



GRAVEN HILL, BICESTER



Construction Phase 1a
Performance Specification for LEAPs - LANDSCAPE

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Quality Assurance – Approval Status

This document has been prepared and checked in accordance with Waterman Group's IMS (BS EN ISO 9001: 2008, BS EN ISO 14001: 2004 and BS OHSAS 18001:2007)

Issue	Date	Prepared by	Checked by	Approved by
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Comments

Comments



Disclaimer

This report has been prepared by Waterman Infrastructure & Environment Limited, with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporation of our General Terms and Condition of Business and taking account of the resources devoted to us by agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

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Drawing **WIB13983-107-AA-74-701 Infrastructure and Landscape Works 1a Western Swale Park LEAP** and **WIB13983-107-AA-74-702 Infrastructure and Landscape Works 1a Woodland LEAP**

1. General Information

- 1.1. Waterman Infrastructure & Environment Ltd (Waterman) have prepared a Design Brief, Evaluation Criteria, Concept Design Drawings and supporting information to inform this Performance Specification prepared on behalf of Graven Hill Village Development Company Limited as part of the proposed development at MOD Graven Hill, Bicester. Within the first phase of Land Transfer Area 1, (LTA1a) two Local Equipped Areas for Play (LEAPs) are proposed. The locations and areas for these facilities have been co-ordinated in terms of their proximity to other play facilities proposed in subsequent phases and their general conformity with the broader environmental and engineering requirements of the development.
- 1.2. The Design Brief, Concept Design Drawings and supporting information will be developed (as a LEAP Proposal) by the tendering play area contractors, (Tendering Contractor) to deliver the detailed design documents, which should be sufficiently detailed to explain how the detailed design responds to the Design Brief and be technically sufficient to obtain all necessary permissions and to deliver an appropriate level of detail for construction purposes.
- 1.3. The detailed design should reflect the prescribed location and extent of activity zone including vehicular and pedestrian entry points or other access requirements.

2. Tender Submission

2.1. The selection of the successful LEAP Proposals will be evaluated by the Client team on the following three broad criteria:

- The manner and effectiveness with which the submission responds to the Design Brief and Concept Design Drawings;
- The assessed quality, durability and ease of maintenance of the play equipment and other structures proposed; and
- The distinctive play value of the proposals.
 - Information/ideas effectively communicated both graphically and technically for construction purposes
 - Sufficient technical detail to be assessed by the Local Authority as the body responsible for granting Planning Approval, adopting and maintaining the LEAP facilities
 - Compliant with all relevant safety standards including recommendations for long term maintenance during operation
 - Provide relevant material sufficient to support the Designers Risk Assessment covering the LEAP facilities
 - Confirm how/where/why sub-contractors to be used for any part of the works(?)
 - Proposals for minimally ground intrusive solutions to equipment foundations within Conifer wood area with particular reference to recommendations within BS5837: Trees in relation to design, demolition and construction – recommendations.
 - Confirm site access/ground protection proposals for conifer wood construction
 - Allowance for site meeting to inform thinning works in Conifer wood sufficient for installation of play equipment and associated built features
 - Allowance for 'making good' landscape areas – liaise with landscape sub-contractor to east of working areas.
 - Confirm that the range of equipment caters for a range of play ages.
 - Provide a well-drained site with suitable ground conditions.
 - Designed to stimulate requirements for play and able to facilitate the scope for exuberance and wider play.

1.1 Evaluation Criteria

2.2. The LEAP Proposals will be evaluated by a scoring matrix based on the three broad criteria set out above, whereby each is given a weighting as set out in Appendix C. These broad criteria are further broken down into sub-criteria, which are also set out in Appendix C. Each of the sub-criteria have also been allocated a weighting representing their relative importance. During the evaluation of the LEAP Proposals, considerations will include:

- Whether the proposals are likely to provide an attractive and effective play scheme;
- Whether the proposals meet or exceed the requirements set out in the Design Brief including relevant safety standards; and
- Whether the proposals are perceived to be practically realistic, reasonable for play, financially viable and deliverable in terms of their methods of construction and materials proposed.

1.2 Information to be returned

- 2.3. The following items should be submitted as part of the tender package for each LEAP Proposal. Please number any enclosures and submit in accordance with the order specified below:
- i) The Outline Design Proposal for each proposed LEAP represented as plan drawing at 1:200 scale
 - ii) A copy of the Design Evaluation Tables set out in (Appendix B) for each proposed LEAP, in which you have completed the column headed 'How feature(s) fulfil requirement', setting out your view of the manner in which you consider you have addressed the issue concerned. Please note that you should not attempt to score your design:
 - iii) A description (in not more than 1000 words) of the design approach, which must identify how the Outline Design Proposal meets the aims of the Design Brief and the needs of potential users;
 - iv) Illustrative materials that support the Outline Design Proposal (e.g. equipment images and a short description of the range and type of play experiences catered for);
 - v) An Outline Cost Proposal and a written confirmation that your LEAP Proposal is deliverable within the budget allocated, together with a written indication of how you anticipate your budgeted figure will be expended by reference to the following heads of expenditure:
 - a. Supply of play equipment and associated fencing, gates and barriers
 - b. Installation of play equipment and associated fencing, gates and barriers
 - c. Ground modelling or earthworks
 - d. Supply and installation of fire retardant and other safety surfacing (where applicable)
 - e. Supply and installation of Signage (sufficient to contain basic information identified in RoSPA Information Sheet Number 18)
 - f. Supply and installation of Site furniture (including seating/litter bins etc.)
 - g. Post-installation inspection and report by a qualified, independent assessor
 - h. Contingency sum
 - i. A rate per m² for supplying and laying general purpose amenity turf and a cost per visit to water during 24 month establishment period.

3. Appendix A: Design Brief

1.2.1 Introduction

- 3.1. The design of the LEAP Proposal should complement the landscape character of their respective locations, to ensure they are distinctive and unique in nature and not overtly standardised in terms of the overall solution. Cherwell District Council have expressed a preference for a natural design approach comprising a 'naturalistic' or 'rural' aesthetic that reinforces the 'sense of place'. This approach should consider the use of a range of landscape features and the use of robust, natural materials throughout, including the timber-based play equipment and ancillary items.
- 3.2. The requirement for any proposed mounding or earthworks as part of the LEAP Proposals is to be included within the tender submission. A supply of stockpiled soil may be available on/adjacent to the Graven Hill site which, (if available) could be transported to the LEAP location(s) if required. The suitability of any such materials for use within the proposal shall be ascertained by the Tendering Contractor. All soil movement (including stockpiling and storage and grading) shall be included within the pricing.
- 3.3. A selection of timber logs/arising resulting from tree felling/vegetation clearance within the Graven Hill site may similarly be available, (by prior agreement) for re-use within the proposed LEAPs. Again, the suitability of any such materials for re-use within the proposals shall be ascertained by the Tendering Contractor. The cutting up, shaping, movement and installation of re-used timber shall be included in the pricing.
- 3.4. Indicative footway/cycleways, where indicated on the Concept Design Drawings, will be constructed by others. The construction of footpaths, hard surfaces and safety surfacing that form part of the design within each LEAP shall be included in the pricing. Turfing (or seeding), for amenity or as part of any impact absorbing safety surfacing within the LEAP, shall be included. Fencing, barriers and gates proposed as part each LEAP shall also be included in the pricing.
- 3.5. An allowance shall be made for liaising with the main infrastructure contractor and/or landscape sub-contractors with regard to the timing of the works, construction access and coordination of works at the boundary between the LEAP and adjacent spaces being implemented by others.

Items to be included in the tender price that form part of the LEAP activity zone and ancillary landscape areas.	Items to be excluded from the tender price that will not form part of the LEAP activity zone and ancillary landscape areas. Items to be constructed / carried out by others
All design and construction costs.	
Paths and hard surfaces	Access paths outside the LEAP
Formation of mounds and earthworks	Formation of attenuation / balancing ponds / swales as shown on the Concept Design Drawings.
Fencing, gates and associated boundary treatments bounding the LEAP.	Other fencing.
Turfing / seeding and safety surfacing.	Turfing / seeding.
Post-Installation Inspection Report	

Contingency sum.

- 3.6. All play equipment is to be supplied and installed in accordance with current European Standards EN1176/7 and the main structures (e.g. combination multi-play structures, principal play equipment) are to have a minimum 10-15 year guarantee. The layout should also be designed in accordance with the requirements of the Disability Discrimination Act (DDA), 1995. The impact absorbing safety surface should provide a continuous surface wherever possible and be DDA compliant. The design is to accord with the Fields In Trust 'Planning and Design for Outdoor Sport and Play'¹ and 'Guidance for Outdoor Sport and Play, Beyond the Six Acre Standard, England'².
- 3.7. The LEAP should be designed and installed to a standard sufficient for a post-installation inspection by an independent, certified inspector (Register of Play Inspectors International (RPII)). A RoSPA play value rating of Good should be achieved for each of the age ranges specified below. The cost for the inspection and report should be included within the tender.
- 3.8. In all cases, the LEAP Proposals must:
- Have a *minimum* activity zone area of 400 m²;
 - Cater for children from 4 to 8 years of age;
 - Be within 5 minutes' walking time from home;
 - Have a buffer zone not less than 10 m in depth between the activity zone and the habitable room façade of an adjacent dwelling. This zone could include planting to enable children to experience natural scent, colour and texture;
 - Not have play equipment overlooking nearby gardens;
 - Be positioned by a pedestrian pathway on a well-used route;
 - Occupy a well-drained site with a grass or hard surface and features an appropriate impact absorbing surface beneath and around the play equipment conforming to EN 1177;
 - Contain at least 5 types of play equipment, of which at least two are individual pieces, rather than part of a combination multi-play unit. Each type of play equipment should be designed to stimulate one of the following activities;
 - Balancing
 - Rocking
 - Climbing/Agility
 - Sliding
 - Social playAdditional items may focus upon rotating, swinging, jumping, crawling, viewing, counting or touching.
 - Conform to EN 1176;
 - Contain seating for parents and/or carers;
 - Contain a litterbin;
 - Have adequate space around the equipment to enable children to express their general exuberance and play games of 'tag' or 'chase';

¹ 'Planning and Design for Outdoor Sport and Play', Fields In Trust 2008.

² 'Guidance for Outdoor Sport and Play, Beyond the Six Acre Standard, England', Fields In Trust 2015.

- Where appropriate, fencing of at least 1m height around the perimeter of the activity zone, with two self-closing gates, on opposite sides of the play area, to deter entry by dogs and to restrict opportunities of bullying;
- Have some form of suitable barrier to limit the speed of a child entering or leaving the facility; and
- Have signage indicating:
 - The area is solely for use by children;
 - Adults are not allowed unless accompanied by children;
 - Dogs are excluded;
 - Name and telephone number of the operator of the facility to report any incident or damage to the play equipment;
 - Location of nearest public telephone.

1.2.2 LEAP 2 – Water and Sand Play

Refer to Concept Design Drawing **WIB13983-107-AA-74-701 Infrastructure and Landscape Works 1a Western Swale Park LEAP**

Location

- 3.9. LEAP 2 is located within the heart of the Graven Hill development, in the vicinity of the proposed Western Swale Park public open space.

Site Usage

- 3.10. The focus for the LEAP is for children aged 4–8 years. The LEAP will be in close proximity to, but outside the buffer zone of, residential properties and within a linear area of public open space that is overlooked by the residential areas in order to facilitate natural surveillance. The linear open space within which the LEAP is situated will provide multi-function of purposes including amenity, drainage (i.e. swales) and ecological connectivity (e.g. bat corridors).
- 3.11. Adjoining the LEAP, but outside the scope of the LEAP’s activity zone, will be a hard-surfaced area with external seating to provide natural surveillance over the LEAP. This area will also provide a vantage point over the wider open space including views towards the swales and planted areas to enhance the amenity and ecological interest of the project.

Aims

- To provide a play space that is stimulating, challenging and imaginative while connecting users to the natural environment.
- To offer a play space that is inclusive and innovative, that creates a ‘sense of place’, appeals to the whole community and encourages wide range of users.

Vision

- 3.12. The space should incorporate various types of play equipment to facilitate a range of play experiences such as swinging, rocking, climbing/agility, balancing, sliding, rotating and strength building activities, as well as social play. Impact absorbing surfacing should also be provided where required.

- 3.13. It is desirable for the space to be informally divided into different activity areas, with each area to cater for particular age groups, providing variety and choice. Overall the areas should be designed as a series of inter-connected spaces so they appear part of one open space.
- 3.14. The boundary of the LEAP should be fenced and gated as appropriate. This fencing arrangement is illustrated on Concept Design Drawing **WIB13983-107-AA-74-701 Infrastructure and Landscape Works 1a Western Swale Park**
- 3.15. In addition, the design should include for:
 - At least one robust seat suitable for parents/carers with back and arm rests; and
 - One litter bin located close to the activity area (to be of complimentary style/material to seating).

1.2.3 LEAP 4 – Woodland Play Area

Refer to Concept Design Drawing **WIB13983-107-AA-74-702 Infrastructure and Landscape Works 1a Woodland LEAP**

Location

- 3.16. LEAP 4 is located within the heart of the Graven Hill development, at the edge of an existing coniferous woodland plantation and near the Entrance Green public open space.

Site Usage

- 3.17. The focus for the LEAP is for children aged 4–8 years. The LEAP will be situated within the north western corner of a rectilinear block of existing coniferous woodland which imparts a strong character to the setting of the site. The LEAP will be in acceptable proximity to commercial and residential properties but within a range that can provide opportunities for informal surveillance.

Aims

- To provide a play space that is stimulating, challenging and imaginative while connecting users to the natural environment particularly the surrounding coniferous woodland.
- To offer a play space that is inclusive and innovative, that creates a 'sense of place', appeals to the whole community and encourages more beneficial use of the woodland area than the existing situation.

Vision

- 3.18. The design should make use of the existing coniferous woodland; taking inspiration from the woodland character as a theme. The design for the LEAP should also facilitate further access into the woodland areas whilst ensuring appropriate integration within the tree canopy and root protection areas. Trees within the woodland will be selectively thinned out, (by others) to allow the additional space for informal paths, seating and the siting of play equipment in and amongst the existing trees ensuring their root protection areas remain intact from construction disturbance..
- 3.19. The LEAP should incorporate a range of play equipment to enable a wide variety of play experiences such as swinging, rocking, climbing/agility, balancing, sliding, rotating and strength building activities, as well as social play. Impact absorbing surfacing should also be provided where required.
- 3.20. It is desirable for the space to be informally divided into different activity areas with each area to cater for particular age groups, providing variety and choice. Overall the areas should be designed as a series of inter-connected spaces so they feel part of one space.

- 3.21. The outer boundaries of the LEAP can be permeable with the surrounding area, to allow the LEAP space to effectively spill-out and connect into the heart of the coniferous woodland. The use of natural boundaries should be explored that facilitate movement rather than the creation of strong barriers. Boundaries such as dead-hedges/brush piles should be explored but where the LEAP borders adjacent roads barriers should provide an appropriate level of enclosure to ensure safe crossing points are defined.
- 3.22. The use of minimally intrusive materials should be explored for paths, impact absorbing surfaces and foundation systems to play equipment etc. The use of 'no-dig' construction techniques will be expected due to the requirement to minimise any construction impacts upon tree roots.
- 3.23. In addition, the design should include:
- At least one robust bench suitable for parents/carers with back and arm rests;
 - One litter bin located close to the activity area (to be of complimentary style/material to seating).

4. Appendix B: Evaluation Criteria

1.2.4 Evaluation Criteria

- 4.1. Each LEAP Proposal will be evaluated by reference to the three broad criteria set out below, scored as follows:

Table 1: Evaluation Criteria

Criterion	Score (%)
The manner and effectiveness with which the submission is perceived to respond to the Design Brief and Concept Design Drawings	50
The assessed quality and durability and ease of maintenance of the play equipment and other structures proposed.	30
The perceived play value of the proposals.	20
TOTAL	100

1.2.5 Evaluation Sub-Criteria

- 4.2. During the evaluation, considerations will include:
- Whether the proposals are likely to provide an attractive and effective play scheme;
 - Whether the proposals meet or exceed the requirements set out in the Design Brief including relevant safety standards; and
 - Whether the proposals are perceived to be practically realistic, reasonable for play, financially viable and deliverable in terms of their methods of construction and materials proposed.
- 4.3. LEAP Proposals will also be rated against the Evaluation Sub-Criteria set out below in the **Design Evaluation Tables 2-4** below. These tables are to be completed and returned as part of the tender with 'How feature(s) fulfils requirement' column filled out, setting out how the criteria have been addressed. **Please note that tenderers should not attempt to score their own design.**

1.2.6 Design Evaluation Tables

Table 2: Evaluation Sub Criteria - Response to the Design Brief and Concept Design Drawings

Item	Max	Score	How feature(s) fulfil requirement
Enlivens the open space and creates a 'sense of place'	5		
Caters for a wide age range (4 to 8 years)	5		
Connects users to the natural environment	4		
Challenging and imaginative	4		
Inclusive and appeals to the whole community	4		

Innovative nature of response and proposals	5
Overall response of proposal to the Design Brief	5
Maximum Points Score	36

Table 3: Evaluation Sub Criteria - Quality and durability and ease of maintenance of the play equipment and other structures proposed

Item	Max	Score	How feature(s) fulfil requirement
Fire retardant safety surfacing	5		
Spares backup policy	4		
Use of stainless steel slides	4		
Anti-wrap swing mechanisms	4		
All play equipment meets BS EN 1176	5		
Safety surfacing meets BS EN 1177, BS 7044 (fire resistance) & BS 7188 (anti-slip) or their European equivalents	5		
Maximum Points Score	27		

1.2.7

1.2.8 Play Value Evaluation Tables

Table 4: Evaluation Sub Criteria - Play Value (Based on RoSPA Play Value Assessment Sheet)

Toddlers/ Infants (e.g. 2-6 years)	Max	Score	How feature(s) fulfil requirement
Balancing	1		
Crawling (short tunnels etc.)	1		
Rocking	1		
Rotating	1		
Sliding	1		
Swinging	1		
Sand Play	6		
Water Play	6		
Sensory Items	3		

Textural variety	2
3+ Primary Colours	2
Toddler seating	1
Imaginative play (area lending to use of child's imagination)	5
Interactive ability (Items encouraging group play)	2
Parental Seating (in Toddler section)	1
Maximum Points Score	34
Excellent =	Good =
>22	18-22
Average =	Below Average =
14-17	9-13
Poor =	<9
OVERALL TODDLER ASSESSMENT =	

Juniors (e.g. 7-12 years)	Max	Score	How feature(s) fulfil requirement
Balancing	2		
Crawling (Short tunnels)	1		
Rocking	1		
Rotating	1		
Rotating (multi user, roundabouts etc.)	2		
Rocking and rotating (Mobilus, Waltz etc.)	4		
Sliding conventional (slide etc.)	1		
Sliding (fireman's pole etc.)	1		
Swinging (single)	1		
Swinging (group)	2		
Gliding (aerial runways etc.)	2		
Hanging	1		
Climbing	2		
Gymnastics	1		
Agility (clatter bridges etc.)	2		
Ball play (basketball/netball/football)	4		

Sand play	4
Water play	4
Sensory items	2
Textural variety	2
Wheeled play (for bikes, skateboards etc.)	6
3+ Primary colours	1
Interactive ability (Items encouraging group play)	4
Junior Seating	1
Imaginative play (Area lending to use of child's imagination)	4
Educational play (abacus etc.)	1
Ground graphics (hopscotch etc.)	2
Maximum Points Score	59

Excellent =	Good =	Average =	Below Average =	Poor =
>40	32-40	26-31	= 15-25	<15

OVERALL JUNIOR ASSESSMENT =

Teenagers	Max	Score	How feature(s) fulfil requirement
Interactive ability (items encouraging group play)	4		
Sports simulation / dynamic equipment / competition	4		
Cardio-vascular / muscular development	4		
Rocking and rotating (Mobilus, Waltz etc.)	4		
Swinging (group)	4		
Gliding (aerial runways etc.)	3		
Climbing (climbing walls etc.)	2		
Textural variety	2		
Scent (From Planting)	2		

Humour	2				
Graphics	3				
Teenage seating areas/shelters	6				
Ball Play (basketball/netball/football etc.)	6				
Wheeled play (for bikes, skateboards etc.)	6				
Maximum Points Score	52				
Excellent =	Good =	Average =	Below Average =	Poor =	
>35	25-35	18-24	11-17	<11	
OVERALL TEENAGE ASSESSMENT=					

Appendix C: Pre Construction Information

Concept Design Drawings

Drawing 1: **WIB13983-107-AA-74-701 Infrastructure and Landscape Works 1a Western Swale Park LEAP**

Drawing 2: **WIB13983-107-AA-74-702 Infrastructure and Landscape Works 1a Woodland**
LEAP

UK and Ireland Office Locations

