ARCHITECTURE
calfordseaden is an award-winning construction and property consultancy. Our comprehensive range of services cover chartered building and quantity surveying, project management, architecture, civil and structural engineering, mechanical and electrical engineering, sustainability and health and safety. Through our complementary and mutually supportive competencies, we provide our clients with a truly multi-disciplinary service through our six offices.

Our award-winning Architectural Practice has been appointed to a variety of projects, from single buildings to multi-million pound mixed-used urban regeneration developments. Our practice provides clients with high quality designs based on innovation, flexibility and sustainability and utilises BIM to successfully deliver projects. Our portfolio of projects covers a wide range of sectors including social and private housing, commercial, industrial, health, education, community, retail, leisure and other building projects.

calfordseaden has extensive experience in traditional construction, but is also a leading authority in the design and use of modern methods of construction, sustainable design and construction, and renewable technologies. Our experience and constantly evolving expertise means we anticipate the needs of our clients and provide them with the best and latest solutions and perspectives. We seek to provide value for money for our clients and pursue a flexible and innovative approach to the challenges we encounter on their behalf.
£15M Gibraltar Technical College

As part of a Gibraltar government initiative to improve and or renew all schools and technical colleges across Gibraltar local architect David Orfila engaged calfordseaden to undertake a feasibility scheme for the conversion of part of the Devils Tower Road multi storey car park into a technical college.

The car park and its location offered many constraints which included:-
- Its close proximity to the airport.
- An awkward layout featuring multiple columns in grid formation.
- Dealing with the existing reinforced concrete structure.
- Ensuring the main vehicle entrance/exit at ground floor remained operational.
- Wide floor plates which caused loss of daylight towards the centre of the structure.

Our design solution was to remove the central area of the car park to create an atrium from 1st to fifth floors; classrooms were located towards the perimeter of the building. The areas adjacent to the car park were used for rooms which weren’t dependant on natural light such as workshops IT Suites and library spaces.

To overcome the complications associated with maintaining the existing car park entrance the decision was taken to create a new college entrance with reception and office space off of Devils Tower Road, this provided the opportunity to reuse the existing escape stairs and lifts.

The building facades were windowed and over clad to create a clean and contemporary with a vertical emphasis as a counterpoint to the horizontal louvered façade of the car park.

Fixed triple glazed windows were specified to address the noise from the airport and the busy Devil’s Tower Road adjacent.

Working closely with colleagues from our in house structural engineers we were able to identify non loadbearing floors which could be omitted to form the atrium.

With our in house M&E engineers we looked into the design of the acoustic treatments together with the lighting, air conditioning, solar shading and fire suppression for the building. Photo-voltaic panels were proposed across the roof which proved to be a surprisingly rare occurrence in Gibraltar.

Detailed discussions were held with the fire officer as the escape from the car par was compromised by the interjection of the technical college. The top floor of the car park was used as an external recreational area along with a kitchen and dining space.

The scheme was presented to the Government and feasibility development is ongoing.
Located on a former school site, calfordseaden provided architectural and principal designer services to transform this location into nine modern new dwellings for the executive and/or large family housing market.

With the site boasting four different house types, it was key to balance a contemporary style and generous room sizes with a unique feel throughout each.

This individual approach was reflected through its design, for which inspiration came from the saw-tooth roofs at an award-winning development and Huf Haus’ take on disconnected pitch roofs. A blend of both pitched and disconnected roofs using various materials ensured a distinct character across all house types.

Features also include a timber frame construction, bespoke house design and high specification components including individual external cladding materials. Sustainable, low carbon materials were utilised alongside these features, together with super insulation and a fabric first approach.

Having worked on this project from concept design through to the submission of the planning application, calfordseaden provided a complete technical drawing package resulting in an elegant mix of natural daylight and ventilation, taking advantage of the surrounding countryside views.
This project involved provision of design services for a 41,250m² regional distribution centre. calfordseaden was initially appointed to provide architectural and structural engineering services for the detailed design of Phase 1 of the proposed new retail distribution centre in Northfleet. We were subsequently appointed to Phase 2, for provision of redesign and analysis services for the warehouse and office spaces to suit the changing operational needs of the company.

Towards the end of Phase 1 the client identified a requirement for an auditorium facility. We examined the viability of incorporating a 120 seat auditorium into the scheme and, following the client’s decision to progress this, very promptly designed the facility, including sight-lines, acoustics and materials to form a high quality conference facility.

Phase 2 of the project was effectively a continuation of Phase 1, with the required changes and adaptations incorporated into the Phase 1 scheme drawings, to facilitate the Operation team’s changing requirements.

The external works including earthworks, drainage, contaminated ground issues, attenuation tanks for surface water and pumps on both surface water and foul. Approximately 50,000m² hard standing and on site roadways/car parks were also included in the development.

One of the unique aspects of this site is the garden that has been provided for the staff. The calfordseaden team coordinated the hard and soft landscaping for the garden and provided various options for the garden furniture.

Following the successful planning consent the calfordseaden team maintained a continuous daily input into the project and weekly presence on site. We have acted as design co-ordinator throughout, ensuring compliance with appropriate codes and regulations and liaising with the very many specialists required to complete a project of this size and complexity.
£750K Markhams Chase, Basildon

Redevelopment of an existing car park and adjacent green space located at the corner of Markhams Chase Recreation Ground. The developer of the site is Sempra Homes, whom play an active role in the regeneration of the borough through provision of affordable housing, homes for private rent and private sale development schemes.

calfordsaden's design team has engaged in pre-application advice from the planning department during the course of developing site proposals. Consultants were appointed at an early stage to provide expert assessments/reports which were used to inform and develop the design.

It is proposed the site be will redeveloped to provide 2 bedroomed properties in accordance with the boroughs housing needs survey. The development proposals for the site are for the relocation of the bus stop and the introduction of 3 terrace houses with associated parking. The homes will be developed for shared ownership and will be marketed to Basildon Borough key workers in the first instance.

The surrounding buildings have influenced the proposed design, the most prevalent being the introduction of an alternative cladding material at first floor level. It was envisaged that a saw tooth roof approach would compliment the existing properties and work well with a contemporary design. A wide range of materials will be used across the development including composite joinery featuring cladding panels, contemporary face-brick work and man-made low profile roofing slate to create a varied and interesting appearance. The choice of materials and design of the houses is a contemporary response to the architecture reflected within the surrounding buildings, to enhance the vicinity but also integrate comfortably within its surroundings.
calfordseaden is providing Architecture and Civil and Structural Engineering services for this mixed use scheme which comprises the design and construction of 49 mixed tenure apartments and a supermarket store of 2000m² plus in Caterham.

The site was introduced to calfordseaden at post planning stage by a contractor who was looking for an affordable housing partner to take on the building contract and acquisition of the whole site, including the commercial elements. We introduced the land and build opportunity as a package to a registered housing provider.

The introduction of both the registered provider and the supermarket retail company enabled the package offer to work with the vendor. calfordseaden committed significant resource to work on risk registers and due diligence to mitigate risks before our client entered into land acquisition and build contracts.

We faced a challenge of a non-viable underground multi-storey car park & main sewer within the building footprint, requiring the reconfiguration of the car park and ground floor layouts.

Significant time pressures were in place that required intensive investigations to mitigate risk under the build contract and for the appropriate land sale price to be agreed. These investigations were actioned by calfordseaden’s multidisciplinary resources under the direction of the Employers Agents, and that included Structural (to assess ground conditions, remediation and basement car park size and levels constraints & major drainage diversions), M&E (to establish substation loadings & sustainability viability) and Architecture (to develop the designs in further detail to remove discrepant information in the planning approved drawings) and thus ensure that at contract stage there was absolute certainty that the project at the agreed contract sum and with the agreed land value was deliverable as desired by the registered provider and contractor.
calfordseaden constructed mould-breaking designs for Bracknell Forest Homes, who was working in collaboration with Bracknell Forest Council, to provide a new extra care housing scheme at Wick Hill in Bracknell.

The new senior living scheme delivers 65 one and two bedroom self-contained apartments over four floors, with communal facilities including a café, kitchen, dining room, lounges, hairdressing salon, hobbies room, library and IT suite. All facilities are available for residents to use as well as the local community.

The 65 units comprises of 14 homes for sale and 51 homes for social rent. The scheme required the design team to undertake extensive research and numerous site visits to housing professionals, experienced sheltered housing managers and occupational therapists.

The sloping development site provided the opportunity for roof terraces and a multi-level atrium to be incorporated into the design. The atrium is a significant design feature and helps create an inclusive and vibrant community through its design as an indoor street. The atrium is a place for a multitude of functions and provides space to meet, relax and engage in a safe, secure and warm environment protected from the elements.

This project was a finalist for ‘BIM Project of the Year’ in the 2013 Constructing Excellence Awards.

Caroline Titley, chief executive of Bracknell Forest Homes, said “Clement House is a fantastic scheme, which takes in the aspirations of older people, the best practice and design innovations in the housing sector, and really effective partnership working to deliver this landmark building. It provides excellent facilities and activities creating a friendly and vibrant environment with the added reassurance of on-site support and security”.

£10M Clement House, Bracknell

**Client**
Bracknell Forest Homes

**Duration**
2011-2014

**Services**
Architect
M&E Design
Sustainability Advisor

**Contract**
Design and Build

**Funding**
HCA Grant

**Sustainability**
Code Level 4
£8M Union Street, Maidstone, Kent

calfordseaden’s client, Maidstone Borough Council’s Regeneration and Economic Development team, are currently exploring the viability for redevelopment of a council owned car park and adjoining NHS site. Our clients brief is for the redevelopment of the entire site with a residential scheme that includes a pay & display car park for 40 cars. The scheme is located within Maidstone town centre and will need to be high density to make best use of the town centre land and satisfy the client’s financial viability appraisal. Dwellings will be split between private sale, shared ownership, market rent, and affordable rent.

calfordseaden has been appointed by Maidstone Borough Council with the brief to obtain planning permission on this site together with a second town centre car park site (Brunswick Street) and package the two schemes together for tender. It is anticipated that best value can be achieved by having one contractor construct both schemes.

Our Architectural teams approach to this project was to develop a number of different sketch schemes of simple hand drawings on tracing paper, laid over the ordnance survey which had been printed to scale. The hand sketches were then scanned and brought into Photoshop and coloured. The preliminary sketch schemes were issued to the client and developed following discussions; this led onto a design team meeting at the council’s offices, where the full team was introduced and the designs were reviewed.

Design proposals were progressed in sketch form until the team felt a viable scheme had presented itself, at which point a pre-application meeting was scheduled with the Senior Planning Officer to discuss the proposal. The meeting was beneficial as suggestions were made for alterations to the general layout and advice was provided on acceptable heights and overlooking distances.
This scheme provides 240 much needed affordable homes for older and vulnerable people across one of the biggest and most diverse Counties in the UK.

The calfordseaden team made a major contribution to the winning of this Kent PFI competition by gaining all Planning permissions and clearing all conditions in record time to achieve financial close. All sites are now successfully complete and occupied providing five extra care schemes and two supported housing schemes.

**St. Stephen’s Walk, Ashford:** This project provided 12 new build senior living apartments for additional accommodation to an existing scheme. Each apartment has been equipped with a full kitchen and balcony, to provide outside space. Two of the apartments have been configured to allow them to be combined to create one family unit, virtually overnight. This flat would also have the potential to be allocated a private garden.

**Bevis Close, Dartford:** This project involved the demolition of an existing nursing home to be replaced by a new 2 - 3 storey building providing 40 extra care apartments and communal spaces, from lounge and dining room to gym and therapy room.

**Cranleigh Drive, Dover:** This scheme involved the demolition of an outdated nursing home and the provision of 40 apartments, with extra care provision, in a modern facility. The design features a spoked layout to best fit with a very tight constrained site.

**St Michael’s Tenterden:** The redevelopment of a former sheltered housing scheme included the demolition of an existing 2 storey structure to construct a new 1-3 storey building to provide a 40 units in a new extra care facility.

**Melbourne Avenue, Dartford:** Melbourne Avenue sits on the site of a former primary school. This development provided a new extra care facility of 49 units and communal facilities.

**Newington Road, Ramsgate:** This scheme sits on the site of a former public library, which was demolished and replaced with a new 1-2 storey structure to house a mental health facility. The building provides 10 one bedroom units as well as both communal and staff facilities.

**Bowles Lodge, Hawkhurst:** This former residential care home and day care centre now houses a single storey extra care facility providing 48 units in a mix of one and two bedrooms.

All of these schemes provide communal areas, guest rooms, assisted bathrooms, staff accommodation and welfare facilities. The schemes also provides a range of wider community facilities including a restaurant, dining area, lounge bar, activity room, hairdressers and a therapy room. The developments benefit from many external features such as the communal gardens which have both hard and soft landscaping, refuse areas and sufficient car parking facilities. All the apartments have the use of either a garden terrace or a balcony.

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<tr>
<th>Client</th>
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<tr>
<td>Duration</td>
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<tr>
<td>Value</td>
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£38M Excellent Homes for All PFI, Kent
Following on from the outstanding success of the award winning scheme at St John’s Wembley, calfordseaden was appointed as architects by ASRA for the new mixed use scheme on the site of St Nicholas Church in Ealing. Many schemes had been attempted by others over a 15 year period but calfordseaden was able to unlock the potential of the site by designing a scheme where the church and community facilities shared the double height ground floor of a new building, which was planned for flexibility, on the most prominent part of the site; the upper floors then provide flats for affordable rent.

The compact church doubles as a community building including five meeting spaces which can be combined or separated in a variety of arrangements. The design also includes a sweeping curved roof at street level to signify the main entrance, as well as an extension of the stair tower to act as a landmark steeple, complete with a large glazed and illuminated cross.

The site provides a mix of affordable and private housing comprising of 10 flats and eight houses, two of which are for wheelchair users, a Code Level six vicarage and community facilities with the addition of a new church and communal garden. The scheme also includes two short terraces of houses, which are simple and modern in design however relate to existing surroundings.

The two-storey church has been awarded a BREEAM ‘Excellent’ rating with the vicarage achieving Code Level six as required by the London Diocese. The remaining residential units achieved Code Level four.

We were actively involved with local residents and the church congregation which enabled us to identify some very innovative designs which could be incorporated into the St Nicholas Church site. These included a landmark church spire, a baptism pool and a large water feature filled with holy water in the foyer entrance.

The scheme has recently been shortlisted for the 2016 Constructing Excellence Awards in London and the South East within the ‘Innovation Category’.
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