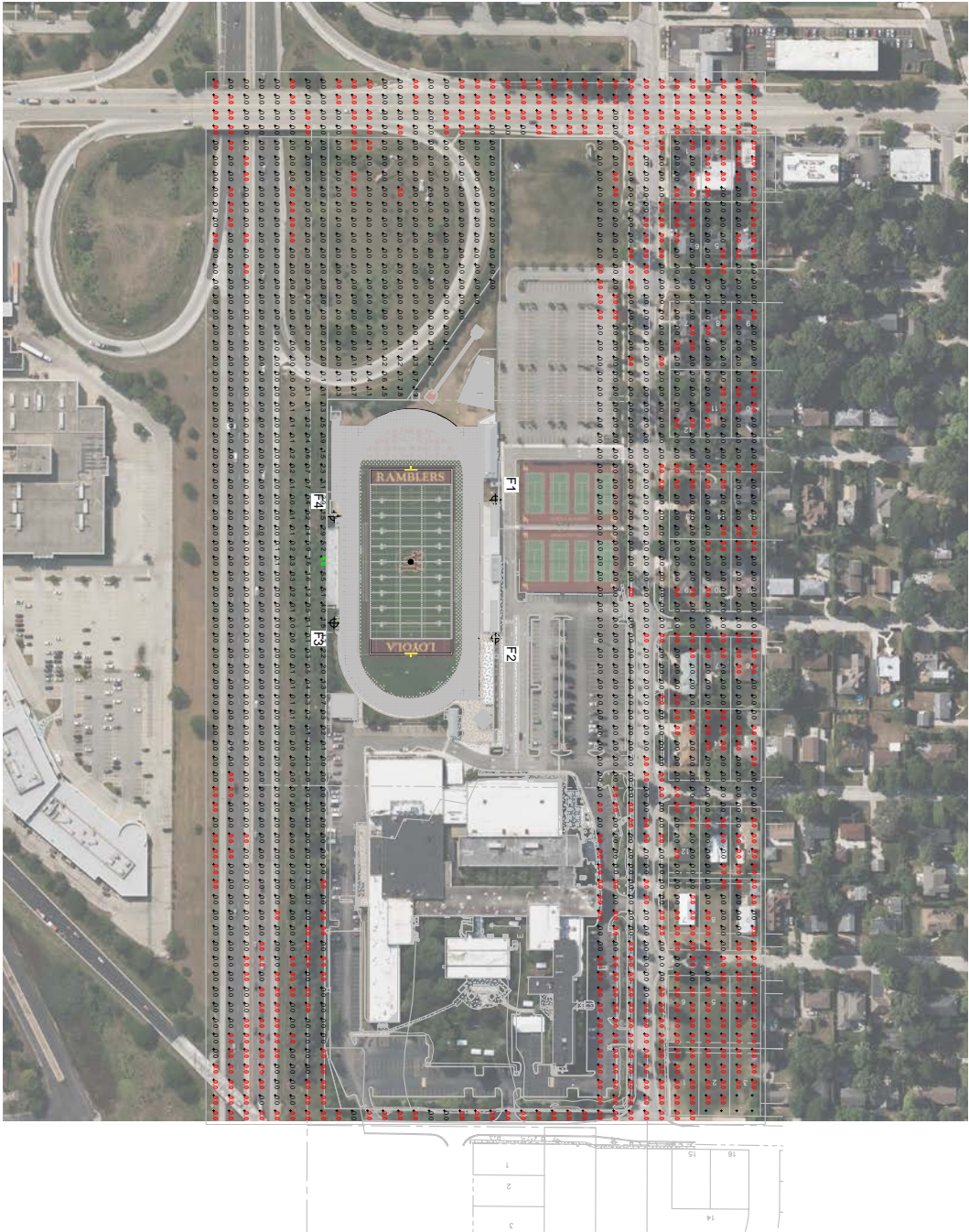
1. Educational facilities must be designed so that the location of entrances and exits, exterior lighting, outdoor recreation areas, service areas, and parking and loading facilities will minimize traffic congestion, pedestrian hazards and adverse impacts on adjoining properties.

» Response: For the reasons set forth above, and subject to the consideration and approval of the exterior lighting and noise variations Loyola Academy has separately applied for, the proposed amendment to the existing special use permit and the new special use permit being requested will minimize traffic congestion, pedestrian hazards and adverse impacts on adjoining properties.

SECTION 2:

Lighting Plan

PHOTOMETRIC PLANS



SCALE IN FEET 1 : 200
0 200 400



ENGINEERED DESIGN By: Clapaczonek - File #202769C R2 - 18-May-23

Pole location(s) Ⓢ dimensions are relative to 0.00 reference point(s) Ⓢ

ILLUMINATION SUMMARY



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Loyola Academy High School Football Wilmington, IL

GRID SUMMARY	
Name	Blanket Grid
Size	300'x300'x0'
Height	3.0' above grade

ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Scan Average	Entire Grid
Maximum	0.05
Minimum	0
Avg / Min	-
Max / Min	-
UG Radiant CU	55.02
No. of Points	0.01
LUMINAIRE INFORMATION	
Applied Circuits	A, B
No. of luminaires	59
Total Load	62.83 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.05 foot-candle depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken on-site using a calibrated light meter.

Electrical System Requirements: Refer to Appendix B for the "Musco Control System Summary" for electrical wiring.

Installation Requirements: Results assume a 3% nominal voltage at the site of the fixture and structures located within 3 feet (1m) of design locations.

Loyola Academy High School Football Winnetka, IL	
GRID SUMMARY	
Name:	Football
Size:	360 x 160'
Seating:	3,000 x 30.0'
Height:	3.0' above grade
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Guaranteed Average:	50
Scan Average:	50.71
Mainbeam:	56
Minimum:	46
Avg / Min:	1.11
Guaranteed Max / Min:	2
UG (adjacent):	11.23
UG (adjacent):	11.41
UG (adjacent):	0.18
No. of Points:	72
ILLUMINANCE INFORMATION	
Applied Circuits:	A, B
Total of luminaires:	59
Total load:	62.83 kW

 **musco**
Lighting

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ILLUMINATION SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN									
QTY	LOCATION	POLE SIZE	FEASIBLE HEIGHT	LUMINAIRES		QTY	TYPE	HPS	TOTAL
				TYPE	POLE				
1	F1	80'	80'	TLC-R80W	2	2	2	0	0
			20'	TLC-R80W-U	1	1	0	0	0
			20'	TLC-R80W-U	2	2	0	0	0
1	F2	80'	80'	TLC-R80W	6	6	0	0	0
			20'	TLC-R80W-U	9	2	0	0	0
			20'	TLC-R80W-U	2	2	0	0	0
			20'	TLC-R80W-U	5	5	0	0	0
2	F3-F4	80'	80'	TLC-R80W	2	2	0	0	0
			15.5'	TLC-R80W-U	2	2	0	0	0
			15.5'	TLC-R80W-U	2	2	0	0	0
			80'	TLC-R80W-U	50	50	0	0	0
4	TOTALS								



SCALE IN FEET 1 : 20

0 20 40

ENGINEERED DESIGN BY: CLAPACZONEK - FILE #202769C R2 - 18-May-23

Loyola Academy High School Football

Wilmerville, VT

GRID SUMMARY	
Name:	Valor Bleachers
Size:	360' x 160'
Spacing:	100' x 100'
ILLUMINATION SUMMARY	
MAINTAINED NON-UNIFORM ILLUMINATION LEVELS	
Scan Average:	12.34
Minimum:	17
Avg / Min:	1.61
Max / Min:	2.16
UG (adjacent ps):	1.41
CU:	0.01
No. of Points:	48
LUMINAIRE INFORMATION	
Applied Circuits:	A, B
No. of luminaires:	200
Total Load:	62.83 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume a 3% nominal voltage at the line side of the drive and structures located within 3 feet (1m) of design locations.



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ILLUMINATION SUMMARY

GRID SUMMARY	
Name	Concession Area
Spacing	10.0 x 10.0'
Height	3.0' above grade
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOT-CANDLES	
Scan Average	Entire Grid
Minimum	15.95
Maximum	31
Avg / Min	6.09
Max / Min	11.73
UG (adjacent pos)	1.46
CU	0.01
No. of Points	60
LUMINAIRE INFORMATION	
Applied Circuits	A, B
No. of luminaires	59
Total Load	62.83 kW

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ILLUMINATION SUMMARY

Loyola Academy High School Football
Wilmette, IL

Lighting System

Pole / Fixture Summary					
Pole ID	Pole Height	Min Height	Fixture Qty	Luminaire Type	Load
F1	80'	80'	4	TLC-LED-1200	468 kW
		80'	6	TLC-LED-1500	846 kW
		80'	2	TLC-RGBW	128 kW
		20'	2	TLC-BT-575	115 kW
		20'	1	TLC-RGB-U	0.43 kW
F2	80'	80'	5	TLC-LED-1200	585 kW
		80'	6	TLC-LED-1500	846 kW
		20'	2	TLC-RGBW	128 kW
		20'	2	TLC-BT-575	115 kW
		80'	3	TLC-RGB-U	0.43 kW
F3-F4	80'	80'	6	TLC-LED-1500	846 kW
		80'	2	TLC-RGBW	128 kW
		16'	2	TLC-BT-575	115 kW
		16'	1	TLC-RGB-U	0.43 kW
4			59		62.88 kW

Circuit Summary			
Circuit	Description	Load	Fixture Qty
A	Football	55.89 kW	47
B	RGB	6.94 kW	12

Fixture Type Summary					
Type	Source	Wattage	Lumens	L90	L80
TLC-LED-1500	LED 5700K - 75 CRI	1410W	181,000	>120,000	>120,000
TLC-LED-1200	LED 5700K - 75 CRI	1170W	150,000	>120,000	>120,000
TLC-RGBW	LED 5700K - 75 CRI	640W	28,500	>120,000	>120,000
TLC-RGB-U	RED-GREEN (Shown) BLUE	430W	16,000	>86,300	>86,300
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>120,000	>120,000

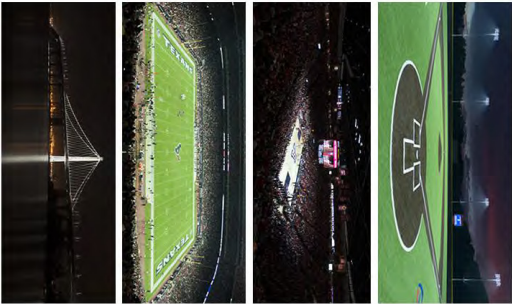
Single Luminaire Ampage Draw Chart					
Driver (80 min power factor)					
Max Line Ampage Per Luminaire					
Single Phase Voltage					
	208	220	240	277	347
	(60)	(60)	(60)	(60)	(60)
TLC-LED-1500	6.4	7.9	7.3	6.3	5.0
TLC-LED-1200	6.9	6.5	6.0	5.2	4.2
TLC-RGBW	4.5	4.3	3.8	3.3	2.7
TLC-RGB-U	3.0	2.8	2.6	2.2	1.8
TLC-BT-575	3.4	3.2	2.9	2.5	2.0

Light Level Summary

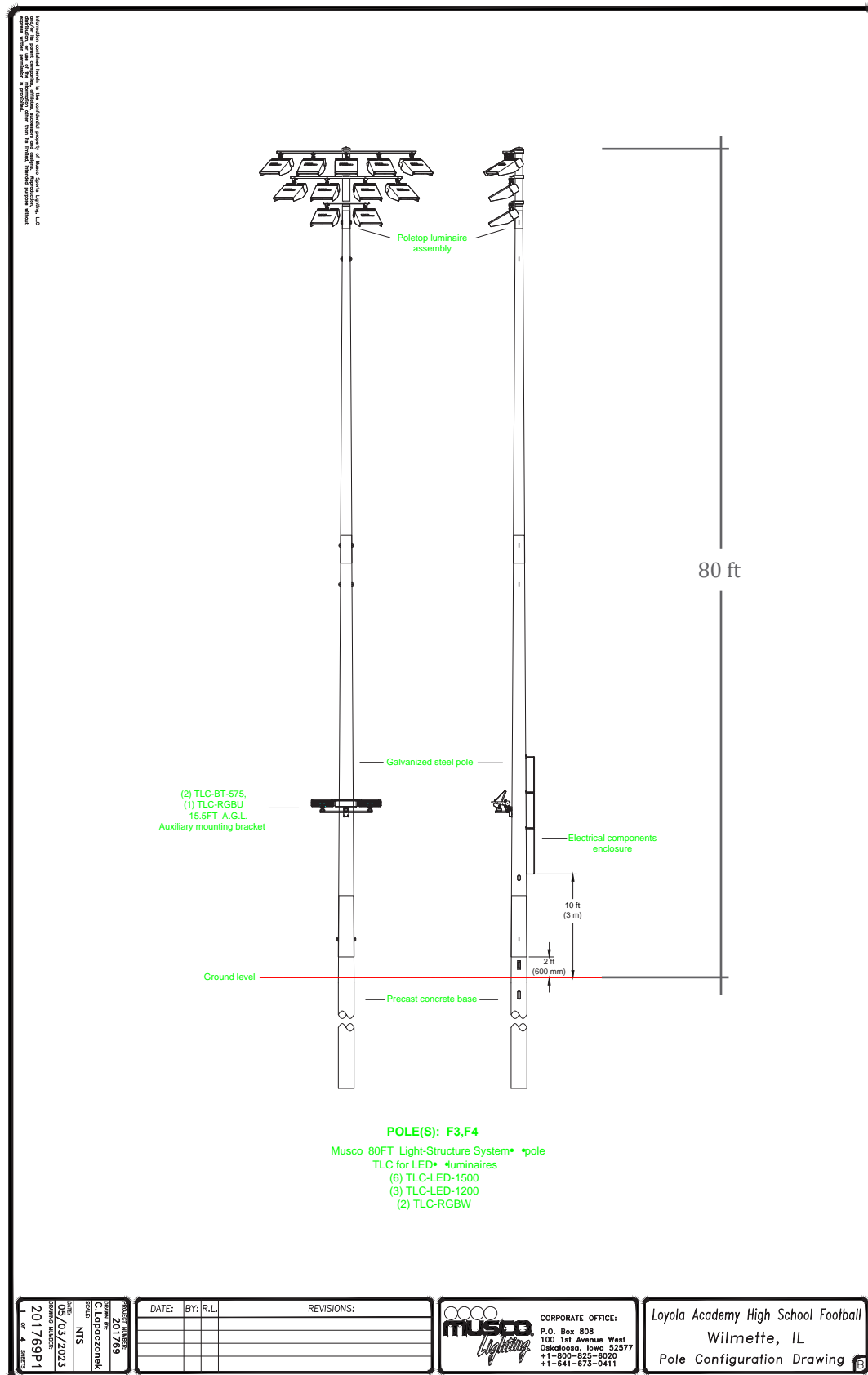
Calculation Grid Summary		Calculation Metric		Foot Candles		Lux		Foot Candles		Lux		Foot Candles		Lux	
Grid Name				Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Blanket Grid		Horizontal		0	6	0.00									
Competition Area		Horizontal		15.9	3	11.73	5.28	A.B		A.B					
Football		Horizontal Illuminance		50.7	46	98	1.23	1.10	A.B						
Home Bleachers		Horizontal		18.4	7	34	4.74	2.63	A.B						
House Property Line		Horizontal		0	0	0.00			A.B						
House Property Line		Max Candela (by Fixture)		0.34	0	2.05	0.00		A.B						
Property Line		Horizontal		0	0	0.00			A.B						
Property Line		Max Candela (by Fixture)		10.9	0	143	0.00		A.B						
Road Property Line		Horizontal		0.03	0	0.10	0.00		A.B						
Road Property Line		Max Candela (by Fixture)		1987	0	8925	0.00		A.B						
Track		Horizontal Illuminance		26.7	6	48	8.13	4.45	A.B						
Visitor Bleachers		Horizontal		12.3	8	17	2.16	1.54	A.B						

ENGINEERED DESIGN By Clapaczonek - File #202769C R2 - 18-May-23

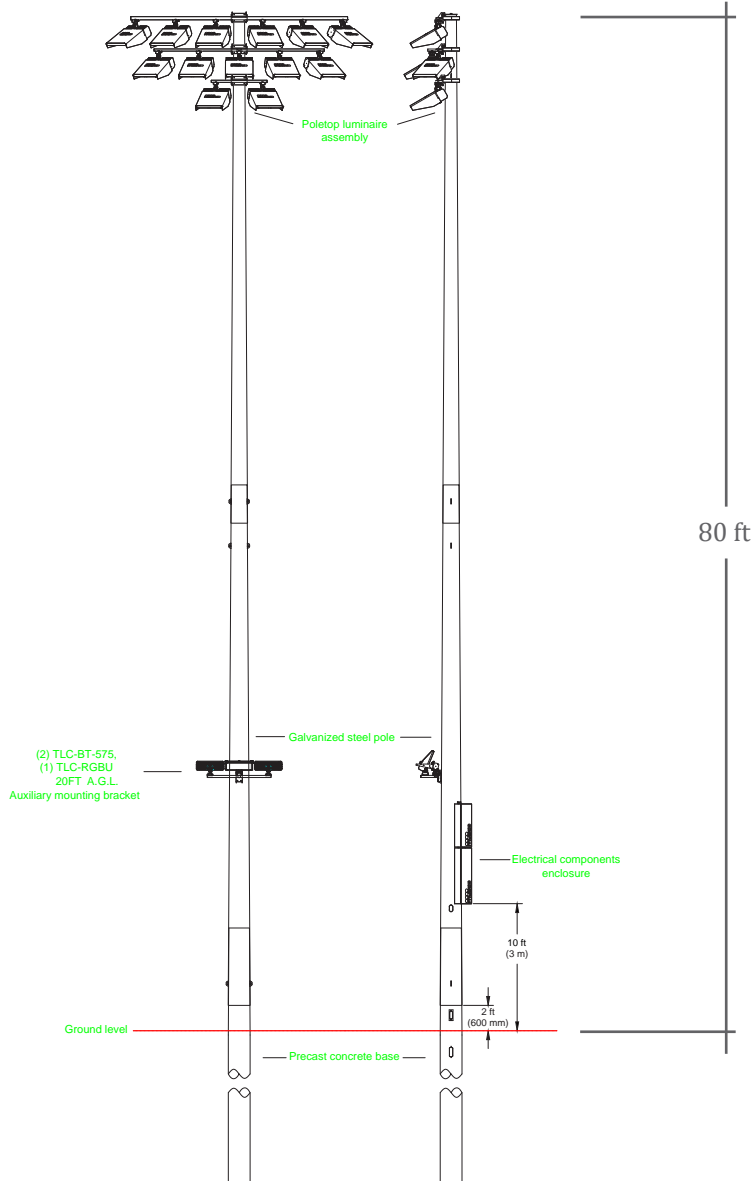
From Hometown to Professional



LIGHT POLE SPECIFICATIONS



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POLE(S): F2
 Musco 80FT Light-Structure System* *pole
 TLC for LED* *luminaires
 (6) TLC-LED-1500
 (5) TLC-LED-1200
 (2) TLC-RGBW

PROJECT NUMBER: 201769	DATE: 05/05/2023
DRAWN BY: C. Lopez	CHECKED BY: NTS
SCALE: 1" = 10'	DATE: 05/05/2023
PROJECT NUMBER: 201769P1	DATE: 05/05/2023

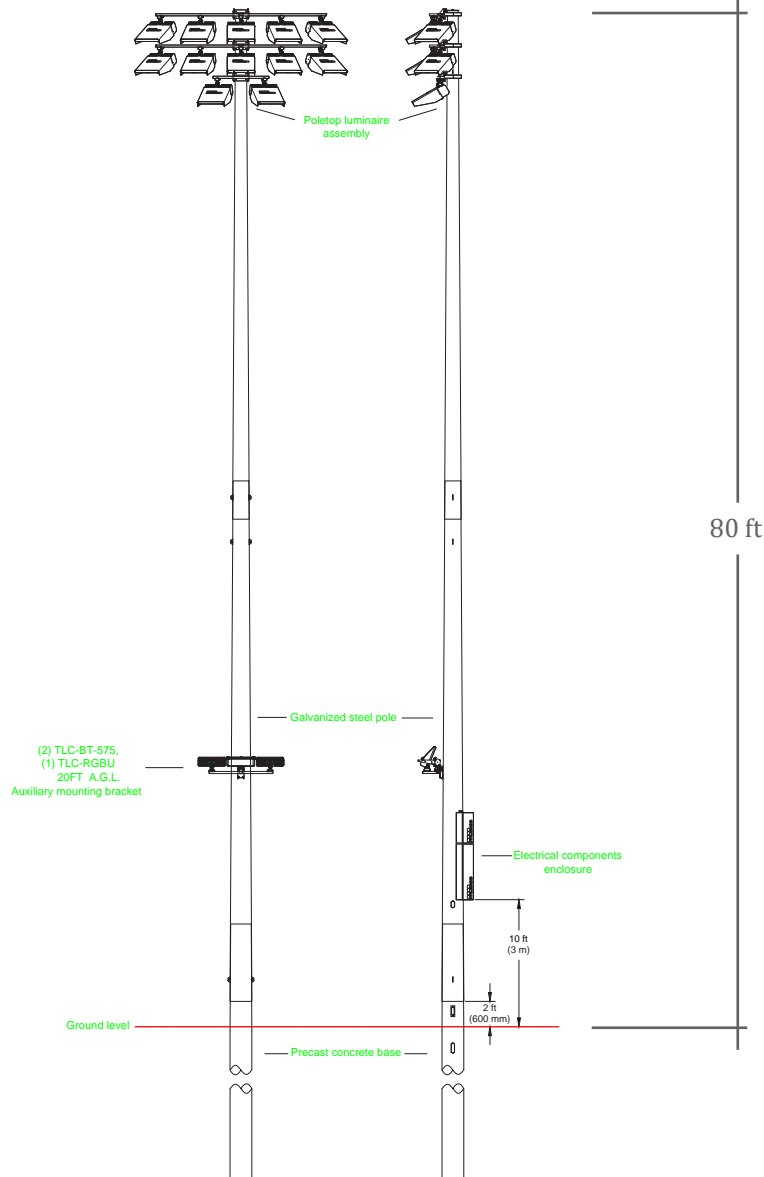
DATE	BY	R/L	REVISIONS

MUSCO
Lighting

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Loyola Academy High School Football
 Wilmette, IL
 Pole Configuration Drawing

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POLE(S): F1
Musco 80FT Light-Structure System • pole
TLC for LED • luminaires
(6) TLC-LED-1500
(4) TLC-LED-1200
(2) TLC-RGBW

DATE: 10/03/2023	BY: NTS	201769P1
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DATE:	BY:	R.L.	REVISIONS:

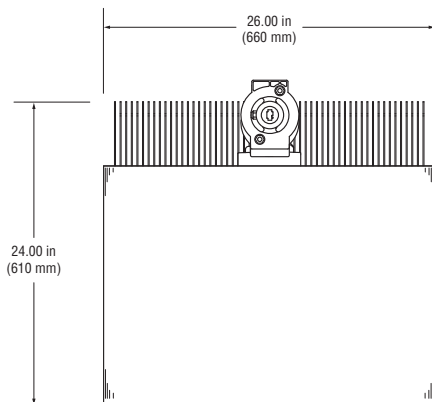
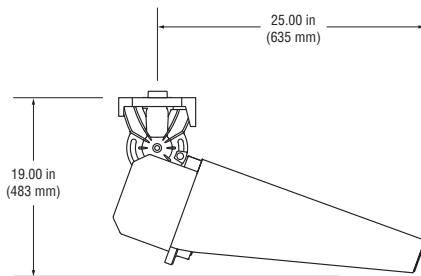
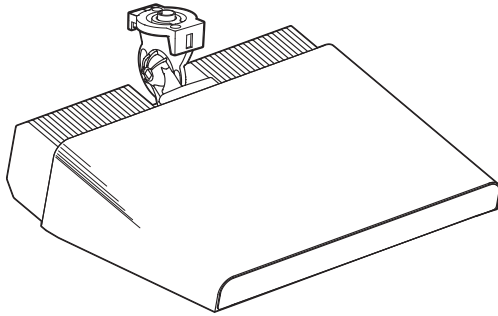
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Loyola Academy High School Football
Wilmette, IL
Pole Configuration Drawing

LIGHTING FIXTURE CUT SHEET

Datasheet: TLC-LED-1200 Luminaire and Driver



Luminaire Data

Weight (luminaire)	45 lb (20 kg)
UL listing number	E338094
UL listed for USA / Canada	UL1598 CSA-C22.2 No.250.0
CE Declaration	LVD, EMC, RoHS
Ingress protection, luminaire	IP65
Impact rating	IK07
Material and finish	Aluminum, powder-coat painted
Wind speed rating (aiming only)	150 mi/h (67 m/s)
UL, IEC ambient temperature rating, luminaire	50°C (122°F)

Photometric Characteristics

Projected lumen maintenance per IES TM-21-11

L90 (20k)	>120,000 h
L80 (20k)	>120,000 h
L70 (20k)	>120,000 h
Lumens ¹	136,000
CIE correlated color temperature	5700 K
Color rendering index (CRI)	75 typ, 70 min
LED binning tolerance	7-step MacAdam Ellipse

Footnotes:

1) Incorporates appropriate dirt depreciation factor for life of luminaire.



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Datasheet: TLC-LED-1200 Luminaire and Driver

Driver Data

Electrical Data

Rated wattage ¹	
Per driver	1170 W
Per luminaire	1170 W
Number of luminaires per driver	1
Starting (inrush) current	<40 A, 256 µs
Fuse rating	15 A
UL, IEC ambient temperature rating, electrical components enclosure	50°C (122°F)
Ingress protection, electrical components enclosure	IP54
Efficiency	95%
Dimming mode	optional
Range, energy consumption	14 – 100%
Range, light output	19 – 100%
Flicker	<2%
Total harmonic distortion (THD) at full output	<20%

	200 Vac 50/60 Hz	208 Vac 60 Hz	220 Vac 50/60 Hz	230 Vac 50 Hz	240 Vac 50/60 Hz	277 Vac 60 Hz	347 Vac 60 Hz	380 Vac 50/60 Hz	400 Vac 50 Hz	415 Vac 50 Hz	480 Vac 60 Hz
Max operating current per luminaire ²	7.26 A	6.98 A	6.60 A	6.31 A	6.05 A	5.24 A	4.18 A	3.82 A	3.63 A	3.50 A	3.03 A

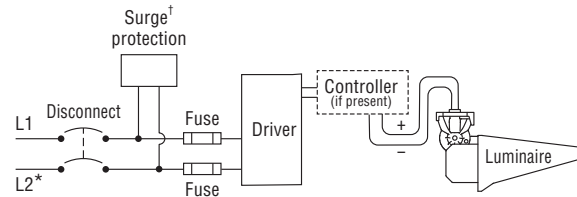
Footnotes:

- 1) Rated wattage is the power consumption, including driver efficiency losses, at stabilized operation in 25°C ambient temperature environment.
- 2) Operating current includes allowance for 0.90 minimum power factor, operating temperature, and LED light source manufacturing tolerances.

Notes

1. Use thermal magnetic HID-rated or D-curve circuit breakers.
2. See *Musco Control System Summary* for circuit information.

Typical Wiring



* If L2 (com) is neutral then not switched or fused.

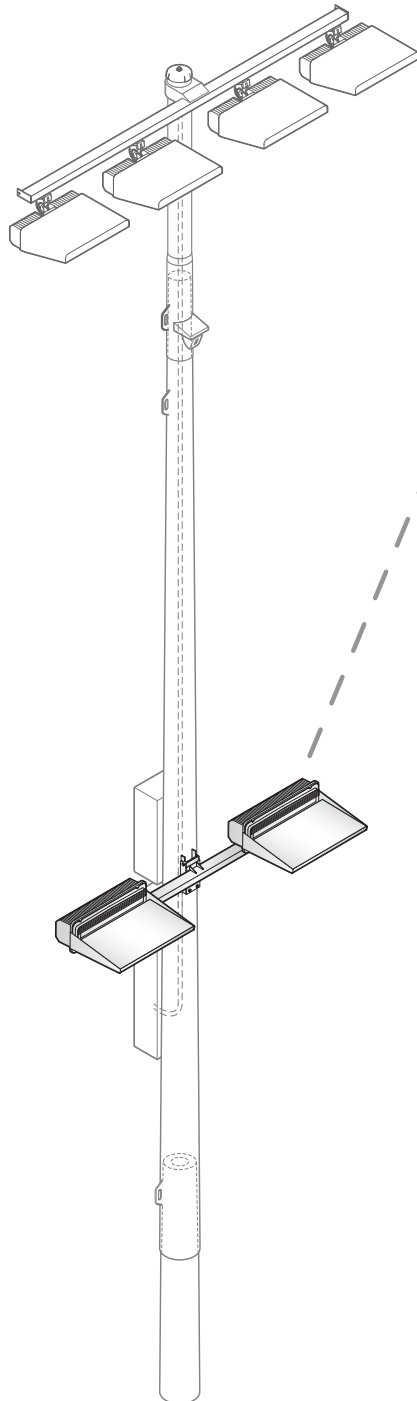
† Not present if indoor installation.



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Luminaire and Driver – TLC-BT-575



Luminaire Data

Weight (luminaire)	34 lb (15 kg)
UL listing number	E338094
UL listed for USA/Canada	UL1598 CSA-C22.2 No.250.0
CE Declaration	LVD, EMC, RoHS
Ingress protection (luminaire)	IP65
Impact rating	IK07
Material and finish	Aluminum, powder-coat painted
Wind speed rating (aiming only)	150 mi/h (67 m/s)
UL, IEC ambient temperature rating (luminaire)	50°C (122°F)

Photometric Characteristics

Projected lumen maintenance per IES TM-21-11	
L90 (20k)	>120,000 h
L80 (20k)	>120,000 h
L70 (20k)	>120,000 h
Lumens ¹	52,000
CIE correlated color temperature	5700 K
Color rendering index (CRI)	75 typ, 70 min
LED binning tolerance	7-step MacAdam Ellipse

Footnotes:

- 1) Incorporates appropriate dirt depreciation factor for life of luminaire.

All components from foundation to poletop are designed to work together in Light-Structure System™ to ensure reliable, trouble-free operation.



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Luminaire and Driver – TLC-BT-575

Driver Data

Electrical Data

Rated wattage¹

Per driver 575 W

Per luminaire 575 W

Number of luminaires per driver 1

Starting (inrush) current <40 A, 256 µs

Fuse rating 15 A

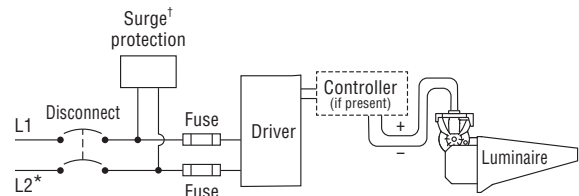
UL, IEC ambient temperature rating, electrical components enclosure 50°C (122°F)

Ingress protection, electrical components enclosure IP54

Efficiency 95%

Total harmonic distortion (THD) at full output <20%

Typical Wiring



* If L2 is neutral then not switched or fused.

† Not present if indoor installation.

	200 Vac 50/60 Hz	208 Vac 60 Hz	220 Vac 50/60 Hz	230 Vac 50 Hz	240 Vac 50/60 Hz	277 Vac 60 Hz	347 Vac 60 Hz	380 Vac 50/60 Hz	400 Vac 50 Hz	415 Vac 50 Hz	480 Vac 60 Hz
Max operating current per luminaire ²	3.48 A	3.35 A	3.16 A	3.03 A	2.90 A	2.51 A	2.01 A	1.83 A	1.74 A	1.68 A	1.45 A

Footnotes:

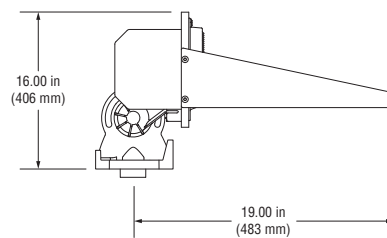
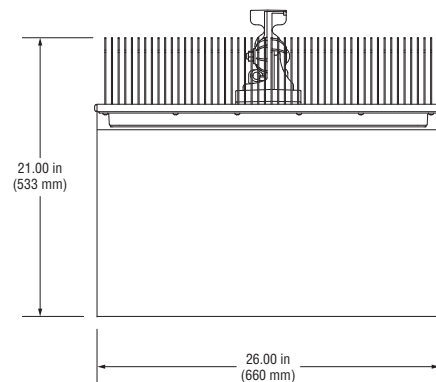
1) Rated wattage is the power consumption, including driver efficiency losses, at stabilized operation in 25°C ambient temperature environment.

2) Operating current includes allowance for 0.90 minimum power factor, operating temperature, and LED light source manufacturing tolerances.

Notes

1. Use thermal magnetic HID-rated or D-curve circuit breakers.

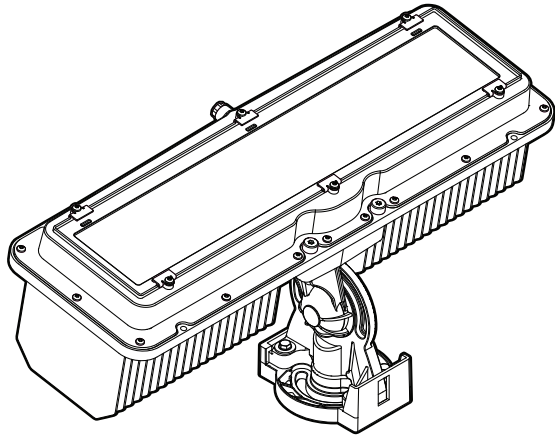
2. See *Musco Control System Summary* for circuit information.



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Datasheet: **TLC for LED® RGBA-U Luminaire and Driver**



Luminaire Data

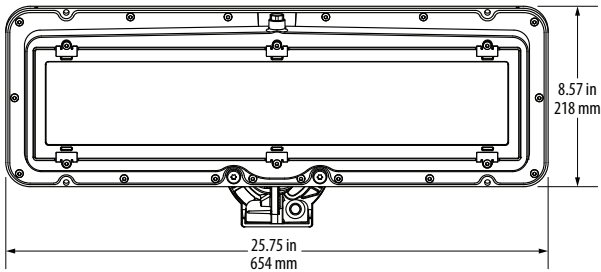
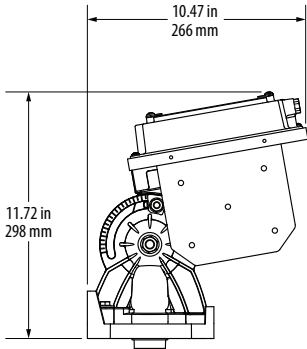
Weight (luminaire)	40 lb (18 kg)
UL listing number	E338094
UL listed for USA / Canada	UL 1598 CSA-C22-2 No.250.0
Ingress protection (luminaire)	IP65
Impact rating	IK07
Material and finish	Aluminum, powder-coat painted
Wind speed rating (aiming only)	150 mi/h (67 m/s)
UL ambient temperature rating (luminaire)	50°C (122°F)

Photometric Characteristics

Lumens ¹ , amber	17,500
Lumens ¹ , red	8000
Lumens ¹ , green	20,000
Lumens ¹ , blue	8000

Footnotes:

1) Incorporates appropriate dirt depreciation factor for life of luminaire.



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www.musco.com • lighting@musco.com

Datasheet: TLC for LED® RGBA-U Luminaire and Driver

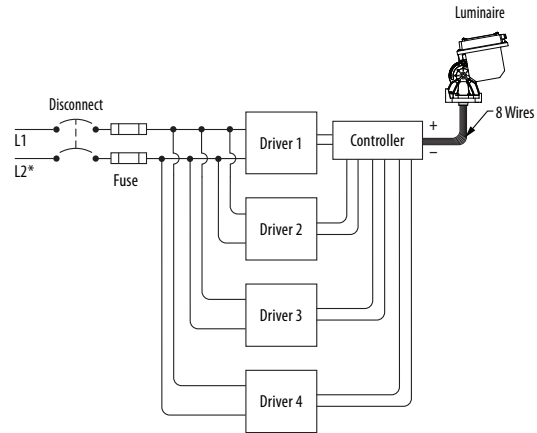
Driver Data

Electrical Data

Rated wattage ¹	
Per luminaire, max	640 W
Number of drivers per luminaire	4
Starting (inrush) current	106 A, 5 ms
Fuse rating	20 A
UL, IEC ambient temperature rating (electrical components enclosure)	50°C (122°F)
Ingress protection (electrical components enclosure)	IP54
Efficiency	94%
Dimming mode	optional
Range, energy consumption	varies by color
Range, light output	varies by color

	200 Vac 50/60 Hz	208 Vac 60 Hz	220 Vac 50/60 Hz	230 Vac 50 Hz	240 Vac 50/60 Hz	277 Vac 60 Hz	347 Vac 60 Hz	480 Vac 60 Hz
Max operating current per luminaire ²	3.56 A	3.44 A	3.24 A	3.08 A	2.96 A	2.56 A	2.04 A	1.48 A

Typical Wiring



* If L2 is neutral then not switched or fused.

Footnotes:

- 1) Rated wattage is the power consumption, including driver efficiency losses, at stabilized operation in 25°C ambient temperature environment.
- 2) Operating current includes allowance for power factor, operating temperature, and LED light source manufacturing tolerances.

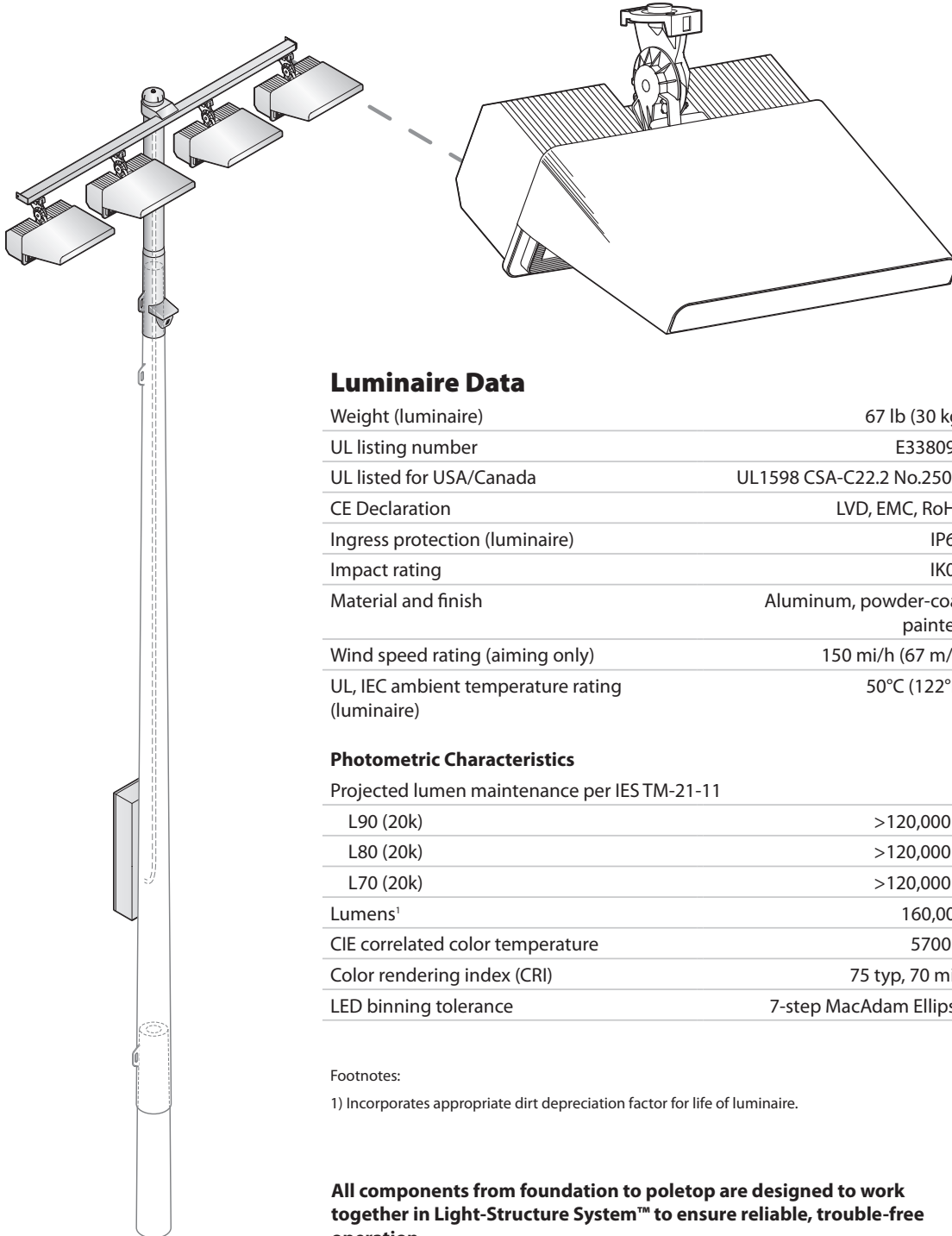
Notes

1. Use thermal magnetic HID-rated or D-curve circuit breakers.
2. See *Musco Control System Summary* for circuit information.



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Luminaire and Driver – TLC-LED-1500



Luminaire Data

Weight (luminaire)	67 lb (30 kg)
UL listing number	E338094
UL listed for USA/Canada	UL1598 CSA-C22.2 No.250.0
CE Declaration	LVD, EMC, RoHS
Ingress protection (luminaire)	IP65
Impact rating	IK07
Material and finish	Aluminum, powder-coat painted
Wind speed rating (aiming only)	150 mi/h (67 m/s)
UL, IEC ambient temperature rating (luminaire)	50°C (122°F)

Photometric Characteristics

Projected lumen maintenance per IES TM-21-11

L90 (20k)	>120,000 h
L80 (20k)	>120,000 h
L70 (20k)	>120,000 h
Lumens ¹	160,000
CIE correlated color temperature	5700 K
Color rendering index (CRI)	75 typ, 70 min
LED binning tolerance	7-step MacAdam Ellipse

Footnotes:

1) Incorporates appropriate dirt depreciation factor for life of luminaire.

All components from foundation to poletop are designed to work together in Light-Structure System™ to ensure reliable, trouble-free operation.



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Luminaire and Driver – TLC-LED-1500

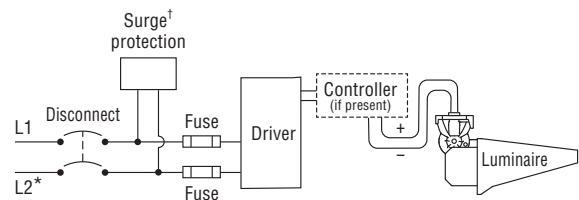
Driver Data

Electrical Data

Rated wattage¹

Per driver	1430 W
Per luminaire	1430 W
Number of luminaires per driver	1
Starting (inrush) current	<40 A, 256 μs
Fuse rating	15 A
UL, IEC ambient temperature rating, electrical components enclosure	50°C (122°F)
Ingress protection, electrical components enclosure	IP54
Efficiency	95%
Dimming mode	optional
Range, energy consumption	12 – 100%
Range, light output	17 – 100%
Flicker	<2%
Total harmonic distortion (THD) at full output	<20%

Typical Wiring



* If L2 is neutral then not switched or fused.

† Not present if indoor installation.

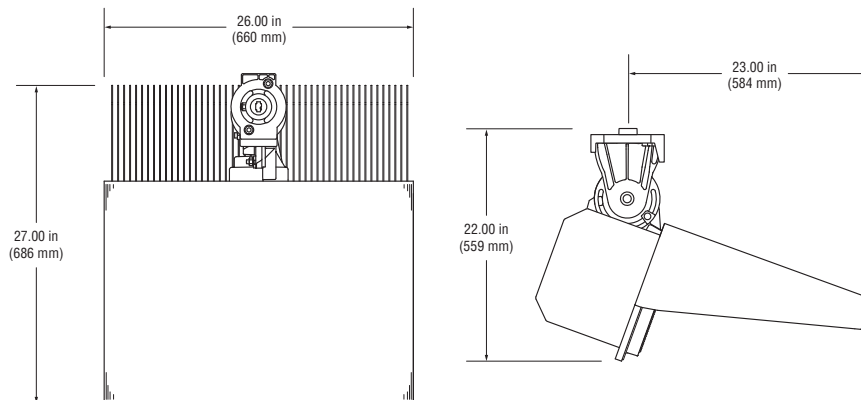
	200 Vac 50/60 Hz	208 Vac 60 Hz	220 Vac 50/60 Hz	230 Vac 50 Hz	240 Vac 50/60 Hz	277 Vac 60 Hz	347 Vac 60 Hz	380 Vac 50/60 Hz	400 Vac 50 Hz	415 Vac 50 Hz	480 Vac 60 Hz
Max operating current per luminaire ²	8.86 A	8.52 A	8.06 A	7.71 A	7.39 A	6.40 A	5.11 A	4.67 A	4.43 A	4.27 A	3.70 A

Footnotes:

- 1) Rated wattage is the power consumption, including driver efficiency losses, at stabilized operation in 25°C ambient temperature environment.
- 2) Operating current includes allowance for 0.90 minimum power factor, operating temperature, and LED light source manufacturing tolerances.

Notes

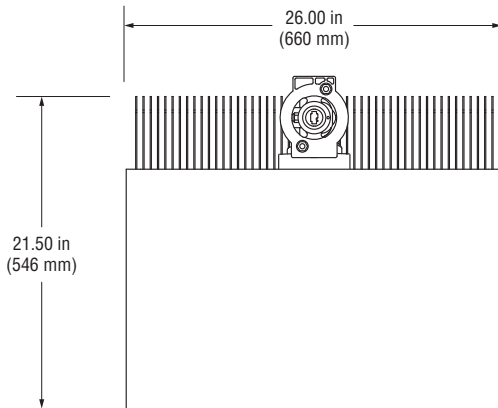
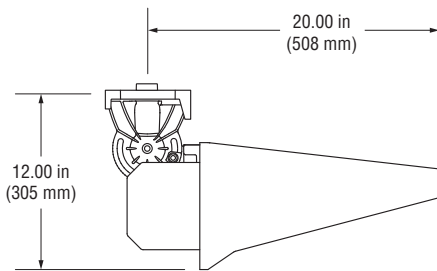
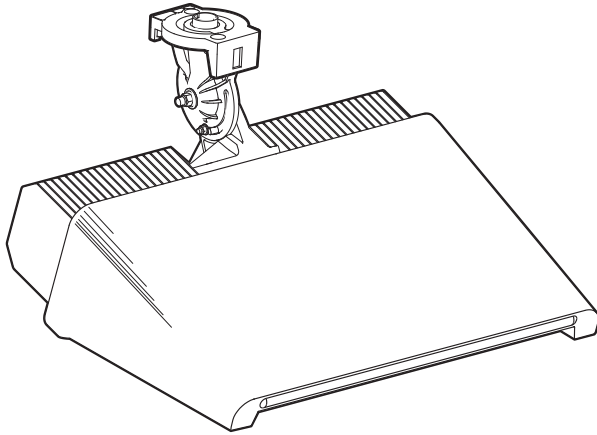
1. Use thermal magnetic HID-rated or D-curve circuit breakers.
2. See *Musco Control System Summary* for circuit information.



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www.musco.com • lighting@musco.com

Datasheet: TLC for LED® RGBW Luminaire and Driver



Luminaire Data

Weight (luminaire)	40 lb (18 kg)
UL listing number	E338094
UL listed for USA / Canada	UL 1598 CSA-C22-2 No.250.0
Ingress protection, luminaire	IP65
Impact rating	IK07
Material and finish	Aluminum, powder-coat painted
Wind speed rating (aiming only)	150 mi/h (67 m/s)
UL ambient temperature rating, luminaire	50°C (122°F)

Photometric Characteristics

Projected lumen maintenance per IES TM-21-11

L90 (20k) (white only)	>120,000 h
L80 (20k) (white only)	>120,000 h
L70 (20k) (white only)	>120,000 h
CIE correlated color temperature (white only)	5700 K
Color rendering index (CRI) (white only)	75 typ, 70 min
Lumens ¹ , white	28,500
Lumens ¹ , red	8,000
Lumens ¹ , green	20,000
Lumens ¹ , blue	8,000
LED binning tolerance	7-step MacAdam Ellipse (white LEDs only)

Footnotes:

1) Incorporates appropriate dirt depreciation factor for life of luminaire.



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Datasheet: TLC for LED® RGBW Luminaire and Driver

Driver Data

Electrical Data

Rated wattage ¹	
Per luminaire, max	640 W
Number of drivers per luminaire	4
Starting (inrush) current	106 A, 5 ms
Fuse rating	20 A
UL, IEC ambient temperature rating, electrical components enclosure	50°C (122°F)
Ingress protection, electrical components enclosure	IP54
Efficiency	94%
Dimming mode	optional
Range, energy consumption	varies by color
Range, light output	varies by color

	200 Vac 50/60 Hz	208 Vac 60 Hz	220 Vac 50/60 Hz	230 Vac 50 Hz	240 Vac 50/60 Hz	277 Vac 60 Hz	347 Vac 60 Hz	480 Vac 60 Hz
Max operating current per luminaire ²	3.56 A	3.44 A	3.24 A	3.08 A	2.96 A	2.56 A	2.04 A	1.48 A

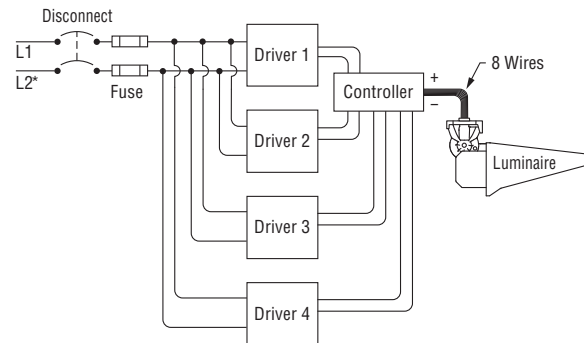
Footnotes:

- 1) Rated wattage is the power consumption, including driver efficiency losses, at stabilized operation in 25°C ambient temperature environment.
- 2) Operating current includes allowance for power factor, operating temperature, and LED light source manufacturing tolerances.

Notes

1. Use thermal magnetic HID-rated or D-curve circuit breakers.
2. See *Musco Control System Summary* for circuit information.

Typical Wiring

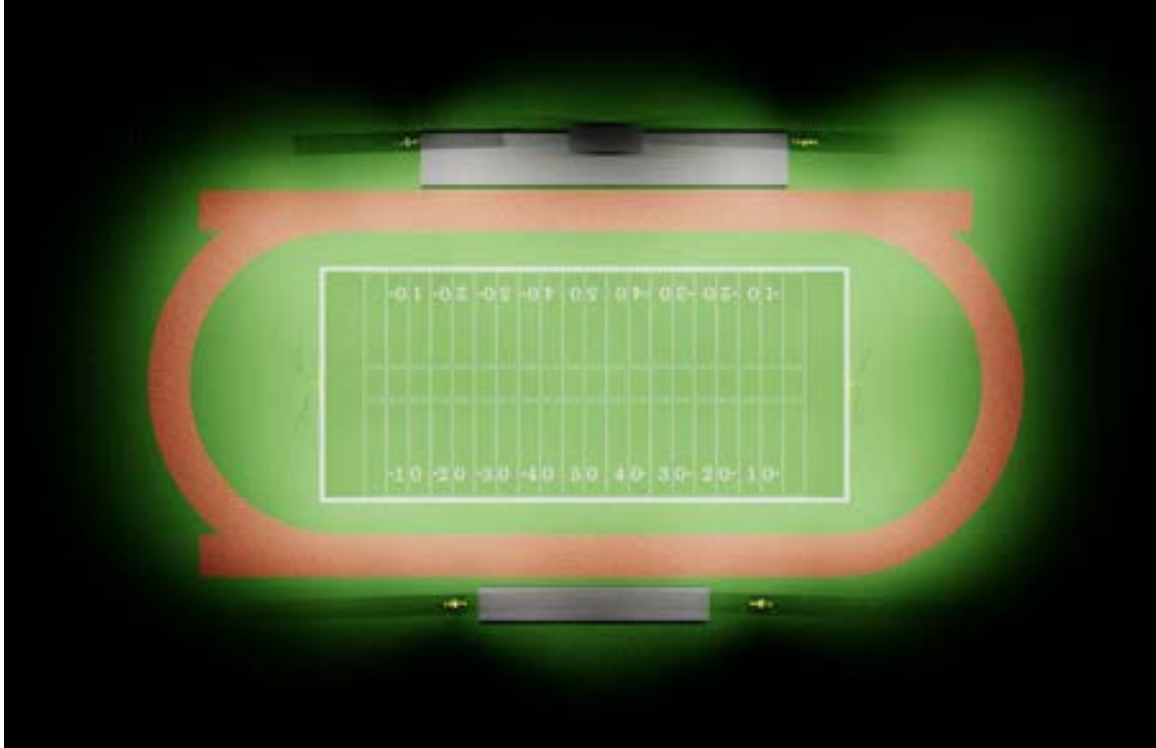


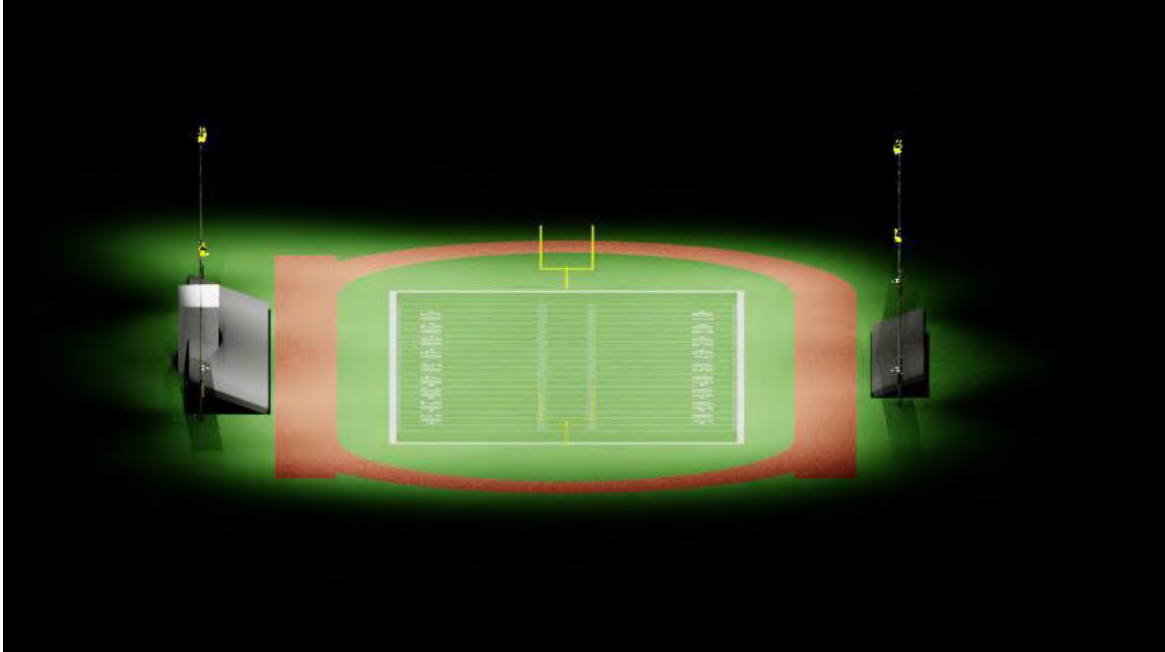
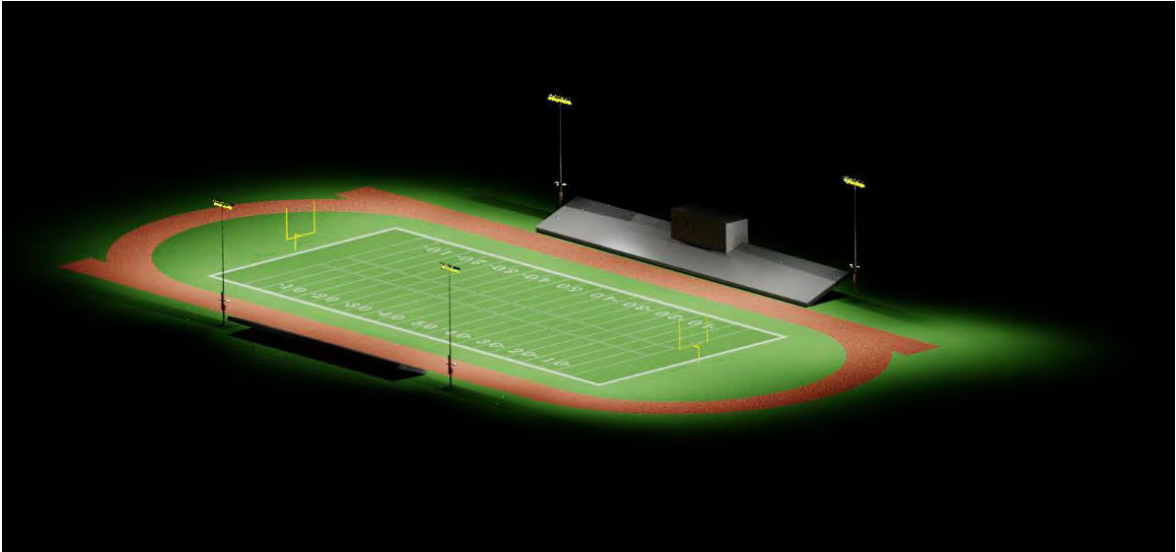
*If L2 is neutral then not switched or fused.

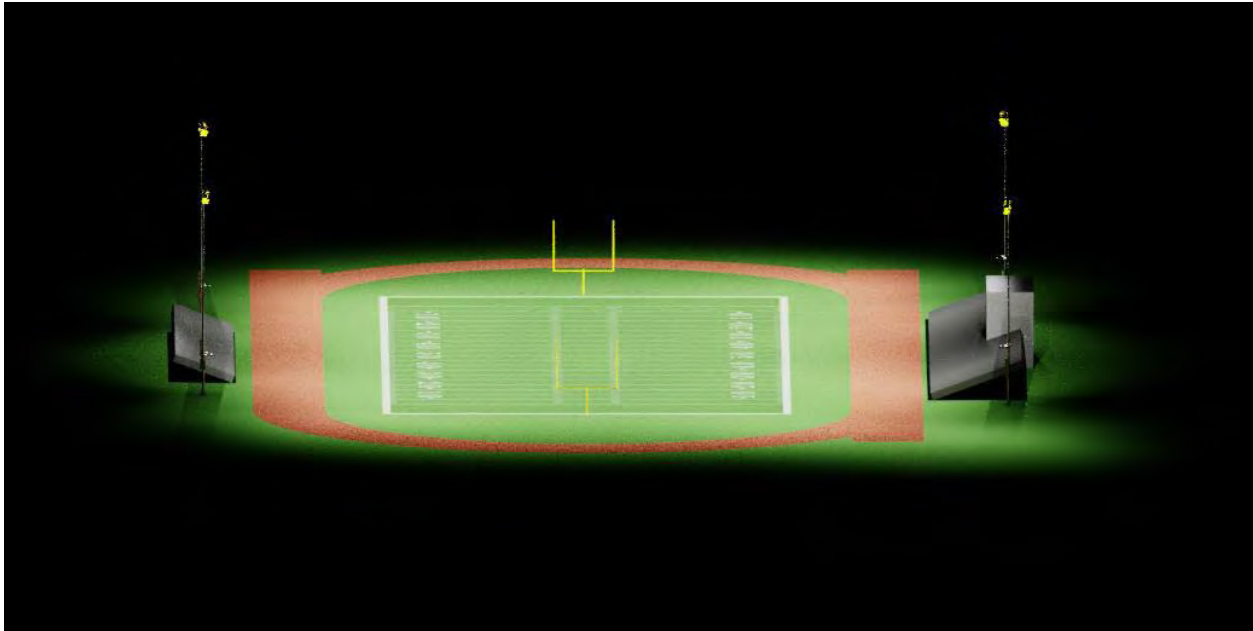


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www.musco.com • lighting@musco.com

ATHLETIC FIELD LIGHT RENDERINGS







SECTION 3:

Key Project Request Metrics

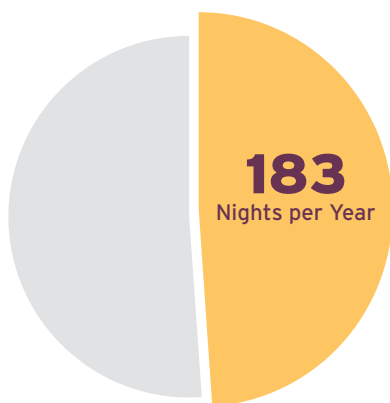
EVOLUTION OF THE REQUEST

In an ongoing effort to address concerns from the neighborhood and better optimize Loyola Academy's program efficiency, Loyola Academy has modified the anticipated use of the athletic field lighting from the original plan. The current request is the third major change to the planned use of the lights and a significant decrease from earlier proposals.

The framework of the proposal includes:

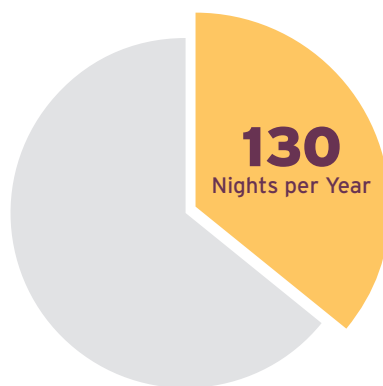
- Nights per year when the lights will be turned on
- Types of events for which lighting will be used on the field
- Cut off time, or lighting curfew time

First Iteration



- Fall Season (Sept - Nov) & Spring Season (March - May)
- 6 Friday night football games
- 10:30 pm cutoff for football games
- 9:00 pm cutoff for practices and non-football games
- ShineToo lighting system

Second Iteration



- No weekend use of lights
- 5 Friday night football games
- 10:30 pm cutoff for football games
- 8:30 pm cutoff for practices and non-football games
- Added Loyola Academy sanctioned IHSA hosting possibility
- LED lighting system by Musco

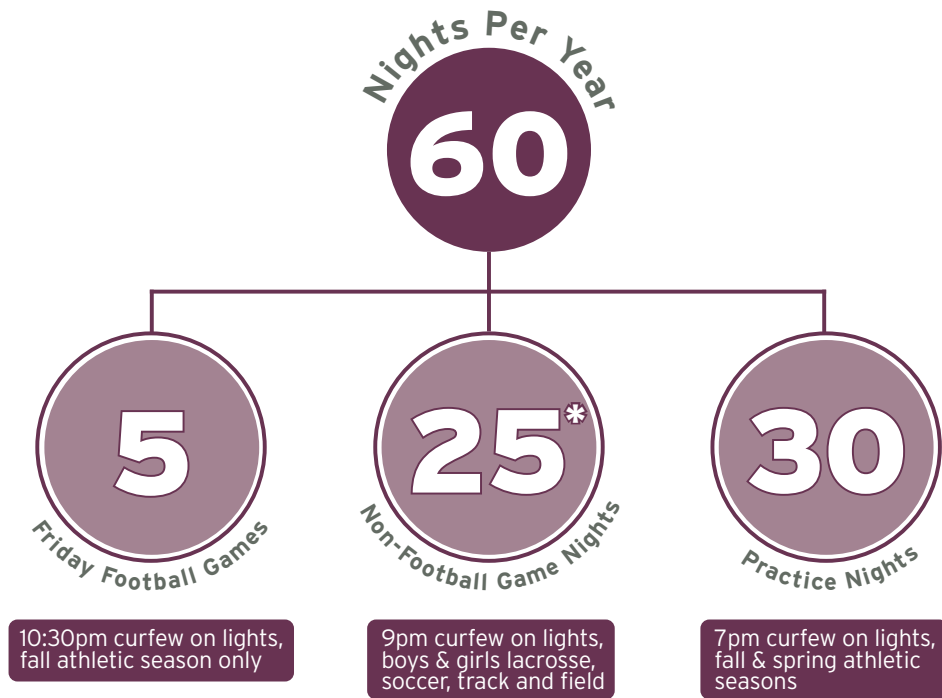
Current Plan



- Limited Saturday use
- 5 Friday night football games
 - 10:30 pm cutoff for football games
- 25 non-football game contests
 - 9:00 pm cutoff
- 30 practice nights
 - 7:00 pm cutoff

CURRENT PLAN METRICS

Loyola Academy will use the outdoor lights on the athletic field according to the following plan:



*Note the athletic fields current use includes 25 non-football games each year. These games noted above are not in addition to the current use of the field.

ADDITIONAL USE STIPULATIONS

WEEKEND USE

- No use of lights on Sundays
- Saturday use of lights only under the following circumstances:
 - » Non-football game with Loyola Academy athletes
 - » Non-football IHSA Game when Loyola Academy is competing
 - » “Act of God” event (delayed/rescheduled/suspended football game)
 - » 9:00 PM curfew on lights

USE LIMITATIONS

- Lights will only be used by Loyola Academy students or athletics
- No third-party facility rentals can use the field lights
- No music or concert events can use the lights

PLANNED FREQUENCY OF USE

What does this use look like during a calendar year?








SECTION 4:

**Our
Neighborhood
Voice**

SUMMARY OF ENGAGEMENT

Loyola Academy, in partnership with the Lakota Group, crafted an engagement strategy to inform the neighbors of the requests to add athletic field lighting to the facilities. The input from the community was very helpful in understanding the issues and concerns of local residents.

Through continuing outreach efforts and ongoing communication with Loyola Academy's neighbors, the school has identified the following perceived key concerns:

-  Increased traffic & congestion associated with lighted (Friday or other) evening events.
-  Noise nuisances associated with lighted (Friday or other) evening events.
-  Increased safety & security concerns associated with lighted (Friday or other) evening events.
-  Brightness, glare, and lighting intrusion from the proposed stadium lighting.
-  Impact on property valuation and the normal peaceful enjoyment of one's property.

OPEN HOUSE: FEBRUARY 8, 2023

Loyola Academy hosted an open house at the Wilmette Golf Club to share concept drawings and plans for outdoor lighting at the school's athletic fields on Laramie Avenue. About a dozen residents attended the event, listened to a presentation from Marty Jennings, VP of Alumni and Network Engagement, about Loyola's proposal, and had an opportunity to review the plans and ask questions.

Residents shared a number of thoughts and concerns about the plan to install lights around the athletic field:

- **Neighborhood Nuisances on Friday Nights.**
Neighbors understood that varsity football games currently held on Saturdays would be held on Friday evenings if the lighting is installed. There was concern about traffic, parking, and pedestrian safety in the neighborhood after the games, noting they felt it worse be at night on Fridays than it is currently in daylight on Saturdays. There as concern that this activity would negatively impact the tranquility in the neighborhood.
- **Clarity on Scope of the Use of the Lights.**
There was interest in the exact nature of how Loyola Academy intended to use the outdoor lighting. Residents questioned whether it was a specific number of nights throughout the school year, or associated with activities that would take place more regularly. The cutoff time for the lights was also discussed. While proposed at 10:30 PM, there was concern they would remain on later.



- **Noise & Sounds from Nighttime Athletic Events.** Residents acknowledged there are sounds associated with high school sporting events, such as music from the marching band, announcements over the public address system throughout the game, and crowd noises. These have been an accepted part of the neighborhood on Saturdays, but would be a greater disturbance on Friday nights.

OPEN HOUSE: JUNE 14, 2023

Loyola Academy made changes to the lighting plan in response to feedback from the first open house and created additional exhibits that explained the scope of the proposal more clearly. All this was shared at a second neighborhood open house at Wilmette Golf Club. The summer weather allowed the gathering to be conducted outside on the rear patio where the Loyola Academy team shared the new information and answered questions from attendees.

About a dozen neighbors attended this open house and took time to review the exhibits, including a calendar illustrating the current use of the athletic field and the proposed use including night events with lighting. While the additional information clarified Loyola Academy's lighting proposal, residents shared concerns including the following:

- Use of the lights after the hours specified in the Special Use Permit, i.e. what happens if the lights stay on past the agreed-upon cut off time
- Parking and traffic associated with the biggest football games on Friday nights
- Schedule and cut-off time for weekday use of the lights

Loyola Academy has revised the lighting plan in response to these concerns and prepared information on how neighborhood concerns will be addressed.



HOW PUBLIC INPUT SHAPED LOYOLA ACADEMY'S REQUEST

As the "Evolution of the Request" illustrates, Loyola Academy has reduced and revised usage of the outdoor lighting to address input from neighborhood residents. Overall use of the lights was reduced from 183 to 60 nights, the number of Friday night football games was reduced, lighted evening practices were reduced, and cut off times for the lights were moved back to earlier times.

The next section of this report details how other community impacts identified during Loyola Academy's engagement efforts will be addressed, including traffic and circulation, noise intrusion, and safety and security.

Loyola Academy continues to foster a positive relationship with our neighbors and remains committed to addressing and monitoring any current and future impacts to the neighborhood as part of its continued operations.

This request for lighting is seen as a substantial programming and operational need and not a physical change to the campus environment. The four sports lighting fixtures required to meet these operational needs will have limited physical impact to the character of the campus or our adjacent neighbors and will address all local applicable codes and regulations.



SECTION 5:

Neighborhood Impacts

NEIGHBORHOOD IMPACTS

In response to community concerns, Loyola Academy has taken specific steps to address the perceived impacts of the athletic field lighting and its planned seasonal usage. The five areas of concern identified through engagement are:



Traffic & Parking Impacts



Noise



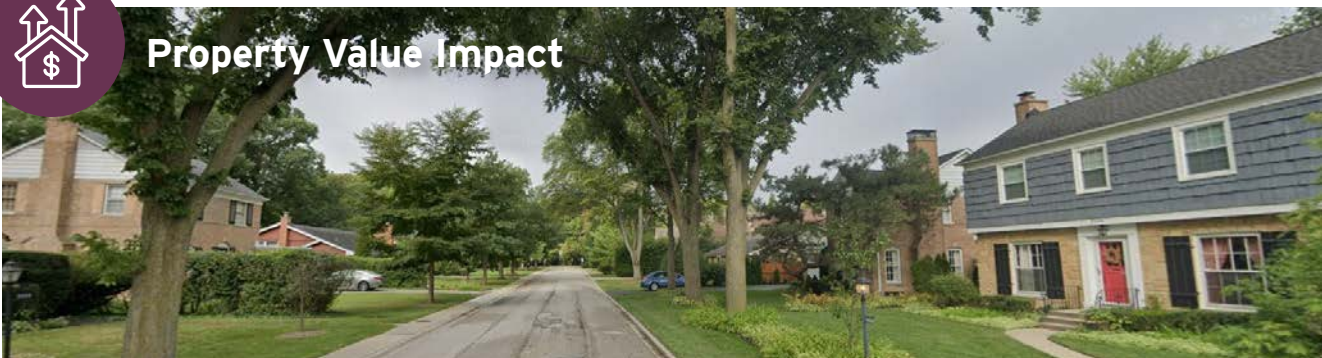
Safety & Security



Light Distribution



Property Value Impact





TRAFFIC & PARKING

“Traffic and parking are already a problem in the neighborhood, the addition of Friday night football games will make things worse.” - Neighborhood Resident

Loyola Academy continues to monitor and manage the overall campus parking and circulation as part of the Loyola Forward 2040 Master Plan commitment and has prepared a more detailed parking management plan to address peak events associated with the stadium light. These strategies include off-site parking, increased fines for violations, and improved enforcement of parking and traffic regulations.

Loyola Academy commissioned Kimley-Horn and Associates, Inc. to create a Traffic Management Plan that evaluated potential impacts of increased auto and pedestrian activity associated with use of the athletic field with the proposed outdoor lighting. Kimley Horn has been working with the Academy to address traffic and circulation issues for nearly a decade and was active in the master planning process over the last several years.

The Traffic Management Plan identifies a series of strategies to address the following:

- Vehicular Traffic
- Parking
- Pedestrians
- Public Transportation

The Plan analyses attendance at typical Loyola Academy athletic events, as well as the occasional games with high attendance. Specific strategies for Special Events address the following:

- Event Parking (off-campus parking lots with shuttles)
- Neighborhood Parking
- Off-Site Parking (designated overflow lots)
- Community Engagement and Review
- Communications

Traffic and parking management strategies to mitigate neighborhood impacts include controlled access, off-site parking plans, and increased fines for on-street parking violations.

Please refer to the full Traffic Management Plan in Section 6 of this application for more information.

Example Signage for Event Parking





NOISE

“The noise from Friday night football games and lighted events will be louder than current conditions and create a neighborhood nuisance.” - Neighborhood Resident

Our team acoustical engineer has modeled the potential increase in noise created by anticipated lighted events at Loyola Academy’s athletic field.

- Edens Expressway nearby creates substantial ambient noise
- Sounds from the athletic field during lighted events have the potential to exceed this ambient noise only slightly
- Music played during games may be audible, but will not significantly increase the noise impact on neighboring properties.

Loyola Academy’s new time and usage limitations will reduce the potential for noise impacts to the neighborhood. Please refer to the Football Stadium Noise Evaluation and Supplemental Football Stadium noise evaluation in Section 6 of this application which summarize the conclusions of Acoustic Associates, Ltd. These conclusions analyze noise in the Loyola Academy neighborhood and the potential impacts of additional sound created by athletic activities on the school’s property.



SAFETY & SECURITY

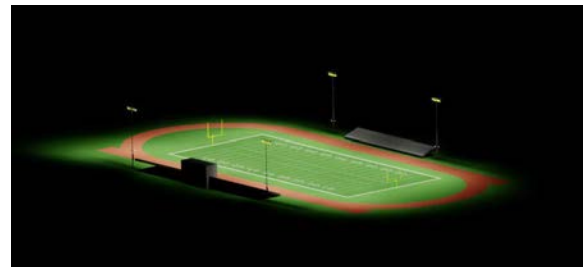
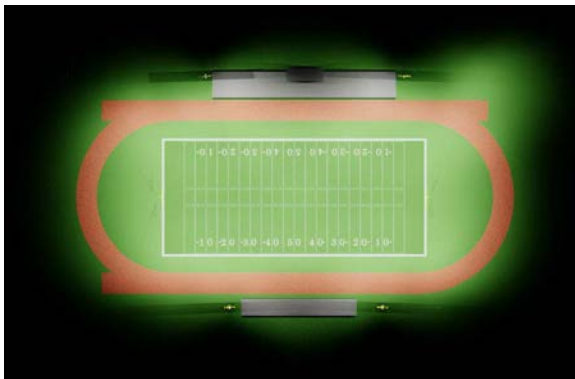
- Coordination with Wilmette Police Department
 - » Up to six officers at Friday night football games
 - » Needs will be evaluated annually
- Torch Club, comprised of six to eight students, will assist safety officers in parking management and traffic control
- Loyola Academy Neighborhood Liaison will provide a consistent point of contact for neighbors to address concerns
- Athletic field lighting brightness lowered after games to minimum brightness to allow safe and secure exit from facility



LIGHT DISTRIBUTION

Loyola Academy has invested in industry-leading LED lighting technology that provides maximum control over light spillage and glare. Zero light spill will occur over residential property lines adjacent to the field. Optimized fixture technology and mounting height reduces the need for additional light poles. For more information on the lighting, please refer to the lighting plans in Section 2 of this application package.

Figure: Athletic Field Lighting Renderings



PROPERTY VALUE IMPACT

Loyola Academy's real estate appraisal consultant has studied and identified numerous comparable case valuation studies to analyze the potential impact, if any, on the value of the surrounding residential properties of the addition of four 80-foot tall light poles for the Loyola Academy athletic field.

- 10 similar school athletic fields with outdoor lighting in the Chicago area were evaluated
- Many are surrounded by residential land uses and have similar usage schedules
- Many have residential properties in closer proximity than Loyola Academy and use older, less controllable lighting technology
- Existing conditions and proposed usage plan factored into analysis

Conclusion of study: the proposed improvements to the Loyola Academy athletic field will not diminish property values in the vicinity

Please refer to the complete Market Impact Analysis included in this application.



SECTION 6:

Additional Application Documents

ZBA AMENDED APPLICATION FOR PUBLIC HEARING

**VILLAGE OF WILMETTE ZONING
BOARD OF APPEALS
Amended Application for Public Hearing**

1. PETITIONER AND OWNER INFORMATION

Petitioner's Name: Loyola Academy

Property Address: 1100 Laramie Avenue, Wilmette, Illinois 60091

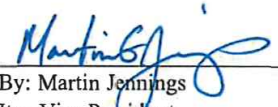
Mailing Address (if different): _____

Petitioner's Daytime Phone: 847-920-2429

Petitioner's Email: mjennings@loy.org

PETITIONER:

LOYOLA ACADEMY


By: Martin Jennings

Its: Vice President

Date: 8/15/2023

Is Loyola Academy the legal owner of the property? YES ☒ NO

If not, state the owner's name, address and phone number and submit his/her signature here or in a letter of authorization.

Owner's Name: _____

Owner's Address: _____

Owner's Daytime Phone: _____

Owner's Email: _____

Owner's Signature _____

_____ Date

Letter of Authorization Attached

2. PROPERTY DESCRIPTION

Legal Description of the property:

LOT 1 IN LOYOLA ACADEMY CONSOLIDATION, BEING A CONSOLIDATION OF PARTS OF THE SOUTH EAST QUARTER OF SECTION 30, TOWNSHIP 42 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 28, 2015 AS DOCUMENT NO. 1514834005, IN COOK COUNTY, ILLINOIS

Present Use: Institutional/Educational

3. DESCRIPTION OF REQUEST

Application for: ☒ Variation ☒ Special Use

Briefly describe the request: Please see attached.

- ☒ Please attach a separate letter addressed to the Zoning Board of Appeals stating how this request conforms to the standards of review for a variation and/or a special use as set forth in the Village of Wilmette Zoning Ordinance.

4. CHECKLIST OF COMPLETE SUBMITTALS

Please check off those attachments being submitted with this application. *Please note: applications are scheduled in order of filing date, with complete applications being scheduled first.*

Required Submittals

- ☒ Filing Fee (see the current fee schedule)
- ☒ Evidence of Ownership
- ☒ Plans
 - ☐ Site Plan, showing lot dimensions, existing and proposed structures, existing and proposed setbacks, distances to structures on adjoining lots, and a north arrow.
 - ☐ Floor plans to accurate scale with all dimensions indicated.
 - ☐ Elevations drawn to accurate scale with all dimensions indicated.
- ☒ Plat of Survey
- ☐ Floor Area Worksheets (if applicable; consult Village staff if unsure)
- ☒ Letter to the Zoning Board of Appeals, containing Standards of Review
- ☒ Traffic Study (if applicable; consult Village staff if unsure)

All correspondence should be addressed to:
Community Development Department
Village of Wilmette
1200 Wilmette Avenue
Wilmette, IL 60091

**VILLAGE OF WILMETTE ZONING BOARD OF APPEALS
AMENDED APPLICATION FOR PUBLIC HEARING DATED 8/15/2023**

**DESCRIPTION OF REQUEST FOR
AMENDMENT TO EXISTING SPECIAL USE PERMIT,
APPROVAL OF NEW SPECIAL USE PERMIT AND
VARIATIONS**

(LOYOLA ACADEMY, WILMETTE, ILLINOIS)

Loyola Academy is seeking to install outdoor lighting on its Laramie Avenue Campus athletic field. Loyola is pursuing this request for the reasons detailed in the Project Narrative which accompanies this application. In furtherance of this request, Loyola seeks the following zoning relief from the Village:

1. Pursuant to Section 30-5.3(i)(l) of the Zoning Ordinance, Loyola seeks an expansion of its existing special use for the Laramie Avenue campus, which was approved by Ordinance No. 93-0-36, an Ordinance Granting a Special Use Permit to Loyola Academy, which ordinance was subsequently amended by Ordinance No. 2017-0-63 and Ordinance No. 2020-0-38.
2. Pursuant to Section 30-13.3.c.1.B of the Zoning Ordinance, Loyola seeks approval of a new special use permit to allow for the installation of outdoor recreational field lighting on its Laramie Avenue campus athletic field.
3. Section 30-13.3.a.1.C of the Zoning Ordinance limits light levels to no greater than .5 footcandle at the property line. Loyola seeks a variation to allow for light levels reaching 6.0 footcandles along Loyola's east and south property lines where the property abuts the Edens Expressway and expressway on-ramp.
4. Section 30-13.3.c.1.A of the Zoning Ordinance limits the height of lighting for non-residential uses to 18 feet in height with fully-shielded luminaires. Loyola seeks a variation to allow for athletic field lighting poles that will be 80 feet tall with luminaires that are not fully-shielded.
5. Section 30-8.3 of the Zoning Ordinance requires land uses in the R1-A zoning district that are other than single-family residences to maintain a 20-foot side yard adjoining a street that is open and unobstructed from the ground to the sky. Loyola seeks a variation to allow for up to a five-foot encroachment into the side yard adjoining a street (i.e., the I-94 right-of-way) so that it can place two light poles within such yard. Those two light poles will be located 15 feet and 16 feet, 6 inches, respectively, from the east property line.
6. Section 30-13.7 of the Zoning Ordinance limits sound levels in residential zoning districts to 50 decibels between 7:00 a.m. and 7:00 p.m. and to 45 decibels between 7:00 p.m. and 7:00 a.m. Loyola seeks a variation from the provisions of Section 30-13.7 to allow for a maximum 1-second sound level along the boundaries of Loyola's campus property between the hours of 7:00 p.m. and 10:30 p.m. of 94 decibels on nights a football game is being played on the Loyola Academy athletic field (in other words, a maximum variation of 49 decibels). It should be noted that on a one-hour time-averaged (LEQ) basis, which is how the state of Illinois measures sound, the noise generated by a night football game is projected to generate sound at a level of between 66 and 69 decibels, which is generally only four to seven decibels above the sound level of traffic being generated on the nearby Edens Expressway.

PROOF OF OWNERSHIP

ALTA COMMITMENT FOR TITLE INSURANCE



CHICAGO TITLE INSURANCE COMPANY

Commitment Number:

17010944WF

CHICAGO TITLE INSURANCE COMPANY, a Florida corporation ("Company"), for a valuable consideration, commits to issue its policy or policies of title insurance, as identified in Schedule A, in favor of the Proposed Insured named in Schedule A, as owner or mortgagee of the estate or interest in the land described or referred to in Schedule A, upon payment of the premiums and charges and compliance with the Requirements; all subject to the provisions of Schedules A and B and to the Conditions of this Commitment.

This Commitment shall be effective only when the identity of the Proposed Insured and the amount of the policy or policies committed for have been inserted in Schedule A by the Company.

All liability and obligation under this Commitment shall cease and terminate six (6) months after the Effective Date or when the policy or policies committed for shall issue, whichever first occurs, provided that the failure to issue the policy or policies is not the fault of the Company.

The Company will provide a sample of the policy form upon request.

This Commitment shall not be valid or binding until countersigned by a validating officer or authorized signatory.

IN WITNESS WHEREOF, CHICAGO TITLE INSURANCE COMPANY has caused its corporate name and seal to be affixed by its duly authorized officers on the date shown in Schedule A.

Chicago Title Insurance Company

By:

President

Attest:

Secretary



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ALTA Commitment (06/17/2006)

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CHICAGO TITLE INSURANCE COMPANY**COMMITMENT NO. 17010944WF**

ORIGINATING OFFICE:	FOR SETTLEMENT INQUIRIES, CONTACT:
Chicago Title Company, LLC 2441 Warrenville Rd, Suite 100 Lisle, IL 60532 Main Phone: (630)871-3500 Email: ctwheaton@ctt.com	Chicago Title and Trust Company 2441 Warrenville Rd, Suite 100 Lisle, IL 60532 Main Phone: (630)871-3500 Main Fax: (630)871-3588

Issued By: Chicago Title Company, LLC
2441 Warrenville Rd, Suite 100
Lisle, IL 60532

SCHEDULE A**ORDER NO. 17010944WF**

Property Ref.: Loyola Academy, 1100 Laramie Ave, Wilmette, IL 60091

1. Effective Date: June 20, 2017

2. Policy or Policies to be issued:

- a. ALTA Owner's Policy 2006
Proposed Insured: Loyola Academy
Policy Amount: \$10,000.00

3. The estate or interest in the land described or referred to in this Commitment is:

Fee Simple

4. Title to the estate or interest in the land is at the Effective Date vested in:

Loyola Academy, a not-for-profit corporation

5. The land referred to in this Commitment is described as follows:

LOT 1 IN LOYOLA ACADEMY CONSOLIDATION, BEING A CONSOLIDATION OF PARTS OF THE SOUTH EAST QUARTER OF SECTION 30, TOWNSHIP 42 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 28, 2015 AS DOCUMENT NO. 1514834005, IN COOK COUNTY, ILLINOIS.

END OF SCHEDULE A

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ALTA Commitment (06/17/2006)

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NOISE EVALUATION

Acoustic Associates, Ltd.



Specialists in Hearing and Acoustics

867 Scottsdale Drive, Pingree Grove, IL 60140
Office: 847-359-1068 • Fax: 847-359-1207
Website: www.AcousticAssociates.com

Tom Thunder, AuD, FAAA, INCE – Principal
Greg Andorka, BSEE, MCS – Senior Field Engineer
Steve Thunder, BSA – Senior Acoustical Engineer

Football Stadium Noise Evaluation

Prepared for:
Marty Jennings - Loyola Academy, Wilmette, IL
April 24, 2023

Acoustic Associates was asked to evaluate the potential for noise emanating from the Loyola Academy evening football games. In undertaking this evaluation, we reviewed a football game noise study we conducted at Oak Park High School. We also conducted a site visit of the area surrounding the Loyola stadium to characterize and measure the existing ambient sound levels.

Wilmette Noise Code

Section 30-13.7(a)(1) of the Wilmette municipal code references the State of Illinois regulations which limit noise to a 1-hour LEQ of 55 dB for the hours from 7:00 AM to 10:00 PM. Table 13-3 of the Village code, however, specifies a limit of 50 dB for the daytime hours of 7:00 a.m. to 7:00 p.m. and 45 dB for the hours between 7:00 p.m. and 7:00 a.m. Based on this local code for evening games, the 45 dB limit would apply. These limits apply to any point on the receiving property.

Existing Ambient Noise Level

Regardless of the limits established by a noise code, the impact of a noise source is determined by the degree of its audibility above the existing ambient noise. To evaluate the current ambient noise level, we conducted a site visit to set up professional-grade equipment on Wednesday evening March 8 from 7:30-8:30 p.m. to record the noise on the east side of Laramie about 45 feet from the road (about the same distance the homes are from the road). This location is shown in **Figure 1**. Even though the homes are 90 feet further than this location, the ambient sound level at the homes would be less than a 1 dB lower, which is an immeasurable and indistinguishable difference.

Our audio recording was analyzed to document the ambient noise at 1-second intervals. The results are shown in **Figure 2**. While autos passing on Laramie Avenue were a source of intermittent noise, the source of continuous noise was the traffic on the Edens Expressway. **The time-averaged level of our sample (often called the Equivalent Level or LEQ) was 65 dBA.**

A sound level of 65 dBA is 20 dB higher than the Village nighttime limit and represents a loudness four (4) times higher than the code limit. Accordingly, the de facto limit for noise at this location is not the Village code, but rather the existing ambient level of 65 dBA. Stated differently, if the noise source is not significantly above the existing ambient noise, then it would pose no impact.



Figure 1- Aerial photo of the Loyola stadium showing our measurement location and the distance of the nearest residences to the stadium.

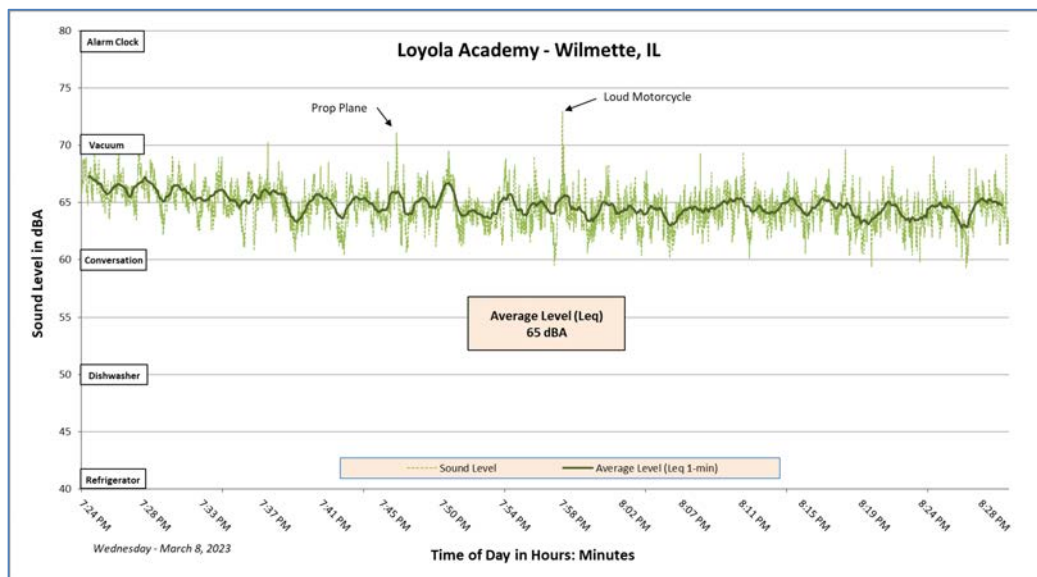


Figure 2 – The ambient noise levels near the homes west of the Loyola Academy stadium.

Football Event Noise

In September of 2007, we conducted sound level measurements at a football game at Oak Park High School. An audio recording was made to capture the entire game including the marching band at halftime and all of the PA announcements. The football sound was recorded at a distance of 50 feet from the endzone with a full view of the field and the fans in the stadium. For acoustical purposes, this location was about 175 feet from the “acoustic center” of the stadium.

Our analysis of the recording revealed that the sound level reached the 80-90 dB range about a dozen times. However, in environmental noise assessment, the accepted metric - and the one required by the State of Illinois - is the time-averaged sound level (sometimes called the equivalent level or LEQ). **The maximum 1-hour LEQ at 175 feet from the acoustic center of the stadium (and 50 feet from the endzone) at the Oak Park High School football game was 69 dBA.**

The sound level measured at Oak Park High School was for a distance of 175 feet from the acoustic center of the stadium. The homes across Laramie however are some 325 feet from the stadium. According to the attenuation-over-distance law of acoustics for large sound sources (such as stadiums), the sound level drops 4.5 dB for every doubling of distance. **Based on this law, we estimate a drop of about 4 dB compared to the Oak Park study.**

The sound measurement at Oak Park High School was for 1300 people. Loyola Academy states that attendance at an average game is about 1500 people. Per acoustic law, the sound level increases by 3 dB for every doubling of the number of sound sources. Accordingly, for 1500 people, the sound level would be 0.6 dB higher. For a rival game, the attendance could reach 3000 people and the sound level would be 3.6 dB higher. For the rare Unicorn games with 5000 people, the sound level would be 5.9 dB higher. **In summary, for typical games, we project an LEQ near the homes of 66 dBA. For rival games, we project a level of 69 dBA. For the Unicorn games, we project a level of 71 dBA.**

Impact of Stadium Noise

In basic acoustic textbooks, it is often stated that a 1 dB difference is imperceptible, a 3 dB difference is just noticeable, a 5 dB difference is significant, and a 10 dB difference is a doubling of loudness. **Table 1** is a chart we constructed to help readers assess - with better precision - the perceptual difference of an increase in the hourly LEQ when compared with the existing ambient noise level.

Table 1 reveals that for typical games with a projected level of 66 dB, the game sound level is only 1 dB over the existing ambient level. This would present no impact. For rival games, the projected level of 69 dBA is 4 dB over the ambient level. According to **Table 1**, this is a “just noticeable” difference and would present a slight impact. For the Unicorn

Table 1 – Perceptual Difference as a Function of the Decibel Increase

Decibel Increase	Perceptual Difference	Impact
1-2 dB	Negligible	None
3-4 dB	Just Noticeable	Slight
5-6 dB	Clearly Noticeable	Mild
7-8 dB	Strongly Noticeable	Moderate
9-10 dB	Doubling in Loudness	Substantial

Acoustic Associates, Ltd.

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games, the expected level of 71 dBA is 6 dB over the ambient level which would present a mild impact.

The discussion above presents an impact statement in the short term. But most environmental noise assessments are based on long-term effects, that is, when the noise is regular and ongoing. This is not the case for the Loyola football games which are **short-lived** (i.e., 3-hour games). The noise is also not regular but **periodic**. Finally, when noise is **predictable** (i.e., knowing when the games will start and stop), it poses a lower long-term impact. This is why sirens are tested on the first Tuesday of every month. When the testing occurs, the sound they generate is certainly annoying in the short term, but residents rarely say they pose a long-term annoyance because they are short-lived, periodic, and predictable.

In conclusion, based on our measurements, analysis, and insight, it is our professional opinion that these football events will pose no long-term impact.

Submitted by:



Dr. Thomas Thunder, AuD, FAAA, Bd. Cert INCE Emeritus
Audiologist and Acoustical Specialist
Adjunct Faculty – Northwestern University and Rush University

SUPPLEMENTAL NOISE EVALUATION

Acoustic Associates, Ltd.



Specialists in Hearing and Acoustics

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Tom Thunder, AuD, FAAA, INCE – Principal
Greg Andorka, BSEE, MCS – Senior Field Engineer
Steve Thunder, BSA – Senior Acoustical Engineer

Supplemental Football Stadium Noise Evaluation

Prepared for:
Marty Jennings - Loyola Academy, Wilmette, IL
August 15, 2023

Acoustic Associates prepared a report dated 4/24/23 that addressed noise emanating from Loyola Academy football games. In that report, we estimated that the 1-hour time-averaged sound level of a football game was 66-69 dBA¹ near the homes on Laramie Avenue. Since the “intrusiveness” of a noise source is based on how audible the noise is relative to the existing ambient noise, the report also gave the results of our evening ambient sound measurements which was a time-averaged level of 65 dBA as measured at Position 0 as shown in **Figure 1**. This position was chosen because it was representative of the homes closest to the stadium. The primary source of ambient noise at this location is the continuous noise of traffic on the Edens Expressway.

This report gives more details on the sound study we conducted at Oak Park High School during a high school football game that was referenced in our 4/24/23 report. It also provides the results of an ambient sound survey we conducted over a broader area around the campus that represented the property boundaries of the Loyola Academy campus.

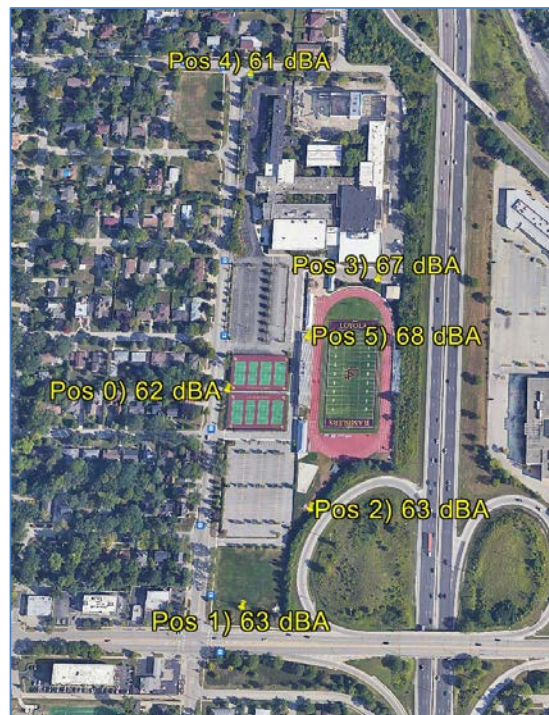


Figure 1- Aerial photo of Loyola Academy showing our measurement locations.

¹ The “A” after dB indicates the filter used on the sound level meter. The A filter is the most commonly used filter as it best represents how humans perceive the loudness of the noise. It is the filter stipulated by the US Environmental Protection Agency as well as the State of Illinois.

Football Event Noise

Figure 2 shows the measurements we made at the football game played at Oak Park High School on September 22, 2007. A nominal 3-hour audio recording was made to capture the game including the marching band at half-time. The sampling occurred 50 feet from the endzone with a full view of the field and about 1300 fans in the stadium.

As seen in **Figure 2**, the noise from the football game varied a great deal. While the time-averaged level of the 3-hour event (often called the equivalent level or LEQ) was 67 dBA, the maximum LEQ of this game in any 1-hour period was 69 dBA. The 1-hour reference period is used because the Village of Wilmette Zoning Ordinance references the State of Illinois noise regulations, which use the maximum 1-hour LEQ. The State limits apply only to noise radiated from a noise source.

Both the State code and the Village Zoning Ordinance allow subtracting ambient noise from the sound level readings to determine the source noise level.

Note from **Figure 2** that the sound levels reached levels in the 80-89 dBA range a dozen times during the 3-hour recording.

Our measurements at Oak Park High School were made at 50 feet from the end zone. In contrast, the closest homes in Wilmette are about 325 feet from the stadium. Because sound dissipates over distance, the sound level values for the Oak Park High School game need to be adjusted downward by 4 dB to account for the reduction over this extra distance at Loyola.

In addition, the measurements at the Oak Park High School game reflected an attendance of about 1300 people. Because more people generate more noise, the sound values for the Oak Park game need to be adjusted upward since attendance at Loyola games is greater. For a typical game of 1500 people, the adjustment is 0.6 dB. For a rivalry game with an expected attendance of about 3000 people, the adjustment is 3.6 dBA.

Using the above adjustments, we project a maximum 1-hour LEQ of 66 dBA ($69 - 4 + .6$) for a typical Loyola football game and 69 dBA for a rivalry game. Using these adjustments, we expect

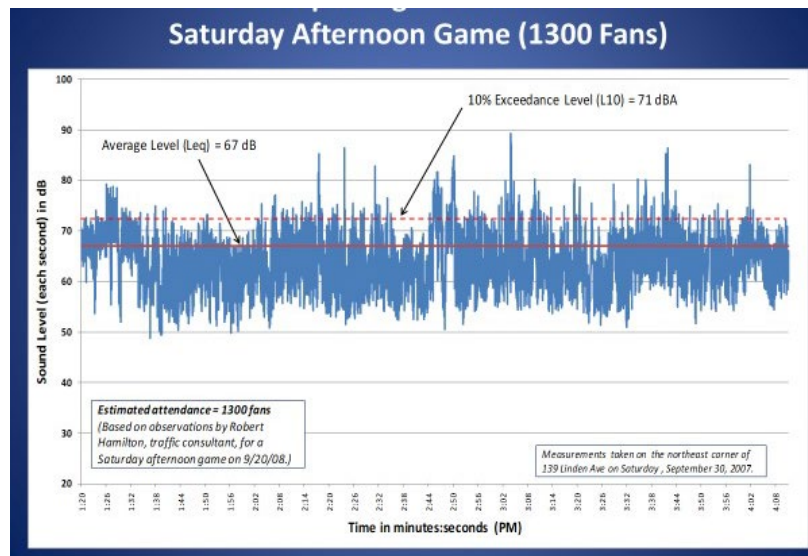


Figure 2 – Three-hour tracing of the football game played at Oak Park High School on September 30, 2007, at 50 feet from the end zone.

that the maximum sound levels at Position 0 will reach 77–87 dBA for a typical game and 80–89 dBA for a rivalry game.

Ambient Noise Levels Around the Campus Perimeter

In our earlier report, we documented the ambient noise at a single location labeled Position 0 in **Figure 1**. This location was chosen because it was near the homes closest to the stadium on Laramie Avenue. The ambient noise level at that location during a weekday evening was an LEQ of 65 dBA. However, we were asked to expand the number of locations to include locations on all Loyola property boundaries. The locations marked in **Figure 1** were chosen based on an aerial depiction and survey provided by attorney Harold Francke on 6/22/23. We conducted our follow-up study on Tuesday, July 18.

The aerial view in **Figure 1** shows all of the locations at Loyola Academy where additional ambient noise measurements were made. The noise level tracing for the recording at Location 0 (our previous location) is shown in **Figure 3**. It reveals a **time-averaged level of 62 dBA over the 1-3/4 hour sample**. Note in this figure that the instantaneous sound levels reached a range of 70-74 dBA about a half dozen times over the sample period.

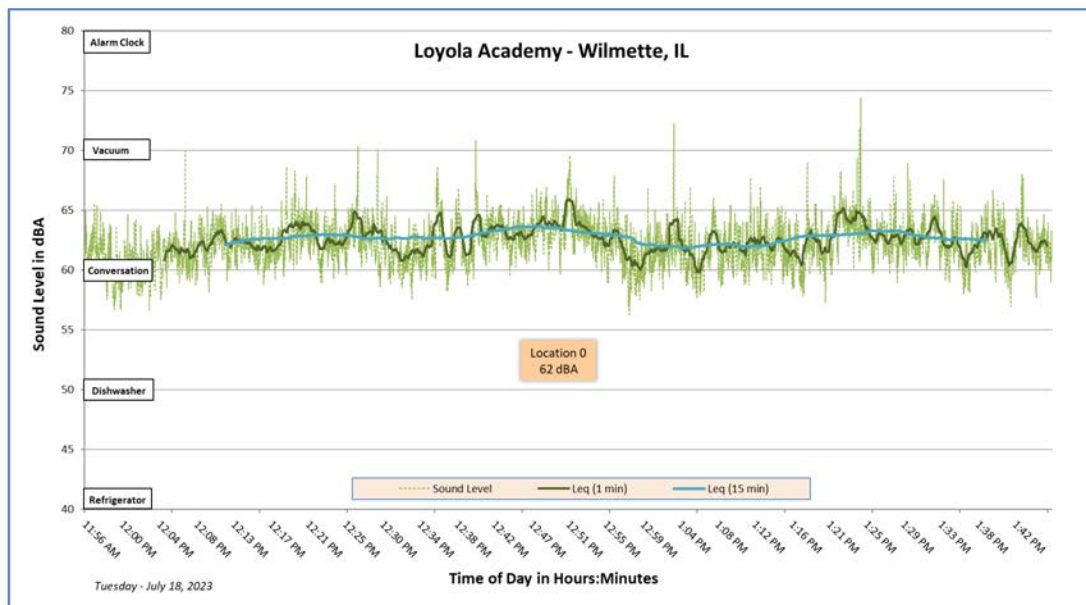


Figure 3 – The ambient noise levels at Location 0 near the homes west of the stadium.

Our measurement at Position 0 was 3 dB lower than we reported in our 4/24/23 report. This may be due to a small difference in traffic volume on the Edens Expressway or a variation in traffic on Laramie Avenue. In any case, because 3 dB is a just noticeable difference to the human ear, the ambient noise measurements made on both days are considered essentially the same.

Figure 4 is a graph showing the sound levels recorded at Positions 1-4 around the campus perimeter. The single-number decibel values given in the text boxes are based on the calculated time-averaged level (LEQ) of each sample. Positions 0, 1, and 4 are the locations near residential areas closest to the stadium. Measurements at these locations reveal an ambient noise level of 61-63 dBA. This indicates there is no audible difference between the three locations.

Impact of Music Played Through the Stadium PA System

We were also asked to assess the impact of students playing music through the PA system during practices. The level of music can vary based on the nature of the songs (high vs. low energy), the volume setting of the amplifier, and the direction in which the PA loudspeakers are pointed. To test the increase in sound level around the campus perimeter as a result of playing music, a high-energy song (i.e., “Ramble On” by Led Zeppelin, <https://youtu.be/LzGBQerkvWs>) was selected and played at a representative level.

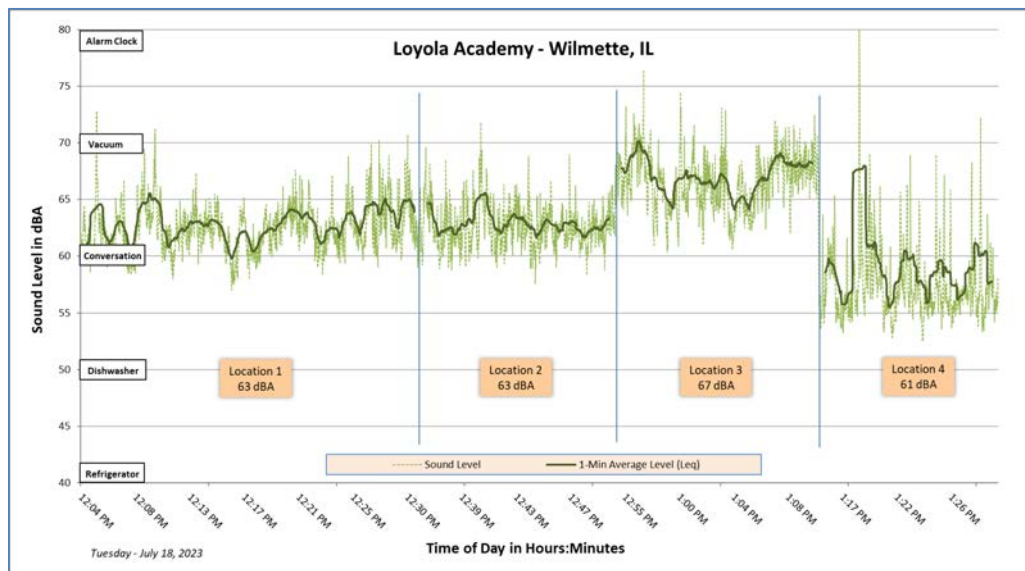


Figure 4 – The ambient noise levels recorded at Location 1, 2, 3, and 4.

To assess the loudness of the music in the stadium, we selected a reference location at a spot midway up the stadium stands labeled as Position 5 in **Figure 1**. Here, the ambient noise was 68 dBA – higher than the other locations because it is closer to I-94. With the music playing, the sound level at this reference location increased to 77 dBA. This 9-dB increase over the ambient noise indicates that the music was twice as loud as ambient noise in the stadium (see **Table 1** of our 4/24/23 report). This is consistent with the typical loudness preference of most people when actively listening to music.

While the same song was played, we measured the sound level at the other locations around the perimeter of the campus. Our results are shown in **Table 1**. Although the music was somewhat audible, it did not exceed the ambient level by more than 1 dBA at any perimeter location. We

conclude from this study that as long as the music is played from the PA system at a level no greater than 77 dBA (as measured at Position 5 in the stadium), it will present no significant increase in noise in the community. In fact, **Table 1** of our 4/24/23 report indicates that a music sound level in the stadium could increase up to 80 dBA (at Position 5) with only a “just noticeable” increase in noise in the community.

Table 1 – Sound Levels observed with and without music from the PA System

	Ambient Noise (dBA)	Level with Music (dBA)	Increase (dBA)
Pos 0	62	63	1
Pos1	63	No change	0
Pos 2	63	64	1
Pos 3	67	No Change	0
Pos 4	61	No Change	0

Wilmette Noise Ordinance

As discussed in our previous report, Section 30-13.7(a)(1) of the Wilmette municipal code references the State of Illinois noise regulations. Although the State limits noise radiated to residential property to 55 dBA (using the 1-hour LEQ) for the hours from 7:00 A.M. to 10:00 P.M., Table 13-3 of the Village code specifies a more strict limit (1-second sound level) of 45 dBA between the hours of 7:00 P.M. and 7:00 A.M.

As presented above, the sound levels we measured at all the locations bordering the Loyola Academy property exceeded the Wilmette evening/nighttime limit by 16-18 dBA on a time-averaging basis. For reference, an ambient noise level of 62 dBA is more than three times as loud as 45 dBA. Hence, the current ambient noise radiated from I-94 masks the sound from the football stadium up to about 61-63 dBA.

In our 4/24/23 report, we estimated that a typical Loyola Academy football game would have a 1-hour LEQ of 66 dBA across from the stadium on Laramie Avenue. At 4 dBA above the ambient level (i.e., conservatively set at 62 dBA), **Table 1** of our 4/24/23 report indicates that the football noise would be a “just noticeable difference” compared to the ambient level. For a rivalry (high attendance) game, the projected level would be about 69 dBA. At 7 dBA above the ambient sound level, these particular games would represent a “clearly noticeable” difference. Keep in mind, however, that the impact of the rivalry games is short-term since the games are only 2-3 hours long, would occur only on certain Friday evenings, and would be scheduled in advance.

Discussion

We indicated above that the projected time-averaged sound level of the football games would be about 66-69 dBA at the nearest homes. At times during the game, the 1-second sound levels in the areas near the closest homes would reach a maximum of 80-89 dBA. While such levels might cause concern about hearing loss, it is important to note that the damage risk criterion for hearing loss set by the National Institute of Occupational Safety and Health is a time-averaged level of

85 dBA for 8 hours. Since football games would not exceed 66-69 dBA on a time-averaged basis, there should be no concern about hearing loss.

Other property locations around the campus (i.e., Pos 1 and 4) are further than Position 0. Because of wave divergence, football noise dissipates at these more distant locations. **Table 2** shows the estimated LEQ and maximum levels for a rivalry (high attendance) game at the other locations on the Loyola perimeter. Note that the results for Location 0 represent the worst-case scenario of those locations near residential areas (i.e., Location 0, 1, and 4).

	Property Line	Distance from End Zone / Stadium	Maximum 1-hour LEQ	Max Sound Levels (Rivalry)
Loc 0	West	325 feet	66-69 dBA	80-89 dBA
Loc 1	South	700 feet	61-64 dBA	75-84 dBA
Loc 2	Southeast	300 feet	66-69 dBA	80-89 dBA
Loc 3	East	150 feet	71-74 dBA	85-94 dBA
Loc 4	North	1000 feet	58-61 dBA	72-81 dBA

Table 2 - Estimated LEQ and maximum levels due to football games at locations around the Loyola property.

Submitted by:



Dr. Thomas Thunder, AuD, FAAA, dBd. Cert INCE Emeritus
Audiologist and Acoustical Specialist
Adjunct Faculty – Northwestern University and Rush University

TRANSPORTATION MANAGEMENT PLAN



MEMORANDUM

To: Marty Jennings
Advancement Chief of Staff
Loyola Academy

From: Peter Lemmon, P.E., PTOE

Date: August 8, 2023

Subject: Loyola Academy
Summary of Transportation and Parking Studies and Planning
Wilmette, Illinois

As part of the Loyola Academy Master Plan and various campus improvements over the past several years, Kimley-Horn and Associates, Inc. (Kimley-Horn) has been engaged to assist with various traffic and parking evaluations and planning efforts at the school and within surrounding area. The list below highlights a sequence of studies and documents prepared in connection with transportation elements of recent campus planning at Loyola Academy, including most recently, an addition to the Transportation Management Plan (TMP) covering special events at the athletic field.

<u>Year</u>	<u>Description</u>
2016	Collection of Traffic and Parking Data <i>Kimley-Horn collected traffic and parking counts at Loyola Academy and at adjacent intersections.</i>
2017	Master Plan Traffic and Parking Study <i>As part of the Loyola Academy Master Plan, Kimley-Horn prepared a comprehensive traffic and parking study associated with the Loyola Academy Master Plan. Updated traffic and parking counts were collected and a survey of student travel characteristics was also undertaken. Recommendations focused on modifying internal traffic circulation and incorporating new driveways to addressing congestion pinch points, reducing traffic impacts on Laramie Avenue. Additional student drop-off/pick-up capacity was added on-site to focus on removing pick-up activity from the adjacent neighborhood streets and organize pedestrian flows. On-site parking capacity was also increased for students. The plan was reviewed by the Village and incorporated as part of the Master Plan approval with a condition that a third-party consultant selected by the Village would complete a follow-up study after completion of the on-site improvements and natatorium construction to validate the original study's conclusions and identify whether additional measures are needed.</i>

kimley-horn.com

111 West Jackson Boulevard, Suite 1320, Chicago, IL 60604

312 726 9445

- 2018** **Transportation Management Plan**
A TMP was prepared by Kimley-Horn, accompanying the Master Plan, to summarize a framework of policies and strategies in place to manage the vehicle traffic, parking, pedestrians, and transit conditions on the Loyola Campus. The plan intended to be reviewed and adjusted over time to respond to changing conditions on the campus and in the surrounding area.
- 2019** **Phase 1 Master Plan Follow-Up Traffic Study**
In Fall 2019 after the Phase 1 work at Loyola Academy was complete, Alfred Benesch & Company conducted a follow-up traffic study. The study validated conclusions of the previous study prepared for the Master Plan approval and did not recommend additional measures.
- 2020** **Phase 2 (Performing Arts Center) Traffic and Parking Review**
Kimley-Horn prepared a technical memo summarizing an updated evaluation of campus parking and multimodal access/circulation throughout the campus relative to a proposed amendment of the Master Plan that relocated the Performing Arts Center from the south parking lot to the northeast corner of the campus. New parking counts were collected and referenced in the analysis of the revised plan due to the redistribution of parking on campus. The review was reviewed by the Village as part of the amended Master Plan approval.
- 2020** **TMP Update (Phase 2 Master Plan)**
Kimley-Horn updated the TMP to reflect the revised parking and traffic circulation plan associated with the Phase 2/Performing Arts Center component of the Master Plan.
- 2023** **TMP Update (Special Event Plan)**
Kimley-Horn prepared a supplemental section of the TMP that outlines strategies related to special event conditions at the athletic field, and in particular, for Friday night football games. This new section of the TMP presents a range of athletic event attendance scenarios and associated transportation characteristics, parking needs, and locations to serve those needs, both on and off campus, as necessary.
- Although the events at the athletic field will not differ from those that currently take place, the proposal for adding lights will allow games to be played in the evening. For the larger events (i.e., Friday night football games), outlined strategies are intended to limit impacts on the surrounding community. The strategies summarized in the document include use of designated off-campus parking locations for overflow parking demands, access and parking restrictions in the surrounding neighborhoods coupled with increased “event parking” fines (\$100 instead of the normal \$40 fine), added directional and parking restriction signs, and a task force to review the past season and revise the TMP to address concerns that may have arisen.*



To date, the various traffic/parking evaluations and transportation management plans have been key elements in development of the Master Plan and successful evolution of the Loyola Academy campus over the past six years. The current proposal to install lights at the athletic field would allow evening football games and more efficient use of the field for other athletic teams at Loyola Academy; however, these uses are largely occurring on the field today. As such, the related traffic and parking conditions are not significantly different than current conditions except for the dates/times that some events will occur. The updated TMP outlines a mix of strategies, some of which are in place today (i.e., off-campus parking locations) while others are proposed (e.g., neighborhood event parking restrictions, increased fines for event-condition parking violations, regular neighborhood/Village task force review of seasons for potential plan updates). As past master planning efforts have thoughtfully considered transportation and parking conditions, the strategies outlined in the TMP are collectively intended to successfully manage event-related traffic and parking conditions to limit impacts on the surrounding neighborhoods.

If you have any questions regarding the various studies and planning documents summarized in this memorandum, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter Lemmon".

Peter Lemmon, P.E., PTOE

Transportation Management Plan



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LIST OF EXHIBITS

- Exhibit 1 Overall School Master Plan
- Exhibit 2 School Master Plan – Phase 1+2
- Exhibit 3 School Arrival Period Access/Circulation Plan
- Exhibit 4 School Dismissal Period Access/Circulation Plan
- Exhibit 5 Parking Plan
- Exhibit 6 Pedestrian Plan
- Exhibit 7 Performing Arts Event Plan
- Exhibit 8 Special Event Parking Options
- Exhibit 9 Tier 1 – Average Game
- Exhibit 10 Tier 1 – Average Game with Carpool Lot
- Exhibit 11 Tier 2 – Rival Game
- Exhibit 12 Tier 2 – Rival Game with Carpool Lot
- Exhibit 13 Tier 2 – Rival Game with Carpool Lot / No New Trier Lot
- Exhibit 14 Tier 2 – Rival Game with Carpool Lot / 10% Drop-Off
- Exhibit 15 Tier 2 – Rival Game with Carpool Lot / 10% Drop-Off / No New Trier Lot

INTRODUCTION

Purpose and Objectives

The Transportation Management Plan (TMP) is a summary of Loyola Academy's proposed objectives and strategies to manage the various transportation conditions at the school during the typical school day.

Like most high schools, Loyola Academy experiences concentrations of traffic and parking activity in the morning leading up to the start of the school day and after school leading up to and after dismissal. To a lesser degree, midday transportation needs, in particular for school visitors, require attention. However, unlike most high schools, Loyola Academy geographically draws student enrollment from an area beyond the local community. Thus, school bus service is not practical and the school is faced with some unique challenges. Students commute by auto and park (using on and off-site locations), auto and dropped off/picked up by a parent/guardian, public transportation, foot, and bicycle.

As part of a recent Campus Master Plan process in 2016 and 2017, The Loyola Forward 2025 Master Plan, several new campus elements were identified to address current transportation issues and improve conditions both on school property and along the adjacent roadways. This TMP has been prepared to assure that the use of these key elements is maximized and related strategies and policies to manage transportation conditions at the school are documented. Loyola Academy has acted on these strategies, and as a study prepared by Alfred Benesch & Company for the Village of Wilmette concluded that "Overall, the operations of the arrival and dismissal periods have improved following implementation of the updated circulation plan. Fewer vehicles are using neighborhood streets and school traffic appears to be focused on Laramie Avenue. The updated traffic management procedures are actively managing the arrival and dismissal periods. No additional modification or additions to the approved Loyola Academy Traffic Management Plan are needed to mitigate increased traffic congestion in the neighborhood."

The TMP is a dynamic document in the sense that it should not be considered static or complete. The TMP has been created concurrently with the identification of Phase 1 of the Master Plan and is now being updated with Phase 2. Subsequent updates may be appropriate as adjustments are made to select parking areas and facilities on school property, access, circulation patterns, and operational changes. Prior to implementing subsequent campus changes, the TMP should be updated, as appropriate. Further, as operational conditions may evolve over time, the TMP should be reviewed and updated periodically to identify opportunities for supplemental or modified measures.

School Overview

Loyola Academy is a Jesuit high school generally located east of Laramie Avenue between Lake Avenue and Illinois Road in Wilmette, Illinois. The school also owns adjacent parcels west of Laramie Avenue and north of Illinois Road. Student enrollment at the school varies year to year, but is generally near 2,000 students with a relatively even distribution among Freshman, Sophomore, Junior, and Senior classes.

Starting with the 2017-18 academic year, the scheduled school day starts at 7:45 AM with dismissal at 2:48 PM. This dismissal time represents a 12-minute adjustment from previous years at 3:00 PM.

Campus Master Plan

The Loyola Forward 2025 Master Plan was crafted for the entire 23.5-acre Loyola Academy campus, which includes parcels of land Loyola Academy owns both north of Illinois Road and east and west of Laramie Avenue. Loyola

anticipates implementing its vision for its campus over a period of approximately seven to ten years. Key elements of the multi-phase Master Plan include (with Phase 1 components noted with an * and Phase 2 components with a **):

New Building Facilities

- Upgrades and renovation of existing building classrooms, administrative, and specialty spaces*
- Natatorium*
- Performing Arts Center**
- Student Commons/Resource Center
- Administrative Support and Mission Outreach

Site and Operational Improvements

- Improved On-Site Parking*
- On-Site Traffic Circulation and Vehicle Stacking*
- Relocated Tennis Facilities*
- Pedestrian Safety Improvements*
- Improved Open Park and Recreation Space*
- Landscape Buffer, Campus Edge Treatments, and Signage*
- Underground Stormwater Storage*

The overall Campus Master Plan and the Phase 1 plan are illustrated in **Exhibit 1** and **Exhibit 2**, respectively.

PLANNING PRINCIPLES

As part of the improved traffic management operations at the campus, Loyola Academy has established the following planning principles to guide transportation management programs, policies, and planning efforts. Referencing these principles is intended to consider transportation conditions at the school and the surrounding area.

- Provide a safe environment for all school and community populations, including pedestrians, bicyclists, transit riders, and vehicle drivers/passengers
- Promote orderly and efficient flow of traffic on and off school property
- Limit impacts on traffic congestion during school peak arrival and dismissal periods
- Support the awareness and understanding of the plan's key elements by students, parents, and the community through multiple communication means and methods

TRANSPORTATION MANAGEMENT PLAN

Vehicular Traffic

Strategy: *Continue to coordinate with the Cook County Department of Transportation and Highways (CCDTH) to monitor and, if feasible, adjust traffic signal timing at the Lake Avenue/Laramie Avenue intersection to optimize the traffic signal during peak school arrival and dismissal periods*

The default traffic signal timing prioritizes east-west traffic along Lake Avenue. Thus, the relatively short peaks of traffic activity coinciding with school arrival and dismissal periods result in congestion along Laramie Avenue. To help flush southbound traffic from Laramie Avenue during these periods and reduce the level/duration of congestion, Loyola Academy should continue to coordinate with CCDTH to monitor and adjust the signal timing, to the extent feasible, during these peak periods on school days so that for approximately 30 minutes each morning and afternoon, the traffic signal allocates additional time for Laramie Avenue while balancing safety and corridor operational considerations along Lake Avenue.

Strategy: *Shift school dismissal time up to reduce overlap with New Trier's West Campus dismissal time*

Starting with the 2017-18 academic year, Loyola Academy will shift the school dismissal bell up 12 minutes from 3:00 PM to 2:48 PM. This shift will create a 17-minute difference between dismissal times at Loyola Academy and New Trier's West Campus (3:05 PM dismissal), limiting the overlap of related traffic and combined traffic impacts on nearby streets.

Strategy: *Implement peak period access restrictions to facilitate on-site drop-off and pick-up circulation and a new stacking plan*

Using the access labels shown on Exhibits 3 and 4, **Table 1** outlines the ingress and egress designations for each school driveway.

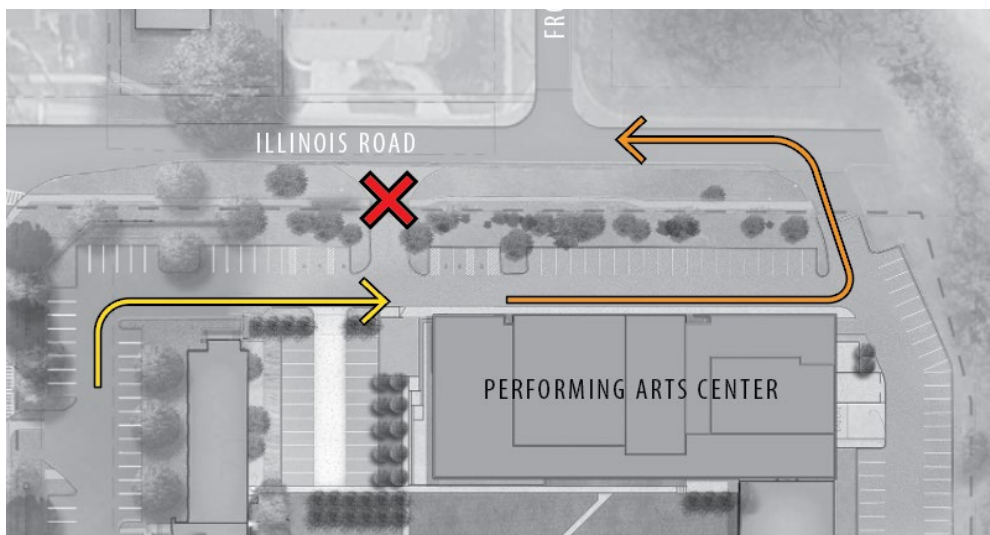
Table 1. Access Ingress/Egress Designations

Access	Description	Time	Use
A – C	Parking Access	All Times	Entry + Exit
D	Arrival/Dismissal Entry	AM Arrival + PM Dismissal	Entry-Only
	Parking Access	All Other Times	
E	Arrival/Dismissal Exit	AM Arrival + PM Dismissal	Exit-Only
	Parking Access	All Other Times	
F	Student Parking	AM Arrival	Entry-Only
		PM Dismissal	Closed
	Parking Access	All Other Times	Entry-Only
G	Student Parking	AM Arrival	Entry-Only
		PM Dismissal	Exit-Only
	Parking Access	All Other Times	Entry + Exit
H	Arrival/Dismissal Entry + Parking Access	All Times	Entry-Only

Exhibit 3 and Exhibit 4 illustrate the peak arrival and dismissal access and circulation routes, respectively.

Strategy: *Close Access B during Performing Arts Center events with significant off-campus attendance*

Through the use of cones or barricades starting prior to the event's peak arrival period and re-opening after event-related traffic has largely dispersed from campus, Access B (aligned just west of Frontage Road) should be temporarily closed during events that draw significant attendance from off campus. As illustrated below, this temporary access driveway closure 1) eliminates conflicts with entering vehicles dropping off/picking up directly in front of the venue and 2) helps to maximize the length of available curbside stacking by encouraging the drop-off/pick-up vehicle queue to start east of the access driveway.



The goal is to not allow vehicles to stop west of the driveway and peel off to exit the school campus straight from the curb. With the access driveway temporarily closed, vehicles dropping off/picking up would proceed east to Access A and exit to Illinois Road.

Strategy: *Provide capacity to accommodate all drop-off and pick-up stacking on site*

Currently, on-site stacking at Loyola Academy has been observed to collectively reach approximately 40 vehicles across multiple locations during the dismissal period. During the same time, up to approximately 35 vehicles have been waiting on Thornwood Avenue, Greenwood Avenue, Elmwood Avenue, and Walnut Avenue just west of Laramie Avenue. The Master Plan provides capacity (90 vehicles) to accommodate all stacking needs and shift vehicles from neighborhood streets to the school property.

As shown on **Exhibit 3** and **Exhibit 4**, the Master Plan includes a new dual lane student loading and stacking area along the west side of the stadium. Between Access E and Access F, the dual lane configuration includes curbside parking/stacking (22 spaces) with an adjacent bypass lane so that vehicles may continue to circulation through the area, particularly vehicles further upstream in the queue that have picked up their student(s). Additional stacking is available along the east side of the tennis courts (24 vehicles), the east drive aisle of the south lot (26 vehicles), Access H south of the south lot (8 vehicles), and in front of the main school building entrance (between Access D and Access E).

Strategy: *Deploy portable “No Student Drop-Off or Pick-Up” signs on neighborhood streets just west of Laramie Avenue on school days*

To support the plan to shift drop-off/pick-up activity from adjacent neighborhood streets, Loyola Academy will deploy temporary “No Student Drop-Off or Pick-Up” signs just west of Laramie Avenue on school days. These areas should be monitored, particularly at the start of each academic year, to promote this restriction. As needed, this restriction should be re-communicated to students and parents during the school year as a reminder and to request compliance.

Strategy: *Adjust drop-off/pick-up access and circulation routes to eliminate a conflict between entering and exiting traffic on Laramie Avenue*

Drop-off and pick-up traffic currently enters the school property at Access D, turns south in front of the school building’s main entrance, and exits at Access E. In order to allow vehicles to exit the school property and keep traffic moving through the student loading area during peak periods, traffic control aides stop north-south traffic on Laramie Avenue which results in residual congestion along the corridor through other intersections.

The Master Plan incorporates a new access location and circulation pattern for entering traffic as shown on **Exhibit 3** and **Exhibit 4**. Entering traffic will now enter at new Access H at the south end of the southern parking lot, circulate counterclockwise around the lot and along the west side of the football field through the new student loading area, and exit to Laramie Avenue at Access E. Since the entry and exit routes will not cross, less traffic will need to stop on Laramie Avenue to let out vehicles that just dropped off or picked up students.

Strategy: *Post traffic control aides at key external access and on-site locations during peak school arrival and dismissal periods*

Loyola Academy currently posts traffic control aides at select access locations along Laramie Avenue. As indicated on **Exhibit 3** and **Exhibit 4**, an expanded deployment of traffic control aides is recommended both on-site (3 AM + 4 PM locations) and at access driveways (2 AM + 3 PM locations) to facilitate access, foster orderly traffic flow on-site, and direct drivers to efficiently use the loading and stacking queue areas

during peak arrival and dismissal periods. Key roles for each traffic control aide post are outline on **Exhibit 3** and **Exhibit 4**.

Parking

Exhibit 5 illustrates the allocation of student permit, staff, visitor, and ADA-accessible parking spaces.

Strategy: *Allow visitor parking within the dual-lane student loading area along the west side of the stadium*

To accommodate the varying demands for visitor parking throughout the academic year, the 22 parallel parking spaces within the dual-lane student loading area should be available for visitor parking needs between 8:00 AM and 2:00 PM. This period starts after students are in school and allows time before parents begin to line up for dismissal (observed to be up to 30 minutes in advance) for school officials to locate owners of any remaining parked vehicles after 2:00 PM so they may be relocated. Additional parking that is permitted all day is located in front of the main school entrance, ADA-accessible parking between the football field and natatorium/aquatics facility, and in the northern section of the lot immediately south of the school.

Strategy: *Student Parking Permits*

The Campus Master Plan includes a provision for 375 on-site student permit parking spaces. The remaining spaces are allocated for staff and school visitors. This student parking allocation generally represents at least 75 percent of the Senior class. Since all students who wish to drive to school cannot be accommodated on-site, the school will continue to utilize a lottery system for permit distribution. However, to maximize the utility of the limited parking capacity and increase the average vehicle occupancy, assignment of student permits should prioritize students that commit to regular carpool arrangements. Illinois law regulates the number of passengers in a vehicle driven by a motorist within 12 months of receiving their license, or until the driver turns 18, whichever comes first. In that period, the driver is limited to one passenger under the age of 20 unless they are a sibling or child of the driver. Considering that most Seniors will have maintained their license for at least 12 months, carpool commitments among Senior applicants should receive priority assignment of permits. The school should also occasionally monitor compliance of carpool commitments.

Pedestrians

Exhibit 6 shows key pedestrian-related elements of the Master Plan, including new fencing, and new/improved crosswalk markings and signs. It also illustrates the allocation of student permit, staff, visitor, and ADA-accessible parking spaces.

Strategy: *Install new fencing along Laramie Avenue between Access D and Access E to direct pedestrians to marked/controlled crosswalks*

Students regularly use a set of stone stairs west of the school building's main entrance and cross Laramie Avenue at various locations/directions north and through the Laramie Avenue/Greenwood Avenue intersection. The new fence will orient pedestrians north to the crosswalk at Access D or south to a new crosswalk at Access E. At both of these locations, traffic control aides will be posted with objectives to control traffic and safely manage the pedestrian crosswalks.

Public Transportation

Strategy: *Maintain on-site Pace Bus staging for school dismissal*

Approximately 14 percent of students commute to/from Loyola Academy via Pace Bus, with 60 percent of those pairing with another form of public transportation (CTA Rail or Metra). Prior to school dismissal, Pace Bus stacks 4-5 buses in the parking aisle between Access D (entry) and Access C (exit). After loading passengers, the buses exit to the north and south on Laramie Avenue. Subsequent buses follow their regular routes and pick-up passengers at the bus stop/shelter on the west side of Laramie Avenue across from Access D, where a traffic control aide assists in safely managing the pedestrian crosswalk. **Exhibit 3** and **Exhibit 4** illustrate the bus stop and staging locations.

TRANSPORTATION MANAGEMENT PLAN (SPECIAL EVENT CONDITIONS)

A range of sporting and special events are hosted at Loyola Academy throughout the academic year, including open houses, Back to School Night, basketball games (e.g., Loyola vs. St. Ignatius), Ramble, football games and team practices. Each of these events include varying characteristics in terms of attendance, day of week, start and end times, and attendee familiarity with campus and the surrounding area (e.g., exclusively Loyola families, mix from Loyola and other schools, etc.). During some events, the demand for parking may exceed the number of spaces available on campus. For some events, overflow parking is a common and predictable experience.

As part of Loyola Academy's plan to install lights at its athletic field, Friday night football games are expected to be an event that warrants implementation of a special event plan to manage traffic and parking conditions. The other sporting and special events that Loyola Academy has historically hosted do not warrant the implementation of such a special event plan.

Event Characteristics

Athletic Field Event Attendance Scenarios

Football games at Loyola Academy represent the highest-attendance events in terms of people at the athletic field (including fans, players, coaches, staff, cheerleaders, band members, etc.). Other events that take place at the athletic field, including track and field, soccer, lacrosse, or various practices involve fewer combined populations. Attendance at non-football events may reach up to 100 or 200 attendees with all parking occurring on campus. Thus, the transportation management plan focuses on conditions for football games. For reference, **Table 2** summarizes the attendance for Fall 2022 football games hosted at Loyola Academy.

Table 2. 2022 Season Home Football Game Attendance Summary

Date	Opponent	Attendance
8/28/2022	St. Xavier (Cincinnati) ¹	5,500
9/3/2022	East Moline	620
9/17/2022	Brother Rice (Chicago)	689
9/24/2022	Fenwick (Oak Park)	1,024
10/15/2022	St. Patrick (Chicago)	982
10/22/2022	Mt. Carmel (Chicago) ²	4,029
10/29/2022	Plainfield South (Playoff)	423
11/12/2022	Lyons Township (Playoff)	1,284

¹ This game was nationally televised on ESPN. St. Xavier, traditionally a highly-ranked program similar to Loyola Academy, brought approximately 2,000 fans to the Wilmette campus for the game

² This game had a higher-than-average attendance for a typical rivalry game due to the two teams being ranked #1 vs #2, playoff seeding implications, and no other impactful high school football games played on that Saturday, which presents fewer travel impacts when compared to a Friday evening.

Loyola Academy football games can be categorized into three tiers of attendance as detailed below:

Tier 1: Average Game

Each year, Loyola Academy typically hosts 5 to 8 home football games. These games have taken place on a Saturday morning or Saturday afternoon. A great majority of home games can be characterized as an average game with a typical attendance reaching up to approximately 1,500 fans, although as shown in Table 2 above, several games are well below 1,000 attendees. The population of players, cheerleaders, and band members averages approximately 200 students while approximately 50 staff are estimated to support gameday activities.

Description	Attendees
Attendance	1,500
- Drop-Off (20%)	-300
Parked Attendance	1,200
Players / Cheer / Band	200
Staff / Gameday Employees	50
Total	1,450

Tier 2: Rivalry Game

Each year, Loyola Academy typically hosts 1 to 2 home games versus rival schools, such as New Trier, Maine South, and Mt. Carmel that draw higher attendance than an average game. The typical attendance for a game in this tier is approximately 3,000 fans. Similar to an average game, the number of players, cheerleaders, and band members are estimated to be 200 students along with 50 staff estimated for gameday activities.

Description	Attendees
Attendance	3,000
- Drop-Off (20%)	-600
Parked Attendance	2,400
Players / Cheer / Band	200
Staff / Gameday Employees	50
Total	2,650

Tier 3: Unicorn Game

On occasion (approximately 1 to 2 games every five years), Loyola Academy may host an opponent in a playoff or nationally televised game that draws significant fan interest. For these infrequent “unicorn” games, the attendance is estimated to reach approximately 5,000 fans. Similar to other tiers of events, the number of players, cheerleaders, and band members are estimated to be 200 students along with 50 staff for gameday activities. These games are planned to continue to occur on Saturdays and not Friday nights.

Description	Attendees
Attendance	5,000
- Drop-Off (20%)	-1000
Parked Attendance	4,000
Players / Cheer / Band	200
Staff / Gameday Employees	50
Total	4,250

Attendee Transportation Characteristics

The various population groups at Loyola Academy football games are expected to exhibit different characteristics in terms of how many people per vehicle will ride to and from a game. The assumed vehicle occupancies for each population group and event tier are summarized below:

Vehicle Occupancy

Football games at Loyola Academy represent the highest-attendance events in terms of people at the athletic field (including fans, players, coaches, staff, cheerleaders, band members, etc.). Other events that take place at the athletic field, including track and field, lacrosse, or various practices involve fewer combined populations. Thus, the transportation management plan focuses on conditions for football games. Loyola Academy football games can be categorized into three tiers of attendance as detailed below:

Population Group	Vehicle Occupancy (people per vehicle)		
	Tier 1	Tier 2	Tier 3
Fan	2.25	2.25	2.25 +
Carpool	3.0	3.0-4.0	3.0-4.0
Players, Cheerleaders, Band Members	1.2	1.2	1.2
Gameday Staff	1.0	1.0	1.0

The number of fans riding together in a car to a football game typically ranges between just over 2 people/vehicle to over 3.25 people/vehicle. Factors contributing to the number of people per car include the cost of parking (and whether it is pre-sold or sold at the lot entrance), the perception regarding levels of congestion for event traffic/parking conditions, and whether attendees find more convenience in riding along with others.

Loyola Academy staff provided insight to the extent that fans park off campus (i.e., location, general level of use) which in turn, allowed for calibration of the assumed vehicle occupancy for football fans reflecting current conditions. For purposes of this evaluation, fan vehicle occupancy is assumed at 2.25 fans/vehicle for all base scenarios. However, as the gameday attendance increases among the three tiers, traffic will be busier and parking will become more limited and/or further from the athletic field, likely resulting in an increase in vehicle occupancy as fans will be increasingly interested in riding together.

Carpools

In some scenarios, establishing a designated portion of the Loyola Academy parking lot for carpool vehicles is included in the plan to incentivize higher vehicle occupancy, and in turn, result in fewer cars that need to be parked. Most scenarios apply a minimum carpool parking vehicle occupancy of 3 people per vehicle while other scenario variations consider the benefits of limiting some parking to those with at least 4 people per vehicle.

Attendee Drop-Offs

For most games, up to 20 percent of fans are estimated to be dropped off at a game rather than driving/parking themselves. Alternative looks at each scenario consider the impact of a lower percentage (10 percent being dropped off) that, in turn, increases the parking demand. This fan category includes drop-offs by either parents or rideshare services.

Event Parking Locations

Parking for Friday night football games will occur using a range of locations, depending on the event tier, attendee transportation characteristics, and parking lot availability. ***Parking on neighborhood streets for fans attending Friday night football games will be prohibited.*** During Friday night football games, increased event parking fines will be in effect for unauthorized parking on nearby neighborhood streets (\$100 per violation).

In addition to parking on campus at Loyola Academy, a number of off-site parking areas have been identified to accommodate gameday parking needs (see below and illustrated in **Exhibit 8**).

• Loyola Academy Parking Lots	718 spaces
• Frontage Road (on-street north of Illinois Road)	16+ spaces
• Chinese Christian Fellowship Church	65 spaces
• New Trier High School – West Campus	762 spaces
• Loyola Academy Grass Practice Fields	187 spaces
• Stepan – Global Technology Center	190 spaces
• Regina Dominican High School	181 spaces

Some of these locations are currently used by Loyola Academy for overflow parking while others have been subject to preliminary discussions between Loyola Academy and the respective property owner. Agreements to utilize these off-site lots will be formalized before Friday night games within their respective Tier are played.

Event Parking Allocation

For each potential event tier, a range of alternative scenarios were evaluated to consider potential deviations such as availability to use potential parking lots, vehicle occupancies, activation of carpool parking, and the assumed percentage of fans being dropped off before the game.

With regards to parking availability, parking lots serving the New Trier West Campus collectively offer a significant source of parking capacity (762 spaces) that is within walking distance of Loyola Academy. However, it is possible that a Tier 2 or Tier 3 game could coincide with New Trier hosting a home game, leaving those lots unavailable for use by Loyola Academy and requiring use of other off-campus parking options. As such, scenarios were evaluated considering the New Trier West Campus as available and unavailable.

This section outlines a range of potential scenarios evaluated for Tier 1, Tier 2, and Tier 3 events and summarizes the planned use and allocation of parking areas to accommodate the projected parking needs.

Tier 1 – Average Game

Tier 1: Average Game		
Attendance	1,500	All parking is accommodated on campus, along Frontage Road north of Illinois Road, and with limited use of the Chinese Christian Fellowship Church. See allocation of spaces below and Exhibit 9.
- Drop Off (20%)	-300	
Parked Attendance	1,200	
Players / Cheer / Band	200	
Staff	50	

Location	Capacity (spaces)	Parking Distribution				
		Fan	Carpool	Player / Cheer / Band	Staff	Total
Loyola (Northern Lots)	244	27		167	50	244
Loyola (Center Lot)	233	233				233
Loyola (South Lot)	241	241				241
Frontage Road	16+	16				16
Chinese Christian Fellowship Church	65	17				17
Total (spaces)	799	534	-	167	50	751
Total (people)		1,202	-	200	50	1,452

Tier 1: Average Game (with carpool)		
Attendance	1,500	With establishing the South Lot at Loyola Academy as a carpool lot with at least 3.0 people per vehicle, all parking is accommodated on campus. See allocation of spaces below and Exhibit 10.
- Drop Off (20%)	-300	
Parked Attendance	1,200	
Players / Cheer / Band	200	
Staff	50	

Location	Capacity (spaces)	Parking Distribution				
		Fan	Carpool (3.0 people/veh)	Player / Cheer / Band	Staff	Total
Loyola (Northern Lots)	244	27		167	50	244
Loyola (Center Lot)	233	233				233
Loyola (South Lot)	241		205			205
Total (spaces)	718	260	205	167	50	682
Total (people)		1,200		200	50	1,450

Tier 2 – Rivalry Game

Tier 2: Rival Game		
Attendance	3,000	All parking is accommodated on campus, along Frontage Road north of Illinois Road, the Chinese Christian Fellowship Church, and a good portion of New Trier's West Lot. See allocation of spaces below and Exhibit 11 .
- Drop Off (20%)	-600	
Parked Attendance	2,400	
Players / Cheer / Band	200	
Staff	50	

Location	Capacity (spaces)	Parking Distribution				
		Fan	Carpool	Player / Cheer / Band	Staff	Total
Loyola (Northern Lots)	244	27		167	50	244
Loyola (Center Lot)	233	233				233
Loyola (South Lot)	241	241				241
Frontage Road	16+	16				16
Chinese Christian Fellowship Church	65	65				65
New Trier (West Lot)	516	485				485
Total (spaces)	1,315	1,067	-	167	50	1,284
Total (people)		2,401	-	200	50	2,651

Tier 2: Rival Game (with carpool)		
Attendance	3,000	With establishing the South Lot at Loyola Academy as a carpool lot with at least 3.0 people per vehicle, allocation is similar to not activating carpool parking, except fewer spaces are used at New Trier. See allocation of spaces below and Exhibit 12 .
- Drop Off (20%)	-600	
Parked Attendance	2,400	
Players / Cheer / Band	200	
Staff	50	

Location	Capacity (spaces)	Parking Distribution				
		Fan	Carpool (3.0 people/veh)	Player / Cheer / Band	Staff	Total
Loyola (Northern Lots)	244	27		167	50	244
Loyola (Center Lot)	233	233				233
Loyola (South Lot)	241		241			241
Frontage Road	16+	16				16
Chinese Christian Fellowship Church	65	65				65
New Trier (West Lot)	516	405				405
Total (spaces)	1,315	746	241	167	50	1,204
Total (people)		1,679	723	200	50	2,652

Tier 2: Rival Game (with carpool + No New Trier Availability)

Attendance	3,000	In the event New Trier has a conflicting event and their parking is not available, this scenario includes designating the south lot at Loyola Academy as a carpool lot with at least 4.0 people per vehicle, use of the practice fields on the west side of Laramie Avenue, the east side of Frontage Road, the Chinese Christian Fellowship Church, and a portion of the south lot at Stepan. All spaces are considered walkable to/from Loyola Academy. See allocation of spaces below and Exhibit 13 .
- Drop Off (20%)	-600	
Parked Attendance	2,400	
Players / Cheer / Band	200	
Staff	50	

Location	Capacity (spaces)	Parking Distribution				
		Fan	Carpool (4.0 people/veh)	Player / Cheer / Band	Staff	Total
Loyola (Northern Lots)	244	27		167	50	244
Loyola (Center Lot)	233	233				233
Loyola (South Lot)	241		241			241
Loyola (Practice Fields)	187	187				187
Frontage Road	16+	16				16
Chinese Christian Fellowship Church	65	65				65
Stepan (South Lot)	154	110				110
Total (spaces)	1,140	638	241	167	50	1,096
Total (people)		1,436	964	200	50	2,650

Tier 2: Rival Game (10% Drop Off + with carpool)

Attendance	3,000	If the level of drop-off activity is limited to 10% for a rivalry game crowd, access to the designated carpool zone in the south lot at Loyola Academy can be increased to a minimum vehicle occupancy of 4.0 people/vehicle, all parking is accommodated on campus, along Frontage Road north of Illinois Road, at the Chinese Christian Fellowship Church, and using a portion of the west lot at New Trier. See allocation of spaces below and Exhibit 14 .
- Drop Off (10%)	-300	
Parked Attendance	2,700	
Players / Cheer / Band	200	
Staff	50	

Location	Capacity (spaces)	Parking Distribution				
		Fan	Carpool (4.0 people/veh)	Player / Cheer / Band	Staff	Total
Loyola (Northern Lots)	244	27		167	50	244
Loyola (Center Lot)	233	233				233
Loyola (South Lot)	241		241			241
Frontage Road	16+	16				16
Chinese Christian Fellowship Church	65	65				65
New Trier (West Lot)	516	431				431
Total (spaces)	1,315	772	241	167	50	1,230
Total (people)		1,737	964	200	50	2,951

Tier 2: Rivalry Game (10% Drop Off + with carpool + No New Trier Availability)

Attendance	3,000	In a scenario similar to the previous condition, but coinciding with a schedule conflict at New Trier, three locations would be active to account for the unavailable lot(s) at New Trier – the practice fields on the west side of Laramie Avenue, the Stepan lots, and parking at Regina Dominican High School. Those parking at Regina would use a shuttle service that transports fans to/from the game. Because schedule conflicts with New Trier would be known well in advance, the Regina parking option (directions, shuttle info, etc.) would be communicated with the visiting team for their use. While overflow parkers could be directed to Regina from Loyola or other more proximate parking options if full, the objective is to have visiting team fans travel directly to Regina to avoid having to seek available parking at the other locations. See allocation of spaces below and Exhibit 15 .
- Drop Off (20%)	-300	
Parked Attendance	2,700	
Players / Cheer / Band	200	
Staff	50	

Location	Capacity (spaces)	Parking Distribution				
		Fan	Carpool (4.0 people/veh)	Player / Cheer / Band	Staff	Total
Loyola (Northern Lots)	244	27		167	50	244
Loyola (Center Lot)	233	233				233
Loyola (South Lot)	241		241			241
Loyola (Practice Fields)	187	187				187
Frontage Road	16+	16				16
Chinese Christian Fellowship Church	65	65				65
Stepan (South Lot)	154	154				154
Stepan (North Lot)	36	36				35
Regina Dominican High School	181	54				54
Total (spaces)	1,357	772	241	167	50	1,230
Total (people)		1,737	964	200	50	2,951

Tier 3 – Unicorn Game

Unicorn games represent occasional contests (1-2 games every 5 years) with the largest attendance. When such games are scheduled, they are planned to remain on Saturdays and not on Friday evenings. Thus, these games do not influence Loyola Academy's proposal for athletic field lights. However, the various transportation management strategies outlined in this plan (e.g., neighborhood event parking restrictions, increased neighborhood parking violation fines, designated carpool priority parking on site, advanced communications, etc.) would be applied to limit traffic and parking impacts in the area. As these events have been hosted in the past, Loyola Academy will continue to use both on-site and off-site parking locations to accommodate event parking needs.

Special Event Strategies

Key traffic and parking measures and strategies comprising the Loyola Academy special event transportation plan are detailed below.

Event Parking

Strategy: *Use of Designated Off-Campus Parking Locations*

Based on the tier of event previously detailed, Loyola Academy will enact use of a range of off-campus parking lots, supported with shuttle service as needed. These off-campus parking options are locations that have been used in the past or have been preliminarily discussed with the property owner. Additional parking options are also available. The off-campus lots that may be utilized for events, based on the tier of game and potential gameday characteristics (e.g., % of fans dropped off, vehicle occupancy, etc.), is summarized below:

Parking Location	Capacity (spaces)	Tier 1 (Average Game)	Tier 2 (Rival Game)	Tier 3 (Unicorn Game)
Loyola Academy	718	×	×	×
Frontage Road	16	×	×	×
Chinese Christian Fellowship Church	65	×	×	×
Loyola Academy Practice Field ¹	187		×	×
New Trier Main Lot	516		×	×
New Trier South Lot	109		×	×
New Trier East Lot	137		×	×
Stepan South Lot	154		×	×
Stepan North Lot	36		×	×
Regina Dominican High School	181			×

¹ Estimated capacity based on measurements of fields and feedback from Loyola Academy's experience with the lot.

Neighborhood Parking

Strategy: *Restrict Neighborhood Access to Residents and Sponsored Guests Only*

Event parking and traffic circulation should be accommodated in a way that limits impacts on adjacent neighborhood streets. In order to restrict Loyola Academy event parking from utilizing neighborhood streets, neighborhood access points shall be controlled with temporary deployment of barricades (i.e., sawhorses or cones) and warning signs.

At least 3 hours prior to the start of an event, warning signs should be posted at each neighborhood access points outlined below and illustrated on the attached exhibits. The warning sign message is recommended to state the following message:



At least 1 hour prior to the start of an event, barricades should be deployed at each side-street location and street approach outlined below. Barricades should not be placed on Laramie Avenue.

- Laramie Ave / Forest Ave (*west leg*)
- Laramie Ave / Walnut Ave (*west leg*)
- Laramie Ave / Elmwood Ave (*west leg*)
- Laramie Ave / Greenwood Ave (*west leg*)
- Laramie Ave / Thornwood Ave (*west leg*)
- Manor Drive / Forest Ave (*south leg*)
- Manor Dr / Illinois Rd (*south and north legs*)
- Illinois Rd / Branch Rd (*north leg*)
- Frontage Rd / Riverside Dr (*west leg*)
- Illinois Rd / 36th Place Dr (*south leg*)
- Illinois Rd / New Trier Ct (*south leg*)
- Laramie Ave / LeClaire Ave (*east and south legs*)
- Laramie Ave / Washington Ave (*north and east legs*)

Barricades should be placed across the entry lane of each identified neighborhood gateway. Within an hour following each event's end time or when traffic and parking conditions have significantly dissipated, all signs and barricades shall be removed and event access/parking restrictions will be lifted.

Strategy: *Distribute Neighborhood Guest Parking Placards*

Event neighborhood access and on-street parking restrictions are intended to prohibit event-generated traffic from circulating through adjacent neighborhoods in search of parking and parking on street. However, these event restrictions are not included to keep neighbors and their guests from accessing their neighborhood and parking on their streets. As such, a resident guest placard will be designed and distributed to neighbors to provide for guests to place on their vehicle's dashboard when parking on street during a special event hosted by Loyola Academy. Placards will be printed and distributed to neighborhood residents at the start of each academic year.

Strategy: *Increase Village Parking Violation Fine for Event Conditions*

To establish a significant financial deterrent for parking on event-restricted neighborhood streets, Loyola Academy will request the Village of Wilmette to establish and assess a \$100 parking violation fine for non-neighborhood residents and unsponsored guests (without a posted dashboard placard). Following the end of each event, parking violation fines would return to the fine established by village ordinance.

Off-Site Parking

Strategy: *Establish Designated Off-Site Overflow Parking Lots*

Loyola Academy will maintain agreements with nearby properties to provide adequate off-site overflow parking for events when parking cannot be accommodated on campus. The need for off-site parking will vary based on the unique characteristics and anticipated attendance for each event. For some events, Loyola Academy may implement valet parking or other operational measures to maintain parking on campus. However, such measures are not appropriate or would not be sufficient for all events. Building on past experience with campus events, the need for off-site parking will be determined in advance of the event with a bias for having overflow parking available.

If overflow parking is needed, traffic control and parking attendants at the campus driveways will begin to re-direct parkers to designated off-site parking locations, primarily north of campus at New Trier West Campus on Happ Road and/or Stepan Company property on Frontage Road following wayfinding signs deployed prior to the event (see below).

Additional locations will be activated, as needed. In the event that off-campus parking at Regina Dominican High School is needed, shuttle service would be provided to transport fans between parking lots and Loyola Academy. These parking locations and associated directions would be communicated with visiting teams to promote direct access to the off-campus parking areas. In the event that more proximate walkable off-campus parking lots fill, attendants will provide directions to the active shuttle-served locations.

Strategy: *Overflow Parking Wayfinding Signs*

If on-campus parking reaches capacity and overflow parking is activated, parkers will be re-directed to remote parking at the New Trier West Campus on Happ Road and/or Stepan Company property on Frontage Road. Prior to the event, remote parking wayfinding signs will be deployed along Laramie Avenue, Illinois Road, Frontage Road, and Happ Road as well as at each remote parking entrance. Once the on-campus parking reaches capacity, signs indicating "LOT FULL" will be displayed at each of Loyola Academy's entrances and event traffic control personnel will re-direct parkers to follow the deployed wayfinding signs to the overflow lots.

Community Engagement and Review

Strategy: *Neighborhood Transportation Management Task Force*

Transportation management plans should be dynamic and living documents that evolve to address and respond to changing conditions over time. In partnership with a task force comprised of neighborhood representatives, Village staff, and other appropriate stakeholder groups, Loyola Academy will facilitate two annual sessions to review neighborhood traffic and parking conditions and the measures in place and, if necessary, outline anticipated changes in special event programming, identify if adjustments to the plan are needed, and update the transportation management plan. The two annual sessions are anticipated to be held in the Winter (reviewing the previous Fall season and 1st semester of the academic year) and early Summer (reviewing the Spring season and 2nd semester of the academic year).

Communications

Strategy: *Advance Transportation Access and Parking Communications*

Prior to each special event, Loyola Academy will prepare a transportation access and parking overview for distribution to expected attendees and visiting schools. Communications should include a map of the campus; note access points and event-specific parking areas on campus; include information on overflow parking locations and direct routes; provide details on shuttle service, as applicable; and clearly highlight neighborhood access/parking restrictions and increased event parking violation fines in place. Depending on the type of special event these communications can be shared directly via e-mail, posted on Loyola Academy's website, shared through visiting school athletic departments, and announced on Twitter, Facebook, and other available platforms.

COMMUNICATION + COORDINATION

A key planning principle for the TMP includes increasing education and promotion of the plan's objectives, strategies, and expectations of students, parents, and staff. In addition, the TMP is intended to be a dynamic document that will be updated to reflect subsequent phases of the Campus Master Plan's implementation and in response to monitoring of observed transportation conditions. Thus, it is important that Loyola Academy remains active and open in communicating the plan with students, parents, staff, and the community. The following section summarizes the methods of communication and coordination among stakeholders.

Website, E-mail, and Social Media

In addition to the school's website and use of e-mail distribution lists, Loyola Academy maintains a presence on several social media outlets which can be used to communicate the plan, share reminders, and post alerts or notices regarding plan adjustments or special events. The school can be followed via the following:

- Website www.goramblers.org
- Twitter [@LoyolaAcademy](https://twitter.com/LoyolaAcademy)
- Facebook [@goramblers](https://www.facebook.com/goramblers)

School Handbook and Plan Acknowledgment

Before the start of the academic year, is an opportune time to introduce the plan to incoming Freshmen and their families. It is also a time to remind Sophomores, Juniors, and Seniors of the TMP, its key elements, and the expectations of students, parents, and staff to adhere to the plan in order to facilitate safe and orderly conditions for transportation access, circulation, and parking. Thus, the TMP will be included and fully explained within the school handbook. The school handbook is a document containing a range of school policies that is reviewed and signed by both parents and students to acknowledge their agreement and understanding of said policies and plans along with their corresponding expectations, including those outlined in the TMP.

Village and Community Coordination

As a continuation of the Campus Master Plan process, Loyola Academy will continue to host periodic meeting forums to provide plan updates, solicit input and feedback, and interface with Village Staff and neighbors. This coordination and communication with Village Staff departments and neighbors is necessary to implement components of the Campus Master Plan, to monitor and manage the transportation and parking conditions on site, and review transportation management activities and effectiveness.

Loyola Academy recognizes the importance of maintaining healthy dialogue with the Village and surrounding community regarding upcoming events, planning, and facility changes that affect both the school and neighborhood. Continued relationships with these groups are a desired and useful method to communicate on transportation issues going forward.

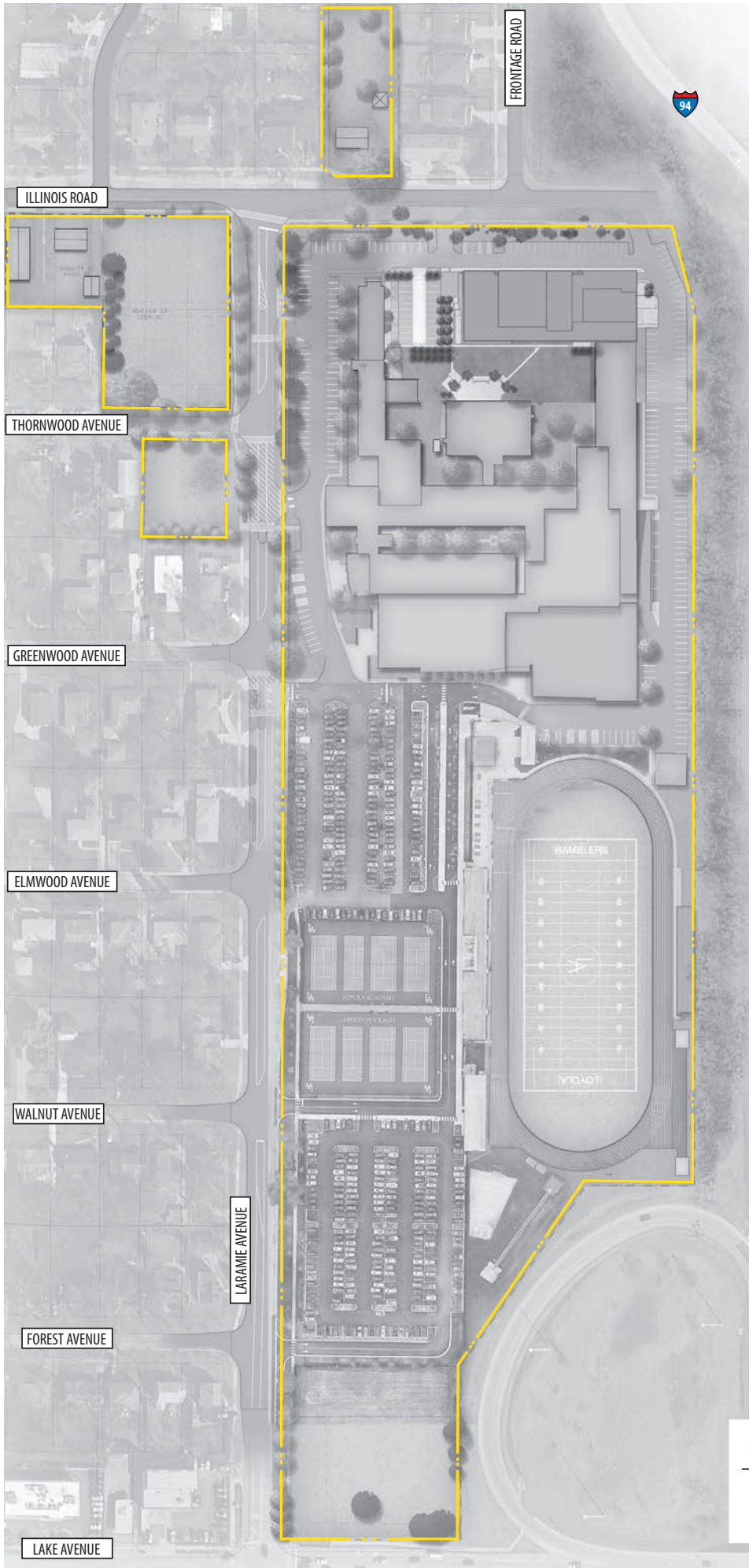
Contact Information

The following is key contact information for Loyola Academy related to the TMP.

Martin Jennings – Vice President of Alumni and Network Engagement

Tel: (847) 920-2429

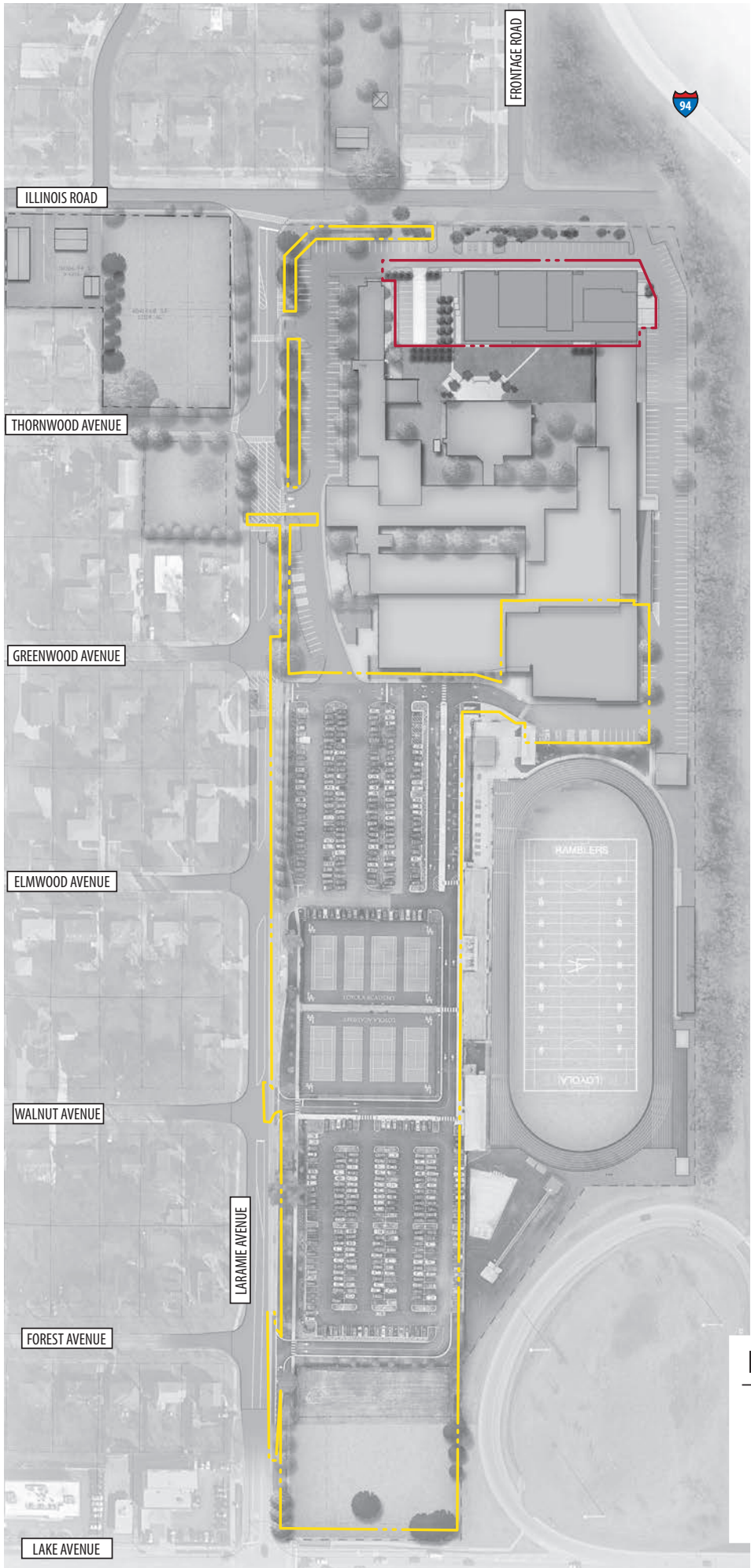
E-mail mjennings@loy.org





LEGEND

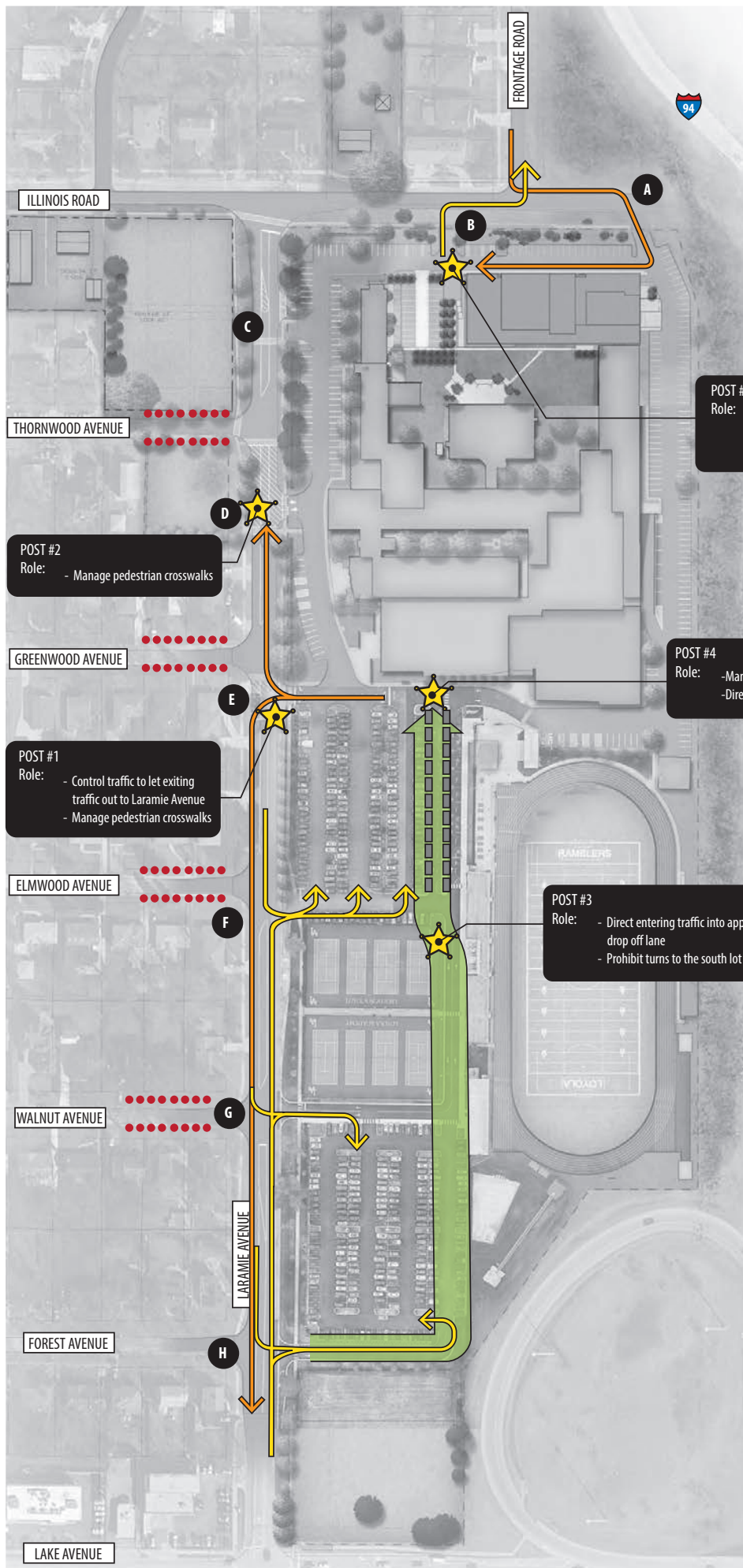


MASTER PLAN BOUNDARY



LEGEND

-  PHASE 1 BOUNDARY
-  PHASE 2 BOUNDARY



POST #5
 Role: - Manage student drop-offs in this area so as not to conflict with parking and pedestrians in the lot

POST #2
 Role: - Manage pedestrian crosswalks

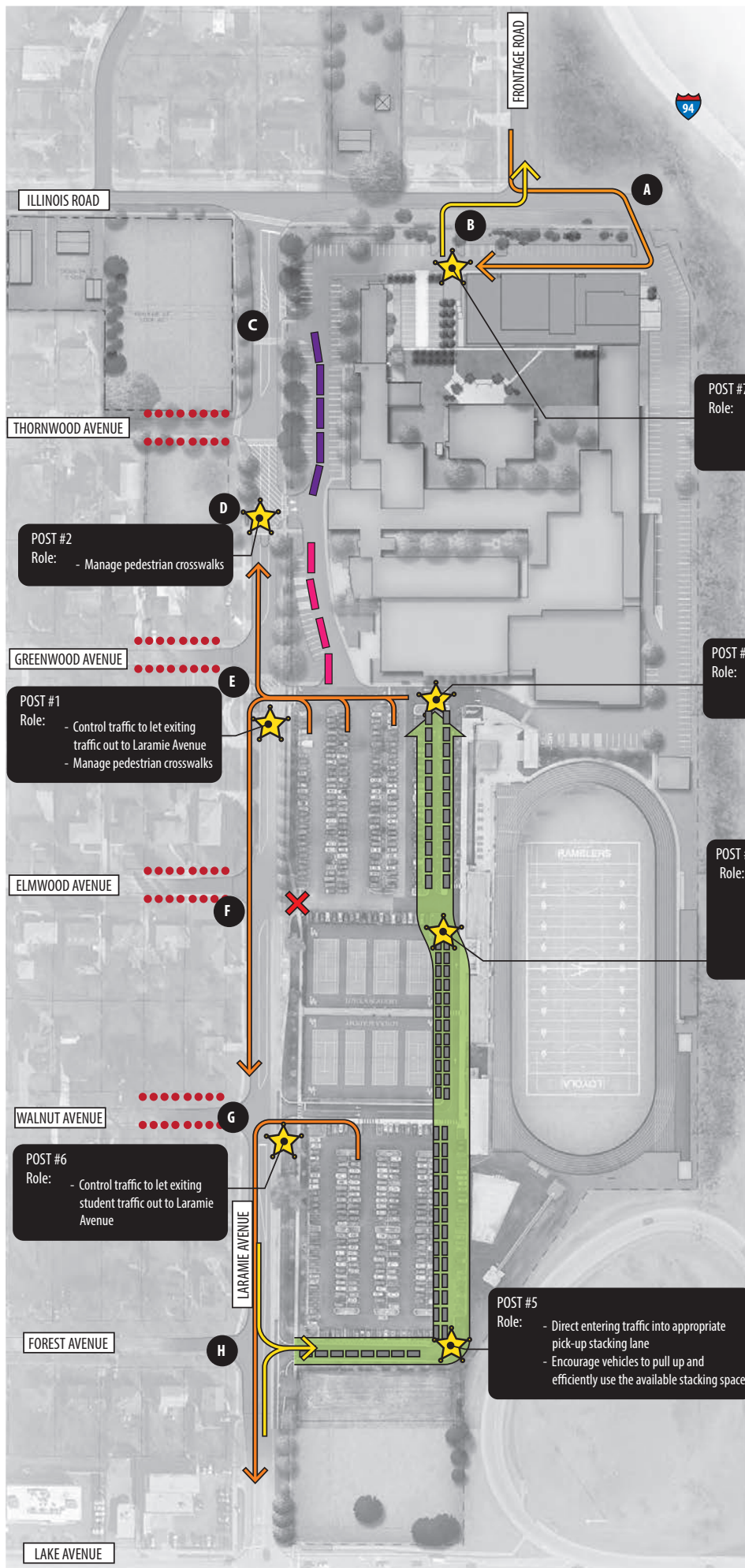
POST #4
 Role: -Manage pedestrian crosswalks
 -Direct traffic to exit

POST #1
 Role: - Control traffic to let exiting traffic out to Laramie Avenue
 - Manage pedestrian crosswalks

POST #3
 Role: - Direct entering traffic into appropriate drop off lane
 - Prohibit turns to the south lot

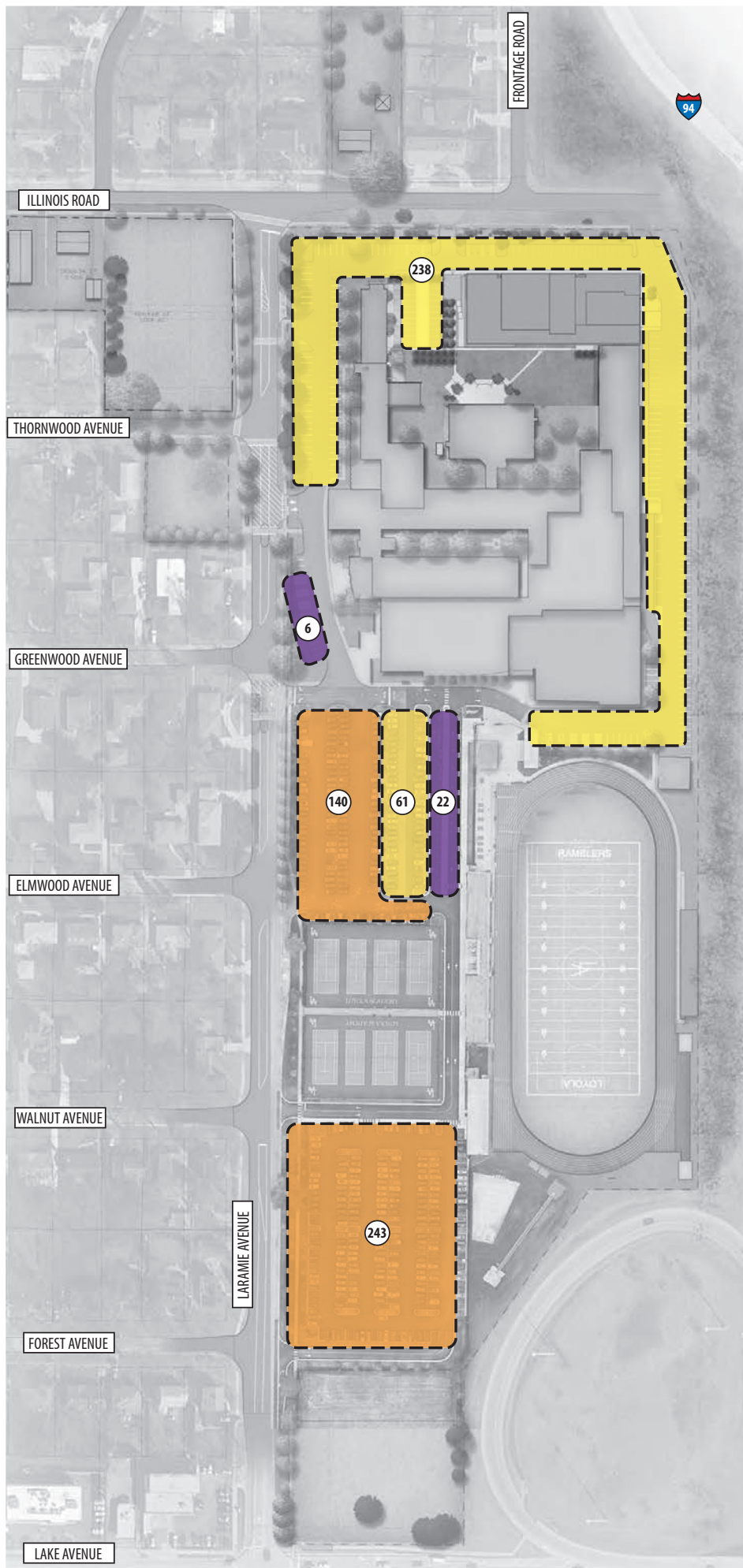
LEGEND

- ENTRANCE ROUTE
- EXIT ROUTE
- STUDENT DROP-OFF STACKING AREA
- PORTABLE SIGNS (NO DROP-OFF/PICK-UP)
- SCHOOL TRAFFIC CONTROL AIDE
- ACCESS DRIVEWAY LABEL
- NO PARKING (NO ACCESS/PARKING)
- CLOSE ACCESS WITH CONES



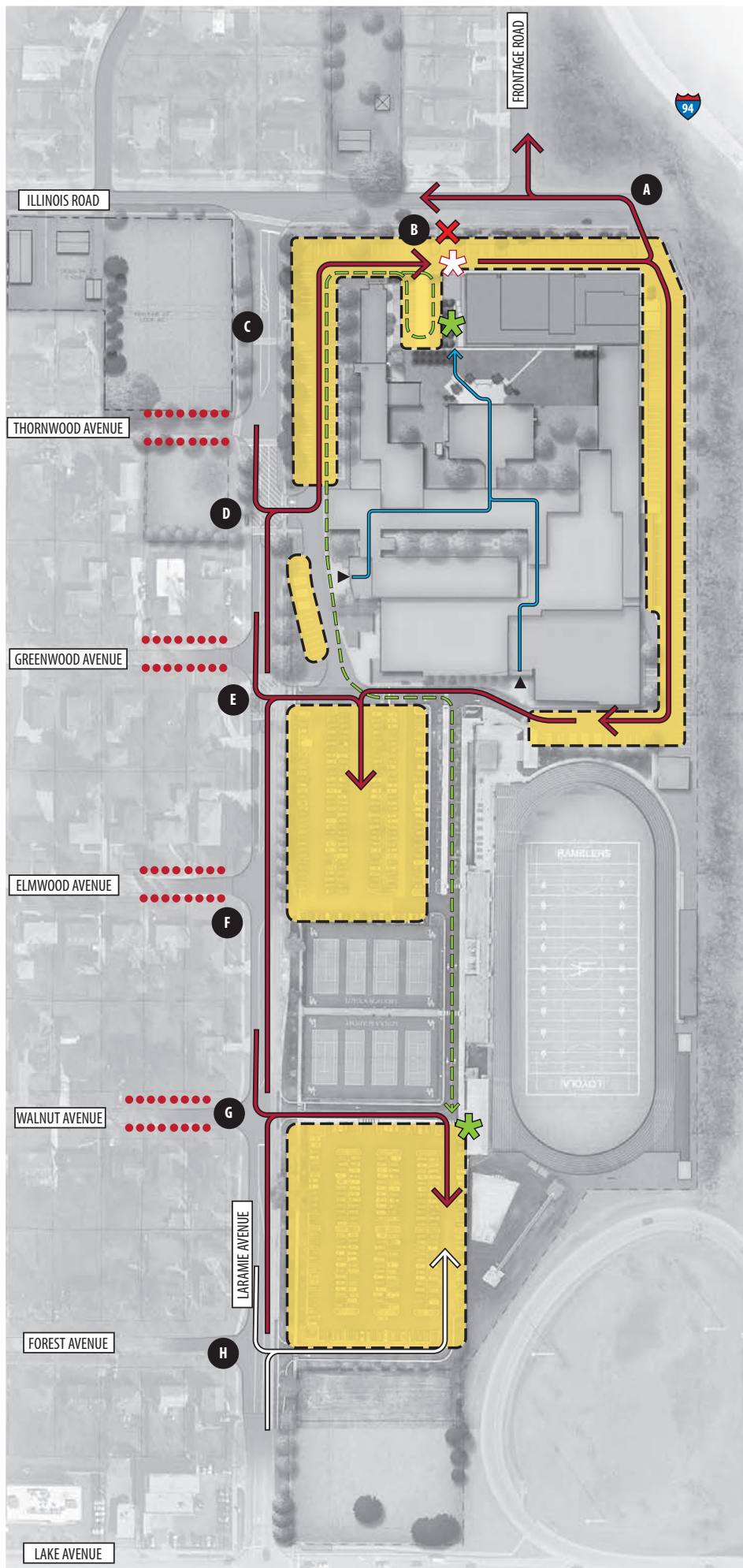
LEGEND

- ENTRANCE ROUTE
- EXIT ROUTE
- PACE BUS STACKING
- ATHLETIC TEAM BUS STACKING
- STUDENT PICK-UP STACKING AREA
- PORTABLE SIGNS (NO DROP-OFF/PICK-UP)
- CLOSE ACCESS WITH CONES
- SCHOOL TRAFFIC CONTROL AIDE
- ACCESS DRIVEWAY LABEL
- CONSTRUCTION ZONE (NO ACCESS/PARKING)









LEGEND

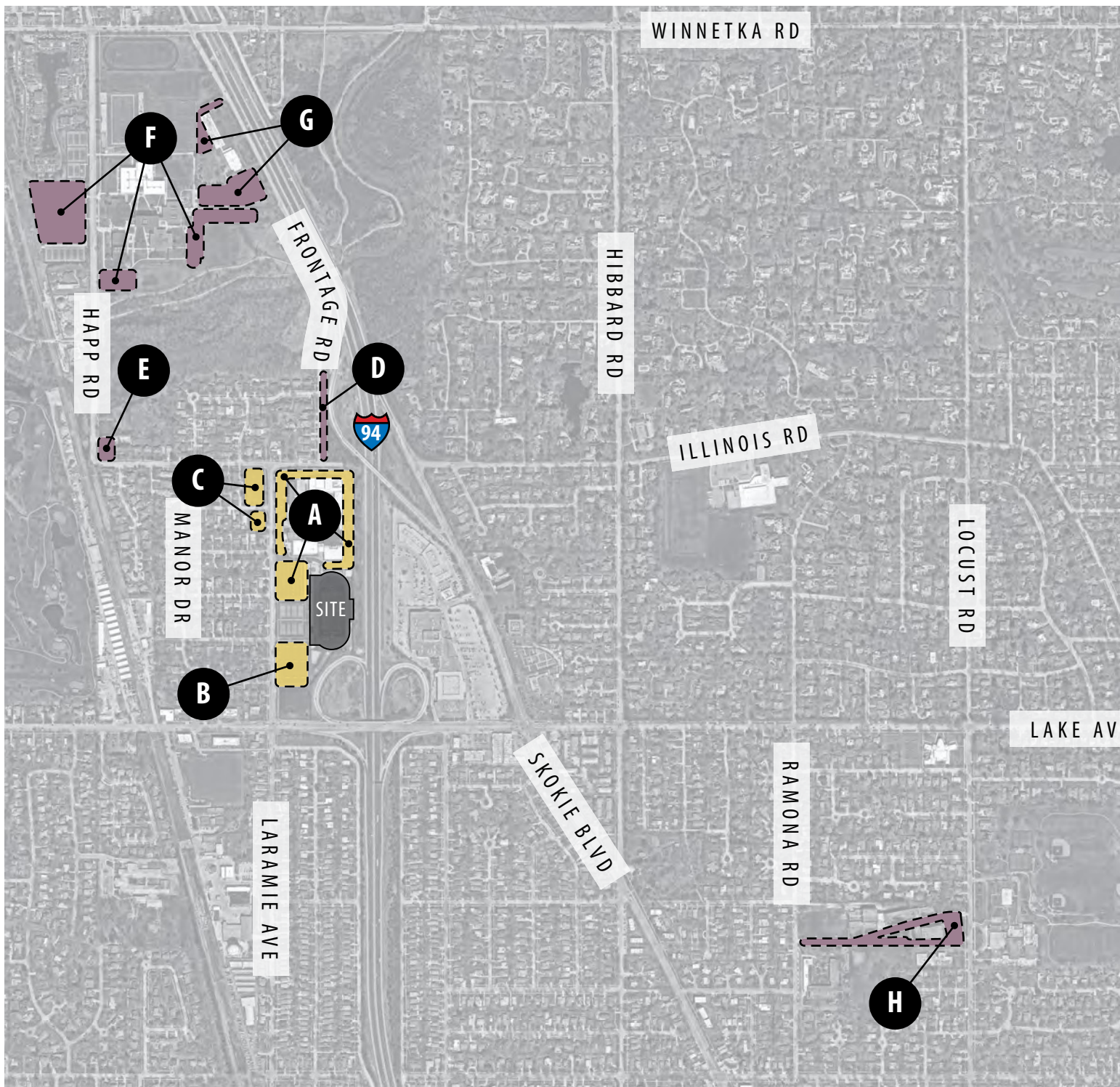
- STUDENT PERMIT PARKING
(383 TOTAL)
- STAFF PARKING
(299 TOTAL)
- VISITOR PARKING
(28 TOTAL)
- # PARKING SPACES



LEGEND

-  ENTRANCE ROUTE
-  GOLF CART MOBILITY ASSISTANCE ROUTE
-  WALK ROUTE THROUGH SCHOOL
-  EVENT CURBSIDE MANAGER
-  GOLF CART MOBILITY PICK-UP/DROP-OFF
-  EVENT PARKING
-  ACCESS DRIVEWAY LABEL
-  PORTABLE SIGNS (NO DROP-OFF/PICK-UP)
-  CLOSE ACCESS WITH CONES

INTENTIONALLY LEFT BLANK



LEGEND



PARKING LOT (On-Site / Owned by Loyola Academy)

PARKING LOT (Off-Site)



LOYOLA ACADEMY (North Lots)
Capacity: 477 spaces



LOYOLA ACADEMY (South Lot)
Capacity: 241 spaces



LOYOLA ACADEMY (Practice Fields)
Capacity: 187 spaces



FRONTAGE
Capacity: 1



CHINESE CHURCH
Capacity: 6



NEW TRIER
Capacity: 1



ROAD (East Side)
16+ spaces

CHRISTIAN CHURCH
55spaces

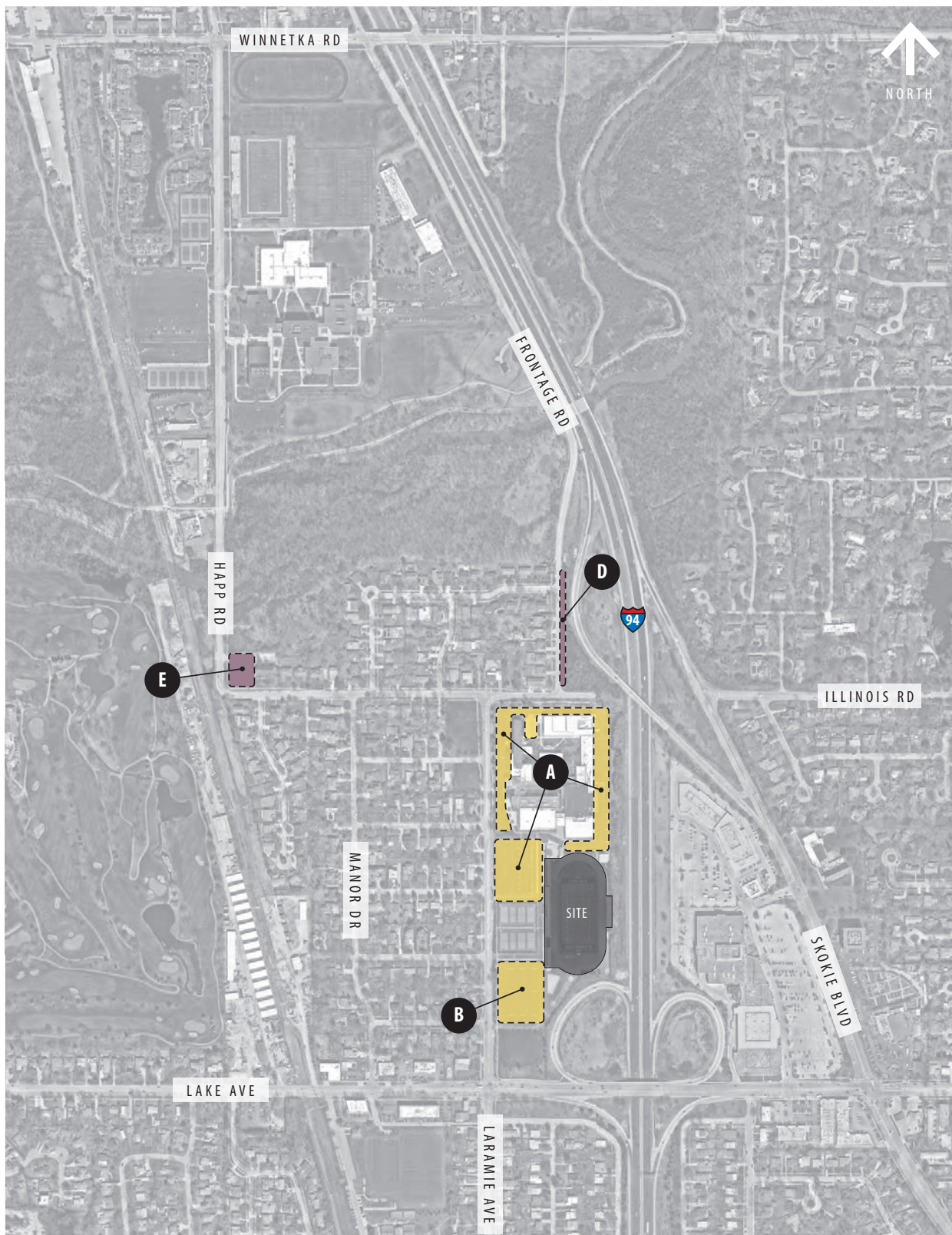
WEST CAMPUS
762 spaces





STEPAN - GLOBAL TECHNOLOGY CENTER
Capacity: 190 spaces



REGINA DOMINICAN HIGH SCHOOL
Capacity: 181 spaces



LEGEND

- | | |
|--|---|
| <p>A LOYOLA ACADEMY (North Lots)
Capacity: 477 spaces
Use: Fans / Players, Cheer, & Band / Staff</p> <p>B LOYOLA ACADEMY (South Lots)
Capacity: 241 spaces
Use: Fans</p> <p> PARKING LOT
(On-Site / Owned by Loyola Academy)</p> | <p>D FRONTAGE ROAD (East Side)
Capacity: 16+ spaces
Use: Fans</p> <p>E CHINESE CHRISTIAN FELLOWSHIP CHURCH
Capacity: 65 spaces
Use: Fans</p> <p> PARKING LOT
(Off-Site)</p> |
|--|---|



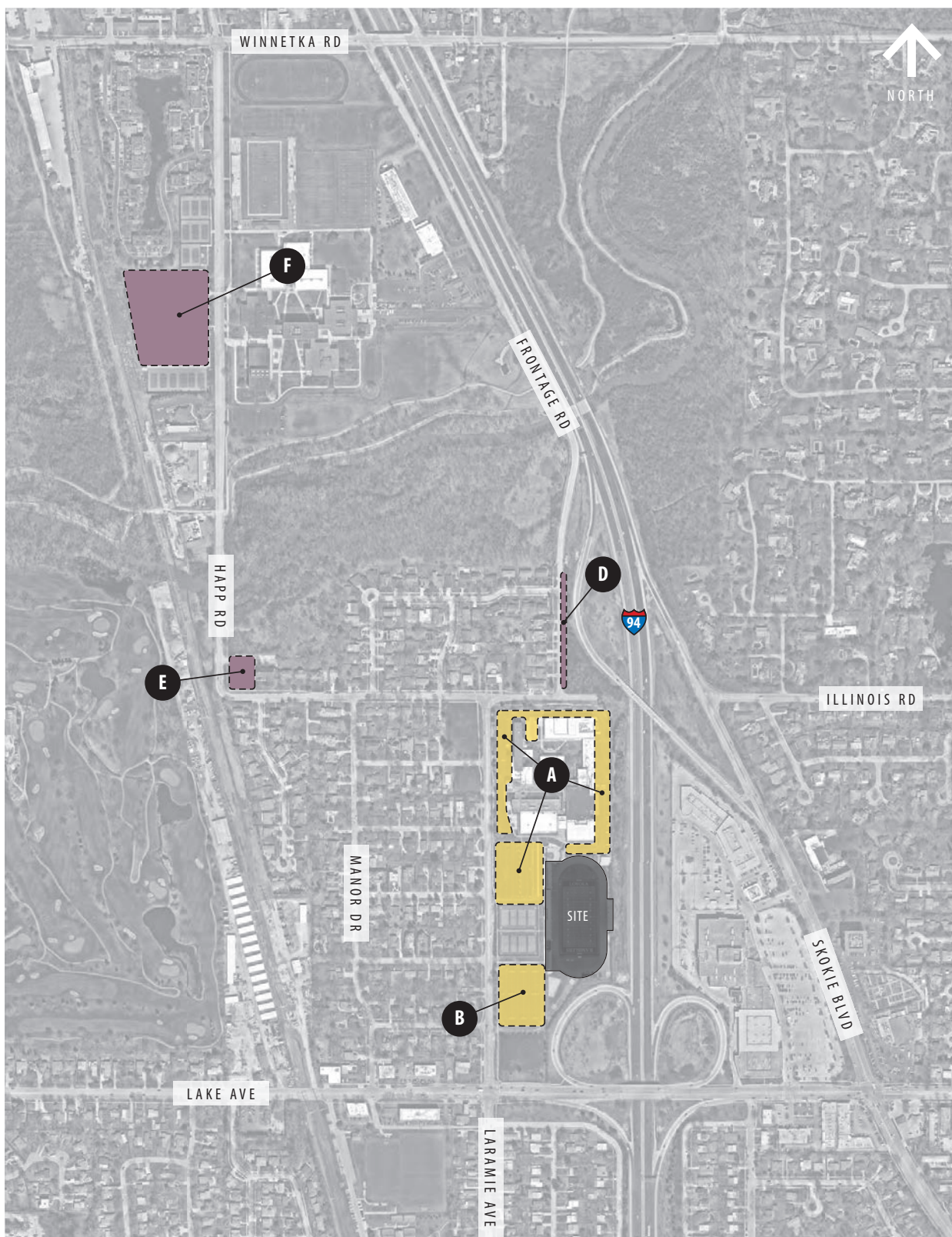
LEGEND

A **LOYOLA ACADEMY (North Lots)**
Capacity: 477 spaces
Use: Fans / Players, Cheer, & Band / Staff



B **LOYOLA ACADEMY (South Lots)**
Capacity: 241 spaces
Use: Fans - **CARPOOL (Min 3 per car)**

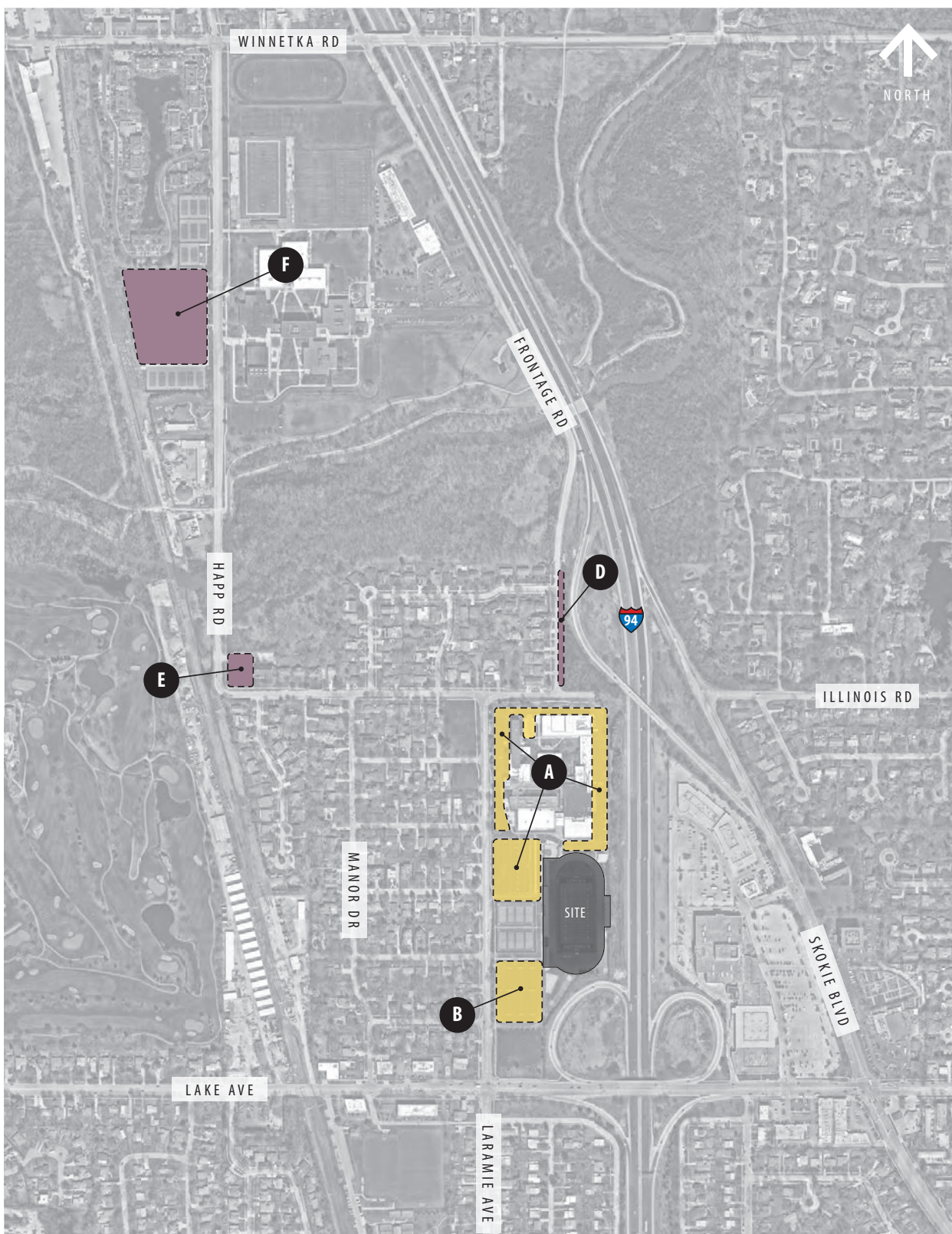
 **PARKING LOT**
(On-Site / Owned by Loyola Academy)

 **PARKING LOT**
(Off-Site)



LEGEND

- | | | |
|--|---|--|
| <p>A LOYOLA ACADEMY (North Lots)
Capacity: 477 spaces
Use: Fans / Players, Cheer, & Band / Staff</p> <p>B LOYOLA ACADEMY (South Lots)
Capacity: 241 spaces
Use: Fans</p> <p> PARKING LOT
(On-Site / Owned by Loyola Academy)</p> | <p>D FRONTAGE ROAD (East Side)
Capacity: 16+ spaces
Use: Fans</p> <p>E CHINESE CHRISTIAN FELLOWSHIP CHURCH
Capacity: 65 spaces
Use: Fans</p> <p> PARKING LOT
(Off-Site)</p> | <p>F NEW TRIER WEST CAMPUS (WEST LOT)
Capacity: 516 spaces
Use: Fans</p> |
|--|---|--|



LEGEND

A **LOYOLA ACADEMY (North Lots)**
Capacity: 477 spaces
Use: Fans / Players, Cheer, & Band / Staff

B **LOYOLA ACADEMY (South Lots)**
Capacity: 241 spaces
Use: Fans - **CARPOOL (Min 3 per car)**

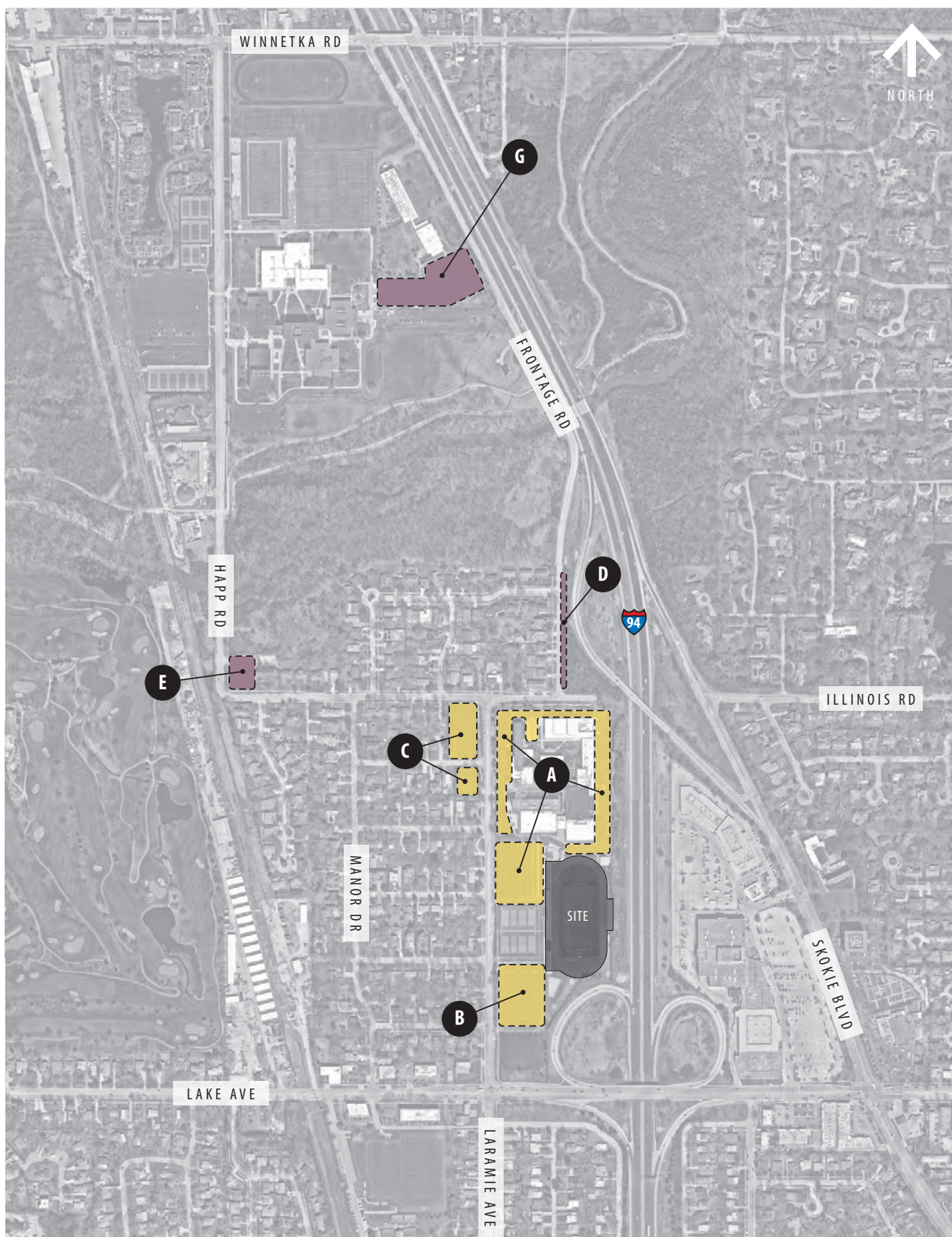
PARKING LOT
(On-Site / Owned by Loyola Academy)

D **FRONTAGE ROAD (East Side)**
Capacity: 16+ spaces
Use: Fans

E **CHINESE CHRISTIAN FELLOWSHIP CHURCH**
Capacity: 65 spaces
Use: Fans

PARKING LOT
(Off-Site)

F **NEW TRIER WEST CAMPUS (West Lot)**
Capacity: 516 spaces
Use: Fans



LEGEND



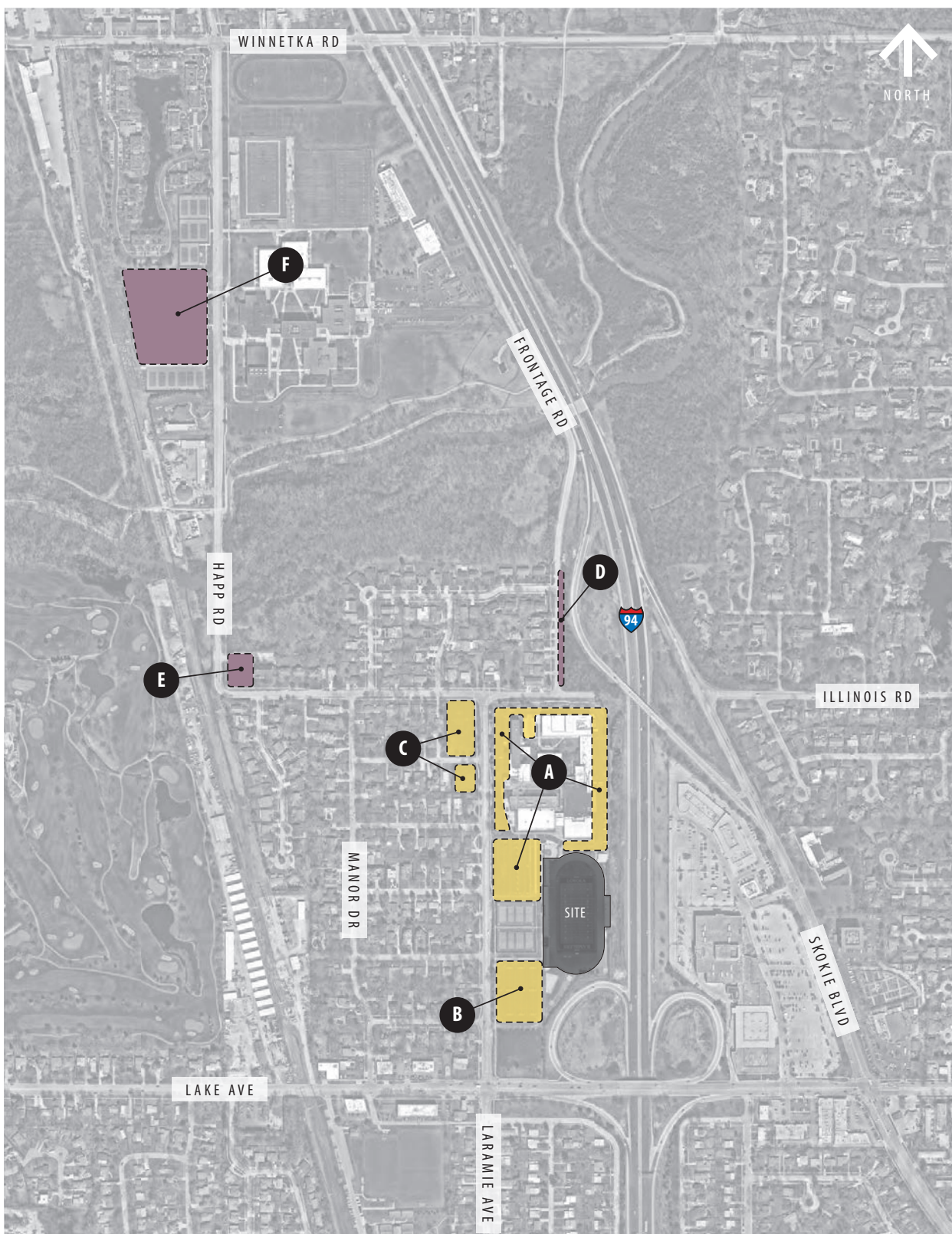
- | | | |
|---|--|---|
| A LOYOLA ACADEMY (North Lots)
Capacity: 477 spaces
Use: Fans / Players, Cheer, & Band / Staff | C LOYOLA ACADEMY (Practice Fields)
Capacity: 187 spaces
Use: Fans | E CHINESE CHRISTIAN FELLOWSHIP CHURCH
Capacity: 65 spaces
Use: Fans |
| B LOYOLA ACADEMY (South Lots)
Capacity: 241 spaces
Use: Fans - CARPPOOL (Min 4 per car) | D FRONTAGE ROAD (East Side)
Capacity: 16+ spaces
Use: Fans | G STEPAN - GLOBAL TECHNOLOGY CENTER
Capacity: 154 spaces
Use: Fans |
|  PARKING LOT
(On-Site / Owned by Loyola Academy) |  PARKING LOT
(Off-Site) | |

EXHIBIT 13

PARKING OPTIONS



LEGEND



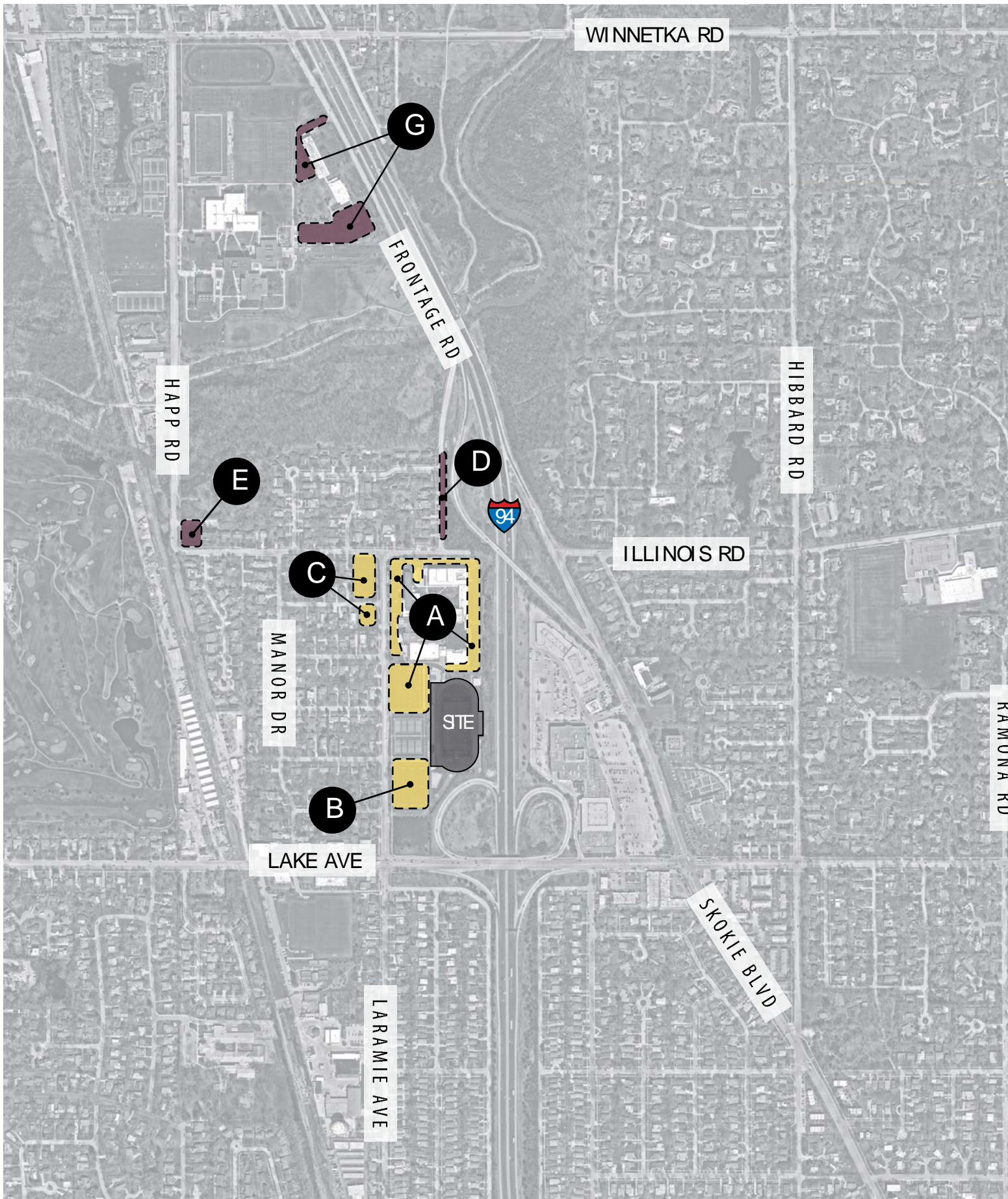
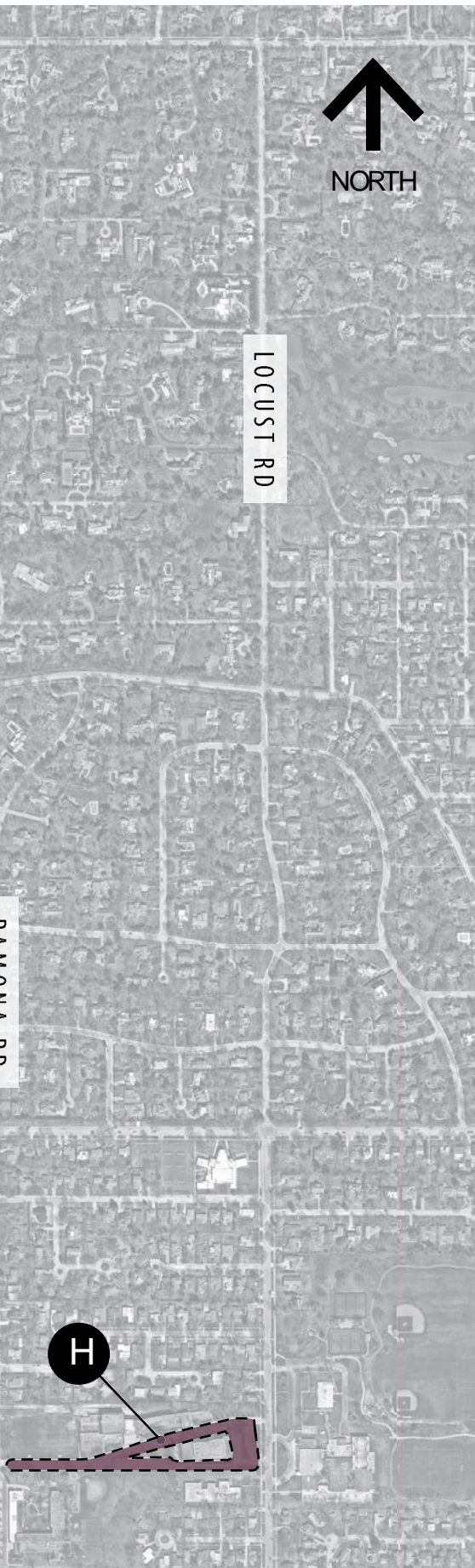
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|---|--|---|
| A LOYOLA ACADEMY (North Lots)
Capacity: 477 spaces
Use: Fans / Players, Cheer, & Band / Staff | D FRONTAGE ROAD (East Side)
Capacity: 16+ spaces
Use: Fans | F NEW TRIER WEST CAMPUS (West Lot)
Capacity: 516 spaces
Use: Fans |
| B LOYOLA ACADEMY (South Lots)
Capacity: 241 spaces
Use: Fans - CARPPOOL (Min 4 per car) | E CHINESE CHRISTIAN FELLOWSHIP CHURCH
Capacity: 65 spaces
Use: Fans | |
|  PARKING LOT
(On-Site / Owned by Loyola Academy) |  PARKING LOT
(Off-Site) | |

EXHIBIT 14

PARKING OPTIONS





LEGEND



PARKINGLOT (On-Ste/ Owned by Loyola Academy)



PARKINGLOT (Off-Ste)



LOYOLA ACADEMY (North Lots)

Capacity: 477 spaces

Use: Fans/ Players, Cheer, & Band/ Staff



LOYOLA ACADEMY (South Lots)

Capacity: 241 spaces

Use: Fans - **CARPOOL (Min 4 per car)**



LOYOLA ACADEMY (Practice Fields)

Capacity: 187 spaces

Use: Fans



FRONTAGE ROAD (East Side)

Capacity: 187 spaces

Use: Fans



CHINESE CHRISTIAN FELLOWSHIP CHURCH

Capacity: 65 spaces

Use: Fans



STEPAN - GLOBAL TECHNOLOGY CENTER

Capacity: 190 spaces

Use: Fans



REGINA DOMINICAN HIGH SCHOOL

Capacity: 181 spaces

Use: Fans

EXHIBIT 15

PARKING OPTIONS

VALRY GAME (10% DROP OFF / CARPOOL LOT / NO NEW TRIER AVAILABILITY)

MARKET IMPACT ANALYSIS

MARKET IMPACT ANALYSIS

PROPOSED LIGHTED ATHLETIC FIELD

1100 LARAMIE AVENUE

WILMETTE, ILLINOIS 60091

August 9, 2023

MPS Law
1515 East Woodfield Road, Suite 250
Schaumburg, Illinois 60173

Attention: Mr. Harold W. Francke, Partner

Subject: Market Impact Analysis
Proposed Lighted Athletic Field
1100 Laramie Avenue
Wilmette, Illinois 60091

Dear Mr. Francke,

In accordance with your request, the application for development approval of the lighted Loyola Academy athletic field has been analyzed and this value-impact analysis has been prepared.

MaRous & Company specializes in the valuation of unique and complex investment-grade real estate and has conducted similar market impact studies for a variety of clients and for several different proposed developments over the last 40 years. Clients have ranged from municipalities, counties, and school districts, to corporations, developers, and citizens' groups. The types of projects analyzed include: suburban school development, recreational uses such as skate parks and lighted high school athletic fields, warehouse and distribution facilities, commercial developments such as shopping centers and big-box retail facilities; religious facilities such as mosques and mega-churches; residential developments such as high-density multifamily and congregate-care buildings and large single-family subdivisions; and industrial uses such as waste transfer stations, landfills, and quarries. MaRous & Company has appraised a variety of real estate properties in the subject area.

MaRous & Company has appraised over 15 schools ranging from elementary schools to high schools in Des Plaines, Arlington Heights, Bensenville, Elmhurst, Palatine, Warrenville, Lake Forest, Joliet, Geneva, Elgin, Highland Park, Old Mill Creek, Wilmette, Glendale Heights, and Chicago.

Value-impact projects related to this include but are not limited to the proposed Memorial Field variance for a lighted field for Glenbard Township High School; the proposed development of a K-8 school in Evanston; proposed development of tennis courts at Woodlands Academy, Lake Forest; and manufacturing/distribution parks in South Elgin, Carpentersville, Hillside, Glenview, and Huntley. Other value-impact projects include an assisted-living facility in Highland Park and Bannockburn; the proposed development of a residential rehabilitation facility near St. Charles; a senior independent-living building in Grayslake; expansion of a continuing care community in Lake Forest; two Presbyterian Homes facilities in Evanston—one new construction and one proposed redevelopment; and The Moorings of Arlington Heights.

Along with the various projects described above, MaRous & Company has conducted numerous market studies of energy-related projects. These projects consist of analyzing the impact of wind energy facilities, solar energy facilities, and transmission lines on adjacent residential uses, as well as several proposed natural gas-fired electric plants in various locations.

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Project Information

Location	1100 Laramie Avenue Wilmette, Illinois 60091
Project Type	Field lights addition
Loyola Academy Land Area	≈ 950,000 square feet
Proposed Lighting	Four 80-foot tall light poles around the athletic field, each pole containing 2 rows of seven lights
Light Description	G2 LED Stadium Lighting, Series ST-RSL, 400 – 1200 Watts
Light Usage Schedule/Limitations	<ul style="list-style-type: none">• 60 total days of lighted events:<ul style="list-style-type: none">○ 5 Friday night football games - 10:30 pm cutoff○ 25 non-football game contests - 9:00pm cutoff○ 30 practice nights○ no use of lights on Sundays• Saturday use of lights only under the following circumstances:<ul style="list-style-type: none">○ non-football game with Loyola Academy athletes○ IHSA game only when Loyola Academy is competing○ an act of God results in delay, rescheduling, or suspension of Friday night football games○ 9:00pm cutoff on lights• Lights will only be used by Loyola Academy students or athletics• No third-party facility rentals can use the field lights• No music or concert events can use the lights
Current Restrictions	70-foot limit on light structures
Current Zoning	R1-A, Residential with a special use
Approximate Number of Homes in the West-Adjacent Subdivision	209
Estimated Distance from Proposed Development to Closest Residential Home	≈ 435 feet (includes road buffer)
Field to the Closest Home (Building)	

Purpose and Intended Use of the Study

The purpose of this appraisal assignment is to analyze the potential impact, if any, on the value of the surrounding residential properties of the addition of four 80-foot tall light poles for the Loyola Academy athletic field. The report is intended specifically for the use of MPS Law. Any other use or user of this report is considered to be unintended.

Executive Summary

As a result of the market impact analysis undertaken, we have concluded that the proposed improvements to the Loyola Academy athletic field will not diminish property values in the vicinity. These conclusions are based on the following:

- ✧ Controls are in place to limit the athletic field use without adding additional events/practices.
- ✧ Loyola Academy has had an active use of the land they occupy with events, athletics, traffic, and other items associated with a high school for over 50 years.
- ✧ The proposed new, state-of-the-art LED lights will improve Loyola Academy's function and further serve proximate homes with a prestigious walkable high school.
- ✧ The proposed state-of-the-art LED lights will meet the village lighting requirements and will protect the nearby properties.
- ✧ As concluded by Kimley-Horn & Associates Inc., most recently amended August 2023, after analysis of the parking management plan, the study area has sufficient reserve capacity to accommodate the parking generated by the proposed lighted athletic field.
- ✧ An expert sound study conducted by Acoustic Associates, Ltd., concluded that events conducted on the athletic field will generate sound levels which are not materially above ambient sound levels.
- ✧ Interstate 94, which carries approximately 144,400 vehicles per day and contains approximately 100-foot visible light poles on the southbound off-ramp near Loyola Academy, has been in existence for over 40 years in the subject area.
- ✧ It is not uncommon for high schools in the subject area to have lighted athletic fields with homes closer than that of the subject and with possibly inferior lighting improvements.
- ✧ An analysis of home sales concluded that homes have been appreciating in value proximate to lighted athletic fields.
- ✧ Professionally developed lighted athletic fields with appropriate restrictions in the subject area have had no measurable negative impact on the residential market of the subject area.
- ✧ Interviews with brokers active in the subject area revealed no negative perspective to buyers or sellers in the residential market due to lighted athletic fields.
- ✧ An analysis of recent residential sales proximate to existing schools in the nearby area, which includes a residential sale as close as 159 feet to a lighted athletic field (building to field), did not support any finding that proximity to lighted field use had any impact on property values.

Definition of Market Value

When discussing market value, the following definition is used:

The most probable price a property should bring in a competitive and open market under all condition's requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- ⋈ Buyer and seller are typically motivated.
- ⋈ Both parties are well informed or well advised and acting in what they consider their own best interests.
- ⋈ A reasonable time is allowed for exposure in the open market.
- ⋈ Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto.
- ⋈ The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.¹

Scope of Work and Reporting Process

Information was gathered concerning the real estate market generally and the market of the area surrounding the project specifically. The uses in the surrounding area were considered. The following summarizes the actions taken:

- ⋈ Review of documents provided by MPS Law regarding applications from Loyola Academy and the Village of Wilmette.
- ⋈ Review of the project's plans and elevations provided by MPS Law.
- ⋈ Review of the demographics and traffic counts in the area of the school.
- ⋈ Review of a sound study prepared by Acoustic Associates, Ltd., dated April 24, 2023, and reviewed a supplemental report dated August 8, 2023.
- ⋈ Review of a lighting plan prepared by Musco Lighting, dated May 18, 2023.
- ⋈ Review of an amended traffic management plan prepared by Kimley-Horn Associates Inc., dated July 2023, and most recently amended August 2023.
- ⋈ Data was gathered on the general market area of the proposed development, and on the other areas nearby in which existing lighted fields are located.
- ⋈ Data was gathered on the market for residential properties in the nearby area of the project and from other areas in the county from private sources, public sources, and sources from villages, Cook County, and/or Illinois public records.
- ⋈ Illinois real estate professionals were interviewed concerning recent sales in their area, local market conditions, and the impact of lighted fields on property values in the area.

¹ (12 C.F.R. Part 34.42(g); 55 Federal Register 34696, August 24, 1990, as amended at 57 Federal Register 12202, April 9, 1992; 59 Federal Register 29499, June 7, 1994).

- ∴ Properties used for development of the matched pairs were physically inspected by MaRous & Company on the exterior, and photographs of the interiors were reviewed where available.
- ∴ Inspections were performed of the subject area and the areas in nearby towns with existing lighted field use by Michael S. MaRous and Stephen A. Vizcarra on May 1, 2023. Michael S. MaRous also performed a similar inspection on April 23, 2023.

This document is considered to conform to the requirements of the *Uniform Standards of Professional Appraisal Practice and Advisory Opinions* (USPAP). This letter is a brief recapitulation of the appraisal data, analyses, and conclusions; additional supporting documentation is retained in the MaRous & Company office file. There are no extraordinary assumptions or hypothetical conditions included in the market study.

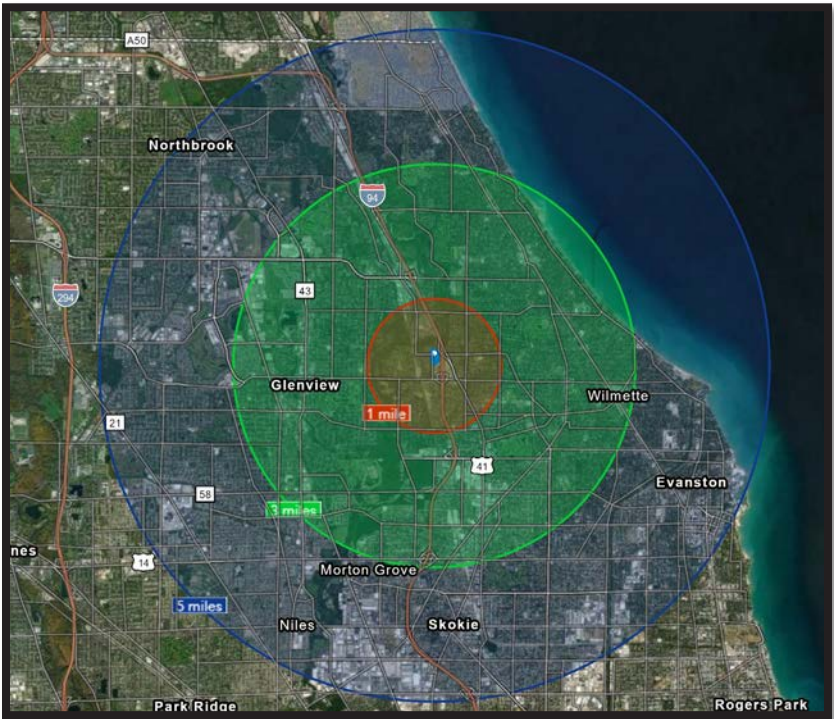
In order to form a judgment concerning the potential impact, if any, on the value of the surrounding residential properties of the approval of the proposed development the following have been considered:

- ∴ The character and the value of the residential properties in the general area of the proposed lighted field.
- ∴ The economic impact on the larger community by the proposed lighted field.
- ∴ The impact on the value of the surrounding residential properties by the proposed lighted field.
- ∴ The impact on the value of a proximate single-family home to the lighted field before the existence of the proposed lights and after.

Subject Area Overview

Loyola Academy is located at 1100 Laramie Avenue, Wilmette. The character of the area and Wilmette are defined by good schools, demographics, linkage/transportation, and convenient shopping centers. Interstate 94 has been in existence in the subject area for over 40 years. Loyola Academy has been in existence for over 50 years and has an outstanding reputation in the subject area and has a history of students from the west neighborhood attending. Loyola Academy has had an active use of the land they occupy with events, athletics, traffic, and other items associated with a high school. The proposed development will help modernize the already prestigious school which is an amenity to the west-adjacent neighborhood.

The following pages highlight the demographics in the area, traffic counts, and home values in the subject area.



2022 Demographics and Traffic Counts

RADIUS	1-MILE	3-MILE	5-MILE
Population	8,493	106,693	297,611
Median Household Income	\$154,022	\$146,107	\$112,546
Average Household Income	\$219,146	\$216,710	\$174,071
Total Number of Households	3,020	38,071	108,595
Owner-Occupied Housing Units	2,698	31,397	82,888
Renter-Occupied Housing Units	321	6,636	25,638

Source: Site to Do Business/ESRI, based upon 2022 U.S. Bureau of the Census data/ESRI forecasts



Traffic Count Map - Close Up

Laramie Ave
Laramie Ave, Wilmette, Illinois, 60091
Rings: 1, 3, 5 mile radii

Prepared by Esri
Latitude: 42.08252
Longitude: -87.76091



Average Daily Traffic Volume
▲ Up to 6,000 vehicles per day
▲ 6,001 - 15,000
▲ 15,001 - 30,000
▲ 30,001 - 50,000
▲ 50,001 - 100,000
▲ More than 100,000 per day



Source: ©2022 Kalibrate Technologies (Q3 2022).

May 05, 2023

Residential Sales Near the Subject Area

The following table summarizes a sample of sales of single-family residential in the immediate west subdivision of Loyola Academy in approximately the last 2 years, which consisted of sales that had consistent data across private and public sources. These sales are proximate to the subject, and a map is added to the addenda of this report.

	Stat	Street #	Str Name	Sfx	City	All Beds	Baths	Yr Blt	ASF	Acreage	Closed Date	Sold Pr
1	CLSD	3516	Forest	Ave	Wilmette	4	2	1956	1600	0.21	11/30/2021	\$349,000
2	CLSD	3521	Elmwood	Ave	Wilmette	3	1.1	1956	1202	0.045	05/07/2021	\$380,000
3	CLSD	3521	Forest	Ave	Wilmette	3	2.1	1956	1237		02/22/2023	\$394,850
4	CLSD	1035	Manor	Dr	Wilmette	4	3	1959	0		12/01/2022	\$401,627 (F)
5	CLSD	3521	Greenwood	Ave	Wilmette	3	2	1957	1635		09/16/2022	\$500,000
6	CLSD	3515	Elmwood	Ave	Wilmette	4	3	1960	2619	0.2088	08/02/2021	\$510,000
7	CLSD	1120	Manor	Dr	Wilmette		2.1	1956	0	0.267	05/24/2021	\$575,000
8	CLSD	1131	New Trier	Ct	Wilmette	4	2.1	1971	2853	0.171	05/20/2022	\$630,000
9	CLSD	3424	Illinois	Rd	Wilmette	4	2.2	1989	4822	0.194	11/15/2022	\$677,300
10	CLSD	925	Manor	Dr	Wilmette	5	4	1923	0	0.7087	07/08/2022	\$1,155,000
11	CLSD	1139	Manor	Dr	Wilmette	5	4.1	1994	5085	0.3263	04/14/2023	\$1,225,000

11 Sold - Detached Single Statistics

	High	Low	Average	Median
List Price	\$1,350,000	\$349,000	\$637,364	\$525,000
Sold Price	\$1,225,000	\$349,000	\$617,980	\$510,000
Listing Market Time	95	5	27	18
Market Time	95	5	27	18

The following properties are re-sales within the last 5 years in the west-adjacent subject neighborhood.

Address	Square Footage	Year Built	Beds	Baths	Lot Size
1-3521 Elmwood Avenue, Wilmette	1202	1956	3	1.1	0.045 Acres
Sale Date: 02/20/2018			Sale Price: \$368,000		
Sale Date: 05/07/2021			Sale Price: \$380,000		
About 1% appreciation (straight line) year over year for about 3.25 years, included in such was an interior update of the home. The update consisted of new appliances and a kitchen update. Broker’s comments on listing sheet, “...located blocks from New Trier's exclusive Freshman Campus and top ranked Loyola Academy.”					
Address	Square Footage	Year Built	Beds	Baths	Lot Size
2-911 Manor Drive, Wilmette	2620	1976	4	2.1	0.19 Acres
Sale Date: 02/23/2018			Sale Price: \$403,100		
Sale Date: 11/04/2020			Sale Price: \$547,500		
About 13.03% appreciation (straight line) year over year for about 2.75 years, included in such was an interior update of the home. The update consisted of new appliances, updated bathrooms, and a new roof. Broker’s comments on listing sheet, “Location is the most solid factor in any property and this location could not be any more desirable.”					

The above homes have been appreciating proximate to the active use of the high school and Interstate 94.



3521 Elmwood Avenue, Wilmette

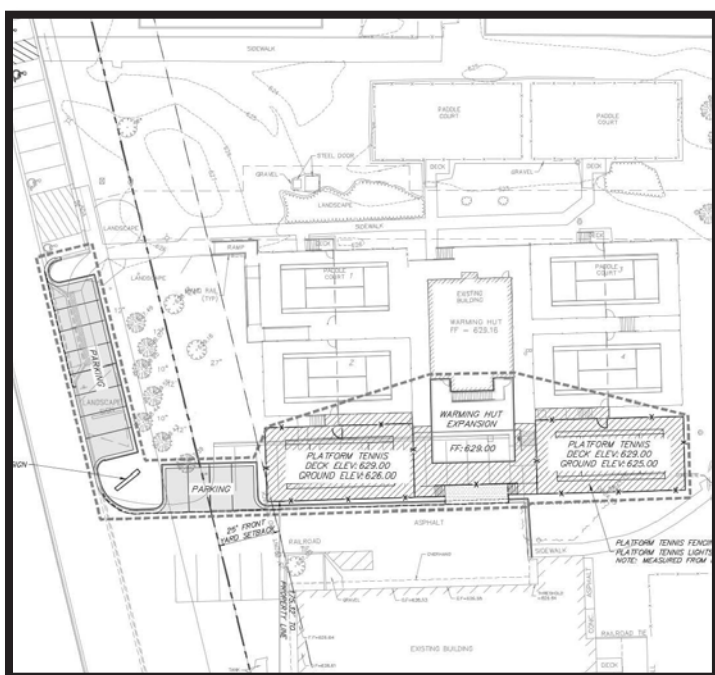


911 Manor Drive, Wilmette

Nearby West Park Paddle and Tennis Special Use Expansion

The Wilmette Park District has the Wilmette Paddle Club located at 3551 Lake Ave, Wilmette, IL 60091 (nearly across the street from the subject). That property features six lighted paddle tennis courts and a warming hut. The property is approximately 260 feet from the nearest residential structure. The leagues play on the courts Monday through Thursdays from September through April. Generally, for this type of use, each user brings his/her vehicle.

On April 11, 2022, the Wilmette Park District applied for 2 additional lighted paddle tennis courts, expansion of the warming hut, operation of the courts until 11:00 PM, expansion from 37 to 40 parking spaces, and other items.



This project, either all in or part, was approved, and in the Spring of 2023, demolition/preparation of the project began.

Compared to the proposed project for the subject property, the Wilmette Paddle Club has a use that is more intensive than the subject property. The lighted Wilmette Paddle Club is used later (11:00 PM), is used more days (leagues for over 100 games a year), likely has more intensive traffic/parking (proportionately), is closer to nearby single-family homes, likely has inferior lighting, and is likely noisier.

Factors that Affect Property Values Considered

- ⋈ Appearance
 - Lighted athletic fields have an active use of the land they occupy and are generally compatible with most uses in their immediate area. They typically have an open space-like appearance that will fit with the visual designs of surrounding buildings.
 - The proposed state-of-the-art LED lights will meet the village lighting requirements and will protect the nearby properties.
 - Three approximately 100-foot-tall light poles with three lights each servicing the off-ramp for Interstate 94 at the Lake Avenue intersection are already visible from Laramie Avenue near the school parking lots.
 - It is not uncommon for high schools in the subject area to have lighted athletic fields.
 - Newer lighting technology is further reducing visual impact from lighting such as the proposed project.
- ⋈ Noise and Odor
 - Lighted athletic fields do not produce significant odor.
 - Lighted athletic fields do produce some sound. However, an expert sound study conducted by Acoustic Associates, Ltd., concluded that events conducted on the athletic field will generate sound levels which are not materially above ambient sound levels.
 - Noise from Interstate 94 appears to already impact the subject area which sustains approximately 144,400 vehicles per day.
 - Controls are in place to limit the athletic field use.
 - The number of events/practices are not increasing; rather they are changing schedules.
- ⋈ Traffic/Parking
 - The current traffic produced by Loyola Academy already impacts the subject area.
 - Fewer buses will be used to transport students to play on other lighted athletic fields.
 - As concluded by Kimley-Horn & Associates Inc., after analysis of the parking management plan, the study area has sufficient reserve capacity to accommodate the parking generated by the proposed lighted athletic field.
- ⋈ Hazardous Materials
 - Lighted athletic fields are not reported to produce hazardous materials.

High School Lighted Athletic Fields in the Subject Area

There are a variety of high schools in the subject area that have lighted athletic fields similar to the proposed subject project. Many of the fields are surrounded by residential use, have similar usage schedules, and generally have older lighting compared to the subject, whereas newer lighting technology (such as that being proposed for the subject project) will further reduce visual impact from lighting.

The following high schools were analyzed and compared to the proposed project: Glenbrook North, Maine South, Niles North, New Trier West, Notre Dame, Schaumburg, and Maine West. These are only a few of the many schools with lighted athletic fields in the Chicagoland suburbs. Other schools are less comparable to the subject in relation to the proximity to residential use, demographics, athletic programs, and other items. In those cases, the lighted athletic fields did not impact residential property values as well.

Comparable High Schools with Lighted Athletic Fields							
High School	Light Pole Count [#]	Lights Per Pole [#]	Light Pole Height [#]	Age of the Light Poles ⁺	Lighting Technology	Key Field Usage*	Distance from the Field to the Closest Home ⁺
Proposed Loyola Academy	4	14	80 Feet	New	New, State-of-the-Art Musco LED Lights	Friday Night Football	433 Feet
Glenbrook North	4	16	80 Feet	5 +Years	Older Musco Lighting Metal Halide Technology	Friday Night Football	287 Feet
Maine South	4	2 (16) 2 (10)	90 Feet	5+ Years	Musco Lighting Green Technology Metal Halide	Friday Night Football	230 Feet
Niles North (Near I-94)	4	13	70 Feet	5+ Years	Soon to be LED Technology Musco Lighting	Friday Night Football	119 Feet
New Trier West (Near I-94)	4	3 (9) 1 (12)	2 (80-Foot) 2 (90-Foot)	5 Years	LED Musco Lighting Technology	Friday Night Football	550 Feet (SFR) 215 (MFR)
Notre Dame	4	3 (13) 1 (12)	3 (70-Foot) 1 (90-Foot)	5+ Years	Non-Musco LED Technology	Friday Night Football	152 Feet
Schaumburg	4	2 (19) 2 (17)	90 Feet	5+ Years	Older Musco Lighting Metal Halide Technology	Friday Night Football	152 Feet
Maine West	4	2 (16) 2 (12)	2 (90-Foot) 2 (70-Foot)	5+ Years	Musco Lighting Metal Halid Technology	Friday Night Football	163 Feet
[#] Estimated/Taken from Google Earth [*] Estimated from Google Maps (Historical Street View) ⁺ Taken from School Schedules							

The proposed project is similar to that of existing lighted athletic fields. In many cases as shown above, the proposed project will likely have a less-intensive use compared to other schools. Not only do the above fields utilize lighting that is older and likely more impactful, but the distance to proximate homes appears to be less on average than that of the subject. Following this section is data showing no negative impact caused by these lighted fields by further analyzing the proximate homes to some of them.

Residential Appreciation Amidst Lighted Athletic Fields

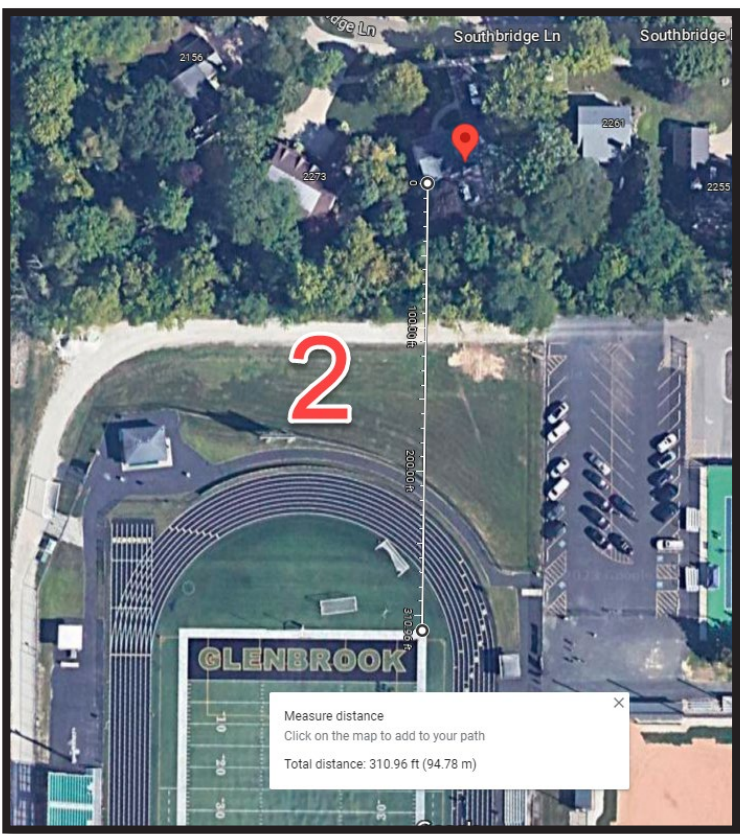
An analysis of 4 homes proximate to lighted athletic fields during the existence of lighted athletic fields has been conducted to determine if there is any impact on the single-family homes.

Address	Square Footage	Year Built	Beds	Baths	Lot Size
1-5120 Weber Lane, Skokie 192 feet away from Niles North field)	3632	1962	3	2.1	0.19 Acres
Sale Date: 03/17/2017			Sale Price: \$360,000		
Sale Date: 03/18/2021			Sale Price: \$526,875		
About 11.59% appreciation (straight line) year over year for about 4 years, included in such was an interior and exterior update of the home. The update consisted of new windows, electric panel, paint, kitchen update, bathroom updates, conversion of a bedroom to a walk-in closet, and more. Broker's comments on listing sheet, "Nice location on a quiet cul-de-sac and within walking distance to Niles North HS and Old Orchard shopping center."					
Address	Square Footage	Year Built	Beds	Baths	Lot Size
2-2267 Southbridge Lane, Northbrook 310 feet away from Glenbrook North field)	2271	1968	4	2.1	0.31 Acres
Sale Date: 08/23/2017			Sale Price: \$490,000		
Sale Date: 02/04/2019			Sale Price: \$725,000		
About 32% appreciation (straight line) year over year for about 1.5 years, included in such was an interior and exterior remodel of the home. It is unclear what the details of the remodel included. Broker's comments on listing sheet, "Walk to all 3 schools: Maple, Wescott and GBN from this spectacular home."					
Address	Square Footage	Year Built	Beds	Baths	Lot Size
3-8642 North Ozark Avenue, Niles 160 feet away from Notre Dame field)	1179	1957	3	2	0.15 Acres
Sale Date: 04/24/2017			Sale Price: \$265,000		
Sale Date: 05/10/2018			Sale Price: \$381,000		
About 43.77% appreciation (straight line) year over year for about 1 year, included in such was an interior and exterior update of the home. The update consisted of new stairs, half-bath conversion to a full bath, paint, kitchen update, bathroom updates, new furnace, new fence, new lights, and more.					
Address	Square Footage	Year Built	Beds	Baths	Lot Size
4-718 South Hamlin Avenue, Park Ridge 317 feet away from Maine South field)	N/A	1967	4	3	0.185 Acres
Sale Date: 03/16/2010			Sale Price: \$520,000		
Sale Date: 04/09/2021			Sale Price: \$709,900		
About 3.32% appreciation (straight line) year over year for about 11 years, included in such appears to be normal maintenance and updates.					

The above homes have been appreciating proximate to lighted athletic fields. This confirms that the proximate residential properties will not be affected by the proposed project. Following this page are pictures of the properties.



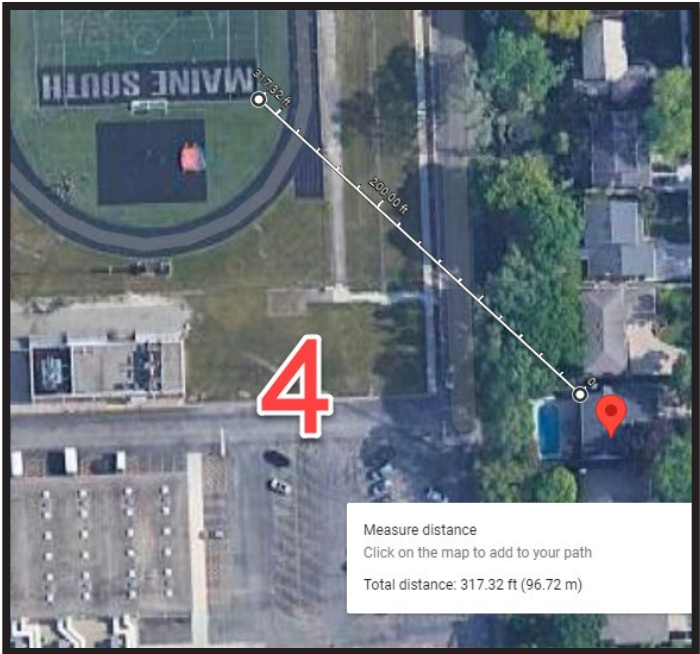
5120 Weber Lane, Skokie
Niles North



2267 Southbridge Lane, Northbrook
Glenbrook North



8642 N. Ozark Avenue, Niles
Notre Dame



718 S. Hamlin Avenue, Park Ridge
Maine South

Market Impact Analysis

A market impact analysis is undertaken to develop an opinion as to whether the proposed project will have an effect on the value of residential uses in proximity to the proposed project. This analysis includes:

- ∴ Matched pairs analyzing the impact on values of residential properties proximate to lighted athletic fields.

Matched Pair Analysis

A matched pair analysis is a methodology which analyzes the importance of a selected characteristic, in this instance proximity to public schools, to the value of a property.² This technique compares the sale of a property in proximity to the selected characteristic to the sale of a similar property in the same market area and under similar market conditions but without the proximity to the selected characteristic.

It is difficult to find properties that are identical except for proximity to lighted athletic fields, and which also occurred under substantially similar market conditions. The residences included in this study were researched through MLS then confirmed by the corresponding municipality/county public records.

Adjustment grids are included with each matched pair analysis to compare each variable of sale. The adjustment comparisons in the following analyses are qualitative. A qualitative analysis involves using quality ratings based on how the non-proximate sales compare to the proximate sales and does not require using dollar adjustments.³ The non-proximate sales are adjusted with the notations of superior (-), similar (o), and inferior (+). The superior variables are given downward adjustments to meet the related variables of the proximate residences. The similar variables do not require adjustments. The inferior variables are given upward adjustments in order to meet the related variables of the proximate residences.

² See the discussion “Paired Sales Analysis” and “Sale/Resale Analysis” in Bell, Randall, MAI, *Real Estate Damages, Applied Economics and Detrimental Conditions*, Second Edition, Appraisal Institute, 2008, pages 25-27. The idea is to review a sale and resale of a property in proximity to a selected characteristic, to compare it to a sale and resale of a similar property without such proximity, and to then analyze whether the proximity to the selected characteristic influenced the change in value. However, in rural areas it usually is not possible to find data for this type of “pure pair” analysis.

³ Horn, T. (2015, September 3). What qualitative analysis is and how agents can use it to price their listings. *Birmingham Appraisal Blog*. Retrieved from <https://birminghamappraisalblog.com/appraisal/what-qualitative-analysis-is-and-how-agents-can-use-it-to-price-their-listings/>.

Maine South High School Analysis - Matched Pair No. 1

Maine South High School is located at 1111 South Dee Road, Park Ridge.

Matched Pair #1 considers the sale of a house located at 718 South Hamlin Avenue, Park Ridge, sold in April 2021. This house is approximately 317 feet (house to field) from Maine South's lighted athletic field.

This sale is compared with one nearby comparable sale that sold in January 2023. The salient details of these properties are summarized in the table below.

MATCHED PAIR NO. 1		
	1A - Proximate to a Lighted Field	1B – Nearby Sale
Address	718 South Hamlin Avenue Park Ridge	324 South Lincoln Avenue Park Ridge
Distance from the Lighted Athletic Field (feet)	317	N/A
Sale Date	April 09, 2021	January 31, 2023
Sale Price	\$709,900	\$710,000
Sale Price/Sq. Ft. (Above Grade)	N/A	\$328.70
Year Built	1967	1967
Building Size (Sq. Ft.)	N/A	2160
Lot Size (Sq. Ft.)	8,049.89	6,198.59
Function/Style	1.5 Stories (Brick) 4 bedrooms, 3 bath	2 Stories (Brick/Vinyl) 4 bedrooms, 3.1 bathrooms
Basement	Finished	Finished
Utilities	Central Air Gas heat Public water	Central Air Systems Gas, Forced-Air Heat Public Water
	2-Car Attached Garage	2-Car Attached Garage
Other	In-Ground Pool, Fireplace, Patio	Heated Floors, Fireplace, Patio In- Ground Sprinklers



718 South Hamlin Avenue
Park Ridge

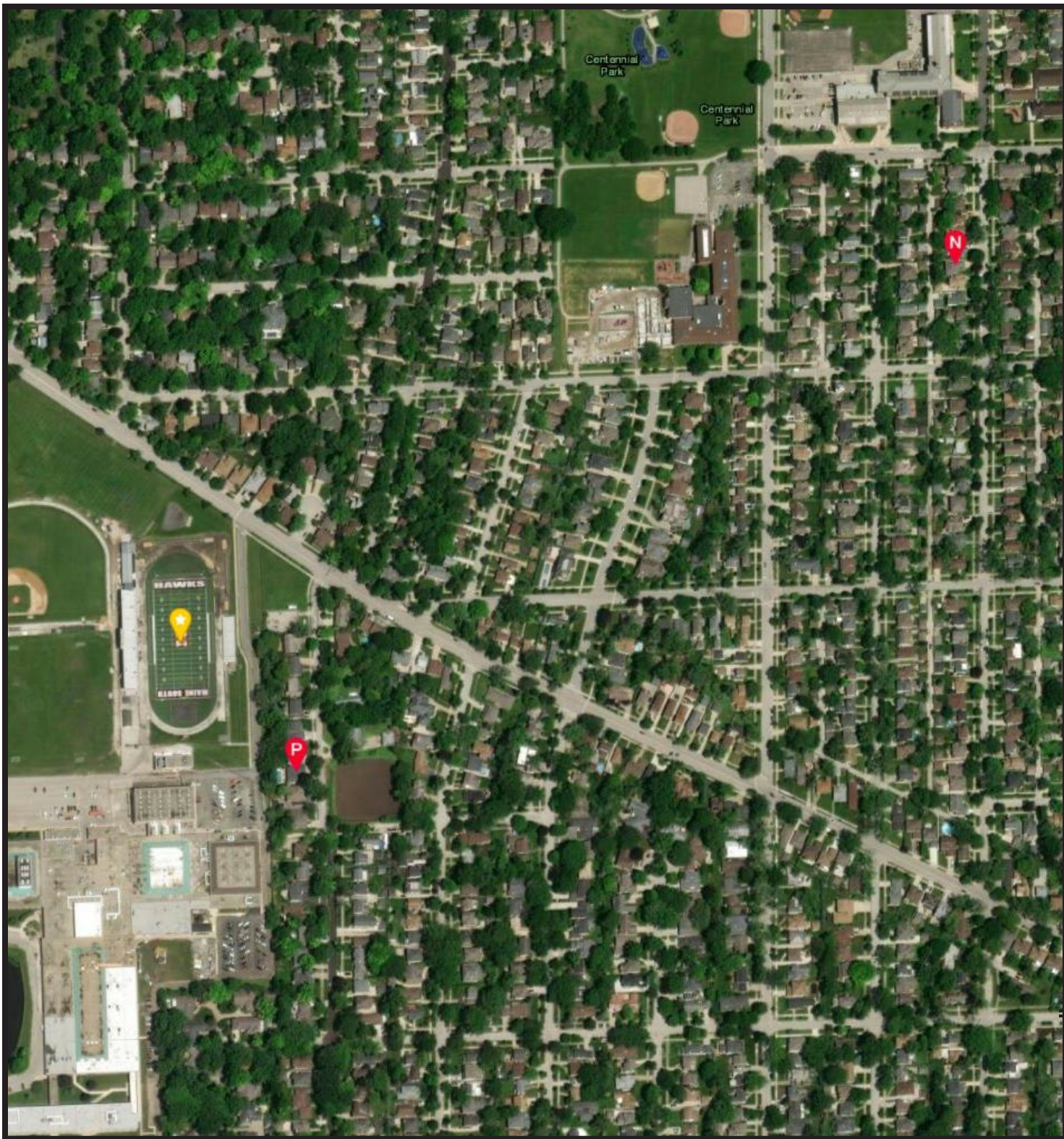


324 South Lincoln Avenue
Park Ridge

ADJUSTMENT GRID MATCHED PAIR NO. 1

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Exterior Style	Interior Finish	Function	Other Amenities
1B	324 South Lincoln Avenue Park Ridge	+	o	N/A	+	o	+	N/A	-	+
+	Positive adjustment based on comparable being inferior in comparison to property #1A									
-	Negative adjustment based on comparable being superior in comparison to property #1A									
o	No adjustment necessary									

The above sale compared to 718 South Hamlin Avenue is similar. However, considering the adjustments noted in the above table, the difference in the sale price does not support the conclusion that proximity to a lighted athletic field had a negative impact on the value of the 718 South Hamlin Avenue property.



Maine South Matched Pair No. 1 Location Map

Glenbrook North High School Analysis - Matched Pair No. 2

Glenbrook North High School is located at 2300 Shermer Road, Northbrook.

Matched Pair #2 considers the sale of a house located at 2267 Southbridge Lane, Northbrook, sold in February 2019. This house is approximately 310 feet (house to field) from Glenbrook North's lighted athletic field.

This sale is compared with two nearby comparable sales that sold in May 2017 and August 2021. The salient details of these properties are summarized in the table below.

MATCHED PAIR NO. 2			
	2A - Proximate to a Lighted Field	2B – Nearby Sale	2C – Nearby Sale
Address	2267 Southbridge Lane Northbrook	2639 Mulberry Lane Northbrook	2602 Farnsworth Lane Northbrook
Distance from the Lighted Athletic Field (feet)	310	N/A	N/A
Sale Date	February 4, 2019	August 4, 2021	May 18, 2017
Sale Price	\$725,000	\$720,000	\$730,000
Sale Price/Sq. Ft. (Above Grade)	\$319.24	\$267.86	\$252.16
Year Built	1969	1967	1967
Building Size (Sq. Ft.)	2271	2688	2895
Lot Size (Sq. Ft.)	13,229.17	11,456.28	13,525.38
Function/Style	2 Stories (Aluminum) 4 bedrooms, 2.1 bath	2 Stories (Brick/Cedar) 4 bedrooms, 3.1 bathrooms	2 Stories (Brick/Vinyl) 4 bedrooms, 2.1 bathrooms
Basement	Finished	Finished	Finished
Utilities	Central Air Gas heat Public water	Central Air Systems Gas, Forced-Air Heat Public Water	Central Air Systems Gas, Forced-Air Heat Public Water
	2-Car Attached Garage	2-Car Attached Garage	2-Car Attached Garage
Other	Fireplace, Patio	Fireplace, Patio	Fireplace, Deck
Broker Comment	"Walk to all 3 Schools: Maple, Wescott and Glenbrook North"		

ADJUSTMENT GRID MATCHED PAIR NO. 2										
Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Exterior Style	Interior Finish	Function	Other Amenities
2B	2639 Mulberry Lane Northbrook	-	o	-	+	o	+	o	-	o
2C	2602 Farnsworth Lane Northbrook	+	o	-	o	o	+	o	o	o
+	Positive adjustment based on comparable being inferior in comparison to property #2A									
-	Negative adjustment based on comparable being superior in comparison to property #2A									
o	No adjustment necessary									

The above sales compared to 2267 Southbridge Lane are similar. However, considering the adjustments noted in the above table, the difference in the sale prices do not support the conclusion that proximity to uses similar to lighted athletic fields had a negative impact on the value of the 2267 Southbridge Lane property.

2639 Mulberry Lane
Northbrook

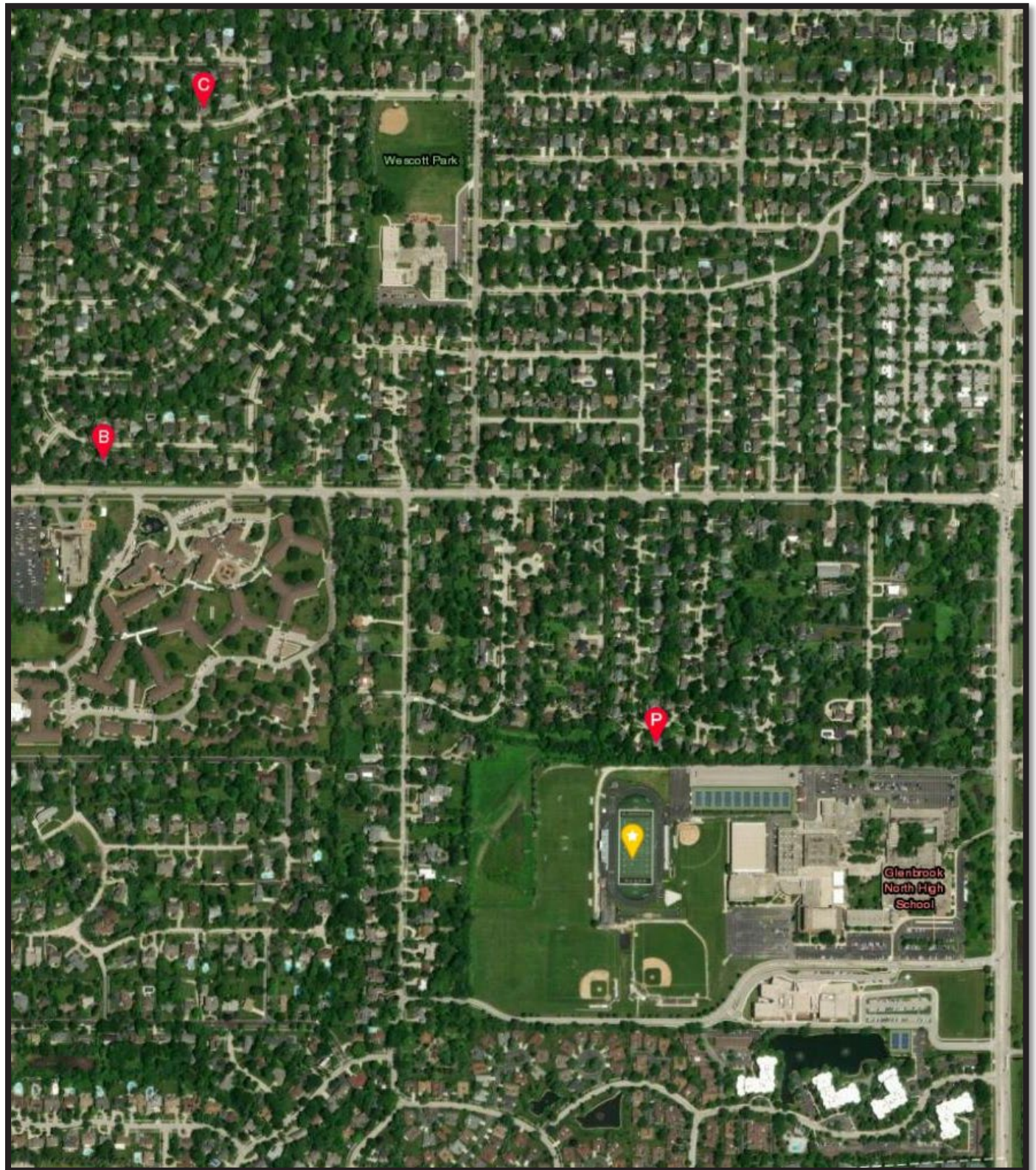


2602 Farnsworth Lane
Northbrook



2267 Southbridge Lane
Northbrook





Glenbrook North Matched Pair No. 2 Location Map

Niles North High School Analysis - Matched Pair No. 3

Niles North High School is located at 9800 Lawler Avenue, Skokie.

Matched Pair #3 considers the sale of a house located at 9707 Le Claire Avenue, Skokie, sold in March 2022. This house is approximately 276 feet (house to field) from Niles North lighted athletic field.

This sale is compared with two nearby comparable sales that sold in December 2022 and September 2022. The salient details of these properties are summarized in the table below.

MATCHED PAIR NO. 3			
	3A - Proximate to a Lighted Field	3B – Nearby Sale	3C – Nearby Sale
Address	9707 Le Claire Avenue Skokie	9406 Lavergne Avenue Skokie	9615 Le Claire Avenue Skokie
Distance from the Lighted Athletic Field (feet)	276	N/A	N/A
Sale Date	March 31, 2022	September 23, 2022	December 28, 2022
Sale Price	\$490,000	\$490,000	\$485,000
Sale Price/Sq. Ft. (Above Grade)	\$225.29	\$288.24	N/A
Year Built	1963	1961	1964
Building Size (Sq. Ft.)	2175	1700	N/A
Lot Size (Sq. Ft.)	7,187.40	5,536.48	5,384.02
Construction/Style	1.5 Stories (Brick) 4 bedrooms, 2.1 bath	1.5 Stories (Brick) 3 bedrooms, 2 bathrooms	1.5 Stories (Brick) 3 bedrooms, 2 bathrooms
Finishement	Finished	Finished	Finished
Utilities	Central Air Gas heat Public water	Central Air Systems Gas, Forced-Air Heat Public Water	Central Air Systems Gas, Forced-Air Heat Public Water
	2-Car Detached Garage	2.5-Car Detached Garage	2-Car Detached Garage
Other	Fireplace, Sprinkler System, Patio	Patio	
Broker's Comments	"Close to everything: expressway, shopping mall, supermarkets, schools, etc."		



9707 Le Claire Avenue
Skokie

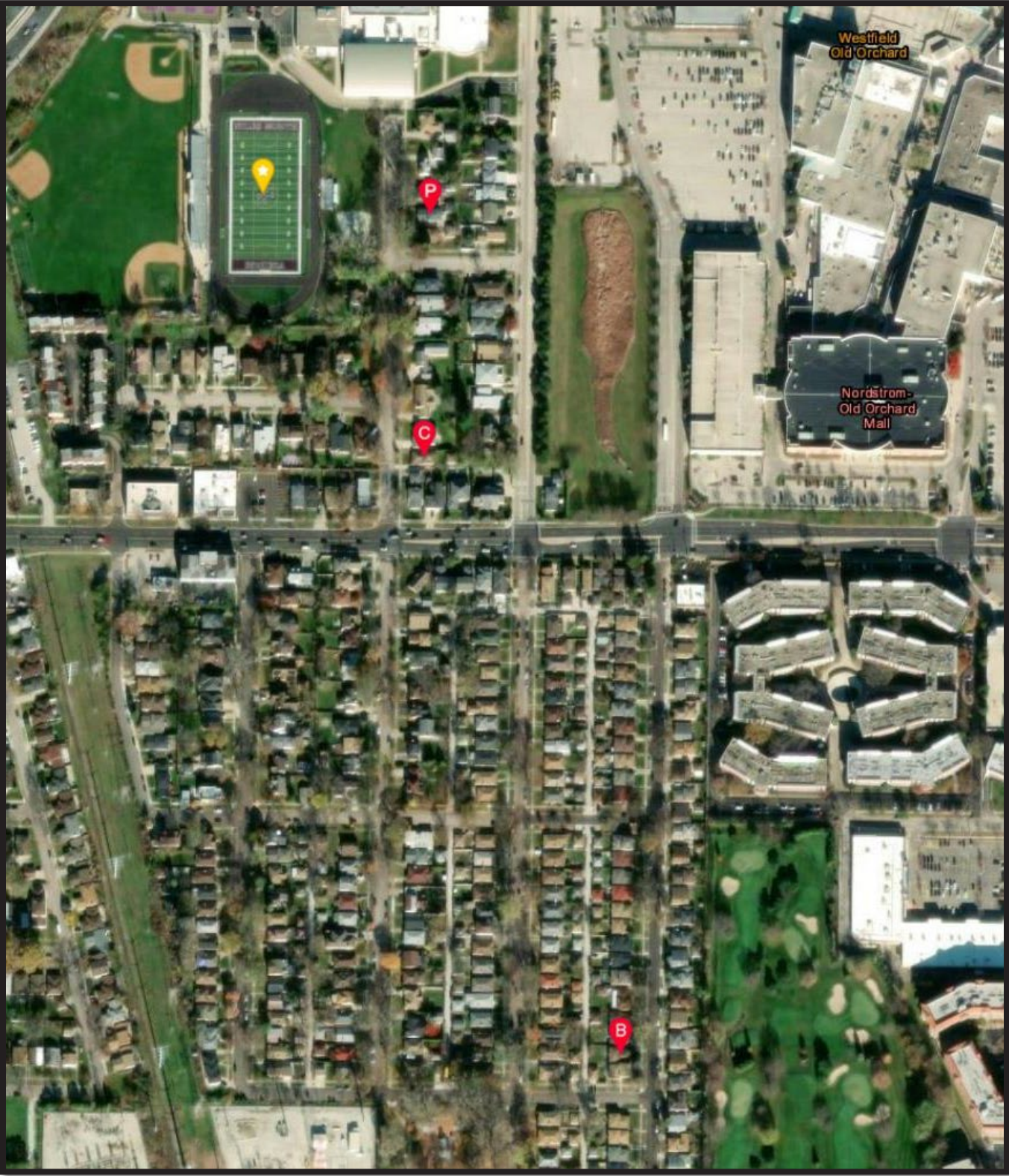


9615 Le Claire Avenue
Skokie

ADJUSTMENT GRID MATCHED PAIR NO. 3										
Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Exterior Style	Function	Interior Finish	Other Amenities
3B	9406 Lavergne Avenue Skokie	+	o	+	+	o	o	+	-	+
3C	9615 Le Claire Avenue Skokie	+	o	N/A	+	o	o	+	-	+
+	Positive adjustment based on comparable being inferior in comparison to property #3A									
-	Negative adjustment based on comparable being superior in comparison to property #3A									
o	No adjustment necessary									



9406 Lavergne Avenue
Skokie



Niles North Matched Pair No. 3 Location Map

Notre Dame High School Analysis - Matched Pair No. 4

Notre Dame High School is located at 7655 West Dempster Street, Niles.

Matched Pair #4 considers the sale of a house located at 8646 North Ozark Avenue, Niles, sold in August 2022. This house is approximately 159 feet (house to field) from Notre Dame's lighted athletic field.

This sale is compared with two nearby comparable sales that sold in May 2022 and November 2021. The salient details of these properties are summarized in the table below.

MATCHED PAIR NO. 4			
	4A - Proximate to a Lighted Field	4B – Nearby Sale	4C – Nearby Sale
Address	8646 North Ozark Avenue Niles	7237 West Crain Street Niles	8712 North Oketo Avenue Niles
Distance from the Lighted Athletic Field (feet)	159	N/A	N/A
Sale Date	August 31, 2022	May 09, 2022	November 03, 2021
Sale Price	\$450,000	\$434,000	\$459,000
Sale Price/Sq. Ft. (Above Grade)	\$256.41	\$252.62	\$266.86
Year Built	1956	1959	1960
Building Size (Sq. Ft.)	1755	1718	1720
Lot Size (Sq. Ft.)	6,551.42	6,782.29	6,969.60
Function/Style	1.5 Stories (Brick) 4 bedrooms, 2.1 bath	1.5 Stories (Brick) 3 bedrooms, 2 bathrooms	1.5 Stories (Brick) 3 bedrooms, 2 bathrooms
Basement	Finished	Finished	Finished
Utilities	Central Air Gas heat Public water	Central Air Systems Gas, Forced-Air Heat Public Water	Central Air Systems Gas, Forced-Air Heat Public Water
	1-Car Detached Garage	2.5-Car Detached Garage	2-Car Detached Garage
Other	Patio, Deck	Patio	Patio, Fireplace



8646 North Ozark Avenue
Niles



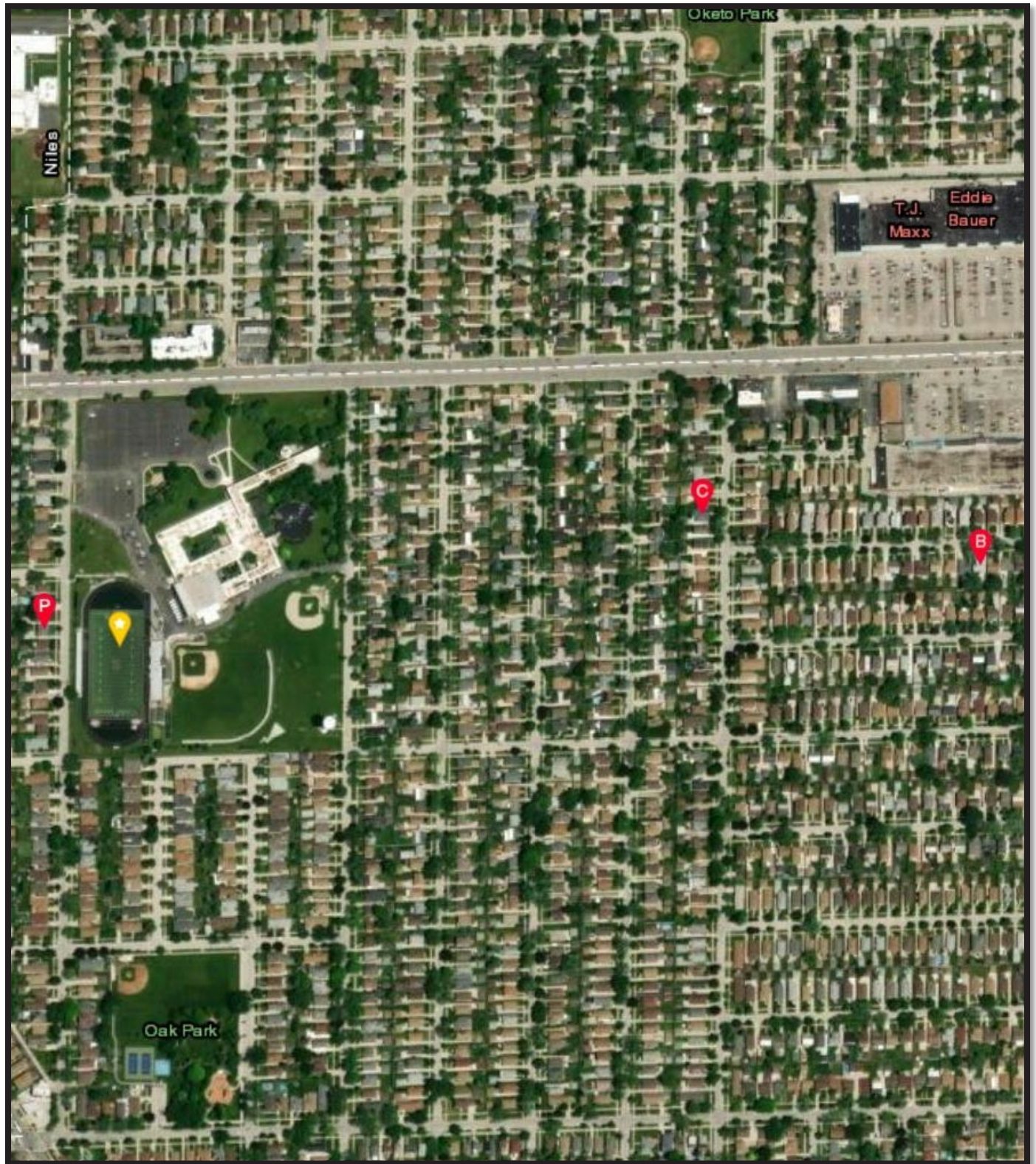
8712 North Oketo Avenue
Niles

ADJUSTMENT GRID MATCHED PAIR NO. 4

Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Exterior Style	Function	Interior Finish	Other Amenities
4B	7237 West Crain Street Niles	-	o	o	o	o	-	+	-	o
4C	8712 North Oketo Avenue Niles	+	o	o	-	o	-	+	-	o
+	Positive adjustment based on comparable being inferior in comparison to property #4A									
-	Negative adjustment based on comparable being superior in comparison to property #4A									
o	No adjustment necessary									



7237 West Crain Street
Niles



Notre Dame Matched Pair No. 4 Location Map

New Trier West High School Analysis - Matched Pair No. 5

New Trier West High School is located at 7 North Happ Road, Northfield.

Matched Pair #5 considers the sale of a house located at 140 Frontage Road, Northfield, sold in April 2021. This house is approximately 775 feet (house to field) from New Trier West's lighted athletic field.

This sale is compared with one nearby comparable sale that sold in July 2020. The salient details of these properties are summarized in the table below.

MATCHED PAIR NO. 5		
	5A - Proximate to a Lighted Field	5B – Nearby Sale
Address	140 Frontage Road Northfield	251 Happ Road Northfield
Distance from the Lighted Athletic Field (feet)	775	N/A
Sale Date	April 29, 2021	July 13, 2020
Sale Price	\$310,000	\$305,000
Sale Price/Sq. Ft. (Above Grade)	\$307.54	N/A
Year Built	1942	1957
Building Size (Sq. Ft.)	1,008	N/A
Lot Size (Sq. Ft.)	10,097	8,350.45
Function/Style	1 Story (Aluminum) 2 bedrooms, 1 bath	1.5 Stories (Aluminum) 4 bedrooms, 2 bathrooms
Basement	Unfinished	Unfinished
Utilities	Central Air Gas heat Public water	Possibly no AC Gas, Forced-Air Heat Public Water
	None	1.5-Car Attached Garage
Other	Short Sale	Seller to Replace Water Heater and Waterproof Basement

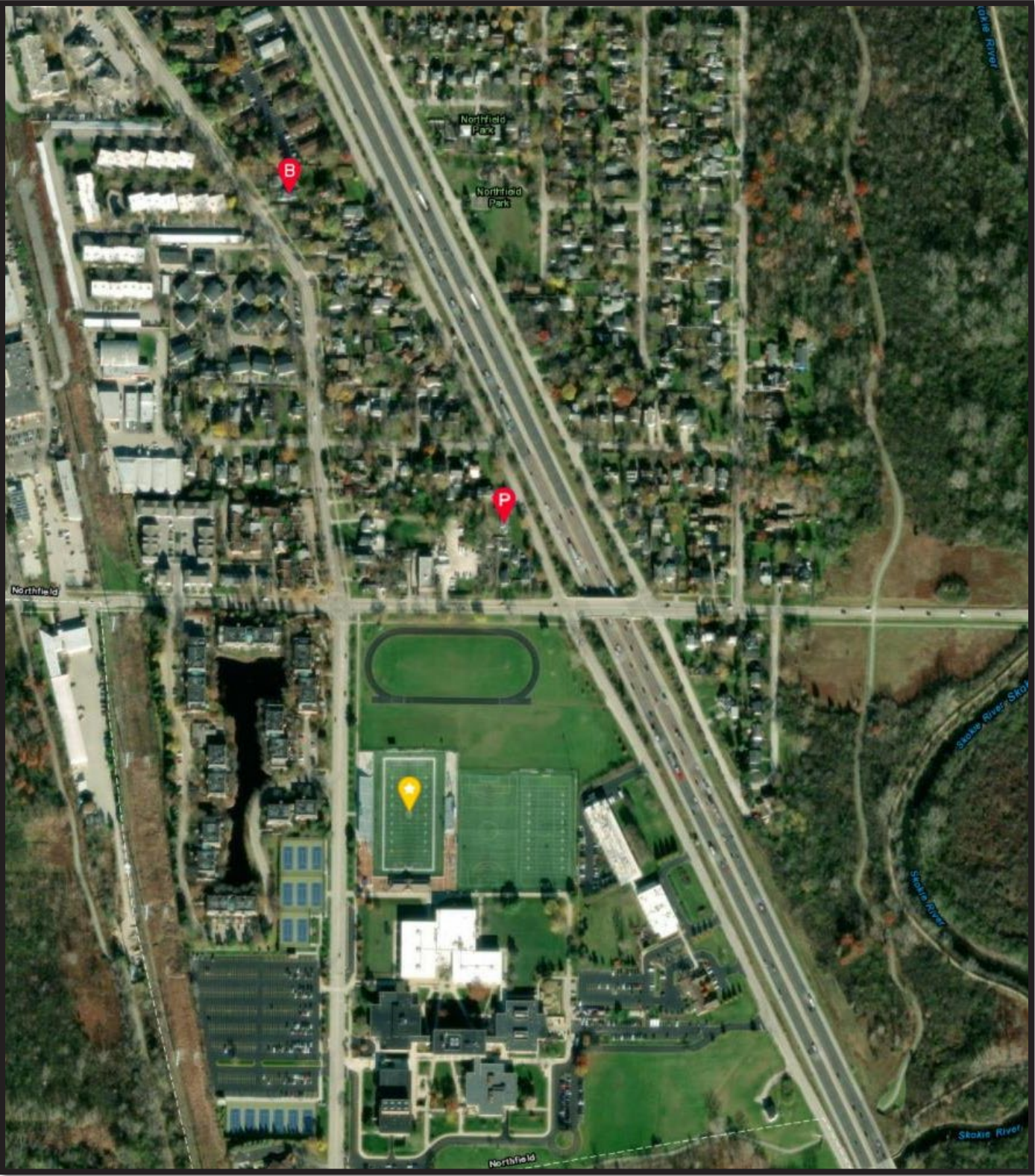


140 Frontage Road
Northfield



251 Happ Road
Northfield

ADJUSTMENT GRID MATCHED PAIR NO. 5										
Sale No.	Address	Sale Date	Year Built	Building Size	Lot Size	Location	Exterior Style	Function	Interior Finish	Other Amenities
5B	251 Happ Road Northfield	+	-	o	+	o	o	-	+	-
+	Positive adjustment based on comparable being inferior in comparison to property #5A									
-	Negative adjustment based on comparable being superior in comparison to property #5A									
o	No adjustment necessary									



New Trier West Matched Pair No. 5 Location Map

Matched Pair Analysis Conclusions

Comparing the sale of properties proximate to lighted athletic fields to similar properties selling under similar market conditions without proximity to lighted athletic fields, we have not discovered any sales in which proximity to lighted athletic fields appears to have had a negative impact on property values. Comparatively, the distance to the proposed project from its nearby residential homes are similar and an even farther distance than the matched pairs' distances to its lighted athletic fields in this report. Additionally, recent sales near lighted athletic fields show further evidence of the lack of impact from proximity. Lastly, price points for the residential market of the subject area over the last two years amidst lighted athletic fields' use in the subject area have continued to increase. Therefore, we have concluded that there does not appear to have been any measurable negative impact on surrounding residential property values due to the proximity of lighted athletic fields, similar to the proposed project.

Conclusions

As a result of the market impact analysis undertaken, we have concluded that the proposed improvements to the Loyola Academy athletic field will not diminish property values in the vicinity. These conclusions are based on the following:

- ✧ Controls are in place to limit the athletic field use without adding additional events/practices.
- ✧ Loyola Academy has had an active use of the land they occupy with events, athletics, traffic, and other items associated with a high school for over 50 years.
- ✧ The proposed new, state-of-the-art LED lights will improve Loyola Academy's function and further serve proximate homes with a prestigious walkable high school.
- ✧ The proposed state-of-the-art LED lights will meet the village lighting requirements and will protect the nearby properties.
- ✧ As concluded by Kimley-Horn & Associates Inc., most recently amended August 2023, after analysis of the parking management plan, the study area has sufficient reserve capacity to accommodate the parking generated by the proposed lighted athletic field.
- ✧ An expert sound study conducted by Acoustic Associates, Ltd., concluded that events conducted on the athletic field will generate sound levels which are not materially above ambient sound levels.
- ✧ Interstate 94, which carries approximately 144,400 vehicles per day and contains approximately 100-foot visible light poles on the southbound off-ramp near Loyola Academy, has been in existence for over 40 years in the subject area.
- ✧ It is not uncommon for high schools in the subject area to have lighted athletic fields with homes closer than that of the subject and with possibly inferior lighting improvements.
- ✧ An analysis of home sales concluded that homes have been appreciating in value proximate to lighted athletic fields.
- ✧ Professionally developed lighted athletic fields with appropriate restrictions in the subject area have had no measurable negative impact on the residential market of the subject area.
- ✧ Interviews with brokers active in the subject area revealed no negative perspective to buyers or sellers in the residential market due to lighted athletic fields.
- ✧ An analysis of recent residential sales proximate to existing schools in the nearby area, which includes a residential sale as close as 159 feet to a lighted athletic field (building to field), did not support any finding that proximity to lighted field use had any impact on property values.

This report is based on market conditions existing as of July 31, 2023. This market impact study has been prepared specifically for the use of the client to gain information in relation to the construction of the proposed lighting improvements. Any other use or user of this report is considered to be unintended.

Respectfully submitted,

Michael S. MaRous, MAI, CRE
Illinois Certified General - #553.000141 (9/23 expiration)

Stephen A. Vizcarra
Associate Real Estate Trainee Appraiser - #557.006879 (9/23 expiration)

CERTIFICATE OF REPORT

We do hereby certify that:

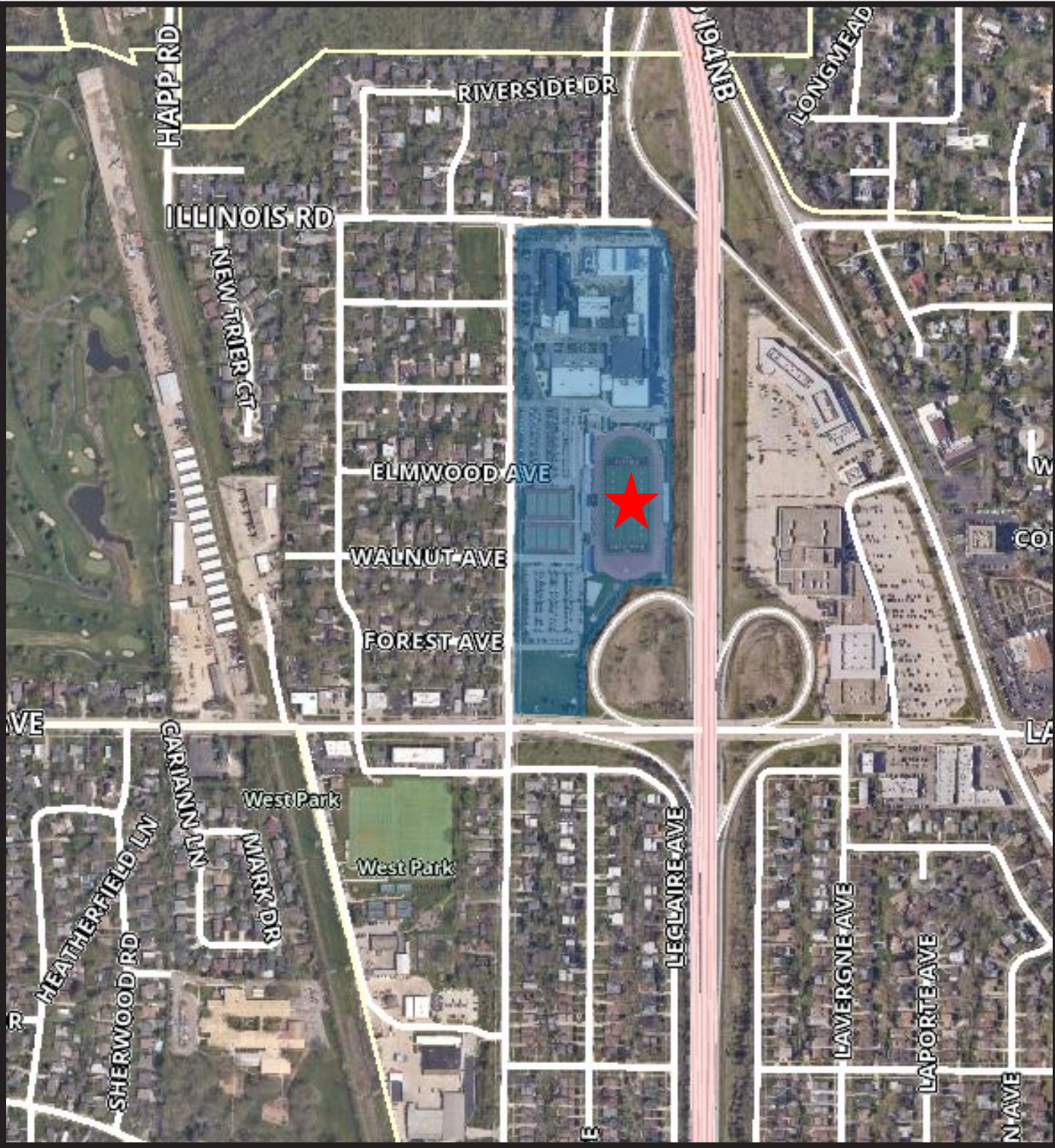
1. The statements of fact contained in this report are true and correct.
2. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, and unbiased professional analyses, opinions, conclusions, and recommendations.
3. We have no present or prospective personal interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
4. We have performed no services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
5. We have no bias with respect to the property that is the subject of the work under review or to the parties involved with this assignment.
6. Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
7. Our compensation for completing this assignment is not contingent upon the development or reporting of predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal consulting assignment.
9. Our analyses, opinions, and conclusions were developed, and this report has been prepared in conformity with the *Uniform Standards of Professional Appraisal Practice*.
10. We have made a personal inspection of the subject of the work under review.
11. The reported analysis, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Foundation.
12. The use of the report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
13. As of the date of this report, Michael S. MaRous, MAI, CRE, has completed the continuing education requirements for Designated Members of the Appraisal Institute.

Respectfully submitted,
MaRous & Company

Michael S. MaRous, MAI, CRE
Illinois Certified General - #553.000141 (9/23 expiration)

Stephen A. Vizcarra
Associate Real Estate Trainee Appraiser - #557.006879 (9/23 expiration)

ADDENDA



Aerial Site View

EQUIPMENT LIST FOR AREAS SHOWN

GRID SUMMARY	
Name:	Football
Size:	360' x 160'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Guaranteed Average:	50
Scale Average:	50/71
Max / Min:	72 / 46
Minimum:	46
Max / Min:	1:1.1
Guaranteed Max / Min:	2
Max / Min:	1.25
UG (adjacent job):	1:1.1
CU:	0.45
Ns. of Points:	72
ILLUMINATION DATA	
Applied Circuits:	A, B
No. of luminaires:	50
Total Load:	2,833 W

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume $\pm 3\%$ nominal voltage at line side of the driver and structures located within 3 feet (1 m) of design locations.

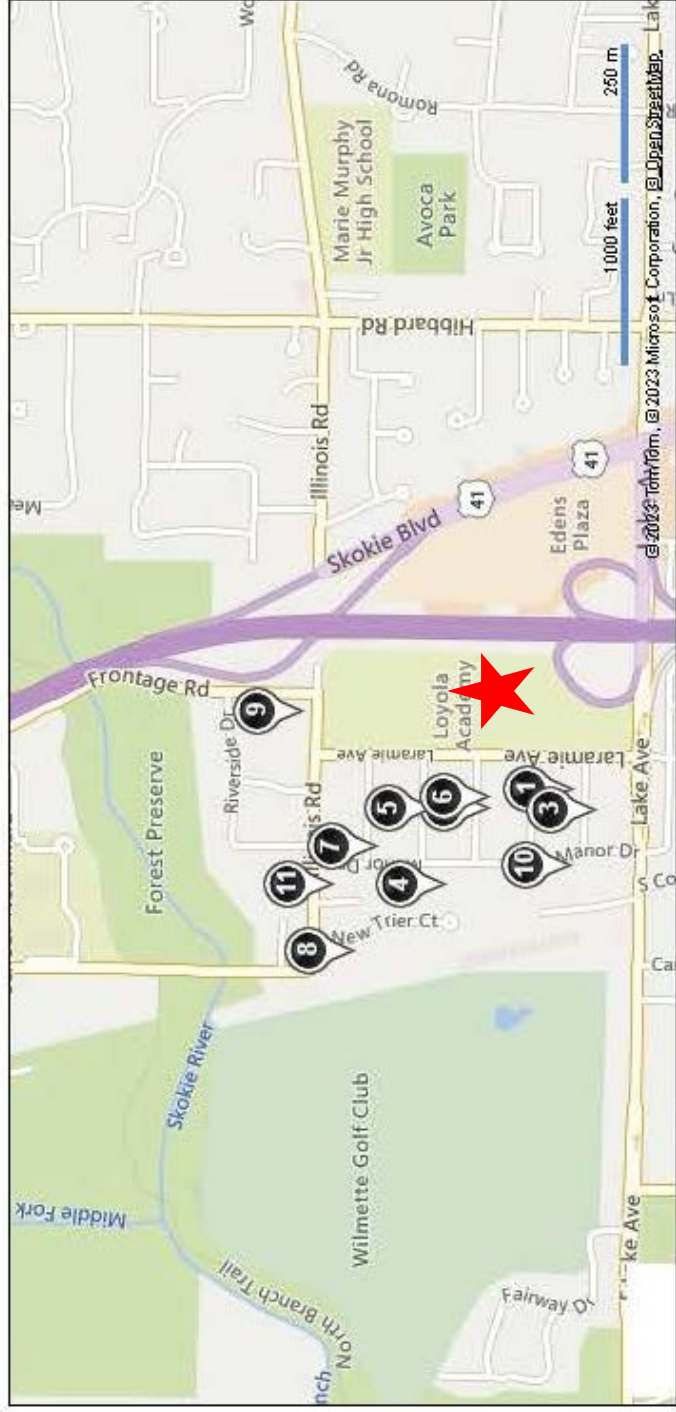


ENGINEERED DESIGN By: C.Lapaczynski · File #202769C R2 · 18-May-23

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ILLUMINATION SUMMARY



MLS #	Status	Address	Price
1 11230934	CLSD	3516 Forest Ave	\$349,000
2 10963912	CLSD	3521 Elmwood Ave	\$380,000
3 11653616	CLSD	3521 Forest Ave	\$394,850
4 11653615	CLSD	1035 Manor Dr	\$401,627
5 11463337	CLSD	3521 Greenwood Ave	\$500,000
6 11088151	CLSD	3515 Elmwood Ave	\$510,000
7 11050498	CLSD	1120 Manor Dr	\$575,000
8 11363573	CLSD	1131 New Trier Ct	\$630,000
9 11633666	CLSD	3424 Illinois Rd	\$677,300
10 11394703	CLSD	925 Manor Dr	\$1,155,000
11 11660717	CLSD	1139 Manor Dr	\$1,225,000

Subject Property Area Home Sales

QUALIFICATIONS

STEPHEN VIZCARRA

Stephen Vizcarra has been active in real estate appraisal since 2021 and employed at MaRous & Company since 2020. He is also a State of Illinois Associate Real Estate Trainee Appraiser, License Number 557.006879 (9/23). Mr. Vizcarra has assisted in a variety of types of appraisal projects such as estate planning, real estate tax appeal, market impact and acquisition.

Appraisal Experience

- Industrial Land
- Residential Land
- Commercial Land
- Farmland
- Market Impact Analysis
- Highest and Best Use Studies

Professional Designations and Affiliations

Illinois Associate Real Estate Trainee Appraiser, License Number 557.006879, expiration (9/23)

Education

Associates degree in Computer Information Systems, Harper Community College, graduated 2019

MICHAEL S. MAROUS
STATEMENT OF QUALIFICATIONS

Michael S. MaRous, MAI, CRE, is president and owner of MaRous and Company. He has appraised more than \$15 billion worth of primarily investment-grade real estate in more than 25 states. In addition to providing documented appraisals, he has served as an expert witness in litigation proceedings for many law firms; financial institutions; corporations; builders and developers; architects; local, state, county, and federal governments and agencies; and school districts in the Chicago metropolitan area. His experience in partial interest, condemnation, damage impact, easement (including aerial and subsurface), marital dissolutions, bankruptcy proceedings, and other valuation issues is extensive. He has provided highest and best use, marketability, and feasibility studies for a variety of properties. Many of the largest redevelopment areas and public projects, including Interstate 355, the Chicago O'Hare International Airport expansion, the Chicago Midway International Airport expansion, and the McCormick Place expansion, are part of Mr. MaRous' experience. Mr. MaRous also has experience in regard to mediation and arbitration proceedings. Also, he has purchased and developed real estate for his own account.

APPRAISAL AND CONSULTATION EXPERIENCE

Business Parks Distribution Centers	Industrial Properties Manufacturing Facilities Research Facilities	Self-storage Facilities Warehouses
Auto Sales/Service Facilities Banquet Halls Big Box Stores	Commercial Properties Gasoline Stations Hotels and Motels Office Buildings	Restaurants Shopping Centers Theaters
Bowling Alleys Cemeteries Farms Golf Courses Lumber Yards	Special-Purpose Properties Nurseries Riverboat Gambling Facilities Schools Stadium Expansion Issues Solar Farms	Tank Farms Underground Gas Aquifers Utility Corridors Waste Transfer Facilities Wind Farms
Apartment Complexes Condominium Conversions	Residential Properties Condominium Developments Single-family Residences	Subdivision Developments Townhouse Developments
Agricultural Alleys Commercial	Vacant Land Easements Industrial Residential	Rights of Way Streets Vacations
Corporations Financial Institutions	Clients Law Firms Not-for-profit Associations	Private Parties Public Entities

EDUCATION

B.S., Urban Land Economics, University of Illinois, Urbana-Champaign
Continuing education seminars and programs through the Appraisal Institute
and the American Society of Real Estate Counselors, and real estate brokerage classes

PUBLIC SERVICE

Mayor, City of Park Ridge, Illinois (2003-2005)
Alderman, City of Park Ridge, including Liaison to the Zoning Board of Appeals and Planning and Zoning and
Chairman of the Finance and Public Safety Committees (1997-2005)

PROFESSIONAL AFFILIATIONS AND LICENSES

Appraisal Institute, MAI designation, Number 6159
Counselors of Real Estate, CRE designation
Illinois Certified General Real Estate Appraiser, License Number 553.000141 (9/23)
Indiana Certified General Real Estate Appraiser, License Number CG41600008 (6/24)
Wisconsin Certified General Real Estate Appraiser, License Number 1874-10 (12/23)
Minnesota Certified General Real Estate Appraiser, License Number 40330656 (8/22)
Iowa Certified General Real Estate Appraiser, License Number CG03468 (6/24)
South Dakota Certified General Real Estate Appraiser, License Number 1467CG (9/24)

Licensed Real Estate Broker (Illinois)

PROFESSIONAL ACTIVITIES

Mr. MaRous is past president of the Chicago Chapter of the Appraisal Institute. He is former chair and vice chair of the National Publications Committee and has sat on the board of The Appraisal Journal. In addition, he has served on and/or chaired more than 15 other committees of the Appraisal Institute, the Society of Real Estate Appraisers, and the American Institute of Real Estate Appraisers.

Mr. MaRous served as chair of the Midwest Chapter of the Counselors of Real Estate in 2006 and 2007 and has served on the National CRE Board since 2011. He sat on the Midwest Chapter Board of Directors, the Editorial Board of Real Estate Issues, and on various other committees.

Mr. MaRous also is past president of the Illinois Coalition of Appraisal Professionals. He also has been involved with many other professional associations, including the Real Estate Counseling Group of America, the Northwest Suburban Real Estate Board, the National Association of Real Estate Boards, and the Northern Illinois Commercial Association of Realtors.

PUBLICATIONS AND PROFESSIONAL RECOGNITION

Mr. MaRous has spoken at more than 20 programs and seminars related to real estate appraisal and valuation.

Author

"Low-income Housing in Our Backyards," *The Appraisal Journal*, January 1996
"The Appraisal Institute Moves Forward," *Illinois Real Estate Magazine*, December 1993
"Chicago Chapter, Appraisal Institute," *Northern Illinois Real Estate Magazine*, February 1993
"Independent Appraisals Can Help Protect Your Financial Base," *Illinois School Board Journal*, November-December 1990
"What Real Estate Appraisals Can Do for School Districts," *School Business Affairs*, October 1990

Awards

Appraisal Institute - George L. Schmutz Memorial Award, 2001
Chicago Chapter of the Appraisal Institute – Heritage Award, 2000
Chicago Chapter of the Appraisal Institute - Herman O. Walther, 1987 (Distinguished Chapter Member)

Reviewer or Citation in the Following Books

Rural Property Valuation, 2017
Real Estate Damages, 1999, 2008, and 2016
Golf Property Analysis and Valuation, 2016
Dictionary of Real Estate Appraisal, Fourth Edition, 2002 and Sixth Edition, 2015
Market Analysis for Real Estate, 2005 and 2014
Appraisal of Real Estate, Twelfth Edition, 2001, Thirteenth Edition, 2008, Fourteenth Edition, 2013
Shopping Center Appraisal and Analysis, 2009
Subdivision Valuation, 2008
Valuation of Apartment Properties, 2007
Valuation of Billboards, 2006
Appraising Industrial Properties, 2005
Valuation of Market Studies for Affordable Housing, 2005
Valuing Undivided Interest in Real Property: Partnerships and Cotenancies, 2004
Analysis and Valuation of Golf Courses and Country Clubs, 2003
Valuing Contaminated Properties: An Appraisal Institute Anthology, 2002
Hotels and Motels: Valuation and Market Studies, 2001
Land Valuation: Adjustment Procedures and Assignments, 2001
Appraisal of Rural Property, Second Edition, 2000
Capitalization Theory and Techniques, Study Guide, Second Edition, 2000
Guide to Appraisal Valuation Modeling Land, 2000
Appraising Residential Properties, Third Edition, 1999
Business of Show Business: The Valuation of Movie Theaters, 1999
GIS in Real Estate: Integrating, Analyzing and Presenting Locational Information, 1998
Market Analysis for Valuation Appraisals, 1995

REPRESENTATIVE WORK OF MICHAEL S. MAROUS

Headquarters/Corporate Office Facilities in Illinois

Corporate headquarters, 300,000 sq. ft. and 500,000 sq. ft., Chicago
Fortune 500 corporation facility, 450,000 sq. ft., Northfield
Major airline headquarters, 1,100,000 million sq. ft. on 47 acres, Elk Grove Village
Corporate Headquarters, 1,500,000+ sq. ft., Lake County

Office Buildings in Chicago

401 South LaSalle Street, 140,000 sq. ft.
134 North LaSalle Street, 260,000 sq. ft.
333 North Michigan Avenue, 260,000 sq. ft.
171 West Randolph Street, 360,000 sq. ft.
20 West Kinzie Street, 405,000 sq. ft.
55 East Washington Street, 500,000 sq. ft.
10 South LaSalle Street, 870,000 sq. ft.
222 West Adams Street, 1,000,000 sq. ft.
141 West Jackson Boulevard, 1,065,000 sq. ft.
333 South Wabash Avenue, 1,125,000 sq. ft.
155 North Wacker Drive, 1,406,000 sq. ft.
70 West Madison Street, 1,430,000 sq. ft.
111 South Wacker Drive, 1,454,000 sq. ft.
175 West Jackson Boulevard, 1,450,000 sq. ft.
227 West Monroe Street, 1,800,000 sq. ft.
10 South Dearborn Street, 1,900,000 sq. ft.

Hotels in Chicago

One West Wacker Drive (Renaissance Chicago Hotel)
10 East Grand Avenue (Hilton Garden Inn)
106 East Superior Street (Peninsula Hotel)
120 East Delaware Place (Four Seasons)
140 East Walton Place (The Drake Hotel)
160 East Pearson Street (Ritz Carlton)
301 East North Water Street (Sheraton Hotel)
320 North Dearborn Street (Westin Chicago River North)
401 North Wabash Avenue (Trump Tower)
505 North Michigan Avenue (Hotel InterContinental)
676 North Michigan Avenue (Omni Chicago Hotel)
800 North Michigan Avenue (The Park Hyatt)

Large Industrial Properties in Illinois

Chicago Fortune 500 company distribution center, 1,000,000 sq.
Caterpillar Distribution Facility, 2,231,000 sq. ft., Morton
Self-storage facilities, various Chicago metropolitan locations

Airport Related Properties

Mr. MaRous has performed valuations on more than 100 parcels in and around Chicago O'Hare International Airport, Chicago Midway International Airport, Palwaukee Municipal Airport, Chicago Aurora Airport, DuPage Airport, and Lambert-St. Louis International Airport

Vacant Land in Illinois

15 acres, office, Northbrook	250 acres, Island Lake
20 acres, residential, Glenview	450 acres, residential, Wauconda
25 acres, Hinsdale	475± acres, various uses, Lake County
55 acres, mixed-use, Darien	650 acres, Hawthorne Woods
68 acres, Roosevelt Road and the Chicago River	650 acres, Waukegan/Libertyville
75 acres, I-88 at I-355, Downers Grove	800 acres, Woodridge
100± acres, various uses, Lake County	900 acres, Matteson
100 acres, Western Springs	1,000± acres, Batavia area
140 acres, Flossmoor	2,000± acres, Northern Lake County
142 acres, residential, Lake County	5,000 acres, southwest suburban Chicago area
160 acres, residential, Cary	Landfill expansion, Lake County
200 acres, mixed-use, Bartlett	

Retail Facilities

20 Community shopping centers, various Chicago metropolitan locations
Big box uses, various Chicago metropolitan locations and the Midwest
Gasoline Stations, various Chicago metropolitan locations
More than 100 single-tenant retail facilities larger than 80,000 sq. ft., various Midwest metropolitan locations
Macy's Downtown Chicago
Apple Store Downtown Chicago

Residential Projects

Riverview II, Chicago; Old Town East and West, Chicago; Museum Park Lofts II, Museum Park Tower 4,
University Commons, Two River Place, River Place on the Park, Chicago;
Timber Trails, Western Springs, Illinois

Market Impact Studies

Land-fill projects in various locations
Quarry expansions in Boone and Kendall counties
Commercial development and/or parking lots in various communities
Zoning changes in various communities
Waste transfer stations in various communities

Business and Industrial Parks

Chevy Chase Business Park, 30 acres, Buffalo Grove
Carol Point Business Center, 300-acre industrial park, Carol Stream, \$125,000,000+ project
Internationale Centre, approximately 1,000 acre-multiuse business park, Woodridge

Properties in Other States

330,000 sq. ft., Newport Beach, California
Former government depot/warehouse and distribution center, 2,500,000 sq. ft. on 100+ acres, Ohio
Shopping Center, St. Louis, Missouri, Office Building, Clayton, Missouri
Condominium Development, South Dakota, South Dakota
Hormel Foods, various Midwest locations
Wisconsin Properties including Lowes, Menards, Milwaukee Zoo, CVS Pharmacy's in Milwaukee, Dairyland
Racetrack, Major Industrial Property in Manawa, Class A Office Buildings and Vacant Land

Energy Related Projects

Oakwood Hills Energy Center, McHenry County, Illinois
Lackawanna Power Plant, Lackawanna County, Pennsylvania
Commonwealth Edison, high tension lines

Wind Projects

Illinois

Alta Farms Wind Project II, Dewitt County
Bennington Wind Project, Marshall County
Goose Creek Wind, Piatt County
Harvest Ridge Wind Farm, Douglas County
Lincoln Land Wind Farm, Morgan County
Midland Wind Farm, Henry County

McLean County Wind Farm, McLean County
Otter Creek Wind Farm, LaSalle County
Pleasant Ridge Wind Farm, Livingston County
Radford's Run Wind Farm, Macon County
Shady Oaks II, Lee County
Twin Groves Wind Farm, McLean County
Walnut Ridge Wind Farm, Bureau County

Indiana

Roaming Bison Wind Farm, Montgomery County
Tippecanoe County Wind Farm, Tippecanoe County

Iowa

Great Pathfinder Wind Project, Boone & Hamilton County
Ida Grove II Wind Farm, Ida County

Kansas

Neosho Ridge Wind Farm, Neosho County
Jayhawk Wind, Bourbon County & Crawford County

New York

Alle-Catt Wind, Allegany County, Cattaraugus County, & Wyoming County
Orangeville Wind Farm, Wyoming County

Ohio

Seneca Wind, Seneca County
Republic Wind, Seneca County & Sandusky County

South Dakota

Deuel Harvest Wind Farm, Deuel County
Dakota Range Wind Project I-III, Codington County, Grant County, & Roberts County

Crocker Wind Farm, Clark County
Crowned Ridge Wind II, Deuel County
Prevailing Wind Park, Bon Homme County, Charles Mix County, & Hutchinson County

Sweet Land Wind Farm, Hand County
Triple H Wind Farm, Hyde County
Tatanka Ridge Wind Project, Deuel County

Solar Projects

Illinois

Hickory Point Solar Energy Center, Christian County

Indiana

Lone Oak Solar Farm, Madison County

Maryland

Dorchester County Solar Farm, Dorchester County

Wisconsin

Badger Hollow Solar Farm, Iowa County
Darien Solar Energy Center, Rock County & Walworth County
Grant County Solar, Grant County
Paris Solar Energy Center, Kenosha County

South Dakota

Brookhaven Solar Energy Production Facility, Brookings County
Western Regions of the United States of America
Southwest Region – Arizona, Colorado, Nevada, New Mexico, & Utah
Northwest Region – Idaho and Oregon
Southern Great Plains Region – Texas
Northern Great Plains Region – General Research

REPRESENTATIVE CLIENT LISTING OF MICHAEL S. MAROUS

Law Firms

Alschuler, Simantz & Hem LLC Ancel,
Glink, Diamond, Bush,
DiClanni & Krafthefer
Arnstein & Lehr LLP
Berger, Newmark & Fenchel P.C.
Berger Schatz
Botti Law Firm, P.C.
Carmody MacDonald P.C.
Carr Law Firm
Crane, Heyman, Simon, Welch & Clar
Daley & Georges, Ltd.
Day, Robert & Morrison, P.C. Dentons
US LLP
DiMonte & Lizak LLC
DLA Piper
Dreyer, Foote, Streit, Furgason &
Slocum, P.A.
Drinker, Biddle & Reath LLP Figliulo &
Silverman, P.C.
Foran, O'Toole & Burke LLC Franczek
Radelet P.C.
Fredrikson & Byron, P.A.
Freeborn & Peters LLP

Gould & Ratner LLP
Greenberg Traurig LLP
Helm & Wagner
Robert Hill Law, Ltd.
Hinshaw & Culbertson LLP
Holland & Knight LLP
Ice Miller LLP
Jenner & Block
Katz & Stefani, LLC
Kinnally, Flaherty, Krentz, Loran,
Hodge & Mazur PC
Kirkland & Ellis LLP
Klein, Thorpe & Jenkins, Ltd.
McDermott, Will & Emery
Mayer Brown
Meltzer, Purtill & Stelle LLC
Michael Best & Friedrich LLP
Morrison & Morrison, Ltd.
Bryan E. Mraz & Associates
Neal, Gerber & Eisenberg, LLP
Neal & Leroy LLC
O'Donnell Haddad LLC
Prendergast & DelPrincipe
Rathje & Woodward, LLC

Righeimer, Martin & Cinquino, P.C.
Robbins, Salomon & Patt, Ltd.
Rosenfeld Hafron Shapiro & Farmer
Rosenthal, Murphey, Coblentz &
Donahue Rubin & Associates, P.C.
Ryan and Ryan, P.C.
Reed Smith LLP
Sarnoff & Baccash
Scariano, Himes & Petrarca, Chtd.
Schiff Hardin LLP
Schiller, DuCanto & Fleck LLP
Schirott, Luetkehans & Garner, LLC
Schuyler, Roche & Crisham, P.C.
Sidley Austin LLP
Storino, Ramello & Durkin
Thomas M. Tully & Associates
Thompson Coburn, LLP
Tuttle, Vedral & Collins, P.C.
Vedder Price
von Briesen & Roper, SC
Winston & Strawn LLP
Worsek & Vihon LLP

Financial Institutions

AmericaUnited Bank Trust
BMO Harris Bank
Charter One
Citibank
Cole Taylor Bank
First Bank of Highland Park
First Financial Northwest Bank

First Midwest Bank
First State Financial
Glenview State Bank
Itasca Bank & Trust Co.
Lake Forest Bank & Trust Co.
MB Financial Bank

Midwest Bank
Northern Trust
Northview Bank & Trust
The Private Bank
Wintrust

Corporations

Advocate Health Care System
Alliance Property Consultants
American Stores Company
Archdiocese of Chicago
Arthur J. Rogers and Company
Avangrid Renewables, LLC
BHE Renewables
BP Amoco Oil Company
Christopher B. Burke Engineering,
Ltd. Cambridge Homes
Canadian National Railroad
Capital Realty Services, Inc.
Chicago Cubs
Children's Memorial Hospital
Chrysler Realty Corporation

Citgo Petroleum Corporation
CorLands
CVS
Edward R. James Partners, LLC
Enterprise Development Corporation
Enterprise Leasing Company
Exxon Mobil Corporation
Hamilton Partners
Hollister Corporation
Imperial Realty Company
Invenergy LLC
Kimco Realty Corporation
Kinder Morgan, Inc.
Lakewood Homes

Lowe's Companies, Inc.
Loyola University Health System
Marathon Oil Corporation
Meijer, Inc.
Menards
Mesirow Stein Real Estate, Inc.
Paradigm Tax Group
Prime Group Realty Trust
Public Storage Corporation
RREEF Corporation
Shell Oil Company
Union Pacific Railroad Company
United Airlines, Inc.

Public Entities

Illinois Local Governments and Agencies

Village of Arlington Heights
Village of Barrington
Village of Bartlett
Village of Bellwood
Village of Brookfield
Village of Burr Ridge
City of Canton
Village of Cary
City of Chicago
Village of Deer Park
City of Des Plaines
Des Plaines Park District
Downers Grove Park District
City of Elgin
Elk Grove Village
City of Elmhurst
Village of Elmwood Park
City of Evanston
Village of Forest Park
Village of Franklin Park

Village of Glenview
Glenview Park District
Village of Harwood Heights
City of Highland Park
Village of Hinsdale
Village of Inverness
Village of Kenilworth
Village of Kildeer
Village of Lake Zurich
Leyden Township
Village of Lincolnshire
Village of Lincolnwood
Village of Morton Grove
Village of Mount Prospect
Village of North Aurora
Village of Northbrook
City of North Chicago
Village of Northfield
Northfield Township
Village of Oak Brook

Village of Orland Park
City of Palos Hills
City of Peoria
City of Prospect Heights
City of Rolling Meadows
Village of Rosemont
City of St. Charles
Village of Schaumburg
Village of Schiller Park
Village of Skokie
Village of South Barrington
Village of Streamwood
Metropolitan Water Reclamation
District of Greater Chicago
City of Waukegan
Village of Wheeling
Village of Wilmette
Village of Willowbrook
Village of Winnetka
Village of Woodridge

County Governments and Agencies

Boone County State's Attorney's
Office Forest Preserve of Cook County
Cook County State's Attorney's Office
DuPage County Board of Review

Forest Preserve District of DuPage County
Kane County
Kendall County Board of Review
Lake County

Lake County Forest Preserve District
Lake County State's Attorney's Office
Morton Township
Peoria County

State and Federal Government Agencies

Federal Deposit Insurance Corporation
U.S. General Services Administration

Illinois Housing Development Authority
Illinois State Toll Highway Authority

The U.S. Postal Service

Schools

Argo Community High School
District No. 217
Arlington Heights District No. 25
Township High School District No. 214,
Arlington Heights
Barrington Community Unit District
No. 220
Chicago Board of Education
Chicago Ridge District No. 127½
College of Lake County
Community Consolidated School
District No. 15
Community Consolidated School
District No. 146
Community School District No. 200
Consolidated High School
District No. 230
Darien District No. 61
DePaul University

Elk Grove Community Consolidated
District No. 59
Elmhurst Community Unit School
District No. 205
Glen Ellyn School District No. 41
Glenbard High School District No. 87
Indian Springs School District No. 109
LaGrange School District No. 105
Lake Forest Academy
Leyden Community High School
District No. 212
Loyola University
Lyons Township High School District
No. 204
Maine Township High School District
No. 207
Niles Elementary District No. 71
North Shore District No. 112, Highland
Park

Northwestern University
Orland Park School District No. 135
Palatine High School District #211
Rhodes School District No. 84-1/2
Riverside-Brookfield High School
District No. 208
Rosalind Franklin University
Roselle School District No. 12
Schaumburg Community Consolidated
District No. 54
Sunset Ridge School District No. 29
Township High School District No. 211
Township High School District No. 214
Triton College
University of Illinois
Wheeling Community Consolidated
District No. 21
Wilmette District No. 39

