



# East Devon District Council

## Assessment of Existing and New Potential Sites in Exmouth & Honiton

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## Introduction

- East Devon District Council following an undertaking of a playing pitch strategy identified that there were requirements for additional sports pitches in the Exmouth and Honiton areas. As a result the STRI were commissioned to undertake a review of existing sites and assessment of potential new sites that have been identified by the Local Authority.
- The project is split into two potential areas, firstly a global agronomic / site potential review for which this is the report and secondly surveying and site layouts being developed for those sites with most potential.
- Following on from the initial assessment it is clear that the existing sites do not provide sufficient sports facilities and in many cases the surfaces and playing conditions were very poor. This was the case in both Exmouth and Honiton. There were exceptions particularly in Exmouth where the surfaces were good due to the more sandy soils of the cricket club and Exmouth Town football club and the heath soils of the Withycombe pitches.

In Honiton all sites were on heavier soils and therefore suffered from poor potential drainage.

As a consequence of recent wet weather this has meant that the pitches on the heavier soils were almost unplayable or had significant disturbance due to play in unsuitable conditions. As part of the ongoing strategy current pitch improvements should be considered to increase the availability and potential usage.

- A number of new sites were identified and for a number of reasons were either considered for future investigation or were rejected. Key parameters that were considered were based on those factors that would make development of a site very costly such as include excessive slopes needing major cut and fill grading, or factors relating to its usability as a playing field such as potential access and size and then other mitigating factors such as the need to remove hedgerows.
- A standard methodology of assessment was used and the summary sheets are included in the appendix to the report. The aim was to find new sites that provided a sufficient tract of usable land to allow the development of both junior and senior pitches at moderate cost. The report provides a suggested priority list for site to be considered and this is based on ease of works and partially location.

Existing sites also were assessed to identify the need to make improvement works. In each case basic recommendations were made according to the need of each site.

## Methodology

To ensure an efficient and repeatable assessment strategy a methodology for all site assessments was developed. This included key aspects of the site location, access, general topography (although this was not measured using laser equipment but by eye), current vegetation, soil type and drainage characteristics, size of the site and other mitigating risks or factors that would make the site difficult to potentially develop. This resulted in a graded score. Each of the parameters was weighted to give a true reflection of the suitability of a site.

The existing sites were assessed using a standard pitch assessment methodology based on IOG, STRI and FA standards for a Local Authority pitch.

## Scoring interpretation

The weighted scores were put into a range of categories and given a colour code. This is shown below:

Overall Weighted and Adjusted Scores /100				
Unacceptable	Poor Quality	Unsatisfactory	Acceptable	Good Quality
≤ 30	30 - 55	56 - 70	71- 85	> 85

The resultant score was a good guide as to whether the site would be feasible or not and generally those falling in the lower 2 brackets would be rejected. The upper 3 brackets would give a range of investment needs from those in the green bracket requiring few or no works, the blue possibly needed to be improved and then the yellow significant works being required.

Potential works for each site was briefly identified and the site ranked in potential order of priority viewed by the report author.

Where permissible the sites were walked to give a full picture although a number of the sites did not have permission from the land owners and therefore review was undertaken from the perimeter of the site where possible. In all cases this gave a good picture of the site and therefore there were no concerns about sites that might have been rejected but would have been of potential.

Ultimately within such a process there is a need to consider the potential cost and cost benefit of developing sites. The aim however is to achieve a playable surface for the majority of the winter period except in extreme weather events. This would maximise the playability of a site. It also means that the greatest amount of use can be undertaken on an area.

Many of the soils assessed for works were typically heavy and either silt or silt and clay rich. These have significant issues of drainage and require very intensive and potentially costly solutions to improve performance. As a typical guide for one adult size pitch to install a close centred drainage system, sand amelioration, surface cultivation and overseeding could cost in the region of £50,000. It should be noted at this point that it is our concern that existing sites were in poor condition and would greatly benefit from increased maintenance strategy as this will dramatically improve playability and potential use.

Where a site has a slope then the process of a cut and fill plateau would need to be considered. The basic principal of this would be to remove topsoil, grade subsoil and replace the topsoil. In all cases drainage would then be required in addition. The challenge of grading a site is that bank take up valuable space and therefore a site needs to be considerably larger to accommodate a sensible number of playing surfaces. Another disadvantage of cut and fill is that can take a number of years to settle in as soil structure is damaged and timing of works is critical. As an example to construct an adult pitch where any cut and fill is required, the costs would be in the region of £100,000 excluding drainage and other works.

Therefore those sites identified with potential should be surveyed in stage 2 to allow plans to be drawn up and therefore costs can then be allocated. This is outside the scope of this report.

The below table provides a summary to the assessment ranked in the authors priority order. Note the order within an individual rank band is not in order of priority.

Site	code	score	outcome	key reasons	works	potential pitch numbers	possible priority for works
Exmouth							
St Johns Road	E1	67	possible	Site with good space but very wet, could accept at least 2 new pitches	drainage and levelling to extension	2a+2j	1
Hulham Road	E12	61	possible	Some slopes to deal with and hedgerows	drainage and levelling	3a+1j	1
Withycombe new site	E19	80	possible	Flat site but across busy road from existing sports site	surface works possibly drainage	3a	1
Rolle College	Ec	75	existing	Central site with potential to accommodate upto 3 pitches	drainage	1a+2j	1
Warren View	Ed	79	existing	Site with potential for 3g and development as a sports hub	drainage and 3G	1a,3g +1j	1
Exmouth Cricket club	Ee	97	existing	Site with potential for multi use	none	1a+1j	1
King Georges field	E3	69	possible	Next to existing ground but site small	drainage but could be brought into use without works	1j	2
Brixington Primary School	E7	62	possible	Space limited site but could be improved, may need changing facilities	drainage	2j	2
Courtlands Cross	E11	58	possible with better access	Flat site but with poor access	drainage	3a	2
Imperial ground	Ef	85	existing	Large site with limited extra space, poor surface conditions	drainage and levelling	2a	2
Raleigh Park	Eg	71	existing	Central site restricted in size and heavily worn	drainage	1a	2
Littleham Primary school	E4	62	possible with access	Only progress if access can be resolved, would need significant works	levelling and drainage	2j	3
Salterton road	E9, E16	62	possible	Some restrictions and would need grading works	levelling and drainage	2a+1j	3
Withycombe Pitches	Ea	94	existing	Good condition, no further space		3a+1j	3
Exmouth town fc	Eb	79	existing	Small site, fair condition no further room for expansion.	increase maintenance	1a	3
Brixington Park	E5	62	no further works	Site heavily used as a park, poor soils and slopes		1j	4
Knapp Cross	E2	55	reject	Site very small with poor access			5
Imperial recreation	E6	57	reject	On landfill and next to important wildlife site, used for other key activities			5
St Joseph's Primary School	E8	54	reject	Very small site with large mature tree			5
Lower Halsdon Farm	E10	36	reject	Steep slopes poor access and irregular site			5
Canterbury Way	E13	49	reject	Site small and difficult to develop, small copse in middle of site			5
Sowden Brake	E14	44	reject	Partitioned site with difficult access off busy road			5
Withycombe Barton	E15	41	reject	Difficult site with slopes and out of town			5
Withycombe Archery	E17	81	reject	Current use incompatible with winter sports			5
Littleham Brook valley	E18	48	reject	Access difficult, expensive to develop due to slopes			5
Honiton							
St Ritas pitches	H1	75	possible	Good site but next to St Ritas retreat	drainage and surface works	2a	1
St Ritas extra	H9	76	possible	Narrow strip of land possible use for mini pitches	drainage and surface works	2m	1
St Ritas pitches	Hb	65	existing	Undulating site with some expansion possible, access poor and soft	drainage	2a+1j	1
All Hallows	Hc	75	existing	Space for 2 pitches, very wet and soft	drainage	2a	1
Former Showground	H4	63	possible	Good site but with slopes and large pylon	levelling and drainage	4a	2
Tower Hill	H2	58	possible	Large site able to accommodate a number of pitches, out of town	drainage and infrastructure	5a	3
Manor house	H5	64	possible	Site reasonable but out of town and now part of an exclusive pavillion development	limited works but may need drainage	2a	3
Kings Arms Farm	H7	61	possible	Large site but on edge of town and on floodplain	drainage and surface works	3a	3
Mountbatten park	Ha	82	existing	Football and cricket with limited space, pitches wet	drainage	2a	3
Honiton Showground	H3	57	reject	Large site but out of town and on floodplain			4
Hayne lane	H6	50	reject	Steeply sloped and pylon across site			5
Awliscombe Road	H8	34	reject	Steeply sloped , out of town and with large pylon			5

## Exmouth

In Exmouth eight existing sites were assessed and 17 potentially new sites. The new sites ranged from school playing fields through to agricultural fields. Of the new sites seven were rejected for a range of reasons from a very steeply sloped, poor access, location or size issues. This left 11 sites that could have possibilities subject to further investigation.

The existing sites at Exmouth Cricket Club, Exmouth Town Football Club and Withycombe pitches were in good condition but had no additional space for further expansion. The remaining sites had limited ability to accommodate additional pitches and would benefit from additional works or increased maintenance. The main observation however was that of poor surfaces mainly due to poor drainage and the problems of heavy soils.

A number of the preferred sites could provide significant areas for a local sports hub and would more easily meet the needs of the playing pitch strategy by being more flexible in layout. The key sites were Withycombe new site providing three adult size pitches, Courtland Cross providing three to four adult pitches, Salterton Road three to four pitches, St John's Road additional adult and junior pitches. Hulham Road would be interesting due to the location close to new housing and could provide three to four pitches. Remaining sites were generally smaller providing junior pitches and were typically on existing primary schools.

It would therefore be appropriate for a survey to be undertaken on St John's Road, Littleham Primary School, Salterton Road, sites E9 and E16, Courtlands Cross, Hulham Road and Withycombe new site. In town on the existing sites the Imperial Ground, Raleigh Park and Warren View would benefit from being surveyed. Rolle College is potentially being surveyed as part of a wider development in the area and therefore would not need to be included in this project.

## Honiton

At Honiton nine potential sites were reviewed and three existing sites. As with Exmouth the existing sites all showed issues of poor drainage at differing degrees and would require additional works/maintenance to improve their playability. All three sites however were congested for space and would allow no further pitch development. Of the nine new sites, three sites were rejected for slopes, location or other reasons such as power cables or complexity of development. This included the Hayne Lane site, the Awliscombe Road site and the current Honiton showground.

Of the remaining sites all would require some form of levelling and provide sites with varying sizes of layout.

The area around St Ritas was interesting in that the field to the south of the retreat would provide a good area for the pitches on a moderately level ground and would only need surface works. There was also an additional strip of land closer to the A30 that could provide additional mini pitches. The current St Ritas pitches however were very undulating and could be expensive to provide additional pitch areas bar perhaps a small mini pitch on some of the remaining flatter ground. There was also a significant water pipe running across the lower part of the site that may preclude grading being able to be undertaken in this area. This would need further investigation and discussion with South west Water. The Mountbatten pitches are surrounding a cricket square and therefore bar some increased maintenance provide a good surface.

Tower Hill continues to be a potential site although its location out of town and the high cost of developing infrastructure for the site could question its future progression.

The former Showground is of potential being close to the town but does have slopes and is restricted by the pylon running across the western side. It is estimated this would provide a space for three to four adult pitches on levelled and drained ground. There would need to be a soft cut and fill on this site due to the levels.

## Flood Plain

The River Otter flood plain running near Honiton is a challenge to site choice as it is known to flood and has done so within the last ten years. Pitches located in areas liable to flooding have issues and concerns. The first issue is whether any change of landform can be achieved due to the requirement provide sufficient flood plain areas. This often restricts design and landforms that can be reworked. However, consultation with the Environment Agency can provide solutions.

The second issue is when a pitch floods. Initially the problem is of contaminated silts that could cover the surface of the pitch. This would make the pitch unplayable until ultraviolet light breaks down bacteria on the surface. Extreme care at this stage would have to be made with anybody working on the site as it should be treated as contaminated waste. A layer of silt is not such an issue as the River basin soils are created by such layers, however the impact by a drainage system can be quite significant as it would cap off the system. The decision on whether silts would need to be removed would have to be based on the situation following a flood event. It is likely that either drainage would need to be remediated or secondary drainage, sand dressings and decompaction may be possible.

However, there is a high risk that pitches would be out of use for a period of time typically in the winter months when floods occur and this could ultimately preclude provision of pitches on such sites. Inevitably there would be higher costs of maintenance that would have to be factored in in a development in such areas. The only area potentially considered or suggested consideration would be the Kings Arms farm site H7 as this is closest to the town edge. It is likely that with surveying review of the work drainage and surface would be needed and could accommodate at least three adult pitches.

## Artificial 3<sup>rd</sup> Generation Pitches

One way that capacity can be achieved within football/rugby is to provide a 3G artificial surface. These have the ability to play in all weather conditions. Considerations should be made in the fact that such surfaces have a life, potentially up to around 10 years before the carpet needs replacing, have a high capital cost and as use increases have a moderate maintenance regime particularly regarding brushing and debris removal. However, as part of a sports hub can be a powerful addition to any town.

In Exmouth whilst there is consideration to create a 3G surface at Raleigh Park which is currently used by Withycombe Rugby Club and would also be used by the neighbouring collage, the site may be restricted in its use to wider sports clubs. There are floodlights currently on site and therefore any restrictions to floodlighting would not necessarily apply. On reviewing the existing sites the Warren View site could have a high level potential for a 3G site. This would allow a community sports hub to develop and provide a wider community use. Being in a former quarry it does allow any 3G surface to be more hidden but the surroundings are houses and issues with achieving planning for floodlighting could occur. St John Roads could also site a pitch although floodlighting would be potentially difficult to be installed.

In Honiton it is slightly more difficult to predict where a sand based ATP surface should be sited but the worst soils are at the All Hallows sports ground as there are existing courts and other facilities it

may be that this would be an interesting location. Alternatively, one of the newer sites as they are developed would include or should include a sand based ATP surface.

A final point to note is that there are different specifications for the different sports and therefore a correct choice is important. As the project progresses we can provide advice on the different surfaces and profiles.

## Devon Hedgerows

Many of the sites had established and ancient hedgerows across them built on Devon banks. The established method of dating hedges by number of species present showed many were significantly old. The difficulty of any sites contained by such banks and hedges is that wildlife and particularly bats could roost particularly in the larger trees and the age of the hedgerow could limit its potential removal to make sites more compatible. Therefore, every site would have to be assessed potentially by an ecologist to see the likely risks and further consultations made to see whether any hedges could be removed on each site. It should be noted this may preclude some sites from future development.

## Other Soils Issues

Many of the new sites had a high stone content in the topsoil. Stones of around 15 mm can be removed through effective stone buying and removal techniques. However smaller stone can still cause significant injury and therefore effective design of any pitch surface is essential. Probably the most key route would be that of a sand cap the surface to protect the player from coming into contact with the stone. It is interesting that over time stone tends to be cleaned from a fixed profile not due to stones moving necessarily but due to silty soils gradually working their way to the surface in a similar manner as when one puddles concrete. This can happen moderately quickly in the first five years of using a site or could take ten years if there is a very high stone content. The key risk of the above is that if the sand cap is removed through excessive play then stone at lower levels can be re-exposed.

## Pitch Improvements to Current Sites

It is clear on the review of the pitches in Honiton and Exmouth that the current pitches in many areas are struggling with drainage capacity and hence pitch playing performance. Separate reviews are included with the Appendix for the existing sites to give a quantifiable measure of their current condition.

On observation it is likely that most of the sites were developed in the 1970s either with cut and fill if they were steeply sloped or through drainage. Such drainage systems typically would have been a clay pipe surrounded by some gravel and topped up either with a sand or a native soil. Such systems have a life typically of around 20 years. Most of the sites now have reached the end of this life cycle. The soils also on the site are very silty and clay rich and these under play tend to de-structure quite significantly and without moderately high annual levels of maintenance of sand dressings and verti-draining can often play very poorly. There is often a downward trend in the quality of the surface leading to pitches becoming less available during the playing season.

In order to improve these the key action would be install a close centred drainage system. This could be a combination of primary drains typically at around 3 m centres that would work across a fall into main pipe and to an outfall or attenuated soakaway. In some places this could be quite a challenge and in others existing outfalls could be retained. In many cases permissions would be needed to tap into such outfalls. The drainage would be modern plastic pipe backfilled with a grit and topped to the surface with either sand or rootzone. This would allow an active removal of water from the surface into a drain line. At 3 m centres this gives good performance and a long life.

Initially however to further improve the site some secondary sand bands can be installed across the drain lines and additional sand dressing applied. It should be noted that such a system would have a limited life, (i.e. rapid rate of water removal for the first five to six years) before sand bands cap over and then a reasonable level of drainage from then onwards to around 25 yrs. This can be enhanced by either reinstalling sand bands or annual additions of sand dressing of around 100 tonnes per ha. The use of aeration and particularly decompaction via the Verti-drain and also equipment such as the Linear decompactors such as the Earthquake, Shockwave or Groundbreaker have a significant benefit although on the clay soils up to four to five applications per year will be necessary to improve the site.

The benefit of all the above works is that the playability of the site can increase from an estimated one game per week which is typically the level an undrained site of this soil type would cope with, on average up to three games or four per week if improved to a higher level. This could have a significant impact on the amount of pitches required for a given area to reach the requirements of the strategy. Interestingly one area that causes issues is that of training activities and causal use. Both of these are intensive activities and are more damaging to a pitch than a match and therefore sites need to be protected/managed effectively.

### Sites identified for Surveying

The below table identifies those site recommended for next stage survey work. This will provide the potential size and layout possibilities once levelling has been taken into account. This will also allow a better guide to the likely cost estimate to develop pitches. It should be noted that these sites would need to be surveyed for next stage works but may be deemed unfeasible prior to this stage.

EXMOUTH	Site Code
St Johns Road	E1
Littleham Primary	E4
Salterton Road	E9,E16
Courtland Cross	E11
Hulham Road	E12
Withycombe new site	E19
Imperial ground	Ef
Raleigh Park	Eg
Warren View	Ed
HONITON	
St Ritas	H1
Tower Hill	H2
Former Showground	H4
Kings Arms Farm	H7
St Ritas Extra	H9
St Ritas	Hb

Signed

A handwritten signature in black ink that reads 'Steve Gingell'.

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