প্রজুক্তির স্পন্দন

A Walkway of Knowledge

AGARGAON, DHAKA

Submitted By

TABRIZ RASHID KHAN

11108018

ARC 512

SEMINAR II

Submitted in partial fulfillment of the requirements for the degree of
Bachelor of Architecture
Department of Architecture
BRAC University
Summer 2017

ACKNOWLEDGEMENT

First of all thanks to Almighty Allah for everything I have achieved till now. Without Him I could not be able to complete my work all by myself. I want to thank my instructors Abul Fazal Mahmudun Nobi, Dr.Sajid Bin Doza, Tanjina Khan, Sheikh Rubaiya Sultana, Nandini Awal, S.M.Kaikobad for guiding me through this project and report. Thanks to all my seniors and juniors specially Sheikh Suraiya Rehnuma, Eftakhar Jahan Faisal, Aaymaan Aashaab Rusd, Kazi Abrarul Hawk for helping me throughout my project. Most importantly I would like to thank my family for their full support, and my friends for being beside me whenever it was needed.

I will be forever grateful to all of you guys for helping me in this most important chapter of my architecture student life.

ABSTRACT

Science is a major base and an indispensable part of the life in this day. Being encompassed with the nations that are continually enhancing and building up their aptitudes in science and innovation, Bangladesh needs to upgrade theirs as well. The initial step of the nation like Bangladesh is to know about the science and innovation potential outcomes is to make interest in the psyches of the sprouting ones. This venture will be a hotspot for such interest and to draw in youngsters and grown-ups to the universe of science and innovation. This science center would depict the conceivable outcomes and the outflow of science and innovation age and improvement. This gallery would be a one stop rooftop to house all the science and innovation fundaments and divisions with the goal that a man can improve his insight in the way he feels.

TABLE OF CONTENTS:

CHAPTER 1
BACKGROUND OF THE PROJECT

1.1 PROJECT BRIEF:

Name of the project: Centre for Science Technology
Project type: Educational & Cultural
Client: The Ministry of Science and Technology
Location: Agargoan, Dhaka
Site Area: 217800sqft, 5acres (Approx.)

1.2 PROJECT INTRODUCTION:

Lately, science and innovation has assumed control over the energy of human and has the entire world in their grasp. Similar to a creating nation, it is essential for us to have the capacity to run as one with the super paced world, for mechanical improvement, the underlying foundations without bounds era ought to be advanced. Of late, inside the most recent decade, Bangladesh has grown broadly in the specialized field, propelling our versatile assembling organization, remote controlled motorbikes et cetera. Despite the fact that, there is as yet an edge between being in fact tested and specialized advancement.

1.3 PROJECT BACKGROUND:

The National Museum of Science and Technology in Dhaka, Bangladesh, was set up in 1966 by the legislature of Pakistan. It was first situated in the Dhaka Public Library working, after which the centre moved various circumstances before it was built up in its lasting home in 1981.

1.4 PROJECT RATIONAL:

Being encompassed with the nations that are always enhancing and building up their abilities in science and innovation, Bangladesh needs to improve theirs as well. The initial step of the nation like Bangladesh to know about the science and innovation conceivable outcomes is to make interest in the psyches of the sprouting ones. If we look around some of our neighbouring countries like Japan, India,Singapore, Malaysia etc it’s clearly visible that Bangladesh are lagging behind. The initial step of the nation

towards development can be through this science and technology centre by creating interest and awareness among the young generations of the country. This venture will be a hotspot for such interest and to pull in kids and grown-ups to the universe of science and innovation. This gallery would depict the conceivable outcomes and the outflow of science and innovation era and improvement. This historical center would be a one stop rooftop to house all the science and innovation fundaments and divisions so that a man can improve his insight in the way he feels.

1.5 AIMS AND OBJECTIVES:

To create proper learning environment where we can attract the young minds of our country towards science and innovations. To create a proper platform where scholars from different countries could interact with the intellectual minds of our country. To create a proper environment where guests can take in more about science and innovation through displays , recreation and establishments. The proposition of this venture is to upgrade the national museum if science and technology into a training focus: this could be a solitary place where individuals of all age gathering can find out about science. Updating it such that not just it cab be of the same or practically similar level of furnished with the remote science focuses. This could a one stop understanding for any kids who have an eye for science. To put it plainly, this could be total diversion and instruction bundle for a developing inquisitive personality.

1.6 GIVEN PROGRAMMES:

01. Administrative Unit
02. Technology Unit
03. Gallery (Seperated for different groups of science and technology)
04. Movie Theatre
05. Drama Theatre
06. Lecture Theatre
08. Dormitory
09. Multipupose Hall
10. Machine Workshop
11. Innovation Lab
12. Roof Top Observatory
13. Cafeteria
14. Aquarium
15. Souvenir Shop

16. Medical Centre
17. Parking

CHAPTER 2
LITERATURE REVIEW

Science, technology and society (STS) considers how social, political, and social esteems influence logical research and mechanical advancement, and how these, thusly, influence society, legislative issues and culture. STS is another and extending subject. Like most interdisciplinary projects, it rose up out of the conjunction of an assortment of orders and disciplinary subfields, all of which had built up an intrigue—commonly, amid the 1960s or 1970s—in survey science and innovation as socially inserted ventures. Science, technology, and society In the mid-to late-1960s, understudy and workforce social developments in the U.S., UK, and European colleges propelled a scope of new interdisciplinary fields, (for example, ladies' examinations) that supposedly addressed applicable points that the conventional educational modules overlooked. One such improvement was the ascent of "science, innovation, and society" programs, which are likewise—confusingly—known by the STS acronym. Drawn from an assortment of controls, including human sciences, history, political science, and social science, researchers in these projects made undergrad educational program committed to investigating the issues raised by science and innovation. Dissimilar to researchers in science thinks about, history of innovation, or the history and logic of science, they were and will probably consider themselves to be activists working for change as opposed to impartial, "ivory tower" specialists. For instance of the lobbyist drive, women's activist researchers in this and other developing STS ranges tended to themselves to the rejection of ladies from science and building. Science, designing, and open strategy considers rose in the 1970s from similar worries that spurred the originators of the science, innovation, and society development: A feeling that science and innovation were creating in ways that were progressively inconsistent with the general population's best advantages. The science, innovation, and society development endeavored to refine the individuals who might make tomorrow's science and innovation, however this teach adopted an alternate strategy: It would prepare understudies with the expert abilities expected to end up players in science and innovation approach. A few projects came to stress quantitative techniques, and the majority of these were in the end retained into frameworks building. Others stressed sociological and subjective methodologies, and found that their nearest kinfolk could be found among researchers in science, innovation, and society offices.

2.1 SCIENCE AND TECHNOLOGY IN BANGLADESH:

In Bangladesh, the development of present day science began amid the British run when the main current instructive foundations, concentrated on logical fields, were built up in the nation. The University of Dhaka, built up in 1921, went about as the main thrust in delivering numerous prestigious researchers in Bangladesh.Since its freedom in 1971, Bangladesh has been tormented with numerous social issues like neediness, lack of education and so on. Consequently, science and innovation have falled behind in the need rundown of the progressive governments. Be that as it may, actuated by the current financial advance, science and innovation has been seeing serious development in the nation after a time of stagnation, most quite in the data innovation and biotechnology areas. The national strategies for science and innovation is arranged and created by the National Council for Science and Technology which is controlled by the service of science and technology.

2.2 BRANCHES OF SCIENCE AND TECHNOLOGY:

The branches of science (also referred to as “sciences”, “scientific fields”, or “scientific disciplines”) are commonly divided into three major groups: physical science, earth science and life science. The natural sciences and social sciences are empirical sciences, meaning that the knowledge must be based on observable phenomena and must be capable of being verified by other researchers working under the same conditions.These three categories make up the fundamental sciences, which form the basis of interdisciplinary and applied sciences such as engineering and medicine. Specialized scientific disciplines that exist in multiples categories may include parts of other scientific disciplines but often possess their own terminologies and expertises. The fields of the specialized scientific disciplines are as follows:

The Physical Sciences:

- Physics: The study of matter and energy and the interactions between them. Physicists study such subjects as gravity, light, and time. Albert Einstein, a famous physicist, developed the Theory of Relativity.
- Chemistry: The science that deals with the composition, properties, reactions, and the structure of matter. The chemist Louis Pasteur, for example, discovered pasteurization, which is the process of heating liquids such as milk and orange juice to kill harmful germs.
- Astronomy: The study of the universe beyond the Earth’s atmosphere.

The Earth Sciences:

- Geology: The science of the origin, history, and structure of the Earth, and the physical, chemical, and biological changes that it has experienced or is experiencing.
- Oceanography: The exploration and study of the ocean.
- Paleontology: The science of the forms of life that existed in prehistoric or geologic periods.
- Meteorology: The science that deals with the atmosphere and its phenomena, such as weather and climate.

The Life Sciences:

- Botany: The study of plants.
- Zoology: The science that covers animals and animal life.
- Genetics: The study of heredity.
- Medicine: The science of diagnosing, treating, and preventing illness, disease, and injury.

2.3 BACKGROUND OF NATIONAL MUSEUM OF SCIENCE AND TECHNOLOGY:

The National Museum of Science and Technology was an activity to recognize the nation with the rich science and innovation of the world. The National Museum of Science and Technology was set up in 1966 by the East Pakistan government. After the freedom war in 1971, this dynamic exhibition hall was shut and it revived in around 1982. After it revived it sorted out yearly shows and projects with the goal that they can even now run smooth. It used to exceptionally swarmed and dynamic place to be, as the historical center had an extensive variety of displays and shows. It ran effectively from that point forward, yet for a few reasons it quit updating the displays and it brought about disappointment of the venture. Disappointment one might say that; it used to have 200 to 2000 guests for each day yet as of late it has around 100 guests by and large. The up degree won't not be the main issue, it may likewise be that the innovation is so natural to reach and the general population these days are so lethargic to visit an exhibition hall or they have a wrong discernment about historical center being exhausting that they are never again intrigued. The gallery has 7 distinct displays all incorporated. Every one of the exhibitions are committed to various segments and branches of science and technology.

2.4 IMPORTANCE OF SCIENCE AND TECHNOLOGY CENTER IN BANGLADESH:

The significance of science and technology in contemporary society is exhibited by the utilization of it in our everyday lives. Furthermore, we regularly have no clue how science and innovation truly influence us. We live and work in structures given to us by science and innovation. We are transported around on the ground, over the water and noticeable all around by vehicles that are the immediate consequence of science and innovation. Present day social orders are actually based on science and innovation. When we turn on the tap, flush the can, or flip a light switch, we are getting to science and innovation. Drug is one end to the other science and innovation, and any individual who is more than somewhat sick or has been harmed in more than a minor way will profit by science and innovation. Without innovation, we would not have a TV, PC, telephones and different things. Without science, we would scarcely know anything about our planet, nation or even our neighborhood. Thusly, recognizing the youthful eras of the assortment of science and innovation, our nation could be produced in a degree we may have never considered. Likewise learning about science and technology could shape Bangladesh in a degree that it might contend with the created nations.

2.5 EVOLVING ROLES OF SCIENCE CENTERS:

Science and technology centers have the chance to fill in as translators of innovation for open groups of onlookers and as fields for drawing in subjects in the thought of investigating the different uses of science and innovation. These parts can, indeed, apply to any new area of forefront science and innovation. As casual science teachers, science historical center staffs give understanding into logical techniques and discoveries with respect to the characteristic world and into humanmade instruments and advancements. Science focuses and historical centers that have officially dedicated themselves to the test of giving shows and projects on current science and innovation will see the strong and powerful space of nanotechnology as a fundamental component of their central goal driven instructive portfolio. These associations will no uncertainty likewise have additionally started to think about their way to deal with contemplations of the moral, ecological, general wellbeing, and societal debates that surface with many rising advancements. Such science and society issues incite values-based and additionally reality based talk and level headed discussion. Thus, the part of the science historical center mediator is regularly to enable gatherings of people to comprehend the refinement between the two, staying nonpartisan on the qualities questions, while filling in as an asset for the precision of the accurate data. “Staying unbiased on the qualities questions,” be that as it may, never again implies they are overlooked as though totally

distinguishable from the science itself. Rather, it might imply that teachers discover methods for encouraging their groups of onlookers' understandings of the structure and terms of the open deliberation and the different points of view conveyed to manage. Science, innovation, and society talks have a tendency to draw in for the most part grown-ups and a few youngsters. Their development as a vital part of the science exhibition hall encounter has extended the very idea of the science historical center a long ways past that of a child focused, indoor play area loaded with handson chances to investigate the common and synthetic world. With nanotechnology, science galleries by and by have the chance to grow the skylines of their guests with mindfulness and comprehension of the ways future advances could change our reality in interesting and startling ways. They can give a gathering to resident interest in mindful thought of the application and administration of new advances. They can bring science and innovation analysts and also different partners into the exchange.

2.6 SCIENCE AS 'CULTURE':

Science centers are transports of culture, the social journey for logical learning of our reality and the way of life of ponder, revelation and development. They enable us to respect these key parts of the human soul and human accomplishment. Science exhibition halls commend visionary voyagers and innovators the way craftsmanship historical centers praise visionary painters and stone workers and ensembles praise visionary artists and arrangers. Also, similar to orchestras and galleries of workmanship, it is critical for science historical centers to attempt to perceive awesome new works really taking shape. Similarly as Galileo's telescope opened the sky to close investigation, and at last to space travel, and similarly as Leeuwenhoek's magnifying lens opened our eyes to the overflowing universe of smaller scale life forms, and in this way to current drug, maybe it will be said later on that IBM's advancement of the scanning probe magnifying instrument initially put individuals in contact with particles, the very building pieces of issue, and opened up new outskirts of materials, gadgets, and photonics conceivable outcomes. Or, on the other hand possibly not. Perhaps the relationship is less to instruments of vision and all the more excessively empowering advancements – the bridling of flame, the cutting of the wheel, the improvement of farming, the disclosure of radio waves, and the innovation of the transistor. Regardless, for science exhibition halls, the issue with holding up until the point that the history books are composed, the Nobel is granted, or a Nano-upgraded cure for malignancy wins FDA endorsement, is that it makes the narrative of science so hostile to climatic. There's no tension, no test, no battling against the chances; it's what might as well be called investigating the decorations check toward the finish of the Olympics as opposed to watching the features of the opposition en route. The stories we tell about what John Durant calls "completed science" are pre-decided – we know which way they end; who

wasn't right; who was correct. [2006 Durant]. We wind up passing on actualities, similar to course books, making the present innovations look the aftereffect of an inescapable line of advance. No big surprise the historical backdrop of science appears to be so exhausting to such a large number of individuals. Indeed, even a hands-on show enabling a historical center guest to investigate Newton's strengths is, best case scenario a re-order, with a known result. In the event that "the analysis" doesn't turn out "right," we know the show needs support, or, maybe our utilization of it requires"adjustment". We don't hope to turn an acknowledged hypothesis – one that has sent men to the Moon – on its head. Then again, on the off chance that we set out to ride the real flood of disclosure and experimentation, we can depict the way of life of science as it genuinely may be: the notorious story of blindfolded individuals investigating an elephant, attempting to get a handle on what it is; five pathways up a mountain, everything except one of them deadlocks; a blaze of motivation that winds up sparing a million lives; a glimmer of motivation that lies in a pool of shame on the research facility floor. It is a piece of the mission of most science focuses and historical centers to cultivate gratefulness and in addition cooperation in the way of life of science and building. Credible experiences with and stories of the pioneers in our middle Nano scientists and others – bring science alive and catch the creative energy of the up and coming era of pilgrims. We are celebrants and holders of the fire for moving that people to come.

CHAPTER 3
SITE AND CONTEXT ANALYSIS

3.1 LOCATION OF THE SITE

Location: Agargaon, Sher-e-Bangla Nagar, Dhaka, Bangladesh
Site area: 217800 sq.ft. 5 acres (12pprox.)
Currently: The National Museum of Science and Technology
Altitude: 9m from sea level
Latitude: 23"46' N
Longitude: 90"22' E

The site is in Agargaon, which is a part of the master plan of Sher-E-Bangla nagar. Shere-e-Bangla Nagar is the heart of Dhaka. All government office and Parliamentary office situated in this area. Lt is divided into six sectors. The location of the chosen site is at the civic sector. The site is currently holds The National Museum of Science and Technology.


Sher-e-bangla nagar
Civic Sector
Site
Sayad Mehboob Murshed Sharani Road
Begum Rokeya Sarani Link Road
Shymoli Road
Khilji Road
Mirpur Road
Babar Road
Humayun Road
Gajnabi Road
Suhrawardy Hospital
Khaled Mosharaf Avenue
Zia Uddan Park
Bijoy
Begum Rokeya
Sir Syed Road

Figure: Site

Figure: Existing Zoning

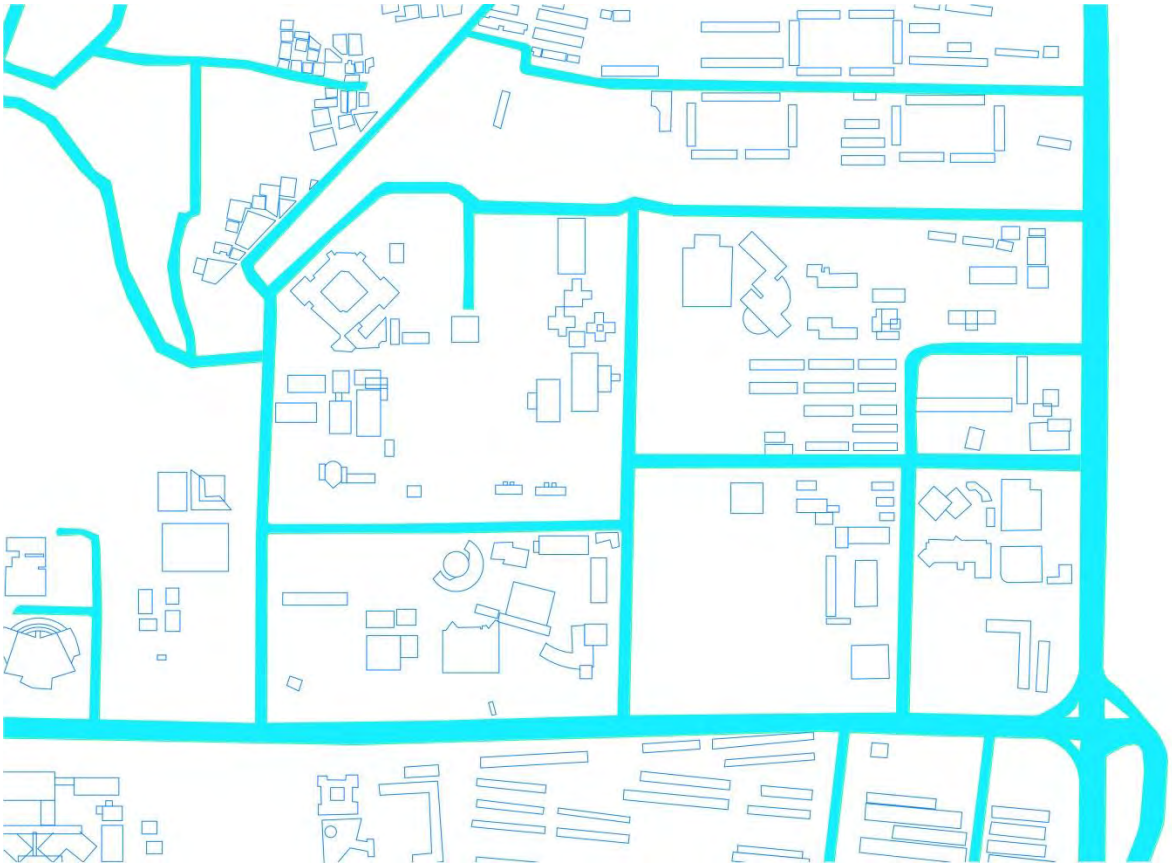


Figure: Road Network

Figure: Green and Waterbody

3.2 FINDINGS FROM SITE SURROUNDINGS:

Findings:

1. Mostly administrative and commercial buildings in the civic sector.
2. Most buildings are made of brick and concrete.
3. Illegal settlements are seen around the site.
4. Multistoried buildings ranging from 4-10 storied structures.
5. No historical buildings are present in the surrounding area.
6. Roads are mostly in grid other than housing zone.
7. Pedestrian roads are present.

Topography:

The topography of the site is a flat land. There has no great variation in the elevation.

Habitation:

To the north and the west it is still undeveloped. To the east is the BANSDOC. There is height variations from twenty storied to two storied.

Climatic Consideration:

The site receives constant southern breeze as the building height of the southern site is notmore than five storied. Though the west side is still underdeveloped and the east is loaded with green trees. Lt also receives plentiful amount of north light.

Temperature:

Season	Month	Maximum (Degree C)	Minimum (Degree C)
Dry-Summer	March- June	40	35
Monsoon	July- October	30	32
Winter	Nov- Feb	26	28

Figure: Temperature chart of Agargaon
Source: http://weather.mirbig.net/en/BD/81/1349452_Agargaon

Figure: Temparature chart of Agargaon
Source: http://weather.mirbig.net/en/BD/81/1349452_Agargaon

Figure: Rainfall chart of Agargaon
Source: http://weather.mirbig.net/en/BD/81/1349452_Agargaon

3.3 S.W.O.T. ANALYSIS:

Strength:

1. Agargaon can be a centre of social hub and civic space since there is no significant civic space in the surrounding area.

2. The site already has The National Museum of Science and Technology, ever since 1966.

3. In this centre visitors from inside and outside the country can learn more about science and technology, therefore it will leave a mark globally.

4. The site demands an updated science and technology center, for all age group.

5. It is located almost centrally in the city and easily accessible.

6. The west side is mostly filled with build structures, so it will provide sufficient shade.

7. The site can be accessed from 2 sides.

8. The site is larger in the east-west side .

Weakness:

1. At night the area becomes insecure.

2. The site and surrounding is not properly taken care by authority.

3. The existing museum used to be vibrant, but due to low maintenance and ignorance made the place to be less lively.

Opportunity:

1. As the area does not have a proper public place, this site will give a chance to flourish the idea of public place in the city.

2. The other public building around the site would act as positive forces for the centre.

3. It will initiate a fresh development in this area.

4. The site being near to the Parliament Building could help to generate for visitors, local and foreign to visit.

Threat:

1. If the site is not handled appropriately, it might make a bad effect in society as this being the only science center.

2 The environment would be affected if the ratio of build area and green is not properly balanced.

CHAPTER 4
CASE STUDIES

4.1 BANGLADESH SHISHU ACADEMY:

Bangladesh Shishu Academy was set up in 1976 with the view to the advancement of physical, mental, social and idle ability of children and in this way develops the future country manufacturers as proficient nationals. Indeed, even 13 years before the Child Right Convention with respect to youngster security and welfare by the United Nations was received in 1989, the establishing of Bangladesh Shishu Academy assumed a vital part in the improvement and national enthusiasm of the offspring of Bangladesh.

At present Bangladesh Shishu Academy is an autonomous institution under the Ministry of Women and Children Affairs. Its activities are run by a 13 member board of management. It is the only national institution working for children's cultural and mental development. The main activities of Shishu Academy are operated by the central office. The same activity is followed by the central office as well as in all districts. For the smooth operation of the branch offices there is an operational committee headed by the District Commissioner. There is a local committee headed by the UNO to operate the children activities in every upazilla.

This novel association for social and mental improvement of Bangladeshi kids has begun from 1976. From 1992 their exercises have spread out everywhere throughout the nation through area workplaces. Consistently, more than 30 occasions have actualized everywhere throughout the nation with three normal exercises like social preparing, National youngsters grant rivalry and SBK and Pre-school program. The reason and targets of Bangladesh Shishu Academy were: to build up the physical, mental imagination and inactive ability of the offspring of Bangladesh, to distribute diverse books, month to month magazines, lexicon reasonable for kids, to sort out various instructive projects like test, civil argument and recitation rivalries to encourage youngsters are perusing propensity, to arrange national kids grant rivalry, intermittent rivalry and distinctive fairs for kids each year, to create opportunity for the children of Bangladesh to participate in the international painting competitions, to celebrate traditional cultural programs, to operate cultural training on different subjects for children, to operate informative children museum based on the history and tradition of Bangladesh and different countries' geography.

Figure: Bangladesh Shishu Academy

Figure: Bangladesh Shishu Academy

4.2 ONTARIO SCIENCE CENTRE:

Ontario Science Centre is a science museum in Toronto, Ontario, Canada, near the Don Valley Parkway about 11 kilometres (6.8 mi) northeast of downtown on Don Mills Roadjust south of Eglinton Avenue East in the former city of North York. It is built down the side of a wooded ravine formed by one branch of the Don River located in Flemingdon Park.

Planning for the Science Centre started in 1961 during Toronto's massive expansion of the late 1950s and 1960s. In 1964, Toronto architect Raymond Moriyama was hired to design the site. The Brutalist design, which consists of three main buildings connected by a series of bridges and escalators, follows the natural contours of the Don River ravine, into which the Centre descends. Construction started in 1966 with plans to make it a part of the city's 1967 Canadian Centennial celebrations. It was first officially named the "Centennial Centre of Science and Technology". However construction was not complete in 1967, and the Science Centre did not open to the public until two years later, on September 26, 1969.

The Centre has several hundred interactive and passive exhibits, featuring geology, the science of nature (in the west wing), astronomical science, how to play music and technology in the south wing, human anatomy, communication and bias, and some miscellaneous artifacts of science. In 1982, the exhibition China: 7,000 Years of Discovery broke all attendance records and attracted more than 1.5 million visitors. The Centre's Rainforest exhibit opened in 1993 and Ontario's only IMAX Dome theatre opened in 1996. Tourism Toronto named the Ontario Science Centre the "fastest growing attraction" in the Greater Toronto Area in 1997.In 2003, the Strange Matter exhibition opened, and KidSpark, a designated space for children eight and under to explore and learn through play, launched. Body Worlds 2 attracted almost half a million visitors over five months when it came to the Centre in 2005. The Space Hall, which features Toronto's only operating planetarium since the closing of the McLaughlin Planetarium, was refurbished in the late 2000s and features one of the few Mars and moon rocks on public display in Canada. The exhibition Facing Mars ran in 2008. The Centre hosted Harry Potter Exhibition, a collection of props from the film series in 2010. Leonardo da Vinci's Workshop (2011) featured physical models of da Vinci's inventions, built from drawings in his Codices. It also included interactive touch-screen digital reproductions of his Codices, the Mona Lisa and The Last Supper. Circus: The Exhibition ran in 2012. Game On 2.0, a video game history exhibition, ran March 9 to September 2, 2013

A place of inspiration and expression, the "!dea Gallery" displays innovative projects by young artists and researchers that blur traditional boundaries between art, science, design and technology. In Knowledge We Trust, ran October 4 to December 7, 2014, and explored the role trust plays in making us willing to share or use the knowledge we receive.The Great Hall is home to Cloud, a massive, computer-controlled kinetic sculpture by Toronto installation artist David Rokeby, which consists of an array of blue

and transparent squares that rotate in various ways to simulate the three states of matter: solid, liquid and gas.The Weston Family Innovation Centre houses Pipe Dreams by Bruce Shapiro, a bubble art installation. Lotic Meander by Stacey Levy is an outdoor installation in polished and blasted granite and cast glass set into the solar terrace of the Ontario Science Centre. The work depicts the patterns of water as it moves through a stream bed.

Figure: Day View

Figure: Night View

Figure: Children Interaction

Figure: Meeting Room

4.3 HONK KONG SPACE MUSEUM:

The Hong Kong Space Museum is one the most celebrated and exceptional point of interest in Hong Kong since 1980. It's conveniently located on the Tsim Sha Tsui waterfront, next to Hong Kong Museum of Arts and HK Cultural Centre. The museum was built to popularise astronomy and space science education, and occupies an area of 8,000 square meters. The museum's egg-shaped dome makes its easily recognizable. Space Museum is divided into two areas: the East Wing is the planetarium's core hosting the Space Theatre and the Hall of Space Science; the West Wing comprises the lecture Hall, the Hall of Astronomy and a gift shop. The museum houses a large collection of meteorites and offers an extensive range of activities for both adults and children. It produces 2 planetarium shows as well as introduces some of the best foreign OMNIMAX productions in the city.

The idea of a planetarium was originally proposed in 1961 by the Urban Council. Ten years later, the Urban Services Department (USD) set up a working group to study overseas experience in establishing planetariums. The study was aimed at laying the groundwork for setting up the future Hong Kong Space Museum. The Hong Kong Government decided to build the museum at Tsim Sha Tsui and invited Mr. Joseph Liu to serve as Planetarium Advisor.In 1974, The USD signed a contract with the Carl Zeiss Company to purchase a planetarium and other equipment with a price of HK$3,050,000.Construction commenced in 1977 and the museum opened on 8 October 1980..

The museum has two wings: east wing and west wing. The former consists of the nucleus of the museum's planetarium, which has an egg-shaped dome structure. Beneath it are the Stanley Ho Space Theatre, the Hall of Space Science, workshops and offices. The west wing houses the Hall of Astronomy, the Lecture Hall, a gift shop and offices. The planetarium's egg-shaped dome covers more than 8,000 square metres, making it a famous landmark in Hong Kong. It was the first local planetarium for the popularisation of astronomy and space science. There is also a mockup of the nose and cockpit section of the Space Shuttle orbiter. Hong Kong Space Museum has two thematic exhibition halls: the Hall of Space Science and the Hall of Astronomy on the ground and first floors respectively. The exhibits, predominantly interactive, enable visitors to learn through a series of entertaining and educational experiences. The museum sits within walking distance of both Tsim Sha Tsui Station and East Tsim Sha Tsui Station of the MTR. It is also near the Star Ferry Pier and a bus terminus.

Figure: Day View

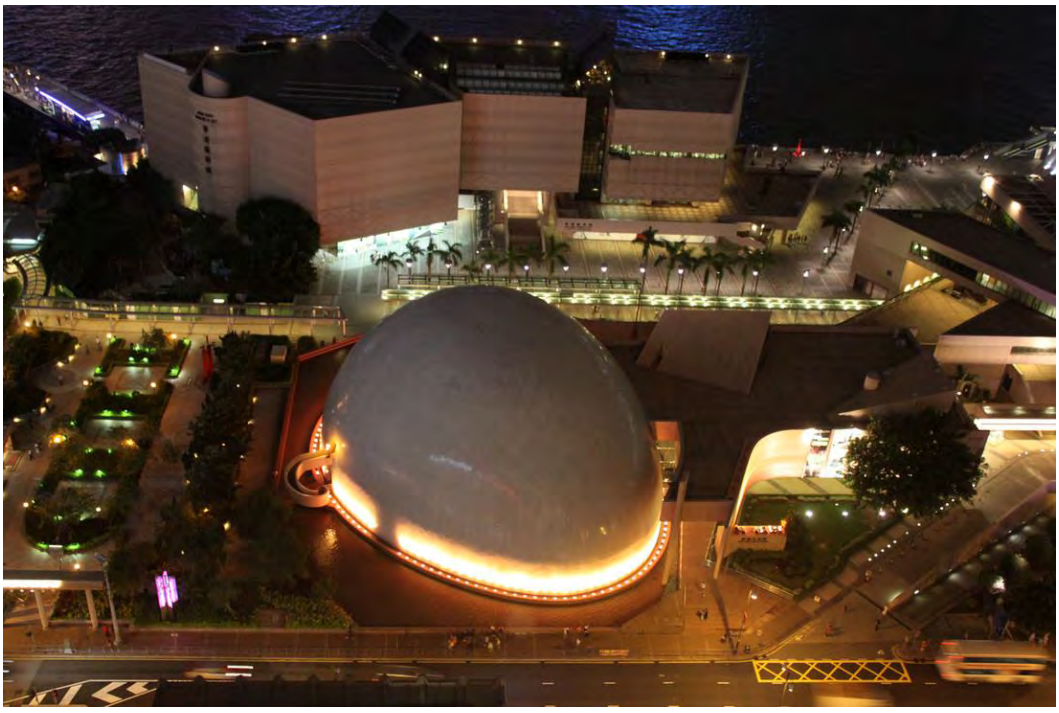


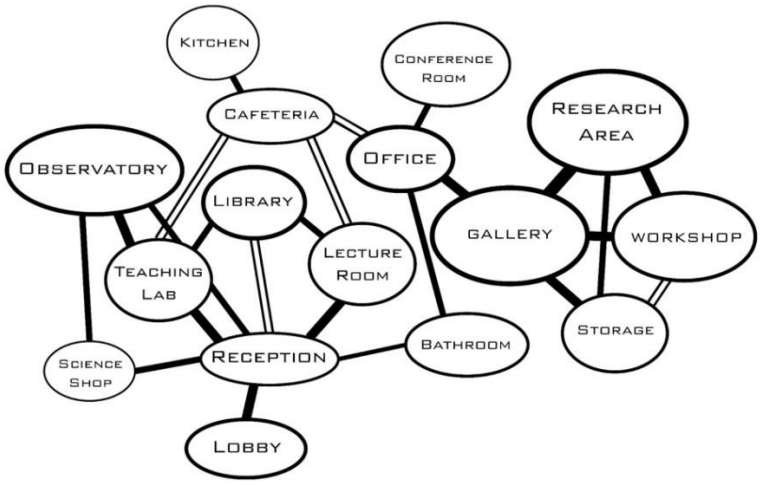
Figure: Night View

CHAPTER 5
PROGRAM AND DEVELOPMENT

5.1 PROPOSED PROGRAMS

01. Administrative Unit	15,000 sq.ft
02. Technology Unit	20,000 sq.ft
03. Gallery (Seperated for different groups of science and technology)	1,00,000 sq.ft
04. Virtual Dome (360 Degree Theatre)	3,000 sq.ft
05. Library	8,000 sq.ft
06. Lecture Theatre	6,000 sq.ft
08. Staff Rooms	1,000 sq.ft
09. Multipupose Hall	6,000 sq.ft
10. Machine Workshops	6,000 sq.ft
11. Innovation Labs	8,000 sq.ft
12. Roof Top Observatory	1,000 sq.ft
13. Cafeteria	4,000 sq.ft
14. Souvenir Shop	1,000 sq.ft
15. Parking	100 cars
16. Toilets+ Circulation	30%

5.2 BUBBLE DIAGRAM



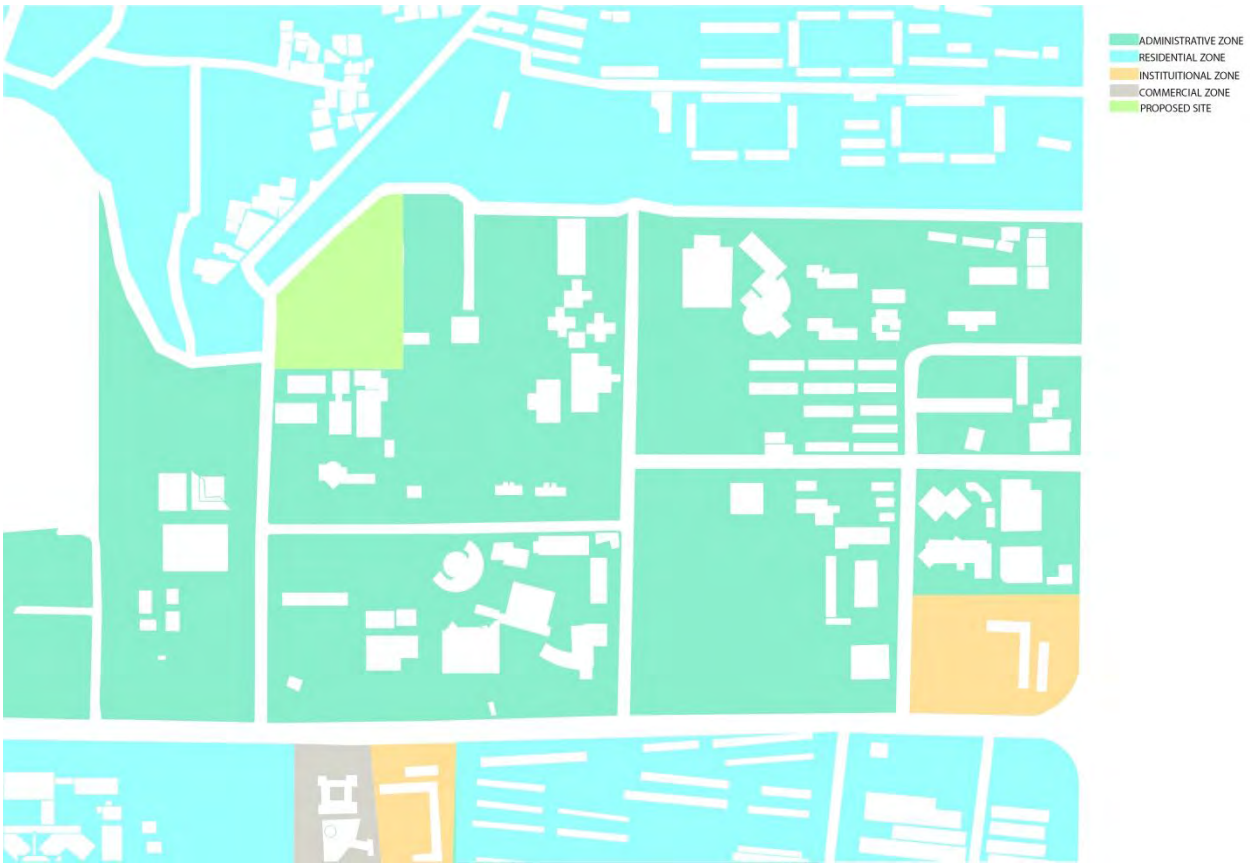
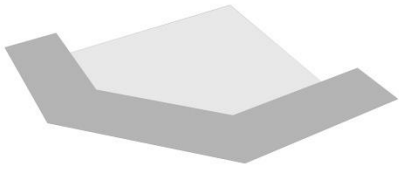
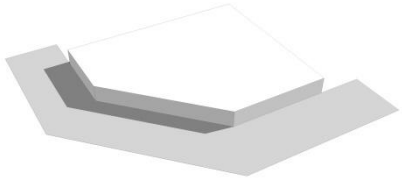


Fig: Proposed site and zoning

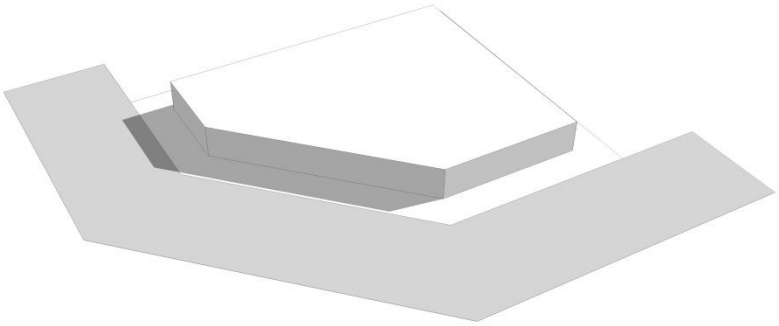
5.3 CONCEPTUAL LAYOUTS:



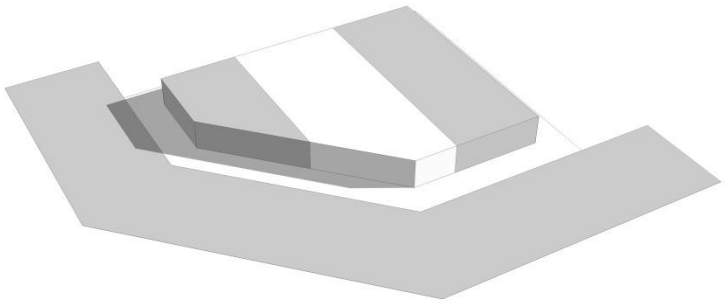
Site



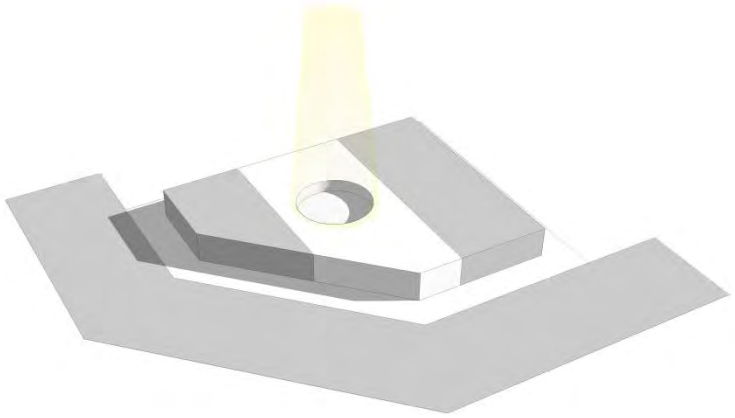
Mass Uplifting



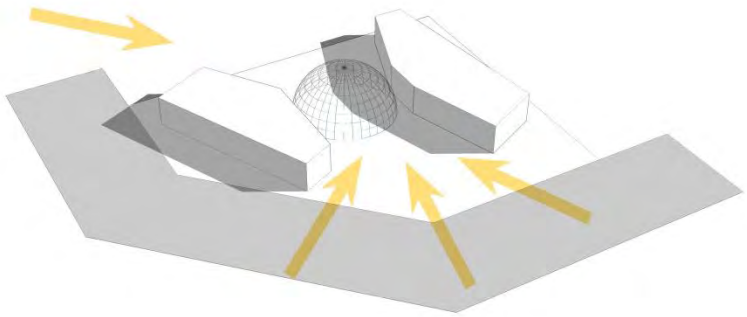
Reducing mass from all sides for proper access



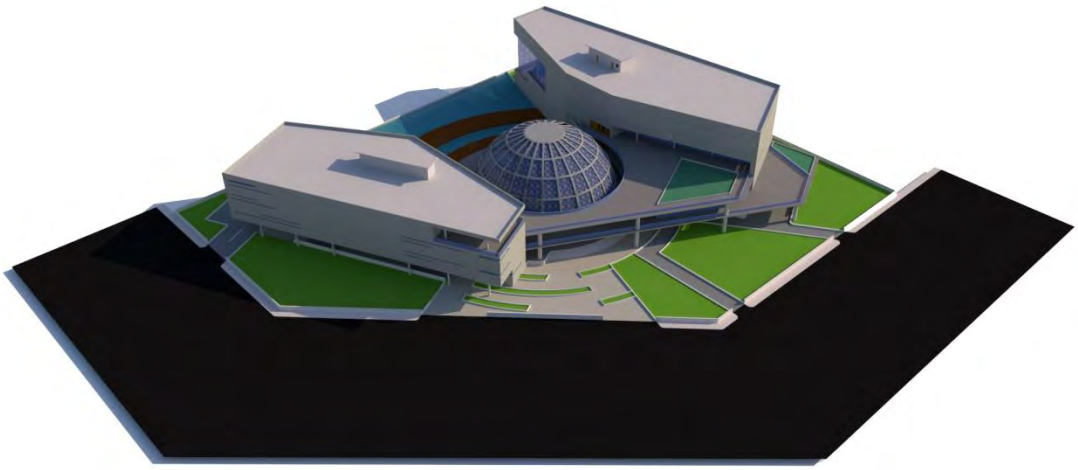
Visible distinction between admin and museum space



Putting the core of attraction (Virtual 360 degree theatre) in the middle



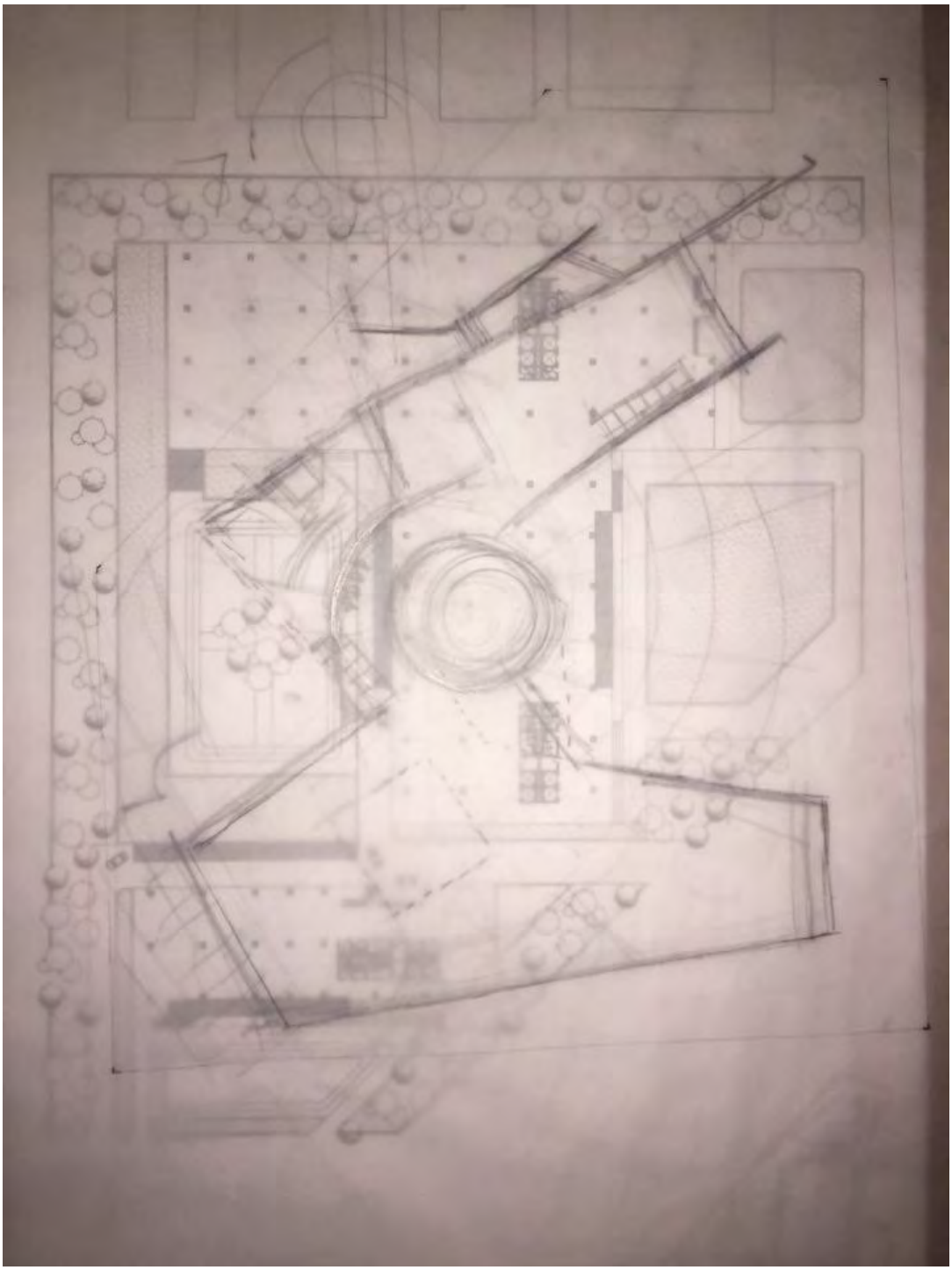
Reducing the two masses according to proper view points from the surrounding roads



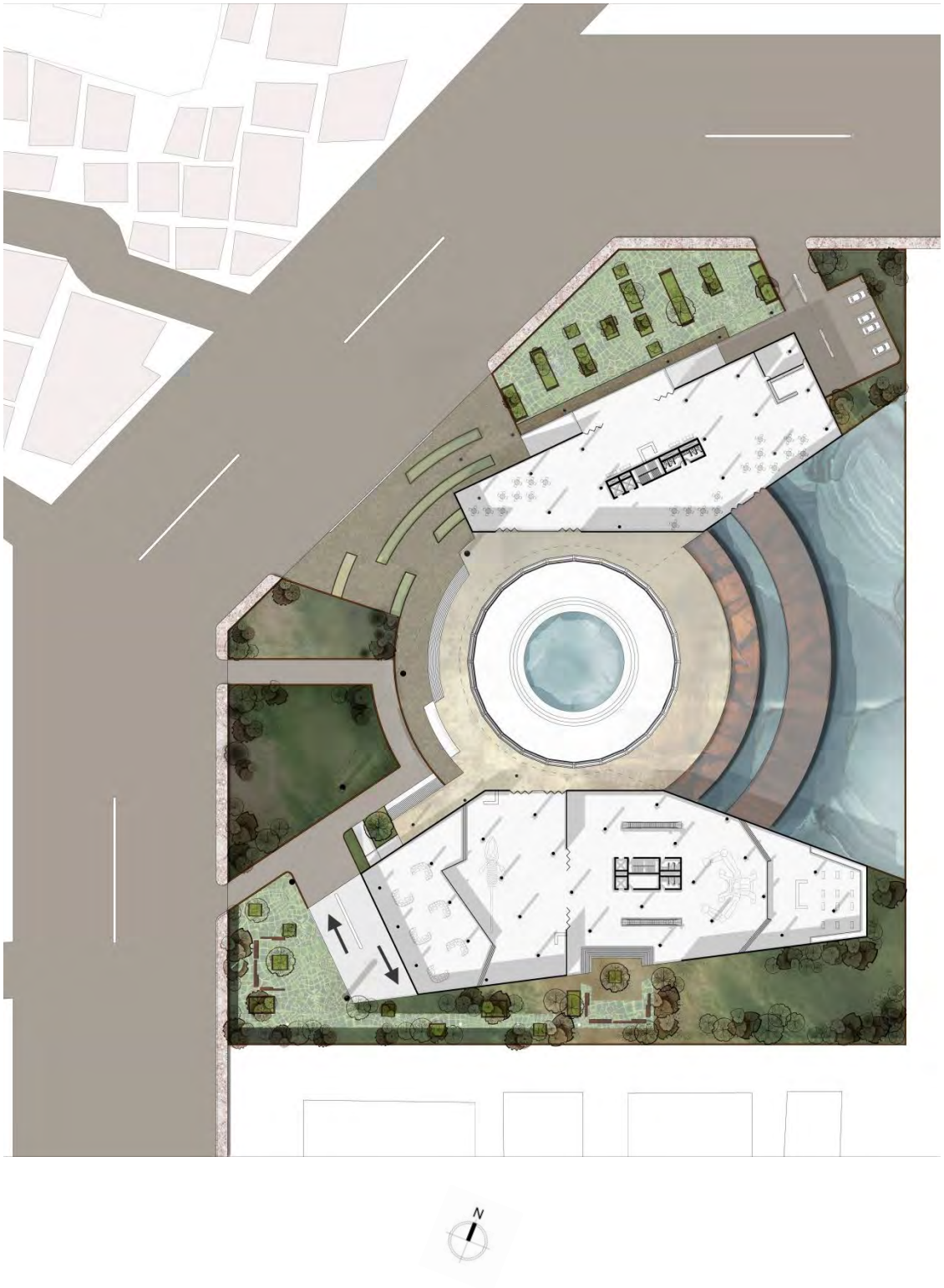
Final form after connecting the two masses

CHAPTER 6
FINAL DESIGN DEVELOPMENTS

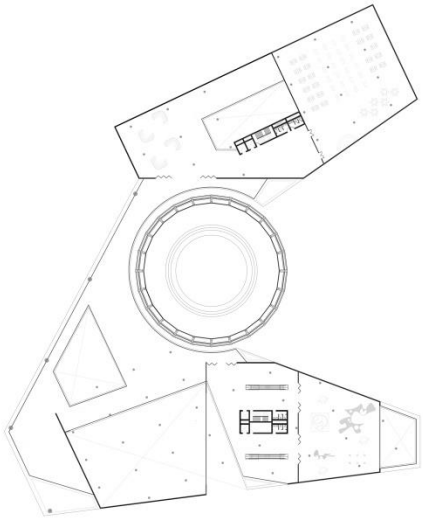
Designing a museum requires and extremely innvative and fun movement. In this plan, experience is more important than function. When I began to wonder about how a science museum works, I was searching for the thoughts methods of insight, longs for giving induviduals of the nation something new and energizing. I will be another sort of experience to import to all. I needed to envision this center as a place where imdividuals could spend couple of hours and have fun with their family during that time and in the long run wind up taking in more about science and innovation. The initial step of the nation towards development can be through this science and technology centre by creating interest and awareness among the young generations of the country.



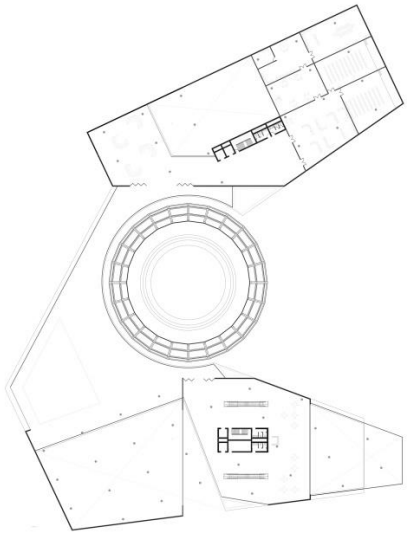
Initial stage of ground floor plan and zoning



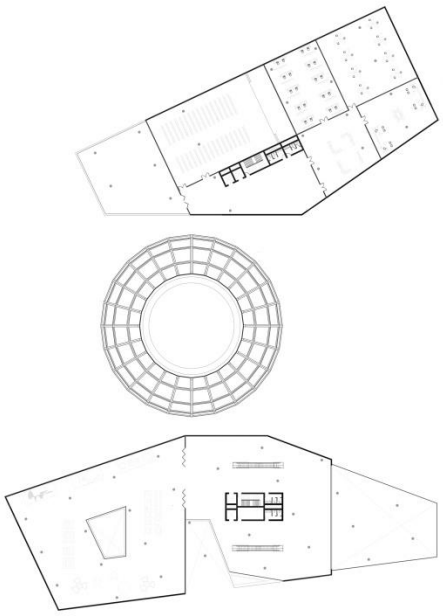
Plan at 12'



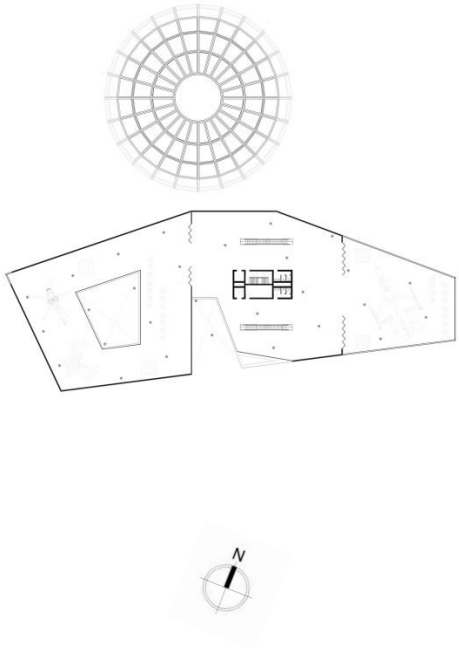
Plan at 30’



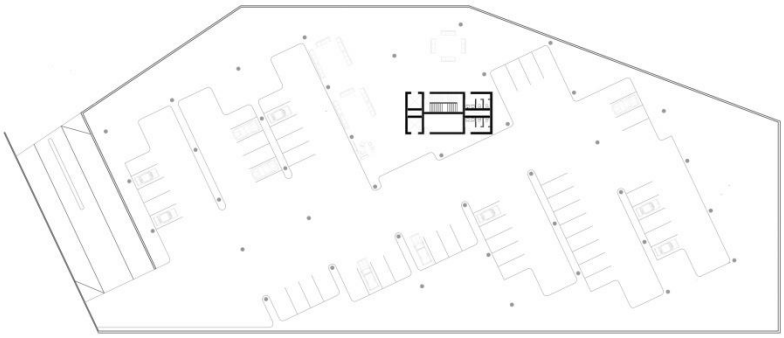
Plan at 45’



Plan at 60’



Plan at 75’



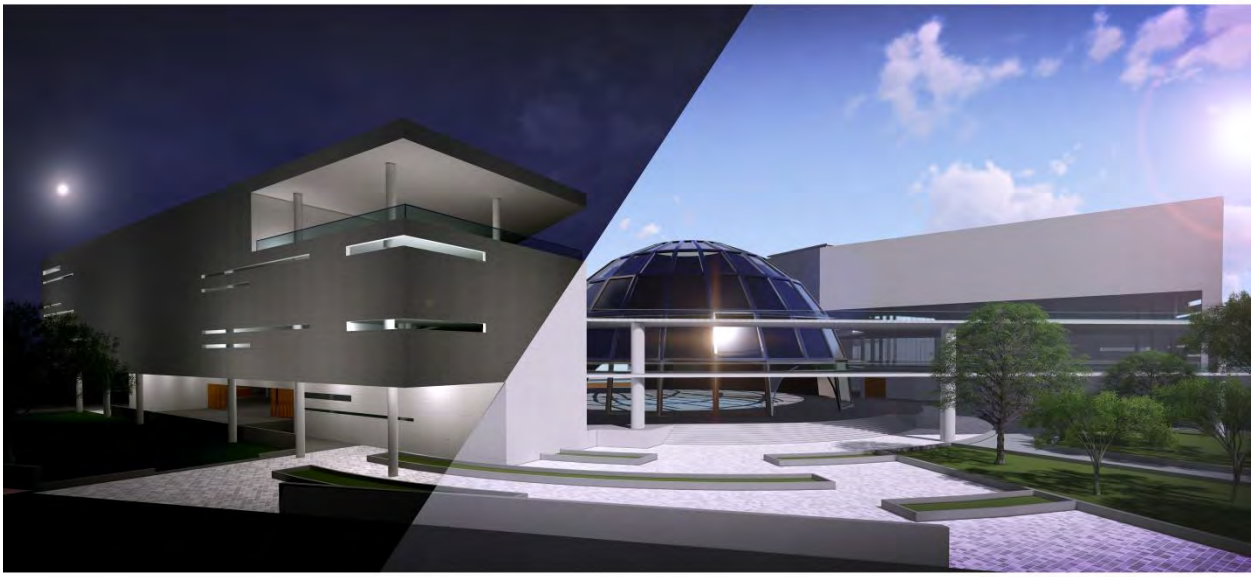
Basement Plan

North-East Elevation

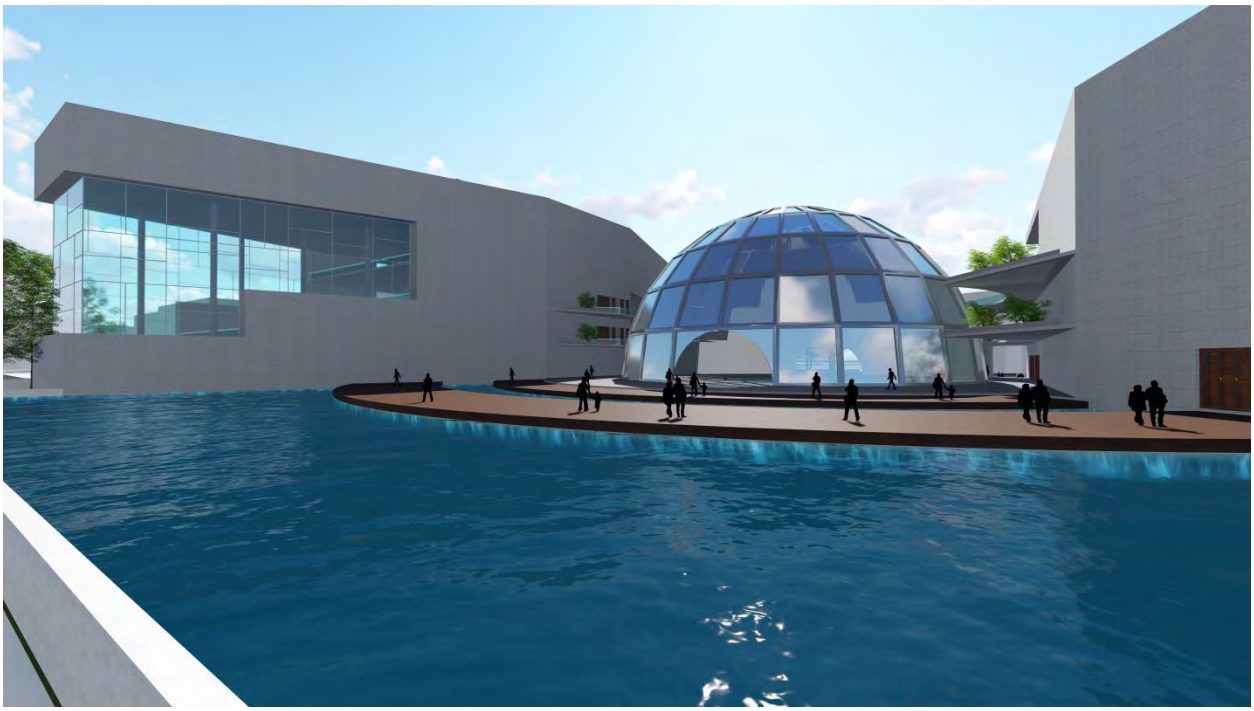
South-West Elevation

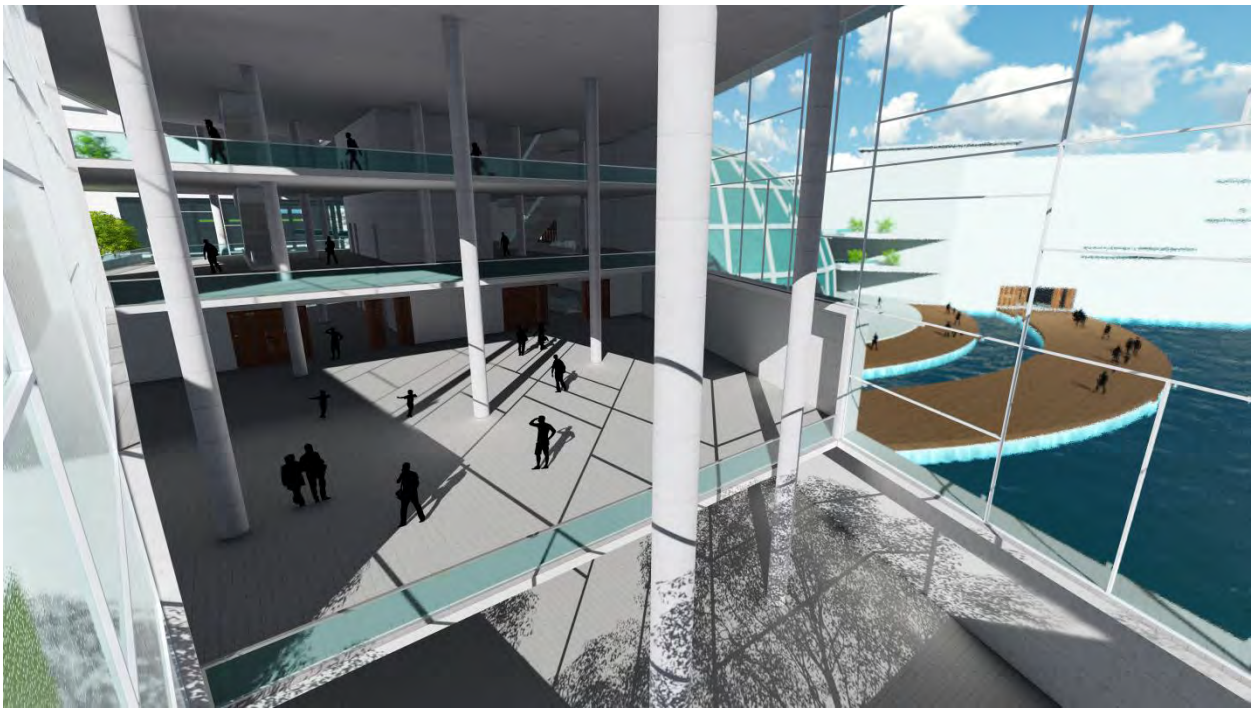
Section AA'

Section BB'



Day/Night Render





Rendered Images

Rendered Images

CHAPTER 7
CONCLUSION

The expressed above parts incorporate the procedure and voyage of fulfillment of the overhaul of the national exhibition hall of Science and technology. It can hugly affect the life of the general population of Bangladesh to upgrade their insight on science and technology, as we as a whole need a place to prepare ourselves to confront the paced computerized world. The science center will act naturally supporting as it won't just profit the general population and the youthful personalities of our nation yet will likewise bring financial yield by drawing in visitors. Like any overhauling venture, the advancement and the acknowledgment of the entire new look of the national Museum of science and technology, will probably encounter challenges however it will likewise add a one of a kind component to the city, improving the personal satisfaction for the majority of our subjects

REFERENCES

1. https://en.wikipedia.org/wiki/Science_and_Technology_Centre
2. https://www.importantindia.com/24015/importance-of-science-and-technology-in-our-daily-life/
3. https://en.wikipedia.org/wiki/Science_and_technology_in_Bangladesh
4. http://scientificbangladesh.com/en/news/technology-development-in--bangladesh#.WoKA_66Wapo
5. https://en.wikipedia.org/wiki/Bangladesh_Shishu_Academy
6. https://en.wikipedia.org/wiki/Ontario_Science_Centre
7. http://www.seetorontonow.com/listings/ontario-science-centre/#sm.000flo0u4d9eexd10wb2rij14fg6i
8. http://www.lcsd.gov.hk/ce/Museum/Space/en_US/web/spm/whatsnew.html
9. https://en.wikipedia.org/wiki/Hong_Kong_Space_Museum