From:	<u>-r b-</u>
To:	Board of Supervisors, (BOS)
Subject:	2018-012648PRJ, 2018-012648APL-02 Stadium Lights at S.I.
Date:	Thursday, September 17, 2020 12:31:30 PM

#### Board of Supervisors,

I am disheartened to learn that you have approved the New Stadium Lights at St. Ignatius College Preparatory.

I live one and a half blocks from the school and I know that most of my neighbors are very much opposed to this project. This project will change our residential neighborhood from a restful neighborhood will little night time activity to something more akin to a business neighborhood that operates evenings half of the calendar nights a year.

How can you make such drastic changes and go against the vast majority of constituents who are affected most by it?

It is a residential neighborhood that now sees its one for profit business about to make huge sums of money while the neighbors assume all the liability and zero benefit.

Must I remind you that the school has tennis courts and a swimming pool that are NOT available to the neighbors. Now we will have light and noise pollution, parking issues and absolutely no benefit to us.

This is the current state of Democracy for the wealthy. I am disappointed in you.

I want to be the person my dog thinks I am. That's the way I like it.

From: To:	Dave Crosby Board of Supervisors, (BOS); Mar, Gordon (BOS); Stefani, Catherine (BOS); Preston, Dean (BOS); Haney, Matt (BOS); MandelmanStaff, [BOS]; Walton, Shamann (BOS); Peskin, Aaron (BOS); Safai, Ahsha (BOS); Ronen,
	<u>Hillary; Yee, Norman (BOS); Fewer, Sandra (BOS); sisunset neighbors</u>
Cc:	Christine Crosby
Subject:	Appeal of CEQA Exemption Determination and Conditional Use Authorization - Proposed Project - 2001-37th Avenue CUA #2018-012648
Date:	Thursday, September 17, 2020 1:55:37 PM

#### September, 2020

I understand the deadline for submission of this letter was noon today, I humbly request that you consider my letter despite arriving after this prespecified deadline.

Dear Mr. Mar and Members of the SF Board of Supervisors,

I live in the Sunset District near St. Ignatius College Preparatory.

I am a taxpayer and a voter.

I am also an alumnus of St. Ignatius. I am not opposed to the school or its core mission of education and service; however, I am opposed to their plan to light their main field and hold 150 or more-night events.

That field is not surrounded by public lands like Balboa Park, nor a parkland like Beach Chalet fields is surrounded by GGP and Ocean Beach. The field they want to illuminate to a professional level and utilize into the night is bounded by my residential family neighborhood - it is closely bordered by the homes in which we live.

They want 90-foot-tall light standards with huge light arrays in a residential neighborhood with single family, 2 story houses, and height limits. These night events will overrun our neighborhood with cars parking, double parking, sometimes reckless driving, all bringing teens and adults from beyond our neighborhood and even beyond San Francisco.

They want to do all this for 150 or more nights a year.

No other high school in the City does this. No other school is having a problem scheduling all of their teams without night events.

No public school is determined to make a profit by renting private event space to "affiliates" by linking these other private institutions to themselves by assigning an employee to work for both.

Beyond all of the resulting disruption and disregard for Sunset residents will be the construction trucks, supplies, noise and dirt, shaking due to pilings, and more.

We have direct experience when St. Ignatius has rented night lights in the past and are very much aware of the impacts due to their night events.

Please, as representatives of the residents of San Francisco, please stop the SI project to light and use their football field at Rivera St and 39th Avenue 150+ nights per year.

Please keep the Sunset District a residential family neighborhood.

Thank you for your time and consideration David Crosby, Ph.D. 2186 36th Avenue San Francisco CA 94116

From:	Eugene Llamera
To:	Board of Supervisors, (BOS); Mar, Gordon (BOS); Stefani, Catherine (BOS); Preston, Dean (BOS); Haney, Matt (BOS); MandelmanStaff, [BOS]; Walton,
Subject:	Shamann (BOS); Peskin, Aaron (BOS); Safai, Ahsha (BOS); Ronen, Hillary; Yee, Norman (BOS); Fewer, Sandra (BOS); sisunsetneighbors@hotmail.com Appeal of CEQA Exemption Determination and Conditional Use Authorization - Proposed Project - 2001-37th Avenue CUA #2018-012648
Date:	Thursday, September 17, 2020 4:47:50 PM
•	

#### September 17, 2020

#### Dear Mr. Mar and Members of the SF Board of Supervisors,

I am a homeowner on 39<sup>th</sup> Avenue, ½ a block from Saint Ignatius (SI) field. I am a SF taxpayer and voter. My letter is lengthy but presents a strong case against the proposed lighting and playing schedules at SI.

Are the both sides of the SI renovations talking about the same thing?

During the planning committee hearing, both sides of the issue clearly had a parallel conversation. The SI alumni, students and supporter talked about how sports are beneficial. On the other hand, the neighborhood homeowners talked about how the lights, noise, traffic, and crowd will negatively affect their lives. Please clearly understand that the conversation should be focused on the proposed changes to the lights and field use. SI sports are *not* being cancelled. SI students and parents can still enjoy their sports without being an **intrusive** neighbor by keeping their current lighting situation and by ending the games before our young children need to sleep.

#### Are 90 ft lights needed to play sports?

SI alumni students and parents spoke of the great experiences thru SI sports. Seriously consider that their experiences happened with the *current* lighting and playing schedule. Their testimony clearly show that lives were made better without the **pollution** from proposed 90 ft lights. Their numerous successes are obvious, bright proof that the **90 ft lights are not important**. While SI supporters' stories pull on the heart strings, they pull away the topic of how **selfish** the 90 ft lights and late schedule will make SI appear. Future successes will still be fostered in the current lighting and playing schedule.

Would you be pleased if your neighbor Bob and Karen (fictional, of course) have their child practice at 10PM? Imagine for a moment, Bob and Karen have four beautiful children. Three of them are having great successes in sports, leading to full scholarships to top colleges. Bob Jr, the last child, is also having a good but less spectacular career than his siblings. Bob and Karen want the same success for the last child. They decided to add flood lights to their backyard and create a practice schedule to allow Bob Jr to practice up to 10 PM. Take a moment: put yourself next door to Bob and Karen. As their neighbor, you want to feel for Bob Jr while you hear him practicing basketball at 10PM just a few feet from your child's bedroom. Would you be happy to allow a ball bouncing loudly and smack repeatedly into the backboard with bright lights? Or would you be furious that your 2 year old and/or 4 year old cannot sleep and are now crying because of Bob Jr's aspirations for a sports scholarship? Now, replace Bob and Karen with SI.

Why are SI supporters only focusing on the light issue? Why haven't they discussed the late night noise? A learned caller had offered proof that 90' lights will not necessarily garner any complaints by citing the Beach Chalet soccer field lights. This comparison falls on the ridiculous since the Beach Chalet lights are hundreds of feet from any homes and since the Safeway grocery does not house any young children that need to sleep at 8 or 9 o'clock. If the coyotes are interviewed, they will most likely complain about the lights. The Beach Chalet soccer fields is a noncomparison as SI is only a few ft from homes and has bigger, noisier crowds than Beach Chalet fields. SI supporters are willing to discuss the lights because it is the 'easier' of the two concerns to address. They cannot combat the concern of the **deafening noise** the crowd and sound (PA) system will create. By filling up the conversation about lighting, SI supporters conveniently divert our attention that between noise and light, the **noise is a more disruptive** issue. I live ½ a block from SI and I can clearly I hear the current PA and crowd with our bedroom windows closed; my son will not be able to sleep at 8:30P if the SI is allowed to use the fields until 10PM. The noise from the late game/practice schedule will be more **harmful** to our quality of life. Are you going to allow SI to distract you from a more disruptive issue of noise?

Is the neighborhood anti-sport? Lacks the vision to see the benefits of sports? As a parent, I fully embrace sports. For over 5 years, we have taken my boy up to 5 days a week to Hapkido, martials arts training. Now I am rewarded with a 12 y.o. old black belt. Next step will be 2nd degree black belt. In concurrence with martial arts training, my boy plays competitive sports: basketball, baseball, football and soccer. No breaks. When COVID forced him to practice with his basketball team through only thru zoom, I would play one-on-one immediately after I get home so he wouldn't lose his competitive edge. Though I am taller than him and foul him liberally, I win as much as the Washington Generals against the Harlem Globetrotters, damaging my ego in the process. Still I coaxed him to play against me again and again. While sports have an incalculable benefit to a growing person, I will never place sports above the well-being of my neighbors. Having SI play sports up to 10PM will be the same as if I had my child practice basketball until 10 PM in my backyard, making SI and I **inconsiderate** neighbors to the house adjacent to me where a 2 and 4 year old live and need to sleep well before 10PM.

#### Is SI being honest that the changes will be beneficial to the neighborhood?

SI's claim reminds of an email we all may have received from a nigerian prince who wanted us a wire over money to cover a money transfer. Vigorously the prince claims that we will get more money than we will send. Like this internet scam, the lights and late schedule will benefit only SI, not the neighborhood, by renting out its field to various sports groups in the bay area, and by receiving money from Verizon. The claim that the changes (are for the kids) is a rouse similar to how Southern Ocean whalers fought for years to justify their killing of whales is in the name of scientific research. The whalers vigorously defended their claim until the International Court of Justice ruled in 2014 that the whalers were killing whales to sell whale meat rather than research. The SI changes are largely, if not purely, about money. Would you allow SI to become a "nigerian prince"? Would you allow SI to be another 'whaler'?

#### Is having later practice the only solution to promoting more sleep to the athletes?

SI supporters have stated that the late evening process will be beneficial to their athletes' sleep (please refer above for how this is not beneficial to the neighborhood children and adults). The reasoning behind with having the students practice late into the night so they have "better" sleep is faulty. This reasoning is like someone holding a very hot cup of water in the left hand; so the left hand is not burnt, the person transfers the cup to the right hand – still continuing to burn a hand. Having the students practice/play later just means they will be sleeping later because the added time it takes to pack their gear, get home, showered and eat/snack. Medical studies repeatedly show that that evening exercise leads to delayed sleep (https://www.health.harvard.edu/staying-healthy/does-exercising-at-night-affect-sleep



The most effective solution is to sleep on time or, in case of an early game, sleep earlier. If my son has an early game (especially if it was out of town) or is hitting the ski runs early, he sleeps at 8PM rather than 8:30PM (even though his friends are still up). Extending the practice late into the night continues the sleep deprivation, if not **worsens** it. Would you allow SI to make changes that keep or worsen the athletes sleep issue?

If the answer to any of the questions above is "no", then the proposed SI changes must not be approved. In the IT world, there is a saying that goes something like, "beware that the current solution will be the next problem." The proposed SI changes will be the **next problem**. The SI changes will **harmful** to its neighbors and has **no benefits** to the SI athletes, and so should not be approved.

Thank you for your consideration,

Eugene Llamera Father of a 12 y.o. at APG

2250 39th Avenue

SF, CA 94116

From:	Ken Johnson
То:	Yee, Norman (BOS); Board of Supervisors, (BOS); Haney, Matt (BOS); MandelmanStaff, [BOS]; Peskin, Aaron
	(BOS); Mar, Gordon (BOS); Preston, Dean (BOS); Fewer, Sandra (BOS); Safai, Ahsha (BOS); Ronen, Hillary; Stefani, Catherine (BOS); Walton, Shamann (BOS)
Subject:	Lights at JB Murphy Field at St. Ignatius
Date:	Thursday, September 17, 2020 6:12:01 PM
Attachments:	5.15.20 - Ken Johnson.docx

Please find attached my May letter endorsing the installation of lights at JB Murphy Field at St. Ignatius. Regards, Ken Johnson 2126 Ulloa St. SF, 94116 5/18/2020

Fwd: SI Lights - nharlan@siprep.org - St. Ignatius College Preparatory Mail

From: **Ken Johnson** <<u>kenj630@gmail.com</u>> Date: Fri, May 15, 2020 at 6:16 PM Subject: SI Lights To: <<u>joel.koppel@sfgov.org</u>>, <<u>kathrin.moore@sfgov.org</u>>, <<u>sue.diamond@sfgov.org</u>>, <<u>frank.fung@sfgov.org</u>>, <<u>theresa.imperial@sfgov.org</u>>, <<u>milicent.johnson@sfgov.org</u>>, <jonas.ionin@sfgov.org>, <<u>commissions.secretary@sfgov.org</u>>

### 5/15/2020

President Joel Koppel and Honorable Commissioners San Francisco Planning Commission San Francisco City Hall

## **VIA EMAIL**

Re: Lights at St. Ignatius Field

Dear Commissioners:

My name is Ken Johnson, a 30 year resident of the Sunset District and parent of a former St. Ignatius student athlete and a strong advocate for providing any and all opportunities for high school students to participate in sports, if they are so inclined, as part of their high school experience.

I'm writing in strong support for approval of lights at St. Ignatius Field in order to create more options for student athletes and also to allow St. Ignatius to implement a later start time in accordance to CA State law.

There are fewer spaces for students to practice field sports in San Francisco and allowing S.I. to build these lights will keep students closer to the campus rather than traveling great distances to practice.

St. Ignatius College Preparatory has been an excellent center of learning not just to take tests and get good grades but to be in service to others. Many of those lessons are learned through the shared experience on the field. Even the students who participate as spectators gain a strong feeling of community by supporting their friends and fellow classmates.

Please vote YES! to the lights at St. Ignatius Field and thank you for your consideration.

Sincerely,

Ken Johnson 2126 Ulloa St. S.F. 94116 kenj630@gmail.com

https://mail.google.com/mail/u/0/?tab=cm#inbox/FMfcgxwHNMdvDxSBBTXwkBtqzdxPwTdH?compose=new

Gustavo Manzanares			
Yee, Norman (BOS); Board of Supervisors, (BOS); Haney, Matt (BOS); MandelmanStaff, [BOS]; Peskin, Aaron (BOS); Mar, Gordon (BOS); Preston, Dean (BOS); Fewer, Sandra (BOS); Safai, Ahsha (BOS); Ronen, Hillary; Stefani, Catherine (BOS); Walton, Shamann (BOS)			
File No. 200992 and 200996			
Friday, September 18, 2020 11:47:16 AM <u>FieldLightsLetter.docx</u>			

Please see attached letter regarding field lights at St.Ignatius College Preparatory.

#### Warm regards,

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Gustavo Manzanares, *MCM* Defensive Coordinator Associate Director of Athletics St. Ignatius College Preparatory 2001 37th Avenue San Francisco, CA 94116 www.siprep.org Go 'Cats!

#### Dear Commissioners:

My name is Gustavo Manzanares and I am an Alumni of St. Ignatius. I have been part of the St. Ignatius Sunset Community for the past 20 years.

I'm writing in strong support for approval of lights at St. Ignatius Field. Flexible time management possibilities that allow different students and programs the opportunity to create a strong structure for the day play an advantageous role in developing high level intellectual, emotional, and physical attributes in students. Adding lights at SI would assist in achieving this goal by opening up more options in a day for more effective planning and scheduling to serve student-athletes. This would lead to a more robust and diverse amount of opportunities to enhance learning and the SI student experience.

There are fewer spaces for students to practice field sports in San Francisco and allowing S.I. to build these lights will keep students closer to the campus rather than traveling great distances to practice and extending an already long and demanding day.

St. Ignatius College Preparatory has been an excellent center of learning not just to take tests and get good grades but to be in service to others in areas of emotional and social development. Many of those lessons are learned through the shared experience on the athletic field. Even the students who participate as spectators gain a strong feeling of community by supporting their friends and fellow classmates.

Please vote YES! to the lights at St. Ignatius Field and thank you for your consideration.

Sincerely,

Gustavo Manzanares 287 South Hill Blvd. San Francisco CA Gustavomanzanares@gmail.com

From:	Kathleen Carouba
To:	Yee, Norman (BOS); Board of Supervisors, (BOS)
Cc:	Haney, Matt (BOS); MandelmanStaff, [BOS]; Peskin, Aaron (BOS); Mar, Gordon (BOS); Preston, Dean (BOS);
	<u>Fewer, Sandra (BOS); Safai, Ahsha (BOS); Ronen, Hillary; Stefani, Catherine (BOS); Walton, Shamann (BOS)</u>
Subject:	Re: File No. 200992 and 200996
Date:	Friday, September 18, 2020 12:22:37 PM

President Norman Yee and Members of the San Francisco Board of Supervisors City Hall 1 Dr. Carlton B. Goodlett Place, Room 244 San Francisco, CA 94102-4689

Re: File No. 200992 and 200996

#### VIA EMAIL

Re: Lights at St. Ignatius Field

Dear Commissioners:

My name is Kathleen Carouba and I am a 1<sup>st</sup> generation, native San Franciscan. I have lived in the sunset district for over 50 years. My son graduated from St. Ignatius in 1983 and was actively involved in their athletics program. I have many memories of attending football games at SI. I also have two granddaughters who are currently enrolled in school in San Francisco and who are looking forward to attending SI.

It is so important to have a space where students can safely get together and build community, not only for themselves, but the neighborhood as well. It just makes good sense. There are not enough practice fields in San Francisco and it would be much safer for the students to practice on their home field. These lights will create more options for all students and allow St. Ignatius to implement a later start time in accordance with California State law.

With proper guidelines and the involvement of the entire community, this will be a very worthwhile achievement.

Please vote YES! to the lights at St. Ignatius Field and thank you for your consideration.

Sincerely,

Kathleen Carouba

3065 24<sup>th</sup> Avenue

San Francisco, CA 94132 kcarouba@yahoo.com

From: To:	<u>Michael Sweeney</u> <u>Yee, Norman (BOS); Board of Supervisors, (BOS); Haney, Matt (BOS); MandelmanStaff, [BOS]; Peskin, Aaron</u> (BOS); Mar, Gordon (BOS); Preston, Dean (BOS); Fewer, Sandra (BOS); Safai, Ahsha (BOS); Ronen, Hillary;		
	Stefani, Catherine (BOS); Walton, Shamann (BOS)		
Subject:	Lights at St Ignatius field		
Date:	Friday, September 18, 2020 9:50:11 PM		

To the Board of Supervisors:

I am writing to you in support of lights for the sports field at St Ignatius College Preparatory. I am a native and current resident of the Sunset District. I am also a practicing attorney with an office in the nearby West Portal neighborhood for the last 20 years.

As a graduate of St Anne's elementary school, St Ignatius, the University of California at Berkeley and the University of California - Hastings College of the Law, I am 100% the product of local schools, and, as such, know the tremendous importance of recreational opportunities for young people growing up in an urban environment like San Francisco. As you know, San Francisco has the lowest percentage of children among the Bay Area counties and one of the lowest percentages among all U.S. cities. Anything that can be done to expand the recreational opportunities for youth in San Francisco should be a high priority for the Planning Commission.

As a graduate of St Ignatius, I know what a good partner the school has been for the Sunset District and for the larger San Francisco community over the past half century. I can recall the school hosting Special Olympics events in its sports facilities when I was a student there in the 1980s. As the uncle of a 12-year-old San Franciscan, I am also aware of the large extent to which St Ignatius makes its sport facilities available to K-8 students from the neighborhood for various tournaments and practices. Allowing lights and evening sporting events will only expand such opportunities.

Sincerely,

Michael T. Sweeney 1527 32nd Avenue San Francisco tel. 415-317-9878

From: To:	Giancarlo Loeffler Yee, Norman (BOS); Board of Supervisors, (BOS); Haney, Matt (BOS); MandelmanStaff, [BOS]; Peskin, Aaron (BOS); Mar, Gordon (BOS); Preston, Dean (BOS); Fewer, Sandra (BOS); Safai, Ahsha (BOS); Ronen, Hillary; Stefani, Catherine (BOS); Walton, Shamann (BOS)
Subject:	St. Ignatius - Lights at Field (File No. 200992 and 200996)
Date:	Saturday, September 19, 2020 9:31:40 AM

Good Morning Mr. Yee and Members of the San Francisco Board of Supervisors, My name is Giancarlo Loeffler. I've lived in San Francisco my entire life and graduated from St. Ignatius in 2001. I was raised in the Richmond District, but have lived in the Sunset District since 2006.

I'm writing to you today in support of approval of the installation of lights at St. Ignatius Field in order to create more options for student athletes as well as to allow for the school to implement a later start time in accordance to California State Law.

As you know, there are fewer spaces for students to practice field sports in San Francisco. Allowing SI to build these lights will allow students to remain closer for practice and not force them to travel significant distances just to be able to practice.

St. Ignatius has been an excellent center of learning and has encouraged students to serve others. Many of these important lessons are learned through team sports and the sharing of these experience on the field. A sense of community and togetherness is even instilled with fellow students who participate by spectating and encouraging their classmates.

Please vote YES to the lights at St Ignatius field. Thank you for your consideration.--Giancarlo

From: To:	<u>Jeannie Quesada</u> <u>Yee, Norman (BOS); Haney, Matt (BOS); MandelmanStaff, [BOS]; Peskin, Aaron (BOS); Mar, Gordon (BOS);</u> <u>Preston, Dean (BOS); Fewer, Sandra (BOS); Safai, Ahsha (BOS); Hilary.Ronen@sfgov.org; Stefani, Catherine</u>
	(BOS); Walton, Shamann (BOS); Board of Supervisors, (BOS)
Subject:	File No. 200992 and 200996 Lights at St. Ignatius Field
Date:	Monday, September 21, 2020 9:35:51 AM

September 20, 2020

President Norman Yee and Members of the San Francisco Board of Supervisors City Hall 1 Dr. Carlton B. Goodlett Place, Room 244 San Francisco, CVA 94102-4689

Re: File No. 200992 and 200996 -- Lights at St. Ignatius Field

Dear Members of the San Francisco Board of Supervisors:

My name is Jeannie Quesada. I am a lifelong resident of San Francisco and a 30-year resident of the Sunset District. My husband, Richard, a city native, and I raised three children in the neighborhood. All three children graduated from St. Ignatius College Preparatory. We also have two grandchildren living in the Sunset District.

We are writing to strongly support the approval of lights at St. Ignatius Field. We believe lighting the Field will allow for more options for students and SI to implement a later start time for school as per California State law. Because there are fewer facilities to practice field sports in San Francisco, lights at SI will keep students on campus instead of them having to travel long distances to practice.

St. Ignatius College Preparatory has a long history of service to San Francisco, our community, and educating our youth. Allowing SI to light the Field will help create a strong feeling of community for students, athletes, families, and neighbors.

Please vote "YES" to approve the lighting of St. Ignatius Field. Thank you.

Sincerely,

Jeannie & Richard Quesada 2639 - 24th Avenue San Francisco, CA 94116 jquesada516@gmail.com

From:	Bill Moore
To:	Yee, Norman (BOS)
Cc:	Haney, Matt (BOS); MandelmanStaff, [BOS]; Peskin, Aaron (BOS); Mar, Gordon (BOS); Preston, Dean (BOS); Fewer, Sandra (BOS); Safai, Ahsha (BOS); Ronen, Hillary; Stefani, Catherine (BOS); Walton, Shamann (BOS); Board of Supervisors, (BOS)
Subject:	Re: File No. 200992 and 200996 (Lighting project St. Ignatius)
Date:	Monday, September 21, 2020 12:23:07 PM

Dear President Norman Yee and Members of the San Francisco Board of Supervisors,

My name is William Moore and my wife is Francesca Felizzatto Moore, we are Sunset District residents who live within a couple blocks of St. Ignatius College Prep (Santiago Street). I currently have a daughter that is a senior, as well as a newly admitted freshman daughter - both "wildcats" of St. Ignatius.

I'm writing to you in an effort to show support for approval of lights at St. Ignatius Field. Even before my children attended this school, I felt the camaraderie of the athletic programs, the healthiness of extracurricular activities and the "sunset spirit" excluded from this location. We would often sit in the backyard on weekends and listen to announced games, and events bellowing from the campus. Adding lights will only help create a more communal environment and instill healthy competition. Moreover, the ability to illuminate the field will create more options for student athletes and also allow St. Ignatius to implement a better schedule for students by playing games or attending events in the evening.

Furthermore, I'd rather see the kids of St. Ignatius be able to play at their schools opposed to traveling long distances. In this new (post Covid) environment, having a designated area, controlled by an institution we can count on to be socially responsible is paramount today.

Finally, St. Ignatius College Preparatory has always been a learning institution that has brought the best out of young adults. They instill giving back to others and have always treated the residents of the Sunset District with generosity, integrity and with humility. The addition of lights around their field will only enhance that opposed to impeding on it. Most of the lessons taught happen on those fields through coaching, and team building events. While not all students play sports and not every sport is played on these fields, the events that do happen there, and the few that happen in the evening would only help those attendees feel a stronger sense of community - especially by supporting colleagues, friends and strangers!.

Please vote YES! to the lights at St. Ignatius Field, we appreciate your leadership and willingness to be open to the advantages this has for everyone, when brought on responsibly. Thank you for your consideration.

Sincerely,

Bill and Francesca Moore

--



From:	Paul Albritton
To:	Board of Supervisors, (BOS)
Cc:	BOS Legislation, (BOS); SANDERS, WILLIAM (CAT); Wong, Jocelyn (BOS); Horn, Jeffrey (CPC); Storrs, Bruce (DPW); Tse, Bernie (DPW); Duran, Vanessa (DPW); PEARSON, ANNE (CAT); Hillis, Rich (CPC); Wong, Jason (DPW); STACY, KATE (CAT); JENSEN, KRISTEN (CAT); Jain, Devyani (CPC); Rivera, Javier (DPW); RUIZ- ESQUIDE, ANDREA (CAT); Gibson, Lisa (CPC); Rodgers, Andraire (CPC); BOS-Legislative Aides; BOS-Supervisors; Longaway, Alec (BOA); Sullivan, Katy (BOA); Rosenberg, Julie (BOA); Omokaro, Ify (MTA); Starr, Aaron (CPC); Sider, Dan (CPC); Sanchez, Scott (CPC); Teague, Corey (CPC); Navarrete, Joy (CPC); Varat, Adam (CPC); Calvillo, Angela (BOS); Mchudh, Eileen (BOS); Somera, Alisa (BOS)
Subject:	Items 75 - 82: Verizon Wireless Appeal Response SF BOS Agenda September 22, 2020
Date: Attachments:	Tuesday, September 22, 2020 11:38:23 AM Verizon Wireless Letter 09.22.20.pdf

Please find attached Verizon Wireless's response opposing the appeal of the Planning Commission approved Collocated Telecommunications Facility at 2001 37th Avenue.

Thank you for your careful consideration of this correspondence.

Paul

Paul Albritton Mackenzie & Albritton, LLP 155 Sansome Street, Suite 800 San Francisco, California 94104 (415) 288-4000

#### **MACKENZIE & ALBRITTON LLP**

155 SANSOME STREET, SUITE 800 San Francisco, California 94104

> TELEPHONE 415/288-4000 FACSIMILE 415/288-4010

September 22, 2020

#### VIA EMAIL

President Norman Yee Supervisors Sandra Lee Fewer, Catherine Stefani, Aaron Peskin, Gordon Mar, Dean Preston, Matt Haney, Rafael Mandelman, Hillary Ronen, Shamann Walton, and Ahsha Safai San Francisco Board of Supervisors 1 Dr. Carlton B. Goodlett Place San Francisco, California 94102

> Re: Verizon Wireless Response to Appeal Collocated Telecommunications Facility, 2001 37<sup>th</sup> Avenue (St. Ignatius College Preparatory) <u>Board of Supervisors Agenda, September 22, 2020</u>

Dear President Yee and Supervisors:

We write on behalf of Verizon Wireless to ask that you uphold the approval of the Planning Commission and deny the appeal filed by the Saint Ignatius Neighborhood Association ("Appellant") of a wireless facility collocated on proposed new stadium lighting at the St. Ignatius College Preparatory school (the "Approved Facility"). Verizon Wireless designed the Approved Facility to provide needed service with minimal impact. As confirmed by the Planning Commission, the Approved Facility meets all findings for approval under San Francisco's Code (the "Code"). Appellant does not present any substantial evidence to warrant denial of the Approved Facility. Further, because the Approved Facility will fill a significant gap in Verizon Wireless service, and there is no less intrusive alternative, denial would violate the federal Telecommunications Act. We urge you to reject the appeal and approve the Approved Facility.

#### I. The Project

St. Ignatius College Preparatory school has proposed to add four 90-foot stadium lights to an existing field stadium at its private secondary school. The Approved Facility has been thoughtfully designed to minimize any impact by locating on the northwest light standard. Verizon Wireless proposes to place nine panel antennas, three integrated radio antenna units, six remote radio units, two surge suppressors, and ancillary equipment

San Francisco Board of Supervisors September 22, 2020 Page 2 of 6

within a 12-foot by 28-foot fenced area located on the ground, adjacent to the light standard.

Photosimulations of the Approved Facility are attached as <u>Exhibit A</u>. A report prepared by third-party consulting engineers, attached as <u>Exhibit B</u>, confirms that radio frequency ("RF") exposure from the Approved Facility will fully comply with Federal Communications Commission ("FCC") guidelines.

#### **II.** The Approved Facility Satisfies All Findings For A Special Use Permit.

As confirmed by the Planning Commission's approval, the Approved Facility meets all requirements for approval of a conditional use authorization, including the Planning Department's Wireless Telecommunications Services Facilities Siting Guidelines (the "WTS Guidelines"), as detailed by the Planning Commission. Notably, the Approved Facility will not be detrimental to public health, safety or welfare, because radio frequency emissions will fall well under FCC exposure guidelines, and the facility will not be accessible to the public.

The Approved Facility satisfies all development standards, including the location preferences in the WTS Guidelines. WTS Guidelines, §8.1. The WTS Guidelines establish five categories of preferred location sites, and the Approved Facility qualifies for the two most preferred locations. The first location, "publicly-used structures," includes "[w] here the installation complies with all FCC regulations and standards, schools, hospitals, health centers, places of worship, or other institutional structures. . . ." WTS Guidelines, §8.1.1. Here, the Approved Facility complies with all FCC regulations and standards, as established by the third-party engineer's report and also because it is located at a school. San Francisco's Department of Public Health have reviewed this report and independently approved it. <u>Exhibit C</u>.

The second location preference, "co-location site," is for "[a]ny existing site on which a legal wireless telecommunications facility is currently located shall be a Preferred Location Site regardless of the underlying zoning designation of the site. . . ." WTS Guidelines, §8.1.2. Both AT&T Mobility and T-Mobile have wireless facilities on the three-story classroom building about 490 feet to the northeast of the Approved Facility at the school.

There will be no impact to views, as the Approved Facility will be located on the school's proposed light standards. The Approved Facility will not increase the height of the lights and will use its existing infrastructure. The Approved Facility is necessary and desirable because it will improve wireless connectivity for residents, visitors, and emergency personnel, with minimal impact on the neighborhood.

In sum, the Approved Facility satisfies all requirements for approval.

San Francisco Board of Supervisors September 22, 2020 Page 3 of 6

#### III. Verizon Wireless Has Presented Substantial Evidence For Approval, And Appellant Presents No Substantial Evidence To Warrant Denial

Under the federal Telecommunications Act, a local government's denial of a wireless facility application must be based on "substantial evidence." *See* 47 U.S.C. § 332(c)(7)(B)(iii). A denial of an application must be based on requirements set forth in the local code and supported by evidence in the record. *See Metro PCS, Inc. v. City and County of San Francisco,* 400 F.3d 715, 725 (9th Cir. 2005) (denial of application must be "authorized by applicable local regulations and supported by a reasonable amount of evidence"). While a local government may regulate the placement of wireless facilities based on aesthetics, mere generalized concerns or opinions about aesthetics or compatibility with a neighborhood do not constitute substantial evidence upon which a local government could deny a permit. *See City of Rancho Palos Verdes v. Abrams* (2002) 101 Cal. App. 4th 367, 381.

As set forth above, Verizon Wireless has provided substantial evidence to show that the Approved Facility complies with all requirements for approval under the Code. Among other evidence, photosimulations demonstrate the minimal impact of Verizon Wireless's collocated antennas, painted to match. The submitted reports confirm that radio frequency exposure will comply with FCC guidelines, and noise emissions comply with City limits.

In contrast, Appellant has provided no evidence – let alone the substantial evidence required by federal law – to support denial of the Approved Facility. Appellant presents no evidence to contradict the Planning Commission's findings for approval. We respond to Appellant's various grounds for appeal below.

#### IV. The Planning Commission Properly Determined That The Approved Facility Is Exempt From CEQA

Appellant challenges the Planning Commission's exemption of the Approved Facility from the California Environmental Quality Act (Pub. Res. Code §§21000-21189.3) ("CEQA") and the Guidelines for Implementation of the California Environmental Quality Act (14 Cal. Code Regs. §§15000-15387) ("CEQA Guidelines"). The Approved Facility qualifies for a Class 3 categorical exemption, which applies to new construction of small facilities or structures. 14 Cal. Code Regs. §15303. Courts have consistently upheld the application of the Class 3 exemption to a wide variety of wireless and telecommunications projects. *See Don't Cell Our Parks v. City of San Diego* (2018) 21 Cal.App.5th 338 (faux tree telecommunications pole in public park); *Aptos Residents Ass'n v. County of Santa Cruz* (2018) 20 Cal.App.5th 1039 (10 microcell transmitter units on existing utility poles); *Robinson v. City and County of San Francisco* (2012) 208 Cal.App.4th 950 (40 wireless equipment cabinets on existing utility poles); *San Francisco Beautiful v. City and County of San Francisco* (2014) 226 Cal.App.4th 1012 (726 new utility cabinets on public sidewalks). San Francisco Board of Supervisors September 22, 2020 Page 4 of 6

The CEQA Guidelines provide examples of the Class 3 exemption, including multi-family residential structures; a store, motel, office, restaurant or similar structure not exceeding 2,500 square feet in floor area; and in urbanized areas, up to four commercial buildings, not exceeding 10,000 square feet in floor area. 14 Cal. Code Regs. §15303. The Approved Facility has a much smaller footprint than these examples, with only a 336-square foot equipment enclosure and minimal equipment attached to a stadium light standard.

Finally, Appellant claims that exceptions to the Class 3 exemption preclude its use. 14 Cal. Code Regs. §15300.2. However, Appellant has not contended that any of these exceptions apply to the Approved Facility.

In sum, Appellant raises no grounds for appeal that constitute substantial evidence to deny the Approved Facility. In contrast, Verizon Wireless has provided ample evidence that the Approved Facility complies with all City requirements. The appeal must be rejected.

#### IV. The Appeal Must Be Denied To Avoid An Unlawful Prohibition Of Service

A local government's denial of a permit for a wireless facility violates the "effective prohibition" clause of the federal Telecommunications Act if the wireless provider can show two things: (1) that it has a "significant gap" in service; and (2) that the proposed facility is the "least intrusive means," in relation to the land use values embodied in local regulations, to address the gap. *See T-Mobile USA, Inc. v. City of Anacortes,* 572 F.3d 987 (9th Cir. 2009).

If a provider proves both elements, the local government *must* approve the facility, even if there is substantial evidence to deny the permit under local land use provisions (which there is not in this case). This is because the provider has met the requirements for federal preemption; i.e., denial of the permit would "have the effect of prohibiting the provision of personal wireless services." 47 U.S.C. § 332(c)(7)(B)(1)(ii); *T-Mobile v. Anacortes*, 572 F.3d at 999. To avoid such preemption, the local government must show that another alternative is available, technologically feasible, and less intrusive than the proposed facility. *T-Mobile v. Anacortes*, 572 F.3d at 998-999.

#### A. Verizon Wireless Has Demonstrated a Significant Gap in Service.

Verizon Wireless has identified a significant gap in its LTE service coverage in the area surrounding the St. Ignatius school in the Sunset District. Verizon Wireless's small cell facilities in the greater vicinity are too distant to serve the gap. The significant gap is described in the coverage maps, attached as <u>Exhibit D</u>. The existing coverage map shows a lack in-building LTE coverage on nearby school properties and the residential neighborhoods to the west and south. There is a lack of in-vehicle coverage along local roads to the west, north and east, and along a 0.6-mile stretch of major thoroughfare Sunset Boulevard to the east. The proposed coverage map shows that the Approved Facility will provide reliable new in-building coverage to the school properties and San Francisco Board of Supervisors September 22, 2020 Page 5 of 6

residential neighborhoods, as well as new in-vehicle coverage to local roadways and Sunset Boulevard.

A third-party engineering firm, approved by the City, independently verified this gap by reviewing the maps and conducting their own drive test, attached as Exhibit E. They concluded that "Based on the measurement data, we conclude that the Verizon 4G LTE coverage map showing the service area without the proposed installation includes areas of relatively weak signal levels in the carrier's present coverage."

#### **B**. The Approved Facility is the Least Intrusive Means To Fill the Significant Gap in Service.

In an effort to address the significant gap, Verizon Wireless searched for a site that qualified for the WTS Guidelines' Code's top two preferences for wireless facility placement.

In short, Verizon Wireless has identified a significant gap in coverage and has shown that the Approved Facility is the least intrusive means to address it, based on the values expressed in City regulations. Under these circumstances, Verizon Wireless has established that denial of the Approved Facility would constitute an unlawful prohibition of service.

#### V. Conclusion

Verizon Wireless has worked diligently to identify the ideal location and design for a new facility to serve the south Monterey area. As confirmed by the Planning Commission, the Approved Facility meets all findings for approval under the Code. Appellant raises no substantial evidence to contradict this approval. Ensuring reliable Verizon Wireless service in Monterey is critical to residents and visitors as well as emergency service personnel. We strongly encourage you to affirm the Planning Commission's approval, and to deny the appeal.

Very truly yours,

Jane allut

Paul B. Albritton

cc: Jeff Horn **Bill Sanders** Jocelyn Wong San Francisco Board of Supervisors September 22, 2020 Page 6 of 6

#### **Schedule of Exhibits**

Exhibit A: Photosimulations

- Exhibit B: Radio Frequency Exposure Report by Hammett & Edison, Inc.
- Exhibit C: DPH Approval
- Exhibit D: Engineering Necessity Case
- Exhibit E: Hammett & Edison, Inc. Peer Review of Necessity

## Exhibit A



## **verizon**<sup>/</sup>

2/6/20

#### Sunset & Noriega Site # 255926

2001 37th Ave. San Francisco, CA Looking Southeast from 39th Ave.

View #1 insight photosim (707) 315-1585



## verizon<sup>/</sup>

Sunset & Noriega Site # 255926

Looking Northeast from 39th Ave.

2/6/20

View #2 insight photosim (707) 315-1585

## **Exhibit B**

## Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of Verizon Wireless, a personal wireless telecommunications carrier, to evaluate the base station (Site No. 255926 "Sunset & Noriega") proposed to be located at 2001 37th Avenue in San Francisco, California, for compliance with appropriate guidelines limiting human exposure to radio frequency ("RF") electromagnetic fields.

### Background

The San Francisco Department of Public Health has adopted an 11-point checklist for determining compliance of proposed WTS facilities or proposed modifications to such facilities with prevailing safety standards. The acceptable exposure limits set by the FCC are shown in Figure 1. The most restrictive limit for exposures of unlimited duration at several wireless service bands are as follows:

Wireless Service Band	Transmit	"Uncontrolled" Public Limit	Occupational Limit (5 times Public)
	Frequency		<u>,</u>
Microwave (point-to-point)	1–80 GHz	$1.0 \text{ mW/cm}^2$	$5.0 \text{ mW/cm}^2$
Millimeter-wave	24–47	1.0	5.0
Part 15 (WiFi & other unlicensed)	2-6	1.0	5.0
CBRS (Citizens Broadband Radio)	3,550 MHz	1.0	5.0
BRS (Broadband Radio)	2,490	1.0	5.0
WCS (Wireless Communication)	2,305	1.0	5.0
AWS (Advanced Wireless)	2,110	1.0	5.0
PCS (Personal Communication)	1,930	1.0	5.0
Cellular	869	0.58	2.9
SMR (Specialized Mobile Radio)	854	0.57	2.85
700 MHz	716	0.48	2.4
600 MHz	617	0.41	2.05
[most restrictive frequency range]	30-300	0.20	1.0

## Checklist

Reference has been made to information provided by Verizon, including zoning drawings by Streamline Engineering and Design, Inc., dated April 16, 2019. It should be noted that the calculation results in this Statement include several "worst-case" assumptions and therefore are expected to overstate actual power density levels from the proposed operations. Figure 2 describes the calculation methodologies, reflecting the facts that a directional antenna's radiation pattern is not fully formed at locations very close by (the "near-field" effect) and that at greater distances the power level from an energy source decreases with the square of the distance from it (the "inverse square law"). This methodology is an industry standard for evaluating RF exposure conditions and has been demonstrated through numerous field tests to be a conservative prediction of exposure levels.



HAMMETT & EDISON, INC. CONSULTING ENGINEERS SAN FRANCISCO ©2020

## 1. <u>The location, identity, and total number of all operational radiating antennas installed at this site.</u>

There are reported no wireless base stations installed at or near the site, a 90-foot stadium light pole sited next to the north end of the bleachers on the west side of the football field at St. Ignatius College Preparatory, located at 2001 37th Avenue.

# 2. <u>List all radiating antennas located within 100 feet of the site that could contribute to the cumulative radio frequency energy at this location.</u>

There were observed similar antennas for use by AT&T Mobility and T-Mobile located on the three-story classroom building about 490 feet to the northeast.

### 3. <u>Provide a narrative description of the proposed work for this project.</u>

Verizon proposes to install twelve antennas. This is consistent with the scope of work described in the drawings for transmitting elements.

### 4. <u>Provide an inventory of the make and model of antennas or transmitting equipment being installed</u> <u>or removed.</u>

Verizon proposes to install twelve directional panel antennas – three CommScope Model NNH4-65A-R6, three Ericsson Model 6701, and six Ericsson Model 2208 – on the 90-foot tall light pole. The antennas would employ up to 4° downtilt, would be mounted at effective heights of about 63, 45, and 50 feet above ground, respectively, and would be oriented in identical groups of four at about 120° spacing, to provide service in all directions.

For the limited purpose of this study, it is assumed that AT&T has installed Kathrein Model 800-10964 and CommScope Model JAHH-65A directional panel antennas, employing up to 6° downtilt and mounted at an effective height of about 42 feet above ground, and that T-Mobile has installed Ericsson Model AIR21 and RFS Model APXVARR24 directional panel antennas, employing 2° downtilt and mounted at an effective height of about 42 feet above ground.

5. Describe the existing radio frequency energy environment at the nearest walking/working surface to the antennas and at ground level. This description may be based on field measurements or calculations.

There is no installed access to the antenna location. The maximum measured<sup>\*</sup> RF level for a person at ground near the site was  $0.0013 \text{ mW/cm}^2$ , which is 0.65% of the most restrictive public limit.

<sup>\*</sup> February 13, 2019, using calibrated Narda Type NBM-520 Broadband Field Meter with Type EF-0391 Isotropic Broadband Electric Field Probe (Serial No. D-0454).



6. Provide the maximum effective radiated power per sector for the proposed installation. The power should be reported in watts and reported both as a total and broken down by frequency band.

The maximum effective radiated power proposed by Verizon in any direction is 18,545 watts, representing simultaneous operation at 193 watts for 28 GHz, 172 watts for CBRS, 5,250 watts for AWS, 5.130 watts for PCS, 4.170 watts for cellular, and 3.630 watts for 700 MHz service.

## 7. Describe the maximum cumulative predicted radio frequency energy level for any nearby publicly accessible building or area.

The maximum calculated cumulative level at any nearby building is 11% of the public limit; this occurs at the school buildings located about 240 feet to the northeast. The maximum calculated cumulative level at the nearby bleachers is 6.9% of the public exposure limit. The maximum calculated cumulative level at the second-floor elevation of any nearby residence<sup>†</sup> is 7.4% of the public exposure limit.

## 8. *Report the estimated cumulative radio frequency fields for the proposed site at ground level.*

For a person anywhere at ground, the maximum RF exposure level due to the proposed Verizon operation by itself is calculated to be  $0.032 \text{ mW/cm}^2$ , which is 5.2% of the applicable public exposure limit. Cumulative RF levels at ground level near the site are therefore estimated to be less than 6% of the applicable public limit.

9. Provide the maximum distance (in feet) the three dimensional perimeter of the radio frequency energy level equal to the public and occupational exposure limit is calculated to extend from the face of the antennas.

The three-dimensional perimeters of RF levels equal to the public and occupational exposure limits are calculated to extend up to 94 and 36 feet out from the Verizon antenna faces, respectively, and to much lesser distances above, below, and to the sides; this does not reach any publicly accessible areas.

10. Provide a description of whether or not the public has access to the antennas. Describe any existing or proposed warning signs, barricades, barriers, rooftop striping or other safety precautions for people nearing the equipment as may be required by any applicable FCC-adopted standards.

Due to their mounting location and height, the Verizon antennas would not be accessible to unauthorized persons, and so no measures are necessary to comply with the FCC public exposure guidelines. To prevent occupational exposures in excess of the FCC guidelines, it is recommended that appropriate RF safety training, to include review of personal monitor use and lockout/tagout procedures, be provided to all authorized personnel who have access to the structure, including

<sup>&</sup>lt;sup>†</sup> Located at least 80 feet to the west, based on photographs from Google Maps.



employees and contractors of the wireless carriers and of the property owner. No access within 36 feet directly in front of the Verizon antennas themselves, such as might occur during certain maintenance activities high on the pole, should be allowed while the base station is in operation, unless other measures can be demonstrated to ensure that occupational protection requirements are met. It is recommended that explanatory signs<sup>‡</sup> be posted at the antennas and/or on the pole below the antennas, readily visible from any angle of approach to persons who might need to work within that distance.

### 11. Statement of authorship and qualification.

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2021. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.

### Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that operation of the base station proposed by Verizon Wireless at 2001 37th Avenue in San Francisco, California, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations. Training authorized personnel and posting explanatory signs are recommended to establish compliance with occupational exposure limits.

E-13026 M-20676 William F. Hammett, P.E. 6-30-2021 707/996-5200

April 10, 2020

<sup>\*</sup> Signs should comply with OET-65 color, symbol, and content recommendations. Contact information should be provided (*e.g.*, a telephone number) to arrange for access to restricted areas. The selection of language(s) is not an engineering matter; the San Francisco Department of Public Health recommends that all signs be written in English, Spanish, and Chinese.



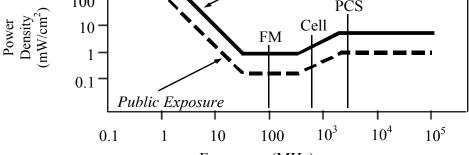
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## FCC Radio Frequency Protection Guide

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The FCC adopted the limits from Report No. 86, "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements ("NCRP"). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive. The more recent standard, developed by the Institute of Electrical and Electronics Engineers and approved as American National Standard ANSI/IEEE C95.1-2006, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," includes similar limits. These limits apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

As shown in the table and chart below, separate limits apply for occupational and public exposure conditions, with the latter limits (in *italics* and/or dashed) up to five times more restrictive:

Frequency	Electromagnetic Fields (f is frequency of emission in MHz)					
Applicable Range	Electric Field Strength		Magnetic Field Strength		Equivalent Far-Field Power Density	
(MHz)	(V/	•		/m)	(mW/	
0.3 - 1.34	614	614	1.63	1.63	100	100
1.34 - 3.0	614	823.8/f	1.63	2.19/f	100	$180/f^{2}$
3.0 - 30	1842/ f	823.8/f	4.89/ f	2.19/f	$900/~{\rm f}^{2}$	$180/f^{2}$
30 - 300	61.4	27.5	0.163	0.0729	1.0	0.2
300 - 1,500	3.54 <b>√</b> f	1.59 <b>√</b> f	<b>√</b> f/106	<b>√</b> f/238	f/300	<i>f/1500</i>
1,500 - 100,000	137	61.4	0.364	0.163	5.0	1.0
1000 -			- Occupat	ional Expos	sure	
		$\mathbf{N}$	Cell	PCS		



Frequency (MHz)

Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits, and higher levels also are allowed for exposures to small areas, such that the spatially averaged levels do not exceed the limits. However, neither of these allowances is incorporated in the FCC conservative calculation formulas in the Office of Engineering and Technology Bulletin No. 65 (August 1997) for projecting field levels. Hammett & Edison has incorporated those formulas in a computer program capable of calculating, at thousands of locations on an arbitrary grid, the total expected power density from any number of individual radio frequency The program allows for the inclusion of uneven terrain in the vicinity, as well as any sources. number of nearby buildings of varying heights, to obtain more accurate projections.



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## RFR.CALC<sup>™</sup> Calculation Methodology

## Assessment by Calculation of Compliance with FCC Exposure Guidelines

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The maximum permissible exposure limits adopted by the FCC (see Figure 1) apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits.

#### Near Field.

Prediction methods have been developed for the near field zone of panel (directional) and whip (omnidirectional) antennas, typical at wireless telecommunications base stations, as well as dish (aperture) antennas, typically used for microwave links. The antenna patterns are not fully formed in the near field at these antennas, and the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives suitable formulas for calculating power density within such zones.

For a panel or whip antenna, power density  $S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}$ , in mW/cm<sup>2</sup>,

and for an aperture antenna, maximum power density  $S_{max} = \frac{0.1 \times 16 \times \eta \times P_{net}}{\pi \times h^2}$ , in mW/cm<sup>2</sup>,

where  $\theta_{BW}$  = half-power beamwidth of antenna, in degrees,

 $P_{net}$  = net power input to antenna, in watts,

D = distance from antenna, in meters,

h = aperture height of antenna, in meters, and

 $\eta$  = aperture efficiency (unitless, typically 0.5-0.8).

The factor of 0.1 in the numerators converts to the desired units of power density.

## Far Field.

OET-65 gives this formula for calculating power density in the far field of an individual RF source:

power density 
$$\mathbf{S} = \frac{2.56 \times 1.64 \times 100 \times \mathrm{RFF}^2 \times \mathrm{ERP}}{4 \times \pi \times \mathrm{D}^2}$$
, in mW/cm<sup>2</sup>,

where ERP = total ERP (all polarizations), in kilowatts,

RFF = three-dimensional relative field factor toward point of calculation, and

D = distance from antenna effective height to point of calculation, in meters.

The factor of 2.56 accounts for the increase in power density due to ground reflection, assuming a reflection coefficient of 1.6 ( $1.6 \times 1.6 = 2.56$ ). The factor of 1.64 is the gain of a half-wave dipole relative to an isotropic radiator. The factor of 100 in the numerator converts to the desired units of power density. This formula is used in a computer program capable of calculating, at thousands of locations on an arbitrary grid, the total expected power density from any number of individual radio frequency sources. The program also allows for the inclusion of uneven terrain in the vicinity, as well as any number of nearby buildings of varying heights, to obtain more accurate projections.





San Francisco City and County Department of Public Health London Breed, Mayor Grant Colfax, MD, Director of Health

Environmental Health Branch

Stephanie K.J. Cushing, MSPH, CHMM, REHS Director of Environmental Health

%

#### **Review of Cellular Antenna Site Proposals**

<b>Project Sp</b>	onsor: Verizon	ļ	Planner:	Ashley Lindsay	
<b>RF Engineer Consultant:</b>		Hammett & Edison		Phone Number:	(707) 996-5200
Project Ad	ldress/Location:	2001 37th Av			
Site ID:	521	SiteNo.:	SF05300A	<b>Report Dated:</b>	4/10/2020

The following information is required to be provided before approval of this project can be made. These information requirements are established in the San Francisco Planning Department Wireless Telecommunications Services Facility Sitting Guidelines dated August 1996.

In order to facilitate quicker approval of this project, it is recommended that the project sponsor review this document before submitting the proposal to ensure that all requirements are included.

X 1. The location, identity and total number of all operational radiating antennas installed at this site was provided. (WTS-FSG, Section 10.4.1, Section 11, 2b)

Number of Existing Antennas: 0

- X 2. A list of all radiating antennas located within 100 feet of the site which could contribute to the cumulative radio frequency energy at this location was provided. (WTS-FSG, Section 10.5.2)
   Yes No
- X 3. A narrative description of the proposed work for this project was provided. The description should be consistent with scope of work for the final installation drawings. (WTS-FSG, Section 10)

● Yes
 ○ No

- X 4. An inventory of the make and model of antennas or transmitting equipment being installed or removed was provided. The antenna inventory included the proposed installation height above the nearest walking/working surface, the height above ground level and the orientations of the antennas. (WTS-FSG, Section 10.5.2)
   Yes No
- X 5. A description of the existing radio frequency energy environment at the nearest walking/working surface to the antennas and at ground level was provided. A description of any assumptions made when doing the calculations was also provided. (WTS-FSG, Section 10.4.1a, Section 10.4.1c, Section 10.5)
   Yes No
- **X** 6. The maximum effective radiated power per sector for the proposed installation was provided along with the frequency bands used by the antennas. (WTS-FSG, Section 10.1.2, Section 10.5.1)

Maximum Effective Radiated Power: 18545 Watts

- X 7. Based on the antenna orientation, the maximum cumulative predicted radio frequency energy level for any nearby publicly accessible building or area was provided. (WTS-FSG, Section 10.4, Section 10.5.1)
   Maximum percent of applicable FCC public standard at the nearest building or structure: 11 %
   Distance to this nearby building or structure: 240 feet
- X
   8. The estimated maximum cumulative radio frequency fields for the proposed site at ground level. (WTS-FSG, Section 10.5) Maximum RF Exposure: 0.032 mW/cm<sup>2</sup>
   Maximum RF Exposure Percent: 5.2

**X** 9. The maximum distance (in feet) the three dimensional perimeter of the radio frequency energy level equal to the public and occupational exposure limit is calculated to extend from the face of the antennas was provided. Any potential walking/working surfaces exceeding regulatory standards were identified. (WTS-FSG, Section 10.9.2)

Public Exclusion Area	Public Exclusion In Feet:	94
Occupational Exclusion Area	Occupational Exclusion In Feet:	36

X 10. A description of whether or not the public has access to the antennas was provided. A description was also provided of any existing or proposed warning signs, barricades, barriers, rooftop stripping or other safety precautions for people nearing the equipment as may be required by any applicable FCC-adopted standards. All signs will be provided in English, Spanish and Chinese. (WTS-FSG, Section 9.5, Section 10.9.2)

● Yes ○ No

X 11. Statement regarding the engineer who produced the report and their qualifications was provided. The engineer is licensed in the State of California. (WTS-FSG, Section 11,8)

• Yes O No

X Approved. Based on the information provided the following staff believes that the project proposal will comply with the current Federal Communication Commission safety standards for radiofrequency radiation exposure. FCC standard <u>CFR47 1.1310</u> Approval of the subsequent Project Implementation Report is based on project sponsor completing recommendations by project consultant and DPH.

#### Comments:

There are no antennas existing operated by Verizon installed on the roof top of the building at 2001 37th Av. Existing RF levels at ground level were around 1% of the FCC public exposure limit. No other antennas were observed within 100 feet of this site. Verizon proposes to install 12 new antennas. The antennas are mounted at a height of 45- 63 feet above the ground. The estimated ambient RF field from the proposed Verizon transmitters at ground level is calculated to be 0.032 mW/sq cm., which is 5.2 % of the FCC public exposure limit. The three dimensional perimeter of RF levels equal to the public exposure limit extends 94 feet and does not reach any publicly accessible areas. Warning signs must be posted at the antennas and roof access points in English, Spanish and Chinese. Workers should not have access to within 36 feet of the front of the antennas while they are in operation.

Not Approved, additional information required.

**Not Approved**, does not comply with Federal Communication Commission safety standards for radiofrequency radiation exposure. FCC Standard

1 Hours spent reviewing

Charges to Project Sponsor (in addition to previous charges, to be received at time of receipt by Sponsor)

Signed:

Dated: 4/20/2020

Arthur Duque Environmental Health Management Section San Francisco Dept. of Public Health 1390 Market St., Suite 210, San Francisco, CA. 94102 (415) 252-3966

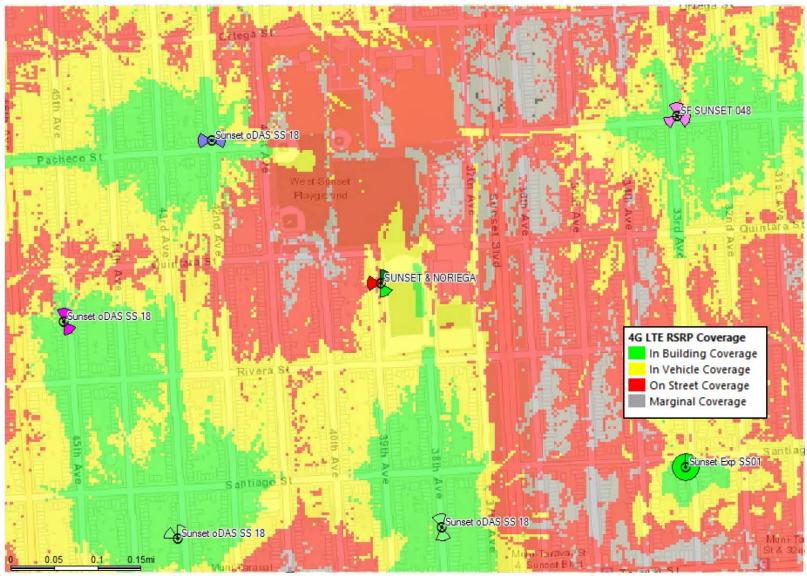
**Exhibit D** 

# **SUNSET & NORIEGA**

March 30<sup>th</sup>, 2020

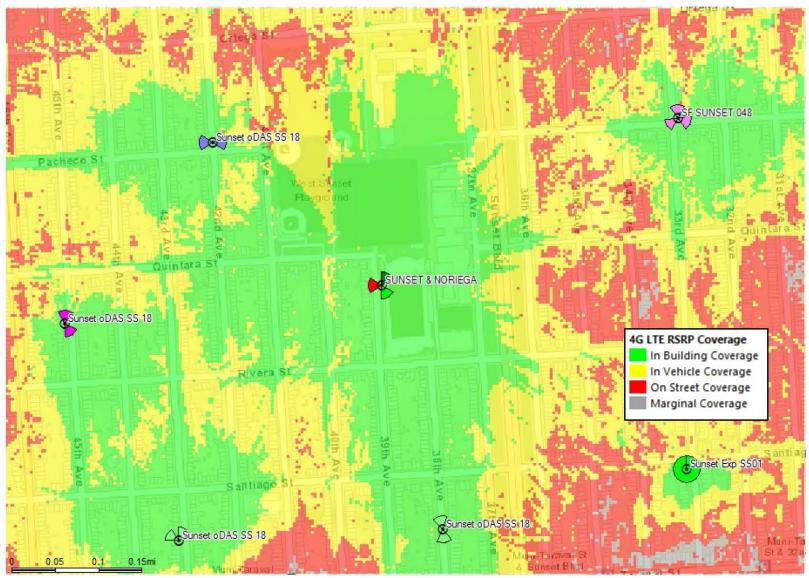


# **Existing LTE Coverage**





# **Proposed LTE Coverage**







## Exhibit E

WILLIAM F. HAMMETT, P.E. Rajat Mathur, P.E. Robert P. Smith, Jr. Andrea L. Bright, P.E. Neil J. Olij, P.E. Manas Reddy, P.E. Brian F. Palmer M. Daniel Ro

#### BY EMAIL CHAD.CHRISTIE@RIDGECOMMUNICATE.COM

April 10, 2020

Mr. Chad Christie Ridge Communications 949 Antiquity Drive Fairfield, California 94534 Robert L. Hammett, P.E. 1920-2002 Edward Edison, P.E. 1920-2009

DANE E. ERICKSEN, P.E. Consultant

Dear Chad:

As you requested, we have conducted the review required by the City of San Francisco of the coverage maps that Verizon Wireless will submit as part of its application package for its base station proposed to be located at 2001 37th Avenue (Site No. 255926 "Sunset & Noriega"). This is to fulfill the submittal requirements for Planning Department review.

#### **Executive Summary**

We concur with the maps provided by Verizon. The maps provided to show the before and after conditions are reasonable representations of the carrier's present and postinstallation coverage.

Verizon proposes to install twelve directional panel antennas – three CommScope Model NNH4-65A-R6, three Ericsson Model 6701, and six Ericsson Model 2208 – on the 90-foot stadium light pole sited next to the north end of the bleachers on the west side of the football field at St. Ignatius College Preparatory, located at 2001 37th Avenue. The antennas would employ up to 4° downtilt, would be mounted at effective heights of about 63, 45, and 50 feet above ground, respectively, and would be oriented in identical groups of four at about 120° spacing, to provide service in all directions. The maximum effective radiated power proposed by Verizon in

any direction is 18,545 watts, representing simultaneous operation at 193 watts for 28 GHz, 172 watts for CBRS, 5,250 watts for AWS, 5,130 watts for PCS, 4,170 watts for cellular, and 3,630 watts for 700 MHz service.

Verizon provided for review two coverage maps, attached for reference. The maps show Verizon's 4G LTE coverage in the area <u>before</u> and <u>after</u> the site is operational. Both maps show five signal levels of coverage, which Verizon colors and defines as follows:

Green	better than -75 dBm
Yellow	-75 dBm to -85 dBm
Red	-85 dBm to -95 dBm
Grey	-95 dBm to -105 dBm
Black	worse than -105 dBm

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These service thresholds used by Verizon are in line with industry standards, similar to the thresholds used by other wireless service providers.

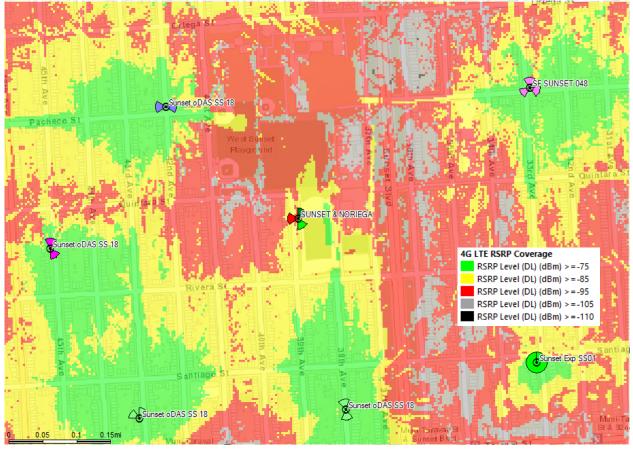
We conducted our own drive test, using an Ascom TEMS Pocket network diagnostic tool with built-in GPS, to measure the actual Verizon 4G LTE signal strength in the vicinity of the proposed site. Our fieldwork was conducted on April 6, 2020, between 9:50 AM and 11:40 AM, along a measurement route selected to cover all the streets within the map area that Verizon had indicated would receive improved service.

Based on the measurement data, we conclude that the Verizon 4G LTE coverage map showing the service area without the proposed installation includes areas of relatively weak signal levels in the carrier's present coverage. The map submitted to show the after coverage with the proposed base station in operation was reportedly prepared on the same basis as the map of the existing conditions and so is expected to accurately illustrate the improvements in coverage.

We appreciate the opportunity to be of service. Please let us know if any questions arise on this matter.

Sincerely yours, -13026M-20676 p. 6-30-2021 William F. Hammett, P.E. Enclosures scn

# **Existing LTE Coverage**





# **Proposed LTE Coverage**

