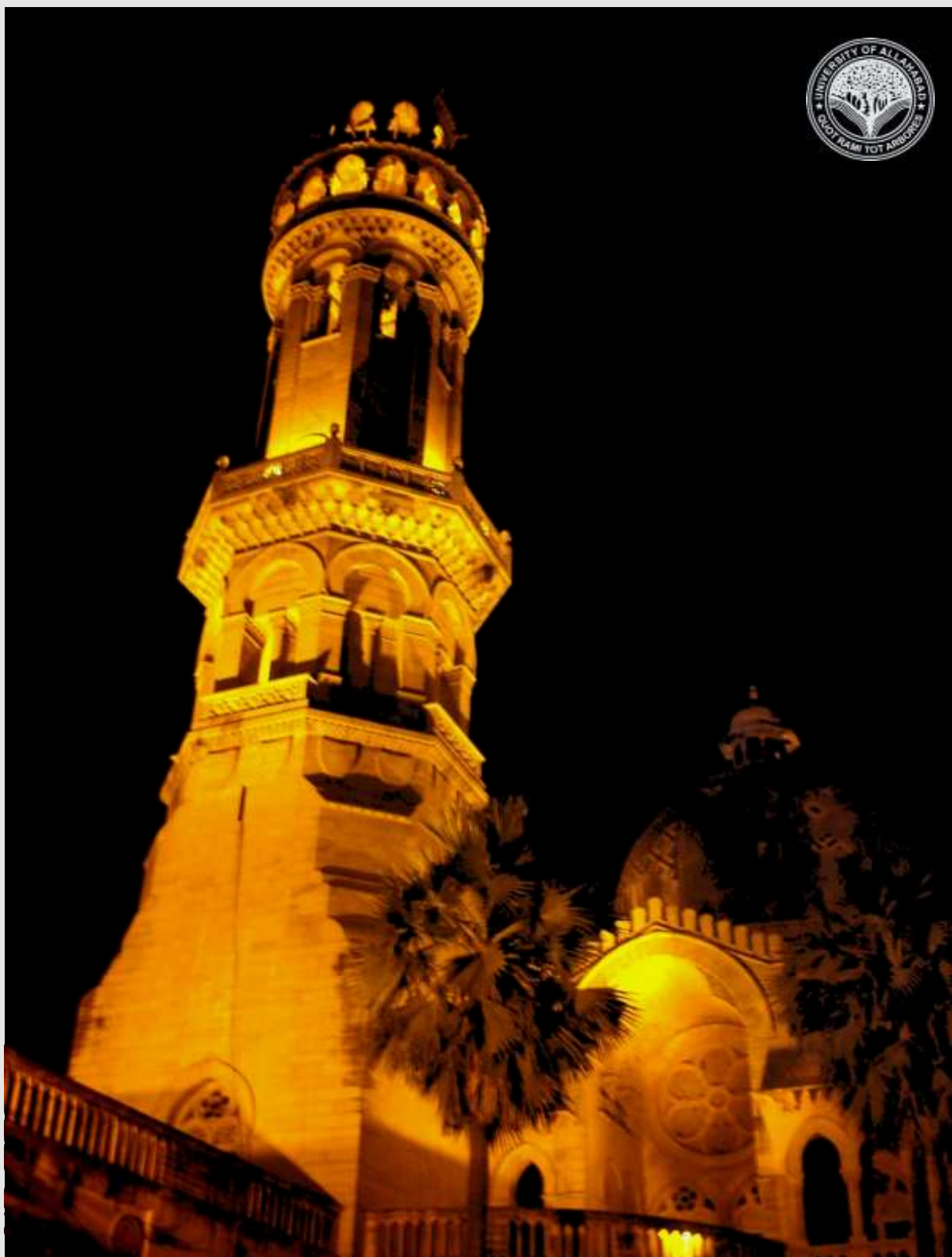




Campus Redevelopment Plan for The University of Allahabad

NEEV ARCHITECTS INTERIORS AND URBAN DESIGN CONSULTANTS PVT. LTD.

CAMPUS REDEVELOPMENT PLAN FOR UNIVERSITY OF ALLAHABAD



PREFACE

The University of Allahabad was established in 1887 as the fourth oldest university in India and has to its credit, several achievements in higher education. The university was initially an affiliating body and was established to relieve the burden of the University of Calcutta of supervising education in northern and central India. The university has been a unitary teaching institution since 1921 and was under the state of Uttar Pradesh after independence until 2005 when the Govt. of India recognized its role and contribution in the fields of higher and national development, the University of Allahabad was reincorporated as a Central University under the University of Allahabad Act 2005.

The University has undergone significant changes in institutional setup with continuity in the academic systems and processes. The university has emerged from a chronic resource crunch for over 2 decades until it became a central university. The inadequacy of resources hampered the expansion and infrastructural facilities, though new programs were instituted through new academic initiatives.

The University of Allahabad had drawn a vision plan in January 2002 for the period of 2002-2012 which was reviewed in 2006 and the revised vision plan mandates the mission statement of the University and has defined the institutional agenda up till the end of the 11th plan. Within the ambit of this agenda, various plans have been formulated towards establishing academic excellence and effective utilization and upgradation of infrastructural facilities. The University has given due consideration to the Knowledge Commission recommendations in the development of the vision plan and in specifying the objectives.

In the above pursuit, the University initiated the development of comprehensive master planning of all the existing properties and campuses to efficiently utilize the available real estate resource and to upgrade and add new academic, research, housing and recreational facilities for the students and staff with an objective to make the University of Allahabad a global university in order to regain its old legacy. The University of Allahabad under the guidance of Prof. R. G. Harshe, Hon. Vice Chancellor, initiated this endeavor and the new Master Plan is an outcome of his great vision for the university, it is the first of its kind of redevelopment initiative undertaken by any Indian University, on this scale. This will become a benchmark for the future development of campuses in the country.

The University initiated the search process for Architectural and Urban Design consultancy firms throughout the country in March 2006 and after rigorous selection procedure and scrutinizing 33 firms from all over India, the selection committee selected an experienced and known Delhi based firm M/S Neev Architects Interiors and Urban Design Consultants Pvt. Ltd. as the consulting Architects and Urban Designers to the University and were entrusted the task of preparation of Master Plan which would serve as a guideline for effective land use planning and suggest mechanisms for optimum and efficient utilization of resources in view of the future needs of the academic departments, centers for research and advanced learning and other supporting infrastructural facilities such as staff and student housing, sports facilities, etc.

The emphasis of the development of the Master Plan would be to prepare a methodology for integrated development of the campuses in harmony with the heritage buildings of the Allahabad University. The University has also initiated the conservation and preservation of heritage buildings. The work on the above has been entrusted to INTACH and is currently in progress.



UNIVERSITY OF ALLAHABAD – CONTEXT & STATUS

The University of Allahabad unlike many of the newer campuses with sprawling expanse of the land and exciting backdrops, finds itself tightly packed and wedged within the heart of the cantonment city. It has Katras with sprawling housing with ever growing commercial activities separating the two campuses with dense and organic urban fabric. The science and arts campus is divided by a old settlement called Katra which developed around 1801 characterized by high densities (500-750P/HA), dense grain, organic street pattern with an courtyard typology supporting intense commercial activity along linear spine having a status of central business district in Allahabad Master Plan. This area has now undergone deterioration and has entered into a state of blight and obsolescence. One edge of the district is owned by private trusts who have developed housing for the students and the vital link between the two campuses has generated student related activities such as book shops, printing houses, tailors/grocery shops, fast food joints etc. The Katra zone has an area of 2.6sq.km. with a population of over 50,000 persons approx. The Colonelgunj area in easterly continuation resembles the Katra, in structure and use, marking an extension to the activity pattern.





VISION FOR THE CAMPUS REDEVELOPMENT PLAN FOR UNIVERSITY OF ALLAHABAD

The campus plan is a vision for the physical future of the University of Allahabad. It was prepared in a process that engaged a broad cross section of people whose lives are closely linked with the campus, including students, faculty, staff, administrators, technicians and consultants. The plan's physical form represents a remarkable consensus, among the participants, about the qualities and values central to campus life. The emphasis for the development of a Strategic Framework was to develop a campus environment relevant for the 21st century which meets the future demands of the University. A detailed analysis of the campuses and their precincts can be summarized as under :

One major edge of the Science campus adjoins the major city level green area – Alfred Park along the highway. The other precincts of the campus namely the Bank Road, Church Road, Allengunj, Cantonment are characterized by adhoc development predominantly residential, in form of plotted housing with densities varying from 250-350P/HA. (Ground plus two/three storey developments.) Some of the buildings along the edge are undergoing transformations to support activities related to students but commercial in nature such as coaching institutes, typing colleges etc. The open spaces are loose and amorphous, with no hierarchy.

At present, the university finds itself in a state of unprecedented chaos. This has been the result of a variety of adhoc, unplanned and short sighted expansion programmes. The university has a variety of non-descript architectural styles. The first sight of the university campus is likely to generate mixed feelings. In the midst of lush green setting, some of the old heritage buildings are built in a colonial style comprising of domes and arches and wide verandahs. However, every inch of wall space within reach is covered with rude and crude lettering naming students, union candidates and slogans resulting in intense visual pollution.

In contrast to the older buildings in colonial architectural style, the newer generations of buildings, especially those constructed in last fifty years, find themselves in a very barren and bland settings. The buildings are totally insensitive to open spaces, scale and architectural style of older buildings, flouting every norm of appropriate urban and civic design. Much of the chaotic environment can be attributed to:

- (1) the short sighted planning or no planning programs
- (2) incontiniguous university land holdings
- (3) decentralized university facilities
- (4) neglected buildings resulting in highly dilapidated structures
- (5) scattered low cost class four staff housing units
- (6) undeveloped parking and cycle stands at odd places
- (7) lack of directional roads, paths, walkways and
- (8) undefined and unstructured open spaces with little or no grass and barbed wire enclosures.

All the above conditions were on account of a tremendous resource crunch but after 2005, when the University became a Central University, consistent efforts and allocation of funds have been made in upgrading the existing facilities through organized repair and maintenance works undertaken by the University.

- The most highly valued asset of the campus is its magnificent heritage buildings, which should be the focus of campus spaces and more closely integrated into the patterns of circulation and use.
- The views of the heritage buildings should be an integral part of the design of both indoor and outdoor spaces throughout the campus.
- The many different academic disciplines and activities need to be bound together with a coherent and dignified system of open spaces and circulation. This is essential to promoting interdisciplinary dialogue and connecting the various parts of campus life through restructuring and by establishing appropriate landuses for various components of the campuses.
- A coherent system of pedestrian circulation well connected to destinations needs to be developed and conflicts between pedestrians and cars is required to be eliminated. The pedestrian environment thus created can be safe by efficient use of perimeter parking.
- A Sustainable Development Framework to guide the future development of the campuses, through use of appropriate technologies and management of systems needs to be developed.
- The design of buildings should contribute to the coherence of the campus in form, typology, scale and expression.



- The real estate value of the campuses should not be wasted with inefficient buildings, adhoc constructions and additions, temporary structures, or surface parking. The available resource needs to be optimally and efficiently utilized through structured development and allocation of Ground Coverage and FAR.
- The campuses should have a positive relationship with the precincts (the surrounding residential, commercial, and recreational areas) and the city of Allahabad.
- The challenge for the Campus Plan is to support the University in realizing those qualitative human goals which have universal appeal. Therefore, the Campus Plan attempts to establish the public and private realm and a pattern of common open space that can serve as a framework within which individual building projects can be developed. The regulating lines that define the public spaces should be respected. The buildings to be developed should be conceived as a means of creating public spaces as well as containers for academic functions and in this way each building will be another step toward realizing a common vision.
- This Plan builds on the efforts and vision of distinguished academicians, administrators and alumni whose vision and concepts which have been integrated into this plan and which are key to its form.
- The Campus Plan is described using three dimensional images of the spaces that can be created. These images can lead the process and serve as a reference to evaluate all proposals from this point forward.



AN APPROACH TOWARDS AN INTEGRATED CAMPUS PLAN

The principle of linking the parts of the main Senate campus to the north and south campuses namely Chaitham Lines Campus, Muir Campus and part of the neighbouring community of Katra and Colonelgunj in the existing context, forms the basis for an Integrated Development Plan for the University of Allahabad besides defining appropriate uses for other properties owned by the University in the city.

The relationship between the three main campuses is not strong. Currently many students and staff live in precincts of the campuses wherein the University owns several properties and buildings. The University road has the opportunity to become a seam instead of a barrier, by developing compatible functions on the either side of the street, having tremendous urban development potential as this would provide an improved town-gown transition and provide much-needed high quality interface.



The development and treatment of the university road and improvement of Chaitham Lines campus junction is an important part of this connection, and should be considered as a two-lane road with roundabouts in conjunction with other improvements to the traffic and as an interchange for public transport network. A magnificent landscape treatment is important to establishing the entrances to the Campuses.

The edge along the Muir campus, the University Road and Katra-Colonelgunj crossing is used mostly for parking and informal sector encroachments. The replacement of the existing off street surface parking with structured parking lots will result in creation of public space that take advantage of the views and strengthen the front door of the campus. Developing a public building at the edge of Katra-Colonelgunj junction and improvement of the node, can help to create a public square which can be an economic resource for the University and would be a transition between AN Jha Hostel and the student housing. The edges of the commercial district also need to be upgraded with necessary facade improvements and street development to give a distinct character to the edges in order to enhance the quality of public spaces and its image through proposed urban design interventions.

The main Senate campus is one part of the overall UOA campuses. The north and south campus are primarily student housing and academic areas which should be better linked by a stronger framework of pedestrian and bicycle access, and a similar interconnected system of coherent open spaces and landscaping.



CAMPUS PLANNING PROCESS

The Campus Redevelopment Plan process engaged Architects, Urban Designers, Landscape Architects and experts from Engineering Disciplines particularly Structural Engineering, Electrical, Public Health Engineering, HVAC Experts and a large cross section of the UOA community which included Students, Faculty, Administrators, and Non Teaching Staff. The process was completed in three phases over ten months.

The first phase was a process of figuring out the existing conditions and collecting data. The process started in November 2006 with the collection of key information and establishing ground realities through detailed Physical Survey of all the properties using Total Station and developing base drawings on a digital format. The beginning of the campus planning process was a Campus and Building Audit conducted by a team of experts leading to detailed Urban Design Component Evaluation and Building Audit, which served as the basis for the Campus Plan. The design team visited the UOA campuses several times, documenting the campus and meeting with the campus community in a series of focus groups. Documentation included extensive drawings, photography, on site appraisal as well as analysis of campus spaces, appurtenant building spaces, building types, conditions of structures, entrances to campuses, circulation networks, pedestrian spaces, parking, infrastructural facilities, security systems, sports and housing facilities etc.

Focus group meetings included faculty, administrators, staff, students, and other campus community members. The analysis identified the strengths, weaknesses and opportunities of the campuses and subsequently resulted in formulating a vision for campus development. Also in the first phase, the design team compiled a series of parametric analysis drawings which examine the campus and its surroundings by its different systems using a systems approach.

A detailed Area Program was developed for all the Academic Departments, Central Core facilities, Staff and Students Housing, Sports and Recreational facilities and other supporting infrastructural services. The Building Audit identified the utilization of existing spaces and support services in each building. The future needs of all departments and projections have been considered towards development and rationalization of the Final Area Program. This document will form the basis for future development of each component of the university.

The recommendations of National Knowledge Commission Report 2007 and have been duly incorporated in the proposed allocation of areas for various components of the University

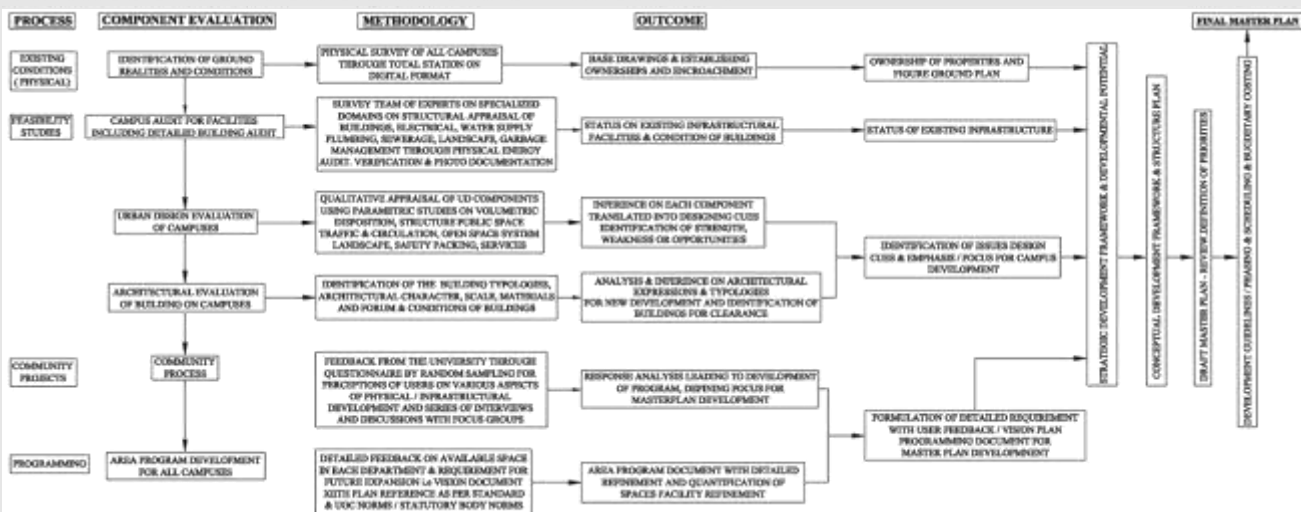
The second phase of the process was exploring ideas and an intense working session which took place at the University during March April, 2006 through series of Working Group Meetings which identified and debated key issues for development .The participatory design process involved the input of many of the focus group participants from the campus community. A presentation to review the progress was given in the University followed by additional reviews and comments.

The guidance of the Hon' Vice Chancellor was very valuable during the working group meetings and at every stage of design development besides, participation of the Registrar, Finance Officer, Senior Professors, Members from Planning & Development Board and the University Engineer, consistently facilitated the planning and decision making process.

The final phase of the process involved creating a Campus Plan, including design guidelines for the buildings and spaces on the campus. The Master Plan proposals for all the campuses were presented to the Planning and Development Board of the University in the Senate Hall on 9th October, 2007 by the Principal Architect and Urban Designer of Neev Architects Interior and Urban Design Consultants Pvt. Ltd. which was well appreciated and subsequently approval on the same was accorded by the Board. The detailed engineering designs are in progress for infrastructural development along with implementation mechanism, phasing and scheduling.

The portrait of existing conditions, illustrated on the forthcoming pages, is a compilation of the information gathered about the Campus. The portrait shows land uses, open spaces, pedestrian and vehicular movement networks/parking, volumetric disposition, interfaces, conditions of buildings etc.. These analytical diagrams, pull the portrait apart into separate layers, examining each system separately. This analytical process, along with comments from focus groups, resulted in a set of core design principles, used to guide the design process and the preparation of the Campus Plan. The comparative diagrams on various aspects are presented to examine the outcomes of the Master Plan proposals and the existing realities.

METHODOLOGY FOR CAMPUS REDEVELOPMENT



EXISTING CONDITION ANALYSIS

UNIVERSITY LAND OWNERSHIP



The university has ten campuses other than three main campuses distributed in the city falling under varied landuses and it is proposed to develop them as per prescribed Master Plan guidelines and Zoning Regulations of Allahabad development authority.

NODE DISTRIBUTION



The campus edges are defined by thick vegetation, the scale is accentuated by the highway defining the districts. Activity nodes can be classified into various types by virtue of the use and activity it supports but are weakly defined due to the amorphous spaces created between the forms.

CONDITION OF STRUCTURES



The typology of the campus is very similar to the adjoining urban fabric of civil lines with built form defined by spaces and courtyards to suit the climatic conditions. The old buildings such as the Vijaynagaram Hall and the Senate Hall are monumental in scale equivalent to ground+4 storey development while other buildings are generally low rise (ground+2 storey structures).

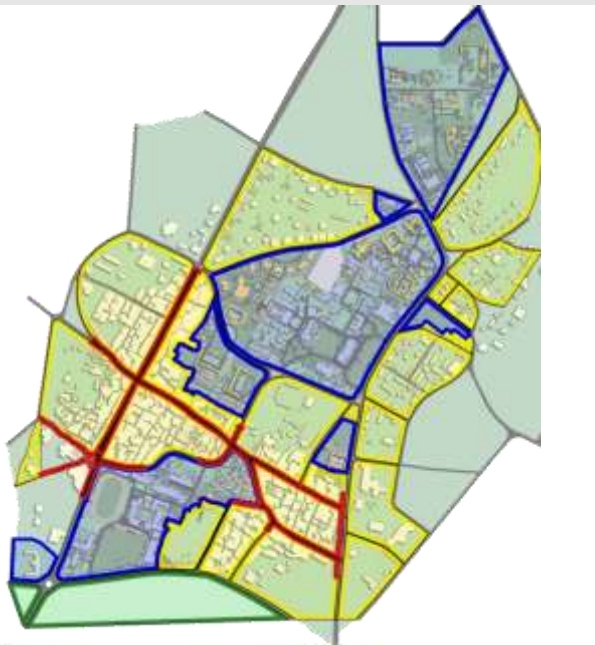
MAJOR ROAD NETWORK



The University has three distinct campuses namely the Science Campus, Arts Campus and the Law/Management Campus. The main edges of these three campuses are defined by the highways connecting Varanasi from Lucknow and Kanpur. These provide major linkages to the campus while Master Zahrulul Hasan Road, the major city arterial, also links the campus.

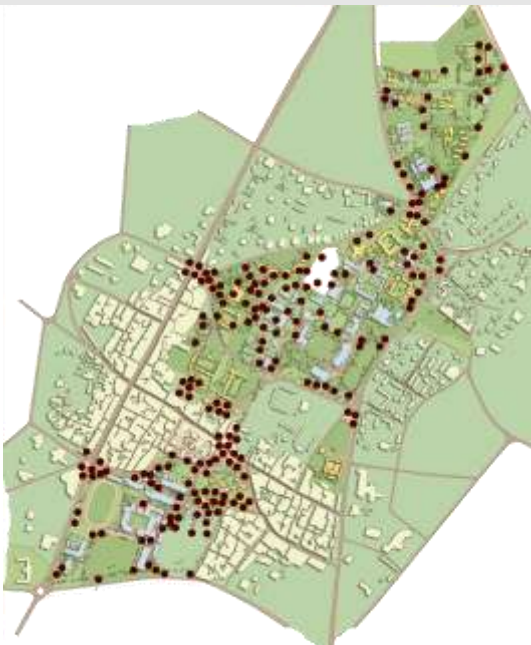
EXISTING CONDITION ANALYSIS

INTERFACES AND EDGE CONDITIONS



The University campus is truly an urban campus which was developed in phases in independent pockets of land dispersed as an integral part of the fabric of Allahabad. As a consequence of the above, the campus defines its district for institutional use but has interfaces with a variety of landuses, thereby creating very distinct edge conditions and street character.

WEAKNESSES



The detailed visual survey and discussions with the focus groups helped in identification of areas of weaknesses and strengths in the campus in terms of their physical perceptions, use and activity patterns supported by them. The outcome resulted in defining appropriate design strategies for these areas.

OPPORTUNITIES



STRENGTHS



COMPARITIVE CONDITION ANALYSIS

EXISTING FIGURE GROUND



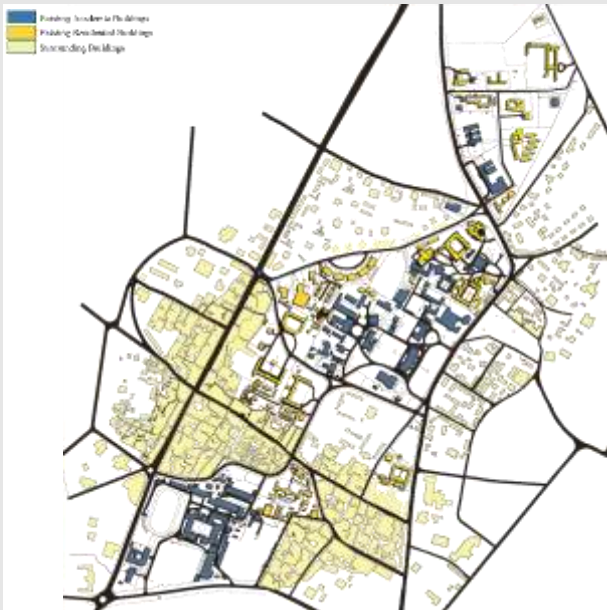
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PROPOSED FIGURE GROUND



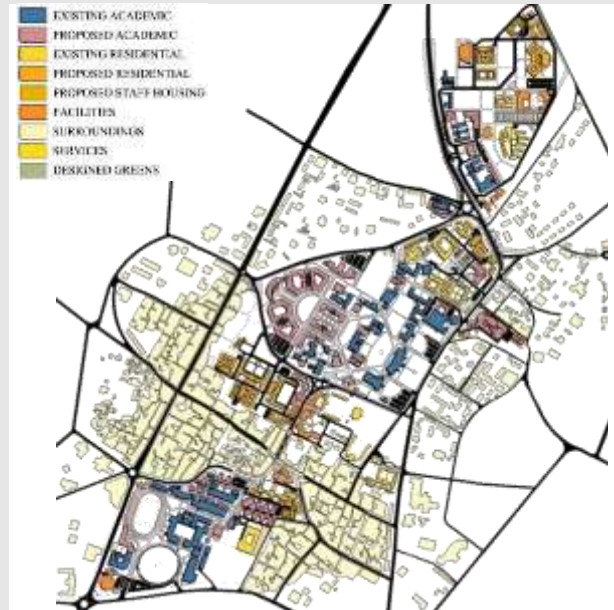
The new Master Plan attempts to retain the existing typology with internal spaces created as courtyards and more intimate spaces as part of Academic Departments. The Plan proposes structured and designed parcels of land created through integration of movement systems and open spaces. The footprint has been developed to create a well defined spatial structure.

EXISTING LANDUSE



The campus structure is characterized by amorphous spaces and incoherent built form. The spaces are not contained and tend to lose scale. The faculties of Arts, Science and Law are distributed in three different campuses with 15% housing available for the students and just about 5% for the staff. The facilities within the campus are inadequate such as livable space, recreational space, parking, etc.

PROPOSED LANDUSE



The Campus Redevelopment plan has attempted, restructuring of spaces and detailing the overall spatial structure of campuses. The revised landuse pattern specifies concentration of academic activities in the campus core with additional assignable FAR for new programs and expansion of academic and research facilities and expanding staff housing to other nearby properties though retaining student housing & sports within the campuses.

COMPARITIVE CONDITION

EXISTING VOLUMETRIC DISPOSITION



The entire bulk disposition of the site is extremely unbalanced which is a consequence of adhoc developments and have no definite campus planning strategy. The buildings are loosely placed without any relationship to the adjoining buildings having amorphous appurtenant land. There is no defined scale and no definite massing in the campus.

PROPOSED VOLUMETRIC DISPOSITION



The new Master Plan attempts to retain the existing typology with internal spaces created as courtyards and more intimate spaces as part of Academic Departments. The Plan proposes a maximum foot print of 30% & FAR of 1, resulting in G+2 storey structures & thereby controlling the height of buildings to retain the landmark quality of heritage buildings.

EXISTING ROAD NETWORK



The use of bicycles and two wheelers are predominant mode of transportation and conflicts with pedestrians has been eliminated in the Senate campus but there are no controls in Muir and Chaitham Lines campuses leading to conflicts in circulations with pedestrian movement. There is no defined hierarchy of movement in the campuses.

PROPOSED ROAD NETWORK

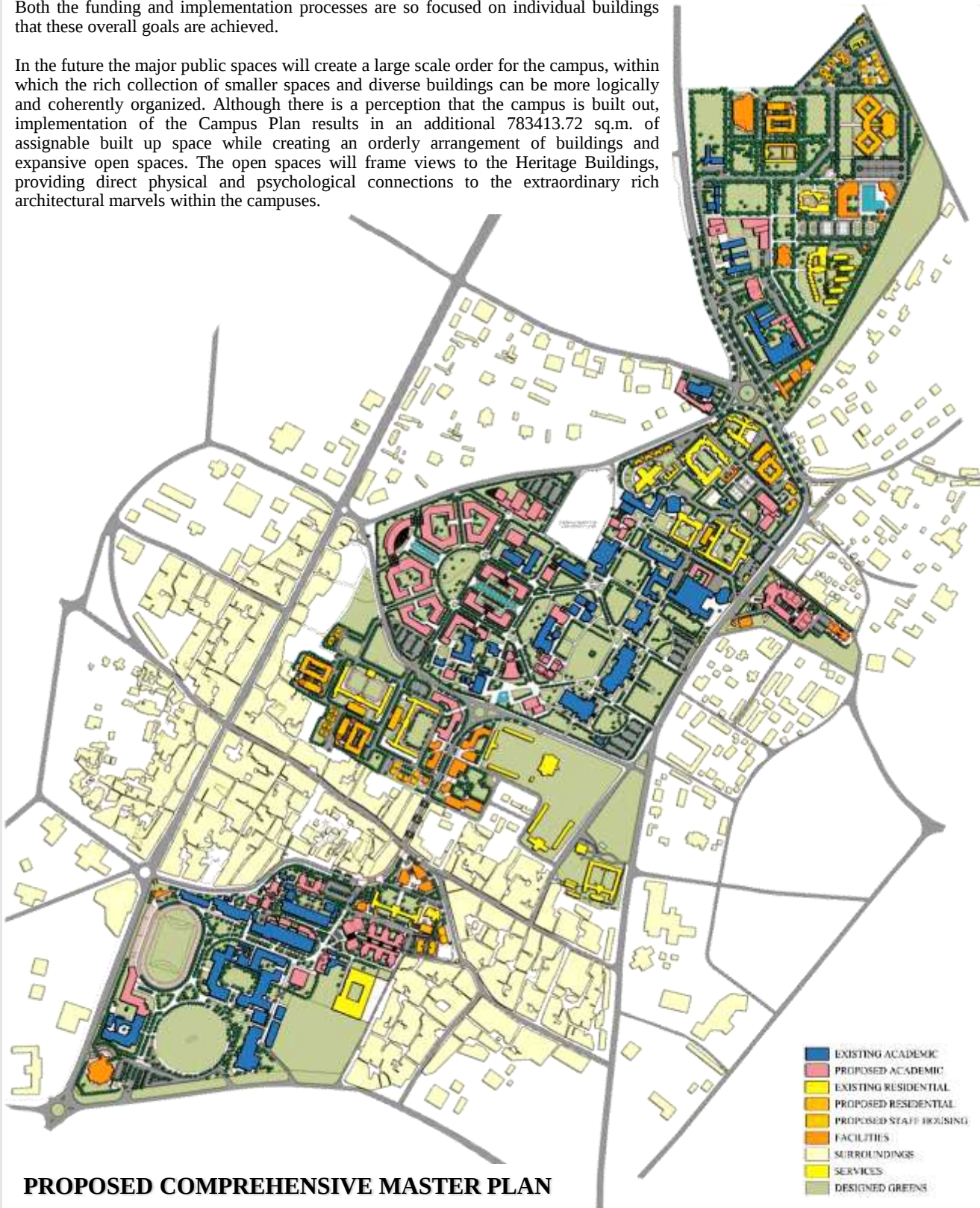


A system of peripheral road network is proposed in the Master Plan connected to the parking lots and the central areas have been pedestrianized and have been kept free from any vehicular movement. The structure plan articulates the pedestrian movements with open spaces and built form to provide a rich experience of spaces to the academic community.

BUILDING A GREAT UNIVERSITY CAMPUS

The present campus has a rich variety of spaces and a diverse collection of buildings which fail to create a coherent environment. The values, which emerged so clearly in this planning process, are the values stated in the preface to all previous planning efforts. Both the funding and implementation processes are so focused on individual buildings that these overall goals are achieved.

In the future the major public spaces will create a large scale order for the campus, within which the rich collection of smaller spaces and diverse buildings can be more logically and coherently organized. Although there is a perception that the campus is built out, implementation of the Campus Plan results in an additional 783413.72 sq.m. of assignable built up space while creating an orderly arrangement of buildings and expansive open spaces. The open spaces will frame views to the Heritage Buildings, providing direct physical and psychological connections to the extraordinary rich architectural marvels within the campuses.



DEVELOPMENT POTENTIAL

The restructuring of grand campus spaces and the clarification of circulation networks results in a series of development blocks. Many blocks have existing buildings while others are proposed for development. The creation of well defined blocks allows for the orderly arrangement of new buildings and additions to existing buildings. The Structures which were dilapidated or were inefficient have been identified as part of the phased renewal plan and clearing. The development potential of the Campus Plan is calculated assuming a Floor Area Ratio (FAR) of 1 and a building coverage of 30%, which results in an average building height of three stories. This would restrict the Maximum height of the buildings to G+2 stories and would result in retaining the landmark image of heritage buildings.

Total balance ground coverage:

: 230880.32 sq.m

Development potential at FAR 1 & 30% coverage:

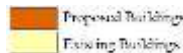
: 783413.72 sq.m

Development potential at 65% efficiency of buildings (Net carpet area):

: 509218.91 sq.m

Net gain:

: 526766.10 sq.m



S.No	CAMPUS NAME	SITE AREA (IN SQ. METERS)	MAX. PERM. DG COVERAGE	GROUND COVERAGE (IN SQ. METERS)	GROUND COVERAGE USED	GROUND COVERAGE CLEARED (IN SQM)	AVG. GROUND COVERAGE	SACRATITE DG COVERAGE	SADE	TOTAL BUILT UP IN SQ. METERS	F.A.R. LIMIT	SAL F.A.R.	BALANCE F.A.R. (IN SQM)
1	BIJUR COLLEGE CAMPUS	170274.01	51702.80	43304.00	26.14%	11183.61	22180.48	31802.81	46.18%	36179.34	0.41	0.89	198888.88
2	SENGATE CAMPUS	487147.33	137144.77	47748.74	10.48%	23130.48	14675.39	121024.88	26.34%	81026.39	0.38	0.88	360318.34
3	CHANDRASEKHAR CAMPUS	300116.79	80447.51	71432.30	8.71%	5862.76	11477.34	40743.91	14.32%	14048.56	0.13	0.84	170897.80
4	SWETA SHAR INSTITUTE OF SOC. SCIENCE	3748.27	844.48	881.88	23.80%	0	881.88	61.40	9.84%	881.88	0.27	0.73	5887.19
5	WAPPA COLONY OF SINDH COLLEGE	14118.69	4234.76	0.00	0.00%	0	0.00	4234.76	100.00%	0.00	1.00	14118.68	
6	WAPPA COLONY OF SINDH COLLEGE	44238.83	14271.88	3744.87	8.80%	0	3744.87	10342.27	76.89%	7847.49	0.14	0.86	44238.83
7	GUEST HOUSE OF SINDH COLLEGE	28841.70	8483.33	0.00	0.00%	0	0.00	8483.33	100.00%	0.00	1.00	28841.70	
8	P.O.C. PLOT	14487.75	4237.33	4084.82	29.58%	0	4084.82	72.71	1.88%	10386.00	0.39	0.39	2987.19
9	BALI FARMS	81251.17	10364.35	16882.81	20.88%	0	10647.41	4700.84	26.81%	48916.62	0.38	0.38	18364.66
10	PURASADAPUR PLOT	14628.86	4299.02	72.24	0.19%	91.84	0.00	4299.02	100.00%	0.00	1.00	14628.86	
11	BALI RAMPUR HOUSE (R.O.D.)	5065.38	884.82	428.88	42.59%	0	428.88	179.38	29.80%	428.88	0.42	0.58	885.84
12	ALLENGURU	246.06	167.89	167.89	68.20%	0	167.89	0.00	0.00%	246.06	1.00	0.00	0.00
13	SHARAD JUBILEE HOSTEL	22972.35	8777.88	3687.28	15.59%	0	3687.28	3779.48	66.89%	6897.72	0.32	0.78	17614.86
TOTAL 'A'		1848863.34	312394.88	131334.30		48821.96	21624.34	238880.12		388647.62	4.38		193413.72
14	SHARAD RAMP HOSPITAL	126734.88	37177.41	24718.10	20%	0	24718.10	2688.51	5.88%	82821.88	0.43	0.88	72752.78
15	HOSPITAL NEARBY MEDICAL COLLEGE	23888.19	71888.76	21488.00	12.58%	0	21488.00	46825.76	46.72%	64274.39	0.27	0.73	178884.90
TOTAL 'B'		36823.88	188887.18	68888.10	6.40	0.00	68888.10	43825.86	8.85	117148.16	0.69	1.21	348477.89
GRAND TOTAL		1488888.32	427091.83	197794.40		48821.96	147272.44	274789.39		371763.81	4.98		933491.41
NOTE: ASSUMING TOTAL F.A.R. EQUAL TO 1 FOR INSTITUTIONAL LAND USE PERMISSIBLE GROUND COVERAGE - 30% AND PERMISSIBLE F.A.R. = 1 AS PER MASTER PLAN OF ALLAHABAD													
AVAILABLE CAPACITY FOR DEVELOPMENT OF INFRASTRUCTURE ON EACH CAMPUS													
NET BALANCE GROUND COVERAGE													
IN UNIVERSITY CAMPUSES													
NET BALANCE F.A.R.													
IN UNIVERSITY CAMPUSES													



REDEVELOPMENT PROPOSAL FOR THE UNIVERSITY OF ALLAHABAD

A BRIEF ON PROPOSED DEVELOPMENT

The university has already proposed an elaborate Conservation and Preservation Plan for the heritage buildings through INTACH. The developmental plan recognizes the value of these buildings having great architectural value. Therefore no new building is proposed around 100m of these buildings other than the existing structures. The structure plan has been developed with heritage buildings as main landmarks and foci. The spaces within the campuses have been articulated to compliment the scale, volumetric disposition and architectural quality of the buildings with respect to the existing context and provide greater legibility and permeability. The space addressing the heritage buildings is proposed for development as part of landscape plan complimenting the scale of the buildings and the architectural quality. However, the existing structures constructed as additions for e.g. Physics Department extension, having no respect for the context, is proposed to be redeveloped with matching fenestrations.

The Comprehensive Master Plan proposes a Sites and Services approach for development wherein all the circulation networks, campus services, development of parcels of land will be undertaken. All the proposed buildings will be constructed in the parcels after development of campus infrastructure as part of the relocation plan, in phases. The departments under relocation or to be provided with new buildings will be shifted to the new premises before demolition of the existing dilapidated structures. The campus green areas which are not in conflict with any proposed construction will be developed simultaneously as per the proposed landscape plan along with horticulture, lighting etc.

ACADEMIC AREAS

MUIR CAMPUS

It is proposed to create additional spaces in buildings, wherein the condition of the structure is good and can take mezzanine floors to create additional usable spaces. It is also proposed to create additional spaces for cognate departments within the vicinity of the departments having the same resource utilization. It is proposed to create a new block for physical education and also provide independent buildings for departments which currently share the same building such as Bio Chemistry and Home Science Department.

The department of Defense Studies will also be provided with new building in order to create more space for mathematic and statistic department. The plan proposes to create additional, advanced research facilities for the physics and applied physics department by clearing the USIC building.



The University can acquire, for its use, the building currently with IIT as part with Nehru Science building, for the expansion of allied departments. The extensions proposed to the chemistry, geology and botany departments have been provided to efficiently utilize the appurtenant space by relocating small nurseries, animal houses and other temp. structures to create an improved spatial structure. It is also proposed to create a new library for the Science faculty after clearing the services area, which is currently not in use.

A Lecture Theatre complex comprising of 9 lecture theatres for under graduate teaching is proposed in Muir campus along with Deans Office and Proctors Extension Office and Placement Cell and it is proposed to restructure internal spaces in various departments generated after relocation of classrooms to be utilized for new PG Programs and Research Facilities/Lab and Faculty Rooms, Departmental Libraries and IT Facilities.

SENATE CAMPUS

The Strategy for Conservation of Heritage buildings and integration of the same as landmark buildings and Visual Foci forms the basis for structure plan of the campus. It is proposed to create additional spaces in buildings, wherein the condition of the structure is good and can take mezzanine floors to create additional usable spaces. It is also proposed to create additional spaces for Cognate Departments, Institutes and Schools of Learning offering programs at PG/M.Phil/Doctoral levels within the vicinity of the departments for efficient resource utilization.



It is proposed to create a new block for Departments of Journalism and Mass Communication, Tourism, Economics, Medieval and Modern History, Philosophy and Academic Building in the Women's College Campus, Extensions to Ancient History Departments, Visual Communication, Fine Arts, Photo Journalism and create independent buildings for departments which currently share the same building.

It is proposed to provide a University Centre for Information Technology for managing the central networking facility of all the campuses along with Satellite Communication network, one section in the same building will be provided for all Confidential Work of the Examination Section and other Administrative functions. The plan proposes to create additional, advanced research facilities for department by clearing all the Staff Housing from this campus and GN Jha Hostel in a Phased manner. The University can acquire for its use the Hindu Hostel campus for the expansion for allied department.

It is also proposed to upgrade and refurbish the Main Library in the Arts Faculty which also is nodal centre for Networking with other Libraries in the country and abroad. This library will have the main administrative control of other proposed Libraries in Science and Chaitham Lines campuses.

A Lecture Theatre Complex comprising of 12 Lecture Theatres for Under Graduate Teaching and departmental extension offices is proposed in FCI Campus along with Dean Students Welfare Office, Proctors Extension Office, and University Information Centre along with Public Relation Officers office and it is proposed to restructure internal spaces in various departments generated after relocation of classrooms as an attempt towards capacity building and the above spaces will be utilized for new PG Programs and Research Facilities/Lab and Faculty Rooms, Departmental Libraries and IT Facilities.

The Dean's office and Proctors Office Setup in each Campus needs to be established in an appropriate manner and Executive areas need to be well defined.

CHAITHAM LINES CAMPUS

It is proposed to create additional spaces in buildings by constructing additional floors, wherein the condition of the structure is good. It is also proposed to create additional spaces for cognate departments within the vicinity of the departments having the same resource utilization. It is proposed to create a new block for the Centre for Intellectual Property Rights and Integrated Law Program. It is proposed to provide independent buildings for new proposed allied departments/ disciplines such as Retail Management, International Business, Actuarial Sciences, and Resource Management etc. in the campus. The plan proposes to create additional, advanced research facilities for the Management and Commerce Departments.



A Lecture Theatre Complex comprising of 6 Lecture Theatres for Under Graduate Teaching is Proposed in Muir Campus along with Deans Office and Proctors Extension Office and Placement Cell and it is proposed to restructure internal spaces in various departments generated after relocation of classrooms to be utilized for new PG Programs and Research Facilities/Lab and Faculty Rooms, Departmental Libraries and IT Facilities.

FCI CAMPUS

It is proposed to create Lecture Theatre Complex comprising of 12 Lecture Theatres for Under Graduate Teaching and departmental extension offices in the FCI Campus along with Dean Students Welfare Office, Proctors Extension Office, and University Information Centre along with Public Relation Officers office and Academic Section. This facility will also have an E-Learning Centre along with Seminar Rooms with Video Conferencing facility to organize Special Lectures and conduct interaction with Professors from other Universities. The above will also have a Food Court for the use of staff and students keeping in view the strength of students.



COMPUTER CENTRE AND NATIONAL CENTRE FOR EXPERIMENTAL MINERALOGY AND PETROLOGY

It is proposed to provide a University Centre for Information Technology to manage the centralized operations for all the Campuses and relocate the current Computer Centre to the Senate Campus and create more space for expansion of Department of Experimental Mineralogy and Petrology and for NCEMP.

SPORTS AND RECREATIONAL FACILITIES

MUIR CAMPUS

The existing facilities in the science campus will be upgraded by developing a new Cricket Ground in front of Vijaynagaram Hall while the athletic stadium will be upgraded with Change Rooms, Rest Rooms and a score board besides up gradation of viewer's gallery and seating arena. This will accommodate Football and Hockey grounds .A State of the art Gymnasium and Aerobics hall is proposed as part of new Physical Education Block. The Athletic Association building will be conserved and preserved.



SENATE CAMPUS

It is propose to provide Indoor Sports facilities such as Billiards, Table Tennis, Carom and Chess etc. A Students Hobbies Clubs as part of the Central facility for the University is proposed near PCB Hostel



CHAITHAM LINES CAMPUS

It is proposed to provide state of the art Sports facilities such as an International Size Swimming Pool, Indoor Badminton, Wrestling and Squash Courts along with Lawn Tennis, Volley Ball, and Basket Ball Courts in the Chaitham Lines Campus.



RESIDENTIAL FACILITIES

STUDENTS HOUSING

Development strategies for Student Housing in view of a Residential University have been formulated particularly in terms of the Heritage value of old Hostel Buildings and their restoration and preservation . It is proposed to provide State of the art hygienic Mess/ Dining Facilities, recreational facilities in all hostels and up gradation of existing facilities (Rooms and Toilets/External Services) to make conditions live-able. It is proposed to retain PG Students /Research Scholars in old Hostels like PCB/SSL/AN Jha/Diamond Jubilee as rooms with single occupancy after up gradation and preservation while all the new proposed hostels in science and arts Campus can be provided to UG students.

It is also proposed to generate space for development by combining the Chief Warden/Asst. Warden along with support staff residences as Cluster Housing near the Hostels as walk up apartments as proposed in Belifarm campus.

It is estimated that in the future about 80% of the students will be demanding Hostel Facilities and the University will be required to provide adequate infrastructure.



ADDITIONAL NEW STUDENTS & STAFF HOUSING

MUIR CAMPUS

An annex is proposed to the AN Jha Hostel for additional 100 students.

SENATE CAMPUS

It is proposed to provide two more Boys Hostel near PCB and SSL Hostel with a capacity of 250 rooms each with integrated Mess and Recreational Facility. Each Hostel will be equipped with E-Centers having Internet Connectivity. The Rooms have been designed as per UGC Standards with inbuilt Storage space and a balcony shared between Two Rooms.

Additional Rooms are proposed to be added to existing Hostels in Women's Campus particularly in Priyadarshini Hostels and a new Hostel with a capacity for 250 Students is proposed with similar facilities as above.



CHAITHAM LINES CAMPUS

It proposed to create additional student housings for 900 students by adding one new PG Hostel (300 students) behind International Hostel and one Hostel for 600 UG students after clearing of Pant Hostel. The existing Shatabdi Hostel will be upgraded and completed to add to the existing housing stock. A new block is proposed to be added to the existing International Hostel for married students (Research Scholars) and the facility will be upgraded. The requisite number of Staff Housing as Cluster Housing will be provided for Wardens along with Type II Housing for Supporting Staff.



TRANSIT HOSTEL AND CONFERENCING FACILITY, SHIELA DHAR INSTITUTE PROPERTY, NEAR MUMFORDGUNJ

It is proposed to develop Visiting Professor's Transit Accommodation with Conference facilities at par with International standards near the Shiela Dhar Institute land.

BELIFARM STAFF HOUSING

The BeliFarm is proposed to be developed as Low Rise High Density Housing –Type-III to Type VI (As per GOI Guidelines) as per Allahabad Master Plan Zoning regulations for Faculty and Staff Housing Purposes. It is proposed to construct 328 Units on this Campus in various categories.



LAYOUT PLAN

PURAGAREDDIA HOUSING

The Puragareddia Land is proposed to be developed as Low Rise High Density Housing for Non Teaching Administrative Staff in various categories (Type-III-Type VII). All the other campuses other than the three main campuses are proposed with land-uses as per the Master Plan of Allahabad. This land also has the capacity to accommodate about 300 more housing units.

CORE FACILITIES AND SERVICES

It is proposed to provide certain common facilities as a part of Core Campus facility such as an Auditorium for a capacity of 600 persons, an amphitheatre- 500 persons, Resource centers with Information and Placement services.

A commercial precinct at Katra –Colonelgunj junction near AN Jha Hostel is proposed as an attempt to generate economic resource for the University besides being a facility for the benefit of staff and students.

It is proposed to provide students hobbies clubs as part of the central facility for the University near PCB hostel.

It is proposed to relocate the University Hospital from Muir Campus to Chaitham Lines and is proposed to provide state of the art health care facility with a 50 bedded University Hospital with all diagnostic facilities and a medical ICU.

SEWERAGE SYSTEM

The complete sewerage system of all campuses needs to be restructured and redesigned with biological waste treatment plants and recovery systems, such as a biogas plant in each campus, detailed Engineering and Technical guidelines for which needs to be developed. The waste water outfall rich in organic nutrients will be utilized for horticulture. The biological waste treatment system is used to reduce the volume of black water entering the municipal system. The alternative includes aerobic treatment system, solar aquatic waste system (or living machines), composting or ecologically-based toilets, etc.

WATER SUPPLY SYSTEM

The water supply system for each campus will be supported by a grid system with bore wells and underground tanks, three to four in each campus, depending upon total water requirement, integrated with filtration and Chlorine dosing plants. It is proposed to recharge the ground water through integrated rain water harvesting system for all the campuses. The underground tank capacities are planned with adequate fire reserve with an up flow system design supporting the fire ring. All the campuses will be provided with Garden and Fire hydrants.

ELECTRICAL SYSTEM

The Electrical System is proposed to be augmented with separate Unitized ESS's with a Ring Main Units in all campuses sourcing HT supply from 33kv Substation, proposed by UOA, with underground cable networking. The ESS shall be provided with step down transformers of 11000V to 440V and LT cables shall feed a network of Feeder Pillars for distribution of power to respective buildings. The Captive Power requirement shall be provided as per Electrical Demand Load with respect to Lighting, Power and Air conditioning loads on a Power Load Sharing System. The existing substations will be upgraded and a minimum of three substations are proposed in each campus keeping in view the power loads and corresponding land use.

WASTE MANAGEMENT SYSTEM

A waste management system for garbage disposal will be provided. The entire garbage will be categorized into Bio - degradable, Non Bio- degradable and Recyclable waste.

COMMUNICATION SYSTEM

The Communication System integrating all the campuses is in progress with a Centralized EPABX Exchange and it is proposed to provide Fiber Optic connectivity for Networking, and satellite uplinking will be provided as a part of comprehensive integrated system for all academic and administrative departments and to all students hostel and staff housing provided on campus. This facility will also be provided in other residential campuses also.

A comprehensive landscape plan has been developed with detailed horticulture guidelines keeping in view the existing plantation on campus and landscape will be provided to compliment the structures. It is proposed to provide plant species using the regional bio diversity and the planting pattern has been detailed to create boulevards and avenues as part of the Campus Development Plan. The soft areas would be provided with green cover while other public spaces will be created as Plazas with variety of paving material, water bodies, sculptures, planting beds and landscape lighting. The transition spaces as part of the movement system will be provided with urban furniture elements and are to be utilized by students and staff as interacting spaces.

WATER MANAGEMENT SYSTEM

The development strategies include the systems to reduce building water use by the use of Infra Red Water Sensors and delayed action shut off or automatic shut off valves. Low flow toilets, waterless urinals, low flow kitchen faucets and shower heads and optimizing line losses and return cycle of over flow from overhead tanks to the main supply tanks will be used.

ENERGY EFFICIENT TECHNOLOGIES

Energy Efficient Technologies are suggested as part of Comprehensive Master Plan Strategy towards long term sustainable development. The strategies for efficient energy use would include optimization of building envelope thermal performance, provide day lighting integrated with electric lighting control, use of an effective lighting system and control, maximized mechanical system performance and use of efficient equipment and appliances. The plan also proposes to use energy sources with low environmental impact by the use of Photo Voltaic cells, solar water heaters, etc.

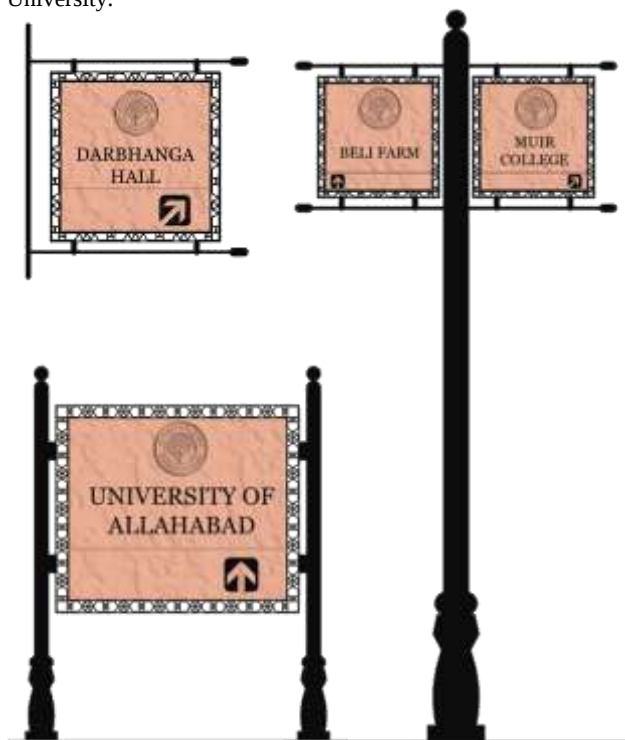
SECURITY SYSTEMS

An effective security and access control system is proposed for all campuses which include SWIPE CARD ACCESS CONTROL, BOOM BARRIERS, CCTV'S and IR detectors. The identity cards will be provided to all the staff and student for access into the campus. The boundary walls and general lighting on boundary walls will be provided and a complete security management plan will be implemented in consultation with the appointed security agency.

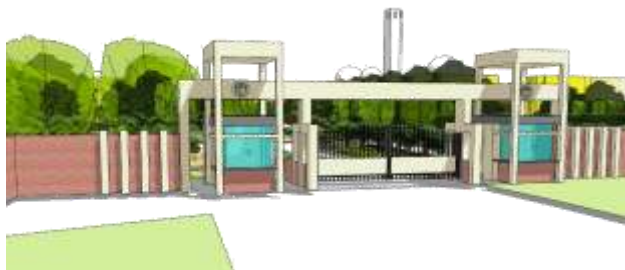


URBAN FURNITURE/SIGNAGES /LIGHTING

Detailed Designs have been developed to provide Distinctive and Designed Urban Furniture, Signage and Street Lighting for UOA Campus. The Plan will integrate Landscape Design, Surface treatments, Landscape Elements and Lighting of the Buildings. The design for Boundary wall, Drinking water Fountains and Entrance gates have been prepared for the University.



SIGNAGES



ENTRANCE GATE



DRINKING WATER FOUNTAIN

MATERIAL RESOURCES

The strategies for effective utilization of materials and resources and waste include reduction in consumption of material resources, which are non renewable. Minimized waste generated from construction, renovation and demolition of buildings by reuse and recycling of materials can be utilized for construction purposes. The strategy also specifies use of material with low life cycle cost in order to conserve embodied energy of material and utilized the locally available materials. It is also suggested to encourage better management of waste and minimized waste generated during building occupancy.

INDOOR ENVIRONMENT QUALITY

It is proposed to provide effective lighting, vibration and noise control in buildings and provide views to the exterior from the interior work spaces, thereby providing a connection to the natural environment. The indoor air quality shall be maintained through HVAC system along with moisture control and provide ample ventilation for pollutant control and thermal comfort. It is also proposed to use low volatile organic compound, emitting materials.

NEW BUILDINGS



CENTRE FOR FOOD TECHNOLOGY



LECTURE THEATRE COMPLEX-FCI CAMPUS



LECTURE THEATRE COMPLEX-MUIR CAMPUS

SALIENT FEATURES OF COMPREHENSIVE MASTER PLAN

The development of Structure Plan for the University of Allahabad campuses is an outcome of very detailed analysis of existing typologies of spaces, architectural expressions and built form characteristics besides other morphological aspects. The plan recognizes the great Architectural Heritage as a predominant asset of the university and the entire planning gives due emphasis, through structuring, to these significant structures. The developmental guidelines have been prepared with the above focus.

OPEN SPACE STRUCTURE

The current open space network of the development parcels, parks, greens, quads and courts are perhaps the most valuable asset of the UOA campus. The existing open space network is confusing and does not have a clear hierarchy. The Campus Plan solves problems identified through the analysis and responses of the campus community and identifies a number of key open spaces and disposition of built form which define the character of the campus. The open spaces are defined by existing buildings and important view corridors which define sites for new buildings and for additions to existing buildings. The framework of open space also defines zones for circulation of pedestrians, bicycles, and motorists. Studying the plan by its different elements clearly defines the limits within which new development projects can fall. The open space structure establishes the hierarchy of major parks and malls as well as paseos.



CIRCULATION NETWORKS

The existing campus street network does not support an orderly, beautiful campus. The existing perimeter city streets are wide but not efficient. The existing street systems are proposed as feeders to the entrances and parking lots of the campuses. The center has been made traffic free and all spaces are connected through pedestrian networks. This will enhance better security within the campus as all access control facilities are proposed to be created at the access points. The Campus Plan calls for improving the existing street geometrics and development of verge, footpaths, signage, lighting, horticulture and urban furniture elements including public facilities and development of intersections using public art installations by appropriate traffic planning principles, treatment of edges, drop off locations, bus stops, parking lots etc. The internal pathways have been designed as boulevards with public art and landscape elements as intermediate markers to provide legibility and association with spaces.

The major buildings of the campus have been located as visual foci and have been used as a structuring tool. The widths of pathways have been designed on an average of 3-4m which can be used to move vehicles such as Ambulances or Fire Tenders in case of any exigency.

The proposed changes to peripheral city roads will increase the capacity of the system sufficiently to relieve congestion and to support the anticipated growth of the campus. The University road, the Bank road and Chintamani Ghosh road can be developed with double lanes supporting one way traffic system to act as a loop to the Jawaharlal Nehru road (Lowther road) which needs to be developed as a major arterial road with three lanes on either sides of the central verge.



The same improvement is suggested for the Kamla Nehru road and main national Highway along science campus as the volume of traffic is very high. It is preferable to provide 7.5m service roads along the highway. Reconfiguring the intersections as traffic circles greatly increases their capacity and is suggested at the Bank road and JLN road intersection. The city development authorities need to urgently improve the traffic networks, design of roads and geometrics as it involves the safety of large number of students and other citizens. The movements and trips are generated as major activity cycle is generated by the UOA.

PARKING

The proposed parking plan for UOA campus is proposed as a peripheral parking system with parking lots located on the periphery of the campuses fed by a system of internal peripheral road or specified entry points to the campuses for access control and effective security management. This perimeter parking strategy is positive for pedestrian circulation as the campus core is free of vehicular traffic, but the surface parking lots consume a lot of valuable developable land therefore, for new extensions it is proposed to provide basement parking for ticketed cars of the faculty.



KEY ELEMENTS OF THE CAMPUS PLAN

The disorderly and cluttered form of the existing campus is transformed into an orderly sequence of grand campus spaces enabling the addition of potential assignable built up areas while creating a more open and spacious campus. There are two critical elements in achieving this transformation, firstly, the immediate replacement of dilapidated buildings with new appropriately designed buildings with a firm commitment to the architectural controls and developmental guidelines for each campus. Secondly, when individual buildings are proposed, they should be designed within the framework of open space and development parcel specified.

The Campus Plan includes a series of new building sites, areas for additions to existing buildings, and a network of circulation for all modes of travel. The main spaces of the transformed campus are detailed as under:

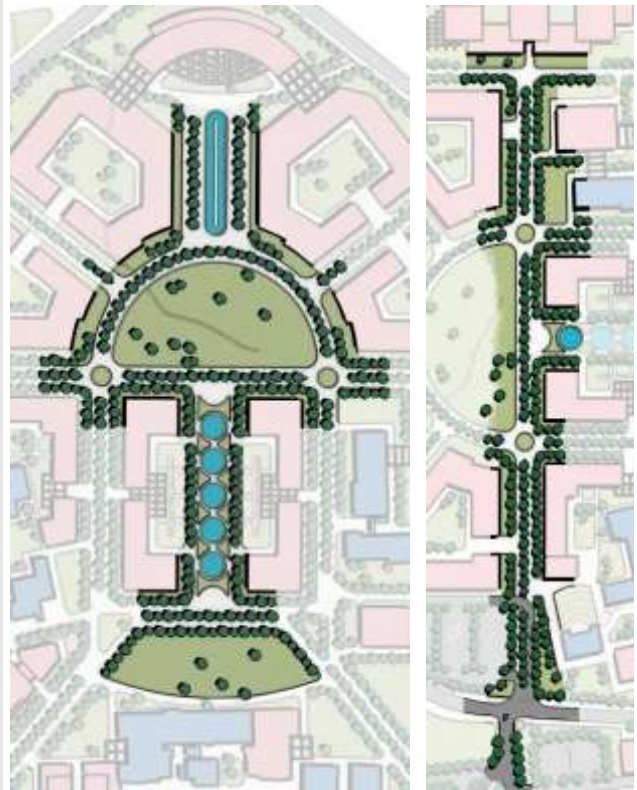
- Muir Mall and Muir Plaza
- Senete Square and Quad
- Campus Crescent
- Library Mall
- Chaitham Greens and Shatabdi Square
- FCI Development
- Beli Farm residential development
- Delegacy Square
- University Road Development



PUBLIC SPACES OF A GREAT CAMPUS

The central goal of the Campus Plan is to provide a coherent system of open space that is appropriate for a respected University and which facilitates communication and access among all parts of the campus. The Plan recommends the early implementation of four key spaces which establish the framework for developing the campus. Each of these spaces will have a unique character and function. They are:

- Muir Mall and Muir Square - A grand entry space leading from Muir Road to Library Plaza with Transition forecourt of Muir Square addressing the Vijaynagar Hall.
- Senate Square and Quad - A busy public space addressing the University Students Union building, north - south pedestrian senate street running from University Road to the Senate Hall and the main quad, large formal green space consisting of the Great Banyan Tree.
- Chaitham Greens - Large central public space between academic zones and residential areas developed as formal green park.
- Library Mall - A linear park from Darbhanga Hall to the Central Library.



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Landscape: Kshitiz Gupta – Design Process

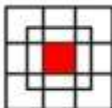
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The above project profile has been edited and prepared by Ar. Dipanshu Biswas for Neev Architects Interiors and Urban Design Consultants Pvt. Ltd.



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