



The Center for Health, Energy & the Environment, LLC

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September 17, 2020

Attn: Angela Cavillo, Clerk of the Board of Supervisors
San Francisco City Hall, Room 244
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102
Via email: Board.of.Supevisors@sf.org, bos.legislation@sf.org

RE: Planning Case Number 2018-012648CUA - Saint Ignatius Stadium Lighting Project

Honorable Members of the Board of Supervisors:

I am writing on behalf of the Saint Ignatius Neighborhood Association (“SINA”) concerning the proposal to install stadium lighting towers and a wireless telecommunications facility at the J.B. Murphy Field Stadium (“stadium” or “field”) of Saint Ignatius College Preparatory (“Saint Ignatius” or “school”) located at 2001 37th Avenue. Saint Ignatius is a private secondary school located in a residential neighborhood in the Outer Sunset District.

SINA is an association comprised of over 165 neighbors who live in the area surrounding the school. The organization was formally registered as a community/neighborhood organization with the San Francisco Planning Department in October 2016.

The Planning Commission granted Conditional Use Authorization (Case No. 2018-012648CUA) for the stadium lighting project (“Project”) on July 23, 2020 (Motion No. 20769). The Motion incorporated the Planning Department’s June 3, 2020 CEQA categorical exemption determination. Pursuant to San Francisco Administrative Code Section 31.16(e), Mr. Michael Graf, Esq. on behalf of SINA filed a timely appeal of the CEQA exemption on August 24, 2020¹.

This letter provides additional information in support of the CEQA appeal. It expands upon SINA’s previous submittals for the Project’s Planning Commission hearings (Advance Materials submittal May 6, 2020 and supplements dated June 9, 2020² and July 22, 2020³) and includes results of CHEE’s analysis of the proposed Project relevant to the CEQA appeal.

¹BOS File No. 200992 <https://sfgov.legistar.com/View.ashx?M=F&ID=8761932&GUID=9AE437DD-D0C7-42DC-AEA3-0879363996D4>

² Included as Exhibit J in the July 23, 2020 Commission hearing packet. <https://commissions.sfplanning.org/cpcpackets/2018-012648CUAc1.pdf>

³ Available at https://docs.google.com/document/d/1tnLYBpZMoCu-rsKzRUBUmcrwFZ_lSXNcAwL3cmhrOgc/edit?usp=sharing

Qualifications of the Center for Health, Energy & the Environment, LLC

The Center for Health, Energy & the Environment, LLC (“CHEE”) is a boutique consulting firm specializing in environmental and regulatory analysis, permitting, and compliance monitoring. Our staff have over 40 years of technical expertise in regulatory interpretation including the National Environmental Policy Act (NEPA) and state equivalents; natural resource assessment and mitigation; construction and recreation planning and permitting; environmental monitoring and measurement; environmental data analysis; and reporting for compliance. We have provided services across more than 30 states including California for clients such as federal and state agencies, multi-national corporations, regional planning commissions, municipalities and non-profit organizations. A sample of CHEE’s project experience relevant to this CEQA appeal is summarized in Attachment 1.

Project Summary

The Project Sponsors (Saint Ignatius and Verizon Wireless) propose to add four 90-foot tall lighting towers to the stadium which borders Rivera Street and 39th Avenue. The lighting towers are intended to allow for up to 150 nights a year of weekday evening use for athletic practices, games and events lasting until 9 pm, and until 10 pm for up to 20 Friday or Saturday nights per year. In addition, on the proposed northwest light tower (at 39th Avenue near Quintara Street), the Project Sponsors seek to install and operate a wireless telecommunication service facility, consisting of antennas, remote radio units, and surge suppressors located at a height of 34 to 66 feet above ground on the tower, as well as ancillary equipment in a lease area located on the ground within a fenced compound adjacent to 39th Avenue near Quintara Street.

At this time there is no lighting at the stadium, which means the Project would constitute a significant expansion of use of the field on virtually every weekday evening in the late fall, winter, and early spring seasons, as well as on some weekends - from the time of sunset between 5 and 6 pm without field lights - to 9 to 10 pm under the proposed Project. The school currently has field lighting at their smaller practice field, authorized under a separate CUA (Case No. 2003.1273C, Motion No. 16770). Practice field lighting is authorized for use only until 7:30 pm.

Additional information related to CEQA appeal filing

Section B.1.b of the CEQA appeal filing stated “There is a reasonable possibility that noise, parking, traffic, and public safety impacts caused by expanding use to games, events and practices until 9 or 10:00 pm nights a year may be significant.”

CHEE has analyzed these factors and the discussions in Sections 1 and 2 below summarize our findings. We also offer additional input in Section 3 on another aspect of CEQA that is relevant to this Project, specifically the potential adverse effects on sensitive wildlife species due to the Project’s lighting and noise impacts.

1. Noise - There is a Reasonable Possibility that Impacts will be Significant

CHEE conducted an analysis of expected noise levels for the Project and it is our opinion that stadium-related activities would exceed applicable noise thresholds by a factor of two to three, and noise levels would exceed ambient noise levels up to four times in the immediate neighborhood, resulting in a significant impact. Our analysis and conclusions are discussed below.

a. Background

The Planning Department did not require a noise study for the Project, suggesting that no study was needed because there would be “no substantial permanent increase in ambient noise levels in the project vicinity or persons in excess of noise level standards”. The CEQA exemption determination stated that the existing use of the athletic field would only be shifted from day time to evenings, and that a new public address “(PA)” system would be installed and designed to direct sound away from the neighbors during games.

The Project Sponsors have provided no noise related information to support the Department’s noise finding. In fact, there are no details about a purported new PA system, and no new system is explicitly included in the Project scope nor mentioned in any the CUA or CEQA application documents, nor in the Commission’s CUA approval motion. Yet, the CEQA exemption assumes that a new system will be installed and that it will be an improvement over the existing PA system. Yet, CEQA requires that the effectiveness of mitigation measures be evaluated in a CEQA review process, not as part of an exemption determination.

The only available noise level information was provided at a September 15, 2015 neighborhood meeting (Appendix 4b of SINA’s Planning Commission hearing submittal dated May 6, 2020) wherein the school’s representatives stated: “We plan to involve an acoustical engineer if we move forward with the light project to see if we can somehow redirect the sound system.” This statement does not support the idea of a new PA system. The school’s representatives also indicated in that meeting’s document that they had measured sound levels at an event and concluded that the sound level was not “excessive”. Based on the lack of details provided, it cannot be assumed that the measurements were conducted in accordance with generally accepted standards for measuring noise or in accordance with the San Francisco Noise Guideline protocols⁴.

Even if the measurements were valid, they cannot be considered representative of a game with high attendance such as a football game. The event was a “ProCamps” football camp⁵ for children in grades 1 through 8. The noise measurements were taken on the second day of the event which was a Sunday in late June 2015. Images from the event (footnote 2) show that the school’s bleachers were nowhere near full as they would be for a large football game, and it is not known whether the PA system was even in use at the time of noise measurement.

⁴ <https://www.sfdph.org/dph/files/EHSdocs/ehsNoise/GuidelinesNoiseEnforcement.pdf>.

⁵ <https://www.ninersnation.com/2015/6/23/8829195/colin-kaepernicks-third-annual-procamps>.

b. Noise Level Analysis

Noise levels emanating from games at the Saint Ignatius athletic field would be significantly higher than ambient levels. Peak noise levels would be nearly quadruple ambient levels along 39th Avenue which is located within 50 feet of the edge of the playing field. Along Rivera Street, about 113 feet from the playing field, noise levels would be two to three times higher than ambient levels.

It is the Project Sponsors' responsibility to conduct a valid noise study; however, CHEE has conducted a quantitative desktop analysis to estimate the potential noise levels for this Project. We reviewed available noise studies from CEQA Environmental Impact Reports (EIRs) conducted for similar high school stadium lighting projects to obtain a proxy for the range of noise levels that might be expected at this Project. Readily available noise studies were selected so as to be generally comparable to Saint Ignatius based on game attendance or spectator capacity, and similarity of the surrounding residential neighborhoods. Four comparative studies were selected:

- San Marin High School, Novato, CA⁶
- San Mateo High School, San Mateo, CA⁷
- Hillsdale High School San Mateo, CA⁸
- Aragon High School San Mateo, CA⁹

A subset of monitoring locations from each study was selected using those closest to neighboring residential streets, similar to the neighborhood locations of concern for the Saint Ignatius Project. Distances were taken from the study reports and adjusted so that each monitoring location is measured consistently from the nearest approximate edge of the football field playing surface to the monitoring location.

Table 1 presents a summary of the short term noise measurements (ranging from about 10 to 15 minutes each) that were obtained during varsity football games at each school. Measurements were taken for the PA system, crowd noise, game whistles, and in some cases for crowd and PA system noise combined. The values were recorded as the highest sound pressure level (L_{max}) during the measuring period and reported in A-weighted decibels (dBA)¹⁰. Values were reported as a range of values or as discrete values at each monitoring location.

⁶ San Marin Stadium Lights Project Final Environmental Impact Report. May 2017.

<https://3b9svs2dfskd3fzfwfu347pov-wpengine.netdna-ssl.com/wp-content/uploads/2019/10/SMHS-Project-Final-EIR-Sections-1-7.pdf>.

⁷ San Mateo Union High School District Draft Environmental Impact Statement. May 2016.

https://www.smuhsd.org/cms/lib/CA02206192/Centricity/Domain/1242/Community_StadiumLights_CEQA_SMUHSDStadiumImprovementProjectDraftEIR.pdf and Initial Study. February 2016, see Appendix D in: https://www.smuhsd.org/cms/lib/CA02206192/Centricity/Domain/1242/Community_StadiumLights_CEQA_SMUHSDStadiumImprovementProjectDraftEIRAppendicesA-F.pdf.

⁸ Ibid.

⁹ Ibid.

¹⁰ A-weighting accounts for the relative loudness perceived by the human ear at different frequencies on sound, and it discounts low frequencies since the ear is less sensitive to those frequencies.

Table 1. Summary of Maximum Noise Levels during Comparable High School Football Games
 (Note: “n/a” indicates no value was reported)

School	Day of Week and Time of Measurement	No. of Spectators	Monitoring Site No. and Location	L _{max} dBA			
				PA System	Crowd	Crowd + PA	Game Whistle
San Marin	Saturday 08/27/16 ~2-3:15 pm	594	ST1 – edge of property ~170 ft away from end of field	62	70	n/a	72
			ST3 – across street ~215 ft away from long side of field	61	65	n/a	64 – 71
	Saturday 11/05/15 ~2-3:15 pm	1,200	ST1 – edge of property ~170 ft away from end of field	67 – 74	72	n/a	54 – 65
			ST3 – across street ~215 ft away from long side of field	57 – 64	60 – 70	n/a	61
San Mateo	Friday 10/30/15 ~ 7-8 pm	Not stated, 3,136 capacity	ST1 – across street ~330 ft away from end of field	57	64, 67	66	n/a
			ST2 – across street ~190 ft away from long side of field	60, 63, 64, 66	75	n/a	60, 60, 65, 66
			ST3 – within property ~110 ft away from end of field	n/a	66, 71, 74	n/a	63, 64, 66
Aragon	Friday 11/06/15 ~ 8-8:30 pm	Not stated, 698 capacity	ST1 – across street ~150 ft away from end of field	66, 65 – 72	73	88 - 91	n/a
			ST2 – across street ~150 ft away from end of field	56 – 60	59	61	53, 55
Hillsdale	Friday 11/13/15 ~ 7:30-8 pm	Not stated, 988 capacity	ST2 – across street ~150 ft away from long side of field	69 – 73	71 - 77	74 - 85	n/a
			ST3 – across street ~160 ft away from end of field	64 – 72	71 - 74	76 - 80	n/a

The data in Table 1 shows the maximum recorded noise levels at all four schools during the five different football games was: 72 dBA from whistles, 74 dBA from PA systems, 77 dBA from crowd noise, and 91 dBA for a PA system and crowd noise combined. These levels were recorded at distances ranging from approximately 110 feet to 330 feet from the edge of the playing fields.

At Saint Ignatius, the perpendicular distance from the edge of the west (long) side of the field to the adjacent sidewalk on 39th Avenue is approximately 48 feet, and approximately 113 feet to the adjacent sidewalk on Rivera Street from the edge of the field's south end. Sound levels attenuate (decrease) by 6 dB for each doubling of distance from a point source (e.g., PA system speaker). All other things being equal, noise levels emanating from the Saint Ignatius field during football games would be significantly higher than the Table 1 values since all of those measurements were taken at locations farther away from the source than the school property lines at 39th Avenue and Rivera Street.

The San Marin measurements in Table 1 were taken at two games with known spectator counts (594 and 1,200) and provide a general example of the minimum noise levels expected from the PA system, crowds, and game whistles at Saint Ignatius football games – with their higher expected attendance of 1,000 to 2,800 people (Exhibit A of Commission Motion No. 20769). Monitoring site ST1 was selected to represent Rivera Street, and site ST3 to represent 39th Avenue.

Aragon site ST1 was selected to represent to Rivera Street, and Hillsdale site ST2 to represent 39th Avenue for comparison of the combined crowd and PA system noise levels that were measured at those schools. Crowd size was not provided in those noise studies, but stadium capacity is smaller at both schools (698 at Aragon, 988 at Hillsdale) than Saint Ignatius, so again, the calculated equivalent noise levels are considered minimums for the purpose of estimating noise levels at Saint Ignatius.

Based on these considerations, the representative data from Table 1 was converted to equivalent noise levels at 39th Avenue and Rivera Street as shown in Table 2, using the formula:

$$L_p(R2) = L_p(R1) - 20 \times \log_{10}(R2/R1)$$

Where:

$L_p(R1)$ = Sound pressure level at closer location

$L_p(R2)$ = Sound pressure level at farther location

R1 = Distance from the noise source to closer location

R2 = Distance from noise source to the farther location

Table 2. Calculated Maximum Noise Level Estimates at Saint Ignatius

Comparison Location	Study Location and Game	L _{max} dBA at Comparison Location			
		PA System	Crowd	Crowd + PA	Game Whistle
Rivera St.	San Marin ST1 small game	65.6	73.6		75.6
	San Marin ST1 large game	70.6 – 77.6	75.6		57.6 – 68.6
	Aragon ST1			90.5 – 93.5	
39 th Ave	San Marin ST3 small game	74	78		77 - 84
	San Marin ST3 large game	70 – 77	73 – 83		64
	Hillsdale ST2			83.9 – 94.9	

The San Marin noise study also monitored noise at games and practices other than varsity football games. An hourly L₅ measurement was used which denotes the noise level exceeded 5% of the time within an hour-long measurement period. Table 3 shows the results converted to equivalent noise levels expected at Saint Ignatius although the San Marin study did not specify crowd size or whether the PA system was in use at the time.

Table 3. Calculated 5% Exceedance Noise Level Estimates at Saint Ignatius

Comparison Location	Study Location	L ₅ dBA at Comparison Location			
		Varsity Football	Freshman and Junior Varsity Football	Non-Football Games	Practice
Rivera St.	San Marin ST1	74.6	68.5	67.6	60.6
39 th Ave	San Marin ST3	84	79	78	65

c. Discussion

This analysis finds there is a reasonable possibility that noise impacts from the proposed Saint Ignatius Project would be significant, unavoidable, and are unlikely to be fully mitigated.

In general, a 3 dB change in noise level is noticeable, and a 10 dB increase is perceived as a doubling of loudness¹¹. Noise that occurs during the evening (7 – 10 pm) and night time (10 pm – 7 am) is considered more disturbing to people than the same level of noise occurring during the day since ambient noise levels are typically lower in the evening and night time than they are during the day, particularly in residential neighborhoods. Many noise ordinances account for this phenomenon using the Community Noise Equivalent Level (CNEL) which is a weighted sound level over a 24 hour period, including a “penalty” of 5 dB added between 7 and 10 pm and a penalty of 10 dB added for the nighttime hours of 10 pm to 7 am.

CEQA does not provide quantitative noise level threshold limits for determining the significance of a noise impact. Instead, CEQA refers to local ordinances, adopted agency standards, and the potential for a project to significantly increase noise levels above those present without the Project. The applicable local standards are the San Francisco Police Code (Article 1, Section 49, Article 15.1, and Article 29) and the San Francisco General Plan (Environmental Protection Element, Policies 10.1 and 11.1).

Under the San Francisco General Plan, Environmental Protection Element, Objective 10 seeks to minimize the impact of noise on affected areas [emphasis added] and Policy 10.1 promotes site planning, building orientation and design, and interior layout that will lessen noise intrusion.

Policy 11.1 discourages new uses in areas in which the noise level exceeds the noise compatibility guidelines for that use. The associated Land Use Compatibility Chart for Community Noise¹² identifies community noise exposures for various land use categories including outdoor spectator sports. The online chart shows that for outdoor spectator sports uses at all (background) community noise levels, new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design [emphasis added]. The associated Map 1¹³ shows 24-hour average neighborhood ambient noise levels, penalized for night but not penalized for evening hours.

Ambient levels in the neighborhood immediately surrounding the Saint Ignatius stadium are shown in the Map to be approximately 55 to 60 dBA, with only the corner of Rivera Street near 37th Avenue in the 60 to 65 dBA range.

¹¹ Cowan, James P. 2004. Handbook of Environmental Acoustics.

¹² https://generalplan.sfplanning.org/I6_Environmental_Protection.htm#ENV_TRA_10.

¹³ https://generalplan.sfplanning.org/images/I6_environmental/ENV_Map1_Background_Noise%20Levels.pdf

San Francisco Police Code Article 29 Section 2909 regulates noise and the Noise Guideline¹⁴ provides a table in Appendix A that lists applicable noise standards and thresholds for different sources of noise emission. There is no category for educational institutions nor is there an applicable exemption for schools, therefore the most applicable category is for commercial/industrial property noise which has a noise threshold not to exceed 8 dBA over ambient noise levels at the property line. That threshold is equivalent to 63 - 68 dBA for most of the immediate neighborhood surrounding the stadium.

Tables 2 and 3 above show that the estimated peak noise levels from games and even practices would exceed these ambient thresholds, creating two to four times the level of noise along 39th Avenue since each 10 dB increase in sound doubles the effect.

Appendix A of the Noise Guideline also specifies an 80 dBA maximum noise level from construction equipment between 7 am and 8 pm at a distance of 100 feet from the source. If the stadium lighting is installed, Saint Ignatius games and practices will last until after 8 pm and noise levels at the property line could far exceed even that high threshold for football games (Tables 2 and 3).

Furthermore, the CEQA exemption determination stated: “The new sound system would be designed to direct sound away from the neighbors during games”. As noted above, even if a new PA system were to be installed, it would be extremely difficult if not impossible, to direct sound away from the neighbors and mitigate noise spillover into the neighborhood. To do so would require a sophisticated system design and moment-to-moment adjustments in the sound levels emanating from it. A PA system is intended to provide sound that is audible to fans on the bleachers located along both long sides of the stadium. Air temperature gradients and wind can steer sound in unintended directions, a particular problem during night football games, as cool fall air sits over surface level air that has been warmed all day by the sun. Moisture in the air will absorb high frequencies making amplification of voice announcements muddier and harder for fans to hear under fog conditions. To have clear intelligible spoken information, a PA system needs to be 6 to 10 decibels louder than crowd noise¹⁵ which would further exacerbate overall sound levels during games.

There are few if any acoustic sound dampening elements at or around the school that would reduce noise spillover from the field into the surrounding neighborhood. There are only small shrubs bordering Rivera Street and only three street trees - one on Rivera Street and two on 39th Avenue – that could potentially help to mitigate some excess noise effects - but the CEQA determination notes that no streetscape changes are proposed for this Project. This issue is discussed in more detail in Section 1.c of CHEE’s expert testimonial letter in support of the CUA appeal.

¹⁴ Op. cit. Footnote 4.

¹⁵ <https://www.athleticbusiness.com/designing-sound-systems-to-meet-stadium-audio-challenges.html>

d. Noise Impact Conclusions

Each of the comparative four noise studies cited above found that noise impacts from lighted games and practices would exceed applicable noise thresholds and would be “significant and unavoidable”.

It is important to note that Saint Ignatius has stated that part of the purpose of the lights is to increase attendance at games. The 2018 CUA application states: “The lights will enable the school to have night games; increasing parental participation at games...” Saint Ignatius’ own estimate of current Saturday game attendance ranges from 750-1,000 historically and from 500 – 1,100 in 2019¹⁶.

The Project permit proposal dated April 29, 2020 anticipated 800 – 1,500 spectators for night time football games. More telling is the school’s Night Game or Large Event Management Plan¹⁷ developed to manage games and events with “anticipated attendance of 1,000 to 2,800 people” [emphasis added]. Therefore, expected noise levels would be significantly higher for Friday night games than for the current Saturday games with lower attendance.

The comparison noise studies were conducted at games with attendance no more than 1,200 people (San Marin, Aragon, Hillsdale). Those noise levels, when converted to equivalent levels at Saint Ignatius as shown in Tables 2 and 3, are expected to be greatly exacerbated at Saint Ignatius with night game attendance that could double in size from current Saturday game attendance levels.

Neighbors have repeatedly reported their concerns and complaints about noise from day time practices and games, as well as from night time games that took place under temporary rented lights (see CEQA appeal filing, August 24, 2020). The complaints date back to 2015 when the Project was first proposed in letters to then Supervisor Katy Tang, and more recently in testimonial letters to the Planning Commission for the Commission hearing and to the Board of Supervisors for the appeals. Letters are included in Attachments 2-5 of SINA’s appeal letter dated September 17, 2020. Neighbors have also provided video clips of noise from practices that document actual noise levels at neighboring homes. In summary, these testimonials provide additional substantial evidence that noise impacts are already significant and would be greatly exacerbated under expanded use of the athletic field.

Therefore, this analysis finds that there is a reasonable possibility that noise impacts from the proposed Saint Ignatius Project would be significant, unavoidable, and not able to be fully mitigated.

¹⁶ Exhibit I in <https://commissions.sfplanning.org/cpcpackets/2018-012648CUAc1.pdf>

¹⁷ https://www.siprep.org/uploaded/Misc/Large_Event_Plan_Writeup_ver2.pdf.

2. Traffic, Parking, and Public Safety - There is a Reasonable Possibility that Impacts will be Significant

CHEE conducted an analysis of expected parking and traffic impacts for the Project and it is our opinion that impacts would be significant due to local parking constraints, a lack of parking at the school, and Saint Ignatius' overly optimistic parking and traffic plan. Our analysis and conclusions are discussed below.

a. Background

The Planning Department did not require a traffic and parking study for the Project. The CEQA exemption determination states that the proposed Project “would shift the existing use to later times in the day and/or days of the week”.

However, the Project Sponsors stated in 2018: “We are obtaining a traffic and parking study as part of the Conditional Use Permit process” (CUA Informational and Supplemental Application Packet ,dated September 5, 2018). At the April 29, 2020 remote neighborhood meeting, the school representative stated that they had a “transportation and parking study” and would post it on their Good Neighbor website. No such study was ever provided, and the representative may have been referring to their Night Game and Large Event Management Plan posted on their website¹⁸ or to their Campus Pick-Up and Drop-Off Plan filed as part of the original Project application (dated 10/31/2018)¹⁹.

Saint Ignatius published their Large Event Management Plan in June 2020. It is important to note that the Plan was developed after the Planning Department exempted the Project from CEQA review [emphasis added]. The only traffic-related plan available for the CEQA review was the school's Campus Drop-off and Pick-up Management Plan. The drop-off plan only addresses procedures for students to be dropped off and picked up on 37th Avenue before and after school, including the use of buses to transport students to/from extra-curricular activities including games. There are no provisions in the drop-off plan for managing traffic during large events and night time games, and the CEQA review was flawed in ignoring this important Project aspect [emphasis added].

The Project Sponsors state that Saturday traffic and parking impacts would be reduced, and that weekday evening Project-related traffic “will depart and arrive after commute hour traffic on Sunset Boulevard has subsided” (draft Motion No. 20769, Exhibit I)²⁰.

¹⁸ Ibid.

¹⁹ Available on the Accela website for the Project under CEQA documents, no weblink available.

²⁰ Op. cit. Footnote 17.

b. Traffic and Parking Analysis

As discussed below, our analysis reveals that parking in the neighborhood is already limited and that the school's Large Event Management Plan is fatally flawed.

Again, it is the Project Sponsors' responsibility to conduct a valid traffic and parking study; however, CHEE has conducted a qualitative desktop analysis to estimate the potential for traffic and parking impacts from the Project. We also peer reviewed the Large Event Management Plan and provide our quantitative and qualitative critique of the plan.

i. Street Parking Analysis

CHEE looked at actual parking levels around the school to estimate the existing and potential new parking impacts from the Project. Google Earth images were analyzed to identify varying levels of on-street parking use depending on school activities. Parked vehicles in the images were counted within the blocks immediately surrounding the school and public properties encompassing, clockwise from the northeast corner - 37th Avenue from Ortega to Rivera Streets, Rivera Street from 37th to 39th Avenues, 39th Avenue from Rivera to Quintara, Quintara between 39th and 41st Streets, 41st Avenue between Quintara and Ortega Streets, and Ortega Street between 41st and 37th Avenues (Figure 1 below).

Figure 1. Parking Use Evaluation Area



Four dates were selected from available Google Earth historical imagery to represent different conditions based on apparent field usage, as follows (see Figures 2 – 5 below):

- a pre-COVID school morning with no field activity
- a pre-COVID weekday after school with field activity (assumed to be a practice not a game based on level of activity)
- a Saturday afternoon football game when the public West Sunset playground soccer fields were also in use
- a post-COVID weekday morning

Time of day was estimated from the angle and direction of shadows cast from structures in each image. Trees or shadows precluded an accurate count in some locations on some dates, so those counts were adjusted slightly upward to assume that vehicles were present but not visible. Image quality also varied by date, but the images were zoomed and panned within Google Earth to allow for the most accurate counting possible along each street. Even in the images below, vehicles are clearly visible on surrounding streets. Results of the analysis are summarized in Table 4 and discussed below.

Figure 2. Pre-COVID School Morning



Figure 3. Pre-COVID Afternoon Weekday Practice



Figure 4. Post-COVID Weekday Morning



Figure 5. Saturday Afternoon Football Game and Public Soccer Field Use



Table 4. Estimated On-street Parking Use on Streets Surrounding Saint Ignatius

Date	Location	Approximate Vehicle Count
Monday 9/23/2019 10 am pre COVID school day	Rivera between 37th and 39th	43
	39th between Rivera and Quintara	42
	Quintara between 39th and 41st	14
	Ortega between 37th and 41st	50
	37th between Ortega and Rivera	126
	Total	275
Wednesday 11/2/16 5 pm pre-COVID practice	Rivera between 37th and 39th	33
	39th between Rivera and Quintara	28
	Quintara between 39th and 41st	20
	Ortega between 37th and 41st	37
	37th between Ortega and Rivera	137
	Total	255
Thursday 4/2/2020 10 am post-COVID no school activity	Rivera between 37th and 39th	23
	39th between Rivera and Quintara	17
	Quintara between 39th and 41st	21
	Ortega between 37th and 41st	27
	37th between Ortega and Rivera	12
	Total	100
Saturday 9/11/10 2 pm football game day and public field use	Rivera between 38th and 39th	42
	39th between Rivera and Quintara	52
	Quintara between 39th and 41st	45
	Ortega between 37th and 41st	56
	37th between Ortega and Rivera	149
	Total	344

The table shows that on a typical Monday school morning (09/23/2019) approximately 275 parking spaces are in use. This number drops by only 20 vehicles (7%) to 255 vehicles in the afterschool 5 pm period (Wednesday 11/16/ 2016) with a small athletic field practice underway and no apparent use for the public fields or public schools.

This is not surprising considering that Saint Ignatius has 215 staff²¹ not all of whom can be accommodated in the school's 65-space parking garage. There are also staff at the two public schools and Saint Ignatius students who park in the neighborhood that would leave at the end of the school day freeing up some parking spots. It is possible that some residents would have returned home by that time and some guests of residents could also arrive by 5 pm and use some of the available spaces. While difficult to discern from the scale of the Figures reproduced herein, the practice day appears to have approximately 22 people on the field (Figure 2).

²¹ Op. cit. Footnote 19.

The available post-COVID image from April 2, 2020 taken shortly after the City's Shelter in Place Order took effect. It illustrates parking levels that are likely to be attributable only to local resident use, approximately 100 vehicles. Evening parking levels in a post-COVID world could be slightly higher due to some use by people visiting residents so parking capacity for evening school games would be somewhat less than shown.

After school parking use attributable to Saint Ignatius for a small field practice (11/16/2016) is still more than twice that of local resident parking use levels.

On the Saturday (09/11/2010) football game day with concurrent use at the West Sunset soccer fields, local parking use was 344 vehicles or more than 3 times the resident-only parking level on April 2, 2020. The soccer fields were in full use with perhaps 350 - 400 players and spectators, but the football stadium bleachers were only about half full.

It is important to note that the most recent football game day found on Google Earth was in September 2010 - ten years ago - and it is likely to under-represent more recent general use and football game parking levels. As noted above, the school expects night time football games to have significantly higher attendance levels than Saturday games. Therefore, it is likely that football game attendance, and hence parking pressure, was lower on that date than would be expected currently on a Friday night football game under stadium lights with the expected increase in attendance.

It is also important to note that there are no commercial businesses within these blocks - only residences, Saint Ignatius, two public schools, the West Sunset playground, a small public library, and a small public health center. Therefore, levels of parking activity at any time are unlikely to be attributable to commercial business in the neighborhood.

ii. Large Event Management Plan Summary

The Large Event Management Plan goal is to: "ensure a safe and minimal impact on our Community footprint" related to traffic, parking, security, and trash management for night football games and other large events with anticipated attendance from 1,000 up to 2,800.

The Plan also indicates that the school has only 65 onsite garage parking spaces. However, the it states that 37th Avenue between Ortega and Rivera Streets offers "exclusive use to accommodate capacity events". The school plans to obtain street closure permits for that area from the San Francisco Municipal Transportation Agency. Permits would restrict traffic and parking to event parking only. Additional parking is planned under rental agreements with the San Francisco Unified School District at the AP Giannini Middle School (at Ortega Street between 37th and 39th Avenues) when parking is available [emphasis added], and at the Robert Lewiston Stevenson Elementary School (at 34th Avenue between Pacheco and Quintara Streets). Saint Ignatius also plans to seek permits from the San Francisco Recreation and Parks Department for parking at the West Sunset playground parking lot on Quintara between 39th and 40th Avenues.

Under a street closure permit, the Plan states that 37th Avenue could accommodate up to 300 vehicles in three parking lanes between Pacheco and Rivera Streets, while retaining two

(southbound only) traffic lanes and keeping the intersections open at Pacheco, Quintara, and Rivera Streets. Vehicles would be able to exit those parking spaces into the two separate driving lanes “created by the distances between the three parking lanes”.

The Plan also states that street closures would go into effect and vehicles would be “staged” along 37th Avenue between Ortega and Pacheco Streets starting 90 minutes before large games, or by 5:30 pm for a 7 pm game start time (according to the final project proposal)²². Vehicles would be directed to proceed south on 37th Avenue from Ortega Street toward Rivera Street and would be parallel parked in the three designated parking lanes from south to north, filling the parking lanes from Rivera back up to Pacheco. Ortega Street would not be used for parking.

iii. Large Event Plan Parking Data Analysis

Google Earth imagery shows at most 83 parking spaces at AP Giannini, although the Plan states that Saint Ignatius would also use the school yard (perhaps their own playing fields) for parking of 250-300 vehicles. There appears to be no off street parking at the Robert Lewis Stevenson Elementary School. We believe Saint Ignatius may have intended to refer to the Sunset Elementary School located next to AP Giannini although there are only 50 spaces there, and there are at most 20 spaces at the West Sunset Playground parking lot.

We analyzed parking capacity on 37th Avenue in the two blocks between Pacheco and Rivera Streets to assess the number of vehicles that could actually be accommodated in that area. The total length of 37th Avenue between Pacheco and Rivera is 1,200 feet, between pedestrian crosswalks on each block. The width of 37th Avenue between Pacheco and Quintara Streets is 45.6 feet, but only 40 feet between Quintara and Rivera²³.

The National Association of City Transportation Officials²⁴ recommends parking lanes of at least 7 to 9 feet wide, presumably for curbside lanes that allow for passenger side door opening onto a sidewalk.

Vehicle widths range from about 5.9 feet for a smaller vehicle to 6.7 feet for a full-size SUV, excluding side mirrors²⁵. For this analysis, side mirrors are conservatively assumed to be 6 inches wide each based on actual measurement of a small car’s side mirror (Toyota Corolla).

The two planned curbside parking lanes would then need to be about 8 feet wide to accommodate full-size SUVs and the planned center parking lane would need to be wider, perhaps as much as 13 feet wide, to allow for both side mirrors and for opening doors into the two planned travel lanes. This analysis assumes a minimum 2.5 feet would be needed on each side to allow both the driver and passengers to squeeze out of and later reenter their vehicles. Door opening may not be a concern during the parking phase with no traffic

²² Op. cit. Footnote 17.

²³ [https://striping.sfmta.com/drawings/01_Numbered_Avenue/37th%20Ave/37th%20Ave_Str-8026.1%20\(Taraval%20St%20to%20Pacheco%20St\).pdf](https://striping.sfmta.com/drawings/01_Numbered_Avenue/37th%20Ave/37th%20Ave_Str-8026.1%20(Taraval%20St%20to%20Pacheco%20St).pdf)

²⁴ <https://nacto.org/publication/urban-street-design-guide/street-design-elements/lane-width/>

²⁵ <https://vehq.com/how-big-is-an-suv/>

expected to be passing in the travel lanes, but safe distances for door opening into traffic would be needed as vehicles exit when a game is over, since there is no way for the school to orchestrate vehicle exits in the same manner or in the same order as vehicles had parked. The total width for all three parking lanes would therefore need to be at least 24 feet (ignoring center lane door openings) and most likely up to 29 feet (with allowance for door opening).

The San Francisco Fire Code Section 503.2.1 requires a minimum 20-foot wide unobstructed roadway for emergency vehicles under normal circumstances, a temporary special event street closure permit requires a minimum 14-foot emergency access lane²⁶.

Even in the best case scenario ignoring door opening allowances, three separate 8-foot wide parking lanes would leave only 21.6 feet between Pacheco and Quintara Streets and only 16 feet between Quintara and Rivera. With a minimum 14-foot travel width of at least one lane for emergency vehicles, two travel lanes cannot be accommodated as only 7.6 feet and 2 feet of width would remain for the second travel lane. Therefore, three separate parking lanes and two travel lanes are simply not possible.

Furthermore, the length of vehicles ranges between 16.0 feet (e.g., a small Honda Accord) to about 18.7 feet (a large Chevy Suburban)²⁷. A typical US parallel parking space is 19 feet long plus a 4-foot front/back clearance for entering and exiting the space, or 23 feet total²⁸. For the school's large events, vehicles could in theory be parked more closely than that, but since not all vehicles will exit in the order in which they parked, space must be allowed between vehicles. Given the 1,200-foot total length of 37th Avenue within the Plan's two-block parking area, approximately 52 vehicles could be parked in each row.

c. Discussion

The Plan significantly over-estimates the number of vehicles that can accommodated for large football games and events. It also over-estimates the school's ability to adequately control excessive game-related traffic in the residential neighborhood, including during peak traffic times.

Parking

Since three parking rows are not possible along 37th Avenue, only 104 vehicles could be accommodated in two parking lanes, not the 300 vehicles assumed in three lanes. The Plan does not seem to include a provision for parking vehicles between Ortega and Pacheco but even if that did occur, a maximum of 48 vehicles could be parked in two lanes since that block is slightly shorter, for a total of approximately 152 vehicles parked along 37th Avenue.

The Project Sponsors go so far as to state that "moving activities from Saturdays to Fridays [for football games] has the added benefit of reducing neighborhood weekend traffic as weekend crowds at West Sunset soccer fields can be quite large". We note that the public

²⁶ https://www.sfmta.com/sites/default/files/reports-and-documents/2017/11/specialevents_factsheet-1117_0.pdf

²⁷ Op. cit. Footnote 25.

²⁸ <https://www.dimensions.com/element/parallel-parking-spaces-layouts>

soccer field usage is not nearly as large as what would be expected for football games or other school events with attendance from 1,000 and up to 2,800. Further, while Saturday parking pressures may be reduced by moving large games to Friday nights, the school has not provided any data to quantify that benefit, nor have they provided any data on the number of vehicles expected for football games. Therefore, it is impossible to know what the true expected impact would be without a valid and robust traffic and parking study.

People are most likely to park as close to the stadium entrances as possible. Once the limited parking on 37th Avenue is full vehicles would search for and fill any available public parking spaces along Rivera Street and 39th Avenue first, then would search for and fill spaces on the streets that are slightly farther away. This will lead to potentially significant parking impacts throughout the neighborhood.

Traffic

The Plan calls for street closures and vehicle staging beginning 90 minutes prior to the 7 pm game start. Closures that begin at 5:30 pm on a Friday afternoon will coincide with the evening peak commuting time and adversely impact the non-game related normal traffic flow on the streets around the closed street and intersections. It is likely that traffic backups will occur at the intersections and potential safety issues will result as vehicles enter from Sunset Boulevard for staging on Ortega Street. Non-game driver confusion at the closed street and intersections will lead to increased traffic congestion in the surrounding neighborhoods and could create additional safety concerns as drivers search for alternate routes around the closures.

Neighbors have reported traffic congestion in the past, without the added traffic due to large games. At a July 7, 2020 remote meeting of representatives from the school and SINA that CHEE staff also attended, a neighbor noted: “There are often traffic conflicts at Sunset and Ortega, there have always been back ups there”. The school’s response was: “Yes, that is a perennial concern”. Yet there is no provision in the Large Event Plan to mitigate this concern.

Public Safety

The Plan indicates that 3 police officers and 10 security personnel will control traffic and parking but there are no specified qualifications for the non-police security personnel. It is common to see the effects of non-police traffic controllers that are poorly trained and unqualified at many road construction sites – they can greatly exacerbate traffic issues and create confusion and public safety concerns for drivers and workers alike by their lack of situational awareness, lack of understanding of basic traffic hand signals, and the resulting mis-communication with drivers.

San Francisco has a job description for a Parking Control Officer²⁹ which includes, among other tasks:

²⁹ <https://www.jobapscloud.com/SF/specs/classspecdisplay.asp?ClassNumber=8214>

- Direct vehicular and pedestrian traffic by using appropriate hand signals and whistle at a specific intersection or other control points
- Assists pedestrians in crossing from curb to curb at intersections
- Directs traffic at the perimeters of critical incidents, parades, and other public functions.
- Operates and monitors a 2-way radio to keep in contact with supervisors/managers
- Responds to complaints from the public and from departmental dispatchers
- Inform departmental supervisors and dispatch centers of any circumstances requiring police or emergency assistance

Qualifications include, among others:

- Ability to problem solve, accurately analyze situations, and take an effective course of action
- Communicate orally in a clear and effective manner to the general public, supervisors/managers, and other city departmental staff
- Tactfully, professionally, and effectively interact with parking violators, the general public, and other city departmental personnel
- Work independently with minimal supervision and under stressful and hostile conditions

Experience and training requirements (with some substitution allowed for directly related education) are:

- Two years of satisfactory public contact experience which must have included providing and/or verifying information on laws, rules, regulations, and procedures, or responding to client or customer complaints as a primary responsibility; or
- Successful completion of two (2) years military service either on active or reserve duty; or
- Six months of satisfactory experience as a class 8214 Parking Control Officer.

To ensure public safety, Saint Ignatius would need to carefully vet all outside security personnel applicants and ensure that they are fully qualified to manage the traffic and parking related to the large events. The Plan should include provisions for security pre-qualification, direct supervision, and prompt removal of underperforming individuals to ensure public safety and appropriately manage traffic inflow and outflow.

d. Traffic and Parking Impact Conclusions

The CEQA exemption determination states that the Project does not propose additional parking. Given the school's own very limited parking, this is a gross oversight. Furthermore, the Commission Motion states that night time stadium use is not expected to adversely impact traffic and parking in the neighborhood. The Planning Department apparently relies upon the school's Large Event Management Plan and/or the Campus Drop-off and Pick up Plan as a means to ensure that impacts are managed, implying that there are, in fact, adverse impacts needing mitigation under the Plan. Yet, CEQA requires that the

effectiveness of mitigation measures be evaluated in a CEQA review process, not as part of an exemption determination.

The analysis above shows that even non-game parking is currently affected by school activities and would be greatly exacerbated by large Friday night football games; that the Plan greatly overestimates the amount of parking made available by street closures; and that the Plan itself is highly questionable in terms of the school's ability to control traffic and parking for these events in a way that protects public safety and ensures parking availability for residents.

Neighbors have repeatedly reported their concerns and complaints about parking, traffic, and public safety from day time practices and games, as well as from night time games that took place under temporary rented lights (see CEQA appeal filing, August 24, 2020). The complaints date back to 2015 when the Project was first proposed in letters to then Supervisor Katy Tang, and more recently in testimonial letters to the Planning Commission for the Commission hearing and to the Board of Supervisors for the appeals. Letters are included in Attachments 2 – 5 of SINA's appeal letter dated September 17, 2020. In summary, these testimonials provide additional substantial evidence that these impacts are already significant and would be greatly exacerbated under expanded use of the athletic field.

Therefore, this analysis finds that there is a reasonable possibility that traffic and parking impacts from the proposed Saint Ignatius Project are likely be significant, unavoidable, and not able to be fully mitigated.

3. Sensitive Species - There is a Reasonable Possibility that Impacts will be Significant

CHEE has reviewed information on the potential impacts of the stadium lighting Project on sensitive wildlife species, and it is our opinion that impacts from the Project's lighting and noise levels could be significant. The Planning Department completely ignored these potential impacts as part of the Project's categorical exemption, but these potential impacts are important and need to be considered and evaluated under a CEQA review.

a. Background

The Project application ignores potential impacts to sensitive species although the 2015 Project Review Meeting submittal (2015-014427PRV) notes that Saint Ignatius is located within 300 feet of a possible urban bird refuge corridor along Sunset Boulevard³⁰.

The CEQA exemption determination is silent on sensitive species and the Planning Department's own Environmental Evaluation Screening Form used for project applications does not consider sensitive species at all, and only addresses tree removals or additions in the Biological Resources section. As if there are no concerns for wildlife within the City limits.

³⁰ <https://sfplanning.org/sites/default/files/resources/2018-08/Urban%20Bird%20Refuge.pdf>

However, Appendix G of the CEQA Guidelines³¹ provides a CEQA checklist form which specifically includes consideration of project impacts on sensitive species including habitat modifications, interference with the movement of native or migratory species, or alteration of their movement corridors.

As with noise and traffic/parking it is the Project Sponsor's responsibility to evaluate these impacts. SINA submitted a summary of publicly available information on species that are documented or likely to be present in the immediate vicinity of Saint Ignatius, in order to point out the potential for Project impacts on them³². The following discussion expands upon and adds context and definition to that information.

b. Data Sources

Species information for this review was obtained from several sources as noted in SINA's prior submittal. Numerous rare, threatened or endangered species are or may be present at or near the Project site.

- The US Fish and Wildlife Service's Information for Planning and Consultation (IPaC) online mapping system³³. It provides information on the known or expected ranges of threatened and endangered species protected under the federal Endangered Species Act, and migratory birds protected under the federal Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act. SINA conducted an online data check on July 20, 2020. The federally-listed wildlife species that could be present and thus affected by activities in the 98-acre area surrounding the school and bounded by Ortega and Santiago Streets, and 36th and 41st Avenues include:
 - two mammals
 - six birds
 - two reptiles
 - one amphibian
 - five butterflies

Some of the identified federally-listed species are also California state-listed species under the California Endangered Species Act³⁴. These include four bird species and the San Francisco garter snake. Other state-listed species that are not also federally-listed may be present in the immediate school vicinity. Species information is not publicly available from the state's natural diversity database, and therefore not included in this analysis.

³¹ California Code of Regulations Title 14, Division 6, Chapter 3, Appendix G.
[https://govt.westlaw.com/calregs/Document/I9D1077043F694621BD0D17A6E0616567?viewType=FullText&originContext=documenttoc&transitionType=CategoryPageItem&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Document/I9D1077043F694621BD0D17A6E0616567?viewType=FullText&originContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default))

³² Op. cit. Footnote 3, Appendices B and C.

³³ <https://ecos.fws.gov/ipac/>

³⁴ <https://wildlife.ca.gov/conservation/cesa>

- The IPaC report also lists 24 species of migratory birds that could be present at certain times of the year. The list includes the state-endangered bald eagle and the state-threatened tricolored blackbird.
- The nationwide eBird website³⁵ compiles bird observation data and lists over 67 species of more common birds observed since 2015 at the West Sunset Playground, adjacent to Saint Ignatius.
- There are also 16 bat species reported within the Bay area³⁶ and at least four species within the City³⁷.
- Neighbor reports of nesting red tail hawks commonly seen in the trees by the Community Garden located just north of the school property. Owls have also been seen there. Neighbors also report killdeer grazing and eating bugs off the natural grass soccer fields and baseball field adjacent to the athletic field. Western snowy plovers, a federally threatened species, have also been observed nesting on flat roofs of some homes on 39th Avenue and in the surrounding neighborhood.

c. Discussion

The high-intensity LED lighting specified for the Project brings adverse human and wildlife health effects that have not been addressed. The CEQA appeal supplement letter from Kera Lagios (dated September 11, 2020 and filed September 17, 2020), SINA's lighting expert, discusses the effects of light and the blue-ish light from LEDs in particular, on the circadian system of living organisms. She states: "Fundamentally, darkness is important because human beings, animals and plants have evolved biologically to take cues from the daily cycles of light and dark".

It has also been demonstrated that excess noise has adverse effects on wildlife. The increase in the Project's evening noise levels discussed in Section 1 above will occur virtually every evening of the week during the fall, winter and early spring which could have a significant impact on wildlife.

Extensive peer-reviewed literature is available^{38, 39, 40, 41, 42, 43} that documents the adverse effects of excess light on wildlife, including:

³⁵ <https://ebird.org/hotspot/L6317907?yr=all&m=>

³⁶ <https://baynature.org/article/where-are-there-bats-in-the-bay-area/>

³⁷ <https://www.krauel.com/publications/Krauel2016plosone.pdf>

³⁸ For instance, the Journal of Experimental Zoology Part A devoted an entire issue to Artificial Light at Night as an Environmental Pollutant. Volume 329 Issue 8-9, October/November 1, 2018.

<https://onlinelibrary.wiley.com/toc/24715646/2018/329/8-9>

³⁹

https://www.researchgate.net/publication/272889669_Impacts_of_artificial_lighting_on_bats_A_review_of_challenges_and_solutions

⁴⁰

https://www.researchgate.net/profile/Michael_Salmon3/publication/235602286_Perry_G_B_W_Buchanan_R_Fisher_M_Salmon_and_S_Wise_2008_Effects_of_night_lighting_on_urban_reptiles_and_amphibians_Chapter_16_in_Urban_Herpetology_Ecology_Conservation_and_Management_of_Amphibians_and_Links/57486e6108a6e389f4e1792.pdf

⁴¹ <https://www.nature.com/articles/s41598-018-21577-6>

⁴² <http://soundandlightecologyteam.colostate.edu/pdf/biologicalconservation2020.pdf>

⁴³ <http://soundandlightecologyteam.colostate.edu/pdf/insects2018.pdf>

- Disruption of the nocturnal environment
- Attraction of sea birds and migratory birds to bright lights
- Alterations in amphibian, reptile, insect and pollinator behaviors
- Reproductive changes in many species
- Reduction in foraging and roosting behavior of bats

In addition, noise has adverse effects on wildlife. The National Park Service states: “Sound, just like the availability of nesting materials or food sources, plays an important role in the ecosystem. Activities such as finding desirable habitat and mates, avoiding predators, protecting young, and establishing territories are all dependent on the acoustical environment”⁴⁴. Many studies indicate that animals, like humans, are stressed by noisy environments.

Shannon et al. 2015⁴⁵ conducted a systematic and standardized review of the 242 scientific studies published from 1990 to 2013 dealing with the effects of anthropogenic noise on wildlife. The majority of those studies documented effects of noise including:

- Altered vocal behavior
- Reduced species abundance in noisy habitats
- Altered predator-prey interactions due to inability to hear cues
- Changes in foraging behavior
- Impacts on individual fitness and the overall structure of ecological communities

That literature review showed that terrestrial wildlife responses begin at noise levels of approximately 40 dBA, and 20% of studies documented impacts below 50 dBA. Overall, 88% of reviewed studies reported a statistically measured biological response to noise exposure. For birds, changes in song characteristics, reproduction, abundance, stress hormone levels and species richness were documented at noise levels at or above 45 dBA. Terrestrial mammals showed increased stress levels and decreased reproduction at noise levels at or above 52 dBA.

The frequency and intensity of noise are also factors in wildlife responses to noise. Shannon et al. 2015 states: “Evidence suggests that the characteristics of the acoustic signal (e.g., frequency, duration, onset, intensity) and the biology of the species in question (e.g., hearing range, behavioral state, habitat, vocal behaviors) are important for predicting how noise is likely to affect a particular organism”.⁴⁶

d. Sensitive Species Impact Conclusions

It is highly likely that the new high-intensity stadium lighting and nighttime noise levels would adversely impact at least some sensitive species that are dependent upon darkness and/or quiet for foraging, roosting and nesting, and migration. A full CEQA review would

⁴⁴ https://www.nps.gov/subjects/sound/effects_wildlife.htm

⁴⁵ Available for purchase from <https://onlinelibrary.wiley.com/doi/abs/10.1111/brv.12207>

⁴⁶ Ibid. at p. 988.

typically trigger endangered species consultation with the US Fish and Wildlife Service and California Department of Fish and Wildlife since such species are known or likely to be present (as discussed above).

Since the Planning Department exempted the Project from CEQA this consultation has not occurred and there is no information upon which to dismiss potential impacts on sensitive species. The presence of sensitive species must be investigated and potential adverse impacts of the stadium lighting project on them must be evaluated and mitigated to the extent possible.

The Planning Department must also support the City's Biodiversity Program and Biodiversity Policy (Board of Supervisors Resolution 107-18)⁴⁷ by providing robust oversight on projects that could imperil biodiversity. The Policy states: "In San Francisco, 95% of our land area is developed and its remaining natural heritage, including a dozen distinct ecological communities and several endangered species, is in a precarious state. From the Pacific Ocean to the Bay, the City is a unique natural environment worth protecting. The Planning Department has an important role (independently and in collaboration with our fellow City agencies) to help San Francisco be a sustainable and healthy city for all its inhabitants; human, animal, and plant."

This analysis finds that there is a reasonable possibility that impacts on sensitive species from the proposed Saint Ignatius Project are likely be significant, unavoidable, and unable to be fully mitigated.

After our in-depth review of available information and the analyses summarized above, it is my professional opinion that the Saint Ignatius Stadium Lighting Project has a reasonable potential to create significant adverse impacts on ambient evening noise levels in the neighborhood; to create significant traffic and parking problems throughout the neighborhood; and to adversely impact sensitive wildlife species due to both the lighting and noise.

Use of the athletic field would be expanded to 150 nights per year, or nearly every evening during the fall, winter and spring months with shorter daylight hours. The environmental impacts of this high level of new use have not been adequately evaluated. Therefore, we find that the Project should not have been categorically exempted from CEQA review and should be subject to a full CEQA review including preparation of a full Environmental Impact Report.

Sincerely,



Maryalice Fischer
Executive Director, CHEE LLC

Attachment 1. Abbreviated list of related CHEE projects

⁴⁷ <https://sfgov.legistar.com/View.ashx?M=F&ID=6221173&GUID=F6DFAFED-8F3E-4615-AE74-86FA078A97EC>

Attachment 1

Abbreviated list of projects relevant to this CEQA appeal that were completed by CHEE, or independently by CHEE staff

National Environmental Policy Act (NEPA)

- Conducted peer reviews and/or adequacy assessments of NEPA Environmental Impact Statements and Environmental Impact Reports prepared by others for over 70 development projects in 15 states.

Sensitive Species Assessment, Impact Analysis, and Mitigation

- Evaluated project compliance with the Endangered Species Act (ESA) and state-level ESA programs for over 100 sites in 25 states, as part of regulatory reviews and/or environmental compliance audits of federal installations and for private development projects.
- Rare, Threatened and Endangered Species Study. TransCanada. Coordinated multi-year studies to identify sensitive plant and wildlife species in 120 linear miles of habitat in two states. Managed teams of biologists in study design, procurement of species scientific collection permits, comprehensive field surveys, GIS-based habitat mapping, data analysis, and reporting.
- Tuberculid Orchid Recovery and Mitigation Program. US Generating Company (then a subsidiary of Pacific Gas & Electric Company). Managed five-year program to relocate and monitor state-endangered plant species to avoid adverse effects from development proposal.
- Natural Resources Inventory, Barrington NH, Strafford Regional Planning Commission. Completed municipal natural resources inventory report including GIS-based assessments and summary of the natural resource basis as part of the municipal Master Plan.

Traffic and Parking

- Recreation Area Planning, US Generating Company (then a subsidiary of Pacific Gas & Electric Company). Developed and coordinated implementation of 10-year comprehensive plan to improve and expand 17 public access recreation areas in two states. The project included evaluation of pre-existing traffic patterns and development of site-specific traffic improvements; coordination with state and local transportation departments to ensure that measures met applicable standards; evaluated parking needs and improvements to parking facilities; obtained federal, state and local permits for all ground-disturbing activities; conducted construction monitoring and oversight and post-construction maintenance and reporting on efficacy of the improvements. Other aspects of the project including aesthetic improvements and mitigation, and threatened and endangered species surveys and protection measures.
- Comprehensive Recreation Facility Needs Assessment. TransCanada. Managed multi-year study to assess recreation area adequacy and identify improvement needs at 48 public access recreation areas. Assessments including traffic counts, visitor surveys, parking and traffic flow evaluations, and development of a 370-page report detailing findings with recommendations for traffic, parking, and other recreation area improvements.

Attachment 1

Abbreviated list of projects relevant to this CEQA appeal that were completed by CHEE, or independently by CHEE staff

- Northwood Meadows State Park Discovery Day, NH Department of Parks and Recreation and Northwood Area Land Management Collaborative. Large event organization and management. Developed and implemented state-approved large event management plan. conducted traffic flow analysis; designed patterns for safe traffic flow, ingress and egress, and parking utilization; coordinated with state and local police and EMS agencies to ensure public safety and ease of access for emergency personnel and event attendees; and managed security team to ensure that traffic and parking requirements were enforced.
- Utility Traffic Control Program, Granite State Electric Company. Developed traffic control strategies for roadside construction projects. Developed written program for traffic control, trained utility workers in proper traffic control methods including situational awareness, hand signaling to workers and drivers, warning sign placement, and coordination with police during construction activities.
- Public Transit Human Services Transportation Plan. Alliance for Community Transportation and Rockingham and Strafford Metropolitan Planning Organizations. Facilitated the efforts of transportation providers in a 38-town region to coordinate public transit service as part of the region's Long Range Transportation Plan. Developed federally-compliant implementation plan; identified transportation needs of individuals with disabilities, older adults, and individuals with limited income; assessed available services and any gaps in service; and developed strategies for meeting those needs and prioritizing services throughout the region.

Noise

- Industrial Hygiene Hearing Conservation Program, New England Power Company: Developed and implemented corporate hearing conservation program. Conducted occupational exposure noise monitoring, determined noise thresholds requiring hearing protection, instituted audiometric testing program for workers, provided hearing conservation training program, and maintained records of noise levels and audiometric testing results.
- Large Event Noise Level Management and Control, various clients. Measured amplified sound levels; monitored compliance with applicable noise standards; and conducted continual active sound level control to remain within applicable standards at large indoor and multi-day outdoor venues, including among others:
 - Hampton Beach NH Seafood Festival
 - Salem MA Seafood Festival
 - South Berwick ME Strawberry Festival
 - Bentley's, Arundel ME
 - Lobster in the Rough, York ME