WELCOME

UNIVERSITY OF VAVUNIYA

MASTER PLAN

2021



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INTRODUCTION

A Master Plan (MP) describes an institution's academic /administrative mission, driving the University' future. This report contains the conceptual master plan to guide the University of Vavuniya' future infrastructure development. The master plan includes analysis, recommendations, and proposals for a site's population, economy, housing, transportation, community facilities, and land use. It is based on public input, surveys, planning initiatives, existing development, physical characteristics, and social and economic conditions.

BACKGROUND OF THE PROJECT

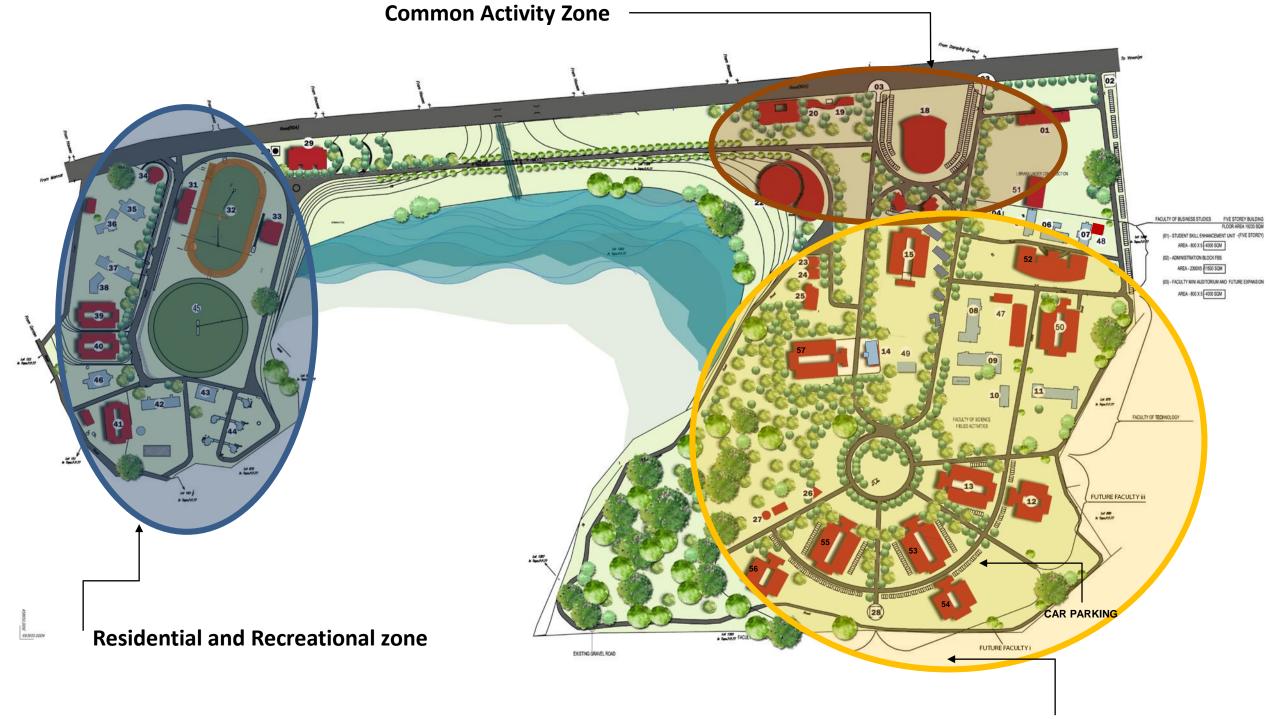
The history of the University of Vavuniya as a seat of learning goes back to 1991. It was formed by elevating the status of the Northern Province Affiliated University College (NPAUC) at Vavuniya to offer Diploma Courses in Mathematical Sciences, English and Accountancy, and Finance.

The Vavuniya Campus of the University of Jaffna was established on 1st April 1997 by an order made under Section 22 of the Universities Act No. 16 of 1978 with two faculties: the Faculty of Applied Science and Faculty of Business Studies, each with two departments. Students were absorbed into Vavuniya Campus, and the Faculty commenced its academic activities in 1997. The first direct intake of the Campus took place in 1998.

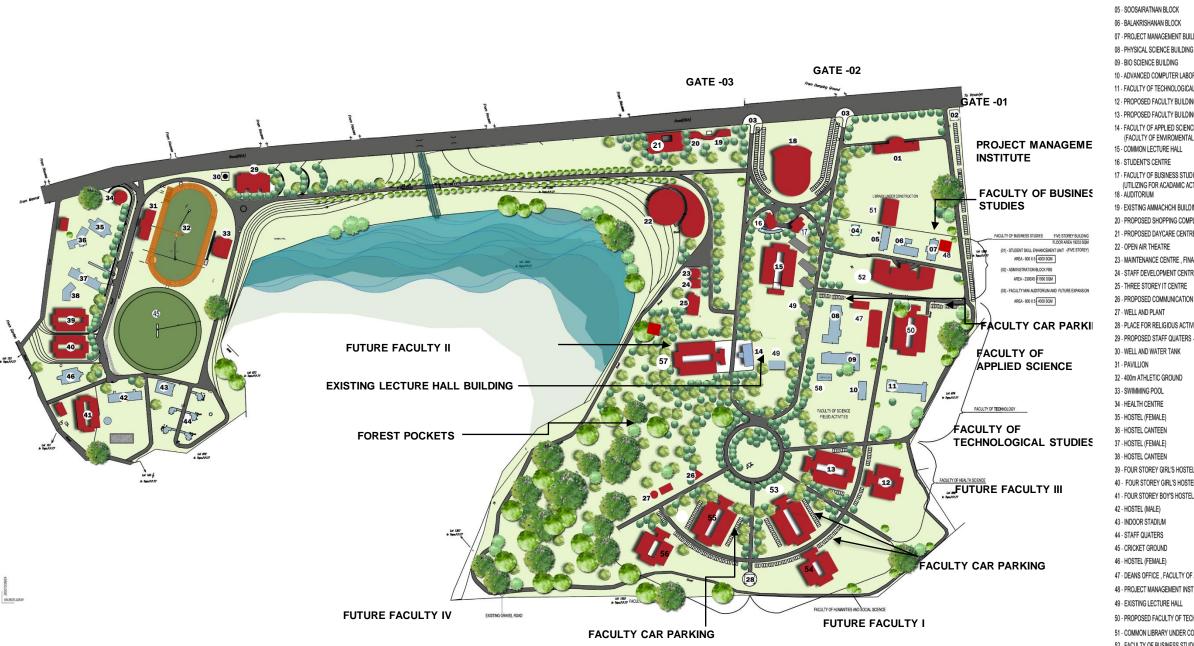
The University of Vavuniya was established on 1st of Auguest 2021 by an order made under section 22 of the Universities Act No. 16 of 1978 with three faculties: Faculty of Business Studies, Faculty of Applied Science, and Faculty of Technological Studies.



BASIC ZONES



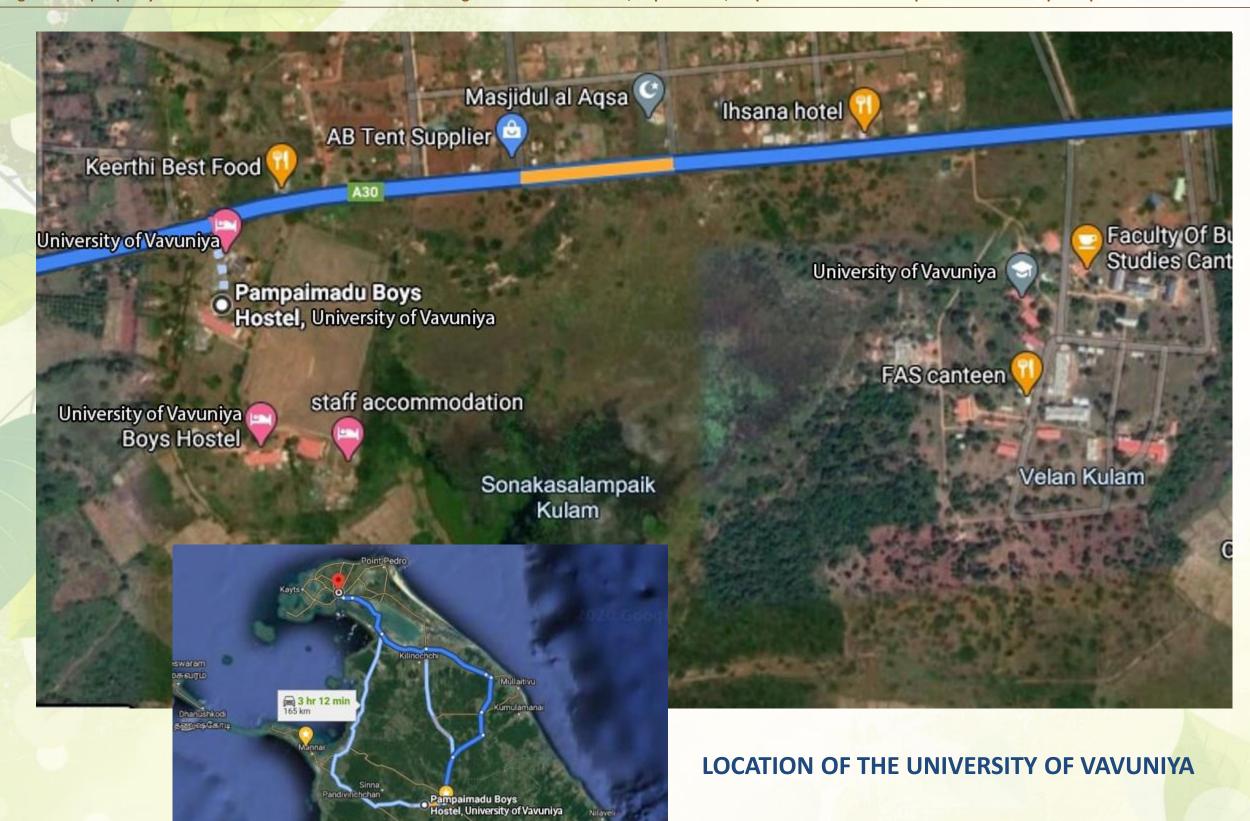
Academic and Administration Zone



ALL SEMIPERMANENT SINGLE STOREY LECTURE HALLS TO BE DEMOLISHED ONCE COMPLETED THE COMMON LECTUREHALL BUILDING IN LATER STAGE

LEGEND

- 01 ADMINISTRATION BLOCK
- 02 MINI GUEST HOUSE 03 - GATE
- 04 EXISTING CANTEEN
- 05 SOOSAIRATNAN BLOCK
- 06 BALAKRISHANAN BLOCK
- 07 PROJECT MANAGEMENT BUILDING
- 09 BIO SCIENCE BUILDING
- 10 ADVANCED COMPUTER LABORATORY
- 11 FACULTY OF TECHNOLOGICAL STUDIES
- 12 PROPOSED FACULTY BUILDING (TYPICAL SMALL)
- 13 PROPOSED FACULTY BUILDING (TYPICAL LARGE)
- 14 FACULTY OF APPLIED SCIENCE BUILDING
- (FACULTY OF ENVIROMENTAL SCIENCE BUILDING IN FUTURE)
- 15 COMMON LECTURE HALL
- 16 STUDENT'S CENTRE
- 17 FACULTY OF BUSINESS STUDIES BUILDING
- (UTILIZING FOR ACADAMIC ACTIVITIES / COMMON ACTIVITIS IN FUTURE)
- 19 EXISTING AMMACHCHI BUILDING
- 20 PROPOSED SHOPPING COMPLEX
- 21 PROPOSED DAYCARE CENTRE AND KINDER GARDEN
- 22 OPEN AIR THEATRE
- 23 MAINTENANCE CENTRE . FINANCE STORE
- 24 STAFF DEVELOPMENT CENTRE
- 25 THREE STOREY IT CENTRE
- 26 PROPOSED COMMUNICATION TOWER LOCATION
- 28 PLACE FOR RELIGIOUS ACTIVITIES
- 29 PROPOSED STAFF QUATERS 30 Nos: FIVE STOREY BUILDING
- 30 WELL AND WATER TANK
- 31 PAVILLION
- 32 400m ATHLETIC GROUND 33 - SWIMMING POOL
- 34 HEALTH CENTRE
- 35 HOSTEL (FEMALE)
- 36 HOSTEL CANTEEN
- 37 HOSTEL (FEMALE)
- 38 HOSTEL CANTEEN
- 39 FOUR STOREY GIRL'S HOSTEL 40 - FOUR STOREY GIRL'S HOSTEL
- 41 FOUR STOREY BOY'S HOSTEL
- 42 HOSTEL (MALE)
- 43 INDOOR STADIUM
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- 55 FACULTY OF ARCHITECTURE AND FASHION DESIGN(TYPICAL LARGE)
- 56 FACULTY OF ARCHITECTURE AND FASHION DESIGN(TYPICAL SMALL)
- 57 FACULTY OF ENVIRONMENT SCIENCE
- 58 COMPUTER LAB





SCOPE OF THE WORK

The prospects for the University' phased development are considered over the next ten years and the next 20+ years, creating a flexible planning framework. It is to be accomplished within ten years and the University may require 20 years to complete the project holistically.

The placement of specific buildings has to be planned much more broadly. The analysis would cover how the University should function as a community, its infrastructure, its recreational spaces, its athletic facilities, etc. The previous University plans will be as points of departure. The recommendation will be given for appropriate growth and reorganization strategies.

The goal is to increase the on-University residency rate to, at least 75% (with the possibility of going higher). There will be stable enrolments and stronger retention. The appropriate footprint for the University will be developed the on-off - University living option will be attractive, Culture – friendly and environmental – friendly. The project will recommend improvement in preserving multiple housing options.

The project will assess the needs for academic and co-curricular facilities, athletic facilities and playing fields, parking and open space over the next 20 years.

Some activities of the comprehensive project at the University have already been accomplished. These include space analyses connected with all the faculties in the academic zone, administration zone, auditorium, public services, and interconnected residential and recreational zones with an elevated bridge crossing the nature-friendly tank area.

This project will provide a broad landscape master plan that will incorporate appropriate standards for paving, walkways, signage, lighting, and a long-term plan for parking for moving vehicles in and out of the University core.

NEED FOR SENSETIVE USE OF LAND

The land for the University at Pampaimadu is 65.0250 hectares. It has smaller land plots in Vavuniya town, such as Park Road premises, Inner Circular Road Premises, and Kurumankaadu premises. They are presently used for administrative activities. The existing University is bonded by a couple of tanks naming Sopalapillayankulam and Velankulam Therefore, adequate sensitivity and care are essential to minimise the disturbances to the tanks and the catchment in any development activities of University of Vavuniya.

NEED FOR FUTURE EXPANSION

At present, there are three "academic entities/common facilities" as Faculty of Applied Sciences, Faculty of Business Studies, and Faculty of Technological Studies with above 1500 students. The University expects to increase the student intake through introducing a new study programme along with proposed future faculties will be established one by one.

- 01. Faculty of Medicine,
- 02. Faculty of Humanities and Social Sciences,
- 03. Faculty of Health Science,
- 04. Faculty of Environmental Science,
- 05. Faculty of Aquaculture, Fisheries and Marine Studies,
- 06. Faculty of Tourism and Hotel Management,
- 07. Faculty of Livestock,
- 08. Faculty of Graduate Studies

These expansions need to be organized to prevent ad-hoc development and allow adequate space for further expansion even beyond the next twenty years maximising the best use of land.



Faculty of Applied Science

- 01. The Faculty of Applied Science will be shifted to the proposed Area once it's Administrative buildings are completed.
- 02.The Faculty of Environmental Science will utilize the existing Administrative Building of the Faculty of Applied Science.
- 03. The Field level activities (Silage production, Mushroom cultivation & Yoghurt production) belongs to the faculty of applied science would be carried out continuously at the same location

Faculty of Business Studies

- 01.The Faculty of Business Studies will be shifted to the proposed Area once it's Administrative buildings are completed.
- O2.The existing Administrative Building of the Faculty of Business Studies will be utilized for future "academic activities /Common Facilities."
- NOTE: All the semi-permanent buildings have been utilizing by Faculties continuously until those facilities available in those semi permanent buildings are substituted in another full-fledged building.



MAINTAIN THE CONDUSIVE ENVIRONMENT AND IDENTICLE CHARACTER

The region's general climatic condition has characteristics of relatively higher temperature and low humidity throughout the year. Therefore, the University premises and its surroundings will also need a green environment, pocket parks, shady cycling tracks, and walking pathways interconnected with the faculties and residential areas. They will reduce the heat generated by solar reduction and ground reflection, reduce glare by shade containing dust, fumes. It will be pleasant to the users.

The existing faculty buildings and semi-permanent lecture hall buildings do not pose a strong architectural character that could lead to a strong image. Therefore, proposed building and all elements to be built up by the theme of strong architectural concept to create an iconic landmark among the Universities in Sri Lanka

MASTER PLAN OBJECTIVES AND CONCEPTS

As this document introduced, the place-making principles that set the vision for the Master plan have evolved to address the opportunities within the site analysed, which promote vital objectives. These key objectives seek to:

Improve the University arrival and navigation experience to align it with the reputation of the University.

The Master plan proposes enhancing entrances from Vavuniya - Mannar main road with landscaping, finding signage, and directional stopping points for visitors. It will allow the most frequent users (students and public) to travel by motor vehicle to enter the University more conveniently, promoting users to leave their vehicles towards the periphery and walk to their destination within the University. It will also help encourage less car usage in the centre of the University, which will be more pedestrian in its nature and character.

Create high-quality pedestrian environments, including a central core to promote interaction and a sense of place.

Deliver a connected and walk able University that prioritises sustainable transport choices.

Use way finding and a clear design aesthetic in urban design to provide a safe and consistent University experience.

Provide high-quality facilities for our students, staff, commercial partners, and visitors that meet the University's technological and sustainability objectives.



The concept has been developed as a green-oriented University adhering to a natural couple of water bodies and naturally grown-up indigenous wilderness and topographical setup.

Essential factors have been considered to achieve this concept

Natural geographic features of the land and surrounding.

Maximum use of existing structure, field activities and road network.

Achieve a teaching and learning environment for proposed building projects.



INFRASTRUCTURE DEVELOPMENT STRATEGY.

1. WATER SUPPLY AND DRAINAGE

The water supply in the Vavuniya area is already having problems related to quality, quantity, and continuity due to the scarcity of reliable sources. In this regard, the strategy proposed is to establish several deep-water wells coupled with R.O. plants to treat hardness. The project recommends to obtain the service of the national water supply and drainage board for this purpose.

A separate centralized water tank is needed for the Academic and Residential Areas respectively

The water requirement of the University within the next few years will be tremendously increased up to 60000 lives. Providing adequate portable water will be one of the main challenges that the University has to face.

2. TOILET WASTE.

According to the forecast, the University's population density needs two treatment plants. One is to be located at the residential premises, and the other at academic zone. The size may be varied according to the usage.



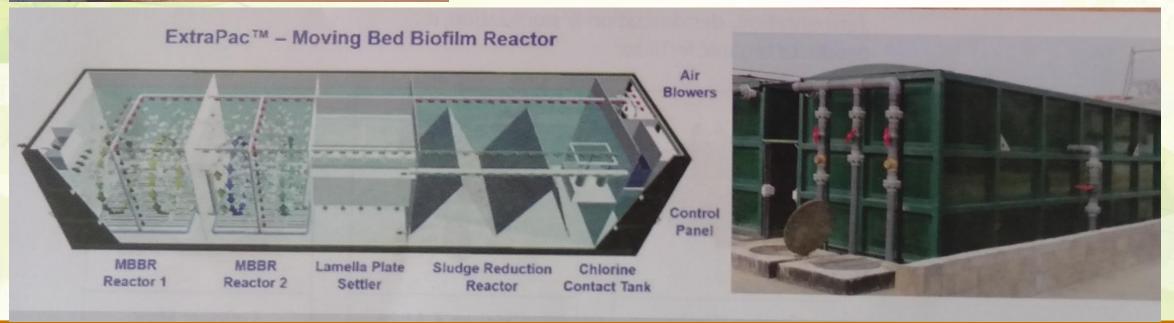


ORGANIC WASTE TREATEMENT PLANT

R.O PLANT FOR TREAT THE HARDNESS OF WATER – 500 LPH



SEWERAGE TREATEMENT PLANT



3. VEHICLE PARKING AND ROAD NETWORK.

There are three factors to be considered:

Road network and flow patterns

Location of the public, students and staff's parking areas

Shaded bicycle sheds and riding tracks



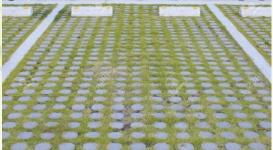
Colourful paving blocks and studded concrete blocks with adequate ramps for the disabled access There are three types of roads, according to widths.

The main entrance road – 6m wide

Connecting the roadways – 3m wide with 2m wide cycle tracks / 1m walk tracks detailed in the coloured paving blocks.

echo friendly walkways, parking plots, shaded connecting roads and pocket parks









4. ENERGY.

The national grid CEB will be enabled to provide adequate supply meeting the energy demand of the Campus. All the proposed buildings should respond to the energy-efficient building codes developed by the sustainable energy authority and other national guidelines. Photovoltaic glass panels, solar panels indigenous plants, and creeper barriers are to be fixed according to the sun path, solar panel as a roof of the buildings, and other energy-efficient green features should be included in future proposals.



SOLAR PANEL SHADED CAR PARKING PLOTS



SOLAR PANELS ON ROOF TOPS



PROPOSED GREEN FEATURES TO CREATE SUSTAINABLE ECO FRIENDLY ENVIRONMENT



PHOTOVOLTAIC GLASS FACADES



SHADED BLOCK PAVED CYCLE TRACKS



VERTICAL GARDEN WITH HEAT REDUCTION GLAZED FACADE





PROPOSED UNDERGROUND FEEDER CABLE SYSTEM WITH CONCRETE TRENCHES



5.BUILDING ARCHITECTURE

The proposed building for each faculty in the academic and administration zones has five floors (the ground and the four) A courtyard will complement to provide the demand capacity, thermal comfort and impressive modern outlook. All the buildings should have weather protection features and cultural uniqueness among the cluster of the buildings.

Interior finishes and services should be done carefully under a consultant architect's guidance. Proposed lecture halls and open office spaces, and floor finishing materials should be homogeneous.







EXISTING BUILDING IMAGES

SOOSAIRATNAM BUILDING (LECTURE HALL)



FACULTY OF APPLIED SCIENCE



PHYSICAL SCIENCE BUILDING



PROJECT MANAGEMENT BUILDING



ADVANCE D COMPUTER LABORATORY





EXISTING BUILDING IMAGES

ADVANCE COMPUTER LABORATORY



BALAKRISHNAN BUILDING





EXISTING FACULTY OF BUSINESS STUDIES BUILDING

FACULTY OF TECHNOLOGICAL STUDIES



BIO SCIENCE BUILDING





EXISTING CANTEEN



HOSTEL CANTEEN



4 STORY GIRLS HOSTEL



EXISTING BUILDINGS IN RESEDENTIAL ZONE

2 STORY STAFF QUARTERS







ONGOING PROJECTS

IT CENTER

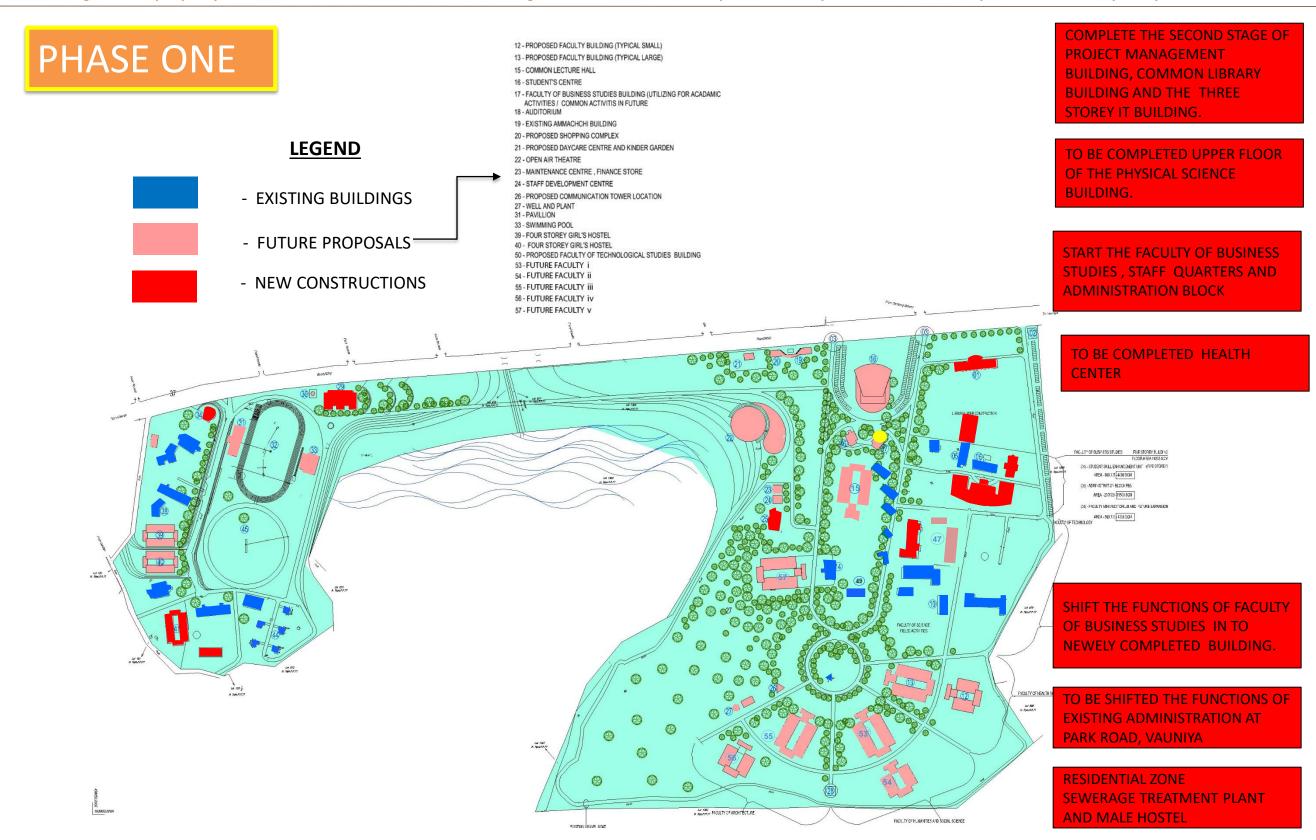


LIBRARY BUILDING

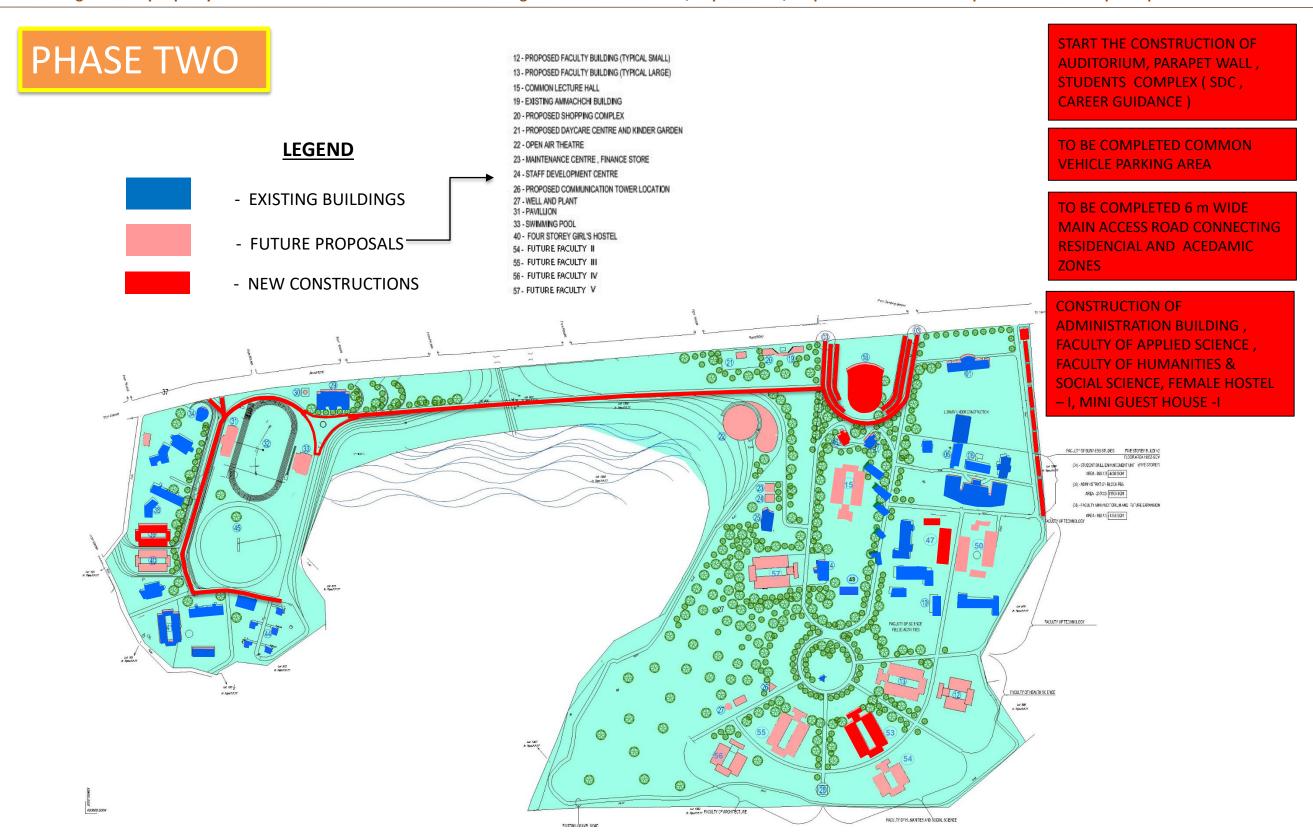


PROJECT IMPLEMENTATION WITHIN NEXT 10 YEARS

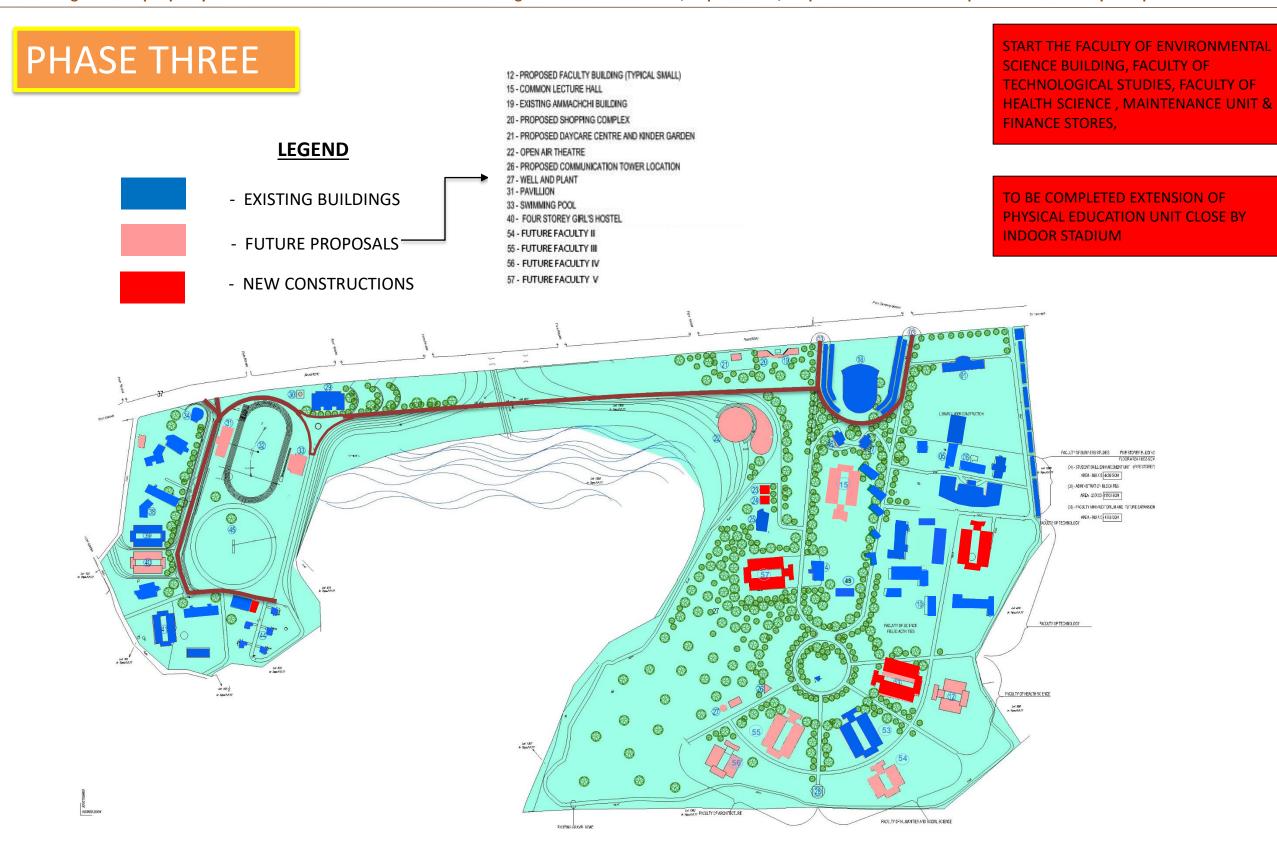
PROJECT IMPLEMENTATION PHASE WILL BE VERIFIED FROM 2 YEARS TO 3 YEARS ACCORDING TO THE FUND ALLOCATION OF THE UNIVERSITY OF VAVUNIYA.







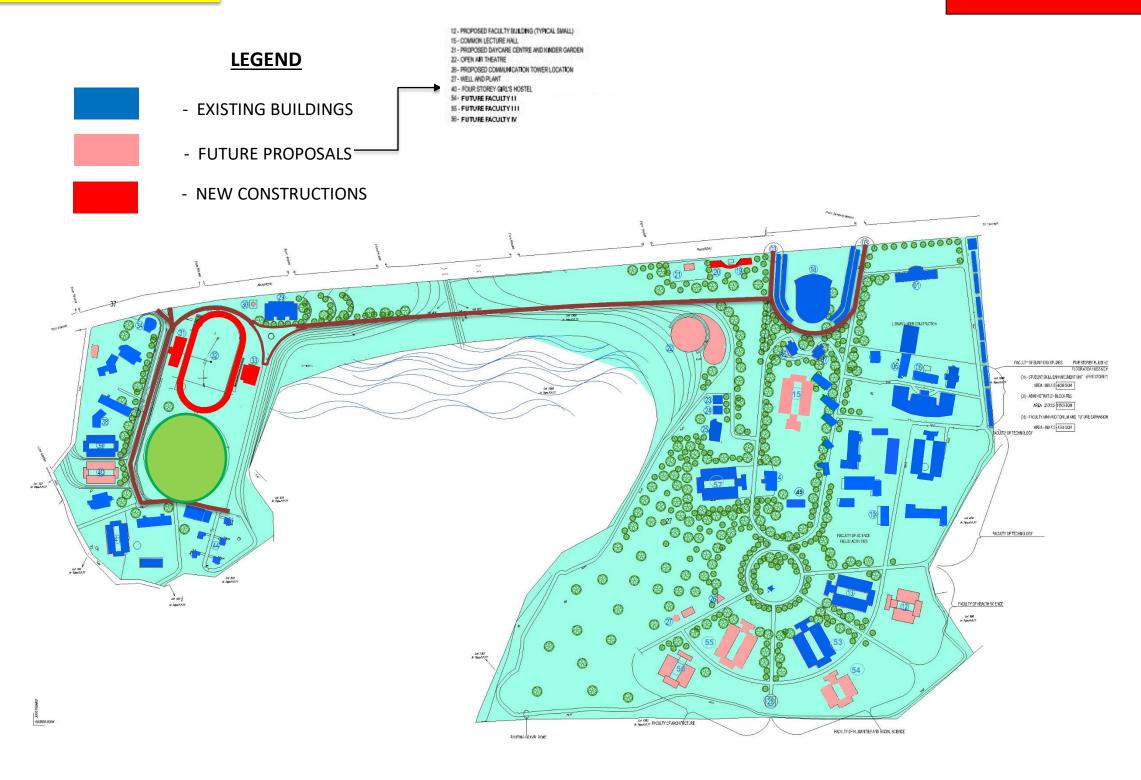






PHASE FOUR

START THE CONSTRUCTIONS OF SHOPPING COMPLEX, SWIMMING POOL. EXTENSION OF PLAY GROUND,



PHASE FIVE

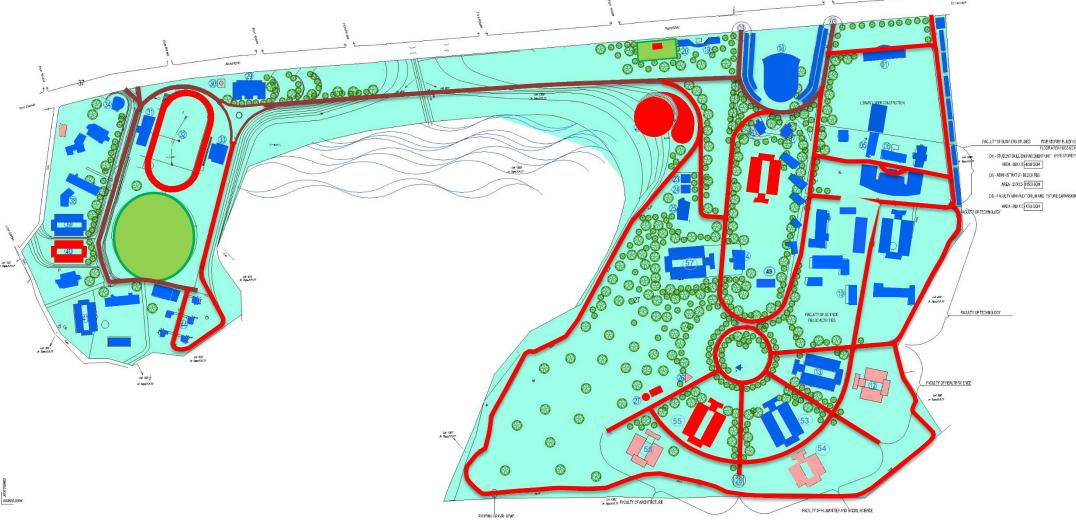
LEGEND

12 - SECOND STAGE OF PROPOSED FACULTY BUILDING (TYPICAL SMALL)
26 - SECOND STAGE OF PROPOSED COMMUNICATION TOWER LOCATION
54 - SECOND STAGE OF FUTURE FACULTY II
56 - SECOND STAGE OF FUTURE FACULTY IV

- NEW CONSTRUCTIONS

START ALL OTHER FACILITIES ONE BY ONE FACULTY OF ARCHITECTURE & FASHION DESIGN, OVERHEAD WATER TANK DAY CARE CENTER AND ALL OTHER SERVICES BUILDINGS.

DEVELOPMENT OF ROAD NETWORK WITH DRAINAGE CONSTRUCTION, ELECTRICITY LINE, CENTRALIZED WATER TANK PIPE LINE,



3D PRESENTATION



PROPOSED ADMINISTRATION BUILDING WITH GREEN FEATURES







GUEST HOUSE

PROPOSED AUDITORIUM

MAIN ENTRANCE



PROPOSED SHOPPING COMPLEX BEHIND THE AMACHCHI BUILDING

PROPOSED DAYCARE









PROPOSED FACULTY OF BUSINESS STUDIES BUILDING



REAR VIEW





PROPOSED FACULTY OF APPLIED SCIENCE

PROPOSED FACULTY OF TECHNOLOGICAL STUDIES







PROPOSED FUTURE FACULTY II



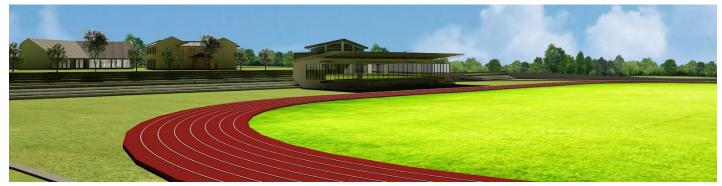
PROPOSED IT BUILDING, MAINTENANCE CENTER, FINACIAL STORE AND STAFF

DEVELOPMENT CENTER





PROPOSED MEDICAL CENTER





PROPOSED RECREATIONAL AND RESIDENTIAL FACILITIES

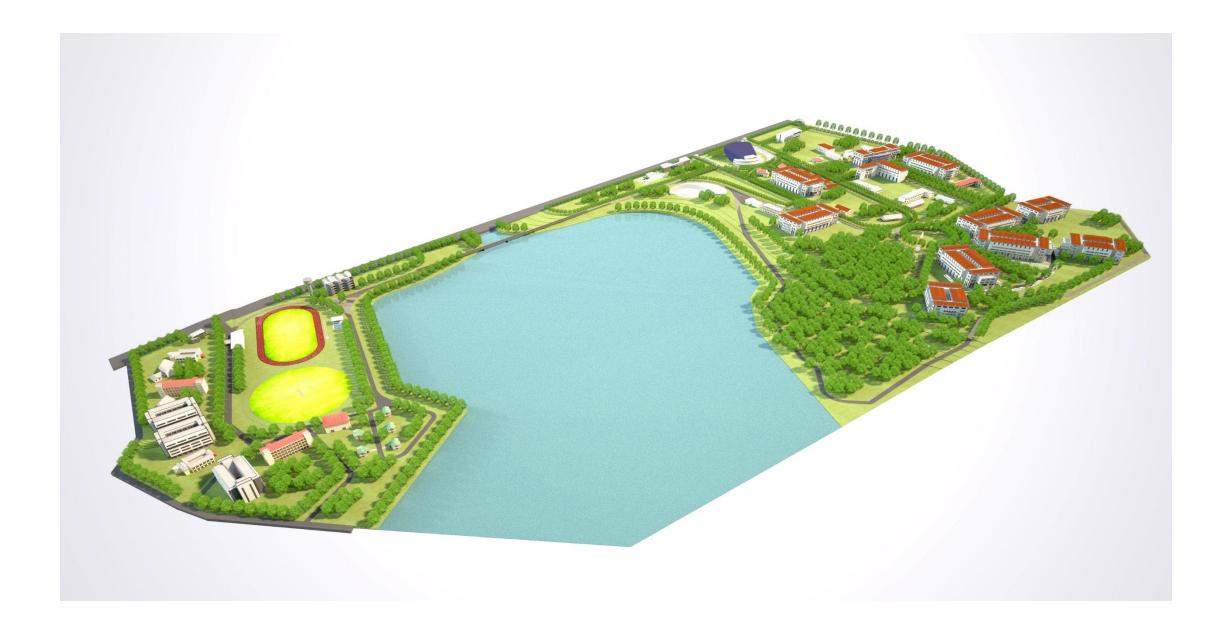




PROPOSED MASTER PLAN VIEW FROM FUTURE FACULTY III



PROPOSED MASTER PLAN VIEW FROM MALE STUDENT HOSTEL





PROPOSED MASTER PLAN VIEW FROM FEMALE STUDENT HOSTEL



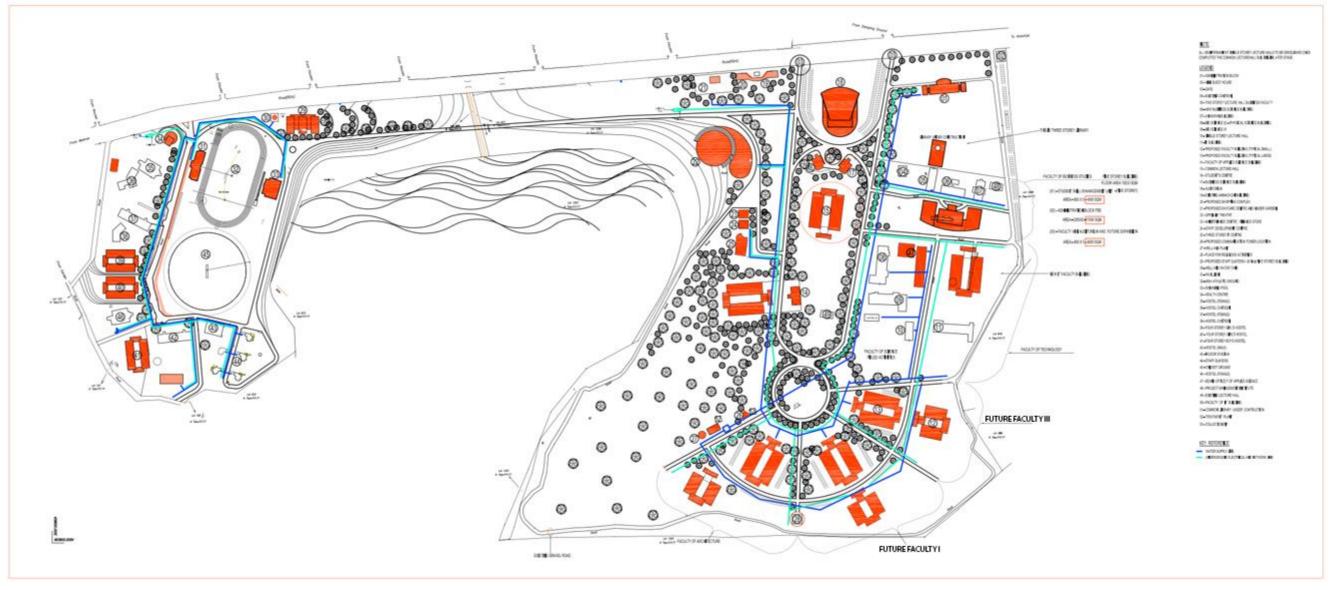


PROPOSED MASTER PLAN VIEW FROM THE ADMINISTRATION CORNER



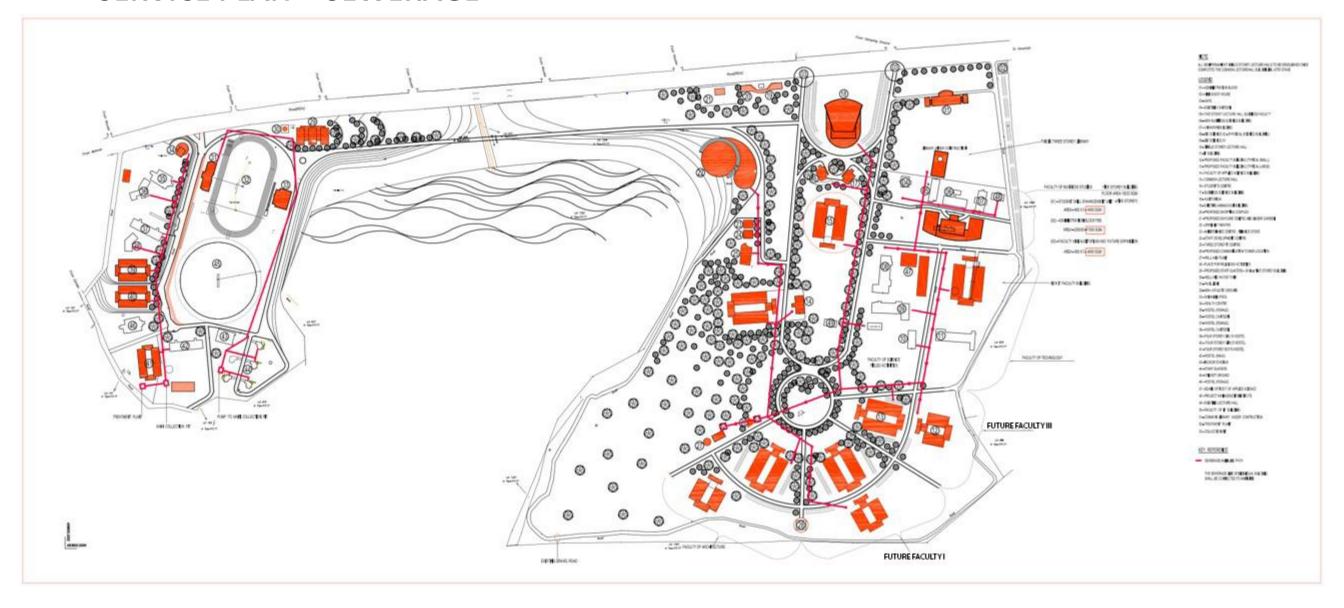


SERVICE PLAN - WATER SUPPLY AND ELECTRICAL





SERVICE PLAN - SEWERAGE



THANK YOU

