



**Marin Catholic High School
675 Sir Francis Drake Boulevard
Kentfield, CA 94904**

**Marin County Community Development Agency
Marin Catholic Athletic Field Lights
Design Review Submission
(APN: 022-010-35)**

Executive Summary:

Marin Catholic High School ("MC") is proposing to install a state-of-the-art field lighting system ("Field Lights") at Dino Ghilotti Motta Athletic Stadium ("DGMAS"). MC is operated by the Archdiocese of San Francisco and serves all of Marin County as the only Archdiocesan Catholic high school in Marin. Enrollment ranged from 758 to 802 over the last five years. On average, 30% of MC families receive financial aid to provide opportunities for families of different socioeconomic backgrounds.

Participation in extracurricular activities, particularly interscholastic sports, is an important aspect of the high school experience as it promotes mental health, enhances school spirit, and translates to greater success in the classroom. In addition, participation in youth sports plays a very important role, teaching students how to work together, solve problems, handle adversity, and dedicate themselves towards a common goal. Participation in youth sports also improves school attendance and academic performance, particularly among students most at risk.

Throughout Marin County, there is a real lack of available field space for practices and games given the increased popularity of field sports at all age levels, especially with the continued growth of female sports. MC is not alone in recognizing that a permanent lights solution is now a requirement to operate successfully as a school. To address this problem at the high school level, stadium lights have successfully been installed or updated over the years at San Rafael High School, Tomales High School, and San Marin High School mostly to increase the availability and capacity of the existing playing fields. In addition, College of Marin's Indian Valley campus in Novato also has a lighted field. While all of this has been very positive for Marin County, the growing demand for greater field space remains a critical issue.

At MC, the lack of field space problem is particularly acute as MC suffers from a historic lack of athletic fields (see note at end of this document). All of our 21 male and female teams share access to only two fields, DGMAS and the adjacent Bishop Thomas A. Daly baseball field. These sports include lacrosse, track, baseball, softball, soccer, cheer, football, cross-country, and field hockey teams. This forces multiple teams from different sports to use the same field concurrently, negatively impacting the quality of each team's practice. Further, in the winter, MC must dismiss soccer players early from school enabling them to start HOME soccer games early enough to complete before darkness. Some student athletes also must travel to offsite locations for practice, which only adds car trips and emissions during peak commute times.

Several representative examples of how MC's lack of athletic fields and not having lights

hinders its ability to operate as a school include the following:

- In December of the 2023-24 school year, MC's Varsity football team was forced to practice in the baseball field, sharing the field with the Varsity women's soccer team and the Varsity baseball team. This was during game-week preparations for its State Championship football game to be played in Southern California later that week and was necessary, because the Varsity soccer team was hosting a home game at DGMAS.
- Another representative example occurred during the Winter of the 2023-24 school year. The women's Varsity soccer team was forced to play its entire preseason schedule (6 games) as AWAY games to ensure the Varsity football team could practice on the football field at DGMAS during the weeks of football playoffs.
- Other examples include our need to rent field space away from MC for our Soccer teams and Lacrosse teams to practice during months when Winter and Spring sports overlap. This causes students and parents to be on the roads during peak traffic hours which is not ideal for the school or the community.

For over 25 years, MC has rented temporary construction lighting equipment in order to safely practice on the DGMAS field during the late fall months. However, as discussed with the County, this temporary measure is not a sustainable approach from a permitting perspective and it also does not solve the long-term issue concerning field space for multiple sports through the fall and winter months. A more permanent solution is needed to provide certainty to MC, Marin County, and MC's neighbors.

The Field Lights project and use plans, developed with past input from the community, have been designed to be sensitive to neighbors, the surrounding neighborhood, and current and future traffic patterns within the immediate area. As designed, the project includes four, 80-foot tall light poles installed at the 10 yard line on each side of the field. The light fixtures utilize LED technology which allows for unparalleled light "control" reducing the light spillage and glare effect as well as reduced energy consumption as compared to metal halide lamp fixtures. It is a highly-targeted system that only lights the field of play. Additionally, code compliant bleacher and pedestrian pathway lighting that will not illuminate the marsh will be installed. Initial testing for the lighting array will be scheduled between September 1 to January 31 to avoid general nesting bird season.

Field lights at MC will allow weekday practices and games for soccer, lacrosse and football to be spread out during the afternoon and early evening hours, so multiple teams are not practicing at the same time and students are not being released early from school for HOME games. In most instances, the lights for practices will be turned off by 7:15pm. Field lights will also allow for lacrosse and soccer games as well as a designated number of Friday (or Saturday) evening football games during which the lighting would be turned off by 10 pm. MC has experience hosting Friday evening games for Men's varsity basketball which has historically been approximately 1,000 spectators (the gym bleacher capacity is 1,032). MC has not received

any complaints concerning increased traffic or neighborhood parking issues. Security for these games is provided by the Marin County Sheriff's Department.

Weekday early evening practices and games will also provide a number of benefits to student athletes throughout Marin County and the local community. Scheduling early evening games eliminates the need for student athletes, particularly from visiting teams, to leave school early to participate in games only during natural daylight hours. Additionally, as practices and games are spread throughout the afternoon and early evening, weekday traffic on Sir Francis Drake Boulevard will be reduced during the peak commute, as fewer student athletes will be leaving campus between 5:00 and 5:30pm. Field lights at MC will enable a more effective and efficient use of its limited field space.

Since 2016, when MC last considered permanent lights, the lack of field space has become even more apparent as new teams have been added (junior varsity girls track and field, and a co-ed competitive cheer team) or are being considered (female flag football). In developing this application, MC reviewed the usage plans of San Marin and San Rafael High Schools to incorporate the best practices of other local schools. Our application seeks that MC be treated fairly and consistently with other Marin County high schools. In fact, our application and intended lights usage is significantly less than San Rafael High School's ability to operate lights 365 days a year until 9:30pm (and even later for Football) and is somewhat less than San Marin's approved lights usage. Further, in previous discussions regarding field lights, MC heard concerns of local neighborhood groups and other stakeholders relating to the number of practices and games utilizing the lights. In response, the current application for field lights reflects a **substantial reduction** of approximately 30% in proposed hours of lights usage from the 2016 proposed plan.

Additionally, and at the direction of County staff, MC engaged experts in four areas known to be of concern: traffic (Parametrix), acoustic (Coffman Engineers), lighting (Pearce Renewables), and environmental (WRA Environmental Consultants). While the existing site conditions and stadium capacity have remained the same since MC's 2016 application for field lights, the consultant reports provide additional review of these four topic areas. All came to the same conclusion: Field lighting would not negatively impact the local community and environment in any material or significant way.

To summarize, the purpose of this application is to achieve a positive outcome that balances the needs of student athletes, neighbors, and the broader community. We look forward to working with the County on this important project.

Note: By way of background, the lack of athletic fields at MCHS is directly attributable to its 1974 donation and sale (to Marin County) of the land adjacent to campus that is now Hal Brown Park at Creekside and County floodplain. As part of this donation, Marin County allowed future development at MCHS consistent with operating as a school to be subject only to Design Review and not the Use Permit process.

Appendix:

A. Local Setting

The project site is located at 675 Sir Francis Drake Blvd, Kentfield. The project site is approximately 3.23 acres in size while the entire campus consists of one parcel (Assessor Parcel Number [APN] 022-010-35) for an approximate total of 18.469 acres. The project site is located within the southeast portion of the parcel. The campus is currently zoned R-1:B-2 by the County Zoning Code (Title 22). The general topography of the campus is tri-level with a slight slope from the classrooms and administration building on the northwest side, stepping down to the main parking lot and gymnasium and further stepping down to the football and baseball fields on the southeast side of the campus. The campus is surrounded by St. Sebastian Catholic Church and the Bay Club to the southeast, Hal Brown Park at Creekside to the southwest, Bacich Elementary School to the northwest and low density single family residential housing across Sir Francis Drake Blvd to the northwest.

B. Existing Conditions

The project site consists of an athletic field with artificial turf and a six lane synthetic track that surrounds the field perimeter. There is a 1,242 seat home bleacher section which includes a six person press box and a 266 seat visitors section. Underneath the home bleachers is a 7,000 square foot field house which contains men's and women's public restrooms, a weight room, two locker rooms, a training room, a concession stand, a storage area, and electrical rooms. The bleachers and field house, which reduced stadium capacity by 282 seats, were completed in 2014 and are now ADA-compliant. The project site also includes a free standing scoreboard located in the northwest end of the field and various other track facilities located near the eastern end zone.

The project site is surrounded by a chain link fence with seven locked access gates located on-site, including: two locked gates from the baseball field, two locked gates from the main parking lot, a gate at the top of the ADA access ramp, a gate above the ten parking spaces at the field level and a gate from the St. Sebastian parking lot. Two gates currently provide access for event attendees - the gate from the southwest corner of the main parking lot and the gate from the St. Sebastian parking lot. Field lighting does not currently exist within the field area.

Vehicle access is provided via Sir Francis Drake Blvd. and Bon Air Road. Event parking is provided in the school's main parking lot, as well as the St. Sebastian parking lot. Historically, parking has always been sufficient, even before the capacity of the stadium was reduced by 282 seats in 2014.

Currently during stadium events, the school utilizes the following staff to provide general supervision and security:

- Football: Four MCHS staff members, and eight volunteer parents
- Soccer/Lacrosse: Two MCHS staff members
- Track Meets: Two MCHS staff members, 10 volunteer parents

In addition, MC hired a Campus Security Supervisor in 2023 who is responsible for protecting the welfare of the campus while representing the school to the wider community and liaising with law enforcement.

C. Current Stadium Field Usage

Football

- MC has three football teams: Varsity, Junior Varsity (JV) and Freshmen (Frosh) running the first week of August through the first week of November. *The Varsity postseason may extend through mid-December.*
 - Frosh Football shares practice space on the Bishop Thomas A. Daly Field with Girls' Field Hockey after school. JV and Varsity Football share practice space on the Dino Ghilotti Motta Athletic Stadium, or stadium field, after school.
 - Portable lights are used up to 2 times per week (2 hours each use) for Varsity Football practice after the Daylight Savings time change (November) through the end of the playoffs (mid December).
 - MC may host up to 5 home preseason/league games for each level
 - Frosh games are Thursdays after school beginning at 4:00 or Saturday mornings beginning at 9:30am
 - JV games are Saturday mornings beginning at 11:30am
 - Varsity games are Saturday afternoons immediately after the JV games (approximately 2:00pm)
 - MC may host up to 4 postseason Varsity home games
 - Postseason games are on Saturday afternoons at 1:00pm
 - The public address system is used to announce play by play for all games. Music is only played for Varsity level games.
 - Attendance at Varsity games ranges from a low of approximately 600 to a high of approximately 1,100. Attendance for freshman and junior varsity games is generally less than 300.

Soccer

- MC has four soccer teams: Boys' Varsity, Boys' Junior Varsity (JV), Girls' Varsity, and Girls' Junior Varsity (JV) running the first week of November through the first week of February. *Boys' and Girls' Varsity postseason may extend through the first week of March.*
 - All 4 Soccer teams practice immediately after school until dark (approximately 5:00pm) sharing the stadium and baseball fields.
 - During the Football postseason (November through mid-December); all 5 teams practice on the two on campus fields.
 - MC rents offsite locations for Soccer practices, if available.
 - MC may host up to 12 home preseason/league soccer games at the athletic stadium for each level.
 - Each team plays one home game per week.
 - Games begin at 3:00pm.

- MC may host up to 20 home postseason soccer games (10 each for Boys' and Girls')
 - Games begin at 3:00pm
- The public address system may be used to announce play-by-play for all games. Music is only played for warm-ups for Varsity level games.
- Students are dismissed from classes early for all games.

Lacrosse

- MC has four Lacrosse teams: Boys' Varsity, Boys' Junior Varsity (JV), Girls' Varsity, and Girls' Junior Varsity (JV) running the first week of February through the mid April. *Boys' and Girls' Varsity postseason may extend through the first week of May.*
 - All Lacrosse teams practice immediately after school until dark (approximately 5:00pm) sharing the stadium field.
 - During the Soccer postseason (February); all 6 teams share the stadium field.
 - MC rents offsite locations for Lacrosse practices, if available.
 - MC may host up to 10 home preseason/league Lacrosse games on the stadium field for each level.
 - Each team plays one home game per week.
 - Varsity games begin at 3:00pm; JV games immediately follow the Varsity games (approximately 5:00pm)
 - MC may host up to 14 home postseason Lacrosse games (7 each for Boys' and Girls')
 - Games begin at 3:00pm
 - The public address system may be used to announce play-by-play for all games. Music is only played for warm-ups for Varsity level games.
 - Students are dismissed from classes early for all games.

Track & Field

- MC has four Track and Field teams: Boys' Varsity, Boys Junior Varsity (JV), Girls Varsity, and Girls Junior Varsity (JV) running the first week of February through the last week of May.
 - Track & Field practices immediately after school.
 - MC hosts up to two Co-Ed Track & Field meets on the Richard Ghilotti Family Football Field and Track
 - Meets begin at 4:00pm and average three hours.
 - The public address system is used to announce the meets. No music is played.

D. Project Characteristics and Installation

The proposed project will include the installation and use of field and bleacher lighting at the

stadium field on the MC campus.

1. Field Lighting:

The proposed field lighting system consists of four 80-foot poles with differing fixture arrays. The four poles will be situated symmetrically in a rectangular formation surrounding the field (at approximately the 10-yard line). Each pole will have 16 fixtures at the top of the pole for field lighting. Poles F1 & F2 on the south side of the field in front of the home bleachers will each have 1 additional fixture illuminating the home bleachers. Pole F3 on the northwest side of the field will have 2 fixtures at the 15-foot level for field up-lighting (to see the bottom of a kicked ball) and 2 fixtures at the 15-foot and 70-foot level illuminating the visitor bleachers. Pole F4 on the northeast side of the field will have 3 fixtures at the 15-foot level for up-lighting. The 16 fixtures at the top of each pole will utilize an innovative design where there are two crossarms mounted one behind the other, placing the fixtures at the same elevation. This eliminates the problem of reflected light off lower mounted fixtures, thus reducing night glare.

Building materials will consist of four in-ground pre-cast concrete bases with 80-foot high galvanized steel standards (poles). Each fixture will have spill and glare shielding. The installation of the pre-cast concrete bases involves the excavation of four, 36- to 48-inch (diameter depending on soil conditions) by 16-foot deep holes. The chosen design uses the Light Structure Green (LSG) system designed and manufactured by Musco Lighting Systems (www.Musco.com) which only requires 50- to 1,500-watt LED fixtures to achieve the recommended 50 footcandle (fc) average. The LSG fixtures are designed to concentrate the light on the field area with very minimal light emitted outside the targeted areas compared to the non-LSG systems, which are commonly in place today. Additionally, the LSG system is designed to be switched to a "dimmed" setting. This feature will allow the lights to be turned down during events not requiring full lighting. Also, the lights can be dimmed after the completion of an event when less light is needed as team members exit the field, spectators vacate the bleachers and school staff clean up the area after a game. The proposed lighting system also has a wireless on-off control feature.

Further, the following measures will be implemented to minimize any potential glare:

- All outdoor lighting shall be shielded and directed downward to minimize both sky-light and spill-light, in accordance with California Code of Regulations (CCR) Title 23 outdoor lighting requirements. Lighting will be controlled by photo-control or time switches.
- Field testing will take place for the actual performance of the system to ensure the maximum spill-light on residences remains at or below 1.0 footcandles
- Any need to re-aim and/or adjust the luminaires during the initial night-time testing of the lights will be addressed to ensure that no excessive spill-light remains uncorrected
- The proposed lights will be provided with programmable controls to turn off the lights at a pre-set time as recommended by School Standards. Manual controls will only be provided for testing the lights.
- Additional control features that allow the field illumination to be reduced for practices and for after-game cleanup will be included as part of the Stadium Lights.

2. Bleacher, Pedestrian Pathway Lighting:

Due to the minimal light spill from the field lighting, additional code-compliant lighting will be added for the bleachers and pathway surrounding the field. This lighting will be similar to the lighting installed in 2014 along the ADA ramp from the main parking lot to the field and will not illuminate the marsh. This will be accomplished through directional lighting, shaders, the intensity of the lighting, and lower height fixtures.

3. Construction and Phasing:

Construction is anticipated to be completed in one phase and take approximately four to six weeks. It will involve heavy equipment including a drill rig, boom truck, 100-foot crane, forklift, trencher, bobcat, dump truck, concrete trucks and a pumper truck.

E. Proposed Lighted Field Usage

MC will continue to offer essentially the same amount of practices and competitions to our student athletes. However, permanent lights will provide a safer and improved training environment. Administrators and coaches will have the ability to organize practices so that teams will not have to share field space or play in dangerous twilight conditions. Lights will also allow games to begin later, specifically when Daylight Savings ends, so students will not be dismissed before the end of the academic school day.

MC proposes that lights would be used under the following conditions:

- Lights turned on for practices/games 30 minutes prior to before sunset
- Practices using lights end at 7:00pm; lights turned off at 7:15pm
 - Due to overlapping seasons (i.e. Varsity Football postseason and Soccer or Soccer postseason and Lacrosse) and Daylight Savings time changes, during November and February, practices would end at 9:00pm (lights turned off at 9:15pm)
- Games using lights will be reduced to “practice level” 15 minutes after the end of the game and turned off completely a half hour after the game ends
 - Soccer games end approximately 7:30pm
 - Lacrosse games end approximately 9:00pm
 - Football games end approximately 9:30pm

Football/Flag Football:

- Frosh Football would move practices to the stadium field. This would allow MC an opportunity to offer Flag Football to girls. Girls Flag Football would share practice space on the Bishop Thomas A. Daly Field with Girls Field Hockey (no lights used).
 - Girls Flag Football games would be held on Saturday mornings/afternoons (no lights used)

- Varsity Football would have 2 hours of field use daily on weekdays during their postseason for practices. (Second week of November through their postseason).
- JV and Varsity Football games (up to 5 preseason/regular games and up to 4 postseason Varsity games) would shift from Saturday afternoon to Friday evening.
 - JV games begin at 4:00pm; Varsity games immediately following (approximately 7:00pm)

Soccer:

- During the Varsity Football postseason, 4 Soccer teams would have 2 hours of exclusive field time daily on weekdays on the stadium field and 2 hours of exclusive field time daily on weekdays on the Bishop Thomas A. Daly Field.
- After the Varsity Football postseason, all soccer practices would be on the stadium field.
- Each team would have one home game per week beginning at 6:00pm; November - mid February.
 - Varsity teams may each have up to 10 playoff games mid February - mid March beginning at 6:00pm.

Lacrosse:

- During the Soccer postseason (February) and prior to Daylight Savings time change, field practice time would be extended to 9:00pm to accommodate 2 Soccer teams and 4 Lacrosse teams.
- Lacrosse practices would not need lights after the Daylight Savings time change.
- Lacrosse games would be played twice a week (JV/Varsity Boys on one day and JV/Varsity girls on one day)
 - JV games would begin at 5:00pm and Varsity would immediately follow (approximately 6:30pm).
 - Varsity games are approximately 2 hours in length and lights would turn off approximately 9:00pm after field clean up.

F. Summary of Expert Analysis - (full reports attached)

MC engaged four experts in the areas of: Traffic and Parking, Lighting, Acoustic, and Environmental. All came to the same conclusion, Stadium lighting would not negatively impact the local community and environment in any material or significant way.

1. Traffic and Parking - MC engaged Parametrix:

- “The Project is expected to result in a modest increase in average vehicle delay under the Football Games Scenario and a minimal increase under other scenarios, compared to existing conditions. The intersections would be expected to meet the County LOS performance standards of LOS D or better under all Project scenarios.”
- “Queues would be expected to be stored in the provided roadway space and would not impact the overall roadway network. The parking demand for all study scenarios would be

expected to be satisfied with a combination of on-site and off-site parking, or on-site parking alone.”

2. Lighting: MC engaged Pearce Renewables:

- “The results of the spill/glare light studies indicate that spill/glare light impact should be zero toward Sir Francis Blvd, as well as towards hillside residences to the north of the field.”
- “Hillside residents should not see any glare from fixtures at all, only the illuminated surface of the football field will be visible.”
- “There will be zero to minor glare when viewed from the property along Bon Air Road, in the southern direction from the field.”

3. Acoustic: MC engaged Coffman Engineers

- “In the case of the loudest activity, a varsity football game, the sound from these games would be more noticeable at residences on a Friday evening (proposed condition) than they would be on a Saturday afternoon (existing condition). This is primarily due to ambient noise (mostly traffic on roadways) decreasing during the evening hours.”
- “However, noise from the project does not exceed this report’s adopted threshold of significance which is based on the County implementing program NO-1.c.”
- “Therefore, noise from the project is considered to have a less than significant impact.”

4. Environmental: MC engaged WRA Environmental Consultants:

- “Modeling specific to the Project shows that no light trespass will occur in nearby Creekside Marsh which hosts sensitive wildlife species. Glare is expected to be negligible at best, save for in a small, marginal portion of the marsh near MCHS.”
- “While the Project will increase the annual period of lighting use and shift games and practices to the evening, it is likely that any impacts from these shifts to local wildlife will be minimal and temporary in nature.”
- “Increases in noise due to increased spectator attendance (for evening games) are anticipated to be minimal at best and discountable compared to baseline conditions.”
- “Based on the review of potential incidental impacts to wildlife included in this report, any such impacts would be ***less than significant.***”

[Tables](#) (Click link and print 2 data tables)