



SYNTHETIC TURF

Fullerton Joint Union High School

District

Board Meeting

December 13, 2016



Topics for Discussion

- Cost over 1-5-20 years
- Infill option recommendations
- Community Outreach
- School District Survey Results

Maintenance Costs Per Year

Maintenance Hours and Materials

Per Stadium Field

	Grass	Artificial Turf
Mowing	\$13,520	\$0
Fertilizer	\$3,060	\$0
Aerify	\$1,440	\$0
Top Dressing	\$2,440	\$0
Sand Fill	\$7,560	\$500
Insecticide	\$1,030	\$0
Over-Seeding	\$4,520	\$0
Irrigation Repair	\$15,520	\$1,000
Water	\$5,600	\$500
Sweeping	\$0	\$5,000
Turf Repair	\$0	\$1,000
<u>Unforeseen</u>	<u>\$0</u>	<u>\$5,000</u>
TOTAL (without escalation)	\$55,470	\$13,000

Cost to Install New Turf Field

Natural Turf

\$480,000

Synthetic Turf

\$960,000

Difference

\$480,000

Artificial Turf Replacement Cost

Artificial Turf Replacement Costs

Turf/Carpet	175,000
Infill	35,000
Fasteners Seam Bonding	19,000
Removal & Recycle of Existing Turf	85,000
Installation of Turf	<u>166,000</u>
	480,000

Grass Replacement Costs

Pulverization	21,000
Laser Grading	23,000
Sod	50,000
Irrigation Adjustment	5,000
Fertilization	<u>1,000</u>
	100,000

Return on Investment

Maintenance Costs Per Year	\$55,470 (natural) <u>- \$13,000 (synthetic)</u> \$42,470 (net maintenance)
Cost Difference-New to Artificial	\$480,000

Return on Investment = 11.30 Years ($\$480,000 \div \$42,470$)

Cost Over 5 Years

	Grass	Synthetic Turf
Complete replacement of sod (1 time)	\$100,000	\$0 (not needed)
Maintenance	\$55,470	\$13,000
	<u>X 5 years</u>	<u>X 5 years</u>
	\$277,350	\$65,000
Total 5 Years Maintenance and Replacement	\$377,350	\$65,000
Natural Turf Replace and Maintenance Cost	\$377,350	
<u>Synthetic Turf Maintenance Cost</u>	<u>-\$65,000</u>	
Savings	\$312,350	

Cost Over 10 Years

	Grass	Synthetic Turf	
Complete replacement of sod (3 times)	\$100,000 <u>X 3</u> \$300,000	\$480,000 <u>X 1</u> \$480,000	(1 time)
Maintenance	\$55,470 <u>X 10 years</u> \$554,700	\$13,000 <u>X 10 years</u> \$130,000	
Total 10 Years Maintenance and Replacement	\$854,700	\$610,000	
Natural Turf Replace/Maintenance	\$854,700		
<u>Synthetic Turf Replace/Maintenance</u>	<u>-\$610,000</u>		
Savings	\$244,700		

Cost Over 20 Years

	Grass	Synthetic Turf
Complete replacement of sod (5 times)	\$100,000 <u>X 5</u> \$500,000	\$480,000 <u>X 2</u> \$960,000 (2 times)
Maintenance	\$55,470 <u>X 20 years</u> \$1,109,400	\$13,000 <u>X 20 years</u> \$260,000
Total 10 Years Maintenance and Replacement	\$1,609,400	\$1,220,000
Natural Turf Replace/Maintenance	\$1,609,400	
<u>Synthetic Turf Replace/Maintenance</u>	<u>-\$1,220,000</u>	
Savings	\$389,400	

Infill Recommendation

1. Recycled Crumb Rubber

Continues to be used across the US

No proven harm to users

Proven Product

Stable GMAX

#1 Product used in Pro/College/H.S. Fields

2. EPDM

New Product no toxins

No proven harm to end users

Stable GMAX

Expensive; adds 4 x cost of recycled rubber

Approximately \$150,000 added to project cost

User Input Community Outreach

Fullerton Joint Union High School District is seeking input from you, our common users on the possibility of installing artificial turf in our stadiums.

What are your thoughts? Do you have any recommendations that we should consider?

Please respond to this email with your comments.

Thank you.

Thank you for your email. As the high school Head coach of El Dorado high school in Placentia we are very fortunate to have a lovely turf field for our players to use.

Turf obviously isn't grass, but having used it for 6 years at El Dorado, we know that it is so beneficial for our players, plus we never have to cancel practices or games due to field conditions.

For american football, lacrosse the turf field is definitely a huge plus for those sports as well.

If you need any more information regarding turf, please let me know.

Thanks

Rob Fisher

Strikers FC North

Director of Coaching

Thank you for including me on this discussion. It's good to know that they are looking for input from those who currently do and will use the stadium once it is done. I've listed my thoughts below.

The stadium is used by such a variety of groups throughout the year and the grass maintenance is always an issue. Artificial turf is the direction that nearly all schools/districts are headed once they remodel their stadiums. In my opinion, I think that the district will move in this direction and install the artificial turf regardless of any negative feedback, but I'd like to share some of my thoughts on how it will help/hinder my program directly. (1) First of all, having artificial turf will enable the field to be used more frequently by groups as it will not turn to mud, be too wet after watering, etc. However, on the other side when new turf is put in, there will be lots of new rules and regulations on when/how groups can use it and for what purpose. It will be harder to use in some respects as well as in theory more able to be used more frequently because it will not have to be watered, repaired, moved, reseeded, etc. (2) The field will no longer be able to be used for certain activities (jog-a-thon booth set up, non-sporting gatherings) as it will be an expensive investment by the district who will not want it to be damaged by tents, tons of foot traffic, and such. (3) The field will be sooo much hotter than a grass field. Grass is much cooler and artificial turf with rubber bits heats up and stays hot longer. (4) What about the auxiliary/utility field? will that be dirt still? If so, that area may be desired by certain groups now/if they want grass or will not be able to use the artificial turf. Will there be permanent lights installed on that area for night practices? (5) There will be no customizing of the artificial turf (painting for "tackle cancer" nights or the like) unless there is some method I am unaware of. The field will be painted the way it is and remain that way. (6) Since it will be used for FUHS and Troy HS, what will the endzones say? Will it just say Fullerton Stadium? (7) Artificial turf still will need repairs and maintenance. What does that schedule look like? Is there a plan to maintain it to look pristine by the district or is that a FUHS issue?

That's all I can think of at the top of my head. I will send more as I think of more.

Thank you,

*Troy Trimble
Instrumental Music Director
Fullerton Union High School*

My name is Scott Browne, and for the last 7 years, I have been a parent of 3 student athletes at Fullerton High school, My first is a junior in college now, and I still have 2 kids that are currently attending FHS. Although my kids will not see any of these capital improvements before they graduate, I am speaking for the kids to come. Personally, I have been coaching our local youth in Fullerton for the last 15 years, and still do, Parents ask me all the time which school they should pick: Fullerton, Troy, or Sunny Hills? This includes out of district kids that transfer in for specific programs as well. Frankly, for the student athlete, the quality and safety of the facilities is the focal point.

At this particular moment, it is time for me to be selfish on behalf of the kids at Fullerton High School, they are in dire need of YOUR help. Unfortunately, Fullerton High School looks and acts like its age. I encourage you to walk into the gym foyer and that's all you need to know...

Two things need to be at the top of your list for the vote:

1 The utility field at Fullerton High School needs to be artificial turf. This cannot wait years to happen. My oldest daughter was the starting shortstop on the varsity softball team as a freshman. Her best friend, Brook Castillo, also a freshman, dove for a ball in center field and ended up with a concussion. This was a direct result of the "Sand Lot" conditions of the utility field, hard packed, dry dirt, no grass. The utility field is used by all sports year round, Football, Soccer, Softball, and so on. The area is so small that it is impossible to keep safe with natural grass. Artificial turf will help curb accidents like this. I am surprised that there have been no law suits (that I know of) because of the lack of care for this area and the over-use do to limited space. The other schools have so much more room and the natural grass areas are so abundant, this is a non-issue for them.

Solution: The softball field needs to be moved directly next to the stadium. No need for 2 softball fields because they can play games one after the other, JV, then Varsity (because there will be lights). The tennis team will lose 3 courts or so if this happens. Each level can play a traditional stacked schedule, Frosh/Soph. JV, then Varsity. This is also not a problem because there will be lights. By doing this, this will increase the field size and practice area for ALL sports by approximately 33%.

2 The stadium needs artificial turf installed immediately. This is all about player safety. The stadium is so over used by all sports, the athletes experience the same injuries as the utility field. How much money was spent on rolling out new grass this season? Its already worn down. That money should have been applied to artificial turf. Just outside of Fullerton, most stadiums are all artificial turf and have been for some time.

I have personally talked to your head of facilities and the bond money priority list seems to be backwards, not based on actual need. I would love to personally talk to all of you. I have no vested interest anymore because my own kids will not realize any of the proposed improvements. I am an advocate for the kids to come.

Please vote YES to these at your meeting and please do not push off these action items any longer, the kids deserve this...

Respectfully,

Scott Browne //

As for me, I do have mixed feeling on the issue. With water restrictions, and such heavy use of the FUHS stadium field – natural grass isn't working. Soccer is a winter sport, and as such – uses the field after football (both Troy and FUHS football). We also have rain to deal with, which can cause games to be canceled on grass fields – creating scheduling challenges. As a soccer program, we are at a huge disadvantage under the current circumstances – as our other league competition at SHHS and THS have pristine soccer fields (not sure how they accomplish this with water restrictions – but that's probably another issue). The FUHS field is mostly dirt by the time soccer season rolls around.

Turf fields do cost a lot of money. But with drought and water restrictions, I don't see how we can have an acceptable playing surface without turf. Turf fields are also able to be played on in rain conditions, which eliminates scheduling conflicts of canceled games.

With the funds already approved (my understanding), I am in favor of a turf field at FUHS. In addition to the other stadium improved that I've seen planned, this would make FUHS stadium a premiere sports field in Fullerton. I am not concerned about player safety on turf, as I believe injury can happen on either playing surface.

Unless we can water a grass field as needed to create and maintain a premier playing surface for years to come, I believe turf is the best option.

*Thanks for asking for my/our input – I appreciate it!
Danny*

Danny Monson

California School Product Use

Schools using crumb rubber infill

Palos Verdes
Unified
Lake Elsinore
Unified
Riverside Unified
Santa Monica
Unified
Alvord Unified
Newport Mesa
Unified
Pomona Unified
Downey Unified
Baldwin Park
Unified
Duarte Unified
Paramount Unified

ValVerde Unified
Santa Ana Unified
Capistrano Unified
Saddleback
Unified
Monrovia Unified
Laguna Hills
Unified
Irvine Unified
Fontana Unified
Walnut Unified
Covina Unified

San Diego Unified
Tustin Unified
Norwalk Unified
Long Beach Unified
Pasadena Unified
Yucaipa Calimesa JUSD
Chino Valley USD
Fremont Unified School District
Newport Mesa USD
Livermore Valley Joint Unified

Questions

18

