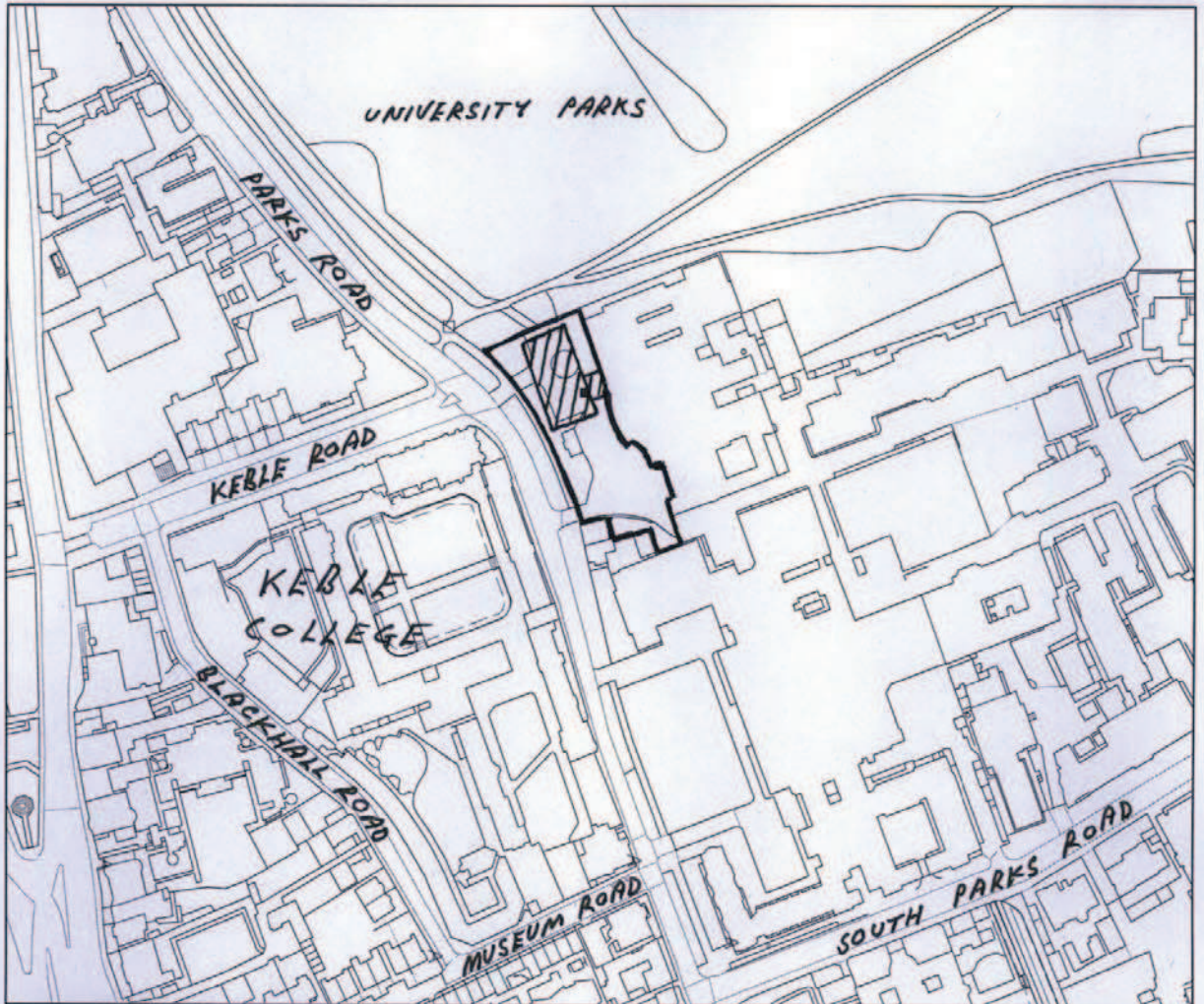


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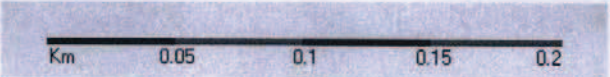
Dept. of Physics, South Parks Rd.



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Legend



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**PROPOSED PHYSICS RESEARCH LABORATORY (CL2)
RESPONSES TO CONSULTATION COMMENTS**

1.0 BACKGROUND

- 1.1 The preparation, submission and on-going consultation on the proposals for the new Physics Laboratory have involved numerous opportunities for participation in the design process for the building. This has meant that the design has evolved through an iterative process which has built upon the original ideas of the architects.
- 1.2 The starting point for the process is the identification, by the Physics Department of a need for new, improved accommodation. The brief for the new building, not only identified the amount and nature of new floorspace required, but also confirmed where it should be provided if it was to meet the aspirations of the Department, the University as a whole, and indeed the wider community.
- 1.3 The consultation process therefore began with an assessment of the type of accommodation to be provided and an analysis of the selected site in order to better understand its surroundings and the constraints which would have an impact on the design.
- 1.4 A wide range of groups, organisations and individuals have been consulted and, wherever possible, their views and comments have been taken into account. Clearly, as some comments conflict with each other, it is not possible to meet with, and respond positively to all comments. The following have been part of the consultation process.

- i) The University of Oxford, Physics Department and various project groups and steering committees (from inception of project).
- ii) Keble College.
Presentations to the College Gardens Committee and to individuals at exhibitions (28 Sept; 9 Nov 2010).

- iii) Local Planning Authority;
Highways Authority regular meetings;
English Heritage monthly from February 2010.
- iv) Local Interest Groups.
Oxford Preservation Trust: June 2010; March 2011;
Oxford Civic Society: June, August 2010;
Oxford Architectural & Historical Society: June, August 2010.
- v) Public Consultation (including Members of Interest groups (Local and National) local elected members, interested individuals) (June, October and November 2010).
- vi) Peer group appraisal.
Presentation to South East Regional Design Panel (Oct. 2010)

2.0 ISSUES AND CONCERNS AND RESPONSE

Site Selection

- 2.1 The ability of the site to accommodate any building was raised by a number of consultees for the following reasons:
 - It would obscure the front elevation of the Lindemann Building
 - It would have an unacceptable impact on the setting of Keble College Chapel
 - It would obscure views of the Chapel from the Parks.
 - It would create a narrow, canyon-like approach to the City Centre along Parks Road.
- 2.2 This is an "in principle" objection to development on this site rather than concern with the scale or appearance of the proposed building.

2.3 The justification for development of a new Physics Research Laboratory is set out below:

1. Planning

- The site was identified as appropriate for a building in the 1938 Lanchester and Lodge Master Plan.
- The site is identified as a development site in the current Science Area Master Plan.
- Comment from English Heritage that there is "no objection in principle to a new building here...."
- Comments from the South East Regional Design Panel (SERDP) that "...the size, shape and position of the building are well considered".
- Importance to the economy, status, prestige and function of Oxford that University Departments (especially those involved in scientific research) should continue to be located close to the City Centre, as opposed to peripheral business or science parks or more distant research establishments (Harwell Campus).
- The Lanchester and Lodge Master Plan noted that a new building on the land in front of the Lindemann Building was an opportunity to reinforce the rhythm of the building enclosure along Parks Road.

2. Departmental Justification

- The Oxford Physics Department which is one of the largest in the world is currently housed in a collection of 19th and 20th Century buildings that are spread across two roads (Parks Road and Keble Road). The accommodation is unfit for purpose and leads to a fragmented Department.
- Physics as a discipline proceeds through an iterative process of interactions between theoreticians and experimentalists. There is no

building suitable to accommodate both types of research. In fact, there are no facilities in Oxford suitable for contemporary experimental physics.

- There are two key requirements for any new facility for experimental physics. First it should be close to and well integrated with theoretical physics, and secondly the design and position of the building should ensure that it will be free from vibration and electromagnetic interference.
- In the light of these constraints the proposed site is the only one which is close to all other existing Physics buildings which are to remain, and is also free from interference. The land at the rear of the Clarendon laboratory is compromised by the electricity sub station. (NB measurement and simulations indicate that the proposed new underground laboratory space will achieve world class performance in terms of vibrations, electromagnetic and acoustic noise).
- The ability to develop a new laboratory building in this location is regarded as essential to the long-term future of physics at Oxford. It will not be possible to recruit top scientists or retain existing staff, and student attraction to Oxford will decline. This will have a significant impact on the local community because the current workforce of 450 people will decline with the inevitable impact on the local economy and prestige of Oxford.
- Physics is the most fundamental of natural sciences. No world-class University can operate without strong research and teaching programmes in this field. The proposed new building is an essential element in ensuring that the existing strengths are retained and developed.

2.4 Size and Shape of the building

- The space requirements of the new building have been determined by the current and future needs of the Physics Department. The Department set out a brief for a building to accommodate both theoretical and experimental

physicists which would be closely integrated physically with the existing main buildings on Parks Road.

- When the space requirements were assessed in relation to the only feasible site and its constraints it was evident that a building of a certain size and mass would be required. The design process had to take into account the clear physical constraints of the site such as the plot size and the need to maintain separation from the Lindermann Building, the Cedar Tree and the boundary with the Parks, as well as consideration for the heritage assets of significance. These included the buildings of Keble College, views from the Parks, and views more generally along Parks and Keble Roads. The buildings surrounding the site also inspired design elements such as building lines, parapet heights and proportions.
- The size and bulk of the building have been determined by the need to accommodate major laboratory space underground and the requirement for a central 'atrium' which has been designed to offer a range of bespoke collaboration spaces to facilitate the working methods of the theoretical physicists.
- The central location of the collaboration spaces rather than around the perimeter of the building, achieves an efficiency ratio of 70%. This is higher than the standard for the higher education sector of 65%.
- The design of the building above ground most effectively supports the way that theoretical physicists work in practice. Projects are normally initiated by group discussions (hence the design of the atrium collaborative areas) and are subsequently refined during quiet periods working in an office.

2.5 Mass and height of the building

It has been suggested that the proposed building is too large and too high, resulting in a building that would dominate the area.

- The design proposals have been carefully developed to create a building which will sit comfortably within its urban context. The facade is carefully articulated to ensure verticality to the design, which responds well to the surrounding buildings. The roofscape has been designed to break down the mass with the main facades generally sitting below Carfax Height. Efforts have been made to develop a design that steps below, but occasionally above Carfax Height in an attempt to counter the flat monotonous rooflines that may result from a building height policy.
- The Oxford Preservation Trust have expressed concern that the building *'is too high by at least a storey'*, however SERDP note that *'the scale is right and the architectural approach is stimulating. The building has the prospect of making a very positive contribution to this part of Oxford.'*
- Careful consideration has been given to developing a design which is not too horizontal and 'slab like', but rather displays elegant proportions and retains a sense of vertical emphasis. Any reduction in height would impact on this and result in an overly horizontal building. In order to retain the accommodation required to consolidate the department, the building would need to increase in footprint, which could impact on the Atlantic Cedar tree in Sherrington Court.

2.6 Impact on Keble Chapel

A number of consultees have questioned the impact of the new Physics CL2 building on the setting of Keble College Chapel.

It should be noted that the composition of Keble College has had a direct influence on the design of the new building and most consultees have acknowledged, both formally and informally that, from a design point of view, the new building sits comfortably against the Chapel and College with specific regard to its choice of materials, vertical emphasis and articulated mass within the facade and at roof level, thereby ensuring the new Physics building will make a positive contribution to the urban fabric.

- SERDP note that 'The overriding impression is of a well mannered building that picks up some aspects of its surroundings, such as the vertical rhythms of Keble College Chapel, without being derivative. The materials are thoughtfully chosen and the colours will compliment their neighbours.'
- It has always been the intention that this building should form a gateway with Keble Cottage across Parks Road, but it should not compete with Keble or dominate its surroundings. The atrium roof is over 8m lower (2 storeys) than the roof line of Keble College Chapel. This is considered to be sufficiently subservient while retaining an ability to create a building of suitable gravitas and quality to play an important role as a gateway to the science area and frame this urban boundary. The Oxford Preservation Trust outlines this as a key opportunity in their formal response and is a notion supported within the Heritage statement, as submitted as part of this planning application.
- It is acknowledged that the site is highly prominent but it is considered that the design responds to its setting appropriately. The proposed site is a considerable distance, in urban terms, away from Keble College Chapel. It is across a main road and is set back from the curb behind a generous, tree lined grass verge, footpath and cycle way. This is comparable to the distance between Keble College Chapel and Keble Terraces along Keble Road. By bringing the building line forward in this location the balance of the streetscape will in fact be significantly improved when viewed from the south and east.
- English Heritage acknowledge that the redevelopment of the public realm and, in particular Sherrington Court, will enhance the setting of the conservation area and, to a lesser extent, Keble College Chapel. The creation of a formal public space and new entrance to the park will have a significant positive impact on the setting of the chapel. This will be further improved by the longer term proposals to create a shared surface at the junction of Keble Road and Parks Road, thus providing a greatly

enhanced pedestrian friendly street scene, access to the park and improved general setting of the existing architectural landmarks. The integration of these proposals was also endorsed by SERDP.

2.7 Impact on the Surrounding Areas – Views

- Some consultees raised concerns over the impact of the new Physics building on views from the surrounding areas and in particular from, and into, University Parks.
- As mentioned above, the rhythms of the buildings on the East side of Parks Road were established by the 1938 Masterplan and in the current Science Area Masterplan. North of the Earth Sciences Building the poor quality planting, cars and temporary buildings block the view of the Parks. The proposed building does not block any significant view into the Parks and in fact steps back at ground floor to the east and reduces low level planting and clutter so that the view of Parks Road is extended directly to the new gateway to the Parks.
- The long views south from the Parks are not significantly affected as the vast majority of the building is low enough to sit below the tree line. This is reinforced by Verified Views 01, 07, and 08. Shorter views are inevitably affected and in these the new proposal defines the southern boundary of the Parks by the buildings along it thereby forming the boundary with the University Science Area. Careful consideration has been given to dynamic views especially how the view of Keble will open up as one approaches the new park entrance.
- There are also improvements to the relationship between the Parks and Keble College Chapel, opening up clearer views particularly at low level. The Parks were not designed to focus on the Chapel and it is one of a number of buildings and wider views that form the context of the Parks.

2.8 Design Changes

- In response to some of the latest feedback the design has been reviewed and two alterations have been made that respond to comments raised and improve the overall design.
- Plinth Condition – SERDP questioned the resolution of the entrance, whilst Keble College, queried why the plinth steps up along the West Elevation. The response has been to retain a single storey plinth along the whole west elevation and wrap this around the south-west corner. The plinth then steps up halfway across the south elevation to provide better definition of the building entrance from Sherrington Court, and a 'quieter' response to the west elevation.
- Atrium Roof Enclosure – In response to the comments regarding mass and the buildings relationship with Keble College Chapel, the atrium rooflight design has been reviewed. By changing the way the atrium is ventilated and the rooflight accessed it has been possible to drop the western edge of the rooflight by 2.5m. This will mean that the perceived bulk when looking down Keble Road will be reduced as the parapet will be 2.5 lower. The view from the North and South will also be altered with a pitch introduced to the ends of the rooflight enclosure. This reduces the quantity of built volume above Carfax height and also gives the rooflight some 'direction' and increased articulation, which help to 'lighten' the building mass.

2.9 Benefits of the Proposed Development

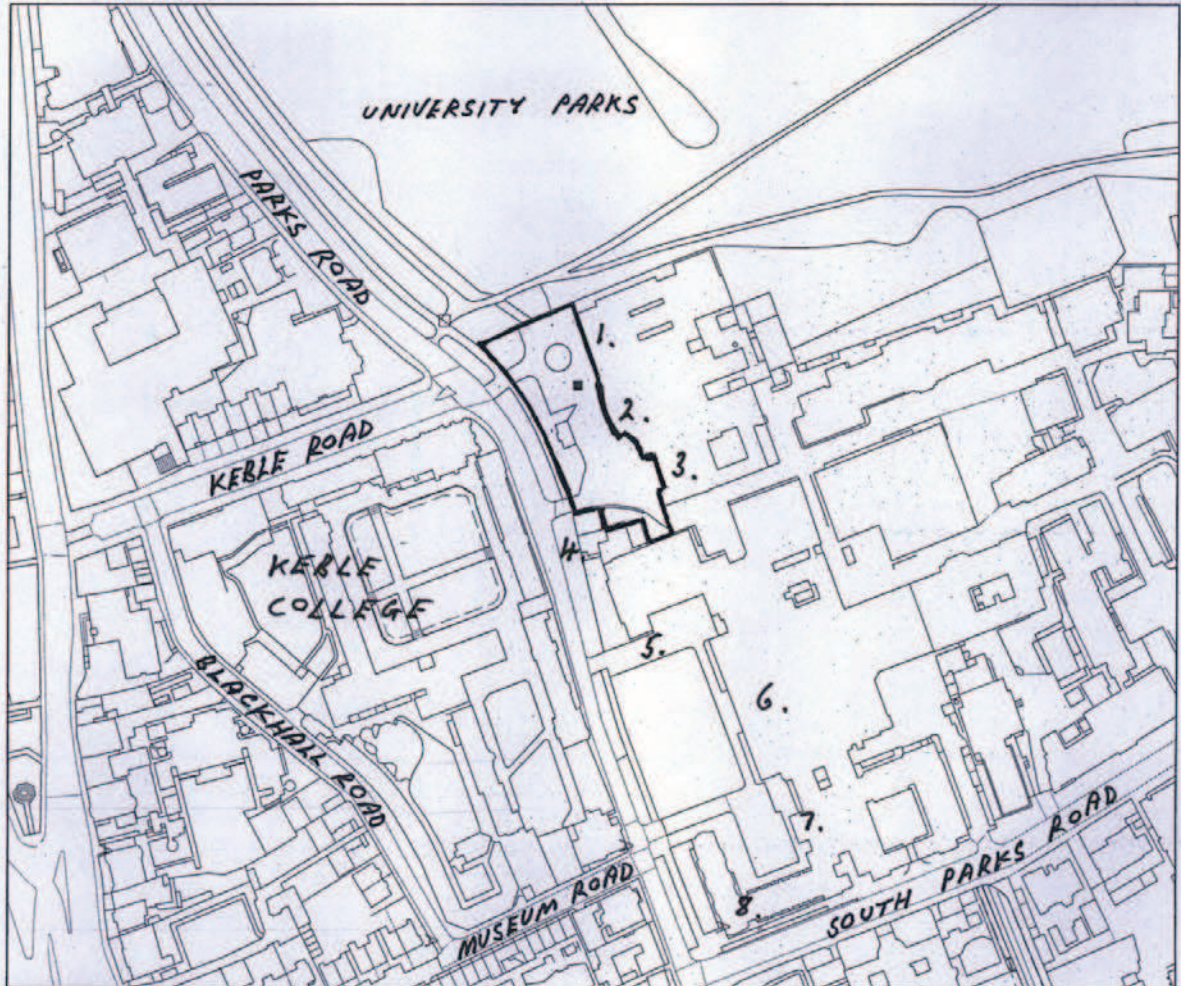
In any assessment of this proposal it will be necessary to weigh the perceived harm that the proposal might have for example to heritage assets, against the benefits that will flow from it. In essence the benefits may be described as:

- The provision of essential and vital accommodation for the Physics Department to help ensure its long-term success and viability;
- The protection and enhanced setting for the Atlantic Cedar tree;

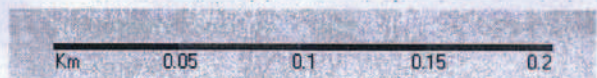
- A high quality landscaped 'quad' and improved setting for the grade II listed Townsend building, reinstating the architectural hierarchy;
- Improvement to the untidy, low quality, cluttered forecourt in front of the Lindemann Building;
- To enable the continued use of the dated Lindemann building and retain its front elevation in its entirety. Whilst this elevation will be predominantly hidden from Parks Road it will still be visible from the Parks and the approach and entrance to the new building.
- The creation of a new Parks entrance and the associated public realm offers an improved approach to the Parks and an enhanced setting to Keble College Chapel.
- The addition of a high quality building within the science area, raising the

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Dept. of Physics, South Parks Rd.



Legend	
1.	LINDEMANN BUILDING.
2.	SIR MARTIN WOOD LECTURE THEATRE
3.	TOWNSEND BUILDING.
4.	MUSEUM LODGE
5.	DEPT. OF EARTH SCIENCES.
6.	UNIVERSITY MUSEUM.
7.	OLD CHEMISTRY LABORATORY.
8.	RADCLIFFE SCIENCE LIBRARY.



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