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TWERTON PARK

3G-FEASIBILITY STUDY

Draft for Discussion

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1. EXECUTIVE SUMMARY

Background

A timely and definitive decision on an investment in 3G by BCFC is now required as:

- It has important implications for the ground re-development project. While 3G can be viewed independently of the latter, this Study believes it would be a net positive for the ground re-development;
- The Supporters' Society 2016 Business Plan signalled 3G as a potential option which would be considered post the change of ownership, which occurred in 2017;
- BCFS's recently adopted twin strategic priorities under Society ownership of achieving financial sustainability and community impact are both potential reasons for investing in 3G;
- The club's continuing trading loss highlights the urgent need for achieving a step-change in its revenues and profitability if financial sustainability is to be achieved;
- Such an investment will fundamentally change the business model of BCFC. It is therefore not
 a decision to be taken lightly and requires endorsement from all BCFC'S key stakeholder
 groups;
- It offers the vision of a broadly based community football club, catering for all ages, abilities and gender, centred in the heart of Twerton; and
- 3G also represents a potential 'Plan B' in the event that the ground re-development does not progress.

Key Findings

Regulatory Considerations

- BCFC would need to install a 'FIFA Quality Pro 3G' playing surface to meet National League requirements.
- This surface is, however, not currently approved by the Football League. This also has
 implications for managing and maintaining the surface and the extent of its community
 usage.
- It also has implications for BCFC's potential Football League aspirations.

Qualitative Reasons For and Against 3G

• Based upon FA and FIFA research and uptake, this Study concludes there is no material basis for objecting to this particular 3G surface for BCFC based on football 'quality' and safety considerations alone, versus the current grass pitch.

Community Impact of 3G

3G would have a positive community impact as:

- Twerton Park is located in close proximity to pockets of deprivation identified by BANES.
- There is a widely accepted shortage of 3G capacity and quality football pitches generally in Bath and its surrounding catchment area.
- The ground would become available for a material number of football based community activities throughout the full year.
- None of these activities are currently possible on the existing grass pitch.

- 3G at Twerton would have a more limited community impact relative to other full time community football centres, as the latter facilities can be used up to 80-90 hours a week.
- Only 35 hours/week minimum usage is assumed in this Study for BCFC (5 are assumed for BCFC), to maintain the quality of the surface over 5 years. Total usage subject to demand could rise up to 50 hours/week over 4 years.
- 3G at Twerton would be consistent with BANES's research on local needs, demographics and its strategic priorities.

Financial Impact of 3G

- Funding for the upfront capital cost of 3G is estimated at £600k.
- 3G would have a positive financial impact on BCFC's profitability in the short and medium term.
- The current shortage of 3G and current and latent demand for access to better quality football surfaces in BANES should mean Twerton can be used for a minimum of 35 hours/week and this is not expected to change over the medium term.
- A pro-forma first year profit contribution of approx £65k to BCFC is projected in this Study, based only on 3G usage, a conservative set of assumptions and third party inputs.
- This contribution is material in the context of the urgent need to reduce BCFC's 2016/17 operating loss of £90k, which is not sustainable. Higher usage up to 50 hours would significantly increase profits.
- Profits can be expected to grow over time, including from other sources of ancillary revenue. The business case does not, however, depend on this.

Key Conclusion/Recommendation and Next Steps

Based upon the above findings, an investment in 3G for BCFC is recommended, subject to the following:

- Supporter and community engagement and endorsement;
- Further deliberation and consideration of the Football League's position (by June at the latest);
- An appropriate funding strategy for the upfront cost of installing 3G;
- Further analysis and verification of the underlying assumptions made in this Study of 3G demand, 3G maintenance and management costs (relative to the current operating costs of BCFC); and
- Inclusion of 3G in the ground re-development project, to share certain costs and to maximise the potential of its financial and community impact.

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2. INTRODUCTION

Background to 3G and BCFC

The potential ground re-development of Twerton Park requires a detailed, objective analysis and decision as to whether 3G should be included in the larger project. If there is a case for 3G, then clearly combining the installation of a 3G pitch to coincide with the re-development makes sense as: (i) 3G will have an impact on the specification of the Club's new grandstand; and (ii) disruption to the Club's activities would be minimised by the combination of the two projects, as would certain costs common to both (eg site surveys, earth removal).

In addition, the possibility of 3G was clearly signalled in the business plan for the Supporters' Society Bid for majority ownership of BCFC in 2016. A decision on 3G will also be required in the next few months, given the current timeline set for the re-development project. However, 3G is a separate initiative, capable of being assessed independently of the ground re-development. If the latter does not proceed (and there can be no guarantee that it will) there is no reason why 3G could not. If 3G is deemed not appropriate, this would not impact upon the overall status of the ground redevelopment project. A '3G Business Plan for BCFC' can be seen as both a potential credible alternative to the ground re-development if the latter does not happen, as well as enhancing it if it does. For example, recent discussions on the need to remove earthworks for the re-development could assist in ground levelling for 3G, thereby saving significant costs and removing a potential logistical obstacle. It is also possible that the inclusion of 3G and its community benefits may be beneficial in terms of Planning consent for the overall project. The re-development partners are positive on its inclusion.

The adoption of 3G by football authorities and football clubs in the UK is both at an early stage and contested. It is a controversial topic within the game, capable of provoking both strong positive and negative reactions. A small working group of members of the ground re-development Board sub-committee, supported by an MBA graduate from the University of Bath, was set up in late 2017 to prepare this 3G Feasibility Study. The objective of this draft Study has been to complete a basic due diligence exercise, provide a recommendation and share objective evidence and facts to support a properly informed and transparent debate, inclusive of all the key stakeholders in BCFC. This should help to ensure the correct decision can be taken within the required timetable, based upon the best available information at this time.

This is a very significant decision for BCFC, on a number of levels. In particular, it would fundamentally alter BCFC'S business model and have profound implications for how the club is funded and managed going forward. Perhaps most importantly, it also offers the vision of a much more broadly based, inclusive and integrated club. By providing quality access to football for all ages, abilities and gender, which is crucially based in one location, player and supporter bases have the opportunity to become mutually self-reinforcing.

A decision on 3G also needs to be viewed in the context of the successful change in BCFC'S majority shareholding achieved in 2017, in becoming a community owned football club. Its subsequent twin priorities of achieving financial sustainability and maximising its community impact within the Twerton and broader Bath areas are priorities which were identified in advance and independent of any debate on 3G. Importantly, they are consistent with two of the key reasons advanced by promoters of 3G as to why a UK football club would install a 3G pitch.

At an early stage in this due diligence process and consistent with one of the new Board's priorities to build much stronger relationships with BCFC sister organisations, it was decided the working group would team up with Bath City Youth FC (Ed Tann-Chairman), as the latter charitable organisation is an active current user of 3G pitches in the Bath area. BCYFC has 350+ active children playing football at all levels in the Bath area.

Methodology

The data gathering employed during the Study has primarily focused on interviewing individuals and/or collecting information from the following organisations:

BANES, the Somerset FA, the FA, the University of Bath, the Football Foundation, South Bristol Sports Centre, Bristol and Bath Regional Capital, two experienced 3G installers-one local, one national (Verde Recreo, S&C Slatter), FIFA, three consulting firms (RLF, Max Associates, The Sports Consultancy), [FWP (stadium consultant to BCFC on the ground redevelopment)], Merthyr Town FC, Maidstone United and Sutton United (three non-League clubs pioneering 3G), 3G4US (a football club led lobby group in favour of 3G), and Jerry Gill.

It is believed the above is a sufficiently comprehensive group of organisations to ensure there should be no major errors or omissions in this draft Report. It is, however, a group containing organisations with an inherent bias in favour of 3G. This has been taken into account in drawing firm conclusions from the due diligence, in order to present a more balanced and conservative view. In particular, certain views and information on the financial impact of 3G have been viewed as too optimistic or selective and have been scaled back in this Study's analysis and conclusions.

No fees have been paid to any third party consultants to date, as no independent work has yet been commissioned. The subsequent use of consultants may be necessary if this is felt to be required in terms of providing independent verification, particularly in relation to future local market demand for a 3G facility, for example, operating costs or a needs assessment. The quoted costs for such work do not appear unreasonable (18,19).

The Study has been deliberately presented for sharing with a broad audience and a wide range of views. This creates its own challenges but from the executive summary to the main body of the document and the attachments it is hoped most information needs will be met and the information referred to can be accessible to all in the spirit of full transparency. The attachments are integral to this Report. They are numbered at the end of the Report and referenced in the relevant sections of the Report. Certain key attachments are available online. A hard copy of every attachment is available for review in a mini 'data room' at Twerton Park (contact Carole Banwell). It is intended that this Study will be a live document which can be updated with new information on an ongoing basis.

The scope of the Study has not included funding options for the up-front capital cost. It is anticipated this would become a priority if an 'in principle' decision to proceed is agreed by the key stakeholder groups. Robust community support is likely to improve the prospects for securing funding for the project although this would not be available from the Football Foundation (as a result of the constraint on community usage). Up to £100k of grant funding may be available from a family Foundation as a 'cornerstone'. The club's ownership of Twerton Park may provide the necessary asset backing to secure third party debt for the project. It is anticipated that this Study's analysis can be used to support formal requests for funding if required at the appropriate time.

The scope has also not currently included a review of any planning or other regulatory consents solely relating to 3G. Precedents would suggest planning should not be an issue. If 3G is included in the ground re-development, it would obviously be included in Planning consent for that larger project.

3G-Regulatory Background Relevant to BCFC

There is a significant history to the adoption of 3G pitches for football in the UK. This Report will not repeat the detail behind this history. '3G' is also a generic term which can cover a broad range of surfaces, from poorly maintained, overused and old community pitches to international FIFA tested high quality surfaces. The following is a summary of the key issues and regulations relating to 3G specific to BCFC at the present time:

The FA is in favour of 3G pitches for grassroots football and 3G is accepted in the FA Cup as a result (9,11);

3G is currently only allowed up to National League level. The pitch has to be of the 'FIFA Quality Pro' standard, the same level as for international football-FIFA therefore endorses this quality of surface. It is not, however, accepted by the Football League. This quality surface would therefore apply to BCFC. This is significant because it has implications for community use, estimated life, quality testing and maintenance costs. All subsequent references to 3G in this Study therefore refer only to this standard of surface.

Upon promotion to the EFL, a National League club's 3G pitch would therefore currently have to be replaced by a grass pitch (16). The current sanction is relegation. This is clearly significant for any club which has an aspiration to achieve League status in the future. The last meeting to debate this issue for EFL clubs ended in deadlock and the next one is scheduled for June this year. Sutton United may set a precedent for having to deal with and challenge this sanction in the very near future, given the club currently occupies a National League promotion/play-off place;

3G4US is actively lobbying for a change in the above rules (16). They point to other countries in Europe now permitting 3G at their top levels of football and they highlight certain other sports, such as premiership rugby union in the UK, as doing the same. However, there appears to be no clear consensus at the present time whether these rules will be changed by the EFL in the short to medium term;

Conclusion

The National League's current rules specify and regulate the quality of 3G pitch and impact upon its level of use by BCFC. They also potentially negatively impact on the club's ambition in achieving Football League status. Over the timeframe of a potential promotion from the National League, it is possible to argue BCFC's 3G would need replacing in any event (say 3-5 years) or the rules may be changed, assisted potentially by the steadily improving quality of 3G and its broader adoption generally. The latter rule change cannot be guaranteed, however, and remains an open issue. This may also have implications for funders.

3. QUALITATIVE REASONS FOR AND AGAINST 3G

Maidstone United identify twelve reasons relevant to BCFC as to why a club may want to install 3G (5). The two most significant in this context relate to 3G's community and financial impact, where an analytical approach, based in part on current case studies, is possible. Both are covered in the subsequent sections of this Study. A significant number of the other reasons espoused are qualitative judgements or opinions from a club keen to encourage others to adopt. They are therefore capable of challenge. They can be summarised as follows:

• FIFA Quality Pro is an excellent playing surface.

- Maidstone claim their independent FIFA pitch testers concluded that their surface behaves as well as Wembley (in terms of bounce, roll and lateral movement).
- This pre-supposes any such surface is properly maintained, tested and policed.
- Criticism of such surfaces can clearly be justified if the above maintenance conditions are not being met or enforced or if the surface is already worn out and needs replacing.
- Earlier 3G surfaces were undoubtedly of much lower quality and have contributed to a negative image of 3G in certain quarters.
- Community based 3G facilities will also not be of the same high quality and this has also negatively impacted perceptions.

3G promotes skilful football.

- This is clearly a qualitative judgement. It is the case that increasing numbers of younger players in the UK are growing up playing and being coached on 3G. Some commentators point to the recent success of England's youth teams as evidence of the positive impact of 3G.
- Jerry Gill believes 3G would support the style of play he is seeking to achieve with the 1st team, subject to caveats relating to maintenance and watering, for example.

The game doesn't change on 3G.

Again this is a qualitative judgement. Maidstone and the FA however, quote research commissioned by FIFA on over 100 matches which concluded the game does not change significantly on 3G relative to a grass pitch-indeed it is easier to play a passing game. Opponents might argue tackling is not the same, however.

3G allows play in most weather and looks good all year round.

- This is important and verifiable. It is important because cancellations on grass pitches due to bad weather cost clubs lost income through postponements and can create fixture congestion. This benefit can be factored into a financial impact assessment although no upside from this has been taken into account in the analysis in this Study.

 Sutton United claim it was their poor quality grass pitch which originally led them to decide to replace it with 3G. BCFC's grass pitch is well maintained and drains effectively, albeit it has a slope and suffers from the usual vagaries of the weather, which negatively impact upon the consistency and quality of the playing surface during the football season.

3G is safe.

- Maidstone quote FIFA research of over 10,000 injuries which concluded that there was no significant differences in the type of injuries incurred between 3G and grass. After five years of their own experience, Maidstone are not aware of any significant injuries having been caused by their 3G and their older players have accepted it.
- The FA has concluded 'scientific studies conducted by government agencies....have all validated the human health and environmental safety of 3G pitches and crumb rubber' (23),2016.

3G is used at the highest levels of the international game.

- 3G is allowed for international matches, World Cup qualifiers, Women's World Cup, Champions and Europa Leagues.
- It is also permitted for top level professional football in Sweden, Germany France, Holland, Wales and Scotland.
- 12 Scottish League clubs currently play on 3G.

3G costs less to maintain and requires fewer changing facilities.

- For the purposes of this exercise, no maintenance cost savings (versus £30k/annum estimated by Maidstone) have been assumed in the Study's financial impact.

3G should last a minimum of five years.

- Maidstone originally believed this should be possible with up to 50 hours (22 men/hour equivalent) of use per week. Sutton claim 8-10 years should be possible and currently use their ground for 55 hours/week. This is a significant variance, which has a major impact upon the financial assessment of a 3G pitch.
- Maidstone have recently revised their usage recommendation down to 40 hours for 5 years (22).
- This is now in line with the recommendation from Verde of 40 hours (7). This has been further reduced in this Study's financial impact to 35 hours to be conservative.
- It is important to stress these parameters remain unproven, as it is still too early to assess 3G longevity relative to usage. Estimated life could therefore also be longer than 5 years at 35 hours/week.

Conclusion

This Study has concluded that based upon independent FA and FIFA endorsement and their research, 3G take-up and feedback from existing clubs, there are no obvious grounds to object to the replacement of the grass pitch with 3G at Twerton, based purely on football quality or safety considerations. This assumes the appropriate maintenance, policing and testing of the surface will be undertaken, which are cost and ground management issues.

Jerry Gill has also confirmed he would have no objection to its installation on this basis, with the above caveats.

4. COMMUNITY IMPACT

The installation of 3G is usually justified in part by the enhanced community impact such a pitch can have within a local area. All three clubs referenced above claim their new surface has been transformational in terms of their 3G pitch's enhanced community impact versus their previous grass pitches (2,4,5,14).

This is relevant to BCFC as: (i) it is now community owned. While the club's community strategy remains work-in-progress (12), 3G could play a central and pivotal role in such a strategy as (ii) the club is based in the heart of Twerton and in close proximity to Whiteway, Foxhill North and Whiteway East-all of which, according to BANES, represent pockets of deprivation. 3G will be most accessible to people living in these areas, who will not have to pay to travel far to access it and: (iii) the club has not had a recent history of active local community engagement. It currently has an under-utilised and underinvested asset located in the centre of the area, which some argue does not currently contribute to the local community at all (3).

Creating a genuine community hub based upon physical fitness, sport and teamwork for all ages, abilities and gender in such a location could have a disproportionately positive social impact. This is supported by the extensive research and current thinking behind the key drivers of 'wellbeing' (eg What Works Well Centre for Wellbeing (20)).

Maidstone, Merthyr and Sutton all market their 3G facility as being available 7 days a week, usually up until 10pm, including for extensive community use.

Maidstone references: schools, community groups, children's holiday football schools, charity events, disability football, fitness and inclusion programmes and health awareness programmes;

Merthyr Town FC Community Trust - "Football as a sport carries an incredible amount of power and the Martyrs Community Trust aims to use that power to engage with the wider community". The Trust references: schools, football camps, disability football, mental health, walking football, special needs and girls' football.

Sutton: "The 3G pitch brings the community into the club every day, seven days a week and generates huge goodwill in the town. More people feel connected to the club, more people get involved in the community facilities, more children join the club, play at the stadium, become supporters, bring along their friends. It's a virtuous circle"

None of the community activities referenced above would be possible on a regular and systematic basis on a grass based football pitch and none take place currently at Twerton Park.

An illustrative example of how community usage could be accommodated is set out below. Community access can generally be provided during times in the day which are complementary to other users:

Indicative Usage Term Time/Football Season

| Term Time | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
|-----------|-----------|-----------|-----------|-----------|-----------|--------------|-------|
| 9.00 | Community | Community | Community | Community | Community | | |
| | | | | | | | |
| 10.00 | Community | Community | Community | Community | Community | | BCYFC |
| | | | | | | | BCYFC |
| 11.00 | Community | Community | Community | Community | Community | | BCYFC |
| | | | | | | | BCYFC |
| 12.00 | Community | Community | Community | Community | Community | | |
| 13.00 | Community | Community | Community | Community | Community | | |
| 14.00 | Community | Community | Community | Community | Community | BCFC1(Match) | BCYFC |
| | | | | | | BCFC1(Match) | BCYFC |
| 15.00 | Community | Community | Community | Community | Community | BCFC1(Match) | BCYFC |
| | | | | | | BCFC1(Match) | BCYFC |
| 16.00 | Community | Community | Community | Community | Community | BCFC1(Match) | |
| | | | | | | BCFC1(Match) | |
| 17.00 | Community | Community | Community | Community | Community | BCFC1(Match) | |
| | | LARKHALL | | | | | |
| 18.00 | BWB | LARKHALL | BCYFC | | BCYFC | | |
| | BWB | LARKHALL | BCYFC | | BCYFC | | |
| 19.00 | BWB | LARKHALL | BCYFC | | BCYFC | | |
| | BWB | BCFC 1 | BCYFC | BCFC 1 | BCYFC | | |
| 20.00 | BWB | BCFC 1 | BCYFC | BCFC 1 | BCYFC | | |
| | BWB | BCFC 1 | BCYFC | BCFC 1 | BCYFC | | |
| 21.00 | | BCFC 1 | | BCFC 1 | | | |
| 22.00 | | | | | + | | |

An illustrative and live example of how 3G pitches can create measurable social impact and benefits is set out in the South Bristol Sports Centre presentation attached (6).

Community demand for 3G at Twerton is covered in more detail in section 5 below under demand drivers. Indeed, there is obvious overlap between 3G's community and financial impacts, as over time they should become self-reinforcing.

Conclusions

The community impact of a 3G pitch at Twerton Park has the potential to be a significant positive for the local area, given the latter's needs and the location of the ground. Next steps include socialising this Report with BCFC's Community Director and the new Chair of Bath City Community Foundation for feedback and engagement with the Twerton community itself. It is important to stress that given the requirement to maintain the quality of the playing surface, the community benefits will not be as significant relative to lower quality 3G facilities designed solely for community use, where usage can be as high as 80-90 hours/week. The range of community access in this report is 30-45 hours/week.

3G did not feature as a prominent option in the first Community Listening Event for the ground redevelopment project in late November but may have been too specialist and football specific (3). Nonetheless, there was a general appreciation of the need to create a community hub and for the football club to become financially sustainable. 3G could be the first tangible follow-up proposal to present to the local community-potentially supported by representatives from one or two of the above clubs to explain the community benefits as they have seen them first hand. There will be a need to time such an approach to the community within the broader community engagement exercise for the re-development and subsequent to the engagement which will be required with the club's supporters.

5. FINANCIAL IMPACT

BCFC's Current Financial Position

The installation of 3G has to be set within the context of BCFC'S current and projected profitability and financial position over the next 1-3 years.

This Study will not dwell upon the background to the club's current financial position. But it is critically important to acknowledge that with current (and rising) borrowings of approx. £1m, due to current annual trading losses of circa £90K (2016/17), the club remains in an extremely vulnerable financial position. The trading loss is particularly large relative to annual revenues of circa £490k, highlighting the significant challenge required in achieving a break-even position. Independent of the ground re-development project, the Supporters' Society original business plan in 2016 focused on eliminating these trading losses over the medium term by investing in a new GM, marketing and the player budget to achieve a gradual improvement in both match and non-match day revenues. This would be driven in large part by lifting average match attendances from approx. 600 currently up to 1000 and by making more effective commercial use of Twerton's social facilities.

A great deal of effort has subsequently been made to generate the necessary return on these investments and thereby reduce the losses. However, the change of ownership took longer than anticipated (delaying the investment while the losses continued), a change in team manager has impacted upon the hoped for improvement in league position (though current prospects remain positive) and Twerton Park's social and commercial facilities have proven to be more difficult to promote than expected. The CrossFit transaction has been a response to the latter, albeit this only partially offsets earlier lost projected car parking revenue from Curo. Cash proceeds from the mast transaction helped initial cash headroom but the reality is cash headroom is inevitably diminishing while trading losses remain at £90k+. Attendances have also not yet moved up. At best, the turnaround has been delayed, at worst it has been delayed but is also proving harder to kick-start than originally expected. With the club's main asset used so infrequently, in reality it would be a challenge for any business to operate profitably on such a basis.

The club's current position is ongoing dependency on external funding for survival. Recent rule changes by the National League in 2017, however, now requires such funding, if it covers trading losses, to be effectively provided only in the form of equity (leading to dilution) or grants. This precludes further conventional loan finance, creates limitations and uncertainty surrounding the sources of any new capital for BCFC and therefore potentially impacts upon the club's future survival.

In summary, the Supporters' Society and Board need a revised plan that will establish a credible strategy for making up for this lost time and thereby still achieve the step change in the club's revenues and profitability which was originally projected. One alternative would be to reduce costs to help preserve cash headroom, although this would have negative implications for the club's ambition and future in the medium term. Ultimately, the club is suffering from a serious

shortfall in revenues relative to its asset and cost base. It would not be prudent to rely solely on the ground re-development in this context, as it remains subject to significant delivery risk and potential timing delays. 3G would potentially drive higher revenues and is therefore an investment consistent with the club's urgent need to achieve financial sustainability.

Funding the installation of 3G will also require external support. If the money raised is in the form of loans, they will have to be repaid. If grants are available, this is clearly a more attractive option. This question will be addressed if a collective decision is taken to proceed with 3G. The capital receipt due upon Planning permission for the ground re-development is an additional funding consideration.

The Drivers of Demand and Supply of 3G in the Bath Area

Investment in 3G requires an assessment of the extent to which such a pitch would be sufficiently utilised to generate the hiring fees required to more than cover its maintenance, replacement and management costs and thereby contribute positively to the profitability of the club. Achieving financial sustainability is one of the two primary reasons why clubs such as Sutton and Maidstone decided to install 3G.

This Study has therefore undertaken a brief analysis of external reports and feedback on the current and likely future demand and supply of 3G in the BANES area over the next 1-5 years, based on the relevant catchment area and established metrics for determining potential usage requirements.

The BANES Playing Pitch Strategy (1) 2016-2029's key conclusions for football can be summarised as follows:

- Sport plays a key role in the BANES area, which has a strong culture of sports clubs and participation;
- The Council's Fit For Life Strategy (2014) highlights a need to focus on improving health and well-being and reducing health inequalities through increasing physical activity levels and participation;
- Increasing population growth and current and latent demand for football pitches drives future demand. But there is already a need to identify additional locations for 3G pitches 'strategically placed to support football clubs', as there is a shortage of such pitches in the area;
- There is a need to ensure sustainability of junior clubs 'by investing in multi pitch hub sites';

The Somerset FA register currently identifies 17 3G pitches on its website (10). Most of these, however, are attached to schools.

The Lansdown Sports Ground proposal from 2012 (13) also highlighted the need for 3G in the Bath area. While Odd Down has been opened since then, evidence from BCFC in relation to securing training facilities, BCYFC and BANES has consistently confirmed there is an ongoing shortage of local 3G capacity. BANES' Leisure and Business Development Officer has confirmed verbally that BANES would welcome the establishment of a 3G pitch at Twerton Park.

The above BANES report and Lansdown proposal also highlighted the fact that many grass pitches in the catchment area are poor quality (60%) and very few are considered good (only 8%). Some clubs have to play on multiple sites or away from their preferred ground. 3G at Twerton, which would be a high quality and stadium based surface, would represent a premium playing surface locally, capable of attracting current demand away from grass pitches.

Informal conversations with BCYFC, Bath and Wiltshire Boys and Larkhall Athletic FC Youth have all indicated an enthusiasm for moving to 3G at Twerton. Combined with BCFC usage for training and match days during the season, this would result in these users absorbing an estimated average of 17 hours/week of usage, nearly 50% of the 35 hours minimum target and requiring only another 18 hours to be hired out (21). This Study concludes that it is reasonable to assume that market demand would be sufficient to absorb this capacity. Additional demand up to 50 hours/week would result in a significant increase in profitability as well as community impact (see below).

In terms of future supply, BANES is not currently aware of any major upcoming projects that would significantly address the demand/supply imbalance in the short to medium term. The University of Bath, however, has however informally indicated an interest in developing further 3G capacity on site. This would be subject to planning but also be primarily targeted at students. The Rec redevelopment is also believed to be considering 3G though again this will be subject to planning, which impacts on timing, and it is not as well placed to address the needs of those living in and around the Twerton area.

Conclusion

This Study concludes that there is a current demand/supply imbalance in relation to both the provision of 3G and quality football surfaces generally in the BANES region. Therefore in the short to medium term there should be healthy demand for the quality of 3G capacity that BCFC would bring to Twerton and the larger Bath catchment area. 35 hours/week of 3G usage should therefore be achievable. BANES should be supportive of such a project - it would be consistent with publicly expressed Council priorities and its own published research on local needs.

Capital, Replacement and Maintenance Costs of 3G

Verde Recreo has submitted very preliminary costs for 3G under the following categories (7). These are all subject to certain key assumptions and qualifications that will require more detailed analysis if the decision is taken to proceed with the project.

Investing in a 3G pitch will add significant (albeit reasonably certain) fixed operating costs to the club. It is therefore critically important that projected revenues are more than sufficient to cover those costs and generate a consistent profit contribution (these revenues are less certain).

Capital Costs

- Estimated at £535k, to include lighting, engineered base and shock pad.
- Excludes surveys, watering facilities, movable goal posts, maintenance machine (£10K)....
- Including the above and a contingency, estimate, say: £600k.
- This ignores any ground levelling that may be required.
- Time to install-12 weeks (Sutton claim they installed in 7 weeks, albeit with perfect weather)

Replacement Costs

- Budget for £250K after 5 years, to replace carpet only (Slatters claim £200k).
- Requires annual sinking fund of £50k/annum.

3G Maintenance Costs

- 3G maintenance specific: £5k for cleaning by contractor, £3k for FIFA testing, rubber crumb replacement £1k.
- £10k/annum of maintenance costs in total. Contractor provides a full-service quarterly maintenance contract and warranties (for performance and 5 year life @ 50 hours).
- This is offset in full by current estimated grass pitch maintenance costs (8).
- BCFC marginal management costs are assumed to be zero. Based on the current operating costs of BCFC and benchmarked against Sutton (who now manage their ground primarily with only one full-time Facility Development Manager supported by volunteers), this is a reasonable initial assumption.

Projected Revenues for 3G

Pricing for 3G

- It is assumed BCFC's initial average hourly hiring fee would be £70/hour.

This is viewed as conservative, as Twerton would be a premium location. Odd Down and Merthyr currently list hiring for £70/hour, Maidstone lists hiring at £120-160/hour. Sutton quote a range £80-160. As utilisation of the pitch improves, it will also be possible to increase hourly hiring fees, a strategy Sutton is now in a position to adopt selectively.

Clearly BCFC would have the potential to manage its pricing structure flexibly, to set a premium price for peak periods and corporate users and a subsidised price for community/Foundation/school users during off peak periods, for example.

Annual revenues at 30 hours/week times 50 times £70=£105k.

The extra 5 hours to achieve 35 represent the current 3G training and league matches for BCFC. This would save the club approx. £9k/annum in current hiring fees.

1st Year Pro Forma Financial Impact

Based upon the above analysis:

| REVENUE | COSTS | | | | |
|--------------------------------|--|---------------------------------|--|--|--|
| Revenues from 3G hiring | | £105k | | | |
| | Sinking fund | £50k (5 year life) | | | |
| | 3G maintenance costs | £10k | | | |
| | Grass maintenance costs (8) First team 3G hiring costs | (£10k, saving) (£9k, saving) | | | |
| | Marginal management costs | zero | | | |
| FIRST YEAR PROFIT CONTRIBUTION | | £64K | | | |

Sutton and Maidstone currently report approx £200k of revenues from their pitch hire (£150k was achieved in the first year at Sutton) and both use their pitch for between 40-55 hours a week. The above revenue projection therefore looks reasonable, both on that basis and given the above analysis of projected 3G local demand and supply.

This would represent a very material-70%- contribution towards eliminating BCFC's 2016/17 trading loss of £90k. In terms of sensitivities, increasing weekly usage to 40 hours and pricing to £80/hour would increase the above profit contribution by £35k (55%) to £99k- it is a very leveraged return on the asset with marginally higher usage and pricing. *This scenario would eliminate BCFC's current trading losses entirely*.

It is also worth noting that Maidstone believe 50 hours usage may be possible over 4 years (22). Under this scenario, the revenues from an extra 15 hours a week at £70/hour (+£52k) would more than offset the increased annual sinking fund payment (-£13k), generating an incremental annual profit of £40k. Thus the financial and community impact could be enhanced by using the surface more frequently and replacing it more often. Again, to be conservative this scenario has not been adopted, but represents potential upside.

Furthermore, this analysis takes no account of any further profit upside that may accrue over time to the club from the following:

- Savings from match day cancellations;
- Additional bar and ancillary revenues from increased stadium footfall;
- Indirect extra revenues from higher attendances, season tickets, merchandising, other events, room hire etc...as a result of creating a broadly based BCFC community hub.

Maidstone now claims an annual 3G revenue benefit in total of approx £516k, including £200k for pitch hire. Sutton claim their season tickets increased from 125 to 1600 over the three years after its investment in 3G and their attendances have tripled.

It is not possible to isolate and thereby verify the specific impact of 3G behind these clubs' claims, independent of any other key drivers. The Maidstone additional indirect revenue of £300k certainly appears 'indicative' (5) and they have been judged to be an outlier. They have, however, recently reported total revenues for the year to June 2017 of £1.72m (2016: £1.54m), up 12% and a profit of £200k-the fifth consecutive year of reporting profits post 3G (4).

It therefore seems reasonable to assume some additional benefit would accrue to the ancillary revenue streams of the club, once it becomes the community hub 3G would catalyse. It is also worth highlighting that Sutton has been able to use its stadium for other high profile football matches (England C, a Rangers friendly....) all of which bring revenue and footfall into the club and local area. There is no reason why Twerton could not do the same and become a real focal point for football in the Bath area. The Twerton ground compares favourably to Sutton and Bath would be a popular destination for visiting supporters.

As a 'check' on the £64k and after the above analysis was completed, Slatters provided an estimate of £70-80k of additional profit per annum for the majority of clubs who have installed 3G, including ancillary profits.

Conclusion

This Study estimates the first year pro-forma financial impact of 3G would be a material profit contribution to BCFC of approx. £65k. This suggests the business case for 3G is robust. It is based on projected revenues from pitch bookings alone based on 35 hours per week - below the bottom end of the recommended usage range. Any additional ancillary revenues over time would be upside but these are harder to verify at this stage and the business case is not dependent upon them.

While this conclusion is predicated upon the key assumptions underpinning the analysis, such assumptions appear reasonable at this point, if not conservative, relative to other external benchmarks and third party inputs. In fact, there is more upside potential than downside risk to the £65k and over time this figure should also improve through increased use, higher pricing and ancillary revenues.

6. ATTACHMENTS/REFERENCES

- 1. BANES Playing Pitch Strategy, 2016-2029*
- 2. Merthyr Town FC Community Trust Presentation, 2016/17
- 3. Tulip Twerton Community Listening Event, 23rd Nov 2017
- 4. Maidstone United Financial Results to June 2017*
- 5. How Does the 3G business model contribute financially to Maidstone United- EFL 2017 Presentation*
- 6. South Bristol Sports Centre October 2017 Social and Financial Impact Reporting (Bristol and Bath Regional Capital)
- 7. Verde Recreo Artificial Turf Pitch Proposal and Literature
- 8. Email dd 5/1/2018 from Andrew Pierce on Twerton Ground Maintenance Costs
- 9. FA Guide to Artificial Grass Pitches May 2010*
- 10. Somerset FA approved list of 3G pitches*
- 11. FA Guide to 3G Football Turf Pitch Design Principles and Layouts*
- 12. BCFC Community Strategy & Social Impact for a thriving Twerton
- 13. Lansdown Sports Ground Business Plan, 2012
- 14. Email dd 15/1/2018 from S&C Slatter, Brochures, References and Sutton United financial impact
- 15. FIFA Quality Programme for Football Turf, October 2015*
- 16. 3G4US August 2017 Time to Reform Rules on 3G Pitches, Blog*
- 17. Rlf BCFC Fee and Feasibility Proposal and Background
- 18. Max Associates-BCFC Consultancy Support for development of community facilities and 3G
- 19. Sports Consultancy-BCFC Business planning and feasibility proposal
- 20. What Works Centre For Wellbeing-website*
- 21. Usage and Revenue Model (available on request)
- 22. Email dd 16/1/18 from Oliver Ash, Joint owner, Maidstone United.
- 23. FA Statement: Safety of Artificial 3G Pitches in the UK*

^{*} available on-line.